



AGENDA

Regular Board of Adjustment Meeting August 10, 2021 - 6:30 PM

Meeting Location:

Town Hall

101 Huntersville-Concord Road

Huntersville NC 28078

- 1. Roll Call, Determination of Quorum**
- 2. Approval of Minutes**
 - 2.A. Consider approval of the July 13, 2021 Minutes of the Meeting
- 3. Hearing of Cases**
 - 3.A. Variance 21-05, 12802 Jamesburg Drive
 - 3.B. Variance 21-07, 15300 Holbrooks Road
 - 3.C. Variance 21-08, 15300 Holbrooks Road
 - 3.D. Variance 21-09, 15300 Holbrooks Road
- 4. Other Business**
- 5. Adjourn**



**MINUTES OF THE MEETING
Regular Board of Adjustment Meeting
July 13, 2021 - 6:30 PM**

Meeting Location:

Town Hall 101 Huntersville-Concord Road Huntersville NC 28078

1. Roll Call, Determination of Quorum

Quorum was determined, and Chairman Cecil called the meeting to order.

Regular Members in attendance: E. Cecil, Chairman, S. Genenbacher, J. Bradshaw, J. Loucks, P. Jacobson, and K. Burton.

Alternate Members present: K. Bray, J. Carbonell, and J. Passarelli who was called upon to serve as a Voting Member.

Regular Members absent: M. Bennett

2. Approval of Minutes

2.A. Consider approval of the May 11, 2021 Minutes of the Meeting

J. Bradshaw made a Motion to Approve the May 11, 2021 Minutes of the Meeting. S. Genenbacher seconded the motion. Chairman Cecil stated that only members present at the May 11, 2021 should vote. The motion passed unanimously (5-0).

Chairman Cecil read the conflict of interest disclosure statement and asked all Board members if there was any conflict. There was no conflict stated.

3. Hearing of Cases

Prior to testimony, a group attestation was completed for all parties involved or giving testimony to the case. This included: Lauren Speight, Planner 1; Jack Simoneau, Planning Director; Terry Montgomery, Barbara Montgomery, Matt Hedrick, Sandy Lusk, Dee Bailey, Clint Gandy, and James Gilbert.

3.A. V 21-03, 6960 HEDRICK CR HUNTERSVILLE NC 28078

Lauren Speight, Planner I (also referred to herein as "staff") presented, and entered the Staff Report into the record through verbal testimony as indicated below, and written documentation, which is attached hereto as Exhibit A, and incorporated herein by reference.

Chairman Cecil requested both variances be heard as one and voted on individually. The Board concurred, there was no objection.

L. Speight, Planner I provided an overview of the variance request as follows:

BACKGROUND:

1. The subject property, Parcel ID 023-062-31, is zoned Rural (R) and located in Critical Area 1

(CA-1) of the Mountain Island Lake Watershed Overlay (MIL-O).

2. The subject property is located within the extraterritorial jurisdictional (ETJ) of the Town of Huntersville.
3. The subject property was last conveyed via deed to Barbara S. Campbell (McQueen) December 3, 1954 and Staff does not find any public record of a residential structure existing on the property. (Exhibit 1)
4. Staff have been in communication with the applicant for several years. Most recently, the applicant contacted Staff May 4, 2021 regarding requirements, specifically access requirements, for zoning approval of a building permit as the subject property and parcel 02306232 were under contract for sale. (Exhibit 2)
5. Staff replied that while 6960 Hedrick Circle abuts Hedrick Circle the subject property is not connected to the the maintained portion of Hedrick Circle and that access could be achieved for the lots. (Exhibit 2)
6. While 6960 Hedrick Circle abuts Hedrick Circle, it is an unmaintained section of Hedrick Circle and the passage through to the maintain section of Hedrick Circle is blocked by vegetation.
7. The 2020 Town of Huntersville Powell Bill map shows the NCDOT-maintained section of Hedrick Circle ends several hundred linear feet west of the Charlotte-Mecklenburg School property. (Exhibit 3)
8. The applicants would like to obtain a variance to relieve the requirement of Article 8.1 that lots shall abut a public street. (Exhibit 4)

“Any lot for which a building (or buildings) is to be erected or use is to be established shall abut a **public street** [defined below] with the following exceptions:

1. Any lot for which a residential use has been legally established prior to the effective date of this ordinance in accordance with provisions permitting establishment of use on a lot served by a private and exclusive recorded easement of at least 15 feet in width connecting said lot to a public street, may be used as if it abutted a street, provided that it is served by a driveway located on said easement. A lot of one (1) acre or more in area created through a division of land not subject to the subdivision ordinance shall be eligible for issuance of a permit to establish a single-family detached house, provided the lot is served by a private and exclusive recorded easement or fee-simple projection of the building lot at least 15 feet in width connecting said lot to a public street. A driveway accessible by emergency equipment must be located on said easement or lot projection. Lots created under these provisions shall be known as “easement-access lots” and “flag lots”, respectively...”

A **public street** is defined in Article 12 as:

“Street, Public: A right-of-way or fee simple tract of land which has been set aside for public travel, dedicated to the public by the recording of a subdivision plat, built to public street standards, and eligible for maintenance by either the Town of Huntersville or the State of North Carolina.”

STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit 4 for the applicant’s responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- A. The applicants most recently contacted staff May 4, 2021 regarding zoning approval for a building permit for the subject property (Exhibit 2).
- B. More than approximately 1,168 linear feet of surface, approved by NCDOT and accepted for maintenance, is required for the frontage of the subject property to comply with Article 8.1 (Exhibit 5).
- C. There are various properties throughout Huntersville facing similar conditions. In 2021, an extension of Robert Street was privately constructed for the development of a single-family home in the Biltmore Park subdivision (Exhibit 6). Currently, there are lots in Biltmore and Norman Park that would require road improvements before a building permit was issued for construction on the property.
- D. The strict application of the Ordinance includes the frontage of the subject property must be paved to the applicable standards (NCDOT).
- E. Staff finds the requirements for this lot similar with the requirements of lots with a similar history in the Town and Staff does not find this requirement has been met.

- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- A. There are eight surrounding properties facing the same conditions (vacant lots on unmaintained apparent right-of-way) if the property owners wish to construct a building on their lot. (Exhibit 7)
- B. A variance was submitted July 2015 for 9840 Midas Springs Road (V15-01) to relieve the requirement of Article 8.1 that lots shall abut a public street. V15-01 was denied by the Huntersville Board of Adjustment.
- C. Two variances were submitted April 2021 for 9808 Midas Springs Road (V21-01) and parcel 02305204 (V21-02) to relieve the requirement of Article 8.1 that lots shall abut a public street. The Huntersville Board of Adjustment approved V21-01 and V21-02.
- D. Staff finds this requirement has been met.

- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*

Staff Findings:

- A. The applicant is an heir of the property owner of the subject lot. The subject lot was last conveyed by deed December 3, 1954. Staff does not know of any action by the property owner or applicant to create this hardship.
- B. Staff finds this requirement has been met.

- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

- A. Lots must abut a public street per Article 8.1 to provide public safety and essential services. Per confirmation from Randy Frazier, Mecklenburg County Fire Marshall existing conditions of the unmaintained gravel road meet the minimum requirements for fire emergency access to the subject lot. (Exhibits 8)
- B. During the staff visit to place required hearing signs, Staff observed the connection of Hedrick Circle and Midas Springs Road is partially unpassable. A barricade in Hedrick Circle near 7635 Hedrick Circle and the path is completely vegetated and appears to be impassible. (See Photo from #6 of Background, Exhibit 9)
- C. If the access to the lot is via the right-of-way for public access that connects Midas Springs Road and Hedrick Circle and road conditions are satisfactory for emergency access, Staff finds this requirement is met.

STAFF POSITION:

The applicant is seeking a variance from Article 8.1 of the Zoning Ordinance, which requires any lot on which a building (or buildings) is to be erected or use is to be established shall abut a public street. Staff finds the application meets three of the four requirements for granting a variance and therefore recommend denial of the request based on the below findings:

- 1. The subject property, Parcel ID 023-062-31, is zoned Rural (R) and located in Critical Area 1 (CA-1) of the Mountain Island Lake Watershed Overlay (MIL-O).
- 2. The subject property is located within the extraterritorial jurisdictional (ETJ) of the Town of Huntersville.
- 3. The subject property was last conveyed via deed to Barbara S. Campbell (McQueen) December 3, 1954 and Staff does not find any public record of a residential structure existing on the property. (Exhibit 1)
- 4. Staff have been in communication with the applicant for several years. Most recently, the applicant contacted Staff May 4, 2021 regarding requirements, specifically access requirements, for zoning approval of a building permit as the subject property and parcel 02306232 were under contract for sale. (Exhibit 2)
- 5. Staff replied that while 6960 Hedrick Circle abuts Hedrick Circle the subject property is not connected to the the maintained portion of Hedrick Circle and that access could be achieved for the lots. (Exhibit 2)
- 6. While 6960 Hedrick Circle abuts Hedrick Circle, it is an unmaintained section of Hedrick Circle and the passage through to the maintain section of Hedrick Circle is blocked by vegetation. During the staff visit to place required hearing signs, Staff observed the connection of Hedrick Circle and Midas Springs Road is partially unpassable. A barricade in Hedrick Circle near 7635 Hedrick Circle and the path is completely vegetated and appears to be impassible. (See below and Exhibit 9)
- 7. The 2020 Town of Huntersville Powell Bill map shows the NCDOT-maintained section of Hedrick Circle ends several hundred linear feet west of the Charlotte-Mecklenburg School property. (Exhibit 3)
- 8. The applicants would like to obtain a variance to relieve the requirement of Article 8.1 that lots shall abut a public street. (Exhibit 4)
 - i. “Any lot for which a building (or buildings) is to be erected or use is to be established shall abut a **public street** [defined below] with the following exceptions:
- 9. Any lot for which a residential use has been legally established prior to the effective date of this ordinance in accordance with provisions permitting establishment of use on a lot served by a private and exclusive recorded easement of at least 15 feet in width connecting said lot to a public street, may be used as if it abutted a street, provided that it is served by a driveway located on said

easement. A lot of one (1) acre or more in area created through a division of land not subject to the subdivision ordinance shall be eligible for issuance of a permit to establish a single-family detached house, provided the lot is served by a private and exclusive recorded easement or fee-simple projection of the building lot at least 15 feet in width connecting said lot to a public street. A driveway accessible by emergency equipment must be located on said easement or lot projection. Lots created under these provisions shall be known as “easement-access lots” and “flag lots”, respectively...”

- i. A **public street** is defined in Article 12 as:
 - ii. “Street, Public: A right-of-way or fee simple tract of land which has been set aside for public travel, dedicated to the public by the recording of a subdivision plat, built to public street standards, and eligible for maintenance by either the Town of Huntersville or the State of North Carolina.”
10. More than approximately 1,168 linear feet of surface, approved by NCDOT and accepted for maintenance, is required for the frontage of the subject property to comply with Article 8.1 (Exhibit 5).
 11. There are various properties throughout Huntersville facing similar conditions. In 2021, an extension of Robert Street was privately constructed for the development of a single-family home in the Biltmore Park subdivision (Exhibit 6). Currently, there are lots in Biltmore and Norman Park that would require road improvements before a building permit was issued for construction on the property.
 12. The strict application of the Ordinance includes the frontage of the subject property must be paved to the applicable standards (NCDOT).
 13. Staff finds the requirements for this lot similar with the requirements of lots with a similar history in the Town.
 14. There are eight surrounding properties facing the same conditions (vacant lots on unmaintained apparent right-of-way) if the property owners wish to construct a building on their lot. (Exhibit 7)
 15. A variance was submitted July 2015 for 9840 Midas Springs Road (V15-01) to relieve the requirement of Article 8.1 that lots shall abut a public street. V15-01 was denied by the Huntersville Board of Adjustment.
 16. Two variances were submitted April 2021 for 9808 Midas Springs Road (V21-01) and parcel 02305204 (V21-02) to relieve the requirement of Article 8.1 that lots shall abut a public street. The Huntersville Board of Adjustment approved V21-01 and V21-02.
 17. The applicant is an heir of the property owner of the subject lot. The subject lot was last conveyed by deed December 3, 1954. Staff does not know of any action by the property owner or applicant to create this hardship.
 18. Lots must abut a public street per Article 8.1 to provide public safety and essential services. Per confirmation from Randy Frazier, Mecklenburg County Fire Marshall existing conditions of the unmaintained gravel road meet the minimum requirements for fire emergency access to the subject lot. (Exhibits 8)

Terry Montgomery, 205 Cherry Hills Drive, Aiken SC 29803 spoke on behalf of his wife Barbara Montgomery, the applicant. He stated that it is their intent to sell the two parcels together as access to the second parcel (02306232) is not feasible. It is their belief that unnecessary hardship has been met because without a variance no building permit can be issued leaving the land incapable of use. Supreme Court already ruled and determined a right-of-way exists and there is legal access.

He continued that Hedrick Circle has been used by the five existing properties for decades and the right-of-way has existed since 1954. This right-of-way has been accessed by emergency vehicles and postal without issue. It is a low volume, low speed road that serves the neighborhood and there is no necessity to upgrade the road.

Matt Hedrick, 7508 Hedrick Circle stated support of the variance. He has lived here since he was a child

and this has always been a well maintained public use road.

Sandy Lusk, 9709 Midas Springs Road stated support of the variance. She said Hedrick Circle has been there since she was a kid and as a resident they have no issue receiving package and postal delivery.

Dee Bailey, 9716 Midas Springs Road stated support of the variance. Reference to the Supreme Court ruling that this was a right-of-way.

Clint Gandy is the proposed purchaser of the land in question, he stated that his intention is to build a single-family home with a possible mother-in-law suite or accessory dwelling for a total of two homes that would comply with the lot allowances and watershed requirements.

James Gilbert, 9811 Midas Springs Road stated opposition to the variance. Reference was made to previous decisions, Whitson vs Dowling and Owens vs Elliot regarding a deed offer being revokable until the right-of-way is completed and accepted by NCDOT thereby making the current right-of-way private as no offer of dedication has been made. J. Gilbert stated that a previous owner granted a private easement which does not carry over to the new owners.

Dee Bailey commented that the Supreme Court already ruled on this matter and determined that it is a public right-of-way. The case was appealed and the decision was upheld.

T. Montgomery spoke to the Supreme Court ruling and stated that an agreement had been drafted by all neighbors who had ownership to the center of the road to grant 15 feet on either side, to be dedicated as public right-of-way.

L. Speight, Planner 1 shared that on the staff visit to the right-of-way in question they found that Midas Springs Road had too much vegetation to allow a car to pass.

P. Jacobson asked if a map or GIS system identifies this portion of the road as Hedrick Circle, and who built the right-of-way in question. The applicant responded that neighbors have stated that there is no issue with receiving their mail or packages and their understanding is that the road is an old logging road.

Chairman Cecil asked if there has ever been an objection to the use of the road from Hedrick Circle to Midas Springs Road. All present stated that there has never been an objection to the use of the road. In 2016 during the Supreme Court hearing was the first objection presented by J. Gilbert and the judge upheld that this was a public right-of-way.

L. Speight commented that the applicant would still require a variance regardless of the Supreme Court decision regarding public right-of-way because it does not meet the Huntersville Zoning definition of a public street.

J. Passarelli asked if the owners had considered combining the lots given the buyers intent with the land and the issue with road frontage for parcel 02306232. The applicant responded that they are selling the two lots together because of this issue but leaving it to the purchaser to resolve if they will recombine the lots.

S. Genenbacher asked staff what the distance is from where NCDOT maintenance ends to these parcels. Staff responded that it is approximately 1,055 feet from end of NCDOT maintenance and approximately 700 feet of that is without gravel.

J. Passarelli asked J. Gilbert if their driveway and mailbox were on Midas Springs Road or Hedrick Circle. J. Gilbert responded that his address is 9811 Midas Springs Road. Chairman Cecil pointed out from the aerial images that it appears J. Gilbert mailbox is on Hedrick Circle and asked if he receives mail and packages at his home. J. Gilbert confirmed that his mailbox does face Hedrick Circle and he

does receive mail and packages at his home.

Chairman Cecil asked the applicant why they do not pave the road to meet the standard. The applicant stated that as with the 2015 variance request that was denied it was determined that it was cost prohibitive to curb, gutter and pave the road to public street standards.

K. Burton asked why the 2015 variance was denied and the recent 2021 variance was approved. J. Simoneau, Planning Director stated that the 2015 variance did not provide a commitment from the Fire Marshall stating that the road was usable by emergency vehicles. In the 2021 variance request the owners had already invested into clearing and maintaining the road and provided a statement from the Fire Marshall that the right-of-way was acceptable for emergency vehicles and the property could be serviced.

S. Genenbacher stated that what he was struggling with was the parcel 02306232 which has no road frontage at all. He asked the applicant and proposed buyer if they would be open to a stipulation that the lots be recombined. J. Loucks added if they would agree to a stipulation that their portion of the road be maintained to standards required for emergency vehicles.

J. Passarelli made a Motion to Approve V21-03 and accept the applicant's finding of facts, subject to the following conditions: 1) the lots be recombined and replatted such that each lot maintain separate road frontage along the public right-of-way between Hedrick Circle and Midas Springs Road and the right-of-way be maintained to the standard required for emergency vehicles. S. Genenbacher seconded the motion. The motion passed (6-1) with J. Bradshaw opposed.

3.B. V 21-04, Parcel ID 02306232

Lauren Speight, Planner I (also referred to herein as "staff") presented, and entered the Staff Report into the record through verbal testimony as indicated below, and written documentation, which is attached hereto as Exhibit A, and incorporated herein by reference.

Chairman Cecil requested both variances be heard as one and voted on individually. The Board concurred, there was no objection.

L. Speight, Planner I provided an overview of the variance request as follows:

BACKGROUND:

1. The subject property, Parcel ID 023-062-32 is zoned Rural (R) and located in Critical Area 1 (CA-1) of the Mountain Island Lake Watershed Overlay (MIL-O).
2. The subject property is located within the extraterritorial jurisdictional (ETJ) of the Town of Huntersville.
3. The subject property was last conveyed via deed to William H. and Barbara S. McQueen August 23, 1961 and Staff does not find any public record of a residential structure existing on the property. (Exhibit 1)
4. Staff have been in communication with the applicant for several years. Most recently, the applicant contacted Staff May 4, 2021 regarding requirements, specifically access requirements, for zoning approval of a building permit as the subject property and parcel 02306231 were under contract for sale. (Exhibit 2)
5. According to an email from NCDOT staff, the State-maintained portion of Midas Spring Road ends in front of 9730 Midas Springs Road as represented by the yellow line in the below map (also Exhibit 3). The blue line is an area that was not previously accepted for maintenance but will be accepted per a 1950 petition. The red line with arrows shows the unmaintained portion of Midas

Springs Road across the frontage of the subject property. Beyond parcel 023-052-04, this gravel drive is now overgrown.

6. There is no structure listed with the tax information for the parcel and there is no aerial data showing the lot has ever been developed.
7. The applicants would like to obtain a variance to relieve the requirement of Article 8.1 that lots shall abut a public street. (Exhibit 4)

“Any lot for which a building (or buildings) is to be erected or use is to be established shall abut a **public street** [defined below] with the following exceptions:

2. Any lot for which a residential use has been legally established prior to the effective date of this ordinance in accordance with provisions permitting establishment of use on a lot served by a private and exclusive recorded easement of at least 15 feet in width connecting said lot to a public street, may be used as if it abutted a street, provided that it is served by a driveway located on said easement. A lot of one (1) acre or more in area created through a division of land not subject to the subdivision ordinance shall be eligible for issuance of a permit to establish a single-family detached house, provided the lot is served by a private and exclusive recorded easement or fee-simple projection of the building lot at least 15 feet in width connecting said lot to a public street. A driveway accessible by emergency equipment must be located on said easement or lot projection. Lots created under these provisions shall be known as “easement-access lots” and “flag lots”, respectively...”

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STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit 4 for the applicant’s responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- F. The applicants most recently contacted staff May 4, 2021 regarding zoning approval for a building permit for the subject property (Exhibit 2).
- G. More than approximately 1,055 linear feet of surface, approved by NCDOT and accepted for maintenance, is required for the frontage of the subject property to comply

with Article 8.1 (Exhibit 5).

- H. There are various properties throughout Huntersville facing similar conditions. In 2021, an extension of Robert Street was privately constructed for the development of a single-family home in the Biltmore Park subdivision (Exhibit 6). Currently, there are lots in Biltmore and Norman Park that would require road improvements before a building permit was issued for construction on the property.
- I. The strict application of the Ordinance includes the frontage of the subject property must be paved to the applicable standards (NCDOT).
- J. Staff finds the requirements for this lot similar with the requirements of lots with a similar history in the Town and Staff does not find this requirement has been met.

- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- E. There are eight surrounding properties facing the same conditions (vacant lots on unmaintained apparent right-of-way) if the property owners wish to construct a building on their lot. (Exhibit 7)
- F. A variance was submitted July 2015 for 9840 Midas Springs Road (V15-01) to relieve the requirement of **Article 8.1** that lots shall abut a public street. V15-01 was denied by the Huntersville Board of Adjustment.
- G. Two variances were submitted April 2021 for 9808 Midas Springs Road (V21-01) and parcel 02305204 (V21-02) to relieve the requirement of Article 8.1 that lots shall abut a public street. The Huntersville Board of Adjustment approved V21-01 and V21-02.
- H. Staff finds this requirement has been met.

- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*

Staff Findings:

- A. The applicant is an heir of the property owner of the subject lot. The subject lot was last conveyed by deed August 23, 1961. Staff does not know of any action by the property owner or applicant to create this hardship.
- B. Staff finds this requirement has been met.

- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

- A. Lots must abut a public street per Article 8.1 to provide public safety and essential services. Per confirmation from Randy Frazier, Mecklenburg County Fire Marshall existing conditions of the below highlighted unmaintained gravel road meet the minimum requirements for fire emergency access to the subject lot. (Exhibit 8)
- B. Because the frontage of the property along Midas Springs Road is currently wooded, Staff and the County Fire Marshal Office agree any immediate access should be via the public drive that connects Hedrick Circle and Midas Springs Road. This would require a recombination of the lots for the subject parcel to abut the gravel drive that connects Hedrick Circle and Midas Springs Road.
- C. If this lot is recombined with parcel 023-062-31 such that access to the lot is via the right-of-way for public access that connects Midas Springs Road and Hedrick Circle and road conditions are satisfactory for emergency access, Staff finds this requirement is met.

STAFF POSITION:

The applicant is seeking a variance from Article 8.1 of the Zoning Ordinance, which requires any lot on which a building (or buildings) is to be erected or use is to be established shall abut a public street. Staff finds the application meets three of the four requirements for granting a variance and therefore recommend denial of the request based on the below findings:

1. The subject property, Parcel ID 023-062-32 is zoned Rural (R) and located in Critical Area 1 (CA-1) of the Mountain Island Lake Watershed Overlay (MIL-O).
2. The subject property is located within the extraterritorial jurisdictional (ETJ) of the Town of Huntersville.
3. The subject property was last conveyed via deed to William H. and Barbara S. McQueen August 23, 1961 and Staff does not find any public record of a residential structure existing on the property. (Exhibit 1)
4. Staff have been in communication with the applicant for several years. Most recently, the applicant contacted Staff May 4, 2021 regarding requirements, specifically access requirements, for zoning approval of a building permit as the subject property and parcel 02306231 were under contract for sale. (Exhibit 2)
5. According to an email from NCDOT staff, the State-maintained portion of Midas Spring Road ends in front of 9730 Midas Springs Road as represented by the yellow line in the below map (also Exhibit 3). The blue line is an area that was not previously accepted for maintenance but will be accepted per a 1950 petition. The red line with arrows shows the unmaintained portion of Midas Springs Road across the frontage of the subject property. Beyond parcel 023-052-04, this gravel drive is now overgrown.
6. There is no structure listed with the tax information for the parcel and there is no aerial data showing the lot has ever been developed.
7. The applicants would like to obtain a variance to relieve the requirement of Article 8.1 that lots shall abut a public street. (Exhibit 4)
 - a. “Any lot for which a building (or buildings) is to be erected or use is to be established shall abut a **public street** [defined below] with the following exceptions:
 - i. Any lot for which a residential use has been legally established prior to the effective date of this ordinance in accordance with provisions permitting establishment of use on a lot served by a private and exclusive recorded easement of at least 15 feet in width connecting said lot to a public street, may be used as if it abutted a street, provided that it is served by a driveway located on said easement. A lot of one (1) acre or more in area created through a division of land not subject to the subdivision ordinance shall be eligible for issuance of a permit to establish a single-family detached house, provided the lot is served by a private and exclusive recorded easement or fee-simple projection of the building lot at least 15 feet in width connecting said lot to a public street. A driveway accessible by emergency equipment must be located on said easement or lot projection. Lots created under these provisions shall be known as “easement-access lots” and “flag lots”, respectively...”
 - b. A **public street** is defined in Article 12 as:
 - c. “Street, Public: A right-of-way or fee simple tract of land which has been set aside for public travel, dedicated to the public by the recording of a subdivision plat, built to public street standards, and eligible for maintenance by either the Town of Huntersville or the State of North Carolina.”
8. More than approximately 1,055 linear feet of surface, approved by NCDOT and accepted for maintenance, is required for the frontage of the subject property to comply with Article 8.1

- (Exhibit 5).
9. There are various properties throughout Huntersville facing similar conditions. In 2021, an extension of Robert Street was privately constructed for the development of a single-family home in the Biltmore Park subdivision (Exhibit 6). Currently, there are lots in Biltmore and Norman Park that would require road improvements before a building permit was issued for construction on the property.
 10. The strict application of the Ordinance includes the frontage of the subject property must be paved to the applicable standards (NCDOT).
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 13. Two variances were submitted April 2021 for 9808 Midas Springs Road (V21-01) and parcel 02305204 (V21-02) to relieve the requirement of Article 8.1 that lots shall abut a public street. The Huntersville Board of Adjustment approved V21-01 and V21-02.
 14. The applicant is an heir of the property owner of the subject lot. The subject lot was last conveyed by deed August 23, 1961. Staff does not know of any action by the property owner or applicant to create this hardship.
 15. Lots must abut a public street per Article 8.1 to provide public safety and essential services. Per confirmation from Randy Frazier, Mecklenburg County Fire Marshall existing conditions of the below highlighted unmaintained gravel road meet the minimum requirements for fire emergency access to the subject lot. (Exhibit 8)
 16. Because the frontage of the property along Midas Springs Road is currently wooded, Staff and the County Fire Marshal Office agree any immediate access should be via the public drive that connects Hedrick Circle and Midas Springs Road. This would require a recombination of the lots for the subject parcel to abut the gravel drive that connects Hedrick Circle and Midas Springs Road.

J. Passarelli made a Motion to Approve V21-04 and accept the applicants findings of fact, subject to the following conditions: 1)the lots be recombined and replatted such that each lot maintain separate road frontage along the public right-of-way between Hedrick Circle and Midas Springs Road and the right-of-way be maintained to the standard required for emergency vehicles. S. Genenbacher seconded the motion. The motion passed (6-1) with J. Bradshaw opposed.

4. Other Business

4.A. Consider appointment of Chairman and Vice-Chairman

J. Passarelli nominated Ed Cecil to serve as Chairman. J. Loucks seconded. All regular and alternate members may vote. The appointment passed unanimously (9-0).

J. Passarelli nominated P. Jacobson to serve as Vice-Chairman. J. Loucks seconded. All regular and alternate members may vote. The appointment passed unanimously (9-0).

5. Adjourn

J. Passarelli made a Motion to Adjourn. J. Bradshaw seconded the motion. The motion passed unanimously (7-0).

**Town of Huntersville
Board of Adjustment
August 10, 2021**

To: Town Board

From: Lauren Speight, Planner 1

Date: August 10, 2021

Subject:

EXPLAIN REQUEST:

The applicant is requesting a variance from **Article 8.25** of the Zoning Ordinance. The request is for a variance to impact an intermittent stream buffer as a part of grading for development at the subject property.

ACTION RECOMMENDED:

Planning Department Staff find this variance application meets the four requirements for granting a variance request and therefore recommend approval based on the staff findings included in the staff report.

FINANCIAL IMPLICATIONS:

N/A

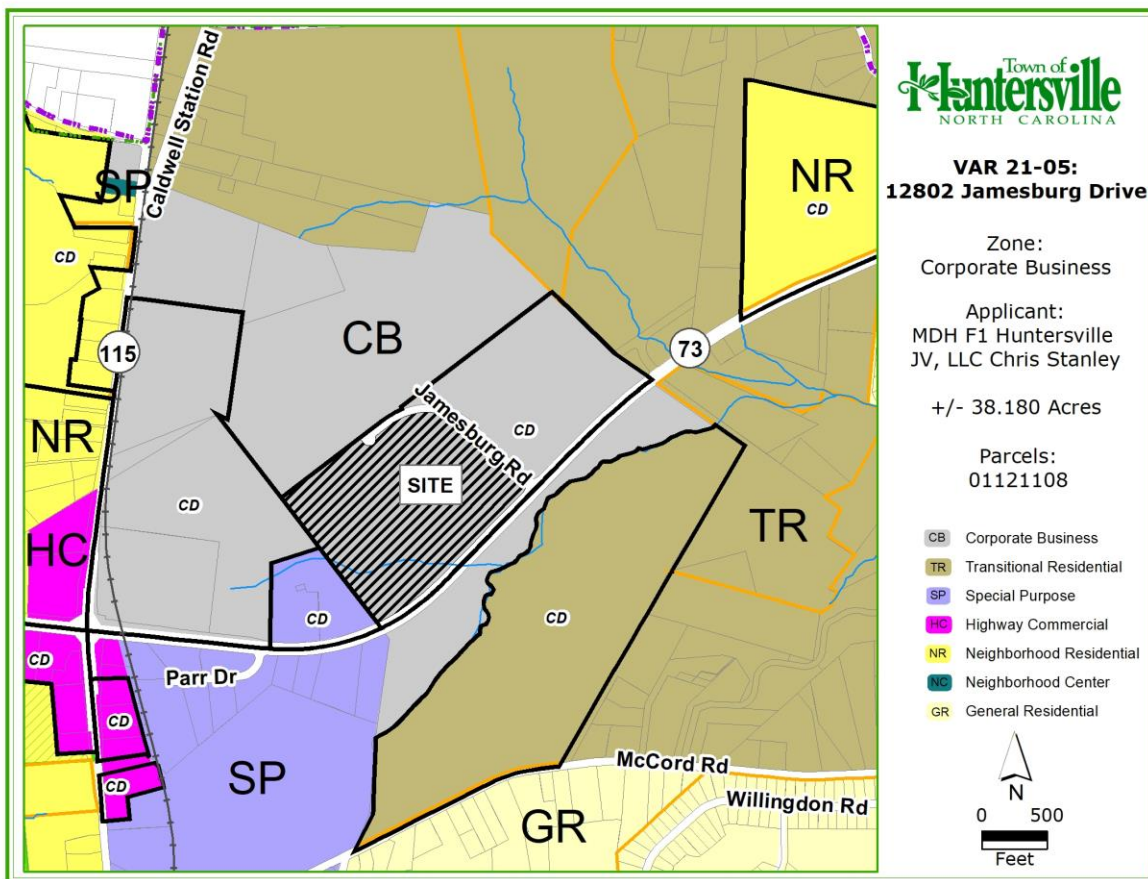
ATTACHMENTS:

1. V21-05 Staff Report

V 21-05, 12802 Jamesburg Drive
Parcel ID 01121108

Case #: V21-05
Address: 12802 Jamesburg Drive, Huntersville, NC 28078
Parcel #: 011-211-08
Acreage: 38.180 acres
Property Owner/Applicant: Chris Stanley on behalf of MDH F1 Huntersville JV, LLC
Owner/Applicant Address: 3715 Northside Parkway NW, Building 400, Suite 240
Staff: Lauren Speight – Planner II

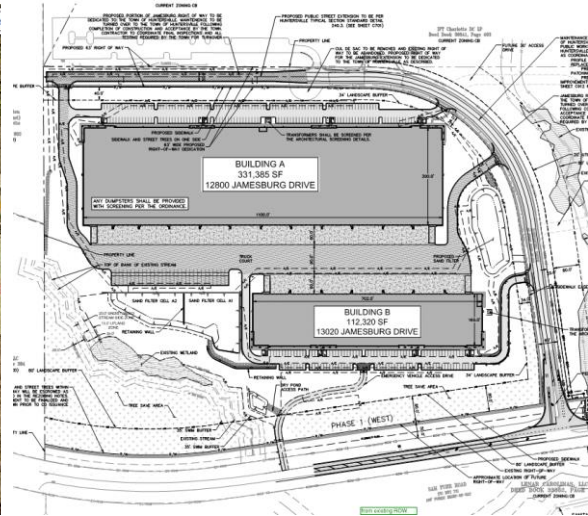
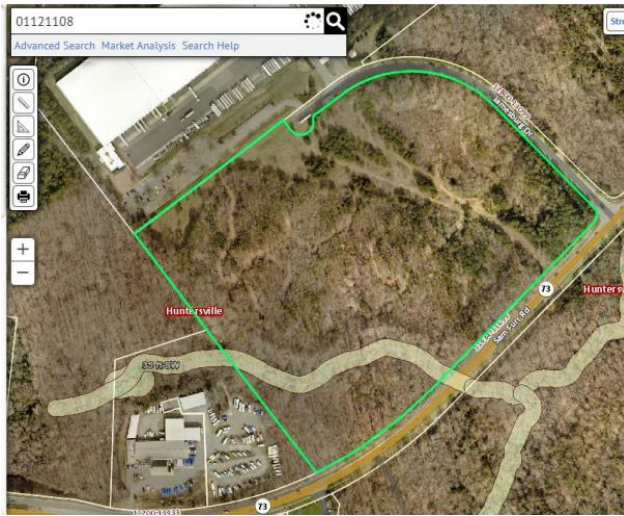
Currently under active development, the 38.180-acre property is served by unmaintained apparent right-of-way that is not a public street accepted for maintenance by NCDOT. The applicant, Chris Stanley on behalf of MDH F1 Huntersville JV, LLC is requesting a variance from **Article 8.25.11 S.W.I.M Buffers** to allow disturbance and mitigation of an intermittent stream as established in Section 8.25.11 (b) of the Zoning Ordinance.



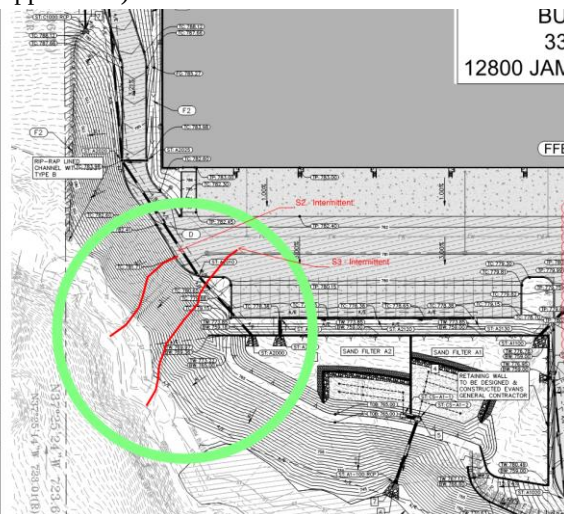
BACKGROUND:

1. The subject property, Parcel ID 011-211-08 is zoned Corporate Business (Conditional District), CB (CD).
2. The subject property is located within the Town of Huntersville.
3. The subject property is included within Rezoning R19-13 approved by the Huntersville Board of Commissioners 3/16/2020.
4. The subject property was conveyed via deed to MDH F1 Huntersville JV, LLC March 23, 2020. (Exhibit 1)

5. A commercial site plan was submitted to the Town for land development review April 27, 2020 and approved August 24, 2020. Polaris 3G and the approved commercial site plan did not show two intermittent streams (Exhibits 2 and 3) extended from the 35' SWIM buffer shaded in yellow below left. The two intermittent streams were also not identified on conditional rezoning plan R19-13.



6. A building permit for MMF Huntersville Distribution Park - Building A was issued September 24, 2020 based on the approved commercial site plan. (Exhibit 4)
7. A survey dated April 2021 by Kimley-Horn identified two intermittent streams not previously shown on Polaris 3G or the commercial site plan (Figure 4 of Variance Application).



8. A Certificate of Occupancy has not yet been issued for Building A.
9. Per Article 8.25.1 of the Zoning Ordinance, "The purpose of a stream buffer network is to filter pollutants, store floodwaters, provide habitat, and contribute to the "green infrastructure." Vegetated lands adjacent to the stream channel in the drainage basin serve as "buffers" to protect the stream's ability to fulfill its natural functions. Buffers have the primary natural functions of protecting water quality by filtering pollutants, providing intermittent storage for floodwaters, allowing channels to meander naturally, and providing suitable habitat for wildlife." (Exhibit 5)
10. Per Article 8.25.9 of the Zoning Ordinance, "Buffer boundaries including all buffer zones must be clearly delineated on all site-specific plans for Board of Commissioner approval, on all construction plans, including grading and clearing plans, erosion and sediment control plans, and site plans."
11. And, Per Article 8.25.4, S.W.I.M. Stream Buffers, throughout the jurisdiction of the Town of Huntersville shall be delineated by Mecklenburg County through its geographic information system (GIS), Polaris 3G.
12. Construction at the site has been ongoing since the building permit was issued in August 2020 (photo below from February 2021). Highlighted area shows approximate location of intermittent streams.



13. Staff received a variance application from Chris Stanley on behalf of MDH F1 Huntersville JV, LLC June 2, 2021. (Exhibit 6). According to the application, once it was discovered the two intermittent streams were impacted by development "...Town, State, and Corps were notified..."
14. Article 8.25.11 provides nine different options to mitigate impacts on SWIM Buffers when an applicant is seeking a variance. The ordinance states that any of these mitigation techniques shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2(e)(4) consistent with adopted plans and protection of public safety and welfare.

STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit 6 for the applicant's responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- A. The applicant states the S.W.I.M. Buffer surrounding the two intermittent streams has already been disturbed and additional hardship would result from the demolition of the existing construction and reestablishment of the original buffer.
- B. Per sheet C402 of the variance application, the area impacted by the intermittent streams is minimal.
- C. Polaris 3G and the approved commercial site plan do not show the two intermittent streams that are identified in Figure 4 of the variance application. (Exhibits 2 and 3)
- D. The applicant also states the Buffer did not appear on site plans as the result of an option not selected in the applicant's development system.
- E. If a variance is granted, mitigation is required for the disturbance per one of the prescribed methods indicated in Article 8.25.11.
- F. If a variance is not granted, restoration of the intermittent streams is required and the applicant would be required to remove permanent structures from the S.W.I.M. Buffer.
- G. As mitigation or restoration of the Buffer is required regardless, Staff finds unnecessary hardship would result from the strict application of the Ordinance. The additional demolition of within the Buffer would cause greater disturbance than mitigation alone.

- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- A. S.W.I.M. Stream Buffers are present throughout the Town of Huntersville and are not peculiar to the property.
- B. Polaris 3G and the approved commercial site plan do not show the two intermittent streams that identified in Figure 4 of the variance application. (Exhibits 2 and 3 and below)



- C. The applicant states the Buffer did not appear on site plans as the result of an option not selected in the applicant's plan system.
- D. Staff finds that while S.W.I.M. Stream Buffers are not unique to the subject property, it is unique the two intermittent streams were not delineated by Mecklenburg County through its geographic information system (GIS), Polaris 3G.
- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*
- Staff Findings:**
- A. According to the variance application, the property owner, MDH F1 Huntersville JV, LLC, "...was unaware of the stream buffer as it did not show up on the GIS maps and was turned off on the subject plans." The intermittent streams were also not identified on the conditional rezoning plans for R 19-13 approved by Huntersville on 3/16/2020.
- B. While Article 8.25.4 indicates, S.W.I.M. Stream Buffers, throughout the jurisdiction of the Town of Huntersville shall be delineated by Mecklenburg County through its geographic information system (GIS), the applicant also states the Buffer did not appear on site plans as the result of an option not selected in the applicant's development system.
- C. Staff does find the property owner, MDH F1 Huntersville JV, LLC was unaware of the intermittent SWIM buffers at the time a building permit was issued.
- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

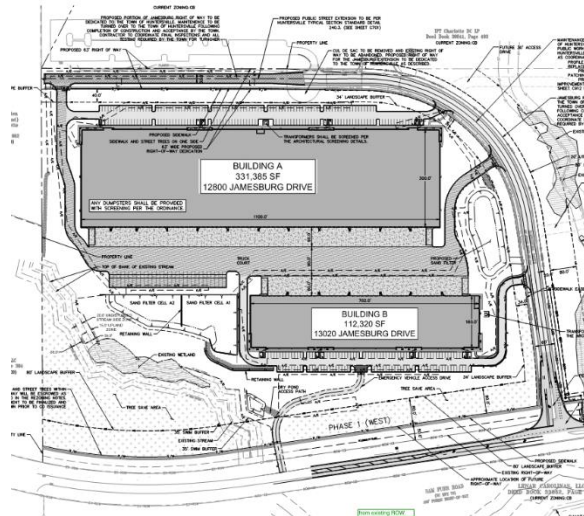
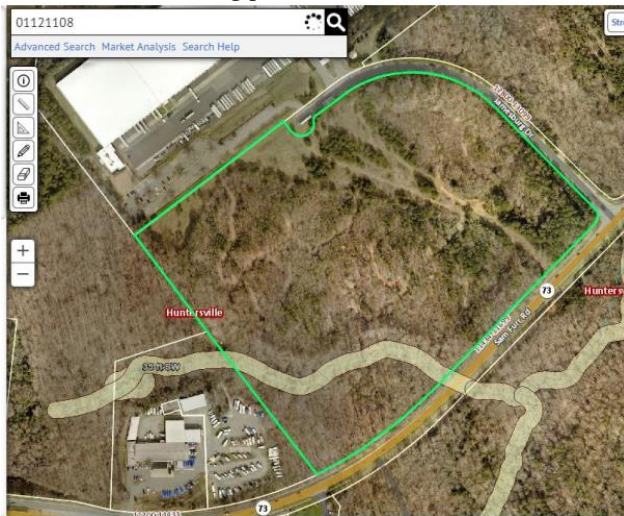
- A. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4. The applicant has submitted a buffer mitigation plan that uses one the approved mitigation techniques set for in Article 8.25.11.
- B. The applicant is proposing:
- (5) Bottom Land Hardwood Preservation. On a 2:1 acreage basis for impacted stream and buffer area 2 acres of bottomland hardwood for each acre of disturbed area), the owner may provide a combination of the preservation of existing bottom land hardwood forest or other specifically approved natural heritage area by conservation easement or other legal instrument, and the implementation of structural or non-structural BMPs to achieve specific pollutant removal targets within the impacted area. Plan to be approved by Mecklenburg County Land Use and Environmental Services Agency.
- C. The site mitigation plan is still under review and has not yet been approved by the County Storm Water Administrator.

- D. Pending the ultimate approval by the County Storm Water Administrator, Staff finds this requirement can be satisfied.

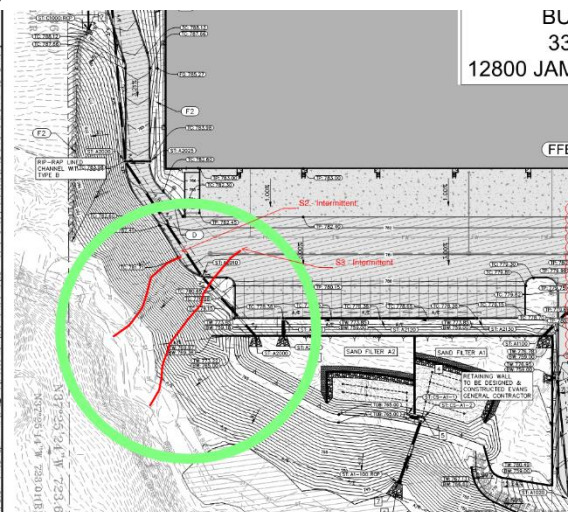
STAFF POSITION:

The applicant is seeking a variance from Article 8.25.11 of the Zoning Ordinance. Article 8.25.11 indicates strict parameters for disturbance allowed dependent upon the location of the disturbance within the Buffer and type of disturbance proposed. Disturbance not permitted by Article 8.25.11 requires a variance from the Board of Adjustment and a site mitigation plan approved by the designated agency. Staff finds the application meets the four requirements for granting a variance and therefore recommend approval of the request based on the below Staff Findings:

1. The subject property, Parcel ID 011-211-08 is zoned Corporate Business (Conditional District), CB (CD).
2. The subject property is located within the Town of Huntersville.
3. The subject property is included within Rezoning R19-13 approved by the Huntersville Board of Commissioners 3/16/2020.
4. The subject property was conveyed via deed to MDH F1 Huntersville JV, LLC March 23, 2020. (Exhibit 1)
5. A commercial site plan was submitted to the Town for land development review April 27, 2020 and approved August 24, 2020. Polaris 3G and the approved commercial site plan did not show two intermittent streams (Exhibits 2 and 3) extended from the 35' SWIM buffer shaded in yellow below left. The two intermittent streams were also not identified on conditional rezoning plan R19-13.



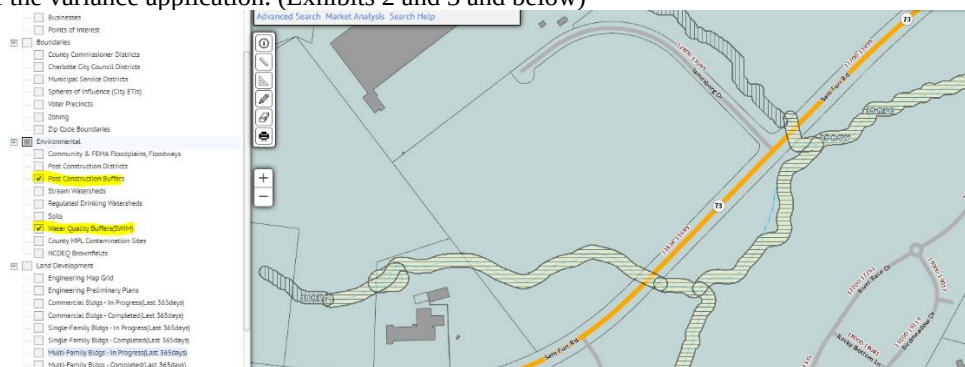
6. A building permit for MMF Huntersville Distribution Park - Building A was issued September 24, 2020 based on the approved commercial site plan. (Exhibit 4)
7. A survey dated April 2021 by Kimley-Horn identified two intermittent streams not previously shown on Polaris 3G or the commercial site plan (Figure 4 of variance application).



8. A Certificate of Occupancy has not yet been issued for Building A.
9. Per Article 8.25.1 of the Zoning Ordinance, “The purpose of a stream buffer network is to filter pollutants, store floodwaters, provide habitat, and contribute to the “green infrastructure.” Vegetated lands adjacent to the stream channel in the drainage basin serve as “buffers” to protect the stream’s ability to fulfill its natural functions. Buffers have the primary natural functions of protecting water quality by filtering pollutants, providing intermittent storage for floodwaters, allowing channels to meander naturally, and providing suitable habitat for wildlife.” (Exhibit 5)
10. Per Article 8.25.9 of the Zoning Ordinance, “Buffer boundaries including all buffer zones must be clearly delineated on all site-specific plans for Board of Commissioner approval, on all construction plans, including grading and clearing plans, erosion and sediment control plans, and site plans.”
11. And, Per Article 8.25.4, S.W.I.M. Stream Buffers, throughout the jurisdiction of the Town of Huntersville shall be delineated by Mecklenburg County through its geographic information system (GIS), Polaris 3G.
12. Construction at the site has been ongoing since the building permit was issued in August, 2020 (photo below from February 2021). Highlighted area shows approximate location of intermittent streams.



13. Staff received a variance application from Chris Stanley on behalf of MDH F1 Huntersville JV, LLC June 2, 2021. (Exhibit 6). According to the application, once it was discovered the two intermittent streams were impacted by development “...Town, State, and Corps were notified...”.
14. Article 8.25.11 provides nine different options to mitigate impacts on SWIM Buffers when an applicant is seeking a variance. The ordinance states that any of these mitigation techniques shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2(e)(4) consistent with adopted plans and protection of public safety and welfare.
15. The applicant states the S.W.I.M. Buffer surrounding the two intermittent streams has already been disturbed and additional hardship would result from the demolition of the existing construction and reestablishment of the original buffer.
16. Per sheet C402 of the variance application, the area impacted by the intermittent streams is minimal.
17. If a variance is granted, mitigation is required for the disturbance per one of the prescribed methods indicated in Article 8.25.11.
18. If a variance is not granted, restoration of the intermittent streams is required and the applicant would be required to remove permanent structures from the S.W.I.M. Buffer.
19. As mitigation or restoration of the Buffer is required regardless, Staff finds unnecessary hardship would result from the strict application of the Ordinance. The additional demolition of within the Buffer would cause greater disturbance than mitigation alone.
20. S.W.I.M. Stream Buffers are present throughout the Town of Huntersville and are not peculiar to the property.
21. Polaris 3G and the approved commercial site plan do not show the two intermittent streams that are called out in Figure 4 of the variance application. (Exhibits 2 and 3 and below)



22. While Article 8.25.4 indicates, S.W.I.M. Stream Buffers throughout the jurisdiction of the Town of Huntersville shall be delineated by Mecklenburg County through its geographic information system (GIS), the applicant states the Buffer did not appear on site plans as the result of an option not selected in the applicant's plan system.
23. Staff finds that while S.W.I.M. Stream Buffers are not unique to the subject property, it is unique the two intermittent streams were not delineated by Mecklenburg County through its geographic information system (GIS), Polaris 3G.
24. According to the variance application, the property owner, MDH F1 Huntersville JV, LLC, "...was unaware of the stream buffer as it did not show up on the GIS maps and was turned off on the subject plans." The intermittent streams were also not identified on the conditional rezoning plans for R 19-13 approved by Huntersville on 3/16/2020.
25. Staff does find the property owner, MDH F1 Huntersville JV, LLC was unaware of the intermittent SWIM buffers at the time a building permit was issued.
26. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4. The applicant has submitted a buffer mitigation plan that uses one the approved mitigation techniques set for in Article 8.25.11.
27. The applicant is proposing:
 - (5) Bottom Land Hardwood Preservation. On a 2:1 acreage basis for impacted stream and buffer area 2 acres of bottomland hardwood for each acre of disturbed area), the owner may provide a combination of the preservation of existing bottom land hardwood forest or other specifically approved natural heritage area by conservation easement or other legal instrument, and the implementation of structural or non-structural BMPs to achieve specific pollutant removal targets within the impacted area. Plan to be approved by Mecklenburg County Land Use and Environmental Services Agency.
28. The site mitigation plan is still under review and has not yet been approved by the County Storm Water Administrator
29. Pending the ultimate approval by the County Storm Water Administrator, Staff finds this requirement can be satisfied.

EXAMPLE MOTION: V21-05, 12802 Jamesburg Drive, Parcel ID 011-211-08, Huntersville, NC 28078

Planning Department	Board of Adjustment
APPROVAL: In considering the application for V21-05, a request by Chris Stanley on behalf of MDH F1 Huntersville JV, LLC for a variance from Article 8.25.11 of the Zoning Ordinance, the Planning Department recommends approval of the variance request based on a finding that the request meets all of the four criteria, outlined in the Zoning Ordinance for granting a variance.	APPROVAL: In considering the application for V21-05, a request by Chris Stanley on behalf of MDH F1 Huntersville JV, LLC for a variance from Article 8.25.11 of the Zoning Ordinance, the Board of Adjustment approves the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request meets ____ of the four criteria for granting a variance based on the following findings of fact: <i>(explain findings of fact)</i>
	DENIAL: In considering the application for V21-05, a request by Chris Stanley on behalf of MDH F1 Huntersville JV, LLC for a variance from Article 8.25.11 of the Zoning Ordinance, the Board of Adjustment denies the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request does not meet the criteria for granting a variance based on the following findings of fact: <i>(explain findings of fact)</i>

Exhibit 1 –2020 Deed of Subject Property, DB 34393, P 628

Exhibit 2 – Subject Property with S.W.I.M. Buffer Layer in Polaris 3G

Exhibit 3 – Page 301 from Approved Commercial Site Plan

Exhibit 4 – Building Permit for Building A

Exhibit 5 – Article 8.25 of Zoning Ordinance

Exhibit 6 – Variance Application with Attachments

Exhibit 1 –2020 Deed of Subject Property, DB 34393, P 628

For Registration
 Fredrick Smith
 Register of Deeds
 Mecklenburg County, NC
 Electronically Recorded
 2020 Mar 23 10:36 AM RE Excise Tax: \$ 0.00
 Book: 34393 Page: 628 - 632 Fee: \$ 26.00
 Instrument Number: 2020040394

Fredrick Smith

Excise Tax \$0.00 Recording Time, Book and Page

Tax Lot No.: 011-033-05, 011-033-12 and 011-034-01

Prepared by:

Anna R. Kouba, Esq.
 Morris, Manning & Martin, LLP
 1401 Eye Street, N.W., Suite 600
 Washington, D.C. 20005
 NC Bar # 36879

Mail after recording to:

MDH F1 Huntersville JV, LLC
 3715 Northside Parkway, NW
 Building 400, Suite 240
 Atlanta, GA 30327

Brief description for the Index: Lot 2, DSC Logistics – Map 1, Map Book 26, Page 902

NORTH CAROLINA SPECIAL WARRANTY DEED

THIS DEED made as of this 20 day of March, 2020, by and between

GRANTOR	GRANTEE
Louise G. Howard Family Investments, L.P. c/o Atlanta Hardwood 5596 Riverview Road Mableton, GA 30126	MDH F1 Huntersville JV, LLC 3715 Northside Parkway, NW Building 400, Suite 240 Atlanta, GA 30327

The designation Grantor and Grantee, as used herein, shall include said parties, their heirs, successors and assigns, and shall include singular, plural, masculine, feminine or neuter as required by context.

Submitted electronically by "First American Title Insurance Company - NCS Atlanta"
 in compliance with North Carolina statutes governing recordable documents
 and the terms of the submitter agreement with the Mecklenburg County Register of Deeds.

fee simple, all that certain lot or parcel of land situated in Mecklenburg County, North Carolina, and more particularly described as follows:

See Exhibit "A" attached hereto and incorporated herein by reference. Said property having been acquired by James W. Howard, Sr. by instrument recorded in Book 2487, Page 320, Mecklenburg County Registry. James W. Howard, Sr. died on October 19, 1992. See Estate File # 94 E 253 regarding Estate of James W. Howard, Sr.

Together with all appurtenances thereto and privileges thereto, together with (i) any land lying in the bed of any strips, gores, highway, street, road or avenue, opened or proposed, in front of or abutting or adjoining such tract or piece of land and any easements and appurtenances pertaining thereto and (ii) any easements, rights-of-way, covenants, development rights, water rights, air rights, subsurface rights, oil gas and other hydrocarbon substances, mineral rights, licenses privileges, rights of ingress or egress other interests, rights and benefits belonging to, owned by or vested in Grantor as related thereto.

TO HAVE AND TO HOLD the aforesaid lot or parcel of land and all privileges and appurtenances thereto belonging to the Grantee in fee simple.

And Grantor covenants with Grantee, that Grantor has done nothing to impair such title as Grantor received, and Grantor will warrant and defend the title against the lawful claims of all persons claiming by, under or through Grantor, except for the exceptions hereinafter stated on Exhibit "B".

The Property does not contain the primary residence of Grantor.

Title to the Property is subject to the following matters: See Exhibit "B".

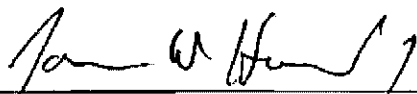
[SIGNATURE APPEARS ON FOLLOWING PAGE]

IN WITNESS WHEREOF, Grantor has executed this Deed under seal on the day and year set forth above.

GRANTOR:

**LOUISE G. HOWARD FAMILY INVESTMENTS,
L.P., a Georgia limited partnership**

By: Howard Family Holdings, Inc., a Georgia
corporation, its sole general partner

By: 

Name: James W. Howard, Jr.

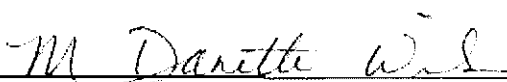
Title: President

(CORPORATE SEAL)

STATE OF GA
COUNTY OF Cobb

I certify that the following person personally appeared before me this day, each acknowledging to me that he or she voluntarily signed the foregoing document for the purpose stated therein and in the capacity indicated.

Date: 3-18, 2020


Official Signature of Notary

M Danette Wilson
Notary's printed or typed name, Notary Public

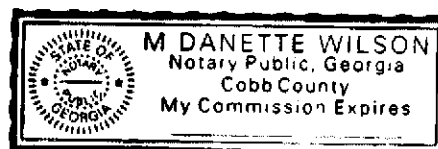


EXHIBIT "A"
LEGAL DESCRIPTION

BEING ALL OF LOT 2, DSC LOGISTICS-MAP 1 AS SHOWN ON PLAT RECORDED IN
MAP BOOK 26, PAGE 902 OF THE MECKLENBURG COUNTY PUBLIC REGISTRY.

EXHIBIT "B"
PERMITTED EXCEPTIONS

1. Taxes and assessments for the year 2020 and subsequent years, a lien not yet due and payable.
2. Easements and any other facts as shown on plat recorded in Plat Book 26, Page 902, Mecklenburg County Registry.
3. Easement to Board of Transportation, an agency of the State of North Carolina recorded in Book 3924, Page 177, Mecklenburg County Registry.
4. Easement to Board of Transportation, an agency of the State of North Carolina recorded in Book 3924, Page 181, Mecklenburg County Registry.
5. Easement to Duke Power Company recorded in Book 4145, Page 939, Mecklenburg County Registry.
6. Easement to Duke Power Company recorded in Book 6075, Page 857, Mecklenburg County Registry.
7. Easement to Dry Storage Corporation, an Illinois corporation recorded in Book 8242, Page 612, Mecklenburg County Registry.

**Exhibit 2 – Subject Property with S.W.I.M. Buffer Layer in
Polaris 3G**



POLARIS 3G

[Tutorials](#) [Quick Tips](#) [Report Issues](#) [More Map Apps](#)

[Search Results](#) [Layers/Labels](#) [Property Report](#) [Zoom To](#)

Property Key

Parcel ID GIS ID

01121108 01121108

Addresses located on Property (Postal City)

13020 JAMESBURG DR B HUNTERSVILLE NC 2807 ▼

Owner Name Mailing Address

MDH FI HUNTERSVILLE JV
LLC 3715 NORTHSIDE PARKWAY
NW BLDG 400 STE 240
ATLANTA GA 30327

[Is ownership or parcel boundary wrong?](#) Request Change

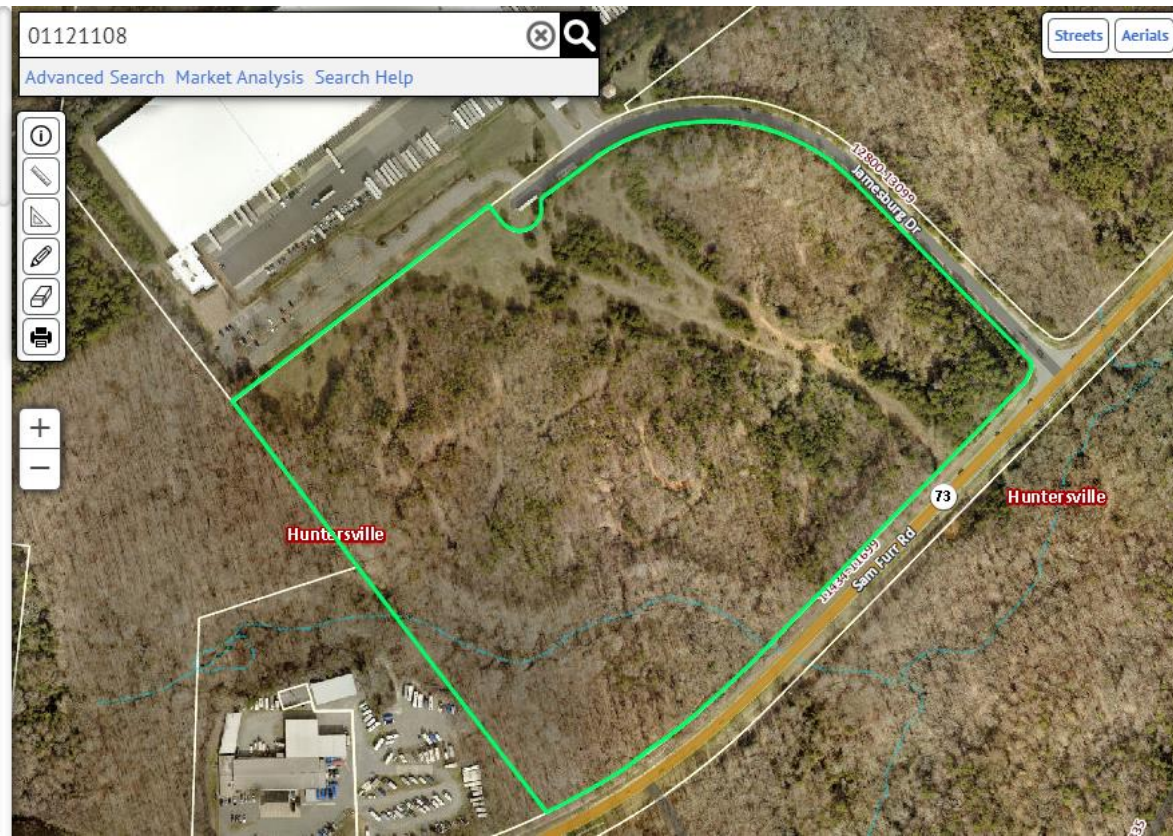
[Is the mailing address wrong?](#) Request Change

Link To

[Google Street View](#)

[Birdseye View maintained by Mecklenburg County](#)

[Unselect Property](#)





POLARIS 3G

[Tutorials](#) [Quick Tips](#) [Report Issues](#) [More Map Apps](#)

[Search Results](#) [Property Details](#) [Lyr Dictionary](#) [Legend](#)



Switching on too many overlays slows down the map

Overlay Toggle

- ☐ Labels
 - ☐ Lot Dimensions
 - ☐ Address No
 - ☐ Parcel IDs
 - ☐ Businesses
 - ☐ Points of Interest
- ☐ Boundaries
 - ☐ County Commissioner Districts
 - ☐ Charlotte City Council Districts
 - ☐ Municipal Service Districts
 - ☐ Spheres of Influence (City ETJs)
 - ☐ Voter Precincts
 - ☐ Zoning
 - ☐ Zip Code Boundaries
- ☒ Environmental
 - ☐ Community & FEMA Floodplains, Floodways
 - ☐ Post Construction Districts
 - ☐ Post Construction Buffers
 - ☐ Stream Watersheds
 - ☐ Regulated Drinking Watersheds
 - ☐ Soils
 - ☒ Water Quality Buffers(SWIM)

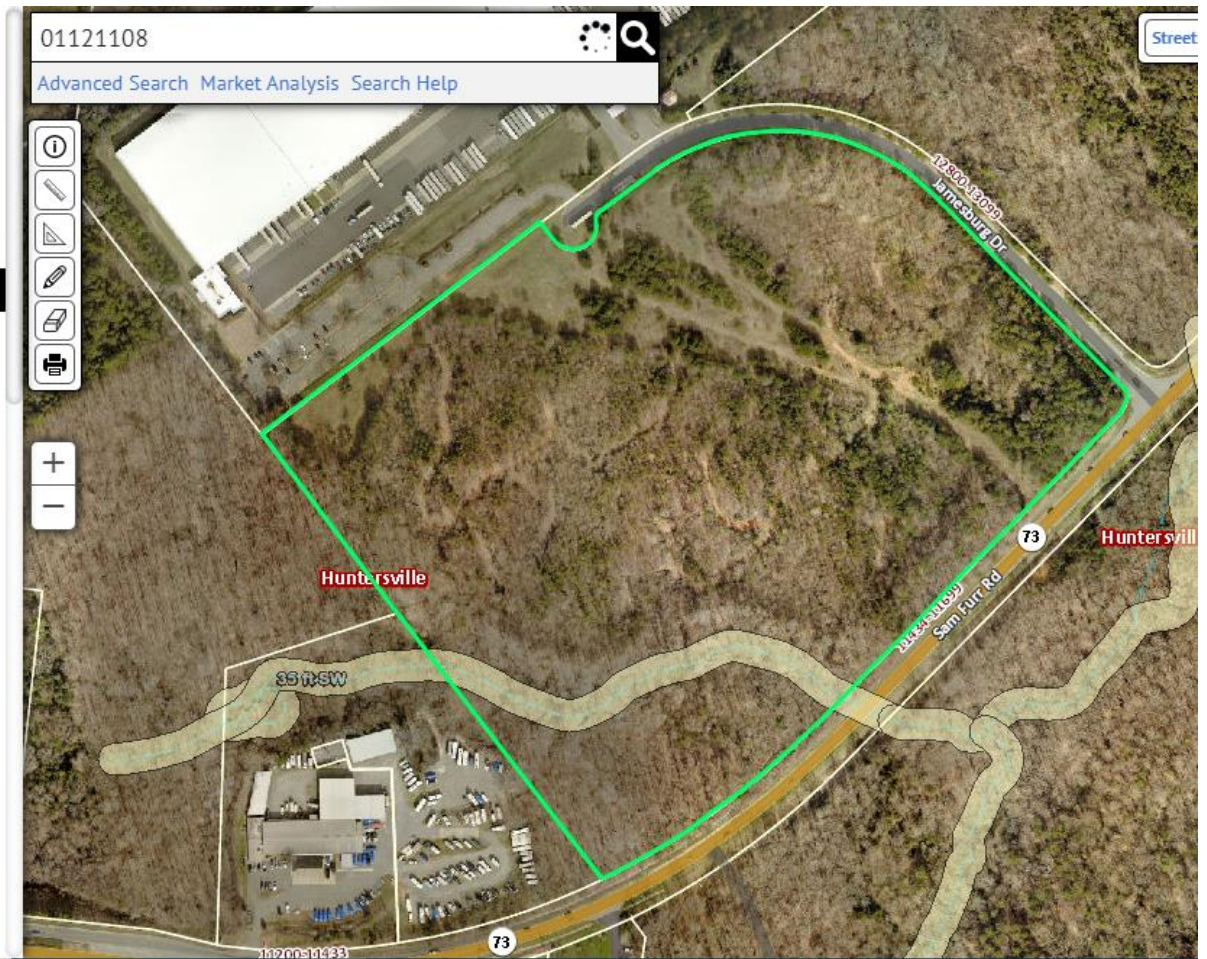
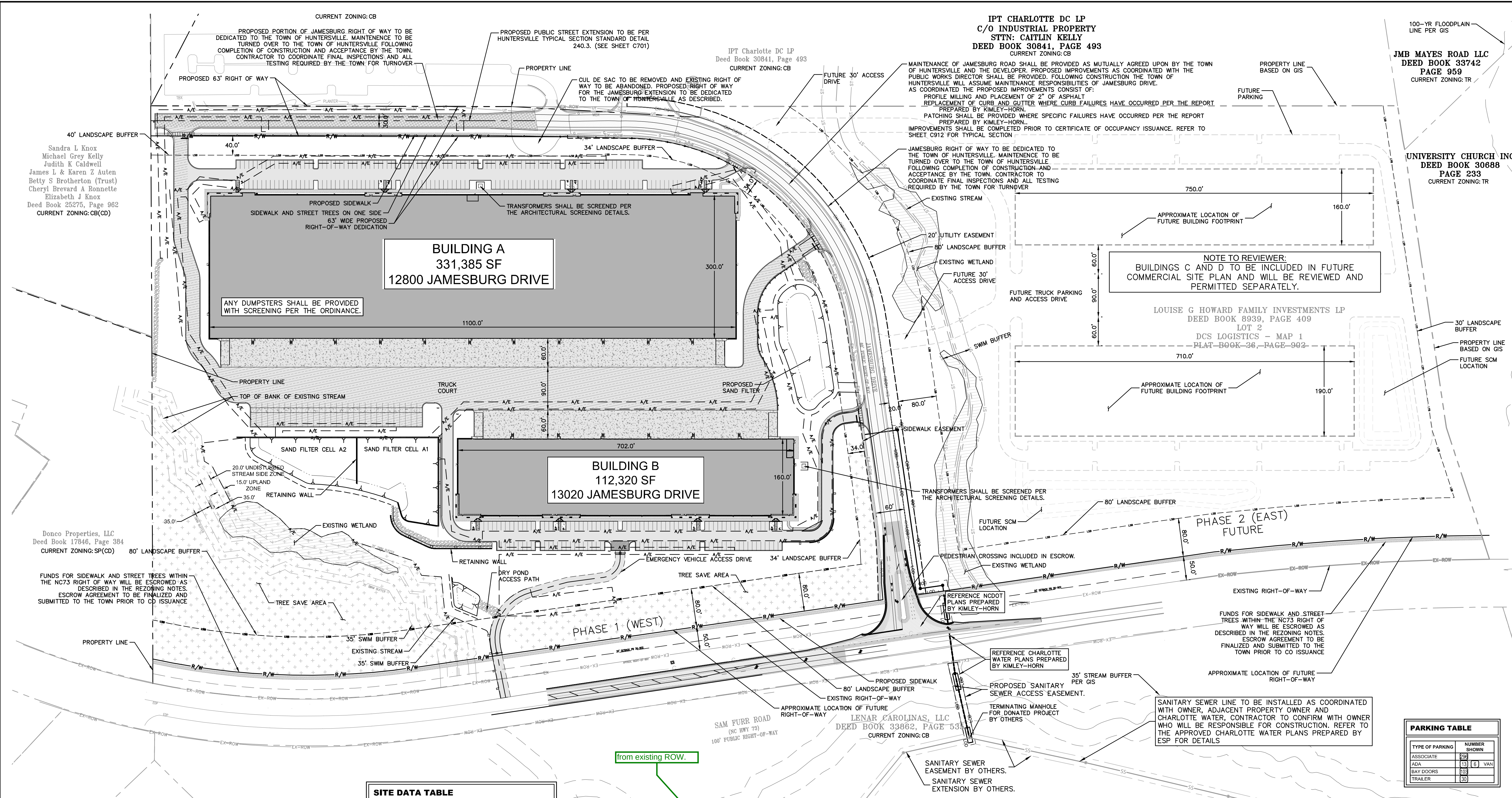


Exhibit 3 – Page 301 from Approved Commercial Site Plan



CONSTRUCTION TIMELINE	
<u>PHASE 1</u>	
CONSTRUCTION START - - - - -	07/15/2020
CONSTRUCTION END - - - - -	10/15/2021
<u>PHASE 2 (APPROX.)</u>	
DESIGN/PERMITTING START - - - -	07/15/2021
CONSTRUCTION START - - - - -	12/01/2020
CONSTRUCTION END - - - - -	03/01/2023

PRIOR TO C.O. ISSUANCE <u>REQUIRED BY TOWN OF HUNTERSVILLE:</u> CONTRACTOR SHALL PROVIDE FINAL PLAT AS REQUIRED BY THE TOWN OF HUNTERSVILLE PRIOR TO THE ISSUANCE OF THE CERTIFICATION OF OCCUPANCY. IF CONTRACTOR WISHES TO OBTAIN THE CERTIFICATE OF OCCUPANCY PRIOR TO FINAL COMPLETION OF THE PROJECT, BONDS MUST BE POSTED IN ACCORDANCE TO THE TOWN OF HUNTERSVILLE AND MECKLENBURG COUNTY REQUIREMENTS.

SITE DEVELOPMENT PLAN NOTES	
1.	SEE "GENERAL NOTES" SHEET FOR SITE GENERAL CONSTRUCTION NOTES, PAVING, STRIPING, GRADING, AND ZONING NOTES.
2.	SEE "EXISTING CONDITIONS" FOR COMPLETE BOUNDARY DESCRIPTION, ADJOINING PROPERTIES, ZONING AND USE.
3.	SEE "SITE DETAILS" SHEETS FOR DETAILS REFERENCED ON THE SITE PLANS.
4.	ALL DIMENSIONS SHOWN ARE MEASURED FROM THE FACE OF CURB TO FACE OF CURB, UNLESS OTHERWISE NOTED. DIMENSIONS LABELED "EOP" ARE MEASURED FROM LIP OF GUTTER TO LIP OF GUTTER.
5.	DIMENSIONS TO THE BUILDING ARE MEASURED TO THE EXTERIOR OF THE FOUNDATION WALL UNLESS OTHERWISE SHOWN.
6.	BEARINGS, DIMENSIONS AND EASEMENTS ARE SHOWN FOR REFERENCE. REFER TO RECORDED PLATS AND SURVEYS FOR ADDITIONAL PROPERTY INFORMATION.
7.	CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF VESTIBULES, SLOPE PAVING, SIDEWALKS, EXIT PORCHES, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

SITE DATA TABLE	
PROJECT AREA:	± 38.2 AC
TOTAL DISTURBED AREA	± 34.2 AC
PARCEL TAX ID:	01121108
STREET ADDRESS:	BUILDING A: JAMESSBURG DR
	BUILDING B: JAMESSBURG DR
	12800 13020
ZONING:	CB-CD
PROPOSED USE:	OFFICE/ LIGHT INDUSTRIAL/WAREHOUSE
BUILDING TYPE:	WORKPLACE
PARKING SUMMARY:	
BUILDING A:	
OFFICE (1/500SF)	16,500 SF
WAREHOUSE (0.25/1000SF)	314,885 SF
TOTAL SF	331,385 SF
REQUIRED PARKING	112 SPACES
PROVIDED PARKING	180 SPACES
BUILDING B:	
OFFICE (1/500SF)	5,600 SF
WAREHOUSE (0.25/1000SF)	106,720 SF
TOTAL SF	112,300 SF
REQUIRED PARKING	38 SPACES
PROVIDED PARKING	116 SPACES
TOTAL IMPERVIOUS AREA (PAYEMENT, WALKS, AND BUILDINGS)	EXISTING: ±2.2 AC PROPOSED: ±20.4 AC
OPEN SPACE	PROVIDED: ±15.6 AC

RESERVATION OF RIGHT-OF-WAY

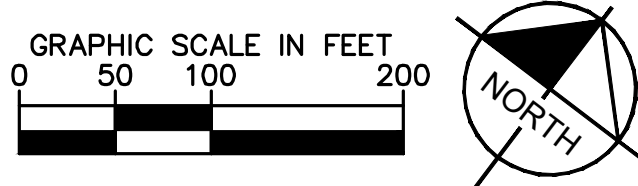
1.	50 FEET FROM THE CENTERLINE OF THE ROAD TO BE RESERVED FOR FUTURE NCDOT RIGHT-OF-WAY. SIDEWALK EASEMENT MEASURED 5 FEET IN WIDTH MUST BE RECORDED PRIOR TO ISSUANCE OF BUILDING PERMITS. IF RESERVING RIGHT-OF-WAY, A SIDEWALK EASEMENT WILL NEED TO BE DOCUMENTED BY A RECORDED PLAT, WHICH WILL REQUIRE REVIEW AND APPROVAL BY THE OFFICE OF HUNTERSVILLE PRIOR TO ISSUANCE OF BUILDING PERMITS.
2.	MECHANICAL EQUIPMENT AT GROUND LEVEL SHALL BE PLACED ON THE PARKING LOT SIDE OF BUILDING AWAY FROM BUILDINGS ON ADJACENT SITES, AND SHALL BE SCREENED FROM VIEW WITH AN OPAQUE SCREEN.
3.	STREET LEVEL WINDOWS SHOULD BE UNTINTED, TINTED GLASS WITH A MINIMUM VISUAL LIGHT TRANSMITTANCE FACTOR OF .35 IS PERMITTED, MIRROR OR REFLECTIVE GLASS IS NOT PERMITTED IN ANY LOCATION.
4.	TRAFFIC CONTROL PLANS SHOWING SIGNAGE AND PAVEMENT MARKINGS SHALL BE PREPARED IN ACCORDANCE WITH THE GUIDANCE OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. THE DEVELOPER IS RESPONSIBLE FOR THE INITIAL INSTALLATION OF THE DEVICES OR MARKINGS AND THE MAINTENANCE THEREOF UNTIL THE PUBLIC ACCEPTS THE STREET FOR MAINTENANCE.
5.	DUMPSTERS SHALL BE SET ON A CONCRETE BED AND SHALL BE HIDDEN BY AN OPAQUE FENCE OR WALL OF SUFFICIENT HEIGHT TO SCREEN THE BIN AND ANY APPURTENANCES, BUT NOT LESS THAN 6' IN HEIGHT.
6.	WHEREVER USED, DETAILS OF THE WALLS BUILDING(S) SHOULD BE CONSTRUCTED TO MATCH THE ARCHITECTURAL DETAIL OF THE MAIN BUILDING(S).
7.	ALL MECHANICAL EQUIPMENT AND ROOFTOP EQUIPMENT SHALL BE SCREENED FROM VIEW WITH AN OPAQUE SCREEN.

OFFSITE ROADWAY REQUIREMENTS

OFF-SITE ROADWAY OFFSITE ROADWAY IMPROVEMENTS MAY BE REQUIRED, IF OFFSITE ROADWAY IMPROVEMENTS ARE DETERMINED TO BE REQUIRED, BASED ON THE RECOMMENDATIONS OF THE APPROVED TIA. OFFSITE ROADWAY IMPROVEMENTS SHALL BE PROVIDED AS MUTUALLY AGREED UPON BY THE TOWN OF HUNTERSVILLE, NCDOT, AND THE DEVELOPER. OFFSITE ROADWAY IMPROVEMENTS MAY BE PHASED WITH THE DEVELOPMENT PHASING AND AS COORDINATED WITH THE STATES TRANSPORTATION IMPROVEMENT PROGRAM, IF MUTUALLY AGREED UPON BY NCDOT, THE TOWN OF HUNTERSVILLE, AND THE DEVELOPER. THE DEVELOPER MAY PARTICIPATE IN THE TIP PROJECT VIA FEE IN LIEU TO PROVIDE THE OFFSITE ROADWAY IMPROVEMENTS REQUIRED IN THE PROJECTS APPROVED TIA. ALL ROAD IMPROVEMENTS SHALL BE INSTALLED PRIOR TO CO ISSUANCE. PROPOSED IMPROVEMENTS SHALL CONSIST OF: <u>RICH HATCHET ROAD AND SAM FURR ROAD</u> RETAINING OF INTERSECTION CONSTRUCTION OF A EASTBOUND LEFT-TURN LANE IN THE EXISTING CHEVRONED AREA THIS IMPROVEMENT WILL REQUIRE AN UPDATE TO THE EXISTING SIGNAL PLAN <u>OLD STATESVILLE ROAD AND SAM FURR ROAD</u> RETAINING OF INTERSECTION THIS IMPROVEMENT WILL REQUIRE AN UPDATE THE EXISTING SIGNAL PLAN <u>SAM FURR ROAD AND JAMESBURG DRIVE</u> CONSTRUCTION OF A WESTBOUND RIGHT-TURN LANE WITH 100' STORAGE CONSTRUCTION OF A SOUTHBOUND LEFT-TURN LANE WITH 150' OF STORAGE INCREASE THE EASTBOUND LEFT-TURN LANE STORAGE FROM 200' OF STORAGE TO 250' OF FULL STORAGE WITH AN APPROPRIATE TAPER LENGTH ADDITIONALLY, PER THE DIRECTION OF NCDOT, THE JAMESBURG WAREHOUSE DEVELOPMENT WILL NEED TO CONSTRUCT A THREE-LANE SECTION FROM THIS TURN LANE TO PROPOSED WESTBOUND LEFT-TURN TURN LANE FOR THE NORTHBROOK DEVELOPMENT THAT IS BEING CONSTRUCTED ON THE SOUTHSIDE OF NC 73.

SITE PLAN DATA TABLE	
PROPOSED BUFFERS (PARCEL #1 - WEST)	
SAM FURR ROAD - FRONT BUFFER	80 FT
JAMESBURG DRIVE - REAR BUFFER	34 FT
JAMESBURG DRIVE - SIDE BUFFER (NORTHEAST)	34 FT
SIDE BUFFER (SOUTHWEST)	N/A
PROPOSED BUFFERS (PARCEL #2 - EAST)	
SAM FURR ROAD - FRONT BUFFER	60 FT
REAR BUFFER	N/A
JAMESBURG DRIVE - SIDE BUFFER (SOUTHWEST)	80 FT
SIDE BUFFER (NORTHEAST)	30 FT

PARKING TABLE	
TYPE OF PARKING	NUMBER SHOWN
ASSOCIATE	296
ADA	13 6 VAN
BAY DOORS	103
TRAILER	30



Know what's below.
Call before you dig.

Exhibit 4 – Building Permit for Building A



Building Permit

Commercial

Property Details:

Address:	13035 JAMESBURG DR	Tax Jurisdiction:	HUNTERSVIL LE
Subdivision:		Parcel Id:	01121110
Owner:	MDH Partners, LLC	Owner Phone No:	4049208479
Owner Address:	3715 Northside Parkway NWAtlanta, GA 30327		

Block:	Lot:	Land Area:	Corner Lot: N	Irregular Lot: N	Through Lot: N
Minimum Setbacks (ft.):	Front:	Rear:	Right Side:	Left Side:	

Project Details:

Project Number:	411311	Res Master Plan #:	
Project Name:	MMF Huntersville Distribution Park - Building A		
USDC Code:	329 - Commercial New Structures - not bldgs (retaining wall)		
Occupancy:	S1 * STORAGE - MODERATE HAZARD		
Lien Agent:	Agent: Chicago Title Company, LLCPhone: (888) 690-7384Fax: (919) 489-5231Email: support@liensnc.comMailing Address: 19 W Hargett ST Unit: 507, Raleigh, North Carolina 27601Physical Address: 19 W Hargett ST Unit: 507, Raleigh, North Carolina 27601	Lien Agent No:	1252023

Trade Details:

Building

Details:	Project is a speculative empty shell for storage occupancy. Potential for single or multiple future tenants. Construction is of load bearing tilt-up concrete panels with steel interior structure with a 32' clear height. The exterior wall finish will be reveal accents and texture paint with skylights along the dock wall. The roof is to be white TPO with skylights. Site is being graded and paved for truck access and auto parking, as well as landscaping under a separate permit. See civil scope below. Building A - 2000 amp service, code required emergency lighting, fire alarm panel with sprinkler monitoring, exterior wall pack lighting. Installation of unit heaters, exhaust fans, louvers, and gas piping for shell building. Shell building with (2) two 6" sanitary sewer systems and (1) one 2" domestic water line with 2" pressure reducing valve and (4) four non freeze wall hydrants.	SI Required: Y	Bedroom Addition:
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Type of Work: New

Square Footage:	Heated:	Renovated:	Deck:
	Unheated: 332165	Converted:	

Does the weight of the PV system exceed 3lbs per square foot?

Does the roof possess more than one layer of asphalt shingles?

Does the roofing material consist of a type other than asphalt or metal?

This permit will expire if work either has not started within 6 months or is discontinued for a period of 12 months.

Inspection required for verification of progress made.

No credit or refund will be given unless applied for within 120 days after a permit has expired.

Solar PV Option:**Electrical**

Service:	New	Power Company:	ELECTRICITIES	
Total Amps:		# of Circuits:	Circuits at 120V:	Circuits Over 120V:

Mechanical

Heating Details:	
Gas Company:	PIEDMONT NATURAL GAS
# of Gas Connections:	# of Appliances

Plumbing

# of Fixtures:		<u>Public Meter/Connection</u>		<u>Private Service</u>	
		<u>Individual</u>	<u>Master</u>	<u>Individual</u>	<u>Community</u>
Type of Service:	New	<u>Water/Well:</u>	Yes	No	No
# of Appliances		<u>Sewer/Septic:</u>	Yes	No	No

Fees

Permit Fee Type:	Construction	Homeowner Recovery Fund:	\$0.00	Fast Track Fee:	\$0.00
*Permit Fee:	\$31,134.44	NESHAP Fee:	\$0.00	Fee Adjustment:	
Zoning Fee:	\$1,385.00	Paper Application Fee:	\$0.00	Total Fee:	\$32519.44
Triple Fee:	\$0.00	HFR Fee:	\$0.00	NESHAP OK:	
Fire Damage Fee:	\$0.00	Paper Plans Fee:	\$0.00	Vector OK:	
Comm Surcharge:	\$0.00			Charge To Acct:	Y
IsSchool Bond:	N	School Bond ID:		School Bond Name:	

* Permit Fee Calculation is based upon the following costs:

Equipment Summary

Bldg Cost less Equipment over \$500K:	\$10988400.00	Total Equipment Costs:	
SubPermit Costs:	\$432800.00	Equipment Cost at 100%	\$0.00
Total Equipment Fee:		Equipment Cost at 20%	
Total Cost Calculation:	\$11421200.00		

Contractors

Building Contractor	EVANS GENERAL CONTRACTING	Contr ID:	X51400
Phone:	6787137616	License #:	69054
Address:	2710 OLD MILTON PARKWAYSUITE 200ALPHRETTA, GA 30009	Homeowner:	No
		Permit #:	B3832572
		Contract Cost:	\$10,988,400.00

Electrical Contractor	LEWIS ELECTRICAL CONTRS INC	Contr ID:	X56510
Phone:	6784552282	License #:	28651
Address:	1346 STONEFIELD COURTALPHARETTA, GA 30004	Homeowner:	No
		Permit #:	E3832602
		Contract Cost:	\$241,700.00

Mechanical Contractor	E SMITH HTG & AIR COND INC	Contr ID:	X56281
Phone:	7704221900	License #:	30849
Address:	964 INDUSTRIAL PARK DRMARIETTA, GA 30062	Homeowner:	No
		Permit #:	M3832603
		Contract Cost:	\$70,000.00

This permit will expire if work either has not started within 6 months or is discontinued for a period of 12 months.

Inspection required for verification of progress made.

No credit or refund will be given unless applied for within 120 days after a permit has expired.

Plumbing Contractor SERVICE PLBG OF CHARLOTTE INC
Phone: 7048958998
Address: P O BOX 1480 CORNELIUS, NC 28031

Contr ID: X27260
License #: 21540
Homeowner: No
Permit #: P3832604
Contract Cost: \$121,100.00

Agency Holds

As of the time of this permit issuance, the following holds exist on this project:

Agency	Phone #	Reason
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Additional Information:

NOTE:

Permit Notes

EPM requested Address Hold based on Business Rules.

Disclaimer: Mechanical equipment shall be placed in side and rear yards only and shall not encroach into any required setbacks.

Inspection Team

Your project has been assigned to the Mega Team Inspection Team. For further assistance you can contact the Mega Team Inspection Team:

Manager:

Building Supervisor

To contact your project manager, inspection supervisor, or obtain inspection assistance with your project, call .

Exhibit 5 – Article 8.25 of Zoning Ordinance

- (i) Flags displaying a logo, message, statement, or expression relating to commercial interests and banners not meeting the definition of a flag contained herein shall conform to all applicable ordinances pertaining to signs.
- (j) A vertical flagpole must be set back from all property boundaries a distance which is at least equal to the height of the flagpole.
- (k) Flags and flagpoles shall be maintained in good repair, and to the extent applicable shall be in compliance with the building code. Flagpoles with broken halyards shall not be used and flags that are torn or frayed shall not be displayed.
- (l) On officially designated county, state, or federal holidays, there shall be no maximum flag size, number, or other limitations on display.
- (m) This section shall not be construed to restrict the right to display eligible flags as banners or signage as provided elsewhere in the ordinance.

8.19 - 8.24 Reserved

8.25 S.W.I.M. (Surface Water Improvement and Management) Stream Buffers

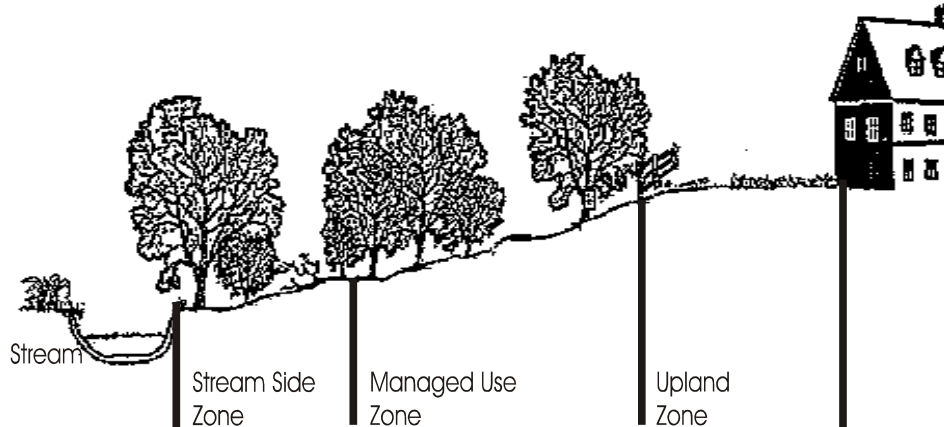
- .1 Purpose. The purpose of a stream buffer network is to filter pollutants, store floodwaters, provide habitat, and contribute to the “green infrastructure”. Stream systems are comprised of each stream and its respective drainage basin.
 - Streams have the primary natural functions of conveying storm and ground water, storing floodwater, and supporting aquatic life.
 - Vegetated lands adjacent to the stream channel in the drainage basin serve as “buffers” to protect the stream’s ability to fulfill its natural functions. Buffers have the primary natural functions of protecting water quality by filtering pollutants, providing intermittent storage for floodwaters, allowing channels to meander naturally, and providing suitable habitat for wildlife.
- .2 Definitions. For the purposes of this section, the following words and phrases shall be defined as specified below:

Best Management Practices (BMPs). A structural or nonstructural management based practice used singularly or in combination to reduce non-point source input to receiving waters in order to achieve water quality protection goals.

Buffer. A vegetated area through which storm water runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants.

Buffer Zones. Buffer widths are measured in three (3) zones as shown below. The buffer width is measured horizontally and must be surveyed by a licensed land surveyor on a line parallel to the surface water, landward from the top of the bank on each side of the stream.

Three Zoned Urban Stream Buffer



Drainage Basin. The area of land that drains to a given point on a body of water.

Floodway. The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than the allowable surcharge (currently one foot).

Flood Fringe. The land area located between the limits of the floodway and the maximum elevation subject to inundation by the base (1% chance) flood.

Floodplain. The low, periodically flooded lands adjacent to rivers and lakes. For land use planning purposes, the regulatory floodplain is usually viewed as all land alongside a watercourse that would be inundated by the base (1% chance) flood; the floodway plus the flood fringe.

Mitigation. Actions taken on-site and/or off-site to offset the effects of temporary or permanent loss of a buffer.

Top of Bank. The landward edge of the stream channel during high water, bankfull conditions at the point where water begins to overflow onto the floodplain.

.3 Applicability.

- a) All properties shall comply with the buffer requirements of this Section except those which, as of the effective date of October 19, 1999, have previously secured a right to proceed by one of the following methods, and have received written authorization to disturb the buffer from the Town's Planning Staff:
 - Having been issued a Certificate of Building Code Compliance;
 - Being subject to an approved major subdivision preliminary plan and/or recorded final plat;
 - Being subject to a minor subdivision plat, exempt plat listed under the definition of subdivision in the Subdivision Ordinance, or described by metes and bounds in a recorded deed which:
 - If to be used for residential purposes, are one (1) acre or less in size.
 - If to be used for nonresidential purposes or mixed use purposes, are four (4) acres or less in size if located on a non-FEMA regulated floodway, or are seven (7) acres or less in size if located on a FEMA regulated floodway.
 - Being subject to a site specific development plan defined under Section 2.2.2 of these zoning regulations; or
 - Having otherwise secured a vested property right under state law.

ARTICLE 8 PROVISIONS

GENERAL

- b) Redevelopment or expansion of uses and structures included in a), above, shall comply with the buffer requirements of this Section, however uses and structures previously approved and constructed in a buffer may remain.
- c) A site specific development plan amended by action of the Board of Commissioners subsequent to adoption of this Section shall comply, in its amended form, with the S.W.I.M. buffer requirements, however uses and structures previously approved for construction in a buffer may remain.
- d) Where stream buffers are also required as part of the Lake Norman or Mountain Island Lake Watershed Overlay Districts, the more stringent of the stream buffer requirements shall apply.

.4 Buffer Delineation.

S.W.I.M. Stream Buffers, throughout the jurisdiction of the Town of Huntersville shall be delineated by Mecklenburg County through its geographic information system (GIS) using the most current digital elevation model (DEM) of no greater than 10-foot cells. This stream buffer delineation including buffer widths shall be periodically updated as new data becomes available. The most recent delineation shall be provided for public use through Mecklenburg County's website.

.5 Minimum Buffer Widths.

All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a 10-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the 10-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the Design Manual. All perennial and intermittent streams draining greater than or equal to 50 acres and less than 300 acres shall have a 35-foot buffer with two (2) zones, including a 20-foot stream side and 15-foot upland zone. Streams draining greater than or equal to 300 acres and less than 640 acres shall have a 50-foot buffer with three (3) zones, including a 20-foot stream side, 20-foot managed use and 10-foot upland zone. Buffers for streams draining greater than or equal to 640 acres shall be 100 feet in width or include the entire floodplain, whichever is greater. This buffer shall consist of a 30-foot stream side, 45-foot managed use and 25-foot upland zone or the entire FEMA floodplain, whichever is greater. All buffers shall be measured from the top of the bank on both sides of the stream. A summary of minimum buffer widths is provided in the table below.

Table of Minimum Buffer Widths by Basin Size and Buffer Zone

Area Designation	Stream Side Zone	Managed Use Zone	Upland Zone	Total Buffer Width each side of Stream	Notes
< 50 acres	N/A	N/A	30 feet	30 feet	(1), (2)
> 50 acres	20 feet	None	15 feet	35 feet	(2)
> 300 acres	20 feet	20 feet	10 feet	50 feet	(2)
> 640 acres	30 feet	45 feet	25 feet or balance of floodplain, whichever is greater	100 feet or entire floodplain, whichever is greater	(2), (3)

Notes:

(1) All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a 10-foot zone adjacent to the bank. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the 10-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the Design Manual.

(2) Buffer widths are surveyed horizontally on a line parallel to the surface water, landward from the top of the bank on each side of the stream.

(3) Floodplain and buffer calculations will be based upon the FEMA flood fringe and floodway encroachment lines, as locally adopted and as may be amended from time to time.

ARTICLE 8
PROVISIONS

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.6 Buffer Description.

Buffer function, vegetation and use vary according to the different buffer zones and are described in the following table.

Table of Buffer Treatment by Buffer Zone

	Stream Side Zone	Managed Use Zone	Upland Zone	Notes
Function	Protect the integrity of the ecosystems	Provide natural filter; provide distance between upland development and the stream side zone	Prevent encroachment and filter runoff	
Vegetative Requirements	<u>Undisturbed (no cutting, clearing or grading).</u> If existing tree density is inadequate, reforestation is required.	<u>Limited clearing (no grading).</u> Existing tree density must be retained to a minimum of 8 healthy trees of a minimum 6 inch caliper per 1000 square feet. If existing tree density is inadequate, reforestation is encouraged.	<u>Herbaceous ground cover,</u> including grass, is allowed; maintenance of existing forest or reforestation is encouraged.	(1)
Uses	<u>Very restricted.</u> Permitted uses limited to flood control structures and bank stabilization (where permitted) as well as installation of parallel or near perpendicular ($\geq 75^\circ$) water and sewer utilities and near perpendicular road crossings ($\geq 75^\circ$) with stabilization of disturbed areas as specified in Section 8.25.10.	<u>Restricted.</u> Permitted uses limited to those allowed in the Stream Side Zone, as well as bike paths and greenway trails up to 10 feet in width.	<u>Restricted.</u> Permitted uses limited to those allowed in Stream Side and Managed Use Zones, as well as gazebos, non-commercial storage buildings less than 150 square feet, limited grading that does not change the functionality or extent of the floodplain, and storm water structural best management practices (BMPs) if approved in accordance with Section 8.25.11 b), as a condition of a buffer width variance or if they are located a minimum distance of 100 feet from the stream bank.	(2), (3), (4)

Note:

- (1) When reforestation of disturbed buffers is required, tree planting shall be as specified in the Charlotte-Mecklenburg SWIM Stream Buffer Implementation Guidelines.
- (2) Fill material **cannot** be brought into any required buffer. In the Upland Zone only, limited grading that does not change the extent or functional characteristics of the floodplain is permitted. Uses permitted in the buffer zones should be coordinated to ensure minimal disturbance of the buffer system. For example, if it is necessary to install utilities within the buffer, then if Greenway Trails are built they should follow these cleared areas instead of necessitating additional clearing.
- (3) Notwithstanding the uses and structures permitted in the “Upland Zone”, the stricter standards of floodway regulations, if applicable, shall apply.
- (4) Greenway Trails referenced in this table refer exclusively to those approved by and dedicated to the Town of Huntersville or Mecklenburg County Parks and Recreation Departments. Other paths or trails in the buffer shall be in accordance with the Charlotte-Mecklenburg SWIM Stream Buffer Implementation Guidelines.

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- .7 Diffuse Flow Requirement. Diffuse flow of runoff shall be maintained in the buffer by dispersing concentrated flow through the use of level spreaders or other such devices to create sheet flow and by reestablishing vegetation. Techniques for providing diffuse flow are specified in the Charlotte-Mecklenburg BMP Design Manual.
- Maximum drainage area size shall be no greater than 10 acres for all outfalls discharging directly into a stream buffer.
 - When practical, a drop structure should be installed prior to the last section of outfall pipe discharging to a buffer. A short length of outfall pipe should be laid flat (0% Slope Energy Dissipater), prior to the riprap apron or other energy dissipater.
 - Concentrated runoff from ditches or other manmade conveyances shall be diverted to diffuse flow before the runoff enters the buffer.
 - Periodic corrective action to restore diffuse flow shall be taken by the property owner as necessary to impede the formation of erosion gullies.
- .8 Ponds that intersect the stream channel shall have the same buffers as the original stream. Buffer requirements do not apply to wet ponds used as structural BMPs.
- .9 Buffer Delineation. The following buffer delineations are required:
- a) Buffer boundaries including all buffer zones must be clearly delineated on all site-specific plans for Board of Commissioner approval, on all construction plans, including grading and clearing plans, erosion and sediment control plans, and site plans.
 - b) The surveyed outside buffer boundary, including all buffer zones, must be clearly marked on-site with orange “tree-protection” or “high-hazard” fence prior to any land disturbing activities. Tree protection is required by Section 7.4(3) of this Ordinance. Where existing trees are to be preserved in a buffer zone, the limits of grading shall equal the drip line of those trees plus an additional five (5) feet on the upland side of the buffer. All Specimen and Heritage trees require a tree survey prior to land-disturbing activity and shall be saved in all buffer zones.
 - c) The surveyed outside boundary of the buffer must be permanently marked with an iron pin at the intersection of the watershed buffer and each property line on each parcel following the completion of land disturbing activities and prior to occupancy. Properties greater than 200’ in width shall be marked at a maximum of 100’ intervals.
 - d) Separate buffer zones must be permanently marked at highway stream crossings.
 - e) Buffer boundaries including all buffer zones as well as all buffer requirements must be specified on the record plat, on individual deeds, and in property association documents for lands held in common.
- .10 Buffer Impacts Permitted under Section 8.25, S.W.I.M. The following buffer impacts are permitted, but design and construction shall comply with the specifications provided in the Charlotte-Mecklenburg Buffer Implementation Guidelines for stabilization of disturbed areas to minimize negative effects on the quality of surface waters.
- Near perpendicular (75° or greater) road crossings for connectivity or transportation links where the Town of Huntersville has granted site plan approval.

ARTICLE 8 PROVISIONS

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- Near perpendicular (75° or greater) utility crossings as approved by Charlotte-Mecklenburg Utilities.
- Parallel water and sewer utility installation as approved by Charlotte-Mecklenburg Utilities, where a logical and appropriate basis for the impact is demonstrated, where disturbance of the Stream Side Zone is minimized to the maximum extent practicable, and where guidelines for restoring vegetation within buffers disturbed as a result of parallel utility installation are met. These guidelines are specified in the Charlotte-Mecklenburg Buffer Implementation Guidelines.
- Public paths and trails parallel to the creek outside the Stream side Zone and near perpendicular stream crossings in any zone. Pathways must use existing and proposed utility alignments or previously cleared areas and minimize tree cutting to the maximum extent practicable. To the extent possible, pathways shall preserve existing drainage patterns and avoid drainage structures that concentrate storm water.
- Incidental drainage improvements/repairs for maintenance.
- Individual pedestrian paths connecting homeowners to the stream in the form of narrow, pervious footpaths with minimal tree disturbance.
- New domesticated animal trails (farming) where existing trails are lost as a result of action beyond the farmer's control. Stream crossings should be constructed to minimize impacts to the Stream Side Zone and be maintained with fencing perpendicular to and through the buffer to direct animal movement.
- Mitigation approved by a state or federal agency acting pursuant to Sections 401 or 404 of the federal Clean Water Act.

.11 Appeals and Variances.

- a) An appeal to reverse or modify the order, decision, determination, or interpretation of the Zoning Administrator shall comply with the procedures and standards of [Section 11.3](#) of these ordinances.
 - b) Special Variance Provisions/Mitigation Techniques.
 - When “unnecessary hardships”, as defined in Section 11.3.2 e, would result from strict adherence to the buffer width requirements and/or buffer treatment standards, a petition for variance may be filed with the Huntersville Board of Adjustment in compliance with the procedures and standards of [Section 11.3](#).
 - Site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e),– 4 consistency with adopted plans and protection of public safety and welfare. Specifications for these mitigation techniques are provided in the Charlotte-Mecklenburg Buffer Implementation Guidelines (for Structural BMPs). The techniques below are not construed to offset the requirement of Section 8.25.6 for diffuse flow.
- (1) Installation of Structural BMPs. The installation of an on-site structural BMP designed to achieve specified pollutant removal targets will allow for all proposed stream buffer impact on the specific site. The BMP must remain outside of the Stream Side Zone and Manage Use Zone. A detailed BMP design plan must be submitted to the Town of Huntersville for approval based on specifications contained in the Charlotte-Mecklenburg BMP Design Manual. This plan must also include a long-term maintenance strategy for

ARTICLE 8 PROVISIONS

GENERAL

the BMP, complete with the establishment of adequate financing to support the proposed maintenance practices.

- (2) Stream Restoration. The owner may restore and preserve the buffer area on any stream of equivalent or greater drainage area the condition of which is determined to be qualified for restoration by the Mecklenburg County Land Use and Environmental Services Agency on a 1:1 basis in linear feet of stream. This restoration shall include stream bank improvements and Stream Side and Managed Use Zone re-vegetation, in accordance with the Charlotte-Mecklenburg Buffer Implementation Guidelines, and receive approval from the Mecklenburg County Land Use and Environmental Services Agency.
 - (3) Stream Preservation. The owner may purchase, fee simple, other stream segments at equivalent or greater drainage area on a 1:1 linear foot basis and convey fee simple and absolute title to the land to the Town of Huntersville, Mecklenburg County, or conservation trust, with a plan approved by the Mecklenburg County Land Use and Environmental Services.
 - (4) Wetlands Restoration. On a 2:1 acreage basis for disturbed stream and buffer area (2 acres of wetland for each acre of disturbed area), the owner may provide a combination of the preservation and/or restoration of wetlands with protective easements and the implementation of structural or non-structural BMPs to achieve specific pollutant removal targets within the impacted area. Restoration plan must be approved by the Mecklenburg County Land Use and Environmental Services.
 - (5) Bottom Land Hardwood Preservation. On a 2:1 acreage basis for impacted stream and buffer area 2 acres of bottomland hardwood for each acre of disturbed area), the owner may provide a combination of the preservation of existing bottom land hardwood forest or other specifically approved natural heritage area by conservation easement or other legal instrument, and the implementation of structural or non-structural BMPs to achieve specific pollutant removal targets within the impacted area. Plan to be approved by Mecklenburg County Land Use and Environmental Services Agency.
 - (6) Controlled Impervious Cover for Disturbance Landward of Stream Side Zone. The owner may commit to, and provide, a specific site development plan for the parcel with requested buffer disturbance. The plan shall limit overall site impervious cover to less than or equal to 24%. Preservation of the Stream Side Zone is still required. Plan to be approved by Mecklenburg County Land Use and Environmental Services Agency.
 - (7) Open Space Development. The submission of a site-specific development plan that preserves 50% of the total land area as undisturbed open space. Plan to be approved by Mecklenburg County Land Use and Environmental Services Agency.
 - (8) Mitigation Credits: The purchase of mitigation credits through the Stream Restoration Program on a 1:1 basis, utilizing linear feet of stream impacted and the prevailing rate of purchase as established by the Charlotte-Mecklenburg Buffer Implementation Guidelines. Mitigation credits purchased under any other program (i.e., U.S. Army Corp of Engineers) shall not cover this requirement unless the issuing agency agrees to relinquish the funds to the appropriate local government agency.
 - (9) Alternative mitigation. The list of mitigation techniques shall not prevent the creative development of alternative mitigation plans that achieve the purposes of this section.
- .12 Posting of financial security required. When structural BMPs (wet detention ponds and other BMPs) are approved for mitigation of a buffer disturbance, the approval will be subject to the owner filing a surety bond or letter of credit or making other financial arrangements which are acceptable to the

Town of Huntersville, in a form which is satisfactory to the Town Attorney, guaranteeing the installation and maintenance of the required structural BMPs until the issuance of certificates of occupancy for seventy-five percent (75%) of all construction which might reasonably be anticipated to be built within the area which drains into the BMPs, allowing credit for improvements completed prior to the submission of the final plat. At such time that this level of occupancy is achieved, written notice thereof must be submitted by the owner to the Town of Huntersville. The owner must also verify the adequacy of the maintenance plan for the BMPs including the necessary financing to support the proposed maintenance practices. The Town of Huntersville will inspect the structural BMPs and verify the effectiveness of the maintenance plan; if both are found to be satisfactory, the department will notify the owner in writing within 30 days of the date of notice.

- .13 Maintenance responsibilities for structural BMPs – Civil Penalties. Maintenance of all structural BMPs will be the responsibility of the property owner or his designee. Any person who fails to maintain the required BMPs in accordance with the approved maintenance plan will be subject to a civil penalty of not more than \$5000. Each day that the violation continues shall constitute a separate violation. No penalties shall be assessed until the person alleged to be in violation has been notified in writing of the violation by registered or certified mail, return receipt requested, or by other means which are reasonably calculated to give actual notice. The notice shall describe the nature of the violation with reasonable particularity, specify a reasonable time period within which the violation must be corrected, and warn that failure to correct the violation within the time period will result in assessment of a civil penalty or other enforcement action.
- .14 Request for Determination of Buffer Requirements. When a landowner or other affected party believes that the S.W.I.M stream buffer delineation maps described in Section 8.25.4 inaccurately depict buffer requirements, he or she shall request a determination from the Storm Water Administrator. Such determinations shall be made by the Storm Water Administrator based on an on-site evaluation using the U.S. Army Corps of Engineers and N.C. Division of Water Quality methodology for stream delineation as well as information from databases maintained for stream delineation by Mecklenburg County. Such determinations can also be made at the discretion of the Storm Water Administrator in the absence of a request from a landowner or other concerned party. The buffer requirements of this ordinance shall apply based on determinations made by the Storm Water Administrator. Surface waters that appear on the maps shall not be subject to this ordinance if an on-site determination by the Storm Water Administrator shows that they fall into one of the following categories.
 - (1) Ditches and manmade conveyances other than modified natural streams.
 - (2) Manmade ponds and lakes that are not intersected by a buffered stream segment and that are located outside natural drainage ways.
 - (3) Ephemeral (storm water) streams.

8.26 Site Lighting

The purpose of the site lighting regulations is to ensure public safety and welfare and to protect the night sky. External lighting shall meet the following standards unless otherwise permitted or restricted by this ordinance.

- .1 General Requirements:
 - a. At a minimum, all lighting installations shall be designed to achieve no greater than the minimal illuminance levels for the activity as recommended by the Illuminating Engineering Society of North America (IESNA).
 - b. Including the base/mounting fixture, the maximum height for lighting (pole mounted and wall mounted) shall be 40 feet except for sports complex lighting as addressed in sections 9.21 and 9.35 of this ordinance.

Exhibit 6 – Variance Application with Attachments



Variance Application

Date of Application: 06/18/2021

Property/Building Address: 12802 Jamesburg Drive, Huntersville, NC 28078 Parcel Size (ac): 65.46 AC

Tax Parcel ID (PIN) Number(s): 01121108

Text of Ordinance to be varied

Ordinance: Zoning Article: 8 Section: 25.11

Description of Request:

The applicant requests a variance to impact an intermittent stream buffer as part of grading operations as permitted through the Army Corps of Engineers. This impact has already taken place as the buffers did not show up on GIS like County SWIM buffers and was not noticed during design.
Reference intermittent streams S2 and S3 on the attached map.

Submittal Requirements and Procedure

The following shall be submitted with the completed application (signed and dated by the property owner and/or applicant):

- One (1) electronic copy by email or (1) hard copy of applicable map(s), site plans, exhibits, and applications showing exact location of property with respect to existing streets, adjoining lots and other important features on or contiguous to the property. Also, include any maps and/or illustrations (to scale), which are necessary to show the location, number and size of buildings, signs, etc., on the property.
- Applications shall be emailed to planning@huntersville.org or mailed as directed below.
- A list of names, addresses and tax parcel identification numbers of properties that abut the site, are across the street from the site or are otherwise within one hundred feet (100') of the site.
- Review Fee - Please check most recent version of Fee Schedule for applicable Variance Review Fee. Reviews shall be submitted by mail as directed below or through the Town website: www.huntersville.org/planning (Select Permits & Process > Submit Planning and Zoning Fee)
- See the current Board of Adjustment Submittal Deadlines and Meeting Schedule for filing deadlines and meeting dates
- Please submit your complete application and fee by **noon the day filing deadline**

Physical Address: 105 Gilead Road | Third Floor (Fed Ex, UPS, and Couriers)
Mailing Address: P.O. Box 664 | Huntersville, North Carolina 28070 (USPS)
Attention: Planning Department

Please make checks payable to: Town of Huntersville
Include property address and/or Tax Parcel ID in memo

Notification Requirements

Planning Staff will be required to notify in writing each adjoining property owner.

Planning Staff will also be required, if you are seeking a variance from the requirements of the Mountain Island Lake or Lake Norman Watershed Overlay Districts, to notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption as follows:

- * Mountain Island Lake Watershed Overlay. Local governments having jurisdiction in the watershed: Charlotte Mecklenburg, Cornelius and Huntersville. Entities using the water supply for consumption: Mecklenburg County, Gastonia and Mount Holly.
- * Lake Norman Watershed Overlay. Local governments having jurisdiction in the watershed: Davidson, Cornelius and Huntersville. Entities using the water supply for consumption: Mooresville, Mecklenburg County and Lincoln County.

Variance Requirements

STANDARDS FOR GRANTING A VARIANCE (Article 11.3.2.e.):

When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all the following:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
4. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

Appropriate conditions, which must be reasonably related to the condition or circumstance that gives rise to the need for a variance, may be imposed by the Board (Article 11.3.1.e.).

In the following spaces, indicate **FACTS** that demonstrate to the Board of Adjustment you meet all the standards for granting a variance:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.
Strict application of the ordinance would not allow impacts to otherwise permitted streams. In this case, as the buffer is already impacted, an additional hardship would be the demolition of existing construction and reestablishment of the original buffer.

2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.
The stream impacts performed, while only noticed after impact, would have been similarly requested and permitted prior to construction due to site topography and the need to impact the subject area with grading.

3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
The applicant was unaware of the stream buffer as it did not show up on GIS maps and was turned off on the subject plans. Once discovered, the applicant, Town, State, and Corps were notified and after the fact permit applications were submitted.

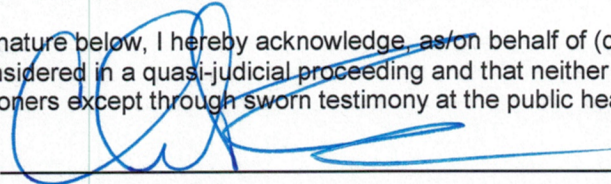
4. The public safety and general welfare have been protected and substantial justice done.
As this request pertains only to a buffer impact, public safety and general welfare are not impacted. Substantial justice will be done by the proposed buffer mitigation of 2:1 onsite dedication.

Applicant

Printed Name MDH F1 Huntersville JV, LLC - Chris Stanley Phone 404-920-8479

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 06/18/2021

Title Sr Managing Director Applicant Phone 404-920-8479

Applicant Email cstanley@mdhpartners.com

Address of Applicant 3715 Northside Parkway NW, Building 400, Suite 240, Atlanta, GA 30327

Property Owner (if different than applicant) SAME AS ABOVE

* Printed Name SAME AS ABOVE

Phone _____

☐ Corporation ☐ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature _____ Date _____

Title _____ Applicant Phone _____

Applicant Email _____

Address of Property Owner _____

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

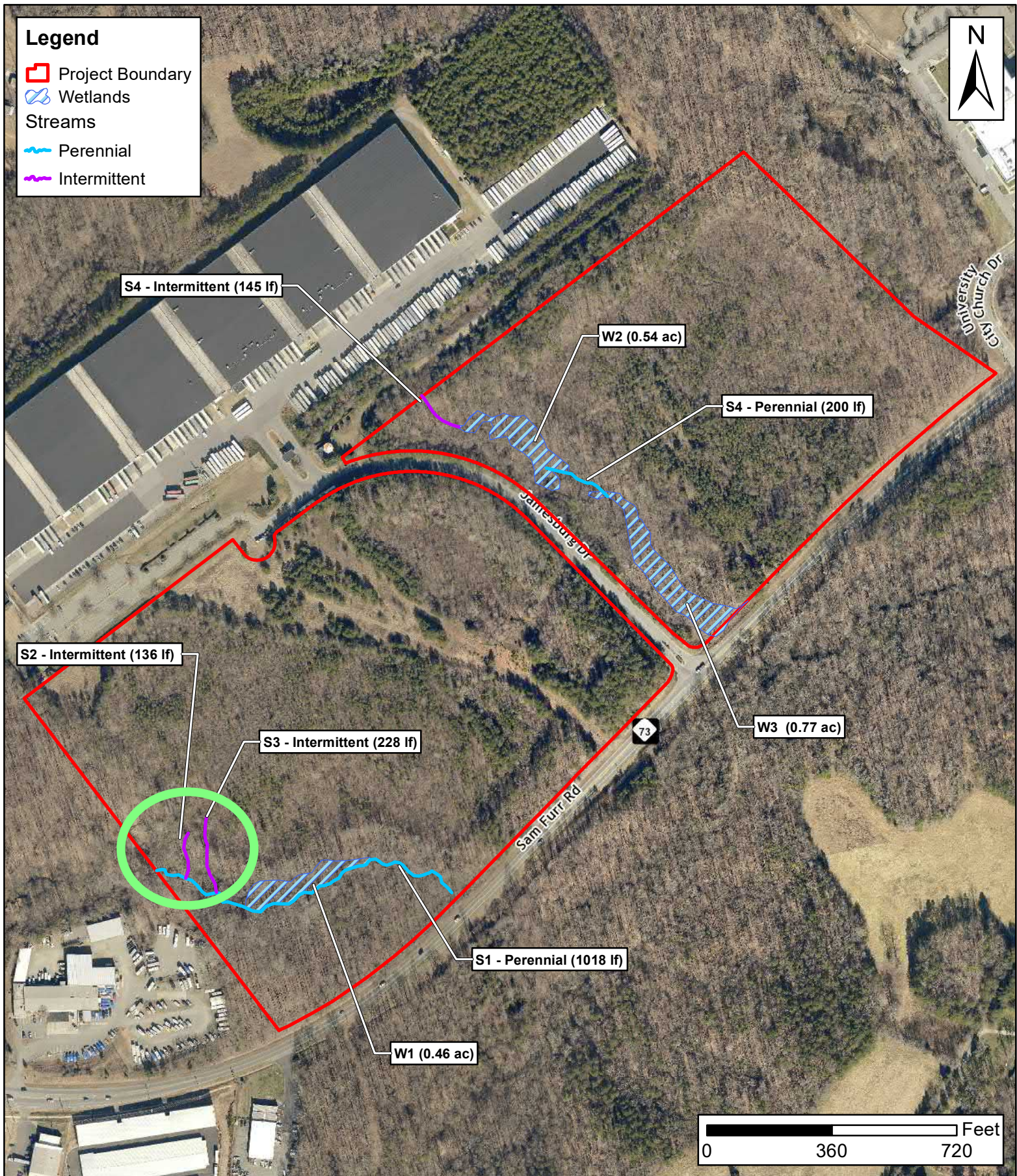
Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this petition MUST be accompanied by a Limited Power of Attorney signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID APPLICATION. **If additional space is needed for signatures, attach the Town of Huntersville Signature Addendum Form.**

Contact Information

Town of Huntersville Phone: 704-875-7000
Planning Department Fax: 704-875-6546
PO Box 664 Physical Address: 105 Gilead Road, Third Floor, Huntersville, NC 28078
Huntersville, NC 28070 Website: <https://www.huntersville.org/228/Planning-Department>

Received By Planning Department Staff: _____

Staff Initials: _____



BUILDING A
331,385 SF
12800 JAMESBURG DRIVE

BUILDING B
112,320 SF
13020 JAMESBURG DRIVE

GRADING & DRAINAGE PLAN NOTES

1. SEE "GENERAL NOTES" SHEET FOR SITE GENERAL NOTES AND ZONING NOTES.
2. SEE "OVERALL GRADING AND DRAINAGE PLAN" FOR GRADING NOTES.
3. SEE "SITE DETAILS" SHEETS FOR DETAILS REFERENCED ON THIS SHEET.
4. SEE SHEETS C801-C802 FOR STORMWATER PROFILES.

GRADING PLAN KEYNOTES

- (A) OUTLINED AREA REPRESENTS THE OUTLINE OF ADA SPACES (PAVEMENT SLOPES WITHIN THE LIMITS OF THIS AREA HAVE BEEN DESIGNED AT 1.8% MAXIMUM GRADE. CONTRACTOR SHALL GRADE THESE AREAS NO STEEPER THAN 2.0%).
- (B) SIDEWALK AND CROSSWALK CROSS-SLOPES SHALL NOT EXCEED 3/16" PER LINEAR FOOT (MAX. 2% SEE DETAIL). 5% MAX. LONGITUDINAL SLOPE. REFERENCE ARCH PLANS FOR ARCHITECTURAL CONCRETE AREAS.
- (C) ADA ACCESSIBLE RAMP IN SIDEWALK TO CONFORM TO FEDERAL, STATE, AND LOCAL ACCESSIBILITY GUIDELINES. (12:1 FLARES)
- (D) CURB, SEE SITE PLAN
- (E) NOT USED
- (F) PERMANENT GRASS SWALE. SEE DETAIL FOR DIMENSION ON SHEET C401. TYPICAL SECTION INDICATED BY NUMBER.
- (G) STREAM BUFFER TO REMAIN UNDISTURBED DURING CONSTRUCTION ACTIVITY
- (H) NOT USED
- (J) NOT USED
- (K) GUIDE RAIL

DRAINAGE PLAN KEYNOTES

1. NOT USED. NOTE INTENTIONALLY REMOVED.
2. ROOF DRAIN DOWNSPOUT LOCATION TO SPLASH ON GRADE. COORDINATE EXACT CONNECTION LOCATION, SIZE, AND INVERT WITH ARCH/MEP PLANS.
3. LOW POINT (LP) DRAINAGE BREAK FLOW LINE IN PAVEMENT SECTION. POSITIVE GRADE DRAIN.
4. STORMWATER SANDFILTER TO TREAT STORMWATER QUALITY AND QUANTITY PER THE CHARLOTTE BMP DESIGN MANUAL. SEE DETAILS THIS PLAN SET.
5. PERMANENT OUTLET CONTROL STRUCTURE (CS). SEE DETAIL.
6. PERMANENT RIP RAP DISSEMINATOR PAD AT STORM OUTLET. SEE DETAIL FOR STONE SIZE AND DIMENSION.
7. RCP FLARED END SECTION. ALL PROPOSED FLARED END SECTIONS TO BE RCP PER THE TOWN OF HUNTERVILLE DETAILS

PROPOSED TOPOGRAPHIC LEGEND

---	GRADE BREAK (GB)	---	PROPOSED MAJOR CONTOUR
HP	HIGH POINT (GB)	---	PROPOSED MINOR CONTOUR
LP	LOW POINT (GB)	---	EXISTING MAJOR CONTOUR
ME	MATCH EXISTING	---	EXISTING MINOR CONTOUR
LDD	LIMITS OF DISTURBANCE	---	PROPOSED RUN / RISE GRADE
2.0%	PROPOSED SLOPE GRADE	---	
780.15	PROPOSED SPOT GRADE	---	
	TO: TOP OF CURB	---	
	TP: TOP OF PAVEMENT	---	
	FG: FINAL GRADE	---	
	ME: MATCH EXISTING	---	
	HP: HIGH POINT	---	
	FPE: FINISHED FLOOR ELEV.	---	

PROPOSED STORM DRAINAGE LEGEND

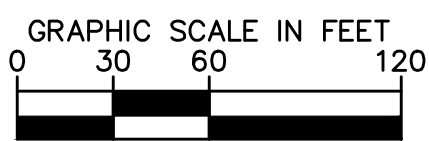
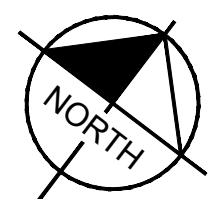
---	STORM DRAIN	⊙	MH MANHOLE
---	RIPRAP APRON	⊞	CB CATCH BASIN
---	TOP OF BANK	⊞	DI DROP INLET
---	WATER SURFACE ELEV.	⊞	JB-DI JUNCTION BOX - DI DROP INLET
---	POND BOTTOM	⊞	FES FLARED END SECTION
---	SWALE, DITCH, CHANNEL OR CENTERLINE	⊞	CS OUTLET CONTROL STRUCTURE
---		STR: C35-DI	
---		RIM: 767.79	
---			PROPOSED STORM LABEL

STORM DRAINAGE ABBREVIATIONS LIST

CB	CATCH BASIN (CURB INLET) (NC DOT STD. DET. 840.02, 840.03)
DI	DROP INLET (NC DOT STD. DET. 840.14, 840.16)
AI	AREA INLET (NC DOT STD. DET. 840.04)
MH	MANHOLE (NC DOT STD. DET. 840.52, 840.54)
RD	ROOF DRAIN (REF. ARCH/MEP)
CO	CLEAN-OUT (PER SRU STANDARD SPECIFICATIONS, H-20 TRAFFIC RATED)
CS	BMP OUTLET CONTROL STRUCTURE (840.45, 840.46 - REF. DETAILS)
FES	FLARED END SECTION (REF. DETAILS)
"D"	DOUBLE STRUCTURE
RR	(NC DOT STD. DET. 876.02)

MATCH LINE SHEET C403

NOTE: ALL SLOPES EXCEEDING 3:1 SHALL USE SC250 MATTING WITH SLOPEMASTER SEED.

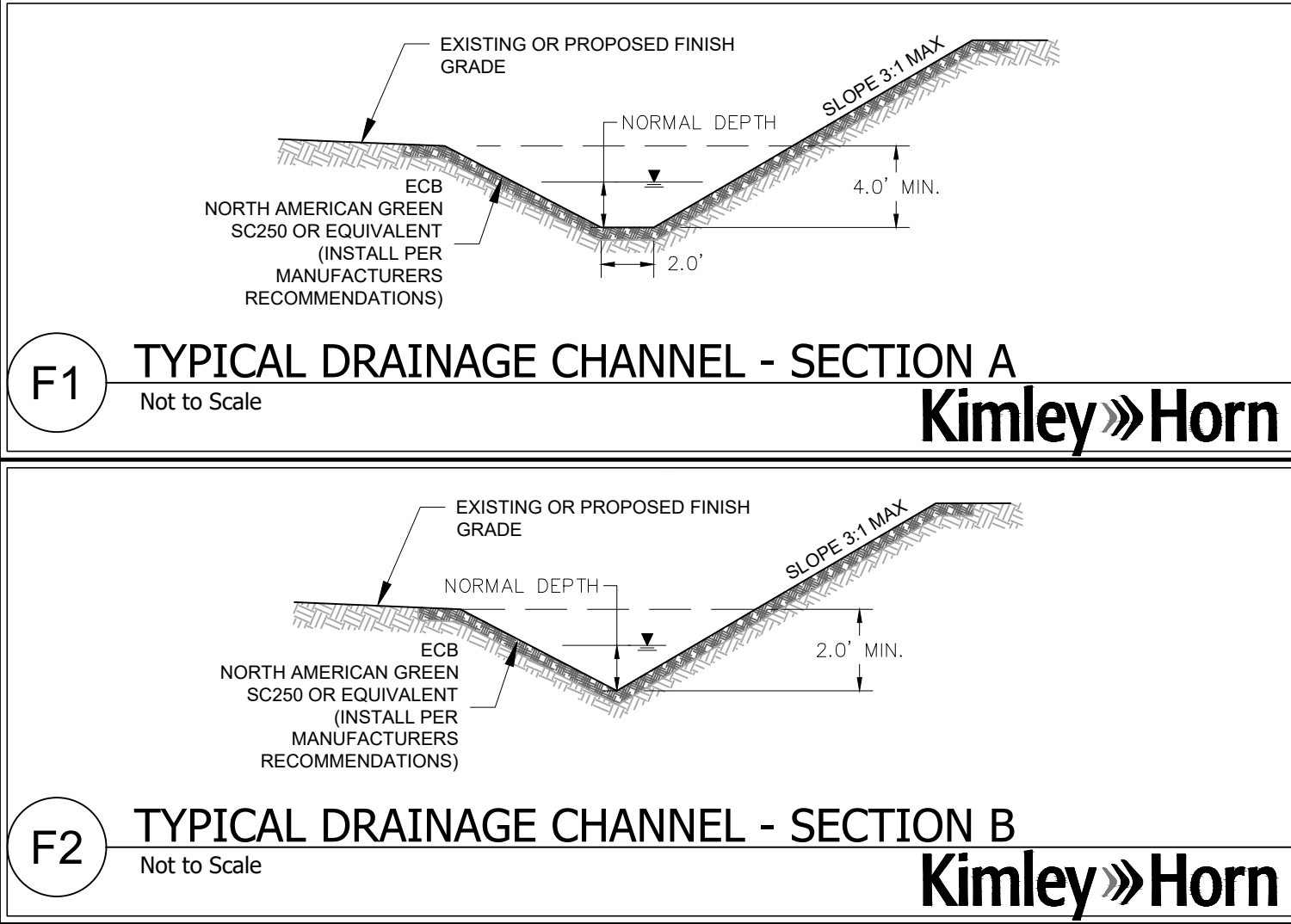


HUNTERVILLE
DISTRIBUTION PARK
PREPARED FOR
MDH PARTNERS LLC
HUNTERVILLE

Kimley»Horn
© 2020 KIMLEY-HORN AND ASSOCIATES, INC.
200 SOUTH TRYON ST., SUITE 200, CHARLOTTE, NC 28202
WWW.KIMLEY-HORN.COM
NC LICENSE #F-0102

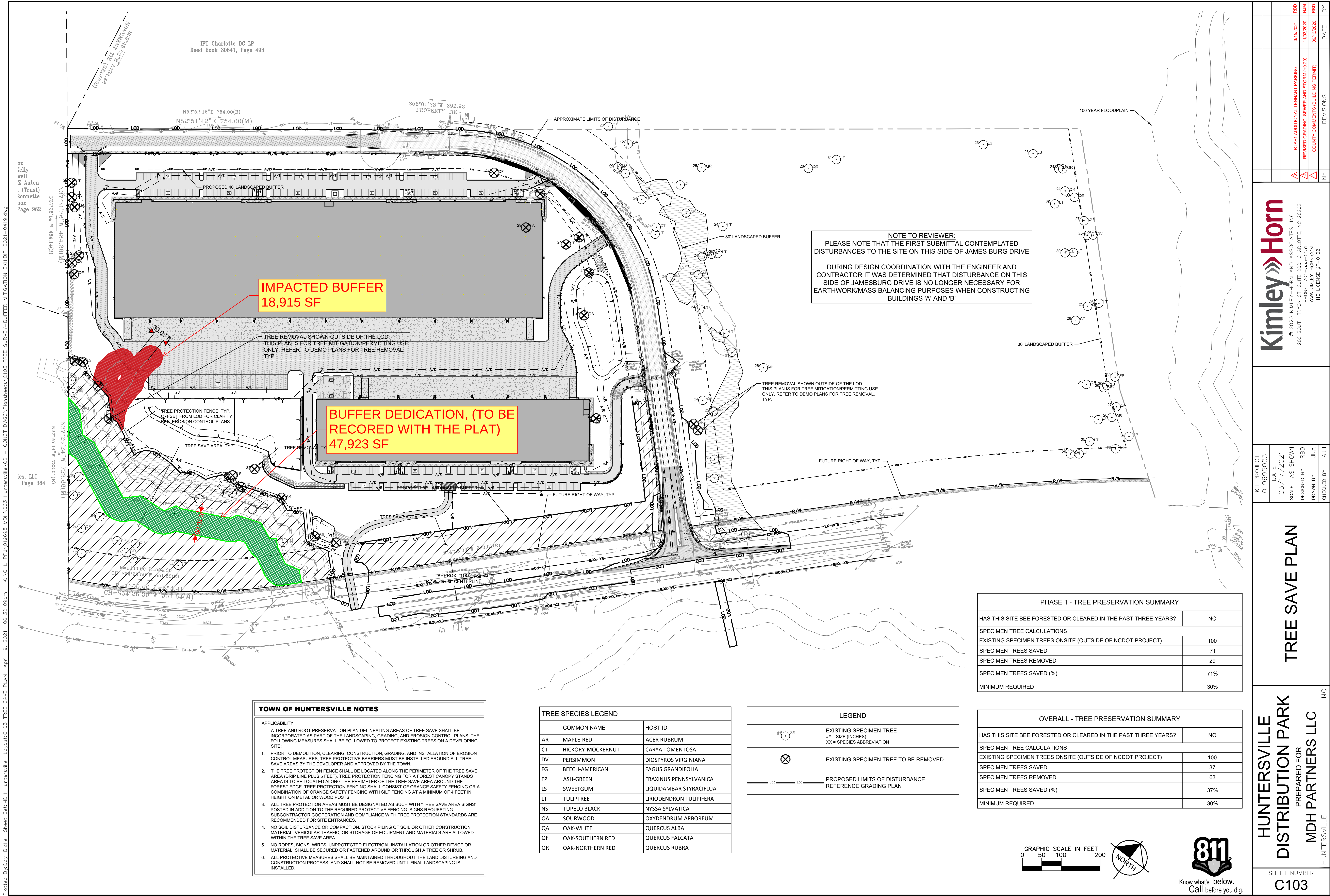
KH PROJECT
D19695003
DATE
05/20/2021
SCALE AS SHOWN
DESIGNED BY RBD
DRAWN BY JKA
CHECKED BY AJH

NO.	REVISIONS	DATE	BY
1	REVISED GRADING, SEWER AND STORM (+20)	11/03/2020	RBD
2	COUNTY COMMENTS (BUILDING PERMIT)	09/15/2020	RBD
3	RTAP1 ADDITIONAL TENANT PARKING	5/20/2021	RBD



Plotted By: Wills, Austin Sheet Set: MDH Hunterville Layout: C402 G&D PLAN - AREA A June 01, 2021 04:32:42pm K:\CHL_PRA\019695 MDH\003 Hunterville 02 - CONST DWG\Plan\Sheet\G402 GRADING & DRAINAGE PLAN.dwg

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.





Aerial 01-20-2020



Aerial 01-23-2021

**Town of Huntersville
Board of Adjustment
August 10, 2021**

To: Town Board

From: Lauren Speight, Planner 1

Date: August 10, 2021

Subject:

EXPLAIN REQUEST:

The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from Article 8.25 S.W.I.M Buffers to allow disturbance and mitigation of S.W.I.M. as established in Section 8.25.11 (b) of the Zoning Ordinance for development.

ACTION RECOMMENDED:

Planning Department Staff recommend continuing the public hearing for this variance request based on the staff findings provided in the staff report.

FINANCIAL IMPLICATIONS:

N/A

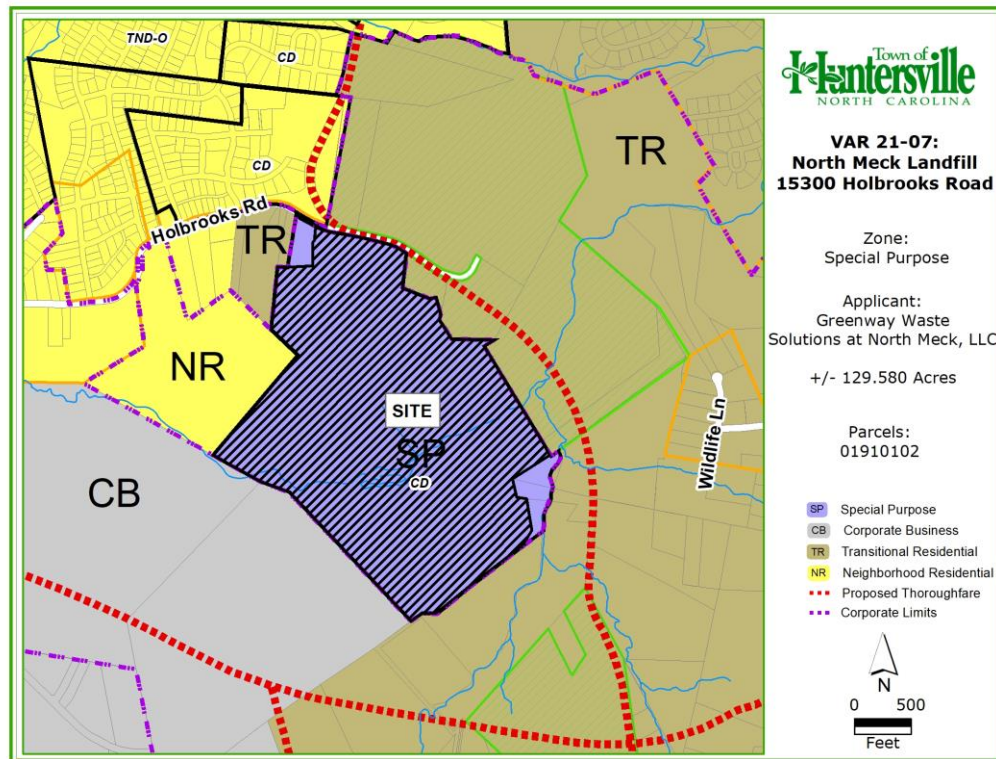
ATTACHMENTS:

1. V21-07 Staff Report

V 21-07, 15300 Holbrooks Road
Parcel ID 019-101-02

Case #: V21-07
Address: 15300 Holbrooks Road, Huntersville, NC 28078
Parcel #: 019-101-02
Acreage: 129.58
Property Owner/Applicant: C&D Management Company (Owner)
Owner/Applicant Address: John Brown on behalf of Greenway Waste Solutions at North Meck, LLC (applicant)
Staff: Lauren Speight – Planner II

Currently in use, the 129.58-acre property is seeking to expand the construction and demolition landfill area within the subject property. The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Article 8.25 S.W.I.M Buffers** to allow disturbance and mitigation of S.W.I.M. as established in Section 8.25.11 (b) of the Zoning Ordinance for development.



BACKGROUND:

1. The subject property, 15300 Holbrooks Road (Parcel 019-101-02) is located within a Special Purpose Conditional District, Rezoning 16-06. (Exhibit 1 - Approved CD Rezoning 16-06)
2. The subject property is currently operating a landfill and has been continuously operating since 1991. The subject property was not within the zoning jurisdiction of the Town of Huntersville in 1991.
3. The subject property obtained a Special Use Permit 16-01 approved by the Huntersville Town Board November 7, 2016 to allow the landfill to expand its boundaries and add a recycling center to the facility. (Exhibit 2 - Approved Special Use Permit 16-01)
4. The subject property is located within the Town of Huntersville.

5. The applicant is also currently seeking a modification to the Conditional Rezoning (R16-06) and Special Use Permit approval (SUP16-01). They are seeking to pipe the stream running across their property and expand the C&D landfill over the stream. To move forward with the Rezoning and Special Use Permit process the applicants are required first to obtain the following variance approvals from the Board of Adjustment for the following sections:
 - a. Zoning Ordinance Article 8.25
 - i. The proposed use is not a permitted buffer impact per Article 8.25.6 or Article 8.25.10. Per, Article 8.25.11(b), when “unnecessary hardships,” as defined in Section 11.3.2 f, would result from strict adherence to the buffer width requirements and/or buffer treatment standards, a petition for variance may be filed with the Huntersville Board of Adjustment in compliance with the procedures and standards of Section 11.3.
 - b. Zoning Ordinance Article 9.23.4 c (See V21-08)
 - i. No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - ii. 50-foot buffer from delineated streams.
 - c. Code of Ordinances Section 151.60(A)(10) (See V21-09)
 - i. Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance, in special flood hazard area.
6. In addition to the conditional rezoning and special use permit, Variance 16-02 has been submitted seeking variances from Article 8.25 of the Zoning Ordinance, Article 9.23 of the Zoning Ordinance, and Section 151.60(A)(10) of the Code of Ordinances.
7. The three same variance requests were submitted in 2016 but were withdrawn due to contamination issues at the landfill. See below. (See Exhibit 3 - 2016 Withdrawal Email).
8. Included in the 2016 withdrawal email exchange between Planning Department Staff and the applicant, staff referenced a significant finding at the time that NCDEQ found contamination of surface and groundwater at the subject property. Staff was unable to support the 2016 variance application meeting the fourth variance standard that the request was consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved. (See Exhibit #3)
9. Because the property did not obtain the 2016 variance, use of the landfill was constricted to the area outside of the S.W.I.M. Buffer and the use was allowed in other areas of the property.
10. Within the application for Variance 21-07, the applicant includes a letter dated October 3, 2019 from NCDEQ to the applicant with regard to the Corrective Action Plan for the groundwater exceedances at the landfill. The letter references a Corrective Action Plan submitted to and approved by NCDENR to control and mitigate contaminated groundwater. (See Exhibit 4 - Variance Application, pages 17-18)
11. Variance 21-07 is a variance request from Article 8.25 of the Zoning Ordinance to impact the S.W.I.M. buffer at the subject property. The variance request is subject to subsequent approval of a S.W.I.M. Buffer Mitigation Plan by the Mecklenburg County Storm Water Administrator, approval of a Floodplain Development Permit by Mecklenburg County, approval of a 404-401 Stream Mitigation Plan approved by US Army Corps of Engineers, approval of NCDEQ Solid Waste Permit, and approval of all Town, County, and State building permit activities.
12. The applicant proposes to pipe the creek inside the +/- .87 acre Special Flood Hazard and S.W.I.M. Area. The applicant proposes the proposed lines and capped landfill expansion will be engineered to NCDEQ’s most current standards to further enhance public health and safety and will not reduce the value of nearby property as compared to past North Carolina standards. (See Exhibit 4 - Variance Application, page 6)
13. The applicant included in the application dated March 2, 2021 from NCDEQ Solid Waste Section Chief Ed Mussler that indicates LaBella (engineering consultant for Greenway Waste Solutions) compared the existing cap requirements to the proposed capping system. The findings by LaBella indicate employing the proposed, enhanced cap will reduce infiltration of pollutants by 50% compared to the alternative of the regulatory minimum cap on the landfill with no expansion. (See Exhibit 4 - Variance Application, page 15)

14. Additionally, the applicant includes a letter from the Catawba and Yadkin Riverkeepers. (See Exhibit 4 - Variance Application, page 16)
15. While the Catawba and Yadkin Riverkeepers is an advocacy organization, NCDEQ administers regulatory programs designed to protect air quality, water quality, and the public's health.
16. The letter indicates that riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. The letter states, “[they] are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 location, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.” The letter from the Catawba and Yadkin Riverkeepers also acknowledges their recommendation is based on several assumptions and the Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
17. A document is included by the applicant, “Historical Regulatory Compliance Time-Line,” that indicates a lab that previously analyzed groundwater samples from the subject property produced false-positive results for vinyl chloride. (See Exhibit 4 - Variance Application, page 19)
18. The Environmental Protection Agency classifies vinyl chloride as a human carcinogen. (See Exhibit 5 – EPA Fact Sheet on Vinyl Chloride)
19. The Historical Regulatory Compliance Time-Line document provided by the applicant also indicates analytical results from Eurofins TestAmerica (ETA), an environmental testing lab, show vinyl chloride has been detected in 10 monitoring wells according to testing conducted in April 2021. However, according to the document the detections identified by ETA do not exceed the allowable concentration of vinyl chloride specified in the 2L rules.
20. There is no document included by NCDEQ demonstrating there is no present contamination of surface or groundwater at the subject property.
21. Per Article 8.25.1 of the Huntersville Zoning Ordinance, the purpose of the S.W.I.M. stream buffer network is to filter pollutants, store floodwaters, provide habitat, and contribute to the “green infrastructure.” Stream systems are comprised of each stream and its respective drainage basin.
22. Article 8.25.11 of the Huntersville Zoning Ordinance provides nine different options to mitigate impacts on SWIM Buffers when an applicant is seeking a variance. The ordinance states that any of these mitigation techniques shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2(e)(4) consistent with adopted plans and protection of public safety and welfare.
23. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. (See Exhibit 6 – Email from Rusty Rozzelle and report from Mecklenburg County Storm Water Services)
24. On August 4, 2021, Town Planning Department Staff (Brad Priest and Lauren Speight) held a conference call with Jacklynne Drummond (Hydrologist, Solid Waste Section, NCDEQ). Ms. Drummond confirmed the information stated in the previously referenced March 2, 2021 letter from NCDEQ. Staff has outstanding questions regarding the proposed geosynthetic liner, contamination of surface water and storm water above the liner, and NCDEQ requirements for the collection system above the liner.

STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit 4 for the applicant’s responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

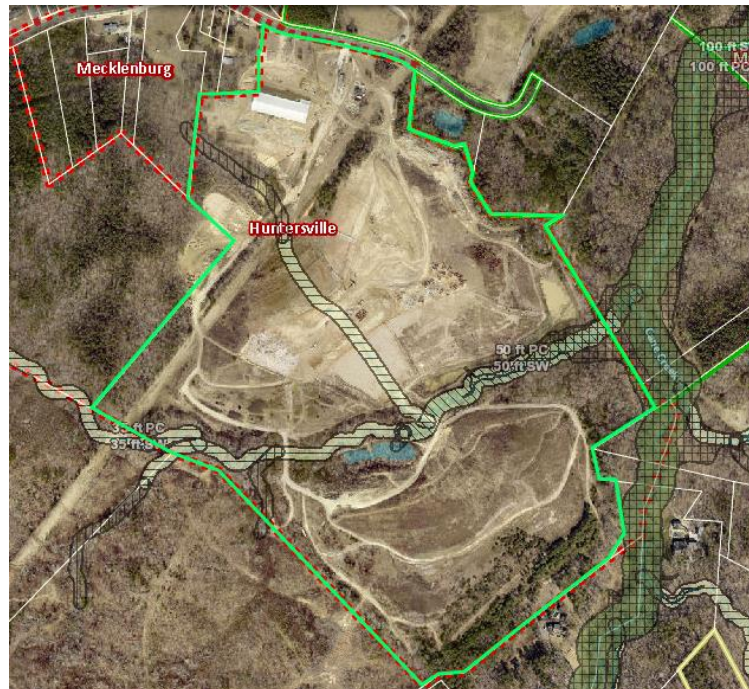
Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- A. The applicant states these (Huntersville Zoning Ordinance) regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe water through the site for expansion of the landfill use, which may prematurely reduce the lifespan of the landfill.
- B. The property is currently within the Special Purpose Zoning District. As mentioned, the subject property has an approved conditional district rezoning plan.
- C. The Land Clearing & Inert Debris and Construction & Demolition landfill use is permitted with an approved Special Use Permit in the Special Purpose Zoning District.
- D. The subject property has an approved Special Use Permit.
- E. The property is an active Construction & Demolition landfill.
- F. The subject property is seeking a variance to expand the use within the boundary of the subject property and the proposed expansion would impact a S.W.I.M. area.
- G. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4. As of August 3, 2021, the County Stormwater Administrator stated additional information is need from the applicant before approval of the proposed mitigation technique.
- H. The S.W.I.M. Buffers within the subject property occupy a comparably small proportion of total site area. The subject property is currently operating a Construction and Debris landfill. While infill of the S.W.I.M. buffer may reduce the lifespan of the landfill, denial of the variance would not prevent use of the property as landfill. Additionall, mitigation has not been approved by the Storm Water Aministrator.



- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- A. S.W.I.M. Stream Buffers are present throughout the Town of Huntersville and are not peculiar to the property. However, the Zoning Ordinance offers relief, Article 8.25.11 (Exhibit 4) from required SWIM buffer widths with an approved mitigation plan and Board of Adjustment action.
- B. The applicant states all of the following: The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition (C&D) landfill. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling area. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity.
- C. Properties throughout the Town that contain S.W.I.M. buffer areas are within a variety of zoning districts and allow a multitude of uses. Any property that sought to propose a use currently not allowed per Article 8.25 would be required to obtain an approved mitigation plan before disturbance of the buffer area.

- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*

Staff Findings:

- A. Greenway Waste at North Meck has been in operation since June 1993.
- B. SWIM buffer regulations added to the Zoning Ordinance in October 1999.
- C. The applicant states the hardship was not created by the manner in which the property has been used and the request is consistent with the intent of the Ordinance.
- D. S.W.I.M buffer areas are not created by property owners or applicant and Staff finds the hardship did not result from actions taken by the applicant or property owner.

- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

- A. If the variance is approved this would be just one part of the approval process in which the applicant is seeking. After obtaining BOA approval, the applicants will have to seek approval for a Rezoning to Special Purpose District and Special Use Permit for a C&D Landfill from the Town Board of Commissioners.
- B. The applicant states all of the following: “The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.”
- C. Two of the conditions of SUP 16-01 were:
 - a. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five(5) year basis.
 - b. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant’s property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.

- D. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques listed and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4.
- E. For their mitigation, the applicant proposes to utilize:
 - (8) Mitigation Credits: The purchase of mitigation credits through the Stream Restoration Program on a 1:1 basis, utilizing linear feet of stream impacted and the prevailing rate of purchase as established by the Charlotte-Mecklenburg Buffer Implementation Guidelines. Mitigation credits purchased under any other program (i.e., U.S Army Corp of Engineers) shall not cover this requirement unless the issuing agency agrees to relinquish the funds to the appropriate local government agency.
- F. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion.

STAFF POSITION:

The applicant is seeking a variance from Article 8.25 of the Zoning Ordinance. Article 8.25 indicates strict parameters for disturbance allowed dependent upon the location of the disturbance within the Buffer and type of disturbance proposed. Disturbance not permitted by Article 8.25 requires a variance from the Board of Adjustment and a site mitigation plan approved by the designated agency. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. Therefore, Staff recommends continuing this variance request at this time.

EXAMPLE MOTION: V21-07, 15300 Holbrooks Road, Parcel ID 019-101-02, Huntersville, NC 28078

Planning Department	Board of Adjustment
	APPROVAL: In considering the application for V21-07, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from Article 8.25 of the Zoning Ordinance, the Board of Adjustment approves the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request meets ____ of the four criteria for granting a variance based on the following findings of fact: <i>(explain findings of fact)</i>
	DENIAL: In considering the application for V21-07, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from Article 8.25 of the Zoning Ordinance, the Board of Adjustment denies the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request does not meet the criteria for granting a variance based on the following findings of fact: <i>(explain findings of fact)</i>

Exhibit List

Exhibit #1 - Approved Conditional District Rezoning 16-06

Exhibit #2 - Approved Special Use Permit 16-01

Exhibit #3 - 2016 Email Withdrawing Variance 16-02

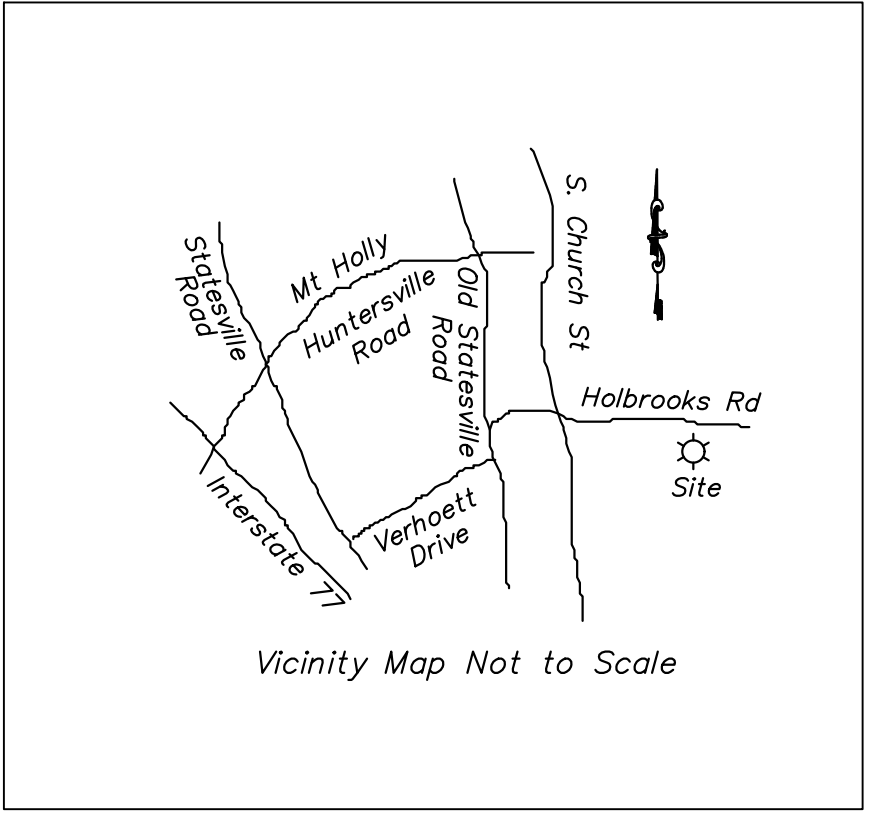
Exhibit #4 - 2021 Variance Application

Exhibit #5 - EPA Vinyl Chloride Fact Sheet

Exhibit #6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services regarding Mitigation

Exhibit #1 - Approved Conditional District Rezoning 16-06

CONDITIONAL DISTRICT REZONING FOR GREENWAY WASTE SOLUTIONS OF NORTH MECK. LLC.



LIST OF DRAWINGS:

CD001	COVER SHEET
CD100	CONDITIONAL DISTRICT SITE PLAN
CD101	CONDITIONAL DISTRICT SITE PLAN

**EPM REFERENCE NUMBER:
#365454 CONDITIONAL REZONING & CONCEPT PLAN**

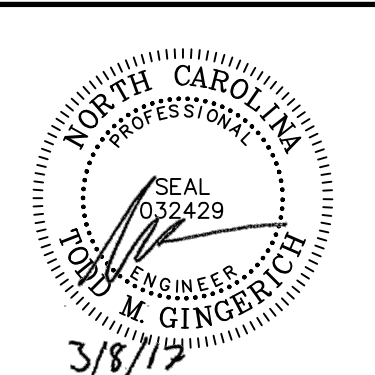


Note: The Huntersville Board of Commissioners approved R16-06 on November 7, 2016.

CONCEPT NOTE: Approval of this Concept Plan does not imply or guarantee approval of the Final Construction Plans. Final Construction Plans will be reviewed for compliance with all Town, County and State regulations in effect at time of submittal.

APPROVAL OF THIS CONCEPT PLAN DOES NOT IMPLY OR
GUARANTEE APPROVAL OF THE FINAL CONSTRUCTION
PLAN. FINAL CONSTRUCTION PLAN WILL BE REVIEWED
FOR COMPLIANCE PER ALL TOWN, COUNTY, AND STATE
REGULATIONS IN EFFECT AT TIME OF SUBMITTAL.

NORTH CAROLINA
BOARD OF EXAMINERS
FOR ENGINEERS AND
SURVEYORS LICENSE
NO. C-3035



CONDITIONAL DISTRICT COVER SHEET

CD001

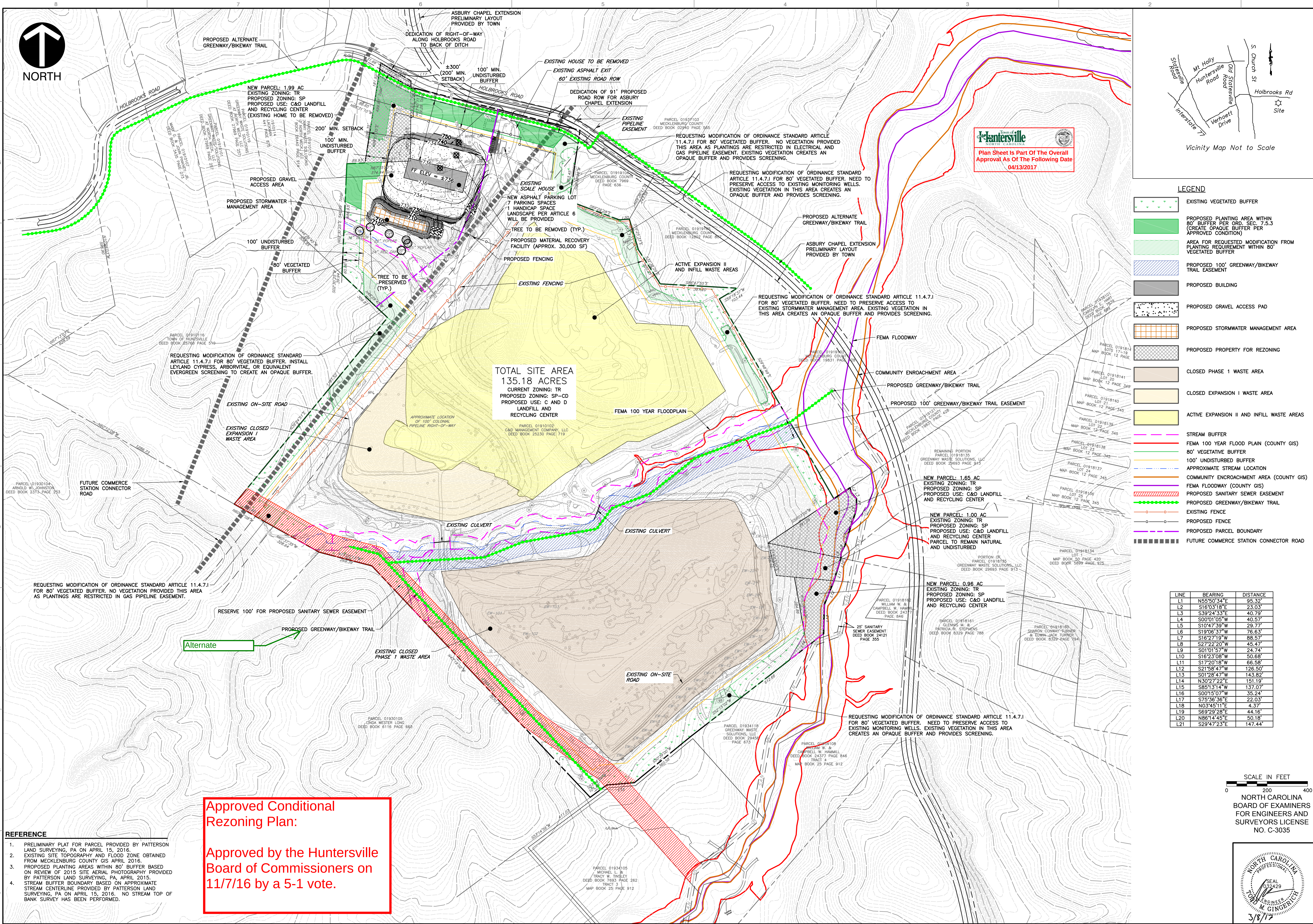
**GREENWAY WASTE SOLUTIONS
AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA**



Civil & Environmental Consultants, Inc.
 1900 Center Park Drive - Suite A - Charlotte, NC 28217
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Approved Conditional Rezoning Plan:

Approved by the Huntersville Board of Commissioners on 11/7/16 by a 5-1 vote.

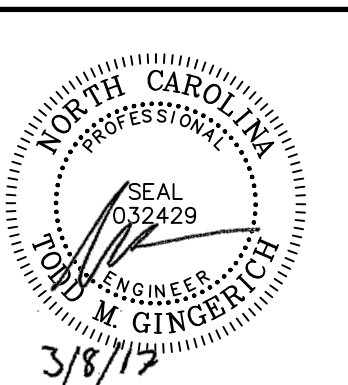
- REFERENCE**
1. PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
 2. EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY GIS APRIL 2016.
 3. PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2016.
 4. STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM TOP OF BANK SURVEY HAS BEEN PERFORMED.

LINE	BEARING	DISTANCE
L1	N55°50'34"E	95.32'
L2	S16°03'18"E	23.03'
L3	S39°24'33"E	40.79'
L4	S00°01'05"W	40.57'
L5	S10°47'39"W	29.77'
L6	S19°06'37"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'20"W	45.47'
L9	S01°01'57"W	24.74'
L10	S16°23'08"W	50.68'
L11	S17°20'18"W	66.58'
L12	S21°58'47"W	126.50'
L13	S01°28'47"W	143.82'
L14	N30°27'22"E	151.19'
L15	S85°31'14"W	137.07'
L16	S00°15'07"W	35.24'
L17	S75°36'36"E	22.03'
L18	N03°45'11"E	4.37'
L19	S69°29'28"E	44.16'
L20	N86°14'45"E	50.18'
L21	S29°47'23"E	147.44'

SCALE IN FEET

0 200 400

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035



REVISION RECORD

NO	DATE	DESCRIPTION
1	03/20/15	ADDED FLOODING INFORMATION
2	03/20/15	REVISED PER TOWN OF HUNTERVILLE
3	03/20/15	REVISED PER TOWN OF HUNTERVILLE
4	03/20/15	REVISED PER TOWN OF HUNTERVILLE
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1900 Center Park Drive - Suite A - Charlotte, NC 28217

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www.cesinc.com

CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC

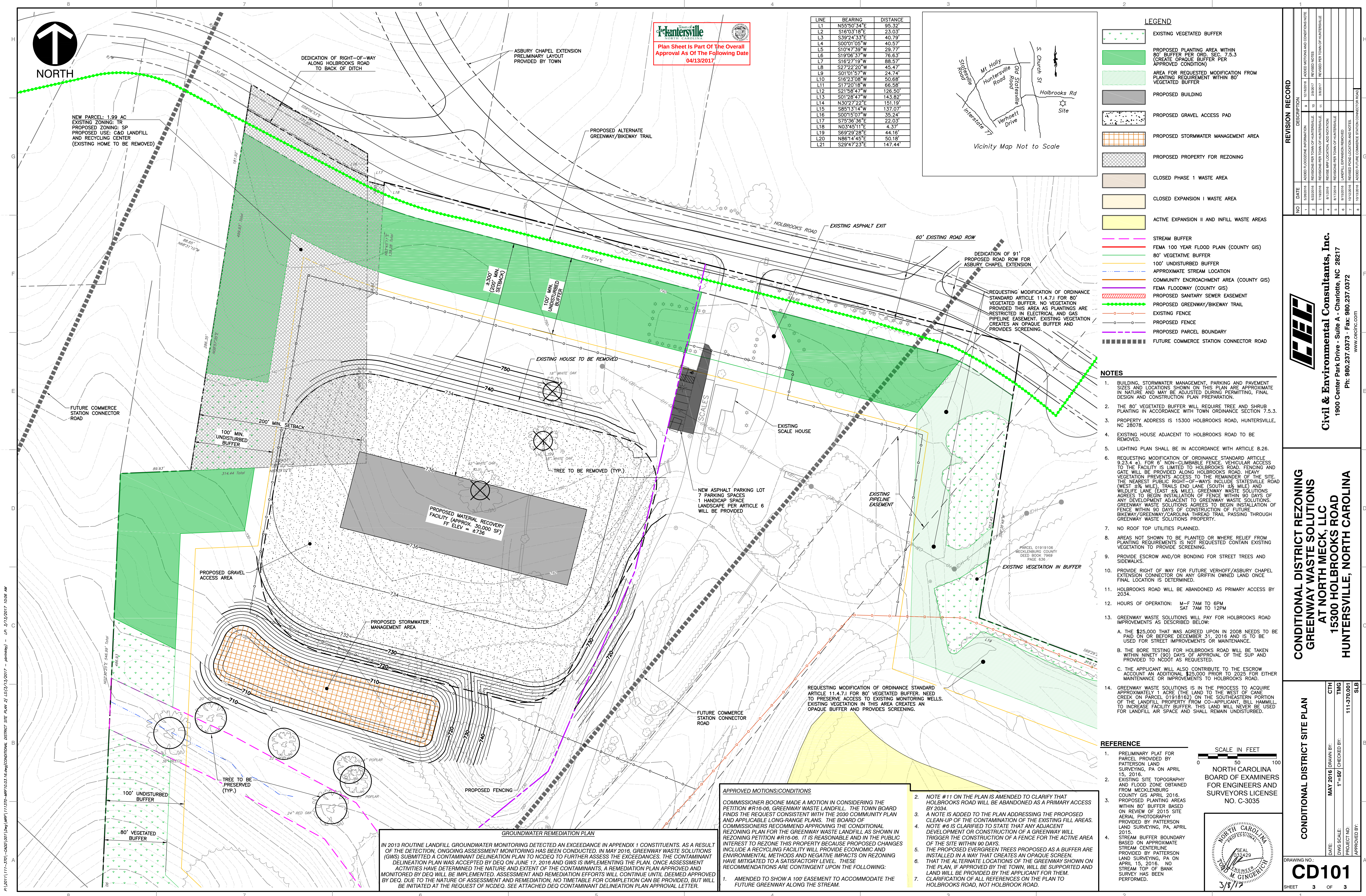
15300 HOLBROOKS ROAD HUNTERSVILLE, NORTH CAROLINA

CONDITIONAL DISTRICT SITE PLAN

DATE:	1 MAY 2016	DRAWN BY:	CTH
DWG SCALE:	1"=200'	CHECKED BY:	TMG
PROJECT NO:	111-370-001	APPROVED BY:	SJB

DRAWING NO: **CD100**

SHEET 2 OF 3



P:\2017\1171-3201-CAD\001\DWG\11713201-WR10.01.16.dwg/CONDITIONAL DISTRICT SITE PLAN 2/15/2017 10:06 AM - LP: 3/13/2017 10:06 AM

GROUNDWATER REMEDIATION PLAN

IN 2013 ROUTINE LANDFILL GROUNDWATER MONITORING DETECTED AN EXCEEDANCE IN APPENDIX 1 CONSTITUENTS. AS A RESULT OF THE DETECTION, ONGOING ASSESSMENT MONITORING HAS BEEN CONDUCTED. IN MAY 2016, GREENWAY WASTE SOLUTIONS (GWS) SUBMITTED A CONTAMINANT DELINEATION PLAN TO NCEQ TO FURTHER ASSESS THE EXCEEDANCES. THE CONTAMINANT DELINEATION PLAN WAS ACCEPTED BY DEQ ON JUNE 17, 2016 AND GWS IS IMPLEMENTING THE PLAN. ONCE ASSESSMENT ACTIVITIES HAVE DETERMINED THE NATURE AND EXTENT OF THE CONTAMINANTS, A REMEDIATION PLAN APPROVED AND MONITORED BY DEQ WILL BE IMPLEMENTED. ASSESSMENT AND REMEDIATION EFFORTS WILL CONTINUE UNTIL DEEMED APPROVED BY DEQ. DUE TO THE NATURE OF ASSESSMENT AND REMEDIATION, NO TIMETABLE FOR COMPLETION CAN BE PROVIDED, BUT WILL BE INITIATED AT THE REQUEST OF NCEQ. SEE ATTACHED DEQ CONTAMINANT DELINEATION PLAN APPROVAL LETTER.

APPROVED MOTIONS/CONDITIONS

COMMISSIONER BOONE MADE A MOTION IN CONSIDERING THE PETITION #16-06, GREENWAY WASTE LANDFILL. THE TOWN BOARD FINDS THE REQUEST CONSISTENT WITH THE 2030 COMMUNITY PLAN AND APPLICABLE LONG-RANGE PLANS. THE BOARD OF COMMISSIONERS RECOMMEND APPROVING THE CONDITIONAL REZONING PLAN FOR THE GREENWAY WASTE LANDFILL AS SHOWN IN REZONING PETITION #16-06. IT IS REASONABLE AND IN THE PUBLIC INTEREST TO REZONE THIS PROPERTY BECAUSE PROPOSED CHANGES INCLUDE A RECYCLING FACILITY WILL PROVIDE ECONOMIC AND ENVIRONMENTAL METHODS AND NEGATIVE IMPACTS ON REZONING HAVE MITIGATED TO A SATISFACTORY LEVEL. THESE RECOMMENDATIONS ARE CONTINGENT UPON THE FOLLOWING:

1. AMENDED TO SHOW A 100' EASEMENT TO ACCOMMODATE THE FUTURE GREENWAY ALONG THE STREAM.

2. NOTE #11 ON THE PLAN IS AMENDED TO CLARIFY THAT HOLBROOKS ROAD WILL BE ABANDONED AS A PRIMARY ACCESS BY 2034.
3. A NOTE IS ADDED TO THE PLAN ADDRESSING THE PROPOSED CLEAN-UP OF THE CONTAMINATION OF THE EXISTING FILL AREAS.
4. NOTE #6 IS CLARIFIED TO STATE THAT ANY ADJACENT DEVELOPMENT OR CONSTRUCTION OF A GREENWAY WILL TRIGGER THE CONSTRUCTION OF A FENCE FOR THE ACTIVE AREA OF THE SITE WITHIN 90 DAYS.
5. THE PROPOSED EVERGREEN TREES PROPOSED AS A BUFFER ARE INSTALLED IN A WAY THAT CREATES AN OPAQUE SCREEN.
6. THAT THE ALTERNATE LOCATIONS OF THE GREENWAY SHOWN ON THE PLAN, IF APPROVED BY THE TOWN, WILL BE SUPPORTED AND LAND WILL BE PROVIDED BY THE APPLICANT FOR THEM.
7. CLARIFICATION OF ALL REFERENCES ON THE PLAN TO HOLBROOKS ROAD, NOT HOLBROOK ROAD.

REFERENCE

1. PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
2. EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY 05 APRIL 2016.
3. PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2016.
4. STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM OF BANK SURVEY HAS BEEN PERFORMED.

SCALE IN FEET

0 50 100

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035

3/8/17

NOTES

1. BUILDING, STORMWATER MANAGEMENT, PARKING AND PAVEMENT SIZES AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE IN NATURE AND MAY BE ADJUSTED DURING PERMITTING, FINAL DESIGN AND CONSTRUCTION PLAN PREPARATION.
2. THE 80' VEGETATED BUFFER WILL REQUIRE TREE AND SHRUB PLANTING IN ACCORDANCE WITH TOWN ORDINANCE SECTION 7.5.3.
3. PROPERTY ADDRESS IS 15300 HOLBROOKS ROAD, HUNTERSVILLE, NC 28078.
4. EXISTING HOUSE ADJACENT TO HOLBROOKS ROAD TO BE REMOVED.
5. LIGHTING PLAN SHALL BE IN ACCORDANCE WITH ARTICLE 8.26.
6. REQUESTING MODIFICATION OF ORDINANCE STANDARD ARTICLE 9.23.4 (a) FOR 6' NON-CLIMBABLE FENCE. VEHICULAR ACCESS TO THE FACILITY IS LIMITED TO HOLBROOKS ROAD. FENCING AND GATES WILL BE PROVIDED ALONG HOLBROOKS ROAD. HEAVY VEGETATION PREVENTS ACCESS TO THE REMAINDER OF THE SITE. THE NEAREST PUBLIC RIGHT-OF-WAYS INCLUDE STATESVILLE ROAD (WEST ¼ MILE), TRAILS END LANE (SOUTH ¼ MILE) AND WILDLIFE LANE (EAST ¼ MILE). GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF ANY DEVELOPMENT ADJACENT TO GREENWAY WASTE SOLUTIONS. GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF CONSTRUCTION OF FUTURE BIKEWAY/GREENWAY/CAROLINA THREAD TRAIL PASSING THROUGH GREENWAY WASTE SOLUTIONS PROPERTY.
7. NO ROOF TOP UTILITIES PLANNED.
8. AREAS NOT SHOWN TO BE PLANTED OR WHERE RELIEF FROM PLANTING REQUIREMENTS IS NOT REQUESTED CONTAIN EXISTING VEGETATION TO PROVIDE SCREENING.
9. PROVIDE ESCROW AND/OR BONDING FOR STREET TREES AND SIDEWALKS.
10. PROVIDE RIGHT OF WAY FOR FUTURE VERHOEFF/ASBURY CHAPEL EXTENSION CONNECTOR ON ANY GRIFFIN OWNED LAND ONCE FINAL LOCATION IS DETERMINED.
11. HOLBROOKS ROAD WILL BE ABANDONED AS PRIMARY ACCESS BY 2034.
12. HOURS OF OPERATION: M-F 7AM TO 6PM SAT 7AM TO 12PM
13. GREENWAY WASTE SOLUTIONS WILL PAY FOR HOLBROOKS ROAD IMPROVEMENTS AS DESCRIBED BELOW:
 - A. THE \$25,000 THAT WAS AGREED UPON IN 2008 NEEDS TO BE PAID ON OR BEFORE DECEMBER 31, 2016 AND IS TO BE USED FOR STREET IMPROVEMENTS OR MAINTENANCE.
 - B. THE BORE TESTING FOR HOLBROOKS ROAD WILL BE TAKEN WITHIN NINETY (90) DAYS OF APPROVAL OF THE SUP AND PROVIDED TO NCEQ AS REQUESTED.
 - C. THE APPLICANT WILL ALSO CONTRIBUTE TO THE ESCROW ACCOUNT AN ADDITIONAL \$25,000 PRIOR TO 2025 FOR EITHER MAINTENANCE OR IMPROVEMENTS TO HOLBROOKS ROAD.
14. GREENWAY WASTE SOLUTIONS IS IN THE PROCESS TO ACQUIRE APPROXIMATELY 1 ACRE (THE LAND TO THE WEST OF CANE CREEK ON PARCEL 01918162) ON THE SOUTHEASTERN PORTION OF THE LANDFILL PROPERTY FROM CO-APPLICANT, BILL HAMMILL, TO INCREASE FACILITY BUFFER. THIS LAND WILL NEVER BE USED FOR LANDFILL AIR SPACE AND SHALL REMAIN UNDISTURBED.

CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC 15300 HOLBROOKS ROAD HUNTERSVILLE, NORTH CAROLINA

Civil & Environmental Consultants, Inc.
1900 Center Park Drive - Suite A - Charlotte, NC 28217
Ph: 980.237.0373 • Fax: 980.237.0372
www.cecinc.com

REVISION RECORD

NO	DATE	DESCRIPTION
1	03/08/16	ADDED FLOODZONE INFORMATION
2	03/08/16	REVISED NOTES
3	03/08/16	REVISED TOWN OF HUNTERSVILLE
4	03/08/16	REVISED TOWN OF HUNTERSVILLE
5	03/08/16	REVISED TOWN OF HUNTERSVILLE
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DRAWING NO. CD101

SHEET 3 OF 3

Special Use Permit Granted

On Monday November 7, 2016 the Huntersville Town Board held a public meeting to consider the below noted Special Use Permit:

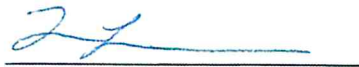
SUP16-01, a request by Greenway Waste Solutions, LLC and William Hammill for a Special Use Permit allowing the 135 acre landfill located at 15300 Holbrook Road to expand its boundaries and add another fill area in the existing site (parcels 01910102, 01910109, and portions of 01918135, 01918162, and 01934118).

Having heard all the evidence and argument presented at the meeting, the Board finds the application is complete, that the application complies with all of the applicable requirements of the Huntersville Zoning Ordinance for the operation proposed, and therefore the application to make use of the above-described property for the purpose indicated is hereby approved, subject to all applicable provisions of the Zoning Ordinance, the attached Findings of Fact, and the conditions added by the Town Board at the time of approval.

Also, the applicant shall complete the development strictly in accordance with the site plan, building elevations, and letter from the applicant attached which were submitted to and approved by this Board, a copy of which is filed in the Town of Huntersville Planning Department.

IN WITNESS WHEREOF, the Town of Huntersville has cause this permit to be issued in its name, and the undersigned, being all of the property owners of the property above described, do hereby accept this Special Use Permit, together with all its conditions, as binding on them and their successors in interest.

Michael L. Griffin, owner(s) of the above identified property, do hereby acknowledge receipt of this Special Use Permit. The undersigned owners do further acknowledge that no work may be done pursuant to the permit except in accordance with all of its conditions and requirements and that the restriction shall be binding on them and their successors in interest.



Owner

Planning

Post Office Box 664 • 101 Huntersville-Concord Road • Huntersville, NC 28070
phone 704.875.7000 • fax 704.875.6546 • www.huntersville.org

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Teresa D. Nantz, a Notary Public of the County and State aforesaid, certify that Michael L. Griffin, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal or stamp, this 34th day of March 2017.

(SEAL)

Notary Public

Teresa D. Nantz

My commission expires: 7/4/2019



STAFF FINDINGS OF FACT APPROVED BY THE TOWN BOARD

Article 9.23

Off Site LCID and C&D landfills are permitted in the SP District-subject to a Special Use Permit, according to the procedures of Section 11.4.10. The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

STAFF FINDINGS: *The Greenway Waste Solutions Landfill (North Mecklenburg Landfill) is an existing Construction and Demolition (C&D) landfill with an unexpired special use permit that would be allowed to continue to operate in its current zoning designation per Article 9.23.10. The proposed application is to amend the existing special use permit to add adjacent properties to the permit boundaries, add an additional fill area on the site over the stream that bisects the site, and include a recycling facility near Holbrook Road. The applicants are seeking a rezoning of the entire 135 acre property to Special Purpose (SP) concurrent with the SUP application in conformance to Article 9.23.10.*

- *UPDATE 9/19/16: The updated site plan has removed the additional fill area over the stream from the application. The special use permit now is solely for the boundary expansion as shown on the plan and for the addition of the recycling facility near Holbrook Road.*
1. That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills.

STAFF FINDINGS: *The NCDENR (North Carolina Division of Environment and Natural Resources) is now known as the North Carolina Department of Environmental Quality (NCDEQ). The NCDEQ permit has not been forwarded by the applicant showing evidence of permitting. In addition, after discussion with NCDEQ Division of Waste Management, the landfill in question has been found to exceed state regulatory limits of various groundwater and surface water contaminants and methane gas since 2013. Further, a Notice of Violation was issued on September 16, 2014 to the landfill due to an encroachment upon their required state mandated buffer to the east of the property. As of now, the landfill remains in violation of the required buffer.*

- *UPDATE 9/19/16: The current NCDEQ permit has been forwarded and is attached in the Board's agenda packet. The current permit is valid through 10/8/17. The updated letter attached to the SUP application states that the applicants will operate in compliance with NCDEQ rules. Staff recommends that a more specific statement from the applicant be added to the SUP plan or attached letter that addresses the contamination of the site and the buffer violation. It is staff's understanding that the applicants are beginning discussion with NCDEQ on the remediation process to clean up the contamination. They are also in the process of purchasing property to the southeast of the site that will mitigate their buffer violation.*
2. That the proposed use will not endanger the public health and safety, nor substantially reduce the value of the nearby property; and

STAFF FINDINGS: *Per discussion with NCDEQ Division of Waste Management, it appears the constituents leaching from the landfill have contaminated multiple drinking water wells adjacent to the subject property. Two parcels were purchased (including one residence) by the landfill and two homes were added on to municipal water service due to the groundwater contamination. According to NCDEQ, the applicant has been cooperative with the state in installing both shallow and deep*

groundwater monitoring wells and methane gas monitoring wells, in an effort to analyze and find the nature and extent of both the groundwater contamination and the methane gas exceedances. The applicant has also been cooperative in addressing the immediate issue of the contamination of the adjacent drinking water wells as discussed above. The monitoring and analyzing of both the groundwater and methane gas contamination is ongoing. At this time, there are still many unknowns in regard to the nature and extent of the existing groundwater and surface water contamination and potential methane gas migration. Once the nature and extent is more fully understood, NCDEQ will require mitigation plans for the applicant to begin contamination cleanup of both the active fill area, and the fill area that is closed out and inactive (which is under a different set of state rules). In addition, contamination was also found in the groundwater monitoring wells near the stream, and recently in the surface water sampling of the stream that is being proposed to be piped and covered with the expansion. Please find the groundwater monitoring well locations of the site in a map forwarded by NCDEQ.

- UPDATE 9/16/19: The proposed recycling facility is located near Holbrook Road, separated from the area that is contaminated and a significant distance from where active monitoring wells are located. Please see the NCDEQ Monitoring well map attached in the agenda packet. There are no new fill areas proposed with the updated application. Therefore since disturbance of the contaminated area is no longer proposed, and the new recycling facility is located a significant distance from the contamination, staff finds the contamination issue of the existing facility and the addition of the recycling facility separate issues that do not conflict. However for record in regard to public safety and health concerns, it is recommended that the applicant add a note in the plan stating the planned schedule of NCDEQ remediation of the existing site and commit to the cleanup in a timely manner.
 - UPDATE 10/17/16: The updated condition letter submitted by the applicant states: "Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented"
3. That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

STAFF FINDINGS: The subject property is not located within the boundaries of any of the Small Area Plans adopted by the Town of Huntersville. However, the East Huntersville plan does mention and recommend a connector road in between the proposed Verhoeff Drive extension to the south and the future Asbury Chapel extension to the north. The north/south connector road could traverse the subject property. In the 2009 landfill SUP, the applicants reserved the right of way in the area of the gas pipeline and buffer at the southwest edge of the property through their main entrance. Please find the 2009 SUP for your reference in your agenda packet. For this application no commitment has been made to accommodate the future connection.

- UPDATE 9/19/16: The letter attached to the application states that "the site plan makes an accommodation for the connector road on any Griffin owned land once the final locate is determined". The note on the plan however is not clear and needs to be reworded showing the intent to provide right of way for the thoroughfare connector road through the subject property. UPDATE 10/17/16: The note has been amended on the conditional letter stating that the applicant will accommodate for the connector road on any property owned by the applicant.

4. That the comprehensive site plan addresses each of the environmental and development standards below:

- (a) A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare-where available. Landfills 10 acres or less must directly connect to a major or minor thoroughfare or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

STAFF FINDING: *The existing landfill does not have access to a thoroughfare or a street that is built to commercial street standards. Access is from Holbrooks Road, which is a secondary residential street that traverses a residential neighborhood. The ordinance states that the Town Board may issue a SUP for a landfill that does not front on a thoroughfare or commercial street if it finds that it “would not likely cause any injurious effect on the property adjacent to the access”.*

When the last Special Use Permit (SUP) application was submitted in 2009, the NCDOT district engineer commented in an email to the applicant that Holbrooks Road “does not possess the pavement structure to accommodate the truck traffic it has experienced and will be subject to with the continued use your company is planning”. The 2009 SUP was eventually approved with an added stipulation that the condition of Holbrooks Road be reviewed in 5 years. Another condition was that the applicant contributes \$25,000 in the next 10 years toward the maintenance of Holbrook Road. In December of 2014 public works and engineering staff inspected Holbrook Road and found that it was in good condition as NCDOT had just finished repaving the street in 2013 (added 4 inches of asphalt). As of this date, the applicant has not forwarded the \$25,000 to NCDOT for the street maintenance.

After contacting NCDOT and asking for their input on the current state of Holbrook Road in relation to the proposed expansion and indefinite lifespan extension of the landfill, NCDOT’s concern about the durability of the road remained. They requested that the applicant submit core samples of the road to evaluate its substructure. As of the date of this report staff is not aware of any recent discussions the applicant has had with NCDOT on the durability of Holbrook Road in regard to this application. Please find the emails from NCDOT attached in your agenda package.

- **UPDATE 9/19/16:** *The newest plan submitted has no updated notes about the maintenance and structure of Holbrook Road in response to NCDOT comments. The letter submitted by the applicant with the application states that they intend to “connect to the future Verhoff/Asbury Chapel Extension and will reserve a right of way for the future connection to a potential industrial street to the south through the Commerce Station Industrial Park by 2034”. Per past discussions with the applicant it is thought that this note is intended to cap or limit their usage of Holbrook Road to no longer than the year 2034, as well as providing a connection from their site to one of the future thoroughfares by that time. Staff recommends that if that is the case, the note be clarified to clearly state that on the special use permit plan. It is still also unclear if the \$25,000 committed to at the last SUP approval would carry over as a condition for this permit.*

- *UPDATE 10/17/16: Note #11 on the latest Special Use Permit plan submitted states "Greenway Waste Solutions shall have alternative access to replace Holbrooks Road by 2035". Staff recommends the note be clarified to read: "Greenway Waste Solutions will cease using Holbrook Road as its primary access and will have functional primary access onto a commercial street or thoroughfare by 2034". 2034 is the year that based on prior approvals, permission has already been granted for the use of Holbrook Road.*
- *Note #13 on the updated Special Use Permit plan includes a series of notes in regard to the maintenance and improvement of Holbrook Road. They include:*
 - *Conducting the boring tests to determine the current pavement structure of Holbrook Road, per NCDOT's request.*
 - *Overlaying Holbrook Road in front of the facility as requested by NCDOT.*
 - *Carrying over the previously offered \$25,000 contribution for improvements to Holbrook Road as part of this application.*
 - *Reassessing the condition of Holbrook Road with Town Staff and NCDOT in 2025, about the half way point between now and 2034 when they've agreed to stop using Holbrook Road.*
 - *The applicant would then contribute additional funds at that time if the Town and NCDOT deem it necessary.*

(b) That the proposed or existing use will be in compliance with the rules and regulations as established by Traffic Impact Analysis (TIA) Article 14.

STAFF FINDING: *Engineering and Public Works has determined that based on the expansion proposed, the new amount of traffic that will be generated will not meet the threshold that would require the submission of Traffic Impact Analysis (TIA). Please find the TIA determination from engineering in your agenda packet.*

- (c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modifications made by the state unless the state standards become more restrictive.
- 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and /or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right of way to fill area (non-state requirement).

STAFF FINDING: *The submitted letter from Greenway Waste Solutions states that they conform to all the buffers required in this section. However, as shown on aerial photography and from the*

submitted special use permit plan, multiple existing driveways are located within the 100 foot undisturbed buffer. In addition, the applicants are seeking a variance from the Board of Adjustment for this section of the ordinance in order to encroach/fill the 50 foot delineated stream buffer and to fill in designated wetlands and FEMA flood areas. No new encroachments are shown on the plan other than the ones requested by way of the Board of Adjustment. In order for the applicant to try to address some concerns by staff, the Board of Adjustment has continued the variance hearing per the applicant's request. The hearing is scheduled to continue on September 13, 2016.

- *UPDATE 9/19/16: On September 13, the applicants withdrew their variance applications. The proposed plan no longer proposes to fill the stream and encroach into the required buffers. After review, there are not any newly proposed encroachments on the updated special use permit plan.*

- (d) Driveway access to the facility must be paved for a distance of at least 100 feet from the public street.

STAFF FINDING: *According to aerial photography and as inspected in a staff site visit, the entrance driveway to the facility is paved to a distance greater than 100 feet. However the separate exit drive that connects to the main street driveway where trucks leave the site is not paved for distance of 100 feet. The special use permit plan submitted by the applicant shows the exit drive proposed to be paved for a distance of 100 feet per this section.*

- (e) Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6 feet high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

STAFF FINDING: *The letter from the applicant states that the site is "closeable and secured from vehicular and pedestrian access" but does not provide how that is done. The letter also mentions that a variance will be submitted for the fence requirement. No variance application has been submitted for this section of the ordinance. The Special Use Permit site plan includes a note stating that "heavy vegetation" prevents access to the site. The submitted information does not provide conformance to the fence and security requirement of this section.*

- *UPDATE 9/19/16: The new rezoning plan (separate application) includes a modification request to the Town Board from the fencing section of the ordinance. It states that the new recycling facility near Holbrook Road would be fenced and shows an existing fence along the northern sections of the landfill. However it implies that the remainder of the site, the southern portion, would not be fenced. A note on the plan states that "heavy vegetation prevents access to the remainder of the site". Staff cannot support this modification request at this time as it is unclear whether or not heavy vegetation provides a secure facility as intended in the code.*

- UPDATE 10/17/16: The updated Special Use Permit plan modifies the above note (note #6), which commits the applicant to enclose the rest of the active facility with a fence within 90 days of either development happening adjacent to the property, or the greenway begins construction through the applicant's property.

- (f) All driveways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100 feet from the public street so that no traffic waiting to enter the site will be backed up on any public right of way.

STAFF FINDING: The letter from the applicant states that "The driveway that serves the site is wide enough to accommodate two-way traffic for 200 feet from the public street. There is ample room such that traffic should not enter the public right of way". As shown on aerial photography and inspected on a site visit, there is a single driveway entering the facility that is not wide enough to accommodate two way traffic through the scale house and into the facility. This driveway is mainly about 11 feet wide. However, this entrance driveway leading up to the scale house is over 100 feet long in conformance to this section. There is a separate and additional one-way exit drive that directs trucks back out to the main driveway. Therefore with both of these driveways combined two-way traffic is appropriately accommodated for in and out of the facility.

5. That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

STAFF FINDING: In the letter attached from the applicant, it is stated that they "have taken pride in keeping the roadways clean". However no commitment has been made to weekly clean the road as required in this section. On several site inspections to the site the majority of Holbrook Road seems to be clean and debris free. However the area of street immediately in front of the facility's driveway is often covered with dirt from trucks exiting the facility.

- UPDATE 9/19/16: In the updated letter from the applicant, they've stated that they "plan to continue to exceed section 6.5 of the franchise agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles". This statement however does not make it clear that the cleaning of Holbrook Road would take place on a weekly basis. UPDATE 10/17/16: The applicants have updated the letter to commit to "routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed."

6. That use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

STAFF FINDING: *The Greenway Waste Solutions landfill is adjacent to a residential zoning district therefore the restricted hours of operation will apply. The letter from the applicant has stated that the use will be limited from 7:00 am to 6:00 pm.*

7. That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

STAFF FINDING: *The letter from the applicant states that an updated timetable has been submitted with the application. However staff has not located it in the submittal.*

- **UPDATE 9/19/16:** *The updated letter from the applicant states that based on current waste acceptance rates and anticipated recycling rates, they project the life of the landfill to be over 20 years.*

8. That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

STAFF FINDING: *No updated reclamation plan (or closure plan) has been submitted by the applicant for this application.*

- **UPDATE 9/19/16:** *There is no reclamation plan/closure plan submitted with the updated submitted as required. The letter submitted with the application though includes a statement regarding NCDEQ monitoring the site post closure. **UPDATE 10/17/16:** The closure plan has been submitted.*

9. An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

- (a) The landfill has been continuously operating since 1991 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;
- (b) The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;
- (c) The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and
- (d) In no event shall the landfill operate under a LCID landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately

commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plans shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.

STAFF FINDINGS: *The Greenway Waste Solution Landfill is a Construction and Demolition Landfill (C&D) and is not subject to this section of the ordinance. This section of the ordinance applies to Land Clearing and Inert Debris Landfills (LCID).*

10. Any existing C&D landfill shall be permitted to continue operating in the zone in which it is located provided that landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

STAFF FINDINGS: *The current special use permit for the Greenway Waste Solutions landfill is current and unexpired. However the applicants do wish to expand the boundaries of the landfill as shown in the attached Special Use Permit site plan. Therefore the rezoning application submitted for these properties must first be approved designating them Special Purpose (SP) prior to this special use permit being approved. The rezoning of the property was approved on 11/7/17 immediately prior to the special use permit approval.*

Additional Conditions Added by the Town Board (when in conflict with the findings above, the conditions below shall apply)

1. The site will operate in compliance with all NCDEQ requirements.
2. The applicant will cooperate with NCDEQ in addressing its contaminated ground waters.
3. The \$25,000 that was agreed upon in 2008 needs to be paid on or before December 31, 2016 and to be used for street improvements or maintenance.
4. The proposed use will not be in conflict with the objectives of the long and short range adopted area plans.
5. The comprehensive site plan addresses necessary environmental and development standards.
6. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
7. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant's property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
8. The bore test for Holbrooks Road will be taken within ninety (90) days of approval of the SUP and provided to NCDOT as requested.

9. The applicant will maintain an internal 100' driveway from the public street in good condition.
10. The applicant will also contribute to the escrow account an additional \$25,000 prior to 2025 for either maintenance or improvements to Holbrook Road.
11. All right-of-ways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100' from a public street so that traffic waiting to enter the site will not be backed up onto any public right-of-way.
12. The landfill operator will commit to routinely washing Holbrooks Road with a specialized truck designed to remove dirt and mud when required.
13. That the use of the site shall be limited to the hours of 7 a.m. to 6 p.m. Monday through Saturday.
14. That a time table be submitted indicating the development phases and life expectancy of the landfill.
15. That a closure plan (reclamation plan) is provided in accordance with applicable state regulations and the applicant commits to make updates to the plan as circumstances dictate.
16. The applicant will meet all appropriate state operating and reporting requirements pertaining to C&D recycling.
17. Due to the contamination in the landfill and surrounding areas the applicant will provide updates to the Town with compliance of the SUP conditions 10 years following the approval of the SUP and every 5 years thereafter upon the closure of the landfill.
18. That all provisions and findings of Article 9.23 be complied with as identified by staff (shown above as staff findings of fact).



Special Use Permit Application

Subject: Letter stating how the applicant satisfies Article 9

Date: 10/12/16

Greenway Waste Solutions, LLC has been operating in its current use since 1988. During this time Greenway Waste Solutions, LLC has operated under the purview of Article 9.23 and satisfied all criteria.

Sincerely,

John Brown
Greenway Waste Solutions

Special Use Permit
~~COMMERCIAL SITE PLAN~~
APPROVED BY THE TOWN OF HUNTERSVILLE
Bradley D. Smith 3/28/17
Planning Staff Date

9.23 Off-Site Land Clearing and Inert Debris (LCID) and Construction & Demolition (C&D) Landfills

Off-Site LCID and C&D Landfills are permitted in the SP District subject to a Special Use Permit, according to the procedures of [Section 11.4.10](#). The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

.1 That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills, as amended.

This site will operate in compliance with the rules according to NCDEQ. See attached NCDEQ (formerly NCDENR) Permit No. 60-13 CDLF-1993. The current permit expires 10/8/2017. (see p.6, Attachment 3, Part I:1)

In 2013 routine landfill groundwater monitoring detected an exceedance in Appendix 1 constituents. As a result of the detection, ongoing assessment monitoring has been conducted. In May 2016, Greenway Waste Solutions (GWS) submitted a Contaminant Delineation Plan to NCDEQ to further assess the exceedances. The Contaminant Delineation Plan was accepted by DEQ on June 17, 2016 and GWS is implementing the plan. Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented. Assessment and remediation efforts will continue until deemed approved by DEQ. Due to the nature of assessment and remediation, no timetable for completion can be provided, but will be initiated at the request of NCDEQ. See attached DEQ Contaminant Delineation Plan approval letter.

GWS is in process to acquire approximately 1 acre (the land to the west of Cane creek on parcel 01918162) on the southeastern portion of the landfill property from co applicant, Bill Hammill to increase our facility buffer. With the increased buffer area, the landfill will have significantly more buffer than required and will no longer be in violation of the NCDEQ buffer requirements. This land will never be used for landfill air space and shall remain undisturbed.

.2 That the proposed use will not endanger the public health and safety, nor substantially



reduce the value of nearby property; and

This site and the cleanup of the existing contamination will operate in compliance with the rules according to NCDEQ. Waste entering the recycling center will be hand sorted. Any unacceptable waste will be sent off site to the proper facility.

.3 That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

This site will not be in conflict with the objectives of the most detailed plan adopted for the area. The small area plan calls for a connector road from Commerce Station to the future Verhoff/Asbury Chapel Extension. The applicant will and the site plan makes an accommodation for the connector road on any Griffin owned land once the final location is determined. See note 14 on CD-101.

.4 That the comprehensive site plan addresses each of the environmental and development standards below:

a). A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare. Landfills 10 acres or less must directly connect to a major or minor thoroughfare, or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

GWS shall relocate their main access from Holbrook Road to the future Verhoff/Asbury Chapel Extension as soon as available but no later than 2034. GWS will reserve a right-of-way through their property for the future connector road from the Verhoff extension to Asbury Chapel extension.

Additionally:

GWS will pay for Holbrooks borings per DOT's request

GWS will pay for extending Holbrooks shoulders and a new overlay for 300 feet West of GWS' entrance

GWS will extend the \$25,000 donation to the Town of Huntersville for improvements to Holbrooks Road for as long as GWS customers use Holbrooks Road.

GWS agrees to reassess Holbrooks Road's condition in conjunction with the town and DOT during 2025 (halfway mark for GWS' commitment to stop using Holbrooks). GWS agrees to contribute an additional amount to the maintenance of Holbrooks if the Town and DOT deem necessary.

b). That the proposed or existing use will be in compliance with the rules and regulations as established by the Traffic Impact Analysis (TIA) Article 14.

A Traffic Impact Analysis was not deemed necessary.

c). Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated



below take precedence over any and all modification made by the state unless the state standards become more restrictive.

500-foot buffer from existing residential water supply wells to fill area.

200-foot buffer from adjacent property to fill area.

No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.

50-foot buffer from delineated streams.

50-foot buffer from road right-of-way to fill area (non-state requirement).

The site is in compliance with all criteria in this section.

d). Driveway access to the facility must be paved for a distance of at least 100' from the public street.

Driveway access to the facility is paved at least 100' from the public street. See "f" below

e). Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6' high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

See site plan CD 100 for existing and proposed fencing around the recycling facility. The active landfill area has a security fence. The applicant is seeking relief from the fencing requirement for the closed fill area that is inaccessible.

"GWS agrees to begin installation of fence within 90 days of any development on the parcels east or west of GWS. GWS also agrees to begin installation of fence within 90 days of construction of future Bikeway/Greenway/Carolina Thread Trail passing through GWS property."

f). All driveways which serve the site must be wide enough to accommodate two-way traffic for a distance of at least 100' from the public street so that no traffic waiting to enter the site will be backed up on any public right-of-way.

The driveway is about 48' wide serving both ingress and egress for about 65 feet. From that point ingress only continues to the scalehouse for about 125 feet for a total of 185 feet of paved driveway. The scalehouse separates ingress and egress providing two way traffic. Egress is paved for approximately 125 feet from Holbrooks Road.

.5 That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

Since inception we have taken pride in keeping the roadways clean. This process starts on site where we provide a well groomed tipping floor for our customers. From there we maintain gravel roads to remove dirt from tires. Lastly, the site operators commit to routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed. This includes debris that is not related to our facility. We plan to continue to exceed section 6.5 of the Franchise



Agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles.

An added benefit of the MRF is that all trucks will be tipping their loads on a concrete floor further eliminating dirt falling from trucks.

.6 That the use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

The use of the site is limited to the hours of 7:00AM until 6:00PM, Monday through Friday and 7:00AM until 12:00PM on Saturday.

.7 That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

Based on current waste acceptance rates and anticipated recycling rates we project a life of over 20 years.

.8 That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

See attached Infill Expansion Closure Plan and drawing

.9 An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

This not applicable to this site.

a). The landfill has been continuously operating since 1990 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;

b). The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;

c). The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and

d). In no event shall the landfill operate under a LCID or demolition landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plan shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.



.10 Any existing C&D landfill shall be permitted to continue operation in the zone in which it is located provided the landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

Exhibit#3-2016 Email Withdrawing Variance 16-02

From: [Mike Griffin](#)
To: [Meredith Nesbitt](#)
Cc: [Bradley Priest](#); [Jackie Drummond](#); [Jason Watkins](#); [Jack Simoneau](#); [John Brown](#); [Butch Joyce](#); [Mousa A. Maimoun](#)
Subject: Variance Application Withdrawal
Date: Saturday, September 10, 2016 4:55:57 PM

Meredith,

Per our meetings this week, I think it's best we withdrawal or variance applications. We will continue to pursue our rezoning & PUD for our site and for our proposed recycle center. We really appreciate your assistance and look forward to revisiting this opportunity after we make more progress with DEQ.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 7, 2016, at 4:05 PM, Meredith Nesbitt <mnesbitt@huntersville.org> wrote:

All,

Click [here](#) for the Board of Adjustment meeting schedule. It includes an agenda and the staff reports for each of the cases scheduled. Please let me know if you have any questions or trouble accessing the reports.

Mike,

Let us know how your meeting goes tomorrow. We will decided what needs to happen from there. Looks like schedules are clear for Friday, early afternoon but I will confirm with Brad and Jack after we hear from you about your meeting with Ed.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]
Sent: Wednesday, September 07, 2016 12:19 PM
To: Meredith Nesbitt <mnesbitt@huntersville.org>
Cc: Bradley Priest <bpriest@huntersville.org>; Jackie Drummond <jaclynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>
Subject: Re: Aug 17th follow-up

Meredith,

Thank you for your reply and input. I would like to ask for a continuance instead of withdrawal at this time. We have a meeting tomorrow morning with Ed Mussler, NC DEQ's Division of Waste Management - Solid Waste Manager, to address the concerns you have detailed. Are y'all available to meet this Friday or Tuesday to discuss the results of this meeting? It may be that we need to pull the applications but I want to exhaust all options due to our fairly tight timeline that I discussed in my earlier email.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies
19109 W Catawba Ave. Cornelius, NC 28031-5611
MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 2, 2016, at 5:46 PM, Meredith Nesbitt
<mnesbitt@huntersville.org> wrote:

Mike,

Staff has reviewed and discussed the information you provided. At this time, we are still not able to reach a supporting recommendation for the floodplain variance. We appreciate the information submitted but we do not believe it qualifies as finding of fact to satisfy the findings below. In addition, the letter specifically mentions the revenue lost as an applicable hardship. However, section 151.46(B) states that specifically is not a reason for granting a variance. Therefore, with this in mind we still find deficiency in the following criteria for the floodplain variance:

- Section 151.44 Factors For Conditions and Determination of Completeness
 - o (6) Availability of alternative locations, not subject to flooding or erosion damage during a community base

flood, for the proposed use

- Section 151.45 Conditions for Variances
 - o *(C) Variances shall only be issues upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*
- Section 151.46 Standards for Granting a Variance
 - o *(A)(2) A determination that failure to grant the variance would result in exceptional hardship*
 - o *(B)The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance*
- Section 151.47 Miscellaneous Conditions
 - o *(B)(1) No feasible location exist for the use outside the Special Flood Hazard Area*
outside of the floodplain to fill and this criteria is not satisfied.

Additionally, the information concerning the contamination of the site provided to us by NCDEQ is finding of fact in relation to all the variance requests. Therefore, with that new information, staff finds the SWIM buffer and Article 9.23 variance request criteria potentially deficient in the following:

(4) The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

At our August 17 meeting, it was discussed that in response to the information provided to us by DEQ you would follow up with them to obtain a letter or other finding of fact in relation to the benefit and appropriateness of your project even with the contamination issue being outstanding. The information you provide below, though helpful, still does not provide a finding of fact that the contamination issue is not a detriment to public health. What you proposed is to ask for approval with the assumption that permitting from DEQ will be approved. That does not address the concern we have received from DEQ in regard to the proposed project. Therefore, Staff is uncomfortable recommending approval for the SWIM Buffer and Article 9.23 variance request with the unknowns surrounding the surface and groundwater contamination. We would request more evidence and finding of fact.

At this point, we feel it would be beneficial if the applications were withdrawn until a remediation plan can be approved by NCDEQ. That

would provide an excellent finding of fact to address that requirement. This principle would also be true for the rezoning and special use permit, if it were to include the additional fill area. However, this is not a requirement, we could move forward with all the applications. Although, if we do move forward, it would be staff's recommendation that more findings of fact be submitted to address the contamination issue prior to any approvals.

We will be glad to discuss this information in more detail – however, please note Town offices are closed Monday, September 5th for Labor Day.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]

Sent: Wednesday, August 31, 2016 3:19 PM

To: Meredith Nesbitt <mnesbitt@huntersville.org>; Bradley Priest <bpriest@huntersville.org>

Cc: Jackie Drummond <jacklynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>

Subject: Aug 17th follow-up

Meredith & Brad,

Per the discussions from our Aug 17th meeting, we met this Monday with DEQ's Jason Watkins and Jackie Drummond who I have copied. We had a discussion that I think covered every aspect of our efforts to seek Huntersville's conditional approvals for a new lined landfill expansion and C&D MRF. We also reviewed and discussed the status of the ongoing assessment of groundwater and buffer issues specific to the older portions of our facility.

The pending buffer issue will be resolved before we present to the

Planning Board meeting scheduled for September 27th. This could have been resolved over a year ago had I understood that we could recombine Bill Hammill's acre into our parcel without going through the pending rezoning and SUP. I got hung up on the fact that the Hammill parcel is outside the Town limits and that we were trying to recombine it into a parcel inside the Town. This is my fault for not better understanding the process.

The groundwater issue has a longer timeline with greater complexity.

We are working with our consultants and DEQ in the assessment phase which will eventually roll into remediation. We have always assumed that DEQ will only issue a permit for the new landfill expansion after a remediation plan is in process or completed. We've also assumed that any Town approvals would be conditioned on DEQ approvals so we didn't see how the groundwater issue would inhibit us from seeking conditional approvals from the Town.

In reading Article 9.23.2, 'The proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property,' we're convinced that our proposed new landfill expansion is in accordance with this article and will most likely lessen the chances of the older portions of our facility from being inconsistent with this Article. The proposed expansion will be lined to include a leachate collection system plus we are proposing to install a synthetic cap on the closed portions of our site to better divert water from these closed areas.

We would normally complete the DEQ assessment and remediation phases before starting this process but these processes will take multiple years and we have diminishing airspace that requires us to pursue them concurrently. Note that the previous Gantt Chart schedule shared with the Town always started with Task 2. Per the attached Gantt Chart, Task 1 is the compliance process specific to remediating the groundwater issues to DEQ standards. We intentionally omitted the first task being it is not pertinent to the Town's conditional approvals and it would only add confusion to an already complex request.

I really don't feel this is pertinent to our pending requests but I'd be glad to describe the extensive work that has transpired since the first groundwater exceedance in 2013. We look forward to your feedback on our consistency statement with 9.23.2. This discussion is specific to the rezoning and SUP whereas we know the most urgent matter is addressing the staff findings for the BOA meeting scheduled for September 13th. We will continue to tweak our plans and comments specific to the rezoning and SUP and present this to all in the coming days. Jason Watkins gave us a solid suggestion in that we should consider permitting the C&D MRF in a parcel separate from the landfill parcel. John and I will quickly inquire with DEQ's permitting folks to discuss the merits on their end.

John and I have had several conversations with Butch Joyce and Dr. Mousa Maimoun with Joyce Engineering specific to staff not supporting our request to pipe and fill the Special Flood Hazard Area.

Per the attached letter from Butch, the inability to fill this area kills the proposed landfill expansion. Ironically, Butch also highlights how the redesign around the Special Flood Hazard Area decreases our site's environmental compliance quality. We feel these factors make it clear that the piping and filling of this very small area should be supported by the staff. We also feel staff's support is extremely important and will ask for a continuance or withdraw if there needs to be more time for consideration.

Following are our proposed conditions in order to seek staff and BOA support:

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers & NC DEQ Water Quality
4. Approval of groundwater remediation plan by NCDEQ
5. Approval of NCDEQ Solid Waste Permit specific to the proposed expansion
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, and will not reduce the value of nearby property.
8. The additional synthetic capping of older closed areas will further enhance public health and safety, and will not reduce the value of nearby property.

Please feel free to add anything we missed. We have stated many times that this process should be properly conditioned in recognition that the complex engineering and design submittals to the various government agencies will start after the Town's approval. We will add the final conditions list on our letterhead after your input.

In summary, we're trying to get the conceptual vision approved by the town before the more technical work is required. I really appreciate everyone's considerable efforts to enhance our applications. The complexities of these concurrent processes can easily create misunderstandings which I hope we have cleared up over the last couple weeks. We look forward to your feedback.

Best regards,

Mike

cc: Jackie Drummond
Jason Watkins
Jack Simoneau
John Brown
Butch Joyce
Mousa Maimoun

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies



Variance Application

Date of Application: 7/1/21

Property/Building Address: 15300 Holbrooks Road Parcel Size (ac): 121.040

Tax Parcel ID (PIN) Number(s): 01910102

Text of Ordinance to be varied

Ordinance: S.W.I.M Buffer Article: 8 Section: 25

Submittal Requirements and Procedure

The following must be submitted with the completed application (signed and dated by the property owner and/or applicant):

- One (1) hard copy and one (1) electronic copy of any applicable map(s), site plans, exhibits, and applications showing exact location of property with respect to existing streets, adjoining lots and other important features on or contiguous to the property. Also, include any maps and/or illustrations (to scale), which are necessary to show the location, number and size of buildings, signs, etc., on the property.
- A list of names, addresses and tax parcel identification numbers of properties that abut the site, are across the street from the site or are otherwise within one hundred feet (100') of the site. (Electronic format preferred)
- Review Fee (Please check most recent version of Fee Schedule for applicable Variance Review Fee)
- See the current Board of Adjustment Submittal Deadlines and Meeting Schedule for filing deadlines and meeting dates
- Please submit your complete application and fee by **noon the day filing deadline**

Notifications Requirements

Planning Staff will be required to notify in writing each adjoining property owner.

Planning Staff will also be required, if you are seeking a variance from the requirements of the Mountain Island Lake or Lake Norman Watershed Overlay Districts, to notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption as follows:

- * Mountain Island Lake Watershed Overlay. Local governments having jurisdiction in the watershed: Charlotte Mecklenburg, Cornelius and Huntersville. Entities using the water supply for consumption: Mecklenburg County, Gastonia and Mount Holly.
- * Lake Norman Watershed Overlay. Local governments having jurisdiction in the watershed: Davidson, Cornelius and Huntersville. Entities using the water supply for consumption: Mooresville, Mecklenburg County and Lincoln County.

Variance Requirements

STANDARDS FOR GRANTING A VARIANCE (Article 11.3.2.e.):

When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all the following:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
4. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

Appropriate conditions, which must be reasonably related to the condition or circumstance that gives rise to the need for a variance, may be imposed by the Board (Article 11.3.1.e.).

In the following spaces, indicate **FACTS** that demonstrate to the Board of Adjustment you meet all the standards for granting a variance:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

See Attached

2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

See Attached

3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.

See Attached

4. The public safety and general welfare have been protected and substantial justice done.

See Attached

Applicant

Printed Name Greenway Waste Solutions at North Meck, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Chief Operating Officer Applicant Phone 919-795-0599

Applicant Email jdbrown@griffinbros.com

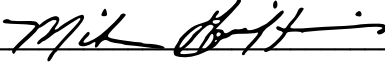
Address of Applicant 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

Property Owner (if different than applicant)

* Printed Name C&D Management Company, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Manager Applicant Phone 704-533-5781

Applicant Email mike@griffinbros.com

Address of Property Owner 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this petition MUST be accompanied by a Limited Power of Attorney signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID APPLICATION. **If additional space is needed for signatures, attach the Town of Huntersville Signature Addendum Form.**

Contact Information

Town of Huntersville Phone: 704-875-7000
Planning Department Fax: 704-875-6546
PO Box 664 Physical Address: 105 Gilead Road, Third Floor, Huntersville, NC 28078
Huntersville, NC 28070 Website: <https://www.huntersville.org/228/Planning-Department>

Received By Planning Department Staff: _____

Staff Initials: _____

List of adjacent property owners (for variance)
-within 100ft

- 01930104 Arnold W. Johnston 12300 Old Statesville Road Huntersville, NC 28078
- 01930105 Linda Wester Long 7910 Golf Course Dr N Denver NC 28037
- 01934105 Michael and Tracy Tinsley 11737 Trails End Lane Huntersville NC 28078
- 01934118 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031 (Trails End Holdings LLC)
- 01934108 William and Campbell Hammill 11745 Trails End Ln Huntersville NC 28078
- 01918135, 01918167, 01918166, 01934119, 01910116 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031
- 01919102, 01919105, 01919106, 01937103, 01937199, 01919121 Mecklenburg County 600 E4th Street 11th floor Charlotte NC 28202
- 01937280, 01937286- Southside Neighborhood LLC (w/in 100' of MRF parcel)



Conditions for Approval of Variances June 6, 2021

Greenway Waste Solutions is requesting approval of the following variances:

Article 8.25.5 S.W.I.M. Stream Buffers Minimum Buffer Widths

Floodplain Ordinance Section 151.60(A)(10)

Article 9.23.4.c Off Site Landfill Clearing and Inert Debris (LCID) and Construction and Demolition (C&D) Landfills

The approval of the aforementioned variances is subject to the following conditions

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers
4. Approval of NCDEQ Solid Waste Permit
5. Approval of all Town/County/State building permit related activities
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, nor reduce the value of nearby property as compared to past North Carolina standards.
8. Condition that the aforementioned expansion and additional synthetic capping of older closed areas will further enhance public health and safety, nor reduce the value of nearby property specific to areas currently operating or previously closed.

Article 8.25

Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

The inability to impact the S.W.I.M Buffer as the landfill expands creates an unnecessary hardship for the property owner and the community alike. As a result of the ordinance the long term potential life of the landfill site will be cut in half and have to close prematurely. This variance is one part of the process that, if approved, will allow for continued existence by increasing the area for operation. The hardship is that these regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe the water through the site. Upon plan approval from these agencies, the applicant will create a permanent storm water management system that will improve the flow and decrease likelihood of a flood in the area as compared to existing conditions. The system will improve flow up and down stream by providing basins on either end of the pipe. This will help control the speed of the water. The pipe itself will provide sufficient capacity to allow water to flow during peak flood conditions. This system will meet the requirements and criteria of Mecklenburg County Storm Water standards and require a floodplain development permit. A buffer mitigation plan has been approved by Mecklenburg County. The professionally engineered plans and process through which the applicant will gain ultimate approval will be heavily scrutinized and coordinated with the State's Department of Environmental Quality ("NCDEQ") Water Quality Division, the Army Corps of Engineers and NCDEQ Solid Waste Division. Beyond the approval of this variance, extensive engineering and multiple levels of approval will be needed. This ordinance threatens to derail this project because local approval is required by the State and Federal agencies Exhibit A provides detail on the storm water management system and site.

1.) The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

- a. The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition ("C&D") landfills. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling areas. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity

by joining the two permitted areas. The proposed solution better manages water through concrete encased pipe, as depicted in Exhibit A and B. Keeping the water isolated to the pipes eliminates the ability for runoff and material to enter the stream. The plan includes significant storm water management basins on both ends of the pipe. This solution will allow for a more environmentally responsible way to manage water and maximizes the landfill capacity to better serve the citizens of Huntersville and the North Mecklenburg region. The specifications of the storm water system and pipe will meet the requirements of Mecklenburg County.

2.) The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship

The hardship was not created by the manner in which the property has been used. The ability for relief provided in Article 8.25 shows the intention of the ordinance is to allow for built-in relief. Therefore, the applicant's request for a variance is consistent with the intent of the ordinance.

3.) The public safety and general welfare have been protected and substantial justice done.

- a. The public's safety and general welfare are best served by a variance to this regulation. The community and the North Mecklenburg region will see an increase in truck traffic as a result of taking C&D debris to other counties or Mecklenburg County's only other permitted C&D landfill in South Charlotte. The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. * Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.** It is in the best interest of the community to ensure the continued operation of this site. These hardships can be avoided through a variance. Exhibit C is a map showing proximity to other locations and Exhibit D shows the routes which will experience an increase in truck traffic without the facility.

The public's safety and welfare will also be better served as a result of the proposed piping; given that water will not interact with the materials during normal flow nor a flood. The applicant will provide ample capacity for the water to flow through the pipes, before and after storage basins as well as lining and capping the facility. This ensures that water will not touch the debris that is deposited in this area.

Further, the NC Department of Environmental Quality agrees that the design of the landfill expansion is more protective of human health

and the environment than what is required by NC solid waste regulations. (see Attachment 1)

The Catawba and Yadkin Riverkeepers are in support of the landfill expansion project. (see Attachment 2)

NC DEQ approved a Corrective Action Plan for the landfill on October 3, 2019 (see Attachment 3)

Groundwater history & geosynthetic cap environmental benefit. (see Attachment 4)

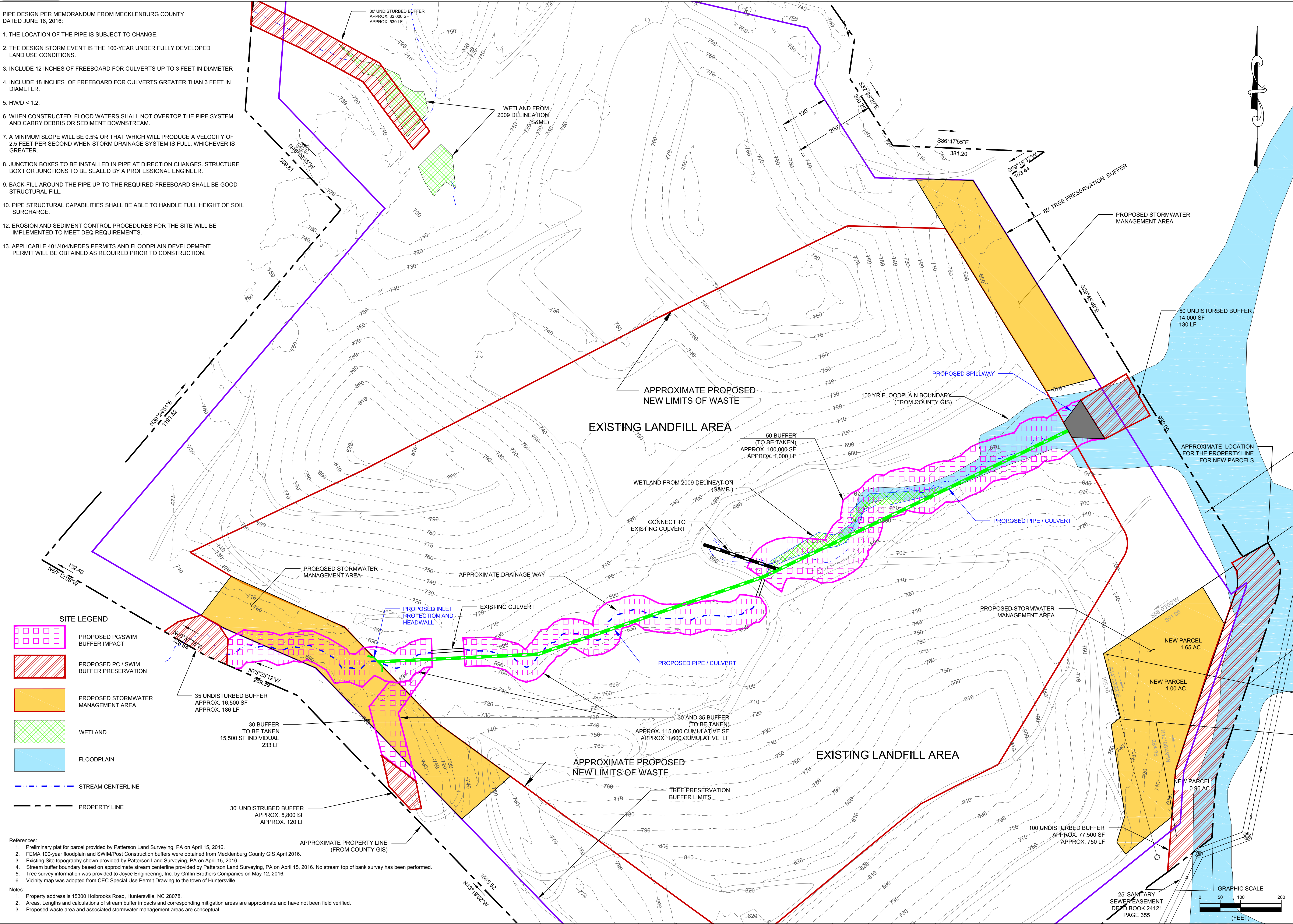
*based on 2015 volume with the assumption of an average increase of 20 miles per truck to the next permitted C&D facility.

**carbon calculator courtesy of the USDOT Federal Transit Administration

Exhibit A

PIPE DESIGN PER MEMORANDUM FROM MECKLENBURG COUNTY
DATED JUNE 16, 2016:

1. THE LOCATION OF THE PIPE IS SUBJECT TO CHANGE.
2. THE DESIGN STORM EVENT IS THE 100-YEAR UNDER FULLY DEVELOPED LAND USE CONDITIONS.
3. INCLUDE 12 INCHES OF FREEBOARD FOR CULVERTS UP TO 3 FEET IN DIAMETER
4. INCLUDE 18 INCHES OF FREEBOARD FOR CULVERTS GREATER THAN 3 FEET IN DIAMETER.
5. $HWD < 1.2$.
6. WHEN CONSTRUCTED, FLOOD WATERS SHALL NOT OVERTOP THE PIPE SYSTEM AND CARRY DEBRIS OR SEDIMENT DOWNSTREAM.
7. A MINIMUM SLOPE WILL BE 0.5% OR THAT WHICH WILL PRODUCE A VELOCITY OF 2.5 FEET PER SECOND WHEN STORM DRAINAGE SYSTEM IS FULL, WHICHEVER IS GREATER.
8. JUNCTION BOXES TO BE INSTALLED IN PIPE AT DIRECTION CHANGES. STRUCTURE BOX FOR JUNCTIONS TO BE SEALED BY A PROFESSIONAL ENGINEER.
9. BACK-FILL AROUND THE PIPE UP TO THE REQUIRED FREEBOARD SHALL BE GOOD STRUCTURAL FILL.
10. PIPE STRUCTURAL CAPABILITIES SHALL BE ABLE TO HANDLE FULL HEIGHT OF SOIL SURCHARGE.
12. EROSION AND SEDIMENT CONTROL PROCEDURES FOR THE SITE WILL BE IMPLEMENTED TO MEET DEQ REQUIREMENTS.
13. APPLICABLE 401/404/NPDES PERMITS AND FLOODPLAIN DEVELOPMENT PERMIT WILL BE OBTAINED AS REQUIRED PRIOR TO CONSTRUCTION.



DESIGNED		DRAWN		CHECKED		APPROVED		DATE		REVISIONS AND RECORD OF ISSUE		NO		BY		CK		APP	
MM		RWH		LJ				06/17/16											

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JOYCE ENGINEERING
9731-F SOUTHERN PINE BLVD
CHARLOTTE, NC 28273
PHONE: (704) 817-2037
NC CORP LIC: C-0782

GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC
MECKLENBURG COUNTY, NORTH CAROLINA

APPLICATION FOR A WATER QUALITY
BUFFER DISTURBANCE:
PROPOSED PIPE LOCATION

PROJECT NO.
916.1501.11

SCALE
AS SHOWN

DRAWING NO.
1

NOT FOR CONSTRUCTION

L:\NORTH MECK\CONCEPT STREAM CULVERT JUNE 2016.dwg Layout/Layout

(for illustrative purposes only)

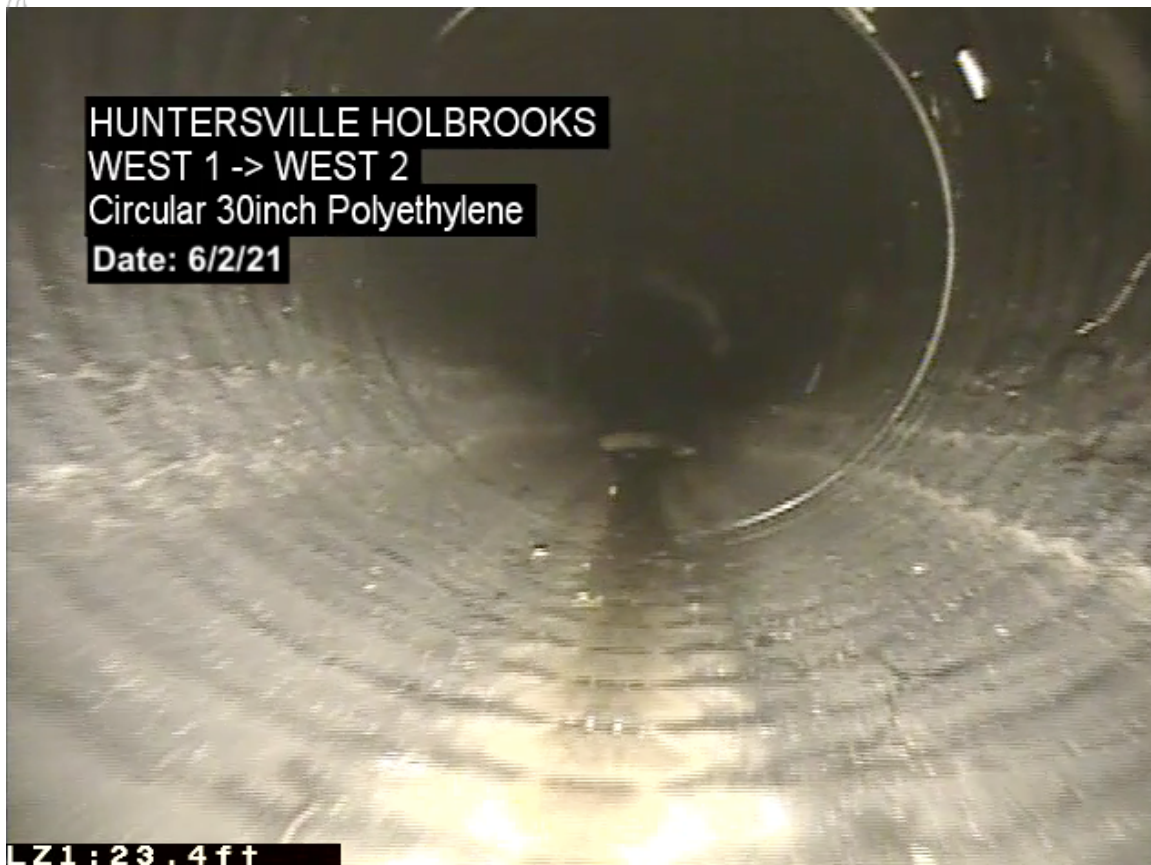
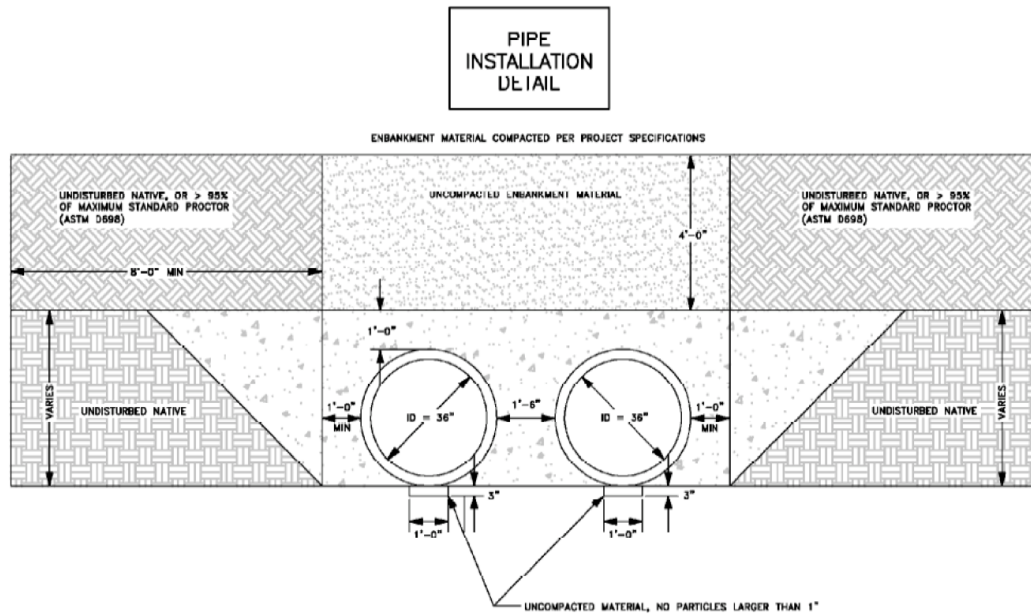


Exhibit C

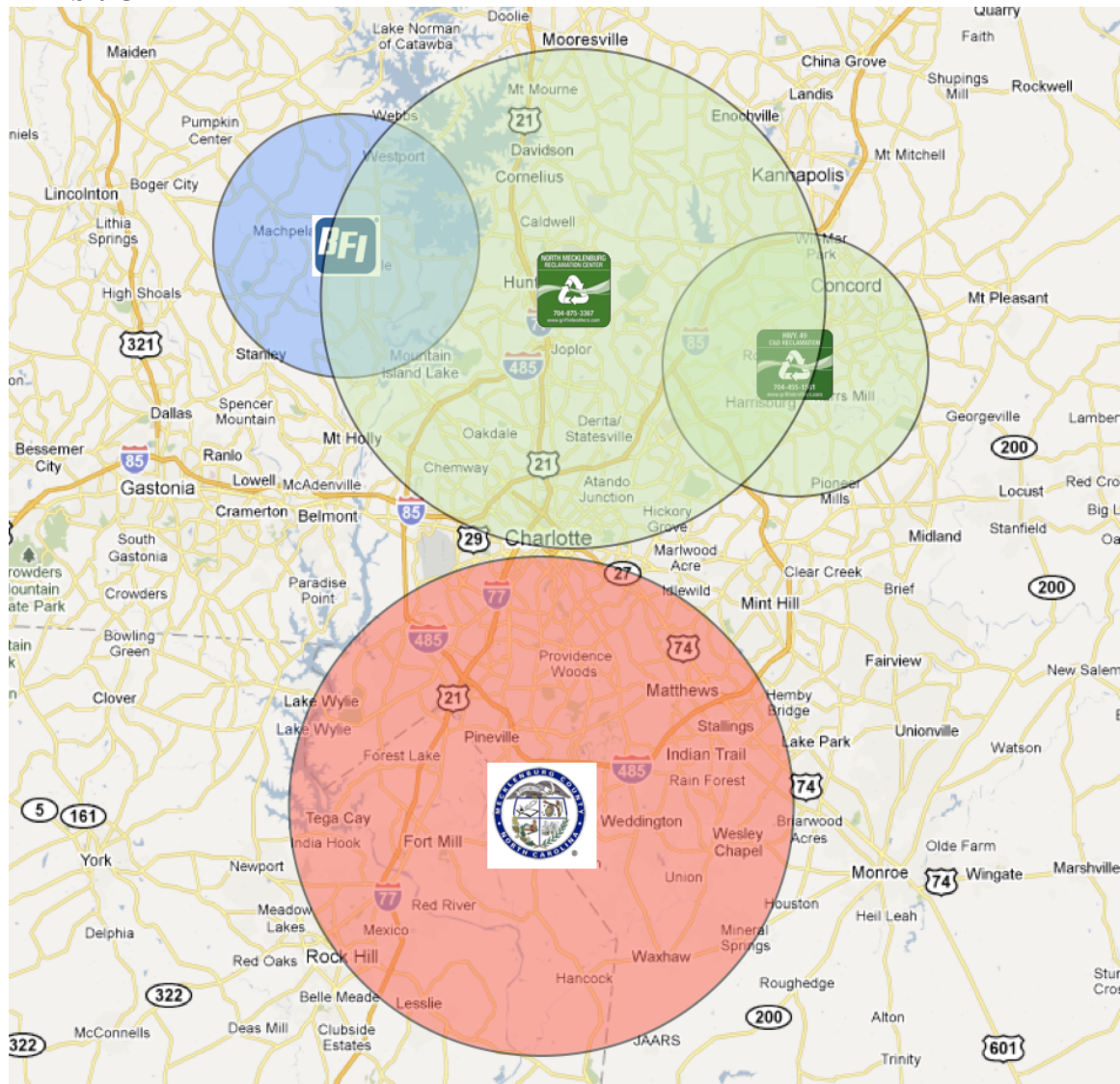
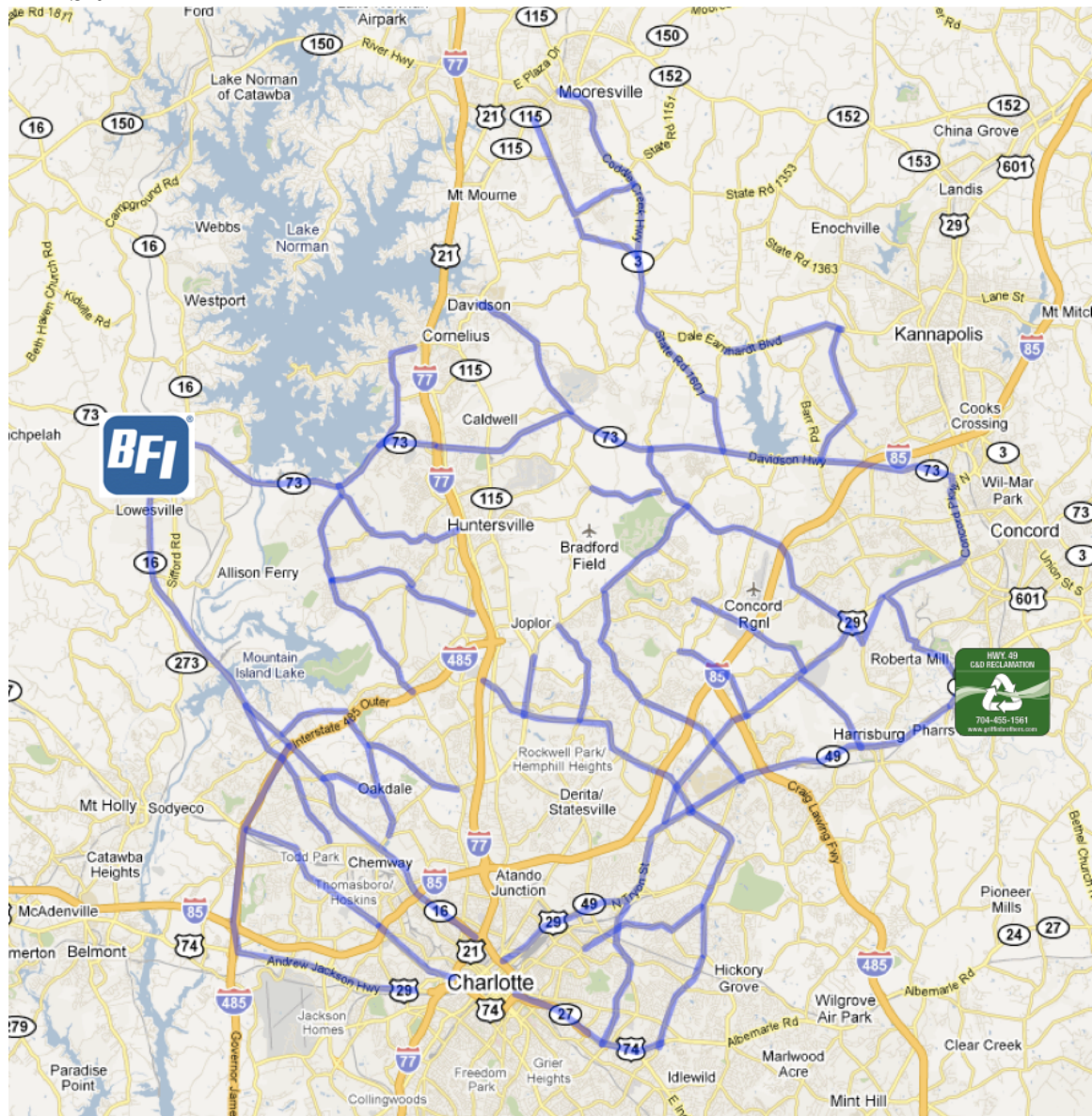


Exhibit D





NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head





Mr. Griffin,

Thank you for contacting the Catawba and Yadkin Riverkeepers concerning the possible future expansion of the North Meck C&D landfill at 15300 Holbrooks Road Huntersville, NC 28078. As we understand it, this project would involve the piping of approximately 1750 ft of perennial waters and the placement of impervious landfill liners over the existing C&D fills and newly buried stream.

Riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. In general, we are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 locations, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.

This nonintuitive recommendation is due to:

1. High levels of iron oxidizing bacteria and elevated conductivity indicate that groundwater from the unlined landfills is currently negatively impacting the UT.
2. Although not assessed by the NC biological assessment branch, our initial measurements indicate that this stream likely would be listed as impaired for biota. The 303d system is poorly suited to address impairment from nonpoint groundwater sources.
3. Covering the existing landfills will minimize or eliminate the infiltration of precipitation through the unlined fills and prevent leachate from entering Cane Creek.
4. Water monitoring and reporting on the unlined fills will end after 30 years. By constructing a new site on top, monitoring will be extended.
5. Siting a landfill at a new location will cause impacts to an additional part of the watershed.

This recommendation is based on several assumptions, if any of these are invalid then our support is withdrawn until further examination.

1. A new landfill must be built. The Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
2. Groundwater and surface water will continue to be monitored (and remediated if necessary) for the entire site.
3. Runoff from the entire site will be captured and treated before discharging.
4. The current landfills will remain uncapped (pervious) if a new landfill is not sited on top.

Please let us know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Fannon".

Brian Fannon, Yadkin Riverkeeper

A handwritten signature in black ink, appearing to read "Brandon Jones".

Brandon Jones, Catawba RIVERKEEPER®



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

October 3, 2019

Sent Via Email – mike@griffinbros.com

Mr. Mike Griffin

Greenway Waste Solutions at North Meck, LLC

19109 West Catawba Avenue, Suite 200

Cornelius, NC 28031

Re: *Corrective Action Plan (Revised October 1, 2019)*
Groundwater Corrective Action
North Mecklenburg C&D Landfill Active Infill Area and Closed Phase I Area
Mecklenburg County
Solid Waste Permit Number 6013-CDLF-1993
FID 1358901

Dear Mr. Griffin,

The Solid Waste Section (Section) has completed a review of the *Corrective Action Plan (Revised October 1, 2019)* and received via email on October 2, 2019 (FID 1358899). The plan was submitted on your behalf by CEC Consultants, Inc. for the North Mecklenburg Construction and Demolition (C&D) Landfill, Solid Waste Permit Number 6013-CDLF-1993 consisting of the Infill Area and the Phase I Area. The *Corrective Action Plan (Revised October 1, 2019)* was submitted in response to the consistent groundwater exceedances at the landfill.

In accordance with 15A NCAC 13B .0545 and 15A NCAC 2L, Greenway Waste Solutions at North Meck, LLC selected a remedy proposed to restore groundwater quality at and beyond the relevant point of compliance, to effectively reduce the overall groundwater contamination at the landfill, and to control the migration of contaminated groundwater to prevent unacceptable impacts. The selected remedy for the landfill includes Active Landfill Gas Extraction and Monitored Natural Attenuation (MNA), and the Section approved the selected remedy on June 10, 2019 (FID 1322138). In addition, Greenway Waste Solutions at North Meck, LLC had a waterline installed downgradient of the Phase I Area and purchased adjacent property.

Based upon the review of the *Corrective Action Plan (Revised October 1, 2019)*, the plan is approved as written based upon the information presented to the Section at this time. During groundwater corrective action, a Corrective Action Effectiveness Report (CAER) will be required to be submitted every five years. The Corrective Action Effectiveness Report (CAER) includes an interpretation of the corrective action data collected and a technical evaluation of the approved selected remedy.



Attachment 3 (cont.)

If you have any questions or concerns regarding this letter, please feel free to contact me by phone at 828.296.4706 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Solid Waste Section, Division of Waste Management
NCDEQ

cc sent via email:

- Ed Mussler, Section Chief
- Sherri Stanley, Permitting Branch Head
- Larry Frost, Permitting Engineer
- Jason Watkins, Field Operations Branch Head
- Adam Ulishney, Environmental Compliance Branch Head
- Deb Aja, Western District Supervisor
- Teresa Bradford, Environmental Senior Specialist
- John Brown, Greenway Waste/Griffin Brothers Companies
- Brandt Kayser, Greenway Waste/Griffin Brothers Companies
- Donald Cobb, CEC, Inc.
- Bruce Reilly, CEC Inc.
- Scott, Brown, CEC, Inc.
- Joe Hack, Mecklenburg County Solid Waste Management
- Jack Simoneau, Town of Huntersville



**North Mecklenburg C&D Landfill (GWSNM)
NC Solid Waste Facility Permit No. 60-13**

Historical Regulatory Compliance Time-Line

North Meck Groundwater History

Groundwater monitoring at the North Meck C&D Landfill has been on-going on a semi-annual basis since March of 1998 around the currently closed southern section of the landfill (Closed Area), and semi-annual groundwater monitoring around the northern waste disposal area (Infill Area) began in October of 2011. Leading up to the Spring 2013 sampling event, groundwater samples were mostly analyzed by Pace Analytical Services, and analytical results indicated no consistent chemical detections at concentrations which exceeded the applicable 15A NCAC 02L .0202 Groundwater Quality Standards (2L Standards or 2L Rules).

Greenway switched to Shealy Environmental Services for the Spring 2013 sampling event. The analytical results from the Spring 2013 sampling event indicated that vinyl chloride (VC) was detected at elevated concentrations in numerous monitoring wells around both the Infill Area and Closed Area, including one monitoring well located near the water supply well for the Gilkerson residence on the south side of the Closed Area (**Figure 1**). In June of 2014, GWSNM paid for Charlotte Water connections for the Gilkerson residence as well as the two adjacent homes which are occupied by the Tinsley and Hammill families.

Following a series of investigations, Enviro-Pro, PC (GWSNM's groundwater consultant at the time) concluded that the groundwater contamination was the result of landfill gas (LFG) contacting water as a result of precipitation. LFG is produced from the anaerobic decomposition of waste by naturally-occurring bacteria and other micro-organisms in soil, and LFG production is accelerated by the presence of water.

In April of 2015, GWSNM's current consultant, Civil & Environmental Consultants, Inc. (CEC) oversaw the installation of LFG extraction wells in the Closed Area in accordance with the North Carolina Department of Environmental Quality (DEQ) -approved Corrective Action Plan. These extraction wells were installed in order to remove LFG to limit the exposure of percolating water to LFG. CEC later submitted a Landfill Gas Mitigation Expansion Plan in April 2017 proposing to install additional LFG extraction wells in the Closed Area and Infill Area. These extraction wells have remained active to date, and the detected concentrations of VC around the Closed Area have been reduced to below the concentration specified in the 2L Rules. Per the DEQ-approved Revised Corrective Action Plan, GWSNM conducts quarterly groundwater sampling of 16 site wells to monitor for natural attenuation (MNA) of VC in groundwater below the North Meck Landfill. Natural attenuation, which is the process by which naturally-occurring bacteria digest and convert chemicals into non-hazardous chemicals, has been shown to successfully reduce contaminant concentrations over time.

Due to the on-going detections of significantly elevated concentrations of VC by Shealy, GWSNM switched analytical labs back to Pace for the Fall 2016 sampling event and submitted duplicate groundwater samples to Shealy, Pace, and Eurofins TestAmerica (ETA) in order to

compare the detected concentrations. The results of the samples sent to Shealy indicated detections of VC which were consistent with recent detections, while the results of the duplicate samples analyzed by Pace and ETA indicated that VC was detected at significantly lower concentrations relative to the Shealy results. In a letter dated May 23, 2017, OI Analytical, the owners of Shealy Environmental Services, stated that an internal investigation revealed that a component in their analytical equipment was generating false-positive results for VC (**Exhibit 1**).

The analytical results from ETA for the most recent water quality monitoring event, conducted in April 2021, indicate that VC has been detected in 10 monitoring wells but **none of these detections exceeded the allowable concentration for VC specified in the 2L Rules**

Proposed Valley Expansion Benefits

The proposed valley expansion, located between the Infill Area and Closed Area, will significantly increase environmental protection of groundwater. In accordance with 15A NCAC 13B .0540 Construction Requirements for C&DLF Facilities both the Closed Area and Infill Area waste disposal units were constructed with soil liner systems. These compacted soil liners significantly limit, but do not prevent, fluid percolation into groundwater. Additionally, the Closed Area is capped with a soil cap in accordance with 15A NCAC 13B .0543 Closure and Post Closure Requirements for C&DLF Facilities (c)(1)(A). Similar to the compacted soil liner, the soil cap serves to significantly limit, but not eliminate, infiltration of rainwater into the landfill.

The infill expansion cap currently requires a low permeability soil liner however, it does not require a synthetic membrane as proposed as part of the valley expansion liner system. The proposed valley expansion includes a multi-layer geosynthetic, soil, and aggregate liner system with a built-in leachate collection system (**Exhibit 2**). This liner system will cover the side slopes as well as the top of both the Infill and Closed Areas, which will significantly outperform the DEQ regulatory requirement of a soil cap (**Exhibit 3**). This will substantially decrease rainwater infiltration into waste, leading to significantly reduced leachate and LFG production. Relative to a compacted soil liner, the proposed multi-layer geosynthetic liner will nearly eliminate leachate leakage into groundwater (**Exhibit 4**).

The liner system also includes horizontal collection pipes installed inside the existing landfill waste to collect leachate from both the Infill and Closed Areas. Additionally, the unnamed tributary of Cane Creek will be conveyed below the proposed expansion area through concrete-encased pipes. These pipes will also serve as additional water quality protection measures by eliminating the possibility of runoff, leachate, and groundwater from entering the unnamed tributary of Cane Creek.



LEGEND

PROPERTY LINE

EXISTING STREAM

MW-4A

MW-5

SPRING 2013 VINYL CHLORIDE EXCEEDANCE LOCATION

(i)

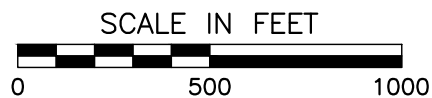
REFERENCE TO INFILL AREA

P:\2011\111-370\111-370-CADD\001\Drawings\Brandt Kayser Requested Figures\111370.0001-Spring2013VinylChlorideExceedance.dwg{1} LS:(6/30/2021 - pbrinkley) - LP: 6/30/2021 1:52 PM



REFERENCE

1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH PRO.
DATED OCTOBER 8, 2016





Civil & Environmental Consultants, Inc.
3701 Arco Corporate Drive - Suite 400 - Charlotte, NC 28273
Ph: 980.237.0373 · Fax: 980.237.0372
www.cecinc.com

DRAWN BY:	JKS/PAB	CHECKED BY:	MBG	APPROVED BY:	DMC	FIGURE NO.:	1
DATE:	JUNE 2021	DWG SCALE:	1" = 500'	PROJECT NO:	111-370.0001		

GREENWAY WASTE SOLUTIONS OF
NORTH MECK, LCC
NORTH MECKLENBURG LANDFILL
HUNTERVILLE, NORTH CAROLINA
SPRING 2013 VINYL CHLORIDE EXCEEDANCE
LOCATION MAP

Exhibit 1



www.oico.com

151 Graham Road, P. O. Box 9010, College Station, TX 77842-9010

(979) 690-1711 FAX: (979) 690-0440

May 23, 2017

Mr. Dan Wright
Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, SC 29172

Mr. Wright,

OI Analytical is aware of an analytical issue with Silica Gel in the 3-layer traps for purge-and-trap analysis. When the sample being analyzed contains the compound Freon 151, the results of the analysis have the potential to erroneously show the presence of Vinyl Chloride in the sample. The potential issue can arise with any brand purge-and-trap utilizing a 3-layer trap with Silica Gel. This is due to impurities in the Silica Gel, a trap packing material, which cause the Freon 151 to breakdown possibly via a dehydrohalogenation process.

We submit this letter without prejudice in pursuit of a mutually agreeable solution. Please note that we reserve all of our rights and remedies at law or in equity and nothing herein nor our willingness to inspect, test and/or repair the subject products and any other related products shall constitute a waiver of these rights nor be construed as an admission with respect to responsibility or damage incurred.

As you can understand, this is a complicated situation that we are working diligently with the supplier to resolve. As soon as we have a definitive timeline for resolution in working with our partners, we will faithfully communicate this with you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joan Killgore". The signature is fluid and cursive, with the first name "Joan" and last name "Killgore" clearly distinguishable.

Joan Killgore

Quality Assurance and Engineering Manager

NOT FOR CONSTRUCTION

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Norfolk Medical
Greene Waste Solutions, LLC

Sdd E

1000 Holbrook Rd, Huntersville, NC 28078

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER: 2180197

DRAWN BY: DAC

REVIEWED BY: MM

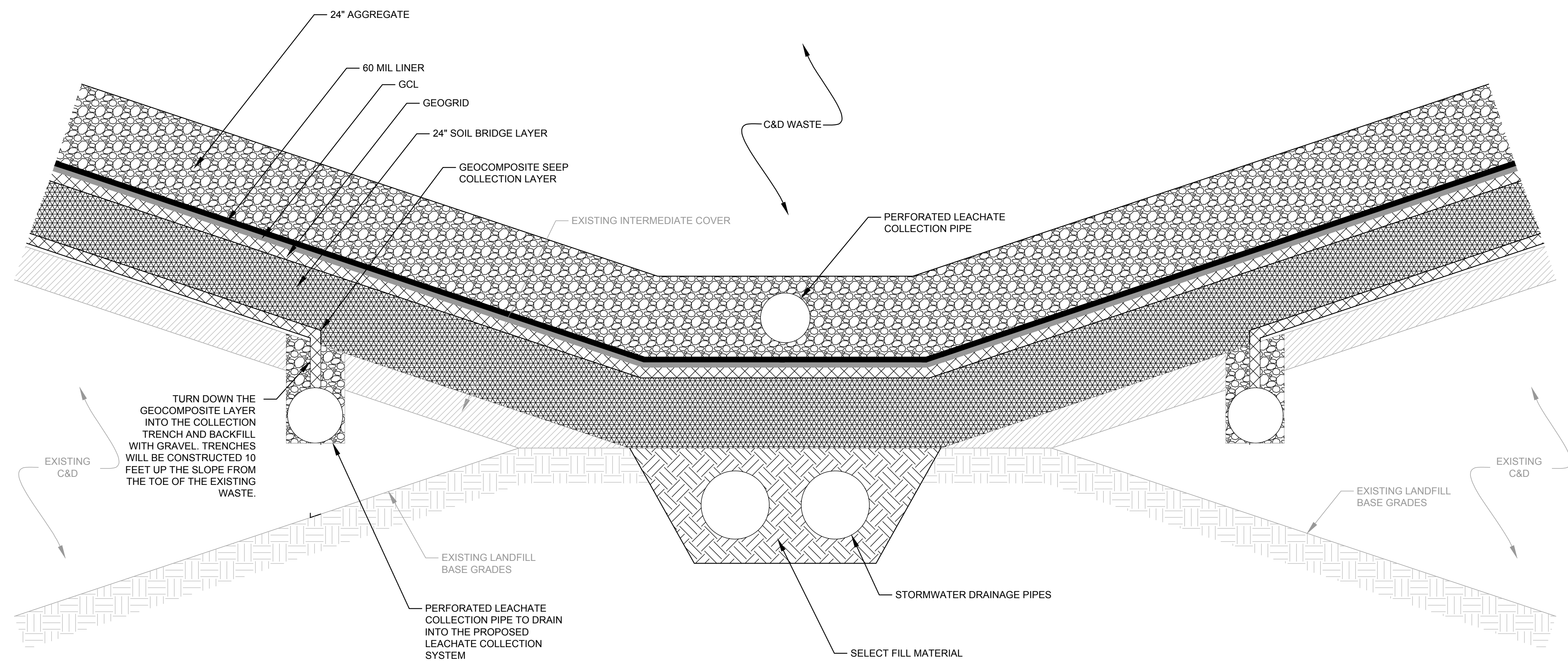
ISSUED FOR: PRELIMINARY

DATE: 10/9/2020

DRAWING NAME:

DETAIL

DRAWING NUMBER:



GEOCOMPOSITE DRAINAGE LAYER
AND BASE LINER SYSTEM (A)

Exhibit 3



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head



November 25, 2020

Mr. Ed Mussler
 Division of Waste Management
 Solid Waste Section
 217 W Jones St
 Raleigh, North Carolina 27603

**RE: HELP Model Analysis of Permitted & Proposed Cap/Liner Systems
 Greenway Waste Solutions at North Meck, LLC
 North Meck Landfill
 Mecklenburg County, North Carolina
 NCDEQ Permit No. 60-13**

Mr. Mussler:

On behalf of Greenway Waste Solutions (GWS), LaBella Associates (LaBella) has prepared a HELP Model Analysis of the percolation/leakage through the proposed liner and cap systems for the North Meck Construction and Demolition (C&D) Landfill (NML) proposed expansion compared to the permitted cap systems of the existing two landfills, as requested by NCDEQ Solid Waste Section.

➤ **Existing Conditions**

The NML currently operates an active C&D Infill Area (approximately 34.3 acres) north of the property. Please refer to Drawing No. 1 for existing conditions. There is also an existing closed C&D Landfill (approximately 33.5 acres) south of the property. The final closure of the C&D Landfill (Phases I&II) was completed in June of 2002. The final cap was constructed with a minimum of 24" of cover soil from a local source. On the other hand, the active Infill Landfill Area is subject to Rule 15A NCAC 13B .0543, which details engineering requirements for caps and became effective in 2007. The permitted/constructed closure caps and the HELP Model Analysis are summarized in Table 1. The attached HELP Model runs assumed a surface slope of 15%.

Table 1: HELP Model Analysis of Existing Permitted/Constructed Landfill Caps.

Landfill	Cap System (from top to bottom) (Permitted/Constructed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil (Constructed)	33.5	9,830	329,305
Infill Landfill Area (Active)	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil (Permitted)	34.3	5,510	188,993
Total		67.8	--	518,298



➤ **Proposed Landfill Expansion**

GWS is proposing to expand the NML by filling in the valley between the two existing landfill areas. The filling of the valley is intended to maximize waste disposal within the limits of the property (parcel) without expanding the waste footprint toward neighboring parcels. GWS is proposing to line the valley and the piggyback areas on the active Infill Landfill Area and the closed C&D Landfill. The base liner system (approximately 48.6 acres) is shown on Detail 1 on Drawing No. 2. GWS is proposing to construct the base liner system as shown on Detail 1 on Drawing No. 2 on the piggyback area of the active Infill Landfill in lieu of the permitted cap. The base liner system will be constructed on the piggyback area of the closed C&D Landfill. GWS may consider a partial removal of C&D Landfill 24" soil cap prior to the construction of the proposed liner system. The HELP Model runs did not include the 24" soil cap in analyzing the proposed liner/cap system.

At the completion of waste filling operations, GWS is proposing to cap the landfill expansion area (approximately 48.6 acres) with the synthetic cap system shown on Detail 1 on Drawing No. 2. Areas outside of the piggyback footprint on the active Infill Landfill Area will be closed using the permitted cap system, while areas on the closed C&D Landfill will remain closed with 24" of cover soil. The permitted/proposed closure caps and the HELP Model Analysis are summarized in Table 2. The attached HELP Model run assumed a surface slope of 15% consistent with the permitted/constructed caps HELP Model runs. All other modeling assumptions were consistent with the permitted/constructed caps HELP Model runs.



Table 2: HELP Model Analysis of Proposed Landfill Cap/Liner Systems.

Landfill	Cap/Liner Systems (from top to bottom) (Permitted/Constructed/Proposed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap /Liner (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil <u>(Constructed)</u>	17.1	9,830	168,093
C&D Landfill (Phases I&II) (piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	16.4	0.00002	0.000328
Infill Landfill Area (Piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	20.7	0.00002	0.000414
Valley Fill Area (Horizontal Landfill Expansion Footprint)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	11.5	0.00002	0.00023
Infill Landfill Area	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil <u>(Permitted)</u>	13.6	5,510	74,936
Total		79.3		243,029

*Gas geocomposite was excluded from the HELP model runs as it has an insignificant impact on the results.



In conclusion, the HELP Model runs evaluate the percolation/leakage to the existing waste with the permitted cap and after the construction of the proposed expansion liner/cap systems. Although the proposed landfill expansion includes lining the valley between the existing closed landfill (Phases I&II) and the active Infill Landfill area, which adds approximately 11.5 acres of landfill footprint, the lining/capping of the existing landfills piggyback areas reduces the percolation/leakage to the existing waste mass by more than 50% according to the HELP Model Analysis. The attached HELP Model runs and drawings provide additional details.

We hope that you agree with our conclusion that the aforementioned benefits from the proposed liner and cap systems of the expansion project are significant compared to closing the landfill as currently permitted. We request a letter from NCDEQ Solid Waste Section to the Town of Huntersville and Mecklenburg County detailing the benefits of the proposed expansion project. The proposed liner/cap systems is significantly reducing percolation/leakage through the existing waste into the environment.

If you have any questions or require additional information that would help the Solid Waste Section determine the benefits of the proposed liner/cap systems compared to the existing permitted/constructed cap systems, please do not hesitate to give me a call at (704) 941-2164.

Respectfully submitted,

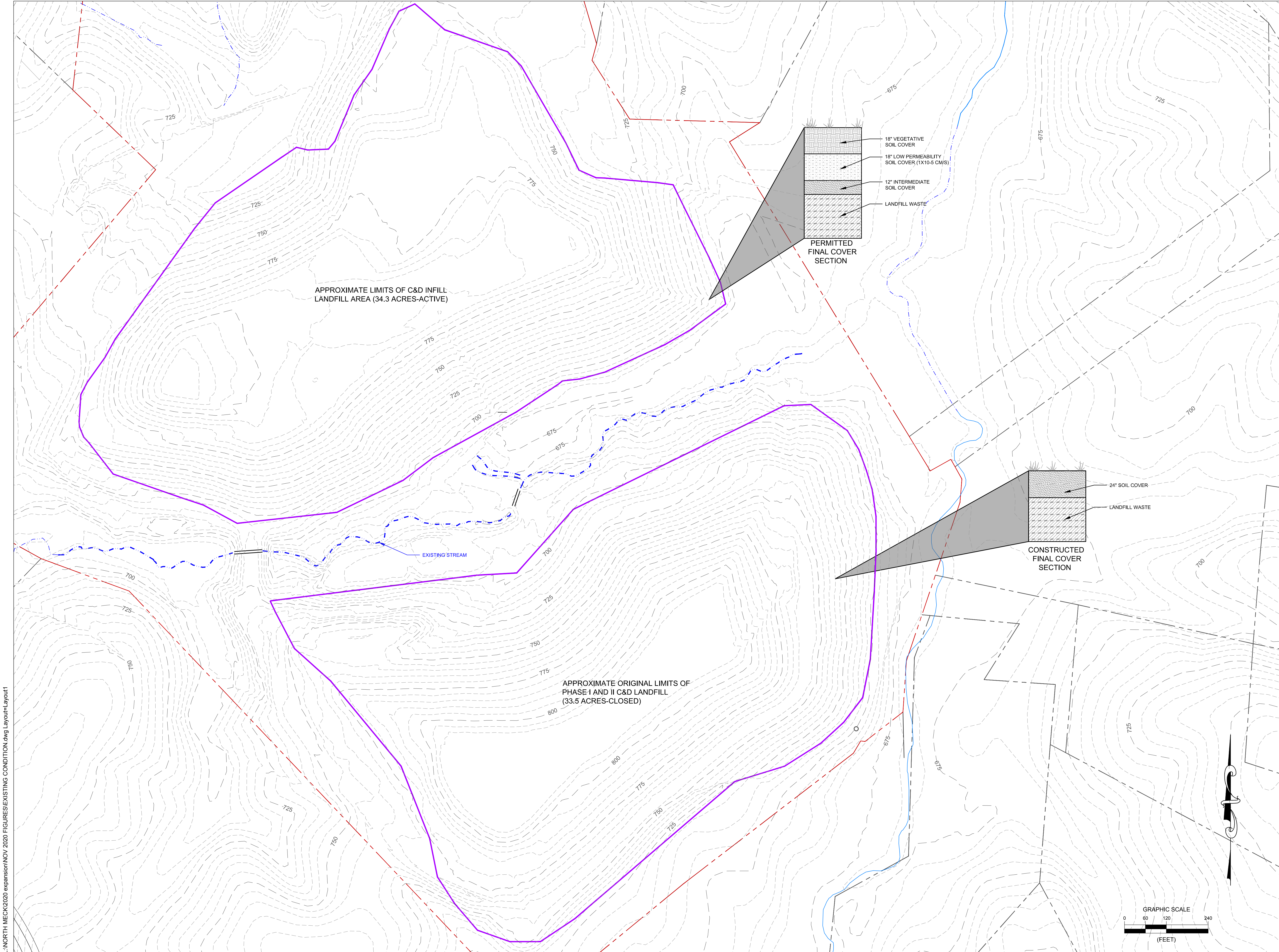
LaBella Associates

Mousa Maimoun, Ph.D., P.E.
Sr. Project Consultant

Attachments:

Drawing No. 1 – Existing Conditions
Drawing No. 2 – Proposed Landfill Expansion (Conceptual)
HELP Model Runs

Cc: Ms. Sherri Stanley, P.E., NCDEQ Solid Waste Section
Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates



L:\NORTH MECK\2020 expansion\NOV 2020 FIGURES\EXISTING CONDITION.dwg Layout=Layout1

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© 2020 LaBella Associates	

GREENWAY WASTE SOLUTIONS, LLC

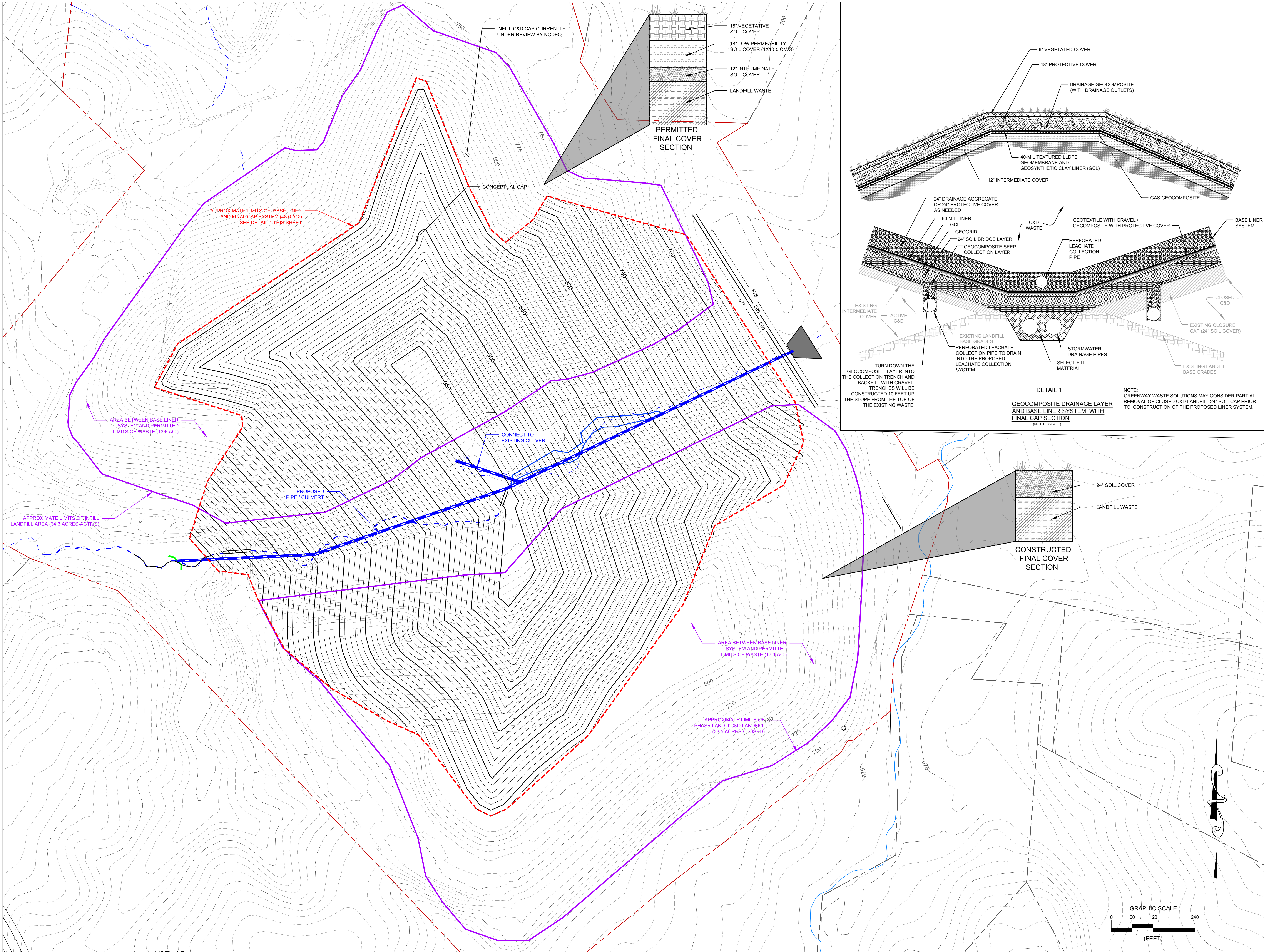
NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

NO:	DATE:	DESCRIPTION:
Revisions		
PROJECT NUMBER: 2180197		
DRAWN BY: RH		
REVIEWED BY: MM		
ISSUED FOR: HELP MODEL ANALYSIS		
DATE: 11/20/2020		
DRAWING NAME:		

EXISTING CONDITIONS

DRAWING NUMBER:

L:\NORTH MECK2020 expansion\NOV 2020 FIGURES\2 CONCEPT LANDFILL WITH CAP AND LINER DETAIL.dwg Layout=Layout1



GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY CONCEPT-HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

**PROPOSED LANDFILL
EXPANSION
(CONCEPTUAL)**

DRAWING NUMBER:

Exhibit#5-EPA Vinyl Chloride Fact Sheet

Vinyl Chloride

75-01-4

Hazard Summary

Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Acute (short-term) exposure to high levels of vinyl chloride in air has resulted in central nervous system (CNS) effects, such as dizziness, drowsiness, and headaches in humans. Chronic (long-term) exposure to vinyl chloride through inhalation and oral exposure in humans has resulted in CNS effects and liver damage. Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. Vinyl chloride exposure, via inhalation, has been shown to increase the risk of a rare form of liver cancer, angiosarcoma of the liver, in humans. EPA has concluded that vinyl chloride is carcinogenic to humans by the inhalation and oral routes of exposure, and highly likely to be carcinogenic by the dermal route of exposure.

Please Note: The main sources of information for this fact sheet are the U.S. Environmental Protection Agency's (EPA's) Integrated Risk Information System and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profile for Vinyl Chloride. (1,2)

Uses

- Most of the vinyl chloride produced is used to make polyvinyl chloride (PVC), a material widely used in automotive parts, packaging products, pipes, construction materials, furniture, and a variety of other products. (2)
- Smaller amounts of vinyl chloride are used as a chemical intermediate and a solvent. (2,4)

Sources and Potential Exposure

- Ambient air concentrations of vinyl chloride are generally quite low, with exposure occurring from the discharge of exhaust gases from factories that manufacture or process vinyl chloride, or evaporation from areas where chemical wastes are stored. (2,3)
- Vinyl chloride may enter finished drinking water from the flow of water through older PVC piping made before 1977, but a more recent study suggests that the extraction of vinyl chloride may diminish over time. Since 1977, product standards (NSF/ANSI 14 and 61) have controlled the release of vinyl chloride from PVC pipes. (5,6)
- Occupational exposure to vinyl chloride may occur in those workers concerned with the production, use, transport, storage, and disposal of the chemical. (2,3)
- Vinyl chloride has been detected in tobacco smoke. (2)

Assessing Personal Exposure

- Vinyl chloride can be measured in urine, body tissue, and exhaled air but the tests are not reliable indicators of total exposure. (2)

Health Hazard Information

Acute Effects:

- Acute exposure of humans to high levels of vinyl chloride via inhalation has resulted in effects on the CNS, such as dizziness, drowsiness, headaches, and giddiness. (2,3)
- Acute exposure to high levels of vinyl chloride in animals has resulted in effects on the CNS, liver, kidney, and lungs. (2)
- Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure. (2,3)

Chronic Effects (Noncancer):

- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure. (2,3)
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema). (2,3)
- CNS effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride. (2)
- Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. (2,3)
- EPA has established a Reference Concentration (RfC) of 0.1 milligrams per cubic meter (0.1 mg/m³) based on effects on the liver in rats. The RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not an estimator of risk but rather a reference point to gauge the potential for effects. At exposures increasingly greater than the RfC, the potential for adverse health effects increases.

Lifetime exposure above the RfC does not imply that an adverse effect would necessarily occur. (1)

- EPA has established a Reference Dose (RfD) for vinyl chloride is 0.003 milligrams per kilogram body weight per day (mg/kg/d) based on liver toxicity in rats. (1)

Reproductive/Developmental Effects:

- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects; however, other studies have not supported these findings. (2,3)
- Several case reports involving worker exposures suggest that male sexual performance may be affected by vinyl chloride; however, these reports are limited by possible co-exposure to other chemicals and lack of exposure estimates. (2)
- Testicular damage and decreased male fertility have been reported in rats exposed to vinyl chloride. (2)
- Animal studies have reported decreased fetal weight and birth defects in the offspring of rats exposed to vinyl chloride through inhalation at levels that are also toxic to maternal animals. (2)

Cancer Risk:

- Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. (1,2,3)
- Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver. (1,2,3)
- Several rat studies show a pronounced early-life susceptibility to the carcinogenic effect of vinyl chloride, i.e., early exposures are associated with higher liver cancer incidence than similar or much longer exposures that occur after maturity. (2)
- EPA has classified vinyl chloride as a known human carcinogen by the inhalation route of exposure. (1)
- EPA uses mathematical models, based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. EPA has calculated inhalation unit risk estimates of $4.4 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for exposure to vinyl chloride during adulthood and $8.8 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for lifetime exposure. EPA estimates that, if an individual were to continuously breathe air containing vinyl chloride at an average of $0.11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-4} \text{ mg}/\text{m}^3$) over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing this chemical. Similarly, EPA estimates that continuously breathing air containing $1.1 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-3} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer, and air containing $11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-2} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-ten thousand increased chance of developing cancer. For a detailed discussion of confidence in the potency estimates, please see IRIS. (1)

- EPA has calculated an oral cancer slope factor of $7.2 \times 10^{-1}(\text{mg/kg-day})$ for oral exposure to vinyl chloride during adulthood and an oral cancer slope factor of 1.4 (mg/kg-day) for lifetime exposure. (1)

Physical Properties

- Vinyl chloride is a colorless, flammable gas with a mild, sweet odor. (4)
- The odor threshold for vinyl chloride ranges from 260 ppm to 4,000 ppm. (4)
- The chemical formula for vinyl chloride is $\text{C}_2\text{H}_3\text{Cl}$ and the molecular weight is 62.5 g/mol. (4)
- The vapor pressure for vinyl chloride is 2,600 mm Hg at 25 °C, and it has a log octanol/water partition coefficient (log K_{ow}) of 1.36. (2)

Conversion Factors:

To convert concentrations in air (at 25 °C) from ppm to mg/m^3 : $\text{mg/m}^3 = (\text{ppm}) \times (\text{molecular weight of the compound}) / (24.45)$. For vinyl chloride: $1 \text{ ppm} = 2.6 \text{ mg/m}^3$.

Health Data from Inhalation Exposure



ACGIH TLV--American Conference of Governmental and Industrial Hygienists' threshold limit value expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effects.

AIHA ERPG - American Industrial Hygiene Association's emergency response planning guidelines. ERPG 1 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor; ERPG 2 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing or developing irreversible or other serious health effects that could impair their abilities to take protective action.

ATSDR MRL – An inhalation MRL is an estimate of the amount of a chemical a person can breathe each day without a detectable risk to health. MRLs are developed for health effects other than cancer. MRLs can be calculated for 3 different time periods of exposure to the chemical: acute (about 1 to 14 days), intermediate (from 15-364 days), and chronic (exposure for more than 364 days).

CalEPA Acute REL – California EPA Office of Environmental and Human Health Assessment (OEHHA) acute reference exposure level is the concentration at or below which no adverse health effects are anticipated for a specified exposure duration.

OSHA PEL--Occupational Safety and Health Administration's permissible exposure limit expressed as a time-weighted average: the concentration of a substance to which most workers can be exposed without adverse effect averaged over a normal 8-h workday or a 40-h workweek.

OSHA PEL Ceiling -- Occupational Safety and Health Administration's permissible exposure limit expressed as a short-term exposure limit that should not be exceeded in a 15-minute time period.

RBC—Risk-based concentration.

^a Toxicity, Health, and Risk numbers are toxicological values from animal testing or risk assessment values developed by EPA.

^b Regulatory numbers are values that have been incorporated in Government regulations, while advisory numbers are nonregulatory values provided by the Government or other groups as advice. OSHA numbers are regulatory, whereas ACGIH, NIOSH, and AIHA numbers are advisory.

Summary updated in March 2020

References

1. U.S. Environmental Protection Agency. Integrated Risk Information System (IRIS) on Vinyl chloride. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. Last revised 8/07/2000. <http://www.epa.gov/iris>

2. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological Profile for Vinyl Chloride. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 2006. <http://www.atsdr.cdc.gov/toxprofiles/tp20.pdf>
3. U.S. Department of Health and Human Services. Hazardous Substances Data Bank (HSDB, online database). National Toxicology Information Program, National Library of Medicine. 2020. <http://pubchem.ncbi.nlm.nih.gov/compound/6338>
4. Pohanish, R.P. Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogens. 6th ed. Elsevier Inc. Oxford, UK and Waltham, MA USA. 2012.
5. Flournoy, R. L., Monroe, D., Chestnut, N., & Kumar, V. (1999). Health effects from vinyl chloride monomer leaching from pre-1977 PVC pipe. In Annual American Water Works Association Conference Proceedings (pp. 1211-1230).
6. Walter, R. K., Lin, P. H., Edwards, M., & Richardson, R. E. (2011). Investigation of factors affecting the accumulation of vinyl chloride in polyvinyl chloride piping used in drinking water distribution systems. Water research, 45(8), 2607-2615.
7. American Conference of Governmental Industrial Hygienists (ACGIH). 2018 TLVs and BEIs. Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices. Cincinnati, OH. 2018.
8. Occupational Safety and Health Administration (OSHA). Occupational Safety and Health Standards, Toxic and Hazardous Substances. Code of Federal Regulations. 29 CFR 1910.1000. 2018.
https://www.osha.gov/pls/oshaweb/owadisp.show_unique?p_table_name=STANDARDS&p_unique_file=1910_1017&p_anchor_name=
9. American Industrial Hygiene Association (AIHA). The AIHA 2018 Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. 2018.
10. California Environmental Protection Agency (CalEPA). Technical Supporting Document for Noncancer RELs, Appendix D2. Office of Environmental Health Hazard Assessment. 2008.
<https://oehha.ca.gov/chemicals/vinyl-chloride>

Exhibit#6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services for Mitigation

Lauren Speight

From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>
Sent: Tuesday, August 3, 2021 7:42 PM
To: Bradley Priest; Jack Simoneau
Cc: Brian Richards; Lauren Speight; Canaan, Dave; Smithberger, Jeffrey; Edwards, Olivia; DeMaury, Joshua; Eubanks, Ron
Subject: Variance Request for North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road
Attachments: Response to Variance Request at 15416 Holbrooks Road in Huntersville.pdf
Importance: High

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Brad,

Please find attached for consideration in the review of the variance request to impact the SWIM Buffer along Cane Creek to install a pipe to facilitate expansion of the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road.

Please let me know if you have any questions.

Thank you.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org



We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.

From: Bradley Priest <bpriest@huntersville.org>
Sent: Tuesday, August 3, 2021 12:49 PM
To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>; Jack Simoneau <jsimoneau@huntersville.org>
Cc: Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>
Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Rusty,

Thank you for that heads up. If you cannot recommend approval for their mitigation and project at this time, our variance recommendation would be to continue their item. Lauren is working on those staff reports now for the August meeting. If you could send me the note outlining the issues, I'll send to the applicant ASAP. I'd like to understand what their intent is for the meeting, to continue the item or move forward. Thanks.

Bradley D. Priest, AICP

Principal Planner

Town of Huntersville

Planning Department

704-766-2214

105 Gilead Road – 3rd Floor

Huntersville, NC 28070

www.huntersville.org



From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Sent: Monday, August 2, 2021 6:07 PM

To: Jack Simoneau <jsimoneau@huntersville.org>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

You are very welcome. FYI, Greenway Waste Solutions has not provide us with enough information to adequately assess the impacts of the piping at the Holbrook Road Landfill. We have assessed the stream they are planning to pipe and we have identified a few mitigation options, but there is still a lot we don't know about the piping itself that prevents us from making a fair assessment regarding potential future impacts. I am preparing something to send to Brad tomorrow that summarizes where we are to date.

From: Jack Simoneau <jsimoneau@huntersville.org>

Sent: Monday, August 2, 2021 6:00 PM

To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the information Rusty.

Jack Simoneau

On Aug 2, 2021, at 4:44 PM, Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov> wrote:

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Jack,

In response to our phone call, the SWIM buffer ordinances for Mecklenburg County, Charlotte, Mint Hill, and Pineville allow for SWIM buffer disturbances with mitigation approved by Charlotte Mecklenburg Storm Water Services. They all use the 9 mitigation measures that you have in your draft ordinance. The SWIM buffer ordinances for Cornelius, Davidson, Huntersville, and Matthews require a variance before buffer impacts will be allowed. None of the jurisdictions in Mecklenburg County allow 401/404 mitigation to count for SWIM buffer mitigation. This is the way it has been since the ordinances were adopted over 20 years ago. 401/404 Permits are required by State and federal laws for impacts to water bodies, including wetlands, streams, lakes, and ponds. SWIM buffer mitigation is required for impacts to buffers around water bodies. In many cases, buffer impacts do not require 401 & 404 Permits. For example, a property owner may want to add a patio in the buffer. This does not require a 401-404 Permit because surface waters are not impacted, but buffer mitigation would be required. Also, 401/404 mitigation is supposed to occur in the same designated HUC or hydrologic unit where the impact occurred. In some cases mitigation is allowed outside the HUC, but at a higher rate. For buffer mitigation, it is to occur in the same jurisdiction. There are 2 HUCs for Huntersville, including Mountain Island Lake-Catawba River (#0305010114) that includes portions of Gaston and Lincoln Counties as well as Charlotte, and the Upper Rocky River (#0304010501) that includes parts of Davidson, Harrisburg and Cabarrus County. If Huntersville were to allow the use of 401/404 mitigation to satisfy a buffer impact, then the money could be spent in several other jurisdictions that would not benefit water quality in the Town. It also important to note that the State does not allow 401/404 mitigation to count as mitigation for impacts to State buffers as described in 15A NCAC 02B .0295. This is because the mitigation is covered under separate rules and is for different purposes. State buffer mitigation has several of the same components as the SWIM buffer mitigation.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org

<image002.png>

We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.



**Response to Variance Request at 15416 Holbrooks Road in
Huntersville (Parcel No. 01910102)
North Mecklenburg Construction & Demolition Landfill
August 3, 2021**

Introduction:

The information below is provided to the Town of Huntersville for their consideration in the review of the variance request to impact approximately 212,500 square feet of SWIM Buffer at the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road. These impacts would be associated with piping an estimated 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion (see Appendix A). This information is provided by the Storm Water Services Division of Mecklenburg County's Land Use and Environmental Services Agency (LUESA).

Description of the Current Conditions of the Stream to be Piped:

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and stream habitat assessment were performed by staff with Storm Water Services within the tributary proposed for piping. The approximate location of the area evaluated is shown in Appendix A. Results indicate that the stream reach has very poor fish community abundance and diversity as well as a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR. The stream channel was found to be badly eroded and lack the necessary habitat conditions to support healthy fish and benthic communities as shown in Photos 1 and 2 below. The locations of these photos are shown in Appendix A. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community. Additional information is provided in Appendix B.



Photo 1: Cane Creek to be Piped



Photo 2: Cane Creek to be Piped

Potential Mitigation Options for the Loss of the Buffer:

If the variance is approved, the petitioner has indicated a preference to use the Mitigation Credit technique described in Article 8.25.11b(8) of Huntersville's Zoning Ordinance. Specifications for the use of this technique are provided on page 54 in Section 5.4.3 of the Charlotte-Mecklenburg Buffer Implementation Guidelines at the following link: [file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20\(13\).pdf](file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20(13).pdf).

This technique involves the purchase of Mitigation Credits on a 1:1 basis utilizing the square feet of the disturbed buffer area and the prevailing rate of \$10/square foot. With a disturbed area estimated at 212,500 square feet, the Mitigation Credit is calculated at \$2,125,000 that would be paid to the Town of Huntersville for use within their jurisdiction for improving water quality. Storm Water Services has identified two (2) potential options for use of this Mitigation Credit as described below.

Option 1: Install a stormwater control measure (SCM) such as a wet pond on Town property located at 100 Sherwood Drive to provide water quality and quantity treatment for approximately 10.4 acres of Town owned parcels located upstream, including Town Hall, the Senior Center, and Sherwood Park (PID Numbers: 01712241, 01712214, 01712213, 01712211, 01712210, 01712245, 01903115, 01903116, & 01903114). The SCM would also provide treatment for some road drainage and Cashion's store. It is estimated that this SCM will remove 1,000 lbs./acre/year of sediment and 5 and 2 lbs./acre/yr. of Total Nitrogen and Total Phosphorus, respectively. Figure 1 below illustrates with a blue dot the potential location of the SCM with the treated upstream drainage area indicated in yellow highlight.

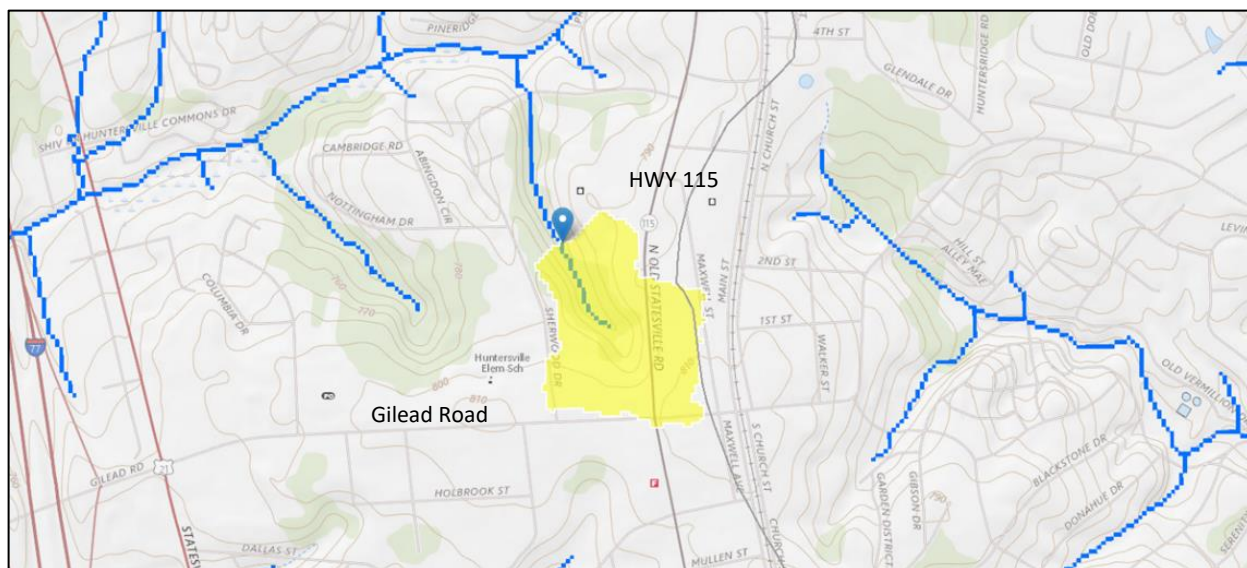


Figure 1: Potential Location of SCM Mitigation Measure

Option 2: Complete a stream restoration project in Cane Creek or the South Prong of Clarke Creek downstream of the landfill. The purpose of the project would be to restore habitat and improve channel stability to promote a healthy aquatic community, including benthics and fish. Storm Water Services uses a Stream Restoration Ranking System or SRRS to prioritize stream reaches for restoration based on a 300-point scale with lower SRRS Scores representing degraded stream conditions with a higher priority for restoration and a SRRS Score of 190 representing acceptable stream conditions. Preliminary SRRS Scores below 190, indicating a potential for restoration, have been calculated for the areas shown in Appendix A along the South Prong of Clarke Creek. In addition, field observations made on July 22, 2021 by Storm Water Services' staff revealed sufficiently degraded channel conditions that potentially warrant restoration in Cane Creek in proximity to the landfill. Photos 3 and 4 below illustrate these conditions at the locations shown in the map included as Appendix A. However, field evaluations and final SRRS Scores are needed to assess channel conditions and potential uplift (i.e., channel stability and habitat improvements) to fully ascertain the viability and benefits of a stream restoration project in either Cane Creek or the South Prong of Clarke Creek in proximity to the landfill.



Photo 3: Cane Creek Downstream of Landfill



Photo 4: Cane Creek Downstream of Landfill

Description of Negative Impacts from the Piping:

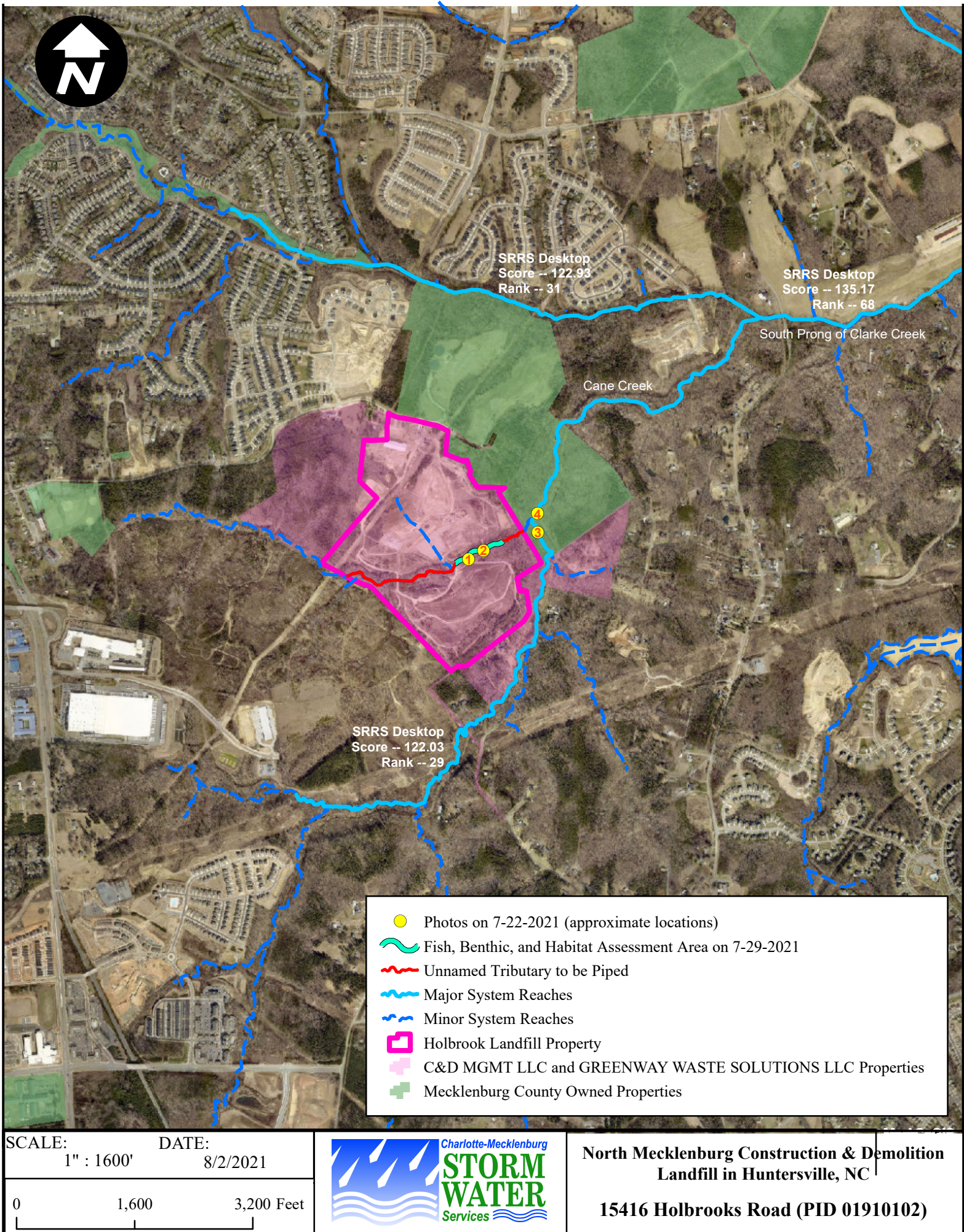
To date, Storm Water Services has not been provided with sufficient information to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. The following questions remain unanswered:

1. What engineering analysis has been performed to verify that the piping system will remain stable and functional during the life of the site and subsequent post closure period?
2. How is the system being engineered to prevent leachate from entering the pipe?
3. What is to prevent the gravel underlayment for the piping system from serving as a conduit for leachate to migrate off site?
4. What is the plan if the piping system fails?
5. Are there plans to monitor for negative downstream water quality impacts?
6. Is the system designed in such a way that leaks can be located and repaired?
7. The outlet of the piped section calls out 130 linear feet of stream to be preserved. However, no energy dissipation device is indicated at the tie-in. What will be constructed to prevent accelerated downstream bank erosion?
8. What are the impacts to flood levels downstream of the pipe? A Hydraulic and Hydrologic Analyses (H&HA) report is requested.
9. What occurs when the flow exceeds the design capacity of the pipe? Where will the water go? The H&HA report from #8 will help answer this question.
10. What measures will be implemented to prevent off site sedimentation during the piping and landfiling operation?

Recommendation to the Town of Huntersville:

The section of Cane Creek proposed for piping is significantly degraded and there are multiple mitigation opportunities in proximity that could result in overall improved water quality conditions. However, these potential improved conditions could easily be negated if the piping system malfunctions or fails resulting in negative downstream impacts associated with water quality and/or quantity issues. Storm Water Services has not been provided with sufficient information to accurately assess the potential for these negative impacts. Responses to the ten (10) questions listed in the previous section are required before this assessment can be completed.

Appendix A: North Mecklenburg Construction & Demolition Landfill Project Area Map



Appendix B

Fish Community Survey, Benthic Macroinvertebrate Bioassessment and Stream Habitat Assessment of the Cane Creek Tributary Flowing through the Holbrooks Landfill

Methodology

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and a stream habitat assessment were conducted by Mecklenburg County Storm Water Services within the tributary to Cane Creek that flows through the Holbrooks Landfill located at 15416 Holbrooks Road in Huntersville, NC. The fish community survey was conducted on a 200-meter stream reach within the project bounds using electroshocking methodologies in accordance with the Mecklenburg County Fish Community Survey Procedures. The benthic macroinvertebrate bioassessment consisted of collecting the benthic macroinvertebrates found within a 100-meter stream reach from all microhabitats present. The bioassessment procedures followed the Mecklenburg County Stream Bioassessment Procedures. The stream habitat assessment consisted of evaluating 10 stream habitat parameters following the Mecklenburg Stream Habitat Assessment (MHAP) Field Guide.

Fish Community Results

A total of 35 organisms, representing three (3) fish species were collected (see Table 1). The fish species collected were Creek Chub, Rosyside Dace, and Green Sunfish which are considered tolerant. Tolerant fish are able to thrive in poor stream conditions. The low numbers of total fish and species type collected during this survey indicates a stream with a very poor fish community abundance and diversity.

Benthic Macroinvertebrate Results

A total of 48 individual organisms were collected. Twenty-one (21) of those organisms were identified to the lowest possible taxa identification level (Genus and Species). The remaining 27 organisms were identified as Chironomidae (Family taxa level). Of the 10 taxa found, only 2 belonged to the sensitive aquatic insect groups of Mayflies (Ephemeroptera), Stoneflies (Plecoptera) and Caddisflies (Trichoptera) collectively referred to as EPT taxa. These results are typical of a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR (see Table 2).

Stream Habitat Assessment (MHAP) Results

The assessed stream reach received a MHAP score of 119.7 out of 200 possible points which is considered *Partially Supporting* (see Table 3). Parameters that received low individual scores include Stream Bed Substrate (6.7 out of 20), Sediment Deposition (7.6 out of 20), Frequency of Riffles (7 out of 20) and Vegetative Buffer Width (7.1 out of 20). The stream bottom was filled with sand resulting in very few riffles (faster moving water) which are the best habitat for benthic macroinvertebrates and very few pools which are the best habitat for fish.

Conclusions

The poor habitat quality of the Cane Creek Tributary flowing through the Holbrooks Landfill property has resulted in the stream being able to support only a small number of fish and benthic macroinvertebrate organisms. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community.

Table 1: Fish Community Survey Data

Fish Species	Count	Size Range (mm)	Multiple Age Classes?	Tolerant / Intolerant?
Creek Chub	28	62 to 110	Yes	Tolerant
Rosyside Dace	5	65 to 79	No	Intermediate
Green Sunfish	2	84 to 88	No	Tolerant

Table 2: Benthic Macroinvertebrate Assessment Data

ORDER	FAMILY	GENUS/SPECIES	TOLERANCE	NO.
EPHEMEROPTERA	BAETIDAE	LABIOBATIS PROPINQUUS	5.8	1
PLECOPTERA	PERLIDAE	PERLESTA SPP.	2.9	1
COLEOPTERA	DRYOPIDAE	HELIHUS SPP.	4.1	1
COLEOPTERA	ELMIDAE	STENELMIS SPP.	5.6	3
DIPTERA	CHIRONOMIDAE	Tanypodinae	NA	14
DIPTERA	CHIRONOMIDAE	Non-Tanypodinae	NA	13
DIPTERA	PTYCHOPTERIDAE	BITTACOMORPHA CLAVIPES	5.0	1
DIPTERA	SIMULIIDAE	SIMULIUM SPP.	4.9	4
DIPTERA	STRATIOMYIDAE	STRATIOMYS SPP.	8.1	1
ODONATA	CALOPTERYGIDAE	CALOPTERYX SPP.	7.5	4
ODONATA	GOMPHIDAE	GOMPHUS SPP.	5.9	3
ODONATA	GOMPHIDAE	PROGOMPHUS OBSCURUS	8.2	2

Table 3: Stream Habitat (MHAP) Data

Instream Cover	Epifaunal Substrate	Stream Bed Substrate	Channel Alteration	Sediment Deposition	Frequency of Riffles	Channel Flow Status	Bank Vegetation	Bank Stability	Buffer
16.1	14.4	6.7	19	7.6	7	12	15.2	14.6	7.1

**Town of Huntersville
Board of Adjustment
August 10, 2021**

To: Town Board

From: Lauren Speight, Planner 1

Date: August 10, 2021

Subject:

EXPLAIN REQUEST:

The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Article 9.23.4 c** of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood Hazard Areas.

ACTION RECOMMENDED:

Planning Department Staff recommend continuing the public hearing for this variance request based on the staff findings provided in the staff report.

FINANCIAL IMPLICATIONS:

N/A

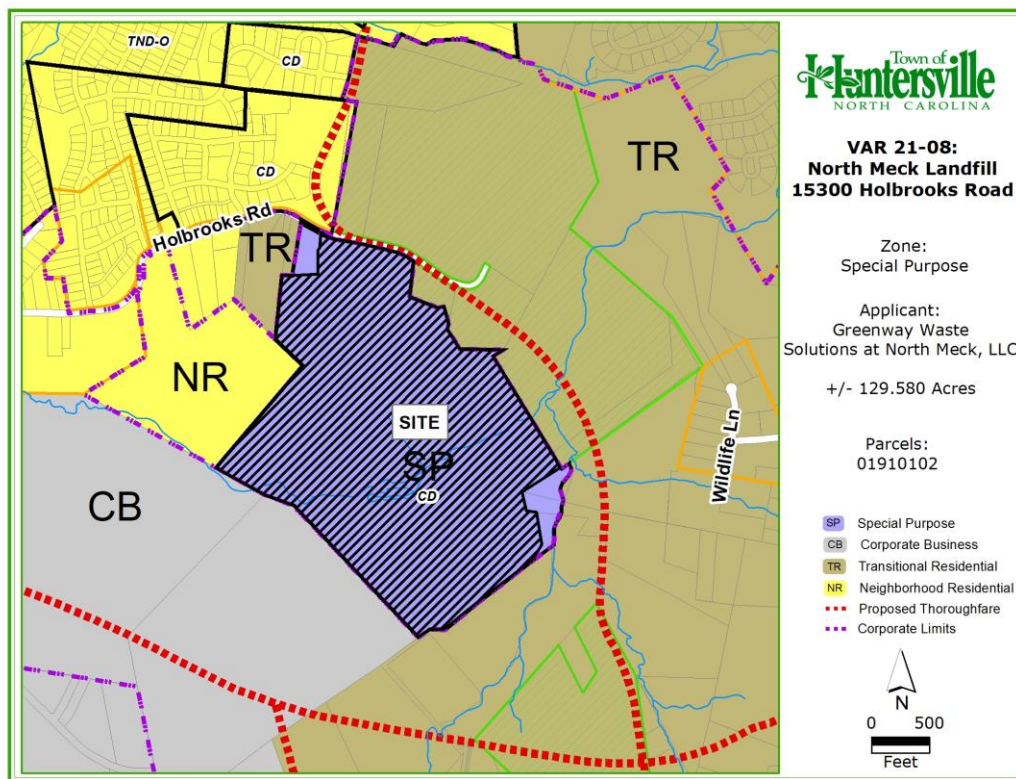
ATTACHMENTS:

1. V21-08 Staff Report

**V 21-08, 15300 Holbrooks Road
Parcel ID 019-101-02**

Case #: V21-08
Address: 15300 Holbrooks Road, Huntersville, NC 28078
Parcel #: 019-101-02
Acreage: 129.58
Property Owner/Applicant: C&D Management Company (Owner)
Owner/Applicant Address: John Brown on behalf of Greenway Waste Solutions at North Meck, LLC (applicant)
Staff: Lauren Speight – Planner II

Currently in use, the 129.58-acre property is seeking to expand the construction and demolition landfill area within the subject property. The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Article 9.23.4 c** of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood Hazard Areas.



BACKGROUND:

1. The subject property, 15300 Holbrooks Road (Parcel 019-101-02) is located within a Special Purpose Conditional District, Rezoning 16-06. (Exhibit #1 - Approved CD Rezoning 16-06)
2. The subject property is currently operating a landfill and has been continuously operating since 1991. The subject property was not with the zoning jurisdiction of the Town of Huntersville in 1991.
3. The subject property obtained a Special Use Permit 16-01 approved by the Huntersville Town Board November 7, 2016 to allow the landfill to expand its boundaries and add a recycling facility to the existing site. (Exhibit #2 - Approved Special Use Permit 16-01)

4. The subject property is located within the Town of Huntersville.
5. The applicants are seeking to modify the Conditional Rezoning (R16-06) and Special Use Permit approval (SUP16-01), to pipe a stream running across their property and expand the C&D landfill over the stream. To move forward with the Rezoning and Special Use Permit process the applicants are first required to obtain the following variance approvals from the Board of Adjustment:
 - a. Zoning Ordinance Article 8.25
 - i. The proposed use was not a permitted buffer impact per Article 8.25.6 or Article 8.25.10. Per, Article 8.25.11(b), when “unnecessary hardships,” as defined in Section 11.3.2 f, would result from strict adherence to the buffer width requirements and/or buffer treatment standards, a petition for variance may be filed with the Huntersville Board of Adjustment in compliance with the procedures and standards of Section 11.3.
 - b. Zoning Ordinance Article 9.23.4 c (See V21-08)
 - i. No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - ii. 50-foot buffer from delineated streams.
 - c. Code of Ordinances Section 151.60(A)(10) (See V21-09)
 - i. Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance, in special flood hazard area.
6. In addition to the conditional rezoning and special use permits modifications, Variance 16-02 was submitted seeking variances from Article 8.25 of the Zoning Ordinance, Article 9.23 of the Zoning Ordinance, and Section 151.60(A)(10) of the Code of Ordinances.
7. The three variance requests submitted in 2016 were withdrawn. (See Exhibit #3 - 2016 Withdrawal Email)
8. Included in the 2016 withdrawal email exchange between Planning Department Staff and the applicant, staff referenced a significant finding at the time that NCDEQ found contamination of surface and groundwater at the subject property. Staff was unable to support of the 2016 variance application meeting the fourth variance standard that the request was consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved. (See Exhibit #3 - Withdrawal)
9. Because the property did not obtain the 2016 variance, use of the landfill was constricted to the area outside of the S.W.I.M. Buffer and the use was allowed in other areas of the property.
10. Within the application for Variance 21-07, the applicant includes a letter dated October 3, 2019 from NCDEQ to the applicant with regard to the Corrective Action Plan for the groundwater exceedances at the landfill. The letter references the Corrective Action Plan submitted to and approved by NCDENR to control the migration of contaminated groundwater. (See Exhibit #4 - Variance Application, pages 16-17)
11. Variance 21-07 is seeking a variance from Article 8.25 of the Zoning Ordinance to impact the S.W.I.M. buffer at the subject property. This approval is subject to the subsequent approval of a S.W.I.M. Buffer Mitigation Plan by the Mecklenburg County Storm Water Administrator, approval of a Floodplain Development Development Permit by Mecklenburg County, approval of a 404-401 Stream Mitigation Plan approved by US Army Corps of Engineers, approval of NCDEQ Solid Waste Permit, and approval of all Town, County, and State building permit activities.
12. The applicant proposes to pipe the creek inside the +/- .87 acre Special Flood Hazard and S.W.I.M. Area. The applicant proposes the proposed lines and capped landfill expansion will be engineered to NCDEQ’s most current standards to further enhance public health and safety and will not reduce the value of nearby property as compared to past North Carolina standards. (See Exhibit #4 - Variance Application, page 6)
13. The applicant included in the application dated March 2, 2021 from NCDEQ Solid Waste Section Chief Ed Mussler that indicates LaBella (engineering consultant for Greenway Waste Solutions) compared the existing cap requirements to the proposed capping system. The findings by LaBella indicate employing the proposed, enhanced cap will reduce infiltration of pollutants by 50% compared to the alternative of

the regulatory minimum cap on the landfill with no expansion. (See Exhibit #4 - Variance Application, page 15)

14. Additionally, the applicant includes a letter from the Catawba and Yadkin Riverkeepers. (See Exhibit #4 - Variance Application, page 15)
15. While the Catawba and Yadkin Riverkeepers is an advocacy organization, NCDEQ administers regulatory programs designed to protect air quality, water quality, and the public's health.
16. The letter indicates that riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. The letter states, "[they] are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 location, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality." The letter from the Catawba and Yadkin Riverkeepers also acknowledges their recommendation is based on several assumptions and the Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
17. A document is included by the applicant, "Historical Regulatory Compliance Time-Line," that indicates a lab that previously analyzed groundwater samples from the subject property produced false-positive results for vinyl chloride. (See Exhibit #4 - Variance Application, page 18-19)
18. The Environmental Protection Agency classifies vinyl chloride as a human carcinogen. (See Exhibit 5 – EPA Fact Sheet on Vinyl Chloride)
19. The Historical Regulatory Compliance Time-Line document provided by the applicant also indicates analytical results from Eurofins TestAmerica (ETA), an environmental testing lab, show vinyl chloride has been detected in 10 monitoring wells according to testing conducted in April 2021. However, according to the document the detections identified by ETA do not exceed the allowable concentration of vinyl chloride specified in the 2L rules.
20. Per Article 9.23.4, c:
 - c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modification made by the state unless the state standards become more restrictive.
 - 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right-of-way to fill area (non-state requirement).
21. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. (See Exhibit 6 – Email from Rusty Rozzelle and report from Mecklenburg County Storm Water Services)
22. On August 4, 2021, Town Planning Department Staff (Brad Priest and Lauren Speight) held a conference call with Jaclynne Drummond (Hydrologist, Solid Waste Section, NCDEQ). Ms. Drummond confirmed the information stated in the previously referenced March 2, 2021 letter from NCDEQ. Staff has outstanding questions regarding the proposed geosynthetic liner, contamination of surface water and storm water above the liner, and NCDEQ requirements for the collection system above the liner.

STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit #4 for the applicant's responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- A. The applicant states these (Huntersville Zoning Ordinance) regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe water through the site for expansion of the landfill use, which may prematurely reduce the lifespan of the landfill.
- B. The property is currently within the Special Purpose Zoning District. As mentioned, the subject property has an approved conditional district rezoning plan.
- C. The Land Clearing & Inert Debris and Construction & Demolition landfill use is permitted with an approved Special Use Permit in the Special Purpose Zoning District.
- D. The subject property has an approved Special Use Permit.
- E. The property is an active Construction & Demolition landfill.
- F. The subject property is seeking a variance to expand the use within the boundary of the subject property and the proposed expansion would impact a S.W.I.M. area and would impact the required 50-foot buffer from delineated streams per Article 9.23.

- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- A. S.W.I.M. Stream Buffers are present throughout the Town of Huntersville and are not peculiar to the property. However, the Zoning Ordinance offers relief, Article 8.25.11 (Exhibit 4) from required SWIM buffer widths with an approved mitigation plan and Board of Adjustment action.
- B. The applicant states all of the following: The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition (C&D) landfill. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling area. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity.
- C. Properties throughout the Town that contain S.W.I.M. buffer areas are within a variety of zoning districts and allow a multitude of uses. Any property that sought to propose a use currently not allowed per Article 8.25 would be required to obtain an approved mitigation plan before disturbance of the buffer area.

- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*

Staff Findings:

- A. Greenway Waste at North Meck has been in operation since June 1993.
- B. SWIM buffer regulations added to the Zoning Ordinance in October 1999.

- C. The applicant states the hardship was not created by the manner in which the property has been used and the request is consistent with the intent of the Ordinance.
 - D. S.W.I.M buffer areas are not created by property owners or applicant and Staff finds the hardship did not result from actions taken by the applicant or property owner.
- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

- A. If the variance is approved this would be just one part of the approval process in which the applicant is seeking. After obtaining BOA approval, the applicants will have to seek approval for a Rezoning to Special Purpose District and Special Use Permit for a C&D Landfill from the Town Board of Commissioners.
- B. The applicant states all of the following: “The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.”
- C. In addition to Article 9.23.4 (c) from which this variance application is seeking approval, Article 9.23 also indicate that the proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property.
- D. One of the follow-up questions posed by Mecklenburg County Storm Water Services requests the contingency plan for if the proposed creek piping system fails.
- E. Two of the conditions of SUP 16-01 were:
 - a. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
 - b. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant’s property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
- F. Article 9.23.4 (a) states, a landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to Industrial Collector Street standards that connects directly to a major or minor thoroughfare.
- G. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4.
- H. For their mitigation, the applicant proposes to utilize:
 - (8) Mitigation Credits: The purchase of mitigation credits through the Stream Restoration Program on a 1:1 basis, utilizing linear feet of stream impacted and the prevailing rate of purchase as established by the Charlotte-Mecklenburg Buffer Implementation Guidelines. Mitigation credits purchased under any other program (i.e., U.S Army Corp of Engineers) shall not cover this requirement unless the issuing agency agrees to relinquish the funds to the appropriate local government agency.
- I. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion.

STAFF POSITION:

The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from Article 9.23.4 c of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood

Hazard Areas. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. Therefore, Staff recommends continuing this variance request at this time.

EXAMPLE MOTION: V21-08, 15300 Holbrooks Road, Parcel ID 019-101-02, Huntersville, NC 28078

Planning Department	Board of Adjustment
	APPROVAL: In considering the application for V21-08, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from 9.23.4 c of the Zoning Ordinance, the Board of Adjustment approves the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request meets ____ of the four criteria for granting a variance based on the following findings of fact: (<i>explain findings of fact</i>)
	DENIAL: In considering the application for V21-08, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from 9.23.4 c of the Zoning Ordinance, the Board of Adjustment denies the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request does not met the criteria for granting a variance based on the following findings of fact: (<i>explain findings of fact</i>)

Exhibits List

Exhibit #1 - Approved Conditional District Rezoning 16-06

Exhibit #2 - Approved Special Use Permit 16-01

Exhibit #3 - 2016 Email Withdrawing Variance 16-02

Exhibit #4 - 2021 Variance Application

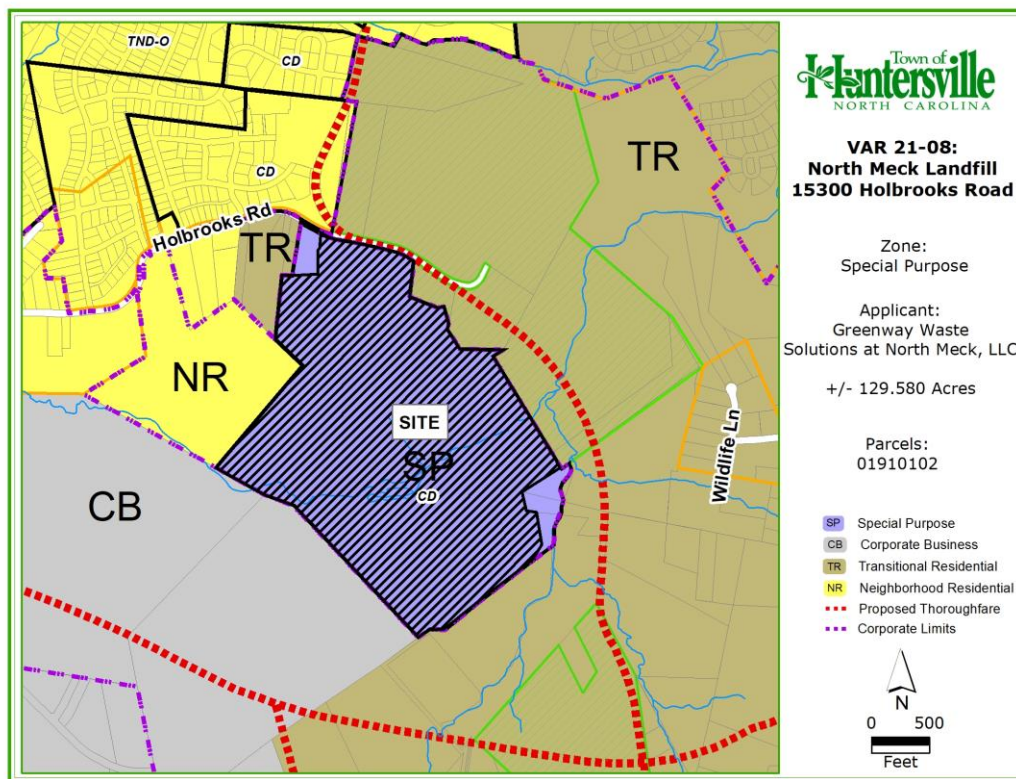
Exhibit #5 - EPA Vinyl Chloride Fact Sheet

Exhibit #6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services regarding Mitigation

**V 21-08, 15300 Holbrooks Road
Parcel ID 019-101-02**

Case #: V21-08
Address: 15300 Holbrooks Road, Huntersville, NC 28078
Parcel #: 019-101-02
Acreage: 129.58
Property Owner/Applicant: C&D Management Company (Owner)
Owner/Applicant Address: John Brown on behalf of Greenway Waste Solutions at North Meck, LLC (applicant)
Staff: Lauren Speight – Planner II

Currently in use, the 129.58-acre property is seeking to expand the construction and demolition landfill area within the subject property. The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Article 9.23.4 c** of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood Hazard Areas.



BACKGROUND:

1. The subject property, 15300 Holbrooks Road (Parcel 019-101-02) is located within a Special Purpose Conditional District, Rezoning 16-06. (Exhibit #1 - Approved CD Rezoning 16-06)
2. The subject property is currently operating a landfill and has been continuously operating since 1991. The subject property was not with the zoning jurisdiction of the Town of Huntersville in 1991.
3. The subject property obtained a Special Use Permit 16-01 approved by the Huntersville Town Board November 7, 2016 to allow the landfill to expand its boundaries and add a recycling facility to the existing site. (Exhibit #2 - Approved Special Use Permit 16-01)

4. The subject property is located within the Town of Huntersville.
5. The applicants are seeking to modify the Conditional Rezoning (R16-06) and Special Use Permit approval (SUP16-01), to pipe a stream running across their property and expand the C&D landfill over the stream. To move forward with the Rezoning and Special Use Permit process the applicants are first required to obtain the following variance approvals from the Board of Adjustment:
 - a. Zoning Ordinance Article 8.25
 - i. The proposed use was not a permitted buffer impact per Article 8.25.6 or Article 8.25.10. Per, Article 8.25.11(b), when “unnecessary hardships,” as defined in Section 11.3.2 f, would result from strict adherence to the buffer width requirements and/or buffer treatment standards, a petition for variance may be filed with the Huntersville Board of Adjustment in compliance with the procedures and standards of Section 11.3.
 - b. Zoning Ordinance Article 9.23.4 c (See V21-08)
 - i. No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - ii. 50-foot buffer from delineated streams.
 - c. Code of Ordinances Section 151.60(A)(10) (See V21-09)
 - i. Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance, in special flood hazard area.
6. In addition to the conditional rezoning and special use permits modifications, Variance 16-02 was submitted seeking variances from Article 8.25 of the Zoning Ordinance, Article 9.23 of the Zoning Ordinance, and Section 151.60(A)(10) of the Code of Ordinances.
7. The three variance requests submitted in 2016 were withdrawn. (See Exhibit #3 - 2016 Withdrawal Email)
8. Included in the 2016 withdrawal email exchange between Planning Department Staff and the applicant, staff referenced a significant finding at the time that NCDEQ found contamination of surface and groundwater at the subject property. Staff was unable to support of the 2016 variance application meeting the fourth variance standard that the request was consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved. (See Exhibit #3 - Withdrawal)
9. Because the property did not obtain the 2016 variance, use of the landfill was constricted to the area outside of the S.W.I.M. Buffer and the use was allowed in other areas of the property.
10. Within the application for Variance 21-07, the applicant includes a letter dated October 3, 2019 from NCDEQ to the applicant with regard to the Corrective Action Plan for the groundwater exceedances at the landfill. The letter references the Corrective Action Plan submitted to and approved by NCDENR to control the migration of contaminated groundwater. (See Exhibit #4 - Variance Application, pages 16-17)
11. Variance 21-07 is seeking a variance from Article 8.25 of the Zoning Ordinance to impact the S.W.I.M. buffer at the subject property. This approval is subject to the subsequent approval of a S.W.I.M. Buffer Mitigation Plan by the Mecklenburg County Storm Water Administrator, approval of a Floodplain Development Development Permit by Mecklenburg County, approval of a 404-401 Stream Mitigation Plan approved by US Army Corps of Engineers, approval of NCDEQ Solid Waste Permit, and approval of all Town, County, and State building permit activities.
12. The applicant proposes to pipe the creek inside the +/- .87 acre Special Flood Hazard and S.W.I.M. Area. The applicant proposes the proposed lines and capped landfill expansion will be engineered to NCDEQ’s most current standards to further enhance public health and safety and will not reduce the value of nearby property as compared to past North Carolina standards. (See Exhibit #4 - Variance Application, page 6)
13. The applicant included in the application dated March 2, 2021 from NCDEQ Solid Waste Section Chief Ed Mussler that indicates LaBella (engineering consultant for Greenway Waste Solutions) compared the existing cap requirements to the proposed capping system. The findings by LaBella indicate employing the proposed, enhanced cap will reduce infiltration of pollutants by 50% compared to the alternative of

the regulatory minimum cap on the landfill with no expansion. (See Exhibit #4 - Variance Application, page 15)

14. Additionally, the applicant includes a letter from the Catawba and Yadkin Riverkeepers. (See Exhibit #4 - Variance Application, page 15)
15. While the Catawba and Yadkin Riverkeepers is an advocacy organization, NCDEQ administers regulatory programs designed to protect air quality, water quality, and the public's health.
16. The letter indicates that riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. The letter states, "[they] are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 location, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality." The letter from the Catawba and Yadkin Riverkeepers also acknowledges their recommendation is based on several assumptions and the Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
17. A document is included by the applicant, "Historical Regulatory Compliance Time-Line," that indicates a lab that previously analyzed groundwater samples from the subject property produced false-positive results for vinyl chloride. (See Exhibit #4 - Variance Application, page 18-19)
18. The Environmental Protection Agency classifies vinyl chloride as a human carcinogen. (See Exhibit 5 – EPA Fact Sheet on Vinyl Chloride)
19. The Historical Regulatory Compliance Time-Line document provided by the applicant also indicates analytical results from Eurofins TestAmerica (ETA), an environmental testing lab, show vinyl chloride has been detected in 10 monitoring wells according to testing conducted in April 2021. However, according to the document the detections identified by ETA do not exceed the allowable concentration of vinyl chloride specified in the 2L rules.
20. Per Article 9.23.4, c:
 - c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modification made by the state unless the state standards become more restrictive.
 - 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right-of-way to fill area (non-state requirement).
21. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. (See Exhibit 6 – Email from Rusty Rozzelle and report from Mecklenburg County Storm Water Services)
22. On August 4, 2021, Town Planning Department Staff (Brad Priest and Lauren Speight) held a conference call with Jaclynne Drummond (Hydrologist, Solid Waste Section, NCDEQ). Ms. Drummond confirmed the information stated in the previously referenced March 2, 2021 letter from NCDEQ. Staff has outstanding questions regarding the proposed geosynthetic liner, contamination of surface water and storm water above the liner, and NCDEQ requirements for the collection system above the liner.

STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit #4 for the applicant's responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- A. The applicant states these (Huntersville Zoning Ordinance) regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe water through the site for expansion of the landfill use, which may prematurely reduce the lifespan of the landfill.
- B. The property is currently within the Special Purpose Zoning District. As mentioned, the subject property has an approved conditional district rezoning plan.
- C. The Land Clearing & Inert Debris and Construction & Demolition landfill use is permitted with an approved Special Use Permit in the Special Purpose Zoning District.
- D. The subject property has an approved Special Use Permit.
- E. The property is an active Construction & Demolition landfill.
- F. The subject property is seeking a variance to expand the use within the boundary of the subject property and the proposed expansion would impact a S.W.I.M. area and would impact the required 50-foot buffer from delineated streams per Article 9.23.

- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- A. S.W.I.M. Stream Buffers are present throughout the Town of Huntersville and are not peculiar to the property. However, the Zoning Ordinance offers relief, Article 8.25.11 (Exhibit 4) from required SWIM buffer widths with an approved mitigation plan and Board of Adjustment action.
- B. The applicant states all of the following: The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition (C&D) landfill. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling area. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity.
- C. Properties throughout the Town that contain S.W.I.M. buffer areas are within a variety of zoning districts and allow a multitude of uses. Any property that sought to propose a use currently not allowed per Article 8.25 would be required to obtain an approved mitigation plan before disturbance of the buffer area.

- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*

Staff Findings:

- A. Greenway Waste at North Meck has been in operation since June 1993.
- B. SWIM buffer regulations added to the Zoning Ordinance in October 1999.

- C. The applicant states the hardship was not created by the manner in which the property has been used and the request is consistent with the intent of the Ordinance.
 - D. S.W.I.M buffer areas are not created by property owners or applicant and Staff finds the hardship did not result from actions taken by the applicant or property owner.
- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

- A. If the variance is approved this would be just one part of the approval process in which the applicant is seeking. After obtaining BOA approval, the applicants will have to seek approval for a Rezoning to Special Purpose District and Special Use Permit for a C&D Landfill from the Town Board of Commissioners.
- B. The applicant states all of the following: “The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.”
- C. In addition to Article 9.23.4 (c) from which this variance application is seeking approval, Article 9.23 also indicate that the proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property.
- D. One of the follow-up questions posed by Mecklenburg County Storm Water Services requests the contingency plan for if the proposed creek piping system fails.
- E. Two of the conditions of SUP 16-01 were:
 - a. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
 - b. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant’s property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
- F. Article 9.23.4 (a) states, a landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to Industrial Collector Street standards that connects directly to a major or minor thoroughfare.
- G. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4.
- H. For their mitigation, the applicant proposes to utilize:
 - (8) Mitigation Credits: The purchase of mitigation credits through the Stream Restoration Program on a 1:1 basis, utilizing linear feet of stream impacted and the prevailing rate of purchase as established by the Charlotte-Mecklenburg Buffer Implementation Guidelines. Mitigation credits purchased under any other program (i.e., U.S Army Corp of Engineers) shall not cover this requirement unless the issuing agency agrees to relinquish the funds to the appropriate local government agency.
- I. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion.

STAFF POSITION:

The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from Article 9.23.4 c of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood

Hazard Areas. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. Therefore, Staff recommends continuing this variance request at this time.

EXAMPLE MOTION: V21-08, 15300 Holbrooks Road, Parcel ID 019-101-02, Huntersville, NC 28078

Planning Department	Board of Adjustment
	APPROVAL: In considering the application for V21-08, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from 9.23.4 c of the Zoning Ordinance, the Board of Adjustment approves the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request meets ____ of the four criteria for granting a variance based on the following findings of fact: (<i>explain findings of fact</i>)
	DENIAL: In considering the application for V21-08, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from 9.23.4 c of the Zoning Ordinance, the Board of Adjustment denies the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request does not met the criteria for granting a variance based on the following findings of fact: (<i>explain findings of fact</i>)

Exhibits List

Exhibit #1 - Approved Conditional District Rezoning 16-06

Exhibit #2 - Approved Special Use Permit 16-01

Exhibit #3 - 2016 Email Withdrawing Variance 16-02

Exhibit #4 - 2021 Variance Application

Exhibit #5 - EPA Vinyl Chloride Fact Sheet

Exhibit #6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services regarding Mitigation

A hand-drawn vicinity map showing the location of a site. The map includes the following features:

- Streets:**
 - St. Joseph Road:** A road running diagonally from the top left towards the center.
 - Interstate 77:** A road running diagonally from the bottom left towards the center.
 - Mt. Holly Huntersville Road:** A road running diagonally from the top center towards the bottom right.
 - Old Statesville Road:** A road running diagonally from the top center towards the bottom right, parallel to Mt. Holly Huntersville Road.
 - Verhoeff Drive:** A road running diagonally from the bottom center towards the bottom right.
 - S Church St:** A road running vertically from the top right towards the bottom right.
 - Holbrooks Rd:** A road running horizontally from the center towards the right.
- Site:** A location marked with a sun-like symbol and labeled "Site", located to the right of Holbrooks Rd.
- Other Features:**
 - A north arrow pointing upwards, located to the left of S Church St.
 - A scale bar labeled "0 1/2 Miles" at the bottom left.

Vicinity Map Not to Scale

APPROVAL OF THIS CONCEPT PLAN DOES NOT IMPLY OR GUARANTEE APPROVAL OF THE FINAL CONSTRUCTION PLAN. FINAL CONSTRUCTION PLAN WILL BE REVIEWED FOR COMPLIANCE PER ALL TOWN, COUNTY, AND STATE REGULATIONS IN EFFECT AT TIME OF SUBMITTAL.

**CONDITIONAL DISTRICT REZONING
GREENWAY WASTE SOLUTIONS
AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA**

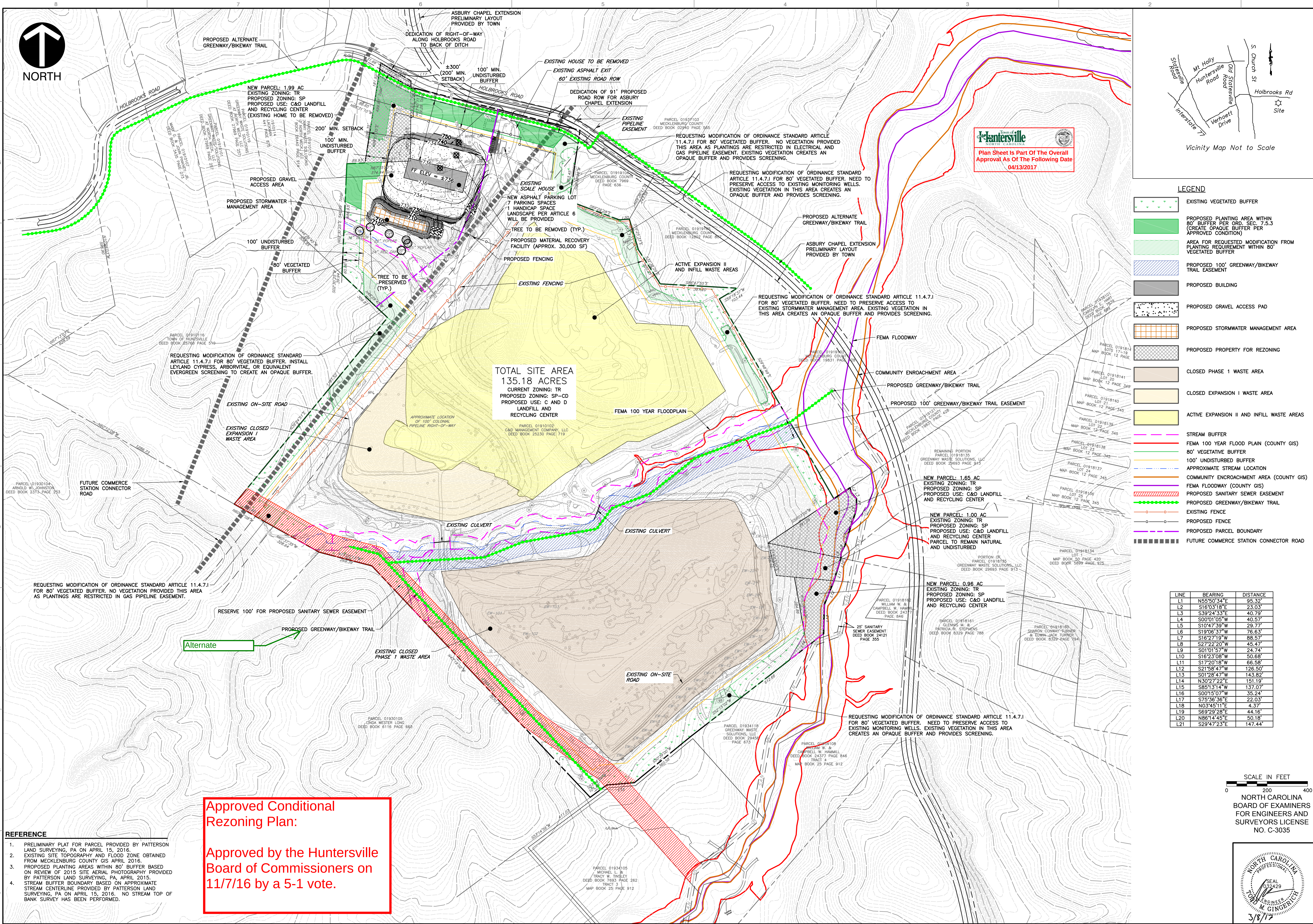
REVISION RECORD	DESCRIPTION
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NO	DATE	DESCRIPTION
1	7/19/2016	REVISIONS PER TOWN OF HUNTERSVILLE.

DATE:		MAY 2016	DRAWN BY:	CTH
DWG SCALE:			N.T.S.	TMG
PROJECT NO.:				111-370.001
APPROVED BY:				SLB

CD001

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Approved Conditional Rezoning Plan:

Approved by the Huntersville Board of Commissioners on 11/7/16 by a 5-1 vote.

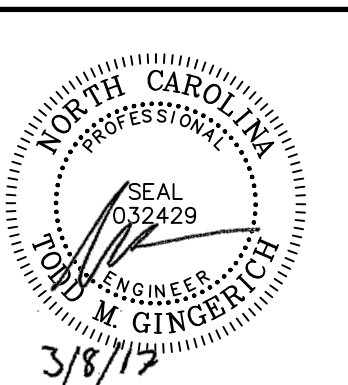
- REFERENCE**
1. PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
 2. EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY GIS APRIL 2016.
 3. PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2015.
 4. STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM TOP OF BANK SURVEY HAS BEEN PERFORMED.

LINE	BEARING	DISTANCE
L1	N55°50'34"E	95.32'
L2	S16°03'18"E	23.03'
L3	S39°24'33"E	40.79'
L4	S00°01'05"W	40.57'
L5	S10°47'39"W	29.77'
L6	S19°06'37"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'20"W	45.47'
L9	S01°01'57"W	24.74'
L10	S16°23'08"W	50.68'
L11	S17°20'18"W	66.58'
L12	S21°58'47"W	126.50'
L13	S01°28'47"W	143.82'
L14	N30°27'22"E	151.19'
L15	S85°31'14"W	137.07'
L16	S00°15'07"W	35.24'
L17	S75°36'36"E	22.03'
L18	N03°45'11"E	4.37'
L19	S69°29'28"E	44.16'
L20	N86°14'45"E	50.18'
L21	S29°47'23"E	147.44'

SCALE IN FEET

0 200 400

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035



REVISION RECORD

NO	DATE	DESCRIPTION
1	03/20/15	ADDED FLOODING INFORMATION
2	03/20/15	REVISED PER TOWN OF HUNTERVILLE
3	03/20/15	REVISED PER TOWN OF HUNTERVILLE
4	03/20/15	REVISED PER TOWN OF HUNTERVILLE
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81	03/20/15	REVISED PER TOWN OF HUNTERVILLE
82	03/20/15	REVISED PER TOWN OF HUNTERVILLE
83	03/20/15	REVISED PER TOWN OF HUNTERVILLE
84	03/20/15	REVISED PER TOWN OF HUNTERVILLE
85	03/20/15	REVISED PER TOWN OF HUNTERVILLE
86	03/20/15	REVISED PER TOWN OF HUNTERVILLE
87	03/20/15	REVISED PER TOWN OF HUNTERVILLE
88	03/20/15	REVISED PER TOWN OF HUNTERVILLE
89	03/20/15	REVISED PER TOWN OF HUNTERVILLE
90	03/20/15	REVISED PER TOWN OF HUNTERVILLE
91	03/20/15	REVISED PER TOWN OF HUNTERVILLE
92	03/20/15	REVISED PER TOWN OF HUNTERVILLE
93	03/20/15	REVISED PER TOWN OF HUNTERVILLE
94	03/20/15	REVISED PER TOWN OF HUNTERVILLE
95	03/20/15	REVISED PER TOWN OF HUNTERVILLE
96	03/20/15	REVISED PER TOWN OF HUNTERVILLE
97	03/20/15	REVISED PER TOWN OF HUNTERVILLE
98	03/20/15	REVISED PER TOWN OF HUNTERVILLE
99	03/20/15	REVISED PER TOWN OF HUNTERVILLE
100	03/20/15	REVISED PER TOWN OF HUNTERVILLE

Civil & Environmental Consultants, Inc.

1900 Center Park Drive - Suite A - Charlotte, NC 28217

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www.cesinc.com

CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC

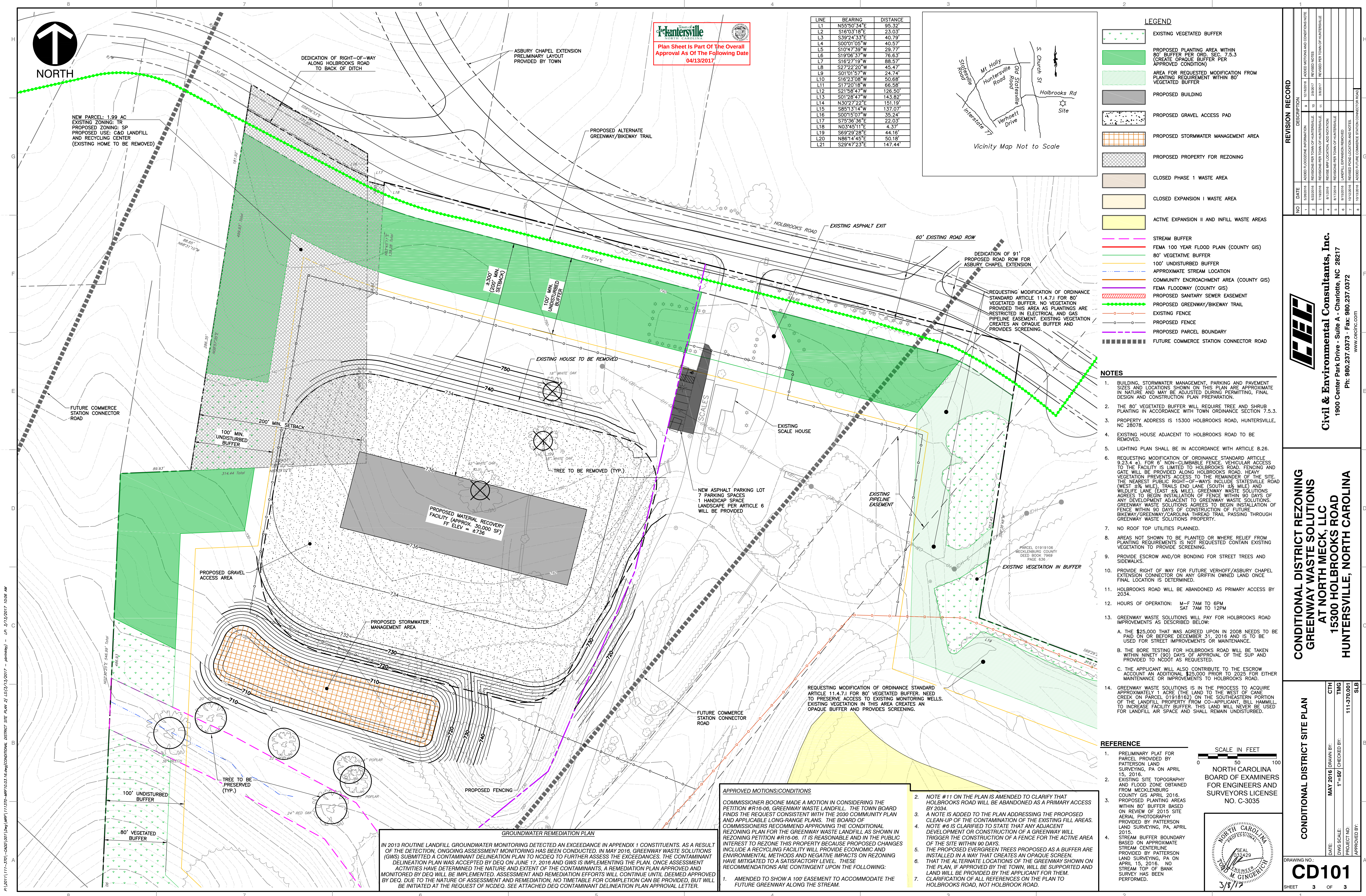
15300 HOLBROOKS ROAD HUNTERSVILLE, NORTH CAROLINA

CONDITIONAL DISTRICT SITE PLAN

DATE:	1 MAY 2016	DRAWN BY:	CTH
DWG SCALE: <td>1"=200'</td> <td>CHECKED BY:<td>TMG</td></td>	1"=200'	CHECKED BY: <td>TMG</td>	TMG
PROJECT NO: <td>111-370.001</td> <td>APPROVED BY:<td>SJB</td></td>	111-370.001	APPROVED BY: <td>SJB</td>	SJB

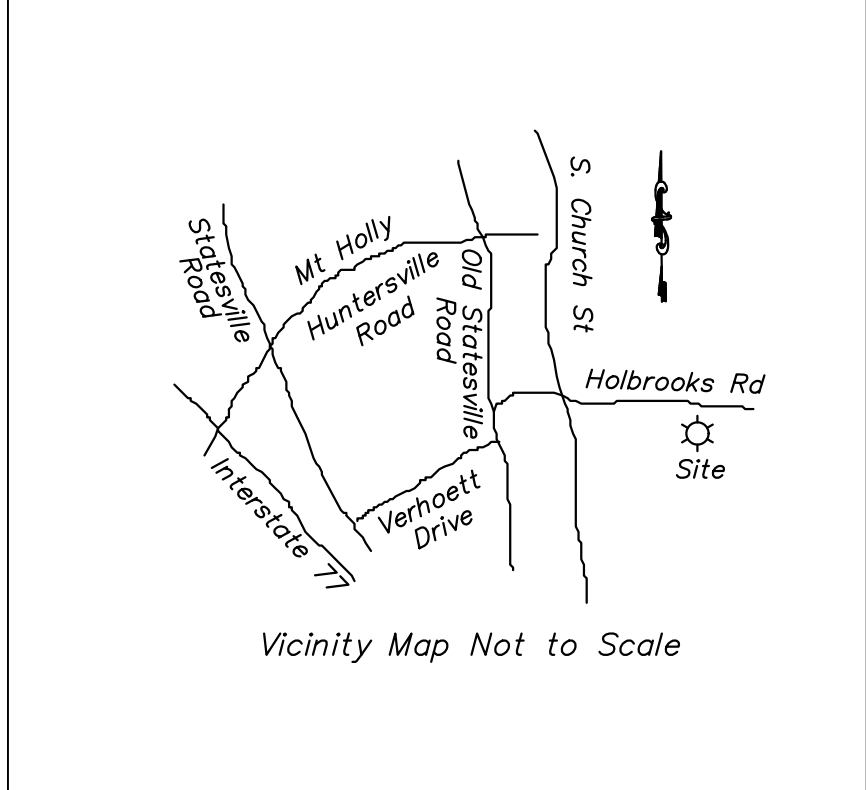
DRAWING NO: **CD100**

SHEET 2 OF 3



Plan Sheet Is Part Of The Overall
Approval As Of The Following Date
04/13/2017

LINE	BEARING	DISTANCE
L1	N85°50'34"E	95.32'
L2	S16°03'18"E	23.03'
L3	S39°24'33"E	40.79'
L4	S00°01'05"W	40.57'
L5	S10°47'39"W	29.77'
L6	S19°06'57"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'20"W	45.47'
L9	S01°01'57"W	24.74'
L10	S16°23'08"W	50.68'
L11	S17°20'18"W	66.58'
L12	S21°58'47"W	128.50'
L13	S01°28'47"W	143.82'
L14	N30°27'22"E	151.19'
L15	S85°13'14"W	137.07'
L16	S00°15'07"W	35.24'
L17	S75°36'36"E	22.03'
L18	N03°45'11"E	4.37'
L19	S69°29'28"E	44.16'
L20	N86°14'45"E	50.18'
L21	S29°47'23"E	147.44'



- LEGEND**
- EXISTING VEGETATED BUFFER
 - PROPOSED PLANTING AREA WITHIN 80' BUFFER PER ORD. SEC. 7.5.3 (CREATE OPAQUE BUFFER PER APPROVED CONDITION)
 - AREA FOR REQUESTED MODIFICATION FROM PLANTING REQUIREMENT WITHIN 80' VEGETATED BUFFER
 - PROPOSED BUILDING
 - PROPOSED GRAVEL ACCESS PAD
 - PROPOSED STORMWATER MANAGEMENT AREA
 - PROPOSED PROPERTY FOR REZONING
 - CLOSED PHASE 1 WASTE AREA
 - CLOSED EXPANSION I WASTE AREA
 - ACTIVE EXPANSION II AND INFILL WASTE AREAS
 - STREAM BUFFER
 - FEMA 100 YEAR FLOOD PLAIN (COUNTY GIS)
 - 80' VEGETATIVE BUFFER
 - 100' UNDISTURBED BUFFER
 - APPROXIMATE STREAM LOCATION
 - COMMUNITY ENCROACHMENT AREA (COUNTY GIS)
 - FEMA FLOODWAY (COUNTY GIS)
 - PROPOSED SANITARY SEWER EASEMENT
 - PROPOSED GREENWAY/BIKEWAY TRAIL
 - EXISTING FENCE
 - PROPOSED FENCE
 - PROPOSED PARCEL BOUNDARY
 - FUTURE COMMERCE STATION CONNECTOR ROAD

- NOTES**
- BUILDING, STORMWATER MANAGEMENT, PARKING AND PAVEMENT SIZES AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE IN NATURE AND MAY BE ADJUSTED DURING PERMITTING, FINAL DESIGN AND CONSTRUCTION PLAN PREPARATION.
 - THE 80' VEGETATED BUFFER WILL REQUIRE TREE AND SHRUB PLANTING IN ACCORDANCE WITH TOWN ORDINANCE SECTION 7.5.3.
 - PROPERTY ADDRESS IS 15300 HOLBROOKS ROAD, HUNTERSVILLE, NC 28078.
 - EXISTING HOUSE ADJACENT TO HOLBROOKS ROAD TO BE REMOVED.
 - LIGHTING PLAN SHALL BE IN ACCORDANCE WITH ARTICLE 8.26.
 - REQUESTING MODIFICATION OF ORDINANCE STANDARD ARTICLE 9.23.4 (a) FOR 6' NON-CRIMABLE FENCE. VEHICULAR ACCESS TO THE FACILITY IS LIMITED TO HOLBROOKS ROAD. FENCING AND GATES WILL BE PROVIDED ALONG HOLBROOKS ROAD. HEAVY VEGETATION PREVENTS ACCESS TO THE REMAINDER OF THE SITE. THE NEAREST PUBLIC RIGHT-OF-WAYS INCLUDE STATESVILLE ROAD (WEST 1/4 MILE), TRAILS END LANE (SOUTH 1/4 MILE) AND WILDLIFE LANE (EAST 1/4 MILE). GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF ANY DEVELOPMENT ADJACENT TO GREENWAY WASTE SOLUTIONS. GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF CONSTRUCTION OF FUTURE BIKEWAY/GREENWAY/CAROLINA THREAD TRAIL PASSING THROUGH GREENWAY WASTE SOLUTIONS PROPERTY.
 - NO ROOF TOP UTILITIES PLANNED.
 - AREAS NOT SHOWN TO BE PLANTED OR WHERE RELIEF FROM PLANTING REQUIREMENTS IS NOT REQUESTED CONTAIN EXISTING VEGETATION TO PROVIDE SCREENING.
 - PROVIDE ESCROW AND/OR BONDING FOR STREET TREES AND SIDEWALKS.
 - PROVIDE RIGHT OF WAY FOR FUTURE VERHOEFF/ASBURY CHAPEL EXTENSION CONNECTOR ON ANY GRIFFIN OWNED LAND ONCE FINAL LOCATION IS DETERMINED.
 - HOLBROOKS ROAD WILL BE ABANDONED AS PRIMARY ACCESS BY 2034.
 - HOURS OF OPERATION: M-F 7AM TO 6PM SAT 7AM TO 12PM
 - GREENWAY WASTE SOLUTIONS WILL PAY FOR HOLBROOKS ROAD IMPROVEMENTS AS DESCRIBED BELOW:
 - A. THE \$25,000 THAT WAS AGREED UPON IN 2008 NEEDS TO BE PAID ON OR BEFORE DECEMBER 31, 2016 AND IS TO BE USED FOR STREET IMPROVEMENTS OR MAINTENANCE.
 - B. THE BORE TESTING FOR HOLBROOKS ROAD WILL BE TAKEN WITHIN NINETY (90) DAYS OF APPROVAL OF THE SUP AND PROVIDED TO NCDOT AS REQUESTED.
 - C. THE APPLICANT WILL ALSO CONTRIBUTE TO THE ESCROW ACCOUNT AN ADDITIONAL \$25,000 PRIOR TO 2025 FOR EITHER MAINTENANCE OR IMPROVEMENTS TO HOLBROOKS ROAD.
 - GREENWAY WASTE SOLUTIONS IS IN THE PROCESS TO ACQUIRE APPROXIMATELY 1 ACRE (THE LAND TO THE WEST OF CANE CREEK ON PARCEL 01918162) ON THE SOUTHEASTERN PORTION OF THE LANDFILL PROPERTY FROM CO-APPLICANT, BILL HAMMILL, TO INCREASE FACILITY BUFFER. THIS LAND WILL NEVER BE USED FOR LANDFILL AIR SPACE AND SHALL REMAIN UNDISTURBED.

REFERENCE

- PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
- EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY 05 APRIL 2016.
- PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2016.
- STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM OF BANK SURVEY HAS BEEN PERFORMED.

SCALE IN FEET
0 50 100
NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035

CONDITIONAL DISTRICT SITE PLAN
DRAWING NO. **CD101**
SHEET 3 OF 3

DATE: MAY 2016
DRAWN BY: TMM
DWG SCALE: 1"=50'
PROJECT NO: 111-370.001
CHECKED BY:
APPROVED BY:

APPROVED MOTIONS/CONDITIONS
COMMISSIONER BOONE MADE A MOTION IN CONSIDERING THE PETITION #16-08, GREENWAY WASTE LANDFILL. THE TOWN BOARD FINDS THE REQUEST CONSISTENT WITH THE 2030 COMMUNITY PLAN AND APPLICABLE LONG-RANGE PLANS. THE BOARD OF COMMISSIONERS RECOMMEND APPROVING THE CONDITIONAL REZONING PLAN FOR THE GREENWAY WASTE LANDFILL AS SHOWN IN REZONING PETITION #16-08. IT IS REASONABLE AND IN THE PUBLIC INTEREST TO REZONE THIS PROPERTY BECAUSE PROPOSED CHANGES INCLUDE A RECYCLING FACILITY WILL PROVIDE ECONOMIC AND ENVIRONMENTAL METHODS AND NEGATIVE IMPACTS ON REZONING HAVE MITIGATED TO A SATISFACTORY LEVEL. THESE RECOMMENDATIONS ARE CONTINGENT UPON THE FOLLOWING:
1. AMENDED TO SHOW A 100' EASEMENT TO ACCOMMODATE THE FUTURE GREENWAY ALONG THE STREAM.- NOTE #11 ON THE PLAN IS AMENDED TO CLARIFY THAT HOLBROOKS ROAD WILL BE ABANDONED AS A PRIMARY ACCESS BY 2034.
- A NOTE IS ADDED TO THE PLAN ADDRESSING THE PROPOSED CLEAN-UP OF THE CONTAMINATION OF THE EXISTING FILL AREAS.
- NOTE #6 IS CLARIFIED TO STATE THAT ANY ADJACENT DEVELOPMENT OR CONSTRUCTION OF A GREENWAY WILL TRIGGER THE CONSTRUCTION OF A FENCE FOR THE ACTIVE AREA OF THE SITE WITHIN 90 DAYS.
- THE PROPOSED EVERGREEN TREES PROPOSED AS A BUFFER ARE INSTALLED IN A WAY THAT CREATES AN OPAQUE SCREEN.
- THAT THE ALTERNATE LOCATIONS OF THE GREENWAY SHOWN ON THE PLAN, IF APPROVED BY THE TOWN, WILL BE SUPPORTED AND LAND WILL BE PROVIDED BY THE APPLICANT FOR THEM.
- CLARIFICATION OF ALL REFERENCES ON THE PLAN TO HOLBROOKS ROAD, NOT HOLBROOK ROAD.

REVISION RECORD

NO	DATE	DESCRIPTION
1	03/08/16	ADDED FLOODZONE INFORMATION
2	03/08/16	REVISED NOTES
3	03/08/16	REVISED NOTES
4	03/08/16	REVISED NOTES
5	03/08/16	REVISED NOTES
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99	03/08/16	REVISED NOTES
100	03/08/16	REVISED NOTES

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CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC 15300 HOLBROOKS ROAD HUNTERSVILLE, NORTH CAROLINA

Special Use Permit Granted

On Monday November 7, 2016 the Huntersville Town Board held a public meeting to consider the below noted Special Use Permit:

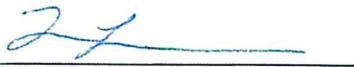
SUP16-01, a request by Greenway Waste Solutions, LLC and William Hammill for a Special Use Permit allowing the 135 acre landfill located at 15300 Holbrook Road to expand its boundaries and add another fill area in the existing site (parcels 01910102, 01910109, and portions of 01918135, 01918162, and 01934118).

Having heard all the evidence and argument presented at the meeting, the Board finds the application is complete, that the application complies with all of the applicable requirements of the Huntersville Zoning Ordinance for the operation proposed, and therefore the application to make use of the above-described property for the purpose indicated is hereby approved, subject to all applicable provisions of the Zoning Ordinance, the attached Findings of Fact, and the conditions added by the Town Board at the time of approval.

Also, the applicant shall complete the development strictly in accordance with the site plan, building elevations, and letter from the applicant attached which were submitted to and approved by this Board, a copy of which is filed in the Town of Huntersville Planning Department.

IN WITNESS WHEREOF, the Town of Huntersville has cause this permit to be issued in its name, and the undersigned, being all of the property owners of the property above described, do hereby accept this Special Use Permit, together with all its conditions, as binding on them and their successors in interest.

Michael L. Griffin, owner(s) of the above identified property, do hereby acknowledge receipt of this Special Use Permit. The undersigned owners do further acknowledge that no work may be done pursuant to the permit except in accordance with all of its conditions and requirements and that the restriction shall be binding on them and their successors in interest.



Owner

Planning

Post Office Box 664 • 101 Huntersville-Concord Road • Huntersville, NC 28070
phone 704.875.7000 • fax 704.875.6546 • www.huntersville.org

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Teresa D. Nantz, a Notary Public of the County and State aforesaid, certify that Michael L. Griffin, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal or stamp, this 34th day of March 2017.

(SEAL)

Notary Public

Teresa D. Nantz

My commission expires: 7/4/2019



STAFF FINDINGS OF FACT APPROVED BY THE TOWN BOARD

Article 9.23

Off Site LCID and C&D landfills are permitted in the SP District-subject to a Special Use Permit, according to the procedures of Section 11.4.10. The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

STAFF FINDINGS: *The Greenway Waste Solutions Landfill (North Mecklenburg Landfill) is an existing Construction and Demolition (C&D) landfill with an unexpired special use permit that would be allowed to continue to operate in its current zoning designation per Article 9.23.10. The proposed application is to amend the existing special use permit to add adjacent properties to the permit boundaries, add an additional fill area on the site over the stream that bisects the site, and include a recycling facility near Holbrook Road. The applicants are seeking a rezoning of the entire 135 acre property to Special Purpose (SP) concurrent with the SUP application in conformance to Article 9.23.10.*

- *UPDATE 9/19/16: The updated site plan has removed the additional fill area over the stream from the application. The special use permit now is solely for the boundary expansion as shown on the plan and for the addition of the recycling facility near Holbrook Road.*
1. That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills.

STAFF FINDINGS: *The NCDENR (North Carolina Division of Environment and Natural Resources) is now known as the North Carolina Department of Environmental Quality (NCDEQ). The NCDEQ permit has not been forwarded by the applicant showing evidence of permitting. In addition, after discussion with NCDEQ Division of Waste Management, the landfill in question has been found to exceed state regulatory limits of various groundwater and surface water contaminants and methane gas since 2013. Further, a Notice of Violation was issued on September 16, 2014 to the landfill due to an encroachment upon their required state mandated buffer to the east of the property. As of now, the landfill remains in violation of the required buffer.*

- *UPDATE 9/19/16: The current NCDEQ permit has been forwarded and is attached in the Board's agenda packet. The current permit is valid through 10/8/17. The updated letter attached to the SUP application states that the applicants will operate in compliance with NCDEQ rules. Staff recommends that a more specific statement from the applicant be added to the SUP plan or attached letter that addresses the contamination of the site and the buffer violation. It is staff's understanding that the applicants are beginning discussion with NCDEQ on the remediation process to clean up the contamination. They are also in the process of purchasing property to the southeast of the site that will mitigate their buffer violation.*
2. That the proposed use will not endanger the public health and safety, nor substantially reduce the value of the nearby property; and

STAFF FINDINGS: *Per discussion with NCDEQ Division of Waste Management, it appears the constituents leaching from the landfill have contaminated multiple drinking water wells adjacent to the subject property. Two parcels were purchased (including one residence) by the landfill and two homes were added on to municipal water service due to the groundwater contamination. According to NCDEQ, the applicant has been cooperative with the state in installing both shallow and deep*

groundwater monitoring wells and methane gas monitoring wells, in an effort to analyze and find the nature and extent of both the groundwater contamination and the methane gas exceedances. The applicant has also been cooperative in addressing the immediate issue of the contamination of the adjacent drinking water wells as discussed above. The monitoring and analyzing of both the groundwater and methane gas contamination is ongoing. At this time, there are still many unknowns in regard to the nature and extent of the existing groundwater and surface water contamination and potential methane gas migration. Once the nature and extent is more fully understood, NCDEQ will require mitigation plans for the applicant to begin contamination cleanup of both the active fill area, and the fill area that is closed out and inactive (which is under a different set of state rules). In addition, contamination was also found in the groundwater monitoring wells near the stream, and recently in the surface water sampling of the stream that is being proposed to be piped and covered with the expansion. Please find the groundwater monitoring well locations of the site in a map forwarded by NCDEQ.

- UPDATE 9/16/19: The proposed recycling facility is located near Holbrook Road, separated from the area that is contaminated and a significant distance from where active monitoring wells are located. Please see the NCDEQ Monitoring well map attached in the agenda packet. There are no new fill areas proposed with the updated application. Therefore since disturbance of the contaminated area is no longer proposed, and the new recycling facility is located a significant distance from the contamination, staff finds the contamination issue of the existing facility and the addition of the recycling facility separate issues that do not conflict. However for record in regard to public safety and health concerns, it is recommended that the applicant add a note in the plan stating the planned schedule of NCDEQ remediation of the existing site and commit to the cleanup in a timely manner.
 - UPDATE 10/17/16: The updated condition letter submitted by the applicant states: "Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented"
3. That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

STAFF FINDINGS: The subject property is not located within the boundaries of any of the Small Area Plans adopted by the Town of Huntersville. However, the East Huntersville plan does mention and recommend a connector road in between the proposed Verhoeff Drive extension to the south and the future Asbury Chapel extension to the north. The north/south connector road could traverse the subject property. In the 2009 landfill SUP, the applicants reserved the right of way in the area of the gas pipeline and buffer at the southwest edge of the property through their main entrance. Please find the 2009 SUP for your reference in your agenda packet. For this application no commitment has been made to accommodate the future connection.

- UPDATE 9/19/16: The letter attached to the application states that "the site plan makes an accommodation for the connector road on any Griffin owned land once the final locate is determined". The note on the plan however is not clear and needs to be reworded showing the intent to provide right of way for the thoroughfare connector road through the subject property. UPDATE 10/17/16: The note has been amended on the conditional letter stating that the applicant will accommodate for the connector road on any property owned by the applicant.

4. That the comprehensive site plan addresses each of the environmental and development standards below:

- (a) A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare-where available. Landfills 10 acres or less must directly connect to a major or minor thoroughfare or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

STAFF FINDING: *The existing landfill does not have access to a thoroughfare or a street that is built to commercial street standards. Access is from Holbrooks Road, which is a secondary residential street that traverses a residential neighborhood. The ordinance states that the Town Board may issue a SUP for a landfill that does not front on a thoroughfare or commercial street if it finds that it “would not likely cause any injurious effect on the property adjacent to the access”.*

When the last Special Use Permit (SUP) application was submitted in 2009, the NCDOT district engineer commented in an email to the applicant that Holbrooks Road “does not possess the pavement structure to accommodate the truck traffic it has experienced and will be subject to with the continued use your company is planning”. The 2009 SUP was eventually approved with an added stipulation that the condition of Holbrooks Road be reviewed in 5 years. Another condition was that the applicant contributes \$25,000 in the next 10 years toward the maintenance of Holbrook Road. In December of 2014 public works and engineering staff inspected Holbrook Road and found that it was in good condition as NCDOT had just finished repaving the street in 2013 (added 4 inches of asphalt). As of this date, the applicant has not forwarded the \$25,000 to NCDOT for the street maintenance.

After contacting NCDOT and asking for their input on the current state of Holbrook Road in relation to the proposed expansion and indefinite lifespan extension of the landfill, NCDOT’s concern about the durability of the road remained. They requested that the applicant submit core samples of the road to evaluate its substructure. As of the date of this report staff is not aware of any recent discussions the applicant has had with NCDOT on the durability of Holbrook Road in regard to this application. Please find the emails from NCDOT attached in your agenda package.

- **UPDATE 9/19/16:** *The newest plan submitted has no updated notes about the maintenance and structure of Holbrook Road in response to NCDOT comments. The letter submitted by the applicant with the application states that they intend to “connect to the future Verhoff/Asbury Chapel Extension and will reserve a right of way for the future connection to a potential industrial street to the south through the Commerce Station Industrial Park by 2034”. Per past discussions with the applicant it is thought that this note is intended to cap or limit their usage of Holbrook Road to no longer than the year 2034, as well as providing a connection from their site to one of the future thoroughfares by that time. Staff recommends that if that is the case, the note be clarified to clearly state that on the special use permit plan. It is still also unclear if the \$25,000 committed to at the last SUP approval would carry over as a condition for this permit.*

- UPDATE 10/17/16: Note #11 on the latest Special Use Permit plan submitted states "Greenway Waste Solutions shall have alternative access to replace Holbrooks Road by 2035". Staff recommends the note be clarified to read: "Greenway Waste Solutions will cease using Holbrook Road as its primary access and will have functional primary access onto a commercial street or thoroughfare by 2034". 2034 is the year that based on prior approvals, permission has already been granted for the use of Holbrook Road.
- Note #13 on the updated Special Use Permit plan includes a series of notes in regard to the maintenance and improvement of Holbrook Road. They include:
 - Conducting the boring tests to determine the current pavement structure of Holbrook Road, per NCDOT's request.
 - Overlaying Holbrook Road in front of the facility as requested by NCDOT.
 - Carrying over the previously offered \$25,000 contribution for improvements to Holbrook Road as part of this application.
 - Reassessing the condition of Holbrook Road with Town Staff and NCDOT in 2025, about the half way point between now and 2034 when they've agreed to stop using Holbrook Road.
 - The applicant would then contribute additional funds at that time if the Town and NCDOT deem it necessary.

(b) That the proposed or existing use will be in compliance with the rules and regulations as established by Traffic Impact Analysis (TIA) Article 14.

STAFF FINDING: *Engineering and Public Works has determined that based on the expansion proposed, the new amount of traffic that will be generated will not meet the threshold that would require the submission of Traffic Impact Analysis (TIA). Please find the TIA determination from engineering in your agenda packet.*

- (c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modifications made by the state unless the state standards become more restrictive.
- 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and /or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right of way to fill area (non-state requirement).

STAFF FINDING: *The submitted letter from Greenway Waste Solutions states that they conform to all the buffers required in this section. However, as shown on aerial photography and from the*

submitted special use permit plan, multiple existing driveways are located within the 100 foot undisturbed buffer. In addition, the applicants are seeking a variance from the Board of Adjustment for this section of the ordinance in order to encroach/fill the 50 foot delineated stream buffer and to fill in designated wetlands and FEMA flood areas. No new encroachments are shown on the plan other than the ones requested by way of the Board of Adjustment. In order for the applicant to try to address some concerns by staff, the Board of Adjustment has continued the variance hearing per the applicant's request. The hearing is scheduled to continue on September 13, 2016.

- *UPDATE 9/19/16: On September 13, the applicants withdrew their variance applications. The proposed plan no longer proposes to fill the stream and encroach into the required buffers. After review, there are not any newly proposed encroachments on the updated special use permit plan.*

- (d) Driveway access to the facility must be paved for a distance of at least 100 feet from the public street.

STAFF FINDING: *According to aerial photography and as inspected in a staff site visit, the entrance driveway to the facility is paved to a distance greater than 100 feet. However the separate exit drive that connects to the main street driveway where trucks leave the site is not paved for distance of 100 feet. The special use permit plan submitted by the applicant shows the exit drive proposed to be paved for a distance of 100 feet per this section.*

- (e) Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6 feet high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

STAFF FINDING: *The letter from the applicant states that the site is "closeable and secured from vehicular and pedestrian access" but does not provide how that is done. The letter also mentions that a variance will be submitted for the fence requirement. No variance application has been submitted for this section of the ordinance. The Special Use Permit site plan includes a note stating that "heavy vegetation" prevents access to the site. The submitted information does not provide conformance to the fence and security requirement of this section.*

- *UPDATE 9/19/16: The new rezoning plan (separate application) includes a modification request to the Town Board from the fencing section of the ordinance. It states that the new recycling facility near Holbrook Road would be fenced and shows an existing fence along the northern sections of the landfill. However it implies that the remainder of the site, the southern portion, would not be fenced. A note on the plan states that "heavy vegetation prevents access to the remainder of the site". Staff cannot support this modification request at this time as it is unclear whether or not heavy vegetation provides a secure facility as intended in the code.*

- UPDATE 10/17/16: The updated Special Use Permit plan modifies the above note (note #6), which commits the applicant to enclose the rest of the active facility with a fence within 90 days of either development happening adjacent to the property, or the greenway begins construction through the applicant's property.

- (f) All driveways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100 feet from the public street so that no traffic waiting to enter the site will be backed up on any public right of way.

STAFF FINDING: The letter from the applicant states that "The driveway that serves the site is wide enough to accommodate two-way traffic for 200 feet from the public street. There is ample room such that traffic should not enter the public right of way". As shown on aerial photography and inspected on a site visit, there is a single driveway entering the facility that is not wide enough to accommodate two way traffic through the scale house and into the facility. This driveway is mainly about 11 feet wide. However, this entrance driveway leading up to the scale house is over 100 feet long in conformance to this section. There is a separate and additional one-way exit drive that directs trucks back out to the main driveway. Therefore with both of these driveways combined two-way traffic is appropriately accommodated for in and out of the facility.

5. That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

STAFF FINDING: In the letter attached from the applicant, it is stated that they "have taken pride in keeping the roadways clean". However no commitment has been made to weekly clean the road as required in this section. On several site inspections to the site the majority of Holbrook Road seems to be clean and debris free. However the area of street immediately in front of the facility's driveway is often covered with dirt from trucks exiting the facility.

- UPDATE 9/19/16: In the updated letter from the applicant, they've stated that they "plan to continue to exceed section 6.5 of the franchise agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles". This statement however does not make it clear that the cleaning of Holbrook Road would take place on a weekly basis. UPDATE 10/17/16: The applicants have updated the letter to commit to "routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed."

6. That use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

STAFF FINDING: *The Greenway Waste Solutions landfill is adjacent to a residential zoning district therefore the restricted hours of operation will apply. The letter from the applicant has stated that the use will be limited from 7:00 am to 6:00 pm.*

7. That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

STAFF FINDING: *The letter from the applicant states that an updated timetable has been submitted with the application. However staff has not located it in the submittal.*

- **UPDATE 9/19/16:** *The updated letter from the applicant states that based on current waste acceptance rates and anticipated recycling rates, they project the life of the landfill to be over 20 years.*

8. That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

STAFF FINDING: *No updated reclamation plan (or closure plan) has been submitted by the applicant for this application.*

- **UPDATE 9/19/16:** *There is no reclamation plan/closure plan submitted with the updated submitted as required. The letter submitted with the application though includes a statement regarding NCDEQ monitoring the site post closure. **UPDATE 10/17/16:** The closure plan has been submitted.*

9. An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

- (a) The landfill has been continuously operating since 1991 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;
- (b) The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;
- (c) The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and
- (d) In no event shall the landfill operate under a LCID landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately

commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plans shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.

STAFF FINDINGS: *The Greenway Waste Solution Landfill is a Construction and Demolition Landfill (C&D) and is not subject to this section of the ordinance. This section of the ordinance applies to Land Clearing and Inert Debris Landfills (LCID).*

10. Any existing C&D landfill shall be permitted to continue operating in the zone in which it is located provided that landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

STAFF FINDINGS: *The current special use permit for the Greenway Waste Solutions landfill is current and unexpired. However the applicants do wish to expand the boundaries of the landfill as shown in the attached Special Use Permit site plan. Therefore the rezoning application submitted for these properties must first be approved designating them Special Purpose (SP) prior to this special use permit being approved. The rezoning of the property was approved on 11/7/17 immediately prior to the special use permit approval.*

Additional Conditions Added by the Town Board (when in conflict with the findings above, the conditions below shall apply)

1. The site will operate in compliance with all NCDEQ requirements.
2. The applicant will cooperate with NCDEQ in addressing its contaminated ground waters.
3. The \$25,000 that was agreed upon in 2008 needs to be paid on or before December 31, 2016 and to be used for street improvements or maintenance.
4. The proposed use will not be in conflict with the objectives of the long and short range adopted area plans.
5. The comprehensive site plan addresses necessary environmental and development standards.
6. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
7. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant's property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
8. The bore test for Holbrooks Road will be taken within ninety (90) days of approval of the SUP and provided to NCDOT as requested.

9. The applicant will maintain an internal 100' driveway from the public street in good condition.
10. The applicant will also contribute to the escrow account an additional \$25,000 prior to 2025 for either maintenance or improvements to Holbrook Road.
11. All right-of-ways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100' from a public street so that traffic waiting to enter the site will not be backed up onto any public right-of-way.
12. The landfill operator will commit to routinely washing Holbrooks Road with a specialized truck designed to remove dirt and mud when required.
13. That the use of the site shall be limited to the hours of 7 a.m. to 6 p.m. Monday through Saturday.
14. That a time table be submitted indicating the development phases and life expectancy of the landfill.
15. That a closure plan (reclamation plan) is provided in accordance with applicable state regulations and the applicant commits to make updates to the plan as circumstances dictate.
16. The applicant will meet all appropriate state operating and reporting requirements pertaining to C&D recycling.
17. Due to the contamination in the landfill and surrounding areas the applicant will provide updates to the Town with compliance of the SUP conditions 10 years following the approval of the SUP and every 5 years thereafter upon the closure of the landfill.
18. That all provisions and findings of Article 9.23 be complied with as identified by staff (shown above as staff findings of fact).



Special Use Permit Application

Subject: Letter stating how the applicant satisfies Article 9

Date: 10/12/16

Greenway Waste Solutions, LLC has been operating in its current use since 1988. During this time Greenway Waste Solutions, LLC has operated under the purview of Article 9.23 and satisfied all criteria.

Sincerely,

John Brown
Greenway Waste Solutions

Special Use Permit
~~COMMERCIAL SITE PLAN~~
APPROVED BY THE TOWN OF HUNTERSVILLE
Bradley D. Smith 3/28/17
Planning Staff Date

9.23 Off-Site Land Clearing and Inert Debris (LCID) and Construction & Demolition (C&D) Landfills

Off-Site LCID and C&D Landfills are permitted in the SP District subject to a Special Use Permit, according to the procedures of [Section 11.4.10](#). The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

.1 That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills, as amended.

This site will operate in compliance with the rules according to NCDEQ. See attached NCDEQ (formerly NCDENR) Permit No. 60-13 CDLF-1993. The current permit expires 10/8/2017. (see p.6, Attachment 3, Part I:1)

In 2013 routine landfill groundwater monitoring detected an exceedance in Appendix 1 constituents. As a result of the detection, ongoing assessment monitoring has been conducted. In May 2016, Greenway Waste Solutions (GWS) submitted a Contaminant Delineation Plan to NCDEQ to further assess the exceedances. The Contaminant Delineation Plan was accepted by DEQ on June 17, 2016 and GWS is implementing the plan. Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented. Assessment and remediation efforts will continue until deemed approved by DEQ. Due to the nature of assessment and remediation, no timetable for completion can be provided, but will be initiated at the request of NCDEQ. See attached DEQ Contaminant Delineation Plan approval letter.

GWS is in process to acquire approximately 1 acre (the land to the west of Cane creek on parcel 01918162) on the southeastern portion of the landfill property from co applicant, Bill Hammill to increase our facility buffer. With the increased buffer area, the landfill will have significantly more buffer than required and will no longer be in violation of the NCDEQ buffer requirements. This land will never be used for landfill air space and shall remain undisturbed.

.2 That the proposed use will not endanger the public health and safety, nor substantially



reduce the value of nearby property; and

This site and the cleanup of the existing contamination will operate in compliance with the rules according to NCDEQ. Waste entering the recycling center will be hand sorted. Any unacceptable waste will be sent off site to the proper facility.

.3 That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

This site will not be in conflict with the objectives of the most detailed plan adopted for the area. The small area plan calls for a connector road from Commerce Station to the future Verhoff/Asbury Chapel Extension. The applicant will and the site plan makes an accommodation for the connector road on any Griffin owned land once the final location is determined. See note 14 on CD-101.

.4 That the comprehensive site plan addresses each of the environmental and development standards below:

a). A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare. Landfills 10 acres or less must directly connect to a major or minor thoroughfare, or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

GWS shall relocate their main access from Holbrook Road to the future Verhoff/Asbury Chapel Extension as soon as available but no later than 2034. GWS will reserve a right-of-way through their property for the future connector road from the Verhoff extension to Asbury Chapel extension.

Additionally:

GWS will pay for Holbrooks borings per DOT's request

GWS will pay for extending Holbrooks shoulders and a new overlay for 300 feet West of GWS' entrance

GWS will extend the \$25,000 donation to the Town of Huntersville for improvements to Holbrooks Road for as long as GWS customers use Holbrooks Road.

GWS agrees to reassess Holbrooks Road's condition in conjunction with the town and DOT during 2025 (halfway mark for GWS' commitment to stop using Holbrooks). GWS agrees to contribute an additional amount to the maintenance of Holbrooks if the Town and DOT deem necessary.

b). That the proposed or existing use will be in compliance with the rules and regulations as established by the Traffic Impact Analysis (TIA) Article 14.

A Traffic Impact Analysis was not deemed necessary.

c). Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated



below take precedence over any and all modification made by the state unless the state standards become more restrictive.

500-foot buffer from existing residential water supply wells to fill area.

200-foot buffer from adjacent property to fill area.

No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.

50-foot buffer from delineated streams.

50-foot buffer from road right-of-way to fill area (non-state requirement).

The site is in compliance with all criteria in this section.

d). Driveway access to the facility must be paved for a distance of at least 100' from the public street.

Driveway access to the facility is paved at least 100' from the public street. See "f" below

e). Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6' high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

See site plan CD 100 for existing and proposed fencing around the recycling facility. The active landfill area has a security fence. The applicant is seeking relief from the fencing requirement for the closed fill area that is inaccessible.

"GWS agrees to begin installation of fence within 90 days of any development on the parcels east or west of GWS. GWS also agrees to begin installation of fence within 90 days of construction of future Bikeway/Greenway/Carolina Thread Trail passing through GWS property."

f). All driveways which serve the site must be wide enough to accommodate two-way traffic for a distance of at least 100' from the public street so that no traffic waiting to enter the site will be backed up on any public right-of-way.

The driveway is about 48' wide serving both ingress and egress for about 65 feet. From that point ingress only continues to the scalehouse for about 125 feet for a total of 185 feet of paved driveway. The scalehouse separates ingress and egress providing two way traffic. Egress is paved for approximately 125 feet from Holbrooks Road.

.5 That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

Since inception we have taken pride in keeping the roadways clean. This process starts on site where we provide a well groomed tipping floor for our customers. From there we maintain gravel roads to remove dirt from tires. Lastly, the site operators commit to routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed. This includes debris that is not related to our facility. We plan to continue to exceed section 6.5 of the Franchise



Agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles.

An added benefit of the MRF is that all trucks will be tipping their loads on a concrete floor further eliminating dirt falling from trucks.

.6 That the use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

The use of the site is limited to the hours of 7:00AM until 6:00PM, Monday through Friday and 7:00AM until 12:00PM on Saturday.

.7 That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

Based on current waste acceptance rates and anticipated recycling rates we project a life of over 20 years.

.8 That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

See attached Infill Expansion Closure Plan and drawing

.9 An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

This not applicable to this site.

a). The landfill has been continuously operating since 1990 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;

b). The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;

c). The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and

d). In no event shall the landfill operate under a LCID or demolition landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plan shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.



.10 Any existing C&D landfill shall be permitted to continue operation in the zone in which it is located provided the landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

Exhibit#3-2016 Email Withdrawing Variance 16-02

From: [Mike Griffin](#)
To: [Meredith Nesbitt](#)
Cc: [Bradley Priest](#); [Jackie Drummond](#); [Jason Watkins](#); [Jack Simoneau](#); [John Brown](#); [Butch Joyce](#); [Mousa A. Maimoun](#)
Subject: Variance Application Withdrawal
Date: Saturday, September 10, 2016 4:55:57 PM

Meredith,

Per our meetings this week, I think it's best we withdrawal or variance applications. We will continue to pursue our rezoning & PUD for our site and for our proposed recycle center. We really appreciate your assistance and look forward to revisiting this opportunity after we make more progress with DEQ.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 7, 2016, at 4:05 PM, Meredith Nesbitt <mnesbitt@huntersville.org> wrote:

All,

Click [here](#) for the Board of Adjustment meeting schedule. It includes an agenda and the staff reports for each of the cases scheduled. Please let me know if you have any questions or trouble accessing the reports.

Mike,

Let us know how your meeting goes tomorrow. We will decided what needs to happen from there. Looks like schedules are clear for Friday, early afternoon but I will confirm with Brad and Jack after we hear from you about your meeting with Ed.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]
Sent: Wednesday, September 07, 2016 12:19 PM
To: Meredith Nesbitt <mnesbitt@huntersville.org>
Cc: Bradley Priest <bpriest@huntersville.org>; Jackie Drummond <jaclynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>
Subject: Re: Aug 17th follow-up

Meredith,

Thank you for your reply and input. I would like to ask for a continuance instead of withdrawal at this time. We have a meeting tomorrow morning with Ed Mussler, NC DEQ's Division of Waste Management - Solid Waste Manager, to address the concerns you have detailed. Are y'all available to meet this Friday or Tuesday to discuss the results of this meeting? It may be that we need to pull the applications but I want to exhaust all options due to our fairly tight timeline that I discussed in my earlier email.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies
19109 W Catawba Ave. Cornelius, NC 28031-5611
MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 2, 2016, at 5:46 PM, Meredith Nesbitt
<mnesbitt@huntersville.org> wrote:

Mike,

Staff has reviewed and discussed the information you provided. At this time, we are still not able to reach a supporting recommendation for the floodplain variance. We appreciate the information submitted but we do not believe it qualifies as finding of fact to satisfy the findings below. In addition, the letter specifically mentions the revenue lost as an applicable hardship. However, section 151.46(B) states that specifically is not a reason for granting a variance. Therefore, with this in mind we still find deficiency in the following criteria for the floodplain variance:

- Section 151.44 Factors For Conditions and Determination of Completeness
 - o (6) Availability of alternative locations, not subject to flooding or erosion damage during a community base

flood, for the proposed use

- Section 151.45 Conditions for Variances
 - o *(C) Variances shall only be issues upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*
- Section 151.46 Standards for Granting a Variance
 - o *(A)(2) A determination that failure to grant the variance would result in exceptional hardship*
 - o *(B)The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance*
- Section 151.47 Miscellaneous Conditions
 - o *(B)(1) No feasible location exist for the use outside the Special Flood Hazard Area*
outside of the floodplain to fill and this criteria is not satisfied.

Additionally, the information concerning the contamination of the site provided to us by NCDEQ is finding of fact in relation to all the variance requests. Therefore, with that new information, staff finds the SWIM buffer and Article 9.23 variance request criteria potentially deficient in the following:

(4) The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

At our August 17 meeting, it was discussed that in response to the information provided to us by DEQ you would follow up with them to obtain a letter or other finding of fact in relation to the benefit and appropriateness of your project even with the contamination issue being outstanding. The information you provide below, though helpful, still does not provide a finding of fact that the contamination issue is not a detriment to public health. What you proposed is to ask for approval with the assumption that permitting from DEQ will be approved. That does not address the concern we have received from DEQ in regard to the proposed project. Therefore, Staff is uncomfortable recommending approval for the SWIM Buffer and Article 9.23 variance request with the unknowns surrounding the surface and groundwater contamination. We would request more evidence and finding of fact.

At this point, we feel it would be beneficial if the applications were withdrawn until a remediation plan can be approved by NCDEQ. That

would provide an excellent finding of fact to address that requirement. This principle would also be true for the rezoning and special use permit, if it were to include the additional fill area. However, this is not a requirement, we could move forward with all the applications. Although, if we do move forward, it would be staff's recommendation that more findings of fact be submitted to address the contamination issue prior to any approvals.

We will be glad to discuss this information in more detail – however, please note Town offices are closed Monday, September 5th for Labor Day.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]

Sent: Wednesday, August 31, 2016 3:19 PM

To: Meredith Nesbitt <mnesbitt@huntersville.org>; Bradley Priest <bpriest@huntersville.org>

Cc: Jackie Drummond <jacklynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>

Subject: Aug 17th follow-up

Meredith & Brad,

Per the discussions from our Aug 17th meeting, we met this Monday with DEQ's Jason Watkins and Jackie Drummond who I have copied. We had a discussion that I think covered every aspect of our efforts to seek Huntersville's conditional approvals for a new lined landfill expansion and C&D MRF. We also reviewed and discussed the status of the ongoing assessment of groundwater and buffer issues specific to the older portions of our facility.

The pending buffer issue will be resolved before we present to the

Planning Board meeting scheduled for September 27th. This could have been resolved over a year ago had I understood that we could recombine Bill Hammill's acre into our parcel without going through the pending rezoning and SUP. I got hung up on the fact that the Hammill parcel is outside the Town limits and that we were trying to recombine it into a parcel inside the Town. This is my fault for not better understanding the process.

The groundwater issue has a longer timeline with greater complexity.

We are working with our consultants and DEQ in the assessment phase which will eventually roll into remediation. We have always assumed that DEQ will only issue a permit for the new landfill expansion after a remediation plan is in process or completed. We've also assumed that any Town approvals would be conditioned on DEQ approvals so we didn't see how the groundwater issue would inhibit us from seeking conditional approvals from the Town.

In reading Article 9.23.2, 'The proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property,' we're convinced that our proposed new landfill expansion is in accordance with this article and will most likely lessen the chances of the older portions of our facility from being inconsistent with this Article. The proposed expansion will be lined to include a leachate collection system plus we are proposing to install a synthetic cap on the closed portions of our site to better divert water from these closed areas.

We would normally complete the DEQ assessment and remediation phases before starting this process but these processes will take multiple years and we have diminishing airspace that requires us to pursue them concurrently. Note that the previous Gantt Chart schedule shared with the Town always started with Task 2. Per the attached Gantt Chart, Task 1 is the compliance process specific to remediating the groundwater issues to DEQ standards. We intentionally omitted the first task being it is not pertinent to the Town's conditional approvals and it would only add confusion to an already complex request.

I really don't feel this is pertinent to our pending requests but I'd be glad to describe the extensive work that has transpired since the first groundwater exceedance in 2013. We look forward to your feedback on our consistency statement with 9.23.2. This discussion is specific to the rezoning and SUP whereas we know the most urgent matter is addressing the staff findings for the BOA meeting scheduled for September 13th. We will continue to tweak our plans and comments specific to the rezoning and SUP and present this to all in the coming days. Jason Watkins gave us a solid suggestion in that we should consider permitting the C&D MRF in a parcel separate from the landfill parcel. John and I will quickly inquire with DEQ's permitting folks to discuss the merits on their end.

John and I have had several conversations with Butch Joyce and Dr. Mousa Maimoun with Joyce Engineering specific to staff not supporting our request to pipe and fill the Special Flood Hazard Area.

Per the attached letter from Butch, the inability to fill this area kills the proposed landfill expansion. Ironically, Butch also highlights how the redesign around the Special Flood Hazard Area decreases our site's environmental compliance quality. We feel these factors make it clear that the piping and filling of this very small area should be supported by the staff. We also feel staff's support is extremely important and will ask for a continuance or withdraw if there needs to be more time for consideration.

Following are our proposed conditions in order to seek staff and BOA support:

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers & NC DEQ Water Quality
4. Approval of groundwater remediation plan by NCDEQ
5. Approval of NCDEQ Solid Waste Permit specific to the proposed expansion
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, and will not reduce the value of nearby property.
8. The additional synthetic capping of older closed areas will further enhance public health and safety, and will not reduce the value of nearby property.

Please feel free to add anything we missed. We have stated many times that this process should be properly conditioned in recognition that the complex engineering and design submittals to the various government agencies will start after the Town's approval. We will add the final conditions list on our letterhead after your input.

In summary, we're trying to get the conceptual vision approved by the town before the more technical work is required. I really appreciate everyone's considerable efforts to enhance our applications. The complexities of these concurrent processes can easily create misunderstandings which I hope we have cleared up over the last couple weeks. We look forward to your feedback.

Best regards,

Mike

cc: Jackie Drummond
Jason Watkins
Jack Simoneau
John Brown
Butch Joyce
Mousa Maimoun

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies



Variance Application

Date of Application: 7/1/21

Property/Building Address: 15300 Holbrooks Road Parcel Size (ac): 121.040

Tax Parcel ID (PIN) Number(s): 01910102

Text of Ordinance to be varied

Ordinance: S.W.I.M Buffer Article: 8 Section: 25

Submittal Requirements and Procedure

The following must be submitted with the completed application (signed and dated by the property owner and/or applicant):

- One (1) hard copy and one (1) electronic copy of any applicable map(s), site plans, exhibits, and applications showing exact location of property with respect to existing streets, adjoining lots and other important features on or contiguous to the property. Also, include any maps and/or illustrations (to scale), which are necessary to show the location, number and size of buildings, signs, etc., on the property.
- A list of names, addresses and tax parcel identification numbers of properties that abut the site, are across the street from the site or are otherwise within one hundred feet (100') of the site. (Electronic format preferred)
- Review Fee (Please check most recent version of Fee Schedule for applicable Variance Review Fee)
- See the current Board of Adjustment Submittal Deadlines and Meeting Schedule for filing deadlines and meeting dates
- Please submit your complete application and fee by **noon the day filing deadline**

Notifications Requirements

Planning Staff will be required to notify in writing each adjoining property owner.

Planning Staff will also be required, if you are seeking a variance from the requirements of the Mountain Island Lake or Lake Norman Watershed Overlay Districts, to notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption as follows:

- * Mountain Island Lake Watershed Overlay. Local governments having jurisdiction in the watershed: Charlotte Mecklenburg, Cornelius and Huntersville. Entities using the water supply for consumption: Mecklenburg County, Gastonia and Mount Holly.
- * Lake Norman Watershed Overlay. Local governments having jurisdiction in the watershed: Davidson, Cornelius and Huntersville. Entities using the water supply for consumption: Mooresville, Mecklenburg County and Lincoln County.

Variance Requirements

STANDARDS FOR GRANTING A VARIANCE (Article 11.3.2.e.):

When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all the following:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
4. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

Appropriate conditions, which must be reasonably related to the condition or circumstance that gives rise to the need for a variance, may be imposed by the Board (Article 11.3.1.e.).

In the following spaces, indicate **FACTS** that demonstrate to the Board of Adjustment you meet all the standards for granting a variance:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

See Attached

2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

See Attached

3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.

See Attached

4. The public safety and general welfare have been protected and substantial justice done.

See Attached

Applicant

Printed Name Greenway Waste Solutions at North Meck, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Chief Operating Officer Applicant Phone 919-795-0599

Applicant Email jdbrown@griffinbros.com

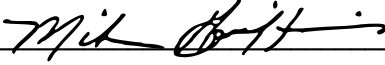
Address of Applicant 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

Property Owner (if different than applicant)

* Printed Name C&D Management Company, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Manager Applicant Phone 704-533-5781

Applicant Email mike@griffinbros.com

Address of Property Owner 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this petition MUST be accompanied by a Limited Power of Attorney signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID APPLICATION. **If additional space is needed for signatures, attach the Town of Huntersville Signature Addendum Form.**

Contact Information

Town of Huntersville Phone: 704-875-7000
Planning Department Fax: 704-875-6546
PO Box 664 Physical Address: 105 Gilead Road, Third Floor, Huntersville, NC 28078
Huntersville, NC 28070 Website: <https://www.huntersville.org/228/Planning-Department>

Received By Planning Department Staff: _____

Staff Initials: _____

List of adjacent property owners (for variance)
-within 100ft

- 01930104 Arnold W. Johnston 12300 Old Statesville Road Huntersville, NC 28078
- 01930105 Linda Wester Long 7910 Golf Course Dr N Denver NC 28037
- 01934105 Michael and Tracy Tinsley 11737 Trails End Lane Huntersville NC 28078
- 01934118 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031 (Trails End Holdings LLC)
- 01934108 William and Campbell Hammill 11745 Trails End Ln Huntersville NC 28078
- 01918135, 01918167, 01918166, 01934119, 01910116 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031
- 01919102, 01919105, 01919106, 01937103, 01937199, 01919121 Mecklenburg County 600 E4th Street 11th floor Charlotte NC 28202
- 01937280, 01937286- Southside Neighborhood LLC (w/in 100' of MRF parcel)



Conditions for Approval of Variances June 6, 2021

Greenway Waste Solutions is requesting approval of the following variances:

Article 8.25.5 S.W.I.M. Stream Buffers Minimum Buffer Widths

Floodplain Ordinance Section 151.60(A)(10)

Article 9.23.4.c Off Site Landfill Clearing and Inert Debris (LCID) and Construction and Demolition (C&D) Landfills

The approval of the aforementioned variances is subject to the following conditions

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers
4. Approval of NCDEQ Solid Waste Permit
5. Approval of all Town/County/State building permit related activities
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, nor reduce the value of nearby property as compared to past North Carolina standards.
8. Condition that the aforementioned expansion and additional synthetic capping of older closed areas will further enhance public health and safety, nor reduce the value of nearby property specific to areas currently operating or previously closed.

Article 8.25

Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

The inability to impact the S.W.I.M Buffer as the landfill expands creates an unnecessary hardship for the property owner and the community alike. As a result of the ordinance the long term potential life of the landfill site will be cut in half and have to close prematurely. This variance is one part of the process that, if approved, will allow for continued existence by increasing the area for operation. The hardship is that these regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe the water through the site. Upon plan approval from these agencies, the applicant will create a permanent storm water management system that will improve the flow and decrease likelihood of a flood in the area as compared to existing conditions. The system will improve flow up and down stream by providing basins on either end of the pipe. This will help control the speed of the water. The pipe itself will provide sufficient capacity to allow water to flow during peak flood conditions. This system will meet the requirements and criteria of Mecklenburg County Storm Water standards and require a floodplain development permit. A buffer mitigation plan has been approved by Mecklenburg County. The professionally engineered plans and process through which the applicant will gain ultimate approval will be heavily scrutinized and coordinated with the State's Department of Environmental Quality ("NCDEQ") Water Quality Division, the Army Corps of Engineers and NCDEQ Solid Waste Division. Beyond the approval of this variance, extensive engineering and multiple levels of approval will be needed. This ordinance threatens to derail this project because local approval is required by the State and Federal agencies Exhibit A provides detail on the storm water management system and site.

1.) The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

- a. The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition ("C&D") landfills. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling areas. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity

by joining the two permitted areas. The proposed solution better manages water through concrete encased pipe, as depicted in Exhibit A and B. Keeping the water isolated to the pipes eliminates the ability for runoff and material to enter the stream. The plan includes significant storm water management basins on both ends of the pipe. This solution will allow for a more environmentally responsible way to manage water and maximizes the landfill capacity to better serve the citizens of Huntersville and the North Mecklenburg region. The specifications of the storm water system and pipe will meet the requirements of Mecklenburg County.

2.) The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship

The hardship was not created by the manner in which the property has been used. The ability for relief provided in Article 8.25 shows the intention of the ordinance is to allow for built-in relief. Therefore, the applicant's request for a variance is consistent with the intent of the ordinance.

3.) The public safety and general welfare have been protected and substantial justice done.

- a. The public's safety and general welfare are best served by a variance to this regulation. The community and the North Mecklenburg region will see an increase in truck traffic as a result of taking C&D debris to other counties or Mecklenburg County's only other permitted C&D landfill in South Charlotte. The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. * Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.** It is in the best interest of the community to ensure the continued operation of this site. These hardships can be avoided through a variance. Exhibit C is a map showing proximity to other locations and Exhibit D shows the routes which will experience an increase in truck traffic without the facility.

The public's safety and welfare will also be better served as a result of the proposed piping; given that water will not interact with the materials during normal flow nor a flood. The applicant will provide ample capacity for the water to flow through the pipes, before and after storage basins as well as lining and capping the facility. This ensures that water will not touch the debris that is deposited in this area.

Further, the NC Department of Environmental Quality agrees that the design of the landfill expansion is more protective of human health

and the environment than what is required by NC solid waste regulations. (see Attachment 1)

The Catawba and Yadkin Riverkeepers are in support of the landfill expansion project. (see Attachment 2)

NC DEQ approved a Corrective Action Plan for the landfill on October 3, 2019 (see Attachment 3)

Groundwater history & geosynthetic cap environmental benefit. (see Attachment 4)

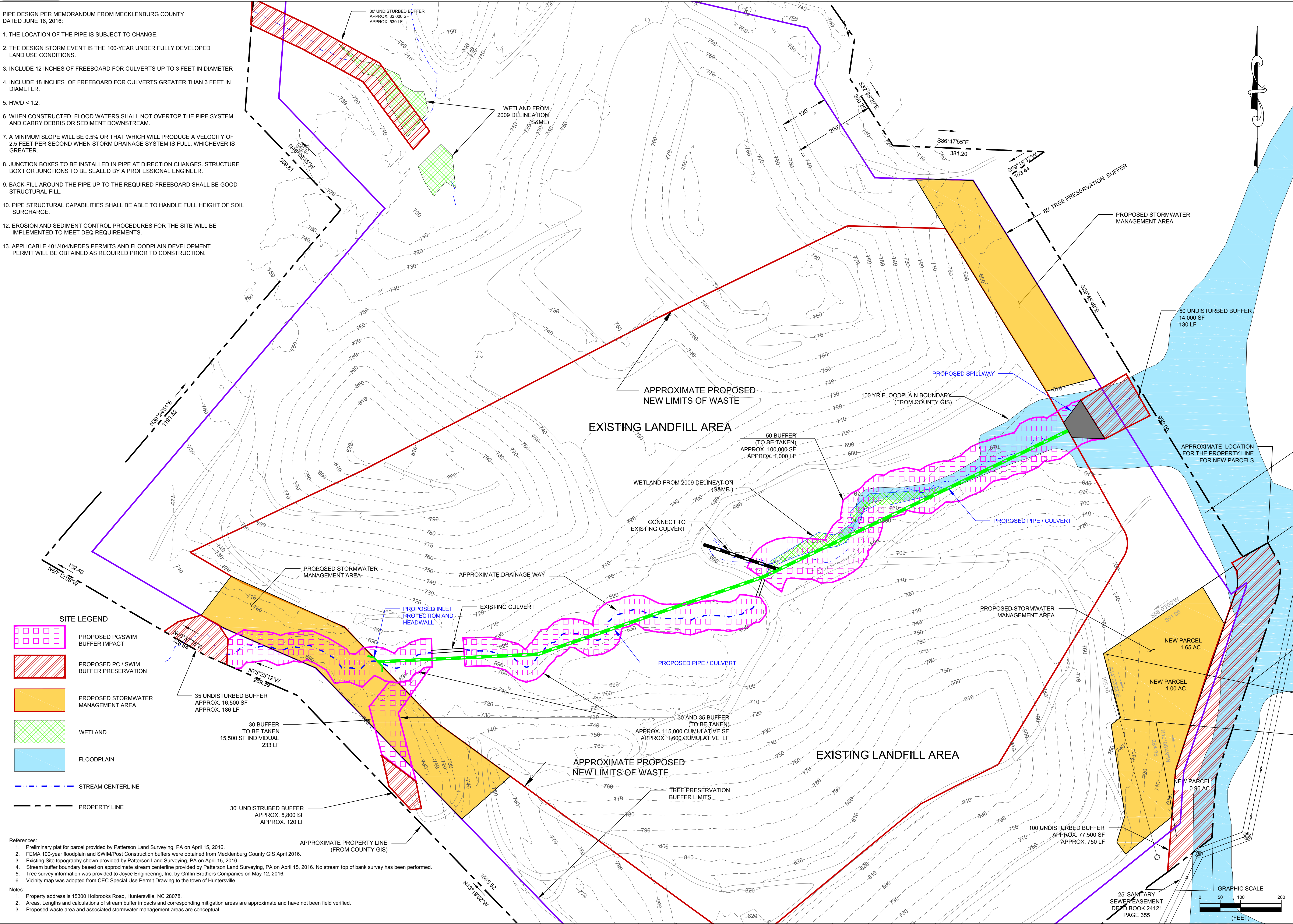
*based on 2015 volume with the assumption of an average increase of 20 miles per truck to the next permitted C&D facility.

**carbon calculator courtesy of the USDOT Federal Transit Administration

Exhibit A

PIPE DESIGN PER MEMORANDUM FROM MECKLENBURG COUNTY
DATED JUNE 16, 2016:

1. THE LOCATION OF THE PIPE IS SUBJECT TO CHANGE.
2. THE DESIGN STORM EVENT IS THE 100-YEAR UNDER FULLY DEVELOPED LAND USE CONDITIONS.
3. INCLUDE 12 INCHES OF FREEBOARD FOR CULVERTS UP TO 3 FEET IN DIAMETER
4. INCLUDE 18 INCHES OF FREEBOARD FOR CULVERTS GREATER THAN 3 FEET IN DIAMETER.
5. $HWD < 1.2$.
6. WHEN CONSTRUCTED, FLOOD WATERS SHALL NOT OVERTOP THE PIPE SYSTEM AND CARRY DEBRIS OR SEDIMENT DOWNSTREAM.
7. A MINIMUM SLOPE WILL BE 0.5% OR THAT WHICH WILL PRODUCE A VELOCITY OF 2.5 FEET PER SECOND WHEN STORM DRAINAGE SYSTEM IS FULL, WHICHEVER IS GREATER.
8. JUNCTION BOXES TO BE INSTALLED IN PIPE AT DIRECTION CHANGES. STRUCTURE BOX FOR JUNCTIONS TO BE SEALED BY A PROFESSIONAL ENGINEER.
9. BACK-FILL AROUND THE PIPE UP TO THE REQUIRED FREEBOARD SHALL BE GOOD STRUCTURAL FILL.
10. PIPE STRUCTURAL CAPABILITIES SHALL BE ABLE TO HANDLE FULL HEIGHT OF SOIL SURCHARGE.
12. EROSION AND SEDIMENT CONTROL PROCEDURES FOR THE SITE WILL BE IMPLEMENTED TO MEET DEQ REQUIREMENTS.
13. APPLICABLE 401/404/NPDES PERMITS AND FLOODPLAIN DEVELOPMENT PERMIT WILL BE OBTAINED AS REQUIRED PRIOR TO CONSTRUCTION.



DESIGNED		DRAWN		CHECKED		APPROVED		DATE		REVISIONS AND RECORD OF ISSUE		NO		BY		CK		APP	
MM		RWH		LB		LJ		06/17/16											

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All rights reserved.

JOYCE ENGINEERING
9731-F SOUTHERN PINE BLVD
CHARLOTTE, NC 28273
PHONE: (704) 817-2037
NC CORP LIC: C-0782

GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC
MECKLENBURG COUNTY, NORTH CAROLINA

APPLICATION FOR A WATER QUALITY
BUFFER DISTURBANCE:
PROPOSED PIPE LOCATION

PROJECT NO.
916.1501.11

SCALE
AS SHOWN

DRAWING NO.
1

NOT FOR CONSTRUCTION

L:\NORTH MECK\CONCEPT STREAM\ CULVERT JUNE 2016.dwg Layout\Layout

(for illustrative purposes only)

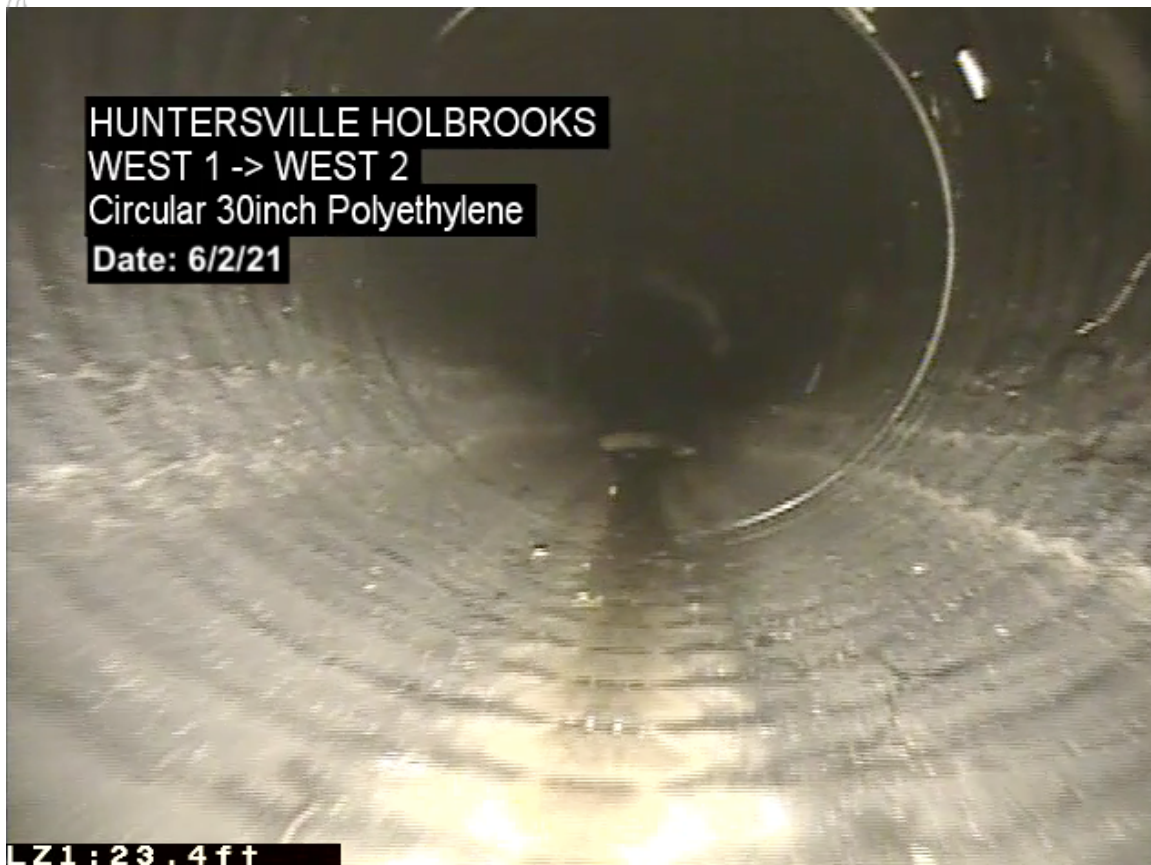
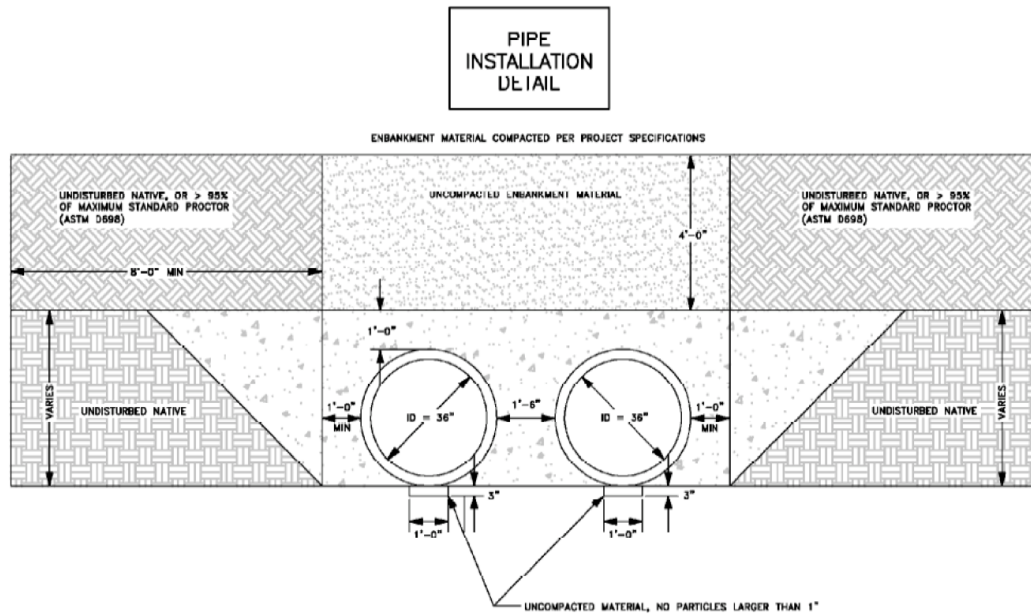


Exhibit C

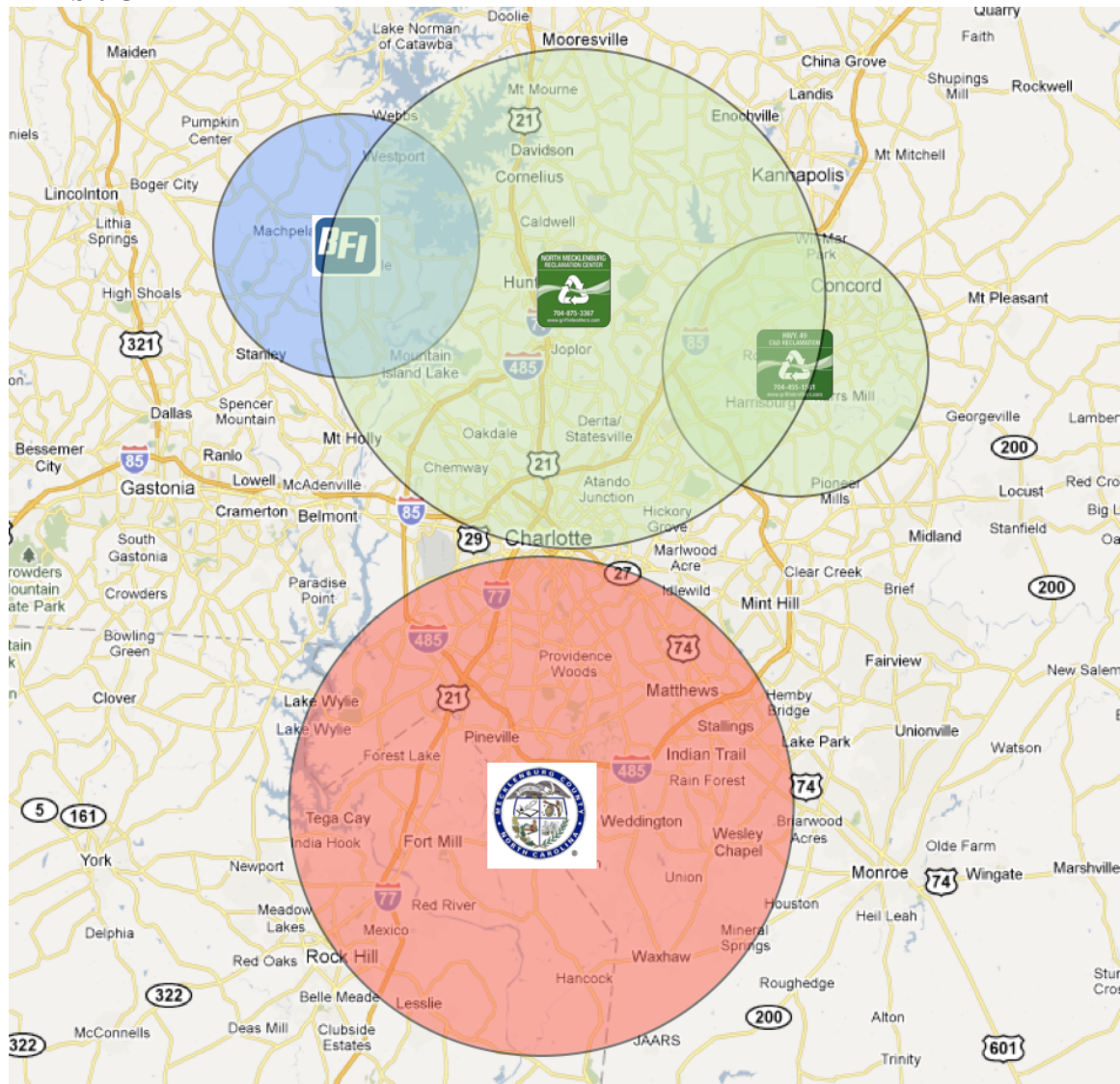
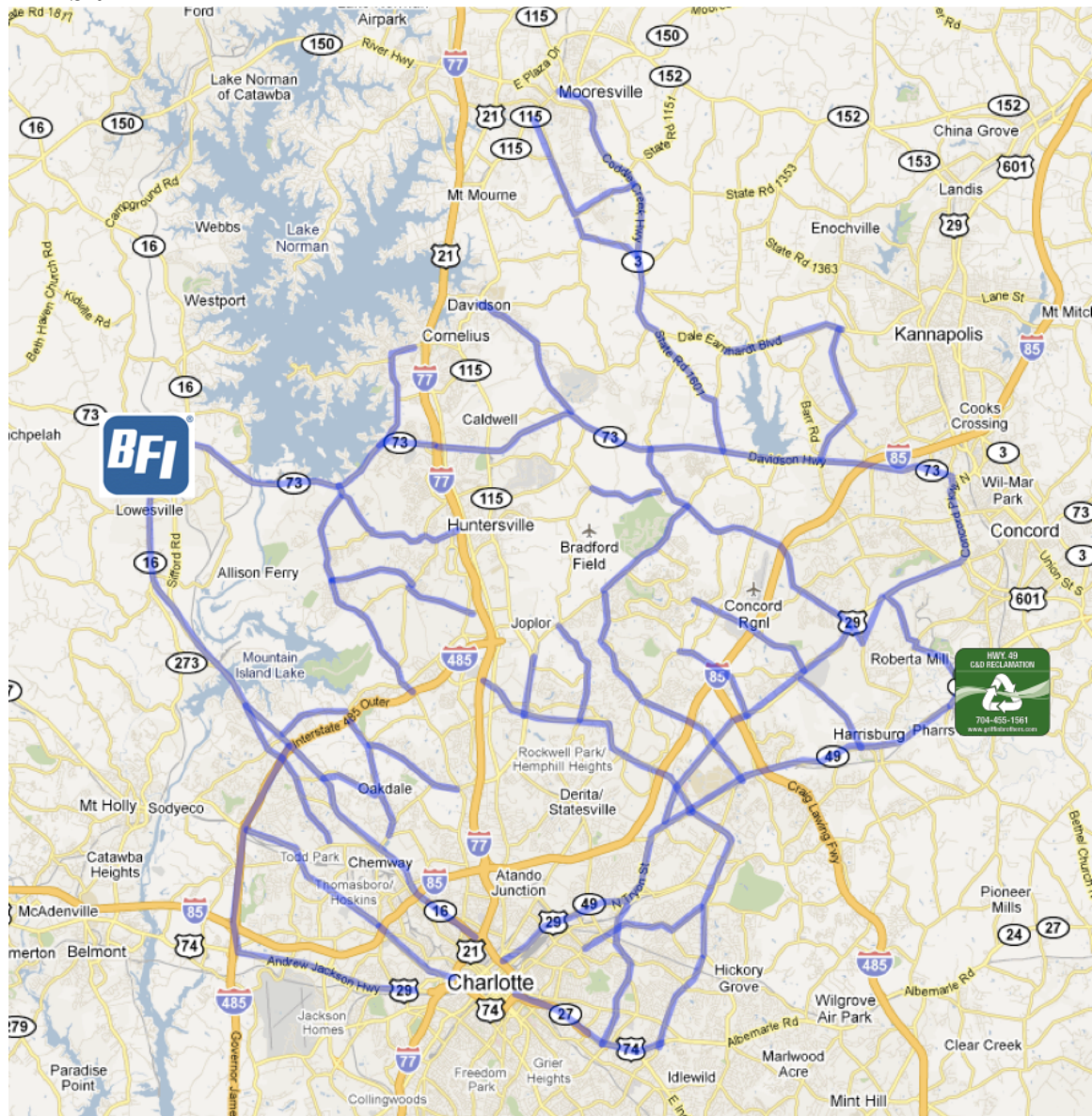


Exhibit D





NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head





Mr. Griffin,

Thank you for contacting the Catawba and Yadkin Riverkeepers concerning the possible future expansion of the North Meck C&D landfill at 15300 Holbrooks Road Huntersville, NC 28078. As we understand it, this project would involve the piping of approximately 1750 ft of perennial waters and the placement of impervious landfill liners over the existing C&D fills and newly buried stream.

Riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. In general, we are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 locations, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.

This nonintuitive recommendation is due to:

1. High levels of iron oxidizing bacteria and elevated conductivity indicate that groundwater from the unlined landfills is currently negatively impacting the UT.
2. Although not assessed by the NC biological assessment branch, our initial measurements indicate that this stream likely would be listed as impaired for biota. The 303d system is poorly suited to address impairment from nonpoint groundwater sources.
3. Covering the existing landfills will minimize or eliminate the infiltration of precipitation through the unlined fills and prevent leachate from entering Cane Creek.
4. Water monitoring and reporting on the unlined fills will end after 30 years. By constructing a new site on top, monitoring will be extended.
5. Siting a landfill at a new location will cause impacts to an additional part of the watershed.

This recommendation is based on several assumptions, if any of these are invalid then our support is withdrawn until further examination.

1. A new landfill must be built. The Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
2. Groundwater and surface water will continue to be monitored (and remediated if necessary) for the entire site.
3. Runoff from the entire site will be captured and treated before discharging.
4. The current landfills will remain uncapped (pervious) if a new landfill is not sited on top.

Please let us know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Fannon".

Brian Fannon, Yadkin Riverkeeper

A handwritten signature in black ink, appearing to read "Brandon Jones".

Brandon Jones, Catawba RIVERKEEPER®



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

October 3, 2019

Sent Via Email – mike@griffinbros.com

Mr. Mike Griffin

Greenway Waste Solutions at North Meck, LLC

19109 West Catawba Avenue, Suite 200

Cornelius, NC 28031

Re: *Corrective Action Plan (Revised October 1, 2019)*
Groundwater Corrective Action
North Mecklenburg C&D Landfill Active Infill Area and Closed Phase I Area
Mecklenburg County
Solid Waste Permit Number 6013-CDLF-1993
FID 1358901

Dear Mr. Griffin,

The Solid Waste Section (Section) has completed a review of the *Corrective Action Plan (Revised October 1, 2019)* and received via email on October 2, 2019 (FID 1358899). The plan was submitted on your behalf by CEC Consultants, Inc. for the North Mecklenburg Construction and Demolition (C&D) Landfill, Solid Waste Permit Number 6013-CDLF-1993 consisting of the Infill Area and the Phase I Area. The *Corrective Action Plan (Revised October 1, 2019)* was submitted in response to the consistent groundwater exceedances at the landfill.

In accordance with 15A NCAC 13B .0545 and 15A NCAC 2L, Greenway Waste Solutions at North Meck, LLC selected a remedy proposed to restore groundwater quality at and beyond the relevant point of compliance, to effectively reduce the overall groundwater contamination at the landfill, and to control the migration of contaminated groundwater to prevent unacceptable impacts. The selected remedy for the landfill includes Active Landfill Gas Extraction and Monitored Natural Attenuation (MNA), and the Section approved the selected remedy on June 10, 2019 (FID 1322138). In addition, Greenway Waste Solutions at North Meck, LLC had a waterline installed downgradient of the Phase I Area and purchased adjacent property.

Based upon the review of the *Corrective Action Plan (Revised October 1, 2019)*, the plan is approved as written based upon the information presented to the Section at this time. During groundwater corrective action, a Corrective Action Effectiveness Report (CAER) will be required to be submitted every five years. The Corrective Action Effectiveness Report (CAER) includes an interpretation of the corrective action data collected and a technical evaluation of the approved selected remedy.



Attachment 3 (cont.)

If you have any questions or concerns regarding this letter, please feel free to contact me by phone at 828.296.4706 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Solid Waste Section, Division of Waste Management
NCDEQ

cc sent via email:

- Ed Mussler, Section Chief
- Sherri Stanley, Permitting Branch Head
- Larry Frost, Permitting Engineer
- Jason Watkins, Field Operations Branch Head
- Adam Ulishney, Environmental Compliance Branch Head
- Deb Aja, Western District Supervisor
- Teresa Bradford, Environmental Senior Specialist
- John Brown, Greenway Waste/Griffin Brothers Companies
- Brandt Kayser, Greenway Waste/Griffin Brothers Companies
- Donald Cobb, CEC, Inc.
- Bruce Reilly, CEC Inc.
- Scott, Brown, CEC, Inc.
- Joe Hack, Mecklenburg County Solid Waste Management
- Jack Simoneau, Town of Huntersville



North Mecklenburg C&D Landfill (GWSNM) NC Solid Waste Facility Permit No. 60-13

Historical Regulatory Compliance Time-Line

North Meck Groundwater History

Groundwater monitoring at the North Meck C&D Landfill has been on-going on a semi-annual basis since March of 1998 around the currently closed southern section of the landfill (Closed Area), and semi-annual groundwater monitoring around the northern waste disposal area (Infill Area) began in October of 2011. Leading up to the Spring 2013 sampling event, groundwater samples were mostly analyzed by Pace Analytical Services, and analytical results indicated no consistent chemical detections at concentrations which exceeded the applicable 15A NCAC 02L .0202 Groundwater Quality Standards (2L Standards or 2L Rules).

Greenway switched to Shealy Environmental Services for the Spring 2013 sampling event. The analytical results from the Spring 2013 sampling event indicated that vinyl chloride (VC) was detected at elevated concentrations in numerous monitoring wells around both the Infill Area and Closed Area, including one monitoring well located near the water supply well for the Gilkerson residence on the south side of the Closed Area (**Figure 1**). In June of 2014, GWSNM paid for Charlotte Water connections for the Gilkerson residence as well as the two adjacent homes which are occupied by the Tinsley and Hammill families.

Following a series of investigations, Enviro-Pro, PC (GWSNM's groundwater consultant at the time) concluded that the groundwater contamination was the result of landfill gas (LFG) contacting water as a result of precipitation. LFG is produced from the anaerobic decomposition of waste by naturally-occurring bacteria and other micro-organisms in soil, and LFG production is accelerated by the presence of water.

In April of 2015, GWSNM's current consultant, Civil & Environmental Consultants, Inc. (CEC) oversaw the installation of LFG extraction wells in the Closed Area in accordance with the North Carolina Department of Environmental Quality (DEQ) -approved Corrective Action Plan. These extraction wells were installed in order to remove LFG to limit the exposure of percolating water to LFG. CEC later submitted a Landfill Gas Mitigation Expansion Plan in April 2017 proposing to install additional LFG extraction wells in the Closed Area and Infill Area. These extraction wells have remained active to date, and the detected concentrations of VC around the Closed Area have been reduced to below the concentration specified in the 2L Rules. Per the DEQ-approved Revised Corrective Action Plan, GWSNM conducts quarterly groundwater sampling of 16 site wells to monitor for natural attenuation (MNA) of VC in groundwater below the North Meck Landfill. Natural attenuation, which is the process by which naturally-occurring bacteria digest and convert chemicals into non-hazardous chemicals, has been shown to successfully reduce contaminant concentrations over time.

Due to the on-going detections of significantly elevated concentrations of VC by Shealy, GWSNM switched analytical labs back to Pace for the Fall 2016 sampling event and submitted duplicate groundwater samples to Shealy, Pace, and Eurofins TestAmerica (ETA) in order to

compare the detected concentrations. The results of the samples sent to Shealy indicated detections of VC which were consistent with recent detections, while the results of the duplicate samples analyzed by Pace and ETA indicated that VC was detected at significantly lower concentrations relative to the Shealy results. In a letter dated May 23, 2017, OI Analytical, the owners of Shealy Environmental Services, stated that an internal investigation revealed that a component in their analytical equipment was generating false-positive results for VC (**Exhibit 1**).

The analytical results from ETA for the most recent water quality monitoring event, conducted in April 2021, indicate that VC has been detected in 10 monitoring wells but **none of these detections exceeded the allowable concentration for VC specified in the 2L Rules**

Proposed Valley Expansion Benefits

The proposed valley expansion, located between the Infill Area and Closed Area, will significantly increase environmental protection of groundwater. In accordance with 15A NCAC 13B .0540 Construction Requirements for C&DLF Facilities both the Closed Area and Infill Area waste disposal units were constructed with soil liner systems. These compacted soil liners significantly limit, but do not prevent, fluid percolation into groundwater. Additionally, the Closed Area is capped with a soil cap in accordance with 15A NCAC 13B .0543 Closure and Post Closure Requirements for C&DLF Facilities (c)(1)(A). Similar to the compacted soil liner, the soil cap serves to significantly limit, but not eliminate, infiltration of rainwater into the landfill.

The infill expansion cap currently requires a low permeability soil liner however, it does not require a synthetic membrane as proposed as part of the valley expansion liner system. The proposed valley expansion includes a multi-layer geosynthetic, soil, and aggregate liner system with a built-in leachate collection system (**Exhibit 2**). This liner system will cover the side slopes as well as the top of both the Infill and Closed Areas, which will significantly outperform the DEQ regulatory requirement of a soil cap (**Exhibit 3**). This will substantially decrease rainwater infiltration into waste, leading to significantly reduced leachate and LFG production. Relative to a compacted soil liner, the proposed multi-layer geosynthetic liner will nearly eliminate leachate leakage into groundwater (**Exhibit 4**).

The liner system also includes horizontal collection pipes installed inside the existing landfill waste to collect leachate from both the Infill and Closed Areas. Additionally, the unnamed tributary of Cane Creek will be conveyed below the proposed expansion area through concrete-encased pipes. These pipes will also serve as additional water quality protection measures by eliminating the possibility of runoff, leachate, and groundwater from entering the unnamed tributary of Cane Creek.



LEGEND

PROPERTY LINE

EXISTING STREAM

MW-4A

MW-5

SPRING 2013 VINYL CHLORIDE EXCEEDANCE LOCATION

(i)

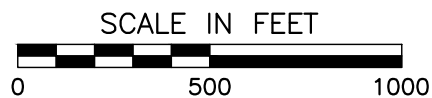
REFERENCE TO INFILL AREA

P:\2011\111-370\111-370-0001-CADD\001\Drawings\Brandt Kayser Requested Figures\111370.0001-Spring2013VinylChlorideExceedance.dwg{1} LS:(6/30/2021 - pbrinkley) - LP: 6/30/2021 1:52 PM



REFERENCE

1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH PRO.
DATED OCTOBER 8, 2016



Civil & Environmental Consultants, Inc.

3701 Arco Corporate Drive - Suite 400 - Charlotte, NC 28273
Ph: 980.237.0373 · Fax: 980.237.0372
www.cecinc.com

DRAWN BY:	JKS/PAB	CHECKED BY:	MBG	APPROVED BY:	DMC	FIGURE NO.:	1
DATE:	JUNE 2021	DWG SCALE:	1" = 500'	PROJECT NO:	111-370.0001		

GREENWAY WASTE SOLUTIONS OF
NORTH MECK, LCC
NORTH MECKLENBURG LANDFILL
HUNTERVILLE, NORTH CAROLINA

SPRING 2013 VINYL CHLORIDE EXCEEDANCE
LOCATION MAP

Exhibit 1



www.oico.com

151 Graham Road, P. O. Box 9010, College Station, TX 77842-9010

(979) 690-1711 FAX: (979) 690-0440

May 23, 2017

Mr. Dan Wright
Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, SC 29172

Mr. Wright,

OI Analytical is aware of an analytical issue with Silica Gel in the 3-layer traps for purge-and-trap analysis. When the sample being analyzed contains the compound Freon 151, the results of the analysis have the potential to erroneously show the presence of Vinyl Chloride in the sample. The potential issue can arise with any brand purge-and-trap utilizing a 3-layer trap with Silica Gel. This is due to impurities in the Silica Gel, a trap packing material, which cause the Freon 151 to breakdown possibly via a dehydrohalogenation process.

We submit this letter without prejudice in pursuit of a mutually agreeable solution. Please note that we reserve all of our rights and remedies at law or in equity and nothing herein nor our willingness to inspect, test and/or repair the subject products and any other related products shall constitute a waiver of these rights nor be construed as an admission with respect to responsibility or damage incurred.

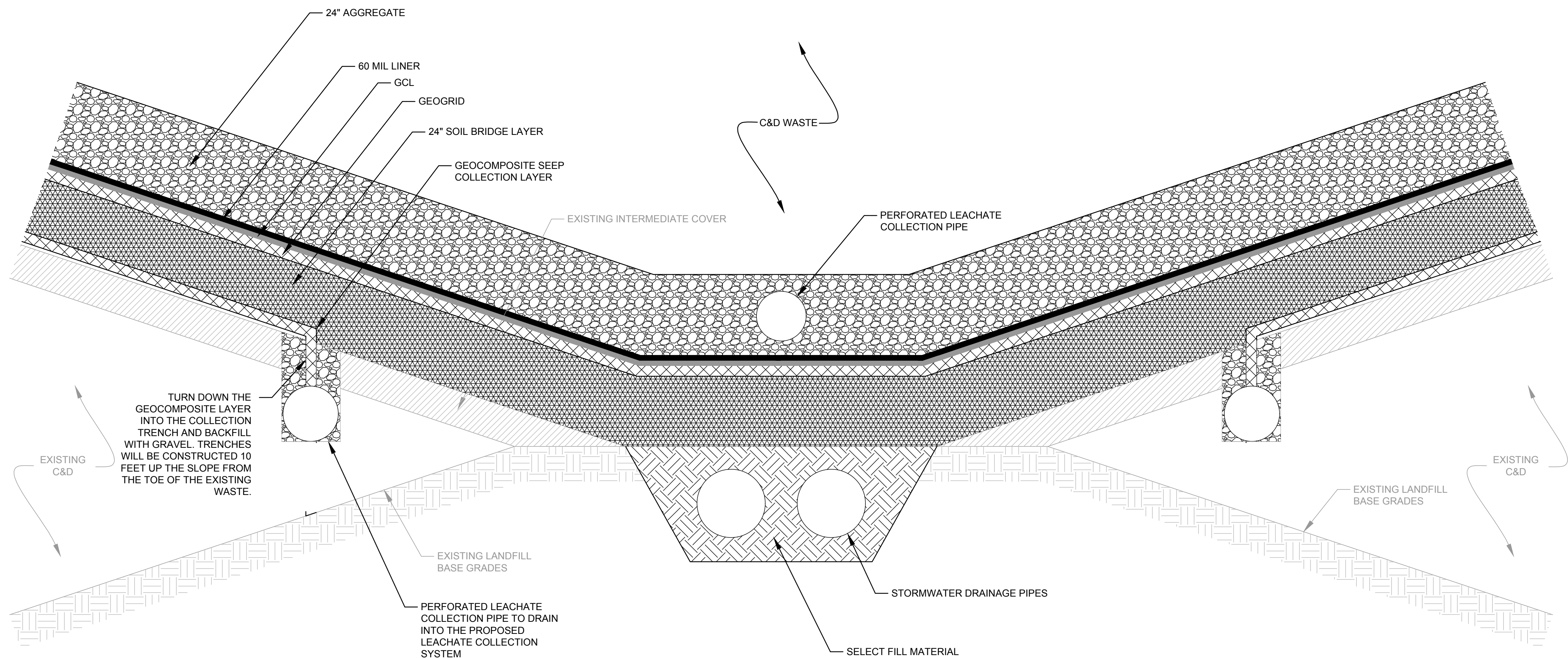
As you can understand, this is a complicated situation that we are working diligently with the supplier to resolve. As soon as we have a definitive timeline for resolution in working with our partners, we will faithfully communicate this with you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joan Killgore". The signature is fluid and cursive, written over the printed name.

Joan Killgore

Quality Assurance and Engineering Manager



GEOCOMPOSITE DRAINAGE LAYER AND BASE LINER SYSTEM
(NOT TO SCALE)

NOT FOR CONSTRUCTION

NORTH
Greene Waste Solutions, LLC

Standard Engineering

1000 Horseshoe Rd, Huntersville, NC 28078

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	DAS
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY
DATE:	10/9/2020
DRAWING NAME:	

DETAIL

DRAWING NUMBER:



Exhibit 3



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head



November 25, 2020

Mr. Ed Mussler
 Division of Waste Management
 Solid Waste Section
 217 W Jones St
 Raleigh, North Carolina 27603

**RE: HELP Model Analysis of Permitted & Proposed Cap/Liner Systems
 Greenway Waste Solutions at North Meck, LLC
 North Meck Landfill
 Mecklenburg County, North Carolina
 NCDEQ Permit No. 60-13**

Mr. Mussler:

On behalf of Greenway Waste Solutions (GWS), LaBella Associates (LaBella) has prepared a HELP Model Analysis of the percolation/leakage through the proposed liner and cap systems for the North Meck Construction and Demolition (C&D) Landfill (NML) proposed expansion compared to the permitted cap systems of the existing two landfills, as requested by NCDEQ Solid Waste Section.

➤ **Existing Conditions**

The NML currently operates an active C&D Infill Area (approximately 34.3 acres) north of the property. Please refer to Drawing No. 1 for existing conditions. There is also an existing closed C&D Landfill (approximately 33.5 acres) south of the property. The final closure of the C&D Landfill (Phases I&II) was completed in June of 2002. The final cap was constructed with a minimum of 24" of cover soil from a local source. On the other hand, the active Infill Landfill Area is subject to Rule 15A NCAC 13B .0543, which details engineering requirements for caps and became effective in 2007. The permitted/constructed closure caps and the HELP Model Analysis are summarized in Table 1. The attached HELP Model runs assumed a surface slope of 15%.

Table 1: HELP Model Analysis of Existing Permitted/Constructed Landfill Caps.

Landfill	Cap System (from top to bottom) (Permitted/Constructed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil (Constructed)	33.5	9,830	329,305
Infill Landfill Area (Active)	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil (Permitted)	34.3	5,510	188,993
Total		67.8	--	518,298



➤ **Proposed Landfill Expansion**

GWS is proposing to expand the NML by filling in the valley between the two existing landfill areas. The filling of the valley is intended to maximize waste disposal within the limits of the property (parcel) without expanding the waste footprint toward neighboring parcels. GWS is proposing to line the valley and the piggyback areas on the active Infill Landfill Area and the closed C&D Landfill. The base liner system (approximately 48.6 acres) is shown on Detail 1 on Drawing No. 2. GWS is proposing to construct the base liner system as shown on Detail 1 on Drawing No. 2 on the piggyback area of the active Infill Landfill in lieu of the permitted cap. The base liner system will be constructed on the piggyback area of the closed C&D Landfill. GWS may consider a partial removal of C&D Landfill 24" soil cap prior to the construction of the proposed liner system. The HELP Model runs did not include the 24" soil cap in analyzing the proposed liner/cap system.

At the completion of waste filling operations, GWS is proposing to cap the landfill expansion area (approximately 48.6 acres) with the synthetic cap system shown on Detail 1 on Drawing No. 2. Areas outside of the piggyback footprint on the active Infill Landfill Area will be closed using the permitted cap system, while areas on the closed C&D Landfill will remain closed with 24" of cover soil. The permitted/proposed closure caps and the HELP Model Analysis are summarized in Table 2. The attached HELP Model run assumed a surface slope of 15% consistent with the permitted/constructed caps HELP Model runs. All other modeling assumptions were consistent with the permitted/constructed caps HELP Model runs.



Table 2: HELP Model Analysis of Proposed Landfill Cap/Liner Systems.

Landfill	Cap/Liner Systems (from top to bottom) (Permitted/Constructed/Proposed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap /Liner (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil <u>(Constructed)</u>	17.1	9,830	168,093
C&D Landfill (Phases I&II) (piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	16.4	0.00002	0.000328
Infill Landfill Area (Piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	20.7	0.00002	0.000414
Valley Fill Area (Horizontal Landfill Expansion Footprint)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	11.5	0.00002	0.00023
Infill Landfill Area	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil <u>(Permitted)</u>	13.6	5,510	74,936
Total		79.3		243,029

*Gas geocomposite was excluded from the HELP model runs as it has an insignificant impact on the results.



In conclusion, the HELP Model runs evaluate the percolation/leakage to the existing waste with the permitted cap and after the construction of the proposed expansion liner/cap systems. Although the proposed landfill expansion includes lining the valley between the existing closed landfill (Phases I&II) and the active Infill Landfill area, which adds approximately 11.5 acres of landfill footprint, the lining/capping of the existing landfills piggyback areas reduces the percolation/leakage to the existing waste mass by more than 50% according to the HELP Model Analysis. The attached HELP Model runs and drawings provide additional details.

We hope that you agree with our conclusion that the aforementioned benefits from the proposed liner and cap systems of the expansion project are significant compared to closing the landfill as currently permitted. We request a letter from NCDEQ Solid Waste Section to the Town of Huntersville and Mecklenburg County detailing the benefits of the proposed expansion project. The proposed liner/cap systems is significantly reducing percolation/leakage through the existing waste into the environment.

If you have any questions or require additional information that would help the Solid Waste Section determine the benefits of the proposed liner/cap systems compared to the existing permitted/constructed cap systems, please do not hesitate to give me a call at (704) 941-2164.

Respectfully submitted,

LaBella Associates

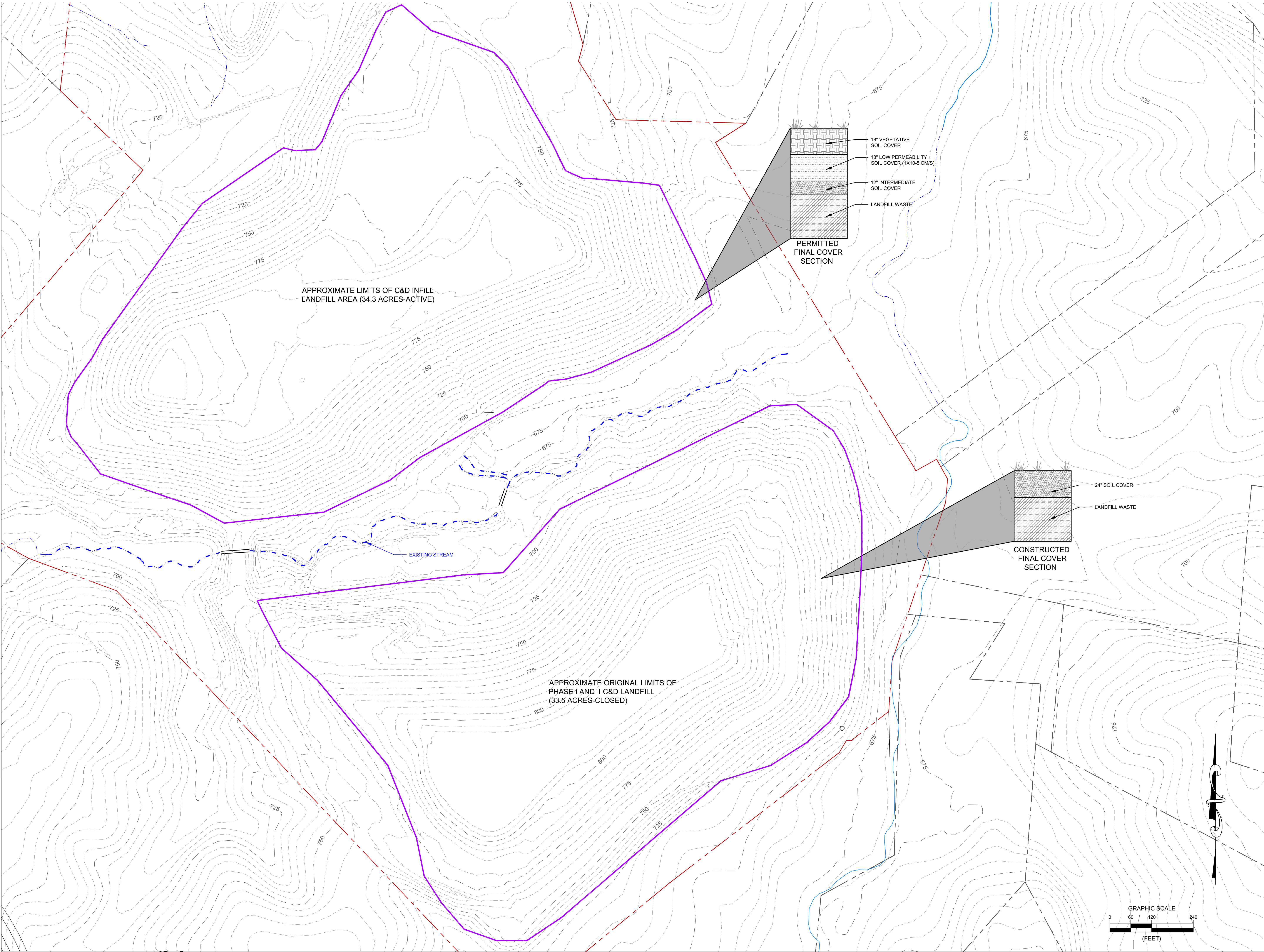
Mousa Maimoun, Ph.D., P.E.
Sr. Project Consultant

Attachments:

Drawing No. 1 – Existing Conditions
Drawing No. 2 – Proposed Landfill Expansion (Conceptual)
HELP Model Runs

Cc: Ms. Sherri Stanley, P.E., NCDEQ Solid Waste Section
Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates

L:\NORTH MECK2020 expansion\NOV 2020 FIGURES\EXISTING CONDITION.dwg Layout=Layout1





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labellapc.com

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GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

NO:	DATE:	DESCRIPTION:
Revisions		
PROJECT NUMBER: 2180197		
DRAWN BY: RH		
REVIEWED BY: MM		
ISSUED FOR: HELP MODEL ANALYSIS		
DATE: 11/20/2020		
DRAWING NAME:		
EXISTING CONDITIONS		
DRAWING NUMBER:		

NO:	DATE:	DESCRIPTION:

Revisions

PROJECT NUMBER: 2180197

DRAWN BY:	RH
REVIEWED BY:	MM

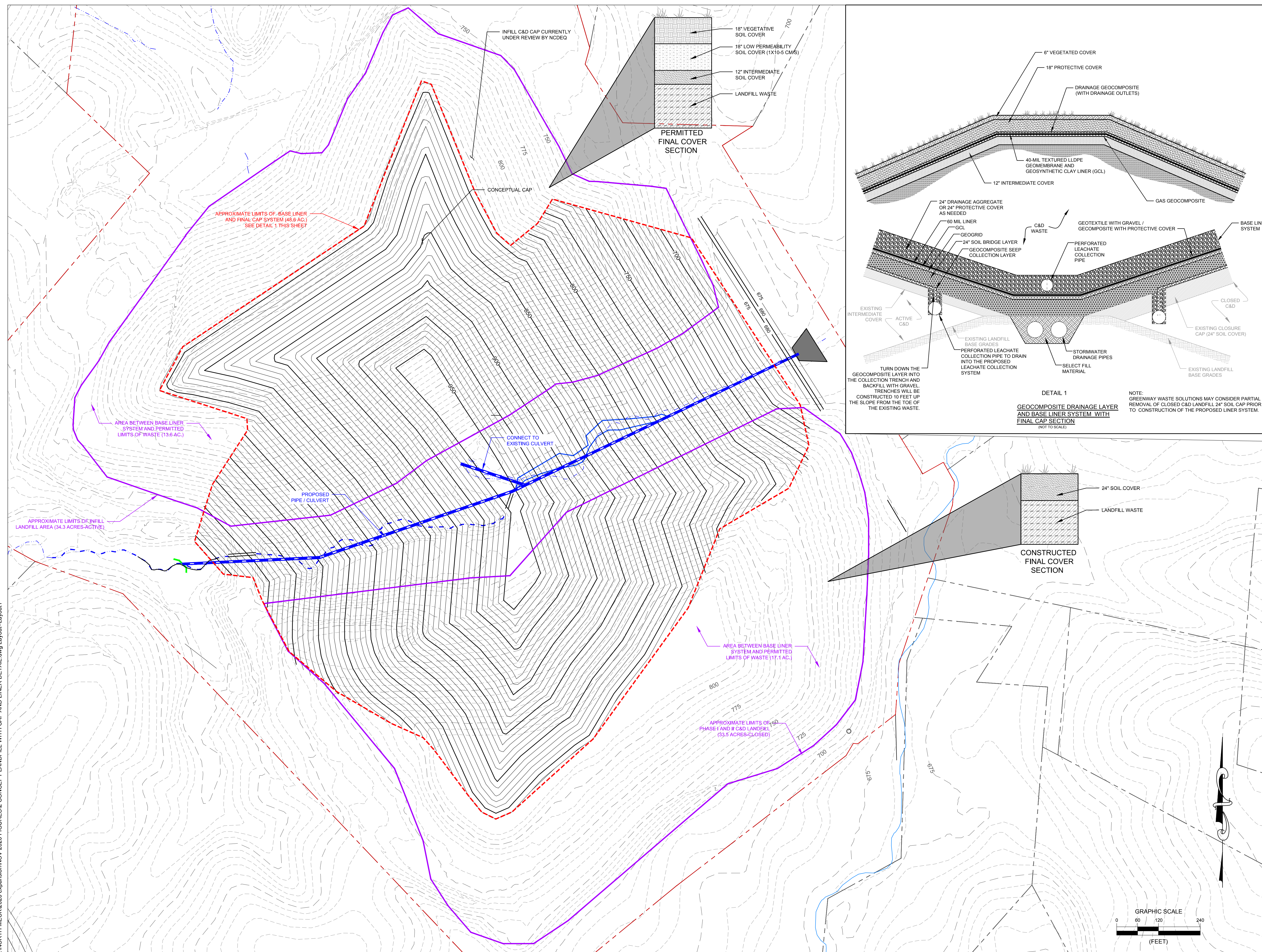
ISSUED FOR:
PRELIMINARY CONCEPT-HELP MODEL ANALYSIS

DATE: 11/20/2020

DRAWING NAME:

**PROPOSED LANDFILL
EXPANSION
(CONCEPTUAL)**

DRAWING NUMBER



Exhibit#5-EPA Vinyl Chloride Fact Sheet

Vinyl Chloride

75-01-4

Hazard Summary

Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Acute (short-term) exposure to high levels of vinyl chloride in air has resulted in central nervous system (CNS) effects, such as dizziness, drowsiness, and headaches in humans. Chronic (long-term) exposure to vinyl chloride through inhalation and oral exposure in humans has resulted in CNS effects and liver damage. Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. Vinyl chloride exposure, via inhalation, has been shown to increase the risk of a rare form of liver cancer, angiosarcoma of the liver, in humans. EPA has concluded that vinyl chloride is carcinogenic to humans by the inhalation and oral routes of exposure, and highly likely to be carcinogenic by the dermal route of exposure.

Please Note: The main sources of information for this fact sheet are the U.S. Environmental Protection Agency's (EPA's) Integrated Risk Information System and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profile for Vinyl Chloride. (1,2)

Uses

- Most of the vinyl chloride produced is used to make polyvinyl chloride (PVC), a material widely used in automotive parts, packaging products, pipes, construction materials, furniture, and a variety of other products. (2)
- Smaller amounts of vinyl chloride are used as a chemical intermediate and a solvent. (2,4)

Sources and Potential Exposure

- Ambient air concentrations of vinyl chloride are generally quite low, with exposure occurring from the discharge of exhaust gases from factories that manufacture or process vinyl chloride, or evaporation from areas where chemical wastes are stored. (2,3)
- Vinyl chloride may enter finished drinking water from the flow of water through older PVC piping made before 1977, but a more recent study suggests that the extraction of vinyl chloride may diminish over time. Since 1977, product standards (NSF/ANSI 14 and 61) have controlled the release of vinyl chloride from PVC pipes. (5,6)
- Occupational exposure to vinyl chloride may occur in those workers concerned with the production, use, transport, storage, and disposal of the chemical. (2,3)
- Vinyl chloride has been detected in tobacco smoke. (2)

Assessing Personal Exposure

- Vinyl chloride can be measured in urine, body tissue, and exhaled air but the tests are not reliable indicators of total exposure. (2)

Health Hazard Information

Acute Effects:

- Acute exposure of humans to high levels of vinyl chloride via inhalation has resulted in effects on the CNS, such as dizziness, drowsiness, headaches, and giddiness. (2,3)
- Acute exposure to high levels of vinyl chloride in animals has resulted in effects on the CNS, liver, kidney, and lungs. (2)
- Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure. (2,3)

Chronic Effects (Noncancer):

- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure. (2,3)
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema). (2,3)
- CNS effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride. (2)
- Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. (2,3)
- EPA has established a Reference Concentration (RfC) of 0.1 milligrams per cubic meter (0.1 mg/m³) based on effects on the liver in rats. The RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not an estimator of risk but rather a reference point to gauge the potential for effects. At exposures increasingly greater than the RfC, the potential for adverse health effects increases.

Lifetime exposure above the RfC does not imply that an adverse effect would necessarily occur. (1)

- EPA has established a Reference Dose (RfD) for vinyl chloride is 0.003 milligrams per kilogram body weight per day (mg/kg/d) based on liver toxicity in rats. (1)

Reproductive/Developmental Effects:

- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects; however, other studies have not supported these findings. (2,3)
- Several case reports involving worker exposures suggest that male sexual performance may be affected by vinyl chloride; however, these reports are limited by possible co-exposure to other chemicals and lack of exposure estimates. (2)
- Testicular damage and decreased male fertility have been reported in rats exposed to vinyl chloride. (2)
- Animal studies have reported decreased fetal weight and birth defects in the offspring of rats exposed to vinyl chloride through inhalation at levels that are also toxic to maternal animals. (2)

Cancer Risk:

- Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. (1,2,3)
- Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver. (1,2,3)
- Several rat studies show a pronounced early-life susceptibility to the carcinogenic effect of vinyl chloride, i.e., early exposures are associated with higher liver cancer incidence than similar or much longer exposures that occur after maturity. (2)
- EPA has classified vinyl chloride as a known human carcinogen by the inhalation route of exposure. (1)
- EPA uses mathematical models, based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. EPA has calculated inhalation unit risk estimates of $4.4 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for exposure to vinyl chloride during adulthood and $8.8 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for lifetime exposure. EPA estimates that, if an individual were to continuously breathe air containing vinyl chloride at an average of $0.11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-4} \text{ mg}/\text{m}^3$) over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing this chemical. Similarly, EPA estimates that continuously breathing air containing $1.1 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-3} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer, and air containing $11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-2} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-ten thousand increased chance of developing cancer. For a detailed discussion of confidence in the potency estimates, please see IRIS. (1)

- EPA has calculated an oral cancer slope factor of $7.2 \times 10^{-1}(\text{mg/kg-day})$ for oral exposure to vinyl chloride during adulthood and an oral cancer slope factor of 1.4 (mg/kg-day) for lifetime exposure. (1)

Physical Properties

- Vinyl chloride is a colorless, flammable gas with a mild, sweet odor. (4)
- The odor threshold for vinyl chloride ranges from 260 ppm to 4,000 ppm. (4)
- The chemical formula for vinyl chloride is $\text{C}_2\text{H}_3\text{Cl}$ and the molecular weight is 62.5 g/mol. (4)
- The vapor pressure for vinyl chloride is 2,600 mm Hg at 25 °C, and it has a log octanol/water partition coefficient (log K_{ow}) of 1.36. (2)

Conversion Factors:

To convert concentrations in air (at 25 °C) from ppm to mg/m^3 : $\text{mg/m}^3 = (\text{ppm}) \times (\text{molecular weight of the compound}) / (24.45)$. For vinyl chloride: $1 \text{ ppm} = 2.6 \text{ mg/m}^3$.

Health Data from Inhalation Exposure



ACGIH TLV--American Conference of Governmental and Industrial Hygienists' threshold limit value expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effects.

AIHA ERPG - American Industrial Hygiene Association's emergency response planning guidelines. ERPG 1 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor; ERPG 2 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing or developing irreversible or other serious health effects that could impair their abilities to take protective action.

ATSDR MRL – An inhalation MRL is an estimate of the amount of a chemical a person can breathe each day without a detectable risk to health. MRLs are developed for health effects other than cancer. MRLs can be calculated for 3 different time periods of exposure to the chemical: acute (about 1 to 14 days), intermediate (from 15-364 days), and chronic (exposure for more than 364 days).

CalEPA Acute REL – California EPA Office of Environmental and Human Health Assessment (OEHHA) acute reference exposure level is the concentration at or below which no adverse health effects are anticipated for a specified exposure duration.

OSHA PEL--Occupational Safety and Health Administration's permissible exposure limit expressed as a time-weighted average: the concentration of a substance to which most workers can be exposed without adverse effect averaged over a normal 8-h workday or a 40-h workweek.

OSHA PEL Ceiling -- Occupational Safety and Health Administration's permissible exposure limit expressed as a short-term exposure limit that should not be exceeded in a 15-minute time period.

RBC—Risk-based concentration.

^a Toxicity, Health, and Risk numbers are toxicological values from animal testing or risk assessment values developed by EPA.

^b Regulatory numbers are values that have been incorporated in Government regulations, while advisory numbers are nonregulatory values provided by the Government or other groups as advice. OSHA numbers are regulatory, whereas ACGIH, NIOSH, and AIHA numbers are advisory.

Summary updated in March 2020

References

1. U.S. Environmental Protection Agency. Integrated Risk Information System (IRIS) on Vinyl chloride. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. Last revised 8/07/2000. <http://www.epa.gov/iris>

2. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological Profile for Vinyl Chloride. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 2006. <http://www.atsdr.cdc.gov/toxprofiles/tp20.pdf>
3. U.S. Department of Health and Human Services. Hazardous Substances Data Bank (HSDB, online database). National Toxicology Information Program, National Library of Medicine. 2020. <http://pubchem.ncbi.nlm.nih.gov/compound/6338>
4. Pohanish, R.P. Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogens. 6th ed. Elsevier Inc. Oxford, UK and Waltham, MA USA. 2012.
5. Flournoy, R. L., Monroe, D., Chestnut, N., & Kumar, V. (1999). Health effects from vinyl chloride monomer leaching from pre-1977 PVC pipe. In Annual American Water Works Association Conference Proceedings (pp. 1211-1230).
6. Walter, R. K., Lin, P. H., Edwards, M., & Richardson, R. E. (2011). Investigation of factors affecting the accumulation of vinyl chloride in polyvinyl chloride piping used in drinking water distribution systems. Water research, 45(8), 2607-2615.
7. American Conference of Governmental Industrial Hygienists (ACGIH). 2018 TLVs and BEIs. Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices. Cincinnati, OH. 2018.
8. Occupational Safety and Health Administration (OSHA). Occupational Safety and Health Standards, Toxic and Hazardous Substances. Code of Federal Regulations. 29 CFR 1910.1000. 2018.
https://www.osha.gov/pls/oshaweb/owadisp.show_unique?p_table_name=STANDARDS&p_unique_file=1910_1017&p_anchor_name=
9. American Industrial Hygiene Association (AIHA). The AIHA 2018 Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. 2018.
10. California Environmental Protection Agency (CalEPA). Technical Supporting Document for Noncancer RELs, Appendix D2. Office of Environmental Health Hazard Assessment. 2008.
<https://oehha.ca.gov/chemicals/vinyl-chloride>

Exhibit#6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services for Mitigation

Lauren Speight

From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>
Sent: Tuesday, August 3, 2021 7:42 PM
To: Bradley Priest; Jack Simoneau
Cc: Brian Richards; Lauren Speight; Canaan, Dave; Smithberger, Jeffrey; Edwards, Olivia; DeMaury, Joshua; Eubanks, Ron
Subject: Variance Request for North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road
Attachments: Response to Variance Request at 15416 Holbrooks Road in Huntersville.pdf
Importance: High

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Brad,

Please find attached for consideration in the review of the variance request to impact the SWIM Buffer along Cane Creek to install a pipe to facilitate expansion of the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road.

Please let me know if you have any questions.

Thank you.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org



We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.

From: Bradley Priest <bpriest@huntersville.org>
Sent: Tuesday, August 3, 2021 12:49 PM
To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>; Jack Simoneau <jsimoneau@huntersville.org>
Cc: Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>
Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Rusty,

Thank you for that heads up. If you cannot recommend approval for their mitigation and project at this time, our variance recommendation would be to continue their item. Lauren is working on those staff reports now for the August meeting. If you could send me the note outlining the issues, I'll send to the applicant ASAP. I'd like to understand what their intent is for the meeting, to continue the item or move forward. Thanks.

Bradley D. Priest, AICP

Principal Planner

Town of Huntersville

Planning Department

704-766-2214

105 Gilead Road – 3rd Floor

Huntersville, NC 28070

www.huntersville.org



From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Sent: Monday, August 2, 2021 6:07 PM

To: Jack Simoneau <jsimoneau@huntersville.org>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

You are very welcome. FYI, Greenway Waste Solutions has not provide us with enough information to adequately assess the impacts of the piping at the Holbrook Road Landfill. We have assessed the stream they are planning to pipe and we have identified a few mitigation options, but there is still a lot we don't know about the piping itself that prevents us from making a fair assessment regarding potential future impacts. I am preparing something to send to Brad tomorrow that summarizes where we are to date.

From: Jack Simoneau <jsimoneau@huntersville.org>

Sent: Monday, August 2, 2021 6:00 PM

To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the information Rusty.

Jack Simoneau

On Aug 2, 2021, at 4:44 PM, Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov> wrote:

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jack,

In response to our phone call, the SWIM buffer ordinances for Mecklenburg County, Charlotte, Mint Hill, and Pineville allow for SWIM buffer disturbances with mitigation approved by Charlotte Mecklenburg Storm Water Services. They all use the 9 mitigation measures that you have in your draft ordinance. The SWIM buffer ordinances for Cornelius, Davidson, Huntersville, and Matthews require a variance before buffer impacts will be allowed. None of the jurisdictions in Mecklenburg County allow 401/404 mitigation to count for SWIM buffer mitigation. This is the way it has been since the ordinances were adopted over 20 years ago. 401/404 Permits are required by State and federal laws for impacts to water bodies, including wetlands, streams, lakes, and ponds. SWIM buffer mitigation is required for impacts to buffers around water bodies. In many cases, buffer impacts do not require 401 & 404 Permits. For example, a property owner may want to add a patio in the buffer. This does not require a 401-404 Permit because surface waters are not impacted, but buffer mitigation would be required. Also, 401/404 mitigation is supposed to occur in the same designated HUC or hydrologic unit where the impact occurred. In some cases mitigation is allowed outside the HUC, but at a higher rate. For buffer mitigation, it is to occur in the same jurisdiction. There are 2 HUCs for Huntersville, including Mountain Island Lake-Catawba River (#0305010114) that includes portions of Gaston and Lincoln Counties as well as Charlotte, and the Upper Rocky River (#0304010501) that includes parts of Davidson, Harrisburg and Cabarrus County. If Huntersville were to allow the use of 401/404 mitigation to satisfy a buffer impact, then the money could be spent in several other jurisdictions that would not benefit water quality in the Town. It also important to note that the State does not allow 401/404 mitigation to count as mitigation for impacts to State buffers as described in 15A NCAC 02B .0295. This is because the mitigation is covered under separate rules and is for different purposes. State buffer mitigation has several of the same components as the SWIM buffer mitigation.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org

<image002.png>

We are passionate about making our environment safe and healthy
by reducing flood losses and improving water quality for all.



**Response to Variance Request at 15416 Holbrooks Road in
Huntersville (Parcel No. 01910102)
North Mecklenburg Construction & Demolition Landfill
August 3, 2021**

Introduction:

The information below is provided to the Town of Huntersville for their consideration in the review of the variance request to impact approximately 212,500 square feet of SWIM Buffer at the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road. These impacts would be associated with piping an estimated 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion (see Appendix A). This information is provided by the Storm Water Services Division of Mecklenburg County's Land Use and Environmental Services Agency (LUESA).

Description of the Current Conditions of the Stream to be Piped:

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and stream habitat assessment were performed by staff with Storm Water Services within the tributary proposed for piping. The approximate location of the area evaluated is shown in Appendix A. Results indicate that the stream reach has very poor fish community abundance and diversity as well as a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR. The stream channel was found to be badly eroded and lack the necessary habitat conditions to support healthy fish and benthic communities as shown in Photos 1 and 2 below. The locations of these photos are shown in Appendix A. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community. Additional information is provided in Appendix B.



Photo 1: Cane Creek to be Piped



Photo 2: Cane Creek to be Piped

Potential Mitigation Options for the Loss of the Buffer:

If the variance is approved, the petitioner has indicated a preference to use the Mitigation Credit technique described in Article 8.25.11b(8) of Huntersville's Zoning Ordinance. Specifications for the use of this technique are provided on page 54 in Section 5.4.3 of the Charlotte-Mecklenburg Buffer Implementation Guidelines at the following link: [file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20\(13\).pdf](file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20(13).pdf).

This technique involves the purchase of Mitigation Credits on a 1:1 basis utilizing the square feet of the disturbed buffer area and the prevailing rate of \$10/square foot. With a disturbed area estimated at 212,500 square feet, the Mitigation Credit is calculated at \$2,125,000 that would be paid to the Town of Huntersville for use within their jurisdiction for improving water quality. Storm Water Services has identified two (2) potential options for use of this Mitigation Credit as described below.

Option 1: Install a stormwater control measure (SCM) such as a wet pond on Town property located at 100 Sherwood Drive to provide water quality and quantity treatment for approximately 10.4 acres of Town owned parcels located upstream, including Town Hall, the Senior Center, and Sherwood Park (PID Numbers: 01712241, 01712214, 01712213, 01712211, 01712210, 01712245, 01903115, 01903116, & 01903114). The SCM would also provide treatment for some road drainage and Cashion's store. It is estimated that this SCM will remove 1,000 lbs./acre/year of sediment and 5 and 2 lbs./acre/yr. of Total Nitrogen and Total Phosphorus, respectively. Figure 1 below illustrates with a blue dot the potential location of the SCM with the treated upstream drainage area indicated in yellow highlight.

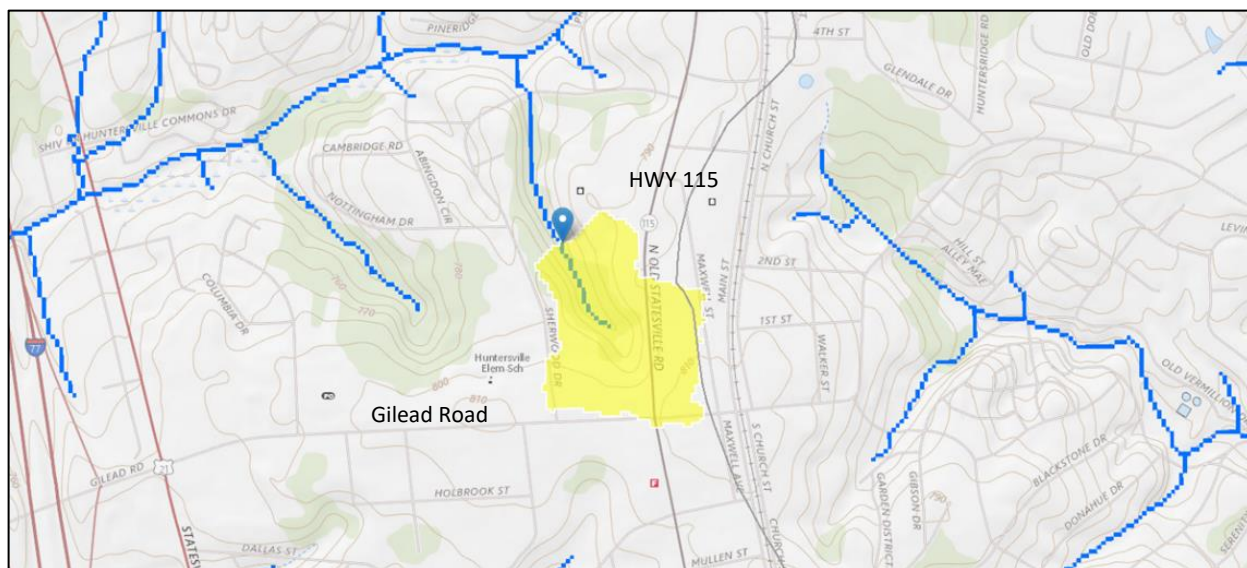


Figure 1: Potential Location of SCM Mitigation Measure

Option 2: Complete a stream restoration project in Cane Creek or the South Prong of Clarke Creek downstream of the landfill. The purpose of the project would be to restore habitat and improve channel stability to promote a healthy aquatic community, including benthics and fish. Storm Water Services uses a Stream Restoration Ranking System or SRRS to prioritize stream reaches for restoration based on a 300-point scale with lower SRRS Scores representing degraded stream conditions with a higher priority for restoration and a SRRS Score of 190 representing acceptable stream conditions. Preliminary SRRS Scores below 190, indicating a potential for restoration, have been calculated for the areas shown in Appendix A along the South Prong of Clarke Creek. In addition, field observations made on July 22, 2021 by Storm Water Services' staff revealed sufficiently degraded channel conditions that potentially warrant restoration in Cane Creek in proximity to the landfill. Photos 3 and 4 below illustrate these conditions at the locations shown in the map included as Appendix A. However, field evaluations and final SRRS Scores are needed to assess channel conditions and potential uplift (i.e., channel stability and habitat improvements) to fully ascertain the viability and benefits of a stream restoration project in either Cane Creek or the South Prong of Clarke Creek in proximity to the landfill.



Photo 3: Cane Creek Downstream of Landfill



Photo 4: Cane Creek Downstream of Landfill

Description of Negative Impacts from the Piping:

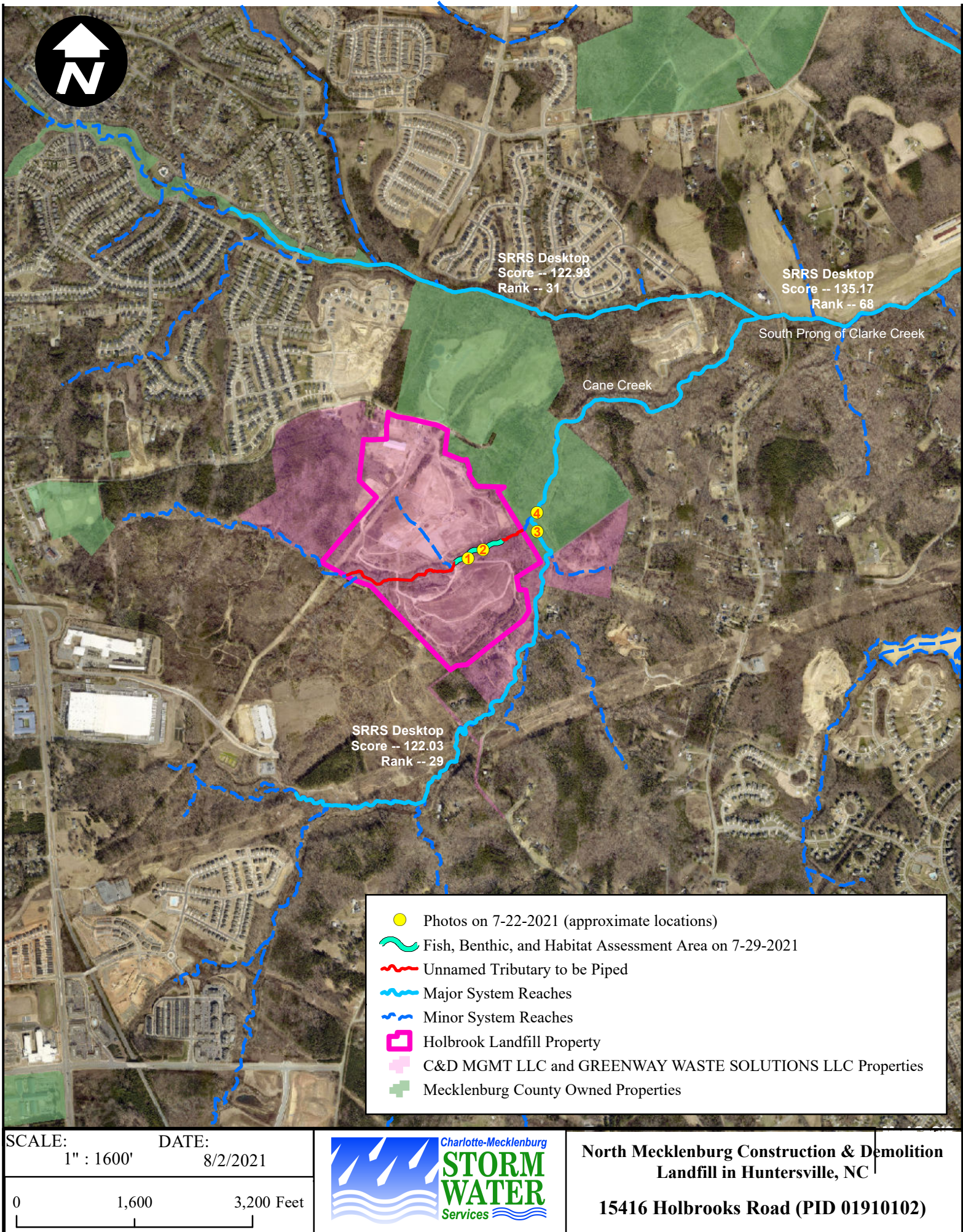
To date, Storm Water Services has not been provided with sufficient information to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. The following questions remain unanswered:

1. What engineering analysis has been performed to verify that the piping system will remain stable and functional during the life of the site and subsequent post closure period?
2. How is the system being engineered to prevent leachate from entering the pipe?
3. What is to prevent the gravel underlayment for the piping system from serving as a conduit for leachate to migrate off site?
4. What is the plan if the piping system fails?
5. Are there plans to monitor for negative downstream water quality impacts?
6. Is the system designed in such a way that leaks can be located and repaired?
7. The outlet of the piped section calls out 130 linear feet of stream to be preserved. However, no energy dissipation device is indicated at the tie-in. What will be constructed to prevent accelerated downstream bank erosion?
8. What are the impacts to flood levels downstream of the pipe? A Hydraulic and Hydrologic Analyses (H&HA) report is requested.
9. What occurs when the flow exceeds the design capacity of the pipe? Where will the water go? The H&HA report from #8 will help answer this question.
10. What measures will be implemented to prevent off site sedimentation during the piping and landfiling operation?

Recommendation to the Town of Huntersville:

The section of Cane Creek proposed for piping is significantly degraded and there are multiple mitigation opportunities in proximity that could result in overall improved water quality conditions. However, these potential improved conditions could easily be negated if the piping system malfunctions or fails resulting in negative downstream impacts associated with water quality and/or quantity issues. Storm Water Services has not been provided with sufficient information to accurately assess the potential for these negative impacts. Responses to the ten (10) questions listed in the previous section are required before this assessment can be completed.

Appendix A: North Mecklenburg Construction & Demolition Landfill Project Area Map



Appendix B

Fish Community Survey, Benthic Macroinvertebrate Bioassessment and Stream Habitat Assessment of the Cane Creek Tributary Flowing through the Holbrooks Landfill

Methodology

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and a stream habitat assessment were conducted by Mecklenburg County Storm Water Services within the tributary to Cane Creek that flows through the Holbrooks Landfill located at 15416 Holbrooks Road in Huntersville, NC. The fish community survey was conducted on a 200-meter stream reach within the project bounds using electroshocking methodologies in accordance with the Mecklenburg County Fish Community Survey Procedures. The benthic macroinvertebrate bioassessment consisted of collecting the benthic macroinvertebrates found within a 100-meter stream reach from all microhabitats present. The bioassessment procedures followed the Mecklenburg County Stream Bioassessment Procedures. The stream habitat assessment consisted of evaluating 10 stream habitat parameters following the Mecklenburg Stream Habitat Assessment (MHAP) Field Guide.

Fish Community Results

A total of 35 organisms, representing three (3) fish species were collected (see Table 1). The fish species collected were Creek Chub, Rosyside Dace, and Green Sunfish which are considered tolerant. Tolerant fish are able to thrive in poor stream conditions. The low numbers of total fish and species type collected during this survey indicates a stream with a very poor fish community abundance and diversity.

Benthic Macroinvertebrate Results

A total of 48 individual organisms were collected. Twenty-one (21) of those organisms were identified to the lowest possible taxa identification level (Genus and Species). The remaining 27 organisms were identified as Chironomidae (Family taxa level). Of the 10 taxa found, only 2 belonged to the sensitive aquatic insect groups of Mayflies (Ephemeroptera), Stoneflies (Plecoptera) and Caddisflies (Trichoptera) collectively referred to as EPT taxa. These results are typical of a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR (see Table 2).

Stream Habitat Assessment (MHAP) Results

The assessed stream reach received a MHAP score of 119.7 out of 200 possible points which is considered *Partially Supporting* (see Table 3). Parameters that received low individual scores include Stream Bed Substrate (6.7 out of 20), Sediment Deposition (7.6 out of 20), Frequency of Riffles (7 out of 20) and Vegetative Buffer Width (7.1 out of 20). The stream bottom was filled with sand resulting in very few riffles (faster moving water) which are the best habitat for benthic macroinvertebrates and very few pools which are the best habitat for fish.

Conclusions

The poor habitat quality of the Cane Creek Tributary flowing through the Holbrooks Landfill property has resulted in the stream being able to support only a small number of fish and benthic macroinvertebrate organisms. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community.

Table 1: Fish Community Survey Data

Fish Species	Count	Size Range (mm)	Multiple Age Classes?	Tolerant / Intolerant?
Creek Chub	28	62 to 110	Yes	Tolerant
Rosyside Dace	5	65 to 79	No	Intermediate
Green Sunfish	2	84 to 88	No	Tolerant

Table 2: Benthic Macroinvertebrate Assessment Data

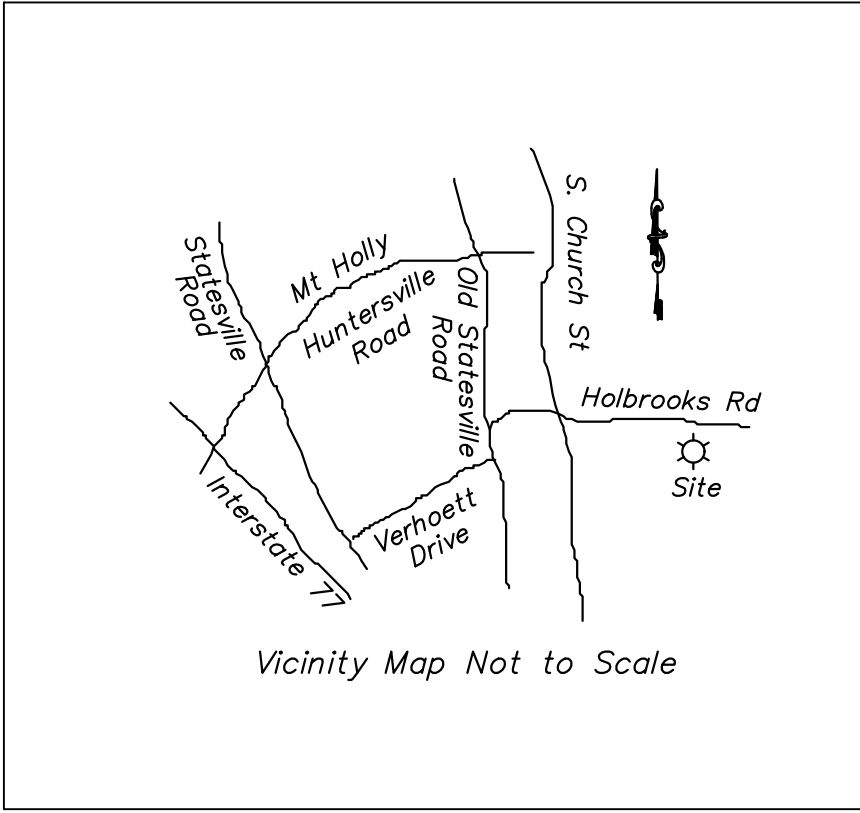
ORDER	FAMILY	GENUS/SPECIES	TOLERANCE	NO.
EPHEMEROPTERA	BAETIDAE	LABIOBATIS PROPINQUUS	5.8	1
PLECOPTERA	PERLIDAE	PERLESTA SPP.	2.9	1
COLEOPTERA	DRYOPIDAE	HElichus SPP.	4.1	1
COLEOPTERA	ELMIDAE	STENELMIS SPP.	5.6	3
DIPTERA	CHIRONOMIDAE	Tanypodinae	NA	14
DIPTERA	CHIRONOMIDAE	Non-Tanypodinae	NA	13
DIPTERA	PTYCHOPTERIDAE	BITTACOMORPHA CLAVIPES	5.0	1
DIPTERA	SIMULIIDAE	SIMULIUM SPP.	4.9	4
DIPTERA	STRATIOMYIDAE	STRATIOMYS SPP.	8.1	1
ODONATA	CALOPTERYGIDAE	CALOPTERYX SPP.	7.5	4
ODONATA	GOMPHIDAE	GOMPHUS SPP.	5.9	3
ODONATA	GOMPHIDAE	PROGOMPHUS OBSCURUS	8.2	2

Table 3: Stream Habitat (MHAP) Data

Instream Cover	Epifaunal Substrate	Stream Bed Substrate	Channel Alteration	Sediment Deposition	Frequency of Riffles	Channel Flow Status	Bank Vegetation	Bank Stability	Buffer
16.1	14.4	6.7	19	7.6	7	12	15.2	14.6	7.1

Exhibit #1 - Approved Conditional District Rezoning 16-06

CONDITIONAL DISTRICT REZONING FOR GREENWAY WASTE SOLUTIONS OF NORTH MECK. LLC.



LIST OF DRAWINGS:

CD001	COVER SHEET
CD100	CONDITIONAL DISTRICT SITE PLAN
CD101	CONDITIONAL DISTRICT SITE PLAN

**EPM REFERENCE NUMBER:
#365454 CONDITIONAL REZONING & CONCEPT PLAN**

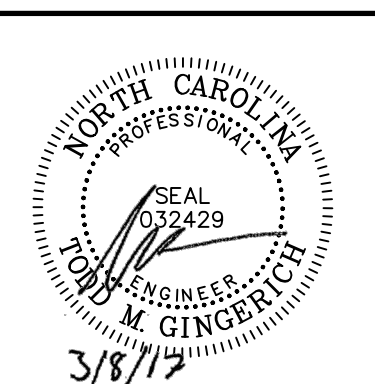


Note: The Huntersville Board of Commissioners approved R16-06 on November 7, 2016.

CONCEPT NOTE: Approval of this Concept Plan does not imply or guarantee approval of the Final Construction Plans. Final Construction Plans will be reviewed for compliance with all Town, County and State regulations in effect at time of submittal.

APPROVAL OF THIS CONCEPT PLAN DOES NOT IMPLY OR
GUARANTEE APPROVAL OF THE FINAL CONSTRUCTION
PLAN. FINAL CONSTRUCTION PLAN WILL BE REVIEWED
FOR COMPLIANCE PER ALL TOWN, COUNTY, AND STATE
REGULATIONS IN EFFECT AT TIME OF SUBMITTAL.

NORTH CAROLINA
BOARD OF EXAMINERS
FOR ENGINEERS AND
SURVEYORS LICENSE
NO. C-3035



CONDITIONAL DISTRICT COVER SHEET

CD001

1 OF 3

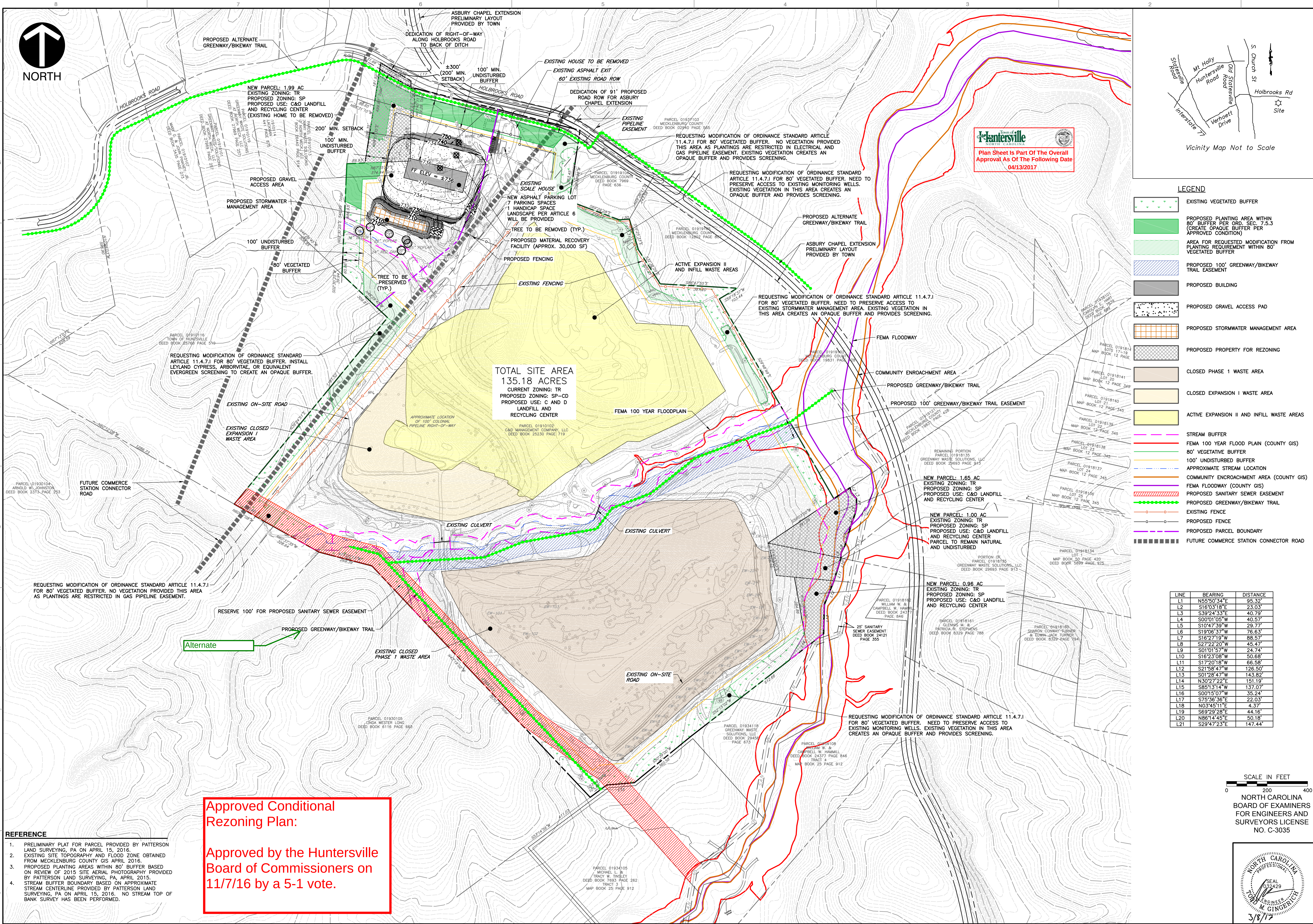
**GREENWAY WASTE SOLUTIONS
AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA**



Civil & Environmental Consultants, Inc.
 1900 Center Park Drive - Suite A - Charlotte, NC 28217
 Ph: 980.237.0373 • Fax: 980.237.0372
www.cecinc.com

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Approved Conditional Rezoning Plan:

Approved by the Huntersville Board of Commissioners on 11/7/16 by a 5-1 vote.

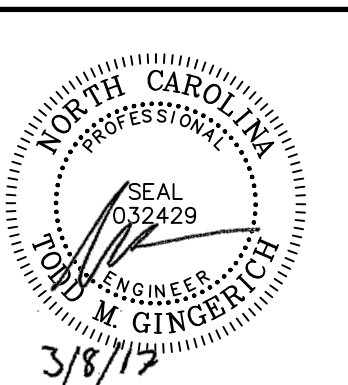
- REFERENCE**
1. PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
 2. EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY GIS APRIL 2016.
 3. PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2016.
 4. STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM TOP OF BANK SURVEY HAS BEEN PERFORMED.

LINE	BEARING	DISTANCE
L1	N55°50'34"E	95.32'
L2	S16°03'18"E	23.03'
L3	S39°24'33"E	40.79'
L4	S00°01'05"W	40.57'
L5	S10°47'39"W	29.77'
L6	S19°06'37"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'20"W	45.47'
L9	S01°01'57"W	24.74'
L10	S16°23'08"W	50.68'
L11	S17°20'18"W	66.58'
L12	S21°58'47"W	126.50'
L13	S01°28'47"W	143.82'
L14	N30°27'22"E	151.19'
L15	S85°31'14"W	137.07'
L16	S00°15'07"W	35.24'
L17	S75°36'36"E	22.03'
L18	N03°45'11"E	4.37'
L19	S69°29'28"E	44.16'
L20	N86°14'45"E	50.18'
L21	S29°47'23"E	147.44'

SCALE IN FEET

0 200 400

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035



REVISION RECORD

NO	DATE	DESCRIPTION
1	03/20/15	ADDED FLOODING INFORMATION
2	03/20/15	REVISED PER TOWN OF HUNTERVILLE
3	03/20/15	REVISED PER TOWN OF HUNTERVILLE
4	03/20/15	REVISED PER TOWN OF HUNTERVILLE
5	03/20/15	REVISED PER TOWN OF HUNTERVILLE
6	03/20/15	REVISED PER TOWN OF HUNTERVILLE
7	03/20/15	REVISED PER TOWN OF HUNTERVILLE
8	03/20/15	REVISED PER TOWN OF HUNTERVILLE
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99	03/20/15	REVISED PER TOWN OF HUNTERVILLE
100	03/20/15	REVISED PER TOWN OF HUNTERVILLE

Civil & Environmental Consultants, Inc.

1900 Center Park Drive - Suite A - Charlotte, NC 28217

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www.civilce.com

CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC

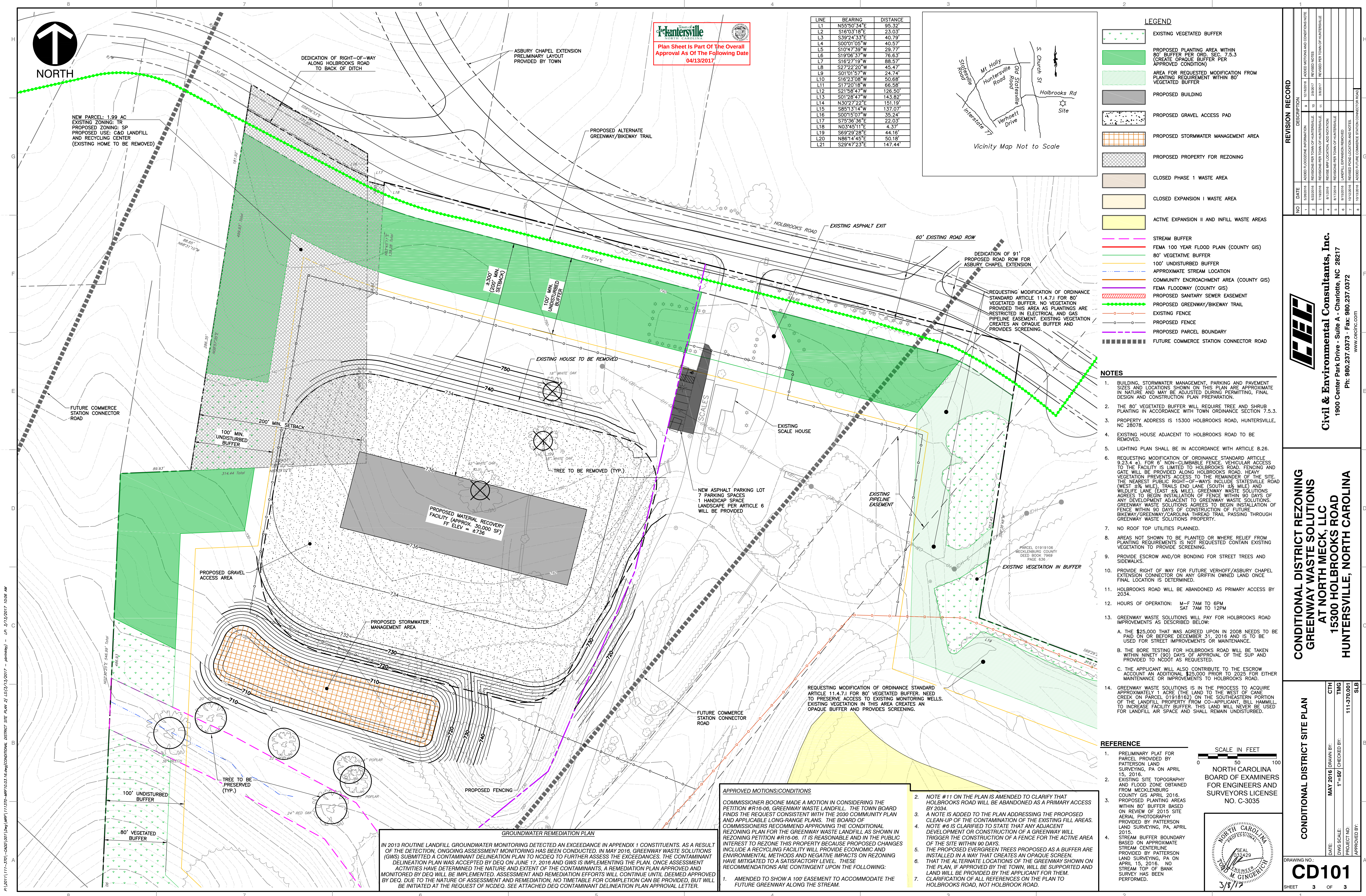
15300 HOLBROOKS ROAD HUNTERSVILLE, NORTH CAROLINA

CONDITIONAL DISTRICT SITE PLAN

DATE:	1 MAY 2016	DRAWN BY:	CTH
DWG SCALE: <td>1"=200'</td> <td>CHECKED BY:<td>TMG</td></td>	1"=200'	CHECKED BY: <td>TMG</td>	TMG
PROJECT NO: <td>111-370.001</td> <td></td> <td></td>	111-370.001		
APPROVED BY: <td></td> <td></td> <td>SJB</td>			SJB

DRAWING NO: **CD100**

SHEET 2 OF 3



P:\2017\1171-3201-CAD\001\DWG\11713201-WR10.01.16.dwg/CONDITIONAL DISTRICT SITE PLAN 2/15/2017 10:06 AM

GROUNDWATER REMEDIATION PLAN

IN 2013 ROUTINE LANDFILL GROUNDWATER MONITORING DETECTED AN EXCEEDANCE IN APPENDIX 1 CONSTITUENTS. AS A RESULT OF THE DETECTION, ONGOING ASSESSMENT MONITORING HAS BEEN CONDUCTED. IN MAY 2016, GREENWAY WASTE SOLUTIONS (GWS) SUBMITTED A CONTAMINANT DELINEATION PLAN TO NCDOE TO FURTHER ASSESS THE EXCEEDANCES. THE CONTAMINANT DELINEATION PLAN WAS ACCEPTED BY DEQ ON JUNE 17, 2016 AND GWS IS IMPLEMENTING THE PLAN. ONCE ASSESSMENT ACTIVITIES HAVE DETERMINED THE NATURE AND EXTENT OF THE CONTAMINANTS, A REMEDIATION PLAN APPROVED AND MONITORED BY DEQ WILL BE IMPLEMENTED. ASSESSMENT AND REMEDIATION EFFORTS WILL CONTINUE UNTIL DEEMED APPROVED BY DEQ. DUE TO THE NATURE OF ASSESSMENT AND REMEDIATION, NO TIMETABLE FOR COMPLETION CAN BE PROVIDED, BUT WILL BE INITIATED AT THE REQUEST OF NCDOE. SEE ATTACHED DEQ CONTAMINANT DELINEATION PLAN APPROVAL LETTER.

APPROVED MOTIONS/CONDITIONS

COMMISSIONER BOONE MADE A MOTION IN CONSIDERING THE PETITION #16-06, GREENWAY WASTE LANDFILL. THE TOWN BOARD FINDS THE REQUEST CONSISTENT WITH THE 2030 COMMUNITY PLAN AND APPLICABLE LONG-RANGE PLANS. THE BOARD OF COMMISSIONERS RECOMMEND APPROVING THE CONDITIONAL REZONING PLAN FOR THE GREENWAY WASTE LANDFILL AS SHOWN IN REZONING PETITION #16-06. IT IS REASONABLE AND IN THE PUBLIC INTEREST TO REZONE THIS PROPERTY BECAUSE PROPOSED CHANGES INCLUDE A RECYCLING FACILITY WILL PROVIDE ECONOMIC AND ENVIRONMENTAL METHODS AND NEGATIVE IMPACTS ON REZONING HAVE MITIGATED TO A SATISFACTORY LEVEL. THESE RECOMMENDATIONS ARE CONTINGENT UPON THE FOLLOWING:

1. AMENDED TO SHOW A 100' EASEMENT TO ACCOMMODATE THE FUTURE GREENWAY ALONG THE STREAM.

2. NOTE #11 ON THE PLAN IS AMENDED TO CLARIFY THAT HOLBROOKS ROAD WILL BE ABANDONED AS A PRIMARY ACCESS BY 2034.
3. A NOTE IS ADDED TO THE PLAN ADDRESSING THE PROPOSED CLEAN-UP OF THE CONTAMINATION OF THE EXISTING FILL AREAS.
4. NOTE #6 IS CLARIFIED TO STATE THAT ANY ADJACENT DEVELOPMENT OR CONSTRUCTION OF A GREENWAY WILL TRIGGER THE CONSTRUCTION OF A FENCE FOR THE ACTIVE AREA OF THE SITE WITHIN 90 DAYS.
5. THE PROPOSED EVERGREEN TREES PROPOSED AS A BUFFER ARE INSTALLED IN A WAY THAT CREATES AN OPAQUE SCREEN.
6. THAT THE ALTERNATE LOCATIONS OF THE GREENWAY SHOWN ON THE PLAN, IF APPROVED BY THE TOWN, WILL BE SUPPORTED AND LAND WILL BE PROVIDED BY THE APPLICANT FOR THEM.
7. CLARIFICATION OF ALL REFERENCES ON THE PLAN TO HOLBROOKS ROAD, NOT HOLBROOK ROAD.

REFERENCE

1. PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
2. EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY 05 APRIL 2016.
3. PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2016.
4. STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM OF BANK SURVEY HAS BEEN PERFORMED.

SCALE IN FEET

0 50 100

NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035

3/8/17

NOTES

1. BUILDING, STORMWATER MANAGEMENT, PARKING AND PAVEMENT SIZES AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE IN NATURE AND MAY BE ADJUSTED DURING PERMITTING, FINAL DESIGN AND CONSTRUCTION PLAN PREPARATION.
2. THE 80' VEGETATED BUFFER WILL REQUIRE TREE AND SHRUB PLANTING IN ACCORDANCE WITH TOWN ORDINANCE SECTION 7.5.3.
3. PROPERTY ADDRESS IS 15300 HOLBROOKS ROAD, HUNTERSVILLE, NC 28078.
4. EXISTING HOUSE ADJACENT TO HOLBROOKS ROAD TO BE REMOVED.
5. LIGHTING PLAN SHALL BE IN ACCORDANCE WITH ARTICLE 8.26.
6. REQUESTING MODIFICATION OF ORDINANCE STANDARD ARTICLE 9.23.4 (a) FOR 6' NON-CLIMBABLE FENCE. VEHICULAR ACCESS TO THE FACILITY IS LIMITED TO HOLBROOKS ROAD. FENCING AND GROWS WILL BE PROVIDED ALONG HOLBROOKS ROAD. HEAVY VEGETATION PREVENTS ACCESS TO THE REMAINDER OF THE SITE. THE NEAREST PUBLIC RIGHT-OF-WAYS INCLUDE STATESVILLE ROAD (WEST 1/4 MILE), TRAILS END LANE (SOUTH 1/4 MILE) AND WILDLIFE LANE (EAST 1/4 MILE). GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF ANY DEVELOPMENT ADJACENT TO GREENWAY WASTE SOLUTIONS. GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF CONSTRUCTION OF FUTURE BIKEWAY/GREENWAY/CAROLINA THREAD TRAIL PASSING THROUGH GREENWAY WASTE SOLUTIONS PROPERTY.
7. NO ROOF TOP UTILITIES PLANNED.
8. AREAS NOT SHOWN TO BE PLANTED OR WHERE RELIEF FROM PLANTING REQUIREMENTS IS NOT REQUESTED CONTAIN EXISTING VEGETATION TO PROVIDE SCREENING.
9. PROVIDE ESCROW AND/OR BONDING FOR STREET TREES AND SIDEWALKS.
10. PROVIDE RIGHT OF WAY FOR FUTURE VERHOEFF/ASBURY CHAPEL EXTENSION CONNECTOR ON ANY GRIFFIN OWNED LAND ONCE FINAL LOCATION IS DETERMINED.
11. HOLBROOKS ROAD WILL BE ABANDONED AS PRIMARY ACCESS BY 2034.
12. HOURS OF OPERATION: M-F 7AM TO 6PM SAT 7AM TO 12PM
13. GREENWAY WASTE SOLUTIONS WILL PAY FOR HOLBROOKS ROAD IMPROVEMENTS AS DESCRIBED BELOW:
 - A. THE \$25,000 THAT WAS AGREED UPON IN 2008 NEEDS TO BE PAID ON OR BEFORE DECEMBER 31, 2016 AND IS TO BE USED FOR STREET IMPROVEMENTS OR MAINTENANCE.
 - B. THE BORE TESTING FOR HOLBROOKS ROAD WILL BE TAKEN WITHIN NINETY (90) DAYS OF APPROVAL OF THE SUP AND PROVIDED TO NCDOE AS REQUESTED.
 - C. THE APPLICANT WILL ALSO CONTRIBUTE TO THE ESCROW ACCOUNT AN ADDITIONAL \$25,000 PRIOR TO 2025 FOR EITHER MAINTENANCE OR IMPROVEMENTS TO HOLBROOKS ROAD.
14. GREENWAY WASTE SOLUTIONS IS IN THE PROCESS TO ACQUIRE APPROXIMATELY 1 ACRE (THE LAND TO THE WEST OF CANE CREEK ON PARCEL 01918162) ON THE SOUTHEASTERN PORTION OF THE LANDFILL PROPERTY FROM CO-APPLICANT, BILL HAMMILL, TO INCREASE FACILITY BUFFER. THIS LAND WILL NEVER BE USED FOR LANDFILL AIR SPACE AND SHALL REMAIN UNDISTURBED.

CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC

15300 HOLBROOKS ROAD HUNTERSVILLE, NORTH CAROLINA

REVISION RECORD

NO	DATE	DESCRIPTION
1	03/08/16	ADDED FLOODZONE INFORMATION
2	03/08/16	REVISED NOTES
3	03/08/16	REVISED NOTES
4	03/08/16	REVISED NOTES
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100	03/08/16	REVISED NOTES

CONDITIONAL DISTRICT SITE PLAN

CD101

3 OF 3

Civil & Environmental Consultants, Inc.

1900 Center Park Drive - Suite A - Charlotte, NC 28217

Ph: 980.237.0373 • Fax: 980.237.0372

www.cecinc.com

Special Use Permit Granted

On Monday November 7, 2016 the Huntersville Town Board held a public meeting to consider the below noted Special Use Permit:

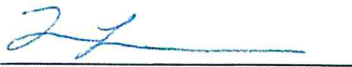
SUP16-01, a request by Greenway Waste Solutions, LLC and William Hammill for a Special Use Permit allowing the 135 acre landfill located at 15300 Holbrook Road to expand its boundaries and add another fill area in the existing site (parcels 01910102, 01910109, and portions of 01918135, 01918162, and 01934118).

Having heard all the evidence and argument presented at the meeting, the Board finds the application is complete, that the application complies with all of the applicable requirements of the Huntersville Zoning Ordinance for the operation proposed, and therefore the application to make use of the above-described property for the purpose indicated is hereby approved, subject to all applicable provisions of the Zoning Ordinance, the attached Findings of Fact, and the conditions added by the Town Board at the time of approval.

Also, the applicant shall complete the development strictly in accordance with the site plan, building elevations, and letter from the applicant attached which were submitted to and approved by this Board, a copy of which is filed in the Town of Huntersville Planning Department.

IN WITNESS WHEREOF, the Town of Huntersville has cause this permit to be issued in its name, and the undersigned, being all of the property owners of the property above described, do hereby accept this Special Use Permit, together with all its conditions, as binding on them and their successors in interest.

Michael L. Griffin, owner(s) of the above identified property, do hereby acknowledge receipt of this Special Use Permit. The undersigned owners do further acknowledge that no work may be done pursuant to the permit except in accordance with all of its conditions and requirements and that the restriction shall be binding on them and their successors in interest.



Owner

Planning

Post Office Box 664 • 101 Huntersville-Concord Road • Huntersville, NC 28070
phone 704.875.7000 • fax 704.875.6546 • www.huntersville.org

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Teresa D. Nantz, a Notary Public of the County and State aforesaid, certify that Michael L. Griffin, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal or stamp, this 34th day of March 2017.

(SEAL)

Notary Public

Teresa D. Nantz

My commission expires: 7/4/2019



STAFF FINDINGS OF FACT APPROVED BY THE TOWN BOARD

Article 9.23

Off Site LCID and C&D landfills are permitted in the SP District-subject to a Special Use Permit, according to the procedures of Section 11.4.10. The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

STAFF FINDINGS: *The Greenway Waste Solutions Landfill (North Mecklenburg Landfill) is an existing Construction and Demolition (C&D) landfill with an unexpired special use permit that would be allowed to continue to operate in its current zoning designation per Article 9.23.10. The proposed application is to amend the existing special use permit to add adjacent properties to the permit boundaries, add an additional fill area on the site over the stream that bisects the site, and include a recycling facility near Holbrook Road. The applicants are seeking a rezoning of the entire 135 acre property to Special Purpose (SP) concurrent with the SUP application in conformance to Article 9.23.10.*

- *UPDATE 9/19/16: The updated site plan has removed the additional fill area over the stream from the application. The special use permit now is solely for the boundary expansion as shown on the plan and for the addition of the recycling facility near Holbrook Road.*

1. That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills.

STAFF FINDINGS: *The NCDENR (North Carolina Division of Environment and Natural Resources) is now known as the North Carolina Department of Environmental Quality (NCDEQ). The NCDEQ permit has not been forwarded by the applicant showing evidence of permitting. In addition, after discussion with NCDEQ Division of Waste Management, the landfill in question has been found to exceed state regulatory limits of various groundwater and surface water contaminants and methane gas since 2013. Further, a Notice of Violation was issued on September 16, 2014 to the landfill due to an encroachment upon their required state mandated buffer to the east of the property. As of now, the landfill remains in violation of the required buffer.*

- *UPDATE 9/19/16: The current NCDEQ permit has been forwarded and is attached in the Board's agenda packet. The current permit is valid through 10/8/17. The updated letter attached to the SUP application states that the applicants will operate in compliance with NCDEQ rules. Staff recommends that a more specific statement from the applicant be added to the SUP plan or attached letter that addresses the contamination of the site and the buffer violation. It is staff's understanding that the applicants are beginning discussion with NCDEQ on the remediation process to clean up the contamination. They are also in the process of purchasing property to the southeast of the site that will mitigate their buffer violation.*
2. That the proposed use will not endanger the public health and safety, nor substantially reduce the value of the nearby property; and

STAFF FINDINGS: *Per discussion with NCDEQ Division of Waste Management, it appears the constituents leaching from the landfill have contaminated multiple drinking water wells adjacent to the subject property. Two parcels were purchased (including one residence) by the landfill and two homes were added on to municipal water service due to the groundwater contamination. According to NCDEQ, the applicant has been cooperative with the state in installing both shallow and deep*

groundwater monitoring wells and methane gas monitoring wells, in an effort to analyze and find the nature and extent of both the groundwater contamination and the methane gas exceedances. The applicant has also been cooperative in addressing the immediate issue of the contamination of the adjacent drinking water wells as discussed above. The monitoring and analyzing of both the groundwater and methane gas contamination is ongoing. At this time, there are still many unknowns in regard to the nature and extent of the existing groundwater and surface water contamination and potential methane gas migration. Once the nature and extent is more fully understood, NCDEQ will require mitigation plans for the applicant to begin contamination cleanup of both the active fill area, and the fill area that is closed out and inactive (which is under a different set of state rules). In addition, contamination was also found in the groundwater monitoring wells near the stream, and recently in the surface water sampling of the stream that is being proposed to be piped and covered with the expansion. Please find the groundwater monitoring well locations of the site in a map forwarded by NCDEQ.

- UPDATE 9/16/19: The proposed recycling facility is located near Holbrook Road, separated from the area that is contaminated and a significant distance from where active monitoring wells are located. Please see the NCDEQ Monitoring well map attached in the agenda packet. There are no new fill areas proposed with the updated application. Therefore since disturbance of the contaminated area is no longer proposed, and the new recycling facility is located a significant distance from the contamination, staff finds the contamination issue of the existing facility and the addition of the recycling facility separate issues that do not conflict. However for record in regard to public safety and health concerns, it is recommended that the applicant add a note in the plan stating the planned schedule of NCDEQ remediation of the existing site and commit to the cleanup in a timely manner.
 - UPDATE 10/17/16: The updated condition letter submitted by the applicant states: "Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented"
3. That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

STAFF FINDINGS: The subject property is not located within the boundaries of any of the Small Area Plans adopted by the Town of Huntersville. However, the East Huntersville plan does mention and recommend a connector road in between the proposed Verhoeff Drive extension to the south and the future Asbury Chapel extension to the north. The north/south connector road could traverse the subject property. In the 2009 landfill SUP, the applicants reserved the right of way in the area of the gas pipeline and buffer at the southwest edge of the property through their main entrance. Please find the 2009 SUP for your reference in your agenda packet. For this application no commitment has been made to accommodate the future connection.

- UPDATE 9/19/16: The letter attached to the application states that "the site plan makes an accommodation for the connector road on any Griffin owned land once the final locate is determined". The note on the plan however is not clear and needs to be reworded showing the intent to provide right of way for the thoroughfare connector road through the subject property. UPDATE 10/17/16: The note has been amended on the conditional letter stating that the applicant will accommodate for the connector road on any property owned by the applicant.

4. That the comprehensive site plan addresses each of the environmental and development standards below:

- (a) A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare-where available. Landfills 10 acres or less must directly connect to a major or minor thoroughfare or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

STAFF FINDING: *The existing landfill does not have access to a thoroughfare or a street that is built to commercial street standards. Access is from Holbrooks Road, which is a secondary residential street that traverses a residential neighborhood. The ordinance states that the Town Board may issue a SUP for a landfill that does not front on a thoroughfare or commercial street if it finds that it “would not likely cause any injurious effect on the property adjacent to the access”.*

When the last Special Use Permit (SUP) application was submitted in 2009, the NCDOT district engineer commented in an email to the applicant that Holbrooks Road “does not possess the pavement structure to accommodate the truck traffic it has experienced and will be subject to with the continued use your company is planning”. The 2009 SUP was eventually approved with an added stipulation that the condition of Holbrooks Road be reviewed in 5 years. Another condition was that the applicant contributes \$25,000 in the next 10 years toward the maintenance of Holbrook Road. In December of 2014 public works and engineering staff inspected Holbrook Road and found that it was in good condition as NCDOT had just finished repaving the street in 2013 (added 4 inches of asphalt). As of this date, the applicant has not forwarded the \$25,000 to NCDOT for the street maintenance.

After contacting NCDOT and asking for their input on the current state of Holbrook Road in relation to the proposed expansion and indefinite lifespan extension of the landfill, NCDOT’s concern about the durability of the road remained. They requested that the applicant submit core samples of the road to evaluate its substructure. As of the date of this report staff is not aware of any recent discussions the applicant has had with NCDOT on the durability of Holbrook Road in regard to this application. Please find the emails from NCDOT attached in your agenda package.

- **UPDATE 9/19/16:** *The newest plan submitted has no updated notes about the maintenance and structure of Holbrook Road in response to NCDOT comments. The letter submitted by the applicant with the application states that they intend to “connect to the future Verhoff/Asbury Chapel Extension and will reserve a right of way for the future connection to a potential industrial street to the south through the Commerce Station Industrial Park by 2034”. Per past discussions with the applicant it is thought that this note is intended to cap or limit their usage of Holbrook Road to no longer than the year 2034, as well as providing a connection from their site to one of the future thoroughfares by that time. Staff recommends that if that is the case, the note be clarified to clearly state that on the special use permit plan. It is still also unclear if the \$25,000 committed to at the last SUP approval would carry over as a condition for this permit.*

- *UPDATE 10/17/16: Note #11 on the latest Special Use Permit plan submitted states "Greenway Waste Solutions shall have alternative access to replace Holbrooks Road by 2035". Staff recommends the note be clarified to read: "Greenway Waste Solutions will cease using Holbrook Road as its primary access and will have functional primary access onto a commercial street or thoroughfare by 2034". 2034 is the year that based on prior approvals, permission has already been granted for the use of Holbrook Road.*
- *Note #13 on the updated Special Use Permit plan includes a series of notes in regard to the maintenance and improvement of Holbrook Road. They include:*
 - *Conducting the boring tests to determine the current pavement structure of Holbrook Road, per NCDOT's request.*
 - *Overlaying Holbrook Road in front of the facility as requested by NCDOT.*
 - *Carrying over the previously offered \$25,000 contribution for improvements to Holbrook Road as part of this application.*
 - *Reassessing the condition of Holbrook Road with Town Staff and NCDOT in 2025, about the half way point between now and 2034 when they've agreed to stop using Holbrook Road.*
 - *The applicant would then contribute additional funds at that time if the Town and NCDOT deem it necessary.*

(b) That the proposed or existing use will be in compliance with the rules and regulations as established by Traffic Impact Analysis (TIA) Article 14.

STAFF FINDING: *Engineering and Public Works has determined that based on the expansion proposed, the new amount of traffic that will be generated will not meet the threshold that would require the submission of Traffic Impact Analysis (TIA). Please find the TIA determination from engineering in your agenda packet.*

- (c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modifications made by the state unless the state standards become more restrictive.
- 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and /or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right of way to fill area (non-state requirement).

STAFF FINDING: *The submitted letter from Greenway Waste Solutions states that they conform to all the buffers required in this section. However, as shown on aerial photography and from the*

submitted special use permit plan, multiple existing driveways are located within the 100 foot undisturbed buffer. In addition, the applicants are seeking a variance from the Board of Adjustment for this section of the ordinance in order to encroach/fill the 50 foot delineated stream buffer and to fill in designated wetlands and FEMA flood areas. No new encroachments are shown on the plan other than the ones requested by way of the Board of Adjustment. In order for the applicant to try to address some concerns by staff, the Board of Adjustment has continued the variance hearing per the applicant's request. The hearing is scheduled to continue on September 13, 2016.

- *UPDATE 9/19/16: On September 13, the applicants withdrew their variance applications. The proposed plan no longer proposes to fill the stream and encroach into the required buffers. After review, there are not any newly proposed encroachments on the updated special use permit plan.*

- (d) Driveway access to the facility must be paved for a distance of at least 100 feet from the public street.

STAFF FINDING: *According to aerial photography and as inspected in a staff site visit, the entrance driveway to the facility is paved to a distance greater than 100 feet. However the separate exit drive that connects to the main street driveway where trucks leave the site is not paved for distance of 100 feet. The special use permit plan submitted by the applicant shows the exit drive proposed to be paved for a distance of 100 feet per this section.*

- (e) Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6 feet high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

STAFF FINDING: *The letter from the applicant states that the site is "closeable and secured from vehicular and pedestrian access" but does not provide how that is done. The letter also mentions that a variance will be submitted for the fence requirement. No variance application has been submitted for this section of the ordinance. The Special Use Permit site plan includes a note stating that "heavy vegetation" prevents access to the site. The submitted information does not provide conformance to the fence and security requirement of this section.*

- *UPDATE 9/19/16: The new rezoning plan (separate application) includes a modification request to the Town Board from the fencing section of the ordinance. It states that the new recycling facility near Holbrook Road would be fenced and shows an existing fence along the northern sections of the landfill. However it implies that the remainder of the site, the southern portion, would not be fenced. A note on the plan states that "heavy vegetation prevents access to the remainder of the site". Staff cannot support this modification request at this time as it is unclear whether or not heavy vegetation provides a secure facility as intended in the code.*

- UPDATE 10/17/16: The updated Special Use Permit plan modifies the above note (note #6), which commits the applicant to enclose the rest of the active facility with a fence within 90 days of either development happening adjacent to the property, or the greenway begins construction through the applicant's property.

- (f) All driveways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100 feet from the public street so that no traffic waiting to enter the site will be backed up on any public right of way.

STAFF FINDING: The letter from the applicant states that "The driveway that serves the site is wide enough to accommodate two-way traffic for 200 feet from the public street. There is ample room such that traffic should not enter the public right of way". As shown on aerial photography and inspected on a site visit, there is a single driveway entering the facility that is not wide enough to accommodate two way traffic through the scale house and into the facility. This driveway is mainly about 11 feet wide. However, this entrance driveway leading up to the scale house is over 100 feet long in conformance to this section. There is a separate and additional one-way exit drive that directs trucks back out to the main driveway. Therefore with both of these driveways combined two-way traffic is appropriately accommodated for in and out of the facility.

5. That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

STAFF FINDING: In the letter attached from the applicant, it is stated that they "have taken pride in keeping the roadways clean". However no commitment has been made to weekly clean the road as required in this section. On several site inspections to the site the majority of Holbrook Road seems to be clean and debris free. However the area of street immediately in front of the facility's driveway is often covered with dirt from trucks exiting the facility.

- UPDATE 9/19/16: In the updated letter from the applicant, they've stated that they "plan to continue to exceed section 6.5 of the franchise agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles". This statement however does not make it clear that the cleaning of Holbrook Road would take place on a weekly basis. UPDATE 10/17/16: The applicants have updated the letter to commit to "routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed."

6. That use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

STAFF FINDING: *The Greenway Waste Solutions landfill is adjacent to a residential zoning district therefore the restricted hours of operation will apply. The letter from the applicant has stated that the use will be limited from 7:00 am to 6:00 pm.*

7. That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

STAFF FINDING: *The letter from the applicant states that an updated timetable has been submitted with the application. However staff has not located it in the submittal.*

- **UPDATE 9/19/16:** *The updated letter from the applicant states that based on current waste acceptance rates and anticipated recycling rates, they project the life of the landfill to be over 20 years.*

8. That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

STAFF FINDING: *No updated reclamation plan (or closure plan) has been submitted by the applicant for this application.*

- **UPDATE 9/19/16:** *There is no reclamation plan/closure plan submitted with the updated submitted as required. The letter submitted with the application though includes a statement regarding NCDEQ monitoring the site post closure. **UPDATE 10/17/16:** The closure plan has been submitted.*

9. An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

- (a) The landfill has been continuously operating since 1991 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;
- (b) The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;
- (c) The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and
- (d) In no event shall the landfill operate under a LCID landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately

commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plans shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.

STAFF FINDINGS: *The Greenway Waste Solution Landfill is a Construction and Demolition Landfill (C&D) and is not subject to this section of the ordinance. This section of the ordinance applies to Land Clearing and Inert Debris Landfills (LCID).*

10. Any existing C&D landfill shall be permitted to continue operating in the zone in which it is located provided that landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

STAFF FINDINGS: *The current special use permit for the Greenway Waste Solutions landfill is current and unexpired. However the applicants do wish to expand the boundaries of the landfill as shown in the attached Special Use Permit site plan. Therefore the rezoning application submitted for these properties must first be approved designating them Special Purpose (SP) prior to this special use permit being approved. The rezoning of the property was approved on 11/7/17 immediately prior to the special use permit approval.*

Additional Conditions Added by the Town Board (when in conflict with the findings above, the conditions below shall apply)

1. The site will operate in compliance with all NCDEQ requirements.
2. The applicant will cooperate with NCDEQ in addressing its contaminated ground waters.
3. The \$25,000 that was agreed upon in 2008 needs to be paid on or before December 31, 2016 and to be used for street improvements or maintenance.
4. The proposed use will not be in conflict with the objectives of the long and short range adopted area plans.
5. The comprehensive site plan addresses necessary environmental and development standards.
6. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
7. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant's property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
8. The bore test for Holbrooks Road will be taken within ninety (90) days of approval of the SUP and provided to NCDOT as requested.

9. The applicant will maintain an internal 100' driveway from the public street in good condition.
10. The applicant will also contribute to the escrow account an additional \$25,000 prior to 2025 for either maintenance or improvements to Holbrook Road.
11. All right-of-ways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100' from a public street so that traffic waiting to enter the site will not be backed up onto any public right-of-way.
12. The landfill operator will commit to routinely washing Holbrooks Road with a specialized truck designed to remove dirt and mud when required.
13. That the use of the site shall be limited to the hours of 7 a.m. to 6 p.m. Monday through Saturday.
14. That a time table be submitted indicating the development phases and life expectancy of the landfill.
15. That a closure plan (reclamation plan) is provided in accordance with applicable state regulations and the applicant commits to make updates to the plan as circumstances dictate.
16. The applicant will meet all appropriate state operating and reporting requirements pertaining to C&D recycling.
17. Due to the contamination in the landfill and surrounding areas the applicant will provide updates to the Town with compliance of the SUP conditions 10 years following the approval of the SUP and every 5 years thereafter upon the closure of the landfill.
18. That all provisions and findings of Article 9.23 be complied with as identified by staff (shown above as staff findings of fact).



Special Use Permit Application

Subject: Letter stating how the applicant satisfies Article 9

Date: 10/12/16

Greenway Waste Solutions, LLC has been operating in its current use since 1988. During this time Greenway Waste Solutions, LLC has operated under the purview of Article 9.23 and satisfied all criteria.

Sincerely,

John Brown
Greenway Waste Solutions

Special Use Permit
~~COMMERCIAL SITE PLAN~~
APPROVED BY THE TOWN OF HUNTERSVILLE
Bradley D. Smith 3/28/17
Planning Staff Date

9.23 Off-Site Land Clearing and Inert Debris (LCID) and Construction & Demolition (C&D) Landfills

Off-Site LCID and C&D Landfills are permitted in the SP District subject to a Special Use Permit, according to the procedures of [Section 11.4.10](#). The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

.1 That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills, as amended.

This site will operate in compliance with the rules according to NCDEQ. See attached NCDEQ (formerly NCDENR) Permit No. 60-13 CDLF-1993. The current permit expires 10/8/2017. (see p.6, Attachment 3, Part I:1)

In 2013 routine landfill groundwater monitoring detected an exceedance in Appendix 1 constituents. As a result of the detection, ongoing assessment monitoring has been conducted. In May 2016, Greenway Waste Solutions (GWS) submitted a Contaminant Delineation Plan to NCDEQ to further assess the exceedances. The Contaminant Delineation Plan was accepted by DEQ on June 17, 2016 and GWS is implementing the plan. Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented. Assessment and remediation efforts will continue until deemed approved by DEQ. Due to the nature of assessment and remediation, no timetable for completion can be provided, but will be initiated at the request of NCDEQ. See attached DEQ Contaminant Delineation Plan approval letter.

GWS is in process to acquire approximately 1 acre (the land to the west of Cane creek on parcel 01918162) on the southeastern portion of the landfill property from co applicant, Bill Hammill to increase our facility buffer. With the increased buffer area, the landfill will have significantly more buffer than required and will no longer be in violation of the NCDEQ buffer requirements. This land will never be used for landfill air space and shall remain undisturbed.

.2 That the proposed use will not endanger the public health and safety, nor substantially



reduce the value of nearby property; and

This site and the cleanup of the existing contamination will operate in compliance with the rules according to NCDEQ. Waste entering the recycling center will be hand sorted. Any unacceptable waste will be sent off site to the proper facility.

.3 That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

This site will not be in conflict with the objectives of the most detailed plan adopted for the area. The small area plan calls for a connector road from Commerce Station to the future Verhoff/Asbury Chapel Extension. The applicant will and the site plan makes an accommodation for the connector road on any Griffin owned land once the final location is determined. See note 14 on CD-101.

.4 That the comprehensive site plan addresses each of the environmental and development standards below:

a). A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare. Landfills 10 acres or less must directly connect to a major or minor thoroughfare, or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

GWS shall relocate their main access from Holbrook Road to the future Verhoff/Asbury Chapel Extension as soon as available but no later than 2034. GWS will reserve a right-of-way through their property for the future connector road from the Verhoff extension to Asbury Chapel extension.

Additionally:

GWS will pay for Holbrooks borings per DOT's request

GWS will pay for extending Holbrooks shoulders and a new overlay for 300 feet West of GWS' entrance

GWS will extend the \$25,000 donation to the Town of Huntersville for improvements to Holbrooks Road for as long as GWS customers use Holbrooks Road.

GWS agrees to reassess Holbrooks Road's condition in conjunction with the town and DOT during 2025 (halfway mark for GWS' commitment to stop using Holbrooks). GWS agrees to contribute an additional amount to the maintenance of Holbrooks if the Town and DOT deem necessary.

b). That the proposed or existing use will be in compliance with the rules and regulations as established by the Traffic Impact Analysis (TIA) Article 14.

A Traffic Impact Analysis was not deemed necessary.

c). Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated



below take precedence over any and all modification made by the state unless the state standards become more restrictive.

500-foot buffer from existing residential water supply wells to fill area.

200-foot buffer from adjacent property to fill area.

No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.

50-foot buffer from delineated streams.

50-foot buffer from road right-of-way to fill area (non-state requirement).

The site is in compliance with all criteria in this section.

d). Driveway access to the facility must be paved for a distance of at least 100' from the public street.

Driveway access to the facility is paved at least 100' from the public street. See "f" below

e). Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6' high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

See site plan CD 100 for existing and proposed fencing around the recycling facility. The active landfill area has a security fence. The applicant is seeking relief from the fencing requirement for the closed fill area that is inaccessible.

"GWS agrees to begin installation of fence within 90 days of any development on the parcels east or west of GWS. GWS also agrees to begin installation of fence within 90 days of construction of future Bikeway/Greenway/Carolina Thread Trail passing through GWS property."

f). All driveways which serve the site must be wide enough to accommodate two-way traffic for a distance of at least 100' from the public street so that no traffic waiting to enter the site will be backed up on any public right-of-way.

The driveway is about 48' wide serving both ingress and egress for about 65 feet. From that point ingress only continues to the scalehouse for about 125 feet for a total of 185 feet of paved driveway. The scalehouse separates ingress and egress providing two way traffic. Egress is paved for approximately 125 feet from Holbrooks Road.

.5 That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

Since inception we have taken pride in keeping the roadways clean. This process starts on site where we provide a well groomed tipping floor for our customers. From there we maintain gravel roads to remove dirt from tires. Lastly, the site operators commit to routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed. This includes debris that is not related to our facility. We plan to continue to exceed section 6.5 of the Franchise



Agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles.

An added benefit of the MRF is that all trucks will be tipping their loads on a concrete floor further eliminating dirt falling from trucks.

.6 That the use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

The use of the site is limited to the hours of 7:00AM until 6:00PM, Monday through Friday and 7:00AM until 12:00PM on Saturday.

.7 That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

Based on current waste acceptance rates and anticipated recycling rates we project a life of over 20 years.

.8 That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

See attached Infill Expansion Closure Plan and drawing

.9 An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

This not applicable to this site.

a). The landfill has been continuously operating since 1990 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;

b). The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;

c). The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and

d). In no event shall the landfill operate under a LCID or demolition landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plan shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.



.10 Any existing C&D landfill shall be permitted to continue operation in the zone in which it is located provided the landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

Exhibit#3-2016 Email Withdrawing Variance 16-02

From: [Mike Griffin](#)
To: [Meredith Nesbitt](#)
Cc: [Bradley Priest](#); [Jackie Drummond](#); [Jason Watkins](#); [Jack Simoneau](#); [John Brown](#); [Butch Joyce](#); [Mousa A. Maimoun](#)
Subject: Variance Application Withdrawal
Date: Saturday, September 10, 2016 4:55:57 PM

Meredith,

Per our meetings this week, I think it's best we withdrawal or variance applications. We will continue to pursue our rezoning & PUD for our site and for our proposed recycle center. We really appreciate your assistance and look forward to revisiting this opportunity after we make more progress with DEQ.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 7, 2016, at 4:05 PM, Meredith Nesbitt <mnesbitt@huntersville.org> wrote:

All,

Click [here](#) for the Board of Adjustment meeting schedule. It includes an agenda and the staff reports for each of the cases scheduled. Please let me know if you have any questions or trouble accessing the reports.

Mike,

Let us know how your meeting goes tomorrow. We will decided what needs to happen from there. Looks like schedules are clear for Friday, early afternoon but I will confirm with Brad and Jack after we hear from you about your meeting with Ed.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]
Sent: Wednesday, September 07, 2016 12:19 PM
To: Meredith Nesbitt <mnesbitt@huntersville.org>
Cc: Bradley Priest <bpriest@huntersville.org>; Jackie Drummond <jaclynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>
Subject: Re: Aug 17th follow-up

Meredith,

Thank you for your reply and input. I would like to ask for a continuance instead of withdrawal at this time. We have a meeting tomorrow morning with Ed Mussler, NC DEQ's Division of Waste Management - Solid Waste Manager, to address the concerns you have detailed. Are y'all available to meet this Friday or Tuesday to discuss the results of this meeting? It may be that we need to pull the applications but I want to exhaust all options due to our fairly tight timeline that I discussed in my earlier email.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies
19109 W Catawba Ave. Cornelius, NC 28031-5611
MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 2, 2016, at 5:46 PM, Meredith Nesbitt <mnesbitt@huntersville.org> wrote:

Mike,

Staff has reviewed and discussed the information you provided. At this time, we are still not able to reach a supporting recommendation for the floodplain variance. We appreciate the information submitted but we do not believe it qualifies as finding of fact to satisfy the findings below. In addition, the letter specifically mentions the revenue lost as an applicable hardship. However, section 151.46(B) states that specifically is not a reason for granting a variance. Therefore, with this in mind we still find deficiency in the following criteria for the floodplain variance:

- Section 151.44 Factors For Conditions and Determination of Completeness
 - o (6) Availability of alternative locations, not subject to flooding or erosion damage during a community base

flood, for the proposed use

- Section 151.45 Conditions for Variances
 - o *(C) Variances shall only be issues upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*
- Section 151.46 Standards for Granting a Variance
 - o *(A)(2) A determination that failure to grant the variance would result in exceptional hardship*
 - o *(B)The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance*
- Section 151.47 Miscellaneous Conditions
 - o *(B)(1) No feasible location exist for the use outside the Special Flood Hazard Area*
outside of the floodplain to fill and this criteria is not satisfied.

Additionally, the information concerning the contamination of the site provided to us by NCDEQ is finding of fact in relation to all the variance requests. Therefore, with that new information, staff finds the SWIM buffer and Article 9.23 variance request criteria potentially deficient in the following:

(4) The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

At our August 17 meeting, it was discussed that in response to the information provided to us by DEQ you would follow up with them to obtain a letter or other finding of fact in relation to the benefit and appropriateness of your project even with the contamination issue being outstanding. The information you provide below, though helpful, still does not provide a finding of fact that the contamination issue is not a detriment to public health. What you proposed is to ask for approval with the assumption that permitting from DEQ will be approved. That does not address the concern we have received from DEQ in regard to the proposed project. Therefore, Staff is uncomfortable recommending approval for the SWIM Buffer and Article 9.23 variance request with the unknowns surrounding the surface and groundwater contamination. We would request more evidence and finding of fact.

At this point, we feel it would be beneficial if the applications were withdrawn until a remediation plan can be approved by NCDEQ. That

would provide an excellent finding of fact to address that requirement. This principle would also be true for the rezoning and special use permit, if it were to include the additional fill area. However, this is not a requirement, we could move forward with all the applications. Although, if we do move forward, it would be staff's recommendation that more findings of fact be submitted to address the contamination issue prior to any approvals.

We will be glad to discuss this information in more detail – however, please note Town offices are closed Monday, September 5th for Labor Day.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]

Sent: Wednesday, August 31, 2016 3:19 PM

To: Meredith Nesbitt <mnesbitt@huntersville.org>; Bradley Priest <bpriest@huntersville.org>

Cc: Jackie Drummond <jacklynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>

Subject: Aug 17th follow-up

Meredith & Brad,

Per the discussions from our Aug 17th meeting, we met this Monday with DEQ's Jason Watkins and Jackie Drummond who I have copied. We had a discussion that I think covered every aspect of our efforts to seek Huntersville's conditional approvals for a new lined landfill expansion and C&D MRF. We also reviewed and discussed the status of the ongoing assessment of groundwater and buffer issues specific to the older portions of our facility.

The pending buffer issue will be resolved before we present to the

Planning Board meeting scheduled for September 27th. This could have been resolved over a year ago had I understood that we could recombine Bill Hammill's acre into our parcel without going through the pending rezoning and SUP. I got hung up on the fact that the Hammill parcel is outside the Town limits and that we were trying to recombine it into a parcel inside the Town. This is my fault for not better understanding the process.

The groundwater issue has a longer timeline with greater complexity.

We are working with our consultants and DEQ in the assessment phase which will eventually roll into remediation. We have always assumed that DEQ will only issue a permit for the new landfill expansion after a remediation plan is in process or completed. We've also assumed that any Town approvals would be conditioned on DEQ approvals so we didn't see how the groundwater issue would inhibit us from seeking conditional approvals from the Town.

In reading Article 9.23.2, 'The proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property,' we're convinced that our proposed new landfill expansion is in accordance with this article and will most likely lessen the chances of the older portions of our facility from being inconsistent with this Article. The proposed expansion will be lined to include a leachate collection system plus we are proposing to install a synthetic cap on the closed portions of our site to better divert water from these closed areas.

We would normally complete the DEQ assessment and remediation phases before starting this process but these processes will take multiple years and we have diminishing airspace that requires us to pursue them concurrently. Note that the previous Gantt Chart schedule shared with the Town always started with Task 2. Per the attached Gantt Chart, Task 1 is the compliance process specific to remediating the groundwater issues to DEQ standards. We intentionally omitted the first task being it is not pertinent to the Town's conditional approvals and it would only add confusion to an already complex request.

I really don't feel this is pertinent to our pending requests but I'd be glad to describe the extensive work that has transpired since the first groundwater exceedance in 2013. We look forward to your feedback on our consistency statement with 9.23.2. This discussion is specific to the rezoning and SUP whereas we know the most urgent matter is addressing the staff findings for the BOA meeting scheduled for September 13th. We will continue to tweak our plans and comments specific to the rezoning and SUP and present this to all in the coming days. Jason Watkins gave us a solid suggestion in that we should consider permitting the C&D MRF in a parcel separate from the landfill parcel. John and I will quickly inquire with DEQ's permitting folks to discuss the merits on their end.

John and I have had several conversations with Butch Joyce and Dr. Mousa Maimoun with Joyce Engineering specific to staff not supporting our request to pipe and fill the Special Flood Hazard Area.

Per the attached letter from Butch, the inability to fill this area kills the proposed landfill expansion. Ironically, Butch also highlights how the redesign around the Special Flood Hazard Area decreases our site's environmental compliance quality. We feel these factors make it clear that the piping and filling of this very small area should be supported by the staff. We also feel staff's support is extremely important and will ask for a continuance or withdraw if there needs to be more time for consideration.

Following are our proposed conditions in order to seek staff and BOA support:

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers & NC DEQ Water Quality
4. Approval of groundwater remediation plan by NCDEQ
5. Approval of NCDEQ Solid Waste Permit specific to the proposed expansion
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, and will not reduce the value of nearby property.
8. The additional synthetic capping of older closed areas will further enhance public health and safety, and will not reduce the value of nearby property.

Please feel free to add anything we missed. We have stated many times that this process should be properly conditioned in recognition that the complex engineering and design submittals to the various government agencies will start after the Town's approval. We will add the final conditions list on our letterhead after your input.

In summary, we're trying to get the conceptual vision approved by the town before the more technical work is required. I really appreciate everyone's considerable efforts to enhance our applications. The complexities of these concurrent processes can easily create misunderstandings which I hope we have cleared up over the last couple weeks. We look forward to your feedback.

Best regards,

Mike

cc: Jackie Drummond
Jason Watkins
Jack Simoneau
John Brown
Butch Joyce
Mousa Maimoun

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies



Variance Application

Date of Application: 7/1/2021

Property/Building Address: 15300 Holbrooks Road Parcel Size (ac): 121.040

Tax Parcel ID (PIN) Number(s): 01910102

Text of Ordinance to be varied

Ordinance: Zoning Article: 9 Section: 23

Text

Submittal Requirements and Procedure

The following must be submitted with the completed application (signed and dated by the property owner and/or applicant):

- One (1) hard copy and one (1) electronic copy of any applicable map(s), site plans, exhibits, and applications showing exact location of property with respect to existing streets, adjoining lots and other important features on or contiguous to the property. Also, include any maps and/or illustrations (to scale), which are necessary to show the location, number and size of buildings, signs, etc., on the property.
- A list of names, addresses and tax parcel identification numbers of properties that abut the site, are across the street from the site or are otherwise within one hundred feet (100') of the site. (Electronic format preferred)
- Review Fee (Please check most recent version of Fee Schedule for applicable Variance Review Fee)
- See the current Board of Adjustment Submittal Deadlines and Meeting Schedule for filing deadlines and meeting dates
- Please submit your complete application and fee by **noon the day filing deadline**

Notifications Requirements

Planning Staff will be required to notify in writing each adjoining property owner.

Planning Staff will also be required, if you are seeking a variance from the requirements of the Mountain Island Lake or Lake Norman Watershed Overlay Districts, to notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption as follows:

- * Mountain Island Lake Watershed Overlay. Local governments having jurisdiction in the watershed: Charlotte Mecklenburg, Cornelius and Huntersville. Entities using the water supply for consumption: Mecklenburg County, Gastonia and Mount Holly.
- * Lake Norman Watershed Overlay. Local governments having jurisdiction in the watershed: Davidson, Cornelius and Huntersville. Entities using the water supply for consumption: Mooresville, Mecklenburg County and Lincoln County.

Variance Requirements

STANDARDS FOR GRANTING A VARIANCE (Article 11.3.2.e.):

When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all the following:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
4. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

Appropriate conditions, which must be reasonably related to the condition or circumstance that gives rise to the need for a variance, may be imposed by the Board (Article 11.3.1.e.).

In the following spaces, indicate **FACTS** that demonstrate to the Board of Adjustment you meet all the standards for granting a variance:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

See Attached

2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

See Attached

3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.

See Attached

4. The public safety and general welfare have been protected and substantial justice done.

See Attached

Applicant

Printed Name Greenway Waste Solutions at North Meck, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Chief Operating Officer Applicant Phone 919-795-0599

Applicant Email jdbrown@griffinbros.com

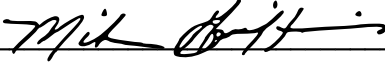
Address of Applicant 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

Property Owner (if different than applicant)

* Printed Name C&D Management Company, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Manager Applicant Phone 704-533-5781

Applicant Email mike@griffinbros.com

Address of Property Owner 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this petition MUST be accompanied by a Limited Power of Attorney signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID APPLICATION. **If additional space is needed for signatures, attach the Town of Huntersville Signature Addendum Form.**

Contact Information

Town of Huntersville Phone: 704-875-7000
Planning Department Fax: 704-875-6546
PO Box 664 Physical Address: 105 Gilead Road, Third Floor, Huntersville, NC 28078
Huntersville, NC 28070 Website: <https://www.huntersville.org/228/Planning-Department>

Received By Planning Department Staff: _____

Staff Initials: _____

List of adjacent property owners (for variance)
-within 100ft

- 01930104 Arnold W. Johnston 12300 Old Statesville Road Huntersville, NC 28078
- 01930105 Linda Wester Long 7910 Golf Course Dr N Denver NC 28037
- 01934105 Michael and Tracy Tinsley 11737 Trails End Lane Huntersville NC 28078
- 01934118 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031 (Trails End Holdings LLC)
- 01934108 William and Campbell Hammill 11745 Trails End Ln Huntersville NC 28078
- 01918135, 01918167, 01918166, 01934119, 01910116 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031
- 01919102, 01919105, 01919106, 01937103, 01937199, 01919121 Mecklenburg County 600 E4th Street 11th floor Charlotte NC 28202
- 01937280, 01937286- Southside Neighborhood LLC (w/in 100' of MRF parcel)



Conditions for Approval of Variances June 6, 2021

Greenway Waste Solutions is requesting approval of the following variances:

Article 8.25.5 S.W.I.M. Stream Buffers Minimum Buffer Widths

Floodplain Ordinance Section 151.60(A)(10)

Article 9.23.4.c Off Site Landfill Clearing and Inert Debris (LCID) and Construction and Demolition (C&D) Landfills

The approval of the aforementioned variances is subject to the following conditions

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers
4. Approval of NCDEQ Solid Waste Permit
5. Approval of all Town/County/State building permit related activities
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, nor reduce the value of nearby property as compared to past North Carolina standards.
8. Condition that the aforementioned expansion and additional synthetic capping of older closed areas will further enhance public health and safety, nor reduce the value of nearby property specific to areas currently operating or previously closed.

23.4.e - 50-foot buffer from delineated streams.

23.4.c - No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.

1.) Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

- a. The inability to impact the 50-foot buffer as the landfill expands and designated wetlands or the FEMA and/or Special Flood Hazard Areas from a delineated stream creates an unnecessary hardship for the property owner and the community alike. As a result of the ordinance the long term potential life of the landfill site will be cut in half and have to close prematurely. This variance is one part of the process that, if approved, will allow for continued existence by increasing the area for operation. The hardship is that these regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe the water through the site. Upon plan approval from these agencies, the applicant will create a permanent storm water management system that will improve the flow and decrease likelihood of a flood in the area as compared to existing conditions. The system will improve flow up and down stream by providing basins on either end of the pipe. This will help control the speed of the water. The pipe itself will provide sufficient capacity to allow water to flow during peak flood conditions. This system will meet the requirements and criteria of Mecklenburg County Storm Water standards and require a floodplain development permit. A buffer mitigation plan has been approved by Mecklenburg County. The professionally engineered plans and process through which the applicant will gain ultimate approval will be heavily scrutinized and coordinated with the State's Department of Environmental Quality ("NCDEQ") Water Quality Division, the Army Corps of Engineers and NCDEQ Solid Waste Division. Beyond the approval of this variance, extensive engineering and multiple levels of approval will be needed. This ordinance threatens to derail this project because local approval is required by the State and Federal agencies. Exhibit A provides detail on the storm water management system and site.

2.) The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

- a. The hardship is unique to this site given the surrounding topography and inability to fill in designated flood area and its use as a Construction and Demolition ("C&D") landfills. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling areas. The topography and no fill hardship prohibit the ability to increase the landfill capacity by joining the two permitted areas. The proposed solution better manages water through concrete encased pipe, as depicted in Exhibit A and B. Keeping the water isolated to the pipes eliminates the ability for runoff and material to enter the stream. The plan includes significant storm water management basins on both ends of the pipe. This solution will allow for a more environmentally responsible way to manage water and maximizes the landfill capacity to better serve the citizens of Huntersville and the North Mecklenburg region. The specifications of the storm water system and pipe will meet the requirements of Mecklenburg County.

3.) The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship

The hardship was not created by the manner in which the property has been used. Unlike other portions of the zoning ordinances Article 9.23 does not include built in relief options for buffers requirements, which presents a hardship for those required to abide by Article 9.23. In the case of section "c.)" of Article 9.23, it restates the buffers earlier established in Article 8.25. In Article 8.25 there are options for relief from these buffer requirements. The applicant believes that this inconsistency is an unnecessary hardship created by the zoning ordinance. Further, the concept of relief being spelled out in Article 8.25 indicates that providing relief is within the intent of the overall Ordinances.

4.) The public safety and general welfare have been protected and substantial justice done.

- a. The public's safety and general welfare are best served by a variance to this regulation. The community and the North Mecklenburg region will see an increase in truck traffic as a result of taking C&D debris to other counties or Mecklenburg County's only other permitted C&D landfill in South Charlotte. The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. * Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.** It is in the best interest of the community to ensure the continued operation of this site. These hardships can be avoided through a variance. Exhibit C is a map showing proximity to other locations and Exhibit D shows the routes which will experience an increase in truck traffic without the facility. The public's safety and welfare will also be better served as a result of the proposed piping; given that water will not interact with the materials during normal flow nor a flood. The applicant will provide ample capacity for the water to flow through the pipes, before and after storage basins as well as lining and capping the facility. This ensures that water will not touch the debris that is deposited in this area.

Further, the NC Department of Environmental Quality agrees that the design of the landfill expansion is more protective of human health and the environment than what is required by NC solid waste regulations. (see Attachment 1)

The Catawba and Yadkin Riverkeepers are in support of the landfill expansion project. (see Attachment 2)

NC DEQ approved a Corrective Action Plan for the landfill on October 3, 2019 (see Attachment 3)

Groundwater history & geosynthetic cap environmental benefit. (see Attachment 4)

*based on 2015 volume with the assumption of an average increase of 20 miles per truck to the next permitted C&D facility.

**carbon calculator courtesy of the USDOT Federal Transit Administration

**carbon calculator courtesy of the USDOT Federal Transit Administration

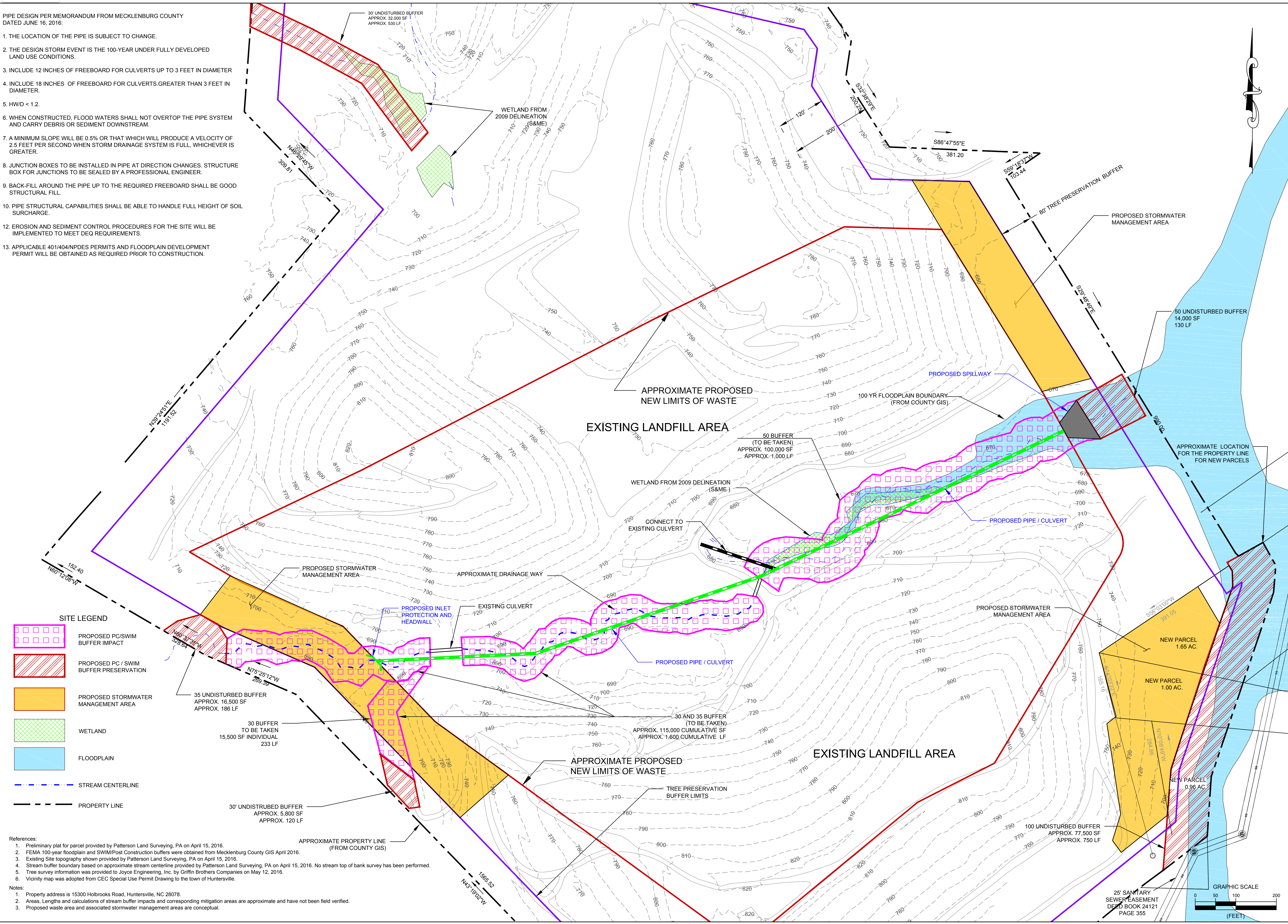
PIPE DESIGN PER MEMORANDUM FROM MECKLENBURG COUNTY
DATED JUNE 16, 2016:

1. THE LOCATION OF THE PIPE IS SUBJECT TO CHANGE.
2. THE DESIGN STORM EVENT IS THE 100-YEAR UNDER FULLY DEVELOPED LAND USE CONDITIONS.
3. INCLUDE 12 INCHES OF FREEBOARD FOR CULVERTS UP TO 3 FEET IN DIAMETER
4. INCLUDE 18 INCHES OF FREEBOARD FOR CULVERTS.GREATER THAN 3 FEET IN DIAMETER.
5. HWD < 1.2.
6. WHEN CONSTRUCTED, FLOOD WATERS SHALL NOT OVERTOP THE PIPE SYSTEM AND CARRY DEBRIS OR SEDIMENT DOWNSTREAM.
7. A MINIMUM SLOPE WILL BE 0.5% OR THAT WHICH WILL PRODUCE A VELOCITY OF 2.5 FEET PER SECOND WHEN STORM DRAINAGE SYSTEM IS FULL, WHICHEVER IS GREATER.
8. JUNCTION BOXES TO BE INSTALLED IN PIPE AT DIRECTION CHANGES. STRUCTURE BOX FOR JUNCTIONS TO BE SEALED BY A PROFESSIONAL ENGINEER.
9. BACK-FILL AROUND THE PIPE UP TO THE REQUIRED FREEBOARD SHALL BE GOOD STRUCTURAL FILL.
10. PIPE STRUCTURAL CAPABILITIES SHALL BE ABLE TO HANDLE FULL HEIGHT OF SOIL SURCHARGE.
12. EROSION AND SEDIMENT CONTROL PROCEDURES FOR THE SITE WILL BE IMPLEMENTED TO MEET DEQ REQUIREMENTS.
13. APPLICABLE 401/404/NPDES PERMITS AND FLOODPLAIN DEVELOPMENT PERMIT WILL BE OBTAINED AS REQUIRED PRIOR TO CONSTRUCTION.

- SITE LEGEND**
- PROPOSED PC/SWIM BUFFER IMPACT
 - PROPOSED PC / SWIM BUFFER PRESERVATION
 - PROPOSED STORMWATER MANAGEMENT AREA
 - WETLAND
 - FLOODPLAIN
 - STREAM CENTERLINE
 - PROPERTY LINE

- References:
1. Preliminary plat for parcel provided by Patterson Land Surveying, PA on April 15, 2016.
 2. FEMA 100-year floodplain and SWIM/Post Construction buffers were obtained from Mecklenburg County GIS April 2016.
 3. Existing Site topography shown provided by Patterson Land Surveying, PA on April 15, 2016.
 4. Stream buffer boundary based on approximate stream centerline provided by Patterson Land Surveying, PA on April 15, 2016. No stream top of bank survey has been performed.
 5. Tree survey information was provided to Joyce Engineering, Inc. by Griffin Brothers Companies on May 12, 2016.
 6. Vicinity map was adopted from CEC Special Use Permit Drawing to the town of Huntersville.

- Notes:
1. Property address is 15300 Holbrooks Road, Huntersville, NC 28078.
 2. Areas, Lengths and calculations of stream buffer impacts and corresponding mitigation areas are approximate and have not been field verified.
 3. Proposed waste area and associated stormwater management areas are conceptual.



DESIGNED	MM	DRAWN	RWH	CHECKED	LB	APPROVED	LJ	DATE	06/17/16	© 2016 Joyce Engineering, Inc. All rights reserved.
NOT FOR CONSTRUCTION										
GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC MECKLENBURG COUNTY, NORTH CAROLINA										
APPLICATION FOR A WATER QUALITY BUFFER DISTURBANCE: PROPOSED PIPE LOCATION										
PROJECT NO. 916.1501.11										
SCALE AS SHOWN										
DRAWING NO. 1										
L:\NORTH MECK\CONCEPT STREAM CULVERT JUNE 2016.dwg Layout\Layout										

Exhibit B

(for illustrative purposes only)

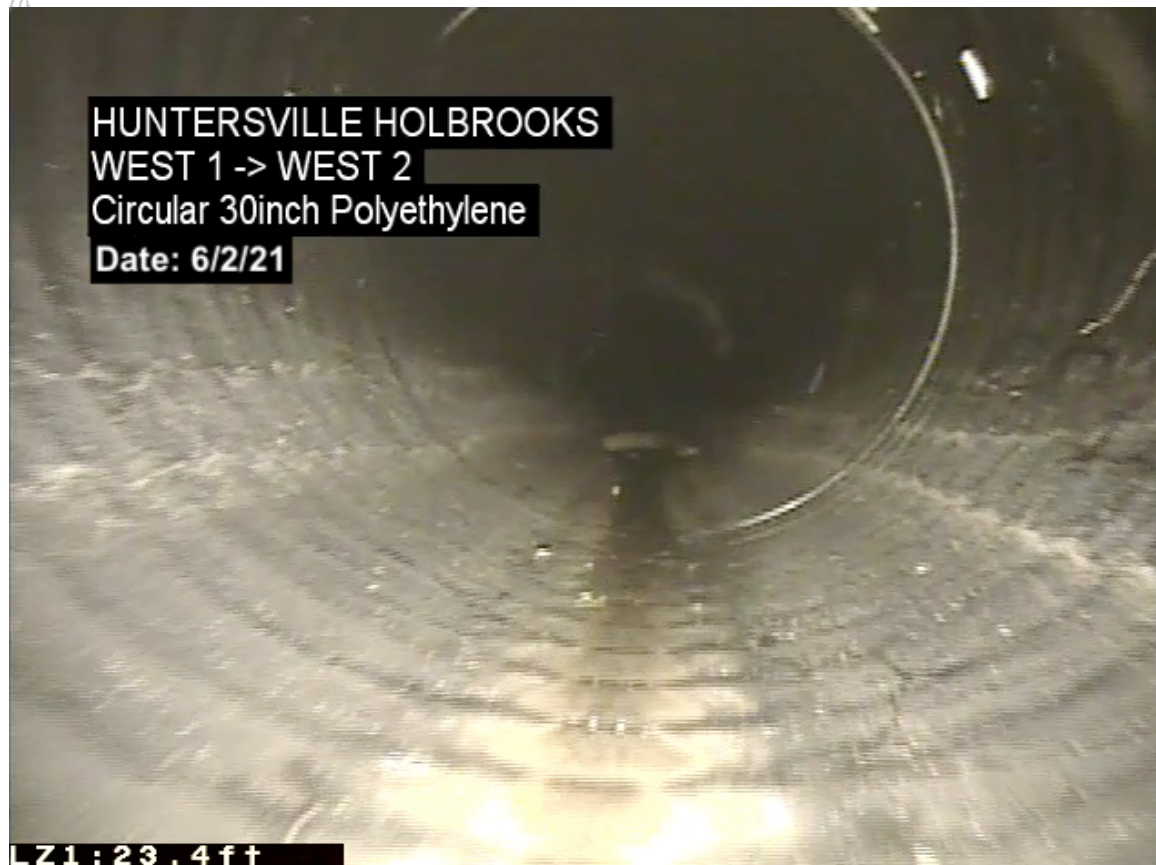
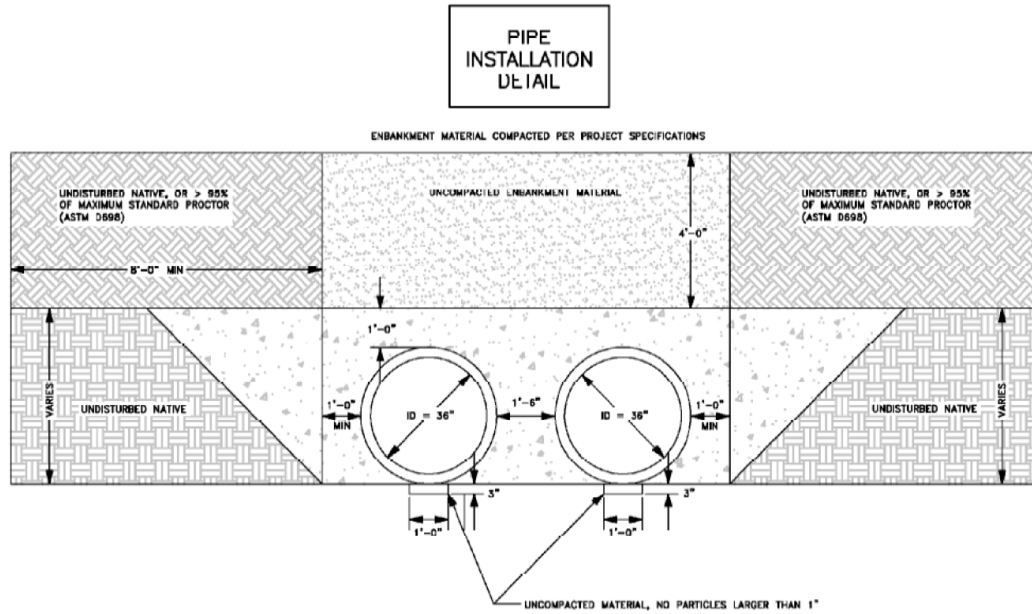


Exhibit C

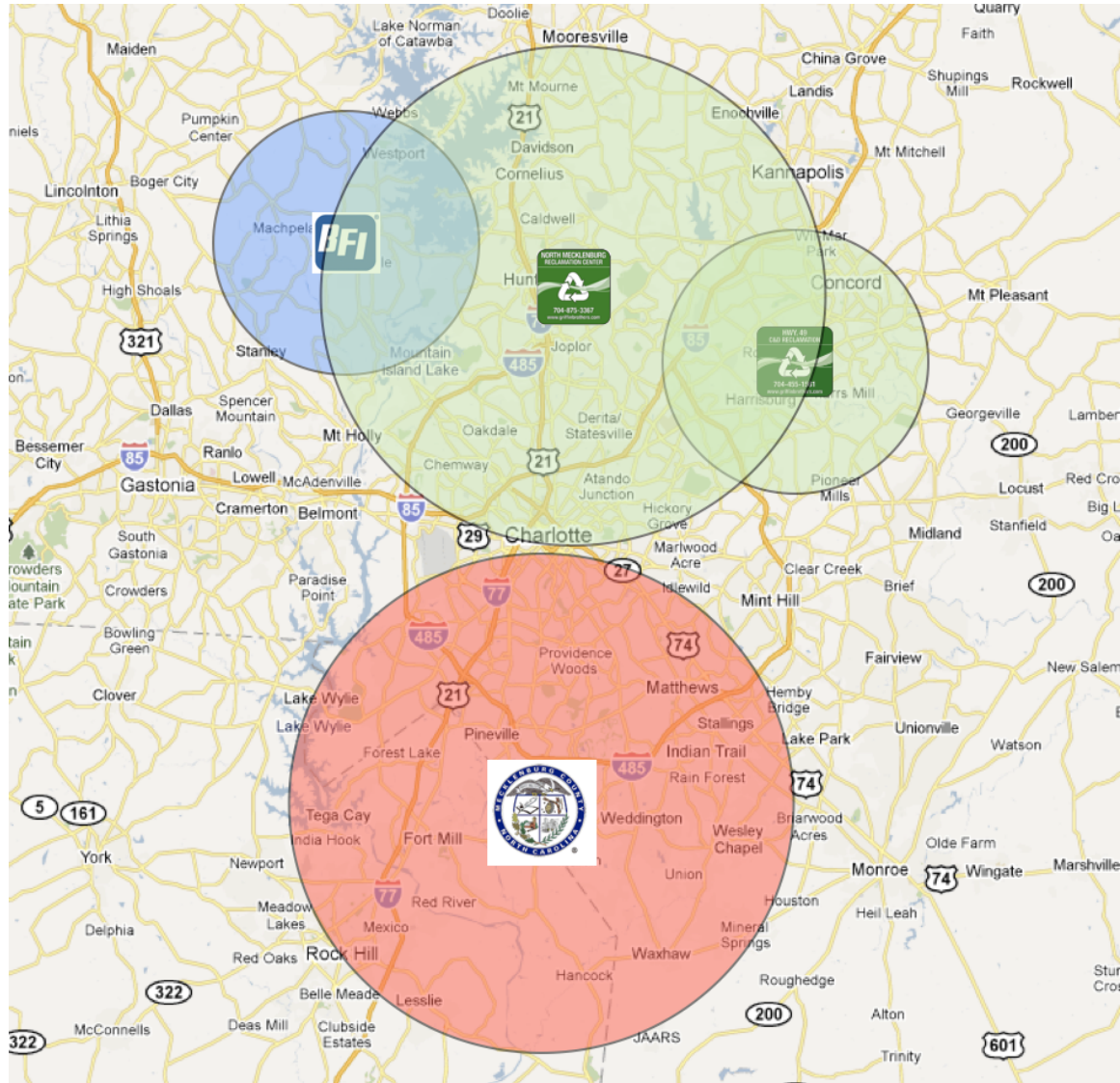
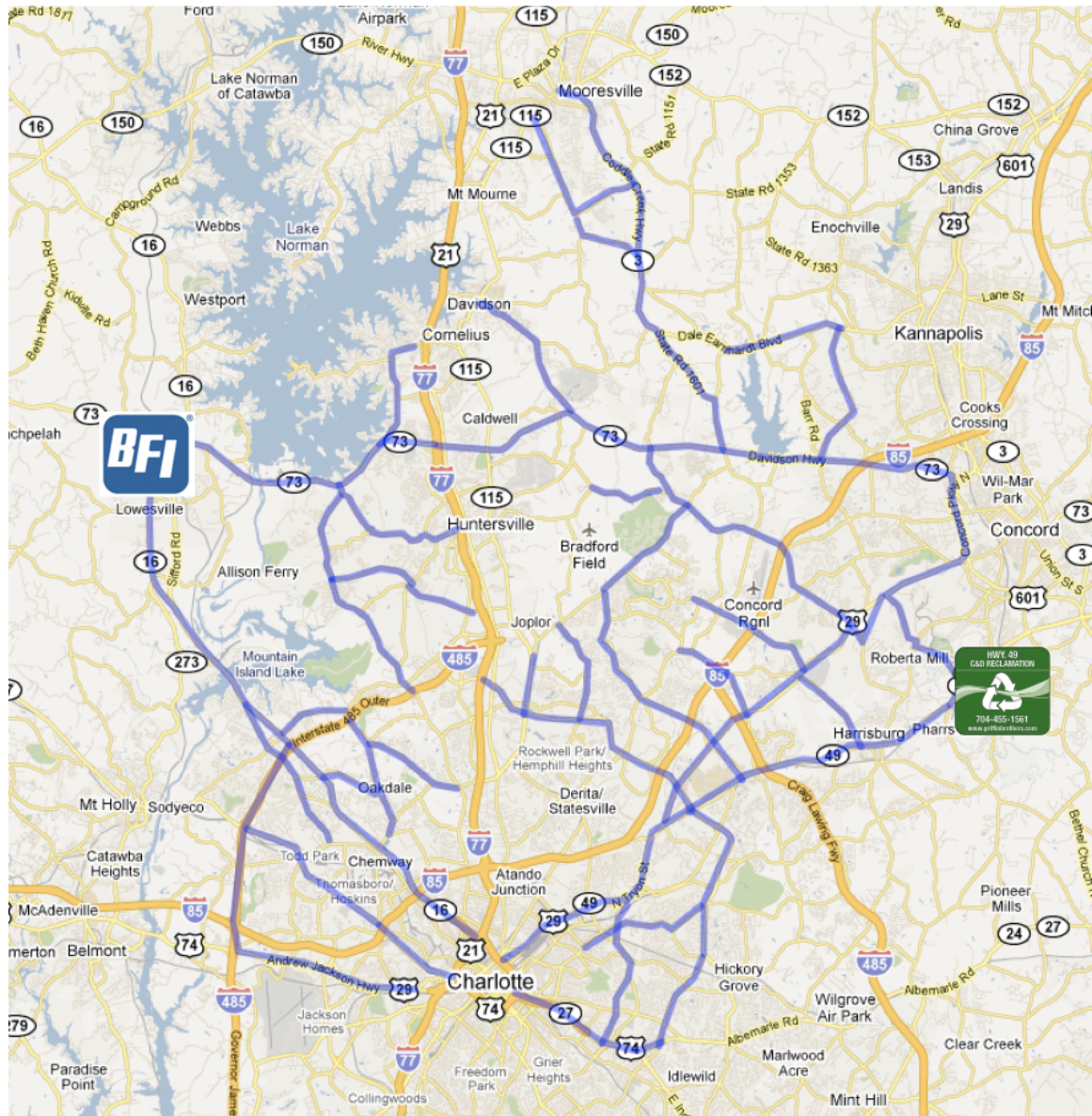


Exhibit D





NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head





Mr. Griffin,

Thank you for contacting the Catawba and Yadkin Riverkeepers concerning the possible future expansion of the North Meck C&D landfill at 15300 Holbrooks Road Huntersville, NC 28078. As we understand it, this project would involve the piping of approximately 1750 ft of perennial waters and the placement of impervious landfill liners over the existing C&D fills and newly buried stream.

Riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. In general, we are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 locations, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.

This nonintuitive recommendation is due to:

1. High levels of iron oxidizing bacteria and elevated conductivity indicate that groundwater from the unlined landfills is currently negatively impacting the UT.
2. Although not assessed by the NC biological assessment branch, our initial measurements indicate that this stream likely would be listed as impaired for biota. The 303d system is poorly suited to address impairment from nonpoint groundwater sources.
3. Covering the existing landfills will minimize or eliminate the infiltration of precipitation through the unlined fills and prevent leachate from entering Cane Creek.
4. Water monitoring and reporting on the unlined fills will end after 30 years. By constructing a new site on top, monitoring will be extended.
5. Siting a landfill at a new location will cause impacts to an additional part of the watershed.

This recommendation is based on several assumptions, if any of these are invalid then our support is withdrawn until further examination.

1. A new landfill must be built. The Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
2. Groundwater and surface water will continue to be monitored (and remediated if necessary) for the entire site.
3. Runoff from the entire site will be captured and treated before discharging.
4. The current landfills will remain uncapped (pervious) if a new landfill is not sited on top.

Please let us know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Fannon".

Brian Fannon, Yadkin Riverkeeper

A handwritten signature in black ink, appearing to read "Brandon Jones".

Brandon Jones, Catawba RIVERKEEPER®



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

October 3, 2019

Sent Via Email – mike@griffinbros.com

Mr. Mike Griffin

Greenway Waste Solutions at North Meck, LLC

19109 West Catawba Avenue, Suite 200

Cornelius, NC 28031

Re: *Corrective Action Plan (Revised October 1, 2019)*
Groundwater Corrective Action
North Mecklenburg C&D Landfill Active Infill Area and Closed Phase I Area
Mecklenburg County
Solid Waste Permit Number 6013-CDLF-1993
FID 1358901

Dear Mr. Griffin,

The Solid Waste Section (Section) has completed a review of the *Corrective Action Plan (Revised October 1, 2019)* and received via email on October 2, 2019 (FID 1358899). The plan was submitted on your behalf by CEC Consultants, Inc. for the North Mecklenburg Construction and Demolition (C&D) Landfill, Solid Waste Permit Number 6013-CDLF-1993 consisting of the Infill Area and the Phase I Area. The *Corrective Action Plan (Revised October 1, 2019)* was submitted in response to the consistent groundwater exceedances at the landfill.

In accordance with 15A NCAC 13B .0545 and 15A NCAC 2L, Greenway Waste Solutions at North Meck, LLC selected a remedy proposed to restore groundwater quality at and beyond the relevant point of compliance, to effectively reduce the overall groundwater contamination at the landfill, and to control the migration of contaminated groundwater to prevent unacceptable impacts. The selected remedy for the landfill includes Active Landfill Gas Extraction and Monitored Natural Attenuation (MNA), and the Section approved the selected remedy on June 10, 2019 (FID 1322138). In addition, Greenway Waste Solutions at North Meck, LLC had a waterline installed downgradient of the Phase I Area and purchased adjacent property.

Based upon the review of the *Corrective Action Plan (Revised October 1, 2019)*, the plan is approved as written based upon the information presented to the Section at this time. During groundwater corrective action, a Corrective Action Effectiveness Report (CAER) will be required to be submitted every five years. The Corrective Action Effectiveness Report (CAER) includes an interpretation of the corrective action data collected and a technical evaluation of the approved selected remedy.



Attachment 3 (cont.)

If you have any questions or concerns regarding this letter, please feel free to contact me by phone at 828.296.4706 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Solid Waste Section, Division of Waste Management
NCDEQ

cc sent via email:

- Ed Mussler, Section Chief
- Sherri Stanley, Permitting Branch Head
- Larry Frost, Permitting Engineer
- Jason Watkins, Field Operations Branch Head
- Adam Ulishney, Environmental Compliance Branch Head
- Deb Aja, Western District Supervisor
- Teresa Bradford, Environmental Senior Specialist
- John Brown, Greenway Waste/Griffin Brothers Companies
- Brandt Kayser, Greenway Waste/Griffin Brothers Companies
- Donald Cobb, CEC, Inc.
- Bruce Reilly, CEC Inc.
- Scott, Brown, CEC, Inc.
- Joe Hack, Mecklenburg County Solid Waste Management
- Jack Simoneau, Town of Huntersville



North Mecklenburg C&D Landfill (GWSNM) NC Solid Waste Facility Permit No. 60-13

Historical Regulatory Compliance Time-Line

North Meck Groundwater History

Groundwater monitoring at the North Meck C&D Landfill has been on-going on a semi-annual basis since March of 1998 around the currently closed southern section of the landfill (Closed Area), and semi-annual groundwater monitoring around the northern waste disposal area (Infill Area) began in October of 2011. Leading up to the Spring 2013 sampling event, groundwater samples were mostly analyzed by Pace Analytical Services, and analytical results indicated no consistent chemical detections at concentrations which exceeded the applicable 15A NCAC 02L .0202 Groundwater Quality Standards (2L Standards or 2L Rules).

Greenway switched to Shealy Environmental Services for the Spring 2013 sampling event. The analytical results from the Spring 2013 sampling event indicated that vinyl chloride (VC) was detected at elevated concentrations in numerous monitoring wells around both the Infill Area and Closed Area, including one monitoring well located near the water supply well for the Gilkerson residence on the south side of the Closed Area (**Figure 1**). In June of 2014, GWSNM paid for Charlotte Water connections for the Gilkerson residence as well as the two adjacent homes which are occupied by the Tinsley and Hammill families.

Following a series of investigations, Enviro-Pro, PC (GWSNM's groundwater consultant at the time) concluded that the groundwater contamination was the result of landfill gas (LFG) contacting water as a result of precipitation. LFG is produced from the anaerobic decomposition of waste by naturally-occurring bacteria and other micro-organisms in soil, and LFG production is accelerated by the presence of water.

In April of 2015, GWSNM's current consultant, Civil & Environmental Consultants, Inc. (CEC) oversaw the installation of LFG extraction wells in the Closed Area in accordance with the North Carolina Department of Environmental Quality (DEQ) -approved Corrective Action Plan. These extraction wells were installed in order to remove LFG to limit the exposure of percolating water to LFG. CEC later submitted a Landfill Gas Mitigation Expansion Plan in April 2017 proposing to install additional LFG extraction wells in the Closed Area and Infill Area. These extraction wells have remained active to date, and the detected concentrations of VC around the Closed Area have been reduced to below the concentration specified in the 2L Rules. Per the DEQ-approved Revised Corrective Action Plan, GWSNM conducts quarterly groundwater sampling of 16 site wells to monitor for natural attenuation (MNA) of VC in groundwater below the North Meck Landfill. Natural attenuation, which is the process by which naturally-occurring bacteria digest and convert chemicals into non-hazardous chemicals, has been shown to successfully reduce contaminant concentrations over time.

Due to the on-going detections of significantly elevated concentrations of VC by Shealy, GWSNM switched analytical labs back to Pace for the Fall 2016 sampling event and submitted duplicate groundwater samples to Shealy, Pace, and Eurofins TestAmerica (ETA) in order to

compare the detected concentrations. The results of the samples sent to Shealy indicated detections of VC which were consistent with recent detections, while the results of the duplicate samples analyzed by Pace and ETA indicated that VC was detected at significantly lower concentrations relative to the Shealy results. In a letter dated May 23, 2017, OI Analytical, the owners of Shealy Environmental Services, stated that an internal investigation revealed that a component in their analytical equipment was generating false-positive results for VC (**Exhibit 1**).

The analytical results from ETA for the most recent water quality monitoring event, conducted in April 2021, indicate that VC has been detected in 10 monitoring wells but **none of these detections exceeded the allowable concentration for VC specified in the 2L Rules**

Proposed Valley Expansion Benefits

The proposed valley expansion, located between the Infill Area and Closed Area, will significantly increase environmental protection of groundwater. In accordance with 15A NCAC 13B .0540 Construction Requirements for C&DLF Facilities both the Closed Area and Infill Area waste disposal units were constructed with soil liner systems. These compacted soil liners significantly limit, but do not prevent, fluid percolation into groundwater. Additionally, the Closed Area is capped with a soil cap in accordance with 15A NCAC 13B .0543 Closure and Post Closure Requirements for C&DLF Facilities (c)(1)(A). Similar to the compacted soil liner, the soil cap serves to significantly limit, but not eliminate, infiltration of rainwater into the landfill.

The infill expansion cap currently requires a low permeability soil liner however, it does not require a synthetic membrane as proposed as part of the valley expansion liner system. The proposed valley expansion includes a multi-layer geosynthetic, soil, and aggregate liner system with a built-in leachate collection system (**Exhibit 2**). This liner system will cover the side slopes as well as the top of both the Infill and Closed Areas, which will significantly outperform the DEQ regulatory requirement of a soil cap (**Exhibit 3**). This will substantially decrease rainwater infiltration into waste, leading to significantly reduced leachate and LFG production. Relative to a compacted soil liner, the proposed multi-layer geosynthetic liner will nearly eliminate leachate leakage into groundwater (**Exhibit 4**).

The liner system also includes horizontal collection pipes installed inside the existing landfill waste to collect leachate from both the Infill and Closed Areas. Additionally, the unnamed tributary of Cane Creek will be conveyed below the proposed expansion area through concrete-encased pipes. These pipes will also serve as additional water quality protection measures by eliminating the possibility of runoff, leachate, and groundwater from entering the unnamed tributary of Cane Creek.



LEGEND

PROPERTY LINE

EXISTING STREAM

MW-4A

MW-5

SPRING 2013 VINYL CHLORIDE
EXCEEDANCE LOCATION

(i)

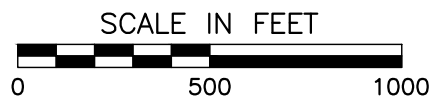
REFERENCE TO INFILL AREA

P:\2011\111-370\111-370-001\DWG\Brandt Kayser Requested Figures\111370.0001-Spring2013VinylChlorideExceedance.dwg{1} LS:{6/30/2021 - pbrinkley} - LP: 6/30/2021 1:52 PM



REFERENCE

1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH PRO.
DATED OCTOBER 8, 2016





Civil & Environmental Consultants, Inc.
3701 Arco Corporate Drive - Suite 400 - Charlotte, NC 28273
Ph: 980.237.0373 · Fax: 980.237.0372
www.cecinc.com

DRAWN BY:	JKS/PAB	CHECKED BY:	MBG	APPROVED BY:	DMC	FIGURE NO.:	1
DATE:	JUNE 2021	DWG SCALE:	1" = 500'	PROJECT NO:	111-370.0001		

GREENWAY WASTE SOLUTIONS OF
NORTH MECK, LCC
NORTH MECKLENBURG LANDFILL
HUNTERVILLE, NORTH CAROLINA

SPRING 2013 VINYL CHLORIDE EXCEEDANCE
LOCATION MAP

Exhibit 1



www.oico.com

151 Graham Road, P. O. Box 9010, College Station, TX 77842-9010

(979) 690-1711 FAX: (979) 690-0440

May 23, 2017

Mr. Dan Wright
Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, SC 29172

Mr. Wright,

OI Analytical is aware of an analytical issue with Silica Gel in the 3-layer traps for purge-and-trap analysis. When the sample being analyzed contains the compound Freon 151, the results of the analysis have the potential to erroneously show the presence of Vinyl Chloride in the sample. The potential issue can arise with any brand purge-and-trap utilizing a 3-layer trap with Silica Gel. This is due to impurities in the Silica Gel, a trap packing material, which cause the Freon 151 to breakdown possibly via a dehydrohalogenation process.

We submit this letter without prejudice in pursuit of a mutually agreeable solution. Please note that we reserve all of our rights and remedies at law or in equity and nothing herein nor our willingness to inspect, test and/or repair the subject products and any other related products shall constitute a waiver of these rights nor be construed as an admission with respect to responsibility or damage incurred.

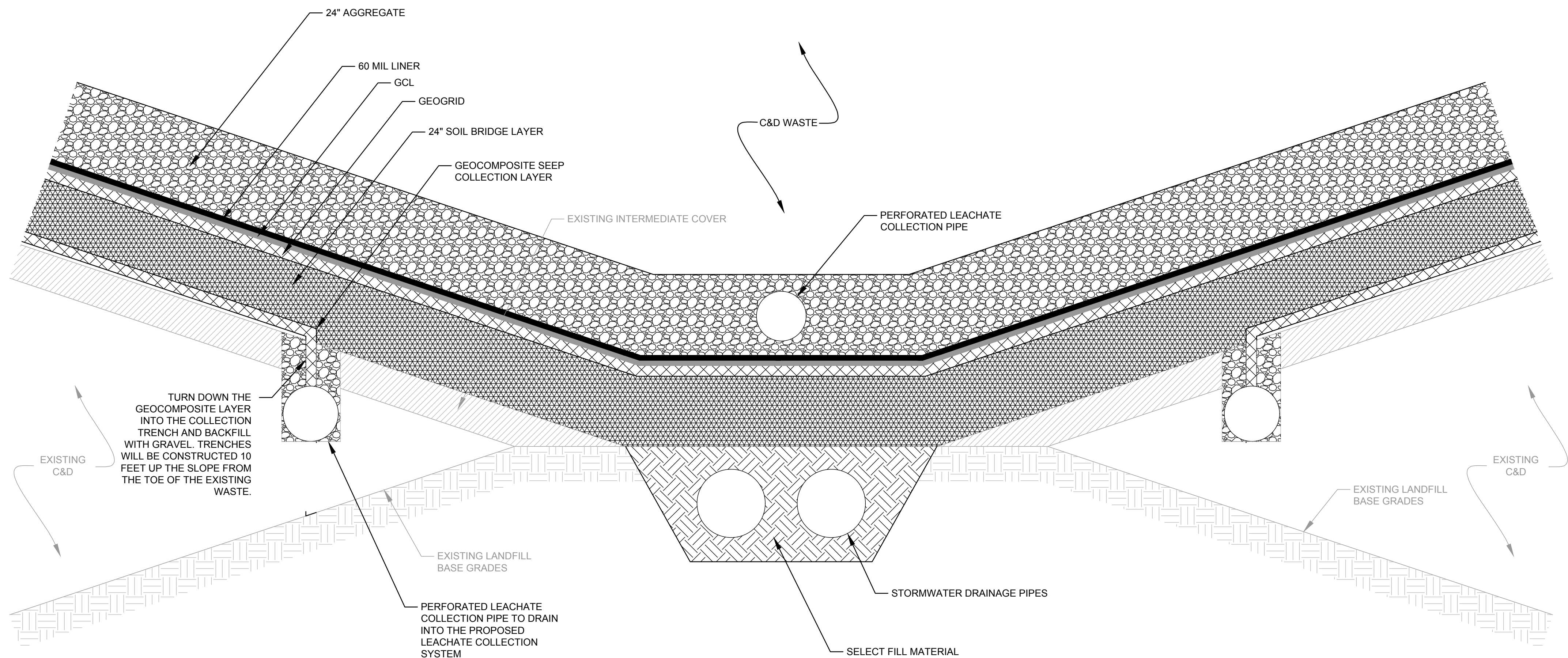
As you can understand, this is a complicated situation that we are working diligently with the supplier to resolve. As soon as we have a definitive timeline for resolution in working with our partners, we will faithfully communicate this with you.

Sincerely,

A handwritten signature in blue ink, reading "Joan Killgore". The signature is fluid and cursive, with the first name "Joan" and last name "Killgore" clearly distinguishable.

Joan Killgore

Quality Assurance and Engineering Manager



GEOCOMPOSITE DRAINAGE LAYER AND BASE LINER SYSTEM ^(A)
(NOT TO SCALE)

VERSION 1.00
07/2010 5:17:11 AM
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NOT FOR CONSTRUCTION

North Carolina
Greene Waste Solutions, LLC

Standard Engineering
1000 Hooters Rd, Hootersville, NC 28078

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	DAS
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY
DATE:	10/9/2020
DRAWING NAME:	

DETAIL

DRAWING NUMBER:



Exhibit 3



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head



November 25, 2020

Mr. Ed Mussler
 Division of Waste Management
 Solid Waste Section
 217 W Jones St
 Raleigh, North Carolina 27603

**RE: HELP Model Analysis of Permitted & Proposed Cap/Liner Systems
 Greenway Waste Solutions at North Meck, LLC
 North Meck Landfill
 Mecklenburg County, North Carolina
 NCDEQ Permit No. 60-13**

Mr. Mussler:

On behalf of Greenway Waste Solutions (GWS), LaBella Associates (LaBella) has prepared a HELP Model Analysis of the percolation/leakage through the proposed liner and cap systems for the North Meck Construction and Demolition (C&D) Landfill (NML) proposed expansion compared to the permitted cap systems of the existing two landfills, as requested by NCDEQ Solid Waste Section.

➤ **Existing Conditions**

The NML currently operates an active C&D Infill Area (approximately 34.3 acres) north of the property. Please refer to Drawing No. 1 for existing conditions. There is also an existing closed C&D Landfill (approximately 33.5 acres) south of the property. The final closure of the C&D Landfill (Phases I&II) was completed in June of 2002. The final cap was constructed with a minimum of 24" of cover soil from a local source. On the other hand, the active Infill Landfill Area is subject to Rule 15A NCAC 13B .0543, which details engineering requirements for caps and became effective in 2007. The permitted/constructed closure caps and the HELP Model Analysis are summarized in Table 1. The attached HELP Model runs assumed a surface slope of 15%.

Table 1: HELP Model Analysis of Existing Permitted/Constructed Landfill Caps.

Landfill	Cap System (from top to bottom) (Permitted/Constructed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil (Constructed)	33.5	9,830	329,305
Infill Landfill Area (Active)	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil (Permitted)	34.3	5,510	188,993
Total		67.8	--	518,298



➤ **Proposed Landfill Expansion**

GWS is proposing to expand the NML by filling in the valley between the two existing landfill areas. The filling of the valley is intended to maximize waste disposal within the limits of the property (parcel) without expanding the waste footprint toward neighboring parcels. GWS is proposing to line the valley and the piggyback areas on the active Infill Landfill Area and the closed C&D Landfill. The base liner system (approximately 48.6 acres) is shown on Detail 1 on Drawing No. 2. GWS is proposing to construct the base liner system as shown on Detail 1 on Drawing No. 2 on the piggyback area of the active Infill Landfill in lieu of the permitted cap. The base liner system will be constructed on the piggyback area of the closed C&D Landfill. GWS may consider a partial removal of C&D Landfill 24" soil cap prior to the construction of the proposed liner system. The HELP Model runs did not include the 24" soil cap in analyzing the proposed liner/cap system.

At the completion of waste filling operations, GWS is proposing to cap the landfill expansion area (approximately 48.6 acres) with the synthetic cap system shown on Detail 1 on Drawing No. 2. Areas outside of the piggyback footprint on the active Infill Landfill Area will be closed using the permitted cap system, while areas on the closed C&D Landfill will remain closed with 24" of cover soil. The permitted/proposed closure caps and the HELP Model Analysis are summarized in Table 2. The attached HELP Model run assumed a surface slope of 15% consistent with the permitted/constructed caps HELP Model runs. All other modeling assumptions were consistent with the permitted/constructed caps HELP Model runs.



Table 2: HELP Model Analysis of Proposed Landfill Cap/Liner Systems.

Landfill	Cap/Liner Systems (from top to bottom) (Permitted/Constructed/Proposed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap /Liner (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil <u>(Constructed)</u>	17.1	9,830	168,093
C&D Landfill (Phases I&II) (piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	16.4	0.00002	0.000328
Infill Landfill Area (Piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	20.7	0.00002	0.000414
Valley Fill Area (Horizontal Landfill Expansion Footprint)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	11.5	0.00002	0.00023
Infill Landfill Area	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil <u>(Permitted)</u>	13.6	5,510	74,936
Total		79.3		243,029

*Gas geocomposite was excluded from the HELP model runs as it has an insignificant impact on the results.



In conclusion, the HELP Model runs evaluate the percolation/leakage to the existing waste with the permitted cap and after the construction of the proposed expansion liner/cap systems. Although the proposed landfill expansion includes lining the valley between the existing closed landfill (Phases I&II) and the active Infill Landfill area, which adds approximately 11.5 acres of landfill footprint, the lining/capping of the existing landfills piggyback areas reduces the percolation/leakage to the existing waste mass by more than 50% according to the HELP Model Analysis. The attached HELP Model runs and drawings provide additional details.

We hope that you agree with our conclusion that the aforementioned benefits from the proposed liner and cap systems of the expansion project are significant compared to closing the landfill as currently permitted. We request a letter from NCDEQ Solid Waste Section to the Town of Huntersville and Mecklenburg County detailing the benefits of the proposed expansion project. The proposed liner/cap systems is significantly reducing percolation/leakage through the existing waste into the environment.

If you have any questions or require additional information that would help the Solid Waste Section determine the benefits of the proposed liner/cap systems compared to the existing permitted/constructed cap systems, please do not hesitate to give me a call at (704) 941-2164.

Respectfully submitted,

LaBella Associates

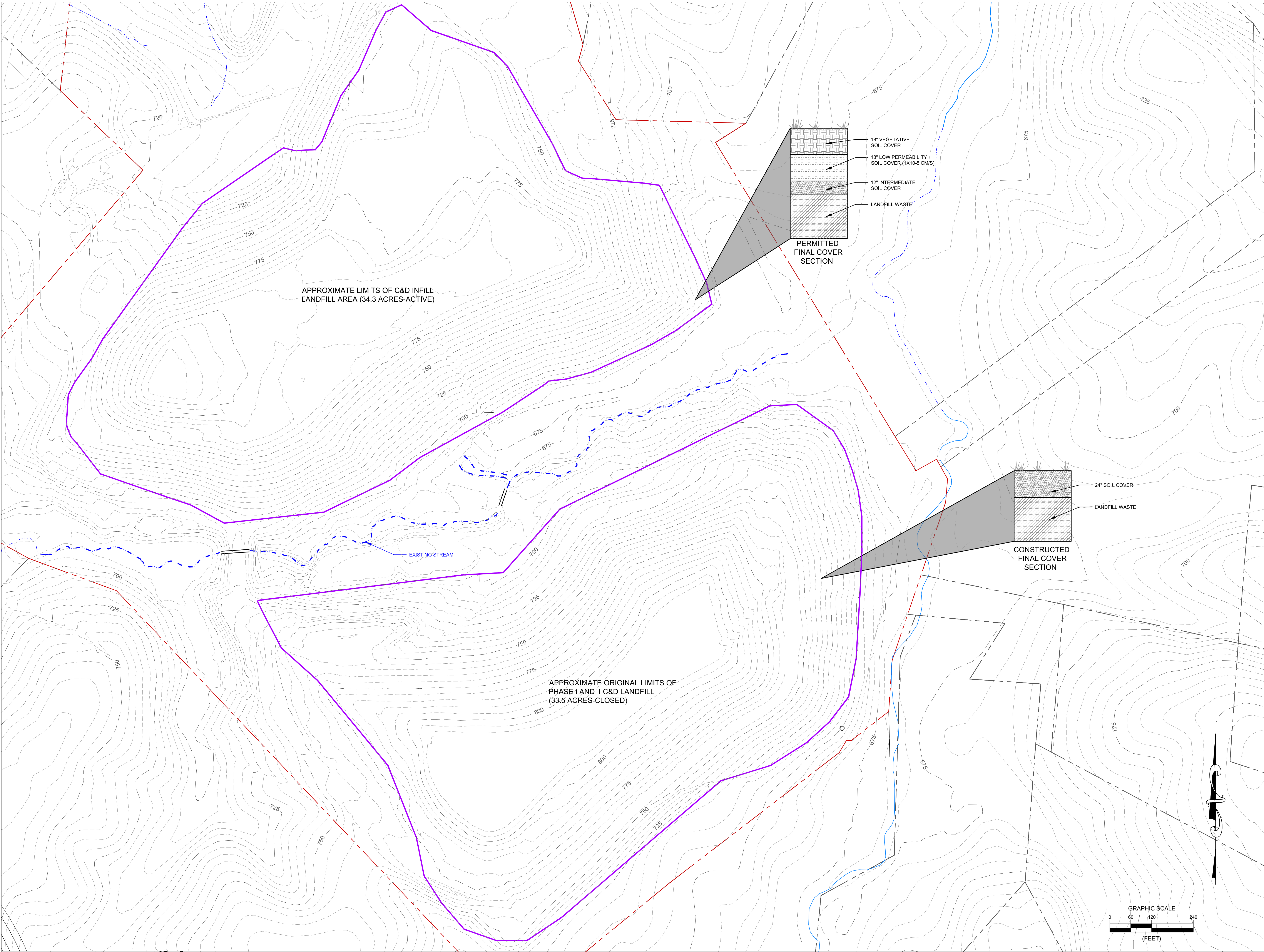
Mousa Maimoun, Ph.D., P.E.
Sr. Project Consultant

Attachments:

Drawing No. 1 – Existing Conditions
Drawing No. 2 – Proposed Landfill Expansion (Conceptual)
HELP Model Runs

Cc: Ms. Sherri Stanley, P.E., NCDEQ Solid Waste Section
Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates

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© 2020 LaBella Associates	

GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

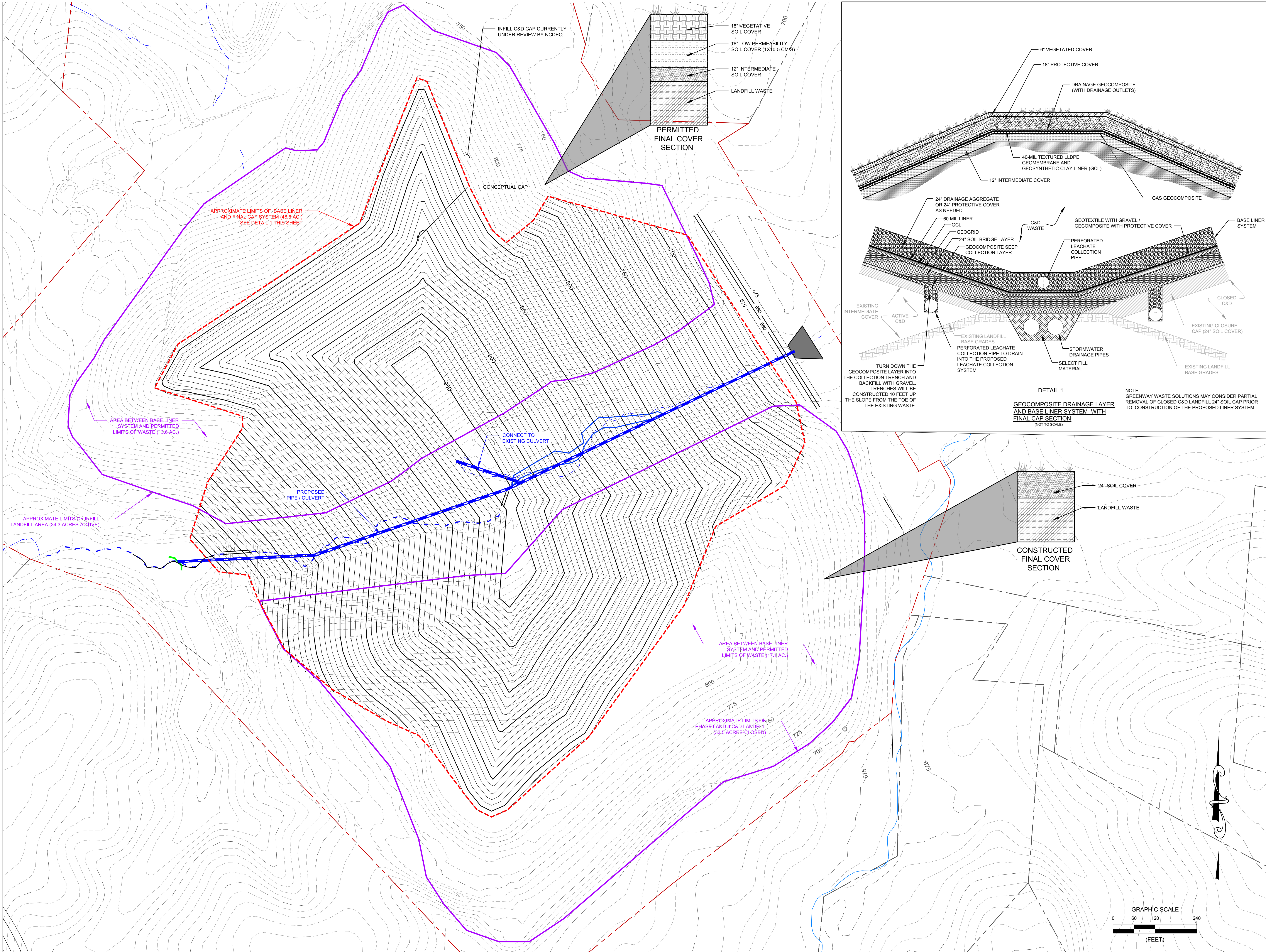
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

EXISTING CONDITIONS

DRAWING NUMBER:

L:\NORTH MECK2020 expansion\NOV 2020 FIGURES\2 CONCEPT LANDFILL WITH CAP AND LINER DETAIL.dwg Layout=Layout1



GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY CONCEPT-HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

**PROPOSED LANDFILL
EXPANSION
(CONCEPTUAL)**

DRAWING NUMBER:

Exhibit#5-EPA Vinyl Chloride Fact Sheet

Vinyl Chloride

75-01-4

Hazard Summary

Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Acute (short-term) exposure to high levels of vinyl chloride in air has resulted in central nervous system (CNS) effects, such as dizziness, drowsiness, and headaches in humans. Chronic (long-term) exposure to vinyl chloride through inhalation and oral exposure in humans has resulted in CNS effects and liver damage. Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. Vinyl chloride exposure, via inhalation, has been shown to increase the risk of a rare form of liver cancer, angiosarcoma of the liver, in humans. EPA has concluded that vinyl chloride is carcinogenic to humans by the inhalation and oral routes of exposure, and highly likely to be carcinogenic by the dermal route of exposure.

Please Note: The main sources of information for this fact sheet are the U.S. Environmental Protection Agency's (EPA's) Integrated Risk Information System and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profile for Vinyl Chloride. (1,2)

Uses

- Most of the vinyl chloride produced is used to make polyvinyl chloride (PVC), a material widely used in automotive parts, packaging products, pipes, construction materials, furniture, and a variety of other products. (2)
- Smaller amounts of vinyl chloride are used as a chemical intermediate and a solvent. (2,4)

Sources and Potential Exposure

- Ambient air concentrations of vinyl chloride are generally quite low, with exposure occurring from the discharge of exhaust gases from factories that manufacture or process vinyl chloride, or evaporation from areas where chemical wastes are stored. (2,3)
- Vinyl chloride may enter finished drinking water from the flow of water through older PVC piping made before 1977, but a more recent study suggests that the extraction of vinyl chloride may diminish over time. Since 1977, product standards (NSF/ANSI 14 and 61) have controlled the release of vinyl chloride from PVC pipes. (5,6)
- Occupational exposure to vinyl chloride may occur in those workers concerned with the production, use, transport, storage, and disposal of the chemical. (2,3)
- Vinyl chloride has been detected in tobacco smoke. (2)

Assessing Personal Exposure

- Vinyl chloride can be measured in urine, body tissue, and exhaled air but the tests are not reliable indicators of total exposure. (2)

Health Hazard Information

Acute Effects:

- Acute exposure of humans to high levels of vinyl chloride via inhalation has resulted in effects on the CNS, such as dizziness, drowsiness, headaches, and giddiness. (2,3)
- Acute exposure to high levels of vinyl chloride in animals has resulted in effects on the CNS, liver, kidney, and lungs. (2)
- Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure. (2,3)

Chronic Effects (Noncancer):

- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure. (2,3)
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema). (2,3)
- CNS effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride. (2)
- Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. (2,3)
- EPA has established a Reference Concentration (RfC) of 0.1 milligrams per cubic meter (0.1 mg/m³) based on effects on the liver in rats. The RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not an estimator of risk but rather a reference point to gauge the potential for effects. At exposures increasingly greater than the RfC, the potential for adverse health effects increases.

Lifetime exposure above the RfC does not imply that an adverse effect would necessarily occur. (1)

- EPA has established a Reference Dose (RfD) for vinyl chloride is 0.003 milligrams per kilogram body weight per day (mg/kg/d) based on liver toxicity in rats. (1)

Reproductive/Developmental Effects:

- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects; however, other studies have not supported these findings. (2,3)
- Several case reports involving worker exposures suggest that male sexual performance may be affected by vinyl chloride; however, these reports are limited by possible co-exposure to other chemicals and lack of exposure estimates. (2)
- Testicular damage and decreased male fertility have been reported in rats exposed to vinyl chloride. (2)
- Animal studies have reported decreased fetal weight and birth defects in the offspring of rats exposed to vinyl chloride through inhalation at levels that are also toxic to maternal animals. (2)

Cancer Risk:

- Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. (1,2,3)
- Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver. (1,2,3)
- Several rat studies show a pronounced early-life susceptibility to the carcinogenic effect of vinyl chloride, i.e., early exposures are associated with higher liver cancer incidence than similar or much longer exposures that occur after maturity. (2)
- EPA has classified vinyl chloride as a known human carcinogen by the inhalation route of exposure. (1)
- EPA uses mathematical models, based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. EPA has calculated inhalation unit risk estimates of $4.4 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for exposure to vinyl chloride during adulthood and $8.8 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for lifetime exposure. EPA estimates that, if an individual were to continuously breathe air containing vinyl chloride at an average of $0.11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-4} \text{ mg}/\text{m}^3$) over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing this chemical. Similarly, EPA estimates that continuously breathing air containing $1.1 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-3} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer, and air containing $11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-2} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-ten thousand increased chance of developing cancer. For a detailed discussion of confidence in the potency estimates, please see IRIS. (1)

- EPA has calculated an oral cancer slope factor of $7.2 \times 10^{-1}(\text{mg/kg-day})$ for oral exposure to vinyl chloride during adulthood and an oral cancer slope factor of 1.4 (mg/kg-day) for lifetime exposure. (1)

Physical Properties

- Vinyl chloride is a colorless, flammable gas with a mild, sweet odor. (4)
- The odor threshold for vinyl chloride ranges from 260 ppm to 4,000 ppm. (4)
- The chemical formula for vinyl chloride is $\text{C}_2\text{H}_3\text{Cl}$ and the molecular weight is 62.5 g/mol. (4)
- The vapor pressure for vinyl chloride is 2,600 mm Hg at 25 °C, and it has a log octanol/water partition coefficient (log K_{ow}) of 1.36. (2)

Conversion Factors:

To convert concentrations in air (at 25 °C) from ppm to mg/m^3 : $\text{mg}/\text{m}^3 = (\text{ppm}) \times (\text{molecular weight of the compound})/(24.45)$. For vinyl chloride: $1 \text{ ppm} = 2.6 \text{ mg}/\text{m}^3$.

Health Data from Inhalation Exposure



ACGIH TLV--American Conference of Governmental and Industrial Hygienists' threshold limit value expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effects.

AIHA ERPG - American Industrial Hygiene Association's emergency response planning guidelines. ERPG 1 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor; ERPG 2 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing or developing irreversible or other serious health effects that could impair their abilities to take protective action.

ATSDR MRL – An inhalation MRL is an estimate of the amount of a chemical a person can breathe each day without a detectable risk to health. MRLs are developed for health effects other than cancer. MRLs can be calculated for 3 different time periods of exposure to the chemical: acute (about 1 to 14 days), intermediate (from 15-364 days), and chronic (exposure for more than 364 days).

CalEPA Acute REL – California EPA Office of Environmental and Human Health Assessment (OEHHA) acute reference exposure level is the concentration at or below which no adverse health effects are anticipated for a specified exposure duration.

OSHA PEL--Occupational Safety and Health Administration's permissible exposure limit expressed as a time-weighted average: the concentration of a substance to which most workers can be exposed without adverse effect averaged over a normal 8-h workday or a 40-h workweek.

OSHA PEL Ceiling -- Occupational Safety and Health Administration's permissible exposure limit expressed as a short-term exposure limit that should not be exceeded in a 15-minute time period.

RBC—Risk-based concentration.

^a Toxicity, Health, and Risk numbers are toxicological values from animal testing or risk assessment values developed by EPA.

^b Regulatory numbers are values that have been incorporated in Government regulations, while advisory numbers are nonregulatory values provided by the Government or other groups as advice. OSHA numbers are regulatory, whereas ACGIH, NIOSH, and AIHA numbers are advisory.

Summary updated in March 2020

References

1. U.S. Environmental Protection Agency. Integrated Risk Information System (IRIS) on Vinyl chloride. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. Last revised 8/07/2000. <http://www.epa.gov/iris>

2. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological Profile for Vinyl Chloride. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 2006. <http://www.atsdr.cdc.gov/toxprofiles/tp20.pdf>
3. U.S. Department of Health and Human Services. Hazardous Substances Data Bank (HSDB, online database). National Toxicology Information Program, National Library of Medicine. 2020. <http://pubchem.ncbi.nlm.nih.gov/compound/6338>
4. Pohanish, R.P. Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogens. 6th ed. Elsevier Inc. Oxford, UK and Waltham, MA USA. 2012.
5. Flournoy, R. L., Monroe, D., Chestnut, N., & Kumar, V. (1999). Health effects from vinyl chloride monomer leaching from pre-1977 PVC pipe. In Annual American Water Works Association Conference Proceedings (pp. 1211-1230).
6. Walter, R. K., Lin, P. H., Edwards, M., & Richardson, R. E. (2011). Investigation of factors affecting the accumulation of vinyl chloride in polyvinyl chloride piping used in drinking water distribution systems. Water research, 45(8), 2607-2615.
7. American Conference of Governmental Industrial Hygienists (ACGIH). 2018 TLVs and BEIs. Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices. Cincinnati, OH. 2018.
8. Occupational Safety and Health Administration (OSHA). Occupational Safety and Health Standards, Toxic and Hazardous Substances. Code of Federal Regulations. 29 CFR 1910.1000. 2018.
https://www.osha.gov/pls/oshaweb/owadisp.show_unique?p_table_name=STANDARDS&p_unique_file=1910_1017&p_anchor_name=
9. American Industrial Hygiene Association (AIHA). The AIHA 2018 Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. 2018.
10. California Environmental Protection Agency (CalEPA). Technical Supporting Document for Noncancer RELs, Appendix D2. Office of Environmental Health Hazard Assessment. 2008.
<https://oehha.ca.gov/chemicals/vinyl-chloride>

Exhibit#6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services for Mitigation

Lauren Speight

From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>
Sent: Tuesday, August 3, 2021 7:42 PM
To: Bradley Priest; Jack Simoneau
Cc: Brian Richards; Lauren Speight; Canaan, Dave; Smithberger, Jeffrey; Edwards, Olivia; DeMaury, Joshua; Eubanks, Ron
Subject: Variance Request for North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road
Attachments: Response to Variance Request at 15416 Holbrooks Road in Huntersville.pdf
Importance: High

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Brad,

Please find attached for consideration in the review of the variance request to impact the SWIM Buffer along Cane Creek to install a pipe to facilitate expansion of the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road.

Please let me know if you have any questions.

Thank you.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org



We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.

From: Bradley Priest <bpriest@huntersville.org>
Sent: Tuesday, August 3, 2021 12:49 PM
To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>; Jack Simoneau <jsimoneau@huntersville.org>
Cc: Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>
Subject: RE: [External]Re: SWIM Buffers

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Hey Rusty,

Thank you for that heads up. If you cannot recommend approval for their mitigation and project at this time, our variance recommendation would be to continue their item. Lauren is working on those staff reports now for the August meeting. If you could send me the note outlining the issues, I'll send to the applicant ASAP. I'd like to understand what their intent is for the meeting, to continue the item or move forward. Thanks.

Bradley D. Priest, AICP

Principal Planner

Town of Huntersville

Planning Department

704-766-2214

105 Gilead Road – 3rd Floor

Huntersville, NC 28070

www.huntersville.org



From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Sent: Monday, August 2, 2021 6:07 PM

To: Jack Simoneau <jsimoneau@huntersville.org>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: RE: [External]Re: SWIM Buffers

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You are very welcome. FYI, Greenway Waste Solutions has not provide us with enough information to adequately assess the impacts of the piping at the Holbrook Road Landfill. We have assessed the stream they are planning to pipe and we have identified a few mitigation options, but there is still a lot we don't know about the piping itself that prevents us from making a fair assessment regarding potential future impacts. I am preparing something to send to Brad tomorrow that summarizes where we are to date.

From: Jack Simoneau <jsimoneau@huntersville.org>

Sent: Monday, August 2, 2021 6:00 PM

To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the information Rusty.

Jack Simoneau

On Aug 2, 2021, at 4:44 PM, Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov> wrote:

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jack,

In response to our phone call, the SWIM buffer ordinances for Mecklenburg County, Charlotte, Mint Hill, and Pineville allow for SWIM buffer disturbances with mitigation approved by Charlotte Mecklenburg Storm Water Services. They all use the 9 mitigation measures that you have in your draft ordinance. The SWIM buffer ordinances for Cornelius, Davidson, Huntersville, and Matthews require a variance before buffer impacts will be allowed. None of the jurisdictions in Mecklenburg County allow 401/404 mitigation to count for SWIM buffer mitigation. This is the way it has been since the ordinances were adopted over 20 years ago. 401/404 Permits are required by State and federal laws for impacts to water bodies, including wetlands, streams, lakes, and ponds. SWIM buffer mitigation is required for impacts to buffers around water bodies. In many cases, buffer impacts do not require 401 & 404 Permits. For example, a property owner may want to add a patio in the buffer. This does not require a 401-404 Permit because surface waters are not impacted, but buffer mitigation would be required. Also, 401/404 mitigation is supposed to occur in the same designated HUC or hydrologic unit where the impact occurred. In some cases mitigation is allowed outside the HUC, but at a higher rate. For buffer mitigation, it is to occur in the same jurisdiction. There are 2 HUCs for Huntersville, including Mountain Island Lake-Catawba River (#0305010114) that includes portions of Gaston and Lincoln Counties as well as Charlotte, and the Upper Rocky River (#0304010501) that includes parts of Davidson, Harrisburg and Cabarrus County. If Huntersville were to allow the use of 401/404 mitigation to satisfy a buffer impact, then the money could be spent in several other jurisdictions that would not benefit water quality in the Town. It also important to note that the State does not allow 401/404 mitigation to count as mitigation for impacts to State buffers as described in 15A NCAC 02B .0295. This is because the mitigation is covered under separate rules and is for different purposes. State buffer mitigation has several of the same components as the SWIM buffer mitigation.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org

<image002.png>

We are passionate about making our environment safe and healthy
by reducing flood losses and improving water quality for all.



**Response to Variance Request at 15416 Holbrooks Road in
Huntersville (Parcel No. 01910102)
North Mecklenburg Construction & Demolition Landfill
August 3, 2021**

Introduction:

The information below is provided to the Town of Huntersville for their consideration in the review of the variance request to impact approximately 212,500 square feet of SWIM Buffer at the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road. These impacts would be associated with piping an estimated 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion (see Appendix A). This information is provided by the Storm Water Services Division of Mecklenburg County's Land Use and Environmental Services Agency (LUESA).

Description of the Current Conditions of the Stream to be Piped:

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and stream habitat assessment were performed by staff with Storm Water Services within the tributary proposed for piping. The approximate location of the area evaluated is shown in Appendix A. Results indicate that the stream reach has very poor fish community abundance and diversity as well as a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR. The stream channel was found to be badly eroded and lack the necessary habitat conditions to support healthy fish and benthic communities as shown in Photos 1 and 2 below. The locations of these photos are shown in Appendix A. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community. Additional information is provided in Appendix B.



Photo 1: Cane Creek to be Piped



Photo 2: Cane Creek to be Piped

Potential Mitigation Options for the Loss of the Buffer:

If the variance is approved, the petitioner has indicated a preference to use the Mitigation Credit technique described in Article 8.25.11b(8) of Huntersville's Zoning Ordinance. Specifications for the use of this technique are provided on page 54 in Section 5.4.3 of the Charlotte-Mecklenburg Buffer Implementation Guidelines at the following link: [file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20\(13\).pdf](file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20(13).pdf).

This technique involves the purchase of Mitigation Credits on a 1:1 basis utilizing the square feet of the disturbed buffer area and the prevailing rate of \$10/square foot. With a disturbed area estimated at 212,500 square feet, the Mitigation Credit is calculated at \$2,125,000 that would be paid to the Town of Huntersville for use within their jurisdiction for improving water quality. Storm Water Services has identified two (2) potential options for use of this Mitigation Credit as described below.

Option 1: Install a stormwater control measure (SCM) such as a wet pond on Town property located at 100 Sherwood Drive to provide water quality and quantity treatment for approximately 10.4 acres of Town owned parcels located upstream, including Town Hall, the Senior Center, and Sherwood Park (PID Numbers: 01712241, 01712214, 01712213, 01712211, 01712210, 01712245, 01903115, 01903116, & 01903114). The SCM would also provide treatment for some road drainage and Cashion's store. It is estimated that this SCM will remove 1,000 lbs./acre/year of sediment and 5 and 2 lbs./acre/yr. of Total Nitrogen and Total Phosphorus, respectively. Figure 1 below illustrates with a blue dot the potential location of the SCM with the treated upstream drainage area indicated in yellow highlight.

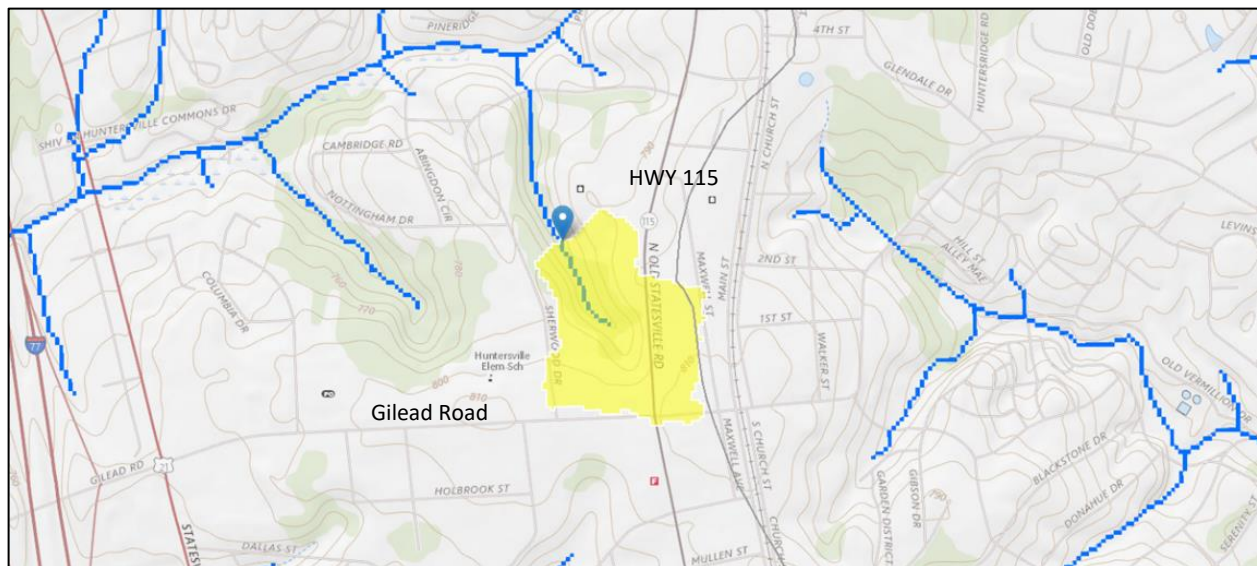


Figure 1: Potential Location of SCM Mitigation Measure

Option 2: Complete a stream restoration project in Cane Creek or the South Prong of Clarke Creek downstream of the landfill. The purpose of the project would be to restore habitat and improve channel stability to promote a healthy aquatic community, including benthics and fish. Storm Water Services uses a Stream Restoration Ranking System or SRRS to prioritize stream reaches for restoration based on a 300-point scale with lower SRRS Scores representing degraded stream conditions with a higher priority for restoration and a SRRS Score of 190 representing acceptable stream conditions. Preliminary SRRS Scores below 190, indicating a potential for restoration, have been calculated for the areas shown in Appendix A along the South Prong of Clarke Creek. In addition, field observations made on July 22, 2021 by Storm Water Services' staff revealed sufficiently degraded channel conditions that potentially warrant restoration in Cane Creek in proximity to the landfill. Photos 3 and 4 below illustrate these conditions at the locations shown in the map included as Appendix A. However, field evaluations and final SRRS Scores are needed to assess channel conditions and potential uplift (i.e., channel stability and habitat improvements) to fully ascertain the viability and benefits of a stream restoration project in either Cane Creek or the South Prong of Clarke Creek in proximity to the landfill.



Photo 3: Cane Creek Downstream of Landfill



Photo 4: Cane Creek Downstream of Landfill

Description of Negative Impacts from the Piping:

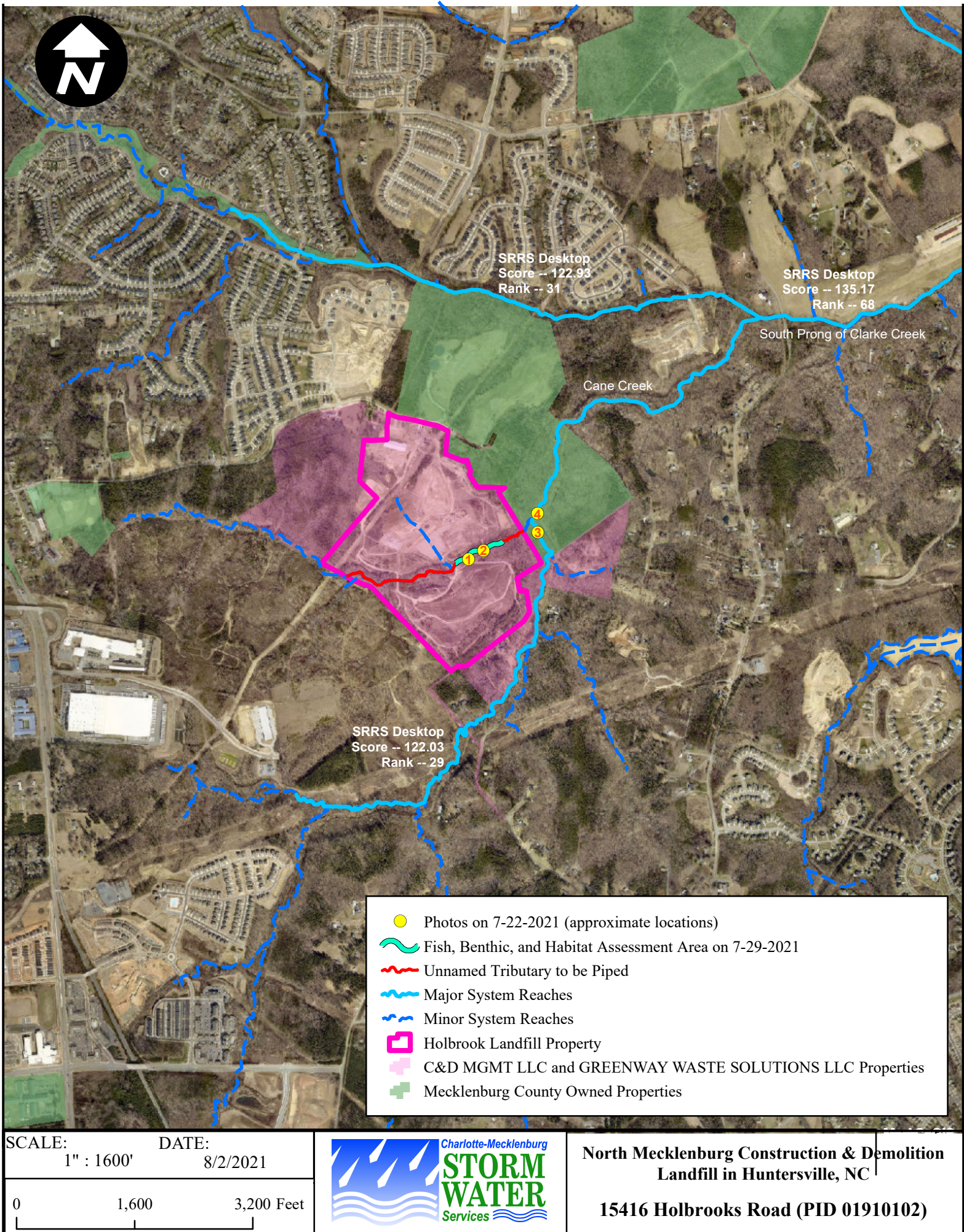
To date, Storm Water Services has not been provided with sufficient information to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. The following questions remain unanswered:

1. What engineering analysis has been performed to verify that the piping system will remain stable and functional during the life of the site and subsequent post closure period?
2. How is the system being engineered to prevent leachate from entering the pipe?
3. What is to prevent the gravel underlayment for the piping system from serving as a conduit for leachate to migrate off site?
4. What is the plan if the piping system fails?
5. Are there plans to monitor for negative downstream water quality impacts?
6. Is the system designed in such a way that leaks can be located and repaired?
7. The outlet of the piped section calls out 130 linear feet of stream to be preserved. However, no energy dissipation device is indicated at the tie-in. What will be constructed to prevent accelerated downstream bank erosion?
8. What are the impacts to flood levels downstream of the pipe? A Hydraulic and Hydrologic Analyses (H&HA) report is requested.
9. What occurs when the flow exceeds the design capacity of the pipe? Where will the water go? The H&HA report from #8 will help answer this question.
10. What measures will be implemented to prevent off site sedimentation during the piping and landfilling operation?

Recommendation to the Town of Huntersville:

The section of Cane Creek proposed for piping is significantly degraded and there are multiple mitigation opportunities in proximity that could result in overall improved water quality conditions. However, these potential improved conditions could easily be negated if the piping system malfunctions or fails resulting in negative downstream impacts associated with water quality and/or quantity issues. Storm Water Services has not been provided with sufficient information to accurately assess the potential for these negative impacts. Responses to the ten (10) questions listed in the previous section are required before this assessment can be completed.

Appendix A: North Mecklenburg Construction & Demolition Landfill Project Area Map



Appendix B

Fish Community Survey, Benthic Macroinvertebrate Bioassessment and Stream Habitat Assessment of the Cane Creek Tributary Flowing through the Holbrooks Landfill

Methodology

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and a stream habitat assessment were conducted by Mecklenburg County Storm Water Services within the tributary to Cane Creek that flows through the Holbrooks Landfill located at 15416 Holbrooks Road in Huntersville, NC. The fish community survey was conducted on a 200-meter stream reach within the project bounds using electroshocking methodologies in accordance with the Mecklenburg County Fish Community Survey Procedures. The benthic macroinvertebrate bioassessment consisted of collecting the benthic macroinvertebrates found within a 100-meter stream reach from all microhabitats present. The bioassessment procedures followed the Mecklenburg County Stream Bioassessment Procedures. The stream habitat assessment consisted of evaluating 10 stream habitat parameters following the Mecklenburg Stream Habitat Assessment (MHAP) Field Guide.

Fish Community Results

A total of 35 organisms, representing three (3) fish species were collected (see Table 1). The fish species collected were Creek Chub, Rosyside Dace, and Green Sunfish which are considered tolerant. Tolerant fish are able to thrive in poor stream conditions. The low numbers of total fish and species type collected during this survey indicates a stream with a very poor fish community abundance and diversity.

Benthic Macroinvertebrate Results

A total of 48 individual organisms were collected. Twenty-one (21) of those organisms were identified to the lowest possible taxa identification level (Genus and Species). The remaining 27 organisms were identified as Chironomidae (Family taxa level). Of the 10 taxa found, only 2 belonged to the sensitive aquatic insect groups of Mayflies (Ephemeroptera), Stoneflies (Plecoptera) and Caddisflies (Trichoptera) collectively referred to as EPT taxa. These results are typical of a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR (see Table 2).

Stream Habitat Assessment (MHAP) Results

The assessed stream reach received a MHAP score of 119.7 out of 200 possible points which is considered *Partially Supporting* (see Table 3). Parameters that received low individual scores include Stream Bed Substrate (6.7 out of 20), Sediment Deposition (7.6 out of 20), Frequency of Riffles (7 out of 20) and Vegetative Buffer Width (7.1 out of 20). The stream bottom was filled with sand resulting in very few riffles (faster moving water) which are the best habitat for benthic macroinvertebrates and very few pools which are the best habitat for fish.

Conclusions

The poor habitat quality of the Cane Creek Tributary flowing through the Holbrooks Landfill property has resulted in the stream being able to support only a small number of fish and benthic macroinvertebrate organisms. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community.

Table 1: Fish Community Survey Data

Fish Species	Count	Size Range (mm)	Multiple Age Classes?	Tolerant / Intolerant?
Creek Chub	28	62 to 110	Yes	Tolerant
Rosyside Dace	5	65 to 79	No	Intermediate
Green Sunfish	2	84 to 88	No	Tolerant

Table 2: Benthic Macroinvertebrate Assessment Data

ORDER	FAMILY	GENUS/SPECIES	TOLERANCE	NO.
EPHEMEROPTERA	BAETIDAE	LABIOBATIS PROPINQUUS	5.8	1
PLECOPTERA	PERLIDAE	PERLESTA SPP.	2.9	1
COLEOPTERA	DRYOPIDAE	HELIHUS SPP.	4.1	1
COLEOPTERA	ELMIDAE	STENELMIS SPP.	5.6	3
DIPTERA	CHIRONOMIDAE	Tanypodinae	NA	14
DIPTERA	CHIRONOMIDAE	Non-Tanypodinae	NA	13
DIPTERA	PTYCHOPTERIDAE	BITTACOMORPHA CLAVIPES	5.0	1
DIPTERA	SIMULIIDAE	SIMULIUM SPP.	4.9	4
DIPTERA	STRATIOMYIDAE	STRATIOMYS SPP.	8.1	1
ODONATA	CALOPTERYGIDAE	CALOPTERYX SPP.	7.5	4
ODONATA	GOMPHIDAE	GOMPHUS SPP.	5.9	3
ODONATA	GOMPHIDAE	PROGOMPHUS OBSCURUS	8.2	2

Table 3: Stream Habitat (MHAP) Data

Instream Cover	Epifaunal Substrate	Stream Bed Substrate	Channel Alteration	Sediment Deposition	Frequency of Riffles	Channel Flow Status	Bank Vegetation	Bank Stability	Buffer
16.1	14.4	6.7	19	7.6	7	12	15.2	14.6	7.1

**Town of Huntersville
Board of Adjustment
August 10, 2021**

To: Town Board

From: Lauren Speight, Planner 1

Date: August 10, 2021

Subject:

EXPLAIN REQUEST:

The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Section 151.60 (A) (10) of the Huntersville Code of Ordinances**. The request is for a variance to allow construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and/or chemical storage facilities in special flood hazard area.

ACTION RECOMMENDED:

Planning Department Staff recommend continuing the public hearing for this variance request based on the staff findings provided in the staff report.

FINANCIAL IMPLICATIONS:

N/A

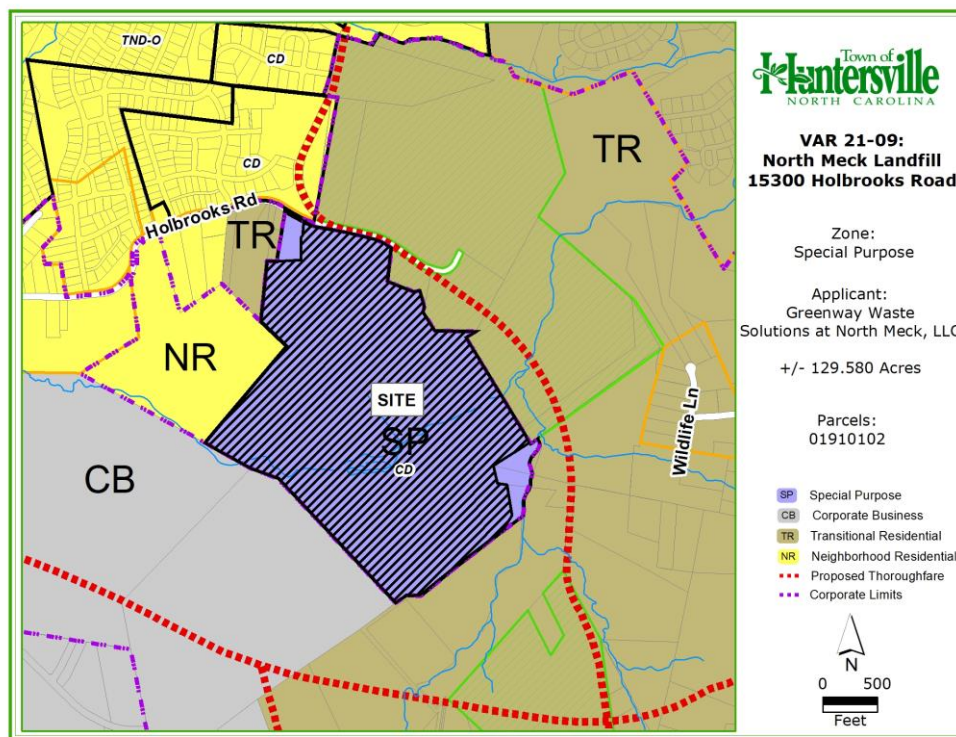
ATTACHMENTS:

1. V21-09 Staff Report

**V 21-09, 15300 Holbrooks Road
Parcel ID 019-101-02**

Case #: V21-09
Address: 15300 Holbrooks Road, Huntersville, NC 28078
Parcel #: 019-101-02
Acreage: 129.58
Property Owner/Applicant: C&D Management Company (Owner)
Owner/Applicant Address: John Brown on behalf of Greenway Waste Solutions at North Meck, LLC (applicant)
Staff: Lauren Speight – Planner II

Currently in use, the 129.58-acre property is seeking to expand the construction and demolition landfill area within the subject property. The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Section 151.60 (A) (10) of the Huntersville Code of Ordinances**. The request is for a variance to allow construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and/or chemical storage facilities in special flood hazard area.



BACKGROUND:

1. The subject property, 15300 Holbrooks Road (Parcel 019-101-02) is located within a Special Purpose Conditional District, Rezoning 16-06. (Exhibit #1 - Approved CD Rezoning)
2. The subject property is currently operating a landfill and has been continuously operating since 1991. The subject property was not with the zoning jurisdiction of the Town of Huntersville in 1991.
3. The subject property obtained a Special Use Permit 16-01 approved by the Huntersville Town Board November 7, 2016 to allow the landfill to expand its boundaries and add another fill area in the existing site. (Exhibit #2 - Approved SUP)
4. The subject property is located within the Town of Huntersville.

5. The applicants are seeking a Conditional District Rezoning (R16-06) and Special Use Permit modification (SUP16-01), to pipe a stream running across their property and expand the C&D landfill over the stream. To move forward with the Rezoning and Special Use Permit process the applicants are first required to obtain variance approvals from the Board of Adjustment for the following sections:
 - a. Zoning Ordinance Article 8.25
 - i. The proposed use was not a permitted buffer impact per Article 8.25.6 or Article 8.25.10. Per, Article 8.25.11(b), when “unnecessary hardships,” as defined in Section 11.3.2 f, would result from strict adherence to the buffer width requirements and/or buffer treatment standards, a petition for variance may be filed with the Huntersville Board of Adjustment in compliance with the procedures and standards of Section 11.3.
 - b. Zoning Ordinance Article 9.23.4 c (See V21-08)
 - i. No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - ii. 50-foot buffer from delineated streams.
 - c. Code of Ordinances Section 151.60(A)(10) (See V21-09)
 - i. Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance, in special flood hazard area.
6. In addition to the condition rezoning and special use permits, Variance 16-02 was submitted seeking variances from Article 8.25 of the Zoning Ordinance, Article 9.23 of the Zoning Ordinance, and Section 151.60(A)(10) of the Code of Ordinances.
7. The three variance requests submitted in 2016 were withdrawn. (See Exhibit #3 - 2016 Withdrawal Email).
8. Included in the 2016 withdrawal email exchange between Planning Department Staff and the applicant, staff referenced a significant finding at the time that NCDEQ found contamination of surface and groundwater at the subject property. Staff was unable to support of the 2016 variance application meeting the fourth variance standard that the request was consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved. (See Exhibit #3 - Withdrawal)
9. Because the property did not obtain the 2016 variance, use of the landfill was constricted to the area outside of the S.W.I.M. Buffer and the use was allowed in other areas of the property.
10. Within the application for Variance 21-09, the applicant includes a letter dated October 3, 2019 from NCDEQ to the applicant with regard to the Corrective Action Plan for the groundwater exceedances at the landfill. The letter the referenced Corrective Action Plan to control the migration of contaminated groundwater submitted to prevent unacceptable impacts was approved. (See Exhibit #4 - Variance Application, pages 27-28)
11. The applicant proposes to pipe the creek inside the +/- .87 acre Special Flood Hazard and S.W.I.M. Area. The applicant proposes the proposed lines and capped landfill expansion will be engineered to NCDEQ’s most current standards to further enhance public health and safety and will not reduce the value of nearby property as compared to past North Carolina standards. (See Exhibit #4 - Variance Application, page 8)
12. The applicant included in the application dated March 2, 2021 from NCDEQ Solid Waste Section Chief Ed Mussler that indicates LaBella (engineering consultant for Greenway Waste Solutions) compared the existing cap requirements to the proposed capping system. The findings by LaBella indicate employing the proposed, enhanced cap will reduce infiltration of pollutants by 50% compared to the alternative of the regulatory minimum cap on the landfill with no expansion. (See Exhibit #4 - Variance Application, page 25)
13. Additionally, the applicant includes a letter from the Catawba and Yadkin Riverkeepers. (See Exhibit #4 - Variance Application, page 10)
14. While the Catawba and Yadkin Riverkeepers is an advocacy organization, NCDEQ administers regulatory programs designed to protect air quality, water quality, and the public's health.
15. The letter indicates that riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. The letter states, “[they] are opposed to increases in

impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 location, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.” The letter from the Catawba and Yadkin Riverkeepers also acknowledges their recommendation is based on several assumptions and the Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.

16. A document is included by the applicant, “Historical Regulatory Compliance Time-Line,” that indicates a lab that previously analyzed groundwater samples from the subject property produced false-positive results for vinyl chloride. (See Exhibit #4 - Variance Application, page 29-30)
17. The Environmental Protection Agency classifies vinyl chloride as a human carcinogen. (See Exhibit 5 – EPA Fact Sheet on Vinyl Chloride)
18. The Historical Regulatory Compliance Time-Line document provided by the applicant also indicates analytical results from Eurofins TestAmerica (ETA), an environmental testing lab, show vinyl chloride has been detected in 10 monitoring wells according to testing conducted in April 2021. However, according to the document the detections identified by ETA do not exceed the allowable concentration of vinyl chloride specified in the 2L rules.
19. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. (See Exhibit #6 – Email from Rusty Rozzelle and report from Mecklenburg County Storm Water Services)
20. On August 4, 2021, Town Planning Department Staff (Brad Priest and Lauren Speight) held a conference call with Jacklynne Drummond (Hydrologist, Solid Waste Section, NCDEQ). Ms. Drummond confirmed the information stated in the previously referenced March 2, 2021 letter from NCDEQ. Staff has outstanding questions regarding the proposed geosynthetic liner, contamination of surface water and storm water above the liner, and NCDEQ requirements for the collection system above the liner.
21. Per Section 151.60(A)(10):

Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance, in special flood hazard area. A structure or tank for chemical or fuel storage incidental to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a special flood hazard area only if the structure or tank is either elevated above the community base flood elevation or designed to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy;
22. Section 151.40 of the Floodplain Ordinance gives the Board of Adjustment the authority to hear and decide petitions for variances.
23. In considering a variance request from the Floodplain Ordinance, the following sections of the Ordinance must be addressed with findings of fact or considered by the Board of Adjustment:
 - *Section 151.44 Factors for Conditions and Determination of Completeness*
 - *Section 151.45 Conditions for Variances*
 - *Section 151.46 Standards for Granting a Variance*
 - *Section 151.47(B) Miscellaneous Conditions*
24. The applicants would like to obtain a variance to relieve the requirement of Floodplain Ordinance Section 151.60(A)(10) therefore allowing them to disturb and expand a Construction and Demolition (C&D) landfill in a Special Flood Hazard Area.

STAFF FINDINGS (ordinance standards are in italics):

Please see **Exhibit #4** for the applicant's responses to the required criteria for granting a variance.

In considering a variance request from the Floodplain Ordinance, the following sections of the Ordinance must be addressed with findings of fact or considered by the Board of Adjustment:

- *Section 151.44 Factors for Conditions and Determination of Completeness*
- *Section 151.45 Conditions for Variances*
- *Section 151.46 Standards for Granting a Variance*
- *Section 151.47(B) Miscellaneous Conditions*

Sec. 151.44 - Factors for consideration and determination of completeness.

(A) *In passing upon variances, the Board of Adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and the:*

- (1) *Danger that materials allowed to be placed in the floodway as a result of the variance may be swept onto other lands to the injury of others during a community base flood;*

Applicant Response: The redundant pipes and designed based grade elevation above the floodway level will prevent any material from being placed within floodway. The floodway area that the pipes will replace will house the same volume of water that would have occupied the floodway in the event of a flood. This design eliminates the ability of water to touch material and thus eliminates the ability for the material to be swept onto other lands to the injury of others during a community base flood. Additionally, permanent storm water basins will be placed on either end of the pipes to better manage water velocity downstream. Exhibit A depicts the storm water management system and details the criteria by which it was designed. Charlotte-Mecklenburg Storm Water Services supplied this criterion. Exhibit B shows a cross section example of another pipe the applicant has installed at this location on another section of the property. The redundant pipes encased in concrete ensure that water travels safely through the site and only makes contact with the pipe. Exhibit C is a screenshot of a video taken from a pipe inspection at the landfill. Inspections are done routinely to document the integrity of the pipe and ensure there is no blockage. Similar inspections will take place for the proposed pipe.

Staff Response: The floodplain will be piped. A letter included in the application dated March 2, 2021 from NCDEQ Solid Waste Section Chief Ed Mussler that indicates LaBella (engineering consultant for Greenway Waste Solutions) compared the existing cap requirements to the proposed capping system. The findings by LaBella indicate employing the proposed, enhanced cap will reduce infiltration of pollutants by 50% compared to the alternative of the regulatory minimum cap on the landfill with no expansion.

- (2) *Danger to life and property due to flooding or erosion damage from a community base flood;*

Applicant Response: The piping of the floodway will not allow erosion as water will be encased in the pipe. The storm water management system proposed will have the necessary capacity to safely handle water in a community base flood scenario. The proposed pipe and storm water basin system will prevent this change to the existing stream from having an adverse impact up and down stream as a result of its capacity to properly handle storm water. Further detail can be seen in Exhibit A as to how the storm water system will adequately handle a community base flood.

Staff Response: The storm water management system as shown in Exhibit A has been designed to handle the required flood event volumes. Details of the storm water management plan will be reviewed and approved by Mecklenburg County. Staff finds that all details of the storm water management plan will be evaluated by Local, State, and Federal agencies before the applicant is allowed to fill in the floodplain.

(3) *Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage during the community base flood;*

Applicant Response: The proposed facility will be able to adequately handle a community base flood. The redundant concrete encased pipes will be engineered to the standards of NC Department of Environmental Quality and Army Corps of Engineers, to withstand a community base flood. Further, the pipes and storm water system will decrease the potential for damage up and down stream as a result of its ability to process the storm water. Further detail can be seen in Exhibit A as to how the storm water system will adequately handle a community base flood.

Staff Response: According to the application, the proposed piping lines and capped landfill expansion will be engineered to NCDEQ's most current standards to further enhance public health and safety and will not reduce the value of nearby property as compared to past North Carolina standards. Staff finds that all details of the storm water management plan will be evaluated by Local, State, and Federal agencies before the applicant is allowed to fill in the floodplain.

(4) *Importance of the services provided by the proposed facility to the community;*

Applicant Response: The services offered by the proposed facility are very important to the community. The continued ability to accept construction and demolition debris has been and will continue to be a benefit to the community. The facility allows for the community to continue growing, as the debris generated by growth has to be processed somewhere. The closer the facility is to the path of development the more economical development is, saving money for the community and sustaining growth. Exhibit D is a map showing proximity to other C&D locations and Exhibit E shows the routes which would experience an increase in truck traffic without the facility. The facility decreases the number of truck miles traveled. If this facility were to shut down there would be an estimated 725,000 additional truck miles on the community's roads each year. This is a result of the longer trips trucks would have to take to fill the void left by this facility. An increase in truck miles would also increase the amount of carbon-dioxide output in the community each year.

Staff Response: According to the recently adopted Huntersville 2040 Comprehensive Plan, the Town of Huntersville is the 16th largest municipality (by most recent population rankings) in North Carolina. Today, Huntersville has a population of over 61,000 people and a planning jurisdiction that covers 63 square miles. The Town population increased by approximately 28,000 residents between 2000 and 2017. As a result of this growth, substantial Construction and Demolition debris is generated in Huntersville's jurisdiction. Staff finds with a population growth there has been rapid growth in Huntersville's jurisdiction. As a result of this growth, substantial Construction and Demolition debris is generated in Huntersville's jurisdiction and the facility provides an important service to the community.

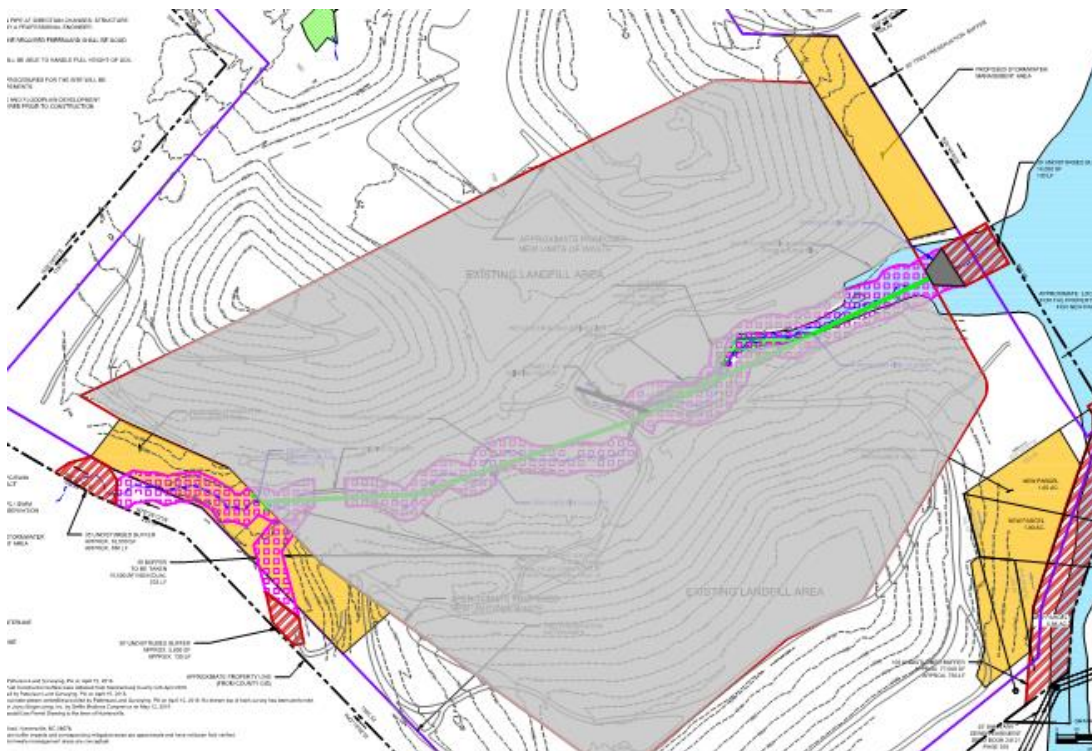
(5) *Necessity to the facility of a waterfront location, where applicable;*

Not Applicable.

(6) *Availability of alternative locations, not subject to flooding or erosion damage during a community base flood, for the proposed use;*

Applicant Response: There are no other areas on this site, outside of the flood area, to develop. Please refer to Exhibit A to see existing landfill areas and property lines. The applicant has exhausted all other areas on site to operate. The applicant is seeking two other variances in order complete this project. It is in the best interest of the community to keep the existing facilities operating as long as possible in its current location. (See Exhibit F)

Staff Response: Staff finds that of the total site area, there are +/- 2.70 acres of floodplain on the property and the applicant is proposing to impact +/- .87 acres of floodplain. The map below identified new fill area that can be created if the SWIM Buffer variance is granted and no landfill activity occurs in the floodplain. Therefore, staff finds there is room outside of the floodplain to fill and this criteria is not satisfied.



(7) *Compatibility of the proposed use with existing and anticipated Development;*

Applicant Response: a) This proposed use is compatible with the existing use as the site is already being used for this purpose. Additionally, our neighbors are a closed county municipal solid waste landfill, the future industrial park, Commerce Station, county owned land and land also owned by the applicant. The anticipated development options are limited to this use and are thus compatible.

Staff Response: Holbrooks Road is the only road accessing the site, which is a residential road not designed for truck traffic. In 2009, the Town Board approved a Special Use Permit. As part of the Special Use Permit, the applicant agreed to move the main entrance and access (within one year) to a commercial street or to Asbury Chapel Road Extension. The continuing commercial traffic and access is not compatible with the residential development to the west of the landfill. If an alternative access off a

thoroughfare can be provided no later than 2034, the estimated life of the current landfill without obtaining any variances, then this criteria could be satisfied.

- (8) *Relationship of the proposed use to the Mecklenburg County Floodplain Management Guidance Document, Mecklenburg County Flood Hazard Mitigation Plans, the Mecklenburg County Greenway Plan, and any other adopted land use plans for that area;*

Applicant Response: The proposed is consistent with the Mecklenburg County Floodplain Management Guidance Documents, Mecklenburg County Flood Hazard Mitigation Plans, the Mecklenburg County Greenway Plan and the local area plans. This site is specifically not within the scope of the East Huntersville Small Area plan.

Staff Response: Additional information is needed about current greenway location.

- (9) *Safety of access to the property in times of a community base flood for ordinary and emergency vehicles.*

Applicant Response: There are existing and established service roads that would allow access to the property in a time of community base flood or emergency. Access will be available during a community flood as a result of the flood area being piped and covered.

Staff Response: The property has frontage on Holbrooks Road for safety access. Staff finds there is sufficient safety access to the property in times of a community base flood.

- (10) *Expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters during a community base flood expected at the site; and*

Applicant Response: The exact heights, velocity, duration and rate of rise and sediment transport at the site are undetermined at this point. The storm water management system will account for all of this in order to be approved by the County. The County will also provide guidance as to the levels to which the system is built. The pipes will eliminate contact between soil and the water, eliminating risk of sediment transportation as it passes through the site. The volume of the pipe will be able to accommodate the heights, velocity, duration and rate of rise caused by a community base flood.

Staff Response: The details will be determined at the Floodplain Development Permitting phase, which will be required to be approved by Mecklenburg County prior to any development in the floodplain. Staff finds that all details of the storm water management plan will be evaluated by Local, State, and Federal agencies before the applicants are allowed to fill in the floodplain.

- (11) *Costs of providing governmental services during and after flood events, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water systems and streets and bridges.*

Applicant Response: The gas pipeline that runs through the property is not in the floodplain and therefore, will not be impacted in any way as a result of this variance. There will be no additional costs of providing governmental services as a result of this project.

Staff Response: The effect of flooding will be reviewed at the time of County permitting. It is unknown if a flood event will affect public utilities until more detail is given. Staff finds that all details of the storm water management plan will be evaluated by Local, State, and Federal agencies before the applicants are allowed to fill in the floodplain.

- (B) *A written report addressing each of the above factors shall be submitted with the application for a variance.*

Staff Response:

The applicants have submitted a written report addressing the factors for conditions and determination of completeness.

- (C) *Upon consideration of the factors listed above and the purposes of this ordinance, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.*

Staff Response:

The Board of Adjustments has the authority to attach conditions to all variance approvals.

- (D) *Variances may be issued for the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.*

Staff Response:

There are no Historic Structures on this site.

- (E) *Functionally dependent facilities if determined to meet the definition as stated in Section 151.06, provided provisions of Section 151.75 have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or*

Staff Response:

Not applicable

- (F) *Any other type of development, provided it meets the requirements of this section.*

Sec. 151.45 - Conditions for variances.

- (A) *Variances shall not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.*

Applicant Response: The applicant will seek approval from NC Department of Environmental Quality Solid Waste Division, the Army Corps of Engineers and will be required to receive a floodplain development permit from Mecklenburg County.

Staff Response: The applicant will be required to obtain Mecklenburg County, State, and Federal permits to ensure all law and regulations are met before being allowed to fill in the floodplain. Staff finds that all details of the storm water management plan will be evaluated by Local, State, and Federal agencies before the applicants are allowed to fill in the floodplain.

- (B) *Variances shall not be issued within any designated floodway if the variance would result in any increase in flood levels during the community and/or FEMA Base Flood discharge unless the requirements of 151.61(A)(6) are met.*

Applicant Response: Approval of this variance will not result in an increase in flood levels. As depicted in Exhibit A the storm water management system that will be built to the County's standards will have adequate capacity.

Staff Response: Section 151.61(A)(6) states the following:

FEMA Floodway and Community Encroachment Area . The FEMA Floodway and the community encroachment area are very hazardous areas due to the velocity of floodwaters which carry debris and potential projectiles and have erosion potential. The following provisions shall apply within each of these designated areas:

- (a) *Community encroachment area . No encroachments, requiring an individual floodplain development permit (Section [151.26](#)), including fill, new construction, substantial improvements and other development shall be permitted within the community encroachment area unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that such encroachment would not result in increased flood heights of greater than 0.10 feet during the occurrence of a community base flood. Such certification and associated technical data by a registered engineer shall be approved by the Floodplain Administrator. Any change which would cause a rise of more than 0.10 feet in the community base flood elevation will require notification of impacted property owners, and a Community Conditional Letter Of Map Revision (CoCLOMR) from the Floodplain Administrator. If approved and constructed, as-built plans must be submitted and approved by the Floodplain Administrator and a Community Letter of Map Revision (CoLOMR) issued. A certificate of occupancy will not be issued without the above stated Community Letter of Map Revision.*

Projects impacting existing habitable buildings that increase the community base flood elevation more than 0.00 feet will not be allowed without a variance.

- (b) *FEMA Floodway . No encroachments requiring an individual floodplain development permit (Section [151.26](#)), including fill, new construction, substantial improvements and other development shall be permitted within the FEMA Floodway unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that such encroachment would not result in any (0.00 feet) increase in the FEMA Base Flood Elevations during the occurrence of a FEMA Base Flood and no increase in the community base flood elevations during the occurrence of the community base flood. Such analysis performed by a registered professional engineer shall be approved by the Floodplain Administrator. Any change which would cause a rise in the FEMA Base Flood Elevation or an increase in the FEMA Floodway width during the occurrence of the FEMA Base Flood will require notification of impacted property owners, and a Conditional Letter Of Map Revision from FEMA. If approved and constructed, as-built plans must be submitted by the property owner and approved by FEMA and a Letter Of Map Revision issued. A certificate of occupancy will not be issued without the above stated Letter of Map Revision.*

Any change which would cause a rise in the community base flood elevation or an increase in the width of the community encroachment area during the occurrence of the community base flood will require notification of impacted property owners, and a Community Conditional Letter Of Map Revision (CoCLOMR).

Projects which cause a rise of greater than 0.00 feet in the FEMA Base Flood Elevation and impact an existing habitable building, will not be allowed.

- (c) *No manufactured homes shall be permitted, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring and the elevation standards of subsection (A)(8) are met.*

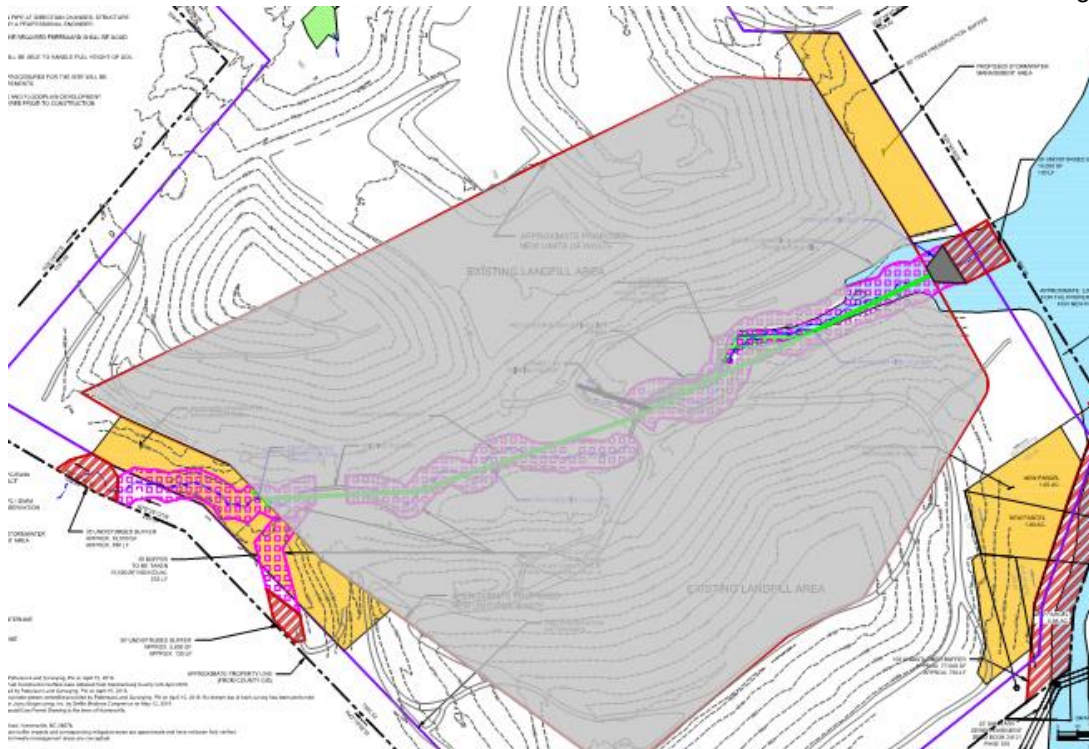
The variance application states one of the conditions of this variance is that a floodplain development permit would be required for the infill of the S.W.I.M. stream and floodplain area. Certification and associated technical data by a registered engineer approved by the Floodplain Administrator is not included in the application. Evidence approved by the Floodplain Administrator is not included to confirm the proposed infill will not result in an increase in flood levels during the community and/or FEMA Base Flood discharge. A floodplain development permit will be required and will identify increase in flood levels before the floodplain can be filled. Staff finds that all details of the storm water management plan will be evaluated by Local, State, and Federal agencies before the applicants are allowed to fill in the floodplain.

Section 151.61(A)(6)(c) does not apply with regard to the variance request.

- (C) *Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*

Applicant Response: Through multiple meetings with the Town of Huntersville and Mecklenburg County it has been determined that the variance is the minimum necessary to afford relief.

Staff Response: Staff finds that of the total site area, there are +/- 2.70 acres of floodplain on the property and the applicant is proposing to impact +/- .87 acres of floodplain. The map below identified new fill area that can be created if the SWIM Buffer variance is granted and no landfill activity occurs in the floodplain. Therefore, staff finds there is room outside of the floodplain to fill and this criteria is not satisfied.



(D) Variances shall only be issued prior to approval of a floodplain development permit.

Applicant Response: A floodplain development permit has not been approved but will be required and submitted before implementation of the plan.

Staff Response: A Floodplain Development Permit will be required before the floodplain can be filled. Staff recommends making this a condition of approval.

Sec. 151.46 - Standards for granting variance.

(A) Variances shall only be issued upon:

(1) A showing of good and sufficient cause;

Applicant Response: The services offered by the proposed facility are very important to the community. The continued ability to accept construction and demolition debris has been and will continue to be a benefit to the community. The facility allows the community to continue growing, as the debris generated by growth has to be processed somewhere. The closer the facility is to the path of development the more economical development is, saving money for the community and sustaining growth. Exhibit D is a map showing proximity to other C&D landfills and Exhibit E shows the routes which would experience an increase in truck traffic without the facility. The facility decreases the number of truck miles traveled. If this facility were to shut down there would be an estimated 725,000 additional truck miles on the community's roads each year. This is a result of the longer trips trucks would have to take to fill the void left by this facility. An increase in truck miles would also increase the amount of carbon-dioxide output in the community each year.

Staff Response: In a letter submitted by LaBella Associates, dated May 28, 2021 (Pages 6-7 of the Variance Application) a showing of good and sufficient cause has been demonstrated; being that filling the valley is intended to maximize waste disposal without expanding the waste footprint. Therefore, staff finds this criteria to be met.

(2) *A determination that failure to grant the variance would result in exceptional hardship; and*

Applicant Response: Failure to grant this variance would result in an exceptional hardship for the applicant and the community this facility serves. The approval of two other variances is contingent on the approval of this variance. Additionally, the approval of all three eliminates the hardship, and disapproval would deny the applicant the ability to seek approval from the State and Army Corps. The inability to fill within this area ultimately prohibits the applicant from piping the remainder of the creek. A variance for this has also been requested.

Staff Response: The use has been operating since 1991, can operate until approximately 2034, and beyond that if the SWIM Buffer variance is granted. At this time, the staff does not find there to be an exceptional hardship in not being able to fill the floodplain.

(3) *A determination that the granting of a variance will not result in increased flood heights (unless the requirements of Section 151.61(A)(6) are met), additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with other existing local laws or ordinances.*

Applicant Response: The applicant will satisfy the criteria set forth by Mecklenburg County Storm Water when engineering the storm water management system that this variance will allow. Additionally, there are further applications at a local, state and federal level that will be required before work can begin.

Staff Response: The application will be required to obtain a floodplain development permit.

(B) *The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance.*

Applicant Response: By denying a variance to fill over the floodway, the project becomes financially infeasible. (See Exhibit F)

Staff Response: Staff finds the property will be utilized more profitably with the variance. Further, staff does not currently have any facts indicating the proposal will have an overall beneficial impact on the environment if the variance is granted.

Sec. 151.47 - Miscellaneous conditions.

(B) *In addition to consideration of the items in 151.44(A), a variance may be issued by the Board of Adjustment for solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in special flood hazard areas provided that all of the following criteria are met:*

(1) *The use serves a critical need in the community.*

Applicant Response: The services offered by the proposed facility are very important to the community. The continued ability to accept construction and demolition debris has been and will continue to be a benefit to the community. The facility allows for the community to continue growing, as the debris generated by growth has to be processed somewhere. The closer the facility is to the path of development the more economical development is, saving money for the community and sustaining growth and Exhibit E shows the increase in truck traffic without the facility is a map showing proximity to other locations. The facility decreases the number of truck miles traveled. If this facility were to shut down there would be an estimated 725,000 additional truck miles on the community's roads each year. This is a result of the longer trips trucks would have to take to fill the void left by this facility. An increase in truck miles would also increase the amount of carbon-dioxide output in the community each year.

Staff Response: According to the recently adopted Huntersville 2040 Comprehensive Plan, the Town of Huntersville is the 16th largest municipality (by most recent population rankings) in North Carolina. Today, Huntersville has a population of over 61,000 people and a planning jurisdiction that covers 63 square miles. The Town population increased by approximately 28,000 residents between 2000 and 2017. As a result of this growth, substantial Construction and Demolition debris is generated in Huntersville's jurisdiction. Staff finds with a population growth there has been rapid growth in Huntersville's jurisdiction. As a result of this growth, substantial Construction and Demolition debris is generated in Huntersville's jurisdiction and the facility provides an important service to the community.

(2) No feasible location exists for the use outside the special flood hazard areas.

Applicant Response: There are no other areas on this site, outside of the flood area, to develop. Please refer to Exhibit A to see existing landfill areas and property lines. The applicant has exhausted all other areas on site to operate. The applicant is seeking two other variances in order to fill within the remainder of the stream area. It is in the best interest of the community to keep the existing facilities operating as long as possible in its current space.

Staff Response: Staff finds that of the total site area, there are +/- 2.70 acres of floodplain on the property and the applicant is proposing to impact +/- .87 acres of floodplain. The map below identified new fill area that can be created if the SWIM Buffer variance is granted and no landfill activity occurs in the floodplain. Therefore, staff finds there is room outside of the floodplain to fill and this criteria is not satisfied.

Staff Response: Because the piping and infill of the Floodplain is also within a S.W.I.M. buffer area, the applicant was also required to submit a variance request from the regulations of Article 8.25 of the Huntersville Zoning Ordinance. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques listed and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4. For their mitigation, the applicant proposes to utilize:

(8) Mitigation Credits: The purchase of mitigation credits through the Stream Restoration Program on a 1:1 basis, utilizing linear feet of stream impacted and the prevailing rate of purchase as established by the Charlotte-Mecklenburg Buffer Implementation Guidelines. Mitigation credits purchased under any other program (i.e., U.S Army Corp of Engineers) shall not cover this requirement unless the issuing agency agrees to relinquish the funds to the appropriate local government agency.

As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. Thus, the Town of Huntersville did not notify the Secretary of North Carolina Department of Public Safety as the Town is not recommending approval of the variance request at this time.

STAFF POSITION:

The applicant is requesting a variance from Floodplain Ordinance Section 151.60(A)(10) in order to be allowed to have a Construction and Demolition (C&D) landfill in a Special Flood Hazard Area. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. Therefore, Staff recommends continuing this variance request at this time.

Staff finds the following criteria are not being satisfied:

- Section 151.44 Factors For Conditions and Determination of Completeness
 - *(6) Availability of alternative locations, not subject to flooding or erosion damage during a community base flood, for the proposed use*

Staff Findings:

Staff finds that of the total site area, there are +/- 2.70 acres of floodplain on the property and the applicant is proposing to impact +/- .87 acres of floodplain. The map below identified new fill area that can be created if the SWIM Buffer variance is granted and no landfill activity occurs in the floodplain. Therefore, staff finds there is room outside of the floodplain to fill and this criteria is not satisfied.

- Section 151.45 Conditions for Variances
 - *(C) Variances shall only be issues upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*

Staff Findings:

Staff finds that of the total site area, there are +/- 2.70 acres of floodplain on the property and the applicant is proposing to impact +/- .87 acres of floodplain. The map below identified new fill area that can be created if the SWIM Buffer variance is granted and no landfill activity occurs in the floodplain. Therefore, staff finds there is room outside of the floodplain to fill and this criteria is not satisfied.

- Section 151.46 Standards for Granting a Variance

- *(A)(2) A determination that failure to grant the variance would result in exceptional hardship*

Staff Findings:

The use can operate until approximately 2034, and beyond that if the SWIM Buffer variance is granted.

- *(B)The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance*

Staff findings:

Staff finds the property will be utilized more profitably with the variance.

- Section 151.47 Miscellaneous Conditions

- *(B)(1) No feasible location exist for the use outside the Special Flood Hazard Area*

Staff Findings:

Staff finds that of the total site area, there are +/- 2.70 acres of floodplain on the property and the applicant is proposing to impact +/- .87 acres of floodplain. The map below identified new fill area that can be created if the SWIM Buffer variance is granted and no landfill activity occurs in the floodplain. Therefore, staff finds there is room outside of the floodplain to fill and this criteria is not satisfied.

EXAMPLE MOTION: V21-09, 15300 Holbrooks Road, Parcel ID 019-101-02, Huntersville, NC 28078

Planning Department	Board of Adjustment
	APPROVAL: In considering the application for V21-09, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from Floodplain Ordinance Section 151.60(A)(10) of the Code of Ordinances, the Board of Adjustment approves the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request meets ____ of the four criteria for granting a variance based on the following findings of fact: <i>(explain findings of fact)</i>
	DENIAL: In considering the application for V21-09, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from Floodplain Ordinance Section 151.60(A)(10) of the Code of Ordinances, the Board of Adjustment denies the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request does not meet the criteria for granting a variance based on the following findings of fact: <i>(explain findings of fact)</i>

Exhibits List

Exhibit #1 - Approved Conditional District Rezoning 16-06

Exhibit #2 - Approved Special Use Permit 16-01

Exhibit #3 - 2016 Email Withdrawing Variance 16-02

Exhibit #4 - 2021 Variance Application

Exhibit #5 - EPA Vinyl Chloride Fact Sheet

Exhibit #6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services regarding Mitigation

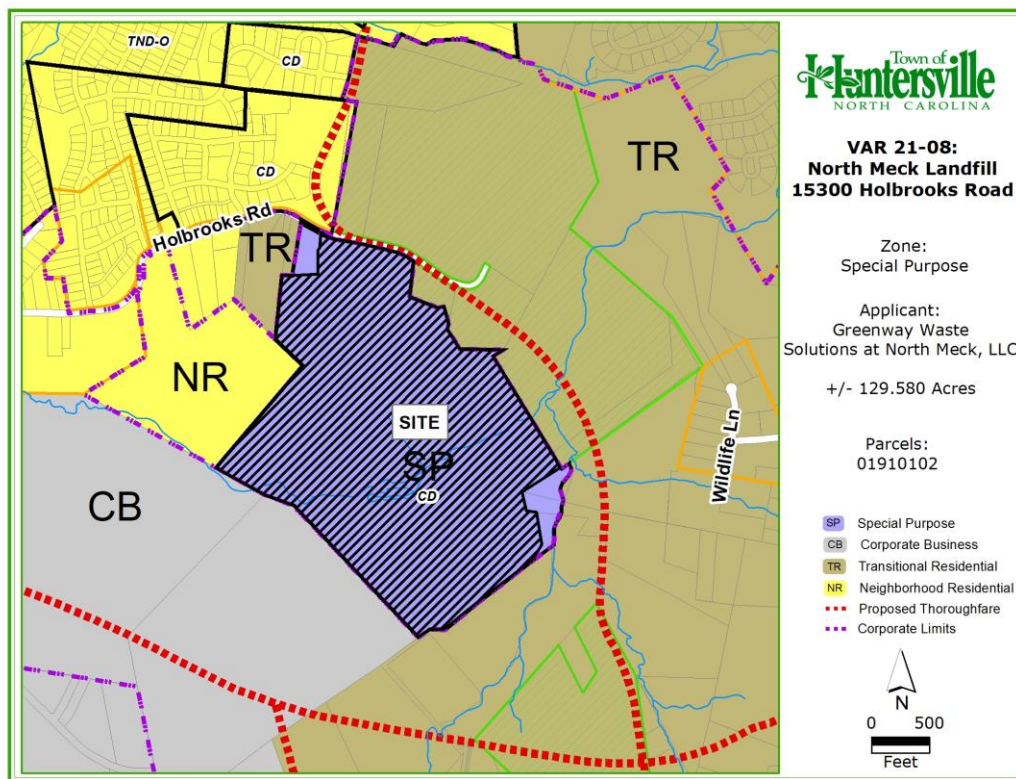
Exhibit #7 - Standards for Variance Requests from Floodplain Ordinance

- Section 151.44 Factors for Conditions and Determination of Completeness
- Section 151.45 Conditions for Variances
- Section 151.46 Standards for Granting a Variance
- Section 151.47(B) Miscellaneous Conditions

**V 21-08, 15300 Holbrooks Road
Parcel ID 019-101-02**

Case #: V21-08
Address: 15300 Holbrooks Road, Huntersville, NC 28078
Parcel #: 019-101-02
Acreage: 129.58
Property Owner/Applicant: C&D Management Company (Owner)
Owner/Applicant Address: John Brown on behalf of Greenway Waste Solutions at North Meck, LLC (applicant)
Staff: Lauren Speight – Planner II

Currently in use, the 129.58-acre property is seeking to expand the construction and demolition landfill area within the subject property. The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from **Article 9.23.4 c** of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood Hazard Areas.



BACKGROUND:

1. The subject property, 15300 Holbrooks Road (Parcel 019-101-02) is located within a Special Purpose Conditional District, Rezoning 16-06. (Exhibit #1 - Approved CD Rezoning 16-06)
2. The subject property is currently operating a landfill and has been continuously operating since 1991. The subject property was not with the zoning jurisdiction of the Town of Huntersville in 1991.
3. The subject property obtained a Special Use Permit 16-01 approved by the Huntersville Town Board November 7, 2016 to allow the landfill to expand its boundaries and add a recycling facility to the existing site. (Exhibit #2 - Approved Special Use Permit 16-01)

4. The subject property is located within the Town of Huntersville.
5. The applicants are seeking to modify the Conditional Rezoning (R16-06) and Special Use Permit approval (SUP16-01), to pipe a stream running across their property and expand the C&D landfill over the stream. To move forward with the Rezoning and Special Use Permit process the applicants are first required to obtain the following variance approvals from the Board of Adjustment:
 - a. Zoning Ordinance Article 8.25
 - i. The proposed use was not a permitted buffer impact per Article 8.25.6 or Article 8.25.10. Per, Article 8.25.11(b), when “unnecessary hardships,” as defined in Section 11.3.2 f, would result from strict adherence to the buffer width requirements and/or buffer treatment standards, a petition for variance may be filed with the Huntersville Board of Adjustment in compliance with the procedures and standards of Section 11.3.
 - b. Zoning Ordinance Article 9.23.4 c (See V21-08)
 - i. No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - ii. 50-foot buffer from delineated streams.
 - c. Code of Ordinances Section 151.60(A)(10) (See V21-09)
 - i. Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance, in special flood hazard area.
6. In addition to the conditional rezoning and special use permits modifications, Variance 16-02 was submitted seeking variances from Article 8.25 of the Zoning Ordinance, Article 9.23 of the Zoning Ordinance, and Section 151.60(A)(10) of the Code of Ordinances.
7. The three variance requests submitted in 2016 were withdrawn. (See Exhibit #3 - 2016 Withdrawal Email)
8. Included in the 2016 withdrawal email exchange between Planning Department Staff and the applicant, staff referenced a significant finding at the time that NCDEQ found contamination of surface and groundwater at the subject property. Staff was unable to support of the 2016 variance application meeting the fourth variance standard that the request was consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved. (See Exhibit #3 - Withdrawal)
9. Because the property did not obtain the 2016 variance, use of the landfill was constricted to the area outside of the S.W.I.M. Buffer and the use was allowed in other areas of the property.
10. Within the application for Variance 21-07, the applicant includes a letter dated October 3, 2019 from NCDEQ to the applicant with regard to the Corrective Action Plan for the groundwater exceedances at the landfill. The letter references the Corrective Action Plan submitted to and approved by NCDENR to control the migration of contaminated groundwater. (See Exhibit #4 - Variance Application, pages 16-17)
11. Variance 21-07 is seeking a variance from Article 8.25 of the Zoning Ordinance to impact the S.W.I.M. buffer at the subject property. This approval is subject to the subsequent approval of a S.W.I.M. Buffer Mitigation Plan by the Mecklenburg County Storm Water Administrator, approval of a Floodplain Development Development Permit by Mecklenburg County, approval of a 404-401 Stream Mitigation Plan approved by US Army Corps of Engineers, approval of NCDEQ Solid Waste Permit, and approval of all Town, County, and State building permit activities.
12. The applicant proposes to pipe the creek inside the +/- .87 acre Special Flood Hazard and S.W.I.M. Area. The applicant proposes the proposed lines and capped landfill expansion will be engineered to NCDEQ’s most current standards to further enhance public health and safety and will not reduce the value of nearby property as compared to past North Carolina standards. (See Exhibit #4 - Variance Application, page 6)
13. The applicant included in the application dated March 2, 2021 from NCDEQ Solid Waste Section Chief Ed Mussler that indicates LaBella (engineering consultant for Greenway Waste Solutions) compared the existing cap requirements to the proposed capping system. The findings by LaBella indicate employing the proposed, enhanced cap will reduce infiltration of pollutants by 50% compared to the alternative of

the regulatory minimum cap on the landfill with no expansion. (See Exhibit #4 - Variance Application, page 15)

14. Additionally, the applicant includes a letter from the Catawba and Yadkin Riverkeepers. (See Exhibit #4 - Variance Application, page 15)
15. While the Catawba and Yadkin Riverkeepers is an advocacy organization, NCDEQ administers regulatory programs designed to protect air quality, water quality, and the public's health.
16. The letter indicates that riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. The letter states, "[they] are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 location, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality." The letter from the Catawba and Yadkin Riverkeepers also acknowledges their recommendation is based on several assumptions and the Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
17. A document is included by the applicant, "Historical Regulatory Compliance Time-Line," that indicates a lab that previously analyzed groundwater samples from the subject property produced false-positive results for vinyl chloride. (See Exhibit #4 - Variance Application, page 18-19)
18. The Environmental Protection Agency classifies vinyl chloride as a human carcinogen. (See Exhibit 5 – EPA Fact Sheet on Vinyl Chloride)
19. The Historical Regulatory Compliance Time-Line document provided by the applicant also indicates analytical results from Eurofins TestAmerica (ETA), an environmental testing lab, show vinyl chloride has been detected in 10 monitoring wells according to testing conducted in April 2021. However, according to the document the detections identified by ETA do not exceed the allowable concentration of vinyl chloride specified in the 2L rules.
20. Per Article 9.23.4, c:
 - c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modification made by the state unless the state standards become more restrictive.
 - 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right-of-way to fill area (non-state requirement).
21. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. (See Exhibit 6 – Email from Rusty Rozzelle and report from Mecklenburg County Storm Water Services)
22. On August 4, 2021, Town Planning Department Staff (Brad Priest and Lauren Speight) held a conference call with Jaclynne Drummond (Hydrologist, Solid Waste Section, NCDEQ). Ms. Drummond confirmed the information stated in the previously referenced March 2, 2021 letter from NCDEQ. Staff has outstanding questions regarding the proposed geosynthetic liner, contamination of surface water and storm water above the liner, and NCDEQ requirements for the collection system above the liner.

STAFF FINDINGS (ordinance standards are in italics):

Please see Exhibit #4 for the applicant's responses to the required criteria for granting a variance.

In considering any variance request, the following Standards for Granting a Variance of the Huntersville Zoning Ordinance (Article 11.3.2.e) must be addressed:

Article 11.3.2.e Standards for Granting a Variance of the Huntersville Zoning Ordinance:

Before granting a variance, the Board of Adjustment shall have made the following findings:

Standards for Granting a Variance. When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all of the following:

- 1) *Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.*

Staff Findings:

- A. The applicant states these (Huntersville Zoning Ordinance) regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe water through the site for expansion of the landfill use, which may prematurely reduce the lifespan of the landfill.
- B. The property is currently within the Special Purpose Zoning District. As mentioned, the subject property has an approved conditional district rezoning plan.
- C. The Land Clearing & Inert Debris and Construction & Demolition landfill use is permitted with an approved Special Use Permit in the Special Purpose Zoning District.
- D. The subject property has an approved Special Use Permit.
- E. The property is an active Construction & Demolition landfill.
- F. The subject property is seeking a variance to expand the use within the boundary of the subject property and the proposed expansion would impact a S.W.I.M. area and would impact the required 50-foot buffer from delineated streams per Article 9.23.

- 2) *The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.*

Staff Findings:

- A. S.W.I.M. Stream Buffers are present throughout the Town of Huntersville and are not peculiar to the property. However, the Zoning Ordinance offers relief, Article 8.25.11 (Exhibit 4) from required SWIM buffer widths with an approved mitigation plan and Board of Adjustment action.
- B. The applicant states all of the following: The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition (C&D) landfill. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling area. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity.
- C. Properties throughout the Town that contain S.W.I.M. buffer areas are within a variety of zoning districts and allow a multitude of uses. Any property that sought to propose a use currently not allowed per Article 8.25 would be required to obtain an approved mitigation plan before disturbance of the buffer area.

- 3) *The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.*

Staff Findings:

- A. Greenway Waste at North Meck has been in operation since June 1993.
- B. SWIM buffer regulations added to the Zoning Ordinance in October 1999.

- C. The applicant states the hardship was not created by the manner in which the property has been used and the request is consistent with the intent of the Ordinance.
 - D. S.W.I.M buffer areas are not created by property owners or applicant and Staff finds the hardship did not result from actions taken by the applicant or property owner.
- 4) *The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.*

Staff Findings:

- A. If the variance is approved this would be just one part of the approval process in which the applicant is seeking. After obtaining BOA approval, the applicants will have to seek approval for a Rezoning to Special Purpose District and Special Use Permit for a C&D Landfill from the Town Board of Commissioners.
- B. The applicant states all of the following: “The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.”
- C. In addition to Article 9.23.4 (c) from which this variance application is seeking approval, Article 9.23 also indicate that the proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property.
- D. One of the follow-up questions posed by Mecklenburg County Storm Water Services requests the contingency plan for if the proposed creek piping system fails.
- E. Two of the conditions of SUP 16-01 were:
 - a. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
 - b. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant’s property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
- F. Article 9.23.4 (a) states, a landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to Industrial Collector Street standards that connects directly to a major or minor thoroughfare.
- G. Per Article 8.25.11, regarding variance applications from S.W.I.M Buffer requirements, site specific mitigation plans using the mitigation techniques set out below and approved by the designated agency shall be construed by the Board of Adjustment to be evidence responsive to Section 11.3.2 e), subparagraph 4.
- H. For their mitigation, the applicant proposes to utilize:
 - (8) Mitigation Credits: The purchase of mitigation credits through the Stream Restoration Program on a 1:1 basis, utilizing linear feet of stream impacted and the prevailing rate of purchase as established by the Charlotte-Mecklenburg Buffer Implementation Guidelines. Mitigation credits purchased under any other program (i.e., U.S Army Corp of Engineers) shall not cover this requirement unless the issuing agency agrees to relinquish the funds to the appropriate local government agency.
- I. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion.

STAFF POSITION:

The applicant, John Brown on behalf of Greenway Waste Solutions at North Meck, LLC, is requesting a variance from Article 9.23.4 c of the Zoning Ordinance. The request is for a variance to impact the 50-foot buffer from delineated streams and allow fill in designated wetlands or FEMA and/or Community Special Flood

Hazard Areas. As of August 3, 2021, Mecklenburg County Storm Water Services states in their report additional information is needed to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. Therefore, Staff recommends continuing this variance request at this time.

EXAMPLE MOTION: V21-08, 15300 Holbrooks Road, Parcel ID 019-101-02, Huntersville, NC 28078

Planning Department	Board of Adjustment
	APPROVAL: In considering the application for V21-08, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from 9.23.4 c of the Zoning Ordinance, the Board of Adjustment approves the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request meets ____ of the four criteria for granting a variance based on the following findings of fact: (<i>explain findings of fact</i>)
	DENIAL: In considering the application for V21-08, a request by John Brown on behalf of Greenway Waste Solutions at North Meck, LLC for a variance from 9.23.4 c of the Zoning Ordinance, the Board of Adjustment denies the variance request based on a finding that the request meets ____ of the four criteria, outlined in the ZONING ORDINANCE, for granting a variance. The Board of Adjustment finds the request does not met the criteria for granting a variance based on the following findings of fact: (<i>explain findings of fact</i>)

Exhibits List

Exhibit #1 - Approved Conditional District Rezoning 16-06

Exhibit #2 - Approved Special Use Permit 16-01

Exhibit #3 - 2016 Email Withdrawing Variance 16-02

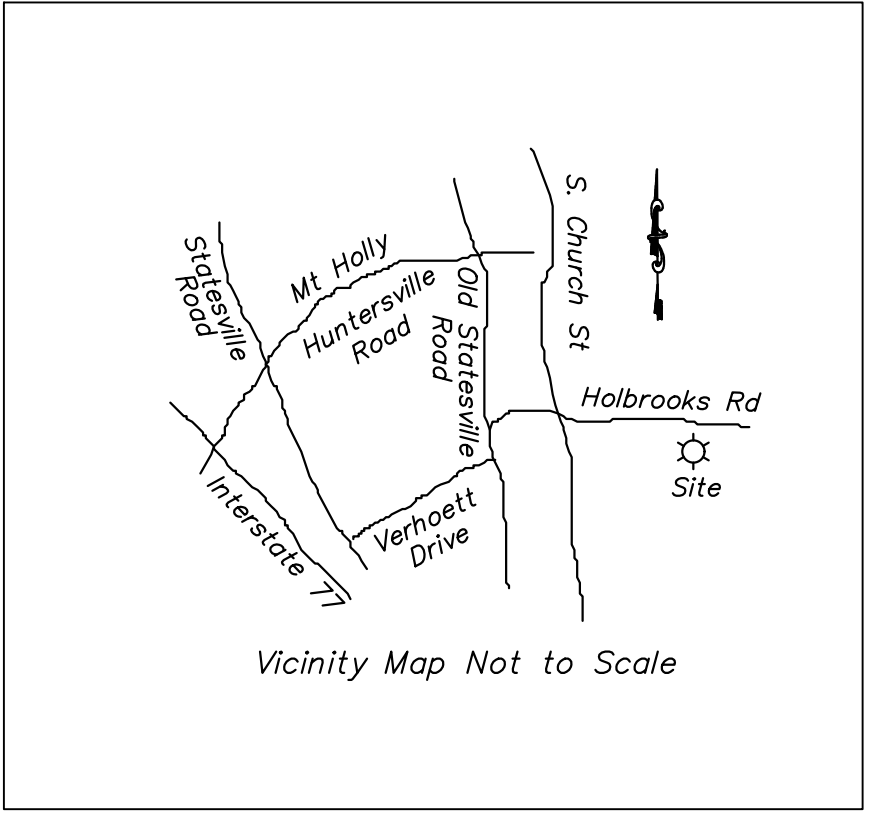
Exhibit #4 - 2021 Variance Application

Exhibit #5 - EPA Vinyl Chloride Fact Sheet

Exhibit #6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services regarding Mitigation

Exhibit #1 - Approved Conditional District Rezoning 16-06

CONDITIONAL DISTRICT REZONING FOR GREENWAY WASTE SOLUTIONS OF NORTH MECK. LLC.



LIST OF DRAWINGS:

CD001	COVER SHEET
CD100	CONDITIONAL DISTRICT SITE PLAN
CD101	CONDITIONAL DISTRICT SITE PLAN

**EPM REFERENCE NUMBER:
#365454 CONDITIONAL REZONING & CONCEPT PLAN**

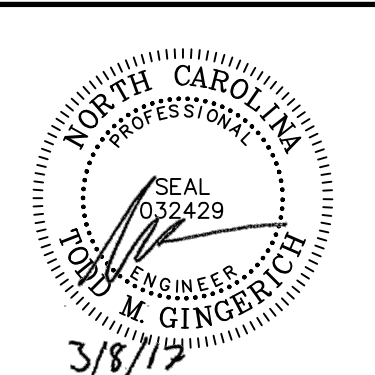


Note: The Huntersville Board of Commissioners approved R16-06 on November 7, 2016.

CONCEPT NOTE: Approval of this Concept Plan does not imply or guarantee approval of the Final Construction Plans. Final Construction Plans will be reviewed for compliance with all Town, County and State regulations in effect at time of submittal.

APPROVAL OF THIS CONCEPT PLAN DOES NOT IMPLY OR
GUARANTEE APPROVAL OF THE FINAL CONSTRUCTION
PLAN. FINAL CONSTRUCTION PLAN WILL BE REVIEWED
FOR COMPLIANCE PER ALL TOWN, COUNTY, AND STATE
REGULATIONS IN EFFECT AT TIME OF SUBMITTAL.

NORTH CAROLINA
BOARD OF EXAMINERS
FOR ENGINEERS AND
SURVEYORS LICENSE
NO. C-3035



CONDITIONAL DISTRICT COVER SHEET

CD001

Civil & Environmental Consultants, Inc.
1900 Center Park Drive - Suite A - Charlotte, NC 28217
Ph: 980.237.0373 • Fax: 980.237.0372

**GREENWAY WASTE SOLUTIONS
AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA**

[illegible]



REVISION RECORD

Ph: 980.237.0373 • Fax: 980.237.0372

HUNTERSVILLE, NORTH CAROLINA

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SHEET 2 OF 3

Approved by the Huntersville
Board of Commissioners on
11/7/16 by a 5-1 vote.

LINE	BEARING	DISTANCE
L1	N55°50'34"E	95.32'
L2	S16°03'13"E	23.03'
L3	S32°24'33"E	40.79'
L4	S00°01'03"W	40.77'
L5	S10°47'39"W	29.77'
L6	S19°06'37"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'20"W	45.47'
L9	S01°10'19"E	29.24'
L10	S12°33'08"W	50.68'
L11	S17°20'18"E	66.58'
L12	S21°58'47"W	126.50'
L13	S01°28'47"W	143.82'
L14	N30°27'22"E	151.69'
L15	S85°13'11"E	137.07'
L16	S00°01'50"W	35.24'
L17	S75°36'36"E	22.03'
L18	N30°45'11"E	4.37'
L19	S69°29'28"E	50.16'
L20	N86°12'03"E	40.18'
L21	S29°47'23"E	147.44'

SCALE IN FEET



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NORTH CAROLINA
BOARD OF EXAMINERS
FOR ENGINEERS AND
SURVEYORS LICENSE
NO. C-3035



P: 2011\111-370\ -CADD\001\ Dwg\ MRF\ 111370-MRF10.03.16.dwg\CONDITIONAL DISTRICT SITE PLAN\ LS:(3/13/2017 - drinkley) - LP: 3/13/2017 10:06 AM

STATION CONNECTOR
ROAD

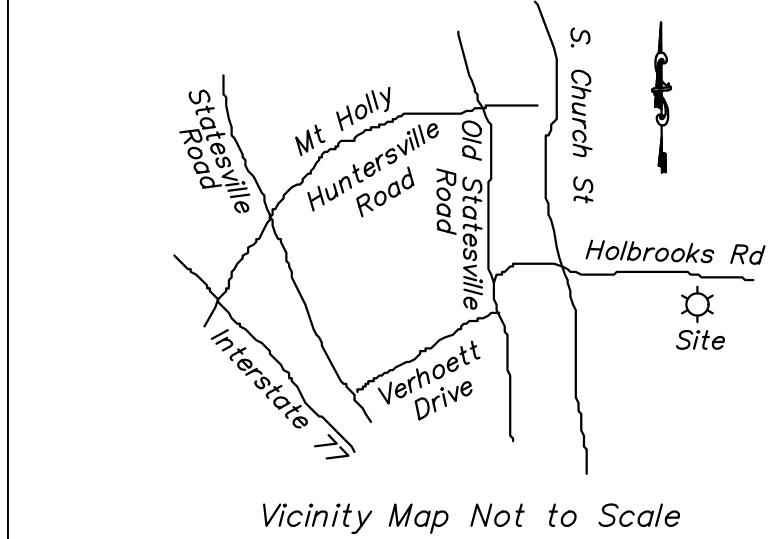
- ASBURY CHAPEL EXTENSION
PRELIMINARY LAYOUT
PROVIDED BY TOWN

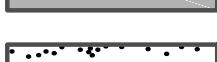
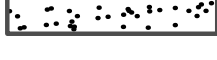
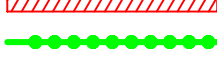
**Plan Sheet Is Part Of The Overall
Approval As Of The Following Date**

04/13/2017

LINE	BEARING	DISTANCE
L1	N55°50'34"E	95.32'
L2	S16°03'18"E	23.03'
L3	S27°22'00"E	40.98'
L4	S00°01'05"W	40.57'
L5	S10°47'39"W	29.77'
L6	S19°06'37"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'00"W	45.47'
L9	S01°01'57"W	24.44'
L10	S16°23'08"W	50.68'
L11	S17°20'18"W	66.58'
L12	S21°58'47"W	126.50'
L13	S01°28'47"W	143.82'
L14	N02°22'00"E	151.93'
L15	S85°13'14"W	137.07'
L16	S00°15'07"W	35.24'
L17	S75°36'36"E	22.37'
L18	N03°45'11"E	4.23'
L19	S88°28'58"W	44.56'
L20	N86°14'45"E	50.18'
L21	S29°47'23"E	147.44'



LEGEND

- | | |
|---|--|
|  | EXISTING VEGETATED BUFFER |
|  | PROPOSED PLANTING AREA WITHIN 90' BUFFER PER ORD. SEC. 7.5.3 (CREATE OPAQUE BUFFER PER APPROVED CONDITION) |
|  | AREA FOR REQUESTED MODIFICATION FROM PLANTING REQUIREMENT WITHIN 80' VEGETATED BUFFER |
|  | PROPOSED BUILDING |
|  | PROPOSED GRAVEL ACCESS PAD |
|  | PROPOSED STORMWATER MANAGEMENT AREA |
|  | PROPOSED PROPERTY FOR REZONING |
|  | CLOSED PHASE 1 WASTE AREA |
|  | CLOSED EXPANSION I WASTE AREA |
|  | ACTIVE EXPANSION II AND INFILL WASTE AREAS |
|  | STREAM BUFFER |
|  | FEMA 100 YEAR FLOOD PLAIN AREA (COUNTY GIS) |
|  | 80' VEGETATIVE BUFFER |
|  | 100' UNDISTURBED BUFFER |
|  | APPROXIMATE STREAM LOCATION |
|  | COMMUNITY ENCROACHMENT AREA (COUNTY GIS) |
|  | FEMA FLOODWAY (COUNTY GIS) |
|  | PROPOSED SANITARY SEWER EASEMENT |
|  | PROPOSED GREENWAY/BIKEWAY TRAIL |
|  | EXISTING FENCE |
|  | PROPOSED FENCE |
|  | PROPOSED PARCEL BOUNDARY |
|  | FUTURE COMMERCE STATION CONNECTOR ROAD |

NOTES

1. BUILDING, STORMWATER MANAGEMENT, PARKING AND PAVEMENT SIZES AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE IN NATURE AND INTENT. THEY ARE NOT TO BE USED DURING PERMITTING, FINAL DESIGN AND CONSTRUCTION PLAN PREPARATION.
2. THE 80' VEGETATED BUFFER WILL REQUIRE TREE AND SHRUB PLANTING IN ACCORDANCE WITH TOWN ORDINANCE SECTION 7.5.3.
3. PROPERTY ADDRESS IS 15300 HOLBROOKS ROAD, HUNTERSVILLE, NC 28078.
4. EXISTING HOUSE ADJACENT TO HOLBROOKS ROAD TO BE REMOVED.
5. LIGHTING PLAN SHALL BE IN ACCORDANCE WITH ARTICLE 8.26.
6. REQUIRING MODIFICATION OF ORDINANCE STANDARD ARTICLE 9.23.4 e), FOR 6' NON-CLIMBABLE FENCE, VEHICULAR ACCESS TO THE FACILITY IS LIMITED TO HOLBROOKS ROAD. FENCING AND GATE WILL BE PROVIDED ALONG THE HOLBROOKS ROAD. HEAVY VEGETATION PREVENTS ACCESS TO THE REMAINDER OF THE SITE. THE NEAREST PUBLIC RIGHT-OF-WAYS INCLUDE STATEVILLE ROAD (N.W. 100' WIDE), HILLS AND DALE (SOUTH 1/4 MILE) AND WILDLIFE LANE (EAST 1/4 MILE). GREENWAY WASTE SOLUTIONS AGREES TO BECOME INVOLVED IN THE DEVELOPMENT OF ONE OF ANY DEVELOPMENT ADJACENT TO GREENWAY WASTE SOLUTIONS. GREENWAY WASTE SOLUTIONS AGREES TO BEHIND INSTALLATION OF FENCING ALONG 90' OF THE BOUNDARY OF THE LOCATION OF FUTURE BIKEWAY/GREENWAY/CAROLINA THREAD TRAIL PASSING THROUGH GREENWAY WASTE SOLUTIONS PROPERTY.
7. NO ROOF TOP UTILITIES PLANNED.
8. AREAS NOT SHOWN TO BE PLANTED OR WHERE RELIEF FROM PLANTING REQUIREMENTS IS NOT REQUESTED CANNOT EXISTING VEGETATION TO PROVIDE SCREENING.
9. PROVIDE ESCROW AND/OR BONDING FOR STREET TREES AND SIDEWALKS.
10. PROVIDE RIGHT OF WAY FOR FUTURE VERHOEFF/ASBURY CHAPEL EXISTING CONNECTOR ON ANY GRIFFIN VONDA LAND ONCE FINAL LOCATION IS DETERMINED.
11. HOLBROOKS ROAD WILL BE ABANDONED AS PRIMARY ACCESS BY 2034.
12. HOURS OF OPERATION: M –F 7AM TO 6PM
SAT 7AM TO 12PM
13. GREENWAY WASTE SOLUTIONS WILL PAY FOR HOLBROOKS ROAD IMPROVEMENTS AS DESCRIBED BELOW:
 - A. THE \$25,000 THAT WAS AGREED UPON IN 2008 NEEDS TO BE PAID ON OR BEFORE DECEMBER 31, 2016 AND IS TO BE USED FOR STREET IMPROVEMENTS OR MAINTENANCE.
 - B. THE BORE TESTING FOR HOLBROOKS ROAD WILL BE TAKEN WITHIN NINETY (90) DAYS OF APPROVAL OF THE SUP AND PROVIDED TO NCDOT AS REQUESTED.
 - C. THE APPLICANT WILL ALSO CONTRIBUTE TO THE ESCROW ACCOUNT AN ADDITIONAL \$25,000 PRIOR TO 2025 FOR EITHER MAINTENANCE OR IMPROVEMENTS TO HOLBROOKS ROAD.
14. GREENWAY WASTE SOLUTIONS IS IN THE PROCESS TO ACQUIRE APPROXIMATELY 1,100 ACRES OF THE WEST OF CREEK CREEK ON PARCEL (01918162) ON THE SOUTHEASTERN PORTION OF THE LANDFILL PROPERTY FROM CO-APPLICANT, BILL HAMMILL. EXISTING FACILITY BUFFER, THIS LAND WILL NEVER BE USED FOR LANDFILL AIR SPACE AND SHALL REMAIN UNDISTURBED.

REFERENCE

1. PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
2. EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY GIS APRIL 2016.
3. PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2015.
4. STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM TOP OR BANK SURVEY HAS BEEN PERFORMED.

SCALE IN FEET
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NORTH CAROLINA
BOARD OF EXAMINERS
FOR ENGINEERS AND
SURVEYORS LICENSE
NO. C-3035



IN 2013 ROUTINE LANDFILL GROUNDWATER MONITORING DETECTED AN EXCEEDANCE IN APPENDIX 1 CONSTITUENTS, AS A RESULT OF THE DETECTION, ONGOING ASSESSMENT MONITORING HAS BEEN CONDUCTED. IN MAY 2016, GREENWAY WASTE SOLUTIONS (GWS) SUBMITTED A CONTAMINANT DELINEATION PLAN TO NDEQ TO FURTHER ASSESS THE EXCEEDANCES. THE CONTAMINANT DELINEATION PLAN WAS ACCEPTED BY DEQ ON JUNE 7, 2016 AND GWS IS IMPLEMENTING THE PLAN. ONCE ASSESSMENT ACTIVITIES HAVE DETERMINED THE NATURE AND EXTENT OF THE CONTAMINANTS, A REMEDIATION PLAN APPROVED AND MONITORED BY DEQ WILL BE IMPLEMENTED. ASSESSMENT AND REMEDIATION EFFORTS WILL CONTINUE UNTIL DEEMED APPROVED BY DEQ. DUE TO THE NATURE OF ASSESSMENT AND REMEDIATION, NO TIMEABLE FOR COMPLETION CAN BE PROVIDED, BUT WILL BE INITIATED AT THE REQUEST OF NDEQ. SEE ATTACHED DEQ CONTAMINANT DELINEATION PLAN APPROVAL LETTER.

APPROVED MOTIONS/CONDITIONS

COMMISSIONER BOONE MADE A MOTION IN CONSIDERING THE PETITION #R16-06, GREENWAY WASTE LANDFILL, THE TOWN BOARD, FINCH FIELDS, 10000 FINCH FIELDS DRIVE, #303, COMMUNITY PLAN AND APPLICABLE LONG-RANGE PLAN. THE BOARD OF COMMISSIONERS RECOMMEND APPROVING THE CONDITIONAL REZONING PLAN FOR THE GREENWAY WASTE LANDFILL AS SHOWN IN REZONING PETITION #R16-06. IT IS REASONABLE AND IN THE PUBLIC INTEREST TO REZONE THIS PROPERTY BECAUSE PROPOSED CHANGES INCLUDE A RECYCLING FACILITY WILL PROVIDE ECONOMIC AND ENVIRONMENTAL METHODS AND NEGATIVE IMPACTS ON REZONING HAVE MITIGATED TO A SATISFACTORY LEVEL. THESE RECOMMENDATIONS ARE CONTINGENT UPON THE FOLLOWING:

1. AMENDED TO SHOW A 100' EASEMENT TO ACCOMMODATE THE FUTURE GREENWAY ALONG THE STREAM.
7. CLARIFICATION OF ALL REFERENCES ON THE PLAN TO HOLBROOKS ROAD, NOT HOLBROOK ROAD.

**CONDITIONAL DISTRICT REZONING
GREENWAY WASTE SOLUTIONS
AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA**

CONDITIONAL DISTRICT SITE PLAN

DATE:	MAY 2016	DRAWN BY:	CTH
DWG SCALE:	1"=50'	CHECKED BY:	TMG
PROJECT NO:	111-370.001		
APPROVED BY:			SIR

DRAWING NO.:
CD

SHEET 3 OF 3



Civil & Environmental Consultants, Inc.
 1900 Center Park Drive - Suite A - Charlotte, NC 28217
 Ph: 980.237.0373 · Fax: 980.237.0372

REVISION RECORD

NO.	DATE	DESCRIPTION	AMOUNT	REMARKS
1	5/26/2015	ADDED FLOODZONE INFORMATION	9	ADDED NOTATIONS AND COMMENTS NOTE
2	6/22/2016	REVISIONS PER TOWN OF HUNTERDALE	10	REVISED NOTES
3	7/18/2016	REVISIONS PER TOWN OF HUNTERDALE	11	REVISED PER TOWN OF HUNTERDALE
4	8/1/2016	REVISION IMPI LOCATION, ADD NOTATION	11	3/8/2017
5	8/17/2016	REVISIONS PER TOWN OF HUNTERDALE		
6	8/17/2016	LANDFILL EXPANSION (REVISED)		
7	10/12/2016	REVISED POND LOCATION AND NOTES.		
8	10/13/2016	ADDED FUTURE COMMERCE SITION CONNECTOR ROAD		

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Special Use Permit Granted

On Monday November 7, 2016 the Huntersville Town Board held a public meeting to consider the below noted Special Use Permit:

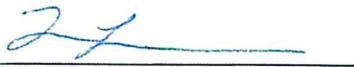
SUP16-01, a request by Greenway Waste Solutions, LLC and William Hammill for a Special Use Permit allowing the 135 acre landfill located at 15300 Holbrook Road to expand its boundaries and add another fill area in the existing site (parcels 01910102, 01910109, and portions of 01918135, 01918162, and 01934118).

Having heard all the evidence and argument presented at the meeting, the Board finds the application is complete, that the application complies with all of the applicable requirements of the Huntersville Zoning Ordinance for the operation proposed, and therefore the application to make use of the above-described property for the purpose indicated is hereby approved, subject to all applicable provisions of the Zoning Ordinance, the attached Findings of Fact, and the conditions added by the Town Board at the time of approval.

Also, the applicant shall complete the development strictly in accordance with the site plan, building elevations, and letter from the applicant attached which were submitted to and approved by this Board, a copy of which is filed in the Town of Huntersville Planning Department.

IN WITNESS WHEREOF, the Town of Huntersville has cause this permit to be issued in its name, and the undersigned, being all of the property owners of the property above described, do hereby accept this Special Use Permit, together with all its conditions, as binding on them and their successors in interest.

Michael L. Griffin, owner(s) of the above identified property, do hereby acknowledge receipt of this Special Use Permit. The undersigned owners do further acknowledge that no work may be done pursuant to the permit except in accordance with all of its conditions and requirements and that the restriction shall be binding on them and their successors in interest.



Owner

Planning

Post Office Box 664 • 101 Huntersville-Concord Road • Huntersville, NC 28070
phone 704.875.7000 • fax 704.875.6546 • www.huntersville.org

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Teresa D. Nantz, a Notary Public of the County and State aforesaid, certify that Michael L. Griffin, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal or stamp, this 34th day of March 2017.

(SEAL)

Notary Public

Teresa D. Nantz

My commission expires: 7/4/2019



STAFF FINDINGS OF FACT APPROVED BY THE TOWN BOARD

Article 9.23

Off Site LCID and C&D landfills are permitted in the SP District-subject to a Special Use Permit, according to the procedures of Section 11.4.10. The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

STAFF FINDINGS: *The Greenway Waste Solutions Landfill (North Mecklenburg Landfill) is an existing Construction and Demolition (C&D) landfill with an unexpired special use permit that would be allowed to continue to operate in its current zoning designation per Article 9.23.10. The proposed application is to amend the existing special use permit to add adjacent properties to the permit boundaries, add an additional fill area on the site over the stream that bisects the site, and include a recycling facility near Holbrook Road. The applicants are seeking a rezoning of the entire 135 acre property to Special Purpose (SP) concurrent with the SUP application in conformance to Article 9.23.10.*

- *UPDATE 9/19/16: The updated site plan has removed the additional fill area over the stream from the application. The special use permit now is solely for the boundary expansion as shown on the plan and for the addition of the recycling facility near Holbrook Road.*
1. That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills.

STAFF FINDINGS: *The NCDENR (North Carolina Division of Environment and Natural Resources) is now known as the North Carolina Department of Environmental Quality (NCDEQ). The NCDEQ permit has not been forwarded by the applicant showing evidence of permitting. In addition, after discussion with NCDEQ Division of Waste Management, the landfill in question has been found to exceed state regulatory limits of various groundwater and surface water contaminants and methane gas since 2013. Further, a Notice of Violation was issued on September 16, 2014 to the landfill due to an encroachment upon their required state mandated buffer to the east of the property. As of now, the landfill remains in violation of the required buffer.*

- *UPDATE 9/19/16: The current NCDEQ permit has been forwarded and is attached in the Board's agenda packet. The current permit is valid through 10/8/17. The updated letter attached to the SUP application states that the applicants will operate in compliance with NCDEQ rules. Staff recommends that a more specific statement from the applicant be added to the SUP plan or attached letter that addresses the contamination of the site and the buffer violation. It is staff's understanding that the applicants are beginning discussion with NCDEQ on the remediation process to clean up the contamination. They are also in the process of purchasing property to the southeast of the site that will mitigate their buffer violation.*
2. That the proposed use will not endanger the public health and safety, nor substantially reduce the value of the nearby property; and

STAFF FINDINGS: *Per discussion with NCDEQ Division of Waste Management, it appears the constituents leaching from the landfill have contaminated multiple drinking water wells adjacent to the subject property. Two parcels were purchased (including one residence) by the landfill and two homes were added on to municipal water service due to the groundwater contamination. According to NCDEQ, the applicant has been cooperative with the state in installing both shallow and deep*

groundwater monitoring wells and methane gas monitoring wells, in an effort to analyze and find the nature and extent of both the groundwater contamination and the methane gas exceedances. The applicant has also been cooperative in addressing the immediate issue of the contamination of the adjacent drinking water wells as discussed above. The monitoring and analyzing of both the groundwater and methane gas contamination is ongoing. At this time, there are still many unknowns in regard to the nature and extent of the existing groundwater and surface water contamination and potential methane gas migration. Once the nature and extent is more fully understood, NCDEQ will require mitigation plans for the applicant to begin contamination cleanup of both the active fill area, and the fill area that is closed out and inactive (which is under a different set of state rules). In addition, contamination was also found in the groundwater monitoring wells near the stream, and recently in the surface water sampling of the stream that is being proposed to be piped and covered with the expansion. Please find the groundwater monitoring well locations of the site in a map forwarded by NCDEQ.

- UPDATE 9/16/19: The proposed recycling facility is located near Holbrook Road, separated from the area that is contaminated and a significant distance from where active monitoring wells are located. Please see the NCDEQ Monitoring well map attached in the agenda packet. There are no new fill areas proposed with the updated application. Therefore since disturbance of the contaminated area is no longer proposed, and the new recycling facility is located a significant distance from the contamination, staff finds the contamination issue of the existing facility and the addition of the recycling facility separate issues that do not conflict. However for record in regard to public safety and health concerns, it is recommended that the applicant add a note in the plan stating the planned schedule of NCDEQ remediation of the existing site and commit to the cleanup in a timely manner.
 - UPDATE 10/17/16: The updated condition letter submitted by the applicant states: "Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented"
3. That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

STAFF FINDINGS: The subject property is not located within the boundaries of any of the Small Area Plans adopted by the Town of Huntersville. However, the East Huntersville plan does mention and recommend a connector road in between the proposed Verhoeff Drive extension to the south and the future Asbury Chapel extension to the north. The north/south connector road could traverse the subject property. In the 2009 landfill SUP, the applicants reserved the right of way in the area of the gas pipeline and buffer at the southwest edge of the property through their main entrance. Please find the 2009 SUP for your reference in your agenda packet. For this application no commitment has been made to accommodate the future connection.

- UPDATE 9/19/16: The letter attached to the application states that "the site plan makes an accommodation for the connector road on any Griffin owned land once the final locate is determined". The note on the plan however is not clear and needs to be reworded showing the intent to provide right of way for the thoroughfare connector road through the subject property. UPDATE 10/17/16: The note has been amended on the conditional letter stating that the applicant will accommodate for the connector road on any property owned by the applicant.

4. That the comprehensive site plan addresses each of the environmental and development standards below:

- (a) A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare-where available. Landfills 10 acres or less must directly connect to a major or minor thoroughfare or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

STAFF FINDING: *The existing landfill does not have access to a thoroughfare or a street that is built to commercial street standards. Access is from Holbrooks Road, which is a secondary residential street that traverses a residential neighborhood. The ordinance states that the Town Board may issue a SUP for a landfill that does not front on a thoroughfare or commercial street if it finds that it “would not likely cause any injurious effect on the property adjacent to the access”.*

When the last Special Use Permit (SUP) application was submitted in 2009, the NCDOT district engineer commented in an email to the applicant that Holbrooks Road “does not possess the pavement structure to accommodate the truck traffic it has experienced and will be subject to with the continued use your company is planning”. The 2009 SUP was eventually approved with an added stipulation that the condition of Holbrooks Road be reviewed in 5 years. Another condition was that the applicant contributes \$25,000 in the next 10 years toward the maintenance of Holbrook Road. In December of 2014 public works and engineering staff inspected Holbrook Road and found that it was in good condition as NCDOT had just finished repaving the street in 2013 (added 4 inches of asphalt). As of this date, the applicant has not forwarded the \$25,000 to NCDOT for the street maintenance.

After contacting NCDOT and asking for their input on the current state of Holbrook Road in relation to the proposed expansion and indefinite lifespan extension of the landfill, NCDOT’s concern about the durability of the road remained. They requested that the applicant submit core samples of the road to evaluate its substructure. As of the date of this report staff is not aware of any recent discussions the applicant has had with NCDOT on the durability of Holbrook Road in regard to this application. Please find the emails from NCDOT attached in your agenda package.

- **UPDATE 9/19/16:** *The newest plan submitted has no updated notes about the maintenance and structure of Holbrook Road in response to NCDOT comments. The letter submitted by the applicant with the application states that they intend to “connect to the future Verhoff/Asbury Chapel Extension and will reserve a right of way for the future connection to a potential industrial street to the south through the Commerce Station Industrial Park by 2034”. Per past discussions with the applicant it is thought that this note is intended to cap or limit their usage of Holbrook Road to no longer than the year 2034, as well as providing a connection from their site to one of the future thoroughfares by that time. Staff recommends that if that is the case, the note be clarified to clearly state that on the special use permit plan. It is still also unclear if the \$25,000 committed to at the last SUP approval would carry over as a condition for this permit.*

- *UPDATE 10/17/16: Note #11 on the latest Special Use Permit plan submitted states "Greenway Waste Solutions shall have alternative access to replace Holbrooks Road by 2035". Staff recommends the note be clarified to read: "Greenway Waste Solutions will cease using Holbrook Road as its primary access and will have functional primary access onto a commercial street or thoroughfare by 2034". 2034 is the year that based on prior approvals, permission has already been granted for the use of Holbrook Road.*
- *Note #13 on the updated Special Use Permit plan includes a series of notes in regard to the maintenance and improvement of Holbrook Road. They include:*
 - *Conducting the boring tests to determine the current pavement structure of Holbrook Road, per NCDOT's request.*
 - *Overlaying Holbrook Road in front of the facility as requested by NCDOT.*
 - *Carrying over the previously offered \$25,000 contribution for improvements to Holbrook Road as part of this application.*
 - *Reassessing the condition of Holbrook Road with Town Staff and NCDOT in 2025, about the half way point between now and 2034 when they've agreed to stop using Holbrook Road.*
 - *The applicant would then contribute additional funds at that time if the Town and NCDOT deem it necessary.*

(b) That the proposed or existing use will be in compliance with the rules and regulations as established by Traffic Impact Analysis (TIA) Article 14.

STAFF FINDING: *Engineering and Public Works has determined that based on the expansion proposed, the new amount of traffic that will be generated will not meet the threshold that would require the submission of Traffic Impact Analysis (TIA). Please find the TIA determination from engineering in your agenda packet.*

- (c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modifications made by the state unless the state standards become more restrictive.
- 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and /or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right of way to fill area (non-state requirement).

STAFF FINDING: *The submitted letter from Greenway Waste Solutions states that they conform to all the buffers required in this section. However, as shown on aerial photography and from the*

submitted special use permit plan, multiple existing driveways are located within the 100 foot undisturbed buffer. In addition, the applicants are seeking a variance from the Board of Adjustment for this section of the ordinance in order to encroach/fill the 50 foot delineated stream buffer and to fill in designated wetlands and FEMA flood areas. No new encroachments are shown on the plan other than the ones requested by way of the Board of Adjustment. In order for the applicant to try to address some concerns by staff, the Board of Adjustment has continued the variance hearing per the applicant's request. The hearing is scheduled to continue on September 13, 2016.

- *UPDATE 9/19/16: On September 13, the applicants withdrew their variance applications. The proposed plan no longer proposes to fill the stream and encroach into the required buffers. After review, there are not any newly proposed encroachments on the updated special use permit plan.*

- (d) Driveway access to the facility must be paved for a distance of at least 100 feet from the public street.

STAFF FINDING: *According to aerial photography and as inspected in a staff site visit, the entrance driveway to the facility is paved to a distance greater than 100 feet. However the separate exit drive that connects to the main street driveway where trucks leave the site is not paved for distance of 100 feet. The special use permit plan submitted by the applicant shows the exit drive proposed to be paved for a distance of 100 feet per this section.*

- (e) Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6 feet high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

STAFF FINDING: *The letter from the applicant states that the site is "closeable and secured from vehicular and pedestrian access" but does not provide how that is done. The letter also mentions that a variance will be submitted for the fence requirement. No variance application has been submitted for this section of the ordinance. The Special Use Permit site plan includes a note stating that "heavy vegetation" prevents access to the site. The submitted information does not provide conformance to the fence and security requirement of this section.*

- *UPDATE 9/19/16: The new rezoning plan (separate application) includes a modification request to the Town Board from the fencing section of the ordinance. It states that the new recycling facility near Holbrook Road would be fenced and shows an existing fence along the northern sections of the landfill. However it implies that the remainder of the site, the southern portion, would not be fenced. A note on the plan states that "heavy vegetation prevents access to the remainder of the site". Staff cannot support this modification request at this time as it is unclear whether or not heavy vegetation provides a secure facility as intended in the code.*

- UPDATE 10/17/16: The updated Special Use Permit plan modifies the above note (note #6), which commits the applicant to enclose the rest of the active facility with a fence within 90 days of either development happening adjacent to the property, or the greenway begins construction through the applicant's property.

- (f) All driveways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100 feet from the public street so that no traffic waiting to enter the site will be backed up on any public right of way.

STAFF FINDING: The letter from the applicant states that "The driveway that serves the site is wide enough to accommodate two-way traffic for 200 feet from the public street. There is ample room such that traffic should not enter the public right of way". As shown on aerial photography and inspected on a site visit, there is a single driveway entering the facility that is not wide enough to accommodate two way traffic through the scale house and into the facility. This driveway is mainly about 11 feet wide. However, this entrance driveway leading up to the scale house is over 100 feet long in conformance to this section. There is a separate and additional one-way exit drive that directs trucks back out to the main driveway. Therefore with both of these driveways combined two-way traffic is appropriately accommodated for in and out of the facility.

5. That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

STAFF FINDING: In the letter attached from the applicant, it is stated that they "have taken pride in keeping the roadways clean". However no commitment has been made to weekly clean the road as required in this section. On several site inspections to the site the majority of Holbrook Road seems to be clean and debris free. However the area of street immediately in front of the facility's driveway is often covered with dirt from trucks exiting the facility.

- UPDATE 9/19/16: In the updated letter from the applicant, they've stated that they "plan to continue to exceed section 6.5 of the franchise agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles". This statement however does not make it clear that the cleaning of Holbrook Road would take place on a weekly basis. UPDATE 10/17/16: The applicants have updated the letter to commit to "routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed."

6. That use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

STAFF FINDING: *The Greenway Waste Solutions landfill is adjacent to a residential zoning district therefore the restricted hours of operation will apply. The letter from the applicant has stated that the use will be limited from 7:00 am to 6:00 pm.*

7. That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

STAFF FINDING: *The letter from the applicant states that an updated timetable has been submitted with the application. However staff has not located it in the submittal.*

- **UPDATE 9/19/16:** *The updated letter from the applicant states that based on current waste acceptance rates and anticipated recycling rates, they project the life of the landfill to be over 20 years.*

8. That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

STAFF FINDING: *No updated reclamation plan (or closure plan) has been submitted by the applicant for this application.*

- **UPDATE 9/19/16:** *There is no reclamation plan/closure plan submitted with the updated submitted as required. The letter submitted with the application though includes a statement regarding NCDEQ monitoring the site post closure. **UPDATE 10/17/16:** The closure plan has been submitted.*

9. An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

- (a) The landfill has been continuously operating since 1991 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;
- (b) The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;
- (c) The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and
- (d) In no event shall the landfill operate under a LCID landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately

commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plans shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.

STAFF FINDINGS: *The Greenway Waste Solution Landfill is a Construction and Demolition Landfill (C&D) and is not subject to this section of the ordinance. This section of the ordinance applies to Land Clearing and Inert Debris Landfills (LCID).*

10. Any existing C&D landfill shall be permitted to continue operating in the zone in which it is located provided that landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

STAFF FINDINGS: *The current special use permit for the Greenway Waste Solutions landfill is current and unexpired. However the applicants do wish to expand the boundaries of the landfill as shown in the attached Special Use Permit site plan. Therefore the rezoning application submitted for these properties must first be approved designating them Special Purpose (SP) prior to this special use permit being approved. The rezoning of the property was approved on 11/7/17 immediately prior to the special use permit approval.*

Additional Conditions Added by the Town Board (when in conflict with the findings above, the conditions below shall apply)

1. The site will operate in compliance with all NCDEQ requirements.
2. The applicant will cooperate with NCDEQ in addressing its contaminated ground waters.
3. The \$25,000 that was agreed upon in 2008 needs to be paid on or before December 31, 2016 and to be used for street improvements or maintenance.
4. The proposed use will not be in conflict with the objectives of the long and short range adopted area plans.
5. The comprehensive site plan addresses necessary environmental and development standards.
6. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
7. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant's property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
8. The bore test for Holbrooks Road will be taken within ninety (90) days of approval of the SUP and provided to NCDOT as requested.

9. The applicant will maintain an internal 100' driveway from the public street in good condition.
10. The applicant will also contribute to the escrow account an additional \$25,000 prior to 2025 for either maintenance or improvements to Holbrook Road.
11. All right-of-ways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100' from a public street so that traffic waiting to enter the site will not be backed up onto any public right-of-way.
12. The landfill operator will commit to routinely washing Holbrooks Road with a specialized truck designed to remove dirt and mud when required.
13. That the use of the site shall be limited to the hours of 7 a.m. to 6 p.m. Monday through Saturday.
14. That a time table be submitted indicating the development phases and life expectancy of the landfill.
15. That a closure plan (reclamation plan) is provided in accordance with applicable state regulations and the applicant commits to make updates to the plan as circumstances dictate.
16. The applicant will meet all appropriate state operating and reporting requirements pertaining to C&D recycling.
17. Due to the contamination in the landfill and surrounding areas the applicant will provide updates to the Town with compliance of the SUP conditions 10 years following the approval of the SUP and every 5 years thereafter upon the closure of the landfill.
18. That all provisions and findings of Article 9.23 be complied with as identified by staff (shown above as staff findings of fact).



Special Use Permit Application

Subject: Letter stating how the applicant satisfies Article 9

Date: 10/12/16

Greenway Waste Solutions, LLC has been operating in its current use since 1988. During this time Greenway Waste Solutions, LLC has operated under the purview of Article 9.23 and satisfied all criteria.

Sincerely,

John Brown
Greenway Waste Solutions

Special Use Permit
~~COMMERCIAL SITE PLAN~~
APPROVED BY THE TOWN OF HUNTERSVILLE
Bradley D. Smith 3/28/17
Planning Staff Date

9.23 Off-Site Land Clearing and Inert Debris (LCID) and Construction & Demolition (C&D) Landfills

Off-Site LCID and C&D Landfills are permitted in the SP District subject to a Special Use Permit, according to the procedures of [Section 11.4.10](#). The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

.1 That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills, as amended.

This site will operate in compliance with the rules according to NCDEQ. See attached NCDEQ (formerly NCDENR) Permit No. 60-13 CDLF-1993. The current permit expires 10/8/2017. (see p.6, Attachment 3, Part I:1)

In 2013 routine landfill groundwater monitoring detected an exceedance in Appendix 1 constituents. As a result of the detection, ongoing assessment monitoring has been conducted. In May 2016, Greenway Waste Solutions (GWS) submitted a Contaminant Delineation Plan to NCDEQ to further assess the exceedances. The Contaminant Delineation Plan was accepted by DEQ on June 17, 2016 and GWS is implementing the plan. Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented. Assessment and remediation efforts will continue until deemed approved by DEQ. Due to the nature of assessment and remediation, no timetable for completion can be provided, but will be initiated at the request of NCDEQ. See attached DEQ Contaminant Delineation Plan approval letter.

GWS is in process to acquire approximately 1 acre (the land to the west of Cane creek on parcel 01918162) on the southeastern portion of the landfill property from co applicant, Bill Hammill to increase our facility buffer. With the increased buffer area, the landfill will have significantly more buffer than required and will no longer be in violation of the NCDEQ buffer requirements. This land will never be used for landfill air space and shall remain undisturbed.

.2 That the proposed use will not endanger the public health and safety, nor substantially



reduce the value of nearby property; and

This site and the cleanup of the existing contamination will operate in compliance with the rules according to NCDEQ. Waste entering the recycling center will be hand sorted. Any unacceptable waste will be sent off site to the proper facility.

.3 That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

This site will not be in conflict with the objectives of the most detailed plan adopted for the area. The small area plan calls for a connector road from Commerce Station to the future Verhoff/Asbury Chapel Extension. The applicant will and the site plan makes an accommodation for the connector road on any Griffin owned land once the final location is determined. See note 14 on CD-101.

.4 That the comprehensive site plan addresses each of the environmental and development standards below:

a). A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare. Landfills 10 acres or less must directly connect to a major or minor thoroughfare, or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

GWS shall relocate their main access from Holbrook Road to the future Verhoff/Asbury Chapel Extension as soon as available but no later than 2034. GWS will reserve a right-of-way through their property for the future connector road from the Verhoff extension to Asbury Chapel extension.

Additionally:

GWS will pay for Holbrooks borings per DOT's request

GWS will pay for extending Holbrooks shoulders and a new overlay for 300 feet West of GWS' entrance

GWS will extend the \$25,000 donation to the Town of Huntersville for improvements to Holbrooks Road for as long as GWS customers use Holbrooks Road.

GWS agrees to reassess Holbrooks Road's condition in conjunction with the town and DOT during 2025 (halfway mark for GWS' commitment to stop using Holbrooks). GWS agrees to contribute an additional amount to the maintenance of Holbrooks if the Town and DOT deem necessary.

b). That the proposed or existing use will be in compliance with the rules and regulations as established by the Traffic Impact Analysis (TIA) Article 14.

A Traffic Impact Analysis was not deemed necessary.

c). Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated



below take precedence over any and all modification made by the state unless the state standards become more restrictive.

500-foot buffer from existing residential water supply wells to fill area.

200-foot buffer from adjacent property to fill area.

No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.

50-foot buffer from delineated streams.

50-foot buffer from road right-of-way to fill area (non-state requirement).

The site is in compliance with all criteria in this section.

d). Driveway access to the facility must be paved for a distance of at least 100' from the public street.

Driveway access to the facility is paved at least 100' from the public street. See "f" below

e). Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6' high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

See site plan CD 100 for existing and proposed fencing around the recycling facility. The active landfill area has a security fence. The applicant is seeking relief from the fencing requirement for the closed fill area that is inaccessible.

"GWS agrees to begin installation of fence within 90 days of any development on the parcels east or west of GWS. GWS also agrees to begin installation of fence within 90 days of construction of future Bikeway/Greenway/Carolina Thread Trail passing through GWS property."

f). All driveways which serve the site must be wide enough to accommodate two-way traffic for a distance of at least 100' from the public street so that no traffic waiting to enter the site will be backed up on any public right-of-way.

The driveway is about 48' wide serving both ingress and egress for about 65 feet. From that point ingress only continues to the scalehouse for about 125 feet for a total of 185 feet of paved driveway. The scalehouse separates ingress and egress providing two way traffic. Egress is paved for approximately 125 feet from Holbrooks Road.

.5 That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

Since inception we have taken pride in keeping the roadways clean. This process starts on site where we provide a well groomed tipping floor for our customers. From there we maintain gravel roads to remove dirt from tires. Lastly, the site operators commit to routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed. This includes debris that is not related to our facility. We plan to continue to exceed section 6.5 of the Franchise



Agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles.

An added benefit of the MRF is that all trucks will be tipping their loads on a concrete floor further eliminating dirt falling from trucks.

.6 That the use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

The use of the site is limited to the hours of 7:00AM until 6:00PM, Monday through Friday and 7:00AM until 12:00PM on Saturday.

.7 That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

Based on current waste acceptance rates and anticipated recycling rates we project a life of over 20 years.

.8 That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

See attached Infill Expansion Closure Plan and drawing

.9 An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

This not applicable to this site.

a). The landfill has been continuously operating since 1990 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;

b). The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;

c). The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and

d). In no event shall the landfill operate under a LCID or demolition landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plan shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.



.10 Any existing C&D landfill shall be permitted to continue operation in the zone in which it is located provided the landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

Exhibit#3-2016 Email Withdrawing Variance 16-02

From: [Mike Griffin](#)
To: [Meredith Nesbitt](#)
Cc: [Bradley Priest](#); [Jackie Drummond](#); [Jason Watkins](#); [Jack Simoneau](#); [John Brown](#); [Butch Joyce](#); [Mousa A. Maimoun](#)
Subject: Variance Application Withdrawal
Date: Saturday, September 10, 2016 4:55:57 PM

Meredith,

Per our meetings this week, I think it's best we withdrawal or variance applications. We will continue to pursue our rezoning & PUD for our site and for our proposed recycle center. We really appreciate your assistance and look forward to revisiting this opportunity after we make more progress with DEQ.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 7, 2016, at 4:05 PM, Meredith Nesbitt <mnesbitt@huntersville.org> wrote:

All,

Click [here](#) for the Board of Adjustment meeting schedule. It includes an agenda and the staff reports for each of the cases scheduled. Please let me know if you have any questions or trouble accessing the reports.

Mike,

Let us know how your meeting goes tomorrow. We will decided what needs to happen from there. Looks like schedules are clear for Friday, early afternoon but I will confirm with Brad and Jack after we hear from you about your meeting with Ed.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]
Sent: Wednesday, September 07, 2016 12:19 PM
To: Meredith Nesbitt <mnesbitt@huntersville.org>
Cc: Bradley Priest <bpriest@huntersville.org>; Jackie Drummond <jaclynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>
Subject: Re: Aug 17th follow-up

Meredith,

Thank you for your reply and input. I would like to ask for a continuance instead of withdrawal at this time. We have a meeting tomorrow morning with Ed Mussler, NC DEQ's Division of Waste Management - Solid Waste Manager, to address the concerns you have detailed. Are y'all available to meet this Friday or Tuesday to discuss the results of this meeting? It may be that we need to pull the applications but I want to exhaust all options due to our fairly tight timeline that I discussed in my earlier email.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies
19109 W Catawba Ave. Cornelius, NC 28031-5611
MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 2, 2016, at 5:46 PM, Meredith Nesbitt
<mnesbitt@huntersville.org> wrote:

Mike,

Staff has reviewed and discussed the information you provided. At this time, we are still not able to reach a supporting recommendation for the floodplain variance. We appreciate the information submitted but we do not believe it qualifies as finding of fact to satisfy the findings below. In addition, the letter specifically mentions the revenue lost as an applicable hardship. However, section 151.46(B) states that specifically is not a reason for granting a variance. Therefore, with this in mind we still find deficiency in the following criteria for the floodplain variance:

- Section 151.44 Factors For Conditions and Determination of Completeness
 - o (6) Availability of alternative locations, not subject to flooding or erosion damage during a community base

flood, for the proposed use

- Section 151.45 Conditions for Variances
 - o *(C) Variances shall only be issues upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*
- Section 151.46 Standards for Granting a Variance
 - o *(A)(2) A determination that failure to grant the variance would result in exceptional hardship*
 - o *(B)The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance*
- Section 151.47 Miscellaneous Conditions
 - o *(B)(1) No feasible location exist for the use outside the Special Flood Hazard Area*
outside of the floodplain to fill and this criteria is not satisfied.

Additionally, the information concerning the contamination of the site provided to us by NCDEQ is finding of fact in relation to all the variance requests. Therefore, with that new information, staff finds the SWIM buffer and Article 9.23 variance request criteria potentially deficient in the following:

(4) The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

At our August 17 meeting, it was discussed that in response to the information provided to us by DEQ you would follow up with them to obtain a letter or other finding of fact in relation to the benefit and appropriateness of your project even with the contamination issue being outstanding. The information you provide below, though helpful, still does not provide a finding of fact that the contamination issue is not a detriment to public health. What you proposed is to ask for approval with the assumption that permitting from DEQ will be approved. That does not address the concern we have received from DEQ in regard to the proposed project. Therefore, Staff is uncomfortable recommending approval for the SWIM Buffer and Article 9.23 variance request with the unknowns surrounding the surface and groundwater contamination. We would request more evidence and finding of fact.

At this point, we feel it would be beneficial if the applications were withdrawn until a remediation plan can be approved by NCDEQ. That

would provide an excellent finding of fact to address that requirement. This principle would also be true for the rezoning and special use permit, if it were to include the additional fill area. However, this is not a requirement, we could move forward with all the applications. Although, if we do move forward, it would be staff's recommendation that more findings of fact be submitted to address the contamination issue prior to any approvals.

We will be glad to discuss this information in more detail – however, please note Town offices are closed Monday, September 5th for Labor Day.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]

Sent: Wednesday, August 31, 2016 3:19 PM

To: Meredith Nesbitt <mnesbitt@huntersville.org>; Bradley Priest <bpriest@huntersville.org>

Cc: Jackie Drummond <jacklynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>

Subject: Aug 17th follow-up

Meredith & Brad,

Per the discussions from our Aug 17th meeting, we met this Monday with DEQ's Jason Watkins and Jackie Drummond who I have copied. We had a discussion that I think covered every aspect of our efforts to seek Huntersville's conditional approvals for a new lined landfill expansion and C&D MRF. We also reviewed and discussed the status of the ongoing assessment of groundwater and buffer issues specific to the older portions of our facility.

The pending buffer issue will be resolved before we present to the

Planning Board meeting scheduled for September 27th. This could have been resolved over a year ago had I understood that we could recombine Bill Hammill's acre into our parcel without going through the pending rezoning and SUP. I got hung up on the fact that the Hammill parcel is outside the Town limits and that we were trying to recombine it into a parcel inside the Town. This is my fault for not better understanding the process.

The groundwater issue has a longer timeline with greater complexity.

We are working with our consultants and DEQ in the assessment phase which will eventually roll into remediation. We have always assumed that DEQ will only issue a permit for the new landfill expansion after a remediation plan is in process or completed. We've also assumed that any Town approvals would be conditioned on DEQ approvals so we didn't see how the groundwater issue would inhibit us from seeking conditional approvals from the Town.

In reading Article 9.23.2, 'The proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property,' we're convinced that our proposed new landfill expansion is in accordance with this article and will most likely lessen the chances of the older portions of our facility from being inconsistent with this Article. The proposed expansion will be lined to include a leachate collection system plus we are proposing to install a synthetic cap on the closed portions of our site to better divert water from these closed areas.

We would normally complete the DEQ assessment and remediation phases before starting this process but these processes will take multiple years and we have diminishing airspace that requires us to pursue them concurrently. Note that the previous Gantt Chart schedule shared with the Town always started with Task 2. Per the attached Gantt Chart, Task 1 is the compliance process specific to remediating the groundwater issues to DEQ standards. We intentionally omitted the first task being it is not pertinent to the Town's conditional approvals and it would only add confusion to an already complex request.

I really don't feel this is pertinent to our pending requests but I'd be glad to describe the extensive work that has transpired since the first groundwater exceedance in 2013. We look forward to your feedback on our consistency statement with 9.23.2. This discussion is specific to the rezoning and SUP whereas we know the most urgent matter is addressing the staff findings for the BOA meeting scheduled for September 13th. We will continue to tweak our plans and comments specific to the rezoning and SUP and present this to all in the coming days. Jason Watkins gave us a solid suggestion in that we should consider permitting the C&D MRF in a parcel separate from the landfill parcel. John and I will quickly inquire with DEQ's permitting folks to discuss the merits on their end.

John and I have had several conversations with Butch Joyce and Dr. Mousa Maimoun with Joyce Engineering specific to staff not supporting our request to pipe and fill the Special Flood Hazard Area.

Per the attached letter from Butch, the inability to fill this area kills the proposed landfill expansion. Ironically, Butch also highlights how the redesign around the Special Flood Hazard Area decreases our site's environmental compliance quality. We feel these factors make it clear that the piping and filling of this very small area should be supported by the staff. We also feel staff's support is extremely important and will ask for a continuance or withdraw if there needs to be more time for consideration.

Following are our proposed conditions in order to seek staff and BOA support:

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers & NC DEQ Water Quality
4. Approval of groundwater remediation plan by NCDEQ
5. Approval of NCDEQ Solid Waste Permit specific to the proposed expansion
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, and will not reduce the value of nearby property.
8. The additional synthetic capping of older closed areas will further enhance public health and safety, and will not reduce the value of nearby property.

Please feel free to add anything we missed. We have stated many times that this process should be properly conditioned in recognition that the complex engineering and design submittals to the various government agencies will start after the Town's approval. We will add the final conditions list on our letterhead after your input.

In summary, we're trying to get the conceptual vision approved by the town before the more technical work is required. I really appreciate everyone's considerable efforts to enhance our applications. The complexities of these concurrent processes can easily create misunderstandings which I hope we have cleared up over the last couple weeks. We look forward to your feedback.

Best regards,

Mike

cc: Jackie Drummond
Jason Watkins
Jack Simoneau
John Brown
Butch Joyce
Mousa Maimoun

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies



Variance Application

Date of Application: 7/1/21

Property/Building Address: 15300 Holbrooks Road Parcel Size (ac): 121.040

Tax Parcel ID (PIN) Number(s): 01910102

Text of Ordinance to be varied

Ordinance: S.W.I.M Buffer Article: 8 Section: 25

Submittal Requirements and Procedure

The following must be submitted with the completed application (signed and dated by the property owner and/or applicant):

- One (1) hard copy and one (1) electronic copy of any applicable map(s), site plans, exhibits, and applications showing exact location of property with respect to existing streets, adjoining lots and other important features on or contiguous to the property. Also, include any maps and/or illustrations (to scale), which are necessary to show the location, number and size of buildings, signs, etc., on the property.
- A list of names, addresses and tax parcel identification numbers of properties that abut the site, are across the street from the site or are otherwise within one hundred feet (100') of the site. (Electronic format preferred)
- Review Fee (Please check most recent version of Fee Schedule for applicable Variance Review Fee)
- See the current Board of Adjustment Submittal Deadlines and Meeting Schedule for filing deadlines and meeting dates
- Please submit your complete application and fee by **noon the day filing deadline**

Notifications Requirements

Planning Staff will be required to notify in writing each adjoining property owner.

Planning Staff will also be required, if you are seeking a variance from the requirements of the Mountain Island Lake or Lake Norman Watershed Overlay Districts, to notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption as follows:

- * Mountain Island Lake Watershed Overlay. Local governments having jurisdiction in the watershed: Charlotte Mecklenburg, Cornelius and Huntersville. Entities using the water supply for consumption: Mecklenburg County, Gastonia and Mount Holly.
- * Lake Norman Watershed Overlay. Local governments having jurisdiction in the watershed: Davidson, Cornelius and Huntersville. Entities using the water supply for consumption: Mooresville, Mecklenburg County and Lincoln County.

Variance Requirements

STANDARDS FOR GRANTING A VARIANCE (Article 11.3.2.e.):

When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all the following:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
4. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

Appropriate conditions, which must be reasonably related to the condition or circumstance that gives rise to the need for a variance, may be imposed by the Board (Article 11.3.1.e.).

In the following spaces, indicate **FACTS** that demonstrate to the Board of Adjustment you meet all the standards for granting a variance:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

See Attached

2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

See Attached

3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.

See Attached

4. The public safety and general welfare have been protected and substantial justice done.

See Attached

Applicant

Printed Name Greenway Waste Solutions at North Meck, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Chief Operating Officer Applicant Phone 919-795-0599

Applicant Email jdbrown@griffinbros.com

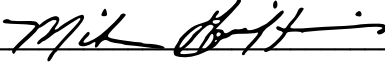
Address of Applicant 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

Property Owner (if different than applicant)

* Printed Name C&D Management Company, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Manager Applicant Phone 704-533-5781

Applicant Email mike@griffinbros.com

Address of Property Owner 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this petition MUST be accompanied by a Limited Power of Attorney signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID APPLICATION. **If additional space is needed for signatures, attach the Town of Huntersville Signature Addendum Form.**

Contact Information

Town of Huntersville Phone: 704-875-7000
Planning Department Fax: 704-875-6546
PO Box 664 Physical Address: 105 Gilead Road, Third Floor, Huntersville, NC 28078
Huntersville, NC 28070 Website: <https://www.huntersville.org/228/Planning-Department>

Received By Planning Department Staff: _____

Staff Initials: _____

List of adjacent property owners (for variance)
-within 100ft

- 01930104 Arnold W. Johnston 12300 Old Statesville Road Huntersville, NC 28078
- 01930105 Linda Wester Long 7910 Golf Course Dr N Denver NC 28037
- 01934105 Michael and Tracy Tinsley 11737 Trails End Lane Huntersville NC 28078
- 01934118 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031 (Trails End Holdings LLC)
- 01934108 William and Campbell Hammill 11745 Trails End Ln Huntersville NC 28078
- 01918135, 01918167, 01918166, 01934119, 01910116 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031
- 01919102, 01919105, 01919106, 01937103, 01937199, 01919121 Mecklenburg County 600 E4th Street 11th floor Charlotte NC 28202
- 01937280, 01937286- Southside Neighborhood LLC (w/in 100' of MRF parcel)



Conditions for Approval of Variances June 6, 2021

Greenway Waste Solutions is requesting approval of the following variances:

Article 8.25.5 S.W.I.M. Stream Buffers Minimum Buffer Widths

Floodplain Ordinance Section 151.60(A)(10)

Article 9.23.4.c Off Site Landfill Clearing and Inert Debris (LCID) and Construction and Demolition (C&D) Landfills

The approval of the aforementioned variances is subject to the following conditions

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers
4. Approval of NCDEQ Solid Waste Permit
5. Approval of all Town/County/State building permit related activities
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, nor reduce the value of nearby property as compared to past North Carolina standards.
8. Condition that the aforementioned expansion and additional synthetic capping of older closed areas will further enhance public health and safety, nor reduce the value of nearby property specific to areas currently operating or previously closed.

Article 8.25

Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

The inability to impact the S.W.I.M Buffer as the landfill expands creates an unnecessary hardship for the property owner and the community alike. As a result of the ordinance the long term potential life of the landfill site will be cut in half and have to close prematurely. This variance is one part of the process that, if approved, will allow for continued existence by increasing the area for operation. The hardship is that these regulations prevent the applicant from seeking the required approvals from State and Federal environmental agencies to pipe the water through the site. Upon plan approval from these agencies, the applicant will create a permanent storm water management system that will improve the flow and decrease likelihood of a flood in the area as compared to existing conditions. The system will improve flow up and down stream by providing basins on either end of the pipe. This will help control the speed of the water. The pipe itself will provide sufficient capacity to allow water to flow during peak flood conditions. This system will meet the requirements and criteria of Mecklenburg County Storm Water standards and require a floodplain development permit. A buffer mitigation plan has been approved by Mecklenburg County. The professionally engineered plans and process through which the applicant will gain ultimate approval will be heavily scrutinized and coordinated with the State's Department of Environmental Quality ("NCDEQ") Water Quality Division, the Army Corps of Engineers and NCDEQ Solid Waste Division. Beyond the approval of this variance, extensive engineering and multiple levels of approval will be needed. This ordinance threatens to derail this project because local approval is required by the State and Federal agencies Exhibit A provides detail on the storm water management system and site.

1.) The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

- a. The hardship is unique to this site given the surrounding topography and SWIM buffer coupled with its use as a Construction and Demolition ("C&D") landfills. Landfills need large areas of land with uninterrupted space for optimal site efficiency. The stream and storm water conveyance, which originates on the Johnston property immediately to the West, channels water between two permitted landfilling areas. The topography and SWIM buffer has created a hardship which prohibits the ability to increase the landfill capacity

by joining the two permitted areas. The proposed solution better manages water through concrete encased pipe, as depicted in Exhibit A and B. Keeping the water isolated to the pipes eliminates the ability for runoff and material to enter the stream. The plan includes significant storm water management basins on both ends of the pipe. This solution will allow for a more environmentally responsible way to manage water and maximizes the landfill capacity to better serve the citizens of Huntersville and the North Mecklenburg region. The specifications of the storm water system and pipe will meet the requirements of Mecklenburg County.

2.) The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship

The hardship was not created by the manner in which the property has been used. The ability for relief provided in Article 8.25 shows the intention of the ordinance is to allow for built-in relief. Therefore, the applicant's request for a variance is consistent with the intent of the ordinance.

3.) The public safety and general welfare have been protected and substantial justice done.

- a. The public's safety and general welfare are best served by a variance to this regulation. The community and the North Mecklenburg region will see an increase in truck traffic as a result of taking C&D debris to other counties or Mecklenburg County's only other permitted C&D landfill in South Charlotte. The discontinued use of the site as a C&D facility will increase the amount of truck traffic by approximately 725,000 miles per year. * Furthermore, 1,183 additional tons or 2.4 million additional pounds of carbon-dioxide would be emitted into the atmosphere annually.** It is in the best interest of the community to ensure the continued operation of this site. These hardships can be avoided through a variance. Exhibit C is a map showing proximity to other locations and Exhibit D shows the routes which will experience an increase in truck traffic without the facility.

The public's safety and welfare will also be better served as a result of the proposed piping; given that water will not interact with the materials during normal flow nor a flood. The applicant will provide ample capacity for the water to flow through the pipes, before and after storage basins as well as lining and capping the facility. This ensures that water will not touch the debris that is deposited in this area.

Further, the NC Department of Environmental Quality agrees that the design of the landfill expansion is more protective of human health

and the environment than what is required by NC solid waste regulations. (see Attachment 1)

The Catawba and Yadkin Riverkeepers are in support of the landfill expansion project. (see Attachment 2)

NC DEQ approved a Corrective Action Plan for the landfill on October 3, 2019 (see Attachment 3)

Groundwater history & geosynthetic cap environmental benefit. (see Attachment 4)

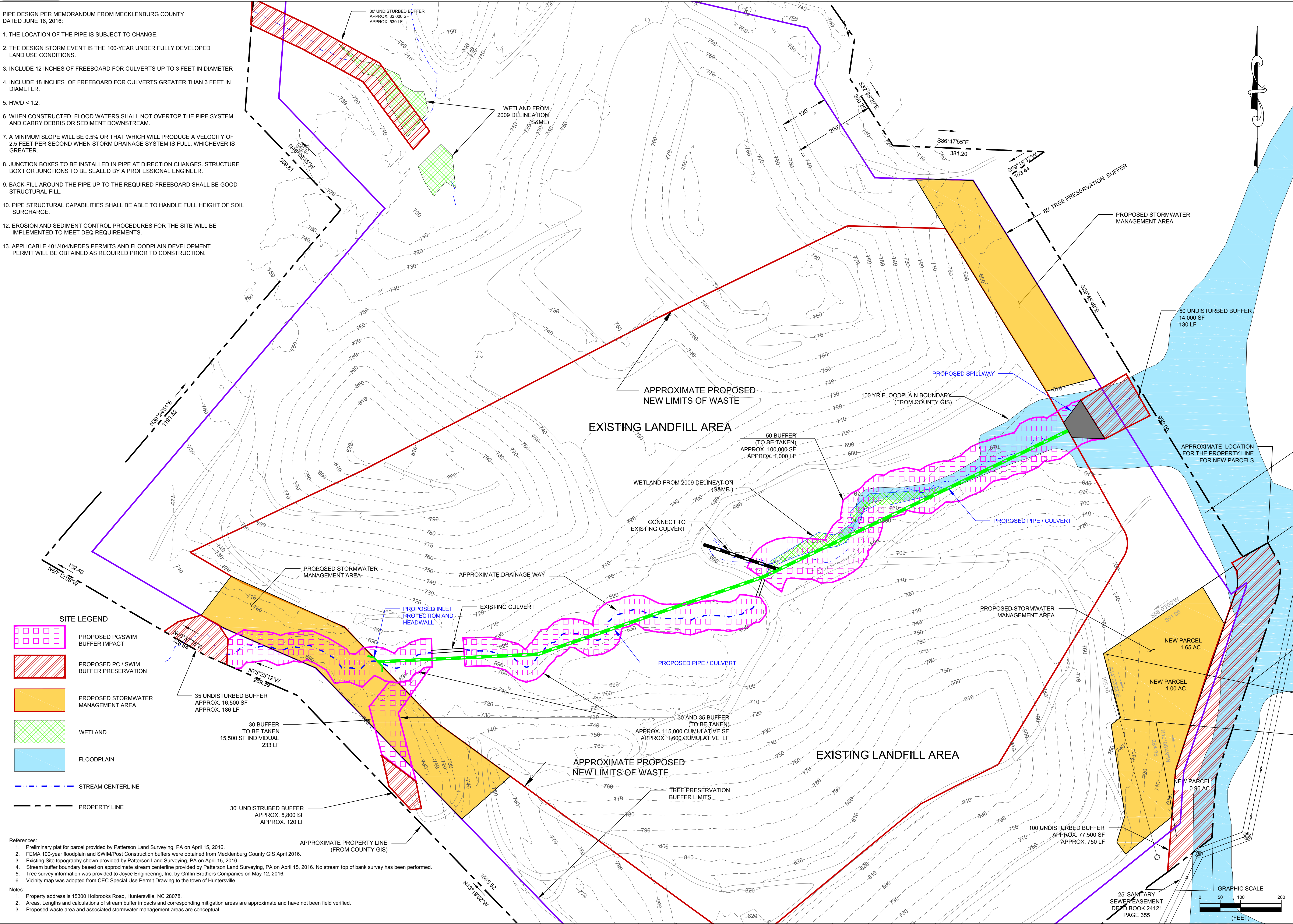
*based on 2015 volume with the assumption of an average increase of 20 miles per truck to the next permitted C&D facility.

**carbon calculator courtesy of the USDOT Federal Transit Administration

Exhibit A

PIPE DESIGN PER MEMORANDUM FROM MECKLENBURG COUNTY
DATED JUNE 16, 2016:

1. THE LOCATION OF THE PIPE IS SUBJECT TO CHANGE.
2. THE DESIGN STORM EVENT IS THE 100-YEAR UNDER FULLY DEVELOPED LAND USE CONDITIONS.
3. INCLUDE 12 INCHES OF FREEBOARD FOR CULVERTS UP TO 3 FEET IN DIAMETER
4. INCLUDE 18 INCHES OF FREEBOARD FOR CULVERTS GREATER THAN 3 FEET IN DIAMETER.
5. $HWD < 1.2$.
6. WHEN CONSTRUCTED, FLOOD WATERS SHALL NOT OVERTOP THE PIPE SYSTEM AND CARRY DEBRIS OR SEDIMENT DOWNSTREAM.
7. A MINIMUM SLOPE WILL BE 0.5% OR THAT WHICH WILL PRODUCE A VELOCITY OF 2.5 FEET PER SECOND WHEN STORM DRAINAGE SYSTEM IS FULL, WHICHEVER IS GREATER.
8. JUNCTION BOXES TO BE INSTALLED IN PIPE AT DIRECTION CHANGES. STRUCTURE BOX FOR JUNCTIONS TO BE SEALED BY A PROFESSIONAL ENGINEER.
9. BACK-FILL AROUND THE PIPE UP TO THE REQUIRED FREEBOARD SHALL BE GOOD STRUCTURAL FILL.
10. PIPE STRUCTURAL CAPABILITIES SHALL BE ABLE TO HANDLE FULL HEIGHT OF SOIL SURCHARGE.
12. EROSION AND SEDIMENT CONTROL PROCEDURES FOR THE SITE WILL BE IMPLEMENTED TO MEET DEQ REQUIREMENTS.
13. APPLICABLE 401/404/NPDES PERMITS AND FLOODPLAIN DEVELOPMENT PERMIT WILL BE OBTAINED AS REQUIRED PRIOR TO CONSTRUCTION.



DESIGNED		DRAWN		CHECKED		APPROVED		DATE		REVISIONS AND RECORD OF ISSUE		NO		BY		CK		APP	
MM		RWH		LB		LJ		06/17/16											

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All rights reserved.

JOYCE ENGINEERING
9731-F SOUTHERN PINE BLVD
CHARLOTTE, NC 28273
PHONE: (704) 817-2037
NC CORP LIC: C-0782

GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC
MECKLENBURG COUNTY, NORTH CAROLINA

APPLICATION FOR A WATER QUALITY
BUFFER DISTURBANCE:
PROPOSED PIPE LOCATION

PROJECT NO.
916.1501.11

SCALE
AS SHOWN

DRAWING NO.
1

NOT FOR CONSTRUCTION

L:\NORTH MECK\CONCEPT STREAM CULVERT JUNE 2016.dwg Layout/Layout

Exhibit B

(for illustrative purposes only)

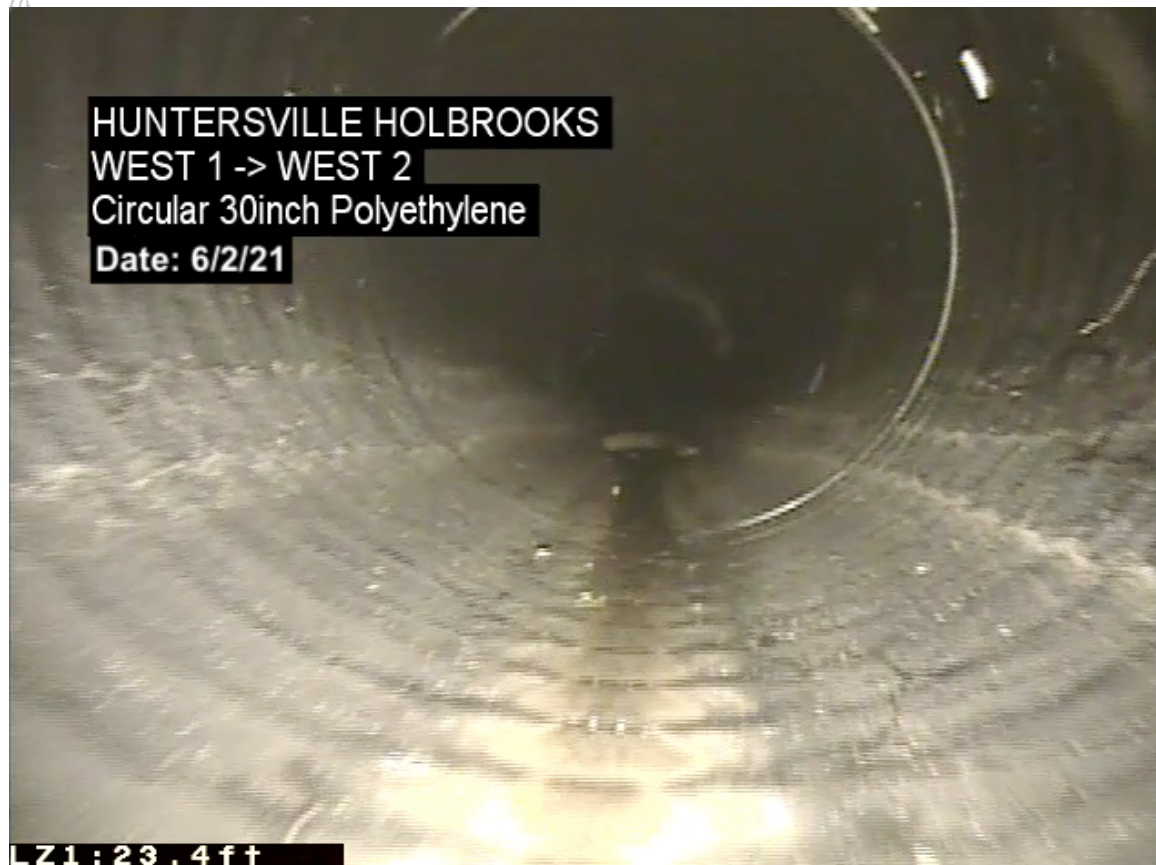
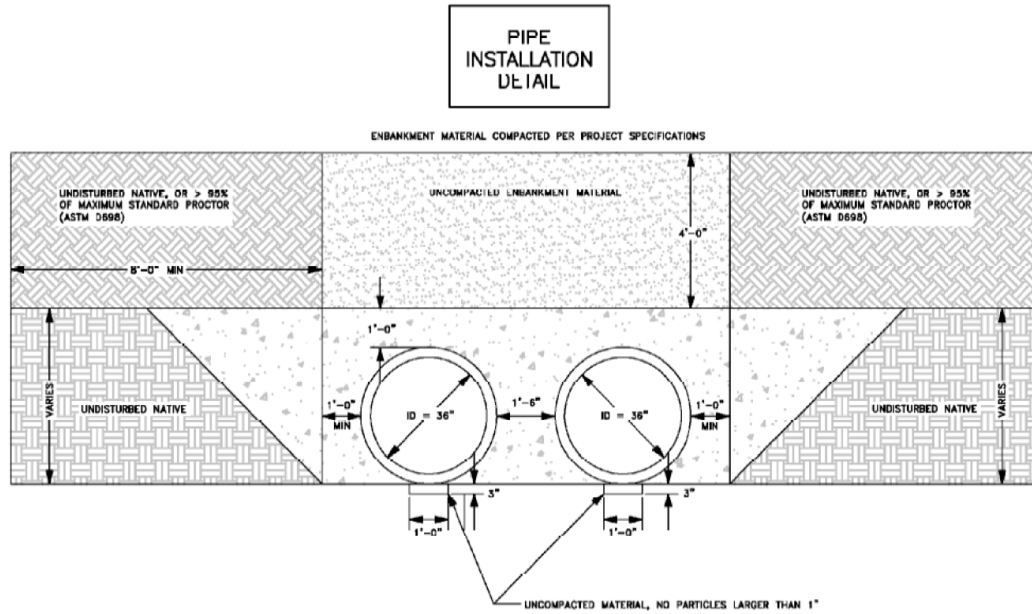


Exhibit C

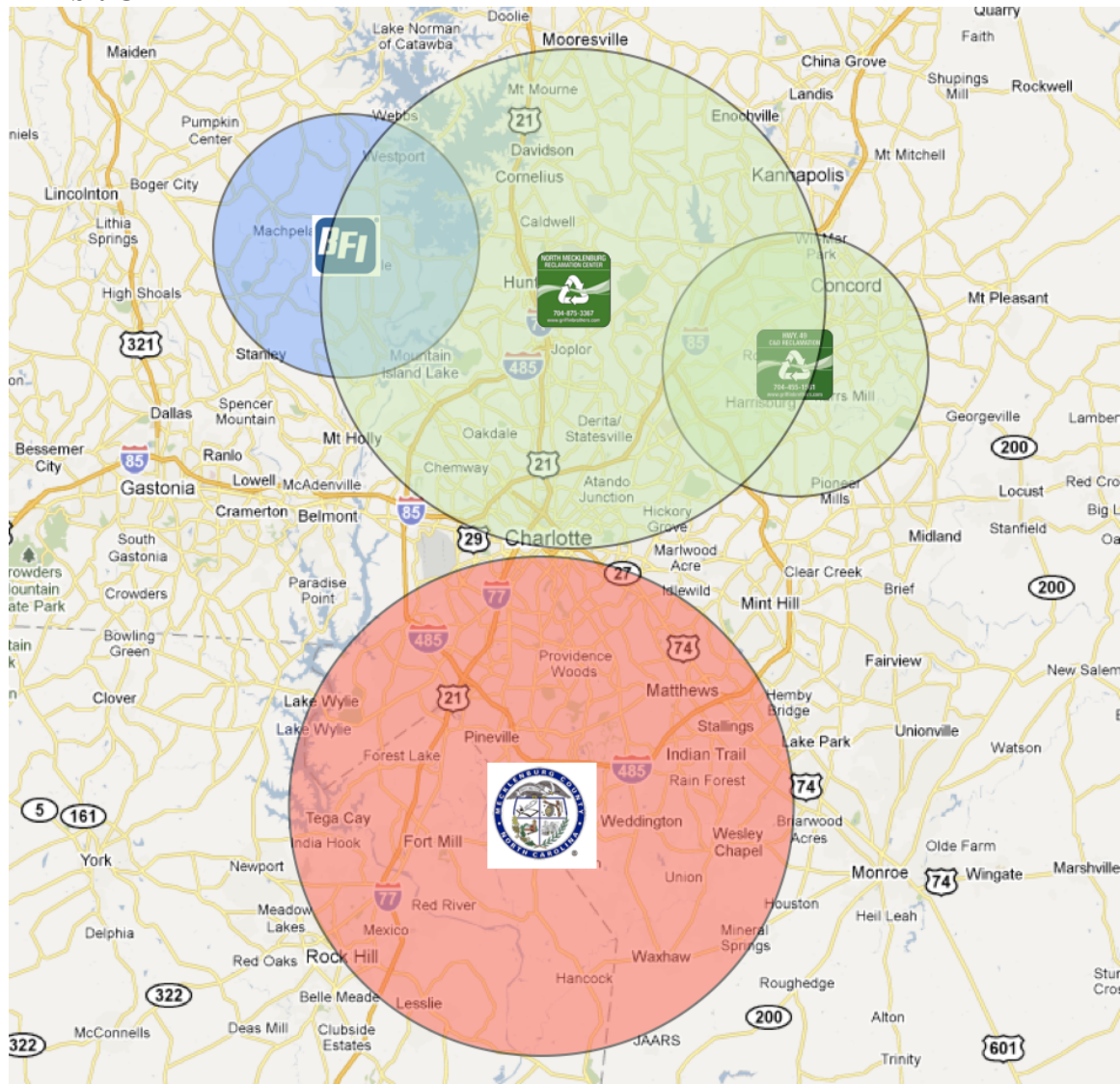
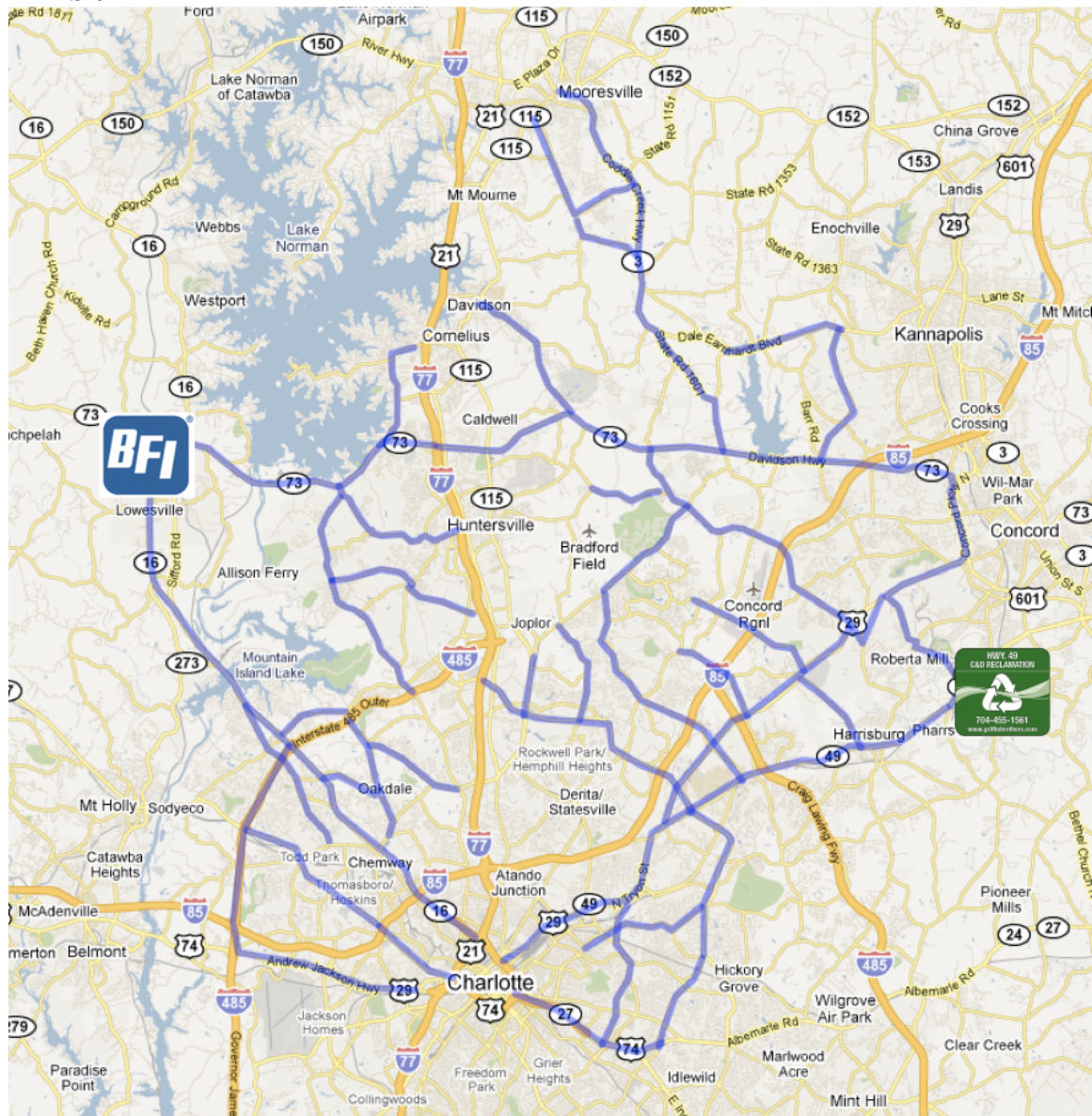


Exhibit D





NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head





Mr. Griffin,

Thank you for contacting the Catawba and Yadkin Riverkeepers concerning the possible future expansion of the North Meck C&D landfill at 15300 Holbrooks Road Huntersville, NC 28078. As we understand it, this project would involve the piping of approximately 1750 ft of perennial waters and the placement of impervious landfill liners over the existing C&D fills and newly buried stream.

Riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. In general, we are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 locations, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.

This nonintuitive recommendation is due to:

1. High levels of iron oxidizing bacteria and elevated conductivity indicate that groundwater from the unlined landfills is currently negatively impacting the UT.
2. Although not assessed by the NC biological assessment branch, our initial measurements indicate that this stream likely would be listed as impaired for biota. The 303d system is poorly suited to address impairment from nonpoint groundwater sources.
3. Covering the existing landfills will minimize or eliminate the infiltration of precipitation through the unlined fills and prevent leachate from entering Cane Creek.
4. Water monitoring and reporting on the unlined fills will end after 30 years. By constructing a new site on top, monitoring will be extended.
5. Siting a landfill at a new location will cause impacts to an additional part of the watershed.

This recommendation is based on several assumptions, if any of these are invalid then our support is withdrawn until further examination.

1. A new landfill must be built. The Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
2. Groundwater and surface water will continue to be monitored (and remediated if necessary) for the entire site.
3. Runoff from the entire site will be captured and treated before discharging.
4. The current landfills will remain uncapped (pervious) if a new landfill is not sited on top.

Please let us know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Fannon".

Brian Fannon, Yadkin Riverkeeper

A handwritten signature in black ink, appearing to read "Brandon Jones".

Brandon Jones, Catawba RIVERKEEPER®



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

October 3, 2019

Sent Via Email – mike@griffinbros.com

Mr. Mike Griffin

Greenway Waste Solutions at North Meck, LLC

19109 West Catawba Avenue, Suite 200

Cornelius, NC 28031

Re: *Corrective Action Plan (Revised October 1, 2019)*
Groundwater Corrective Action
North Mecklenburg C&D Landfill Active Infill Area and Closed Phase I Area
Mecklenburg County
Solid Waste Permit Number 6013-CDLF-1993
FID 1358901

Dear Mr. Griffin,

The Solid Waste Section (Section) has completed a review of the *Corrective Action Plan (Revised October 1, 2019)* and received via email on October 2, 2019 (FID 1358899). The plan was submitted on your behalf by CEC Consultants, Inc. for the North Mecklenburg Construction and Demolition (C&D) Landfill, Solid Waste Permit Number 6013-CDLF-1993 consisting of the Infill Area and the Phase I Area. The *Corrective Action Plan (Revised October 1, 2019)* was submitted in response to the consistent groundwater exceedances at the landfill.

In accordance with 15A NCAC 13B .0545 and 15A NCAC 2L, Greenway Waste Solutions at North Meck, LLC selected a remedy proposed to restore groundwater quality at and beyond the relevant point of compliance, to effectively reduce the overall groundwater contamination at the landfill, and to control the migration of contaminated groundwater to prevent unacceptable impacts. The selected remedy for the landfill includes Active Landfill Gas Extraction and Monitored Natural Attenuation (MNA), and the Section approved the selected remedy on June 10, 2019 (FID 1322138). In addition, Greenway Waste Solutions at North Meck, LLC had a waterline installed downgradient of the Phase I Area and purchased adjacent property.

Based upon the review of the *Corrective Action Plan (Revised October 1, 2019)*, the plan is approved as written based upon the information presented to the Section at this time. During groundwater corrective action, a Corrective Action Effectiveness Report (CAER) will be required to be submitted every five years. The Corrective Action Effectiveness Report (CAER) includes an interpretation of the corrective action data collected and a technical evaluation of the approved selected remedy.



Attachment 3 (cont.)

If you have any questions or concerns regarding this letter, please feel free to contact me by phone at 828.296.4706 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Solid Waste Section, Division of Waste Management
NCDEQ

cc sent via email:

- Ed Mussler, Section Chief
- Sherri Stanley, Permitting Branch Head
- Larry Frost, Permitting Engineer
- Jason Watkins, Field Operations Branch Head
- Adam Ulishney, Environmental Compliance Branch Head
- Deb Aja, Western District Supervisor
- Teresa Bradford, Environmental Senior Specialist
- John Brown, Greenway Waste/Griffin Brothers Companies
- Brandt Kayser, Greenway Waste/Griffin Brothers Companies
- Donald Cobb, CEC, Inc.
- Bruce Reilly, CEC Inc.
- Scott, Brown, CEC, Inc.
- Joe Hack, Mecklenburg County Solid Waste Management
- Jack Simoneau, Town of Huntersville



North Mecklenburg C&D Landfill (GWSNM) NC Solid Waste Facility Permit No. 60-13

Historical Regulatory Compliance Time-Line

North Meck Groundwater History

Groundwater monitoring at the North Meck C&D Landfill has been on-going on a semi-annual basis since March of 1998 around the currently closed southern section of the landfill (Closed Area), and semi-annual groundwater monitoring around the northern waste disposal area (Infill Area) began in October of 2011. Leading up to the Spring 2013 sampling event, groundwater samples were mostly analyzed by Pace Analytical Services, and analytical results indicated no consistent chemical detections at concentrations which exceeded the applicable 15A NCAC 02L .0202 Groundwater Quality Standards (2L Standards or 2L Rules).

Greenway switched to Shealy Environmental Services for the Spring 2013 sampling event. The analytical results from the Spring 2013 sampling event indicated that vinyl chloride (VC) was detected at elevated concentrations in numerous monitoring wells around both the Infill Area and Closed Area, including one monitoring well located near the water supply well for the Gilkerson residence on the south side of the Closed Area (**Figure 1**). In June of 2014, GWSNM paid for Charlotte Water connections for the Gilkerson residence as well as the two adjacent homes which are occupied by the Tinsley and Hammill families.

Following a series of investigations, Enviro-Pro, PC (GWSNM's groundwater consultant at the time) concluded that the groundwater contamination was the result of landfill gas (LFG) contacting water as a result of precipitation. LFG is produced from the anaerobic decomposition of waste by naturally-occurring bacteria and other micro-organisms in soil, and LFG production is accelerated by the presence of water.

In April of 2015, GWSNM's current consultant, Civil & Environmental Consultants, Inc. (CEC) oversaw the installation of LFG extraction wells in the Closed Area in accordance with the North Carolina Department of Environmental Quality (DEQ) -approved Corrective Action Plan. These extraction wells were installed in order to remove LFG to limit the exposure of percolating water to LFG. CEC later submitted a Landfill Gas Mitigation Expansion Plan in April 2017 proposing to install additional LFG extraction wells in the Closed Area and Infill Area. These extraction wells have remained active to date, and the detected concentrations of VC around the Closed Area have been reduced to below the concentration specified in the 2L Rules. Per the DEQ-approved Revised Corrective Action Plan, GWSNM conducts quarterly groundwater sampling of 16 site wells to monitor for natural attenuation (MNA) of VC in groundwater below the North Meck Landfill. Natural attenuation, which is the process by which naturally-occurring bacteria digest and convert chemicals into non-hazardous chemicals, has been shown to successfully reduce contaminant concentrations over time.

Due to the on-going detections of significantly elevated concentrations of VC by Shealy, GWSNM switched analytical labs back to Pace for the Fall 2016 sampling event and submitted duplicate groundwater samples to Shealy, Pace, and Eurofins TestAmerica (ETA) in order to

compare the detected concentrations. The results of the samples sent to Shealy indicated detections of VC which were consistent with recent detections, while the results of the duplicate samples analyzed by Pace and ETA indicated that VC was detected at significantly lower concentrations relative to the Shealy results. In a letter dated May 23, 2017, OI Analytical, the owners of Shealy Environmental Services, stated that an internal investigation revealed that a component in their analytical equipment was generating false-positive results for VC (**Exhibit 1**).

The analytical results from ETA for the most recent water quality monitoring event, conducted in April 2021, indicate that VC has been detected in 10 monitoring wells but **none of these detections exceeded the allowable concentration for VC specified in the 2L Rules**

Proposed Valley Expansion Benefits

The proposed valley expansion, located between the Infill Area and Closed Area, will significantly increase environmental protection of groundwater. In accordance with 15A NCAC 13B .0540 Construction Requirements for C&DLF Facilities both the Closed Area and Infill Area waste disposal units were constructed with soil liner systems. These compacted soil liners significantly limit, but do not prevent, fluid percolation into groundwater. Additionally, the Closed Area is capped with a soil cap in accordance with 15A NCAC 13B .0543 Closure and Post Closure Requirements for C&DLF Facilities (c)(1)(A). Similar to the compacted soil liner, the soil cap serves to significantly limit, but not eliminate, infiltration of rainwater into the landfill.

The infill expansion cap currently requires a low permeability soil liner however, it does not require a synthetic membrane as proposed as part of the valley expansion liner system. The proposed valley expansion includes a multi-layer geosynthetic, soil, and aggregate liner system with a built-in leachate collection system (**Exhibit 2**). This liner system will cover the side slopes as well as the top of both the Infill and Closed Areas, which will significantly outperform the DEQ regulatory requirement of a soil cap (**Exhibit 3**). This will substantially decrease rainwater infiltration into waste, leading to significantly reduced leachate and LFG production. Relative to a compacted soil liner, the proposed multi-layer geosynthetic liner will nearly eliminate leachate leakage into groundwater (**Exhibit 4**).

The liner system also includes horizontal collection pipes installed inside the existing landfill waste to collect leachate from both the Infill and Closed Areas. Additionally, the unnamed tributary of Cane Creek will be conveyed below the proposed expansion area through concrete-encased pipes. These pipes will also serve as additional water quality protection measures by eliminating the possibility of runoff, leachate, and groundwater from entering the unnamed tributary of Cane Creek.



LEGEND

PROPERTY LINE

EXISTING STREAM

MW-4A

MW-5

SPRING 2013 VINYL CHLORIDE
EXCEEDANCE LOCATION

(i)

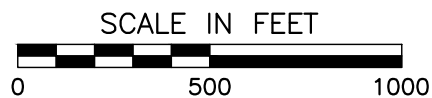
REFERENCE TO INFILL AREA

P:\2011\111-370\111-370-CADD\001\Drawings\Brandt Kayser Requested Figures\111370.0001-Spring2013VinylChlorideExceedance.dwg{1} LS:(6/30/2021 - pbrinkley) - LP: 6/30/2021 1:52 PM



REFERENCE

1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH PRO.
DATED OCTOBER 8, 2016



Civil & Environmental Consultants, Inc.

3701 Arco Corporate Drive - Suite 400 - Charlotte, NC 28273
Ph: 980.237.0373 · Fax: 980.237.0372
www.cecinc.com

DRAWN BY:	JKS/PAB	CHECKED BY:	MBG	APPROVED BY:	DMC	FIGURE NO.:	1
DATE:	JUNE 2021	DWG SCALE:	1" = 500'	PROJECT NO:	111-370.0001		

GREENWAY WASTE SOLUTIONS OF
NORTH MECK, LCC
NORTH MECKLENBURG LANDFILL
HUNTERVILLE, NORTH CAROLINA
SPRING 2013 VINYL CHLORIDE EXCEEDANCE
LOCATION MAP

Exhibit 1



www.oico.com

151 Graham Road, P. O. Box 9010, College Station, TX 77842-9010

(979) 690-1711 FAX: (979) 690-0440

May 23, 2017

Mr. Dan Wright
Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, SC 29172

Mr. Wright,

OI Analytical is aware of an analytical issue with Silica Gel in the 3-layer traps for purge-and-trap analysis. When the sample being analyzed contains the compound Freon 151, the results of the analysis have the potential to erroneously show the presence of Vinyl Chloride in the sample. The potential issue can arise with any brand purge-and-trap utilizing a 3-layer trap with Silica Gel. This is due to impurities in the Silica Gel, a trap packing material, which cause the Freon 151 to breakdown possibly via a dehydrohalogenation process.

We submit this letter without prejudice in pursuit of a mutually agreeable solution. Please note that we reserve all of our rights and remedies at law or in equity and nothing herein nor our willingness to inspect, test and/or repair the subject products and any other related products shall constitute a waiver of these rights nor be construed as an admission with respect to responsibility or damage incurred.

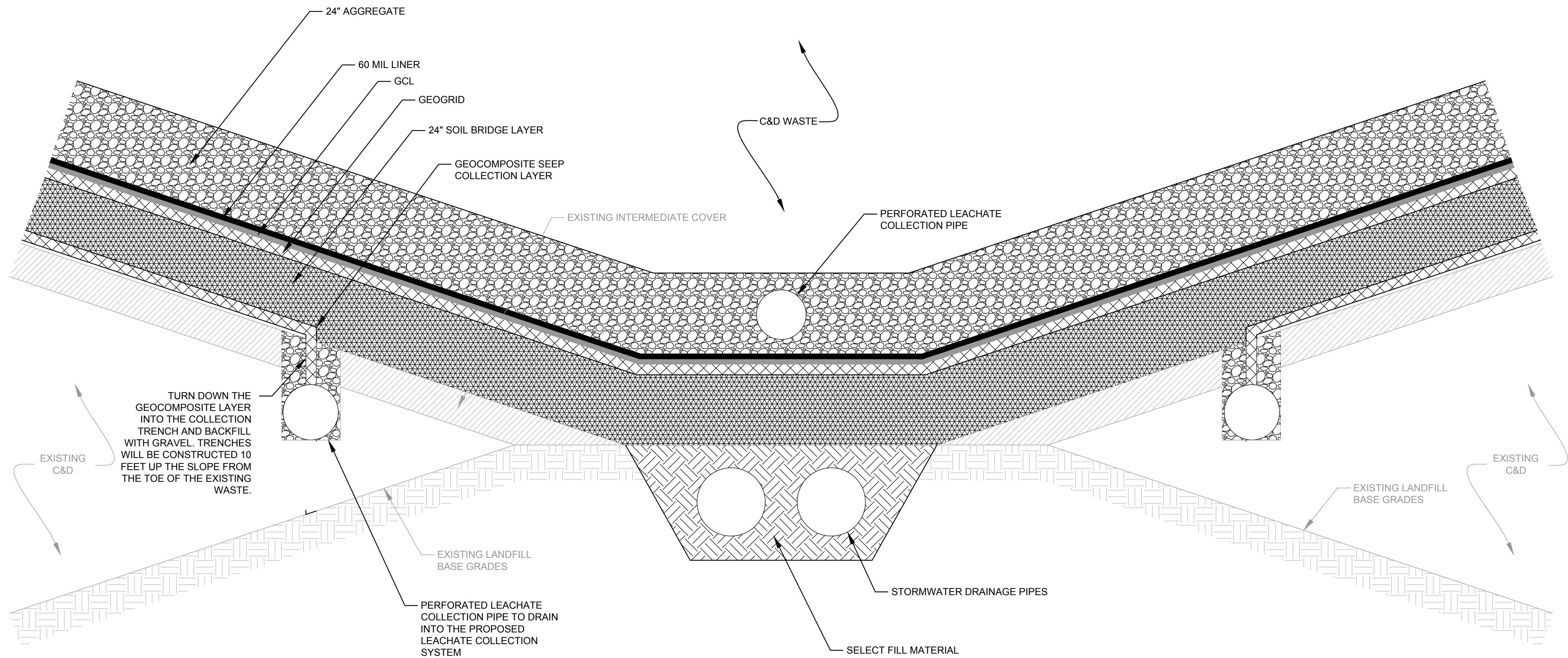
As you can understand, this is a complicated situation that we are working diligently with the supplier to resolve. As soon as we have a definitive timeline for resolution in working with our partners, we will faithfully communicate this with you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joan Killgore". The signature is fluid and cursive, written over the printed name.

Joan Killgore

Quality Assurance and Engineering Manager



GEOCOMPOSITE DRAINAGE LAYER AND BASE LINER SYSTEM (A)
(NOT TO SCALE)

NOT FOR CONSTRUCTION

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	DAS
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY
DATE:	10/9/2020
DRAWING NAME:	

DETAIL



Exhibit 3



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head



November 25, 2020

Mr. Ed Mussler
 Division of Waste Management
 Solid Waste Section
 217 W Jones St
 Raleigh, North Carolina 27603

**RE: HELP Model Analysis of Permitted & Proposed Cap/Liner Systems
 Greenway Waste Solutions at North Meck, LLC
 North Meck Landfill
 Mecklenburg County, North Carolina
 NCDEQ Permit No. 60-13**

Mr. Mussler:

On behalf of Greenway Waste Solutions (GWS), LaBella Associates (LaBella) has prepared a HELP Model Analysis of the percolation/leakage through the proposed liner and cap systems for the North Meck Construction and Demolition (C&D) Landfill (NML) proposed expansion compared to the permitted cap systems of the existing two landfills, as requested by NCDEQ Solid Waste Section.

➤ **Existing Conditions**

The NML currently operates an active C&D Infill Area (approximately 34.3 acres) north of the property. Please refer to Drawing No. 1 for existing conditions. There is also an existing closed C&D Landfill (approximately 33.5 acres) south of the property. The final closure of the C&D Landfill (Phases I&II) was completed in June of 2002. The final cap was constructed with a minimum of 24" of cover soil from a local source. On the other hand, the active Infill Landfill Area is subject to Rule 15A NCAC 13B .0543, which details engineering requirements for caps and became effective in 2007. The permitted/constructed closure caps and the HELP Model Analysis are summarized in Table 1. The attached HELP Model runs assumed a surface slope of 15%.

Table 1: HELP Model Analysis of Existing Permitted/Constructed Landfill Caps.

Landfill	Cap System (from top to bottom) (Permitted/Constructed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil (Constructed)	33.5	9,830	329,305
Infill Landfill Area (Active)	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil (Permitted)	34.3	5,510	188,993
Total		67.8	--	518,298



➤ **Proposed Landfill Expansion**

GWS is proposing to expand the NML by filling in the valley between the two existing landfill areas. The filling of the valley is intended to maximize waste disposal within the limits of the property (parcel) without expanding the waste footprint toward neighboring parcels. GWS is proposing to line the valley and the piggyback areas on the active Infill Landfill Area and the closed C&D Landfill. The base liner system (approximately 48.6 acres) is shown on Detail 1 on Drawing No. 2. GWS is proposing to construct the base liner system as shown on Detail 1 on Drawing No. 2 on the piggyback area of the active Infill Landfill in lieu of the permitted cap. The base liner system will be constructed on the piggyback area of the closed C&D Landfill. GWS may consider a partial removal of C&D Landfill 24" soil cap prior to the construction of the proposed liner system. The HELP Model runs did not include the 24" soil cap in analyzing the proposed liner/cap system.

At the completion of waste filling operations, GWS is proposing to cap the landfill expansion area (approximately 48.6 acres) with the synthetic cap system shown on Detail 1 on Drawing No. 2. Areas outside of the piggyback footprint on the active Infill Landfill Area will be closed using the permitted cap system, while areas on the closed C&D Landfill will remain closed with 24" of cover soil. The permitted/proposed closure caps and the HELP Model Analysis are summarized in Table 2. The attached HELP Model run assumed a surface slope of 15% consistent with the permitted/constructed caps HELP Model runs. All other modeling assumptions were consistent with the permitted/constructed caps HELP Model runs.



Table 2: HELP Model Analysis of Proposed Landfill Cap/Liner Systems.

Landfill	Cap/Liner Systems (from top to bottom) (Permitted/Constructed/Proposed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap /Liner (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil <u>(Constructed)</u>	17.1	9,830	168,093
C&D Landfill (Phases I&II) (piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	16.4	0.00002	0.000328
Infill Landfill Area (Piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	20.7	0.00002	0.000414
Valley Fill Area (Horizontal Landfill Expansion Footprint)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	11.5	0.00002	0.00023
Infill Landfill Area	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil <u>(Permitted)</u>	13.6	5,510	74,936
Total		79.3		243,029

*Gas geocomposite was excluded from the HELP model runs as it has an insignificant impact on the results.



In conclusion, the HELP Model runs evaluate the percolation/leakage to the existing waste with the permitted cap and after the construction of the proposed expansion liner/cap systems. Although the proposed landfill expansion includes lining the valley between the existing closed landfill (Phases I&II) and the active Infill Landfill area, which adds approximately 11.5 acres of landfill footprint, the lining/capping of the existing landfills piggyback areas reduces the percolation/leakage to the existing waste mass by more than 50% according to the HELP Model Analysis. The attached HELP Model runs and drawings provide additional details.

We hope that you agree with our conclusion that the aforementioned benefits from the proposed liner and cap systems of the expansion project are significant compared to closing the landfill as currently permitted. We request a letter from NCDEQ Solid Waste Section to the Town of Huntersville and Mecklenburg County detailing the benefits of the proposed expansion project. The proposed liner/cap systems is significantly reducing percolation/leakage through the existing waste into the environment.

If you have any questions or require additional information that would help the Solid Waste Section determine the benefits of the proposed liner/cap systems compared to the existing permitted/constructed cap systems, please do not hesitate to give me a call at (704) 941-2164.

Respectfully submitted,

LaBella Associates

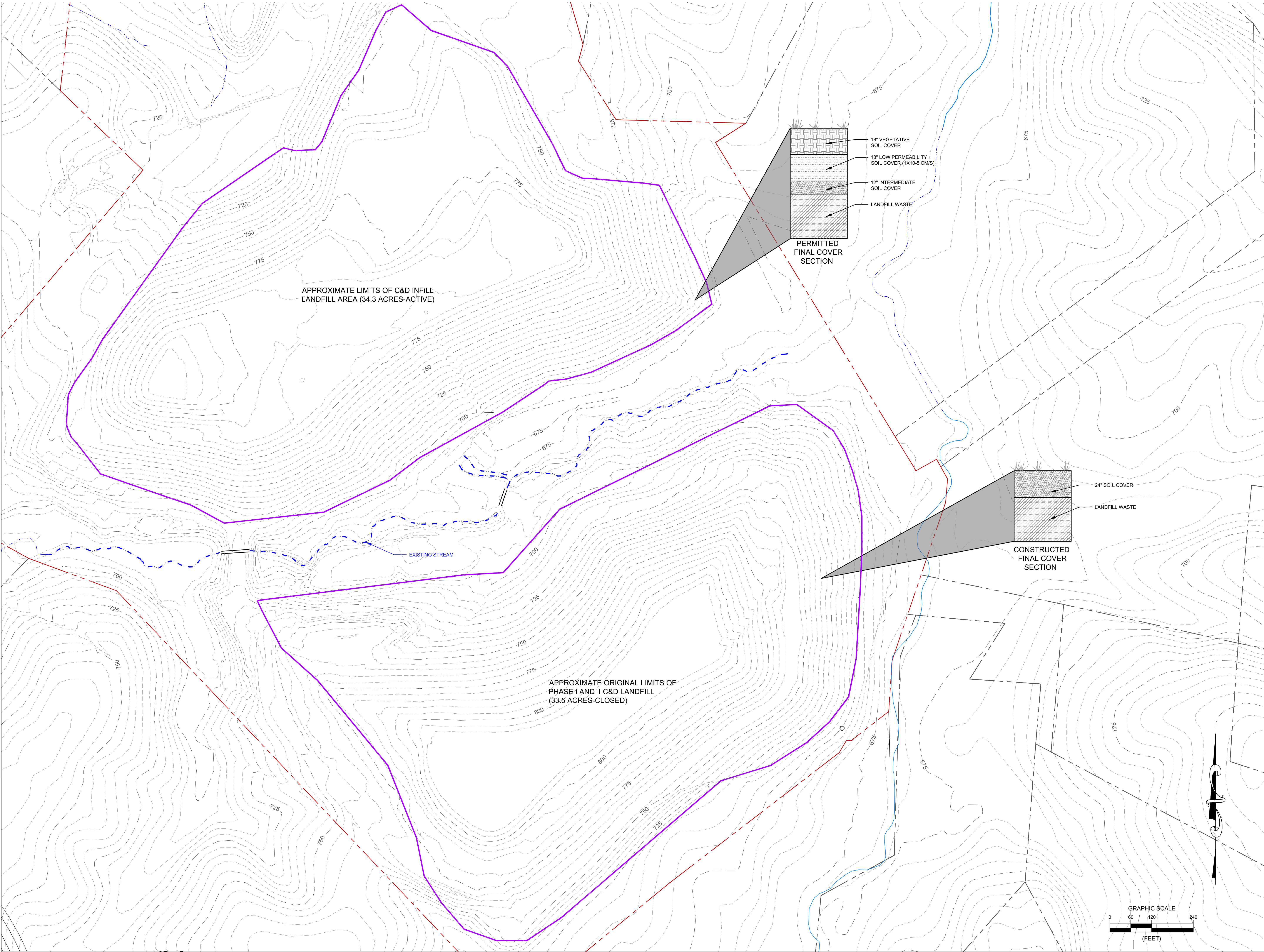
Mousa Maimoun, Ph.D., P.E.
Sr. Project Consultant

Attachments:

Drawing No. 1 – Existing Conditions
Drawing No. 2 – Proposed Landfill Expansion (Conceptual)
HELP Model Runs

Cc: Ms. Sherri Stanley, P.E., NCDEQ Solid Waste Section
Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates

L:\NORTH MECK2020 expansion\NOV 2020 FIGURES\EXISTING CONDITION.dwg Layout=Layout1



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© 2020 LaBella Associates	

GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

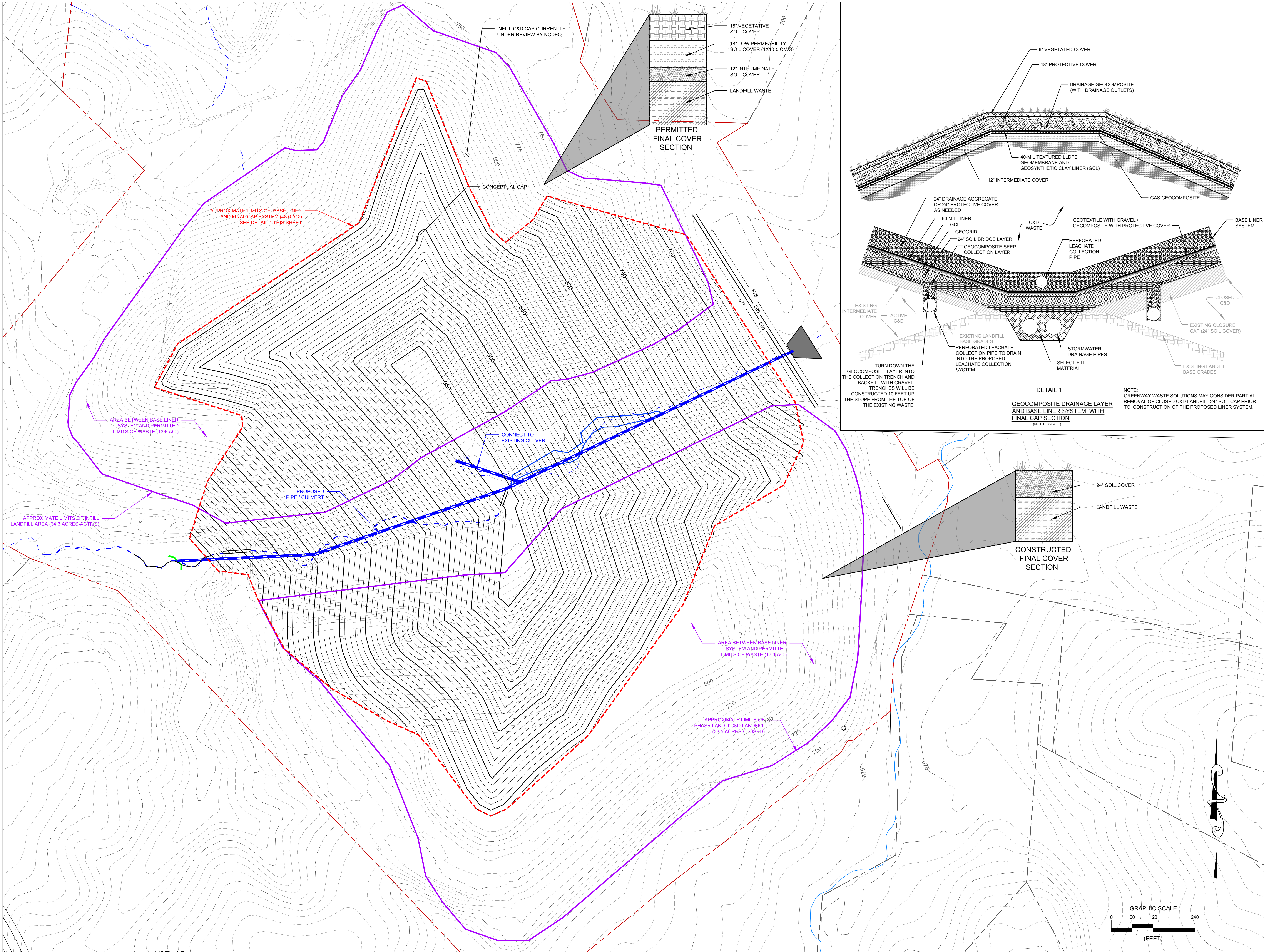
NO:	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

EXISTING CONDITIONS

DRAWING NUMBER:

L:\NORTH MECK2020 expansion\NOV 2020 FIGURES\2 CONCEPT LANDFILL WITH CAP AND LINER DETAIL.dwg Layout=Layout1



GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY CONCEPT-HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

**PROPOSED LANDFILL
EXPANSION
(CONCEPTUAL)**

DRAWING NUMBER:

Exhibit#5-EPA Vinyl Chloride Fact Sheet

Vinyl Chloride

75-01-4

Hazard Summary

Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Acute (short-term) exposure to high levels of vinyl chloride in air has resulted in central nervous system (CNS) effects, such as dizziness, drowsiness, and headaches in humans. Chronic (long-term) exposure to vinyl chloride through inhalation and oral exposure in humans has resulted in CNS effects and liver damage. Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. Vinyl chloride exposure, via inhalation, has been shown to increase the risk of a rare form of liver cancer, angiosarcoma of the liver, in humans. EPA has concluded that vinyl chloride is carcinogenic to humans by the inhalation and oral routes of exposure, and highly likely to be carcinogenic by the dermal route of exposure.

Please Note: The main sources of information for this fact sheet are the U.S. Environmental Protection Agency's (EPA's) Integrated Risk Information System and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profile for Vinyl Chloride. (1,2)

Uses

- Most of the vinyl chloride produced is used to make polyvinyl chloride (PVC), a material widely used in automotive parts, packaging products, pipes, construction materials, furniture, and a variety of other products. (2)
- Smaller amounts of vinyl chloride are used as a chemical intermediate and a solvent. (2,4)

Sources and Potential Exposure

- Ambient air concentrations of vinyl chloride are generally quite low, with exposure occurring from the discharge of exhaust gases from factories that manufacture or process vinyl chloride, or evaporation from areas where chemical wastes are stored. (2,3)
- Vinyl chloride may enter finished drinking water from the flow of water through older PVC piping made before 1977, but a more recent study suggests that the extraction of vinyl chloride may diminish over time. Since 1977, product standards (NSF/ANSI 14 and 61) have controlled the release of vinyl chloride from PVC pipes. (5,6)
- Occupational exposure to vinyl chloride may occur in those workers concerned with the production, use, transport, storage, and disposal of the chemical. (2,3)
- Vinyl chloride has been detected in tobacco smoke. (2)

Assessing Personal Exposure

- Vinyl chloride can be measured in urine, body tissue, and exhaled air but the tests are not reliable indicators of total exposure. (2)

Health Hazard Information

Acute Effects:

- Acute exposure of humans to high levels of vinyl chloride via inhalation has resulted in effects on the CNS, such as dizziness, drowsiness, headaches, and giddiness. (2,3)
- Acute exposure to high levels of vinyl chloride in animals has resulted in effects on the CNS, liver, kidney, and lungs. (2)
- Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure. (2,3)

Chronic Effects (Noncancer):

- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure. (2,3)
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema). (2,3)
- CNS effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride. (2)
- Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. (2,3)
- EPA has established a Reference Concentration (RfC) of 0.1 milligrams per cubic meter (0.1 mg/m³) based on effects on the liver in rats. The RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not an estimator of risk but rather a reference point to gauge the potential for effects. At exposures increasingly greater than the RfC, the potential for adverse health effects increases.

Lifetime exposure above the RfC does not imply that an adverse effect would necessarily occur. (1)

- EPA has established a Reference Dose (RfD) for vinyl chloride is 0.003 milligrams per kilogram body weight per day (mg/kg/d) based on liver toxicity in rats. (1)

Reproductive/Developmental Effects:

- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects; however, other studies have not supported these findings. (2,3)
- Several case reports involving worker exposures suggest that male sexual performance may be affected by vinyl chloride; however, these reports are limited by possible co-exposure to other chemicals and lack of exposure estimates. (2)
- Testicular damage and decreased male fertility have been reported in rats exposed to vinyl chloride. (2)
- Animal studies have reported decreased fetal weight and birth defects in the offspring of rats exposed to vinyl chloride through inhalation at levels that are also toxic to maternal animals. (2)

Cancer Risk:

- Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. (1,2,3)
- Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver. (1,2,3)
- Several rat studies show a pronounced early-life susceptibility to the carcinogenic effect of vinyl chloride, i.e., early exposures are associated with higher liver cancer incidence than similar or much longer exposures that occur after maturity. (2)
- EPA has classified vinyl chloride as a known human carcinogen by the inhalation route of exposure. (1)
- EPA uses mathematical models, based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. EPA has calculated inhalation unit risk estimates of $4.4 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for exposure to vinyl chloride during adulthood and $8.8 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for lifetime exposure. EPA estimates that, if an individual were to continuously breathe air containing vinyl chloride at an average of $0.11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-4} \text{ mg}/\text{m}^3$) over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing this chemical. Similarly, EPA estimates that continuously breathing air containing $1.1 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-3} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer, and air containing $11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-2} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-ten thousand increased chance of developing cancer. For a detailed discussion of confidence in the potency estimates, please see IRIS. (1)

- EPA has calculated an oral cancer slope factor of $7.2 \times 10^{-1}(\text{mg/kg-day})$ for oral exposure to vinyl chloride during adulthood and an oral cancer slope factor of 1.4 (mg/kg-day) for lifetime exposure. (1)

Physical Properties

- Vinyl chloride is a colorless, flammable gas with a mild, sweet odor. (4)
- The odor threshold for vinyl chloride ranges from 260 ppm to 4,000 ppm. (4)
- The chemical formula for vinyl chloride is $\text{C}_2\text{H}_3\text{Cl}$ and the molecular weight is 62.5 g/mol. (4)
- The vapor pressure for vinyl chloride is 2,600 mm Hg at 25 °C, and it has a log octanol/water partition coefficient (log K_{ow}) of 1.36. (2)

Conversion Factors:

To convert concentrations in air (at 25 °C) from ppm to mg/m^3 : $\text{mg/m}^3 = (\text{ppm}) \times (\text{molecular weight of the compound}) / (24.45)$. For vinyl chloride: $1 \text{ ppm} = 2.6 \text{ mg/m}^3$.

Health Data from Inhalation Exposure



ACGIH TLV--American Conference of Governmental and Industrial Hygienists' threshold limit value expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effects.

AIHA ERPG - American Industrial Hygiene Association's emergency response planning guidelines. ERPG 1 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor; ERPG 2 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing or developing irreversible or other serious health effects that could impair their abilities to take protective action.

ATSDR MRL – An inhalation MRL is an estimate of the amount of a chemical a person can breathe each day without a detectable risk to health. MRLs are developed for health effects other than cancer. MRLs can be calculated for 3 different time periods of exposure to the chemical: acute (about 1 to 14 days), intermediate (from 15-364 days), and chronic (exposure for more than 364 days).

CalEPA Acute REL – California EPA Office of Environmental and Human Health Assessment (OEHHA) acute reference exposure level is the concentration at or below which no adverse health effects are anticipated for a specified exposure duration.

OSHA PEL--Occupational Safety and Health Administration's permissible exposure limit expressed as a time-weighted average: the concentration of a substance to which most workers can be exposed without adverse effect averaged over a normal 8-h workday or a 40-h workweek.

OSHA PEL Ceiling -- Occupational Safety and Health Administration's permissible exposure limit expressed as a short-term exposure limit that should not be exceeded in a 15-minute time period.

RBC—Risk-based concentration.

^a Toxicity, Health, and Risk numbers are toxicological values from animal testing or risk assessment values developed by EPA.

^b Regulatory numbers are values that have been incorporated in Government regulations, while advisory numbers are nonregulatory values provided by the Government or other groups as advice. OSHA numbers are regulatory, whereas ACGIH, NIOSH, and AIHA numbers are advisory.

Summary updated in March 2020

References

1. U.S. Environmental Protection Agency. Integrated Risk Information System (IRIS) on Vinyl chloride. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. Last revised 8/07/2000. <http://www.epa.gov/iris>

2. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological Profile for Vinyl Chloride. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 2006. <http://www.atsdr.cdc.gov/toxprofiles/tp20.pdf>
3. U.S. Department of Health and Human Services. Hazardous Substances Data Bank (HSDB, online database). National Toxicology Information Program, National Library of Medicine. 2020. <http://pubchem.ncbi.nlm.nih.gov/compound/6338>
4. Pohanish, R.P. Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogens. 6th ed. Elsevier Inc. Oxford, UK and Waltham, MA USA. 2012.
5. Flournoy, R. L., Monroe, D., Chestnut, N., & Kumar, V. (1999). Health effects from vinyl chloride monomer leaching from pre-1977 PVC pipe. In Annual American Water Works Association Conference Proceedings (pp. 1211-1230).
6. Walter, R. K., Lin, P. H., Edwards, M., & Richardson, R. E. (2011). Investigation of factors affecting the accumulation of vinyl chloride in polyvinyl chloride piping used in drinking water distribution systems. Water research, 45(8), 2607-2615.
7. American Conference of Governmental Industrial Hygienists (ACGIH). 2018 TLVs and BEIs. Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices. Cincinnati, OH. 2018.
8. Occupational Safety and Health Administration (OSHA). Occupational Safety and Health Standards, Toxic and Hazardous Substances. Code of Federal Regulations. 29 CFR 1910.1000. 2018.
https://www.osha.gov/pls/oshaweb/owadisp.show_unique?p_table_name=STANDARDS&p_unique_file=1910_1017&p_anchor_name=
9. American Industrial Hygiene Association (AIHA). The AIHA 2018 Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. 2018.
10. California Environmental Protection Agency (CalEPA). Technical Supporting Document for Noncancer RELs, Appendix D2. Office of Environmental Health Hazard Assessment. 2008.
<https://oehha.ca.gov/chemicals/vinyl-chloride>

Exhibit#6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services for Mitigation

Lauren Speight

From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>
Sent: Tuesday, August 3, 2021 7:42 PM
To: Bradley Priest; Jack Simoneau
Cc: Brian Richards; Lauren Speight; Canaan, Dave; Smithberger, Jeffrey; Edwards, Olivia; DeMaury, Joshua; Eubanks, Ron
Subject: Variance Request for North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road
Attachments: Response to Variance Request at 15416 Holbrooks Road in Huntersville.pdf
Importance: High

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Brad,

Please find attached for consideration in the review of the variance request to impact the SWIM Buffer along Cane Creek to install a pipe to facilitate expansion of the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road.

Please let me know if you have any questions.

Thank you.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org



We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.

From: Bradley Priest <bpriest@huntersville.org>
Sent: Tuesday, August 3, 2021 12:49 PM
To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>; Jack Simoneau <jsimoneau@huntersville.org>
Cc: Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>
Subject: RE: [External]Re: SWIM Buffers

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Hey Rusty,

Thank you for that heads up. If you cannot recommend approval for their mitigation and project at this time, our variance recommendation would be to continue their item. Lauren is working on those staff reports now for the August meeting. If you could send me the note outlining the issues, I'll send to the applicant ASAP. I'd like to understand what their intent is for the meeting, to continue the item or move forward. Thanks.

Bradley D. Priest, AICP

Principal Planner

Town of Huntersville

Planning Department

704-766-2214

105 Gilead Road – 3rd Floor

Huntersville, NC 28070

www.huntersville.org



From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Sent: Monday, August 2, 2021 6:07 PM

To: Jack Simoneau <jsimoneau@huntersville.org>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

You are very welcome. FYI, Greenway Waste Solutions has not provide us with enough information to adequately assess the impacts of the piping at the Holbrook Road Landfill. We have assessed the stream they are planning to pipe and we have identified a few mitigation options, but there is still a lot we don't know about the piping itself that prevents us from making a fair assessment regarding potential future impacts. I am preparing something to send to Brad tomorrow that summarizes where we are to date.

From: Jack Simoneau <jsimoneau@huntersville.org>

Sent: Monday, August 2, 2021 6:00 PM

To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the information Rusty.

Jack Simoneau

On Aug 2, 2021, at 4:44 PM, Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov> wrote:

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Jack,

In response to our phone call, the SWIM buffer ordinances for Mecklenburg County, Charlotte, Mint Hill, and Pineville allow for SWIM buffer disturbances with mitigation approved by Charlotte Mecklenburg Storm Water Services. They all use the 9 mitigation measures that you have in your draft ordinance. The SWIM buffer ordinances for Cornelius, Davidson, Huntersville, and Matthews require a variance before buffer impacts will be allowed. None of the jurisdictions in Mecklenburg County allow 401/404 mitigation to count for SWIM buffer mitigation. This is the way it has been since the ordinances were adopted over 20 years ago. 401/404 Permits are required by State and federal laws for impacts to water bodies, including wetlands, streams, lakes, and ponds. SWIM buffer mitigation is required for impacts to buffers around water bodies. In many cases, buffer impacts do not require 401 & 404 Permits. For example, a property owner may want to add a patio in the buffer. This does not require a 401-404 Permit because surface waters are not impacted, but buffer mitigation would be required. Also, 401/404 mitigation is supposed to occur in the same designated HUC or hydrologic unit where the impact occurred. In some cases mitigation is allowed outside the HUC, but at a higher rate. For buffer mitigation, it is to occur in the same jurisdiction. There are 2 HUCs for Huntersville, including Mountain Island Lake-Catawba River (#0305010114) that includes portions of Gaston and Lincoln Counties as well as Charlotte, and the Upper Rocky River (#0304010501) that includes parts of Davidson, Harrisburg and Cabarrus County. If Huntersville were to allow the use of 401/404 mitigation to satisfy a buffer impact, then the money could be spent in several other jurisdictions that would not benefit water quality in the Town. It also important to note that the State does not allow 401/404 mitigation to count as mitigation for impacts to State buffers as described in 15A NCAC 02B .0295. This is because the mitigation is covered under separate rules and is for different purposes. State buffer mitigation has several of the same components as the SWIM buffer mitigation.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org

<image002.png>

We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.



**Response to Variance Request at 15416 Holbrooks Road in
Huntersville (Parcel No. 01910102)
North Mecklenburg Construction & Demolition Landfill
August 3, 2021**

Introduction:

The information below is provided to the Town of Huntersville for their consideration in the review of the variance request to impact approximately 212,500 square feet of SWIM Buffer at the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road. These impacts would be associated with piping an estimated 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion (see Appendix A). This information is provided by the Storm Water Services Division of Mecklenburg County's Land Use and Environmental Services Agency (LUESA).

Description of the Current Conditions of the Stream to be Piped:

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and stream habitat assessment were performed by staff with Storm Water Services within the tributary proposed for piping. The approximate location of the area evaluated is shown in Appendix A. Results indicate that the stream reach has very poor fish community abundance and diversity as well as a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR. The stream channel was found to be badly eroded and lack the necessary habitat conditions to support healthy fish and benthic communities as shown in Photos 1 and 2 below. The locations of these photos are shown in Appendix A. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community. Additional information is provided in Appendix B.



Photo 1: Cane Creek to be Piped



Photo 2: Cane Creek to be Piped

Potential Mitigation Options for the Loss of the Buffer:

If the variance is approved, the petitioner has indicated a preference to use the Mitigation Credit technique described in Article 8.25.11b(8) of Huntersville's Zoning Ordinance. Specifications for the use of this technique are provided on page 54 in Section 5.4.3 of the Charlotte-Mecklenburg Buffer Implementation Guidelines at the following link: [file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20\(13\).pdf](file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20(13).pdf).

This technique involves the purchase of Mitigation Credits on a 1:1 basis utilizing the square feet of the disturbed buffer area and the prevailing rate of \$10/square foot. With a disturbed area estimated at 212,500 square feet, the Mitigation Credit is calculated at \$2,125,000 that would be paid to the Town of Huntersville for use within their jurisdiction for improving water quality. Storm Water Services has identified two (2) potential options for use of this Mitigation Credit as described below.

Option 1: Install a stormwater control measure (SCM) such as a wet pond on Town property located at 100 Sherwood Drive to provide water quality and quantity treatment for approximately 10.4 acres of Town owned parcels located upstream, including Town Hall, the Senior Center, and Sherwood Park (PID Numbers: 01712241, 01712214, 01712213, 01712211, 01712210, 01712245, 01903115, 01903116, & 01903114). The SCM would also provide treatment for some road drainage and Cashion's store. It is estimated that this SCM will remove 1,000 lbs./acre/year of sediment and 5 and 2 lbs./acre/yr. of Total Nitrogen and Total Phosphorus, respectively. Figure 1 below illustrates with a blue dot the potential location of the SCM with the treated upstream drainage area indicated in yellow highlight.

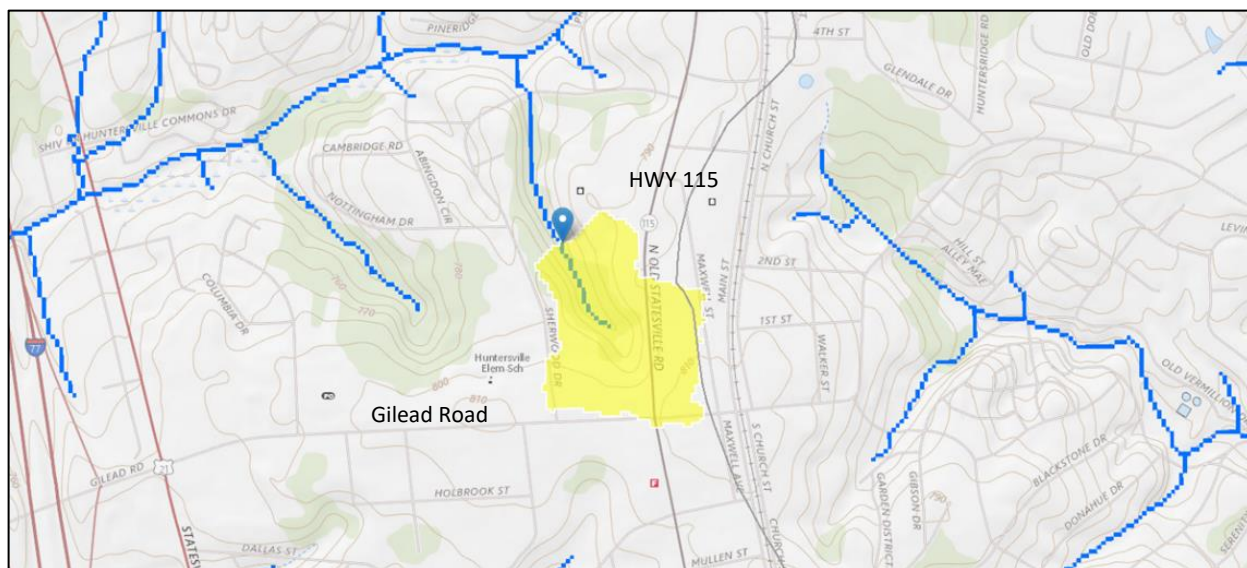


Figure 1: Potential Location of SCM Mitigation Measure

Option 2: Complete a stream restoration project in Cane Creek or the South Prong of Clarke Creek downstream of the landfill. The purpose of the project would be to restore habitat and improve channel stability to promote a healthy aquatic community, including benthics and fish. Storm Water Services uses a Stream Restoration Ranking System or SRRS to prioritize stream reaches for restoration based on a 300-point scale with lower SRRS Scores representing degraded stream conditions with a higher priority for restoration and a SRRS Score of 190 representing acceptable stream conditions. Preliminary SRRS Scores below 190, indicating a potential for restoration, have been calculated for the areas shown in Appendix A along the South Prong of Clarke Creek. In addition, field observations made on July 22, 2021 by Storm Water Services' staff revealed sufficiently degraded channel conditions that potentially warrant restoration in Cane Creek in proximity to the landfill. Photos 3 and 4 below illustrate these conditions at the locations shown in the map included as Appendix A. However, field evaluations and final SRRS Scores are needed to assess channel conditions and potential uplift (i.e., channel stability and habitat improvements) to fully ascertain the viability and benefits of a stream restoration project in either Cane Creek or the South Prong of Clarke Creek in proximity to the landfill.



Photo 3: Cane Creek Downstream of Landfill



Photo 4: Cane Creek Downstream of Landfill

Description of Negative Impacts from the Piping:

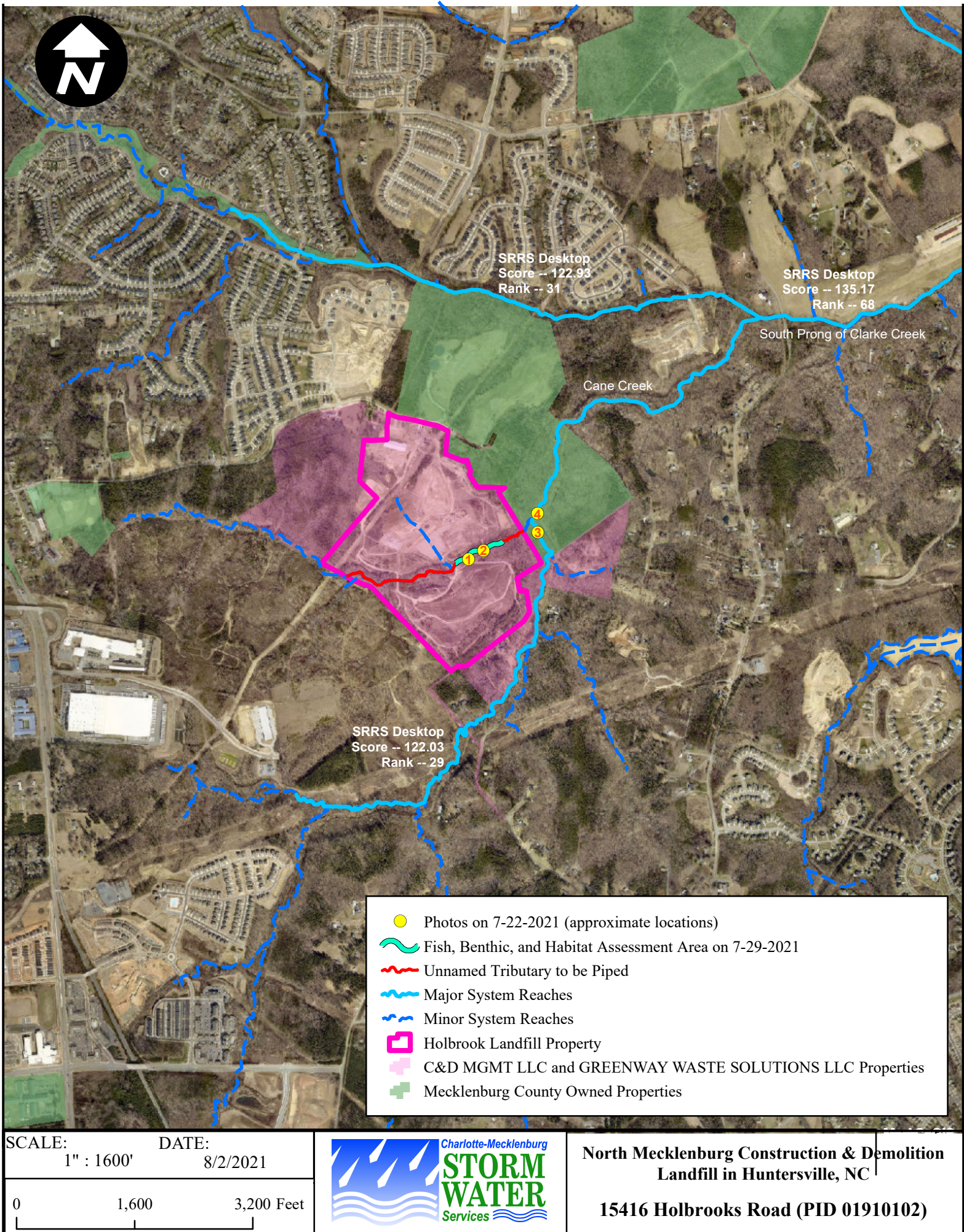
To date, Storm Water Services has not been provided with sufficient information to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. The following questions remain unanswered:

1. What engineering analysis has been performed to verify that the piping system will remain stable and functional during the life of the site and subsequent post closure period?
2. How is the system being engineered to prevent leachate from entering the pipe?
3. What is to prevent the gravel underlayment for the piping system from serving as a conduit for leachate to migrate off site?
4. What is the plan if the piping system fails?
5. Are there plans to monitor for negative downstream water quality impacts?
6. Is the system designed in such a way that leaks can be located and repaired?
7. The outlet of the piped section calls out 130 linear feet of stream to be preserved. However, no energy dissipation device is indicated at the tie-in. What will be constructed to prevent accelerated downstream bank erosion?
8. What are the impacts to flood levels downstream of the pipe? A Hydraulic and Hydrologic Analyses (H&HA) report is requested.
9. What occurs when the flow exceeds the design capacity of the pipe? Where will the water go? The H&HA report from #8 will help answer this question.
10. What measures will be implemented to prevent off site sedimentation during the piping and landfiling operation?

Recommendation to the Town of Huntersville:

The section of Cane Creek proposed for piping is significantly degraded and there are multiple mitigation opportunities in proximity that could result in overall improved water quality conditions. However, these potential improved conditions could easily be negated if the piping system malfunctions or fails resulting in negative downstream impacts associated with water quality and/or quantity issues. Storm Water Services has not been provided with sufficient information to accurately assess the potential for these negative impacts. Responses to the ten (10) questions listed in the previous section are required before this assessment can be completed.

Appendix A: North Mecklenburg Construction & Demolition Landfill Project Area Map



Appendix B

Fish Community Survey, Benthic Macroinvertebrate Bioassessment and Stream Habitat Assessment of the Cane Creek Tributary Flowing through the Holbrooks Landfill

Methodology

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and a stream habitat assessment were conducted by Mecklenburg County Storm Water Services within the tributary to Cane Creek that flows through the Holbrooks Landfill located at 15416 Holbrooks Road in Huntersville, NC. The fish community survey was conducted on a 200-meter stream reach within the project bounds using electroshocking methodologies in accordance with the Mecklenburg County Fish Community Survey Procedures. The benthic macroinvertebrate bioassessment consisted of collecting the benthic macroinvertebrates found within a 100-meter stream reach from all microhabitats present. The bioassessment procedures followed the Mecklenburg County Stream Bioassessment Procedures. The stream habitat assessment consisted of evaluating 10 stream habitat parameters following the Mecklenburg Stream Habitat Assessment (MHAP) Field Guide.

Fish Community Results

A total of 35 organisms, representing three (3) fish species were collected (see Table 1). The fish species collected were Creek Chub, Rosyside Dace, and Green Sunfish which are considered tolerant. Tolerant fish are able to thrive in poor stream conditions. The low numbers of total fish and species type collected during this survey indicates a stream with a very poor fish community abundance and diversity.

Benthic Macroinvertebrate Results

A total of 48 individual organisms were collected. Twenty-one (21) of those organisms were identified to the lowest possible taxa identification level (Genus and Species). The remaining 27 organisms were identified as Chironomidae (Family taxa level). Of the 10 taxa found, only 2 belonged to the sensitive aquatic insect groups of Mayflies (Ephemeroptera), Stoneflies (Plecoptera) and Caddisflies (Trichoptera) collectively referred to as EPT taxa. These results are typical of a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR (see Table 2).

Stream Habitat Assessment (MHAP) Results

The assessed stream reach received a MHAP score of 119.7 out of 200 possible points which is considered *Partially Supporting* (see Table 3). Parameters that received low individual scores include Stream Bed Substrate (6.7 out of 20), Sediment Deposition (7.6 out of 20), Frequency of Riffles (7 out of 20) and Vegetative Buffer Width (7.1 out of 20). The stream bottom was filled with sand resulting in very few riffles (faster moving water) which are the best habitat for benthic macroinvertebrates and very few pools which are the best habitat for fish.

Conclusions

The poor habitat quality of the Cane Creek Tributary flowing through the Holbrooks Landfill property has resulted in the stream being able to support only a small number of fish and benthic macroinvertebrate organisms. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community.

Table 1: Fish Community Survey Data

Fish Species	Count	Size Range (mm)	Multiple Age Classes?	Tolerant / Intolerant?
Creek Chub	28	62 to 110	Yes	Tolerant
Rosyside Dace	5	65 to 79	No	Intermediate
Green Sunfish	2	84 to 88	No	Tolerant

Table 2: Benthic Macroinvertebrate Assessment Data

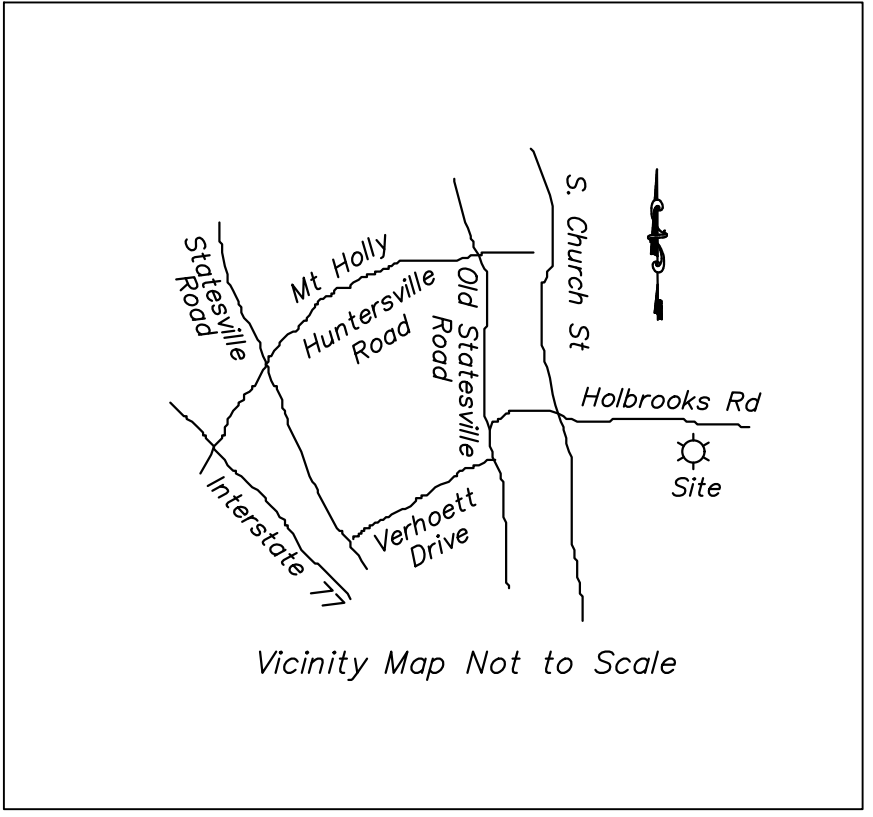
ORDER	FAMILY	GENUS/SPECIES	TOLERANCE	NO.
EPHEMEROPTERA	BAETIDAE	LABIOBATIS PROPINQUUS	5.8	1
PLECOPTERA	PERLIDAE	PERLESTA SPP.	2.9	1
COLEOPTERA	DRYOPIDAE	HElichus SPP.	4.1	1
COLEOPTERA	ELMIDAE	STENELMIS SPP.	5.6	3
DIPTERA	CHIRONOMIDAE	Tanypodinae	NA	14
DIPTERA	CHIRONOMIDAE	Non-Tanypodinae	NA	13
DIPTERA	PTYCHOPTERIDAE	BITTACOMORPHA CLAVIPES	5.0	1
DIPTERA	SIMULIIDAE	SIMULIUM SPP.	4.9	4
DIPTERA	STRATIOMYIDAE	STRATIOMYS SPP.	8.1	1
ODONATA	CALOPTERYGIDAE	CALOPTERYX SPP.	7.5	4
ODONATA	GOMPHIDAE	GOMPHUS SPP.	5.9	3
ODONATA	GOMPHIDAE	PROGOMPHUS OBSCURUS	8.2	2

Table 3: Stream Habitat (MHAP) Data

Instream Cover	Epifaunal Substrate	Stream Bed Substrate	Channel Alteration	Sediment Deposition	Frequency of Riffles	Channel Flow Status	Bank Vegetation	Bank Stability	Buffer
16.1	14.4	6.7	19	7.6	7	12	15.2	14.6	7.1

Exhibit #1 - Approved Conditional District Rezoning 16-06

CONDITIONAL DISTRICT REZONING FOR GREENWAY WASTE SOLUTIONS OF NORTH MECK. LLC.



LIST OF DRAWINGS:

CD001	COVER SHEET
CD100	CONDITIONAL DISTRICT SITE PLAN
CD101	CONDITIONAL DISTRICT SITE PLAN

**EPM REFERENCE NUMBER:
#365454 CONDITIONAL REZONING & CONCEPT PLAN**

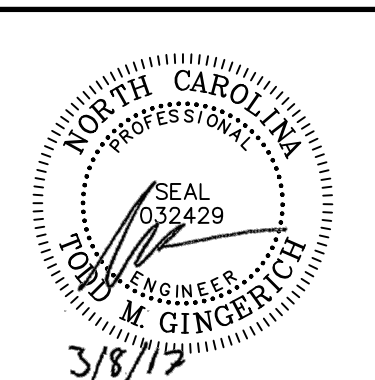


Note: The Huntersville Board of Commissioners approved R16-06 on November 7, 2016.

CONCEPT NOTE: Approval of this Concept Plan does not imply or guarantee approval of the Final Construction Plans. Final Construction Plans will be reviewed for compliance with all Town, County and State regulations in effect at time of submittal.

APPROVAL OF THIS CONCEPT PLAN DOES NOT IMPLY OR
GUARANTEE APPROVAL OF THE FINAL CONSTRUCTION
PLAN. FINAL CONSTRUCTION PLAN WILL BE REVIEWED
FOR COMPLIANCE PER ALL TOWN, COUNTY, AND STATE
REGULATIONS IN EFFECT AT TIME OF SUBMITTAL.

NORTH CAROLINA
BOARD OF EXAMINERS
FOR ENGINEERS AND
SURVEYORS LICENSE
NO. C-3035



CONDITIONAL DISTRICT COVER SHEET

CD001

1 OF 3

Civil & Environmental Consultants, Inc.
1900 Center Park Drive - Suite A - Charlotte, NC 28217
Ph: 980.237.0373 • Fax: 980.237.0372
www.ccecinc.com

**GREENWAY WASTE SOLUTIONS
AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA**

REVISION RECORD

DESCRIPTION	DATE
...	...

NO	1
YES	7/10

1

Z

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10

IT

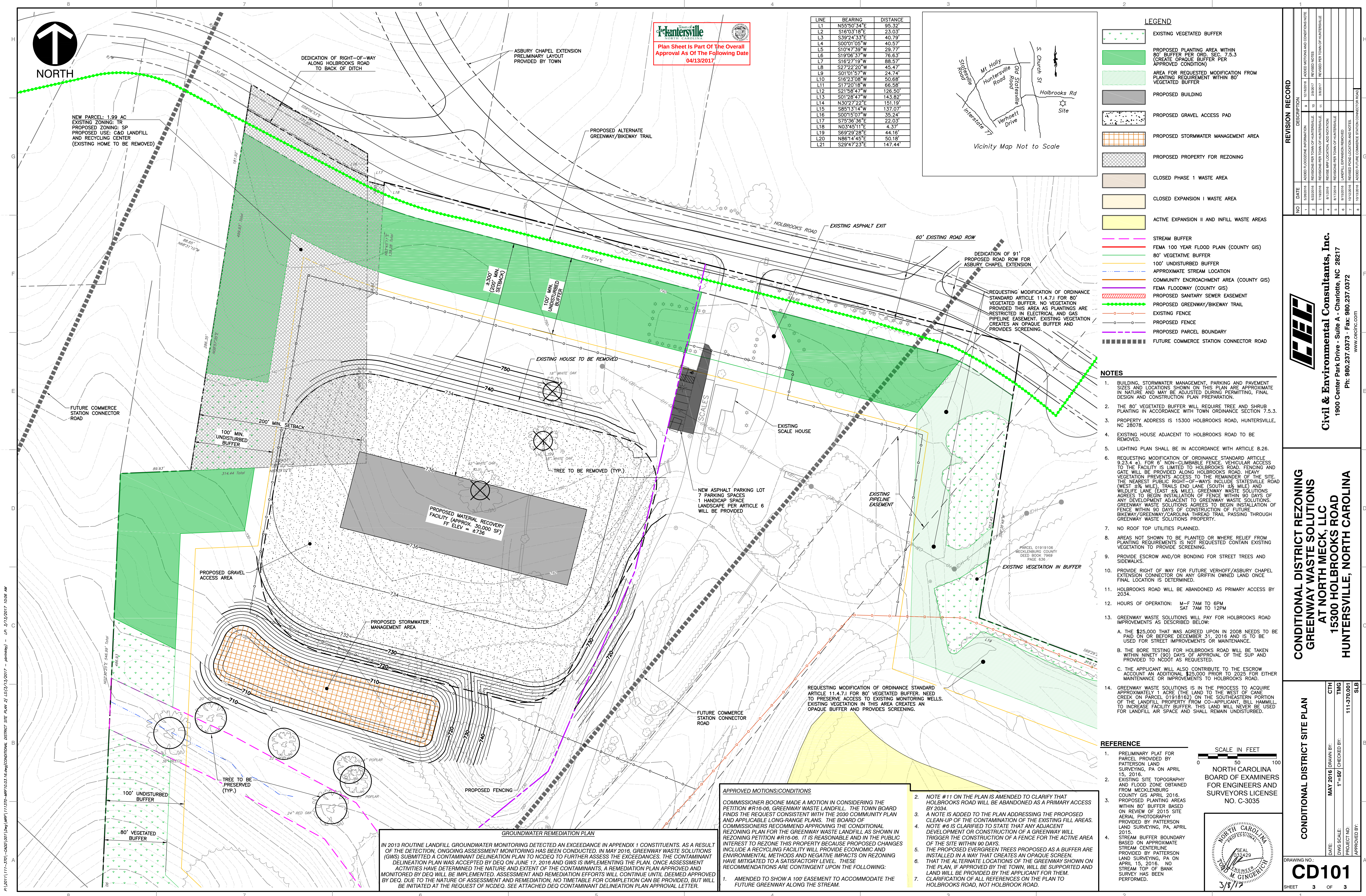
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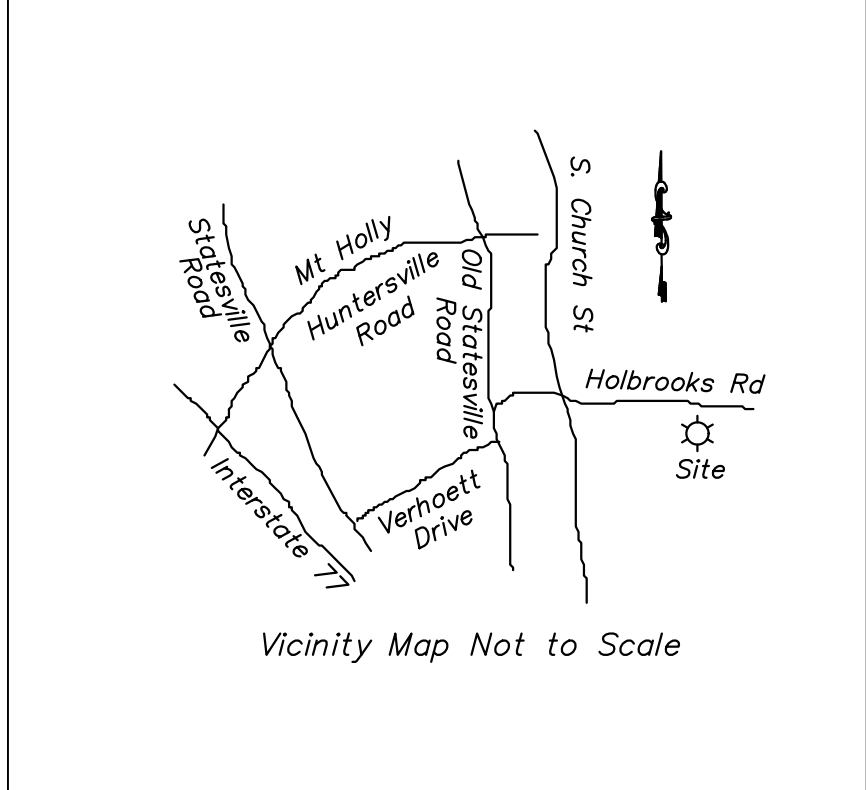
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OF 3



Plan Sheet Is Part Of The Overall
Approval As Of The Following Date
04/13/2017

LINE	BEARING	DISTANCE
L1	N85°50'34"E	95.32'
L2	S16°03'18"E	23.03'
L3	S39°24'33"E	40.79'
L4	S00°01'05"W	40.57'
L5	S10°47'39"W	29.77'
L6	S19°06'57"W	76.63'
L7	S16°27'19"W	88.57'
L8	S27°22'20"W	45.47'
L9	S01°01'57"W	24.74'
L10	S16°23'08"W	50.68'
L11	S17°20'18"W	66.58'
L12	S21°58'47"W	128.50'
L13	S01°28'47"W	143.82'
L14	N30°27'22"E	151.19'
L15	S85°13'14"W	137.07'
L16	S00°15'07"W	35.24'
L17	S75°36'36"E	22.03'
L18	N03°45'11"E	4.37'
L19	S69°29'28"E	44.16'
L20	N86°14'45"E	50.18'
L21	S29°47'23"E	147.44'



- LEGEND**
- EXISTING VEGETATED BUFFER
 - PROPOSED PLANTING AREA WITHIN 80' BUFFER PER ORD. SEC. 7.5.3 (CREATE OPAQUE BUFFER PER APPROVED CONDITION)
 - AREA FOR REQUESTED MODIFICATION FROM PLANTING REQUIREMENT WITHIN 80' VEGETATED BUFFER
 - PROPOSED BUILDING
 - PROPOSED GRAVEL ACCESS PAD
 - PROPOSED STORMWATER MANAGEMENT AREA
 - PROPOSED PROPERTY FOR REZONING
 - CLOSED PHASE 1 WASTE AREA
 - CLOSED EXPANSION I WASTE AREA
 - ACTIVE EXPANSION II AND INFILL WASTE AREAS
 - STREAM BUFFER
 - FEMA 100 YEAR FLOOD PLAIN (COUNTY GIS)
 - 80' VEGETATIVE BUFFER
 - 100' UNDISTURBED BUFFER
 - APPROXIMATE STREAM LOCATION
 - COMMUNITY ENCROACHMENT AREA (COUNTY GIS)
 - FEMA FLOODWAY (COUNTY GIS)
 - PROPOSED SANITARY SEWER EASEMENT
 - PROPOSED GREENWAY/BIKEWAY TRAIL
 - EXISTING FENCE
 - PROPOSED FENCE
 - PROPOSED PARCEL BOUNDARY
 - FUTURE COMMERCE STATION CONNECTOR ROAD

- NOTES**
- BUILDING, STORMWATER MANAGEMENT, PARKING AND PAVEMENT SIZES AND LOCATIONS SHOWN ON THIS PLAN ARE APPROXIMATE IN NATURE AND MAY BE ADJUSTED DURING PERMITTING, FINAL DESIGN AND CONSTRUCTION PLAN PREPARATION.
 - THE 80' VEGETATED BUFFER WILL REQUIRE TREE AND SHRUB PLANTING IN ACCORDANCE WITH TOWN ORDINANCE SECTION 7.5.3.
 - PROPERTY ADDRESS IS 15300 HOLBROOKS ROAD, HUNTERSVILLE, NC 28078.
 - EXISTING HOUSE ADJACENT TO HOLBROOKS ROAD TO BE REMOVED.
 - LIGHTING PLAN SHALL BE IN ACCORDANCE WITH ARTICLE 8.26.
 - REQUESTING MODIFICATION OF ORDINANCE STANDARD ARTICLE 9.23.4 (a) FOR 6' NON-CRIMINAL FENCE. VEHICULAR ACCESS TO THE FACILITY IS LIMITED TO HOLBROOKS ROAD. FENCING AND GATES WILL BE PROVIDED ALONG HOLBROOKS ROAD. HEAVY VEGETATION PREVENTS ACCESS TO THE REMAINDER OF THE SITE. THE NEAREST PUBLIC RIGHT-OF-WAYS INCLUDE STATESVILLE ROAD (WEST 1/4 MILE), TRAILS END LANE (SOUTH 1/4 MILE) AND WILDLIFE LANE (EAST 1/4 MILE). GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF ANY DEVELOPMENT ADJACENT TO GREENWAY WASTE SOLUTIONS. GREENWAY WASTE SOLUTIONS AGREE TO BEGIN INSTALLATION OF FENCE WITHIN 90 DAYS OF CONSTRUCTION OF FUTURE BIKEWAY/GREENWAY/CAROLINA THREAD TRAIL PASSING THROUGH GREENWAY WASTE SOLUTIONS PROPERTY.
 - NO ROOF TOP UTILITIES PLANNED.
 - AREAS NOT SHOWN TO BE PLANTED OR WHERE RELIEF FROM PLANTING REQUIREMENTS IS NOT REQUESTED CONTAIN EXISTING VEGETATION TO PROVIDE SCREENING.
 - PROVIDE ESCROW AND/OR BONDING FOR STREET TREES AND SIDEWALKS.
 - PROVIDE RIGHT OF WAY FOR FUTURE VERHOEFF/ASBURY CHAPEL EXTENSION CONNECTOR ON ANY GRIFFIN OWNED LAND ONCE FINAL LOCATION IS DETERMINED.
 - HOLBROOKS ROAD WILL BE ABANDONED AS PRIMARY ACCESS BY 2034.
 - HOURS OF OPERATION: M-F 7AM TO 6PM SAT 7AM TO 12PM
 - GREENWAY WASTE SOLUTIONS WILL PAY FOR HOLBROOKS ROAD IMPROVEMENTS AS DESCRIBED BELOW:
 - A. THE \$25,000 THAT WAS AGREED UPON IN 2008 NEEDS TO BE PAID ON OR BEFORE DECEMBER 31, 2016 AND IS TO BE USED FOR STREET IMPROVEMENTS OR MAINTENANCE.
 - B. THE BORE TESTING FOR HOLBROOKS ROAD WILL BE TAKEN WITHIN NINETY (90) DAYS OF APPROVAL OF THE SUP AND PROVIDED TO NCDOT AS REQUESTED.
 - C. THE APPLICANT WILL ALSO CONTRIBUTE TO THE ESCROW ACCOUNT AN ADDITIONAL \$25,000 PRIOR TO 2025 FOR EITHER MAINTENANCE OR IMPROVEMENTS TO HOLBROOKS ROAD.
 - GREENWAY WASTE SOLUTIONS IS IN THE PROCESS TO ACQUIRE APPROXIMATELY 1 ACRE (THE LAND TO THE WEST OF CANE CREEK ON PARCEL 01918162) ON THE SOUTHEASTERN PORTION OF THE LANDFILL PROPERTY FROM CO-APPLICANT, BILL HAMMILL, TO INCREASE FACILITY BUFFER. THIS LAND WILL NEVER BE USED FOR LANDFILL AIR SPACE AND SHALL REMAIN UNDISTURBED.

REFERENCE

- PRELIMINARY PLAT FOR PARCEL PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016.
- EXISTING SITE TOPOGRAPHY AND FLOOD ZONE OBTAINED FROM MECKLENBURG COUNTY 05 APRIL 2016.
- PROPOSED PLANTING AREAS WITHIN 80' BUFFER BASED ON REVIEW OF 2015 SITE AERIAL PHOTOGRAPHY PROVIDED BY PATTERSON LAND SURVEYING, PA, APRIL 2016.
- STREAM BUFFER BOUNDARY BASED ON APPROXIMATE STREAM CENTERLINE PROVIDED BY PATTERSON LAND SURVEYING, PA ON APRIL 15, 2016. NO STREAM OF BANK SURVEY HAS BEEN PERFORMED.

SCALE IN FEET
0 50 100
NORTH CAROLINA BOARD OF EXAMINERS FOR ENGINEERS AND SURVEYORS LICENSE NO. C-3035
3/8/17

REVISION RECORD

NO	DATE	DESCRIPTION
1	03/08/16	ADDED FLOODZONE INFORMATION
2	03/08/16	REVISED NOTES
3	03/08/16	REVISED NOTES
4	03/08/16	REVISED NOTES
5	03/08/16	REVISED NOTES
6	03/08/16	REVISED NOTES
7	03/08/16	REVISED NOTES
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100	03/08/16	REVISED NOTES

Civil & Environmental Consultants, Inc.
1900 Center Park Drive - Suite A - Charlotte, NC 28217
Ph: 980.237.0373 • Fax: 980.237.0372
www.cecinc.com

CONDITIONAL DISTRICT REZONING GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC
15300 HOLBROOKS ROAD
HUNTERSVILLE, NORTH CAROLINA

CONDITIONAL DISTRICT SITE PLAN

DRAWING NO: **CD101**
SHEET 3 OF 3

DATE: MAY 2016
DRAWN BY: TMM
CHECKED BY: TMM
PROJECT NO: 111-370.001
APPROVED BY: [Signature]

Special Use Permit Granted

On Monday November 7, 2016 the Huntersville Town Board held a public meeting to consider the below noted Special Use Permit:

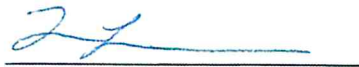
SUP16-01, a request by Greenway Waste Solutions, LLC and William Hammill for a Special Use Permit allowing the 135 acre landfill located at 15300 Holbrook Road to expand its boundaries and add another fill area in the existing site (parcels 01910102, 01910109, and portions of 01918135, 01918162, and 01934118).

Having heard all the evidence and argument presented at the meeting, the Board finds the application is complete, that the application complies with all of the applicable requirements of the Huntersville Zoning Ordinance for the operation proposed, and therefore the application to make use of the above-described property for the purpose indicated is hereby approved, subject to all applicable provisions of the Zoning Ordinance, the attached Findings of Fact, and the conditions added by the Town Board at the time of approval.

Also, the applicant shall complete the development strictly in accordance with the site plan, building elevations, and letter from the applicant attached which were submitted to and approved by this Board, a copy of which is filed in the Town of Huntersville Planning Department.

IN WITNESS WHEREOF, the Town of Huntersville has cause this permit to be issued in its name, and the undersigned, being all of the property owners of the property above described, do hereby accept this Special Use Permit, together with all its conditions, as binding on them and their successors in interest.

Michael L. Griffin, owner(s) of the above identified property, do hereby acknowledge receipt of this Special Use Permit. The undersigned owners do further acknowledge that no work may be done pursuant to the permit except in accordance with all of its conditions and requirements and that the restriction shall be binding on them and their successors in interest.



Owner

Planning

Post Office Box 664 • 101 Huntersville-Concord Road • Huntersville, NC 28070
phone 704.875.7000 • fax 704.875.6546 • www.huntersville.org

STATE OF NORTH CAROLINA
COUNTY OF MECKLENBURG

I, Teresa D. Nantz, a Notary Public of the County and State aforesaid, certify that Michael L. Griffin, personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal or stamp, this 34th day of March 2017.

(SEAL)

Notary Public

Teresa D. Nantz

My commission expires: 7/4/2019



STAFF FINDINGS OF FACT APPROVED BY THE TOWN BOARD

Article 9.23

Off Site LCID and C&D landfills are permitted in the SP District-subject to a Special Use Permit, according to the procedures of Section 11.4.10. The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

STAFF FINDINGS: *The Greenway Waste Solutions Landfill (North Mecklenburg Landfill) is an existing Construction and Demolition (C&D) landfill with an unexpired special use permit that would be allowed to continue to operate in its current zoning designation per Article 9.23.10. The proposed application is to amend the existing special use permit to add adjacent properties to the permit boundaries, add an additional fill area on the site over the stream that bisects the site, and include a recycling facility near Holbrook Road. The applicants are seeking a rezoning of the entire 135 acre property to Special Purpose (SP) concurrent with the SUP application in conformance to Article 9.23.10.*

- *UPDATE 9/19/16: The updated site plan has removed the additional fill area over the stream from the application. The special use permit now is solely for the boundary expansion as shown on the plan and for the addition of the recycling facility near Holbrook Road.*
1. That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills.

STAFF FINDINGS: *The NCDENR (North Carolina Division of Environment and Natural Resources) is now known as the North Carolina Department of Environmental Quality (NCDEQ). The NCDEQ permit has not been forwarded by the applicant showing evidence of permitting. In addition, after discussion with NCDEQ Division of Waste Management, the landfill in question has been found to exceed state regulatory limits of various groundwater and surface water contaminants and methane gas since 2013. Further, a Notice of Violation was issued on September 16, 2014 to the landfill due to an encroachment upon their required state mandated buffer to the east of the property. As of now, the landfill remains in violation of the required buffer.*

- *UPDATE 9/19/16: The current NCDEQ permit has been forwarded and is attached in the Board's agenda packet. The current permit is valid through 10/8/17. The updated letter attached to the SUP application states that the applicants will operate in compliance with NCDEQ rules. Staff recommends that a more specific statement from the applicant be added to the SUP plan or attached letter that addresses the contamination of the site and the buffer violation. It is staff's understanding that the applicants are beginning discussion with NCDEQ on the remediation process to clean up the contamination. They are also in the process of purchasing property to the southeast of the site that will mitigate their buffer violation.*
2. That the proposed use will not endanger the public health and safety, nor substantially reduce the value of the nearby property; and

STAFF FINDINGS: *Per discussion with NCDEQ Division of Waste Management, it appears the constituents leaching from the landfill have contaminated multiple drinking water wells adjacent to the subject property. Two parcels were purchased (including one residence) by the landfill and two homes were added on to municipal water service due to the groundwater contamination. According to NCDEQ, the applicant has been cooperative with the state in installing both shallow and deep*

groundwater monitoring wells and methane gas monitoring wells, in an effort to analyze and find the nature and extent of both the groundwater contamination and the methane gas exceedances. The applicant has also been cooperative in addressing the immediate issue of the contamination of the adjacent drinking water wells as discussed above. The monitoring and analyzing of both the groundwater and methane gas contamination is ongoing. At this time, there are still many unknowns in regard to the nature and extent of the existing groundwater and surface water contamination and potential methane gas migration. Once the nature and extent is more fully understood, NCDEQ will require mitigation plans for the applicant to begin contamination cleanup of both the active fill area, and the fill area that is closed out and inactive (which is under a different set of state rules). In addition, contamination was also found in the groundwater monitoring wells near the stream, and recently in the surface water sampling of the stream that is being proposed to be piped and covered with the expansion. Please find the groundwater monitoring well locations of the site in a map forwarded by NCDEQ.

- UPDATE 9/16/19: The proposed recycling facility is located near Holbrook Road, separated from the area that is contaminated and a significant distance from where active monitoring wells are located. Please see the NCDEQ Monitoring well map attached in the agenda packet. There are no new fill areas proposed with the updated application. Therefore since disturbance of the contaminated area is no longer proposed, and the new recycling facility is located a significant distance from the contamination, staff finds the contamination issue of the existing facility and the addition of the recycling facility separate issues that do not conflict. However for record in regard to public safety and health concerns, it is recommended that the applicant add a note in the plan stating the planned schedule of NCDEQ remediation of the existing site and commit to the cleanup in a timely manner.
 - UPDATE 10/17/16: The updated condition letter submitted by the applicant states: "Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented"
3. That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

STAFF FINDINGS: The subject property is not located within the boundaries of any of the Small Area Plans adopted by the Town of Huntersville. However, the East Huntersville plan does mention and recommend a connector road in between the proposed Verhoeff Drive extension to the south and the future Asbury Chapel extension to the north. The north/south connector road could traverse the subject property. In the 2009 landfill SUP, the applicants reserved the right of way in the area of the gas pipeline and buffer at the southwest edge of the property through their main entrance. Please find the 2009 SUP for your reference in your agenda packet. For this application no commitment has been made to accommodate the future connection.

- UPDATE 9/19/16: The letter attached to the application states that "the site plan makes an accommodation for the connector road on any Griffin owned land once the final locate is determined". The note on the plan however is not clear and needs to be reworded showing the intent to provide right of way for the thoroughfare connector road through the subject property. UPDATE 10/17/16: The note has been amended on the conditional letter stating that the applicant will accommodate for the connector road on any property owned by the applicant.

4. That the comprehensive site plan addresses each of the environmental and development standards below:

- (a) A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare-where available. Landfills 10 acres or less must directly connect to a major or minor thoroughfare or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

STAFF FINDING: *The existing landfill does not have access to a thoroughfare or a street that is built to commercial street standards. Access is from Holbrooks Road, which is a secondary residential street that traverses a residential neighborhood. The ordinance states that the Town Board may issue a SUP for a landfill that does not front on a thoroughfare or commercial street if it finds that it “would not likely cause any injurious effect on the property adjacent to the access”.*

When the last Special Use Permit (SUP) application was submitted in 2009, the NCDOT district engineer commented in an email to the applicant that Holbrooks Road “does not possess the pavement structure to accommodate the truck traffic it has experienced and will be subject to with the continued use your company is planning”. The 2009 SUP was eventually approved with an added stipulation that the condition of Holbrooks Road be reviewed in 5 years. Another condition was that the applicant contributes \$25,000 in the next 10 years toward the maintenance of Holbrook Road. In December of 2014 public works and engineering staff inspected Holbrook Road and found that it was in good condition as NCDOT had just finished repaving the street in 2013 (added 4 inches of asphalt). As of this date, the applicant has not forwarded the \$25,000 to NCDOT for the street maintenance.

After contacting NCDOT and asking for their input on the current state of Holbrook Road in relation to the proposed expansion and indefinite lifespan extension of the landfill, NCDOT’s concern about the durability of the road remained. They requested that the applicant submit core samples of the road to evaluate its substructure. As of the date of this report staff is not aware of any recent discussions the applicant has had with NCDOT on the durability of Holbrook Road in regard to this application. Please find the emails from NCDOT attached in your agenda package.

- **UPDATE 9/19/16:** *The newest plan submitted has no updated notes about the maintenance and structure of Holbrook Road in response to NCDOT comments. The letter submitted by the applicant with the application states that they intend to “connect to the future Verhoff/Asbury Chapel Extension and will reserve a right of way for the future connection to a potential industrial street to the south through the Commerce Station Industrial Park by 2034”. Per past discussions with the applicant it is thought that this note is intended to cap or limit their usage of Holbrook Road to no longer than the year 2034, as well as providing a connection from their site to one of the future thoroughfares by that time. Staff recommends that if that is the case, the note be clarified to clearly state that on the special use permit plan. It is still also unclear if the \$25,000 committed to at the last SUP approval would carry over as a condition for this permit.*

- *UPDATE 10/17/16: Note #11 on the latest Special Use Permit plan submitted states "Greenway Waste Solutions shall have alternative access to replace Holbrooks Road by 2035". Staff recommends the note be clarified to read: "Greenway Waste Solutions will cease using Holbrook Road as its primary access and will have functional primary access onto a commercial street or thoroughfare by 2034". 2034 is the year that based on prior approvals, permission has already been granted for the use of Holbrook Road.*
- *Note #13 on the updated Special Use Permit plan includes a series of notes in regard to the maintenance and improvement of Holbrook Road. They include:*
 - *Conducting the boring tests to determine the current pavement structure of Holbrook Road, per NCDOT's request.*
 - *Overlaying Holbrook Road in front of the facility as requested by NCDOT.*
 - *Carrying over the previously offered \$25,000 contribution for improvements to Holbrook Road as part of this application.*
 - *Reassessing the condition of Holbrook Road with Town Staff and NCDOT in 2025, about the half way point between now and 2034 when they've agreed to stop using Holbrook Road.*
 - *The applicant would then contribute additional funds at that time if the Town and NCDOT deem it necessary.*

(b) That the proposed or existing use will be in compliance with the rules and regulations as established by Traffic Impact Analysis (TIA) Article 14.

STAFF FINDING: *Engineering and Public Works has determined that based on the expansion proposed, the new amount of traffic that will be generated will not meet the threshold that would require the submission of Traffic Impact Analysis (TIA). Please find the TIA determination from engineering in your agenda packet.*

- (c) Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated below take precedence over any and all modifications made by the state unless the state standards become more restrictive.
- 500-foot buffer from existing residential water supply wells to fill area.
 - 200-foot buffer from adjacent property to fill area.
 - No fill in designated wetlands or the FEMA and /or Community Special Flood Hazard Areas.
 - 50-foot buffer from delineated streams.
 - 50-foot buffer from road right of way to fill area (non-state requirement).

STAFF FINDING: *The submitted letter from Greenway Waste Solutions states that they conform to all the buffers required in this section. However, as shown on aerial photography and from the*

submitted special use permit plan, multiple existing driveways are located within the 100 foot undisturbed buffer. In addition, the applicants are seeking a variance from the Board of Adjustment for this section of the ordinance in order to encroach/fill the 50 foot delineated stream buffer and to fill in designated wetlands and FEMA flood areas. No new encroachments are shown on the plan other than the ones requested by way of the Board of Adjustment. In order for the applicant to try to address some concerns by staff, the Board of Adjustment has continued the variance hearing per the applicant's request. The hearing is scheduled to continue on September 13, 2016.

- *UPDATE 9/19/16: On September 13, the applicants withdrew their variance applications. The proposed plan no longer proposes to fill the stream and encroach into the required buffers. After review, there are not any newly proposed encroachments on the updated special use permit plan.*

- (d) Driveway access to the facility must be paved for a distance of at least 100 feet from the public street.

STAFF FINDING: *According to aerial photography and as inspected in a staff site visit, the entrance driveway to the facility is paved to a distance greater than 100 feet. However the separate exit drive that connects to the main street driveway where trucks leave the site is not paved for distance of 100 feet. The special use permit plan submitted by the applicant shows the exit drive proposed to be paved for a distance of 100 feet per this section.*

- (e) Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6 feet high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

STAFF FINDING: *The letter from the applicant states that the site is "closeable and secured from vehicular and pedestrian access" but does not provide how that is done. The letter also mentions that a variance will be submitted for the fence requirement. No variance application has been submitted for this section of the ordinance. The Special Use Permit site plan includes a note stating that "heavy vegetation" prevents access to the site. The submitted information does not provide conformance to the fence and security requirement of this section.*

- *UPDATE 9/19/16: The new rezoning plan (separate application) includes a modification request to the Town Board from the fencing section of the ordinance. It states that the new recycling facility near Holbrook Road would be fenced and shows an existing fence along the northern sections of the landfill. However it implies that the remainder of the site, the southern portion, would not be fenced. A note on the plan states that "heavy vegetation prevents access to the remainder of the site". Staff cannot support this modification request at this time as it is unclear whether or not heavy vegetation provides a secure facility as intended in the code.*

- UPDATE 10/17/16: The updated Special Use Permit plan modifies the above note (note #6), which commits the applicant to enclose the rest of the active facility with a fence within 90 days of either development happening adjacent to the property, or the greenway begins construction through the applicant's property.

- (f) All driveways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100 feet from the public street so that no traffic waiting to enter the site will be backed up on any public right of way.

STAFF FINDING: The letter from the applicant states that "The driveway that serves the site is wide enough to accommodate two-way traffic for 200 feet from the public street. There is ample room such that traffic should not enter the public right of way". As shown on aerial photography and inspected on a site visit, there is a single driveway entering the facility that is not wide enough to accommodate two way traffic through the scale house and into the facility. This driveway is mainly about 11 feet wide. However, this entrance driveway leading up to the scale house is over 100 feet long in conformance to this section. There is a separate and additional one-way exit drive that directs trucks back out to the main driveway. Therefore with both of these driveways combined two-way traffic is appropriately accommodated for in and out of the facility.

5. That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

STAFF FINDING: In the letter attached from the applicant, it is stated that they "have taken pride in keeping the roadways clean". However no commitment has been made to weekly clean the road as required in this section. On several site inspections to the site the majority of Holbrook Road seems to be clean and debris free. However the area of street immediately in front of the facility's driveway is often covered with dirt from trucks exiting the facility.

- UPDATE 9/19/16: In the updated letter from the applicant, they've stated that they "plan to continue to exceed section 6.5 of the franchise agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles". This statement however does not make it clear that the cleaning of Holbrook Road would take place on a weekly basis. UPDATE 10/17/16: The applicants have updated the letter to commit to "routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed."

6. That use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

STAFF FINDING: *The Greenway Waste Solutions landfill is adjacent to a residential zoning district therefore the restricted hours of operation will apply. The letter from the applicant has stated that the use will be limited from 7:00 am to 6:00 pm.*

7. That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

STAFF FINDING: *The letter from the applicant states that an updated timetable has been submitted with the application. However staff has not located it in the submittal.*

- **UPDATE 9/19/16:** *The updated letter from the applicant states that based on current waste acceptance rates and anticipated recycling rates, they project the life of the landfill to be over 20 years.*

8. That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

STAFF FINDING: *No updated reclamation plan (or closure plan) has been submitted by the applicant for this application.*

- **UPDATE 9/19/16:** *There is no reclamation plan/closure plan submitted with the updated submitted as required. The letter submitted with the application though includes a statement regarding NCDEQ monitoring the site post closure. **UPDATE 10/17/16:** The closure plan has been submitted.*

9. An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

- (a) The landfill has been continuously operating since 1991 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;
- (b) The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;
- (c) The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and
- (d) In no event shall the landfill operate under a LCID landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately

commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plans shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.

STAFF FINDINGS: *The Greenway Waste Solution Landfill is a Construction and Demolition Landfill (C&D) and is not subject to this section of the ordinance. This section of the ordinance applies to Land Clearing and Inert Debris Landfills (LCID).*

10. Any existing C&D landfill shall be permitted to continue operating in the zone in which it is located provided that landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

STAFF FINDINGS: *The current special use permit for the Greenway Waste Solutions landfill is current and unexpired. However the applicants do wish to expand the boundaries of the landfill as shown in the attached Special Use Permit site plan. Therefore the rezoning application submitted for these properties must first be approved designating them Special Purpose (SP) prior to this special use permit being approved. The rezoning of the property was approved on 11/7/17 immediately prior to the special use permit approval.*

Additional Conditions Added by the Town Board (when in conflict with the findings above, the conditions below shall apply)

1. The site will operate in compliance with all NCDEQ requirements.
2. The applicant will cooperate with NCDEQ in addressing its contaminated ground waters.
3. The \$25,000 that was agreed upon in 2008 needs to be paid on or before December 31, 2016 and to be used for street improvements or maintenance.
4. The proposed use will not be in conflict with the objectives of the long and short range adopted area plans.
5. The comprehensive site plan addresses necessary environmental and development standards.
6. The condition of Holbrooks Road will be assessed by the applicant and the Town as well as with the participation of NCDOT if available on a five (5) year basis.
7. If a commercial road or thoroughfare becomes available up to and adjacent to the applicant's property line prior to the 2034 Holbrook abandonment requirement, the applicant will move the main access to the new commercial street within one year of the access becoming available.
8. The bore test for Holbrooks Road will be taken within ninety (90) days of approval of the SUP and provided to NCDOT as requested.

9. The applicant will maintain an internal 100' driveway from the public street in good condition.
10. The applicant will also contribute to the escrow account an additional \$25,000 prior to 2025 for either maintenance or improvements to Holbrook Road.
11. All right-of-ways which serve the site must be wide enough to accommodate two way traffic for a distance of at least 100' from a public street so that traffic waiting to enter the site will not be backed up onto any public right-of-way.
12. The landfill operator will commit to routinely washing Holbrooks Road with a specialized truck designed to remove dirt and mud when required.
13. That the use of the site shall be limited to the hours of 7 a.m. to 6 p.m. Monday through Saturday.
14. That a time table be submitted indicating the development phases and life expectancy of the landfill.
15. That a closure plan (reclamation plan) is provided in accordance with applicable state regulations and the applicant commits to make updates to the plan as circumstances dictate.
16. The applicant will meet all appropriate state operating and reporting requirements pertaining to C&D recycling.
17. Due to the contamination in the landfill and surrounding areas the applicant will provide updates to the Town with compliance of the SUP conditions 10 years following the approval of the SUP and every 5 years thereafter upon the closure of the landfill.
18. That all provisions and findings of Article 9.23 be complied with as identified by staff (shown above as staff findings of fact).



Special Use Permit Application

Subject: Letter stating how the applicant satisfies Article 9

Date: 10/12/16

Greenway Waste Solutions, LLC has been operating in its current use since 1988. During this time Greenway Waste Solutions, LLC has operated under the purview of Article 9.23 and satisfied all criteria.

Sincerely,

John Brown
Greenway Waste Solutions

Special Use Permit
~~COMMERCIAL SITE PLAN~~
APPROVED BY THE TOWN OF HUNTERSVILLE
Bradley D. Smith 3/28/17
Planning Staff Date

9.23 Off-Site Land Clearing and Inert Debris (LCID) and Construction & Demolition (C&D) Landfills

Off-Site LCID and C&D Landfills are permitted in the SP District subject to a Special Use Permit, according to the procedures of [Section 11.4.10](#). The Town Board shall issue a Special Use Permit for the subject facility in the SP District if, but not unless, the evidence presented at the Special Use Permit hearing establishes the conditions below.

.1 That the site will operate in compliance with the rules according to NCDENR for C&D and LCID landfills, as amended.

This site will operate in compliance with the rules according to NCDEQ. See attached NCDEQ (formerly NCDENR) Permit No. 60-13 CDLF-1993. The current permit expires 10/8/2017. (see p.6, Attachment 3, Part I:1)

In 2013 routine landfill groundwater monitoring detected an exceedance in Appendix 1 constituents. As a result of the detection, ongoing assessment monitoring has been conducted. In May 2016, Greenway Waste Solutions (GWS) submitted a Contaminant Delineation Plan to NCDEQ to further assess the exceedances. The Contaminant Delineation Plan was accepted by DEQ on June 17, 2016 and GWS is implementing the plan. Once assessment activities have determined the nature and extent of the contaminants, a remediation plan approved and monitored by DEQ will be implemented. Assessment and remediation efforts will continue until deemed approved by DEQ. Due to the nature of assessment and remediation, no timetable for completion can be provided, but will be initiated at the request of NCDEQ. See attached DEQ Contaminant Delineation Plan approval letter.

GWS is in process to acquire approximately 1 acre (the land to the west of Cane creek on parcel 01918162) on the southeastern portion of the landfill property from co applicant, Bill Hammill to increase our facility buffer. With the increased buffer area, the landfill will have significantly more buffer than required and will no longer be in violation of the NCDEQ buffer requirements. This land will never be used for landfill air space and shall remain undisturbed.

.2 That the proposed use will not endanger the public health and safety, nor substantially



reduce the value of nearby property; and

This site and the cleanup of the existing contamination will operate in compliance with the rules according to NCDEQ. Waste entering the recycling center will be hand sorted. Any unacceptable waste will be sent off site to the proper facility.

.3 That the proposed use will not be in conflict with the objectives of the most detailed plan adopted for the area; and

This site will not be in conflict with the objectives of the most detailed plan adopted for the area. The small area plan calls for a connector road from Commerce Station to the future Verhoff/Asbury Chapel Extension. The applicant will and the site plan makes an accommodation for the connector road on any Griffin owned land once the final location is determined. See note 14 on CD-101.

.4 That the comprehensive site plan addresses each of the environmental and development standards below:

a). A landfill which would be larger than 10 acres shall be accessed from a major or minor thoroughfare or from a street built to commercial street standards that connects directly to a major or minor thoroughfare. Landfills 10 acres or less must directly connect to a major or minor thoroughfare, or to a non-residential collector or non-residential local street where available. However, if such thoroughfares or streets are not reasonably available, the Board may nevertheless issue a special use permit upon finding that the use for which the permit is granted would not likely cause any injurious effect on the property adjacent to the access.

GWS shall relocate their main access from Holbrook Road to the future Verhoff/Asbury Chapel Extension as soon as available but no later than 2034. GWS will reserve a right-of-way through their property for the future connector road from the Verhoff extension to Asbury Chapel extension.

Additionally:

GWS will pay for Holbrooks borings per DOT's request

GWS will pay for extending Holbrooks shoulders and a new overlay for 300 feet West of GWS' entrance

GWS will extend the \$25,000 donation to the Town of Huntersville for improvements to Holbrooks Road for as long as GWS customers use Holbrooks Road.

GWS agrees to reassess Holbrooks Road's condition in conjunction with the town and DOT during 2025 (halfway mark for GWS' commitment to stop using Holbrooks). GWS agrees to contribute an additional amount to the maintenance of Holbrooks if the Town and DOT deem necessary.

b). That the proposed or existing use will be in compliance with the rules and regulations as established by the Traffic Impact Analysis (TIA) Article 14.

A Traffic Impact Analysis was not deemed necessary.

c). Neither clearing, grading, land disturbing activities nor any portion of a C&D or LCID landfill may be located within 100 feet of any exterior property line. Further, the buffer requirements for the site are required per the state permitting criteria. The requirements stated



below take precedence over any and all modification made by the state unless the state standards become more restrictive.

500-foot buffer from existing residential water supply wells to fill area.

200-foot buffer from adjacent property to fill area.

No fill in designated wetlands or the FEMA and/or Community Special Flood Hazard Areas.

50-foot buffer from delineated streams.

50-foot buffer from road right-of-way to fill area (non-state requirement).

The site is in compliance with all criteria in this section.

d). Driveway access to the facility must be paved for a distance of at least 100' from the public street.

Driveway access to the facility is paved at least 100' from the public street. See "f" below

e). Vehicular and pedestrian access to the site must be controlled; the site must be closed and secured during hours when filling activities are not under way. A non-climbable fence, at least 6' high, shall be installed around the landfill and all of its operations as a safety device. These fences must be constructed of wire mesh with openings not to exceed 2 inches by 4 inches or equivalent and must be placed on the interior side of screening/buffering devices.

See site plan CD 100 for existing and proposed fencing around the recycling facility. The active landfill area has a security fence. The applicant is seeking relief from the fencing requirement for the closed fill area that is inaccessible.

"GWS agrees to begin installation of fence within 90 days of any development on the parcels east or west of GWS. GWS also agrees to begin installation of fence within 90 days of construction of future Bikeway/Greenway/Carolina Thread Trail passing through GWS property."

f). All driveways which serve the site must be wide enough to accommodate two-way traffic for a distance of at least 100' from the public street so that no traffic waiting to enter the site will be backed up on any public right-of-way.

The driveway is about 48' wide serving both ingress and egress for about 65 feet. From that point ingress only continues to the scalehouse for about 125 feet for a total of 185 feet of paved driveway. The scalehouse separates ingress and egress providing two way traffic. Egress is paved for approximately 125 feet from Holbrooks Road.

.5 That the landfill operator will be responsible for removal of any and all debris, dirt, or other materials which fall from trucks entering or leaving the landfill from all adjoining streets on at least a weekly basis. Failure to comply constitutes a violation of this ordinance and may constitute grounds for revocation of the operating permit.

Since inception we have taken pride in keeping the roadways clean. This process starts on site where we provide a well groomed tipping floor for our customers. From there we maintain gravel roads to remove dirt from tires. Lastly, the site operators commit to routinely wash the street with a specialized truck designed to remove dirt or mud at least once per week or more frequently if needed. Debris and litter on Holbrooks Road will be picked up at least once per week or more frequently if needed. This includes debris that is not related to our facility. We plan to continue to exceed section 6.5 of the Franchise



Agreement with the Town of Huntersville that states that we must pick up debris from our customers vehicles.

An added benefit of the MRF is that all trucks will be tipping their loads on a concrete floor further eliminating dirt falling from trucks.

.6 That the use of the site for any purpose shall be limited to the hours of 7:00 a.m. until 6:00 p.m. Monday through Saturday, if the site adjoins or is across the street from property located in a residential district.

The use of the site is limited to the hours of 7:00AM until 6:00PM, Monday through Friday and 7:00AM until 12:00PM on Saturday.

.7 That a timetable has been submitted with the application indicating the development phases and the projected life expectancy of the landfill.

Based on current waste acceptance rates and anticipated recycling rates we project a life of over 20 years.

.8 That a reclamation plan is provided that shows how the site will be reclaimed upon the closing of the landfill. The reclamation plan shall state the proposed method of conservatorship and perpetual maintenance or use. It shall demonstrate that the site, when closed, will pose no threat to public safety; that the finished contours and groundcover will reestablish a compatible appearance with surrounding lands and buildings; and that the method of maintenance or use will cause no future environmental degradation.

See attached Infill Expansion Closure Plan and drawing

.9 An existing LCID landfill shall not be required to be brought into compliance with the provisions of this ordinance provided:

This not applicable to this site.

a). The landfill has been continuously operating since 1990 and was not within the zoning jurisdiction of the Town of Huntersville in 1991;

b). The landfill has a valid LCID or demolition landfill permit and/or obtains any renewals of the LCID or demolition landfill permit required by the State of North Carolina and/or Mecklenburg County;

c). The landfill has a closure plan approved by the State of North Carolina and/or Mecklenburg County; and

d). In no event shall the landfill operate under a LCID or demolition landfill permit later than December 4, 2016 and further provided that on the earlier of the final date permitted for operation of the landfill or the date the landfill permanently ceases operation, the owner and/or operator of the landfill shall immediately commence and continuously pursue to completion closure of the landfill according to the provisions of the then current closure plan approved by the State of North Carolina and/or Mecklenburg County. Failure to complete closure according to such approved plan shall be a violation of this ordinance enforceable by all remedies and penalties available to the Town.



.10 Any existing C&D landfill shall be permitted to continue operation in the zone in which it is located provided the landfill has an unexpired special use permit. Any expansion beyond the property boundary of an existing C&D landfill as approved on November 11, 2005 must be located in the SP district with a special use permit in accordance with the provisions of this Section.

Exhibit#3-2016 Email Withdrawing Variance 16-02

From: [Mike Griffin](#)
To: [Meredith Nesbitt](#)
Cc: [Bradley Priest](#); [Jackie Drummond](#); [Jason Watkins](#); [Jack Simoneau](#); [John Brown](#); [Butch Joyce](#); [Mousa A. Maimoun](#)
Subject: Variance Application Withdrawal
Date: Saturday, September 10, 2016 4:55:57 PM

Meredith,

Per our meetings this week, I think it's best we withdrawal or variance applications. We will continue to pursue our rezoning & PUD for our site and for our proposed recycle center. We really appreciate your assistance and look forward to revisiting this opportunity after we make more progress with DEQ.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 7, 2016, at 4:05 PM, Meredith Nesbitt <mnesbitt@huntersville.org> wrote:

All,

Click [here](#) for the Board of Adjustment meeting schedule. It includes an agenda and the staff reports for each of the cases scheduled. Please let me know if you have any questions or trouble accessing the reports.

Mike,

Let us know how your meeting goes tomorrow. We will decided what needs to happen from there. Looks like schedules are clear for Friday, early afternoon but I will confirm with Brad and Jack after we hear from you about your meeting with Ed.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]
Sent: Wednesday, September 07, 2016 12:19 PM
To: Meredith Nesbitt <mnesbitt@huntersville.org>
Cc: Bradley Priest <bpriest@huntersville.org>; Jackie Drummond <jaclynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>
Subject: Re: Aug 17th follow-up

Meredith,

Thank you for your reply and input. I would like to ask for a continuance instead of withdrawal at this time. We have a meeting tomorrow morning with Ed Mussler, NC DEQ's Division of Waste Management - Solid Waste Manager, to address the concerns you have detailed. Are y'all available to meet this Friday or Tuesday to discuss the results of this meeting? It may be that we need to pull the applications but I want to exhaust all options due to our fairly tight timeline that I discussed in my earlier email.

Best regards,

Mike

Mike Griffin | Griffin Brothers Companies
19109 W Catawba Ave. Cornelius, NC 28031-5611
MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies

On Sep 2, 2016, at 5:46 PM, Meredith Nesbitt
<mnesbitt@huntersville.org> wrote:

Mike,

Staff has reviewed and discussed the information you provided. At this time, we are still not able to reach a supporting recommendation for the floodplain variance. We appreciate the information submitted but we do not believe it qualifies as finding of fact to satisfy the findings below. In addition, the letter specifically mentions the revenue lost as an applicable hardship. However, section 151.46(B) states that specifically is not a reason for granting a variance. Therefore, with this in mind we still find deficiency in the following criteria for the floodplain variance:

- Section 151.44 Factors For Conditions and Determination of Completeness
 - o (6) Availability of alternative locations, not subject to flooding or erosion damage during a community base

flood, for the proposed use

- Section 151.45 Conditions for Variances
 - o *(C) Variances shall only be issues upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*

- Section 151.46 Standards for Granting a Variance
 - o *(A)(2) A determination that failure to grant the variance would result in exceptional hardship*

 - o *(B)The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance*

- Section 151.47 Miscellaneous Conditions
 - o *(B)(1) No feasible location exist for the use outside the Special Flood Hazard Area*
outside of the floodplain to fill and this criteria is not satisfied.

Additionally, the information concerning the contamination of the site provided to us by NCDEQ is finding of fact in relation to all the variance requests. Therefore, with that new information, staff finds the SWIM buffer and Article 9.23 variance request criteria potentially deficient in the following:

(4) The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

At our August 17 meeting, it was discussed that in response to the information provided to us by DEQ you would follow up with them to obtain a letter or other finding of fact in relation to the benefit and appropriateness of your project even with the contamination issue being outstanding. The information you provide below, though helpful, still does not provide a finding of fact that the contamination issue is not a detriment to public health. What you proposed is to ask for approval with the assumption that permitting from DEQ will be approved. That does not address the concern we have received from DEQ in regard to the proposed project. Therefore, Staff is uncomfortable recommending approval for the SWIM Buffer and Article 9.23 variance request with the unknowns surrounding the surface and groundwater contamination. We would request more evidence and finding of fact.

At this point, we feel it would be beneficial if the applications were withdrawn until a remediation plan can be approved by NCDEQ. That

would provide an excellent finding of fact to address that requirement. This principle would also be true for the rezoning and special use permit, if it were to include the additional fill area. However, this is not a requirement, we could move forward with all the applications. Although, if we do move forward, it would be staff's recommendation that more findings of fact be submitted to address the contamination issue prior to any approvals.

We will be glad to discuss this information in more detail – however, please note Town offices are closed Monday, September 5th for Labor Day.

Thank you!

Best regards,

Meredith M. Nesbitt, MSc. Urban Planning

Planner I

Town of Huntersville

Office: (704) 766-2298

mnesbitt@huntersville.org

From: Mike Griffin [<mailto:griffclt@me.com>]

Sent: Wednesday, August 31, 2016 3:19 PM

To: Meredith Nesbitt <mnesbitt@huntersville.org>; Bradley Priest <bpriest@huntersville.org>

Cc: Jackie Drummond <jacklynne.drummond@ncdenr.gov>; Jason Watkins <jason.watkins@ncdenr.gov>; Jack Simoneau <jsimoneau@huntersville.org>; John Brown <jdbrown@griffinbrothers.com>; Butch Joyce <ljoyce@joyceengineering.com>; Mousa A. Maimoun <mmaimoun@joyceengineering.com>

Subject: Aug 17th follow-up

Meredith & Brad,

Per the discussions from our Aug 17th meeting, we met this Monday with DEQ's Jason Watkins and Jackie Drummond who I have copied. We had a discussion that I think covered every aspect of our efforts to seek Huntersville's conditional approvals for a new lined landfill expansion and C&D MRF. We also reviewed and discussed the status of the ongoing assessment of groundwater and buffer issues specific to the older portions of our facility.

The pending buffer issue will be resolved before we present to the

Planning Board meeting scheduled for September 27th. This could have been resolved over a year ago had I understood that we could recombine Bill Hammill's acre into our parcel without going through the pending rezoning and SUP. I got hung up on the fact that the Hammill parcel is outside the Town limits and that we were trying to recombine it into a parcel inside the Town. This is my fault for not better understanding the process.

The groundwater issue has a longer timeline with greater complexity.

We are working with our consultants and DEQ in the assessment phase which will eventually roll into remediation. We have always assumed that DEQ will only issue a permit for the new landfill expansion after a remediation plan is in process or completed. We've also assumed that any Town approvals would be conditioned on DEQ approvals so we didn't see how the groundwater issue would inhibit us from seeking conditional approvals from the Town.

In reading Article 9.23.2, 'The proposed use will not endanger the public health and safety, nor substantially reduce the value of nearby property,' we're convinced that our proposed new landfill expansion is in accordance with this article and will most likely lessen the chances of the older portions of our facility from being inconsistent with this Article. The proposed expansion will be lined to include a leachate collection system plus we are proposing to install a synthetic cap on the closed portions of our site to better divert water from these closed areas.

We would normally complete the DEQ assessment and remediation phases before starting this process but these processes will take multiple years and we have diminishing airspace that requires us to pursue them concurrently. Note that the previous Gantt Chart schedule shared with the Town always started with Task 2. Per the attached Gantt Chart, Task 1 is the compliance process specific to remediating the groundwater issues to DEQ standards. We intentionally omitted the first task being it is not pertinent to the Town's conditional approvals and it would only add confusion to an already complex request.

I really don't feel this is pertinent to our pending requests but I'd be glad to describe the extensive work that has transpired since the first groundwater exceedance in 2013. We look forward to your feedback on our consistency statement with 9.23.2. This discussion is specific to the rezoning and SUP whereas we know the most urgent matter is addressing the staff findings for the BOA meeting scheduled for September 13th. We will continue to tweak our plans and comments specific to the rezoning and SUP and present this to all in the coming days. Jason Watkins gave us a solid suggestion in that we should consider permitting the C&D MRF in a parcel separate from the landfill parcel. John and I will quickly inquire with DEQ's permitting folks to discuss the merits on their end.

John and I have had several conversations with Butch Joyce and Dr. Mousa Maimoun with Joyce Engineering specific to staff not supporting our request to pipe and fill the Special Flood Hazard Area.

Per the attached letter from Butch, the inability to fill this area kills the proposed landfill expansion. Ironically, Butch also highlights how the redesign around the Special Flood Hazard Area decreases our site's environmental compliance quality. We feel these factors make it clear that the piping and filling of this very small area should be supported by the staff. We also feel staff's support is extremely important and will ask for a continuance or withdraw if there needs to be more time for consideration.

Following are our proposed conditions in order to seek staff and BOA support:

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers & NC DEQ Water Quality
4. Approval of groundwater remediation plan by NCDEQ
5. Approval of NCDEQ Solid Waste Permit specific to the proposed expansion
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, and will not reduce the value of nearby property.
8. The additional synthetic capping of older closed areas will further enhance public health and safety, and will not reduce the value of nearby property.

Please feel free to add anything we missed. We have stated many times that this process should be properly conditioned in recognition that the complex engineering and design submittals to the various government agencies will start after the Town's approval. We will add the final conditions list on our letterhead after your input.

In summary, we're trying to get the conceptual vision approved by the town before the more technical work is required. I really appreciate everyone's considerable efforts to enhance our applications. The complexities of these concurrent processes can easily create misunderstandings which I hope we have cleared up over the last couple weeks. We look forward to your feedback.

Best regards,

Mike

cc: Jackie Drummond
Jason Watkins
Jack Simoneau
John Brown
Butch Joyce
Mousa Maimoun

Mike Griffin | Griffin Brothers Companies

19109 W Catawba Ave. Cornelius, NC 28031-5611

MB 704.533.5781 | mike@griffinbrothers.com | griffclt@me.com
griffinbrothers.com/companies



Variance Application

Date of Application: 7/1/21

Property/Building Address: 15300 Holbrooks Road Parcel Size (ac): 121.040

Tax Parcel ID (PIN) Number(s): 01910102

Text of Ordinance to be varied

Ordinance: Flood Plain Ordinance Article: 151.60 Section: 29(A)(10)

Submittal Requirements and Procedure

The following must be submitted with the completed application (signed and dated by the property owner and/or applicant):

- One (1) hard copy and one (1) electronic copy of any applicable map(s), site plans, exhibits, and applications showing exact location of property with respect to existing streets, adjoining lots and other important features on or contiguous to the property. Also, include any maps and/or illustrations (to scale), which are necessary to show the location, number and size of buildings, signs, etc., on the property.
- A list of names, addresses and tax parcel identification numbers of properties that abut the site, are across the street from the site or are otherwise within one hundred feet (100') of the site. (Electronic format preferred)
- Review Fee (Please check most recent version of Fee Schedule for applicable Variance Review Fee)
- See the current Board of Adjustment Submittal Deadlines and Meeting Schedule for filing deadlines and meeting dates
- Please submit your complete application and fee by **noon the day filing deadline**

Notifications Requirements

Planning Staff will be required to notify in writing each adjoining property owner.

Planning Staff will also be required, if you are seeking a variance from the requirements of the Mountain Island Lake or Lake Norman Watershed Overlay Districts, to notify in writing each local government having jurisdiction in the watershed and the entity using the water supply for consumption as follows:

- * Mountain Island Lake Watershed Overlay. Local governments having jurisdiction in the watershed: Charlotte Mecklenburg, Cornelius and Huntersville. Entities using the water supply for consumption: Mecklenburg County, Gastonia and Mount Holly.
- * Lake Norman Watershed Overlay. Local governments having jurisdiction in the watershed: Davidson, Cornelius and Huntersville. Entities using the water supply for consumption: Mooresville, Mecklenburg County and Lincoln County.

Variance Requirements

STANDARDS FOR GRANTING A VARIANCE (Article 11.3.2.e.):

When unnecessary hardships would result from carrying out the strict letter of a zoning ordinance, the Board of Adjustment shall vary any of the provisions of the ordinance upon a showing of all the following:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
4. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

Appropriate conditions, which must be reasonably related to the condition or circumstance that gives rise to the need for a variance, may be imposed by the Board (Article 11.3.1.e.).

In the following spaces, indicate **FACTS** that demonstrate to the Board of Adjustment you meet all the standards for granting a variance:

1. Unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property. The difficulty or hardship would result only from these regulations and from no other cause, including the actions of the owner or previous owners of the property.

See Attached

2. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. The difficulty or hardship is peculiar to the property and is not generally shared by other properties classified in the same zoning district and/or use for the same purpose.

See Attached

3. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.

See Attached

4. The public safety and general welfare have been protected and substantial justice done.

See Attached

Applicant

Printed Name Greenway Waste Solutions at North Meck, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☒ By signature below, I hereby acknowledge, as/on behalf of (circle one) the applicant my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Chief Operating Officer Applicant Phone 919-795-0599

Applicant Email jdbrown@griffinbros.com

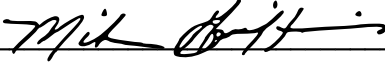
Address of Applicant 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

Property Owner (if different than applicant)

* Printed Name C&D Management Company, LLC Phone 919-795-0599

☐ Corporation ☒ Limited Liability Company ☐ Trust ☐ Partnership ☐ Other: _____

☐ By signature below, I hereby acknowledge, as/on behalf of (circle one) the owner my understanding this application will be considered in a quasi-judicial proceeding and that neither I, nor anyone on my behalf, may contact the Board of Commissioners except through sworn testimony at the public hearing. (Applicable if box is checked)

Signature  Date 7/1/21

Title Manager Applicant Phone 704-533-5781

Applicant Email mike@griffinbros.com

Address of Property Owner 19109 West Catawba Ave., Ste 101, Cornelius, NC 28031

* Property owner hereby grants permission to the Town of Huntersville personnel to enter the subject property for any purpose required in processing this application.

Every owner of each parcel included in this application, or the owner (s) duly authorized agent, must sign this application. If signed by an agent on behalf of the Owner, this petition MUST be accompanied by a Limited Power of Attorney signed by the property owner (s) and notarized, specifically authorizing the agent to act on the owner (s) behalf in signing this application. Failure of each owner, or their duly authorized agent, to sign, or failure to include the authority of the agent signed by the property owner, will result in an INVALID APPLICATION. **If additional space is needed for signatures, attach the Town of Huntersville Signature Addendum Form.**

Contact Information

Town of Huntersville Phone: 704-875-7000
Planning Department Fax: 704-875-6546
PO Box 664 Physical Address: 105 Gilead Road, Third Floor, Huntersville, NC 28078
Huntersville, NC 28070 Website: <https://www.huntersville.org/228/Planning-Department>

Received By Planning Department Staff: _____

Staff Initials: _____

List of adjacent property owners (for variance)
-within 100ft

- 01930104 Arnold W. Johnston 12300 Old Statesville Road Huntersville, NC 28078
- 01930105 Linda Wester Long 7910 Golf Course Dr N Denver NC 28037
- 01934105 Michael and Tracy Tinsley 11737 Trails End Lane Huntersville NC 28078
- 01934118 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031 (Trails End Holdings LLC)
- 01934108 William and Campbell Hammill 11745 Trails End Ln Huntersville NC 28078
- 01918135, 01918167, 01918166, 01934119, 01910116 Greenway Waste Solutions LLC 19109 W. Catawba Ave Ste 110 Cornelius, NC 28031
- 01919102, 01919105, 01919106, 01937103, 01937199, 01919121 Mecklenburg County 600 E4th Street 11th floor Charlotte NC 28202
- 01937280, 01937286- Southside Neighborhood LLC (w/in 100' of MRF parcel)

5/28/21

Mr. Bradley Priest
Town of Huntersville Planning Department
P.O. Box 664
Huntersville, North Carolina 28070

**RE: Variance to Ordinance; the Floodplain Regulations of Huntersville, NC
Greenway Waste Solutions, LLC
North Meck Landfill**

Dear Mr. Priest:

On behalf of Greenway Waste Solutions (GWS), LaBella is requesting a conditional approval of a variance from the Floodplain Regulations of Huntersville, North Carolina for the North Meck Construction and Demolition(C&D) Landfill.

As background, GWS is proposing to expand the North Meck Landfill by filling within a synthetically lined enclosure in the valley between the two existing landfills that will also be synthetically capped. The filling of the valley is intended to maximize waste disposal within the limits of the property (parcel) without expanding the waste footprint toward neighboring parcels. Please note that GWS has exhausted all other areas available onsite, outside of the floodplain area, to develop the landfill. However, the local and State buffer requirements consume the majority of the available area outside of the floodplain area, leaving the infill expansion of the valley the only viable option available to GWS. The development of the floodplain area is critical for the expansion in terms of increasing the life of landfill, which benefits local commercial and residential development and the Town of Huntersville, as well as minimizing the environmental impact of the project.

The NC Department of Environmental Quality agrees that the design of the landfill expansion is more protective of human health and the environment than what is required by NC solid waste regulations.

The North Meck Landfill is classified by NCDEQ as a Construction & Demolition waste landfill. The Landfill does not accept municipal solid waste, which is waste collected from households and commercial businesses. The NCDEQ solid waste regulations do not require that this landfill be constructed with an engineered liner system in the bottom of the landfill. Also, the same regulations do not require an engineered final cover on this landfill. However, GWS will install a composite liner system over the entire infill area. The liner will effectively serve as a low permeability cap for the existing areas of C&D waste and as a bottom liner for new C&D waste. The presence of this liner and cap will minimize impacts to the environment from the landfilling activities, thereby being more protective of human health and the environment than a standard, unlined C&D landfill.
(see Attachment 1).

The Catawba and Yadkin Riverkeepers are in support of the landfill expansion project. Based on inspections they performed of the facility, both Riverkeepers believe that installing a liner system over the entire infill area, which also serves as a landfill cap for the existing landfill areas, and piping the Unnamed Tributary that currently flows between the two landfill areas would be in the best interest of current and future water quality
(see Attachment 2).

Surface water management at the landfill will provide maximum protection of the surface water resources around the landfill. These features will be designed, constructed and maintained in a manner that separates surface water from the waste disposal areas via run on- run off control features thus minimizing impacts to the Yadkin River basin.

Helps Town of Huntersville with growth. The franchise for the landfill was recently approved by the Town of Huntersville. In the approval, the Town acknowledged that the North Meck Landfill is an asset to the Town. Therefore, the expansion, which will extend the life of the facility and its availability to support the residential and commercial development activities in the Town, benefits the Town.

Minimizes Town's carbon footprint. If the landfill expansion does not occur, then construction waste generated in the Town will need to be hauled to surrounding landfills, increasing emissions of carbon dioxide by the trucks used to haul the material a farther distance. The landfill expansion contributes towards minimizing the Town's and northern Mecklenburg County's carbon footprint.

Avoid using undeveloped property as a landfill. The ability to increase the life of the North Mecklenburg Landfill without increasing the landfill footprint beyond its existing boundary, means that a greenfield site will not have to be converted into a landfill. The North Meck Landfill already exists. Since the infill expansion will be protective of human health and the environment as supported by NCDEQ and the Riverkeepers, then maximizing its capacity only benefits the Town of Huntersville.

Downstream flooding is not a concern. In our professional opinion, the proposed landfill development in the floodplain of this unnamed tributary to Cane Creek will be negligible. All state and federal permits from this proposed activity will be secured by providing the appropriate engineering designs and permits for these activities. . The landfill expansion will be designed to have a neutral impact to the floodplain storage area.

A conditional approval of this Variance by Town of Huntersville can be contingent on conducting an environmental study in the future and the approval of other State and Federal Agencies. The environmental study will provide factual evidence, and it will be presented to the State and Federal Agencies as well as the Town of Huntersville and signed off on by a Professional Engineer. The following are some of the proposed design parameters that will be considered to minimize the impact of the project:

- On-site stormwater and sediment control basins will be designed to handle the run-off from all developed areas on the GWS property. The basin(s) will be designed to handle the 25-year, 24-hour storm as required by NC DEQ;
- Off-site stormwater and sediment control basin(s) will be designed to handle the run-off from the neighboring Commerce Station that typically flows through the intermittent (or ephemeral) stream to be piped. GWS is currently negotiating the location of the basin(s) with neighboring owners and developers; and
- The stream will be piped using oversized culverts. These oversized culverts will be able to handle some (all?) of the rising water during a 100-year storm, therefore acting as a flood storage area.

At this time, GWS is seeking your conditional approval of this Variance. The infill landfill expansion area is in the fringe and not the floodway, therefore the Federal Emergency Management Agency (FEMA) will not require GWS to conduct a no-rise study. However, NCDEQ Solid Waste Section will require a variance to fill in the floodplain prior to issuing a Permit to Construct for the proposed expansion. According to NC DEQ Rules: "A C&D landfill must not be located in a 100-year floodplain unless a variance for the facility has been issued in accordance with G.S. 143-215.54A."

Respectfully submitted,

LaBella Associates

A handwritten signature in blue ink, appearing to read 'LEJ', with a long horizontal flourish extending to the right.

Leonard Joyce, PE
VP and Principal



Conditions for Approval of Variances June 6, 2021

Greenway Waste Solutions is requesting approval of the following variances:

Article 8.25.5 S.W.I.M. Stream Buffers Minimum Buffer Widths

Floodplain Ordinance Section 151.60(A)(10)

Article 9.23.4.c Off Site Landfill Clearing and Inert Debris (LCID) and Construction and Demolition (C&D) Landfills

The approval of the aforementioned variances is subject to the following conditions

1. Approval of a SWIM Buffer Mitigation Plan by Mecklenburg County Stormwater Services
2. Approval of a Floodplain Development Permit issued by Mecklenburg County
3. Approval of a 404-401 Stream Mitigation Plan approved by US Army Corp of Engineers
4. Approval of NCDEQ Solid Waste Permit
5. Approval of all Town/County/State building permit related activities
6. Pipe the creek inside the +/- .87 acre Special Flood Hazard Area with the overall condition that the floodway management plan will be improved
7. The proposed lined and capped landfill expansion will be engineered to DEQ's most current standards in order to further enhance public health and safety, nor reduce the value of nearby property as compared to past North Carolina standards.
8. Condition that the aforementioned expansion and additional synthetic capping of older closed areas will further enhance public health and safety, nor reduce the value of nearby property specific to areas currently operating or previously closed.



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head





Mr. Griffin,

Thank you for contacting the Catawba and Yadkin Riverkeepers concerning the possible future expansion of the North Meck C&D landfill at 15300 Holbrooks Road Huntersville, NC 28078. As we understand it, this project would involve the piping of approximately 1750 ft of perennial waters and the placement of impervious landfill liners over the existing C&D fills and newly buried stream.

Riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. In general, we are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 locations, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.

This nonintuitive recommendation is due to:

1. High levels of iron oxidizing bacteria and elevated conductivity indicate that groundwater from the unlined landfills is currently negatively impacting the UT.
2. Although not assessed by the NC biological assessment branch, our initial measurements indicate that this stream likely would be listed as impaired for biota. The 303d system is poorly suited to address impairment from nonpoint groundwater sources.
3. Covering the existing landfills will minimize or eliminate the infiltration of precipitation through the unlined fills and prevent leachate from entering Cane Creek.
4. Water monitoring and reporting on the unlined fills will end after 30 years. By constructing a new site on top, monitoring will be extended.
5. Siting a landfill at a new location will cause impacts to an additional part of the watershed.

This recommendation is based on several assumptions, if any of these are invalid then our support is withdrawn until further examination.

1. A new landfill must be built. The Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
2. Groundwater and surface water will continue to be monitored (and remediated if necessary) for the entire site.
3. Runoff from the entire site will be captured and treated before discharging.
4. The current landfills will remain uncapped (pervious) if a new landfill is not sited on top.

Please let us know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Fannon".

Brian Fannon, Yadkin Riverkeeper

A handwritten signature in black ink, appearing to read "Brandon Jones".

Brandon Jones, Catawba RIVERKEEPER®

(10) Construction of new solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities shall not be permitted except by variance in a Special Flood Hazard Area. A structure or tank for chemical or fuel storage is not allowed to an allowed use or to the operation of a water treatment plant or wastewater treatment facility may be located in a Special Flood Hazard Area only if the structure or tank is either elevated above the community base flood elevation or designed to be water tight with walls substantially impenetrable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy:

The applicant is seeking this variance in order to fill within a floodplain. Additionally, the applicant is seeking other variances in order to pipe the water feature that is running through the site. Upon approval by the Town of Huntersville, North Carolina Department of Environmental Quality Solid Waste Division, Army Corps of Engineers and receiving a floodplain development permit from the County the applicant will install a permanent storm water management system. This system is depicted in Exhibit A.

151.44 Factors for consideration and determination of completeness

A. In passing upon variances, the Board of Adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this chapter, and the:

- 1) *Danger that materials allowed to be placed in the floodway as a result of the variance may be swept onto other lands to the injury of others during a community base flood;*
 - a) The redundant pipes and designed based grade elevation above the floodway level will prevent any material from being placed within floodway. The floodway area that the pipes will replace will house the same volume of water that would have occupied the floodway in the event of a flood. This design eliminates the ability of water to touch material and thus eliminates the ability for the material to be swept onto other lands to the injury of others during a community base flood. Additionally, permanent storm water basins will be placed on either end of the pipes to better manage water velocity downstream. Exhibit A depicts the storm water management system and details the criteria by which it was designed. Charlotte-Mecklenburg Storm Water Services supplied this criterion. Exhibit B shows a cross section example of another pipe the applicant has installed at this location on another section of the property. The redundant pipes encased in concrete ensure that water travels safely through the site and only makes contact with the pipe. Exhibit C is a screenshot of a video taken from a pipe inspection at the landfill. Inspections are done routinely to document the integrity of the pipe and ensure there is no blockage. Similar inspections will take place for the proposed pipe.
- 2) *Danger to life and property due to flooding or erosion damage from a community base flood;*
 - a) The piping of the floodway will not allow erosion as water will be encased in the pipe. The storm water management system proposed will have the necessary capacity to safely handle water in a community base flood scenario. The proposed pipe and storm water basin system will prevent this change to the existing stream from having an adverse impact up and down stream as a result of its capacity to properly handle storm water. Further detail can be seen in Exhibit A as to how the storm water system will adequately handle a community base flood.

3) *Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage during the community base flood;*

- a) The proposed facility will be able to adequately handle a community base flood. The redundant concrete encased pipes will be engineered to the standards of NC Department of Environmental Quality and Army Corps of Engineers, to withstand a community base flood. Further, the pipes and storm water system will decrease the potential for damage up and down stream as a result of its ability to process the storm water. Further detail can be seen in Exhibit A as to how the storm water system will adequately handle a community base flood.

4) *Importance of the services provided by the proposed facility to the community;*

- a) The services offered by the proposed facility are very important to the community. The continued ability to accept construction and demolition debris has been and will continue to be a benefit to the community. The facility allows for the community to continue growing, as the debris generated by growth has to be processed somewhere. The closer the facility is to the path of development the more economical development is, saving money for the community and sustaining growth. Exhibit D is a map showing proximity to other C&D locations and Exhibit E shows the routes which would experience an increase in truck traffic without the facility. The facility decreases the number of truck miles traveled. If this facility were to shut down there would be an estimated 725,000 additional truck miles on the community's roads each year. This is a result of the longer trips trucks would have to take to fill the void left by this facility. An increase in truck miles would also increase the amount of carbon-dioxide output in the community each year.

5) *Necessity to the facility of a waterfront location, where applicable;*

- a) Not applicable.

6) *Availability of alternative locations, not subject to flooding or erosion damageduring a community base flood, for the proposed use;*

- a) There are no other areas on this site, outside of the flood area, to develop. Please refer to Exhibit A to see existing landfill areas and property lines. The applicant has exhausted all other areas on site to operate. The applicant is seeking two other variances in order complete this project. It is in the best interest of the community to keep the existing facilities operating as long as possible in its current location. (See Exhibit F)

7) *Compatibility of the proposed use with existing and anticipated development;*

- a) This proposed use is compatible with the existing use as the site is

already being used for this purpose. Additionally, our neighbors are a closed county municipal solid waste landfill, the future industrial park, Commerce Station, county owned land and land also owned by the applicant. The anticipated development options are limited to this use and are thus compatible.

- 8) *Relationship of the proposed use to the Mecklenburg County Floodplain Management Guidance Document, Mecklenburg County Flood Hazard Mitigation Plans, the Mecklenburg County Greenway Plan, and any other adopted land use plans for that area;*
 - a) The proposed is consistent with the Mecklenburg County Floodplain Management Guidance Documents, Mecklenburg County Flood Hazard Mitigation Plans, the Mecklenburg County Greenway Plan and the local area plans. This site is specifically not within the scope of the East Huntersville Small Area plan.
- 9) *Safety of access to the property in times of a community base flood for ordinary and emergency vehicles;*
 - a) There are existing and established service roads that would allow access to the property in a time of community base flood or emergency. Access will be available during a community flood as a result of the flood area being piped and covered.
- 10) *Expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters during a community base flood expected at the site; and*
 - a) The exact heights, velocity, duration and rate of rise and sediment transport at the site are undetermined at this point. The storm water management system will account for all of this in order to be approved by the County. The County will also provide guidance as to the levels to which the system is built. The pipes will eliminate contact between soil and the water, eliminating risk of sediment transportation as it passes through the site. The volume of the pipe will be able to accommodate the heights, velocity, duration and rate of rise caused by a community base flood.
- 11) *Costs of providing governmental services during and after flood events, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water systems and streets and bridges.*
 - a) The gas pipeline that runs through the property is not in the floodplain and therefore, will not be impacted in any way as a result of this variance.
 - b) There will be no additional costs of providing governmental services as a result of this project.

151.45 Conditions for variances.

A. *Variances shall not be issued when the variance will make the structure in violation of*

other federal, state, or local laws, regulations, or ordinances.

- a. The applicant will seek approval from NC Department of Environmental Quality Solid Waste Division, the Army Corps of Engineers and will be required to receive a floodplain development permit from Mecklenburg County.
- B. *Variances shall not be issued within any designated floodway if the variance would result in any increase in flood levels during the community and/or FEMA base flood discharge unless the requirements of § 151.61(A)(6) are met.*
 - a. Approval of this variance will not result in an increase in flood levels. As depicted in Exhibit A the storm water management system that will be built to the County's standards will have adequate capacity.
- C. *Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.*
 - a. Through multiple meetings with the Town of Huntersville and Mecklenburg County it has been determined that the variance is the minimum necessary to afford relief.
- D. *Variances shall only be issued prior to approval of a floodplain development permit.*
 - a. A floodplain development permit has not been approved but will be required and submitted before implementation of the plan.

151.46 Standards for granting variance.

A. *Variances shall only be issued upon:*

- 1) *A showing of good and sufficient cause;*
 - i. The services offered by the proposed facility are very important to the community. The continued ability to accept construction and demolition debris has been and will continue to be a benefit to the community. The facility allows the community to continue growing, as the debris generated by growth has to be processed somewhere. The closer the facility is to the path of development the more economical development is, saving money for the community and sustaining growth. Exhibit D is a map showing proximity to other C&D landfills and Exhibit E shows the routes which would experience an increase in truck traffic without the facility. The facility decreases the number of truck miles traveled. If this facility were to shut down there would be an estimated 725,000 additional truck miles on the community's roads each year. This is a result of the longer trips trucks would have to take to fill the void left by this facility. An increase in truck miles would also increase the amount of carbon-dioxide output in the community each year.
- 2) *A determination that failure to grant the variance would result in exceptional hardship; and*

- i. Failure to grant this variance would result in an exceptional hardship for the applicant and the community this facility serves. The approval of two other variances is contingent on the approval of this variance. Additionally, the approval of all three eliminates the hardship, and disapproval would deny the applicant the ability to seek approval from the State and Army Corps. The inability to fill within this area ultimately prohibits the applicant from piping the remainder of the creek. A variance for this has also been requested.
 - 3) *A determination that the granting of a variance will not result in increased flood heights (unless the requirements of § 151.61(A)(6) are met), additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with other existing local laws or ordinances.*
 - i. The applicant will satisfy the criteria set forth by Mecklenburg County Storm Water when engineering the storm water management system that this variance will allow. Additionally, there are further applications at a local, state and federal level that will be required before work can begin.
- B. *The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance.*
 - 1. By denying a variance to fill over the floodway, the project becomes financially infeasible. (See Exhibit F)

151.47 Miscellaneous conditions.

- A. *In addition to consideration of the items in § 151.44(A), if dryland access cannot be obtained, a variance to the requirement for dryland access may be granted by the Board of Adjustment upon consideration of the following conditions:*
 - 1) *A determination that all possible alternatives have been investigated in an attempt to provide the safest access from a proposed habitable building to a dry public street.*
 - i. Not applicable.
 - 2) *The existence of a site plan prepared by a licensed land surveyor or professional engineers indicating that the proposed access to habitable buildings on the property poses the least risk from flooding.*
 - i. Not applicable.
- B. *In addition to consideration of the items in § 151.44(A), a variance may be issued by the Board of Adjustment for solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in Special Flood Hazard Areas provided that all of the following criteria are met:*
 - 1) *The use serves a critical need in the community.*
 - i. The services offered by the proposed facility are very important to the community. The continued ability to accept construction and

demolition debris has been and will continue to be a benefit to the community. The facility allows for the community to continue growing, as the debris generated by growth has to be processed somewhere. The closer the facility is to the path of development the more economical development is, saving money for the community and sustaining growth and Exhibit E shows the increase in truck traffic without the facility is a map showing proximity to other locations. The facility decreases the number of truck miles traveled. If this facility were to shut down there would be an estimated 725,000 additional truck miles on the community's roads each year. This is a result of the longer trips trucks would have to take to fill the void left by this facility. An increase in truck miles would also increase the amount of carbon-dioxide output in the community each year.

- 2) *No feasible location exists for the use outside the Special Flood Hazard Areas.*
 - i. There are no other areas on this site, outside of the flood area, to develop. Please refer to Exhibit A to see existing landfill areas and property lines. The applicant has exhausted all other areas on site to operate. The applicant is seeking two other variances in order to fill within the remainder of the stream area. It is in the best interest of the community to keep the existing facilities operating as long as possible in its current space.
- 3) *The reference level of any structure is elevated above the community base flood elevation or is designed and sealed by a professional engineer or a registered architect to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.*
 - i. There are no structures proposed in the community based flood elevation.
- 4) *There will be no storage of materials or tanks which could flood within the Special Flood Hazard Area unless they are contained in a structure as defined in division (B)(3) above.*
 - i. There will be no storage of materials or tanks in this area.
- 5) *The use complies with all other applicable laws and regulations.*
 - i. The use is in compliance with all town, county, state and federal laws and regulations.
- 6) *The town has notified the Secretary of the North Carolina Department of Crime Control and Public Safety of its intention to grant a variance at least 30 calendar days prior to granting the variance.*

Attachments:

Attachment 1: NC Department of Environmental Quality Solid Waste Section Letter.

Attachment 2: The Catawba and Yadkin Riverkeepers are in support of the landfill expansion project.

Attachment 3: NC DEQ approved a Corrective Action Plan for the landfill on October 3, 2019

Attachment 4: Groundwater history & geosynthetic cap environmental benefit.

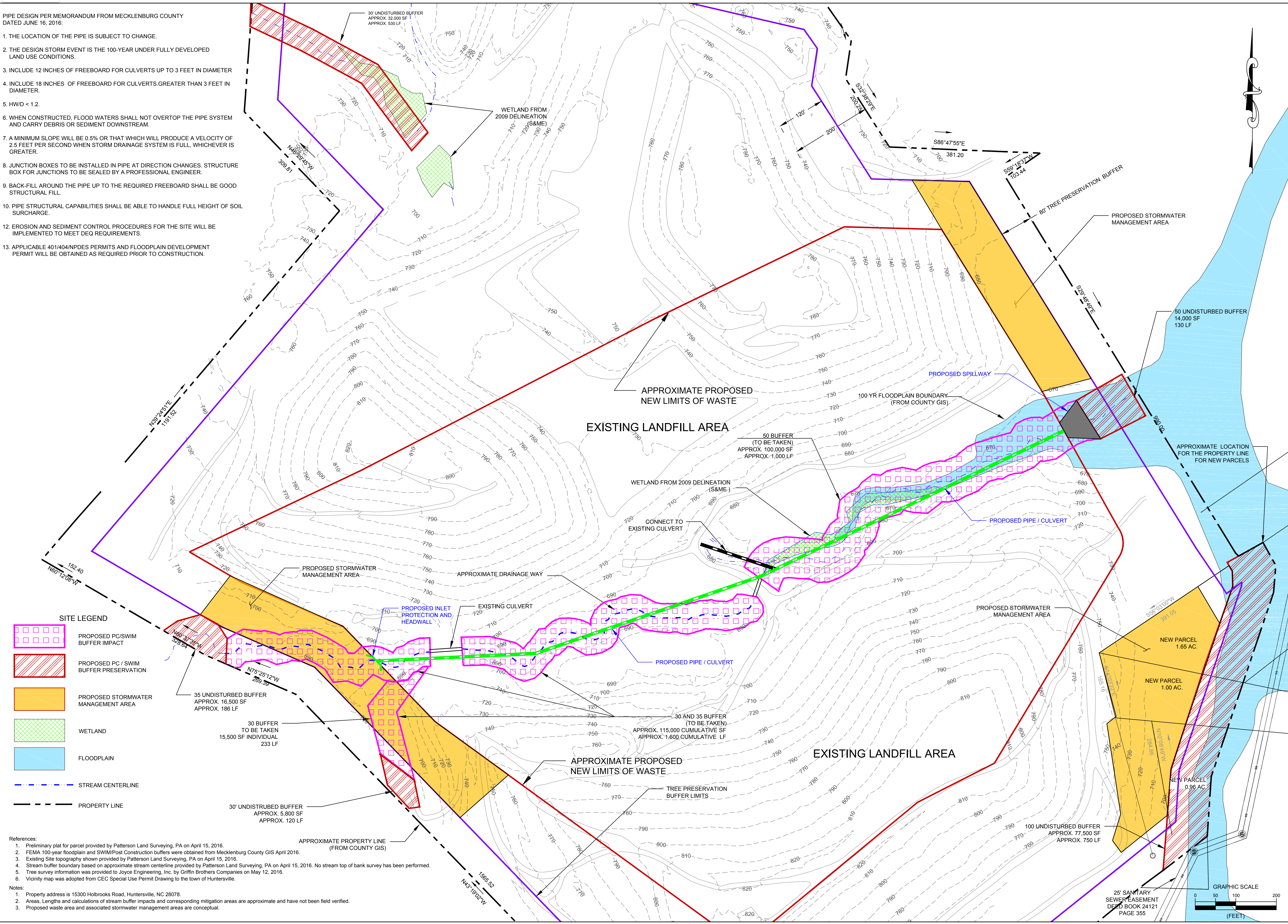
PIPE DESIGN PER MEMORANDUM FROM MECKLENBURG COUNTY
DATED JUNE 16, 2016:

1. THE LOCATION OF THE PIPE IS SUBJECT TO CHANGE.
2. THE DESIGN STORM EVENT IS THE 100-YEAR UNDER FULLY DEVELOPED LAND USE CONDITIONS.
3. INCLUDE 12 INCHES OF FREEBOARD FOR CULVERTS UP TO 3 FEET IN DIAMETER
4. INCLUDE 18 INCHES OF FREEBOARD FOR CULVERTS GREATER THAN 3 FEET IN DIAMETER.
5. $HWD < 1.2$.
6. WHEN CONSTRUCTED, FLOOD WATERS SHALL NOT OVERTOP THE PIPE SYSTEM AND CARRY DEBRIS OR SEDIMENT DOWNSTREAM.
7. A MINIMUM SLOPE WILL BE 0.5% OR THAT WHICH WILL PRODUCE A VELOCITY OF 2.5 FEET PER SECOND WHEN STORM DRAINAGE SYSTEM IS FULL, WHICHEVER IS GREATER.
8. JUNCTION BOXES TO BE INSTALLED IN PIPE AT DIRECTION CHANGES. STRUCTURE BOX FOR JUNCTIONS TO BE SEALED BY A PROFESSIONAL ENGINEER.
9. BACK-FILL AROUND THE PIPE UP TO THE REQUIRED FREEBOARD SHALL BE GOOD STRUCTURAL FILL.
10. PIPE STRUCTURAL CAPABILITIES SHALL BE ABLE TO HANDLE FULL HEIGHT OF SOIL SURCHARGE.
12. EROSION AND SEDIMENT CONTROL PROCEDURES FOR THE SITE WILL BE IMPLEMENTED TO MEET DEQ REQUIREMENTS.
13. APPLICABLE 401/404/NPDES PERMITS AND FLOODPLAIN DEVELOPMENT PERMIT WILL BE OBTAINED AS REQUIRED PRIOR TO CONSTRUCTION.

- SITE LEGEND**
- PROPOSED PC/SWIM BUFFER IMPACT
 - PROPOSED PC / SWIM BUFFER PRESERVATION
 - PROPOSED STORMWATER MANAGEMENT AREA
 - WETLAND
 - FLOODPLAIN
 - STREAM CENTERLINE
 - PROPERTY LINE

- References:
1. Preliminary plat for parcel provided by Patterson Land Surveying, PA on April 15, 2016.
 2. FEMA 100-year floodplain and SWIM/Post Construction buffers were obtained from Mecklenburg County GIS April 2016.
 3. Existing Site topography shown provided by Patterson Land Surveying, PA on April 15, 2016.
 4. Stream buffer boundary based on approximate stream centerline provided by Patterson Land Surveying, PA on April 15, 2016. No stream top of bank survey has been performed.
 5. Tree survey information was provided to Joyce Engineering, Inc. by Griffin Brothers Companies on May 12, 2016.
 6. Vicinity map was adopted from CEC Special Use Permit Drawing to the town of Huntersville.

- Notes:
1. Property address is 15300 Holbrooks Road, Huntersville, NC 28078.
 2. Areas, Lengths and calculations of stream buffer impacts and corresponding mitigation areas are approximate and have not been field verified.
 3. Proposed waste area and associated stormwater management areas are conceptual.



DESIGNED		DRAWN		CHECKED		APPROVED		DATE		REVISIONS AND RECORD OF ISSUE		NO		BY		CK		APP	
MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM	MM

NOT FOR CONSTRUCTION

DESIGNED: MM
DRAWN: MM
CHECKED: MM
APPROVED: MM
DATE: 06/17/16
© 2016 Joyce Engineering, Inc.
All rights reserved.

JOYCE ENGINEERING
9731-F SOUTHERN PINE BLVD
CHARLOTTE, NC 28273
PHONE: (704) 817-2037
NC CORP LIC: C-0782

GREENWAY WASTE SOLUTIONS AT NORTH MECK, LLC
MECKLENBURG COUNTY, NORTH CAROLINA

APPLICATION FOR A WATER QUALITY BUFFER DISTURBANCE:
PROPOSED PIPE LOCATION

PROJECT NO.
916.1501.11

SCALE
AS SHOWN

DRAWING NO.
1

L:\NORTH MECK\CONCEPT STREAM CULVERT JUNE 2016.dwg Layout/Layout

(for illustrative purposes only)

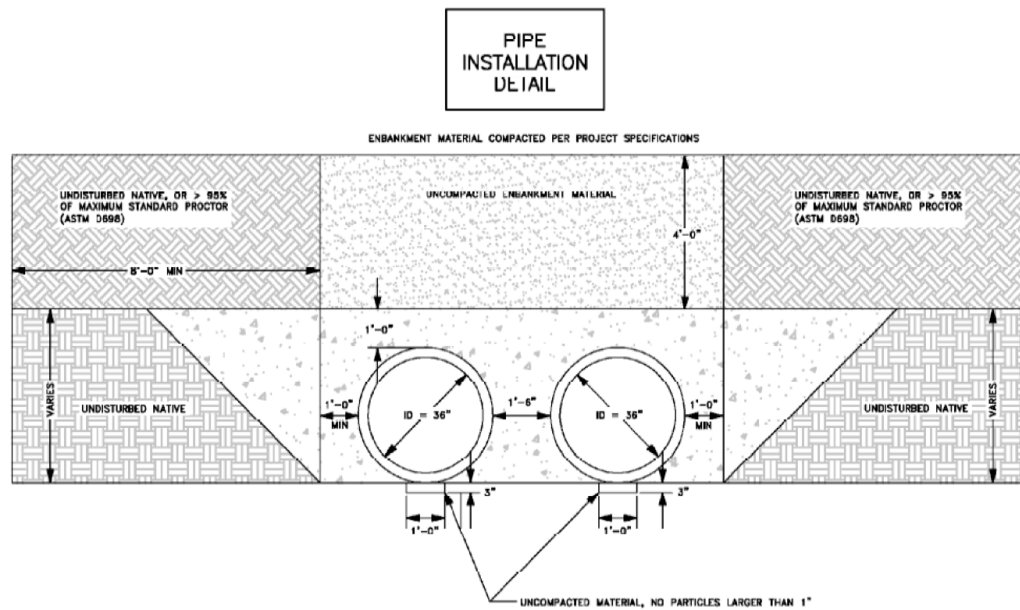


Exhibit C

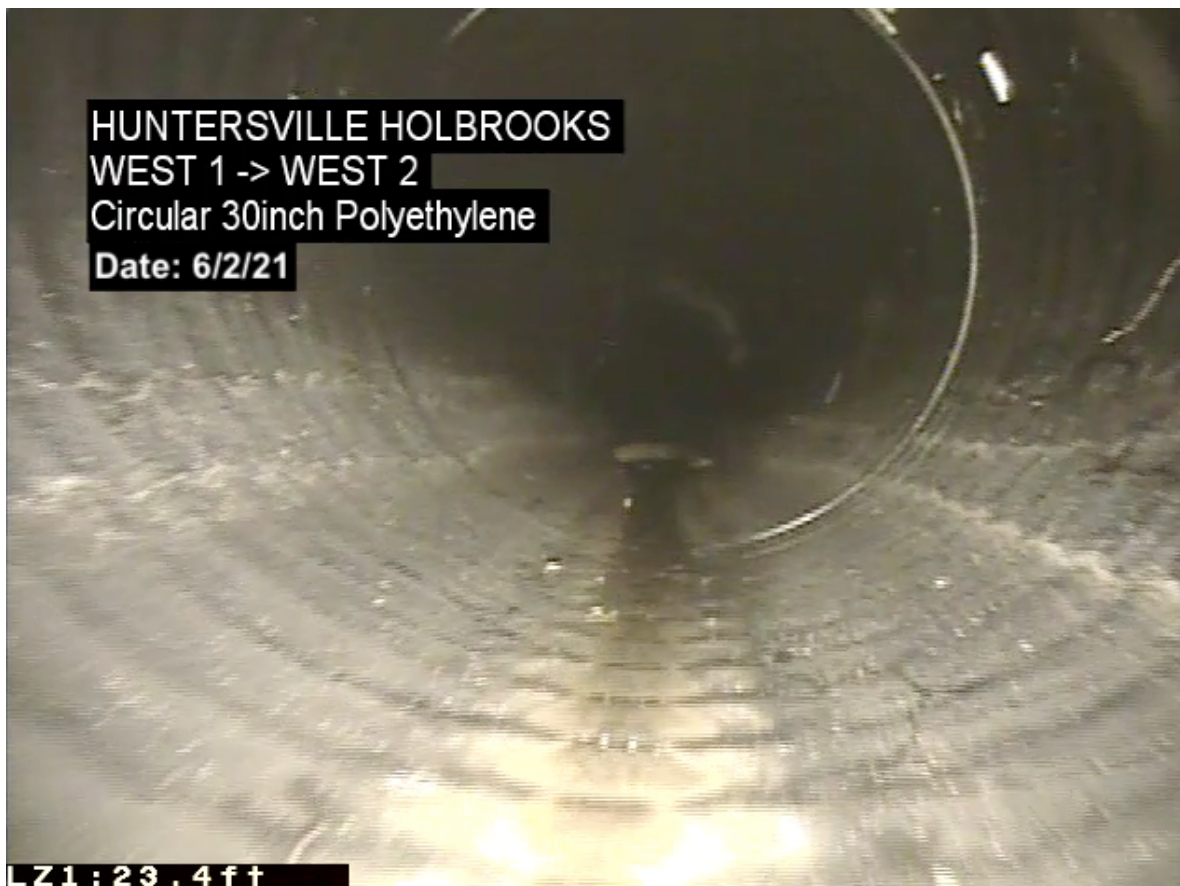


Exhibit D

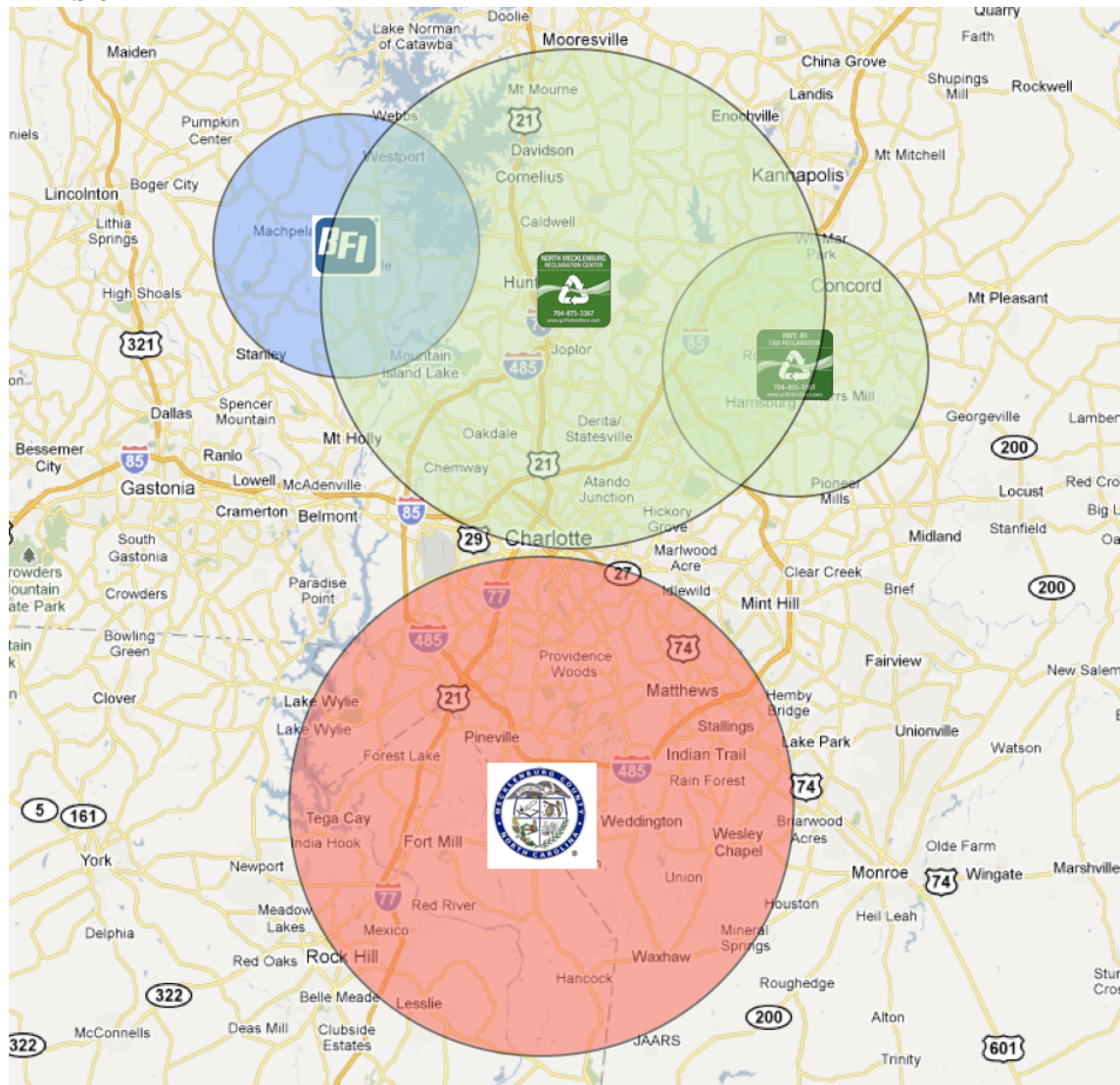
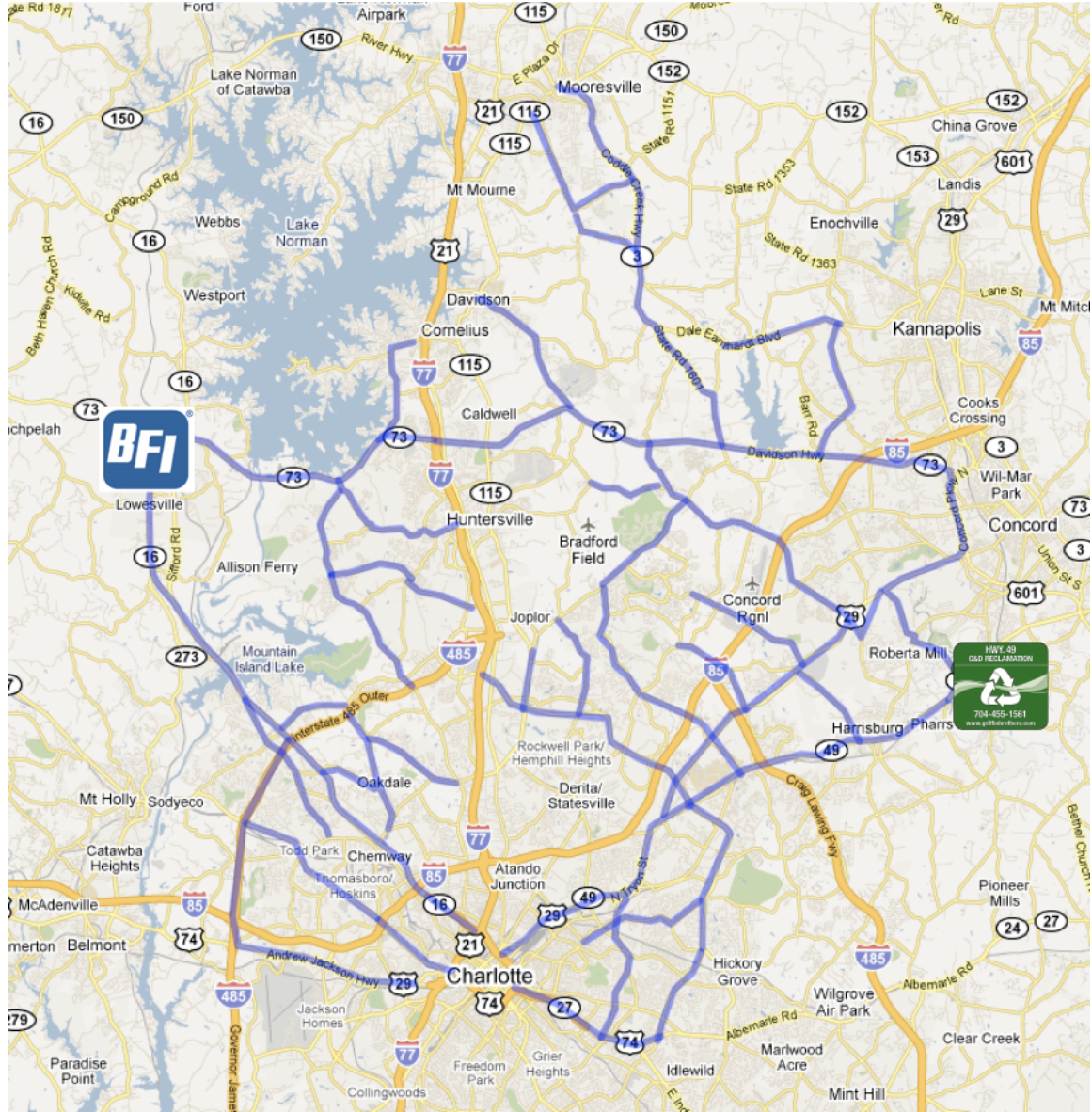


Exhibit E





May 28, 2021

Mr. Bradley Priest,
Town of Huntersville Planning Department
Huntersville, North Carolina 28070

**Re: Variance of Floodzone Ordinance
Greenway Waste Solutions, LLC
North Mecklenburg Landfill**

Dear Mr. Priest:

On behalf of Greenway Waste Solutions (GWS), LaBella is submitting this letter explaining the benefits of this Project.

The conceptual design of the GWS landfill, as requested in the variance application, creates approximately 4.0M cubic yards of disposal volume. By denying a variance to fill over the floodway, the landfill's disposal volume is reduced by 50-60% therefore making the entire project infeasible.

The engineered site features, namely liner and leachate collection system, final closure cover and floodway enhancements, will improve the sites ability to protect the public health and the environment in this community. Additional benefits as a result of designing the landfill over the 'special flood hazard area' verses around it include: Better separation of waste and cover soil erosion from the stream, a continuous liner and final closure cover over the entire facility, significant operational benefits, and a more stable stream channel as a result of the engineered floodway improvements.

As with any project of this nature, all engineering designs and construction will require approvals from NC DEQ and US ACOE before permission is granted to construct and operate this expanded facility. Discussions have been held with the NC DEQ regarding all of the required permits; however, the first step in the process of obtaining all required approvals is getting the Town of Huntersville's approval of this project.

Mr. Bradley Priest
May 28, 2021
Page 2

If you have any questions regarding my explanation of the Project's benefits, please do not hesitate to contact me.

Sincerely,
LaBella Associates



Leonard Joyce, PE
VP and Principal

cc: John Brown, Greenway Waste Solutions
Mike Griffin, Greenway Waste Solutions
Bradley Priest, Town of Huntersville



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head





Mr. Griffin,

Thank you for contacting the Catawba and Yadkin Riverkeepers concerning the possible future expansion of the North Meck C&D landfill at 15300 Holbrooks Road Huntersville, NC 28078. As we understand it, this project would involve the piping of approximately 1750 ft of perennial waters and the placement of impervious landfill liners over the existing C&D fills and newly buried stream.

Riverkeeper organizations advocate for the protection of our waters to ensure that they are swimmable, fishable, and drinkable. In general, we are opposed to increases in impervious surface and the piping of streams as they are detrimental to water quality. However, after 2 site visits, a full stream walk, in-situ measurements at 9 locations, and a macroinvertebrate assessment, the Catawba Riverkeeper Foundation and Yadkin Riverkeeper believe that covering both landfills and piping the Unnamed Tributary (UT) to Cane Creek would be in the best interest of current and future water quality.

This nonintuitive recommendation is due to:

1. High levels of iron oxidizing bacteria and elevated conductivity indicate that groundwater from the unlined landfills is currently negatively impacting the UT.
2. Although not assessed by the NC biological assessment branch, our initial measurements indicate that this stream likely would be listed as impaired for biota. The 303d system is poorly suited to address impairment from nonpoint groundwater sources.
3. Covering the existing landfills will minimize or eliminate the infiltration of precipitation through the unlined fills and prevent leachate from entering Cane Creek.
4. Water monitoring and reporting on the unlined fills will end after 30 years. By constructing a new site on top, monitoring will be extended.
5. Siting a landfill at a new location will cause impacts to an additional part of the watershed.

This recommendation is based on several assumptions, if any of these are invalid then our support is withdrawn until further examination.

1. A new landfill must be built. The Riverkeeper organizations do not have the expertise to predict future construction waste creation and current capacity.
2. Groundwater and surface water will continue to be monitored (and remediated if necessary) for the entire site.
3. Runoff from the entire site will be captured and treated before discharging.
4. The current landfills will remain uncapped (pervious) if a new landfill is not sited on top.

Please let us know if you have additional questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Brian Fannon".

Brian Fannon, Yadkin Riverkeeper

A handwritten signature in black ink, appearing to read "Brandon Jones".

Brandon Jones, Catawba RIVERKEEPER®



NORTH CAROLINA
Environmental Quality

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

October 3, 2019

Sent Via Email – mike@griffinbros.com

Mr. Mike Griffin

Greenway Waste Solutions at North Meck, LLC

19109 West Catawba Avenue, Suite 200

Cornelius, NC 28031

Re: *Corrective Action Plan (Revised October 1, 2019)*
Groundwater Corrective Action
North Mecklenburg C&D Landfill Active Infill Area and Closed Phase I Area
Mecklenburg County
Solid Waste Permit Number 6013-CDLF-1993
FID 1358901

Dear Mr. Griffin,

The Solid Waste Section (Section) has completed a review of the *Corrective Action Plan (Revised October 1, 2019)* and received via email on October 2, 2019 (FID 1358899). The plan was submitted on your behalf by CEC Consultants, Inc. for the North Mecklenburg Construction and Demolition (C&D) Landfill, Solid Waste Permit Number 6013-CDLF-1993 consisting of the Infill Area and the Phase I Area. The *Corrective Action Plan (Revised October 1, 2019)* was submitted in response to the consistent groundwater exceedances at the landfill.

In accordance with 15A NCAC 13B .0545 and 15A NCAC 2L, Greenway Waste Solutions at North Meck, LLC selected a remedy proposed to restore groundwater quality at and beyond the relevant point of compliance, to effectively reduce the overall groundwater contamination at the landfill, and to control the migration of contaminated groundwater to prevent unacceptable impacts. The selected remedy for the landfill includes Active Landfill Gas Extraction and Monitored Natural Attenuation (MNA), and the Section approved the selected remedy on June 10, 2019 (FID 1322138). In addition, Greenway Waste Solutions at North Meck, LLC had a waterline installed downgradient of the Phase I Area and purchased adjacent property.

Based upon the review of the *Corrective Action Plan (Revised October 1, 2019)*, the plan is approved as written based upon the information presented to the Section at this time. During groundwater corrective action, a Corrective Action Effectiveness Report (CAER) will be required to be submitted every five years. The Corrective Action Effectiveness Report (CAER) includes an interpretation of the corrective action data collected and a technical evaluation of the approved selected remedy.



Attachment 3 (cont.)

If you have any questions or concerns regarding this letter, please feel free to contact me by phone at 828.296.4706 or by email at jaclynne.drummond@ncdenr.gov. Thank you for your continued cooperation with this matter.

Sincerely,



Jaclynne Drummond
Hydrogeologist
Solid Waste Section, Division of Waste Management
NCDEQ

cc sent via email:

- Ed Mussler, Section Chief
- Sherri Stanley, Permitting Branch Head
- Larry Frost, Permitting Engineer
- Jason Watkins, Field Operations Branch Head
- Adam Ulishney, Environmental Compliance Branch Head
- Deb Aja, Western District Supervisor
- Teresa Bradford, Environmental Senior Specialist
- John Brown, Greenway Waste/Griffin Brothers Companies
- Brandt Kayser, Greenway Waste/Griffin Brothers Companies
- Donald Cobb, CEC, Inc.
- Bruce Reilly, CEC Inc.
- Scott, Brown, CEC, Inc.
- Joe Hack, Mecklenburg County Solid Waste Management
- Jack Simoneau, Town of Huntersville



North Mecklenburg C&D Landfill (GWSNM) NC Solid Waste Facility Permit No. 60-13

Historical Regulatory Compliance Time-Line

North Meck Groundwater History

Groundwater monitoring at the North Meck C&D Landfill has been on-going on a semi-annual basis since March of 1998 around the currently closed southern section of the landfill (Closed Area), and semi-annual groundwater monitoring around the northern waste disposal area (Infill Area) began in October of 2011. Leading up to the Spring 2013 sampling event, groundwater samples were mostly analyzed by Pace Analytical Services, and analytical results indicated no consistent chemical detections at concentrations which exceeded the applicable 15A NCAC 02L .0202 Groundwater Quality Standards (2L Standards or 2L Rules).

Greenway switched to Shealy Environmental Services for the Spring 2013 sampling event. The analytical results from the Spring 2013 sampling event indicated that vinyl chloride (VC) was detected at elevated concentrations in numerous monitoring wells around both the Infill Area and Closed Area, including one monitoring well located near the water supply well for the Gilkerson residence on the south side of the Closed Area (**Figure 1**). In June of 2014, GWSNM paid for Charlotte Water connections for the Gilkerson residence as well as the two adjacent homes which are occupied by the Tinsley and Hammill families.

Following a series of investigations, Enviro-Pro, PC (GWSNM's groundwater consultant at the time) concluded that the groundwater contamination was the result of landfill gas (LFG) contacting water as a result of precipitation. LFG is produced from the anaerobic decomposition of waste by naturally-occurring bacteria and other micro-organisms in soil, and LFG production is accelerated by the presence of water.

In April of 2015, GWSNM's current consultant, Civil & Environmental Consultants, Inc. (CEC) oversaw the installation of LFG extraction wells in the Closed Area in accordance with the North Carolina Department of Environmental Quality (DEQ) -approved Corrective Action Plan. These extraction wells were installed in order to remove LFG to limit the exposure of percolating water to LFG. CEC later submitted a Landfill Gas Mitigation Expansion Plan in April 2017 proposing to install additional LFG extraction wells in the Closed Area and Infill Area. These extraction wells have remained active to date, and the detected concentrations of VC around the Closed Area have been reduced to below the concentration specified in the 2L Rules. Per the DEQ-approved Revised Corrective Action Plan, GWSNM conducts quarterly groundwater sampling of 16 site wells to monitor for natural attenuation (MNA) of VC in groundwater below the North Meck Landfill. Natural attenuation, which is the process by which naturally-occurring bacteria digest and convert chemicals into non-hazardous chemicals, has been shown to successfully reduce contaminant concentrations over time.

Due to the on-going detections of significantly elevated concentrations of VC by Shealy, GWSNM switched analytical labs back to Pace for the Fall 2016 sampling event and submitted duplicate groundwater samples to Shealy, Pace, and Eurofins TestAmerica (ETA) in order to

compare the detected concentrations. The results of the samples sent to Shealy indicated detections of VC which were consistent with recent detections, while the results of the duplicate samples analyzed by Pace and ETA indicated that VC was detected at significantly lower concentrations relative to the Shealy results. In a letter dated May 23, 2017, OI Analytical, the owners of Shealy Environmental Services, stated that an internal investigation revealed that a component in their analytical equipment was generating false-positive results for VC (**Exhibit 1**).

The analytical results from ETA for the most recent water quality monitoring event, conducted in April 2021, indicate that VC has been detected in 10 monitoring wells but **none of these detections exceeded the allowable concentration for VC specified in the 2L Rules**

Proposed Valley Expansion Benefits

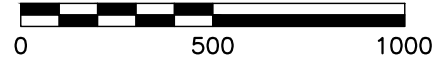
The proposed valley expansion, located between the Infill Area and Closed Area, will significantly increase environmental protection of groundwater. In accordance with 15A NCAC 13B .0540 Construction Requirements for C&DLF Facilities both the Closed Area and Infill Area waste disposal units were constructed with soil liner systems. These compacted soil liners significantly limit, but do not prevent, fluid percolation into groundwater. Additionally, the Closed Area is capped with a soil cap in accordance with 15A NCAC 13B .0543 Closure and Post Closure Requirements for C&DLF Facilities (c)(1)(A). Similar to the compacted soil liner, the soil cap serves to significantly limit, but not eliminate, infiltration of rainwater into the landfill.

The infill expansion cap currently requires a low permeability soil liner however, it does not require a synthetic membrane as proposed as part of the valley expansion liner system. The proposed valley expansion includes a multi-layer geosynthetic, soil, and aggregate liner system with a built-in leachate collection system (**Exhibit 2**). This liner system will cover the side slopes as well as the top of both the Infill and Closed Areas, which will significantly outperform the DEQ regulatory requirement of a soil cap (**Exhibit 3**). This will substantially decrease rainwater infiltration into waste, leading to significantly reduced leachate and LFG production. Relative to a compacted soil liner, the proposed multi-layer geosynthetic liner will nearly eliminate leachate leakage into groundwater (**Exhibit 4**).

The liner system also includes horizontal collection pipes installed inside the existing landfill waste to collect leachate from both the Infill and Closed Areas. Additionally, the unnamed tributary of Cane Creek will be conveyed below the proposed expansion area through concrete-encased pipes. These pipes will also serve as additional water quality protection measures by eliminating the possibility of runoff, leachate, and groundwater from entering the unnamed tributary of Cane Creek.



1. AERIAL IMAGERY TAKEN FROM GOOGLE EARTH PRO.
DATED OCTOBER 8, 2016




Civil & Environmental Consultants, Inc.
3701 Arco Corporate Drive - Suite 400 - Charlotte, NC 28273
Ph: 980.237.0373 · Fax: 980.237.0372
www.cecinc.com

GREENWAY WASTE SOLUTIONS OF NORTH MECK, LCC NORTH MECKLENBURG LANDFILL HUNTERVILLE, NORTH CAROLINA
SPRING 2013 VINYL CHLORIDE EXCEEDANCE LOCATION MAP

DRAWN BY:	JKS/PAB	CHECKED BY:	MBG	APPROVED BY:	DMC	FIGURE NO.: 1
DATE:	JUNE 2021	DWG SCALE:	1" = 500'	PROJECT NO:	111-370.0001	

Exhibit 1



www.oico.com

151 Graham Road, P. O. Box 9010, College Station, TX 77842-9010

(979) 690-1711 FAX: (979) 690-0440

May 23, 2017

Mr. Dan Wright
Shealy Environmental Services, Inc.
106 Vantage Point Drive
West Columbia, SC 29172

Mr. Wright,

OI Analytical is aware of an analytical issue with Silica Gel in the 3-layer traps for purge-and-trap analysis. When the sample being analyzed contains the compound Freon 151, the results of the analysis have the potential to erroneously show the presence of Vinyl Chloride in the sample. The potential issue can arise with any brand purge-and-trap utilizing a 3-layer trap with Silica Gel. This is due to impurities in the Silica Gel, a trap packing material, which cause the Freon 151 to breakdown possibly via a dehydrohalogenation process.

We submit this letter without prejudice in pursuit of a mutually agreeable solution. Please note that we reserve all of our rights and remedies at law or in equity and nothing herein nor our willingness to inspect, test and/or repair the subject products and any other related products shall constitute a waiver of these rights nor be construed as an admission with respect to responsibility or damage incurred.

As you can understand, this is a complicated situation that we are working diligently with the supplier to resolve. As soon as we have a definitive timeline for resolution in working with our partners, we will faithfully communicate this with you.

Sincerely,

A handwritten signature in blue ink, appearing to read "Joan Killgore". The signature is fluid and cursive, with the first name "Joan" and last name "Killgore" clearly distinguishable.

Joan Killgore

Quality Assurance and Engineering Manager



604 0000 Lae
Rcino, A 23220
804-355-4520

labellapc.com

NOT FOR CONSTRUCTION

© 2020 LaBella Associates

North Macedonia
Greena Waste Solutions, LLC

Sdd**E**

1000 Holbrook Rd, Huntersville, NC 28078

NO:	DATE:	DESCRIPTION:

Revisions

PROJECT NUMBER: 2180197

DRAWN BY: DAC

REVIEWED BY: MM

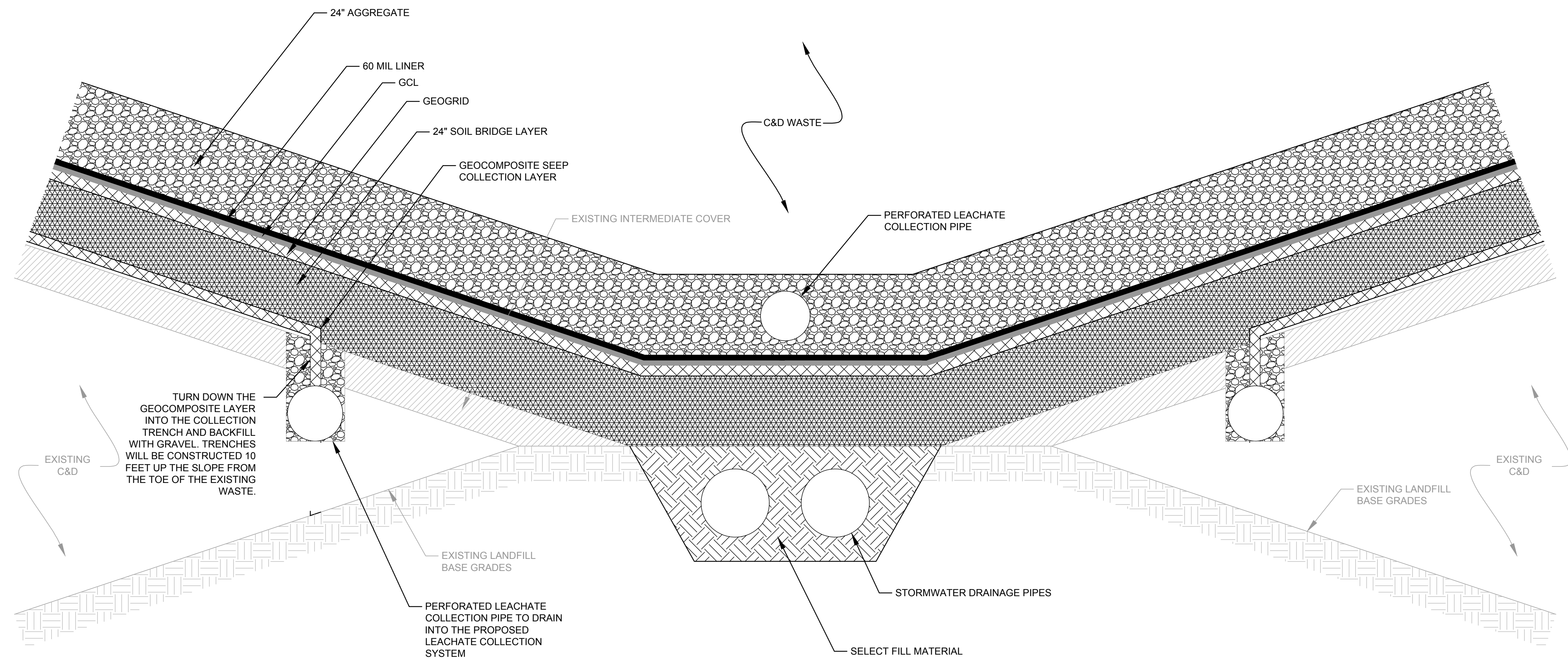
ISSUED FOR: PRELIMINARY

DATE: 10/9/2020

DRAWING NAME:

DETAIL

DRAWING NUMBER:



GEOCOMPOSITE DRAINAGE LAYER
AND BASE LINER SYSTEM (A)

Exhibit 3



NORTH CAROLINA
Environmental Quality

March 2, 2021

ROY COOPER
Governor

MICHAEL S. REGAN
Secretary

MICHAEL SCOTT
Director

Anthony Roberts, Manager
Town of Huntersville
PO Box 664
Huntersville, NC 28070

Dena Diorio, Manager
Mecklenburg County
Charlotte Mecklenburg Government Center
600 East 4th Street
Charlotte, NC 28202

RE: Greenway Waste Solutions at North Meck, LLC - North Meck Landfill
Mecklenburg County, North Carolina
Solid Waste Permit No. 6013-CDLF-1993

Dear Ms. Diorio and Mr. Roberts:

Greenway Waste Solutions and their engineering consultant, LaBella, asked the Solid Waste Section to reach out to you regarding plans for expansion at the North Meck C&D Landfill. The proposed plans call for expanding the landfill footprint by 11.5 acres, all within the current facility boundary, by filling the area between two existing landfill units. Ground and surface water protections include constructing a liner and leachate collection system for the proposed fill area between the units and by applying a less permeable cap system over the additional fill area. LaBella has compared the existing cap requirements to the proposed capping system. (See attached report). Findings indicate that by employing the enhanced cap, infiltration will be reduced by 50% as compared to the alternative of only a regulatory minimum cap on the landfill with no expansion.

Please contact me if you have any questions or comments.

Sincerely,

Ed Mussler, P.E., Chief
Solid Waste Section
Division of Waste Management

cc: Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates
Sherri Stanley, SWS Permitting Branch Head



November 25, 2020

Mr. Ed Mussler
 Division of Waste Management
 Solid Waste Section
 217 W Jones St
 Raleigh, North Carolina 27603

**RE: HELP Model Analysis of Permitted & Proposed Cap/Liner Systems
 Greenway Waste Solutions at North Meck, LLC
 North Meck Landfill
 Mecklenburg County, North Carolina
 NCDEQ Permit No. 60-13**

Mr. Mussler:

On behalf of Greenway Waste Solutions (GWS), LaBella Associates (LaBella) has prepared a HELP Model Analysis of the percolation/leakage through the proposed liner and cap systems for the North Meck Construction and Demolition (C&D) Landfill (NML) proposed expansion compared to the permitted cap systems of the existing two landfills, as requested by NCDEQ Solid Waste Section.

➤ **Existing Conditions**

The NML currently operates an active C&D Infill Area (approximately 34.3 acres) north of the property. Please refer to Drawing No. 1 for existing conditions. There is also an existing closed C&D Landfill (approximately 33.5 acres) south of the property. The final closure of the C&D Landfill (Phases I&II) was completed in June of 2002. The final cap was constructed with a minimum of 24" of cover soil from a local source. On the other hand, the active Infill Landfill Area is subject to Rule 15A NCAC 13B .0543, which details engineering requirements for caps and became effective in 2007. The permitted/constructed closure caps and the HELP Model Analysis are summarized in Table 1. The attached HELP Model runs assumed a surface slope of 15%.

Table 1: HELP Model Analysis of Existing Permitted/Constructed Landfill Caps.

Landfill	Cap System (from top to bottom) (Permitted/Constructed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil (Constructed)	33.5	9,830	329,305
Infill Landfill Area (Active)	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil (Permitted)	34.3	5,510	188,993
Total		67.8	--	518,298



➤ **Proposed Landfill Expansion**

GWS is proposing to expand the NML by filling in the valley between the two existing landfill areas. The filling of the valley is intended to maximize waste disposal within the limits of the property (parcel) without expanding the waste footprint toward neighboring parcels. GWS is proposing to line the valley and the piggyback areas on the active Infill Landfill Area and the closed C&D Landfill. The base liner system (approximately 48.6 acres) is shown on Detail 1 on Drawing No. 2. GWS is proposing to construct the base liner system as shown on Detail 1 on Drawing No. 2 on the piggyback area of the active Infill Landfill in lieu of the permitted cap. The base liner system will be constructed on the piggyback area of the closed C&D Landfill. GWS may consider a partial removal of C&D Landfill 24" soil cap prior to the construction of the proposed liner system. The HELP Model runs did not include the 24" soil cap in analyzing the proposed liner/cap system.

At the completion of waste filling operations, GWS is proposing to cap the landfill expansion area (approximately 48.6 acres) with the synthetic cap system shown on Detail 1 on Drawing No. 2. Areas outside of the piggyback footprint on the active Infill Landfill Area will be closed using the permitted cap system, while areas on the closed C&D Landfill will remain closed with 24" of cover soil. The permitted/proposed closure caps and the HELP Model Analysis are summarized in Table 2. The attached HELP Model run assumed a surface slope of 15% consistent with the permitted/constructed caps HELP Model runs. All other modeling assumptions were consistent with the permitted/constructed caps HELP Model runs.



Table 2: HELP Model Analysis of Proposed Landfill Cap/Liner Systems.

Landfill	Cap/Liner Systems (from top to bottom) (Permitted/Constructed/Proposed)	Area (ac)	Peak Daily Percolation/Leakage Through Cap /Liner (cu ft/acre.day) – HELP Model	Total Leakage (cu ft/day)
C&D Landfill (Phases I&II) (Closed)	24" Cover Soil <u>(Constructed)</u>	17.1	9,830	168,093
C&D Landfill (Phases I&II) (piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	16.4	0.00002	0.000328
Infill Landfill Area (Piggyback)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	20.7	0.00002	0.000414
Valley Fill Area (Horizontal Landfill Expansion Footprint)	6" Vegetative Cover 18" Protective Cover Drainage Geocomposite 40-mil LLDPE membrane Geosynthetic Clay Liner Gas Geocomposite* 12" Intermediate Cover Waste Mass 24" Drainage Layer 60-mil HDPE Liner Geosynthetic Clay Liner <u>(Proposed)</u>	11.5	0.00002	0.00023
Infill Landfill Area	18" Vegetative Cover 18" Low Permeability Soil Cover (10 ⁻⁵ cm/sec) 12" Intermediate Cover Soil <u>(Permitted)</u>	13.6	5,510	74,936
Total		79.3		243,029

*Gas geocomposite was excluded from the HELP model runs as it has an insignificant impact on the results.



In conclusion, the HELP Model runs evaluate the percolation/leakage to the existing waste with the permitted cap and after the construction of the proposed expansion liner/cap systems. Although the proposed landfill expansion includes lining the valley between the existing closed landfill (Phases I&II) and the active Infill Landfill area, which adds approximately 11.5 acres of landfill footprint, the lining/capping of the existing landfills piggyback areas reduces the percolation/leakage to the existing waste mass by more than 50% according to the HELP Model Analysis. The attached HELP Model runs and drawings provide additional details.

We hope that you agree with our conclusion that the aforementioned benefits from the proposed liner and cap systems of the expansion project are significant compared to closing the landfill as currently permitted. We request a letter from NCDEQ Solid Waste Section to the Town of Huntersville and Mecklenburg County detailing the benefits of the proposed expansion project. The proposed liner/cap systems is significantly reducing percolation/leakage through the existing waste into the environment.

If you have any questions or require additional information that would help the Solid Waste Section determine the benefits of the proposed liner/cap systems compared to the existing permitted/constructed cap systems, please do not hesitate to give me a call at (704) 941-2164.

Respectfully submitted,

LaBella Associates

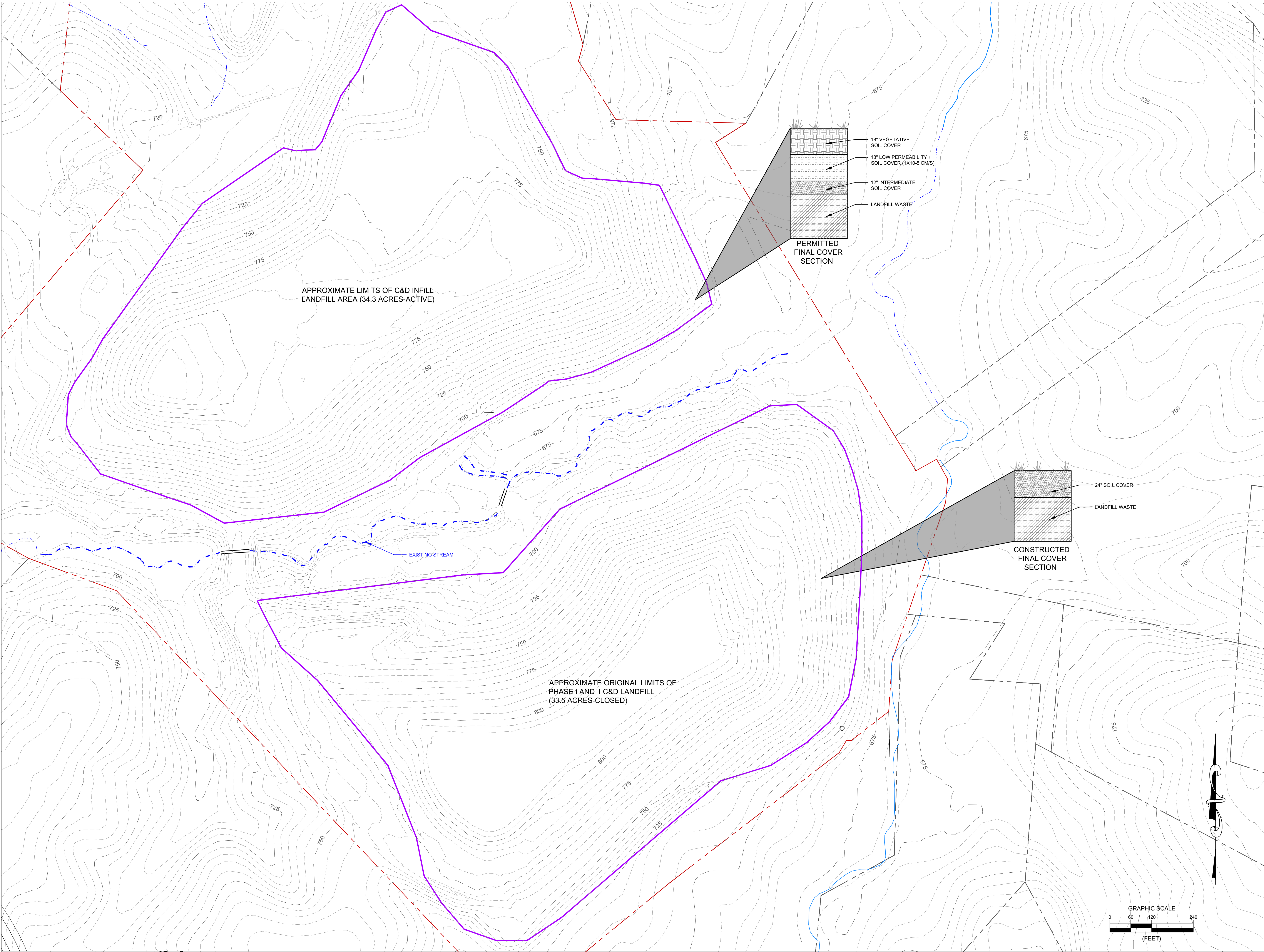
Mousa Maimoun, Ph.D., P.E.
Sr. Project Consultant

Attachments:

Drawing No. 1 – Existing Conditions
Drawing No. 2 – Proposed Landfill Expansion (Conceptual)
HELP Model Runs

Cc: Ms. Sherri Stanley, P.E., NCDEQ Solid Waste Section
Mr. John Brown, Griffin Brothers Companies
Mr. Mike Griffin, Griffin Brothers Companies
Mr. Butch Joyce, LaBella Associates

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© 2020 LaBella Associates	

GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

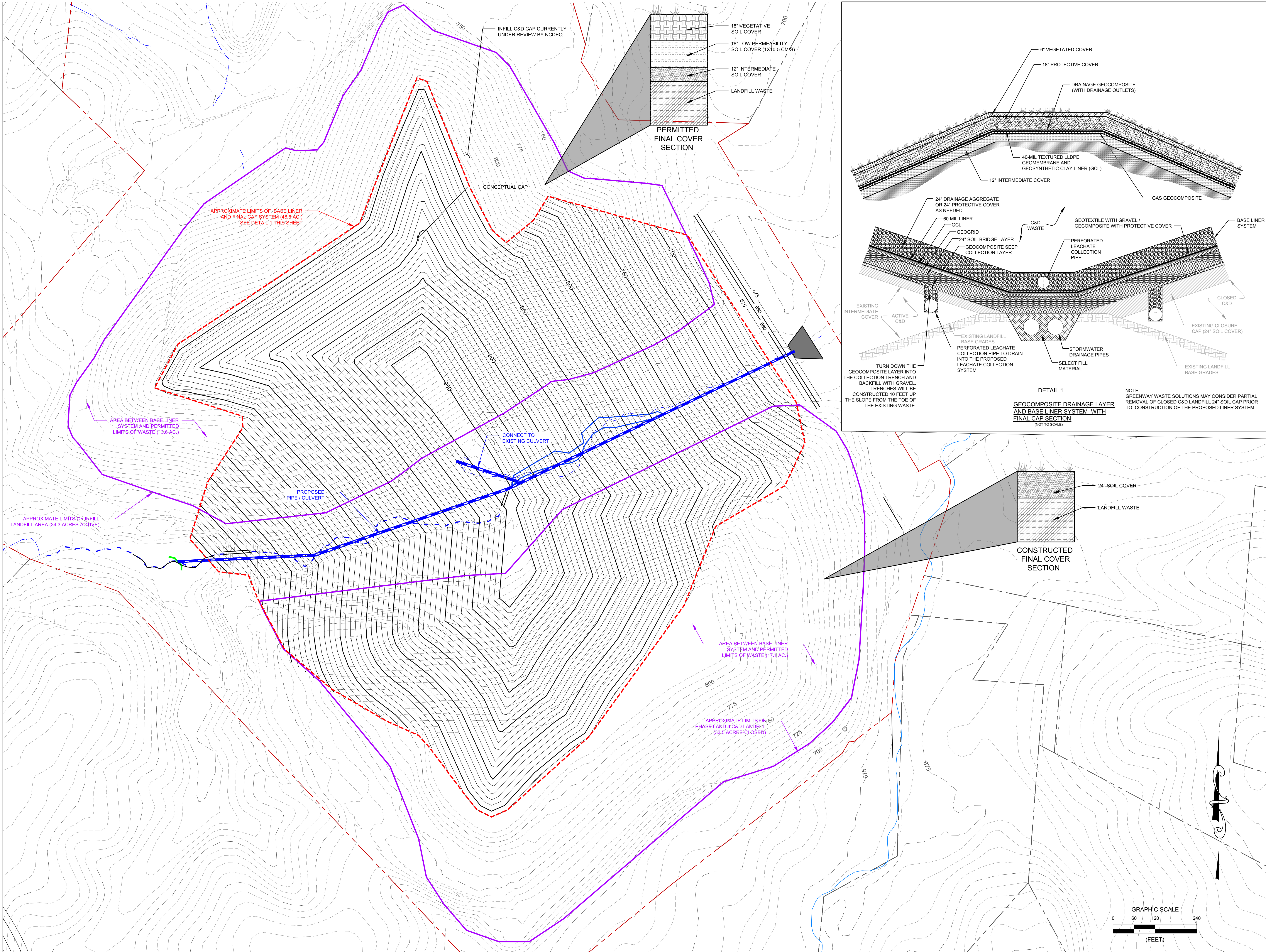
NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

EXISTING CONDITIONS

DRAWING NUMBER:

L:\NORTH MECK2020 expansion\NOV 2020 FIGURES\2 CONCEPT LANDFILL WITH CAP AND LINER DETAIL.dwg Layout=Layout1



GREENWAY WASTE SOLUTIONS, LLC

NORTH MECK. C&D LANDFILL
MECKLENBURG COUNTY, NORTH CAROLINA

NO.	DATE:	DESCRIPTION:
Revisions		

PROJECT NUMBER:	2180197
DRAWN BY:	RH
REVIEWED BY:	MM
ISSUED FOR:	PRELIMINARY CONCEPT-HELP MODEL ANALYSIS
DATE:	11/20/2020
DRAWING NAME:	

**PROPOSED LANDFILL
EXPANSION
(CONCEPTUAL)**

DRAWING NUMBER:

Exhibit#5-EPA Vinyl Chloride Fact Sheet

Vinyl Chloride

75-01-4

Hazard Summary

Most vinyl chloride is used to make polyvinyl chloride (PVC) plastic and vinyl products. Acute (short-term) exposure to high levels of vinyl chloride in air has resulted in central nervous system (CNS) effects, such as dizziness, drowsiness, and headaches in humans. Chronic (long-term) exposure to vinyl chloride through inhalation and oral exposure in humans has resulted in CNS effects and liver damage. Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. Vinyl chloride exposure, via inhalation, has been shown to increase the risk of a rare form of liver cancer, angiosarcoma of the liver, in humans. EPA has concluded that vinyl chloride is carcinogenic to humans by the inhalation and oral routes of exposure, and highly likely to be carcinogenic by the dermal route of exposure.

Please Note: The main sources of information for this fact sheet are the U.S. Environmental Protection Agency's (EPA's) Integrated Risk Information System and the Agency for Toxic Substances and Disease Registry's (ATSDR's) Toxicological Profile for Vinyl Chloride. (1,2)

Uses

- Most of the vinyl chloride produced is used to make polyvinyl chloride (PVC), a material widely used in automotive parts, packaging products, pipes, construction materials, furniture, and a variety of other products. (2)
- Smaller amounts of vinyl chloride are used as a chemical intermediate and a solvent. (2,4)

Sources and Potential Exposure

- Ambient air concentrations of vinyl chloride are generally quite low, with exposure occurring from the discharge of exhaust gases from factories that manufacture or process vinyl chloride, or evaporation from areas where chemical wastes are stored. (2,3)
- Vinyl chloride may enter finished drinking water from the flow of water through older PVC piping made before 1977, but a more recent study suggests that the extraction of vinyl chloride may diminish over time. Since 1977, product standards (NSF/ANSI 14 and 61) have controlled the release of vinyl chloride from PVC pipes. (5,6)
- Occupational exposure to vinyl chloride may occur in those workers concerned with the production, use, transport, storage, and disposal of the chemical. (2,3)
- Vinyl chloride has been detected in tobacco smoke. (2)

Assessing Personal Exposure

- Vinyl chloride can be measured in urine, body tissue, and exhaled air but the tests are not reliable indicators of total exposure. (2)

Health Hazard Information

Acute Effects:

- Acute exposure of humans to high levels of vinyl chloride via inhalation has resulted in effects on the CNS, such as dizziness, drowsiness, headaches, and giddiness. (2,3)
- Acute exposure to high levels of vinyl chloride in animals has resulted in effects on the CNS, liver, kidney, and lungs. (2)
- Tests involving acute exposure of mice have shown vinyl chloride to have high acute toxicity from inhalation exposure. (2,3)

Chronic Effects (Noncancer):

- Liver damage may result in humans from chronic exposure to vinyl chloride through both inhalation and oral exposure. (2,3)
- A small percentage of individuals occupationally exposed to high levels of vinyl chloride in air have developed a set of symptoms termed "vinyl chloride disease," which is characterized by Raynaud's phenomenon (fingers blanch and numbness and discomfort are experienced upon exposure to the cold), changes in the bones at the end of the fingers, joint and muscle pain, and scleroderma-like skin changes (thickening of the skin, decreased elasticity, and slight edema). (2,3)
- CNS effects (including dizziness, drowsiness, fatigue, headache, visual and/or hearing disturbances, memory loss, and sleep disturbances) as well as peripheral nervous system symptoms (peripheral neuropathy, tingling, numbness, weakness, and pain in fingers) have also been reported in workers exposed to vinyl chloride. (2)
- Animal studies have reported effects on the liver, kidney, and CNS from chronic exposure to vinyl chloride. (2,3)
- EPA has established a Reference Concentration (RfC) of 0.1 milligrams per cubic meter (0.1 mg/m³) based on effects on the liver in rats. The RfC is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation to the human population (including sensitive subgroups) that is likely to be without appreciable risk of deleterious noncancer effects during a lifetime. It is not an estimator of risk but rather a reference point to gauge the potential for effects. At exposures increasingly greater than the RfC, the potential for adverse health effects increases.

Lifetime exposure above the RfC does not imply that an adverse effect would necessarily occur. (1)

- EPA has established a Reference Dose (RfD) for vinyl chloride is 0.003 milligrams per kilogram body weight per day (mg/kg/d) based on liver toxicity in rats. (1)

Reproductive/Developmental Effects:

- Several epidemiological studies have reported an association between vinyl chloride exposure in pregnant women and an increased incidence of birth defects; however, other studies have not supported these findings. (2,3)
- Several case reports involving worker exposures suggest that male sexual performance may be affected by vinyl chloride; however, these reports are limited by possible co-exposure to other chemicals and lack of exposure estimates. (2)
- Testicular damage and decreased male fertility have been reported in rats exposed to vinyl chloride. (2)
- Animal studies have reported decreased fetal weight and birth defects in the offspring of rats exposed to vinyl chloride through inhalation at levels that are also toxic to maternal animals. (2)

Cancer Risk:

- Inhaled vinyl chloride has been shown to increase the risk of a rare form of liver cancer (angiosarcoma of the liver) in humans. (1,2,3)
- Animal studies have shown that vinyl chloride, via inhalation, increases the incidence of angiosarcoma of the liver and cancer of the liver. (1,2,3)
- Several rat studies show a pronounced early-life susceptibility to the carcinogenic effect of vinyl chloride, i.e., early exposures are associated with higher liver cancer incidence than similar or much longer exposures that occur after maturity. (2)
- EPA has classified vinyl chloride as a known human carcinogen by the inhalation route of exposure. (1)
- EPA uses mathematical models, based on animal studies, to estimate the probability of a person developing cancer from breathing air containing a specified concentration of a chemical. EPA has calculated inhalation unit risk estimates of $4.4 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for exposure to vinyl chloride during adulthood and $8.8 \times 10^{-6} (\mu\text{g}/\text{m}^3)^{-1}$ for lifetime exposure. EPA estimates that, if an individual were to continuously breathe air containing vinyl chloride at an average of $0.11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-4} \text{ mg}/\text{m}^3$) over his or her entire lifetime, that person would theoretically have no more than a one-in-a-million increased chance of developing cancer as a direct result of breathing air containing this chemical. Similarly, EPA estimates that continuously breathing air containing $1.1 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-3} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-a-hundred thousand increased chance of developing cancer, and air containing $11 \mu\text{g}/\text{m}^3$ ($1.1 \times 10^{-2} \text{ mg}/\text{m}^3$) would result in not greater than a one-in-ten thousand increased chance of developing cancer. For a detailed discussion of confidence in the potency estimates, please see IRIS. (1)

- EPA has calculated an oral cancer slope factor of $7.2 \times 10^{-1}(\text{mg/kg-day})$ for oral exposure to vinyl chloride during adulthood and an oral cancer slope factor of 1.4 (mg/kg-day) for lifetime exposure. (1)

Physical Properties

- Vinyl chloride is a colorless, flammable gas with a mild, sweet odor. (4)
- The odor threshold for vinyl chloride ranges from 260 ppm to 4,000 ppm. (4)
- The chemical formula for vinyl chloride is $\text{C}_2\text{H}_3\text{Cl}$ and the molecular weight is 62.5 g/mol. (4)
- The vapor pressure for vinyl chloride is 2,600 mm Hg at 25 °C, and it has a log octanol/water partition coefficient (log K_{ow}) of 1.36. (2)

Conversion Factors:

To convert concentrations in air (at 25 °C) from ppm to mg/m^3 : $\text{mg/m}^3 = (\text{ppm}) \times (\text{molecular weight of the compound}) / (24.45)$. For vinyl chloride: $1 \text{ ppm} = 2.6 \text{ mg/m}^3$.

Health Data from Inhalation Exposure



ACGIH TLV--American Conference of Governmental and Industrial Hygienists' threshold limit value expressed as a time-weighted average; the concentration of a substance to which most workers can be exposed without adverse effects.

AIHA ERPG - American Industrial Hygiene Association's emergency response planning guidelines. ERPG 1 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing other than mild transient adverse health effects or perceiving a clearly defined objectionable odor; ERPG 2 is the maximum airborne concentration below which it is believed nearly all individuals could be exposed up to one hour without experiencing or developing irreversible or other serious health effects that could impair their abilities to take protective action.

ATSDR MRL – An inhalation MRL is an estimate of the amount of a chemical a person can breathe each day without a detectable risk to health. MRLs are developed for health effects other than cancer. MRLs can be calculated for 3 different time periods of exposure to the chemical: acute (about 1 to 14 days), intermediate (from 15-364 days), and chronic (exposure for more than 364 days).

CalEPA Acute REL – California EPA Office of Environmental and Human Health Assessment (OEHHA) acute reference exposure level is the concentration at or below which no adverse health effects are anticipated for a specified exposure duration.

OSHA PEL--Occupational Safety and Health Administration's permissible exposure limit expressed as a time-weighted average: the concentration of a substance to which most workers can be exposed without adverse effect averaged over a normal 8-h workday or a 40-h workweek.

OSHA PEL Ceiling -- Occupational Safety and Health Administration's permissible exposure limit expressed as a short-term exposure limit that should not be exceeded in a 15-minute time period.

RBC—Risk-based concentration.

^a Toxicity, Health, and Risk numbers are toxicological values from animal testing or risk assessment values developed by EPA.

^b Regulatory numbers are values that have been incorporated in Government regulations, while advisory numbers are nonregulatory values provided by the Government or other groups as advice. OSHA numbers are regulatory, whereas ACGIH, NIOSH, and AIHA numbers are advisory.

Summary updated in March 2020

References

1. U.S. Environmental Protection Agency. Integrated Risk Information System (IRIS) on Vinyl chloride. National Center for Environmental Assessment, Office of Research and Development, Washington, DC. Last revised 8/07/2000. <http://www.epa.gov/iris>

2. Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological Profile for Vinyl Chloride. Public Health Service, U.S. Department of Health and Human Services, Atlanta, GA. 2006. <http://www.atsdr.cdc.gov/toxprofiles/tp20.pdf>
3. U.S. Department of Health and Human Services. Hazardous Substances Data Bank (HSDB, online database). National Toxicology Information Program, National Library of Medicine. 2020. <http://pubchem.ncbi.nlm.nih.gov/compound/6338>
4. Pohanish, R.P. Sittig's Handbook of Toxic and Hazardous Chemicals and Carcinogens. 6th ed. Elsevier Inc. Oxford, UK and Waltham, MA USA. 2012.
5. Flournoy, R. L., Monroe, D., Chestnut, N., & Kumar, V. (1999). Health effects from vinyl chloride monomer leaching from pre-1977 PVC pipe. In Annual American Water Works Association Conference Proceedings (pp. 1211-1230).
6. Walter, R. K., Lin, P. H., Edwards, M., & Richardson, R. E. (2011). Investigation of factors affecting the accumulation of vinyl chloride in polyvinyl chloride piping used in drinking water distribution systems. Water research, 45(8), 2607-2615.
7. American Conference of Governmental Industrial Hygienists (ACGIH). 2018 TLVs and BEIs. Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices. Cincinnati, OH. 2018.
8. Occupational Safety and Health Administration (OSHA). Occupational Safety and Health Standards, Toxic and Hazardous Substances. Code of Federal Regulations. 29 CFR 1910.1000. 2018.
https://www.osha.gov/pls/oshaweb/owadisp.show_unique?p_table_name=STANDARDS&p_unique_file=1910_1017&p_anchor_name=
9. American Industrial Hygiene Association (AIHA). The AIHA 2018 Emergency Response Planning Guidelines and Workplace Environmental Exposure Level Guides Handbook. 2018.
10. California Environmental Protection Agency (CalEPA). Technical Supporting Document for Noncancer RELs, Appendix D2. Office of Environmental Health Hazard Assessment. 2008.
<https://oehha.ca.gov/chemicals/vinyl-chloride>

Exhibit#6 - Email from Rusty Rozzelle and Report from Mecklenburg County Storm Water Services for Mitigation

Lauren Speight

From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>
Sent: Tuesday, August 3, 2021 7:42 PM
To: Bradley Priest; Jack Simoneau
Cc: Brian Richards; Lauren Speight; Canaan, Dave; Smithberger, Jeffrey; Edwards, Olivia; DeMaury, Joshua; Eubanks, Ron
Subject: Variance Request for North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road
Attachments: Response to Variance Request at 15416 Holbrooks Road in Huntersville.pdf
Importance: High

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Brad,

Please find attached for consideration in the review of the variance request to impact the SWIM Buffer along Cane Creek to install a pipe to facilitate expansion of the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road.

Please let me know if you have any questions.

Thank you.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org



We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.

From: Bradley Priest <bpriest@huntersville.org>
Sent: Tuesday, August 3, 2021 12:49 PM
To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>; Jack Simoneau <jsimoneau@huntersville.org>
Cc: Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>
Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hey Rusty,

Thank you for that heads up. If you cannot recommend approval for their mitigation and project at this time, our variance recommendation would be to continue their item. Lauren is working on those staff reports now for the August meeting. If you could send me the note outlining the issues, I'll send to the applicant ASAP. I'd like to understand what their intent is for the meeting, to continue the item or move forward. Thanks.

Bradley D. Priest, AICP

Principal Planner

Town of Huntersville

Planning Department

704-766-2214

105 Gilead Road – 3rd Floor

Huntersville, NC 28070

www.huntersville.org



From: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Sent: Monday, August 2, 2021 6:07 PM

To: Jack Simoneau <jsimoneau@huntersville.org>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: RE: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

You are very welcome. FYI, Greenway Waste Solutions has not provide us with enough information to adequately assess the impacts of the piping at the Holbrook Road Landfill. We have assessed the stream they are planning to pipe and we have identified a few mitigation options, but there is still a lot we don't know about the piping itself that prevents us from making a fair assessment regarding potential future impacts. I am preparing something to send to Brad tomorrow that summarizes where we are to date.

From: Jack Simoneau <jsimoneau@huntersville.org>

Sent: Monday, August 2, 2021 6:00 PM

To: Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov>

Cc: Bradley Priest <bpriest@huntersville.org>; Brian Richards <brichards@huntersville.org>; Lauren Speight <lspeight@huntersville.org>

Subject: [External]Re: SWIM Buffers

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Thank you for the information Rusty.

Jack Simoneau

On Aug 2, 2021, at 4:44 PM, Rozzelle, Rusty <Rusty.Rozzelle@mecklenburgcountync.gov> wrote:

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Jack,

In response to our phone call, the SWIM buffer ordinances for Mecklenburg County, Charlotte, Mint Hill, and Pineville allow for SWIM buffer disturbances with mitigation approved by Charlotte Mecklenburg Storm Water Services. They all use the 9 mitigation measures that you have in your draft ordinance. The SWIM buffer ordinances for Cornelius, Davidson, Huntersville, and Matthews require a variance before buffer impacts will be allowed. None of the jurisdictions in Mecklenburg County allow 401/404 mitigation to count for SWIM buffer mitigation. This is the way it has been since the ordinances were adopted over 20 years ago. 401/404 Permits are required by State and federal laws for impacts to water bodies, including wetlands, streams, lakes, and ponds. SWIM buffer mitigation is required for impacts to buffers around water bodies. In many cases, buffer impacts do not require 401 & 404 Permits. For example, a property owner may want to add a patio in the buffer. This does not require a 401-404 Permit because surface waters are not impacted, but buffer mitigation would be required. Also, 401/404 mitigation is supposed to occur in the same designated HUC or hydrologic unit where the impact occurred. In some cases mitigation is allowed outside the HUC, but at a higher rate. For buffer mitigation, it is to occur in the same jurisdiction. There are 2 HUCs for Huntersville, including Mountain Island Lake-Catawba River (#0305010114) that includes portions of Gaston and Lincoln Counties as well as Charlotte, and the Upper Rocky River (#0304010501) that includes parts of Davidson, Harrisburg and Cabarrus County. If Huntersville were to allow the use of 401/404 mitigation to satisfy a buffer impact, then the money could be spent in several other jurisdictions that would not benefit water quality in the Town. It also important to note that the State does not allow 401/404 mitigation to count as mitigation for impacts to State buffers as described in 15A NCAC 02B .0295. This is because the mitigation is covered under separate rules and is for different purposes. State buffer mitigation has several of the same components as the SWIM buffer mitigation.

Rusty Rozzelle
Water Quality Program Manager
Charlotte-Mecklenburg Storm Water Services
Mecklenburg County | 2145 Suttle Avenue | Charlotte, NC 28208
(980) 314-3217 | rusty.rozzelle@MeckNC.gov | StormWater.CharMeck.org

<image002.png>

We are passionate about making our environment safe and healthy by reducing flood losses and improving water quality for all.



**Response to Variance Request at 15416 Holbrooks Road in
Huntersville (Parcel No. 01910102)
North Mecklenburg Construction & Demolition Landfill
August 3, 2021**

Introduction:

The information below is provided to the Town of Huntersville for their consideration in the review of the variance request to impact approximately 212,500 square feet of SWIM Buffer at the North Mecklenburg Construction and Demolition Landfill located at 15416 Holbrooks Road. These impacts would be associated with piping an estimated 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion (see Appendix A). This information is provided by the Storm Water Services Division of Mecklenburg County's Land Use and Environmental Services Agency (LUESA).

Description of the Current Conditions of the Stream to be Piped:

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and stream habitat assessment were performed by staff with Storm Water Services within the tributary proposed for piping. The approximate location of the area evaluated is shown in Appendix A. Results indicate that the stream reach has very poor fish community abundance and diversity as well as a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR. The stream channel was found to be badly eroded and lack the necessary habitat conditions to support healthy fish and benthic communities as shown in Photos 1 and 2 below. The locations of these photos are shown in Appendix A. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community. Additional information is provided in Appendix B.



Photo 1: Cane Creek to be Piped



Photo 2: Cane Creek to be Piped

Potential Mitigation Options for the Loss of the Buffer:

If the variance is approved, the petitioner has indicated a preference to use the Mitigation Credit technique described in Article 8.25.11b(8) of Huntersville's Zoning Ordinance. Specifications for the use of this technique are provided on page 54 in Section 5.4.3 of the Charlotte-Mecklenburg Buffer Implementation Guidelines at the following link: [file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20\(13\).pdf](file:///C:/Users/rozzers/OneDrive%20-%20Mecklenburg%20County/Downloads/WaterQualityBufferImplementationGuidelines%20(13).pdf).

This technique involves the purchase of Mitigation Credits on a 1:1 basis utilizing the square feet of the disturbed buffer area and the prevailing rate of \$10/square foot. With a disturbed area estimated at 212,500 square feet, the Mitigation Credit is calculated at \$2,125,000 that would be paid to the Town of Huntersville for use within their jurisdiction for improving water quality. Storm Water Services has identified two (2) potential options for use of this Mitigation Credit as described below.

Option 1: Install a stormwater control measure (SCM) such as a wet pond on Town property located at 100 Sherwood Drive to provide water quality and quantity treatment for approximately 10.4 acres of Town owned parcels located upstream, including Town Hall, the Senior Center, and Sherwood Park (PID Numbers: 01712241, 01712214, 01712213, 01712211, 01712210, 01712245, 01903115, 01903116, & 01903114). The SCM would also provide treatment for some road drainage and Cashion's store. It is estimated that this SCM will remove 1,000 lbs./acre/year of sediment and 5 and 2 lbs./acre/yr. of Total Nitrogen and Total Phosphorus, respectively. Figure 1 below illustrates with a blue dot the potential location of the SCM with the treated upstream drainage area indicated in yellow highlight.

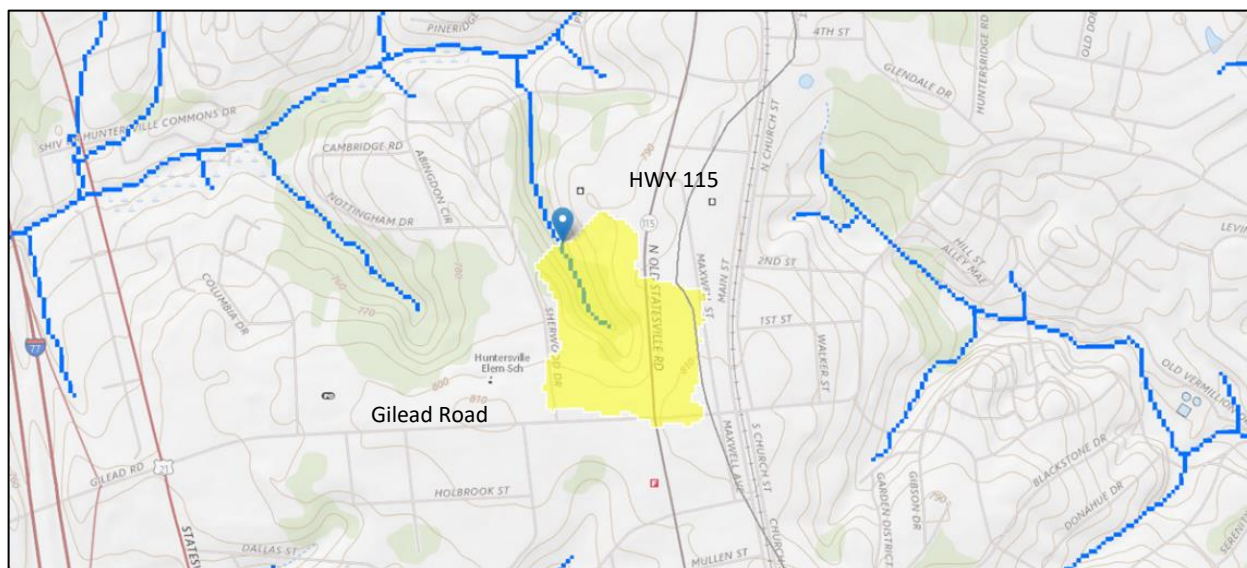


Figure 1: Potential Location of SCM Mitigation Measure

Option 2: Complete a stream restoration project in Cane Creek or the South Prong of Clarke Creek downstream of the landfill. The purpose of the project would be to restore habitat and improve channel stability to promote a healthy aquatic community, including benthics and fish. Storm Water Services uses a Stream Restoration Ranking System or SRRS to prioritize stream reaches for restoration based on a 300-point scale with lower SRRS Scores representing degraded stream conditions with a higher priority for restoration and a SRRS Score of 190 representing acceptable stream conditions. Preliminary SRRS Scores below 190, indicating a potential for restoration, have been calculated for the areas shown in Appendix A along the South Prong of Clarke Creek. In addition, field observations made on July 22, 2021 by Storm Water Services' staff revealed sufficiently degraded channel conditions that potentially warrant restoration in Cane Creek in proximity to the landfill. Photos 3 and 4 below illustrate these conditions at the locations shown in the map included as Appendix A. However, field evaluations and final SRRS Scores are needed to assess channel conditions and potential uplift (i.e., channel stability and habitat improvements) to fully ascertain the viability and benefits of a stream restoration project in either Cane Creek or the South Prong of Clarke Creek in proximity to the landfill.



Photo 3: Cane Creek Downstream of Landfill



Photo 4: Cane Creek Downstream of Landfill

Description of Negative Impacts from the Piping:

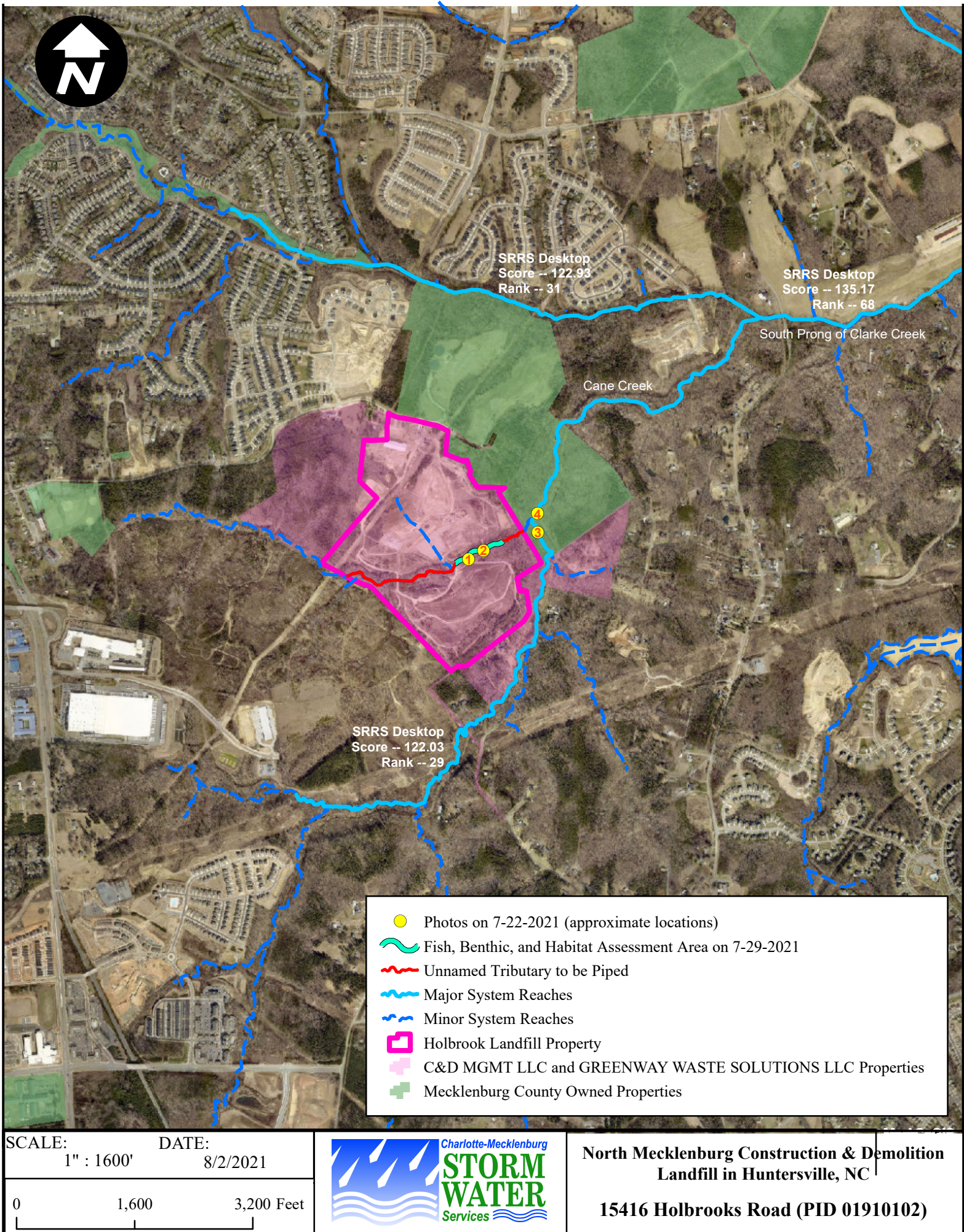
To date, Storm Water Services has not been provided with sufficient information to accurately assess the potential negative impacts from the piping of 1,900 linear feet of Cane Creek and filling in the buffer for landfill expansion. The following questions remain unanswered:

1. What engineering analysis has been performed to verify that the piping system will remain stable and functional during the life of the site and subsequent post closure period?
2. How is the system being engineered to prevent leachate from entering the pipe?
3. What is to prevent the gravel underlayment for the piping system from serving as a conduit for leachate to migrate off site?
4. What is the plan if the piping system fails?
5. Are there plans to monitor for negative downstream water quality impacts?
6. Is the system designed in such a way that leaks can be located and repaired?
7. The outlet of the piped section calls out 130 linear feet of stream to be preserved. However, no energy dissipation device is indicated at the tie-in. What will be constructed to prevent accelerated downstream bank erosion?
8. What are the impacts to flood levels downstream of the pipe? A Hydraulic and Hydrologic Analyses (H&HA) report is requested.
9. What occurs when the flow exceeds the design capacity of the pipe? Where will the water go? The H&HA report from #8 will help answer this question.
10. What measures will be implemented to prevent off site sedimentation during the piping and landfiling operation?

Recommendation to the Town of Huntersville:

The section of Cane Creek proposed for piping is significantly degraded and there are multiple mitigation opportunities in proximity that could result in overall improved water quality conditions. However, these potential improved conditions could easily be negated if the piping system malfunctions or fails resulting in negative downstream impacts associated with water quality and/or quantity issues. Storm Water Services has not been provided with sufficient information to accurately assess the potential for these negative impacts. Responses to the ten (10) questions listed in the previous section are required before this assessment can be completed.

Appendix A: North Mecklenburg Construction & Demolition Landfill Project Area Map



Appendix B

Fish Community Survey, Benthic Macroinvertebrate Bioassessment and Stream Habitat Assessment of the Cane Creek Tributary Flowing through the Holbrooks Landfill

Methodology

On July 29, 2021, a fish community survey, benthic macroinvertebrate bioassessment and a stream habitat assessment were conducted by Mecklenburg County Storm Water Services within the tributary to Cane Creek that flows through the Holbrooks Landfill located at 15416 Holbrooks Road in Huntersville, NC. The fish community survey was conducted on a 200-meter stream reach within the project bounds using electroshocking methodologies in accordance with the Mecklenburg County Fish Community Survey Procedures. The benthic macroinvertebrate bioassessment consisted of collecting the benthic macroinvertebrates found within a 100-meter stream reach from all microhabitats present. The bioassessment procedures followed the Mecklenburg County Stream Bioassessment Procedures. The stream habitat assessment consisted of evaluating 10 stream habitat parameters following the Mecklenburg Stream Habitat Assessment (MHAP) Field Guide.

Fish Community Results

A total of 35 organisms, representing three (3) fish species were collected (see Table 1). The fish species collected were Creek Chub, Rosyside Dace, and Green Sunfish which are considered tolerant. Tolerant fish are able to thrive in poor stream conditions. The low numbers of total fish and species type collected during this survey indicates a stream with a very poor fish community abundance and diversity.

Benthic Macroinvertebrate Results

A total of 48 individual organisms were collected. Twenty-one (21) of those organisms were identified to the lowest possible taxa identification level (Genus and Species). The remaining 27 organisms were identified as Chironomidae (Family taxa level). Of the 10 taxa found, only 2 belonged to the sensitive aquatic insect groups of Mayflies (Ephemeroptera), Stoneflies (Plecoptera) and Caddisflies (Trichoptera) collectively referred to as EPT taxa. These results are typical of a severely impaired benthic macroinvertebrate community receiving a Bioclassification of POOR (see Table 2).

Stream Habitat Assessment (MHAP) Results

The assessed stream reach received a MHAP score of 119.7 out of 200 possible points which is considered *Partially Supporting* (see Table 3). Parameters that received low individual scores include Stream Bed Substrate (6.7 out of 20), Sediment Deposition (7.6 out of 20), Frequency of Riffles (7 out of 20) and Vegetative Buffer Width (7.1 out of 20). The stream bottom was filled with sand resulting in very few riffles (faster moving water) which are the best habitat for benthic macroinvertebrates and very few pools which are the best habitat for fish.

Conclusions

The poor habitat quality of the Cane Creek Tributary flowing through the Holbrooks Landfill property has resulted in the stream being able to support only a small number of fish and benthic macroinvertebrate organisms. Unless the habitat quality significantly improves, it is expected that this stream reach will continue to support an impaired and unhealthy biological community.

Table 1: Fish Community Survey Data

Fish Species	Count	Size Range (mm)	Multiple Age Classes?	Tolerant / Intolerant?
Creek Chub	28	62 to 110	Yes	Tolerant
Rosyside Dace	5	65 to 79	No	Intermediate
Green Sunfish	2	84 to 88	No	Tolerant

Table 2: Benthic Macroinvertebrate Assessment Data

ORDER	FAMILY	GENUS/SPECIES	TOLERANCE	NO.
EPHEMEROPTERA	BAETIDAE	LABIOBATIS PROPINQUUS	5.8	1
PLECOPTERA	PERLIDAE	PERLESTA SPP.	2.9	1
COLEOPTERA	DRYOPIDAE	HElichus SPP.	4.1	1
COLEOPTERA	ELMIDAE	STENELMIS SPP.	5.6	3
DIPTERA	CHIRONOMIDAE	Tanypodinae	NA	14
DIPTERA	CHIRONOMIDAE	Non-Tanypodinae	NA	13
DIPTERA	PTYCHOPTERIDAE	BITTACOMORPHA CLAVIPES	5.0	1
DIPTERA	SIMULIIDAE	SIMULIUM SPP.	4.9	4
DIPTERA	STRATIOMYIDAE	STRATIOMYS SPP.	8.1	1
ODONATA	CALOPTERYGIDAE	CALOPTERYX SPP.	7.5	4
ODONATA	GOMPHIDAE	GOMPHUS SPP.	5.9	3
ODONATA	GOMPHIDAE	PROGOMPHUS OBSCURUS	8.2	2

Table 3: Stream Habitat (MHAP) Data

Instream Cover	Epifaunal Substrate	Stream Bed Substrate	Channel Alteration	Sediment Deposition	Frequency of Riffles	Channel Flow Status	Bank Vegetation	Bank Stability	Buffer
16.1	14.4	6.7	19	7.6	7	12	15.2	14.6	7.1

Sec. 151.44 - Factors for consideration and determination of completeness.

- (A) In passing upon variances, the Board of Adjustment shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and the:
- (1) Danger that materials allowed to be placed in the floodway as a result of the variance may be swept onto other lands to the injury of others during a community base flood;
 - (2) Danger to life and property due to flooding or erosion damage from a community base flood;
 - (3) Susceptibility of the proposed facility and its contents to flood damage and the effect of such damage during the community base flood;
 - (4) Importance of the services provided by the proposed facility to the community;
 - (5) Necessity to the facility of a waterfront location, where applicable;
 - (6) Availability of alternative locations, not subject to flooding or erosion damage during a community base flood, for the proposed use;
 - (7) Compatibility of the proposed use with existing and anticipated Development;
 - (8) Relationship of the proposed use to the Mecklenburg County Floodplain Management Guidance Document, Mecklenburg County Flood Hazard Mitigation Plans, the Mecklenburg County Greenway Plan, and any other adopted land use plans for that area;
 - (9) Safety of access to the property in times of a community base flood for ordinary and emergency vehicles.
 - (10) Expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters during a community base flood expected at the site; and
 - (11) Costs of providing governmental services during and after flood events, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical and water systems and streets and bridges.
- (B) A written report addressing each of the above factors shall be submitted with the application for a variance.
- (C) Upon consideration of the factors listed above and the purposes of this ordinance, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.
- (D) Variances may be issued for the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (E) Functionally dependent facilities if determined to meet the definition as stated in Section 151.06, provided provisions of Section 151.75 have been satisfied, and such facilities are protected by methods that minimize flood damages during the base flood and create no additional threats to public safety; or
- (F) Any other type of development, provided it meets the requirements of this section.

(Ord. of 8-17-2015, § 1)

Sec. 151.45 - Conditions for variances.

- (A) Variances shall not be issued when the variance will make the structure in violation of other federal, state, or local laws, regulations, or ordinances.

- (B) Variances shall not be issued within any designated floodway if the variance would result in any increase in flood levels during the community and/or FEMA Base Flood discharge unless the requirements of 151.61(A)(6) are met.
- (C) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (D) Variances shall only be issued prior to approval of a floodplain development permit.

(Ord. of 8-17-2015, § 1)

Sec. 151.46 - Standards for granting variance.

- (A) Variances shall only be issued upon:
 - (1) A showing of good and sufficient cause;
 - (2) A determination that failure to grant the variance would result in exceptional hardship; and
 - (3) A determination that the granting of a variance will not result in increased flood heights (unless the requirements of Section 151.61(A)(6) are met), additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with other existing local laws or ordinances.
- (B) The fact that the property could be utilized more profitably or conveniently with the variance than without the variance shall not be considered as grounds for granting the variance.

(Ord. of 8-17-2015, § 1)

Sec. 151.47 - Miscellaneous conditions.

- (A) In addition to consideration of the items in 151.44(A), if dryland access cannot be obtained, a variance to the requirement for dryland access may be granted by the Board of Adjustment upon consideration of the following conditions:
 - (1) A determination that all possible alternatives have been investigated in an attempt to provide the safest access from a proposed habitable building to a dry public street.
 - (2) The existence of a site plan prepared by a licensed land surveyor or professional engineers indicating that the proposed access to habitable buildings on the property poses the least risk from flooding.
- (B) In addition to consideration of the items in 151.44(A), a variance may be issued by the Board of Adjustment for solid waste disposal facilities, hazardous waste management facilities, salvage yards, and chemical storage facilities that are located in special flood hazard areas provided that all of the following criteria are met:
 - (1) The use serves a critical need in the community.
 - (2) No feasible location exists for the use outside the special flood hazard areas.
 - (3) The reference level of any structure is elevated above the community base flood elevation or is designed and sealed by a professional engineer or a registered architect to be watertight with walls substantially impermeable to the passage of water and with structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
 - (4) There will be no storage of materials or tanks which could flood within the special flood hazard area unless they are contained in a structure as defined in subsection (B)(3) above.
 - (5) The use complies with all other applicable laws and regulations.

- (6) The Town of Huntersville has notified the Secretary of the North Carolina Department of Public Safety of its intention to grant a variance at least 30 calendar days prior to granting the variance.

(Ord. of 8-17-2015, § 1)