CITY OF HENDERSONVILLE
PLANNING BOARD - REGULAR MEETING
City Hall – 2nd Floor Meeting Room | 160 6th Ave. E. | Hendersonville, NC 28792
Thursday, June 12, 2025 – 4:00 PM

AGENDA

1. **CALL TO ORDER**
2. **APPROVAL OF AGENDA**
3. **APPROVAL OF MINUTES**
   - A. Minutes of May 8, 2025
4. **OLD BUSINESS**
5. **NEW BUSINESS**
   - A. Rezoning: Standard Rezoning – Old Sunset Hill Rd Rezoning | Albea & Taylor (25-38-RZO) – *Matthew Manley, AICP – Long-Range Planning Manager*
   - B. Administrative Review: Preliminary Site Plan– Signal Hill Townhomes (25-20-SPR)– *Sam Hayes – Planner II*
   - C. Rezoning: Conditional Zoning District –Spartanburg Highway Medical Office Building (25-23-CZD)–*Tyler Morrow– Current Planning Manager*
   - D. Rezoning: Standard Rezoning–Quattlebaum Properties F LLC (Sheetz Upward Road) (25-37-RZO) – *Sam Hayes–Planner II*
   - E. Zoning Text Amendment: Tree Canopy Preservation & Enhancement Clarifying Edits (25-15-ZTA)
6. **OTHER BUSINESS**
7. **ADJOURNMENT**

The City of Hendersonville is committed to providing accessible facilities, programs and services for all people in compliance with the Americans with Disabilities Act (ADA). Should you need assistance or an accommodation for this meeting please contact the Community Development Department no later than 24 hours prior to the meeting at 828-697-3010.

Minutes of the Planning Board
Regular Meeting
May 8, 2025

Members Present: Tamara Peacock (Vice-Chair), Donna Waters, Kyle Gilgis, Mark Russell, Bob Johnson, David McKinley, Laura Flores, Lauren Rippy

Members Absent: Jim Robertson (Chair), Peter Hanley

Staff Present: Tyler Morrow, Current Planning Manager, Sam Hayes, Planner II, Matthew Manley, Long Range Planning Manager, Lew Holloway, Community Development Director. Angela Beeker, City Attorney

I Call to Order. ***The Vice-Chair called the meeting to order at 4:00 pm. A quorum was established.***

II Approval of Agenda. ***Ms. Gilgis moved to approve the agenda. The motion was seconded by Mr. Russell and passed unanimously.***

III(A) Approval of Minutes for the meeting of April 10, 2025. ***Ms. Gilgis moved to approve the Planning Board minutes of the meeting of April 10, 2025. The motion was seconded by Ms. Waters and passed unanimously.***

IV Old Business

V New Business

V(A) Conditional Zoning District – Ronan at Hendersonville (P24-33-CZD). Mr. Morrow gave the following background:

Mr. Morrow stated the city has received an application for a conditional rezoning and the subject property is made up of one parcel. It is located on South Allen Road and Upward Crossing Drive. The applicant is Graycliff Capital Development, LLC. The applicant is requesting to rezone the subject property to CHMU CZD. The subject property is approximately 17.13 acres and they are proposing to construction a 192 unit multi-family development with associated accessory buildings.

The NCM for this project was held June 19, 2024. Topics discussed were the need to conserve as many trees as feasible, whether the stormwater detention location would affect tree preservation, the absence of Phase II being discussed during Phase I of the Waterleaf development review, the affordability of the housing units, the recommendation for conducting a wildlife study and concerns regarding the loss of agricultural land.

Site photos were shown and are included in the staff report and presentation.

A brief rezoning history was discussed and is included in the staff report and presentation.

A site plan that was shown and is included in the staff report and presentation. The development includes eight apartment buildings. The site plan was discussed.

Mr. Morrow stated that all the buildings do meet the design requirements for CHMU minus the parking condition.

Mr. Morrow stated a Traffic Impact Analysis was submitted for this project. The TIA showed this project would generate 1,306 daily trips, 82 AM peak hour trips and 103 PM peak hour trips. Five intersections were used as part of this TIA.

A city staff proposed condition that was not agreed to by the developer was discussed. The condition stated the development shall provide a roadway connection between the current dead end of Upward Crossing and South Allen Road. This roadway connection is supported by the zoning ordinance, comprehensive plan and transportation best practices. The connection shall follow the public roadway design established with the existing Waterleaf Phase I extension. The roadway extension was discussed. This is included in the staff report and presentation.

The city proposed condition that was a counter to the previous one was discussed and is included in the staff report and presentation. This condition was approved by the developer.

The developer proposed conditions were discussed and are included in the staff report and presentation.

Future Land Use map was shown and is included in the staff report and presentation.

General Rezoning standards for Comprehensive Plan Consistency were discussed and are included in the staff report and presentation.

The Current Land Use and Zoning map was shown and is included in the staff report and presentation.

General rezoning standards for compatibility were discussed and are included in the staff report and presentation.

A draft Comprehensive Consistency statement was included in the presentation and staff report.

A draft reasonableness statement for approval and denial were included in the staff report and presentation.

Vice-Chair asked if there were any questions for staff.

Mr. Johnson asked about buffering from the interstate. Mr. Morrow stated the city does have some buffering requirements for any public roadway and interstates are not treated differently. They are providing street trees along I-26 and shrubs. As proposed most of the buffering will be from those street trees and not like a sound wall.

Ms. Gilgis asked how soon would it be before the residents requested sound walls. Those trees are not going to provide the kind of buffer that would provide any kind of quality of life as far as sound walls. She asked who is responsible for sound walls if the residents want them. Mr. Morrow stated NCDOT is doing some additional upgrades to I-26 and he does not believe sound walls are in that current contract for them to do those so if there were sound walls it would be between the developer and NCDOT to work out. It would not be anything the city would require. She stated the buildings are three stories high, correct? Mr. Morrow stated correct. She stated and the trees are 1 ½ inch caliper. Mr. Morrow stated yes, usually. Ms. Giligs stated it would take a long time for them to grow and have any kind of a buffer. Mr. Morrow stated yes.

There were no further questions for staff.

Vice-Chair asked if the applicant would like to speak.

Warren Sugg with Civil Design Concepts stated they are a civil engineering group here in Western North Carolina. He stated he would give a presentation and these are not final drawings, they are concept plan drawings. He stated their main point of connection is off of Upward Crossing. He pointed that out on the site plan. He also explained the site plan and pointed out the clubhouse and the garage units. He also pointed out the amenities. They have a dog park and they also have a playground area, fire pits and a pool. They will connect to city water and sewer. He discussed stormwater and pointed out the drainage areas. They are trying to catch the run-off in several different drainage areas. They go through all the details and design for stormwater control. He pointed out the open space areas where they will be saving some of the trees. There are not a ton of trees there because it is kind of an open field. They are aware that there are some streams and wetlands on site. They are going through a field review which will be sent to the Army Corp of Engineers for their review. They will determine what are streams and wetlands on the site. He discussed the fire access.

Chair asked if there any questions for the applicant.

Ms. Gilgis stated let's talk about public safety, let's talk about fire trucks, let's talk about ambulances, sprinklers aren't going to do it. She also stated can a fire truck, a ladder truck get in there. Mr. Sugg stated yes. Ms. Giligs stated how? Mr. Sugg stated they are able to drive up Upward Crossing and they are able to turn into the main intersection and they are able to make any kind of connections within. Ms. Gilgis asked him to show her. Mr. Sugg pointed this out on the site plan. Discussion was made on the sprinklers.

Ms. Gilgis asked about the rectangular area on the plan. Mr. Sugg stated that is a stormwater pond.

Vice-Chair asked for the applicant to point out the area where the sidewalk that they did not want to put in is located. Mr. Sugg pointed this out along with the wetlands. Vice-Chair asked how long the sidewalk was to make the connection. Mr. Sugg stated 100 feet give or take and five feet wide.

Discussion was made on the road going through there and if that would give them the frontage they need to meet those standards. Mr. Sugg stated he thinks that is something that could be debated. He thinks what they have is very adequate. It does what is intended. They are working with what they have.

Discussion was made on if there would be any barrier off of I-26 coning into the development. Mr. Sugg stated there are plantings. There is no fences or barriers or sound barriers like what was mentioned. The site will be built up so they would have to climb a little to get in there. There is a pretty steep grade.

Vice-Chair asked the logic was on the tail piece of property that was supposed to get a roadway on it and you did not agree to that condition. Mr. Sugg stated he thinks that is just residual property from the sale. Vice- Chair stated it is supposed to be a road actually and it shows a lot of exhibits as a road. Mr. Sugg stated they will have some other folks speak to that.

Jay Lee representing Graycliff Capital and their development team stated Graycliff has been active in the area for about 10 years, having done seven workforce housing developments, He discussed housing in the area and what is needed. When city staff first made it apparent a few months ago that they would be including the road extension from Upward Crossing Drive down to South Allen as a condition of approval for their rezoning, they did have their general contractor price the existing road construction plan that the landowners had drawn years ago. He knows their budget and financial feasibility is not necessarily a concern of the Planning Board but he does think it is a major part of this story especially for a market that according to the study needs 60,000 more units in the next 3 ½ years. Their general contractor came back

and determined the road would cost about 2.3 million dollars to extend it from where it currently terminates at the rear entrance to the Summit of Hendersonville and all the way to South Allen. A lot of the cost comes from clearing out the two extensive tree groves on site and filling in paving and the existing wetlands on the property those of which we are proposing to remain undisturbed and as natural amenities for our community. Another thing that was brought up is how the road extension has been shown on past plans and past submissions for the adjacent property. The really important and missing context behind this being shown on their previous site plans is at the time they were entitling the Summit at Hendersonville, the landowners of the Ronan site were pursuing selling this land to a retail developer. He has a site plan that the landowners sent to him years ago while working on the Summit project that shows a retail development going on one portion of this site and the land being subdivided to offer further retail. This site plan was shown to the Board. That is why on their initial submittal for Summit at Hendersonville, the road extension is shown as proposed to be designed and built by others. It was their understanding if retail developers were coming in here and developing store fronts along this road, they would absolutely be extending the road all the way through in order to get more vehicles in front of their stores every day. Now that this has been proposed as an entirely different use, this is a fully residential neighborhood and they have concerns about building a cut through road through the middle of a residential neighborhood. Given how close they are to I-26, they have concerns about truckers and students of the Blue Ridge Community College bypassing the existing infrastructure of Upward Road and South Allen to take their neighborhood as a short cut instead of the existing roadways. He stated the Traffic Impact Analysis which has been finalized and approved by NCDOT and the city, determined that no traffic control improvements have been identified. The city's third party engineering review of their TIA which determined that adding 192 housing units to this area, the expected increase and traffic delays at the intersection of Upward Road and Upward Crossing Drive at peak commute hours in the morning would increase by one second. So they are asked to build a 2.3 million dollar road in order to save commuters one second in the morning. He stated they have several conversations concerning fire and life safety with the city Fire Marshal who has confirmed they will fully comply with the state fire code by having full sprinklers and alarm systems and one entry point where they are located on Upward Crossing Drive. He pointed out the entrance and the connection to the Summit on the site plan and also pointed out the proposed road extension and where it would be.

Ms. Flores asked what the proposed rents would be. Mr. Lee stated they do not know for sure right now. They will be market rate and rents kind of fluctuate daily right now. They will be within 80 to 100% of the median income. This project will not open until at least two years from now so there is just no way to tell.

Ms. Waters stated if this is workforce housing it will be the age where a lot of children could be living there. Has he considered the effect on the Henderson County School System and have you thought about an impact study or offered to help the school system? Mr. Lee stated they would be more than willing to help. Having school age children in the development is another reason they have concerns about this road extension.

Vice-Chair asked if they had any issue with staff's alternate request that they have a private easement through the original site. Mr. Lee stated they have no issues there.

Vice-Chair asked the developer to discuss the developer's proposed conditions. Mr. Lee discussed these conditions. Discussion was made on the sidewalk and the impact to the wetlands. As long as there are no serious impact to the wetland they are willing to put the sidewalk in.

Discussion was made on the trees and the highway. Mr. Morrow explained the street tress and pointed out the common open space area. The larger caliper tree is only specifically for CHMU and it is only specifically from the common space tress that are required as part of that area.

It was stated there are 54 street trees provided along the interstate and another 21 along Upward Crossing, there is vehicular use which provides another 38 trees along with 76 shrubs and on the street buffer they

have 36 shrubs, open space they have 560 shrubs and they have some tree credits and trees required. They have a credit of 108 so 42 trees, common open space they are 63 trees provided and another 375 shrubs.

Craig Justus, attorney representing the applicant stated the access question that was asked about, just a reminder there is the easement through Summit. There is interconnectivity to those two residential neighborhoods. There is access availability through Summit. In terms of the noise variable, obviously these folks are not going to put in a product where the people will not be excited about living there. As you heard they will be looking further on how to deal with it. There is a lot of housing along I-26. He discussed workforce housing and the cost of living today. He talked about the extension of the roadway not being needed and the cost.

There were no questions for the applicant.

Vice-Chair opened public comment.

Ken Fitch, 1046 Patton Street stated the future use of this parcel was a mystery. He discussed the road extension and the wetland. The sidewalk is an issue. There should be some kind of creative solution on this. He talked about the impact of a road at that location. The talked about having three entrances right together. The caliper issue was also a concern of his.

Glenn Lange, 625 Ferncliff stated he is with the Hendersonville Tree Board and he would be glad to talk with you about the caliper of the trees. He stated the 3 and 3 ½ caliper requirement has been in the zoning ordinance for a while and is not anything new. It is related to the common space. It is there to create quicker tree canopy cover for the enjoyment of the residents. They see no reason that sticking with the code is problematic. They recommend that they stick with the 3 or 3 ½ inch caliper just for the common open space trees. All the other trees they plant can be the smaller ones.

Vice-Chair closed the public hearing.

The Board discussed the caliper of the trees. Vice-Chair stated the code for the interstate is for the smaller trees. The sidewalk was also discussed. Discussion was made on the motion and the conditions.

Mr. Russell moved Planning Board recommend City Council adopt an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject property (PIN: 9588-22-1126) from CHMU, Commercial Highway Mixed Use to CHMU-CZD, Commercial Highway Mixed Use Conditional Zoning District, for the construction of a 192 unit multi-family development based on the master site plan and list of conditions submitted by and agreed to by the applicant, [dated 4-25-25] and presented at this meeting and subject to the following: 1. The development shall be consistent with the site plan, including the list of applicable conditions contained therein, and the following permitted uses: Permitted Uses: 1. Residential dwellings, multi-family. 2. Accessory uses & structures. 2. Permitted uses and applicable conditions presented on the site plan shall be amended to remove condition 4 and condition 6. 3. The petition is found to be consistent with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because: The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan. 4. We find this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because: 1. The proposed development further supports the growth of this area as a multi-family node along the I-26 corridor, placing residents in close proximity to I-26, Blue Ridge Community College, a bank, and other commercial amenities. 2. The proposed development

adds needed housing to help address local demand. Ms. Waters seconded the motion which passed 7 in favor and 1 opposed (Ms. Gilgis).

V(B) Conditional Zoning District – Pace Hendersonville (25-11-CZD). Mr. Manley gave the following background:

Mr. Manley stated the city has received an application for a conditional rezoning. The location is 201 Sugarloaf Road and is currently the site of the Cascades Mountain Resort. The property owner is Hendersonville Hospitality and Jacob Glover is here today representing Pace Living. The existing zoning is split zoned C-3 and CHMU. The proposed zoning is Urban Residential. He has an alternate zoning that he will introduce as well. The current land use is a hotel which consists of two buildings. The applicant is proposing to keep the site as is and convert those buildings to multi-family with 120 units. That comes up to 17.8 units per acre on a 6.72 acre site.

The Neighborhood Compatibility meeting was held March 7, 2025. Topics discussed were safety and security measures, improvement to transportation infrastructure/access, sustainable building practices, site drainage, preservation of existing vegetation, provision of a community garden, safe pedestrian access, amenities, public vs. private, provision of a TIA and property management.

Site photos were shown and are included in the staff report and presentation.

The site plan was shown and discussed and is included in the staff report and presentation.

Mr. Manley stated there is no tree preservation required because there is no disturbance of the site proposed. The developer has indicated that all vegetation would remain and landscaping requirements would be met. Trip generation was calculated for this development and the peak AM trips came in at 48 and the peak PM trips came in at 61. The daily trips came in at 809. This does not fall under the threshold for a TIA but NCDOT has stated that Sugarloaf Road is on the list of roads that need improvement and therefore that would require a TIA. The applicant is making a case that the existing use for lodging actually has a higher trip generation than multi-family so they would be bringing down the potential trip generation and it is under the city's threshold. Urban Residential does require a TIA but it could be deferred by City Council. The applicant has asked that it be waived completely. Sidewalks were discussed along with parking spaces. Landscaping compliance will be triggered.

Elevations were shown and discussed and are included in the staff report and presentation.

Professional photos were shown and are included in the staff report and presentation.

The developer proposed conditions were briefly discussed and are included in the staff report and presentation.

Future Land Use map was shown and is included in the staff report and presentation.

General Rezoning standards for Comprehensive Plan Consistency were discussed and are included in the staff report and presentation.

The Current Land Use and Zoning map was shown and is included in the staff report and presentation.

Mr. Manley stated there are some code enforcement and fire and building code violations on the property.

General rezoning standards for compatibility were discussed and are included in the staff report and presentation.

A draft Comprehensive Consistency statement was included in the presentation and staff report.

A draft reasonableness statement for approval and denial were included in the staff report and presentation.

Mr. Manley discussed the housing reforms. He explained the Urban Residential zoning and the CHMU zoning. Walkability and sidewalks were discussed.

Vice-Chair asked if there were any questions for staff.

Vice-Chair asked about the CHMU zoning and being more compatible with the neighborhood, what uses are allowed in that one that are not allowed in Urban Residential? Mr. Manley stated in Urban Residential you can have nonresidential uses but they have to be accessory to the principle use, a residential principle use. Under CHMU you can have a commercial principle use. Mr. Morrow stated it would be a CZD so it would be site specific regardless.

Discussion was made on the number of units allowed.

There were no further questions for staff.

Vice-Chair asked the applicant to come forward and give their presentation.

Jacob Glover, the Director of Operations for Pace Living stated Hendersonville is a beautiful city. He stated they are a company that specializes in conversion space around the southeast. They are really excited about this one for the layout of the existing property, the uses, the amenity spaces and what it can bring to the community as far as the affordability concept. He stated they are proposing 120 units. They are proposing 100 studio units in the main structure. They are proposing ten one-bedroom units and ten two-bedroom units in the annex building. Currently it is a 50 unit structure. The building was built in 1967. He stated they bring contemporary living and he discussed having affordable and attractive living spaces. They take the existing structure and utilize the space by putting in new carpet and kitchens, etc. This keeps the cost down for the tenant. He discussed the amenities that would be provided. He discussed the architectural details and showed photos in the presentation. He stated they have an office in Miami and he works in Augusta, Georgia and they have one in Atlanta as well. The have a lead architect team. He talked about property management and this company is out of Greenville. They also have a design team. He showed a list of units that they have and the location. He discussed the models they have. He feels Hendersonville will be a great place and a great market for their units. He gave a conversion timeline.

Vice-Chair asked if there were any questions for the applicant.

Ms. Waters stated this development sounds like it will be aimed at adults and there won't be children in there. She thinks the sidewalks are a moot point. Mr. Glover stated that is correct and he won't say there won't be children there but the majority of the people will be working professionals. The sidewalk is one of those things if they build it where does it go to.

The ballpark average for the studio in Augusta is $1,100 to $1,200 all in. That gives you your rent and all your utilities. It gives you a pool, a gym and workspace. He doesn't know what the market in Hendersonville will be yet.

Vice-Chair asked what the size of the units would be. Mr. Glover stated a little over 300 to 315 to the 320 range. They will have ten one-bedrooms that will be larger and ten two-bedrooms.

Vice-Chair asked if he had any feelings about adding the CHMU zoning to the motion because she thinks that is better for them. Mr. Glover stated they do too. He feels like it fits.

There were no further questions for the applicant.

Vice-Chair opened public comment.

Ken Fitch, 1046 Patton Street stated he is not against this but he wants to know what is it. It is almost like Lake Pointe Landing but for young professionals. How it functions and how it remains affordable is the question. He stated they want this to succeed and they don't want a problem like it is now. Having staff for the amenities and maintaining it will be a cost. Is there an occupancy limit in the studio apartments. There are people that would love this but would not be able to afford it. The one issue is security and given the location that is a big concern.

Mr. Patel, 150 Sugarloaf Road stated he is not against the project. The only concern he has is how in the future do you make sure it does not become government or low-income housing. That brings other issues in that area. There are police cars running all night long on Sugarloaf Road.

Mr. Glover stated security is always a big deal. Anything they do with 100 units or more will have on-site staff at all times. That is usually one person at night and two people during the day. The property management company will handle the logistics on that end. They will make sure everything is secure and functioning. He described the studio units and having a kitchenette and separating space for a bed. He stated this project will cost money and the money they put in here, government housing would not suffice. They are very strategic on the renovation, the design, the function and the property management. They think it will be a great asset for the city.

Vice-Chair closed public comment.

Ms. Gilgis made a motion to recuse Mark Russell due to a conflict. Ms. Flores seconded the vote which passed unanimously.

The Board discussed the motion and rezonings and adding a second option.

Ms. Gilgis moved the Planning Board recommend City Council adopt an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject property (PIN: 9579-56-1085) from C-3, (Highway Business Zoning District) and CHMU (Commercial Highway Mixed Use Zoning District) to UR-CZD (Urban Residential Conditional Zoning District) or CHMU CZD, (Commercial Highway Mixed Use Conditional Zoning District) based on the site plan and list of conditions submitted by and agreed to by the applicant [dated April 29, 2025], and presented at this meeting and subject to the following: 1. The development shall be consistent with the following permitted uses Permitted Uses: a. Residential Dwellings, Multi-Family 120 units. 2. The development shall be consistent with the site plan, including the list of applicable conditions contained therein. 2. Permitted uses and applicable conditions presented on the site plan shall be amended to include: Proposed City initiated Conditions: TIA shall be deferred to after the rezoning but prior to final site plan approval. 3. The requested rezoning to Urban Residential Conditional Zoning District or CHMU CZD Commercial Highway Mixed Use Conditional Zoning District and the associated proposed redevelopment align with the Gen H 2045 Comprehensive Future Land Use & Conservation Map and the Character Area Description for "Mixed Use Employment". 4. We find this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because: 1. The proposed redevelopment would reuse and restore an underutilized property located in close proximity to a major commercial corridor. 2. The proposed conversion of the subject property would provide needed housing units. 3. The proposed

renovation of the subject property would result in improved landscaping. Mr. McKinley seconded the motion which passed unanimously.

The Board had a five minute recess.

V(C) Zoning Map Amendment – Standard Rezoning – 135 Sugarloaf Road (P24-43-RZO). Mr. Manley stated the applicant requested to defer this application.

Vice-Chair stated this application will be placed on the June meeting at 4:00 PM at this location.

V(D) Zoning Text Amendment – Reforms for Housing – PRD Changes (25-01-ZTA). Mr. Manley gave the following background:

Mr. Manley stated this has been brought to the Board before. The changes to PRD were voted on and approved but staff has made a few tweaks to them. This is falling under the umbrella of housing affordability.

Mr. Manley gave a project background which is included in the staff report and presentation.

Mr. Manley discussed the housing text amendments that were recently approved. He discussed the proposed amendments which are included in the staff report and presentation.

The proposed amendment for PRD were discussed and are included in the staff report and presentation.

Vice-Chair asked if there were any question for staff.

Ms. Flores asked about the setback for the front facing garages and if that was purely for aesthetics. Mr. Manley stated it is about creating clearance from the sidewalk. A lot of people are not using their garage for storing vehicles but for storing stuff and they are parking their vehicle in the driveway. Our current parking space standard is 9' x 18' in a parking lot but the largest vehicles on the road are 20' to 20.5' long so this causes the vehicles to hang out onto the sidewalk so this creates more room for that.

Ms. Gilgis commended staff for their hard work.

Vice-Chair opened public comment.

Ken Fitch stated text amendments are problematic because there are a uniform set of standards but the problem is with our geography the parcels differ greatly and the character and how they function and one size does not fit all. He discussed PRDs and CZDs being investment properties. The changes in setbacks do offer more opportunities for more units. He was concerned about this creating greater opportunities for incompatibility.

Vice-Chair closed the public comment.

Mr. Johnson moved the Planning Board recommend City Council adopt an ordinance amending the official City of Hendersonville Zoning Ordinance: Article IV. Establishment of Zoning Districts & Article V. Zoning District Classifications as presented by staff, based on the following: The petition is found to be consistent with the City of Hendersonville Gen H Comprehensive Plan based on the information from the staff analysis and because: The proposed text amendment aligns with the Gen H 2045 Comprehensive Plan Future Land Use & Conservation Map and the Character Area Descriptions. 2. Furthermore, we find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because: 1.The proposed amendment

creates an opportunity to address the need for additional, dispersed, "attainable" infill housing. 2.The proposed amendment allows for property owners to better utilize their property and earn additional revenue. 3.The proposed amendment will allow for "missing middle housing" Ms. Flores seconded the motion which passed unanimously.

V(E) Zoning Text Amendment – Tree Canopy Preservation & Enhancement Clarifying Edits (25-15-ZTA)

Vice-Chair stated this application has been postponed.

VI Other Business

VII Adjournment – ***The meeting was adjourned at 6:33 pm.***

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Jim Robertson, Chair

DRAFT

CITY OF HENDERSONVILLE

AGENDA ITEM SUMMARY
PLANNING DIVISION

SUBMITTER: Matthew Manley

MEETING DATE: June 12, 2025

AGENDA SECTION: New Business

DEPARTMENT: Community Development

TITLE OF ITEM: Rezoning: Standard Rezoning – Old Sunset Hill Rd Rezoning | Albea & Taylor (25-38-RZO) – *Matthew Manley, AICP – Long-Range Planning Manager*

SUGGESTED MOTION(S):

For Recommending Approval:

I move Planning Board recommend City Council **adopt** an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject property (PINs: 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724) from Henderson County Residential Two Rural to R-15, Medium Density Residential Zoning District based on the following:

1. The petition is found to be Consistent with the City of Hendersonville Gen H Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition is consistent with the Future Land Use and Conservation Map Designations of Multi-Generational Living and is located in a Focused Intensity Node as illustrated in Chapter 4 of the Gen H Comprehensive Plan.

2. Furthermore, we find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because:

1. The proposed zoning allows for the provision of additional housing to offset local demand.
2. The proposed zoning district's minimum lot size is consistent with nearby developments.
3. The proposed zoning district's permitted uses are consistent with nearby developments

[DISCUSS & VOTE]

For Recommending Denial:

I move Planning Board recommend City Council **deny** an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject (PINs: 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724) from Henderson County Residential Two Rural to R-15, Medium Density Residential Zoning District based on the following:

1. **The petition is found to be consistent with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:**

   The petition is consistent with the Future Land Use and Conservation Map Designations of Multi-Generational Living and is located in a Focused Intensity Node as illustrated in Chapter 4 of the Gen H Comprehensive Plan.

2. **We do not find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because:**

   1. The proposed zoning is incompatible with the surrounding land uses
   2. The proposed zoning would result in increased traffic congestion to the surrounding area
   3. The proposed zoning would result in environmental degradation

[DISCUSS & VOTE]

SUMMARY: *The City of Hendersonville is initiating zoning for 4 properties totaling 21.32 acres that were recently annexed into the City Limits. The properties are owned by Gregory Albea, Julianne Albea, Jospeh Taylor, and Laura Taylor. The City is requesting to assign zoning to the subject properties, PINs: 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724, located off Old Sunset Hill Road. The properties were zoned under Henderson County as 'Residential Two Rural'. Planning staff is recommending that they be given a City zoning of R-15, Medium Density Residential. This zoning would allow for a variety of residential development arrangements. Sixty-one standard R-15 lots could be created out of the 21.32 Acres. Single-family or two-family homes could be placed on those lots - though a unit count exceeding 51 units would require a rezoning to a Conditional Zoning District.*

If rezoned, there will not be a binding site plan, list of uses, nor conditions placed on the site. All permitted uses within the R-15 district would be allowed on the site.

PROJECT/PETITIONER NUMBER:	25-38-RZO
PETITIONER NAME:	• City of Hendersonville [Applicant] • Gregory Albea, Julianne Albea, Jospeh Taylor, and Laura Taylor [Owner]
ATTACHMENTS:	1. Staff Report 2. Proposed Zoning Map 3. Draft Ordinance

REZONING: CONDITIONAL REZONING –OLD SUNSET HILL REZONING | ALBEA & TAYLOR (25-38-RZO)

CITY OF HENDERSONVILLE - COMMUNITY DEVELOPMENT STAFF REPORT

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OUTSTANDING ISSUES & CITY PROPOSED CONDITIONS: ..... **Error! Bookmark not defined.**
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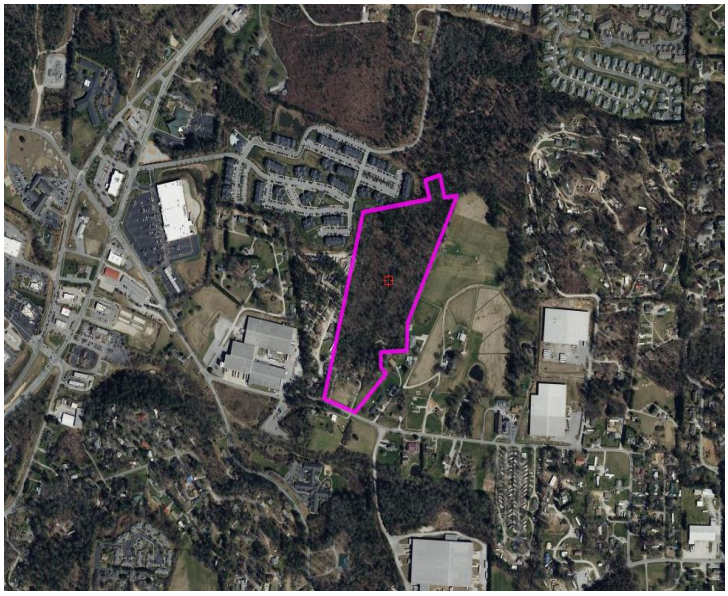
PROJECT SUMMARY

- Project Name & Case #:
  - 25-38-RZO
- Applicant & Property Owner:
  - City of Hendersonville [Applicant]
  - Gregory and Julianne Albea [Owner]
  - Joseph and Laura Taylor [Owner]
- Property Address:
  - 205 Old Sunset Hill Road
- Project Acreage:
  - 21.32 total
- Parcel Identification (PIN):
  - 9579-98-0375
  - 9579-98-3527
  - 9579-99-4115
  - 9579-99-8724
- Current Parcel Zoning:
  - Henderson County Residential Two Rural
- Future Land Use Designation:
  - Henderson County- Infill Area
  - City of Hendersonville- Multi-Generational Living
- Recommended Zoning:
  - R-15

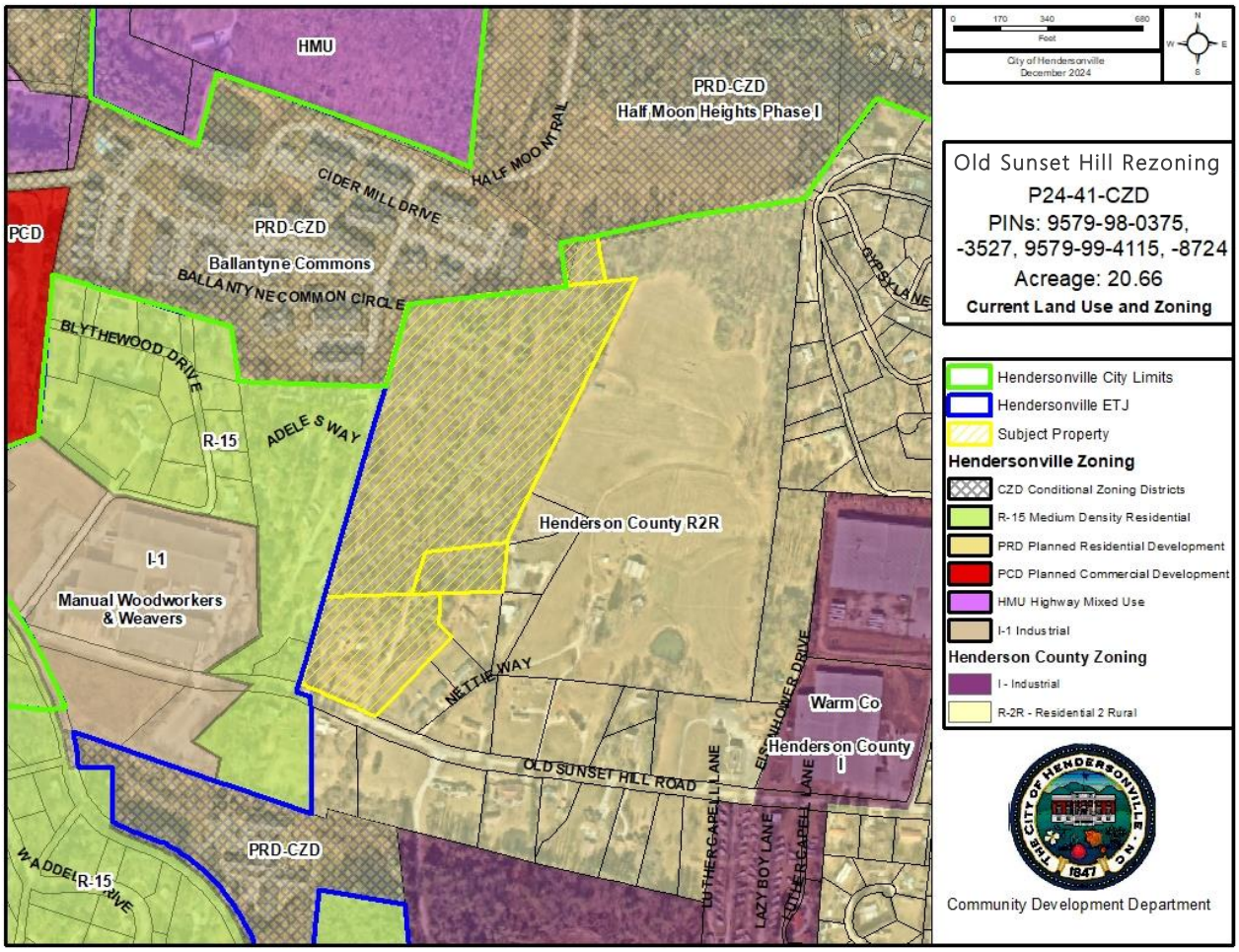


SITE VICINITY MAP

The City of Hendersonville is initiating zoning for 4 properties totaling 21.32 acres that were recently annexed into the City Limits. The properties are owned by Gregory Albea, Julianne Albea, Jospeh Taylor, and Laura Taylor. The City is requesting to assign zoning to the subject properties, PINs: 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724, located off Old Sunset Hill Road. The properties were zoned under Henderson County as 'Residential Two Rural'. Planning staff is recommending that they be given a City zoning of R-15, Medium Density Residential. This zoning would allow for a variety of residential development arrangements. Sixty-one standard R-15 lots could be created out of the 21.32 Acres. Single-family or two-family homes could be placed on those lots - though a unit count exceeding 51 units would require a rezoning to a Conditional Zoning District.

If rezoned, there will not be a binding site plan, list of uses, nor conditions placed on the site. All permitted uses within the R-15 district would be allowed on the site.

EXISTING ZONING & LAND USE



City of Hendersonville Current Zoning & Land Use Map

The subject property comprises four parcels currently zoned Henderson County Residential Two Rural. To the north, parcels are zoned Planned Residential Development Conditional Zoning District and include Ballantyne Commons, an apartment community with a density of 12 units per acre, and Half Moon Heights Phase One, a single-family development with a density of 2.67 units per acre. A stub out from Half Moon Heights Phase One should provide connectivity to the subject properties. Farther north, single-family home subdivisions (Major PRDs), including Wolf Chase and Wolf Pen, have densities of 2.6 and 2.7 units per acre, respectively.

Parcels to the east consist primarily of smaller lots with single-family homes. However, a large, underutilized property directly adjacent to the subject property has redevelopment potential in the future.

To the west, the Connor Creek Mobile Home Park occupies the neighboring parcel. This park contains 94 mobile/manufactured home units, with a density of 12 units per acre. According to a recent survey, some mobile homes in Connor Creek encroach on the subject property.

SITE IMAGES

View of one of the streams that run through the subject property.

View from the subject property to the adjacent apartment development (Ballentyne Commons)

SITE IMAGES

Typical view within the subject property.

View of the largely underutilized land to the east of the subject property.

SITE IMAGES

View of Half Moon Heights Phase I from the subject property.

View of the adjacent mobile home park (Connor Creek).

SITE IMAGES

View of the stream that runs along the western portion of the property.

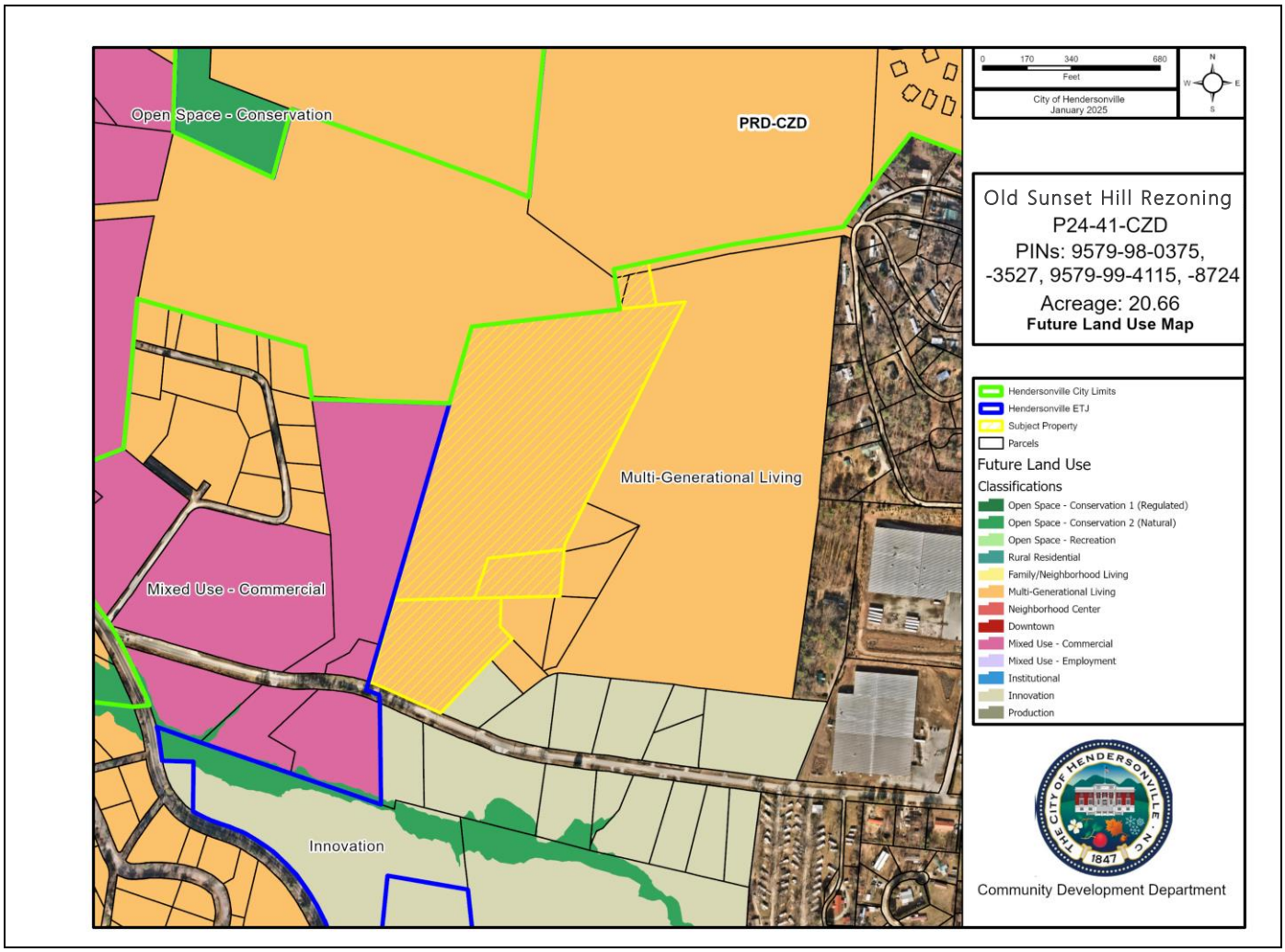
View of an existing house located on the subject property.

SITE IMAGES

View of the subject property from Old Sunset Hill Road

View of the subject property's Old Sunset Hill Road frontage

FUTURE LAND USE



City of Hendersonville Future Land Use Map

The subject property is designated as Multi-Generational Living. These parcels and all other surrounding parcels included in existing Planned Residential Developments have this designation. Parcels to the west are designated as Mixed-Use Commercial and these parcels include the Connor Creek Mobile Home Park as well as the Manual Woodworkers & Weavers. The large, underdeveloped parcel to the east is designated as Multi-Generational Living. Parcels to the south along Old Sunset Hill Road are designated as innovation and Open Space Conservation.

REZONING ANALYSIS – GENERAL REZONING STANDARDS (ARTICLE 11-4)

GENERAL REZONING STANDARDS	
1) Comprehensive Plan Consistency	**Land Supply, Suitability & Intensity** **Land Supply:** The subject property is outside the scope of the land supply map. **Land Suitability**: The subject property was not evaluated. **Focused Intensity Node**: The subject property is in a Focused Intensity Node centered at the intersection of Howard Gap Road and Chimney Rock Road. **Development Intensity:** Highest **Focus Area:** N/A
	Future Land Use & Conservation Map- **Designation:** Multi-Generational Living **Character Area Description:** Consistent **Zoning Crosswalk:** Inconsistent
2) Compatibility	**Whether and the extent to which the proposed amendment is compatible with existing and proposed uses surrounding the subject property –**
	The subject property is located near four Planned Residential Developments, including three single-family developments and one multi-family development. Additionally, it is in close proximity to Chestnut Ridge, a subdivision under Henderson County's jurisdiction that was platted in 1988 and consists of approximately 118 lots on 62 acres. The US 64 corridor continues to experience growth, driven by the presence of large undeveloped and underdeveloped parcels in the surrounding area.
3) Changed Conditions	**Whether and the extent to which there are changed conditions, trends or facts that require an amendment -**
	The subject property is requesting to be annexed into the City. If annexed, the City must apply zoning to the parcels. City staff recommends that the zoning be consistent with surrounding land uses.
4) Public Interest	**Whether and the extent to which the proposed amendment would result in a logical and orderly development pattern that benefits the surrounding neighborhood, is in the public interest and promotes public health, safety and general welfare -**
	Based on the 2021 Bowen Housing Needs Assessment for Western North Carolina, Henderson County has an estimated rental housing gap of 1,650 to 2,008 Units for incomes between <50%-120% AMI. This represents one of the largest gaps in the WNC region. Over the last 3 years, the City of Hendersonville has approved 634 detached single-family homes. It should also be noted that the Housing Needs Assessment Study does not account for the housing gap for incomes above 120% AMI. An additional gap, beyond that reflected in the "1,650 to 2,008-unit gap", exist for those income levels greater than 120% AMI.

5) Public Facilities	**Whether and the extent to which adequate public facilities and services such as water supply, wastewater treatment, fire and police protection and transportation are available to support the proposed amendment**
	Howard Gap Road is a NCDOT maintained road, identified in the Comprehensive Transportation Plan as a boulevard in need of improvements. If approved, the site would be served by City of Hendersonville water and sewer services. Water infrastructure is already available on Old Sunset Hill Road, while sewer service would need to be extended from the Connor Creek Mobile Home Park to the west.
6) Effect on Natural Environment	**Whether and the extent to which the proposed amendment would result in significantly adverse impacts on the natural environment including but not limited to water, air, noise, storm water management, streams, vegetation, wetlands and wildlife -**
	No development is proposed at this time. Therefore there are no known impacts on the natural environment as a result of this rezoning. Approximately 19.5 acres of the 21+acre property are currently covered by an existing tree canopy. The site also includes blue-line streams. These streams would be required to be protected in compliance with the natural resource provisions of the zoning ordinance. Additionally, wetlands have been identified on the site; however, unlike blue-line streams, the zoning ordinance does not extend specific protections to wetlands.

DRAFT COMPREHENSIVE PLAN CONSISTENCY AND REZONING REASONABLENESS STATEMENT

The petition is found to be **consistent** with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition is consistent with the Future Land Use and Conservation Map Designations of Multi-Generational Living and is located in a focused intensity node within chapter 4 of the Gen H Comprehensive Plan.

We **[find/do not find]** this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

DRAFT [Rationale for Approval]

- *The proposed zoning allows for the provision of additional housing to offset local demand.*
- *The proposed zoning district's minimum lot size is consistent with nearby developments.*
- *The proposed zoning district's permitted uses are consistent with nearby developments*

DRAFT [Rational for Denial]

- *The proposed zoning is incompatible with the surrounding land uses*
- *The proposed zoning would result in increased traffic congestion to the surrounding area*
- *The proposed zoning would result in environmental degradation*

Ordinance #___-____

AN ORDINANCE OF THE CITY OF HENDERSONVILLE CITY COUNCIL TO AMEND THE OFFICIAL ZONING MAP OF THE CITY OF HENDERSONVILLE, FOR CERTAIN PARCELS (POSSESSING PIN NUMBERS 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724), BY ASSIGNING THE ZONING DESIGNATION FROM HENDERSON COUNTY R2R, RESIDENTIAL TWO RURAL, TO R-15, MEDIUM DENSITY RESIDENTIAL

IN RE: Parcel Numbers: 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724
205 Old Sunset Hill Rd (Albea & Taylor) | File # 25-38-RZO

WHEREAS, Planning Board took up this application at its regular meeting on June 12, 2025; voting ___ to recommend City Council adopt an ordinance amending the official zoning map of the City of Hendersonville, and

WHEREAS, City Council took up this application at its regular meeting on July 2, 2025, and

WHEREAS, City Council has found that this zoning map amendment is consistent with the City's comprehensive plan, and that it is reasonable and in the public interest for the reasons stated, and

WHEREAS, City Council has conducted a public hearing as required by the North Carolina General Statutes on July 2, 2025,

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Hendersonville, North Carolina:

1. Pursuant to Article XI of the Zoning Ordinance of the City of Hendersonville, North Carolina, the Zoning Map is hereby amended by changing the zoning designation of the following: Parcel Numbers: 9579-98-0375, 9579-98-3527, 9579-99-4115, 9579-99-8724, by changing the zoning designation from Henderson County R2R, Residential Two Rural, to R-15, Medium Density Residential

2. Any development of this parcel shall occur in accordance with the Zoning Ordinance of the City of Hendersonville, North Carolina.

3. This ordinance shall be in full force and effect from and after the date of its adoption.

Adopted this 2nd day of July 2025.

Attest: _____ Barbara G. Volk, Mayor, City of Hendersonville

_____
Jill Murray, City Clerk

Approved as to form:

_____
Angela S. Beeker, City Attorney

CITY OF HENDERSONVILLE

AGENDA ITEM SUMMARY
PLANNING DIVISION

SUBMITTER: Sam Hayes

MEETING DATE: June 12th, 2025

AGENDA SECTION: New Business

DEPARTMENT: Community Development

TITLE OF ITEM: Administrative Review: Preliminary Site Plan– Signal Hill Townhomes (25-20-SPR)– *Sam Hayes – Planner II*

SUGGESTED MOTION(S):

For Approval:	**For Denial:**
I move that the Planning Board grant preliminary site plan approval, based on the requirements of the City of Hendersonville Zoning Ordinance (with primary consideration of sections 5-14 Planned Residential Development and 7-3-3 Review of Preliminary Site Plans) for the Signal Hill Townhomes project. **Condition(s):** 1. The applicant shall work with staff determine by final site plan whether to include the sidewalk within the right-of-way that is 30' or to pay a fee-in-leu for that portion of the sidewalk. **[DISCUSS & VOTE]**	I move that the Planning Board deny the application for preliminary site plan approval for the Signal Hill Townhomes project because the applicant has failed to demonstrate compliance with the following provisions of the Zoning Ordinance • Please list noncompliant sections **[DISCUSS & VOTE]**

SUMMARY:

The City of Hendersonville is in receipt of an application for preliminary site plan review from First Victory Construction and Development (applicant) and Herta G. Suess Trustees (property owner). The applicant is proposing to construct 50 single-family attached homes on the subject property located at O Signal Hill Road (PINs 9579-07-6259, -06-7975, -06-5791, -06-8507, -06-8308, -06-8117).

The proposed site plan shows that the lot sizes of the development will be .07 acres large.

The proposed density of the development is approximately 3.64 units per acre. An R-15 Minor Planned Residential Development allows a max density of 3.75 units an acre or 51

units with current zoning. City Council is set to hear a zoning text amendment at their June 5th, 2025 meeting that could increase the density to 4 units per acre, or 54 units. More information concerning the requirements and process for Minor Planned Residential Developments can be found in the staff report.

PROJECT/PETITIONER NUMBER:	(25-20-SPR)
PETITIONER NAME:	- First Victory Construction and Development [Applicant] - Herta G Suess Trustees [Owner]
ATTACHMENTS:	1. Staff Report 2. Preliminary Site Plan Packet 3. Application / Owner Signature Addendum

PRELIMINARY SITE PLAN–SIGNAL HILL TOWNHOMES (25-20-SPR)
CITY OF HENDERSONVILLE - COMMUNITY DEVELOPMENT STAFF REPORT

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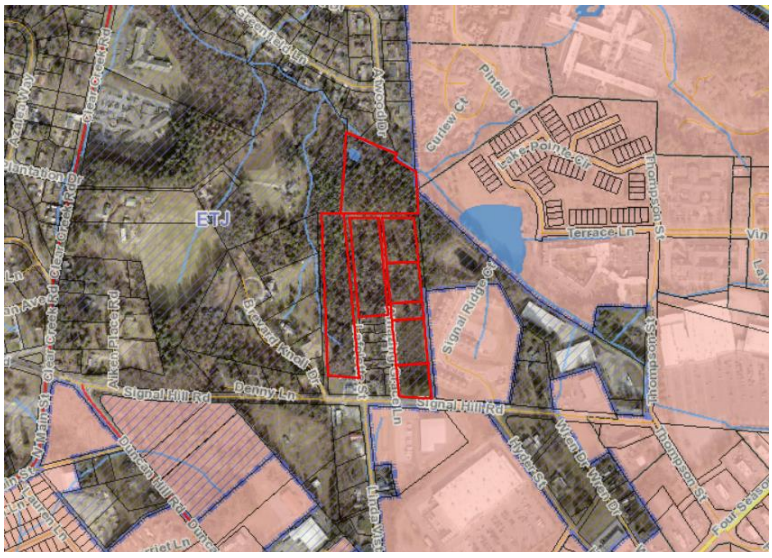
STAFF ANALYSIS 9

PROJECT SUMMARY

- Project Name & Case #:
  - Signal Hill Townhomes
  - 25-20-SPR
- Applicant & Property Owner:
  - First Victory Construction and Development [Applicant]
  - Herta G Suess Trustees [Owners]
- Property Address:
  - 0 Signal Hill Road
- Project Acreage:
  - 13.73 acres
- Parcel Identification (PIN):
  - 9579-07-6259
  - 9579-06-7975
  - 9579-06-5791
  - 9579-06-8507
  - 9579-06-8308
  - 9579-06-8117
- Parcel Zoning:
  - R-15, Medium Density Residential
- Future Land Use Designation:
  - Multi-Generational Living
  - Open Space - Recreation
- Requested Uses:
  - Planned Residential Development (minor)
- Type of Review:
  - **Administrative**- Decisions made in the implementation, administration, or enforcement of the Zoning and Subdivision Ordinances that involve the determination of facts and the application of objective standards set forth in the Zoning and Subdivision Ordinances.



SITE VICINITY MAP

The City of Hendersonville is in receipt of an application for preliminary site plan review from First Victory Construction and Development (applicant) and Herta G. Suess Trustees (property owner). The applicant is proposing to construct 50 single-family attached homes on the subject property located at 0 Signal Hill Road (PINs 9579-07-6259, -06-7975, -06-5791, -06-8507, -06-8308, -06-8117).

The proposed site plan shows that the lot sizes of the development will be .07 acres large.

The proposed density of the development is approximately 3.64 units per acre. An R-15 Minor Planned Residential Development allows a max density of 3.75 units an acre or 51 units with current zoning. City Council is set to hear a zoning text amendment at its June 5th, 2025 meeting that could increase the density to 4 units per acre, or 54 units. More information concerning the requirements and process for Minor Planned Residential Developments can be found below.

Since this development is proposing detached single-family units, the land must be subdivided in order to be built and sold. Due to this, this project must also go through the City's subdivision process. Due to this project including 8 or more lots and the dedication of a new street the project meets the criteria of a major subdivision and therefore will be reviewed according to the standards of section 2.04 H of the subdivision ordinance. ***The project will be required to come back to the Planning Board in order to receive Preliminary Plat Approval.***

PRELIMINARY SITE PLAN AND MINOR PRD REVIEW GUIDELINES

Review of Preliminary Site Plans

Review of preliminary site plans applies to larger projects where the costs of developing detailed final plans can be substantial. It is designed to provide the applicant an opportunity to obtain authorization for a site specific development while incurring reduced expense. Review of preliminary plans is a function of the Planning Board.

Preliminary plan review is required of all development undergoing Site Plan Review for the following:

- Any commercial, industrial or institutional development consisting of more than 20,000 square feet of floor area.
- Addition of more than 30 parking spaces.
- Any Minor Planned Residential Development consisting of 9 or more dwelling units.

Approval of a preliminary site plan shall **not** entitle the applicant to the issuance of a zoning compliance permit. Upon approval of the preliminary site plan by the Planning Board the applicant must then submit an application and final site plans meeting the requirements of of the zoning ordinance, in addition to any other approval including but not limited to stormwater approval, utility approval, driveway permits, land disturbance approval, etc. The applicant shall have two years from the date of such approval to obtain final site plan approval.

5-14-7. Minor Planned Residential Developments

The maximum number of dwelling units which may be constructed in a Minor Planned Residential Development shall be 50 or a number computed on the basis of the following table, whichever is less:

Use District	Dwelling Units Per Acre
R-40	1.0
R-20	2.5
R-15	3.75
R-10	5.5
R-6	8.5
MIC	5.5
RCT	5.5
C-2	8.5
C-3	8.5
I-1	8.5

Minor Planned Residential Developments (Minor PRD) shall be governed by the development standards for Planned Residential Developments (PRD). Unlike Major PRDS, there is no minimum site requirement for a Minor Planned Residential Development, nor is there a requirement that access be by means of a designated thoroughfare. Unlike Major PRDs which undergo a rezoning to a Conditional Zoning District, Minor PRDs undergo site plan review only and do **not** require a rezoning. In cases, where the Minor Planned Residential Development contains 9 or more units, the development must go through preliminary site plan review by the Planning Board. If approved, the subject property would retain its R-15 zoning.

UPDATED ZONING - PRELIMINARY SITE PLAN AND MINOR PRD REVIEW GUIDELINES

The City Council is set to hear a zoning text amendment at their June 5th, 2025 meeting that would revise the Minor Planned Residential Development ordinance. The changes, if adopted, would not restrict the proposed development but would provide for the ability to construct more homes on the property. However, doing so would change this project from a Minor Planned Residential Development to a Major Planned Residential Development and would require a conditional zoning district. The applicant has not expressed interesting in doing this.

5-14-~~7~~5. Minor planned residential developments.

An applicant may elect to have a development processed as a minor planned residential development so long as the proposed development, including all phases, is greater than 2 dwelling units but does not exceed 50 dwelling units. Minor planned residential developments may consist of any residential uses permitted under Sec. 5-14-2, regardless of the underlying zoning district. ~~and so long as no accessory~~ No commercial development may be part of a minor planned residential development. ~~is requested for the project.~~ A minor planned residential development may be located in one or more of the following zoning district classifications: R-40, R-20, R-15, R-10, R-6, MIC, RCT, C-2, C-3, C-4 ~~I-1.~~

5-14-~~7~~5.1 Density.

The maximum number of dwelling units which may be constructed in a minor planned residential development shall be 50 or a number computed on the basis of the following table, whichever is less.

Use District	Dwelling Units Per Acre
R-40	~~1.0~~ 2.0
R-20	~~2.5~~ 3.0
R-15	~~3.75~~ 4.0
R-10	5.5
R-6	8.5
MIC	~~5.5~~ 8.5
RCT	~~5.5~~ 8.5
C-4	8.5
C-2	~~8.5~~ 10.0
C-3	~~8.5~~ 10.0
~~I-1~~	~~8.5~~

5-14-~~7~~5.2 Development standards for minor planned residential developments. Except as otherwise noted herein, minor planned residential developments shall be governed by the development standards for planned residential developments contained in subsection 5-14-~~6~~4, above.

5-14-~~7~~5.3 Procedures for reviewing. Unlike other planned developments which undergo rezoning to a conditional zoning district, minor planned residential developments undergo site plan review pursuant to section 7-3.

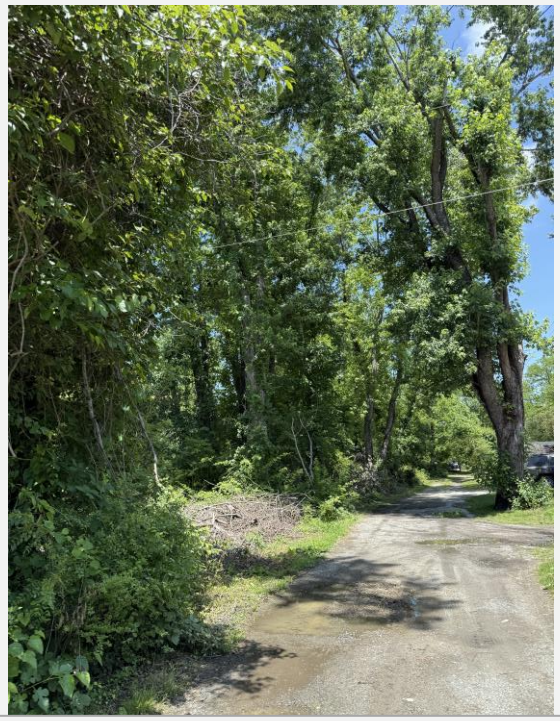
EXISTING ZONING & LAND USE

City of Hendersonville Current Zoning & Land Use Map

The subject property is zoned R-15 medium density residential and is a part of the single-family neighborhoods within the immediate area. The property fronts on Signal Hill Road which is maintained by NCDOT. The property has two public right of ways within its boundaries which are named Amazing Grace Lane and Lafolette Street.

To the south along Signal Hill Road, you will find a mix of residential and commercial and uses. To the immediate south, there is a storage unit facility. To the east, there is an apartment complex. North and west of the property there is a mix of single family, townhomes, and quadplexes.

SITE IMAGES



View of Lafolette Street from entrance near Signal Hill Road.

View of portion of road that developer received variance for to only have a 30' ROW instead of 45'.

SITE IMAGES

View of Amazing Grace Lane taken from near entrance from Signal Hill Road.

View of storage unit facility located south of the subject property across Signal Hill Road.

SITE IMAGES

View of woods on the rear of the property.

- **Units**
  - 50 Single-Family Attached Homes (Townhomes)

- **Proposed Use:**
  - R-15, Medium Density Residential Minor Planned Residential Development (R-15, Minor PRD)

- **Acres/Density**
  - 13.73 acres
  - Proposed density-3.64 units per acre or 50 units.
  - Allowed density (Previous zoning) - 3.75 units an acre or 51 units.
  - Allowed density (New zoning – if passed by City Council on 6/5/25) – 4 units an acre or 54 units.

- **Natural Resource**

  - The property has a natural slope of less than 15.1% which does not trigger any additional steep slop requirements.
  - The site has one stream that runs along the northern boundary of the property.
  - The site does not have any associated floodplains.

- **Streets**
  - All internal streets to the site will be built to public street standards and dedicated to the City for maintenance.
  - The applicant received a variance in 2023 to reduce a portion of the entrance road from the required 45' right of way to 30'.

- **Parking**
  - PRD requires -1 parking space per unit for 1–2-bedroom units and 1.5 parking spaces for 3+ bedroom units. The proposed development will be providing 2 parking spaces for all units (1 in garage, 1 in driveway).

- **Sidewalks**
  - The development shows sidewalks along all internal streets and provides sidewalks on the Signal Hill Road property frontage.
  - Sidewalks are not currently being extended to Signal Hill Drive on the eastern curve of the road. Staff has included a condition to have this issue resolved by final site plan approval.

- **Public Utilities**
  - The site will be served by City of Hendersonville Water and Sewer.
  - Provision of City Utilities requires that the property owner petition to annex.

- **Tree Canopy and Landscaping**
  - The site currently has approximately 531,923 square feet of tree canopy.
  - The development is proposing to save 106,385 square feet of that canopy

(20%)
- The development is also proposing the preservation of an additional 11.1% of the trees to satisfy the tier two requirements.
- The development is also providing the following landscaping:
  - Common Open Space
  - Open Space
  - Street Trees

OUTSTANDING PRELIMINARY SITE PLAN COMMENTS

COMMUNITY DEVELOPMENT

Site Plan Comments:

The preliminary site plan accompanying this petition meets the standards established by the Zoning Ordinance for Planned Residential Development (5-14), Preliminary Site Plan (7-3-3).

Staff has included a condition for planning board to consider that would require the developer to determine if they can either include sidewalks along the portion of road with a 30' right of way, or to pay a fee-in-lieu.

CITY ENGINEER

Preliminary Site Plan Comments:

- None

WATER / SEWER

Preliminary Site Plan Comments:

- None

FIRE MARSHAL

Preliminary Site Plan Comments:

- None

STORMWATER ADMINISTRATOR

Preliminary Site Plan Comments:

- None

FLOODPLAIN ADMINISTRATOR

Preliminary Site Plan Comments:

- None

PUBLIC WORKS

Preliminary Site Plan Comments:

- None

NCDOT

Preliminary Site Plan Comments:

- Face of curb must be 4' from edge of the traveled land. The southern side of the island must also prevent left turns out of or into the development (resolved by final site plan).

TRANSPORTATION CONSULTANT

Preliminary Site Plan Comments:

- None (the proposed use and unit count did not trigger a TIA)

STAFF ANALYSIS

Zoning Compliance:

Based on the review by staff, the submitted preliminary site plan for the Signal Hill Townhomes project meets the Zoning Ordinance standards established for Minor Planned Residential Developments (Section 5-14) and Preliminary Site Plan Review (Section 7-3-3.2).

FIND THE LINE
STUDIOS
LANDSCAPE ARCHITECTURE AND PLANNING

SIGNAL HILL TOWNHOMES

ZONING COMPLIANCE PLANS

HENDERSONVILLE, NORTH CAROLINA

~~MARCH 20, 2025~~
MAY 15, 2025

PROPERTY OWNER / DEVELOPER:
FIRST VICTORY INC
542 S. CALDWELL STREET
BREVARD, NC 28712
828.884.7934

PIN NUMBERS: 9579076259; 9579067975; 9579065791;
9579068507; 9579068308; 9579068117

PROPERTY ADDRESS:
99999 SIGNAL HILL ROAD
HENDERSONVILLE, NC

TOTAL SIZE OF PROPERTY:
13.73 ACRES (598,078.8 SF)

ZONING:
R-15 MINOR PRD
ALLOWABLE DENSITY = 3.75 UNITS PER ACRE (51)
PROPOSED DENSITY = 50 SINGLE FAMILY ATTACHED UNITS

SETBACKS:
40' FROM ADJOINING R.O.W.
30' FROM EXTERIOR PROPERTY LINE
10' STRUCTURE FROM EDGE OF PAVEMENT
35' STRUCTURE FROM CENTERLINE OF ROAD
6' OFFSET FROM STRUCTURE TO LOT LINE

OPEN SPACE:
60% OF TOTAL LOT REQUIRED = 358,848 SF
TOTAL OPEN SPACE PROPOSED = 397,938 SF (66.5%)

TOTAL FOOTPRINT ALLOWED: 20% (119,616 SF)
TOTAL FOOTPRINT PROPOSED = 12% (71,500 SF)

COMMON OPEN SPACE:
10% OF TOTAL LOT REQUIRED = 59,808 SF
TOTAL COMMON OPEN SPACE PROPOSED = 67,580 SF (11.3%)

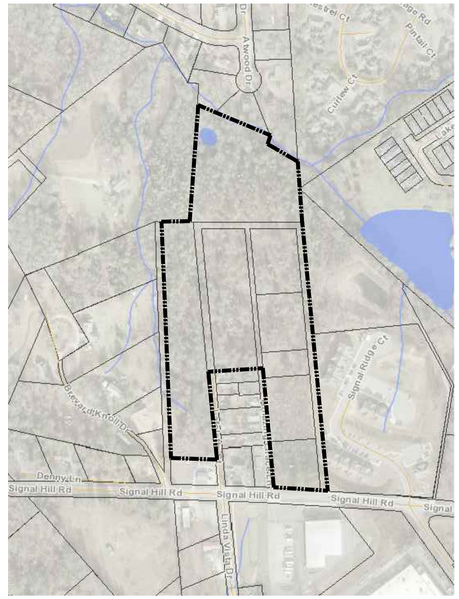
PARKLAND DEDICATION:
500 SF PER UNIT REQUIRED = 25,000 SF
PARKLAND DEDICATION PROPOSED AS PART OF GREENWAY
EASEMENT = 27,210 SF

GREENWAY DEDICATION:
50' WIDE EASEMENT WITH 10' PATH REQUIRED (OR FEE IN LIEU)
FEE IN LIEU PROPOSED

PARKING REQUIREMENTS:
1 PARKING SPACE PER 1 OR 2 BEDROOM UNIT REQUIRED = 50 SPACES MIN.
TOTAL PROPOSED PARKING: 100 SPACES (1 IN GARAGE, 1 IN DRIVEWAY)

CONTACT:
ROB DULL, PLA
362 DEPOT STREET, SUITE 107
ASHEVILLE, NC
828.674.5592
ROB@FINDTHELINESTUDIOS.COM

VICINITY MAP



DRAWING INDEX

SHEET #	SHEET TITLE
L-100	SITE ZONING COMPLIANCE PLAN
L-200	LANDSCAPE COMPLIANCE PLAN
L-201	LANDSCAPE NOTES AND DETAILS
L-400	TREE CANOPY PROTECTION PLAN

FIND THE LINE
STUDIOS
LANDSCAPE ARCHITECTURE AND PLANNING

CONSULTANTS

TOWNHOMES

SIGNAL HILL ROAD
HENDERSONVILLE, NC

PREPARED FOR:
FIRST VICTORY INC

ZONING COMPLIANCE PLAN

MINIMUM 50' WIDE GREENWAY EASEMENT (27,210 SF)
*ALSO COUNTS FOR PARKLAND DEDICATION
PROPOSED FEE-IN-LIEU

COMMON OPEN SPACE (67,580 SF)
WITH TRAILS

OPEN SPACE (330,358 SF)

35' SETBACK FROM CENTERLINE OF ROAD (TYP.)

PERIMETER SETBACKS (TYP.)
*30 FROM EXTERNAL PROPERY LINE
*40' FROM ADJACENT R.O.W.

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

COMMUNAL MAILBOX WITH PARKING AND LOADING SPACES

SIGNAL HILL ROAD SR 1508
MAINTAINED BY NCDOT SUBJECT TO 60' R/W PER NCDOT OFFICIAL (ASPHALT)

LINDA VISTA DR
SR 1521
MAINTAINED BY NCDOT (ASPHALT)

PLAN SET

#	DATE	DESCRIPTION
1	3.20.25	ZONING COMPLIANCE
2	5.15.25	ZONING COMPLIANCE

SHEET NO.
L-100

0 30 60 120 180 240'

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VEHICLE USE AREA (VUA): NOT APPLICABLE

PLANTING STRIPS (PS): NOT APPLICABLE

STREET TREES (ST):
1 TREE PER 35 LF OF PROPERTY ABUTTING A STREET
TOTAL LF: 3,268 LF (INTERNAL ROAD) & 166 LF (SIGNAL HILL ROAD)
TREES REQUIRED: 98 (69 LARGE MATURING TREES / 29 MEDIUM MATURING)
TREES PROVIDED: 75 LARGE-MATURING TREES / 42 MEDIUM MATURING TREE

COMMON SPACE TREE PLANTINGS (CS):
1 TREE AND 5 SHRUBS PER 1,200 SF
TOTAL COMMON SPACE PROVIDED: 59,808 SF
TOTAL TREE PLANTINGS REQUIRED: 50 (70% LARGE MATURING SPECIES)
TOTAL TREE PLANTINGS PROPOSED: 37 LARGE / 15 MEDIUM
TOTAL SHRUB PLANTINGS REQUIRED: 250
TOTAL SHRUB PLANTINGS PROVIDED: 250

OPEN SPACE LANDSCAPING (OS):
1 TREE AND 5 SHRUBS PER 4,000 SF
TOTAL OPEN SPACE PROVIDED: 358,848 SF
TOTAL TREE PLANTINGS REQUIRED: 90
TOTAL TREE PLANTINGS PROPOSED: 91
TOTAL SHRUB PLANTINGS REQUIRED: 450
TOTAL SHRUB PLANTINGS PROVIDED: 485

LANDSCAPE BUFFER (LB):
TYPE A 8' REQUIRED
TOTAL TREES REQUIRED: 6
TOTAL TREES PROVIDED: 6
TOTAL EVG SHRUBS REQUIRED: 45
TOTAL EVG SHRUBS PROVIDED: 46
TOTAL FLW SHRUBS REQUIRED: 59
TOTAL FLW SHRUBS PROVIDED: 59

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

(57) Round-Lobed Sweet Gum (OS)
(OS/CS)(61) Swamp White Oak
(CS) (10) Fastigiate Maidenhair Tree
(CS) (15) Tupelo
(70) Village Green Japanese Zelkova (ST)
(42) Fort McNair Red Horsechestnut (ST)
(5) Swamp White Oak (ST)
(6) Legacy Sugar Maple (LB)
(46) Catawba Rhododendron (LB)
(59) Little Henry® Sweetspire (LB)
(CS)(125) Dwarf Fothergilla
(CS) (125) Arrowwood Viburnum
(OS)(150) Bottlebrush Buckeye
(OS)(185) Spicebush
(OS)(150) Common Witch Hazel

SIGNAL HILL ROAD SR 1508
MAINTAINED BY NCDOT SUBJECT TO 60' R/W PER NCDOT OFFICIAL (ASPHALT)

LINDA VISTA DR
SR 1521
MAINTAINED BY NCDOT (ASPHALT)

PLANTING LEGEND
ST = STREET TREE REQUIREMENT
CS = COMMON SPACE REQUIREMENT
OS = OPEN SPACE REQUIREMENT
LB = LANDSCAPE BUFFER REQUIREMENT

OF PLANTS
Plant Description
3 Large Deciduous Tree (ST)
ZONING USE ABBREVIATION
(SEE LEGEND)

0 30 60 120 180 240'

FIND THE LINE STUDIOS
LANDSCAPE ARCHITECTURE AND PLANNING

CONSULTANTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1585 ROBERT J DULL

SIGNAL HILL TOWNHOMES

SIGNAL HILL ROAD
HENDERSONVILLE, NC

PREPARED FOR:
FIRST VICTORY INC

LANDSCAPE COMPLIANCE PLAN

PLAN SET

#	DATE	DESCRIPTION
1	3.20.25	LS COMPLIANCE
2	5.15.25	LS COMPLIANCE

SHEET NO.
L-200

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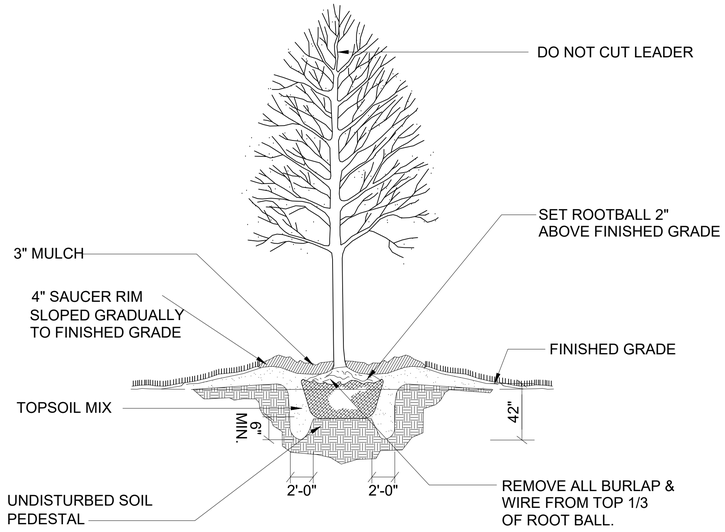
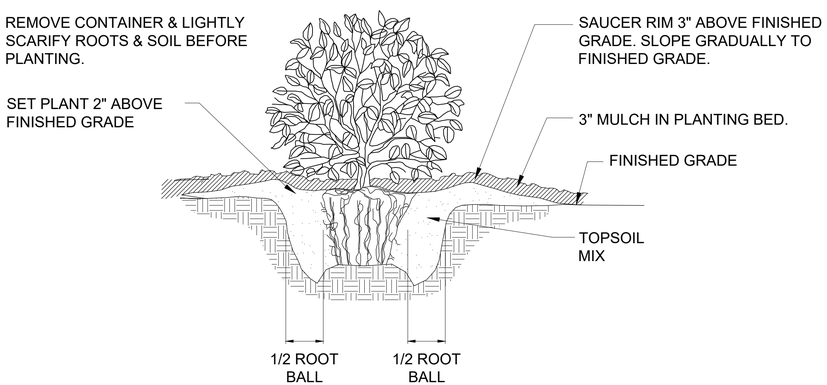
PLANT SCHEDULE

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	CONTAINER	QTY	DETAIL	REMARKS
TREES							
	ACE LEG	Acer saccharum 'Legacy' / Legacy Sugar Maple	3" Cal.	B&B	6		
	AES FOR	Aesculus x carnea 'Fort McNair' / Fort McNair Red Horsechestnut	3" Cal.	B&B	42		
	GIN FAS	Ginkgo biloba 'Fastigiata' / Fastigiate Maidenhair Tree	3" Cal.	B&B	10		
	LIQ RO3	Liquidambar styraciflua 'Rotundiloba' / Round-Lobed Sweet Gum	2" Cal.	B&B	57		
	NYS SYL	Nyssa sylvatica / Tupelo	2" Cal.	B&B	15		
	QUE NU2	Quercus bicolor / Swamp White Oak	3" Cal.	B&B	66		
	ZEL VIL	Zelkova serrata 'Village Green' / Village Green Japanese Zelkova	2" Cal.	B&B	70		
SHRUBS							
	AES PVF	Aesculus parviflora / Bottlebrush Buckeye	3 gal, 18-24" ht.	Pot	150		
	FOT GAR	Fothergilla gardenii / Dwarf Fothergilla	3 gal.		125		
	HAM VIR	Hamamelis virginiana / Common Witch Hazel	3 gal, 18-24" ht.	Pot	150		
	ITE SPR	Itea virginica 'Sprich' / Little Henry® Sweetspire	3 gal, 18-24" ht.	Container	59		
	LIN BEN	Lindera benzoin / Spicebush	3 gal, 18-24" ht.	Pot	185		
	RHO AN2	Rhododendron catawbiense 'Anah Kruschke' / Catawba Rhododendron	3 gal, 18-24" ht.	Container	46		
	VIB DEN	Viburnum dentatum 'Arrowwood' / Arrowwood Viburnum	3 gal.		125		





LANDSCAPE NOTES:

1. PROCEED WITH AND COMPLETE LANDSCAPE WORK AS RAPIDLY AS PORTIONS OF SITE BECOME AVAILABLE, WORKING WITHIN SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.

2. CONTRACTOR SHALL GUARANTEE ALL PLANTINGS FOR ONE YEAR FROM COMPLETION OF THE WORK. REPLACEMENT PLANTS AND LABOR SHALL BE PROVIDED AT THE CONTRACTOR'S EXPENSE.

3. DETERMINE LOCATION OF UNDERGROUND UTILITIES AND IRRIGATION OR DRAINAGE PIPING AND PERFORM WORK IN A MANNER WHICH WILL AVOID POSSIBLE DAMAGE. HAND EXCAVATE, AS REQUIRED. ANY DAMAGE TO UTILITIES SHALL BE REPAIRED AT THE CONTRACTOR'S COST.

4. PROVIDE TREES, SHRUBS AND PLANTS OF QUANTITY, SIZE, GENUS, SPECIES AND VARIETY SHOWN AND SCHEDULE FOR LANDSCAPE WORK AND COMPLYING WITH RECOMMENDATIONS AND REQUIREMENTS OF ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK". PROVIDE HEALTHY, VIGOROUS STOCK, GROWN IN RECOGNIZED NURSERY IN ACCORDANCE WITH GOOD HORTICULTURAL PRACTICE . LANDSCAPE ARCHITECT RESERVES THE RIGHT TO REJECT ANY PLANT MATERIAL, INCLUDING POOR BRANCHING STRUCTURE OR DAMAGED TRUNKS.

5. REPORT ANY POORLY DRAINED SOILS OR ANY DRAINAGE PROBLEMS TO LANDSCAPE ARCHITECT IMMEDIATELY. FAILURE TO REPORT SUCH CONDITIONS WILL RESULT IN THE CONTRACTOR BEING RESPONSIBLE FOR CORRECTING THE PROBLEM AND REPLACING DAMAGED OR LOST PLANTS.

6. BED PREPARATION:
REMOVE ALL DEBRIS, BRUSH, STUMPS, ROCKS, AND CONSTRUCTION TRASH.
SPRAY WEEDS WITH GLYPHOSATE TWO WEEKS BEFORE PLANTING. WHEN SOIL IS DRY, TILL EXISTING CLAY TO A DEPTH OF 8" AND RAKE OUT ALL CLODS AND DEBRIS. SPREAD TRIPLE SUPER PHOSPHATE AT RATE OF 5 LBS/1000 SF OR 1LB/100SF. SPREAD 3" OF SOIL MIX (SEE #7 BELOW). TILL MIX THOROUGHLY INTO NATIVE SOIL AND RAKE SMOOTH. WHERE SLOPES ARE TOO STEEP TO TILL, PLANT HOLE BY HOLE, DIGGING SOIL AMENDMENTS THOROUGHLY INTO NATIVE SOIL, AND DIGGING HOLES A MINIMUM OF 2 X THE SIZE OF ROOTBALL.

SOIL MIX IS A 60/40 BLEND OF WHICH 60% IS COMPOST AND 40% IS BLACK SCREENED TOPSOIL. ASHEVILLE MULCH YARD'S AEB MIX IS AN ACCEPTABLE SUBSTITUTE FOR COMPOST. LA TO APPROVE ANY SUBS. MUST BE CERTIFIED WEED FREE AND BLACK, WELL-ROTTED WITH NO CLUMPS OF PARTIALLY DECOMPOSED LEAVES.

7. PLANT AND WATER THOROUGHLY. CONFIRM THAT PERENNIAL AND GROUNDCOVER ROOT BALLS WILL BE COVERED WHEN SOIL HAS SETTLED AFTER WATERING. IT IS THE CONTRACTOR'S RESPONSIBILITY TO RETURN TO THE SITE AND COVER WITH COMPOST ANY ROOT BALLS THAT ARE EXPOSED 1" OR MORE ABOVE GRADE DUE TO SETTLING OR FREEZE/THAW.

8. B&B TREES CAN BE PLANTED IN NATIVE SOIL, UNLESS THAT SOIL IS COMPACTED CONSTRUCTION CLAY(IF SO, USE40% NATIVE SOIL AND 60% SOIL MIX AS BACKFILL). DO NOT USE MUDDY SOIL FOR BACKFILLING.

9. INSTALLATION OF PLANT MATERIAL BELOW EXISTING TREES SHALL BE DONE WITHOUT TILLING TO PROTECT THE EXISTING ROOT STRUCTURES. HOLES FOR PLANT MATERIAL IN THESE AREAS SHALL BE DUG BY HAND. HAND DUG HOLES FOR SHRUBS AND CONTAINER TREES SHALL RECEIVE 60% SOIL MIX AS BACKFILL.

10. INSTALLATION OF PERENNIALS AND GROUND COVERS UNDER EXISTING TREES - BUILD UP SOIL (MAX HEIGHT 3") USING SOIL MIX AND SPREAD PLANT ROOTS OUT FOR SHALLOWER PLANTING.

11. MULCH: FOR TREES AND SHRUBS, MULCH SHALL BE 2" DOUBLE GROUND PINE, FREE FROM DELETERIOUS MATERIALS. PERENNIALS, GRASSES AND GROUND COVERS SHALL BE MULCHED WITH 2" ASHEVILLE MULCH YARDS AEB OR SIMILAR COMPOST.

FIND THE LINE STUDIOS
LANDSCAPE ARCHITECTURE AND PLANNING

CONSULTANTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT No. 1585 ROBERT J DULL

SIGNAL HILL TOWNHOMES
SIGNAL HILL ROAD
HENDERSONVILLE, NC
PREPARED FOR:
FIRST VICTORY INC
LANDSCAPE COMPLIANCE NOTES

PLAN SET

#	DATE	DESCRIPTION
1	3.20.25	LS NOTES
2	5.15.25	LS NOTES

SHEET NO.
L-201

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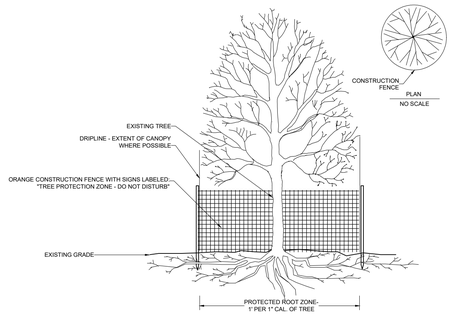
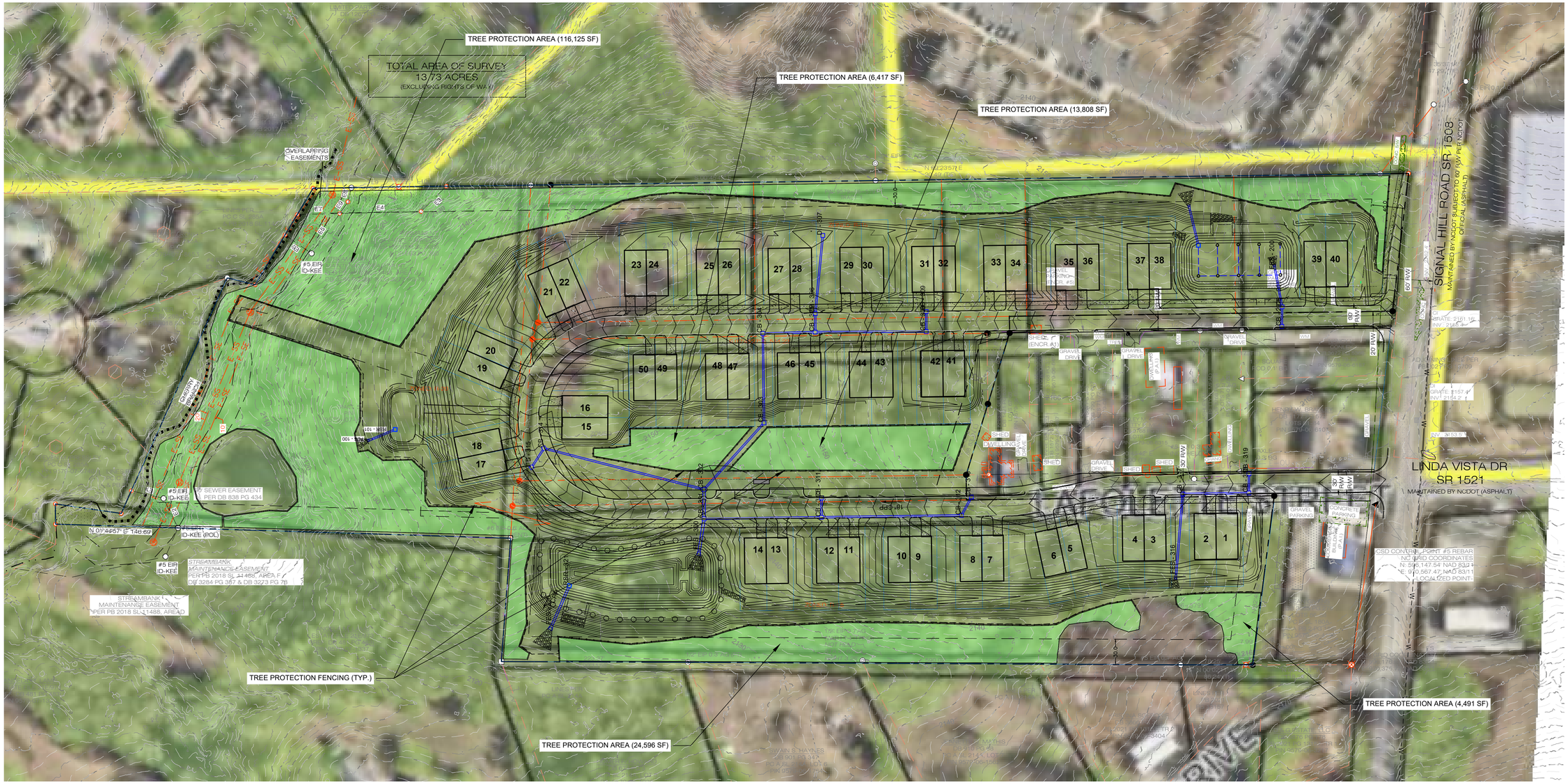


1 TREE PROTECTION
NTS

TREE CANOPY PROTECTION DATA			
TOTAL LAND AREA: 553,647.6 SF (12.71 AC)			
EXISTING TREE CANOPY (FROM GIS TREE CANOPY MAP) 96.1 % (531,923 SF)			
TIER ONE CANOPY REQUIRED 20 % (106,385 sf)	TIER ONE CANOPY PROVIDED 20 % (106,385 SF)		
TIER TWO CANOPY REQUIRED	TIER TWO PRESERVED	TIER TWO PLANTED	TIER TWO PAYMENT-IN-LIEU
53,192 sf (10 %)	59,052 sf (11.1%)	0 sf (0 %)	0 sf (0 %)
TIER ONE + TIER TWO TOTAL CANOPY PRESERVED 31.1 % (165,437 SF)			
NOTE: AREAS DESIGNATED AS TREE CANOPY PROTECTION AREAS SHALL REMAIN AS SUCH IN PERPETUITY. TREE REMOVAL SHALL BE PROHIBITED IN THESE AREAS UNLESS OTHERWISE PERMITTED.			



0 30 60 120 180 240'

FIND THE LINE STUDIOS
LANDSCAPE ARCHITECTURE AND PLANNING

CONSULTANTS

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT
No. 1565
ROBERT J DULL

TOWNHOMES
SIGNAL HILL ROAD
HENDERSONVILLE, NC
PREPARED FOR:
FIRST VICTORY INC
TREE CANOPY PROTECTION PLAN

PLAN SET

#	DATE	DESCRIPTION
1	3.20.25	TREE CANOPY PLAN
2	5.15.25	TREE CANOPY PLAN

SHEET NO.
L-400

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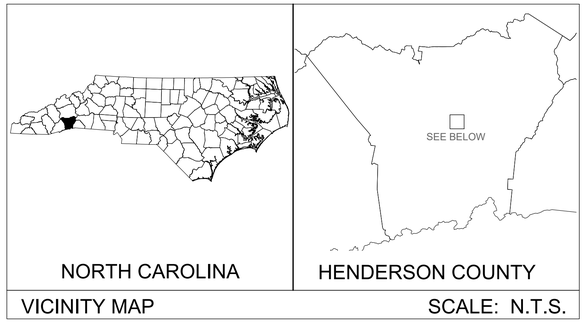
CONSTRUCTION PLANS

FOR

SIGNAL HILL

HENDERSONVILLE, NORTH CAROLINA

Sheet List Table	
Sheet Number	Sheet Title
1	COVER
2	EXISTING CONDITIONS PLAN
3	SITE PLAN
4	ROAD PLAN & PROFILE 0+00 - 11+00
5	ROAD PLAN & PROFILE 11+00 - 21+93
6	EROSION CONTROL PH 1 PLAN
7	EROSION CONTROL PH 2 PLAN
8	ESC DETAILS-1
9	ESC DETAILS-2
10	ESC DETAILS-3
11	NCG01-1
13	GRADING & STORMWATER PLAN
14	SCM DETAIL 1
15	SCM DETAIL 2
16	SCM DETAIL 3
17	ADS DETAILS
18	STORM PLAN & PROFILE - 1
19	STORM PLAN & PROFILE - 2
20	STORM PLAN & PROFILE - 3
21	STORM DETAILS-1
22	STORM DETAILS-2
23	UTILITY PLAN
24	SANITARY SEWER PLAN & PROFILE - 1
25	SANITARY SEWER PLAN & PROFILE - 2
26	SANITARY SEWER DETAILS
27	WATERMAIN PLAN & PROFILE 0+00 - 11+00
28	WATERMAIN PLAN & PROFILE 11+00 - 22+00
29	WATERMAIN DETAILS - 1
30	WATERMAIN DETAILS - 2
31	MISCELLANEOUS DETAILS
32	PRE DEVELOPMENT DRAINAGE AREA MAP
33	POST DEVELOPMENT DRAINAGE AREA MAP



VICINITY MAP SCALE: N.T.S.

VICINITY MAP SCALE: N.T.S.

DEVELOPMENT DATA		
SUBDIVISION CONFIGURATION		
ZONING:	R-15 / R-20	
PARCEL ID NUMBER:	9579065791 9579068507 9579068308 9579068117 9579067975 9579076259	
TYPE OF DEVELOPMENT:	RESIDENTIAL	
DISTURBED AREA:	DA	
TOTAL SITE AREA (Ac.)	13.01	
NO. OF LOTS:	50	
GROSS DENSITY (UNITS/Ac.):		
BUILDING SETBACKS:	FRONT:	30'
	SIDE:	10'
	REAR:	15'
MIMIMUM LOT SIZE:	15,000 / 20,000	
MIMIMUM LOT WIDTH:	85 / 100	
RIGHT-OF-WAY WIDTH	45' MIN.	
UTILITY PROVIDERS		
WATER PROVIDER:		
HENDERSONVILLE WATER & SEWER		
10 6th AVENUE EAST		
HENDERSONVILLE, NC 28792		
828.697.3052		
SEWER PROVIDER:		
HENDERSONVILLE WATER & SEWER		
160 6TH AVENUE EAST		
HENDERSONVILLE, NC 28792		
828.697.3052		
TELEPHONE AND CABLE PROVIDER:		
SPECTRUM		
352 AIRPORT ROAD SUITE 70		
ARDEN, NC 28704		
866.874.2389		
POWER PROVIDER:		
DUKE ENERGY		
957 SPARTANBURG HWY		
HENDERSONVILLE, NC 28792		
828-698-2034		

CONTACT INFORMATION
OWNER/DEVELOPER
FIRST VICTORY
542 S .CALDWELL ST.
BREVARD, NC 28712
828.884.7934
SURVEYOR
COLE SURVEYING AND DESIGN
549 ELK PARK DRIVE; SUITE 707
ASHEVILLE, NC 28804
828.251.7025
ENGINEER
THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
(704) 394-6913
CLIENT CONTACT
TRAVIS FOWLER
828.884.7934

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030945 TOBIN M. HARRIS

THREE NOTCH GROUP, INC. NORTH CAROLINA FIRM # C-497

FIRST VICTORY
542 S .CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
1	08/20/2024	ADDRESS CLIENT COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS
3	02/18/2025	ADDRESS CITY & COUNTY COMMENTS
4	05/15/2025	ADDRESS ZONING COMMENTS

ENGINEER'S SEAL:

05/15/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP

4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: COVER

DRAWING NO: 1

Y:\Stand2_ENGR\656605823\5_DESIGN\DWG\SHEETS\COVER.dwg, 5/15/2025 4:33 PM, Toby Harris

LEGEND:

- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED BOUNDARY
- EXISTING PARCEL LINE (TBR)
- EXISTING ADJACENT PARCEL LINE
- PROPOSED RIGHT-OF-WAY
- EXISTING CREEK
- EXISTING BUFFER
- EXISTING WATERMAIN

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

HIGHLAND INVESTORS LIMITED PARTNERSHIP
DB 1262 PG 521
PIN 9579-16-5868

CAROLINA VILLAGE, INC
DB 1341 PG 582
PB 2017 SL 11014
PIN 9579-18-3554
ZONING: PRD-CZD

HOME DEPOT USA, INC
DB 992 PG 711
PB 1999 SL 3086
PIN 9579-16-0862
ZONING: R-20

SIGNAL RIDGE LP
DB 1680 PG 504
PB 2017 SL 10971
PIN 9579-16-1378
ZONING: PRD-CZD

HENRY GRONKI
PC C SL 285A
PIN 9579-07-8653
ZONING: R-20

STEVEN M. PRESSLEY
PC C SL 285A
PIN 9579-07-6740
ZONING: R-20

YURIY SYSS
PC C SL 285A
PIN 9579-07-7529

ANGELA M. LAMB
ESTATE FILE 21E973
(REF: DB 481 PG 483)
PIN 9579-07-1337
ZONING: R-20

HOMER F. HOWARD
DB 674 PG 3
PC A SL 214A, LOT 5
PIN 9579-06-1906
ZONING: R-20

SWAIN S. HAYNES
DB 901 PG 347
PC A SL 214A, LOT 6
PIN 9579-06-1764
ZONING: R-20

JEANETTE Q. MATHIS
DB 970 PG 68
PC A SL 214A, LOT 7
PIN 9579-06-1562
ZONING: R-20

KRISTINA SOFRONE
DB 3866 PG 389
PB 2021 PG 13157, TR 2
PIN 9579-06-3404
ZONING: R-20

D & G ESTATE, LLC
DB 3876 PG 178
PB 2021 PG 13157, TR 1
PIN 9579-06-3217
ZONING: CHMU

NANCY L. CONLEY
DB 3672 PG 5366
LOTS 79-80
PIN 9579-06-6187
ZONING: R-20

HENRY W. BRADLEY
DB 1177 PG 572
LOTS 81-84
PIN 9579-06-6107
ZONING: R-20

ASHLEY M. CLOUSE
BETTY B. MEAD
DB 3768 PG 310
LOTS 73-76
PIN 9579-06-6315
ZONING: R-20

SEAN GIVENS
DB 3083 PG 278
LOTS 85-88
PC B SL 189A
(AKA PB 2 PG 156)
PIN 9579-06-4126
ZONING: C-3

ADJOINING LINES PER PB 2021 PG 13709

LINES PER PC C SL 285A & PB 2018 SL 11488

LINES PER PC A SL 214A

ADJOINING LINES PER PB 2021 PG 13157

EX. PARCEL LINES TO BE ABANDONED

EX. GRAVEL DRIVE TO BE REMOVED

EX. GRAVEL DRIVE TO BE REMOVED

PERMANENT DRAINAGE EASEMENT PER PB PB 1999 SL 3086 & DB 993 PG 360

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA G DB 3284 PG 387 & DB 3273 PG 78

30' SEWER EASEMENT PER DB 838 PG 434

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA F DB 3284 PG 387 & DB 3273 PG 78

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREAD

AMAZING GRACE LN.
20' PRIVATE R/W

LAFOLETTE ST.
30' PRIVATE R/W

SIGNAL HILL ROAD SR 1508
MAINTAINED BY NCDOT SUBJECT TO 60' R/W PER NCDOT OFFICIAL (ASPHALT)

LINDA VISTA DR
SR 1521
MAINTAINED BY NCDOT (ASPHALT)

CSD CONTROL POINT #5 REBAR
NC GRID COORDINATES
N: 596,147.54' NAD 83/11
E: 970,567.47 NAD 83/11
-LOCALIZED POINT-

NC GRID COORDINATES
N: 596,176.67' NAD 83/11
E: 970,275.72' NAD 83/11

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1"=60'

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
4	05/15/2025	ADDRESS ZONING COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030895 TOBIN M. HARRIS
05/15/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: EXISTING CONDITIONS PLAN

DRAWING NO: 2

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TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

HIGHLAND INVESTORS LIMITED PARTNERSHIP
DB 1262 PG 521
PIN 9579-16-5868

CAROLINA VILLAGE, INC
DB 1341 PG 582
PB 2017 SL 1104
PIN 9579-18-3554
ZONING: PRD-CZD

HOME DEPOT USA, INC
DB 992 PG 711
PB 1999 SL 3086
PIN 9579-16-0862
ZONING: R-20

SIGNAL RIDGE, LP
DB 1680 PG 504
PB 2017 SL 10971
PIN 9579-16-1378
ZONING: PRD-CZD

VICINITY MAP

OVERLAPPING EASEMENTS

PERMANENT DRAINAGE EASEMENT PER PB 1999 SL 3086 & DB 993 PG 360

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA G DB 3284 PG 387 & DB 3273 PG 78

#5 EIR ID-KEE

BOUNDARY 348642 SF. 8.00 AC.

PROP. 30' SS EASEMENT

PROPOSED SCM ACCESS EASEMENT (TYP.)

ER EASEMENT DB 838 PG 434

ANK NCE EASEMENT 18 SL 11488, AREA F G 387 & DB 3273 PG 78

LOT 16 3075 SF. 0.07 AC.
LOT 15 3074 SF. 0.07 AC.
LOT 17 3270 SF. 0.08 AC.
LOT 18 3219 SF. 0.07 AC.
LOT 19 3244 SF. 0.07 AC.
LOT 20 3258 SF. 0.07 AC.
LOT 21 3263 SF. 0.07 AC.
LOT 22 3229 SF. 0.07 AC.
LOT 23 3199 SF. 0.07 AC.
LOT 24 3199 SF. 0.07 AC.
LOT 25 3200 SF. 0.07 AC.
LOT 26 3200 SF. 0.07 AC.
LOT 27 3200 SF. 0.07 AC.
LOT 28 3200 SF. 0.07 AC.
LOT 29 3200 SF. 0.07 AC.
LOT 30 3200 SF. 0.07 AC.
LOT 31 3200 SF. 0.07 AC.
LOT 32 3200 SF. 0.07 AC.
LOT 33 3200 SF. 0.07 AC.
LOT 34 3200 SF. 0.07 AC.
LOT 35 3200 SF. 0.07 AC.
LOT 36 3200 SF. 0.07 AC.
LOT 37 3200 SF. 0.07 AC.
LOT 38 3200 SF. 0.07 AC.
LOT 39 3200 SF. 0.07 AC.
LOT 40 3200 SF. 0.07 AC.
LOT 41 3200 SF. 0.07 AC.
LOT 42 3200 SF. 0.07 AC.
LOT 43 3220 SF. 0.07 AC.
LOT 44 3186 SF. 0.07 AC.
LOT 45 3200 SF. 0.07 AC.
LOT 46 3200 SF. 0.07 AC.
LOT 47 3198 SF. 0.07 AC.
LOT 48 3202 SF. 0.07 AC.
LOT 49 3198 SF. 0.07 AC.
LOT 50 3181 SF. 0.07 AC.
3846 SF. 0.09 AC.
LOT 1 3200 SF. 0.07 AC.
LOT 2 3200 SF. 0.07 AC.
LOT 3 3225 SF. 0.07 AC.
LOT 4 3216 SF. 0.07 AC.
LOT 5 3225 SF. 0.07 AC.
LOT 6 3168 SF. 0.07 AC.
LOT 7 3145 SF. 0.07 AC.
LOT 8 3255 SF. 0.07 AC.
LOT 9 3228 SF. 0.07 AC.
LOT 10 3171 SF. 0.07 AC.
LOT 11 3200 SF. 0.07 AC.
LOT 12 3200 SF. 0.07 AC.
LOT 13 3200 SF. 0.07 AC.
LOT 14 3200 SF. 0.07 AC.

PROPOSED SCM LOCATION

2 – 9.5' X 22' PARALLEL PARKING SPACES
OPEN SPACE
46912 SF.
1.08 AC.

12' x 40' LOADING SPACE

5' SIDEWALK

LAFOLETTE ST.
45' PUBLIC R/W

RIGHT IN - RIGHT OUT ENTRANCE WITH CONCRETE ISLAND

SIGNAL HILL ROAD SR 1508
MAINTAINED BY NCDOT SUBJECT TO 60' R/W PER NCDOT OFFICIAL (ASPHALT)

LINDA VISTA DR
SR 1521
MAINTAINED BY NCDOT (ASPHALT)

60' R/W
30' R/W
20' R

SHED (ENCR.#1)
DWELLING (P.A.I.)
SHED
DWELLING
SHED
DWELLING
SHED
DWELLING

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FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030895 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823		
DATE:	09/16/2024	DESIGN BY:	DW
		DRAWN BY:	DW
		APPROVED:	TMH
		SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE:
ROAD PLAN & PROFILE
0+00 - 11+00

DRAWING NO:
4

GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1"=40'

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FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL:

09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE:
ROAD PLAN & PROFILE
11+00 - 21+93

DRAWING NO:
5

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

TOTAL DENUDED AREA = 11.47 AC.
SEE SHEET 6 FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE

SKIMMER BASIN #2
(STD 03.08.02)
DRAINAGE AREA = 1.24 AC.
DISTURBED AREA = 1.00 AC.
Q_{10} = 2.83 CFS
BASIN TOP ELEV = 2158.00
PRIMARY SPWY ELEV = 2156.50
BASIN BOTTOM ELEV = 2154.00
MIN. VOLUME REQUIRED = 1,800 CF
MIN. VOLUME DESIGNED = 2,487 CF
SURFACE AREA REQUIRED = 920 SF
SURFACE AREA DESIGNED = 1,740 SF

SKIMMER BASIN #1
(STD 03.08.02)
DRAINAGE AREA = 1.22 AC.
DISTURBED AREA = 1.22 AC.
Q_{10} = 2.79 CFS
BASIN TOP ELEV = 2143.00
PRIMARY SPWY ELEV = 2142.00
BASIN BOTTOM ELEV = 2140.00
MIN. VOLUME REQUIRED = 2,196 CF
MIN. VOLUME DESIGNED = 3,000 CF
SURFACE AREA REQUIRED = 907 SF
SURFACE AREA DESIGNED = 1,800 SF

SKIMMER BASIN #3
(STD 03.08.02)
DRAINAGE AREA = 7.12 AC.
DISTURBED AREA = 6.17 AC.
Q_{10} = 16.27 CFS
BASIN TOP ELEV = 2138.00
PRIMARY SPWY ELEV = 2137.00
BASIN BOTTOM ELEV = 2134.00
MIN. VOLUME REQUIRED = 11,106 CF
MIN. VOLUME DESIGNED = 23,165 CF
SURFACE AREA REQUIRED = 5,288 SF
SURFACE AREA DESIGNED = 9,285 SF

HIGHLAND INVESTORS LIMITED PARTNERSHIP
DB 1262 PG 521
PIN 9579-16-5868

CAROLINA VILLAGE, INC
DB 1341 PG 582
PB 2017 SL 11014
PIN 9579-18-3554
ZONING: PRD-CZD

HOME DEPOT USA, INC
DB 992 PG 711
PB 1999 SL 3086
PIN 9579-16-0862
ZONING: R-20

OVERLAPPING EASEMENTS

PERMANENT DRAINAGE EASEMENT PER PB 1999 SL 3086, & DB 993 PG 360

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA G DB 3284 PG 387 & DB 3273 PG 78

30' SEWER EASEMENT PER DB 838 PG 434

LIMITS OF DISTURBANCE (TYP)

SILT FENCE (NCDEQ STD. 6.62)

SILT FENCE OUTLET (DETAIL DWG. 7)

ROCK CHECK DAM (NCDEQ STD. 6.63)

TEMP DIVERSION DITCH (NCDEQ STD. 6.20)

#5 EIR
ID-KEE

4" SKIMMER W/ 3/4" DIA. ORIFICE 6" PVC OUTLET W/ 6' x 6' CLASS B RIPRAP APRON SKIMMER
INV. = 2140.00
6" INV OUT = 2135.00

HDPE SLOPE DRAIN 2/ 6' x 6' CLASS B RIPRAP (NCDEQ STD. 6.32)
INV IN = 2144.00
INV OUT = 2140.00

HDPE SLOPE DRAIN 2/ 6' x 6' CLASS B RIPRAP (NCDEQ STD. 6.32)
INV IN = 2141.50
INV OUT = 2140.00

AMAZING GRACE LN.
20' PRIVATE R/W

LAFOLETTE ST.
30' PRIVATE R/W

2.5" SKIMMER W/ 3/4" DIA. ORIFICE 6" PVC OUTLET W/ 6' x 6' CLASS B RIPRAP APRON SKIMMER
INV. = 2152.00
6" INV OUT = 2151.00

HDPE SLOPE DRAIN 2/ 6' x 6' CLASS B RIPRAP (NCDEQ STD. 6.32)
INV IN = 2158.00
INV OUT = 2153.00

CONSTRUCTION ENTRANCE (DETAIL DWG. 6)

EX. GRAVEL DRIVE TO BE REMOVED

SIGNAL HILL ROAD SR 1508
MAINTAINED BY NCDOT SUBJECT TO 60' R/W PER NCDOT OFFICIAL (ASPHALT)

LINDA VISTA DR
SR 1521
MAINTAINED BY NCDOT (ASPHALT)

8" SKIMMER W/ 1.5" DIA. ORIFICE 6" PVC OUTLET W/ 6' x 6' CLASS B RIPRAP APRON SKIMMER
INV. = 2134.00
6" INV OUT = 2127.00

20' SPILLWAY ELEVATION = 2137.00. LINE WITH RIP RAP TO TOE OF SLOPE

HDPE SLOPE DRAIN W/ 6' x 6' CLASS B RIPRAP (NCDEQ STD. 6.32)
INV IN = 2135.00
INV OUT = 2134.00

POSSIBLE TEMPORARY STOCKPILE

CONCRETE WASHOUT (NCDEQ STD. 6.63)

CSD CONTROL POINT #5 REBAR
NC GRID COORDINATES
N: 596,147.54' NAD 83/11
E: 970,567.47' NAD 83/11
-LOCALIZED POINT-

ANGELA M. LAMB
ESTATE FILE 21E973
(REF: DB 481 PG 483)
PIN 9579-07-1337
ZONING: R-20

SHED (ENCR.#1)

DWELLING (P.A.)

NANCY L. CONLEY
DB 3672 PG 5366
LOTS 79-80
PIN 9579-06-6187
ZONING: R-20

ASHLEY M. CLOUSE
BETTY B. MEAD
DB 3768 PG 310
LOTS 73-76
PIN 9579-06-6315
ZONING: R-20

HENRY W. BRADLEY
DB 1177 PG 572
LOTS 81-84
PIN 9579-06-6107
ZONING: R-20

SEAN GIVENS
DB 3083 PG 278
LOTS 86-88
PC B SL 180A
(AKA PB 2 PG 156)
PIN 9579-06-4126
ZONING: O-2

KRISTINA SOFRONIE
DB 3866 PG 389
PB 2021 PG 13157, TR 2
PIN 9579-06-3404
ZONING: R-20

D & G ESTATE, LLC
DB 3876 PG 178
PB 2021 PG 13157, TR 1
PIN 9579-06-3217
ZONING: CHMU

JEANETTE Q. MATHIS
DB 910 PG 68
PC A SL 214A, LOT 7
PIN 9579-06-1562
ZONING: R-20

SWAIN S. HAYNES
DB 901 PG 347
PC A SL 214A, LOT 6
PIN 9579-06-1764
ZONING: R-20

HOMER F. HOWARD
DB 674 PG 3
PC A SL 214A, LOT 5
PIN 9579-06-1936
ZONING: R-20

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1"=50'

REVISIONS		
REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 039915 TOBIN M. HARRIS
01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-384-6913
www.3ngtch.com
License No: C-0473

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: EROSION CONTROL PH 1 PLAN

DRAWING NO: 6

Y:\Shared\2_ENGR\656605823\5_DESIGN\DWG\SHEETS\EROSION CONTROL PH 1.dwg, 5/15/2025 4:35 PM, Toby Harris

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

TOTAL DENUDED AREA = 11.47 AC.
SEE SHEET 6 FOR EROSION CONTROL NOTES AND CONSTRUCTION SEQUENCE

SKIMMER BASIN #2
(STD 03.08.02)
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DISTURBED AREA = 1.00 AC.
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PRIMARY SPWY ELEV = 2156.50
BASIN BOTTOM ELEV = 2154.00
MIN. VOLUME REQUIRED = 1,800 CF
MIN. VOLUME DESIGNED = 2,487 CF
SURFACE AREA REQUIRED = 920 SF
SURFACE AREA DESIGNED = 1,740 SF

SKIMMER BASIN #1
(STD 03.08.02)
DRAINAGE AREA = 1.22 AC.
DISTURBED AREA = 1.22 AC.
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PRIMARY SPWY ELEV = 2142.00
BASIN BOTTOM ELEV = 2140.00
MIN. VOLUME REQUIRED = 2,196 CF
MIN. VOLUME DESIGNED = 3,000 CF
SURFACE AREA REQUIRED = 907 SF
SURFACE AREA DESIGNED = 1,800 SF

SKIMMER BASIN #3
(STD 03.08.02)
DRAINAGE AREA = 7.12 AC.
DISTURBED AREA = 6.17 AC.
Q_{10} = 16.27 CFS
BASIN TOP ELEV = 2138.00
PRIMARY SPWY ELEV = 2137.00
BASIN BOTTOM ELEV = 2134.00
MIN. VOLUME REQUIRED = 11,106 CF
MIN. VOLUME DESIGNED = 23,165 CF
SURFACE AREA REQUIRED = 5,288 SF
SURFACE AREA DESIGNED = 9,285 SF

HIGHLAND INVESTORS LIMITED PARTNERSHIP
DB 1262 PG 521
PIN 9579-16-5868

CAROLINA VILLAGE, INC
DB 1341 PG 582
PB 2017 SL 11014
PIN 9579-18-3554
ZONING: PRD-CZD

HOME DEPOT USA, INC
DB 992 PG 711
PB 1999 SL 3086
PIN 9579-16-0862
ZONING: R-20

SIGNAL RIDGE, LP
DB 1680 PG 504
PB 2017 SL 10971
PIN 9579-16-1378
ZONING: PRD-CZD

OVERLAPPING EASEMENTS

PERMANENT DRAINAGE EASEMENT
PER PB 1999 SL 3086, & DB 993 PG 360

STREAMBANK MAINTENANCE EASEMENT
#5 EIR
ID-KEE
PER PB 2018 SL 11488, AREA G
DB 3284 PG 387 & DB 3273 PG 78

ALLEN ST.
NOT CURRENTLY IN USE
VARIABLE WIDTH PRIVATE R/W
PER PB 2 PG 10

AMAZING GRACE LN.
NOT CURRENTLY IN USE
20' PRIVATE R/W PER PB 2 PG 156

AMAZING GRACE LN.
20' PRIVATE R/W

LAFOLETTE ST.
30' PRIVATE R/W

SIGNAL HILL ROAD SR 1508
MAINTAINED BY NCDOT SUBJECT TO 60' R/W PER NCDOT OFFICIAL (ASPHALT)

LINDA VISTA DR
SR 1521
MAINTAINED BY NCDOT (ASPHALT)

INLET PROTECTION (SEE DETAIL DWG. 7)

CONSTRUCTION ENTRANCE (DETAIL DWG. 6)

SILT FENCE OUTLET (DETAIL DWG. 7)

CSD CONTROL POINT #5 REBAR
NC GRID COORDINATES
N: 596,147.54' NAD 83/11
E: 970,567.47' NAD 83/11
-LOCALIZED POINT-

30' SEWER EASEMENT PER DB 838 PG 434

ANGELA M. LAMB ESTATE FILE 21E973 (REF: DB 481 PG 483) PIN 9579-07-1337 ZONING: R-20

HOMER F. HOWARD DB 674 PG 3 PC A SL 214A, LOT 5 PIN 9579-06-1936 ZONING: R-20

SWAIN S. HAYNES DB 901 PG 347 PC A SL 214A, LOT 6 PIN 9579-06-1764 ZONING: R-20

JEANETTE Q. MATHIS DB 910 PG 68 PC A SL 214A, LOT 7 PIN 9579-06-1562 ZONING: R-20

KRISTINA SOFRONIE DB 3866 PG 389 PB 2021 PG 13157, TR 2 PIN 9579-06-3404 ZONING: R-20

D & G ESTATE, LLC DB 3876 PG 178 PB 2021 PG 13157, TR 1 PIN 9579-06-3217 ZONING: CHMU

SEAN GIVENS DB 3083 PG 278 LOTS 86-88 PC B SL 180A (AKA PB 2 PG 156) PIN 9579-06-4126 ZONING: O-2

NANCY L. CONLEY DB 3672 PG 5366 LOTS 79-80 PIN 9579-06-6187 ZONING: R-20

HENRY W. BRADLEY DB 1177 PG 572 LOTS 81-84 PIN 9579-06-6107 ZONING: R-20

ASHLEY M. CLOUSE BETTY B. MEAD DB 3768 PG 310 LOTS 73-76 PIN 9579-06-6315 ZONING: R-20

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1"=50'

REVISIONS

REV.	DATE	COMMENTS
1	09/20/2024	ADDRESS CLIENT COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 039615 ENGINEER TOBIN M. HARRIS
01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-384-6913
www.3notch.com
License No. C-4673

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: EROSION CONTROL PH 2 PLAN

DRAWING NO: 7

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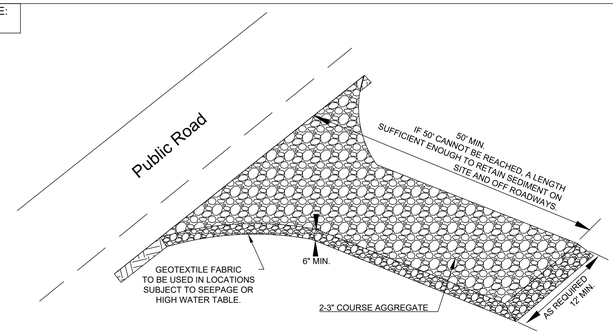
CONSTRUCTION SEQUENCE:

THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT EROSION IS MINIMIZED AND THAT COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, REGULATIONS, AND ORDINANCES IS MAINTAINED THROUGHOUT EXECUTION OF THIS PROJECT.

1. OBTAIN A LAND DISTURBING PERMIT. SCHEDULE A PRE-CONSTRUCTION MEETING.
2. CLEAR FOR AND INSTALL GRAVEL CONSTRUCTION ENTRANCES. CLEAR FOR AND INSTALL ONSITE PERIMETER SILT FENCE AS SHOWN ON THE APPROVED PLANS. ONCE IN PLACE, CONTRACTOR MAY THEN CLEAR FOR AND INSTALL SEDIMENT BASINS, FOLLOWED BY ANY TEMPORARY DIVERSIONS AS SHOWN ON THE APPROVED PLANS. PERMANENT BASIN / POND OUTFALL STRUCTURES AND PIPING WILL REQUIRE INSTALLATION DURING PHASE 1 EROSION CONTROL. ALL SEDIMENT BASINS AND TRAPS MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL ALL UPGRADIENT AREAS ARE STABILIZED.
3. ONCE EROSION CONTROL MEASURES HAVE BEEN APPROVED BY INSPECTOR, COMPLETE DEMOLITION OF ALL FEATURES ON SITE NOT ALREADY NECESSARY TO BE REMOVED FOR BASIN INSTALLATION.
4. EXCAVATION MAY BEGIN AT THIS TIME. ANY FILL OPERATIONS MUST BEGIN AT THE REAR / UPSTREAM SIDE OF THE SITE AND WORK THEIR WAY FORWARD / DOWNSTREAM. THIS WILL ENSURE POSITIVE DRAINAGE OF THE SITE TOWARDS THE SEDIMENT BASINS THROUGHOUT THE MASS GRADING PORTION OF CONSTRUCTION. CONTRACTOR TO ENSURE NO SUMPS ARE CREATED IN GRADED AREAS UNTIL STORM INLETS CAN BE PROVIDED FOR THOSE SUMPS.
5. BEGIN INSTALLATION OF STORM DRAIN, SEWER AND WATER UTILITIES. STORM DRAIN INSTALLATION MUST START AT MOST DOWN STREAM STRUCTURE AND MOVE UPSTREAM. AS INLETS ARE INSTALLED, PROVIDE INLET PROTECTION IMMEDIATELY. AFTER INLETS ARE INSTALLED, CURBING MAY BE INSTALLED WHERE NECESSARY AND WHEN EVER A TEMPORARY DITCH IS TO BE FILLED IN / RELOCATED, CONTRACTOR MUST CONTACT AN EROSION CONTROL INSPECTOR BEFORE AND AFTER THE RELOCATION HAS TAKEN PLACE WITH 48 HOURS NOTICE BEING GIVEN PRIOR TO RELOCATION. AS AREAS ARE BROUGHT UP TO GRADE, TEMPORARILY OR PERMANENTLY STABILIZE PER TIME FRAMES LISTED ON THIS SHEET.
   NOTE: ALL SEDIMENT BASINS AND TRAPS MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL ALL UPGRADIENT AREAS HAVE BEEN STABILIZED AND THE STORM DRAIN SYSTEM IS IN PLACE, DIVERTING DRAINAGE FROM THESE TEMPORARY TRAPS / BASINS TO THE PERMANENT BASINS. A NC DEMLR REPRESENTATIVE MUST APPROVE THE REMOVAL OF ANY SEDIMENT BASIN OR TRAP PRIOR TO IT TAKING PLACE.
6. PROVIDE PAVEMENT IN ROADWAY AND PARKING AREAS IN ORDER TO PERMANENTLY STABILIZE THESE AREAS. IF ALL BUILDING PERMITS HAVE BEEN ACQUIRED, CONSTRUCTION MAY ALSO BEGIN ON BUILDINGS AND RETAINING WALLS AT THIS TIME.
   NOTE: THE CONTRACTOR SHALL ENSURE THAT THE EROSION CONTROL DEVICES REMAIN UNDISTURBED DURING CONSTRUCTION OF THE BUILDING PADS AND ASSOCIATED PARKING/DRIVE AREAS ADJACENT TO THESE DEVICES UNTIL THE CONTRIBUTING UPSTREAM AREAS HAVE BEEN STABILIZED AND APPROVED.
7. ONCE SITE IS APPROVED BY INSPECTOR, SILT FENCING AND CONSTRUCTION ENTRANCE MAY BE REMOVED. SEDIMENT BASINS MAY BE CONVERTED TO THEIR FINAL WET POND CONDITIONS. PERMANENTLY STABILIZE ANY REMAINING AREAS WITH SOD, SEED AND MULCH, OR PAVING AS NECESSARY.

DATE: PAGE:



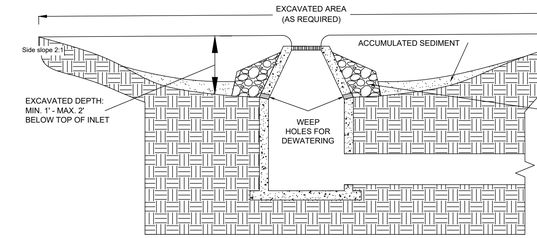
Construction:
1. Clear the entrance and exit area of all vegetation, roots, and other objectionable material and properly grade it.
2. Place the gravel to the specific grade and dimensions shown on the plans, and smooth it.
3. Provide drainage to carry water to a sediment trap or other suitable outlet.
4. Use geotextile fabrics in order to improve stability of the foundation in locations subject to seepage or high water table.

Maintenance:
1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make any required repairs immediately.
2. Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone.
3. Sediment on roadways is to be removed immediately by broom and shovel, either by manual or mechanical means, and not to be washed off where it has the potential to enter a stream, drainage way or storm drain system.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

DATE: PAGE:



Notes:
1. Clear the area of all debris that might hinder excavation and disposal of spoil.
2. Grade the approach to the inlet uniformly.
3. Protect weep holes by gravel.
4. When the contributing drainage area has been permanently stabilized, seal weep holes, fill the basin with stable soil to final grading elevations, compact it properly and stabilize.

Maintenance:
1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater.
2. Clean, and properly maintain the excavated basin after every storm until the contributing drainage area has been permanently stabilized.
3. remove sediment when the volume of the basin has been reduced by one-half.
4. Spread all excavated material evenly over the surrounding land area or stockpile and stabilize appropriately.

EXCAVATED DROP INLET PROTECTION (TEMPORARY)

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

DATE: PAGE:

TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

Seeding Mixture

Species	Rate (lb/acre)
Rye (grain)	120
Annual lespedeza (Kobe in Piedmont and Coastal Plain, Korean in Mountains)	50

Omit annual lespedeza when duration of temporary cover is not to extend beyond June.

Seeding Dates
Mountains—Above 2500 feet: Feb. 15 - May 15
Below 2500 feet: Feb. 1- May 1
Piedmont—Jan. 1 - May 1
Coastal Plain—Dec. 1 - Apr. 15

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

Seeding Mixture

Species	Rate (lb/acre)
German millet	40

In the Piedmont and Mountains, a small-stemmed Sudangrass may be substituted at a rate of 50 lb/acre.

Seeding Dates
Mountains — May 15 - Aug. 15
Piedmont — May 1 - Aug. 15
Coastal Plain — Apr. 15 - Aug. 15

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.

TEMPORARY SEEDING RECOMMENDATIONS FOR FALL

Seeding Mixture

Species	Rate (lb/acre)
Rye (grain)	120

Seeding Dates
Mountains — Aug. 15 - Dec. 15
Coastal Plain and Piedmont — Aug. 15 - Dec. 31

Mulch
Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.

Maintenance
Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.

SEED BED PREPARATION:

LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1-1½ tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.

FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700 - 1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. The finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. All ridges and depressions shall be removed and filled to provide the approved surface drainage. Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.

TEMPORARY SEEDING

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

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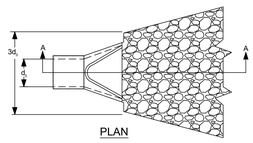
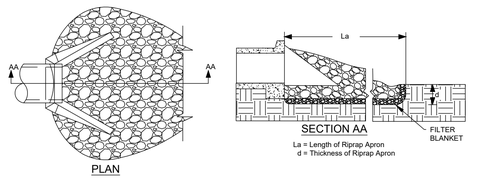
PIPE OUTLET TO FLAT AREA NO WELL-DEFINED CHANNEL



La = Length of Riprap Apron
d = Thickness of Riprap Apron

PIPE OUTLET TO WELL-DEFINED CHANNEL



La = Length of Riprap Apron
d = Thickness of Riprap Apron

NOTES:
1. Compact any fill required in the subgrade to the density of the surrounding undisturbed material. Low areas in the subgrade on undisturbed soil may also be filled by increasing the riprap thickness.
2. The riprap and gravel filter must conform to the specified grading limits shown on the plans.
3. Filter cloth, when used, must meet design requirements, and be properly protected from punching or tearing during installation. Repair any damage by removing the riprap and placing another piece over the damaged area. If the damage is extensive, replace the entire filter cloth.
4. All connecting joints should overlap so the top layer is above the downstream layer a minimum of 1 foot.
5. The minimum thickness of the riprap should be 1.5 times the maximum stone diameter but not less than 6".
6. Riprap may be field stone or rough quarry stone. It should be hard, angular highly weather-resistant and well graded.
7. Construct the apron on zero grade with no overfill at the end. Make the top of the riprap at the downstream end level with the receiving area or slightly below it.
8. Ensure that the apron is properly aligned with the receiving stream and preferably straight throughout its length. If a curve is needed, place in the upper section of the apron.

MAINTENANCE:
1. Inspect outlet structures at least weekly and after each rainfall of 1.0 inch or greater.
2. Check outlets for erosion around or below riprap and for if stones have been dislodged. Make repairs immediately to prevent further damage.

OUTLET STABILIZATION STRUCTURE

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

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NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

SEEDING MIXTURE

Species	Rate
Centipede	5 lbs/acre
Indian Woodoats	1.5-2.5 lbs/acre*
Virginia Wild Rye	4-6 lbs/acre

*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.

Seeding Dates
Coastal or Eastern Piedmont for Centipede- Sept. 1 - May 1
Coastal and Piedmont for Indian Woodoats and Virginia Wild Rye- Feb 15 - April 1
Mountains for Indian Woodoats and Virginia Wild Rye- March 1 - May 15

Maintenance:
Significant maintenance may be required to obtain desired cover.

NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR SUMMER

SEEDING MIXTURE

Species	Rate
Indian Woodoats	1.5-2.5 lbs/acre*
Virginia Wild Rye	4-6 lbs/acre*

*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.

Seeding Dates
Mountains - July 15- Aug 15
Piedmont - Aug 15 - Oct 15

Maintenance:
Indian Woodoats and Virginia Wild Rye are both sun and shade tolerant.

NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR FALL

SEEDING MIXTURE

Species	Rate
Hard Fescue	15 lbs/acre
Switchgrass	2.5-3.5 lbs/acre*
Indian Grass	5-7 lbs/acre*
Big Bluestem	5-7 lbs/acre*
Indian Woodoats	1.5-2.5 lbs/acre*
Virginia Wild Rye	4-6 lbs/acre*

*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.

Seeding Dates
Mountains - Hard Fescue- Aug 1 - June 1
Mountains- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 15
Piedmont and Coastal- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 1
Coastal- Indian Woodoats and Virginia Wild Rye- Sept 1 - Nov 1

Maintenance:
Hard Fescue is not recommended for slopes > 5%. Prefers shade.

SEED BED PREPARATION:

LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1½ tons/acre on coarse0textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.

FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. the finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. all ridges and depressions shall be removed and filled to provide the approved surface drainage . Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.

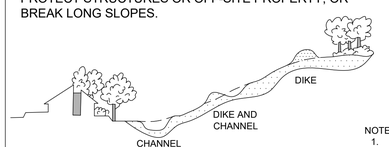
NOTES:
1. Permanent seeding, sodding or other means of stabilization are required when all construction work is completed according to the NPDES timeframes table.
2. A North Carolina Department of Agriculture soils test (or equal) is highly recommended to be obtained for all areas to be seeded, sprigged, sodded or planted.
3. Use a seeding mix that will produce fast0growing nurse crops and includes non-invasive species that will eventually provide a permanent groundcover. Soil blankets may be used in lieu of nurse crops. Mat, tack or crimp mulch, as needed to stabilize seeded areas until root establishment. Mulch must cover at leaser 80% of the soil surface.
4. Ground cover shall be maintained until permanent vegetation is established and stable against accelerated erosion.

PERMANENT SEEDING

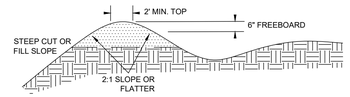
Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

DATE: PAGE:

USE OF DIVERSIONS TO PROTECT CUT OR FILL SLOPES, PROTECT STRUCTURES OR OFF-SITE PROPERTY, OR BREAK LONG SLOPES.



CROSS-SECTION FOR PERMANENT DIVERSION LOCATED ABOVE A SLOPE.



Minimum Design Storm for Degrees of Hazard

Level of Protection	Area to Be Protected	Minimum Design Storm
Low	All erosion control facilities. Open areas, parking lots, minor recreation areas.	10 year
Medium	Recreation development, low-capacity roads and minor structures.	25 year, 24 hour 50 year, 24 hour
High	Major structures, homes, main school buildings, high-capacity roads.	100 year, 24 hour

NOTES:
1. Permanent Diversions can be installed as temporary diversions until the site is stabilized and then completed as a permanent measure, or they can be installed in final form during the initial construction operation, so long as they function properly and meet all temporary measure standards.
2. Remove and properly dispose of all trees, brush, stumps, or other objectionable material. Fill and compact all ditches, swales, or gullies that will be crossed to natural ground level or above.
3. Just before placement of fill, the base of the ridge should be disked by machinery.
4. Excavate, shape, and stabilize the diversion to line, grade, and cross section, as required in the design plan.
5. Compact the ridge to prevent unequal settlement, and to provide stability against seepage.
6. Stabilized the diversion with Permanent vegetation after installation.

MAINTENANCE:
1. Inspect permanent diversions at least weekly and after each rainfall of 1.0 inch or greater.
2. Immediately remove any obstructions from the flow area, and repair the diversion ridge.
3. Check outlets, and make timely repairs as needed.
4. Maintain the vegetation in a vigorous, healthy condition at all times.

PERMANENT DIVERSIONS

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

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Mulching Materials and Application Rates

Material Organic Mulches	Rate Per Acre	Quality	Notes
Straw	1-2 tons	Dry, unchopped, unweathered; avoid weeds.	Should come from wheat or oats; spread by hand or machine; must be tacked down.
Wood Chips	5-6 tons	Air dry	Treat with 12 lbs nitrogen/ton. Apply with mulch blower, chip handle, or by hand. Not for use in fine turf.
Wood Fiber	0.5-1 tons		Also referred to as wood cellulose. May be hydroseeded. Do not use in hot, dry weather.
Bark	35 cubic yards	Air dry, shredded or hammer-milled, or chips.	Apply with mulch blower, chip handler, or by hand. Do not use asphalt tack.
Corn Stalks	4-6 tons	Cut or shredded in 4-6 inch lengths.	Apply with mulch blower or by hand. Not for use in fine turf.
Sericea Lespedeza seed-bearing stems	1-3 tons	Green or dry; should contain mature seed.	
Nets and Mats*			
Jute net	Cover area	Heavy, uniform; woven of single jute yarn.	Withstands waterflow. Best when used with organic mulch
Fiberglass net	Cover area		Withstands waterflow. Best when used with organic mulch
Excelsior (wood fiber net)	Cover area		Withstands waterflow.
Fiberglass roving	0.5-1 tons	Continuous fibers of drawn glass bound together with a non-toxic agent.	Apply with a compressed air ejector. Tack with emulsified asphalt at a rate of 25-35 gal/1,000 sq. ft.
Chemical Stabilizers**			
Aquatain Aerospray Curasol AK Pertroset SB Terra Tack Crust 500 Genaqua 743 M-145	Follow Manufacturer's specifications		Not beneficial to plant growth

*Refer to Practice No. 6.30, Grass Lined Channels in the NC DEQ E&SC Planning and Design Manual
**Use of trade names does not imply endorsement of product.

NOTES:
1. Select material based on site and practice requirements, availability of material, labor and equipment.
2. Before mulching, complete grading, install sediment control practices, and prepare the seedbed. Apply seed before mulching **except** when seed is applied as part of a hydroseeder slurry containing wood fiber mulch or a hydroseeder slurry is applied over straw.

APPLICATION OF ORGANIC MULCH
1. Spread mulch uniformly by hand, or with a mulch blower.
2. When spreading straw mulch by hand, divide the area to be mulched into sections of approximately 1,000 ft², and place 70-90 lb. of straw(1 1/2 to 2 bales) in each section to facilitate uniform distribution.
3. After Spreading, no more than 25% of the ground surface should be visible.
4. In hydroseeding operations a green dye, added to the slurry, assures a uniform application.

ANCHORING ORGANIC MULCH
1. Straw mulch must be anchored immediately after spreading.
2. A tractor-drawn implement designed to punch mulch into the soil or a mulch anchoring tool provides maximum erosion control with straw. A regular farm disk, weighted and set nearly straight, may substitute, but will not do a job comparable to the mulch anchoring tool. The disk should not be sharp enough to cut the straw. These methods are limited to slopes no steeper than 3:1, where equipment can operate safely.
3. Application of liquid mulch binders and tackifiers should be heaviest at the edges of areas and at crests of ridges and banks, to resist winds. Binder should be applied uniformly to the rest of the area. Binders may be applied after mulch is spread, or may be sprayed into the mulch as it is being blown onto the soil. Applying straw and binder together is the most effective method.
4. Emulsified asphalt should be applied at 0.10 gallons per square yard (10 gal/1,000 ft²). Heavier applications cause straw to "perch" over rills. Use Rapid setting (RS or CRS) designated asphalt in traffic areas to prevent uncured asphalt from being picked up on shoes and causing damage to rugs, clothes, etc.
5. Synthetic binders may be used as recommended by the manufacturer.
6. Lightweight plastic, cotton, jute, wire or paper nets may be stapled over the mulch according to the manufacturer's recommendations.
7. For small areas where other methods cannot be used, peg and twine anchoring can be used. Drive 8-10 inch wooden pegs to within 3 inches of the soil surface, every 4 feet in all directions. Stakes can be driven before or after straw is spread. Secure mulch by stretching twine between pegs in a criss-cross-within-a-square pattern. Turn twine two or more times around each peg.
8. Rye Grain may be used to anchor mulch in fall plantings, and German Millet in spring. Broadcast at 15 lb/acre before applying mulch.

CHEMICAL MULCHES
1. May be effective for soil stabilization if used between May 1 and June 15, or Sept. 15 and Oct. 15, provided that they are used on slopes **no steeper** than 4:1, and that proper seedbed preparation has been accomplished, including surface roughening where required.
2. Chemical mulches cannot be used to bind other mulches, or with wood fiber in a hydroseeded slurry at any time. Follow the manufacturer's recommendations for application.

FIBERGLASS ROVING
1. Spread roving uniformly over the area at a rate of 0.25 to 0.35 lb/yd². Anchor with asphalt immediately after application, at a rate of 0.25-0.35 gal/yd²
2. As a channel lining, and at other sites of concentrated flow, the roving mat must be further anchored to prevent undermining.
3. It may be secured with stakes placed at intervals no greater than 10 feet along the drainageway, and randomly throughout its width, but not more than 10 feet apart.
4. As an option to staking, the roving can be buried to a depth of 5 inches at the upgrade end and at intervals of 50 feet along the length of the channel.

NETS AND MATS
1. Nests alone generally provide little moisture conservation benefits and only limited erosion protection. Therefore, typically use in conjunction with an organic mulch such as straw.
2. Except when wood fiber slurry is used, netting should always be installed **over** the mulch. Wood fiber may be sprayed on top of an installed net.
3. Mats, including "excelsior" (wood fiber) blankets, are considered protective mulches and may be used alone.
4. Place the matting in firm contact with the soil, and staple securely.

MULCHING

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030895 TOBIAS M. HARRIS
01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: ESC DETAILS-1
DRAWING NO: 8

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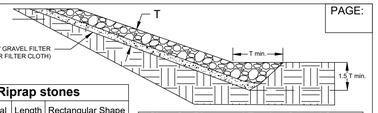

Subgrade Preparation:
1. Prepare the subgrade for riprap and filter to the required lines and grades shown on the plans.
2. Compact any fill required in the subgrade to a density approximating that of the surrounding undisturbed material or overfill depressions with riprap.
3. Remove brush, trees, stumps, and other objectionable material.

Sand and Gravel Filter Blanket:
1. Place the filter blanket immediately after the ground foundation is prepared.
2. When using gravel, spread filter stone in a uniform layer to the specified depth.
3. When more than one layer of filter material is used, spread the layers with minimal mixing.

Synthetic Filter Fabric:
1. Place the cloth filter directly on the prepared foundation.
2. Overlap the edges by at least 12 inches, and space anchor pins every 3 feet along the overlap.
3. Bury the upstream end of the cloth a minimum of 12 inches below ground and bury the lower end of the cloth or over lap with the next section as required.
4. If damage occurs while placing riprap, remove the riprap, and repair the sheet by adding another layer of filter material with a minimum overlap of 12 inches around the damaged area. If damage is extensive, remove and replace the entire sheet.
5. If placing large stones or machine placing is difficult, a 4 inch layer of fine gravel or sand may be needed to protect the filter cloth.

Maintenance:
In general, once a riprap installation has been properly designed and installed it requires very little maintenance. Riprap should be inspected periodically for scour or dislodged stones. Control of weed and brush growth may be needed in some locations.

Size of Riprap stones

Weight (lb)	Mean Spherical Diameter (ft)	Length (ft)	Rectangular Shape Width/Height (ft)
50	0.8	1.4	0.5
100	1.1	1.8	0.6
150	1.3	2.0	0.7
300	1.6	2.6	0.9
500	1.9	3.0	1.0
1000	2.2	3.7	1.3
1500	2.6	4.7	1.5
2000	2.8	5.4	1.8
4000	3.6	6.0	2.0
6000	4.0	6.9	2.3
8000	4.5	7.6	2.5
20,000	6.1	10.0	3.3

Sizes for Riprap and Erosion Control Stone Specified by NCDOT

Riprap		Erosion Control	
Class 1	Class 2	Class A	Class B
5-200 lb	25-250 lb	2"-6"	5"-15"
30% shall weigh a minimum of 60 lbs each	60% shall weigh a minimum of 100 lbs each		
No more than 10% shall weigh less than 15 lbs each	No more than 5% shall weigh less than 50 lbs each	10% tolerance top and bottom sizes	
		Equally distributed, no gradation specified	Equally distributed, no gradation specified

Riprap should be a well-graded mixture with 50% by weight larger than the specified design size.
Diameter of the largest stone size in the mix should be 1.5 times the d_{50} size with smaller sizes grading down to 1 inch.

Stone Placement:
1. Placement of riprap should follow immediately after placement of the filter.
2. Place so that riprap forms a dense, well-graded mass of stone with a minimum of voids.
3. Place to its full thickness in one operation.
4. Do not place by dumping through chutes or other methods that cause segregation of stone sizes.
5. Take care not to dislodge underlying base or filter when placing stone.
6. The toe of the riprap slope should be keyed to a stable foundation at its base.
7. The toe should be excavated to a depth about 1.5 times the design thickness of the riprap and extend horizontally from the slope, as shown above.
8. Hand placing may be necessary to achieve the proper distribution of stone sizes to produce a relatively smooth, uniform surface.

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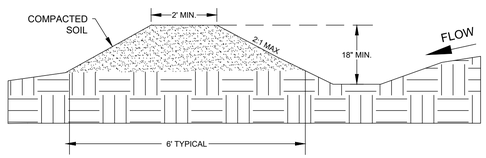
In accordance with the 2013 Design Manual Updates

RIP RAP

DATE: PAGE:

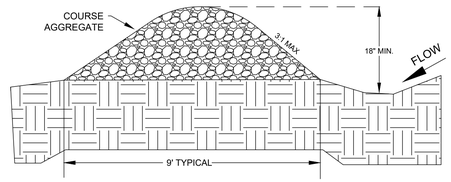
TEMPORARY EARTHEN DIVERSION DIKE



NOTES:
1. Remove and properly dispose of all tree, brush, stumps, and other objectionable material.
2. Temporary diversions are to only be used for drainage areas of 5 acres or less.
3. Ridges will have a 2 feet minimum top width, 2:1 or flatter side slopes and a minimum of 0.3 feet freeboard.
4. Channels will have a parabolic, trapezoidal, or V shape with side slopes of 2:1 or flatter.
5. Any point where vehicles will be crossing should have 3:1 or flatter side slopes.
6. Ensure the top of the dike is not lower at any point than the design elevation plus the specified settlement.
7. Provide sufficient room around diversions to permit machine re-grading and cleanout.
8. Vegetate the ridge immediately after construction unless it will remain in place less than 30 working days.

MAINTENANCE:
1. Inspect all measures at least weekly and after every rainfall of 1.0 inch or greater.
2. Make all repairs immediately.
3. Immediately remove any sediment from the flow area and repair the diversion ridge.
4. Check outlets and make timely repairs as needed.

TEMPORARY GRAVEL DIVERSION DIKE FOR VEHICLE CROSSING



Effective Date: 9/1/2023
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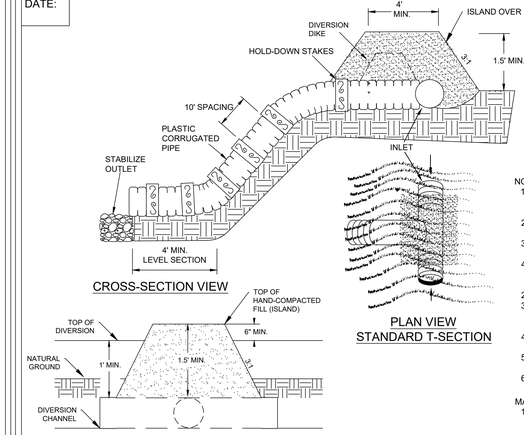
TEMPORARY DIVERSIONS

DATE: PAGE:



Size of Slope Drain

Max. Drainage Area per Pipe (Acres)	Pipe Diameter (Inches)
0.50	12
0.75	15
1.00	18
>1.00*	as designed

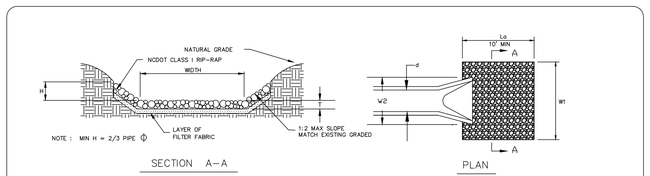
* Inlet design becomes more complex beyond this size.

NOTES:
1. Place slope drains on undisturbed soil or well compacted fill at locations and elevations shown on the plan.
2. Slightly slope the section of pipe under the dike toward its outlet.
3. Hand tamp the soil under and around the entrance section in lifts not to exceed 6 inches.
4. Fill over the drain at the top of the slope to a minimum of 1.5 feet depth, 4 feet top width and 3:1 side slopes.
2. Ensure all slope drain connections are watertight.
3. Compact fill material and securely fasten the exposed section of the drain with grommets or stakes spaced no more than 10 feet apart.
4. Extend the drain beyond the toe of the slope, and adequately protect the outlet from erosion.
5. Make the compacted, settled dike ridge no less than 1 foot above the top of the pipe at every point.
6. Immediately stabilize all disturbed areas following construction.

MAINTENANCE:
1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater; repair immediately.

Effective Date: 9/1/2023

TEMPORARY SLOPE DRAINS



CONSTRUCTION SPECIFICATIONS :

A. BOTTOM GRADE SHALL BE 0.0 %.
B. SIDE SLOPES 2:1 OR FLATTER.
C. SIDEWALLS SHALL EXTEND UP AS SHOWN ON THE PLANS BUT NOT LESS THAN TWO-THIRDS THE PIPE DIAMETER.
D. THERE SHALL BE NO OVERFALL FROM THE END OF THE APRON TO THE SURFACE OF THE RECEIVING CHANNEL. THE AREA TO BE PAVED OR RIP-RAPPED SHALL BE UNDERCUT SO THAT THE INVERT OF THE APRON SHALL BE AT THE SAME GRADE (FLUSH) WITH THE SURFACE OF THE RECEIVING CHANNEL. THE APRON SHALL HAVE A CUTOFF TO TOE WALL AT THE DOWNSTREAM END.
E. APRON DIMENSIONS AND RIP-RAP SIZE OR CONCRETE THICKNESS MUST BE AS SHOWN ON THE PLANS.
F. THE WIDTH OF THE END OF THE APRON SHALL BE EQUAL TO THE BOTTOM WIDTH OF THE RECEIVING CHANNEL AT THE OUTLET PIPE, WHICHEVER IS GREATER, OR 3 TIMES THE DIAMETER.
G. THE PLACING OF FILL, EITHER LOOSE OR COMPACTED IN THE RECEIVING CHANNEL SHALL NOT BE ALLOWED.
H. NO BENDS OR CURVES IN THE HORIZONAL ALIGNMENT OF THE APRON WILL BE PERMITTED.
I. FILTER FABRIC TO BE MIRAFI 500 OR APPROVED EQUAL
J. THICKNESS OF RIP-RAP TO BE 1' OR AS NOTED BY THE ENGINEER.

USE USDA NOMOGRAPH FROM NC SEDIMENT AND EROSION CONTROL MANUAL FOR DESIGN DATA.

OUTLET	Q(CFS)	V(FPS)	La	W1	W2	*T	H
YES--200	10.5	5.9	16'	17.5'	4.5'	14"	20"
YES--204	23.7	13.4	16'	17.5'	4.5'	14"	20"**
YES--300	41.1	8.4	8'	10.5'	7.5'	14"	20"
YES--316	7.8	4.4	14'	15.5'	4.5'	14"	20"
YES--320	40.1	12.8	12'	14'	6'	14"	20"
YES--322	14.4	8.2	12'	13.5'	6'	14"	20"

* d50 (see fig. 8.06 a&b "NC SEDIMENT AND EROSION CONTROL MANUAL"
dmax = 1.5 x d50
T = 1.5 X dmax
** T = THICKNESS OF RIP RAP APRON, 4xd
W1 = END OF APRON, 3xd
W2 = END OF FLARED SECTION

RIP-RAP APRON
FOR FLARED END SECTION

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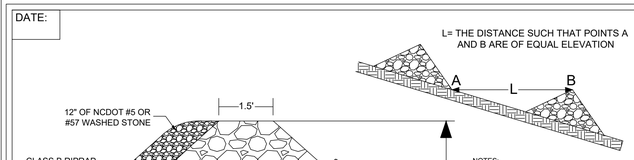

NOTES:
1. Place stone on a filter fabric foundation.
2. The center stone section must be at least 9 inches below natural ground level where the dam abuts the channel banks.
3. Extend stone at least 1.5 feet beyond the ditch bank to keep water from cutting around the ends of the check dam.
4. Set spacing between dams to assure that the elevation at the top of the lower dam is the same as the toe elevation of the upper dam.
5. Protect the channel after the lowest check dam from heavy flow that could cause erosion.
6. Make sure the channel reach above the most upstream dam is stable.
7. Ensure that other areas of the channel, such as culvert entrances below the check dams, are not subject to damage or blockage from displaced stones.
8. Riprap and filter fabric should be keyed in to prevent under cutting.
9. Ends of check dams may need to be turned uphill to prevent bypass and better conform to site conditions.
10. Do not place check dams in intermittent or perennial streams.

MAINTENANCE:
1. Inspect check dams and channels at least weekly and after each rainfall of 1.0 inch or greater. Clean out sediment, straw, limbs or other debris that could clog the channel when needed.
2. Anticipate submergence and deposition above the check dam and erosion from high flows around the edges of the dam. Correct all damage immediately. If significant erosion occurs between dams, additional measures can be taken such as, installing a protective riprap liner in that portion of the channel.
3. Remove sediment accumulated behind the dams as needed to prevent damage to channel vegetation, allow the channel to drain through the stone check dam, and prevent large flows from carrying sediment over the dam. Add stones to the dams as needed to maintain design height and cross section.

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In accordance with the 2013 Design Manual Updates

CHECK DAM

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Temporary Seeding Recommendations

Common Name	Scientific Name	Rate per Acre	Optimal Planting Date
Rye Grain	Secale Cereale	30 lbs	Aug. 15 - May 15
Wheat	Triticum Aestivum	30 lbs	Aug. 15 - May 15
German Millet	Setaria Italica	10 lbs	May 15 - Aug. 15
Browntop Millet	Urochloa Ramosa	10 lbs	May 15 - Aug. 15

Temporary Seeding Recommendations:
- Temporary annual seed selection should be based on season of project installation.
- A single species selection for temporary cover is acceptable.
- In some cases where seasons overlap, a mixture of two or more temporary species may be necessary; however, application rates should not exceed the total recommended rate per acre.
- Temporary seed should be mixed and applied simultaneously with the permanent seed mix if optimal planting dates allow.

Permanent Seeding Recommendations: Optimal Planting: Mar. 1 - May 15, July 15 - Aug. 15

Common Name	Scientific Name	Type*	% of Mix	Soil Drainage Adaptation	Shade Tolerance	Height
Indian Woodoats	Chasmanthium latifolium	Cold Season	1-10%	Well-drained to Droughty	Moderate	4
Virginia Wildrye	Elymus virginicus	Cold Season	5-25%	Well-drained to Droughty	Moderate	3
Eastern Bottle-brush Grass	Elymus hystrix	Cold Season	5-10%	Well-drained to Droughty	Moderate	3
Winter Bentgrass	Argostis hyemalis	Cold Season	10-20%	Well-drained	Moderate	3
Rough Bentgrass	Agrostis scabra	Cold Season	10-20%	Poorly-drained	Poor	2.5

Permanent Seeding Recommendations: Optimal Planting: Dec. 15 - May 15, Aug. 15 - May 15

Common Name	Scientific Name	Type*	% of Mix	Soil Drainage Adaptation	Shade Tolerance	Height
Soft Rush	Juncus effusus	Wetland	1-10%	Poorly-drained	Poor	4
Shallow Sedge	Carex lurida	Wetland	1-10%	Poorly-drained	Poor	3
Fox Sedge	Carex vulpinoidea	Wetland	1-10%	Poorly-drained	Poor	3
Leathery Rush	Juncus coriaceus	Wetland	2-5%	Poorly-drained	Poor	2

Permanent Seeding Recommendations: Optimal Planting Dec. 1 - Apr. 15

Common Name	Scientific Name	Cultivars	Type*	% of Mix	Soil Drainage Adaptation	Shade Tolerance	Height
Switchgrass	Panicum virgatum	Cave-in-rock -- well drained Blackwell -- well drained Shelter -- well drained Kanlow -- poorly drained Carthage -- well drained	Warm Season	10-15%	Cultivar Dependent	Poor	6
Indiangrass	Sorghastrum nutans	Rumsey, Osage, Cheyenne	Warm Season	10-30%	Well-drained to Droughty	Poor	6
Deertongue	Dichanthelium clandestinum	Tioga	Warm Season	5-25%	Poorly-drained to Droughty	Moderate	6
Big Bluestem	Andropogon gerardii	Roundtree, Kaw, Earl	Warm Season	10-30%	Well-drained to Droughty	Poor	6
Little Bluestem	Schizachyrium scoparium	Aldous, Cimarron	Warm Season	10-30%	Well-drained to Droughty	Poor	4
Sweet Woodreed	Cinna arundinacea		Warm Season	1-10%	Poorly-drained to Well-drained	Moderate	5
Rice Cutgrass	Leersia oryzoides		Warm Season	5-25%	Poorly-drained	Poor	5
Redtop Panic Grass	Panicum rigidulum		Warm Season	10-20%	Well-drained	Poor	3.5
Eastern Gammagrass	Tripsacum dactyloides		Warm Season	10-20%	Well-drained to Poorly-drained	Poor	4.5
Purple Top	Tridens flavus		Warm Season	5-10%	Well-drained to Droughty	Poor	2.5

- No specific seeding rate is given in order to allow for custom seed mixes based on site characteristics and season. However, permanent seed inclusion in the mix should total 15 pounds of pure live seed (PLS) per acre drilled or 15-20 pounds PLS per acre broadcast applied.
- At least 4 species should be selected for the mixture, including one species from each type(warm and cold season and wetland); selection of more than four species is recommended for increasing chances of successful vegetation establishment.
- If other species such as wildflowers are added to the mix, they should not be counted in the minimum seeding rate for grasses.

Permanent Seeding:
- Soil analysis should be performed to determine nutrient and lime needs of each site.
- Riparian buffers regulated for nutrient management may be limited to a single application of fertilizer.
- Apply seed uniformly with a cyclone seeder, drop-type spreader, drill or hydroseeder on a firm, friable seedbed.
- When using a drill, equipment should be calibrated in the field for the desired seeding rate.
- Mulch all plantings immediately after seeding (see 6.14, Mulching).If planting on stream banks steeper than 10% or areas subject to flooding, a biodegradable RECP (6.17, Rolled Erosion Control Products) is recommended to hold seed and soil in place.

Maintenance:
- Many of the recommended permanent grass species may require two years of establishment, depending on site conditions.
- Inspect seeded areas for failure and make necessary repairs, soil amendments, and reseedings.
- If weedy exotic species have overtaken the area after the first growing season, the invading species must be eradicated to allow native species to grow.
- Monitor the site until long term stability has been established.

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RIPARIAN AREA SEEDING (MOUNTAIN REGION)

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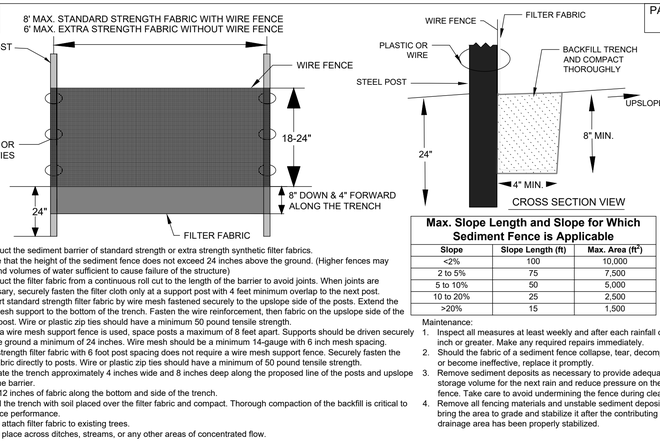

Notes:
1. Construct the sediment barrier of standard strength or extra strength synthetic filter fabrics.
2. Ensure that the height of the sediment fence does not exceed 24 inches above the ground. (Higher fences may impound volumes of water sufficient to cause failure of the structure)
3. Construct the filter fabric from a continuous roll cut to the length of the barrier to avoid joints. When joints are necessary, securely fasten the filter cloth only at a support post with 4 feet minimum overlap to the next post.
4. Support standard strength filter fabric by wire mesh fastened securely to the upslope side of the posts. Extend the wire mesh support to the bottom of the trench. Fasten the wire reinforcement, then fabric on the upslope side of the fence post. Wire or plastic zip ties should have a minimum 50 pound tensile strength.
5. When a wire mesh support fence is used, space posts a maximum of 8 feet apart. Supports should be driven securely into the ground a minimum of 24 inches. Wire mesh should be a minimum 14-gauge with 6 inch mesh spacing.
6. Extra strength filter fabric with 6 foot post spacing does not require a wire mesh support fence. Securely fasten the filter fabric directly to posts. Wire or plastic zip ties should have a minimum of 50 pound tensile strength.
7. Excavate the trench approximately 4 inches wide and 8 inches deep along the proposed line of the posts and upslope from the barrier.
8. Place 12 inches of fabric along the bottom and side of the trench.
9. Backfill the trench with soil placed over the filter fabric and compact. Thorough compaction of the backfill is critical to silt fence performance.
10. Do not attach filter fabric to existing trees.
11. Do not place across ditches, streams, or any other areas of concentrated flow.

Max. Slope Length and Slope for Which Sediment Fence is Applicable

Slope	Slope Length (ft)	Max. Area (ft²)
<2%	100	10,000
2 to 5%	75	7,500
5 to 10%	50	5,000
10 to 20%	25	2,500
>20%	15	1,500

Maintenance:
1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make any required repairs immediately.
2. Should the fabric of a sediment fence collapse, tear, decompose, or become ineffective, replace it promptly.
3. Remove sediment deposits as necessary to provide adequate storage volume for the next rain and reduce pressure on the fence. Take care to avoid undermining the fence during cleanouts.
4. Remove all fencing materials and unstable sediment deposits and bring the area to grade and stabilize it after the contributing drainage area has been properly stabilized.

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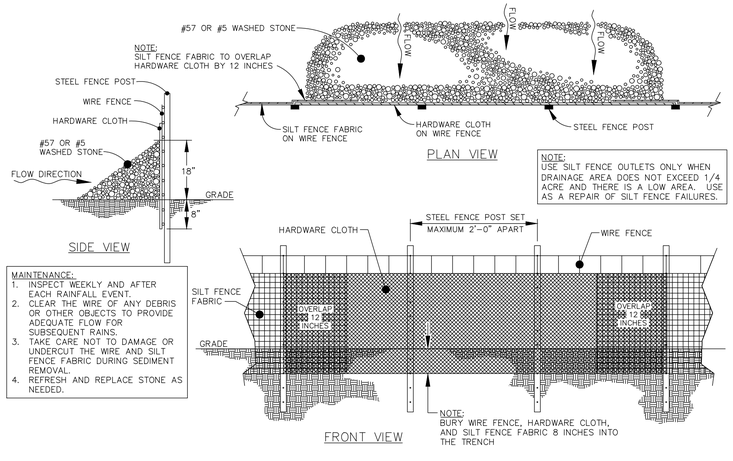
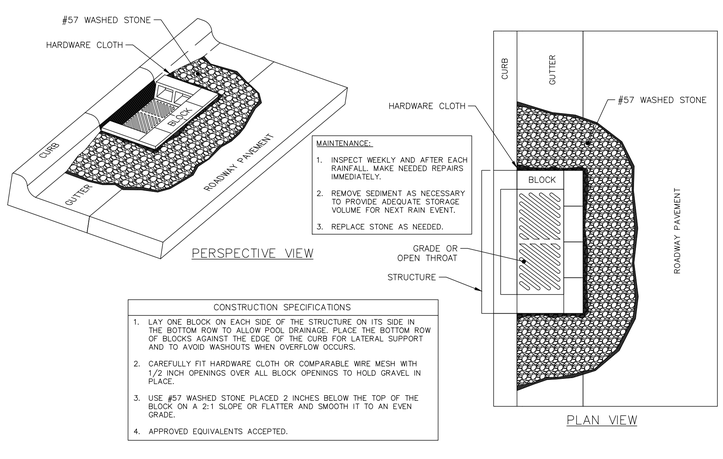
SEDIMENT FENCE



STANDARD SILT FENCE OUTLET



STANDARD BLOCK & GRAVEL PROTECTION

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030895 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-0973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: ESC DETAILS-2
DRAWING NO: 9

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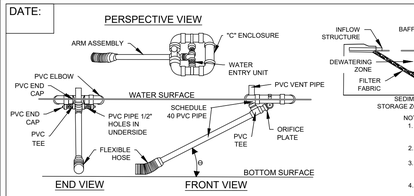
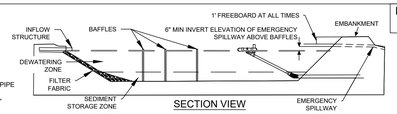
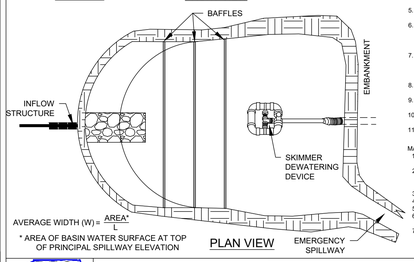
SKIMMER SEDIMENT BASIN





NOTES:

1. Clear, grub and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area. Place temporary sediment control measures below basin as needed.
2. Place the fill in lifts not to exceed 9 inches, and machine compact it. Over fill the embankment 6 inches to allow for settlement.
3. Place the barrel on a firm, smooth foundation of impervious soil. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill around the pipe spillway in 4-inch layers and compact it under and around the pipe to at least the same density as the adjacent embankment.
4. Place a minimum depth of 2 feet compacted backfill over the pipe spillway before crossing with construction equipment.
5. Ensure that the flow length to basin width ratio is at least 2:1 to improve trapping efficiency. Length is measured at the elevation of the principal spillway.
6. Assemble the skimmer following manufacturers instructions or as designed and lay on the bottom of the basin with the flexible joint at the inlet of the barrel pipe. Attach the flexible joint to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach a rope and anchor it to the side of the basin.This will be used to pull the skimmer to the side for maintenance.
7. Install the spillway in undisturbed soil to the greatest extent possible. The spillway should be lined with laminated plastic or impermeable geotextile fabric. The fabric must be wide and long enough to cover the bottom and sides and extend onto the top of the dam for anchoring in a trench. The edges may be secured with 8-inch staples or pins.
8. Filter fabric must be long enough to extend down the slope and exit onto stable ground. The width of the fabric must be one piece, not joined or spliced; otherwise water can get under the fabric.
9. The upper section(s) should overlap the lower section(s) so that water cannot flow under the fabric. Secure the upper edge and sides of the fabric in a trench with staples or pins.
10. Discharge water into the basin in a manner to prevent erosion. Use temporary slope drains or diversions with outlet protection to divert sediment-laden water to the upper end of the pool area to improve basin trap efficiency.
11. Stabilize the emergency spillway embankment and all other disturbed areas above the crest of the principal spillway immediately after construction.



MAINTENANCE:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make necessary repairs immediately.
2. Remove sediment and restore the basin to its original dimensions when sediment accumulates to one-half the height of the first baffle. Pull the skimmer to one side so that the sediment underneath can be excavated. Excavate the sediment from the entire basin, not just around the skimmer or within the first cell.
3. Make sure any vegetation growing in the bottom of the basin does not hold down the skimmer.
4. Repair baffles if they are damaged. Re-anchor the baffles if water is flowing underneath or around them.
5. Ensure the skimmer is not clogged with trash or debris.
6. If the skimmer arm or barrel pipe is clogged, remove orifice and clear debris with a plumber's snake or by flushing with clean water. Be sure to replace the orifice before repositioning the skimmer.
7. Check fabric lined spillway for damage and make any required repairs with fabric that spans the full width of the spillway. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement.

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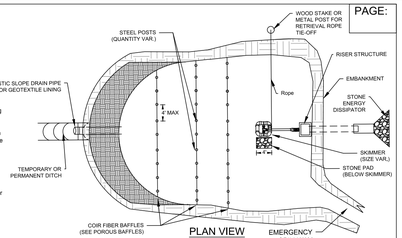
SEDIMENT BASIN

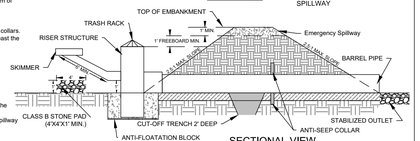
NOTES:

1. Install temporary sediment basins to the approved design. If the basin will eventually be converted to a permanent SCM device, the basin must function as a temporary sediment basin and meet the following parameters until completion of the project:
   - Maximum Drainage Area: 100 acres
   - Minimum Sediment Storage Volume: 1800 cubic feet per acre of disturbed area
   - Minimum Surface Area: 435 square feet per cfs of Q_{10} peak inflow
   - Minimum dewatering time: 48 hours
2. Clear, grub, and strip topsoil from areas under the embankment to remove trees, vegetation, roots, and other objectionable material. Delay clearing the pool area until the dam is complete. Stockpile all topsoil or soil containing organic matter for use on the outer shell of the embankment to facilitate vegetative establishment.
3. Place temporary sediment control measures below the basin and stockpile as needed.
4. Excavate a cut-off trench along the center line of the earth fill embankment. Cut trench to stable soil material, but in no case make it less than 2 feet deep with maximum side slopes no steeper than 1:1. Compaction requirements are the same as those for the embankment.
5. Extend the cut-off trench into both abutments to at least the elevation of the riser crest.
6. Keep the trench dry during backfilling and compaction operations.
7. Fill material should be clean mineral soil, free of roots, woody vegetation, rocks, and other objectionable material. Areas of approved fill should be shown on the plans.
8. Scarify areas on which fill is to be placed prior to placing. Ensure that fill material contains sufficient moisture so it can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction.
9. Place fill material in 6 to 8 inch continuous layers over the entire length of fill area and compact.
10. Construct the embankment to an elevation 10% higher than the design height to allow for settling.
11. Securely attach the riser to the barrel or barrel stub to make a watertight structural connection. All connections should be made using approved watertight assemblies.
12. If no riser structure is to be used, couple the skimmer arm directly into the embankment 1 foot from the bottom of the basin.
13. The arm pipe connecting the skimmer to the riser shall have a minimum length of 6 feet.
14. Place barrel and riser on a firm, smooth foundation of impervious soil.
15. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe or anti-seep collars.
16. Place fill material around the pipe spillway in 4-inch layers, and compact it under and around the pipe to at least the same density as the adjacent embankment.
17. Place a minimum depth of 2 feet of compacted backfill over the pipe spillway before crossing it with any construction equipment.
18. Anchor riser in place by concrete or other satisfactory means to prevent floatation.
19. In no case should the pipe conduit be installed by cutting a trench through the dam after the embankment is complete.
20. Install the emergency spillway in undisturbed soil.
21. Discharge water into the basin in a manner to prevent erosion.
22. Construct basin so that the disturbed area is minimized, divert surface water from bare areas and complete the embankment before the area is cleared.
23. Stabilize the emergency spillway embankment and all other disturbed area above the crest of the principal spillway immediately after construction.
24. Seed and place matting for erosion control on interior and exterior side slopes.
25. Install Porous Baffles as specified on following sheets.

MAINTENANCE:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. Make any repairs immediately.
2. Remove sediment and restore basin to its original dimensions when it accumulates to one-half the design depth.
3. Place removed sediment in an area with sediment control measures to ensure no loss of sediment off-site.
4. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement.
5. Remove all trash and other debris form the riser and pool area.





Acceptable Dimensions for Basin Embankment

Fill Height	Minimum Top Width
Less than 10.0 ft	8.0 ft
10.0 ft to 15.0 ft	10.0 ft

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LAND GRADING

SPACING GUIDE FOR SLOPE BREAKS		
	SLOPE	SPACING (FT)
Steep Slopes	2:1	20
	3:1	35
	4:1	45
Long Slopes	15-25%	50
	10-15%	80
	6-10%	125
	3-6%	200
	<3%	300

Use slope breaks, such as diversions, wattles, or benches, as appropriate, to reduce the length of cut-and-fill slope to limit sheet and rill erosion and prevent gullying.

MAINTENANCE:

1. Periodically check all graded areas and the supporting erosion and sedimentation control practices, especially after heavy rainfalls.
2. Promptly remove all sediment from diversions and other water-disposal practices.
3. If washouts or breaks occur, repair immediately.
4. Prompt maintenance of small eroded areas before they become significant gullies is an essential part of an effective erosion and sedimentation control plan.

NOTES:

1. Construct and maintain all erosion and sediment control practices and measures in accordance with the approved sedimentation control plan and construction schedule.
2. Remove good topsoil from areas to be graded and filled, and preserve it for use in finishing the grading of all critical areas.
3. Scarify areas to be topsoiled to a minimum depth of 2 inches before placing topsoil.
4. Clear and grub areas to be filled by removing trees, vegetation, roots, or other objectionable material that would affect the planned stability of the fill.
5. Ensure that fill material is free of brush, rubbish, rocks, logs, stumps, building debris, and other materials inappropriate for constructing stable fills.
6. Place all fill in layers not to exceed 9 inches in thickness, and compact the layers as required to reduce erosion, slippage, settlement, or other related problems.
7. Do not incorporate frozen, soft, mucky, or highly compressible materials into fill slopes.
8. Do not place fill on a frozen foundation, due to possible subsidence and slippage.
9. Keep diversions and other water conveyance measures free of sediment during all phases of development.
10. Handle seeps or springs encountered during construction in accordance with approved methods (subsurface drain).
11. Permanently stabilize all graded areas immediately after final grading is completed on each area in the grading plan. Apply temporary stabilization measures on all graded areas when work is to be interrupted or delayed for 30 days or longer.
12. Show topsoil, stockpiles, borrow areas, and spoil areas on the plans, and make sure they are adequately protected from erosion. Include final stabilization of these areas in the plan.

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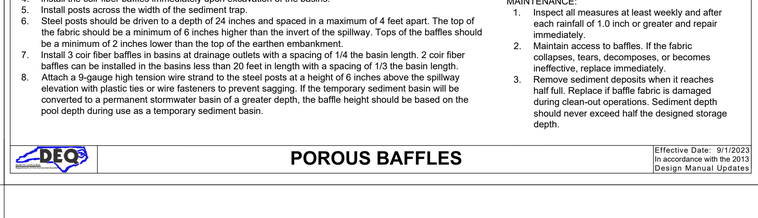
POROUS BAFFLES



NOTES:

1. Use matting made of 100% coconut fiber(coir) twine woven into high strength matrix.
2. Staples should be made of 0.125 inch diameter, new steel wire formed into a 'U' shape not less than 12 inches in length with a throat of 1 inch in width. The staples anchor the porous baffles into the sides and bottom of the basin.
3. Grade the basin so that the bottom is level front to back and side to side.
4. Install the coir fiber baffles immediately upon excavation of the basins.
5. Install posts across the width of the sediment trap.
6. Steel posts should be driven to a depth of 24 inches and spaced in a maximum of 4 feet apart. The top of the fabric should be a minimum of 6 inches higher than the invert of the spillway. Tops of the baffles should be a minimum of 2 inches lower than the top of the earthen embankment.
7. Install 3 coir fiber baffles in basins at drainage outlets with a spacing of 1/4 the basin length. 2 coir fiber baffles can be installed in the basins less than 20 feet in length with a spacing of 1/3 the basin length.
8. Attach a 9-gauge high tension wire strand to the steel posts at a height of 6 inches above the spillway elevation with plastic ties or wire fasteners to prevent sagging. If the temporary sediment basin will be converted to a permanent stormwater basin of a greater depth, the baffle height should be based on the pool depth during use as a temporary sediment basin.

MAINTENANCE:

1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater and repair immediately.
2. Maintain access to baffles. If the fabric collapses, tears, decomposes, or becomes ineffective, replace immediately.
3. Remove sediment deposits when it reaches half full. Replace if baffle fabric is damaged during clean-out operations. Sediment depth should never exceed half the designed storage depth.

Effective Date: 9/1/2023
In accordance with the 2013 Design Manual Updates

REVISIONS

REV.	DATE	COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 030895
TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-0973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: ESC DETAILS-3

DRAWING NO: 10

Y:\Sheets\2_ENGR\656605823\5_DESIGN\DWG\SHEETS\ESC-DETAILS.dwg, 9/15/2025 4:35 PM, Toby Harris

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10 feet or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers. • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants.*
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

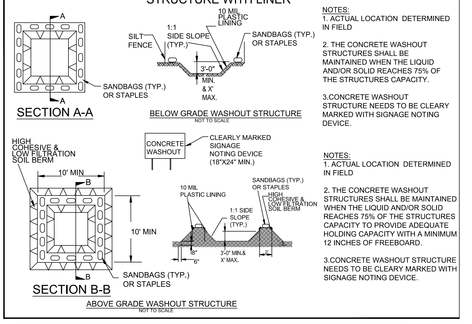
EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

EFFECTIVE DATE: 11/12/2020

NCG-01 GROUND COVER & MATERIALS HANDLING

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend on holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those unattended days (this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "Zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	1. Identification of the measures inspected 2. Date and Time of the inspection 3. Name of the person performing the inspection 4. Indication of whether the measures were operating properly 5. Description of maintenance needs for the measure 6. Description, Evidence, and date of corrective actions taken
(3) Stormwater discharge outfalls(SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	1. Identification of the discharge outfalls inspected 2. Date and Time of the inspection 3. Name of the person performing the inspection 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration 5. Indication of visible sediment leaving the site 6. Description, Evidence, and date corrective actions taken
(4) Perimeter of Site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	If visible Sedimentation is found outside site limits, then record of the following shall be made: 1) Actions taken to clean up or stabilize sediment that has left the site limits 2) Description, Evidence and date of corrective actions taken 3) An explanation as to the actions taken to control future releases
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours.	If the stream or wetland has increased visible sedimentation or has visible increased turbidity from the construction activity, then a record of the following shall be made: 1) Description, Evidence and date of corrective actions taken 2)Records of required reports to the appropriate Division Regional Office per Part III, Section C, Item(2)(a) of this permit
(6) Ground Stabilization Measures	After each phase of grading.	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Document Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if they contain all of the required records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.
(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
(d) Anticipated bypasses and unanticipated bypasses.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframe (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• Within 24 hours, an oral or electronic notification. • Within 7 Calendar Days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related caused, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per item 1(b)-(c) above	• Within 24 Hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• *A report at least ten days before the date of the bypass, if possible.* The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• Within 24 Hours, an oral or electronic notification • Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(l)(7)]	• Within 24 Hours, an oral or electronic notification • Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

EFFECTIVE DATE: 11/12/2020

NCG01- SELF INSPECTION

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

DRAWING NO: 11
SHEET TITLE: NCG01-1

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

ENGINEER'S SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER TOBIN M. HARRIS SEAL 050125 05/15/2025

REVISIONS

REV.	DATE	COMMENTS
4	05/15/2025	ADDRESS ZONING COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD
828.884.7934

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

HIGHLAND INVESTORS LIMITED PARTNERSHIP
DB 1262 PG 521
PIN 9579-16-5868

CAROLINA VILLAGE, INC
DB 1341 PG 582
PB 2017 SL 11014
PIN 9579-18-3554
ZONING: PRD-CZD

HOME DEPOT USA, INC
DB 992 PG 711
PB 1999 SL 3086
PIN 9579-16-0862
ZONING: R-20

SIGNAL RIDGE, LP
DB 1680 PG 504
PB 2017 SL 10971
PIN 9579-16-1378
ZONING: PRD-CZD

OVERLAPPING EASEMENTS

PERMANENT DRAINAGE EASEMENT PER PB 1999 SL 3086, & DB 993 PG 360

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA G DB 3284 PG 387 & DB 3273 PG 78

#5 EIR ID-KEE

AMAZING GRACE LN.
20' PRIVATE R/W

LAFOLETTE ST.
30' PRIVATE R/W

30' SEWER EASEMENT PER DB 838 PG 434

10' MAINTENANCE & ACCESS PATH AT TOP OF DAM
TOP ELEV = 136.00

CONCRETE OUTLET CONTROL STRUCTURE SEE DETAIL ON SHEET NO. 16

EARTHEN BERM
TOP ELEV: 2131.00
SPW ELEV: 2129.50
REF. DETAIL ON SHEET NO. 16

20' CONCRETE EMERGENCY SPILLWAY ELEV=2134.50
LINE W/ CLASS B RIPRAP TO TOE OF SLOPE
REF. DETAIL ON SHEET NO. 16

PROP. FENCE (STYLE TO BE DETERMINED BY DEVELOPER)

RIPRAP APRON (TYP)
SEE DETAIL ON SHEET 9 FOR DIMENSIONS

CSD CONTROL POINT #5 REBAR
NC GRID COORDINATES
N: 596,147.54' NAD 83/11
E: 970,567.47' NAD 83/11
LOCALIZED POINT

ANGELA M. LAMB ESTATE FILE 21E973 (REF: DB 481 PG 483) PIN 9579-07-1337 ZONING: R-20

HOMER F. HOWARD DB 674 PG 3 PC A SL 214A, LOT 5 PIN 9579-06-1936 ZONING: R-20

SWAIN S. HAYNES DB 901 PG 347 PC A SL 214A, LOT 6 PIN 9579-06-1764 ZONING: R-20

JEANETTE Q. MATHIS DB 910 PG 68 PC A SL 214A, LOT 7 PIN 9579-06-1562 ZONING: R-20

KRISTINA SOFRONIE DB 3866 PG 389 PB 2021 PG 13157, TR 2 PIN 9579-06-3404 ZONING: R-20

D & G ESTATE, LLC DB 3876 PG 178 PB 2021 PG 13157, TR 1 PIN 9579-06-3217 ZONING: CHMU

SEAN GIVENS DB 3083 PG 278 LOTS 86-88 PC B SL 180A (AKA PB 2 PG 156) PIN 9579-06-4126 ZONING: O-2

HENRY W. BRADLEY DB 1177 PG 572 LOTS 81-84 PIN 9579-06-6107 ZONING: R-20

ASHLEY M. CLOUSE BETTY B. MEAD DB 3768 PG 310 LOTS 73-76 PIN 9579-06-6315 ZONING: R-20

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1"=50'

Y:\Shared\2_ENGR\6560\6560535_DESIGN\DWG\SHEETS\GRADING & STORMWATER.dwg, 5/15/2025 4:36 PM, Toby Harris

REVISIONS

REV.	DATE	COMMENTS
1	09/20/2024	ADDRESS CLIENT COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS
3	02/18/2025	ADDRESS CITY & COUNTY COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 039915 TOBIN M. HARRIS
02/18/2025

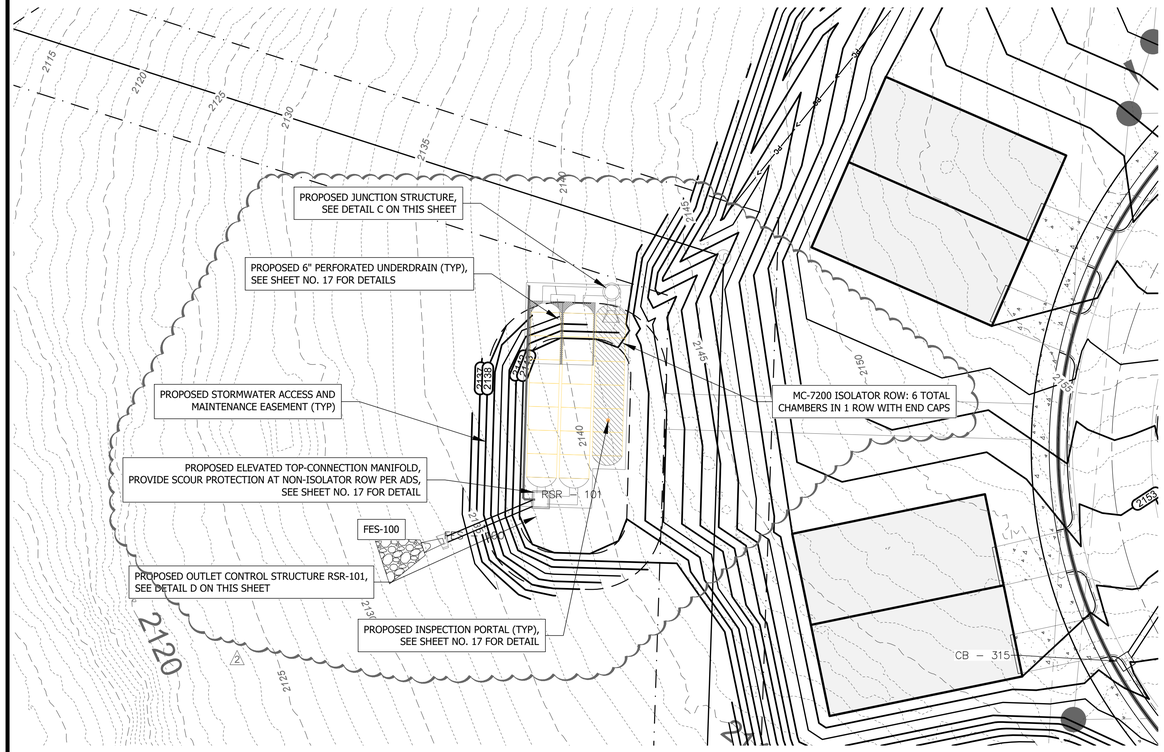
PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-384-6913
www.3ngtch.com
License No. C-4873

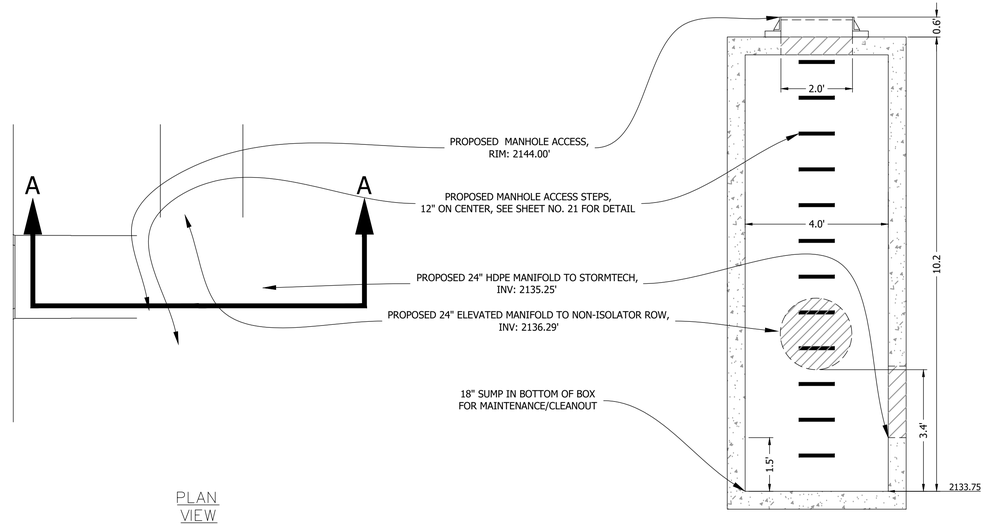
SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: GRADING & STORMWATER PLAN

DRAWING NO: 13



A STORMWATER SCM SYSTEM B4 - PLAN VIEW
SCALE= 1" = 20'



PLAN VIEW

SECTION A–A

C ST-81: JUNCTION MANHOLE TO ISOLATOR ROW
SCALE= 1" = 2'

SCM-1	
WATER QUALITY VOL. (CF)	362
SCM TYPE)	STORMTECH MC-7200
TOTAL STORAGE (CF)	2135.00
BOTTOM OF STORAGE (')	2135.25
BOTTOM OF STORMTECH (')	2136.00
TOP OF STORMTECH (')	2141.00
TOP OF STORAGE (')	2142.00
MIN. FINISHED GRADE	2143.00
MAX FINISHED GRADE	2148.00
WQ ORIFICE SIZE (")	0.5
ELEVATED MANHOLE ELEV. (')	2144.00
FIRST OVERFLOW INV. (')	2135.00
SECOND OVERFLOW INV. (')	2135.00
THIRD OVERFLOW INV. (')	2135.00
WQV STAGE (UNROUTED)(')	2135.00
WQV STAGE (ROUTED)(')	2135.00
2-YR STAGE (')	2137.26
10-YR STAGE (')	2138.28
25-YR STAGE (')	2139.16
50-YR STAGE (')	2139.98

100.0" Wide + 9.0" Spacing = 109.0" C–C Row Spacing

7 Chambers/Row x 6.59' Long +2.73' Cap Length x 2 = 51.61' Row Length +12.0" End Stone x 2 = 53.61' Base Length

3 Rows x 100.0" Wide + 9.0" Spacing x 2 + 12.0" Side Stone x 2 = 28.50' Base Width

12.0" Stone Base + 60.0" Chamber Height + 12.0" Stone Cover = 7.00' Field Height

21 Chambers x 175.9 cf + 39.5 cf Cap Volume x 2 x 3 Rows = 3,930.4 cf Chamber Storage

10,694.9 cf Field – 3,930.4 cf Chambers = 6,764.5 cf Stone x 40.0% Voids = 2,705.8 cf Stone Storage

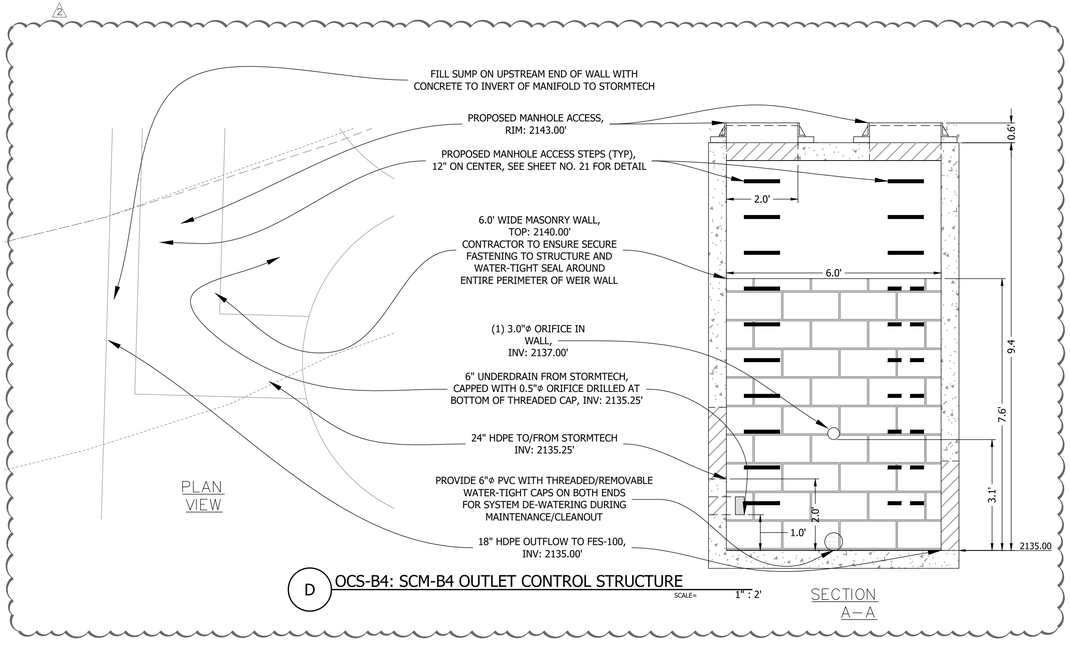
Chamber Storage + Stone Storage = 6,636.2 cf = 0.152 af
Overall Storage Efficiency = 62.1%
Overall System Size = 53.61' x 28.50' x 7.00'

21 Chambers
396.1 cy Field
250.5 cy Stone

B SCM-B2: STORMTECH MC-7200 SYSTEM SUMMARY
SCALE= NTS

STORMWATER WETLAND PLANT RECOMMENDATIONS (FROM NC DEQ MANUAL)

BOTANICAL NAME	COMMON NAME
ASCLEPIAS INCARNATA	SWAMP MILKWEED
CAREX TENERA	QUILL SEDGE
CHELONE GLABRA	WHITE TURTLEHEAD
EUPATORIADELPHUS DUBIUS	DWARF JOE PYE WEED
EUPATORIADELPHUS FISTULOSUS	JOE PYE WEED
EUPATORIADELPHUS MACULATUS	SPOTTED TRUMPETWEED
HIBISCUS COCCINEUS	SCARLET ROSE MALLOW
HIBISCUS LAEVIS	HALBERDLEAF ROSE MALLOW
KOSTELETZKYA VIRGINICA	SEASHORE MALLOW
LOBELIA CARDINALIS	CARDINAL FLOWER
LOBELIA ELONGATA	LONGLEAF LOBELIA
LOBELIA SIPHILITICA	GREAT BLUE LOBELIA
RHYNCHOSPORA COLORATA	STARRUSH WHITETOP
SACCHARUM BALDWINII	NARROW PLUMEGRASS



PLAN VIEW

SECTION A–A

D OCS-B4: SCM-B4 OUTLET CONTROL STRUCTURE
SCALE= 1" = 2'

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

ENGINEERS SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 038895 TOBIN M. HARRIS
01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	1" = 50'

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-0973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: SCM DETAIL 1

DRAWING NO: 14

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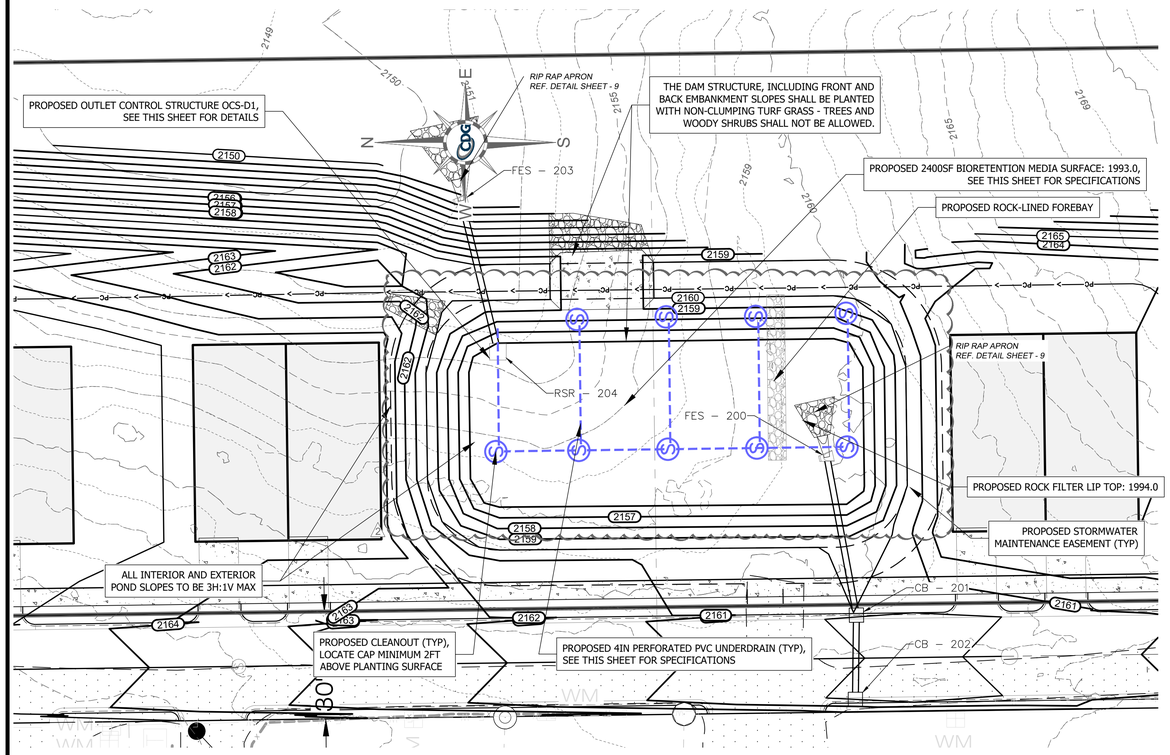


GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1"=20'

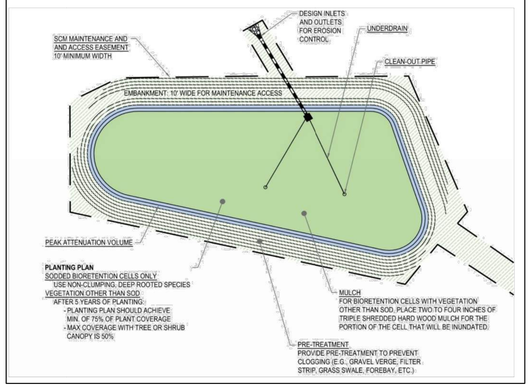
STORMWATER WETLAND PLANT RECOMMENDATIONS
(FROM NC DEQ MANUAL)

BOTANICAL NAME	COMMON NAME
ASCLEPIAS INCARNATA	SWAMP MILKWEED
CAREX TENERA	QUILL SEDGE
CHELONE GLABRA	WHITE TURTLEHEAD
EUPATORIADELPHUS DUBIUS	DWARF JOE PYE WEED
EUPATORIADELPHUS FISTULOSUS	JOE PYE WEED
EUPATORIADELPHUS MACULATUS	SPOTTED TRUMPETWEED
HIBISCUS COCCINEUS	SCARLET ROSE MALLOW
HIBISCUS LAEVIS	HALBERDLEAF ROSE MALLOW
KOSTELETZKYA VIRGINICA	SEASHORE MALLOW
LOBELIA CARDINALIS	CARDINAL FLOWER
LOBELIA ELONGATA	LONGLEAF LOBELIA
LOBELIA SIPHILITICA	GREAT BLUE LOBELIA
RHYNCHOSPORA COLORATA	STARRUSH WHITETOP
SACCHARUM BALDWINII	NARROW PLUMEGRASS

UNDERDRAIN NOTES:

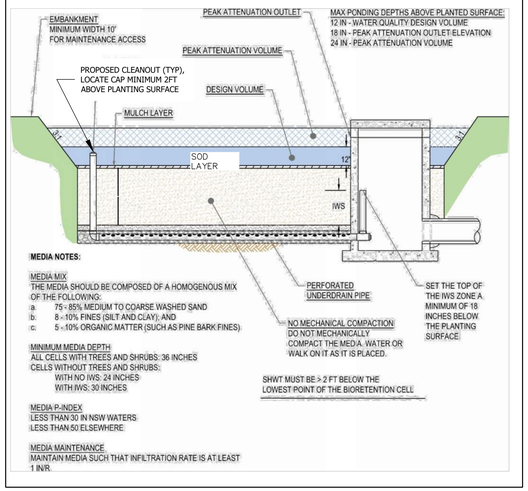
1) ALL PIPING IN THE UNDERDRAIN SYSTEM SHOULD HAVE A MINIMUM SLOPE OF 0.5% AND SHOULD BE CONSTRUCTED OF SCHEDULE 40 OR SDR-35 SMOOTH WALL PVC PIPE
2) A MINIMUM OF 4 ROWS OF PERFORATIONS SHOULD BE PROVIDED AROUND THE DIAMETER OF THE PIPE. THE PERFORATIONS SHOULD BE PLACED 6IN ON CENTER WITHIN EACH ROW FOR THE ENTIRE LENGTH OF THE DRAINAGE LATERAL. PERFORATIONS SHOULD BE 3/8IN DIAMETER.
3) UNDERDRAIN PIPES SHOULD HAVE A MINIMUM OF 3IN OF WASHED #57 STONE ABOVE AND ON EACH SIDE OF THE PIPE (NOT REQUIRED BELOW THE PIPE). ABOVE THE STONE, EITHER FILTER FABRIC OR 2IN OF CHOKING STONE SHOULD BE INSTALLED TO PROTECT THE UNDERDRAIN FROM BLOCKAGE (FILTER FABRIC SHOULD BE AVOIDED IF THERE IS ANY QUESTION ABOUT THE FUTURE STABILITY OF THE DRAINAGE AREA). ABOVE THE FILTERING DEVICE, A MINIMUM OF 2IN OF WASHED SAND SHOULD BE INSTALLED. CHOKING STONE (#8 OR #89) IN LIEU OF FILTER FABRIC IS RECOMMENDED IF THERE IS POTENTIAL FOR HIGHER SEDIMENT LOADS THAT WOULD LEAD TO CLOGGING. PIPE SOCKS ARE ALSO NOT RECOMMENDED

Figure 1: Bioretention Example: Plan View



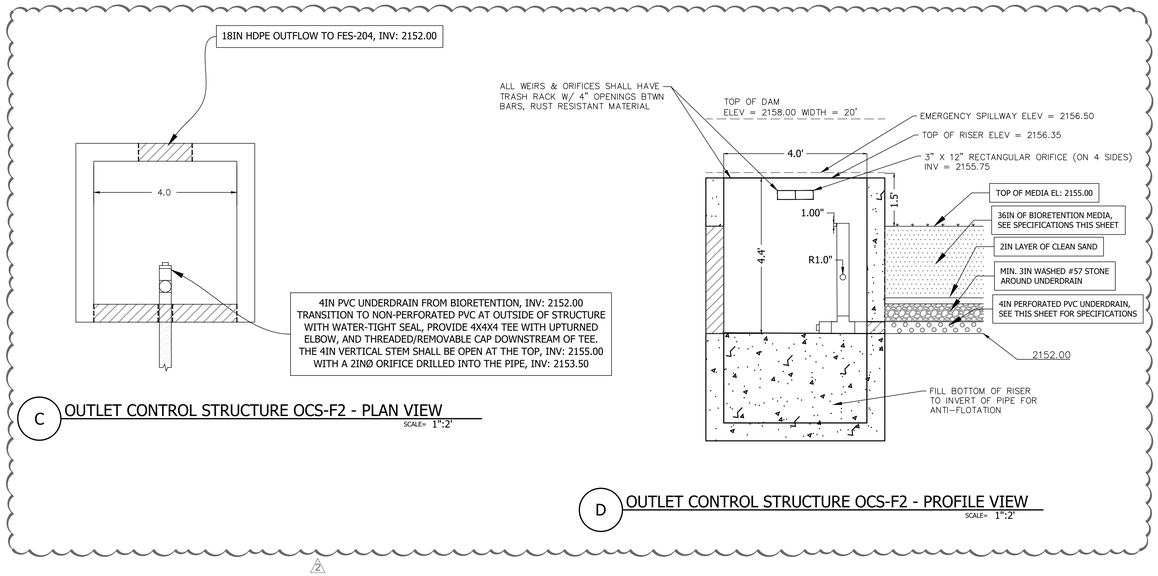
B BIORETENTION DETAILS
SCALE= NTS

Figure 2: Bioretention Example: Cross-Section



MEDIUM TO COARSE WASHED SAND SHALL BE ASTM C33, AASHTO M 6/M 80, ASTM C330, AASHTO M195, OR EQUIVALENT

THE ENTIRE SURFACE OF THE CELL WILL BE VEGETATED. SOD SHOULD BE INSTALLED WHEN GRASS IS USED FOR BIORETENTION CELLS AS SEEDING IS TYPICALLY NOT A VIABLE OPTION.



C OUTLET CONTROL STRUCTURE OCS-F2 - PLAN VIEW
SCALE= 1":2'

D OUTLET CONTROL STRUCTURE OCS-F2 - PROFILE VIEW
SCALE= 1":2'

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 030895 TOBIN M. HARRIS
01/31/2025

PROJECT #:	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	1" = 50'

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-0973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: SCM DETAIL 2

DRAWING NO: 15

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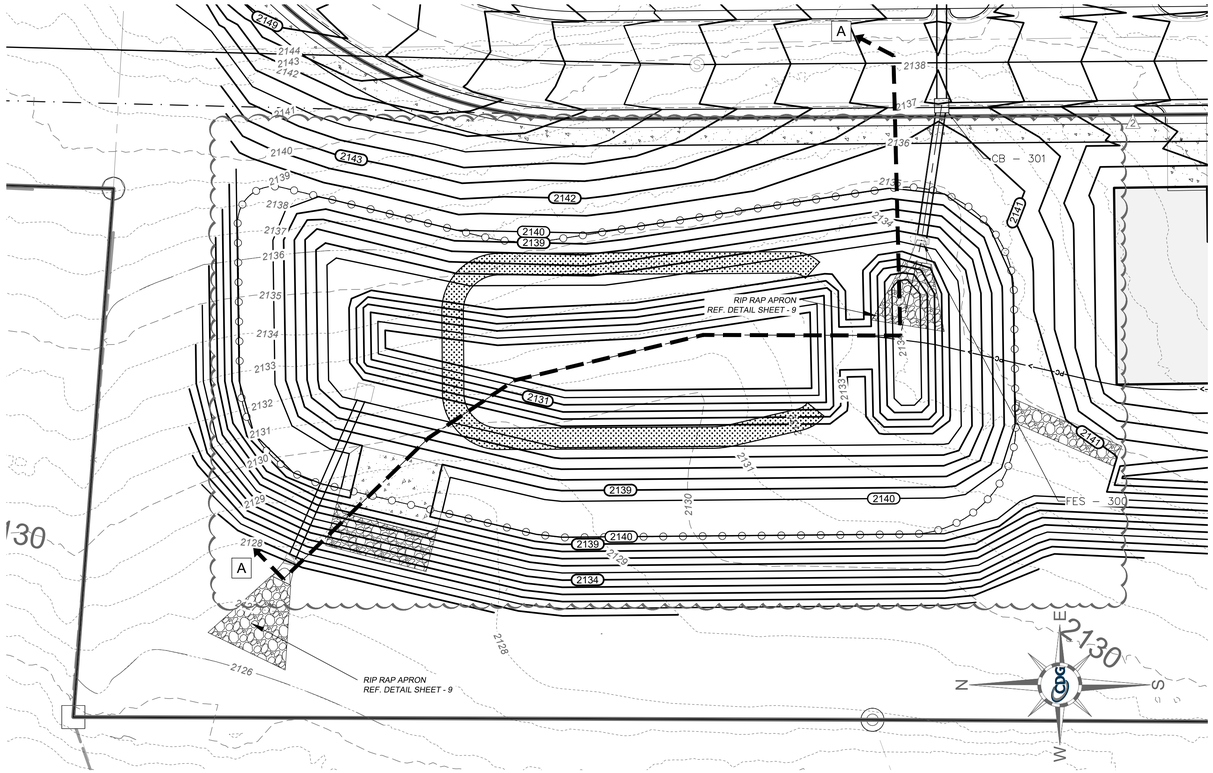
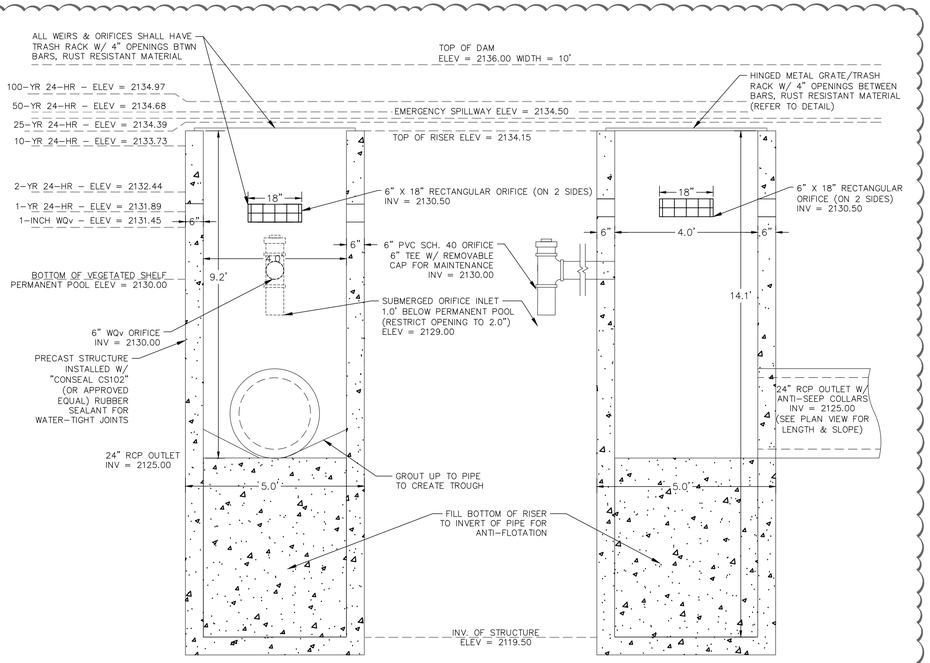


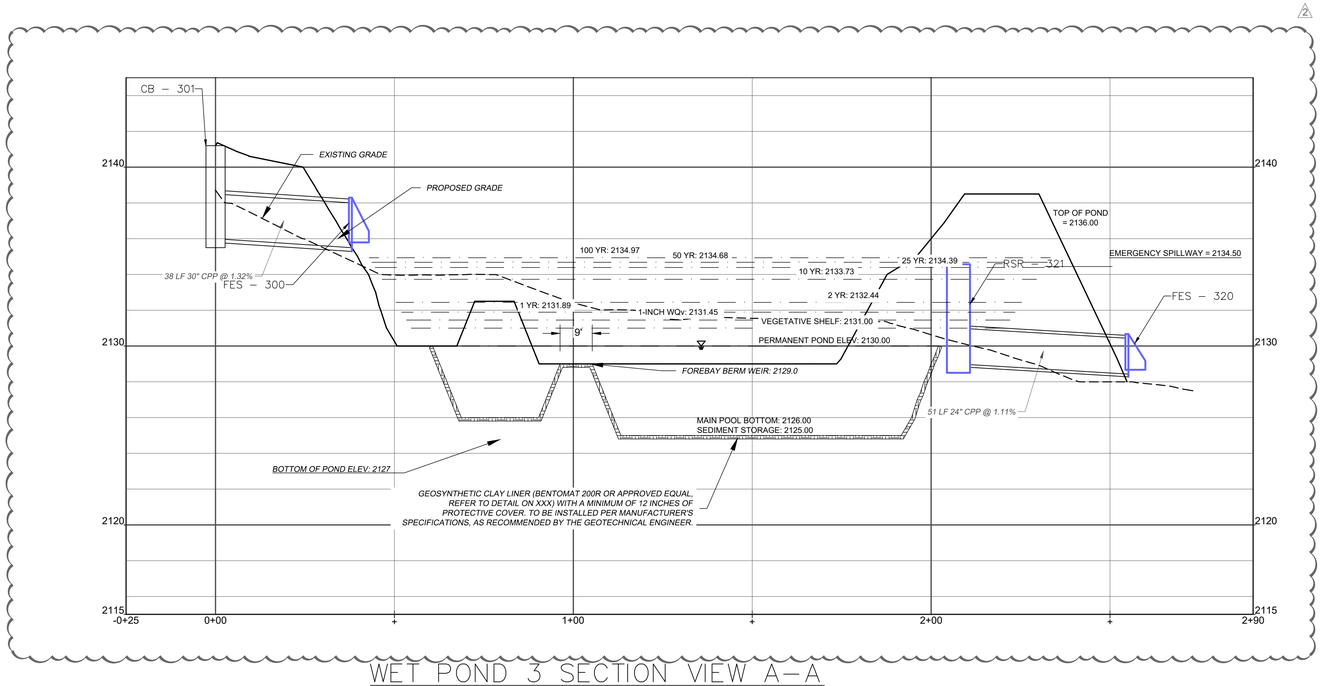
WET POND 3 PLAN VIEW

SCALE : 1" = 20'



WET POND 3
OUTLET STRUCTURE DETAIL

1" = 2'



WET POND 3 SECTION VIEW A–A

HORIZONTAL SCALE : 1" = 20'
VERTICAL SCALE: 1" = 2'

VEGETATED SHELF
0"-18" ABOVE NORMAL POOL
PLANT REQ. 50 PLANTS/200 S.F.

INTERIOR SLOPES ABOVE THE VEGETATED SHELF AND EXTERIOR EMBANKMENT SLOPES SHALL BE VEGETATED WITH NON-CLUMPING TURF GRASS. TREES & WOODY SHRUBS SHALL NOT BE ALLOWED.

MINIMUM PLANTING REQUIREMENTS (PER NCDEQ BMP MANUAL)
50 PLANTS PER 200 SF OF VEGETATED SHELF REQUIRED

AREA OF VEGETATED (LITTORAL) SHELF: 1,450 SF

MINIMUM NUMBER OF PLANTS: 363 PLANTS

USE THREE SPECIES EACH OF SHALLOW LAND HERBACEOUS PLANTS: 3-4 OF EA. SPECIES

PLANTS SHOULD BE SPACED APPROXIMATELY 24" - 36" ON CENTER AND SHOULD YIELD COVER IN APPROXIMATELY 1 - 2 YEARS.

STORMWATER WETLAND PLANT RECOMMENDATIONS (FROM NC DEQ MANUAL)

BOTANICAL NAME	COMMON NAME
ASCLEPIAS INCARNATA	SWAMP MILKWEED
CAREX TENERA	QUILL SEDGE
CHELONE GLABRA	WHITE TURTLEHEAD
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LOBELIA SIPHILITICA	GREAT BLUE LOBELIA
RHYNCHOSPORA COLORATA	STARRUSH WHITETOP
SACCHARUM BALDWINII	NARROW PLUMEGRASS

NOTE: DURING EROSION CONTROL PHASES, THE 6" WATER QUALITY ORIFICE SHALL BE USED TO CONNECT THE SKIMMER TO THE OUTLET STRUCTURE. ALL OTHER WEIRS & ORIFICES, INCLUDING THE TOP GRATE, SHALL BE TEMPORARILY BLOCKED IN ORDER TO FORCE WATER FROM THE SEDIMENT BASIN THROUGH THE SKIMMER. THE EMERGENCY SPILLWAY IN THE DAM SHALL REMAIN ACTIVE THROUGH ALL STAGES OF EROSION CONTROL. ONCE EROSION CONTROL MEASURES ARE REMOVED, THE SEDIMENT BASIN SHALL BE CONVERTED TO A PERMANENT WET DETENTION POND. THE SKIMMER SHAL BE DISCONNECTED, THE WATER QUALITY DEVICE SHALL BE INSTALLED & WEIRS SHALL BE UNCOVERED. REFER TO DETAIL SHEET FOR EROSION CONTROL DETAILS REGARDING THE SKIMMER.

WET DETENTION POND DESIGN CRITERIA
DRAINAGE AREA = 8.79 AC
IMPERVIOUS AREA = 2.18 AC (24.80%)
WATER QUALITY VOLUME = 11,245 CF

TOP OF DAM ELEV = 2136.00
TOP OF VEGETATED SHELF = 2131.00
PERMANENT POOL ELEVATION = 2130.00
BOTTOM OF FOREBAY = 2126.00
BOTTOM OF MAIN POOL = 2125.00

MAIN POOL VOLUME = 17,819 CF
FOREBAY VOLUME = 3,207 CF (18.0%)

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1"=50'

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

ENGINEER'S SEAL:

01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	1" = 50'

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: SCM DETAIL 3

DRAWING NO: 16

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PROJECT INFORMATION	
ENGINEERED PRODUCT MANAGER:	
ADS SALES REP:	
PROJECT NO:	

ADS Advanced Drainage Systems, Inc.

SiteAssist® FOR INSTALLATION INSTRUCTIONS VISIT OUR APP

SIGNAL HILL

HENDERSONVILLE, NC, USA

MC-7200 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH MC-7200.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (+1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75 YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/IN. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR LONG-DURATION DEAD LOAD AND 1.75 FOR SHORT-DURATION LIVE LOAD, BASED ON ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
10. MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER, SEE TECH NOTE #6.33 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
11. ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-7200 CHAMBER SYSTEM

1. STORMTECH MC-7200 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONE AND ROW BY ROW backfilling FROM CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM -9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
8. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE; AASHTO MA3 #3, 357, 4, 467, 5, 56, OR 57.
9. STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER DIFFER BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
10. STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
11. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
12. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH MC-7200 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
2. THE USE OF EQUIPMENT OVER MC-7200 CHAMBERS IS LIMITED:
   - NO EXCAVATOR OVER CHAMBERS UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-7200 CONSTRUCTION GUIDE".
   - NO RUBBER TIRED LOADER, DUMP TRUCK, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-7200 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-7200 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

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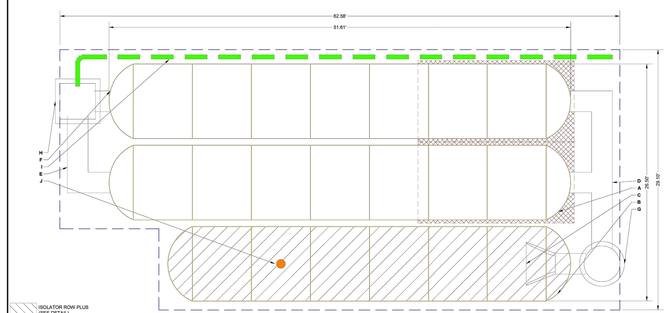
PROPOSED LAYOUT: BED 4		PROPOSED ELEVATIONS		*INVERT ABOVE BASE OF CHAMBER			
QC	STORMTECH MC-7200 CHAMBERS	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)	2148.00	PART TYPE	ITEM OR LAYER	DESCRIPTION	INVERT*
0	STORMTECH MC-7200 END CAPS	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)	2143.50	PREFABRICATED END CAP	A	24" TOP PARTIAL CUT END CAP, PART#: MC07200EPP24T / TYP OF ALL 24" TOP CONNECTIONS	22.09"
X	STONE ABOVE (IN)	MINIMUM ALLOWABLE GRADE (PAVED/CONCRETE PAVEMENT)	2143.00	PREFABRICATED END CAP	B	24" BOTTOM PARTIAL CUT END CAP, PART#: MC07200EPP24B / TYP OF ALL 24" BOTTOM CONNECTIONS AND ISOLATOR PLUS ROWS	2.39"
Y	STONE BELOW (IN)	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)	2142.00				
XD	STONE VOID		2142.00	FLAMP		FLAMP, MC-7200, 24" (600 mm), PART#: MCFLAMP	
	INSTALLED SYSTEM VOLUME (CF)	TOP OF STONE	2142.00	MANIFOLD	C	24" (600 mm) MANIFOLD	22.09"
	OPERATING STONE VOLUME (CY)	TOP OF MC-7200 CHAMBER	2137.09	MANIFOLD	C	24" x 24" BOTTOM MANIFOLD, ADS N-12	2.26"
6899	STONE PERIMETER (LF)	24" (600 mm) ISOLATOR ROW PLUS INVERT	2135.59	PIPE CONNECTION	F	24" BOTTOM CONNECTION	2.26"
	(SAND STONE INCLUDED)	24" ISOLATOR ROW PLUS INVERT	2135.59	CONCRETE STRUCTURE	G	DESIGN BY ENGINEER / PROVIDED BY OTHERS)	6.5 CFS IN
1721	SYSTEM AREA (SF)	24" ISOLATOR ROW PLUS TOP	2137.09	CONCRETE STRUCTURE	G	DESIGN BY ENGINEER / PROVIDED BY OTHERS)	14.2 CFS OUT
1614	SYSTEM PERIMETER (ft)	BOTTOM OF MC-7200 CHAMBER	2135.59	HORIZONTAL PIPE	H	8" (200 mm) DUAL WALL PERFORATED HDPE UNDERDRAIN	
		FOUNDATION STONE	2135.09				
		SUBGRADE	2135.09	INSPECTION PORT	J	212" SEE DETAIL	
		BOTTOM OF STONE	2135.09				



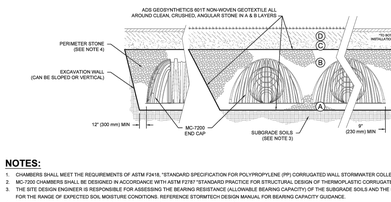
NOTES
- THE SITE DESIGN ENGINEER MUST REVIEW ELEVATIONS AND IF NECESSARY ADJUST GRADING TO ENSURE THE CHAMBER COVER REQUIREMENTS ARE MET.
- **NOT FOR CONSTRUCTION** THIS LAYOUT IS FOR DIMENSIONAL PURPOSES ONLY TO PROVE CONCEPT & THE REQUIRED STORAGE VOLUME CAN BE ACHIEVED ON SITE.

SHEET 2 OF 6

ACCEPTABLE FILL MATERIALS: STORMTECH MC-7200 CHAMBER SYSTEMS

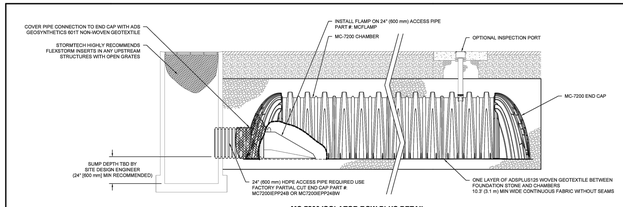
	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (B' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145* A-1, A-2-4, A-3 OR AASHTO M43* 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	GREEN CONSTRUCTION APPLICATIONS MAY REQUIRE WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. FOR PAVED APPLICATIONS OR WHERE HIGHER BEARING CAPACITY IS REQUIRED, THE SITE DESIGN ENGINEER SHALL SPECIFY THE REQUIRED COMPACTION / DENSITY.
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE†	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE†	AASHTO M43* 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.‡‡

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'n' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".



NOTES:
1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60x101
2. MC-7200 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS. REFERENCE STORMTECH DESIGN MANUAL FOR BEARING CAPACITY GUIDANCE.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 450 LBS/FT/IN. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

SHEET 4 OF 6



MC-7200 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORT (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED.
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - 1. MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - 2. FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

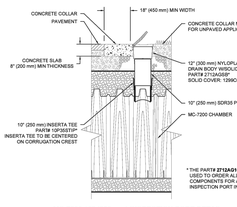
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY WATER FROM THE FLUSH TRUCK'S TANKS, BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

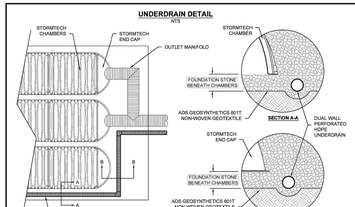
1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



MC-7200 10" (250 mm) INSPECTION PORT DETAIL
NTS

SHEET 5 OF 6

UNDERDRAIN DETAIL
NTS



MC-SERIES END CAP INSERTION DETAIL
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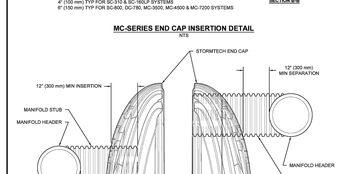
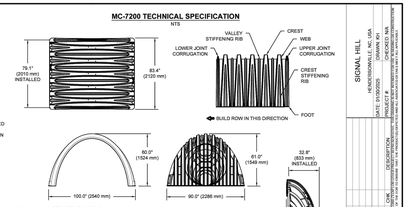


NOTE: MANIFOLD STUB MUST BE LAID HORIZONTAL FOR A PROPER FIT IN END CAP OPENING.

MC-7200 TECHNICAL SPECIFICATION
NTS



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	100.3" X 60.0" X 79.1"	(2540 mm X 1524 mm X 2010 mm)
CHAMBER STORAGE	175.5 CUBIC FEET	(4.96 m³)
MINIMUM INSTALLED STORAGE*	257.3 CUBIC FEET	(7.28 m³)
WEIGHT (NOMINAL)	209 lbs.	(92.9 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	90.0" X 61.0" X 32.8"	(2286 mm X 1549 mm X 833 mm)
END CAP STORAGE	39.5 CUBIC FEET	(1.12 m³)
MINIMUM INSTALLED STORAGE*	115.5 CUBIC FEET	(3.28 m³)
WEIGHT (NOMINAL)	90 lbs.	(40.8 kg)

*ASSUMES 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PARTIAL CUT HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PARTIAL CUT HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
END CAPS WITH A PREFABRICATED WELDED STUB END WITH "06"

PART #	STUB	B	C
MC7200EPP06T	6" (150 mm)	42.54" (1081 mm)	---
MC7200EPP06B		---	0.86" (22 mm)
MC7200EPP08T	8" (200 mm)	40.50" (1029 mm)	---
MC7200EPP08B		---	1.01" (26 mm)
MC7200EPP10T	10" (250 mm)	38.37" (975 mm)	---
MC7200EPP10B		---	1.33" (34 mm)
MC7200EPP12T	12" (300 mm)	35.89" (907 mm)	---
MC7200EPP12B		---	1.55" (39 mm)
MC7200EPP15T	15" (375 mm)	32.72" (831 mm)	---
MC7200EPP15B		---	1.70" (43 mm)
MC7200EPP18T	18" (450 mm)	29.36" (746 mm)	---
MC7200EPP18TW		---	1.97" (50 mm)
MC7200EPP18B		---	
MC7200EPP18BW		---	
MC7200EPP24T	24" (600 mm)	23.05" (585 mm)	---
MC7200EPP24TW		---	2.28" (57 mm)
MC7200EPP24B		---	
MC7200EPP24BW		---	
MC7200EPP30BW	30" (750 mm)	---	2.90" (73 mm)
MC7200EPP36BW	36" (900 mm)	---	3.28" (83 mm)
MC7200EPP42BW	42" (1050 mm)	---	3.59" (90 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

CUSTOM PREFABRICATED INVERTS ARE AVAILABLE UPON REQUEST. INVENTORIED MANIFOLDS INCLUDE 12-24" (300-600 mm) SIZE ON SIZE AND 15-48" (375-1200 mm) x 12" (300 mm) FOR CUSTOM INVERT LOCATIONS ON THE MC-7200 END CAP CUT IN THE FIELD ARE NOT RECOMMENDED FOR PIPE SIZES GREATER THAN 12" (250 mm). THE INVERT LOCATION IN COLUMN 'B' ARE THE HIGHEST POSSIBLE FOR THE PIPE SIZE.

SHEET 6 OF 6

REVISIONS			
REV.	DATE	COMMENTS	
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS	

ENGINEER'S SEAL:

01/31/2025

PROJECT #:	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
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CHARLOTTE, NC 28208
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SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: ADS DETAILS

DRAWING NO: 17

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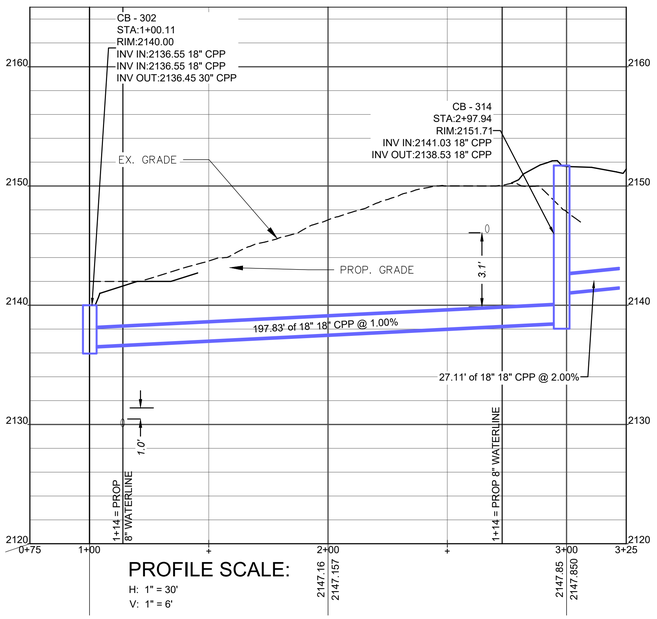

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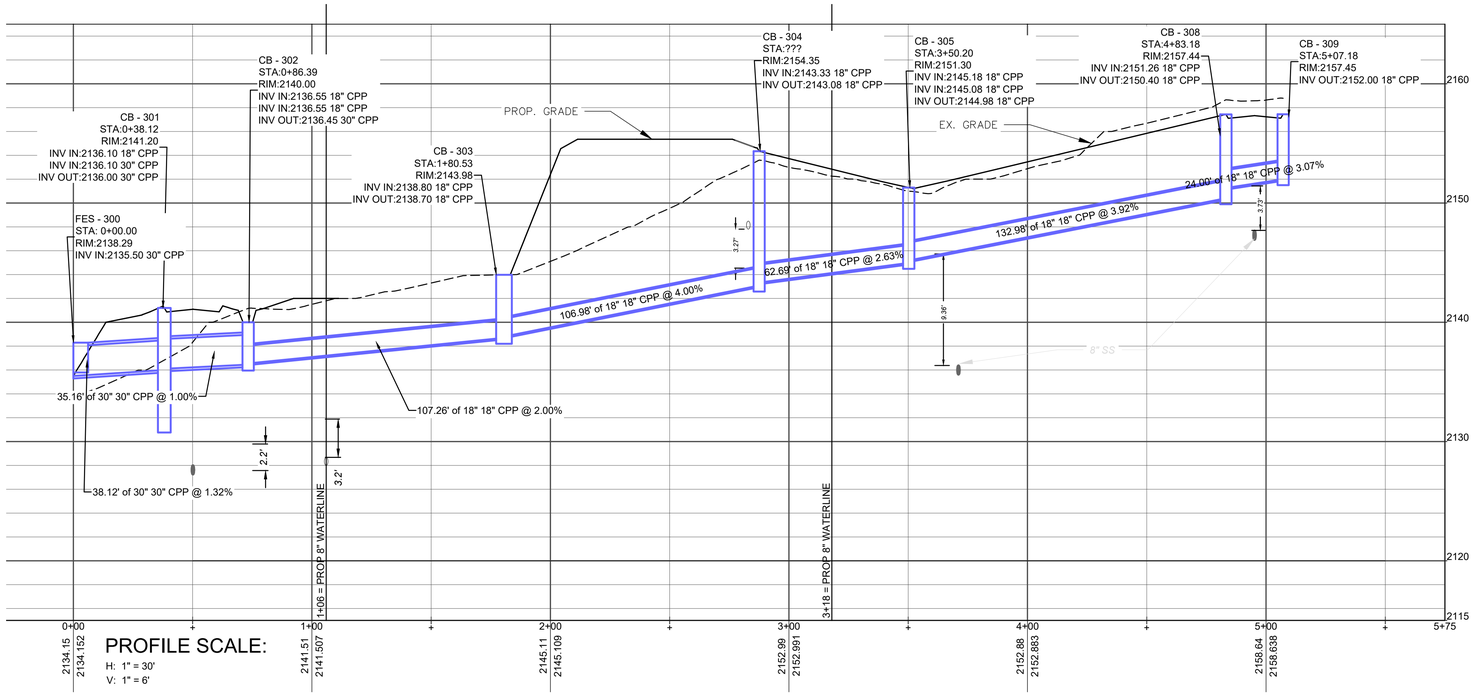

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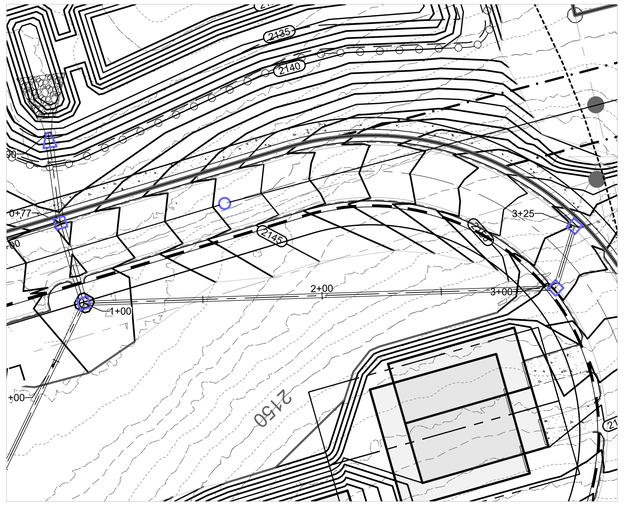

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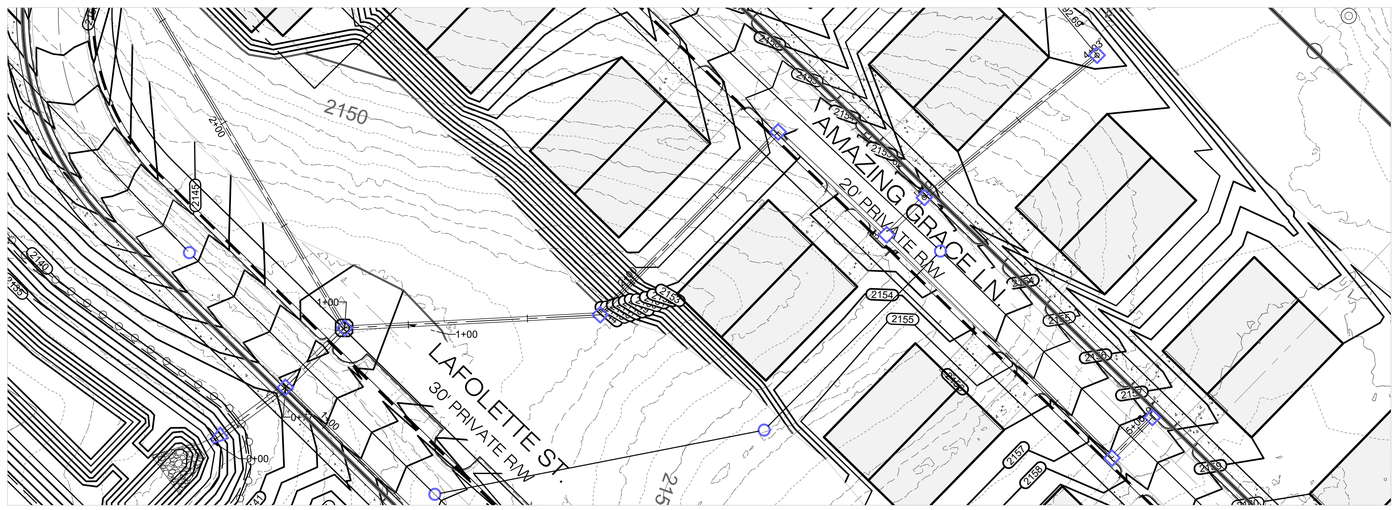

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FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 038945 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

DRAWING NO: 18

SHEET TITLE: STORM PLAN & PROFILE - 1

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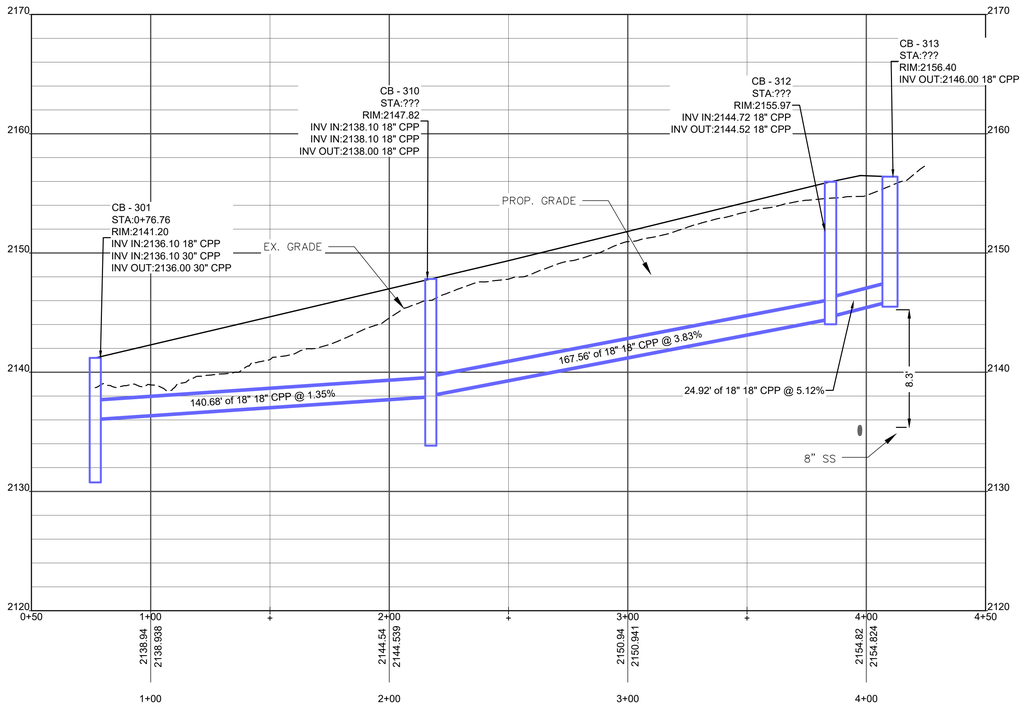

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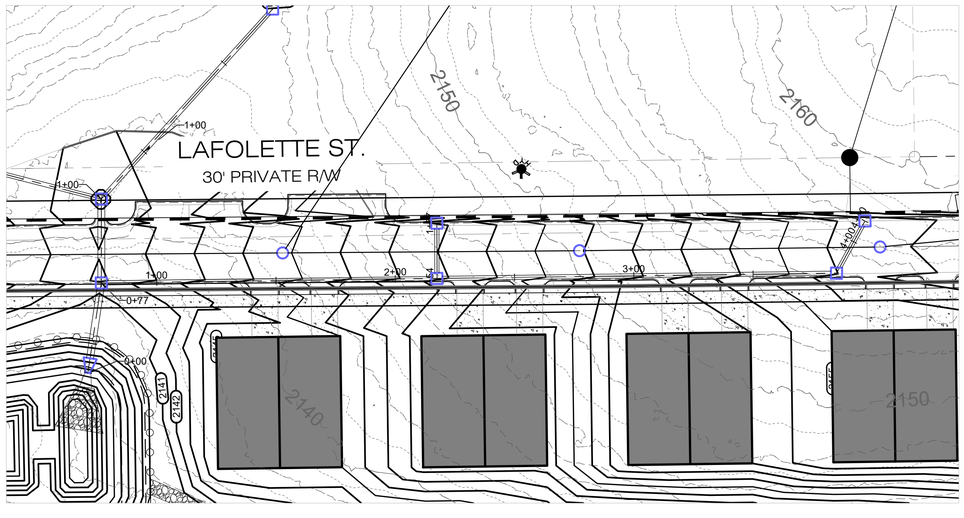

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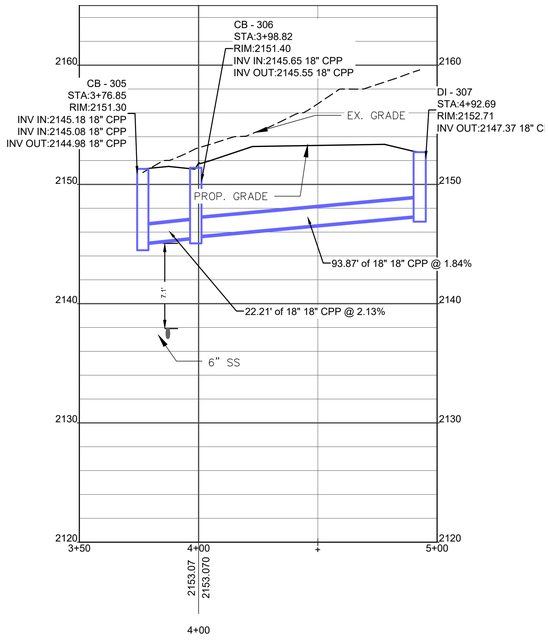

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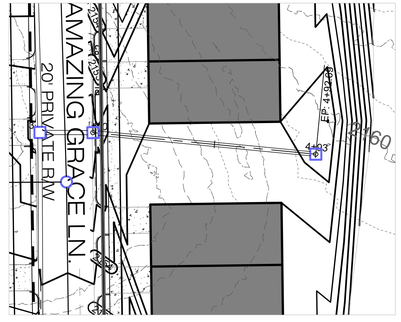

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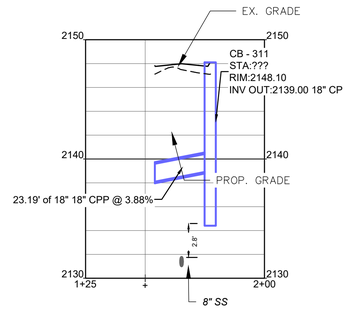

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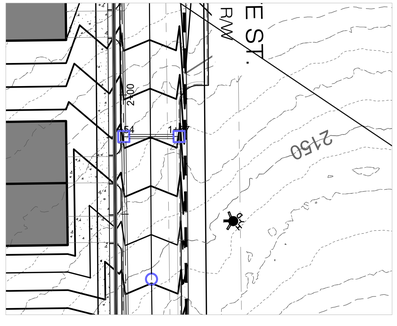

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REVISIONS

REV.	DATE	COMMENTS

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 038850 ENGINEER TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
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License No. C-4973

SIGNAL HILL
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HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: STORM PLAN & PROFILE - 2

DRAWING NO: 19

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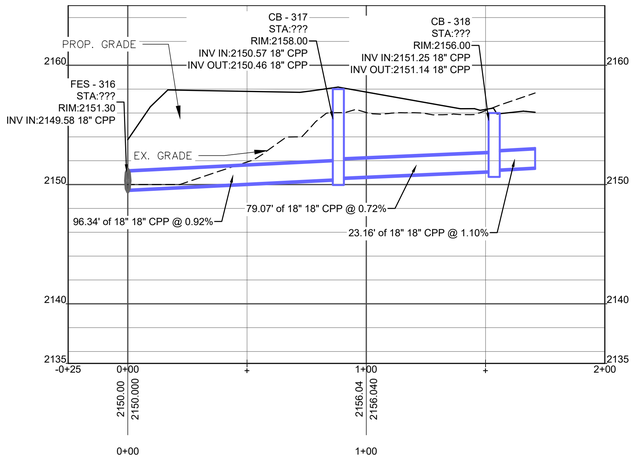

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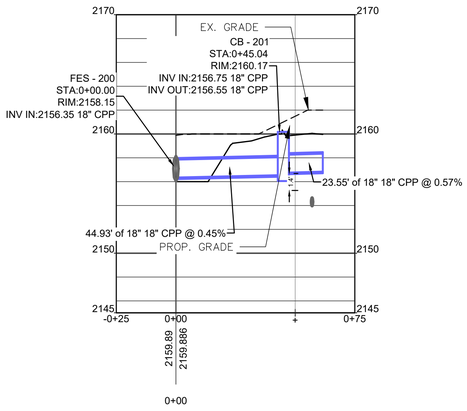

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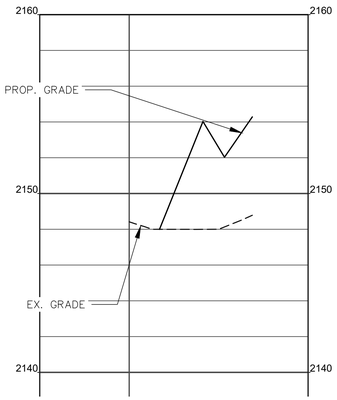

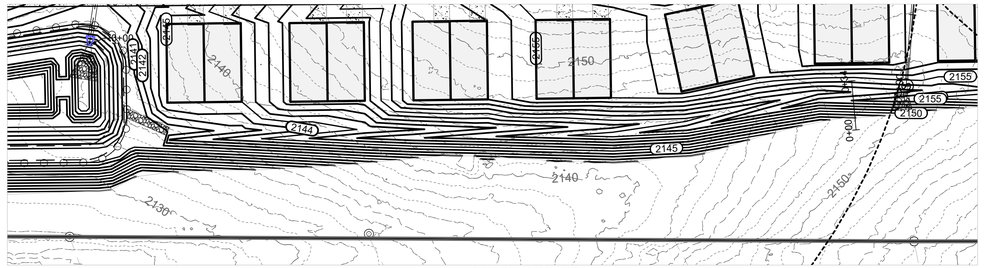

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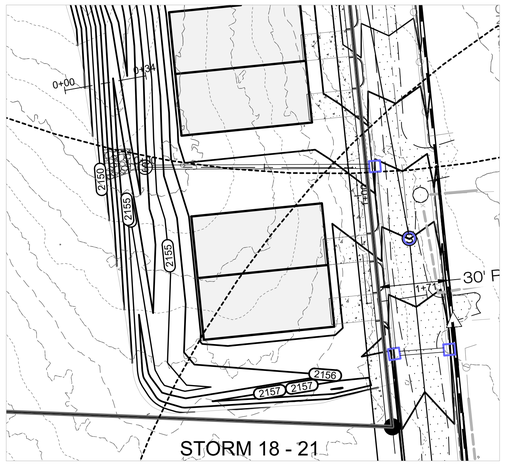

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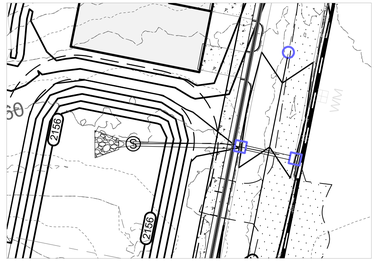

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(IN FEET)
1"=30'

STORM CALCULATIONS

100 - NETWORK

Line No.	Line ID	Drng Area (ac)	Line Size (in)	Line Length (ft)	Line Slope (%)	Line Type	Invert Dn (ft)	Invert Up (ft)	Incr Q (cfs)	Vel Dn (ft/s)	Vel Up (ft/s)	HGL Dn (ft)	HGL Up (ft)
1	RSR-101 - FES-100	0.01	18	37.326	0.99	Cir	2134.63	2135.00	0.04	0.04	1.22	2135.41	2135.07

200 - NETWORK

Line No.	Line ID	Drng Area (ac)	Line Size (in)	Line Length (ft)	Line Slope (%)	Line Type	Invert Dn (ft)	Invert Up (ft)	Incr Q (cfs)	Vel Dn (ft/s)	Vel Up (ft/s)	HGL Dn (ft)	HGL Up (ft)
1	CB-201 - FES-200	0.34	18	37.085	0.54	Cir	2156.35	2156.55	1.23	4.13	3.81	2156.92	2157.15
2	CB-202 - CB-201	0.37	18	24.500	0.53	Cir	2156.75	2156.88	1.34	3.44	3.17	2157.16	2157.31
3	RSR-204 - FES-203	0.01	18	41.349	1.21	Cir	2151.50	2152.00	0.04	1.52	1.22	2151.56	2152.07

300 - NETWORK

Line No.	Line ID	Drng Area (ac)	Line Size (in)	Line Length (ft)	Line Slope (%)	Line Type	Invert Dn (ft)	Invert Up (ft)	Incr Q (cfs)	Vel Dn (ft/s)	Vel Up (ft/s)	HGL Dn (ft)	HGL Up (ft)
1	CB-301 - FES-300	0.21	30	62.678	1.00	Cir	2129.00	2129.63	1.06	3.83	3.83	2133.73	2133.84
2	CB-302 - CB-301	0.99	30	23.359	2.01	Cir	2129.73	2130.20	5.02	2.95	2.95	2134.19	2134.21
3	CB-303 - CB-302	0.59	18	94.448	4.83	Cir	2130.73	2135.29	2.99	4.91	6.02	2134.50	2136.43 j
4	CB-304 - CB-303	0.14	18	162.565	3.00	Cir	2137.00	2141.88	0.71	9.96	5.25	2137.59	2142.86
5	CB-305 - CB-304	0.06	18	55.000	3.00	Cir	2143.33	2144.98	0.30	9.72	5.07	2143.89	2145.91
6	CB-308 - CB-305	0.05	18	130.469	4.00	Cir	2145.18	2150.40	0.25	1.02	2.81	2145.91	2150.75 j
7	CB-309 - CB-308	0.13	18	24.532	3.02	Cir	2151.26	2152.00	0.66	5.16	2.61	2151.45	2152.30
8	CB-306 - CB-305	0.32	18	23.671	1.99	Cir	2145.08	2145.55	1.62	5.69	5.03	2145.91	2146.47
9	DI-307 - CB-306	0.84	18	86.197	2.00	Cir	2145.65	2147.37	4.26	4.28	4.51	2146.47	2148.16 j
10	CB-310 - CB-301	0.11	18	154.064	2.00	Cir	2131.26	2134.34	0.56	2.16	4.35	2134.19	2135.09 j
11	CB-312 - CB-310	0.16	18	168.026	6.00	Cir	2134.44	2144.52	0.81	1.55	3.02	2135.09	2144.92 j
12	CB-313 - CB-312	0.08	18	25.529	5.01	Cir	2144.72	2146.00	0.41	2.95	2.29	2144.92	2146.24
13	CB-314 - CB-302	0.20	18	178.583	5.71	Cir	2130.73	2140.93	1.01	1.32	3.72	2134.50	2141.51 j
14	CB-315 - CB-314	0.27	18	27.156	1.99	Cir	2141.03	2141.57	1.37	2.84	3.19	2141.51	2142.01 j
15	CB-311 - CB-310	0.58	18	23.342	2.01	Cir	2134.44	2134.91	2.94	4.03	3.99	2135.09	2135.56
16	CB-317 - FES-316	0.04	18	88.172	0.54	Cir	2148.10	2148.58	0.20	1.45	3.47	2149.10	2149.09 j
17	CB-318 - CB-317	0.21	18	57.179	0.54	Cir	2148.69	2149.00	1.06	3.71	3.39	2149.15	2149.49
18	CB-319 - CB-318	0.14	18	25.421	0.59	Cir	2149.10	2149.25	0.71	1.94	2.66	2149.49	2149.56 j
19	RSR-321 - FES-320	0.01	24	56.616	1.01	Cir	2125.43	2126.00	0.05	0.03	1.29	2126.47	2126.08

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
1	09/20/2024	ADDRESS CLIENT COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA
053934
SEAL
ENGINEER
TOBIN M. HARRIS
09/20/2024

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-0973

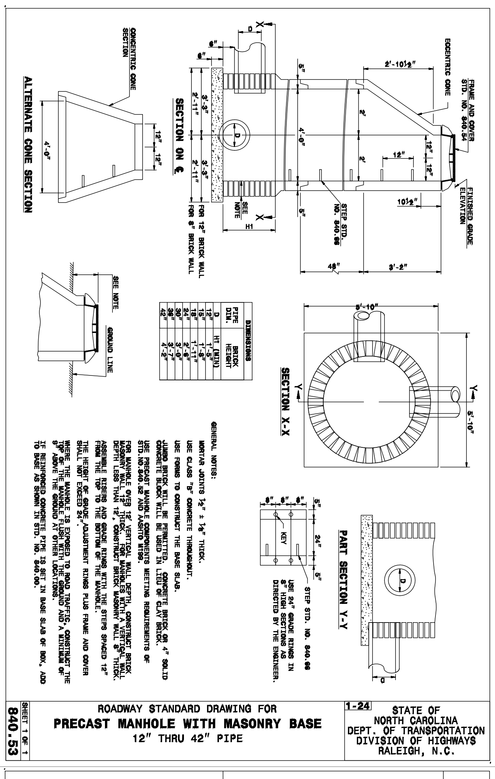
PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

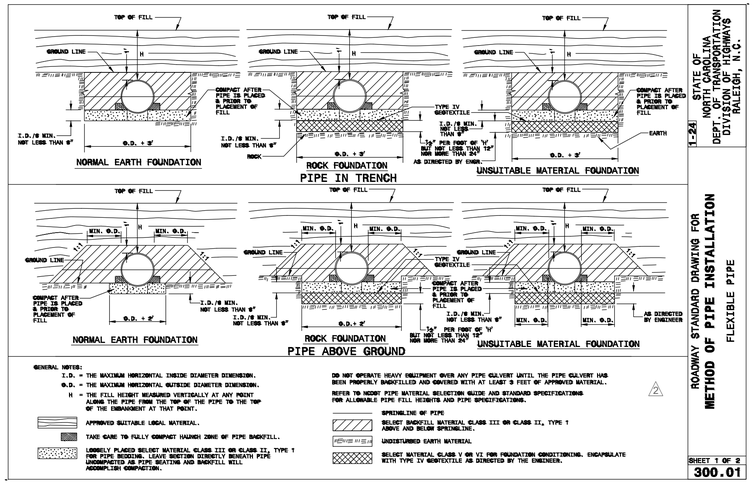
SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: STORM PLAN & PROFILE - 3

DRAWING NO: 20

Y:\Shared\2_ENGR\656605823\5_DESIGN\DWG\SHEETS\PLAN PROFILE STM.dwg, 9/15/2025 4:39 PM, Toby Harris


ALTERNATE CONE SECTION
SECTION X-X
PART SECTION Y-Y
SECTION ON ℄
GENERAL NOTES:
MORTAR JOINTS 3/4" ± 1/4" THICK.
USE CLASS "A" CONCRETE THROUGHOUT.
USE FORMS TO CONSTRUCT THE BASE SLAB.
CONCRETE BLOCK U.N.O. IN NOTES TO CONFORM TO ASTM C-139 OR C-90.
USE #4 BARS AT 16" CENTER AS DIRECTED BY THE ENGINEER.
FOR MANHOLE OVER 10'-0" (OPTION WALL DEPTH), CONTINUOUS REINF. STEEL SHALL BE PLACED IN EVERY COURSE OF BLOCK WALL BEGINNING FROM INITIAL TOP TO THE BOTTOM OF THE MANHOLE, WITH THE VERTICAL BARS SPACED 12" APART.
MANHOLE STEPS SHALL BE INSTALLED IN ADJUSTMENT RINGS ONLY. CONTRACTOR TO INSURE THE MANHOLE IS CONNECTED TO PROPER INVERTS. CONTRACTOR TO INSURE THAT THE TOP OF THE ADJUSTMENT RINGS ARE NOT LOWER THAN 12" BELOW THE FINISH GRADE.
CONTRACTOR SHALL NOT CONSTRUCT BRICK MASONRY WALL 8" THICK, FROM INITIAL TOP TO THE BOTTOM OF THE MANHOLE, WITH THE VERTICAL BARS SPACED 12" APART.
ADJUSTMENT RINGS SHALL BE INSTALLED IN ADJUSTMENT RINGS ONLY



GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE BEDDING DIRECTLY BENEATH PIPE UNDISTURBED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINKLING OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINKLING.

UNDISTURBED EARTH MATERIAL

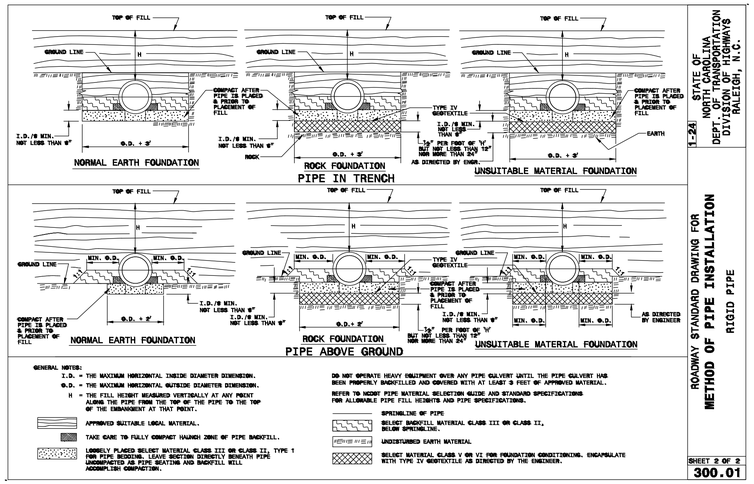
SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
FLEXIBLE PIPE

SHEET 1 OF 2
300.01



GENERAL NOTES:

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

APPROVED SUITABLE LOCAL MATERIAL.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE BEDDING DIRECTLY BENEATH PIPE UNDISTURBED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

REFER TO NCDOT PIPE MATERIAL SELECTION GUIDE AND STANDARD SPECIFICATIONS FOR ALLOWABLE PIPE FILL HEIGHTS AND PIPE SPECIFICATIONS.

SPRINKLING OF PIPE

SELECT BACKFILL MATERIAL CLASS III OR CLASS II, BELOW SPRINKLING.

UNDISTURBED EARTH MATERIAL

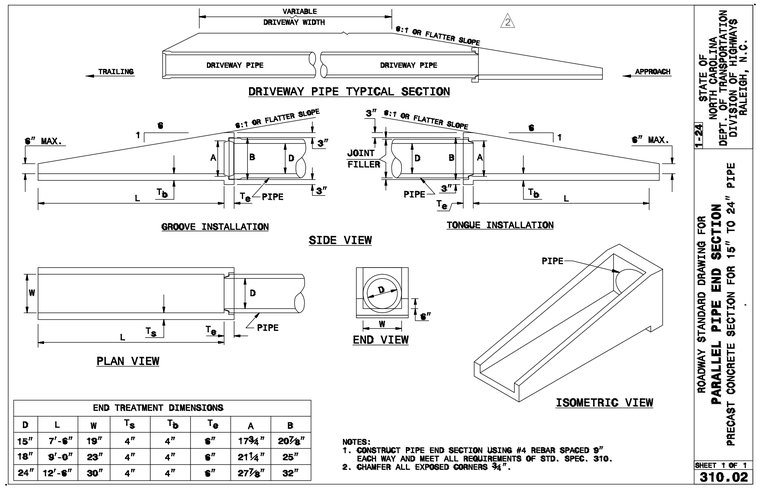
SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE IV GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-24

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
RIGID PIPE

SHEET 2 OF 2
300.01



END TREATMENT DIMENSIONS							
D	L	W	T_S	T_b	T_e	A	B
15"	7'-6"	19"	4"	4"	6"	17¾"	20⅞"
18"	9'-0"	23"	4"	4"	6"	21¼"	25"
24"	12'-6"	30"	4"	4"	6"	27⅞"	32"

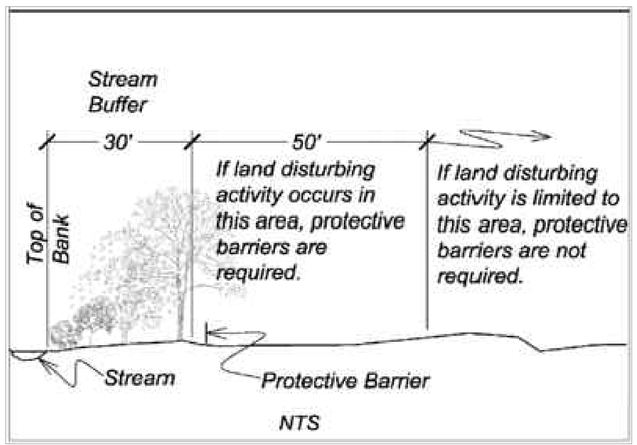
NOTES:
1. CONSTRUCT PIPE END SECTION USING #4 REBAR SPACED 9" EACH WAY AND MEET ALL REQUIREMENTS OF STD. SPEC. 310.
2. CHAMFER ALL EXPOSED CORNERS ¾".

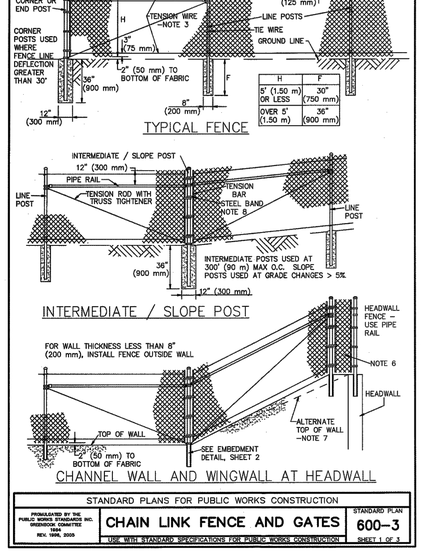
STATE OF NORTH CAROLINA DEPT. OF TRANSPORTATION DIVISION OF HIGHWAYS RALEIGH, N.C.

1-24

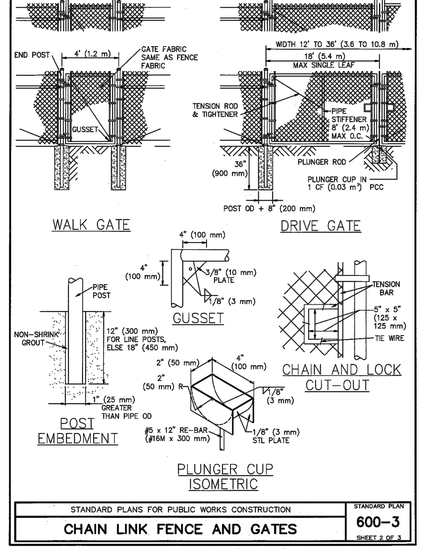
ROADWAY STANDARD DRAWING FOR
PARALLEL PIPE END SECTION
PRECAST CONCRETE SECTION FOR 15" TO 24" PIPE

SHEET 1 OF 1
310.02





STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
PROMULGATED BY THE PUBLIC WORKS STANDARDS INC. SPECIFICATION COMMITTEE 1998 REV. 10/98, 2009	CHAIN LINK FENCE AND GATES	STANDARD PLAN 600–3
	USE WITH STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION	SHEET 1 OF 3



STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
	CHAIN LINK FENCE AND GATES	STANDARD PLAN 600–3
		SHEET 2 OF 3

NOTES:

1. SECURE DRIVE–FIT GALVANIZED CAP TO POST WITH 1/4" (6 mm) ROUND–HEAD RIVET.
2. H DENOTES FABRIC WIDTH AND NOMINAL FENCE HEIGHT. H = 5' (1.5 m) UNLESS OTHERWISE NOTED.
3. IF FENCE WITH TOP RAIL IS SPECIFIED, DELETE STEEL TENSION WIRE AT TOP, AND PIPE RAILS AT INTERMEDIATE, SLOPE, END AND CORNER POSTS. EXTEND TENSION ROD TO TOP RAIL.
4. BARBED WIRE SHALL BE USED ONLY WHEN SPECIFIED.
5. POST SPACING IS MAXIMUM 10' (3.0 m).
6. FILL CLEAR OPENINGS GREATER THAN 3" (75 mm) WITH FABRIC. FOR OPENINGS LESS THAN 18" (450 mm), TIE FABRIC TO POSTS.
7. USE ONE POST FOR COMBINED SLOPE AND CORNER POST IF TOP OF CHANNEL WALL IS CONSTRUCTED AS SHOWN FOR "ALTERNATE".
8. STEEL BANDS AT TENSION BARS SHALL BE 1/8" x 1" (3 x 25 mm), MINIMUM, SPACED AT MAXIMUM 18" (400 mm).
9. SECURE TENSION WIRES TO EACH LINE POST WITH TIE WIRES.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION		
	CHAIN LINK FENCE AND GATES	STANDARD PLAN 600–3
		SHEET 3 OF 3

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030845 TIMOTHY M. HARRIS
01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: STORM DETAILS-2 (SHEET 2 OF 2)

DRAWING NO: 22

Y:\Shared\2_ENGINEERING\656605823\2_DESIGN\DWG\SHEETS\STORM DETAILS.dwg, 9/19/2025 4:41 PM, Toby Harris

MATERIAL SUMMARY	
6" WATER (DIP)	2,003 LF
PROP. FIRE HYDRANTS	1
8" SEWER (PVC)	2,539 LF
SEWER MANHOLES	13

TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

HIGHLAND INVESTORS LIMITED PARTNERSHIP
DB 1262 PG 521
PIN 9579-16-5868

CAROLINA VILLAGE, INC
DB 1341 PG 582
PB 2017 SL 11014
PIN 9579-18-3554
ZONING: PRO-CZD

HOME DEPOT USA, INC
DB 992 PG 711
PB 1999 SL 3086
PIN 9579-16-0862
ZONING: R-20

SIGNAL RIDGE, LP
DB 1680 PG 504
PB 2017 SL 10971
PIN 9579-16-1378
ZONING: PRO-CZD

HENRY GRONKI
PC C SL 285A
PIN 9579-07-8653
ZONING: R-20

YURIY SYSA
PC C SL 285A
PIN 9579-07-7529

STEVEN M. PRESSLEY
PC C SL 285A
PIN 9579-07-6740
ZONING: R-20

ANGELA M. LAMB
ESTATE FILE 21E973
(REF: DB 481 PG 483)
PIN 9579-07-1337
ZONING: R-20

ANGELA M. LAMB
ESTATE FILE 21E973
(REF: DB 481 PG 483)
PIN 9579-07-1337
ZONING: R-20

HOMER F. HOWARD
DB 674 PG 3
PC A SL 214A, LOT 5
PIN 9579-06-1936
ZONING: R-20

SWAIN S. HAYNES
DB 901 PG 347
PC A SL 214A, LOT 6
PIN 9579-06-1764
ZONING: R-20

JEANETTE Q. MATHIS
DB 910 PG 68
PC A SL 214A, LOT 7
PIN 9579-06-1562
ZONING: R-20

KRISTINA SOFRONE
DB 3866 PG 389
PB 2021 PG 13157, TR 2
PIN 9579-06-3404
ZONING: R-20

D & G ESTATE, LLC
DB 3876 PG 178
PB 2021 PG 13157, TR 1
PIN 9579-06-3217
ZONING: CHMU

ASHLEY M. CLOUSE
DB 3768 PG 310
LOTS 73-76
PIN 9579-06-6315
ZONING: R-20

HENRY W. BRADLEY
DB 1177 PG 572
LOTS 81-84
PIN 9579-06-6107
ZONING: R-20

NCY, LLC
DB 3672 PG 536
LOTS 79-80
PIN 9579-06-6187
ZONING: R-20

BEARD HEIRS
DB 3083 PG 2
LOTS 86-88
PC B SL 180A
(AKA PB 2 PG 156)
PIN 9579-06-4126
ZONING: O-3

ADJOINING LINES PER PB 2021 PG 13709

LINES PER PC C SL 285A & PB 2018 SL 11488

LINES PER PC A SL 214A

LINES PER PB 2021 PG 13157

PIN 9579-06-5791 TRACT 1

PIN 9579-06-8507 TRACT 6

PIN 9579-06-8117 TRACT 4

PIN 9579-06-7975 TRACT 3

PIN 9579-07-6259 TRACT 5

ZONED: R-15

ZONED: R-18

ZONED: R-20

OVERLAPPING EASEMENT PER PB 1999 SL 3086

PERMANENT DRAINAGE EASEMENT PER PB PB 1999 SL 3086 & DB 993 PG 360

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA G DB 3284 PG 387 & DB 3273 PG 78

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREA F DB 3284 PG 387 & DB 3273 PG 78

STREAMBANK MAINTENANCE EASEMENT PER PB 2018 SL 11488, AREAD

30' SEWER EASEMENT PER DB 838 PG 434

PROP. 30' SS EASEMENT

PROP. 6" PVC SS MAIN

PROP. 6" PVC WATER MAIN

PROP. 6"x12" TS&V

PROP. FIRE HYDRANT SEE DETAIL SHEET 30

400' RADIUS AT FIRE HYDRANTS, TYP.

MATCH LINE SEE BELOW

MATCH LINE SEE ABOVE

SSMH – 1
SSMH – 2
SSMH – 3
SSMH – 4
SSMH – 5
SSMH – 6
SSMH – 7
SSMH – 8
SSMH – 10
SSMH – 11
SSMH – 12
SSMH – 13

AMAZING GRACE LN
20' PRIVATE R/W

LAFOLETTE ST
30' PRIVATE R/W

30' R/W

PROP. 10' x 20' x 8'D BORING PIT

PROP. 10' x 10' x 7'D RECEIVING PIT

PROP. 6" RJDIP WATER LINE INSIDE 45 LF OF 18" Ø 0.25"t STEEL CASING (CITY MAINTAINED)

1" EIP 0.4' AG ID-KEE

1/2" EIP 0.4' AG

1/2" EIP 0.3' AG (PT)

1/2" EIP 0.7 AG (WITH T-FITTING) NOT HELD STA 4+67.23 RIGHT 3.25'

#4 EIR ID-JENKINS 0.1'

#5 EIR ID-KEE

#5 EIR ID-KEE (POL)

#5 EIR 0.1' AG

#4 EIR 0.2' BS MCABEE

#6 EIR 0.6' BG

#8 EIR 0.3' AG (NOT HELD)

EAI (POL)

EPS (9'x6')

NIR

CSD CONTROL POINT #5 REBAR
NC GRID COORDINATES
N: 596,147.54' NAD 83/11
E: 970,567.47' NAD 83/11
-LOCALIZED POINT-

ES
NC GRID COORDINATES
N: 596,176.67' NAD 83/11
E: 970,375.72' NAD 83/11

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1"=20'

GRAPHIC SCALE
60 0 30 60 120 240
(IN FEET)
1"=60'

REVISIONS			
REV.	DATE	COMMENTS	
3	02/18/2025	ADDRESS CITY & COUNTY COMMENTS	

ENGINEER'S SEAL:
NORTH CAROLINA
SEAL 030895
ENGINEERING
TOBIN M. HARRIS
02/18/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No: C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

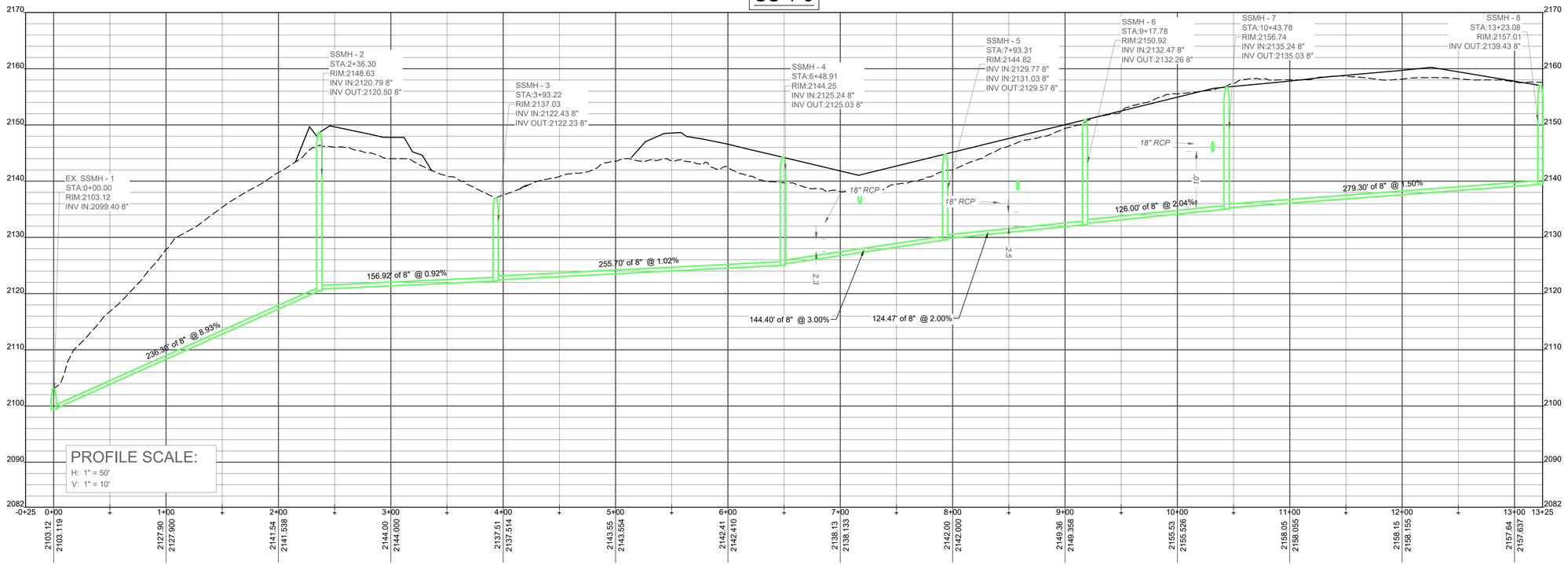
SHEET TITLE: UTILITY PLAN

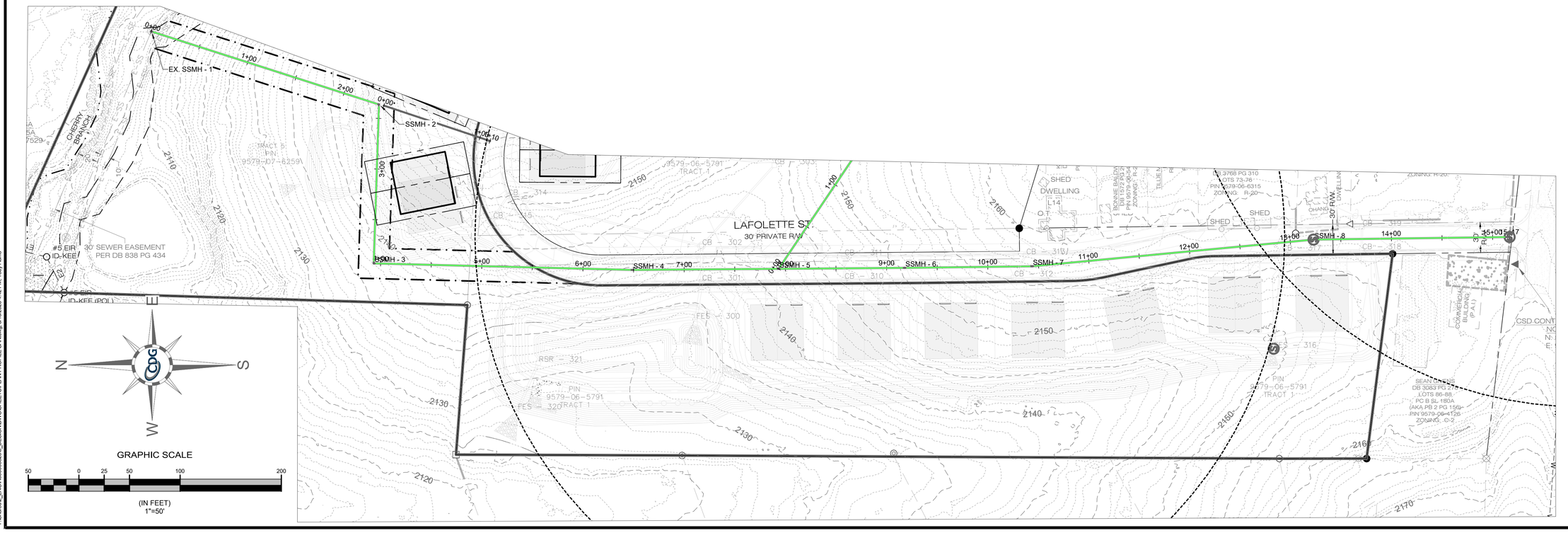
DRAWING NO: 23

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

Y:\Shared\2_ENGR\656605823\05_DESIGN\DGN\SHEET\SUTILITY - OVERALL.dwg, 9/15/2025 4:42 PM, Toby Harris

SS 1-9





FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030845 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: SANITARY SEWER PLAN & PROFILE - 1

DRAWING NO: 24

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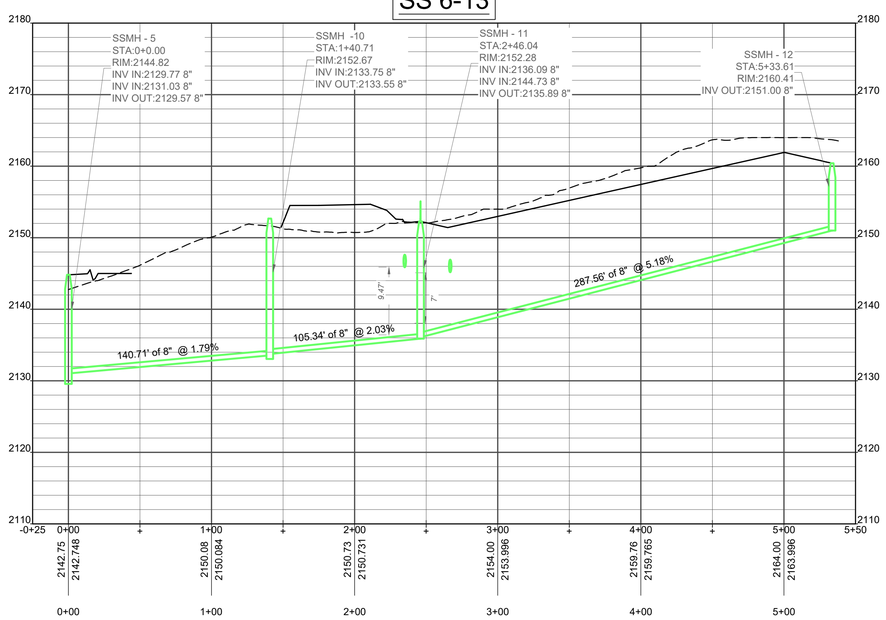
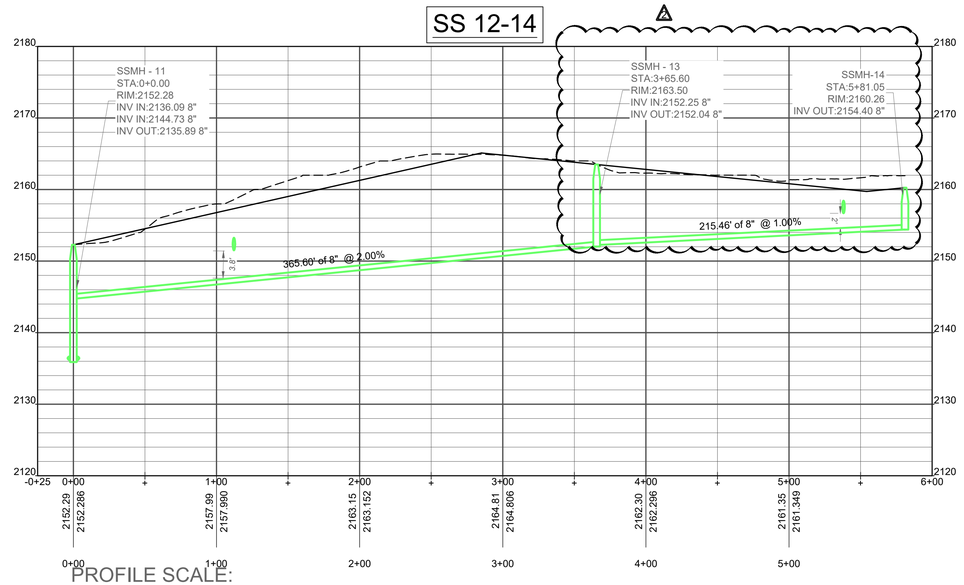
SS 6-13



PROFILE SCALE:

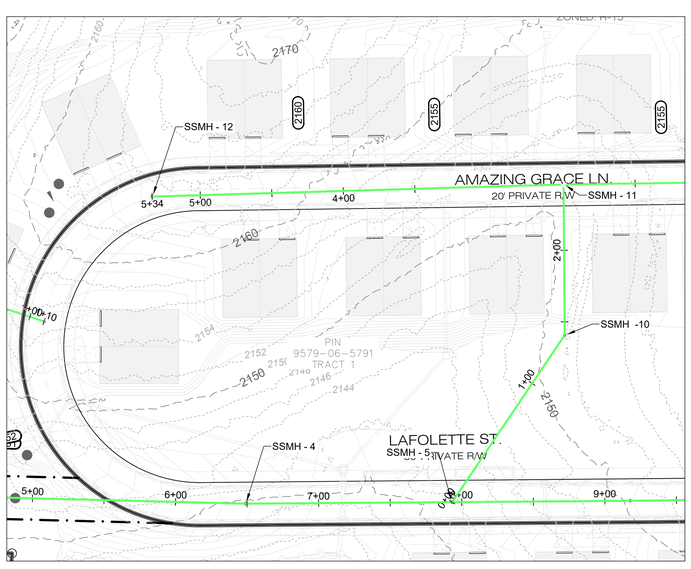
H: 1" = 50'
V: 1" = 10'

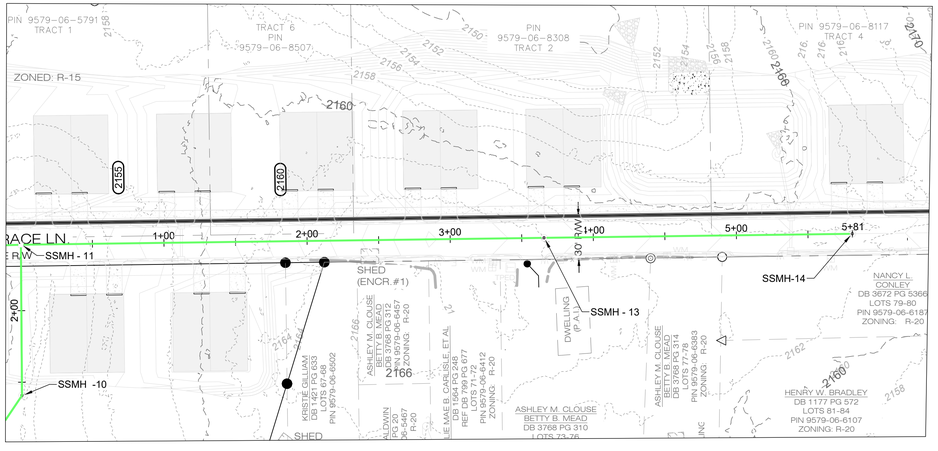
SS 12-14

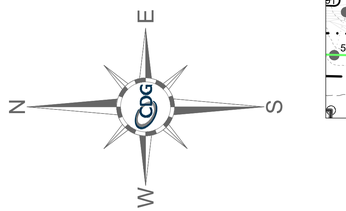


PROFILE SCALE:

H: 1" = 50'
V: 1" = 10'







GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1"=50'

Y:\Shared\2_ENG\6560605823\6_DESIGN\DWG\SHEET\SPLAN PROFILE SAN2.dwg, 5/15/2025 4:43 PM, Toby Harris

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

ENGINEER'S SEAL:

01/31/2025

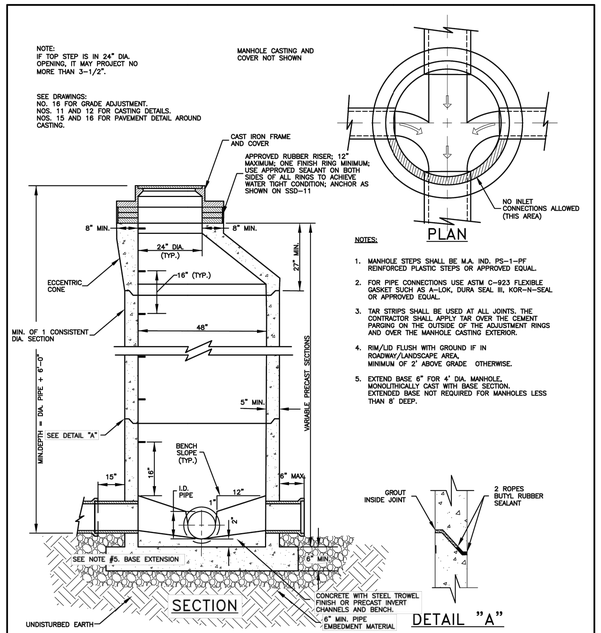
PROJECT #	6560605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE:
SANITARY SEWER PLAN & PROFILE - 2

DRAWING NO:
25



NOTES:

1. MANHOLE STEPS SHALL BE M.A. IND. PS-1-PF REINFORCED PLASTIC STEPS OR APPROVED EQUAL.
2. FOR PIPE CONNECTIONS USE ASTM C-923 FLEXIBLE GASKET SUCH AS A-LOK, DURA SEAL III, KOR-N-SEAL OR APPROVED EQUAL.
3. TAR STRIPS SHALL BE USED AT ALL JOINTS. THE CONTRACTOR SHALL APPLY TAR OVER THE CEMENT PARGING ON THE OUTSIDE OF THE ADJUSTMENT RINGS AND OVER THE MANHOLE CASTING EXTERIOR.
4. RIM/LID FLUSH WITH GROUND IF IN ROADWAY/LANDSCAPE AREA, MINIMUM OF 2' ABOVE GRADE OTHERWISE.
5. EXTEND BASE 6" FOR 4' DIA. MANHOLE, MONOLITHICALLY CAST WITH BASE SECTION. EXTENDED BASE NOT REQUIRED FOR MANHOLES LESS THAN 8' DEEP.

DATE: 01/26/2024	SS-D DWG. NO. 6
SCALE: NOT TO SCALE	

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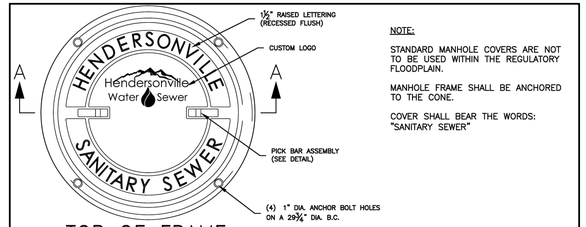
www.cityofhendersonville.org

PRECAST MANHOLE



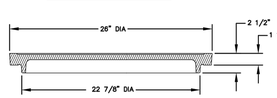
TOP OF FRAME AND COVER

NOTE:

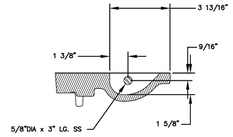
STANDARD MANHOLE COVERS ARE NOT TO BE USED WITHIN THE REGULATORY FLOODPLAIN.

MANHOLE FRAME SHALL BE ANCHORED TO THE CONE.

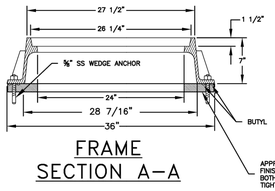
COVER SHALL BEAR THE WORDS: "SANITARY SEWER"



MANHOLE COVER SECTION A–A



PICKBAR DETAIL



FRAME SECTION A–A

DATE: 01/26/2024	SS-D DWG. NO. 11
SCALE: NOT TO SCALE	

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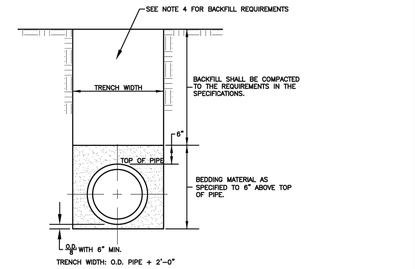
STANDARD MANHOLE FRAME AND COVER

H:\DETAILS\-Current Standard Details\Sewer Only\COH-SEWER-DETAILS-102023.dwg, 1/26/2024 11:52:52 AM



NOTES:

1. BEDDING CLASSIFICATION SHALL MEET OR EXCEED ASTM D2321 CLASS 1 BEDDING FOR FLEXIBLE PIPING, AND ASTM C12, CLASS 'B' BEDDING FOR RIGID PIPING.
2. IN ROCK OR WET SOIL, PIPE MUST BE BEDDED IN AT LEAST 6" OF #57 WASHED STONE.
3. FORCE MAIN BEDDING SHALL BE SELECT NATURAL SAND WELL COMPACTED IN 6" LIFTS.
4. TRENCHES EXCAVATED OUTSIDE EXISTING ROAD AND RAILWAY RIGHTS-OF-WAY SHALL BE BE BACKFILLED WITH COMMON BACKFILL MATERIAL CONSISTING OF EXCAVATED MATERIALS EXCEPT HIGHLY ORGANIC SILTS AND CLAYS AND TAMPED THOROUGHLY. FILL SHALL BE DEPOSITED IN SUCCESSIVE, UNIFORM, APPROXIMATELY HORIZONTAL LAYERS. MATERIAL SHALL BE FREE OF ROOTS, STONES, AND DEBRIS. ALL MATERIAL SHALL HAVE AN IN-PLACE DENSITY OF AT LEAST 85% OF MAXIMUM DRY DENSITY (STANDARD PROCTOR) OR AS APPROVED BY THE ENGINEER. COMMON BACKFILL SHALL NOT CONTAIN STONE BLOCKS, BROKEN CONCRETE, MASONRY RUBBLE, OR OTHER SIMILAR MATERIALS. IT SHALL HAVE PHYSICAL PROPERTIES SUCH THAT IT CAN BE READILY SPREAD AND COMPACTED DURING FILLING. SNOW, ICE, AND FROZEN SOIL WILL NOT BE PERMITTED.
5. WHERE EXCAVATED MATERIAL, AFTER REMOVAL OF ROCKS, STUMPS, PLANT MATERIAL, AND OTHER EXTRANEOUS MATERIAL AND PROPER DEWATERING, DRYING, PROTECTION, AND STORAGE OF THE EXCAVATION BY THE CONTRACTOR, CANNOT BE PREPARED TO MEET THE REQUIREMENTS FOR COMMON BACKFILL, DUE TO THE NATURE OF THE MATERIAL (E.G., EXCESSIVE ROCK, MUCK, ORGANICS, CLAY, SILT, OR OTHER MATERIAL), AND AS DETERMINED BY THE ENGINEER, THE UNACCEPTABLE EXCAVATION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR AND REPLACED BY IMPORTED BACKFILL MEETING THE REQUIREMENTS OF STRUCTURAL BACKFILL. IMPORTED STRUCTURAL BACKFILL SHALL BE FREE OF ORGANICS, ROOTS OR OTHER DELETERIOUS MATERIALS AND SHALL NOT CONTAIN MORE THAN FIVE PERCENT (BY WEIGHT) ORGANIC MATERIAL, HAVE A PLASTICITY INDEX (PI) GREATER THAN 25, OR HAVE A MAXIMUM DRY DENSITY LESS THAN 90 POUNDS PER CUBIC FOOT. IMPORTED STRUCTURAL FILL SHOULD CONSIST OF MATERIAL CLASSIFIED AS ML, CL, SC, OR SM, OR BETTER PER ASTM D-2487 AND BE CAPABLE OF BEING COMPACTED TO 85% STANDARD PROCTOR.
6. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL COMPACTION REQUIREMENTS.

DATE: 10/19/2023	SS-D DWG. NO. 1
SCALE: NOT TO SCALE	

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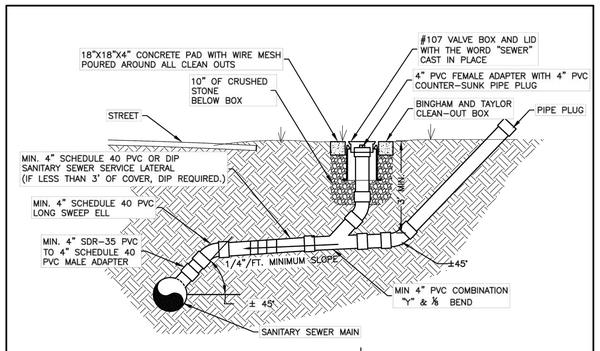
(828) 697-3000 (office)
www.cityofhendersonville.org

GRAVITY SEWER
TRENCH CONSTRUCTION
OUTSIDE PAVEMENT



DATE: 10/19/2023	SS-D DWG. NO. 04
SCALE: NOT TO SCALE	

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Hendersonville, NC 28792
(828) 697-3000 (office)
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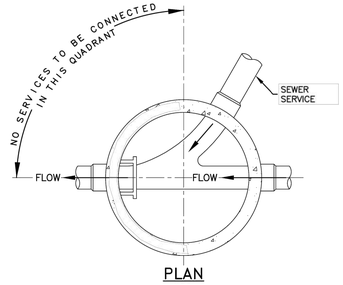
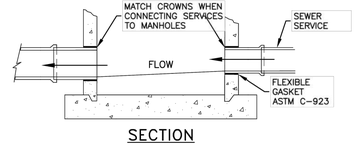
STANDARD SERVICE CONNECTION
LATERAL AND CLEANOUT



PLAN
N.T.S.



SECTION
N.T.S.

DATE: 10/19/2023	SS-D DWG. NO. 5
SCALE: NOT TO SCALE	

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
(828) 697-3000 (office)
www.cityofhendersonville.org

SERVICE CONNECTIONS
AT MANHOLES

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEERS SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030895 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

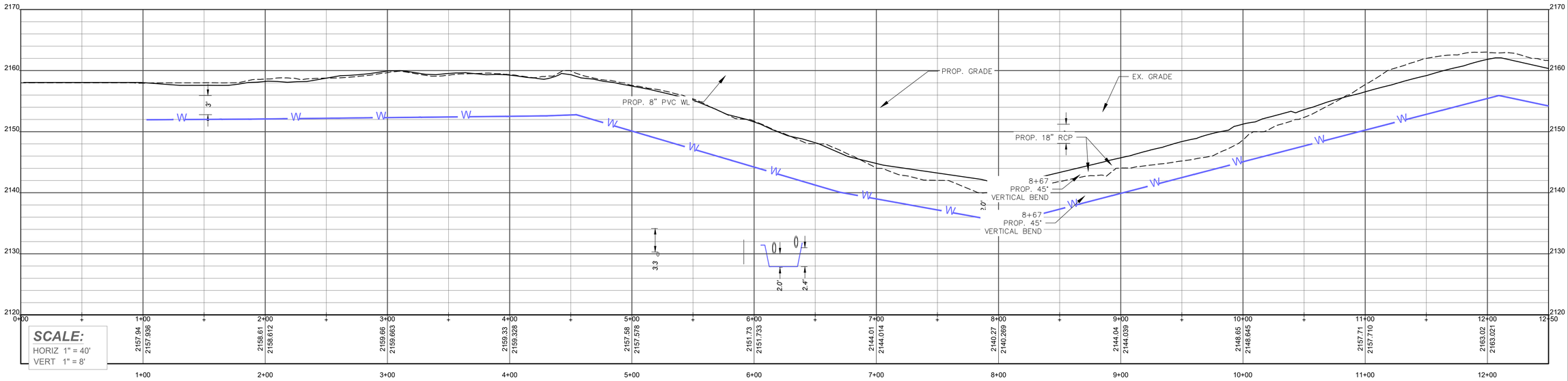
THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: SANITARY SEWER DETAILS

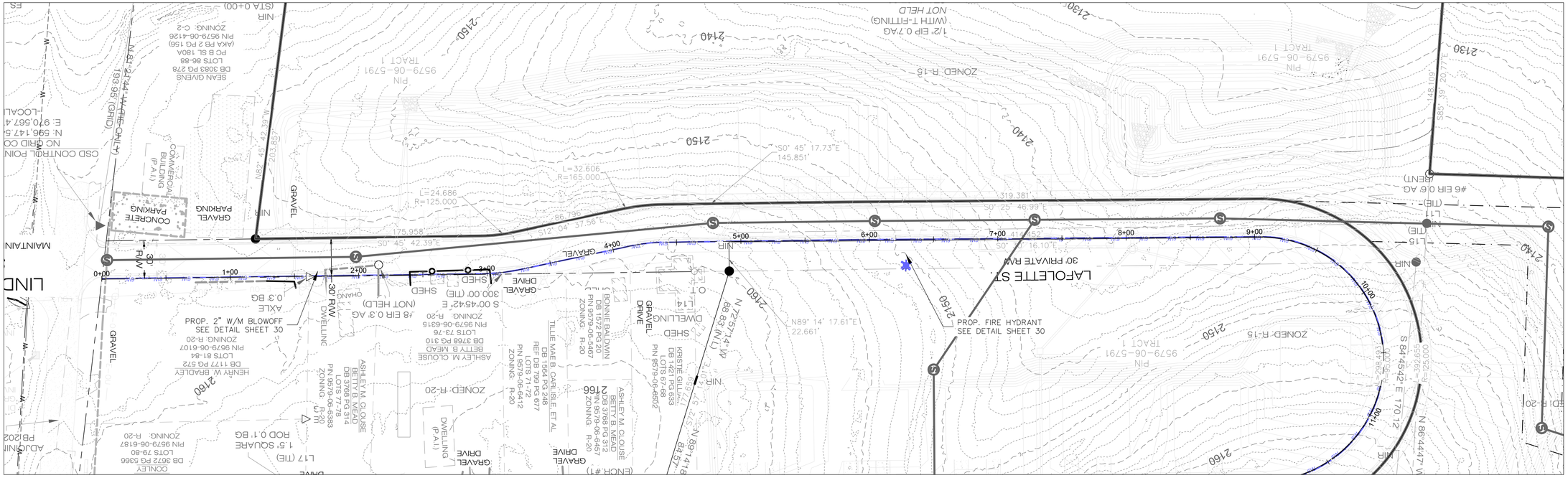
DRAWING NO: 26

Y:\Sheet\2_ENGR\656605823_DESIGN\DWG\SHEETS\PLAN PROFILE SAN.dwg, 9/19/2025 4:44 PM, Toby Harris



WATERMAIN2

SCALE: 1"=50' (h); 1"=10' (v)



FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL:

09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	########

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE:
WATERMAIN PLAN & PROFILE
0+00 - 11+00

DRAWING NO:
27

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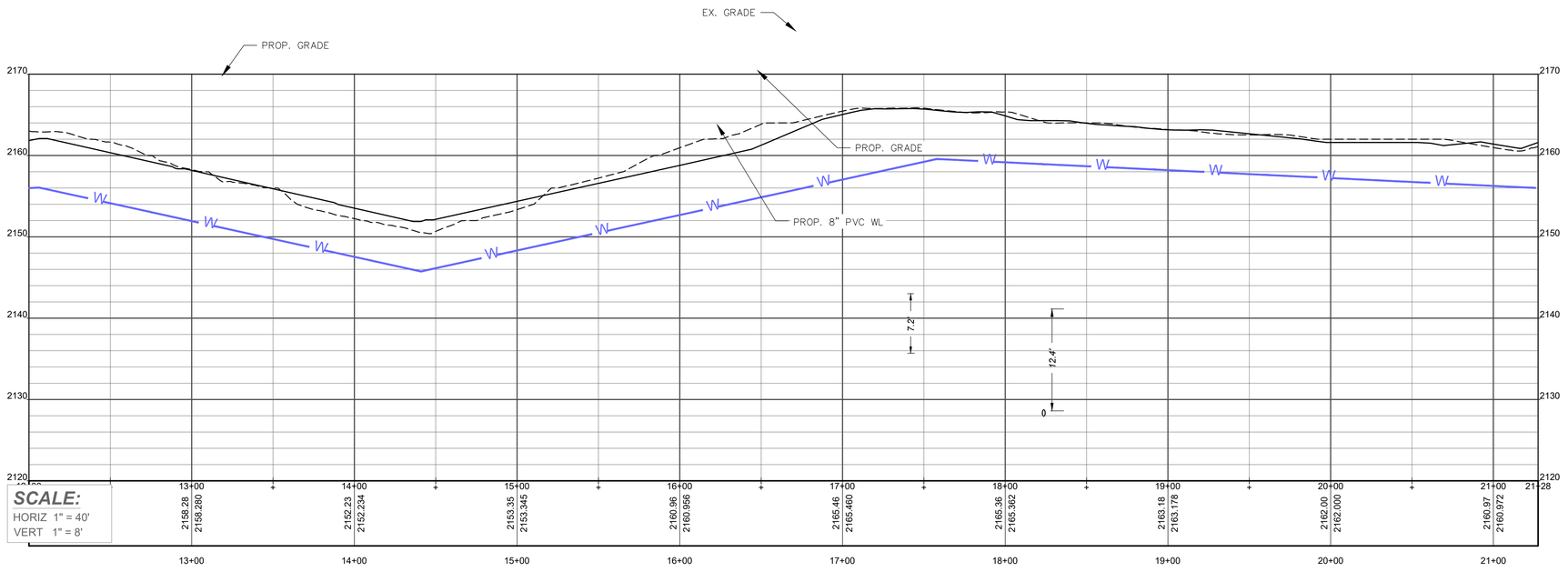
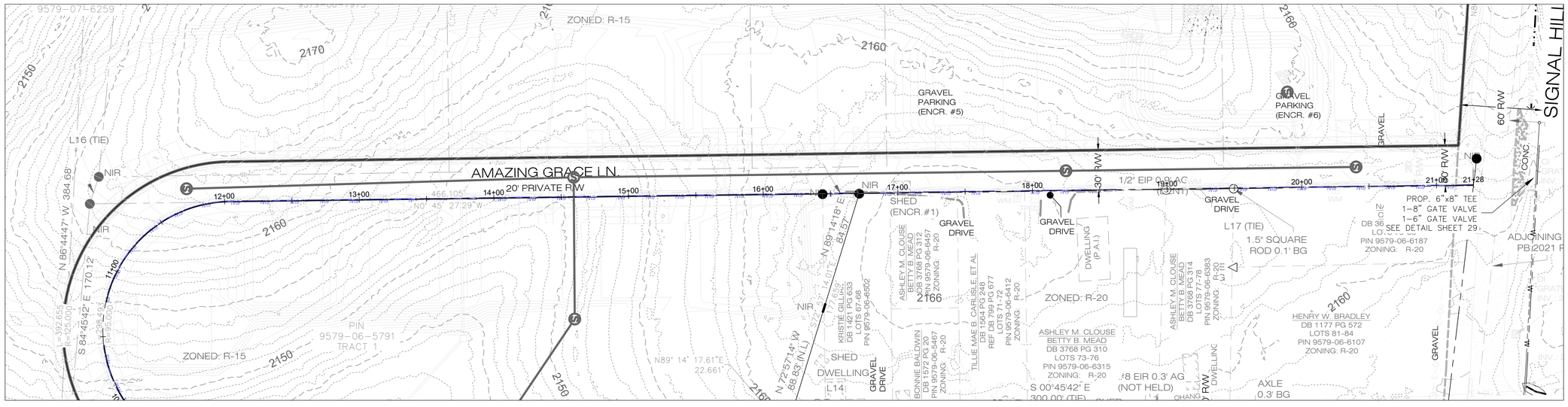


SCALE:
HORIZ 1" = 40'
VERT 1" = 8'

WATERMAIN2

SCALE: 1"=50' (h); 1"=10' (v)


AMAZING GRACE LN
20' PRIVATE R/W
ZONED: R-15
ZONED: R-20
GRAVEL PARKING (ENCR. #5)
GRAVEL PARKING (ENCR. #6)
SHED (ENCR.#1)
GRAVEL DRIVE
DWELLING (P.A.I.)
L16 (TIE)
L17 (TIE)
1.5" SQUARE ROD 0.1' BG
1/2" EIP 0.9' AC (DENT)
AXLE 0.3' BG
8 EIR 0.3' AG (NOT HELD)
PROP. 6"x8" TEE
1-8" GATE VALVE
1-6" GATE VALVE
SEE DETAIL SHEET 29
ADJOINING PB 2021 P
SIGNAL HILL
60' R/W
30' R/W
CONC.
GRAVEL
N 86°44'47" W 384.68'
S 84°45'42" E 170.12'
N 89°14'18" E 84.57'
N 72°57'14" W 66.83' (N,L)
S 00°45'42" E 300.00' (TIE)
N0° 45' 27.29" W
466.105'
N89° 14' 17.61" E 22.661'
PIN 9579-06-5791 TRACT 1
PIN 9579-06-6187
PIN 9579-06-6383
PIN 9579-06-6315
PIN 9579-06-6412
PIN 9579-06-6502
PIN 9579-06-6457
PIN 9579-06-5467
PIN 9579-06-7259
HENRY W. BRADLEY DB 1177 PG 572 LOTS 81-84 PIN 9579-06-6107 ZONING: R-20
ASHLEY M. CLOUSE BETTY B. MEAD DB 3768 PG 310 LOTS 73-76 PIN 9579-06-6315 ZONING: R-20
ASHLEY M. CLOUSE BETTY B. MEAD DB 3768 PG 314 LOTS 77-78 PIN 9579-06-6383 ZONING: R-20
ASHLEY M. CLOUSE BETTY B. MEAD DB 1564 PG 248 REF DB 799 PG 677 LOTS 71-72 PIN 9579-06-6412 ZONING: R-20
ASHLEY M. CLOUSE BETTY B. MEAD DB 3768 PG 312 PIN 9579-06-6457 ZONING: R-20
KRISTIE GILLIS DB 1421 PG 633 LOT 1 PIN 9579-06-6502
TILLIE MAE B. CARLISLE, ET AL DB 1564 PG 248 REF DB 799 PG 677 LOTS 71-72 PIN 9579-06-6412 ZONING: R-20
BONNIE BALDWIN DB 1572 PG 20 PIN 9579-06-5467 ZONING: R-20
DB 36 LO:
PIN 9579-06-6187
ZONING: R-20
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GENERAL NOTES:

1. WATER CONSTRUCTION ON THIS SITE IS AUTHORIZED BY PERMITS ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY (NCDEQ) AND AUTHORIZED BY THE CITY OF HENDERSONVILLE. THE WORK IS SUBJECT TO INSPECTIONS AT ALL TIMES BY REPRESENTATIVES OF NCDEQ, THE CITY OF HENDERSONVILLE, THE OWNER OR THE ENGINEER. THE PERMITS REQUIRE CERTIFICATION OF COMPLETION OF THE WATER SYSTEMS BY THE ENGINEER AND THE APPLICANT PRIOR TO ISSUANCE OF FINAL OPERATION APPROVAL.
2. MATERIALS AND INSTALLATION FOR WATER CONSTRUCTION SHALL CONFORM TO THE LATEST VERSIONS OF CITY SPECIFICATION AND DETAILS AND AWWA STANDARDS AND REQUIREMENTS.
3. CONTRACTOR SHALL NOTIFY NC811 & APPROPRIATE UTILITIES AGENCIES PRIOR TO PERFORMING ANY WORK.
4. REGULAR WORKING HOURS SHALL BE FROM 7:00 AM TO 5:00 PM MONDAY THROUGH FRIDAY, EXCEPT IN CASES OF EMERGENCY OR OTHERWISE APPROVED IN WRITING BY THE CITY OR AUTHORIZED REPRESENTATIVES. THE CONTRACTOR SHALL ENSURE THE CONSTRUCTION SITE IS SAFE FOR ANY PERSONS WHO MAY BE ON SITE DURING NON-WORKING HOURS.
5. ALL PERSONS SHALL BE COURTEOUS AND RESPECTFUL TO THE PUBLIC. CURSING OUR FOUL LANGUAGE IS NOT PERMITTED AND WILL NOT BE TOLERATED.
6. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL ON ALL ROADWAYS DURING THE PROJECT. THE CONTRACTOR SHALL NOTIFY LOCAL EMERGENCY, SCHOOL AND OTHER NECESSARY AUTHORITIES PRIOR TO ANY STREET CLOSING OR TRAFFIC CHANGE.
7. THE CONTRACTOR AT HIS OWN EXPENSE SHALL KEEP THE CONSTRUCTION SITE AND ADJACENT PUBLIC AND PRIVATE ROADWAYS CLEAN DURING THE PROJECT. THE CONTRACTOR IS ALSO RESPONSIBLE FOR CONTROLLING DUST WITHIN THE PROJECT AREA.
8. THE CONTRACTOR IS RESPONSIBLE FOR ALL CONSTRUCTION IN ACCORDANCE WITH THE LINES, GRADES AND ELEVATIONS SHOWN ON THE PLANS OR AS GIVEN BY THE ENGINEER IN THE FIELD.
9. CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND THE ELEVATION FOR ALL UTILITIES, DRAINAGE AND OTHER UNDERGROUND FACILITIES BOTH EXISTING AND PROPOSED, AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO CONSTRUCTION.
10. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION. REPAIRS SHALL BE MADE IN ACCORDANCE WITH APPLICABLE STANDARDS OF APPROPRIATE AGENCIES AT THE CONTRACTOR'S EXPENSE.
11. DURING CONSTRUCTION THE CONTRACTOR SHALL MAINTAIN THE OPERATION OF EXISTING UTILITIES WITH THE LEAST AMOUNT OF SERVICE INTERRUPTION POSSIBLE IN COORDINATION WITH THE CITY OF HENDERSONVILLE. CONTINUOUS SERVICE WITHOUT HEALTH AND SAFETY CONSIDERATIONS SHALL EXCEED ALL OTHERS AND CONTRACTOR'S SCHEDULE, PLANS AND METHODS SHALL BE SUBJECT TO ALTERATION AND MODIFICATION AS NECESSARY FOR THESE CONSIDERATIONS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TEMPORARY OR PERMANENT RELOCATION OF STRUCTURES AND UTILITIES, INCLUDING BUT NOT LIMITED TO POLES, SIGNS, FENCES, MAILBOXES, VALVES, MANHOLES, CONDUITS AND GRADES THAT INTERFERE WITH THE POSITIONING OF THE WORK AS SHOWN ON THE DRAWINGS.
13. CONTRACTOR SHALL BE REQUIRED TO CONFORM AND COMPLY WITH ALL RESTRICTIONS AND EASEMENT CONDITIONS AND IS RESPONSIBLE FOR ALL RELATED INCIDENTAL COSTS INVOLVED.
14. EXISTING WATER SERVICES SHALL BE REPLACED TO THE EXISTING METER UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY. SPLICING OF THE WATER SERVICE ON THE DOWNSTREAM SIDE OF THE METER IS NOT PERMITTED.
15. ALL DISTURBED AREAS, INCLUDING BUT NOT LIMITED TO ASPHALT, CONCRETE, DRIVEWAYS, ROADS, LANDSCAPING, SHALL BE REPAIRED TO EQUAL OR BETTER CONDITION THAN THE ORIGINAL SITE. GRASS AND LANDSCAPED AREAS FILL MATERIAL MUST BE REPLACED IN TRENCH TO GRADE AS SOON AS WATERLINE CONSTRUCTION ALLOWS. ADEQUATE SEEDING AND MULCHING, FERTILIZER, ETC. SHALL BE APPLIED TO THE DISTURBED AREA. ADDITIONAL FILL AND/OR RESTORATION MAY BE REQUIRED WITHIN THE WARRANTY PERIOD AT THE CITY'S DISCRETION.
16. CONTRACTOR SHALL PROVIDE EROSION CONTROL DEVICES TO CONTROL RUNOFF AS REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR ANY FINES THAT MAY BE LEVIED DUE TO RUNOFF FROM CONSTRUCTION.
17. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW ALL APPLICABLE FEDERAL, STATE AND LOCAL HEALTH AND SAFETY REGULATIONS PERTAINING TO CONSTRUCTION OPERATIONS.
18. ALL WATER MAINS SHALL HAVE 3 FEET MINIMUM COVER.
19. INSTALL FERROUS PIPING FOR BOTH WATER AND SEWER WITHIN 10 FT. OF A CROSSING 9".
19.1. SEWER LINE CROSSES OVER WATER, OR
19.2. VERTICAL CLEARANCE BETWEEN WATER AND SEWER IS LESS THAN 18 INCHES.
19.3. MAINTAIN 10 FEET HORIZONTAL SEPARATION BETWEEN SEWER AND WATER MAINS UNLESS LAID IN SEPARATE TRENCHES WITH THE BOTTOM OF THE WATER LINE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE OR USE FERROUS MATERIAL FOR BOTH WATER AND SEWER.
20. MAINTAIN 18 INCHES VERTICAL SEPARATION BETWEEN STORM DRAIN AND WATER, OR INSTALL FERROUS MATERIAL WATER LINE WITHIN 10 FEET EACH SIDE OF CROSSING.
21. TAPS GREATER THAN ONE-INCH IN DIAMETER IN EXISTING, ACTIVE WATER MAIN ARE TO BE PERFORMED BY THE CITY UNLESS OTHERWISE APPROVED IN WRITING BY THE CITY. TAPS IN NEW CONSTRUCTION ARE TO BE PERFORMED BY THE CONTRACTOR IN ACCORDANCE WITH CITY REQUIREMENTS.
22. ALL WATER METERS WILL BE SET BY CITY STAFF UNLESS THE CONTRACTOR IS GRANTED WRITTEN PERMISSION BY THE CITY.
22.1. THE CONTRACTOR WILL PROVIDE THE CITY NOTICE OF 10 WORKING DAYS MINIMUM PRIOR TO THE DATE OF METER INSTALLATION.
22.2. THE CONTRACTOR WILL PROVIDE A LICENSED PLUMBER DURING THE METER INSTALLATION TO VERIFY LINE SERVICES IN ALL MULTI-METER BOXES.
23. ALL PUBLIC WATER MAIN CONSTRUCTION SHALL BE PERFORMED BY A NORTH CAROLINA LICENSED UTILITY CONTRACTOR.
24. ALL WATER APPURTENANCES ARE TO BE MADE USING LEAD FREE MATERIALS. PIPE, FITTINGS, VALVES, HYDRANTS, PIPE CLAMPS, RESTRAINTS, FLANGES, CASTINGS, REBAR, HATCHES, INLETS, METER BOXES AND ALL CAST IRON COMPONENTS SHALL ALSO BE MANUFACTURED IN THE USA.
25. RESTRAINED JOINTS OF AN APPROVED PIPE MANUFACTURER ARE TO BE USED FOR ALL PUBLIC WATER LINES WHERE THRUST RESTRAINING IS REQUIRED IN ACCORDANCE WITH THE PLANS AND MANUFACTURER'S SPECIFICATIONS. CONCRETE THRUST BLOCKS ARE PERMITTED ONLY WHERE CONNECTIONS ARE MADE TO EXISTING WATER LINES OR WHERE THE USE OF MECHANICAL RESTRAINT IS NOT FEASIBLE.
26. ALL FIRE HYDRANTS, VAULTS, BACKFLOW PREVENTERS, HOT BOXES AND WATER METERS ARE TO BE INSTALLED ON RELATIVELY FLAT AREAS (SLOPE OF 4% OR LESS) BY THE ENGINEER IN THE FIELD.
27. TAMPERING WITH OR ILLEGAL USE OF THE PUBLIC WATER SUPPLY WILL RESULT IN SUSPENSION OF WATER SERVICE, INCLUDING DOMESTIC AND COMMERCIAL UNITS, FINAL APPROVAL BY THE CITY IS ISSUED. A PERSON FOUND TO BE USING WATER ILLEGALLY SHALL BE SUBJECT TO PENALTIES OR FINES, AS PRESCRIBED AND APPROVED BY CITY COUNCIL.

TESTING & INSPECTION:

1. NOTIFY THE CITY OF HENDERSONVILLE AND ENGINEER AT LEAST 5 WORKING DAYS BEFORE STARTING CONSTRUCTION OF WATER FACILITIES TO SCHEDULE A PRE-CONSTRUCTION CONFERENCE. THE ENGINEER SHALL PERIODICALLY INSPECT THE PROGRESS OF INSTALLATION AT A MINIMUM AND SHALL COMPLETE A FINAL WATER CERTIFICATION.
2. ALL CHANGES TO THE APPROVED CONSTRUCTION PLANS AND SUBMITTALS MUST BE APPROVED IN WRITING BY THE CITY PRIOR TO IMPLEMENTATION IN THE FIELD.
3. THE CONTRACTOR SHALL FURNISH SECURE AND PROVIDE ALL NECESSARY TESTING MATERIALS, EQUIPMENT, LABOR, THE CONTRACTOR SHALL COORDINATE TESTING, FLUSHING, DISINFECTION, AND BACTERIOLOGICAL SAMPLING WITH CITY INSPECTOR.
4. THE ENGINEER OR CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION INSPECTORS 72 HOURS (MINIMUM) PRIOR TO ANY WATER MAIN OR TESTING OPERATIONS. AT A MINIMUM CITY STAFF SHALL BE NOTIFIED PRIOR TO TAPS, TESTING, FLUSHING, DISINFECTION, AND SAMPLING.
5. PRESSURE TEST WATER MAINS TO 200 PSI MIN. FOR A MINIMUM OF TWO HOURS IN ACCORDANCE WITH CITY REQUIREMENTS AND AWWA C600.
6. DISINFECT WATER LINES AND REMOVE ACCEPTABLE BACTERIOLOGICAL TEST FROM A CERTIFIED TESTING LABORATORY IN ACCORDANCE WITH CITY REQUIREMENTS AND AWWA C651. THE COMBINED WATER LINE TEST SHALL BE PERFORMED BY CITY'S CERTIFIED TESTING LABORATORY.
7. PRIVATELY OWNED FIRE SYSTEMS SHALL BE APPROVED BY THE APPROPRIATE LOCAL PERMITTING AUTHORITY. THE CITY ENGINEERING OR WATER AND SEWER DEPARTMENTS ARE NOT RESPONSIBLE FOR ENSURING COMPLIANCE WITH APPROPRIATE FIRE PROTECTION REGULATIONS. THE CITY DOES NOT PROVIDE ANY GUARANTEE OF ITS WATER SYSTEM'S CAPABILITY TO DELIVER WATER FLOW AND RESIDUAL PRESSURE THE FIRE PERMITTING AUTHORITY MAY REQUIRE.
8. ALL BACKFLOW PREVENTION ASSEMBLIES SHALL BE USC APPROVED AND REVIEWED BY THE CITY'S ENVIRONMENTAL COMPLIANCE COORDINATOR. PROTECTION OF THE PUBLIC WATER DISTRIBUTION SYSTEM SHALL BE ASSURED BY INSPECTION OF THE INSTALLATION AND TESTING OF BACKFLOW PREVENTION DEVICES IN ACCORDANCE WITH APPROPRIATE LOCAL, STATE, AND FEDERAL REGULATIONS.
9. CONSTRUCTION WATER SOURCING MUST BE APPROVED IN WRITING BY THE CITY. CONSTRUCTION WATER CONNECTIONS SHALL BE PAIRED WITH AN IRRIGATION METER AND APPROVED BACKFLOW PREVENTION ASSEMBLY. THIS ASSEMBLY INSTALLATION MUST BE TESTED BY A LICENSED PLUMBER AND TEST RESULTS SUBMITTED TO THE CITY BEFORE USE OF CONSTRUCTION WATER.
10. SECURE FINAL WRITTEN ACCEPTANCE FROM THE CITY OF HENDERSONVILLE PRIOR TO ACTIVATION OF THE SYSTEM. WATER SERVICE WILL NOT BE PROVIDED UNTIL WRITTEN ACCEPTANCE OF THE SYSTEM IS ISSUED BY THE CITY.
11. THE ENGINEER SHALL SUPPLY THE CITY WITH FINAL AS-BUILT DRAWINGS AND COMPLETE ALL PROJECT CLOSE OUT REQUIREMENTS.

DISCLAIMER:

THE STANDARD WATER DETAILS ARE FOR THE SOLE USE OF PROJECTS DIRECTLY FOR, OR THOSE PROJECTS IN WHICH OWNERSHIP WILL BE TRANSFERRED TO THE CITY OF HENDERSONVILLE. THESE TYPICALS ARE INTENDED TO SHOW THE CITY OF HENDERSONVILLE'S EXPECTATIONS FOR THE GENERAL LAYOUT, ARRANGEMENT, AND THE QUALITY OF EQUIPMENT AND MATERIALS FOR WATER DISTRIBUTION SYSTEM ITEMS AND THEIR RELATED APPURTENANCES. IT REMAINS THE SOLE RESPONSIBILITY OF THE ENGINEER IN RESPONSIBLE CHARGE (ERC) OF EACH APPLICATION TO DETERMINE, DESIGN TO, AND CERTIFY TO THE DESIGN PARAMETERS FOR EACH INSTALLATION. THE ERC MUST ALSO ENSURE THE DESIGN COMPLIES WITH THE MINIMUM DESIGN CRITERIA OF NC DIVISION OF ENVIRONMENTAL QUALITY AND ALL LOCAL AND STATE LAWS AND REGULATIONS.

DATE: 05/22/2023 WD DWG. NO. 1
SCALE: NOT TO SCALE

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WATER DETAILS
GENERAL NOTES

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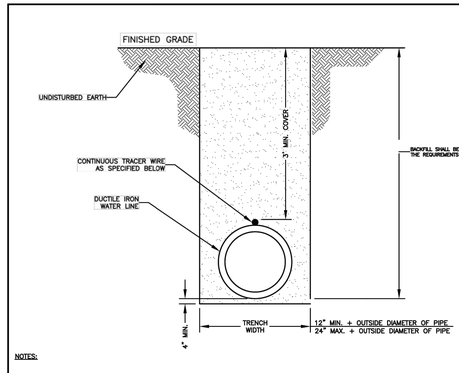

NOTES:

1. TRENCHES EXCAVATED OUTSIDE EXISTING ROAD AND RAILWAY RIGHTS-OF-WAY SHALL BE BE BACKFILLED WITH COMMON BACKFILL MATERIAL CONSISTING OF EXCAVATED MATERIALS EXCEPT HIGHLY ORGANIC SILTS AND CLAYS AND TAMPED THOROUGHLY. FILL SHALL BE DEPOSITED IN SUCCESSIVE, UNIFORM, APPROXIMATELY HORIZONTAL LAYERS. MATERIAL SHALL BE FREE OF ROOTS, STONES, AND DEBRIS. ALL MATERIAL SHALL HAVE AN IN-PLACE DENSITY OF AT LEAST 85% OF MAXIMUM DRY DENSITY (STANDARD PROCTOR) OR AS APPROVED BY THE ENGINEER. COMMON BACKFILL SHALL NOT CONTAIN STONE BLOCKS, BROKEN CONCRETE, MASONRY RUBBLE, OR OTHER SIMILAR MATERIALS. IT SHALL HAVE PHYSICAL PROPERTIES SUCH THAT IT CAN BE READILY SPREAD AND COMPACTED DURING FILLING. SNOW, ICE, AND FROZEN SOIL WILL NOT BE PERMITTED.

   WHERE EXCAVATED MATERIAL, AFTER REMOVAL OF ROCKS, STUMPS, PLANT MATERIAL, AND OTHER EXTRANEOUS MATERIAL AND PROPER DEWATERING, DRYING, PROTECTION, AND STORAGE OF THE EXCAVATION BY THE CONTRACTOR, CANNOT BE PREPARED TO MEET THE REQUIREMENTS FOR COMMON BACKFILL, DUE TO THE NATURE OF THE MATERIAL (E.G., EXCESSIVE ROCK, MUCK, ORGANICS, CLAY, SILT, OR OTHER MATERIAL), AND AS DETERMINED BY THE ENGINEER, THE UNACCEPTABLE EXCAVATION SHALL BE REMOVED FROM THE SITE AND DISPOSED OF BY THE CONTRACTOR AND REPLACED BY IMPORTED BACKFILL MEETING THE REQUIREMENTS OF STRUCTURAL BACKFILL. IMPORTED STRUCTURAL BACKFILL SHALL BE FREE OF ORGANICS, ROOTS OR OTHER DELETERIOUS MATERIALS AND SHALL NOT CONTAIN MORE THAN FIVE PERCENT (BY WEIGHT) ORGANIC MATERIAL, HAVE A PLASTICITY INDEX (PI) GREATER THAN 25, OR HAVE A MAXIMUM DENSITY LESS THAN 90 POUNDS PER CUBIC FOOT. IMPORTED STRUCTURAL FILL SHOULD CONSIST OF MATERIAL CLASSIFIED AS ML, CL, SC, OR SM, OR BETTER PER ASTM D-2487 AND BE CAPABLE OF BEING COMPACTED TO 85% STANDARD PROCTOR.
2. THE WATER LINE SHALL HAVE A MINIMUM OF 3' OF COVER AT FINISHED GRADE.

   TRACER WIRE WILL BE A 19 GAUGE, TIN COATED, COPPER CONDUCTOR WITH POLYETHYLENE INSULATION. CORE MATERIAL COMPRISED OF HIGH-TENACITY, WOVEN POLYESTER WITH WATER BLOCKING YARNS ENCAPSULATED IN 30 MIL. BLUE HDPE JACKET PROVIDING CORROSION RESISTANCE, FLEXIBILITY, IMPACT STRENGTH AND 1800 LBS. TENSILE STRENGTH. TRACER WIRE WILL NOT CONDUCT AN ELECTRICAL CURRENT WHEN STRUCK BY LIGHTNING AND IS DESIGNED FOR DIRECT BURY AND DIRECTIONAL BORING APPLICATIONS. WHEN SPLICES AND LATERAL CONNECTIONS ARE MADE, ONLY GEL FILLED CONNECTORS DESIGNED FOR WIRE WITH WOVEN POLYESTER FIBER CORE ARE TO BE USED. TRACER WIRE AND CONNECTORS SHALL BE TRACE-SAFE® WATER BLOCKING TRACER WIRE AND RELATED CONNECTORS, MANUFACTURED BY NEPTCO, INC., OR EQUIVALENT APPROVED BY ENGINEER, AND PRODUCED IN THE UNITED STATES OF AMERICA.

   TRACER WIRE SHALL BE EXTENDED ALONG ALL WATER LINES, FITTINGS, VALVES, SERVICES, AND HYDRANTS. LOCATING CLIPS SHALL BE PROVIDED AT ALL VALVES, HYDRANT VALVES AND METER BOXES. THE CONTRACTOR SHALL DUCT TAPE TRACER WIRE ON CROWN OF WATER LINE EVERY FIVE FEET.

DATE: 01/12/2020 WD DWG. NO. 2
SCALE: NOT TO SCALE

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WATER TRENCH CONSTRUCTION
OUTSIDE PAVEMENT

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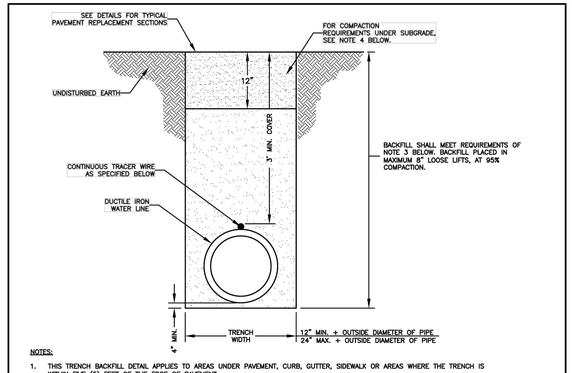

NOTES:

1. THIS TRENCH BACKFILL DETAIL APPLIES TO AREAS UNDER PAVEMENT, CURB, GUTTER, SIDEWALK OR AREAS WHERE THE TRENCH IS WITHIN FIVE (5) FEET OF THE EDGE OF PAVEMENT.
2. COMPACTION OF THE BACKFILL SHALL BE ACHIEVED THROUGH THE USE OF AN APPROVED VIBRATORY PLATE TAMPER OR ROLLER. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL COMPACTION REQUIREMENTS.
3. COMPACTION TESTING OF THE BACKFILL SHALL BE PROVIDED, DIRECTED AND COORDINATED BY THE OWNER. INTERVALS OF TESTING SHALL BE AT THE TOTAL DISCRETION OF THE OWNER AND MAY BE CHANGED AT ANY TIME.

   IF A TEST DOES NOT PASS, THE CONTRACTOR SHALL REMOVE THE DEFECTIVE BACKFILL, REDO THE WORK AND THE AREA WILL BE RETESTED. THE CONTRACTOR SHALL BE AWARE OF THE LEVEL OF COMPACTION REQUIRED.

   IF THE WORK IS SUSPECT TO BE DEFECTIVE BY THE OWNER, THE WORK SHALL BE RETESTED.

   THE WATER CONTENT OF THE BACKFILL MATERIAL SHALL ALSO BE TESTED AND RECORDED FOR EACH TEST COMPLETED. THE CONTRACTOR WILL BE ALLOWED TO ADD WATER TO THE BACKFILL MATERIAL IN ORDER TO ATTAIN WATER CONTENT. HOWEVER, THE CONTRACTOR WILL NOT BE ALLOWED TO UTILIZE THE ADDITION OF WATER AS A MEANS OF COMPACTION. FURTHERMORE, SHOULD THE BACKFILL MATERIAL BE FOUND TO HAVE WATER CONTENT RATIOS WHICH IN THE OPINION OF THE ENGINEER OR THE OWNER PREVENTS THE APPROPRIATE COMPACTION OF THE TRENCH, THE CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL AND UNDERTAKE THE NECESSARY CORRECTIVE WORK.
4. THE TOP TWELVE INCHES OF THE FINAL BACKFILL SHALL BE COMPACTED TO 98% STANDARD PROCTOR,
5. THE WATER LINE SHALL HAVE A MINIMUM OF 3' OF COVER AT FINISHED GRADE.
6. TRACER WIRE WILL BE A 19 GAUGE, TIN COATED, COPPER CONDUCTOR WITH POLYETHYLENE INSULATION. CORE MATERIAL COMPRISED OF HIGH-TENACITY, WOVEN POLYESTER WITH WATER BLOCKING YARNS ENCAPSULATED IN 30 MIL. BLUE HDPE JACKET PROVIDING CORROSION RESISTANCE, FLEXIBILITY, IMPACT STRENGTH AND 1800 LBS. TENSILE STRENGTH. TRACER WIRE WILL NOT CONDUCT AN ELECTRICAL CURRENT WHEN STRUCK BY LIGHTNING AND IS DESIGNED FOR DIRECT BURY AND DIRECTIONAL BORING APPLICATIONS. WHEN SPLICES AND LATERAL CONNECTIONS ARE MADE, ONLY GEL FILLED CONNECTORS DESIGNED FOR WIRE WITH WOVEN POLYESTER FIBER CORE ARE TO BE USED. TRACER WIRE AND CONNECTORS SHALL BE TRACE-SAFE® WATER BLOCKING TRACER WIRE AND RELATED CONNECTORS, MANUFACTURED BY NEPTCO, INC., OR EQUIVALENT APPROVED BY ENGINEER, AND PRODUCED IN THE UNITED STATES OF AMERICA.

   TRACER WIRE SHALL BE EXTENDED ALONG ALL WATER LINES, FITTINGS, VALVES, SERVICES, AND HYDRANTS. LOCATING CLIPS SHALL BE PROVIDED AT ALL VALVES, HYDRANT VALVES AND METER BOXES. THE CONTRACTOR SHALL DUCT TAPE TRACER WIRE ON CROWN OF WATER LINE EVERY FIVE FEET.

DATE: 06/10/2019 WD DWG. NO. 3
SCALE: NOT TO SCALE

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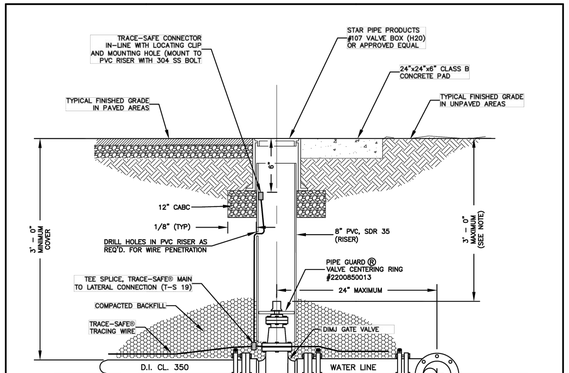
WATER TRENCH CONSTRUCTION
UNDER PAVEMENT



NOTES:

1. TOP OF COVER SHALL BE STAMPED "WATER"
2. VALVE PAD REQUIREMENTS SHALL NOT BE APPLICABLE FOR PAVED SURFACES.
3. PAVEMENT REPAIR SHALL MATCH EXISTING ROAD PAVING SECTION. SEE NCDOT ASPHALT REPAIR DETAIL # 654.01.
4. WHEN OPERATING NUT DEPTH EXCEEDS 3'-0" BELOW FINISHED GRADE, PROVIDE EXTENSION STEM WITH STANDARD 2" SQUARE OPERATING NUT. TOP OF NUT SHALL BE WITHIN 5" TO 9" OF FINISHED GRADE.
5. TRACER WIRE WILL BE A 19 GAUGE, TIN COATED, COPPER CONDUCTOR WITH POLYETHYLENE INSULATION. CORE MATERIAL COMPRISED OF HIGH-TENACITY, WOVEN POLYESTER WITH WATER BLOCKING YARNS ENCAPSULATED IN 30 MIL. BLUE HDPE JACKET PROVIDING CORROSION RESISTANCE, FLEXIBILITY, IMPACT STRENGTH AND 1800 LBS. TENSILE STRENGTH. TRACER WIRE WILL NOT CONDUCT AN ELECTRICAL CURRENT WHEN STRUCK BY LIGHTNING AND IS DESIGNED FOR DIRECT BURY AND DIRECTIONAL BORING APPLICATIONS. WHEN SPLICES AND LATERAL CONNECTIONS ARE MADE, ONLY GEL FILLED CONNECTORS DESIGNED FOR WIRE WITH WOVEN POLYESTER FIBER CORE ARE TO BE USED. TRACER WIRE AND CONNECTORS SHALL BE TRACE-SAFE® WATER BLOCKING TRACER WIRE AND RELATED CONNECTORS, MANUFACTURED BY NEPTCO, INC., OR EQUIVALENT, AND PRODUCED IN THE UNITED STATES OF AMERICA.

DATE: 10/11/2021 WD DWG. NO. 5
SCALE: NOT TO SCALE

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VALVE INSTALLATION DETAIL

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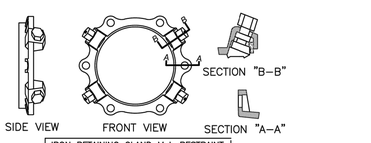
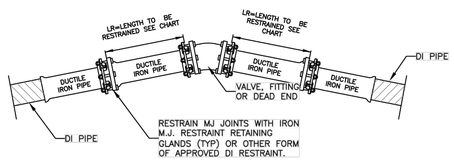


IRON RETAINING GLAND M.J. RESTRAINT			
NOMINAL PIPE SIZE	WEDGES QUANTITY	BOLTS QUANTITY	PRESS RATING
6"	3	6	350
8"	4	6	350
12"	8	8	350
16"	12	12	350

8" SIZE SHOWN 6" & 12" SIMILAR IRON RETAINING GLAND M.J. RESTRAINT

LR (MIN. LENGTH OF RESTRAINT EACH DIRECTION OF THRUST IN LINEAR FEET)
Based on 200 psig pressure, Safety Factor of 2.0:1, BARE DI PIPE AND ML Soil, 3.5' cover
Chart does not apply to pipes wrapped in polyethylene wrap

PIPE SIZE	VALVES DEAD ENDS TEES	90° ELBOWS	45° ELBOW & CROSSES	22-1/2° ELBOWS	REDUCER	
6"	55'	31'	13'	7'	6"X2"	67'
8"	72'	40'	17'	8'	8"X6"	30'
12"	102'	57'	24'	12'	12"X8"	54'
16"	130'	72'	30'	15'	12"X8"	54'
					16"X8"	95'



DATE: 05/22/2023 WD DWG. NO. 4-1
SCALE: NOT TO SCALE

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DUCTILE IRON PIPE
RESTRAINT DETAIL
SHEET 1 OF 2

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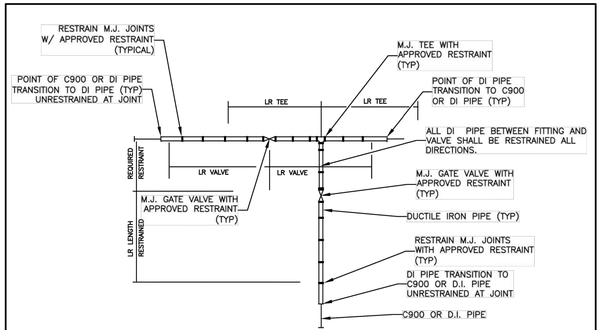

RESTRAINED JOINT DETAIL FOR TYPICAL TEE INTERSECTION
4 WAY INTERSECTION SIMILARLY RESTRAINED

NOTES:

1. THRUST RESTRAINT SHALL BE INSTALLED ON DUCTILE IRON WATER DISTRIBUTION LINES 6" THRU 12" DIAMETER IN THE MANNER SHOWN.
2. IRON RETAINING GLAND M.J. RESTRAINT OR OTHER FORMS OF IRON RESTRAINT SHALL NOT BE USED ON PVC PIPE.
3. PIPE GREATER THAN 12 INCH DIAMETER SHALL REQUIRE RESTRAINED JOINT PIPE FOR THE PROPER LENGTH.
4. COMPACT FITTINGS ARE ACCEPTABLE FOR USE WITH IRON RETAINING GLAND M.J. RESTRAINT AND OTHER FORMS OF DI RESTRAINT.
5. THE MINIMUM LENGTH OF RESTRAINT INDICATED SHALL REQUIRE ALL JOINTS WITHIN THE LR DISTANCE TO BE RESTRAINED.
6. RESTRAINT SYSTEM SHALL BE INSPECTED AND APPROVED PRIOR TO BACKFILLING.
7. RESTRAINT SYSTEMS MAY VARY BASED UPON THE ENGINEERS' DESIGN AS SHOWN ON THE PLAN AND PROFILE SHEETS.
8. GRIPPER RING AND FIELD LOK GASKETS ARE AN ACCEPTABLE METHOD OF RESTRAINT ON DUCTILE IRON PIPE ONLY.
9. TRACER WIRE NOT SHOWN FOR CLARITY. WIRE SHALL BE INSTALLED PER OTHER DETAILS.
10. MECHANICAL JOINTS SHALL BE PRODUCED IN THE UNITED STATES.

DATE: 05/22/2023 WD DWG. NO. 4-2
SCALE: NOT TO SCALE

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DUCTILE IRON PIPE
RESTRAINT DETAIL
SHEET 2 OF 2

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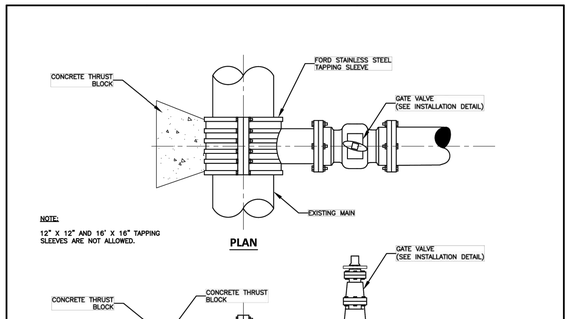
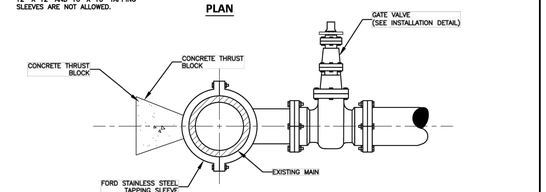
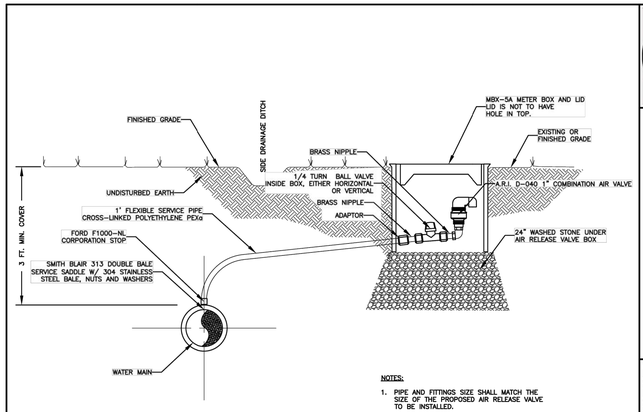


NOTE:
12" X 12" AND 16" X 16" TAPPING SLEEVES ARE NOT ALLOWED.

PLAN


GATE VALVE (SEE INSTALLATION DETAIL)
CONCRETE THRUST BLOCK
CONCRETE THRUST BLOCK
FORD STAINLESS STEEL TAPPING SLEEVE
EXISTING MAIN



NOTES:

1. PIPE AND FITTINGS SIZE SHALL MATCH THE SIZE OF THE PROPOSED AIR RELEASE VALVE TO BE INSTALLED.
2. TRACER WIRE NOT SHOWN FOR CLARITY. TRACER WIRE SHALL BE CONNECTED TO WATER MAIN TRACER USING CONNECTORS APPROVED BY THE MANUFACTURERS. (SEE VALVE BOX INSTALLATION)
3. ACTUAL LOCATION OF AIR RELEASE VALVE SHALL BE COORDINATED WITH THE CITY AND PROPERTY OWNER.

DATE: 03/23/2021	WD DWG. NO. 7	STANDARD AIR RELEASE VALVE INSTALLATION DETAIL
SCALE: NOT TO SCALE		

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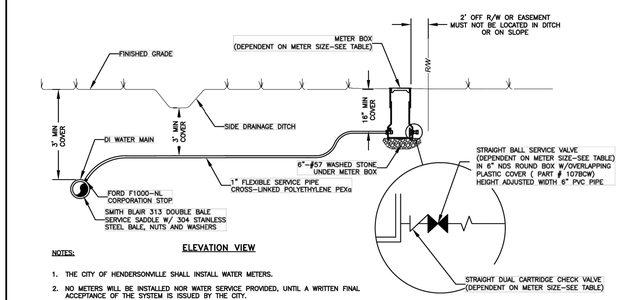
METER SIZE	METER BOX SIZE	METER BOX	LID	STRAIGHT BALL SERVICE VALVE	STRAIGHT DUAL CARTRIDGE CHECK VALVE
3/4" *	3/4"	FORD CB111-233-L-T-NL	FORD YBL-T	FORD B81-233W-NL	HHC81-333-NL
1"	1"	FORD CB111-444-L-T-NL	FORD YBL-T	FORD B81-344W-NL	HHC81-444-NL

* REQUIRES REDUCER L84-34G NL



ELEVATION VIEW

NOTES:

1. THE CITY OF HENDERSONVILLE SHALL INSTALL WATER METERS.
2. NO METERS WILL BE INSTALLED NOR WATER SERVICE PROVIDED, UNTIL A WRITTEN FINAL ACCEPTANCE OF THE SYSTEM IS ISSUED BY THE CITY.
3. METER BOX SHALL BE BITUMINOUS COATED, CAST IRON BASE, INNER BARREL, AND OUTER BARREL WITH 1-7/8" TOUCH-READ HOLE IN LID.
4. EXTEND TRACER WIRE FROM MAIN TO METER BOX. WIRE NOT SHOWN FOR CLARITY. TRACER WIRE WILL BE A 19 GAUGE, TIN COATED, COPPER CONDUCTOR WITH POLYETHYLENE INSULATION, CORE MATERIAL COMPRISED OF HIGH-TENACITY, WOVEN POLYESTER WITH WATER BLOCKING YARNS ENCAPSULATED IN 30 MIL. BLUE HDPE JACKET; PROVIDING CORROSION RESISTANCE, FLEXIBILITY, IMPACT STRENGTH AND 1800 LBS. TENSILE STRENGTH. TRACER WIRE WILL NOT CONDUCT AN ELECTRICAL CURRENT WHEN STRUCK BY LIGHTNING AND IS DESIGNED FOR DIRECT BURY AND DIRECTIONAL BORING APPLICATIONS. WHEN SPLICES AND LATERAL CONNECTIONS ARE MADE, ONLY GEL FILLED CONNECTORS DESIGNED FOR WIRE WITH WOVEN POLYESTER FIBER CORE ARE TO BE USED. TRACER WIRE SHALL BE TERMINATED IN METER BOX AT MOUNTED TRACE-SAFE® LOCATING CLIP, MOUNTED A MAXIMUM OF 3" FROM TOP OF BOX WITH 304 SS BOLT. TRACER WIRE AND CONNECTORS SHALL BE TRACE-SAFE® WATER BLOCKING TRACER WIRE AND RELATED CONNECTORS, MANUFACTURED BY NEPTCO, INC., OR EQUIVALENT APPROVED BY ENGINEER, AND PRODUCED IN THE UNITED STATES OF AMERICA.

DATE: 02/10/2021	WD DWG. NO. 8	MINIMUM SERVICE LINE: 1" SERVICE LATERAL INSTALLATION
SCALE: NOT TO SCALE		

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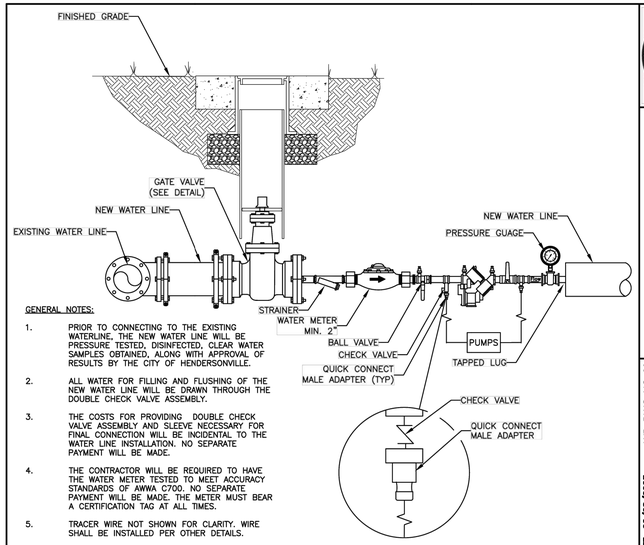

GENERAL NOTES:

1. PRIOR TO CONNECTING TO THE EXISTING WATERLINE, THE NEW WATER LINE WILL BE PRESSURE TESTED, DISINFECTED, CLEAR WATER SAMPLES OBTAINED, ALONG WITH APPROVAL OF RESULTS BY THE CITY OF HENDERSONVILLE.
2. ALL WATER FOR FILLING AND FLUSHING OF THE NEW WATER LINE WILL BE DRAWN THROUGH THE DOUBLE CHECK VALVE ASSEMBLY.
3. THE COSTS FOR PROVIDING DOUBLE CHECK VALVE ASSEMBLY AND SLEEVE NECESSARY FOR FINAL CONNECTION WILL BE INCIDENTAL TO THE WATER LINE INSTALLATION. NO SEPARATE PAYMENT WILL BE MADE.
4. THE CONTRACTOR WILL BE REQUIRED TO HAVE THE WATER METER TESTED TO MEET ACCURACY STANDARDS OF AWWA C700. NO SEPARATE PAYMENT WILL BE MADE. THE METER MUST BEAR A CERTIFICATION TAG AT ALL TIMES.
5. TRACER WIRE NOT SHOWN FOR CLARITY, WIRE SHALL BE INSTALLED PER OTHER DETAILS.

DATE: 02/08/2023	WD DWG. NO. 20	NEW WATER LINE PRESSURE TEST BACKFLOW PREVENTION ASSEMBLY
SCALE: NOT TO SCALE		

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
(828) 697-3000 (office)
www.cityofhendersonville.org

NOTES:

1. FIRE HYDRANTS SHALL BE RATED TO A MINIMUM 250 PSI WORKING PRESSURE IN ACCORDACE WITH AWWA C-502 UNLESS SPECIFIED AS 350 PSI BY THE CITY. HYDRANTS SHALL HAVE A 5¼-INCH BARREL AND STORZ CONNECTION.
2. ALL VALVES AND HYDRANTS SHALL HAVE M. J. CONNECTIONS WITH IRON RETAINING GLAND M.J. RESTRAINT.
3. FIRE HYDRANT SHALL BE FACTORY PAINTED YELLOW, WITH FIELD PAINTED TOUCH-UP, BEFORE PROJECT IS ACCEPTED.
4. HYDRANT VALVE SHALL BE PLACED AS CLOSE AS POSSIBLE TO THE MAIN, BUT DO NOT PLACE VALVE IN PROPOSED OR EXISTING CURB AND GUTTER. IF THE STREET IS SOIL AND NO PAVING IS TO BE DONE AT THIS TIME, THE LOCATION OF THE VALVE IS TO BE DETERMINED BY THE ENGINEER.
5. FIRE HYDRANTS SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
6. HYDRANT BRANCH SHALL NOT BE BACK FILLED UNTIL INSPECTED AND APPROVED BY THE ENGINEER.
7. GATE VALVE AND BOX SHALL BE IN ACCORDANCE WITH STANDARD DETAIL.
8. HYDRANT EXTENSIONS AND/OR OFFSETS SHALL BE APPROVED BY THE ENGINEER.
9. FIRE HYDRANTS WHICH HAVE BEEN INSTALLED MUST BE TAGGED "OUT OF SERVICE" AND BAGGED, UTILIZING A RED CANVAS BAG WITH WHITE LETTERING, UNTIL SUCH TIME AS THE WATER MAIN TO WHICH CONNECTED IS DISINFECTED AND CONNECTED TO THE ACTIVE WATER SYSTEM.

DATE: 04/24/2019	WD DWG. NO. 12	FIRE HYDRANT STANDARD INSTALLATION DETAIL
SCALE: NOT TO SCALE		

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305 Williams Street
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www.cityofhendersonville.org

4/30/2019 11:16:34 AM, mpomraning

TWO-INCH BLOWOFF ASSEMBLY DETAIL

REV.	DATE	COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030845 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	########

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

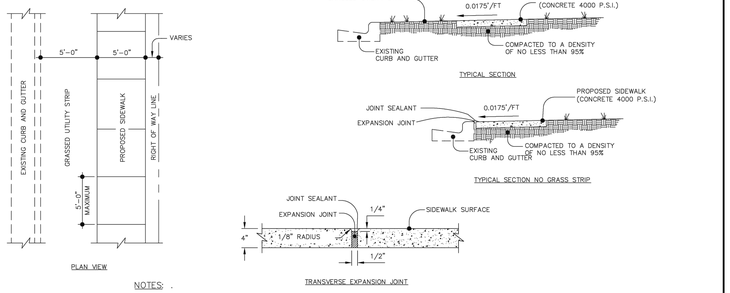
SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: WATERMAIN DETAILS - 2 (SHEET 2 OF 2)

DRAWING NO: 30

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

Y:\Shared\2_ENGR\656605823\5_DESIGN\DWG\SHEETS\WATER PLAN PROFILE.dwg, 9/15/2025 4:46 PM, Toby Harris



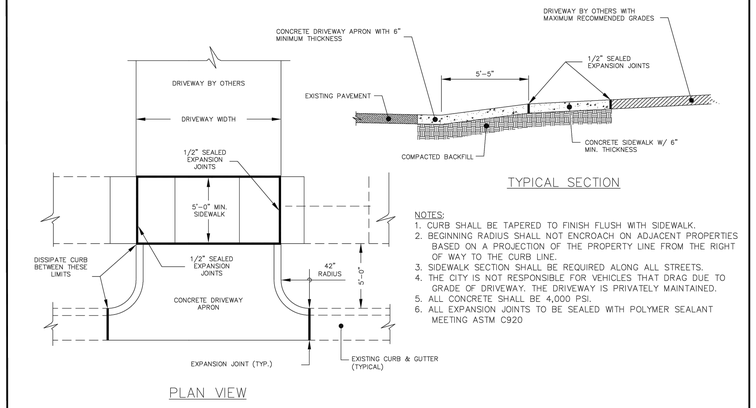
NOTES: .

1. TRANSVERSE EXPANSION JOINTS TO BE A MAXIMUM OF 50 FEET.
2. ALL CONCRETE TO BE FINISHED WITH CURING COMPOUND.
3. A 6 INCH DEPTH IS REQUIRED AT LOCATIONS OF DRIVEWAY CROSSINGS, AT STREET INTERSECTIONS (ALONG THE LENGTH OF RADIUS CURB RETURNS), AND IN THE HANDICAP RAMPS.
4. ALL SIDEWALK MUST BE INSPECTED BY CITY INSPECTOR PRIOR TO CONCRETE PLACEMENT.
5. SIDEWALK CROSS SLOPE WILL BE A MAXIMUM OF 0.02'/1' PER ADA REQUIREMENTS.
6. ALL SIDEWALK WILL BE LEFT IN A BROOM FINISH CONDITION.
7. CONTRACTOR MUST REPAIR ALL DAMAGE TO SIDEWALK PRIOR TO TRANSFER OF OWNERSHIP.
8. EXPANSION JOINT MATERIAL TO BE INSTALLED AT ALL LOCATIONS WHERE SIDEWALK ABUTS A RIGID STRUCTURE.
9. ALL EXPANSION JOINTS TO BE SEALED WITH POLYMER SEALANT MEETING ASTM C920

DATE: 05/19/2023
SCALE: NOT TO SCALE WD DWG. NO. 22

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
(828) 697-3000 (office)
www.cityofhendersonville.org

STANDARD CONCRETE SIDEWALK



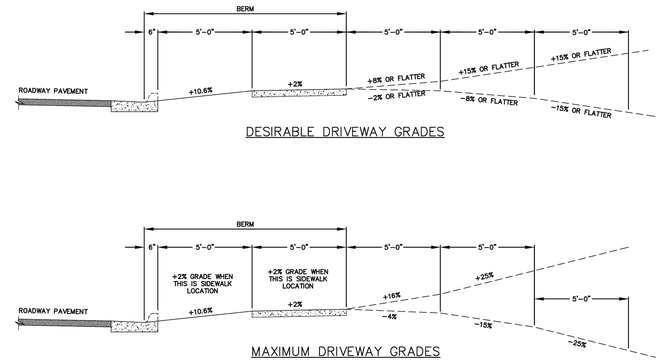
NOTES:

1. CURB SHALL BE TAPERED TO FINISH FLUSH WITH SIDEWALK.
2. BEGINNING RADIUS SHALL NOT ENCROACH ON ADJACENT PROPERTIES BASED ON A PROJECTION OF THE PROPERTY LINE FROM THE RIGHT OF WAY TO THE CURB LINE.
3. SIDEWALK SECTION SHALL BE REQUIRED ALONG ALL STREETS.
4. THE CITY IS NOT RESPONSIBLE FOR VEHICLES THAT DRAG DUE TO GRADE OF DRIVEWAY. THE DRIVEWAY IS PRIVATELY MAINTAINED.
5. ALL CONCRETE SHALL BE 4,000 PSI.
6. ALL EXPANSION JOINTS TO BE SEALED WITH POLYMER SEALANT MEETING ASTM C920

DATE: 05/19/2023
SCALE: NOT TO SCALE WD DWG. NO. 02

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
(828) 697-3000 (office)
www.cityofhendersonville.org

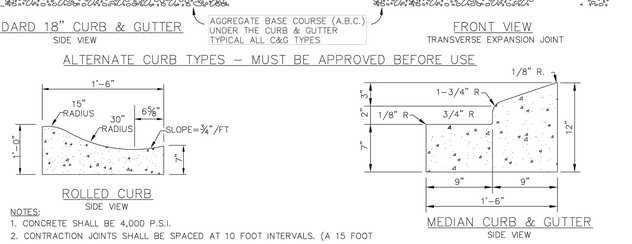
DRIVEWAY APRON TYPE I & II



DATE: 05/19/2023
SCALE: NOT TO SCALE WD DWG. NO. 02G

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
(828) 697-3000 (office)
www.cityofhendersonville.org

DRIVEWAY APRON TYPE I & II GRADES



ALTERNATE CURB TYPES – MUST BE APPROVED BEFORE USE

NOTES:

1. CONCRETE SHALL BE 4,000 P.S.I.
2. CONTRACTION JOINTS SHALL BE SPACED AT 10 FOOT INTERVALS. (A 15 FOOT SPACING WILL BE ALLOWED WHEN A MACHINE IS USED)
3. FINISH ALL CONCRETE WITH CURING COMPOUND.
4. REFER TO **NCDOT** DET. 846.01 FOR CURB & GUTTER SUPERELEVATION RATES.
5. ALL EXPANSION JOINTS WILL BE SEALED WITH JOINT SEALER.

DATE: 05/19/2023
SCALE: NOT TO SCALE WD DWG. NO. 03

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
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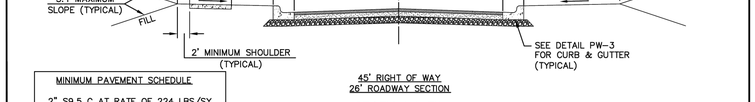
CONCRETE CURB AND GUTTER TYPES



MINIMUM PAVEMENT SCHEDULE

2" S9.5 C AT RATE OF 224 LBS/SY
3" B25.0 C AT RATE OF 342 LBS/SY
6" A.B.C.

NOTES:

1. NORMAL CROWN OF 0.02' PER FOOT UNLESS OTHERWISE REQUIRED TO HAVE SUPERELEVATION.
2. PAVEMENT DESIGN SHALL BE REQUIRED AND APPROVED BY **NCDOT** (FOR NCDOT ROADS) AND/OR CITY OF HENDERSONVILLE PRIOR TO PLACEMENT OF ANY BASE MATERIAL.
3. PAVEMENT DESIGN SHALL BE AS SHOWN OR AS DESIGNED BY GEOTECHNICAL ENGINEER, WHICHEVER IS GREATER.
4. TACK COAT SHALL BE APPLIED BENEATH EACH LAYER OF ASPHALT MIX TO BE PLACED AT A RATE OF 0.04 GAL/SY
5. GRASS UTILITY STRIP REQUIRED UNLESS APPROVED BY PUBLIC WORKS DIRECTOR.
6. FINAL SURFACE COURSE TO BE APPLIED UPON CITY OF HENDERSONVILLE APPROVAL.

DATE: 05/19/2023
SCALE: NOT TO SCALE WD DWG. NO. 04

City of Hendersonville Engineering Department
305 Williams Street
Hendersonville, NC 28792
(828) 697-3000 (office)
www.cityofhendersonville.org

STANDARD LOCAL STREET

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL: NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 030895 TOBIN M. HARRIS
09/16/2024

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: MISCELLANEOUS DETAILS

DRAWING NO: 31

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TOTAL AREA OF SURVEY
13.73 ACRES
(EXCLUDING RIGHTS OF WAY)

B1 – C1
320 LF SHALLOW CONCENTRATED FLOW
(UNPAVED) @ 19.85%

A1 – B1
100 LF SHEET FLOW
(GRASS) @ 8.0%

B2 – C2
282 LF SHALLOW CONCENTRATED FLOW
(UNPAVED) @ 6.4%

A2 – B2
100 LF SHEET FLOW
(GRASS) @ 4.8%

A3 – B3
100 LF SHEET FLOW
(GRASS) @ 5%

B3 – C3
554 LF SHALLOW CONCENTRATED FLOW
(UNPAVED) @ 5%

PRE-DEVELOPED DRAINAGE AREA #1
2.22 AC
CN = 70
Tc = 14.10 MINUTES

PRE-DEVELOPED DRAINAGE AREA #2
2.99
AC
CN = 74
Tc = 14.70 MINUTES

PRE-DEVELOPED DRAINAGE AREA #3
11.36 AC
CN = 73
Tc = 18.70 MINUTES

C1
B1
A1
A3
B3
C3
C2
B2
A2

AMAZING GRACE LN.
20' PRIVATE R/W

FOLETTE ST.
50' PRIVATE R/W

30' SEWER EASEMENT
PER DB 838 PG 434

ZONED: R-20

HYDRAULIC SOIL GROUP
C (HyC, DeB)
W

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1"=50'

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS

ENGINEER'S SEAL:
NORTH CAROLINA PROFESSIONAL SEAL 030893 ENGINEER TOBIN M. MARR
09/16/2024

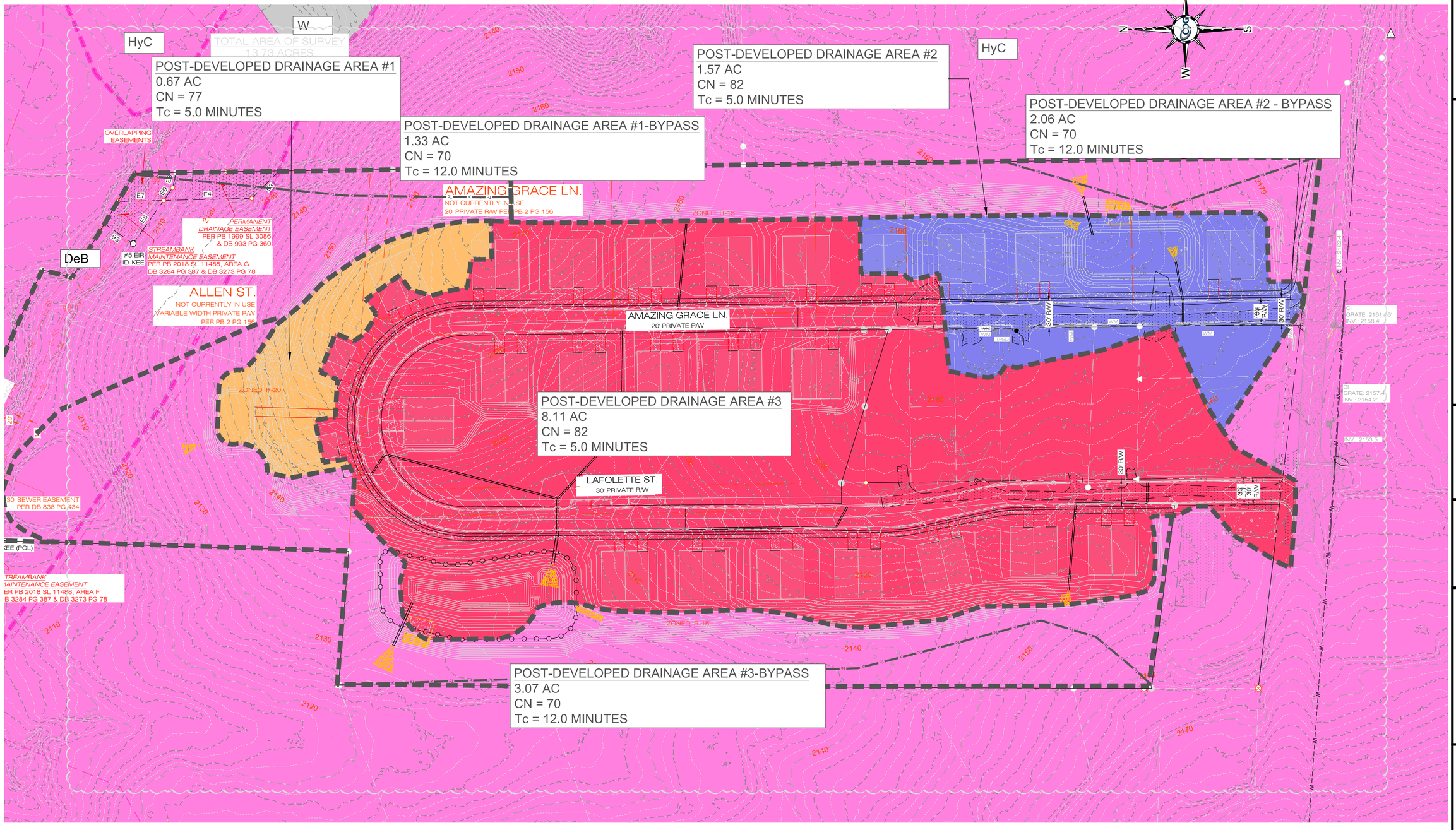
PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704-394-6913
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: PRE DEVELOPMENT DRAINAGE AREA MAP

DRAWING NO: 32



HYDRAULIC SOIL GROUP

C (HyC, DeB)

W

GRAPHIC SCALE

(IN FEET)

1" = 50'

FIRST VICTORY
542 S. CALDWELL ST.
BREVARD, NC 28712
828.884.7934

REVISIONS

REV.	DATE	COMMENTS
2	01/31/2025	ADDRESS CITY & COUNTY COMMENTS

ENGINEER'S SEAL: NORTH CAROLINA PROFESSIONAL SEAL 049853 ENGINEER TOBIN V. HARRIS

01/31/2025

PROJECT #	656605823
DATE:	09/16/2024
DESIGN BY:	DW
DRAWN BY:	DW
APPROVED:	TMH
SCALE:	AS SHOWN

THREE NOTCH GROUP
4301 TAGGART CREEK ROAD
CHARLOTTE, NC 28208
Phone: 704.940.4313
www.3notch.com
License No. C-4973

SIGNAL HILL
SIGNAL HILL ROAD
HENDERSONVILLE, NORTH CAROLINA

SHEET TITLE: 33 - POST DEVELOPMENT DRAINAGE AREA MAP

DRAWING NO: 33

Y:\Share\2_ENGR\656605823\5_DESIGN\DWG\SHEETS\PRE AND POST DEV DA MAPS.dwg, 5/15/2025 4:47 PM, Toby Harris

For use by Principal Authority / Para uso de la Autoridad Principal
Cloudpermit application number / Número de solicitud de Cloudpermit US-NC30720-P-2025-93
PIN / Número de rollo 8235
Application submitted to / Solicitud presentada a Hendersonville, NC, North Carolina / Hendersonville, NC, Carolina del Norte

Description of Subject Property
Address / Dirección 0 NO ADDRESS ASSIGNED
Municipality / Municipio Hendersonville, NC, North Carolina / Hendersonville, NC, Carolina del Norte
PIN / Número de rollo 8235

Purpose of Application
Application type / Tipo de solicitud Site Plan Review — Preliminary Site Plan Review

Applicant		
Last name / Apellido Sexton	First name / Nombre de pila Catherine	Corporation or partnership / Corporación o sociedad First Victory Construction and Development
Street address / Dirección de la calle 542 S. Caldwell Street	Unit number / Número de unidad	Lot / Con.
Municipality / Municipio Brevard	State / Provincia NC	ZIP code / Código postal 28712
Other phone / Otro teléfono		Mobile phone / Teléfono móvil +1 8288847934
Fax		Email / Correo electrónico

Property owner		
Last name / Apellido SUESS, HERTA G TRUSTEE;HERTA G SUESS TRUST	First name / Nombre de pila	Corporation or partnership Corporación o sociedad
Street address / Dirección de la calle 17187 GULF PINE CIR WELLINGTON FL 33414 6354	Unit number / Número de unidad	Lot / Con.
Municipality / Municipio	State / Provincia	ZIP code / Código postal

Other phone / Otro teléfono	Mobile phone / Teléfono móvil
Fax	Email / Correo electrónico

Declaration and Signatures

Applicant

I, Catherine Sexton (The Applicant), do hereby declare that the information contained in this application, the attached schedules and forms, the attached plans and specifications, and other attached documentation is true to the best of my knowledge. If a permit is granted, I agree to comply with Local Ordinances and the conditions of the permit. If the Applicant is a corporation or partnership, I have the authority to bind the corporation or partnership by signing off, I understand that it constitutes a legal signature confirming that I acknowledge and agree to the above declaration.

Digitally signed on 05/16/2025, 1:44:33 PM EDT by Sam Hayes with an authorization letter from Catherine Sexton. / Firmado digitalmente el 16/5/25 13:44:33 EDT por Sam Hayes con una carta de autorización de Catherine Sexton.

Property owner

I, SUESS, HERTA G TRUSTEE;HERTA G SUESS TRUST (The Property owner), do hereby declare that the information contained in this application, the attached schedules and forms, the attached plans and specifications, and other attached documentation is true to the best of my knowledge. If a permit is granted, I agree to comply with Local Ordinances and the conditions of the permit. If the Property owner is a corporation or partnership, I have the authority to bind the corporation or partnership by signing off, I understand that it constitutes a legal signature confirming that I acknowledge and agree to the above declaration.

Digitally signed on 05/16/2025, 1:43:35 PM EDT by Sam Hayes with an authorization letter from SUESS, HERTA G TRUSTEE;HERTA G SUESS TRUST. / Firmado digitalmente el 16/5/25 13:43:35 EDT por Sam Hayes con una carta de autorización de SUESS, HERTA G TRUSTEE;HERTA G SUESS TRUST.

Required Information
Projects proposing any of the following must submit a complete application at least 32 days prior to any Planning Board meeting. • Any commercial, industrial or institutional development consisting of 20,000 or more square feet of floor area. • Addition of more than 30 parking spaces. • Any minor planned residential development consisting of nine or more dwelling units.

Information			
Type of Plan Review Preliminary		List 10 digit PIN or 7 digit PID number for each property 9579065791, 9579068507, 9579068308, 9599068117, 9579067975, 9599076259	
CHECK TYPE OF DEVELOPMENT Residential			
Current Zoning R-15	Total Acreage 13	Proposed Building Sq.ft. 1258.0 sq.ft.	# of Dwelling Units 50

CITY OF HENDERSONVILLE

AGENDA ITEM SUMMARY
PLANNING DIVISION

SUBMITTER: Tyler Morrow

MEETING DATE: June 12th, 2025

AGENDA SECTION: New Business

DEPARTMENT: Community Development

TITLE OF ITEM: Rezoning: Conditional Zoning District –Spartanburg Highway Medical Office Building (25-23-CZD)–*Tyler Morrow– Current Planning Manager*

SUGGESTED MOTION(S):

For Recommending Approval:	**For Recommending Denial:**
I move Planning Board recommend City Council **adopt** an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject property (PINs: 9578-41-6876 & 9578-42-5074) from C3-SU, Highway Business Special Use to CHMU-CZD, Commercial Highway Mixed Use Conditional Zoning District, for the construction of a 42,520 square foot medical office building based on the master site plan and list of conditions submitted by and agreed to by the applicant, [dated 6-4-25] and presented at this meeting and subject to the following: **1. The development shall be consistent with the site plan, including the list of applicable conditions contained therein, and the following permitted uses** Permitted Uses: 1. Offices, business, professional and public ***[for amendments to uses or conditions discussed and agreed upon in the Council meeting (between City & Developer) and not yet represented on the site plan, please use the following language**. Disregard #2 if not needed]* **2. Permitted uses and applicable conditions presented on the site plan shall be amended to include:** **3. The petition is found to be consistent with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:**	I move Planning Board recommend City Council **deny** an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject (PINs: 9578-41-6876 & 9578-42-5074) from C3-SU, Highway Business Special Use to CHMU-CZD, Commercial Highway Mixed Use Conditional Zoning District based on the following: **1. The petition is found to be consistent with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:** The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan. **2. We do not find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because:** 1. The proposed development is not compatible at this location.

The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan. **4. Furthermore, we find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because:** 1. The proposed development would provide citizens who reside on the southern side of Henderson County the opportunity to have primary care, physical therapy, and pharmacy service within a closer proximity to where they live. 2. The proposed development is within close proximity to other institutional uses along this corridor. **[DISCUSS & VOTE]**	**[DISCUSS & VOTE]**

SUMMARY: The City of Hendersonville is in receipt of an application for a Conditional Rezoning from John Bryant, Vice President, Operations and Support Services for UNC Health Pardee, applicant and Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government, property owner. The applicant is requesting to rezone the subject property, PINs 9578-41-6876 & 9578-42-5074 and located between Spartanburg Highway and Old Spartanburg Road, from C-3 SU, Highway Business Special Use to CHMU-CZD, Commercial Highway Mixed Use Conditional Zoning District for the construction of a 42,520 square foot medical office building.

The site plan shows one building proposed at a height of 32'. The development will have access from both Spartanburg Highway and Old Spartanburg Road. The site plan shows the development providing 196 parking spaces to serve the development. There will be a public drop off area on the southern façade of the building and a pharmacy line on the eastern façade.

PROJECT/PETITIONER NUMBER:	25-23-CZD
PETITIONER NAME:	• John Bryant, Vice President, Operations and Support Services for UNC Health Pardee [Applicant] • Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government [Owner]

ATTACHMENTS:	1. Staff Report 2. Comprehensive Plan Review 3. Preliminary Site Plan and Rendering Package 4. Neighborhood Compatibility Meeting Summary 5. Proposed Zoning Map 6. Draft Ordinance 7. Application 8. Deed

REZONING: CONDITIONAL REZONING –SPARTANBURG HIGHWAY MEDICAL OFFICE BUILDING (25-23-CZD)

CITY OF HENDERSONVILLE - COMMUNITY DEVELOPMENT STAFF REPORT

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EXISTING ZONING & LAND USE 3
SITE IMAGES 4
FUTURE LAND USE 8
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STAFF SITE PLAN REVIEW – SUMMARY COMMENTS 9
DEVELOPER-PROPOSED CONDITIONS: 13
OUTSTANDING ISSUES & CITY PROPOSED CONDITIONS: 13
REZONING ANALYSIS – GENERAL REZONING STANDARDS (ARTICLE 11-4) 16
DRAFT COMPREHENSIVE PLAN CONSISTENCY AND REZONING REASONABLENESS STATEMENT 17

PROJECT SUMMARY

- Project Name & Case #:
  - Spartanburg Highway Medical Office Building
  - 25-23-CZD
- Applicant & Property Owner:
  - John Bryant, Vice President, Operations and Support Services for UNC Health Pardee [Applicant]
  - Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government [Owner]
- Property Address:
  - 0 Spartanburg Highway
- Project Acreage:
  - 4.54 Acres
- Parcel Identification (PIN):
  - 9578-41-6876
  - 9578-42-5074
- Current Parcel Zoning:
  - C-3 SU, Highway Business Special Use
- Future Land Use Designation:
  - Mixed Use-Employment
- Requested Zoning:
  - CHMU-CZD, Commercial Highway Mixed Conditional Zoning District.
- Requested Uses:
  - Offices, business, professional and public
- Neighborhood Compatibility Meeting:
  - April 29th, 2025

SITE VICINITY MAP

The City of Hendersonville is in receipt of an application for a Conditional Rezoning from John Bryant, Vice President, Operations and Support Services for UNC Health Pardee, applicant and Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government, property owner. The applicant is requesting to rezone the subject property, PINs 9578-41-6876 & 9578-42-5074 and located between Spartanburg Highway and Old Spartanburg Road, from C-3 SU, Highway Business Special Use to CHMU-CZD, Commercial Highway Mixed Use Conditional Zoning District for the construction of a 42,520 square foot medical office building.

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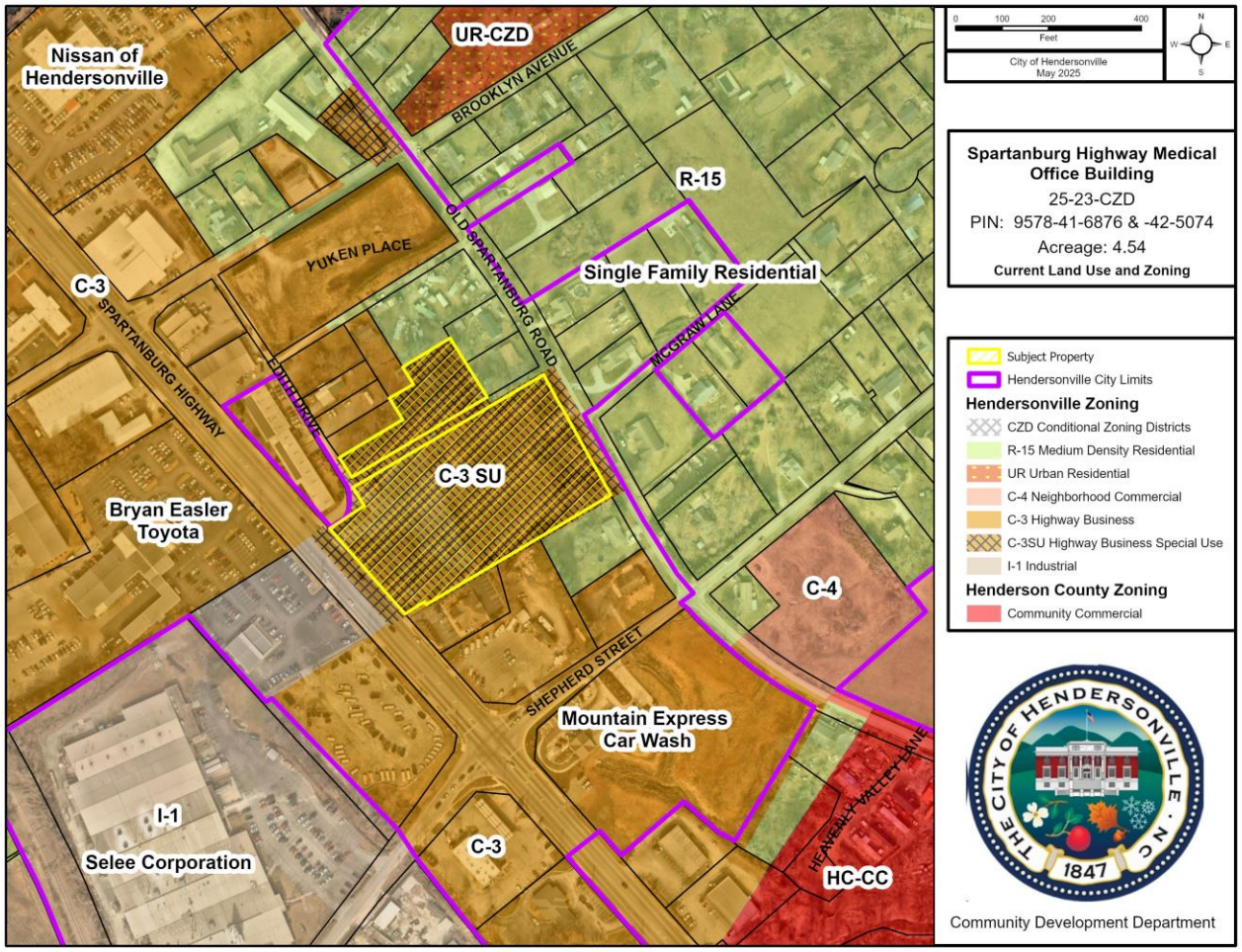
EXISTING ZONING & LAND USE



City of Hendersonville Current Zoning & Land Use Map

The subject property is currently a large vacant property that fronts on both Spartanburg Highway and Old Spartanburg Road. It appears that the site is being utilized currently by utility companies for training. The subject property is zoned C-3-SU, or Highway Business Special Use for a cycle center that was never constructed. The special use permit for that development expired in 2008.

Spartanburg Highway is prominently made up of C-3 Highway Business zoning, a district that is historically found along our major commercial corridors. Just beyond the intersection of Shepherd Street and Spartanburg Highway the corridor transitions to Henderson County's jurisdiction and is zoned community commercial.

Parcels to the east are zoned R-15 medium density residential and are mostly comprised of single family homes. To the northeast sits the recently approved Mabry Woods development which is zoned Urban Residential Conditional Zoning District.

SITE IMAGES

Typical view of the subject property looking southeast from Edith Drive.

View of the subject property from Old Spartanburg Road looking westward.

SITE IMAGES

View of the Duke Energy Transmission lines that run the frontage of the subject property.

View of the subject property frontage on Spartanburg Highway looking south.

SITE IMAGES

View of the privately maintained road that abuts the property known as Edith Drive.

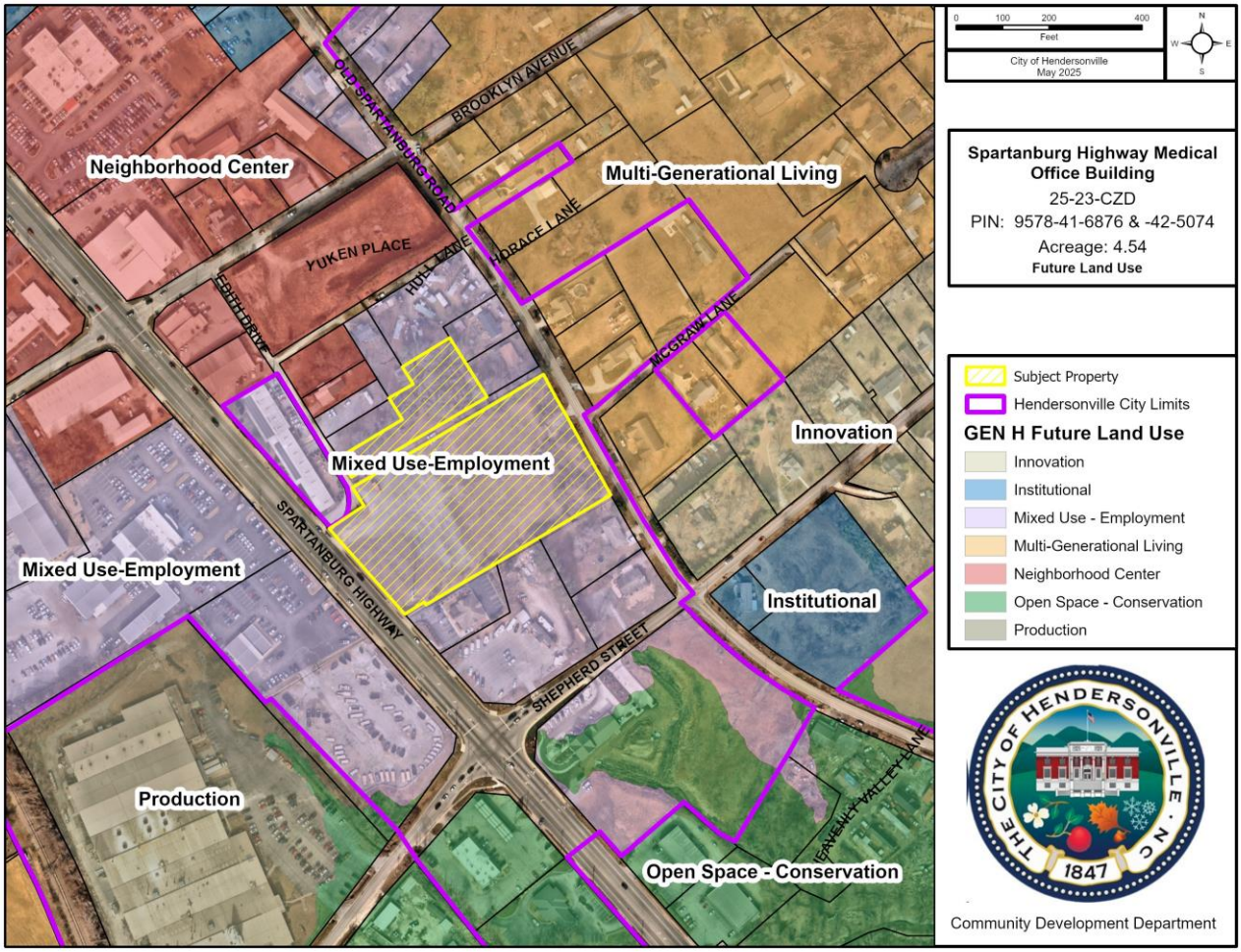
View from the subject property looking west.

SITE IMAGES

View of a mature grove of trees along the northern property boundary.

View of the existing drive access from the subject property onto Old Spartanburg Road.

FUTURE LAND USE



City of Hendersonville Future Land Use Map

The subject property is designated as Mixed Use-Employment, a designation that is found east of the railroad tracks running perpendicular to 176 and follows 176 until Shepherd Street. A node of Neighborhood Center can be found to the north; this node surrounds the Brooklyn Ave and Spartanburg Highway intersection.

Parcels to the south are designated as Open Space Conservation. This designation corresponds with this areas proximity to King Creek and its associated floodplain.

Two parcels to the southeast of the subject property are designated as institutional and this corresponds to the proposed City fire station number 3 and the property directly adjacent to it.

The Selee Corporation to the southwest is designated as production.

REZONING HISTORY

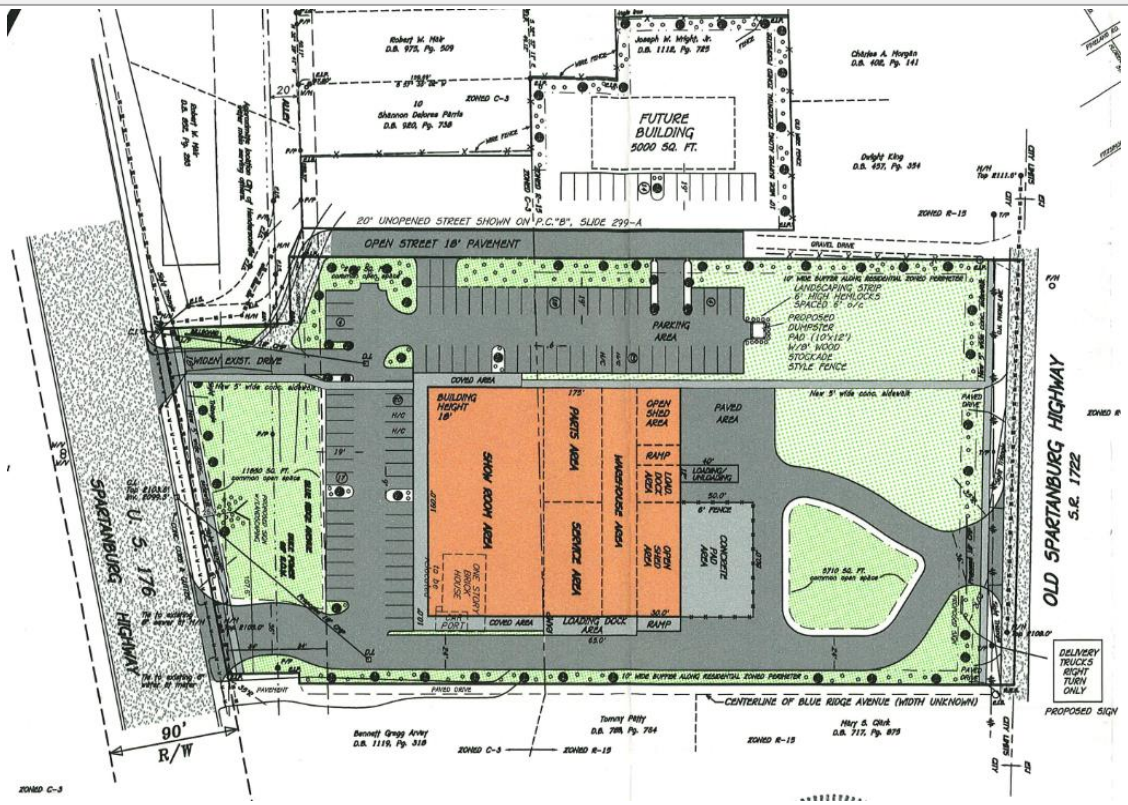
Prior Rezoning (P03-112-SUR)	Summary of Prior Petition	Status
March 4th, 2004 (C-3 and R-15 to C-3 SU)	Development of a 28,000 square foot Dal-Kawa Cycle Center on 3.79 acres, with a 5,000 square foot future expansion building.	Expired (March 4, 2008)

Subject Property History

- **March 4th, 2004:** City Council rezoned and granted a special use permit for the subject property. The subject property was rezoned from C-3 and R-15 to C-3-SU for the construction of a 28,000 square foot Dal Kawa Cycle Center on the 3.79-acre lot and a future 5,000 square foot building on the 0.75-acre lot. The cycle center was to include a showroom, sales, service and parts facility and a warehouse area. The special use permit for this development was set to expire on March 4, 2006.
    - Meeting Minutes: https://library.municode.com/nc/hendersonville/munidocs/munidocs?nodeId=2d9b5a74a0bf4

- **March 9th, 2006:** The Special Use Permit for this project was set to expire on March 4, 2006. The applicant requested a 2-year extension, which was approved by City Council. The project was never constructed and the special use permit expired on March 4th, 2008.
    - Meeting Minutes: https://library.municode.com/nc/hendersonville/munidocs/munidocs?nodeId=2d9b59cf0447b

SITE



STAFF PLAN REVIEW –

SUMMARY COMMENTS

PROPOSED REQUEST DETAILS

Site Plan Summary:

- Proposed Uses:
  - Offices, business, professional and public

- Building:
  - 42,520 square feet of gross floor area.
  - 19,180 Square feet footprint.

- Building Design
  - The building/site is required to meet all building and design requirements of a Commercial Highway Mixed Use development, and this includes but is not limited to building materials, building offsets, building projections, building orientation, building scale, etc.
  - The proposed building meets the design requirements for CHMU developments.

- Height
  - CHMU allows 4 stories for commercial and institutional buildings.
  - Proposed- 32' (2 stories).

- Transportation
  - The site plan shows two access points onto the subject property, both of which are proposed as full movements.
  - One access will be off of Spartanburg Highway and the other access will be from Old Spartanburg Road.

- Sidewalks
  - Sidewalks are provided along the property frontage of Spartanburg Highway and Old Spartanburg Road.
  - Sidewalks will also be provided from the public frontage sidewalks to the front main access of the building.

- Lighting
  - All site lighting will be required to conform to the City's lighting standards for nonresidential developments.

- Parking: Office, Medical
  - Required vs. proposed
    - 1 per each 250 square feet of gross floor area
      - Total required- 170
      - Total provided- 196
  - The subject property is within the Entry Corridor which allows for a 20%

reduction in the required parking. The development is not currently utilizing this reduction, but the reduction is supported by staff.

- Common Space
  - CHMU developments are to provide Common Space. This development is proposing to…
    - Install all service utility lines underground.
    - Provide seating under the main covered entry for better social interaction.
    - Provide an Apple Country bus stop and shelter along the Spartanburg Highway frontage and a bike rack at the building as amenities of the project.

- Natural Resources

  - The most recent USGS topographic maps indicate a blueline stream running through the subject property. However, this stream was piped many years ago and would not be subject to the stream buffer requirements.

- Planting requirements.
  - The site will be required to provide the following landscaping:
    - Vehicular use area plantings
    - Common Space trees
    - Common Open Space Plantings
    - Street trees

  - The new landscaping requirements are being met through new plantings and the utilization of tree credits for qualifying trees.

- Tree preservation
  - The site currently has 53,554 square feet of existing tree canopy (27.07%) of the site.
  - The development is proposing to retain a minimum of 11,335 square feet or 21.17%.
  - The applicants are choosing option 3 for tree preservation and will be required to plant 15% of new canopy.

DEVELOPER-PROPOSED CONDITIONS:

1. None

OUTSTANDING ISSUES & CITY PROPOSED CONDITIONS:

COMMUNITY DEVELOPMENT

Site Plan Comments:

- The site plan accompanying this petition meets the standards established by the Zoning Ordinance for Commercial Highway Mixed Use Developments (5-27).

Proposed City-Initiated Conditions:

- None

DEVELOPMENT REVIEW COMMITTEE COMMENTS:

The Development Review Committee consists of the following Departments/Divisions and Agencies: Engineering, Water/Sewer, Fire Marshal, Stormwater Administration, Floodplain Administration, Public Works, NCDOT, Henderson County Soil & Erosion Control and the City's Traffic Consultant. While all pertinent members of the DRC reviewed this project, staff have provided only the relevant/outstanding comments / conditions below:

TRANSPORTATION CONSULTANT (KIMLEY HORN)

TIA Comments:

- The Traffic Impact Analysis for the development was submitted on May 19th, 2025, by the developer's traffic consultant Mattern and Craig Inc. The City's traffic consultant Kimley Horn provided their review comments on May 28th, 2025. Kimley Horn stated that "Based on a technical review of the TIA as submitted, the analysis as stated should be updated to address the technical issues found. All noted discrepancies, however, are minor and it is not expected that there would be any changes to recommendations once revised."

- The expected **new** trip generation for the proposed development is as follows:

  - 1,826 Daily Trips
  - 118 AM Peak Hour Trips
  - 180 PM Peak Hour Trips

TIA Proposed Mitigation:

- Spartanburg Highway & Old Spartanburg Road (signalized)
  - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the

proposed development.
    - Kimley Horn's Response: The intersection experiences LOS degradation for the EB in the PM peak hour. However, as noted in the report, this is due to the Background LOS being on the cusp of two levels of service. The site is proposed to have minimum impact, and the intersection still performs acceptably. Therefore, no improvements are necessary.

- Spartanburg Highway & Brooklyn Avenue (signalized)
    - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the proposed development.
    - Kimley Horn's Response: Concur

- Spartanburg Highway & Shepherd Street (signalized)
    - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the proposed development.
    - Kimley Horn's Response: The intersection experiences LOS degradation for the EB and SB in the PM peak hour. However, as noted in the report, this is due to the Background LOS being on the cusp of two levels of service. The site is proposed to have minimum impact, and the intersection still performs acceptably. Therefore, no improvements are necessary.

- Old Spartanburg Road & Brooklyn Avenue (unsignalized)
    - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the proposed development.
    - Kimley Horn's Response: Concur

- Old Spartanburg Road & Shepherd Street (unsignalized)
    - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the proposed development.
    - Kimley Horn's Response: Concur

- Spartanburg Highway & Site Drive #1
    - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the

proposed development.
    - Kimley Horn's Response: Concur

- Old Spartanburg Road & Site Drive #2
    - Mattern and Craig's Findings: Given the lack of any significant degradation in level of service or increase in delay within the analysis area, the findings of this report show that no additional improvements should be necessary to accommodate the additional site trips from the proposed development.
    - Kimley Horn's Response: Concur

REZONING ANALYSIS – GENERAL REZONING STANDARDS (ARTICLE 11-4)

GENERAL REZONING STANDARDS	
1) Comprehensive Plan Consistency	**Land Supply, Suitability & Intensity** The subject property was listed as underdeveloped in the land suitability map. The subject property was listed as underdeveloped in the land supply map. Both parcels were designated between "moderately suitable" and "most suitable" for commercial uses.
	Future Land Use & Conservation Map- See Gen H appendix. **Designation:** Mixed Use-Employment **Character Area Description:** Somewhat Consistent **Zoning Crosswalk:** Consistent
2) Compatibility	**Whether and the extent to which the proposed amendment is compatible with existing and proposed uses surrounding the subject property –**
	The proposed development is strategically located near other institutional facilities along this corridor, such as the Henderson County Social Services building and the planned City Fire Station number 3. Introducing CHMU zoning along the Spartanburg Highway corridor aligns with the goals of the Gen H Comprehensive Plan for this area. Therefore, this project is not only compatible with the current character of the corridor but also with its envisioned future.
3) Changed Conditions	**Whether and the extent to which there are changed conditions, trends or facts that require an amendment -**
	The subject property is currently associated with a special use permit that expired in 2008. To proceed with any development on the property, it will first need to be rezoned.
4) Public Interest	**Whether and the extent to which the proposed amendment would result in a logical and orderly development pattern that benefits the surrounding neighborhood, is in the public interest and promotes public health, safety and general welfare -**
	This development would offer residents on the southern side of Henderson County greater access to primary care, physical therapy, and pharmacy services, bringing these amenities closer to their homes.
5) Public Facilities	**Whether and the extent to which adequate public facilities and services such as water supply, wastewater treatment, fire and police protection and transportation are available to support the proposed amendment**

	The site will be served with City services. The property abuts two NCDOT maintained roadways.
6) Effect on Natural Environment	**Whether and the extent to which the proposed amendment would result in significantly adverse impacts on the natural environment including but not limited to water, air, noise, storm water management, streams, vegetation, wetlands and wildlife -**
	According to the 2008 floodplain maps, no part of this property is located within the floodplain or floodway. The most recent USGS topographic maps indicate a blueline stream running through the subject property. However, this stream was piped many years ago and would not be subject to the stream buffer requirements. As indicated in the site plans, the development currently includes 53,554 square feet of tree canopy, covering 27.07% of the site. The proposed development is proposing to retain 11,335 square feet, or 21.17%, of the existing tree canopy.

DRAFT COMPREHENSIVE PLAN CONSISTENCY AND REZONING REASONABLENESS STATEMENT

The petition is found to be **consistent** with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan.

We **[find/do not find]** this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

DRAFT [Rationale for Approval]

- *The proposed development would provide citizens who reside on the southern side of Henderson County the opportunity to have primary care, physical therapy, and pharmacy service within a closer proximity to where they live.*
- *The proposed development is within close proximity to other institutional uses along this corridor.*

DRAFT [Rational for Denial]

- *The proposed development is not compatible at this location.*

Spartanburg Highway Medical Office Building (25-23-CZD)

Chapter 4 - The Vision for the Future	Consistent	Inconsistent	Staff Notes
SUPPLY, SUITABILITY, & INTENSITY			
LAND SUPPLY MAP (Pg. 81, Figure 4.4)	Consistent		The subject property is listed as underdeveloped.
LAND SUITABILITY MAP (Pg. 84-86, Figure 4.5-4.7)	Consistent		The subject property is listed as suitable for commercial uses.
DEVELOPMENT INTENSITY MAP (Pg. 89, Figure 4.9)	N/A		The subject property is not within a focused intensity node.
FUTURE LAND USE & CONSERVATION MAP			
Future Land Use and Conservation Map (Note classification here, Pg. 117, Figure 4.12)	**Mixed Use-Employment**		
Character Area Description (Pg. 122-131)	Somewhat Consistent		The project does not propose a mix of uses within the development.
Zoning Crosswalk (Pg. 132-133, Figure 4.18)	Consistent		

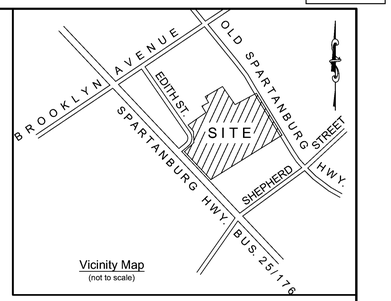
Spartanburg Highway Medical Office Building (25-23-CZD)

Chapter 4 - The Vision for the Future	Consistent	Inconsistent	Staff Notes
GOALS			
Vibrant Neighborhoods (Pg. 93)			
Promote lively neighborhoods that increase local safety.	Consistent		
Enable well-maintained homes, streets, and public spaces.	Consistent		
Promote diversity of ages (stage of life), income levels, and a range of interests.	Consistent		
The design allows people to connect to nearby destinations, amenities, and services.	Consistent		
Abundant Housing Choices (Pg. 93)			
Housing provided meets the need of current and future residents.	N/A		
Range of housing types provided to help maintain affordability in Hendersonville.	N/A		
Housing condition/quality exceeds minimum standards citywide	N/A		
Healthy and Accessible Natural Environment (Pg. 94)			
Recreational (active and passive) open spaces are incorporated into the development.	Consistent		
Water quality is improved with the conservation of natural areas that serve as filters and soil stabilizers.	Consistent		
Natural system capacity (floodplains for stormwater; habitats to support flora/fauna; tree canopy for air quality, stormwater management, and microclimate) is maintained.	Consistent		The development is saving 20% of the existing tree canopy.
Development is compact (infill/redevelopment) to minimize the ecological footprint.	Consistent		
New development respects working landscapes (e.g., orchards, managed forests), minimizing encroachment.	Consistent		
Authentic Community Character (Pg. 94)			
Downtown remains the heart of the community and the focal point of civic activity	N/A		
A development near a gateway sets the tone, presenting the image/brand of the community.	Consistent		The development follows the guidelines of CHMU.
Historic preservation is utilized to maintain the city's identity.	N/A		
City Centers and neighborhoods are preserved through quality development.	N/A		
Safe Streets and Trails (Pg. 95)			
Interconnectivity is promoted between existing neighborhoods through the building out of street networks, including retrofits and interconnectivity of new developments.	Consistent		A cross access easement is provided for the development.
Access is increased for all residents through the provision of facilities that promote safe walking, biking, transit, automobile, ride share, and bike share.	Consistent		The site is proposing a bus stop and is providing sidewalks from the street to the building.
Design embraces the principles of walkable development.	Consistent		
Reliable & Accessible Utility Services			
Wastewater treatment (service and capacity) adequately serves existing and future development	Consistent		

A compact service area (infill, redevelopment) maximizes the utilization of existing infrastructure and feasible service delivery.	Consistent		
Satisfying Work Opportunities (pg. 96)			
The development promotes quality job options.	Consistent		
The lives of residents are enriched with opportunities to learn, build skills, and grow professionally.	Consistent		
Welcoming & Inclusive Community			
Accessibility exceeds minimum standards of ADA, fostering residents' and visitors' sense of belonging.	Consistent		
An inviting public realm (i.e., parks, public buildings) reflects the attitudes of city residents and leaders, and helps residents develop a sense of place and attachment to Hendersonville.	Consistent		
Accessible & Available Community Uses and Services (Pg. 97)			
Private development is plentiful, meeting the demands of current and future populations.	Consistent		
Resilient Community			
N/A			
GUIDING PRINCIPALS (pg. 98)			
Mix of Uses (Pg. 98)			
Revitalization of Outdated Commercial Areas	Consistent		
New business and office space promotes creative hubs.	N/A		
Compact Development (Pg. 100)			
Development is consistent with efforts in the area to establish 15-minute neighborhoods.	Consistent		
The infill project is context sensitive.	Consistent		
Sense of Place (Pg. 102)			
The development contributes to Hendersonville's character and the creation of a sense of place through its architecture and landscape elements. [Place keeping and Placemaking and 3rd Places]	Consistent		
Conserved & Integrated Open Spaces (Pg. 106)			
A diverse range of open space elements are incorporated into the development.	Consistent		
Desirable & Affordable Housing (Pg. 108)			
Missing middle housing concepts are used in the development.	N/A		
Connectivity (Pg. 112)			
The development encourages multimodal design solutions to enhance mobility.	Consistent		
Efficient & Accessible Infrastructure (Pg. 114)			
The development utilizes existing infrastructure	Consistent		

NOTES

* This survey is of existing parcels of land.
* All areas calculated by coordinate computation method.
* This property may be subject to rights-of-way, easements, reservations and restrictions, written and unwritten, recorded and unrecorded, not discovered during the course of this survey.
* The certification shown hereon is not a certification of title, zoning or freedom from encumbrances.
* This survey was conducted without benefit of title work.
* Adjoining property owner information taken from deeds and plats of record as referenced .
* This survey was conducted without benefit of title search.
* Underground utilities shown are based upon paint markings and above ground structures. Call 1-800-632-4949 before digging.
* All distances shown hereon are horizontal ground distances (U.S. Survey feet) unless otherwise noted. To obtain grid distances, utilize a combined factor of 0.999777000 .
* According to Henderson County GIS, property is zoned C-1SU (Central Business Special Use). No zoning report was provided and all zoning information shown hereon should be verified with the Henderson County Planning Department.
* No buildings were observed on the subject parcels .
* No wetland delineation was observed on site.
* There were no proposed changes in street right-of-way lines found or provided. No evidence of recent street or sidewalk construction or repairs was observed during the process of conducting the fieldwork.
* Property corner descriptions with "+", "-" describe the distance above or below the adjacent grade the monument was found.
* 90' right-of-way based on N.C. Board of Transportation Project No. 6.801904, Sheet 12 recorded in Henderson County Register of Deeds Office.



Vicinity Map
(not to scale)

ABBREVIATION LEGEND

CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
DIP	DUCTILE IRON PIPE
N:	NORTHING
E:	EASTING
EL:	ELEVATION
GNSS	GLOBAL NAVIGATION SATELLITE SYSTEM
INV.	INVERT
@	AT
PIN	PARCEL IDENTIFIER NUMBER
S.R.	STATE ROAD
EB	ELECTRICAL BOX
EM	ELECTRICAL METER
TSB	TRAFFIC SIGNAL BOX
A.K.A.	ALSO KNOWN AS
EB	ELECTRICAL BOX
AG	ABOVE GRADE
BG	BELOW GRADE
TTL	TOTAL
D.B.	DEED BOOK
P.B.	PLAT BOOK
M.B.	MAP BOOK
PG.	PAGE
SL.	SLIDE
TDP	TRUNCATED DOME PLATE
CONC.	CONCRETE
RBC	REBAR WITH CAP FOUND
M.B.	MAP BOOK
IRF	IRON ROD FOUND
AI	ANGLE IRON FOUND
OIP	OPEN IRON PIPE FOUND
RR	RAILROAD

SYMBOL LEGEND

- CONCRETE RIGHT-OF-WAY MONUMENT FOUND
- SURVEY CONTROL POINT
- UNMARKED POINT
- CHISELED X FOUND
- MONUMENT FOUND (AS DESCRIBED)
- 5/8" REBAR WITH "ED HOLMES AND ASSOC." CAP SET
- NGS MONUMENT FOUND
- MAGNETIC NAIL FOUND
- MAGNETIC NAIL SET
- STORMWATER MANHOLE
- SANITARY SEWER MANHOLE
- SANITARY SEWER CLEANOUT
- TELEPHONE MANHOLE
- SIGN
- WATER METER
- WATER VALVE
- FIRE HYDRANT
- TELEPHONE PEDESTAL
- UTILITY POLE
- UTILITY POLE WITH GUY WIRE
- LIGHT POLE (SINGLE HEAD)
- BOLLARD
- PAINTED TRAFFIC ARROWS
- 2102.3' SPOT ELEVATION

LOT NUMBERS PLAT CAB B, SLD. 299A

LINE TYPE LEGEND

- PROPERTY LINE (SURVEYED)
- DEED / PLAT LINE (NOT SURVEYED)
- UNDERGROUND WATER LINE
- UNDERGROUND SANITARY SEWER LINE
- OVERHEAD UTILITY LINE
- UNDERGROUND STORMWATER LINE
- EDGE OF CONCRETE
- CONCRETE CURB
- ROAD RIGHT-OF-WAY LINE
- PERMANENT UTILITY EASEMENT LINE
- PERMANENT DRAINAGE EASEMENT LINE
- FENCE (AS DESCRIBED)
- BUILDING SETBACK LINE
- UNDERGROUND COMMUNICATIONS LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND GAS LINE

DWELL CREATIONS, LLC
D.B. 3498, P. 550
P.C. B. SL. 299A
PIN:9578424280

JEANNE & MICHAEL LOUER
D.B. 3054, P. 106
P.C. B. SL. 299A
PIN:9578426107

JOAB ZARAGOZA and wife
PATRICIA RAMIREZ-ZARAGOZA
D.B. 3251, P. 706
P.B. 2017, P. 10786
PIN:9578429221

ZECHARIAH CARTER and wife
MEREDITH STACK
D.B. 3861, P. 459
P.B. 2017, P. 10786
PIN:9578429164

GUY & JO ANN
D.B. 697, P. 485
P.C. B. SL. 299A
PIN:9578423171

DWIGHT & WILMA KING
D.B. 457, P. 354
P.C. B. SL. 299A
PIN:9578426058

BRYAN EASLER ENTERPRISES, INC.
D.B. 1393, P. 180
PIN:9578425074
32284± SQ.FT.
0.74± ACRE

GAYLE MAIR
D.B. 1345, P. 87
P.C. B. SL. 299A
PIN:9578413955

GAYLE MAIR
D.B. 4022, P. 235
P.C. B. SL. 299A
PIN:9578413955

LIMERICK PROPERTIES, LLC
D.B. 28, P. 414
PIN:9578419974

BRYAN EASLER ENTERPRISES, INC.
D.B. 1393, P. 180
PIN:9578416876
165505± SQ.FT.
3.79± ACRE

NC BOARD OF TRANSPORTATION
PERMANENT DRAINAGE EASEMENT
D.B. 554, P. 751

STAR DRAY COMPANY, LLC
D.B. 3072, P. 90
PIN:9578416498

MARIA DEL ROCIO PADRON
CHILEL & ALMER SAUL MIRANDA CHILEL
D.B. 3462, P. 445
PIN:9578418740

GREGG ARVEY
D.B. 119, P. 318
PIN:9578415565

OLD SPARTANBURG HIGHWAY S.R. 1722
NO DOCUMENTATION FOR RIGHT-OF-WAY FOUND
ASPHALT PAVEMENT

BUSINESS U.S. HIGHWAYS 25/176
ASPHALT PAVEMENT

EDITH DRIVE (PRIVATE ROAD PER POWELL BILL MAP)
GRAVEL DRIVE
SEAN MCGRAW LANE
20' PRIVATE ROAD PER PLAT CABINET B, SLIDE 299A
6966± SQ. FT. 0.160± ACRE

SPINDLE FOUND
0.7' NORTH OF LINE
(NOT HELD)

CMP 24"
INV.:2107.8'

APPROXIMATE DIRECTION
CMP 24"

RB 1/2" 0.2' A.G.
0.2' SOUTH OF LINE
(NOT HELD)

IRF 3/4" 0.2' A.G.

IR 5/8" 0.7' B.G.
0.3' WEST OF LINE
(NOT HELD)

OIP 3/4" 0.2' A.G.
0.2' NORTH OF LINE
(NOT HELD)

OIP 3/4" 0.1' A.G.

OIP 3/4" 0.7' A.G.

OIP 1" 0.1' B.G.

AI 1" 2.2' A.G.

CONCRETE

WOVEN-WIRE FENCE

WOOD FENCE

WOODED

GRASS

GRAVEL

TREE LINE

SANITARY SEWER MANHOLE
TOP ELEV:2111.9'
INVERTS NOT OBTAINED.

SANITARY SEWER MANHOLE
TOP ELEV:2110.6'
INVERTS NOT OBTAINED.

SANITARY SEWER MANHOLE
TOP ELEV:2198.4'
INVERTS NOT OBTAINED.

SANITARY SEWER MANHOLE
TOP ELEV:2114.4'
INV. IN PVC 8":2106.3'
INV. OUT PVC 8":2106.2'

SANITARY SEWER MANHOLE
TOP ELEV:2112.7'
INV. IN PVC 8":2105.9'
INV. OUT PVC 8":2105.6'

SANITARY SEWER MANHOLE
TOP ELEV:2108.0'
INV. IN PVC 8" E:2099.6'
INV. IN PVC 8" NW:2099.6'
INV. OUT PVC 8":2099.4'

SANITARY SEWER MANHOLE
TOP ELEV:2102.8'
INVERTS NOT OBTAINED.

SIGN
UNDERGROUND
GAS MARKER

SIGN SPEED LIMIT

RR SPIKE

PARTIALLY BURIED
CONCRETE STORM
BOX

LOCALIZATION POINT
PT. 10001
N:581686.17
E:974645.53
COMBINED FACTOR: 0.999777000

OIP 3/4" DISTURBED

MAG NAIL SET
" CENTER OF RIGHT-OF-WAY
OF BLUE RIDGE AVENUE
PER D.B. 1275, P. 77.

RBC EHA SET 0.0' A.G.
N:581605.83
E:974606.34
NAD 83(2011)

NGS MONUMENT
" JIMNEE "
N:580803.98
E:975106.20
NAD 83(2011)

NORTH CAROLINA BOARD OF TRANSPORTATION
FEE SIMPLE RIGHT-OF-WAY
D.B. 554, P. 751

DUKE ENERGY TRANSMISSION LINE EASEMENT (WIDTH UNKNOWN)
Deed Book 1393, Page 180

24' R/C P. per N.C. Board of Transportation Plans, Project No. 6.801904, Sheet 12

80' R/W
SEE NOTE

N 32°09'54" W 150.46' (T)
N 32°09'54" W 90.10'
S 58°31'52" W 119.93'
S 32°15'01" E 45.94'
S 60°14'06" W 60.01'
S 32°01'45" E 35.44'
N 59°24'02" E 339.01'
S 59°23'01" W 506.39'
S 58°58'20" W 159.38'
S 32°33'38" E 49.89'
N 05°38'18" W 22.36' (TIE)
S 32°03'55" E 45.37'
S 58°29'27" W 89.66'
S 41°30'49" E 245.38'
N 57°55'19" E 49.43'
S 32°04'42" E 7.33'
S 59°47'39" E 1001.40' (GRID)
N 29°28'12" W 208.99'
N 59°16'17" E 492.58'

2105 2110 2115 2106.0' 2107.7' 2102.3' 2101.4' 2104.6' 2108.7' 2110.7' 2109.1' 2107.7'

I, Robert C. Brown, certify that this plat was drawn under my supervision from an actual survey made under my supervision (using deed descriptions recorded in deed books and pages as noted); that the ground survey was completed on July 2nd, 2019; that the boundaries not surveyed are clearly indicated as drawn from information found in deed books and pages as noted; that the ratio of precision or positional accuracy as calculated is 1:20,000; that this plat was prepared in accordance with G.S. 47-30 as amended and is of the following category as described in G.S.47-30(f)(11)

(c)(1) That the survey is of an existing parcel or parcels of land or one or more existing easements and does not create a new street or change an existing street. For the purposes of this subsection, an "existing parcel" or "existing easement" is an area of land described in a single, legal description or legally recorded subdivision that has been or may be legally conveyed to a new owner by deed in its existing configuration.

Furthermore, State Plane Coordinates for this survey were obtained by Global Navigation Satellite System (GNSS) Survey, and the following information was used to perform the GNSS survey:

Horizontal positional accuracy: 0.01m
Vertical positional accuracy: 0.01m
Type of GNSS field procedure: static (post-processed using Trimble Business Center)
Date of GNSS Survey: June 18th, 2024
Datum: horizontal = NAD83 (2011), Vertical = NAVD88
Geoid model: GEOID 12b
Published/Fixed Horizontal Control: NCGS Monument "Jimnee"
Localization point: N:581686 E:974645
Combined scale factor: 0.999777000
Units:U.S. Survey Feet

Witness my original signature, license number, and seal

this date: August 13, 2024

Robert C. Brown
Robert C. Brown, PLS
N.C. Professional Land Surveyor L-2748

NORTH CAROLINA PROFESSIONAL SEAL L-2748 LAND SURVEYOR ROBERT C. BROWN

ED HOLMES & ASSOCIATES LAND SURVEYORS, PA

Submitted electronically by Ed Holmes and Associates Land Surveyors, PA in compliance with North Carolina statutes governing recordable documents and the terms of the submitter agreement with the Henderson County Register of Deeds.

N:\JOBS\24156 Pardee Spartanburg Hwy\DWG\24156 Pardee Spartanburg Hwy Easler CE.dwg

BK 2024 PG 15794 - 15794 (1) DOC# 1001018673
This Document eRecorded: 08/13/2024 12:26:47 PM
Fee: $21.00
Henderson County, North Carolina Tax: $0.00
William Lee King, Register of Deeds

Boundary & Topographic Survey
for
Pardee Hospital
on property owned by
Bryan Easler Enterprises, Inc.

REFERENCES
Record Owner:Bryan Easler Enterprises, Inc.
PIN: 9578-41-6876,9578-42-5074
Deed Book 1393, Page 180
Plat Cabinet B, Slide 299A
City of Hendersonville, Henderson County, NC
Field Work Completed: 7-21-2024
Drawn By: C. Ellison
JOB # 24156

Robert C. Brown, PLS
bob@edholmessurveying.com
www.edholmessurveying.com
Company Licensure # C-2806
200 Ridgefield Court, Suite 208, Asheville, NC 28806
828.225.6562

40' 0' 40' 80' 120'
SCALE 1" = 40'

REVISED 8/13/2024 CHANGED REFERENCE TO BLUE RIDGE AVENUE

D24-021

DocVerify ID: E6FC6793-BC92-4766-A527-A96B5B236ODA
www.docverify.com
Page 1 of 1
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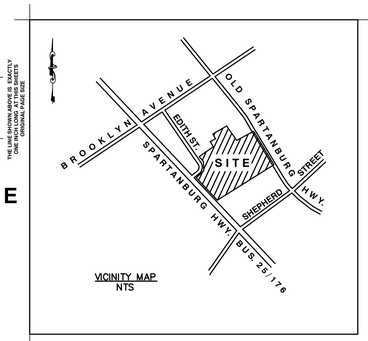


VICINITY MAP
NTS

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ARCH E SHEETS ORIGINAL PLOT SIZE

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED BUILDING SETBACK
- EXISTING 1' CONTOURS
- PROPOSED 1' CONTOURS
- FIRE — FIRE — PROPOSED FIRE WATER SERVICE
- WSv — PROPOSE DOMESTIC WATER SERVICE
- SSv — PROPOSED SEWER SERVICE
- EXISTING STORMWATER PIPE
- PROPOSED STORMWATER PIPE
- PROPOSED 18" CURB AND GUTTER
- PROPOSED LANDSCAPE BUFFER
- PROPOSED ASPHALT
- PROPOSED SD CONCRETE
- PROPOSED HD CONCRETE

PROJECT SUMMARY:

PROJECT NAME:	PARDEE MEDICAL OFFICE BUILDING EASLER LOT
PROJECT ADDRESS:	TBD SPARTANBURG HIGHWAY
PIN:	9578-41-6876 9578-42-5074
DEED REF:	DB:1393 PG:180
PROPERTY AREA:	4.54 AC ±
EXISTING ZONING: PROPOSED ZONING:	C-3SU (CITY OF HENDERSONVILLE) CHMU-CZD (CITY OF HENDERSONVILLE)
PROPERTY OWNER:	HENDERSON COUNTY 800 N JUSTICE STREET HENDERSONVILLE, NC 28791
DEVELOPER:	HENDERSON COUNTY BRYAN RHODES-CAPITAL PROJECTS 828-694-6554
ENGINEER:	JARED L DERIDDER, P.E. 724 5TH AVENUE WEST HENDERSONVILLE, NC 28793 (828) 687-7177
SURVEYOR:	ED HOLMES AND ASSOCIATES LAND SURVEYORS 200 RIDGEFIELD COURT SUITE 208 ASHEVILLE, NC 28806 (828) 225-6562
ARCHITECT:	LS3P 14 O'HENRY AVE, STE 210 ASHEVILLE, NC 28801 (828) 254-1963
WATER SYSTEM: SEWER SYSTEM:	PUBLIC (COH) PUBLIC (COH)

BUILDING SETBACKS:
FRONT – 10'
SIDE – 15'
REAR – 15'

ROAD FRONTAGE:
SPARTANBURG HWY: 245'
OLD SPARTANBURG RD: 297'

PARKING REQUIRED:
OFFICE, MEDICAL:
ONE (1) SPACE PER EACH 250 SF OF GROSS FLOOR AREA
42,520 SF = 170 SPACES (4/1000 SF)
PARKING PROVIDED: 195 SPACES (4.59/1000 SF)

LANDSCAPE BUFFER:
10' TYPE B RESIDENTIAL BUFFER

MAX BUILDING HEIGHT: 4 STORIES
PROPOSED BUILDING HEIGHT: 2 STORIES (32')

NOTES:

1) NO PORTION OF THIS PROJECT IS WITHIN THE 100 YEAR FLOOD PLAIN OR FLOOD WAY.
2) THIS PARCEL AND ALL ADJOINING PARCELS ARE WITHIN THE CITY OF HENDERSONVILLE CITY LIMITS.
3) LIGHTING FOR THE SITE SHALL COMPLY WITH SECTION 6-19 OF THE CITY OF HENDERSONVILLE ZONING ORDINANCE.
4) ALL PLANNED IMPROVEMENTS ARE CURRENTLY PROPOSED TO BE COMPLETED IN ONE PHASE.
5) ALL AREAS SHALL BE PAVED TO NCDOT STANDARDS.
6) ALL PROPOSED PARKING SPACES WILL BE A MINIMUM OF 9'X18' AND 90° PARKING WILL HAVE A MINIMUM DRIVE ISLE WIDTH OF 24'.
7) BUILDING HEIGHTS ARE CALCULATED PER COH ZONING ORDINANCE ARTICLE 12.

8) ALL SIGNAGE WILL BE REVIEWED DURING A SEPARATE REVIEW PROCESS.
9) ALL ON-SITE USGS STREAMS HAVE BEEN PIPED BY PREVIOUS LANDOWNERS.
10) ALL SERVICE LINE CONNECTIONS SHALL BE UNDERGROUND
11) COORDINATION IS UNDERWAY WITH APPLE COUNTRY TRANSIT TO CONFIRM WHETHER OR NOT A PUBLIC BUS STOP COULD BE PLACED ALONG HIGHWAY ROAD FRONTAGE THAT WOULD BE SATISFACTORY FOR AN OPEN SPACE AMENITY.

PROJECT AREA SUMMARY:

PROJECT AREA:
204,675 SF – 4.70 AC – 100%

SITE COVERAGE – BUILDINGS:
19,180 SF – 0.44 AC – 9.37%

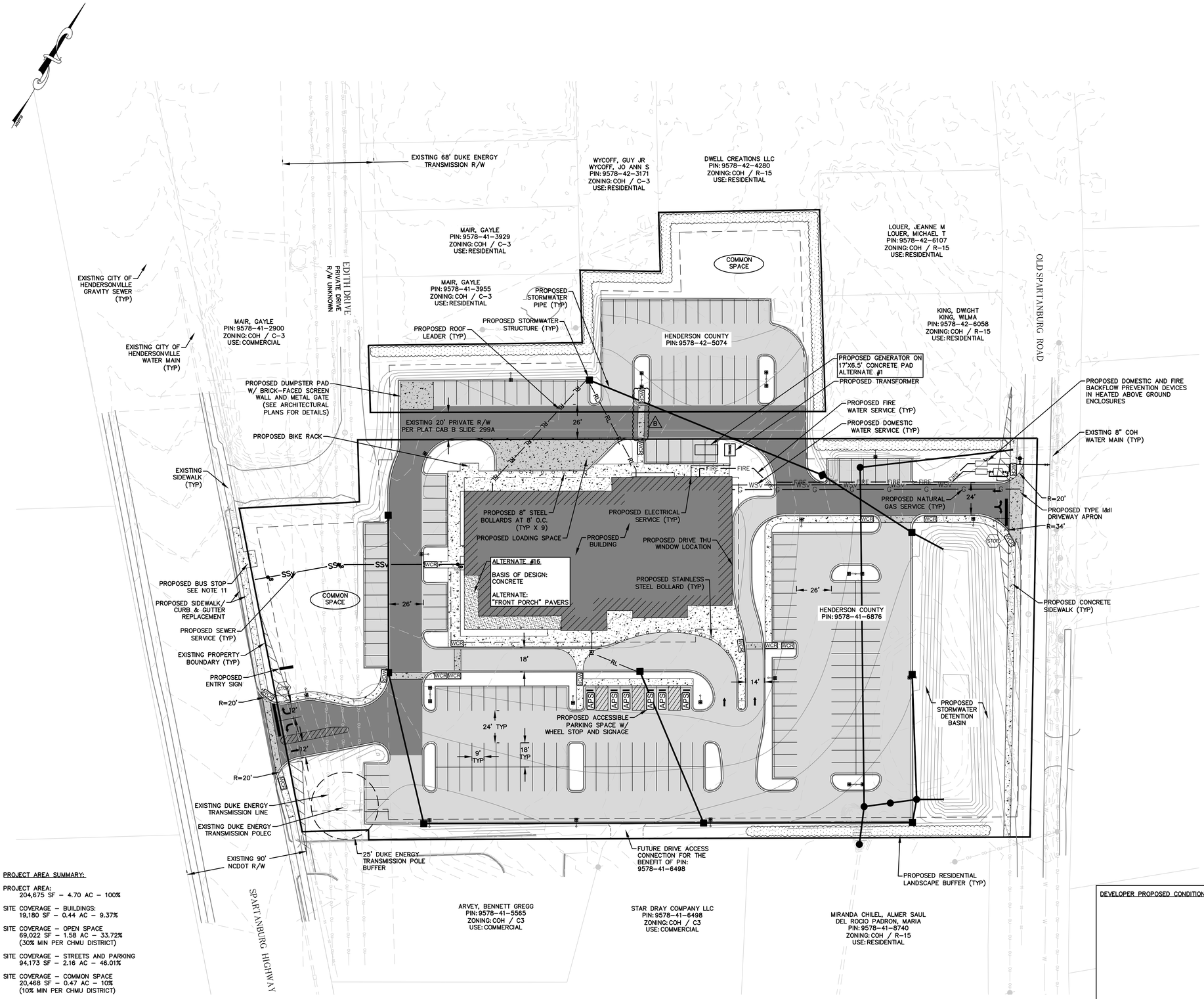
SITE COVERAGE – OPEN SPACE
69,022 SF – 1.58 AC – 33.72%
(30% MIN PER CHMU DISTRICT)

SITE COVERAGE – STREETS AND PARKING
94,173 SF – 2.16 AC – 46.01%

SITE COVERAGE – COMMON SPACE
20,468 SF – 0.47 AC – 10%
(10% MIN PER CHMU DISTRICT)

PRE DEVELOPMENT GROUND COVER SUMMARY
GRASS/OPEN SPACE: 3.8 AC ± (80.85%)
IMPERVIOUS: 0.9 AC ± (19.15%)

POST DEVELOPMENT GROUND COVER SUMMARY
GRASS/OPEN SPACE: 1.58 AC ± (33.72%)
IMPERVIOUS: 3.12 AC ± (66.28%)



GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)

DEVELOPER PROPOSED CONDITIONS

CITY PROPOSED CONDITIONS

LS3P
14 O'HENRY AVENUE, SUITE 210
ASHEVILLE, NC 28801
TEL. 828.254.1963
WWW.LS3P.COM

Preliminary Not For Construction

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HENDERSON CO. & UNCH
PARDEE SH MOB

1427 OLD SPARTANBURG ROAD
HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240136

Δ	DATE	DESCRIPTION

WGLA Engineering
WGLA ENGINEERING, PLLC
724 5th AVENUE WEST
HENDERSONVILLE, NC 28739
(828) 687-7177
WGLA.COM
NC LICENSE P-1342

SHEET NAME:
SITE PLAN

ORIG SUBMISSION: 2025.06.04

SHEET:
C-200

DESIGN DEVELOPMENT

105

5/4/2023 4:11:49 PM

PLANT SCHEDULE CODE LANDSCAPE PLANTING

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	HEIGHT	CONTAINER	REMARKS
TREES						
	ACRU	11	Acer rubrum 'October Glory' October Glory Red Maple	10` Ht.	B&B	LARGE-MATURING; min 3-3.5" cal measured at 6" height for common space
	AEPA	6	Aesculus parviflora Bottlebrush Buckeye	10 gal.	Pot	SMALL-MATURING (Duke easement) for common open space
	AMAR	14	Amelanchier arborea Downy Serviceberry	6` Ht.	B&B	Multi-trunk SMALL-MATURING; one trunk min 2" cal
	CECA	12	Cercis canadensis Eastern Redbud	2" Cal.	B&B	SMALL-MATURING; min 2" cal
	COAM	3	Corylus americana American Hazelnut	10 gal.	Pot	SMALL-MATURING (Duke easement) for common open space
	LIRO	11	Liquidambar styraciflua 'Rotundiloba' Round-Lobed Sweet Gum	10` Ht.	B&B	LARGE-MATURING: min 2" cal
	LITU	15	Liriodendron tulipifera 'JFS-Oz' TM Emerald City Tulip Poplar	10` Ht.	B&B	LARGE-MATURING; min 2" cal
	NYSY	10	Nyssa sylvatica Tupelo	10` Ht.	B&B	LARGE-MATURING; min 2" cal
	OXAR	5	Oxydendrum arboreum Sourwood Tree	2" Cal.	B&B	MEDIUM-MATURING; min 2" cal
	OXAR2	4	Oxydendrum arboreum Sourwood Tree	3" Cal.	B&B	MEDIUM-MATURING; min 3-3.5" cal measured at 6" height for common space
	QUAL	5	Quercus alba White Oak	3" Cal.	B&B	LARGE-MATURING; min 3-3.5" cal measured at 6" height for common space
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	REMARKS
SHRUBS						
	ARAR	33	Aronia arbutifolia Red Chokeberry	3 gal.	Pot	18-24" for landscape buffer
	CAFL	67	Calycanthus floridus Sweetshrub	3 gal.	Pot	18-24" for landscape buffer
	CLAL	43	Clethra alnifolia 'Sixteen Candles' Sixteen Candles Summersweet	3 gal.	Pot	common open space
	FOGA	66	Fothergilla gardenii Dwarf Fothergilla	3 gal.	Pot	18-24" for landscape buffer
	HAVI2	10	Hamamelis virginiana 'Little Suzie' Little Suzie Witch Hazel	3 gal.	Pot	common open space
	HYPO2	10	Hypericum prolificum Broombrush	3 gal.	Pot	common open space
	ILGL	252	Ilex glabra `Densa` Inkberry Holly	5 gal.	Pot	18-24" for landscape buffer
	ITVI	15	Itea virginica 'Merlot' Merlot Sweetspire	3 gal.	Pot	common open space
	RHAR	21	Rhus aromatica 'Gro-Low' Gro-Low Fragrant Sumac	3 gal.	Pot	18-24" for landscape buffer
	RHAR2	13	Rhus aromatica 'Gro-Low' Gro-Low Fragrant Sumac	3 gal.	Pot	common open space

PLANT SCHEDULE NON-CODE PLANTINGS

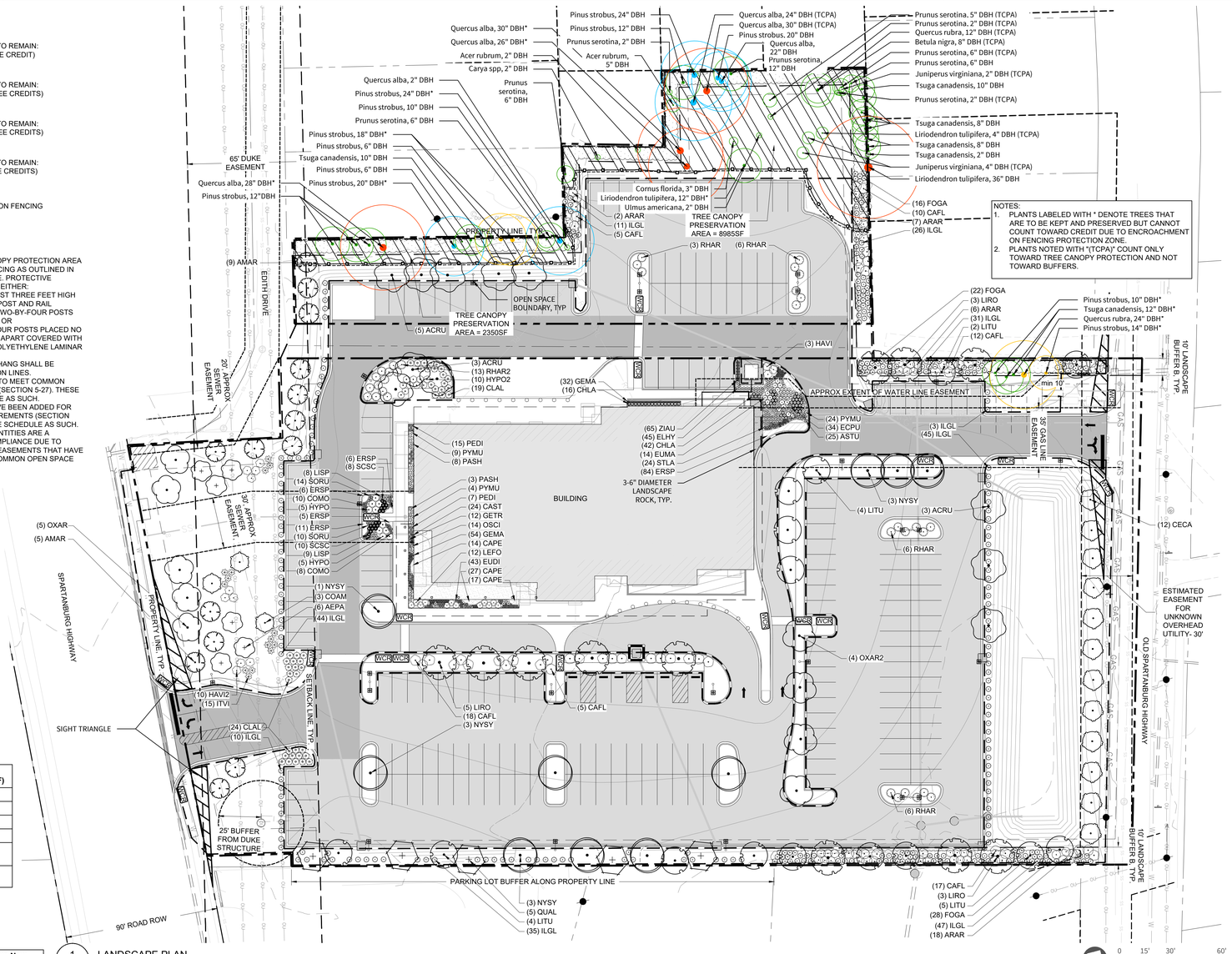
SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	REMARKS
SHRUBS						
	HAVI	3	Hamamelis virginiana 'Little Suzie' Little Suzie Witch Hazel	5 gal.	Pot	
	HYPO	10	Hypericum prolificum Broombrush	5 gal.	Pot	
	LEFO	12	Leucothoe fontanesiana Drooping Leucothoe	5 gal.	Pot	
	PYMU	37	Pycnanthemum muticum Blunt Mountainmint	3 gal.	Pot	
GRASSES						
	CAST	24	Carex stricta Tussock Sedge	1 gal.	Pot	
	CHLA	58	Chasmanthium latifolium Northern Sea Oats	1 gal.	Pot	
	ELHY	45	Elymus hystrix Bottlebrush Grass	1 gal.	Pot	
	PASH	11	Panicum virgatum 'Shenandoah' Shenandoah Switch Grass	1 gal.	Pot	
	SCSC	18	Schizachyrium scoparium 'The Blues' The Blues Little Bluestem	1 gal.	Pot	
PERENNIALS						
	ASTU	25	Asclepias tuberosa Butterfly Milkweed	1 gal.	Pot	
	COMO	18	Coreopsis x 'Moonbeam' Moonbeam Tickseed	1 gal.	Pot	
	ECPU	34	Echinacea purpurea Coneflower	1 gal.	Pot	
	EUDI	43	Eurybia divaricata White Wood Aster	1 gal.	Pot	
	EUMA	14	Eutrochium maculatum `Gateway` Gateway Joe Pye Weed	1 gal.	Pot	
	GETR	12	Gentiana x 'True Blue' True Blue Bottle Genlian	1 gal.	Pot	
	GEMA	86	Geranium maculatum Spotted Geranium	Quart	Pot	
	LISP	17	Liatris spicata 'Kobold' Kobold Blazing Star	1 gal.	Pot	
	OSCI	14	Osmunda cinnamomea Cinnamon Fern	1 gal.	Pot	
	PEDI	22	Penstemon digitalis 'Husker Red' Husker Red Beardtongue	1 gal.	Pot	
	SORU	24	Solidago rugosa `Fireworks` Fireworks Wrinkleleaf Goldenrod	1 gal.	Pot	
	STLA	24	Stokesia laevis Stokes' Aster	1 gal.	Pot	
	ZIAU	65	Zizia aurea Golden Alexander	Pint	Pot	
GROUND COVERS						
	CAPE	58	Carex pensylvanica Pennsylvania Sedge	plug		15" o.c. triangulated spacing
	ERSP	112	Eragrostis spectabilis Purple Lovegrass	plug		18" o.c. triangulated spacing

LEGEND

- EXISTING TREE TO REMAIN: 2-12" DBH (1 TREE CREDIT)
- EXISTING TREE TO REMAIN: 13-18" DBH (2 TREE CREDITS)
- EXISTING TREE TO REMAIN: 19-24" DBH (3 TREE CREDITS)
- EXISTING TREE TO REMAIN: 25"+ DBH (4 TREE CREDITS)
- TREE PROTECTION FENCING

NOTES

1. ALL TREES WITHIN TREE CANOPY PROTECTION AREA MUST BE PROTECTED BY FENCING AS OUTLINED IN SECTION 15-4D(1) IN THE CODE. PROTECTIVE BARRIERS SHALL CONSIST OF EITHER:
   - 1.1. A FENCE WHICH IS AT LEAST THREE FEET HIGH AND CONSTRUCTED IN A POST AND RAIL CONFIGURATION, USING TWO-BY-FOUR POSTS AND ONE-BY-FOUR RAILS; OR
   - 1.2. A FENCE WITH TWO-BY-FOUR POSTS PLACED NO FARTHER THAN TEN FEET APART COVERED WITH A FOUR-FOOT ORANGE POLYETHYLENE LAMINAR SAFETY FENCING.
2. ALL PLANTINGS BELOW OVERHANG SHALL BE IRRIGATED VIA DRIP IRRIGATION LINES.
3. 20 TREES HAVE BEEN ADDED TO MEET COMMON SPACE TREE REQUIREMENTS (SECTION 5-27). THESE ARE NOTED ON THE SCHEDULE AS SUCH.
4. 9 TREES AND 102 SHRUBS HAVE BEEN ADDED FOR COMMON OPEN SPACE REQUIREMENTS (SECTION 15-13) AND ARE NOTED ON THE SCHEDULE AS SUCH. THESE TREE AND SHRUB QUANTITIES ARE A PROPOSED ALTERNATIVE COMPLIANCE DUE TO RIGHTS-OF-WAY AND UTILITY EASEMENTS THAT HAVE CREATED LIMITATIONS FOR COMMON OPEN SPACE PLANTINGS.



1 L1.0 LANDSCAPE PLAN

PROPERTY INFORMATION

PIN	EXISTING TREE CANOPY AREA (SF)
9578425074	29,601.36
9578416876	23,952.77
TOTAL CANOPY	53,554.13
TIER ONE REQUIRED PRESERVATION (20%)	10711
TIER ONE ACTUAL PRESERVED	**11335**

TREE CANOPY PRESERVATION REQUIREMENTS

	Tier One Canopy Preserved	Tier Two Canopy Preserved	Tier Two New Canopy Installed Required
Option 1	10711 sf (20%)	5355 sf (10%)	0 sf (0%)
Option 2	10711 sf (20%)	2678 sf (5%)	6426 sf(7%)
Option 3	10711 sf (20%)	0 sf (0%)	8033 sf (15%)

NEW TREE CANOPY TO BE INSTALLED (TIER TWO)

Size of Tree	Tree Canopy Credit (SF)	Quantity Provided	Area Provided (SF)
Large Maturing	872	46	40,112
Medium Maturing	350	8	2,800
Small Maturing	144	35	5,040
TOTAL TIER TWO NEW CANOPY (SF)			47,952

VEHICULAR USE AREA

1 TREE/ 2 SHRUBS PER 3,000 SF OF VEHICULAR AREA

TOTAL VEHICLE USE AREA 95,057 SF

	TOTAL QUANTITY	*QUANTITY IN ISLANDS*	*BROADLEAF CANOPY (MIN 75%)*
Required Trees	32	16	24
Required Shrubs	64	32	N/A
Proposed Trees	**37**	**16**	**29**
Proposed Shrubs	**138**	**33**	**N/A**

*does not include existing trees to remain

VEHICULAR USE AREA - BUFFERING FROM STREET

3' HEIGHT AT MATURITY; CAN INCLUDE PLANT MATERIAL OR A COMBINATION OF GRADE CHANGE AND PLANT MATERIAL. AT LEAST ONE EVERGREEN OR DECIDOUS SHRUB PLANTED FOR EVERY 5' LF OF BUFFER REQUIRED

Ilex glabra (inkberry holly) provided at 5' on center along parking lot edges where required. Portion along northwest corner also serves as dumpster screening.

NOTE: no landscape planting is permitted within recorded ROW between two parcels

VEHICULAR USE AREA - BUFFERING ALONG PROPERTY LINE

ONE LARGE EVERGREEN OR DECIDUOUS TREE AND 5 EVERGREEN OR FLOWERING SHRUBS FOR EVERY 40 LINEAR FEET OF PROPERTY LINE THAT PARALLELS THE VEHICULAR USE AREA.

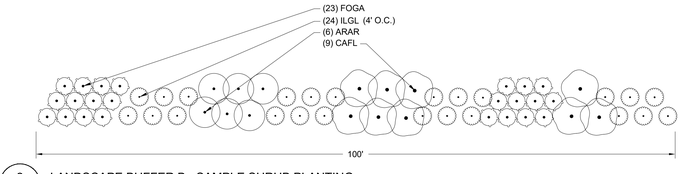
Section Length	*Required Trees*	*Required Shrubs*	***Provided Trees***	***Provided Shrubs***
283	7	35	**7**	**35**

* does not include trees added for common area

COMMON SPACE

10% OF SITE; 1 TREE PER 1000SF; MIN 3-3.5" CAL

TOTAL SF REQUIRED	**20473**	*Provided*
TOTAL TREES REQUIRED	**20**	20



2 L1.0 LANDSCAPE BUFFER B - SAMPLE SHRUB PLANTING NTS

EXISTING TREE CREDITS

Size of Tree	Equivalent Credit (# of trees)	Quantity Preserved (Landscape Buffer)	Total Credits (Buffer)	Quantity Preserved (TCPA only)	Total Credits (TCPA)
2-12" cal	1	25	25	11	11
13-18" cal	2	0	0	0	0
19-24" cal	3	3	9	1	3
25" cal +	4	1	4	1	4
EXISTING TREE CREDITS	29		**38**	13	**18**
TOTAL EXISTING TREE CREDITS					**56**

STREET TREES

WHERE OVERHEAD UTILITY LINES ARE PRESENT, STREET TREES SHALL BE PLANTED AT THE RATE 1 SMALL-MATURING TREE (<25 FEET IN HEIGHT) FOR EVERY 25 LINEAR FEET OF PROPERTY ABUTTING A STREET.

**TREES DO NOT NEED TO BE SPACED EVENLY. THEY MAY BE CLUSTERED WITH A MINIMUM SPACING OF 15 TREES AND MAXIMUM SPACING OF 75 FEET.

*NO STREET TREES CAN BE PLANTED FARTHER THAN 35 FEET FROM THE EDGE OF THE RIGHT-OF-WAY TO COUNT AS STREET TREE.

STREET NAME	*LENGTH*	*TREES REQUIRED*	***TREES PROVIDED***	*TYPE*
Spartanburg Highway	245	10	**5**	Medium Maturing (beside Duke transmission line)
			5	Small Maturing (below Duke transmission line)
Edith Drive	206	8	**9**	Small Maturing (below Duke transmission line)
Old Spartanburg Highway	297	12	**12**	Small Maturing (below overhead utility line)

OPEN SPACE

30% OF SITE; 1 TREE AND 5 SHRUBS PER 4000SF; 50% OF TREES TO BE CANOPY TREES; 70% OF TREES LARGE MATURING AND REMAINING TO BE MEDIUM-MATURING

TOTAL SF REQUIRED	**61420**			
TOTAL TREES REQUIRED	**15**			
TOTAL SHRUBS REQUIRED	**77**			

Section	*SF*	***Provided Large-Maturing Canopy Trees***	***Provided Large-Maturing EvergreenTrees***	***Provided Medium Maturing Trees***	***Provided Shrubs***
North	32909	30*	23*	3*	250
South	23217	20	0		145
Interior	7918	25	0	3	158
TOTALS	**64044**	**73**	**0**	**3**	**553**

* refer to "Existing Tree Credits" chart and plan

LANDSCAPE BUFFER B

PER 100 LINEAR FEET OF BUFFER: 4 BROADLEAF CANOPY TREES (MIN 1.5-1.75" CAL), 25 EVERGREEN SHRUBS 4' O.C. (18-24"), AND 33 FLOWERING SHRUBS (18-24")

Section	*Length*	*Required Trees*	*Required Evergreen Shrubs*	*Required Flowering Shrubs*	***Provided Trees (credit)****	***Provided Trees (planted)***	***Provided Evergreen Shrubs***	***Provided Flowering Shrubs***
North Side	765	31	191	252	**37**	**5**	**68****	**80****
Southeast Side	190	8	48	63	**n/a**	**8**	**47**	**63**
* refer to "Existing Tree Credits" chart for trees included in North Side Landscape Buffer B				TOTAL				

** quantity of shrubs provided NOT within tree canopy protection area; supplement as needed between existing trees using detail 2 this sheet and code requirements above as a guide

LS3P
14 O'HENRY AVENUE, SUITE 210
ASHEVILLE, NC 28801
TEL. 828.254.1963
WWW.LS3P.COM

EQUINOX
14 O'Henry Ave, Suite 206
Asheville, NC 28801
t 828.253.6856

NOT FOR CONSTRUCTION

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HENDERSON CO. & UNCH PARDEE SH MOB

1427 OLD SPARTANBURG ROAD
HENDERSONVILLE, NC 28792

L53P PROJECT: 0403-240136

Δ	DATE	DESCRIPTION

SHEET NAME: PLANTING PLAN

ORIG SUBMISSION: 2025.04.14

SHEET: L1.0

DESIGN DEVELOPMENT

5/4/2023 4:11:49 PM

B1 DEPARTMENTAL PLAN- LEVEL 1

1/8" = 1'-0"

TRUE NORTH

PROJECT NORTH

DEPARTMENTAL LEGEND

- BUILDING SUPPORT
- COMMUNITY CONFERENCE CENTER
- GENERAL STAFF SUPPORT
- IMAGING
- PHARMACY
- PUBLIC
- REHAB
- VERT CIRC
- UNASSIGNED/ ADD ALTERNATE

4/14/2025 11:28:42 AM

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ALL ORIGINAL PLOT SIZES

LS3P
14 O'HENRY AVENUE, SUITE 210
ASHEVILLE, NC 28801
TEL. 828.254.1963
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HENDERSON CO. & UNCH PARDEE SH MOB

1427 OLD SPARTANBURG ROAD
HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

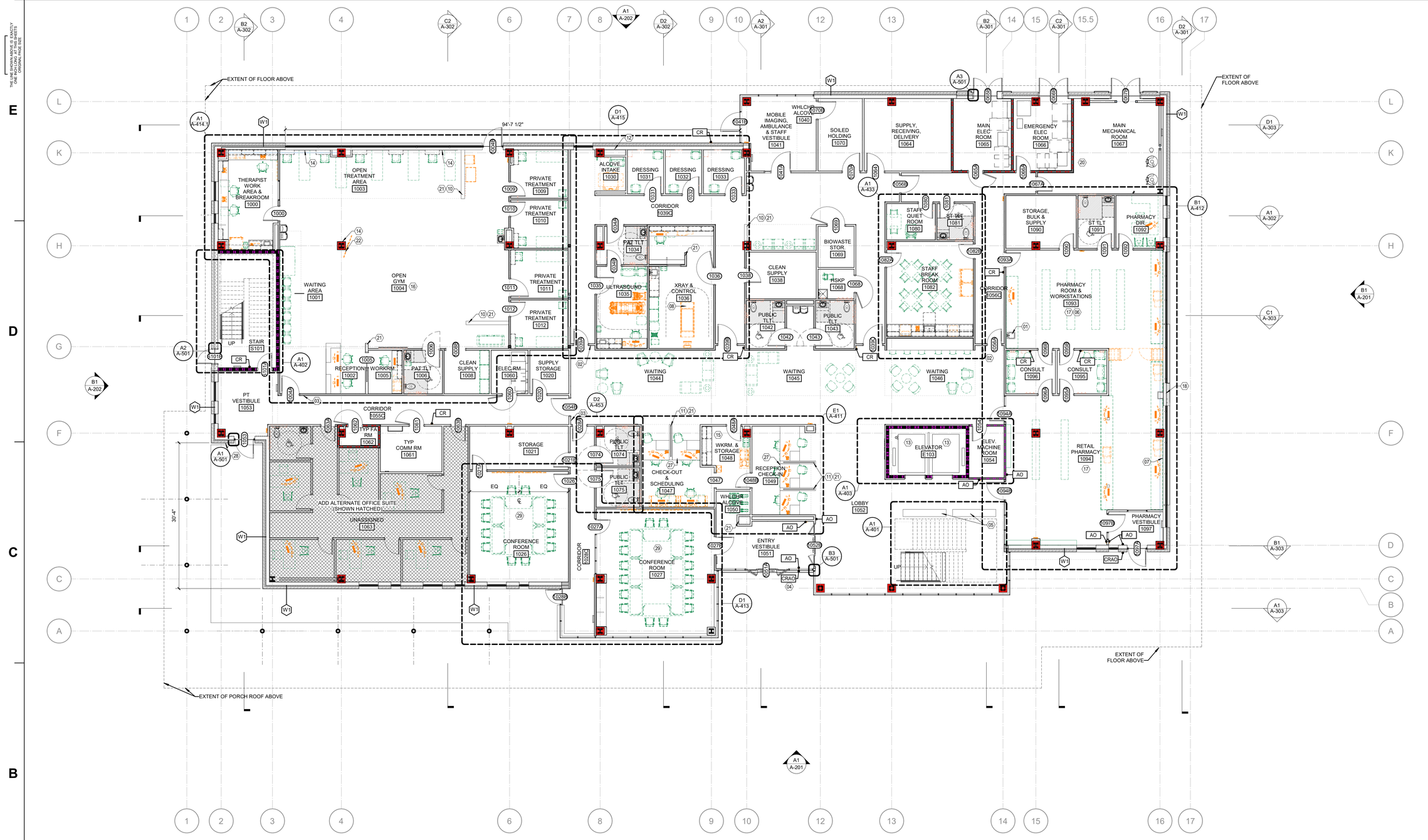
Δ	DATE	DESCRIPTION

SHEET NAME:
DEPARTMENTAL PLAN- LEVEL 1

ORIG SUBMISSION: 2025.04.14

SHEET:
A-101A

DESIGN DEVELOPMENT



B1 OVERALL FLOOR PLAN- LEVEL 1

1/8" = 1'-0"

TRUE NORTH / PROJECT NORTH

FLOOR PLAN SHEET NOTES

A. EXTERIOR DIMENSIONS AT MASONRY VENEER ARE COURSING, INTENDED DIMENSION FROM THE FACE OF MASONRY.
B. EXTERIOR DIMENSIONS AT STUCCO VENEER ARE TO FACE OF METAL STUD.
C. INTERIOR DIMENSIONS INDICATED ARE TO FACE OF STUD, FACE OF MASONRY AND CENTERLINES OF COLUMNS, UNO.
D. LOCATE INTERIOR DOOR OPENINGS 4" FROM NEAREST PERPENDICULAR WALL, UNLESS NOTED OTHERWISE ON DOOR SCHEDULE OR DIMENSIONED OTHERWISE.
E. RATED WALLS/PARTITIONS TO BE CONSTRUCTED TIGHT TO STRUCTURE. ALL PENETRATIONS AND TERMINAL JOINTS ARE TO BE INSTALLED AS SHOWN IN APPLICABLE UL JOINT OR PENETRATION DETAIL.
F. WHERE PARTITIONS OF DIFFERENT FIRE RATINGS INTERSECT, THE HIGHEST RATED PARTITION SHALL CONTINUE THROUGH. MAINTAIN PARTITION FIRE RATING BEHIND RECESSED FIRE EXTINGUISHER CABINETS.
G. RATED WALLS INTERSECTING EXTERIOR WALLS SHALL EXTEND TO THE INSIDE FACE OF EXTERIOR SHEATHING.
H. INSTALL BLOCKING IN PARTITIONS FOR CASEWORK, WALL MOUNTED EQUIPMENT, TRIM, AND RELATED CONSTRUCTION.
I. SEE LIFE SAFETY PLANS FOR LOCATIONS OF FIRE RATED AND SMOKE WALLS
J. SEE SHEET **A-001** FOR CONSTRUCTION SUBSYSTEMS.
K. SEE SHEET **A-002, A-003** FOR PARTITION TYPES.
L. SEE SHEET **A-012** FOR INTERIOR ELEVATIONS, ACCESSORY DESCRIPTIONS & MOUNTING HEIGHTS.
M. SEE STRUCTURAL DRAWINGS FOR SLAB DEPRESSIONS AND CUTOUTS.
N. SEE BUILDING ELEVATION DRAWINGS FOR LOCATION OF EXTERIOR MASONRY CONTROL JOINTS.
O. FIELD VERIFY LOCATION OF INTERIOR WALL & CEILING CONTROL JOINTS REQUIRED IN THE SPECIFICATION WITH ARCHITECT PRIOR TO INSTALLATION.
P. WALLS, INCLUDING GYP. BD. AT PERIMETER OF ROOMS/SPACES WITHOUT CEILINGS, i.e. EXPOSED STRUCTURE, SHALL EXTEND TO STRUCTURE ABOVE.
Q. GC TO SUBMIT CONTROL JOINT SHOP DRAWINGS PROVIDING INTERIOR CONTROL JOINT LOCATIONS TO MEET ASTM C840.

EQUIPMENT & FURNITURE LEGEND

IN THE SUBSEQUENT ROOM DATA SHEETS, REFER TO THIS SCHEDULE AND LEGEND FOR INFORMATION ON TAGGED EQUIPMENT.

TOILET & OTHER ACCESSORIES, REFER TO RESPONSIBILITY MATRIX ON SHEET **A-012** FOR OWNER OR CONTRACTOR RESPONSIBILITY.

ARCHITECTURALLY-SIGNIFICANT EQUIPMENT, APPLIANCES AND/OR FURNISHINGS THAT REQUIRE BLOCKING, POWER, DATA, AND/OR OTHER CONTRACTOR RESPONSIBILITIES FOR INSTALLATION. LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. CONFIRM SPECIFICATIONS AND COORDINATE INSTALLATION REQUIREMENTS WITH THE OWNER PRIOR TO INSTALLATION. REFER TO RESPONSIBILITY MATRIX ON SHEET **A-004** FOR OWNER AND CONTRACTOR RESPONSIBILITY.

ROLLER SHADES AT ALL WINDOWS; OWNER-FURNISHED, OWNER-INSTALLED. CONTRACTOR SHALL PROVIDE 9" GWB SOFFIT POCKET FOR RECESSED INSTALLATION AT ALL EXTERIOR WALL LOCATIONS.

NON-ARCHITECTURALLY-SIGNIFICANT EQUIPMENT AND / OR FURNISHING. ALL ITEMS ARE OWNER FURNISHED, OWNER INSTALLED.

PARTITION GRAPHICS

GRAPHIC SAMPLE: 1 HOUR RATED CMU FIRE/SMOKE BARRIER:

8M1C

- SEE FILL PATTERN LEGEND FOR FIRE-RESISTANCE RATING
- SEE COLOR LEGEND FOR HEIGHT CONDITION AND FIRE/SMOKE PROTECTION TYPE
- SEE PARTITION TAG AND SCHEDULE FOR COMPLETE PARTITION INFORMATION

COLOR LEGEND

NON-RATED PARTITION TO 6" ABOVE CEILING, U.N.O.

NON-RATED PARTITION TO DECK

FLOOR PLAN NOTES BY NUMBER

# NUMBER	NOTE
01	PLUMBING FIXTURE SPECIFICATIONS SHALL BE COORDINATED WITH VENDOR-PROVIDED MILLWORK; CLARIFICATION OF RESPONSIBILITY OF SINK (OWNER VS. VENDOR) PROVIDED IS REQ'D; CONTRACTOR SHALL, AT MINIMUM, PROVIDE PLUMBING SERVICE (SUPPLY AND WASTE) PIPING
02	ADD ALTERNATE: CARD READER
03	ADD ALTERNATE: WAVE OPERATED DOOR AUTO-OPERATOR, BOTH SIDES OF DOOR
04	CARD READER, SLIM PROFILE WHERE INSTALLED ON WINDOW MULLION; FOR AFTER-HOURS / STAFF ACCESS
05	PLAM BENCH, REFER TO DETAIL E5/A-761; LOCATION IS APPROXIMATE
05	WOOD VENEER BENCH, REFER TO DETAIL E5/A-761; LOCATION IS APPROXIMATE
06	ALL OUTLETS TO SERVE OWNER-PROVIDED EQUIPMENT SHALL BE 40" AFF
07	FOR FULL LENGTH OF WALL BETWEEN VESTIBULE AND DRIVE-THROUGH WINDOW. PROVIDE WALL-BLOCKING FOR VENDOR-PROVIDED SHELVING
08	OWNER-PROVIDED EQUIPMENT; COORDINATE STRUCTURAL AND MEP REQUIREMENTS WITH MANUFACTURER'S RECOMMENDATIONS; LEAD-LINING REQUIREMENTS SHALL BE DETERMINED BY OWNER'S PHYSICIST.
09	PLUMBING FIXTURES SHALL HAVE SHUT-OFF OPERABLE FROM LABORATORY SIDE FOR DRUG-TESTING
10	PARTIAL HEIGHT WALL W/ SOLID SURFACE CAP
11	PARTIAL HEIGHT WALL W/ SOLID SURFACE WATERFALL CAP AND SIDES; FRAMELESS SUSPENDED 3-FORM RESIN PANEL
12	SHOREPOWER CONNECTION FOR MOBILE IMAGING
13	ELEVATOR BASIS OF DESIGN: OTIS GEN3EDGE 4500 LB WITH FRONT OPENING 48" DOOR (CAB CLEAR DIMENSIONS: 7'-11"D X 5'-6"W X 7'-7"H), NON-SEISMIC, TWO-STOP
14	PLUG-MOLD AROUND PERIMETER OF ROOM
14	PLUG-MOLD AROUND PERIMETER OF ROOM, REFER TO ELECTRICAL AND INTERIOR ELEVATIONS

FLOOR PLAN NOTES BY NUMBER

# NUMBER	NOTE
15	PLUG-MOLD IN UPPER CABINETS FOR IPAD CHARGING
16	CONTRACTOR SHALL PROVIDE 100 LF OF WALL BLOCKING IN THE PROJECT BUDGET FOR OWNER-PROVIDED WALL-MOUNTED EQUIPMENT. PRIOR TO INSTALLATION OF GWB, THE OWNER SHALL DETERMINE THE SPECIFIC LOCATIONS OF WALL BLOCKING WITHIN THIS ALLOWANCE
17	PHARMACY SHALL BE OUTFIT BY OWNER-PROVIDED VENDOR; ALL MILLWORK AND SHELVING BY OTHERS. CONTRACTOR SHALL PROCURE BIDS FROM OWNER-SELECTED VENDORS AS OWNER-PREFERRED ALTERNATES
18	RETAIL PHARMACY SERVICE WINDOW W/ OPERABLE PANE AND SECURITY DRAWER. PROVIDE CALL BUTTON ON EXTERIOR OF WINDOW TO NOTIFY PHARMACY SOMEONE IS WAITING
20	ROOM SHALL HAVE RESILIENT CHANNEL WALL TYPE AND GASKETED DOOR FOR ENHANCED SOUND-PROOFING
21	AT FREE END OF WING WALL, PROVIDE POST INSTALLED ANCHOR FOR ENHANCED RIGIDITY & STIFFNESS, REFER TO DETAIL, FREE STANDING BASE, ON SHEET D3/A-003
22	WALL MONITOR ON ARTICULATING ARM. BLOCKING AS REQUIRED. COORDINATE WITH MEP.
23	LADDER TO ROOF ACCESS; COORDINATE WITH STRUCTURAL
24	ROOM POWER AND DATA SHALL BE PROVIDED SIMILAR TO NURSE WORK 2061, REFER TO ELECTRICAL FOR OUTLET LOCATIONS AND FLOOR BOXES REQUIRED TO SERVE DESK
26	PROVIDE FLOOR DRAIN TO SERVE FUTURE OWNER-PROVIDED EQUIPMENT; COORDINATE LOCATION WITH OWNER
27	UNDER-COUNTER PANIC BUTTON
28	KNOX BOX; COORDINATE FINAL LOCATION WITH FIRE MARSHAL AND AHJ
29	PROVIDE RECESSED FLOOR BOXES (SINGLE OUTLETS) FOR POWER UNDER TABLE, COORDINATE LOCATIONS W/ ELECTRICAL

FLOOR PLAN NOTES BY NUMBER

# NUMBER	NOTE
29	PROVIDE RECESSED FLOOR BOXES FOR POWER UNDER TABLE, COORDINATE LOCATIONS W/ ELECTRICAL

14 O'HENRY AVENUE, SUITE 210
ASHEVILLE, NC 28801
TEL. 828.254.1963
WWW.LS3P.COM

NOT FOR CONSTRUCTION

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HENDERSON CO. & UNCH PARDEE SH MOB

1427 OLD SPARTANBURG ROAD
HENDERSONVILLE, NC 28792

L3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

SHEET NAME:
REFERENCE PLAN- LEVEL 1

ORIG SUBMISSION: 2025.04.14

SHEET:
A-101B

DESIGN DEVELOPMENT

4/14/2025 11:26:57 AM

B1 DEPARTMENTAL PLAN- LEVEL 2

1/8" = 1'-0"

TRUE NORTH

PROJECT NORTH

DEPARTMENTAL LEGEND

- BLUE MD PRIMARY CARE
- BUILDING SUPPORT
- PUBLIC
- VERT CIRC

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SCALE ON ORIGINAL PLOT SET

4/14/2025 11:29:36 AM

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HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

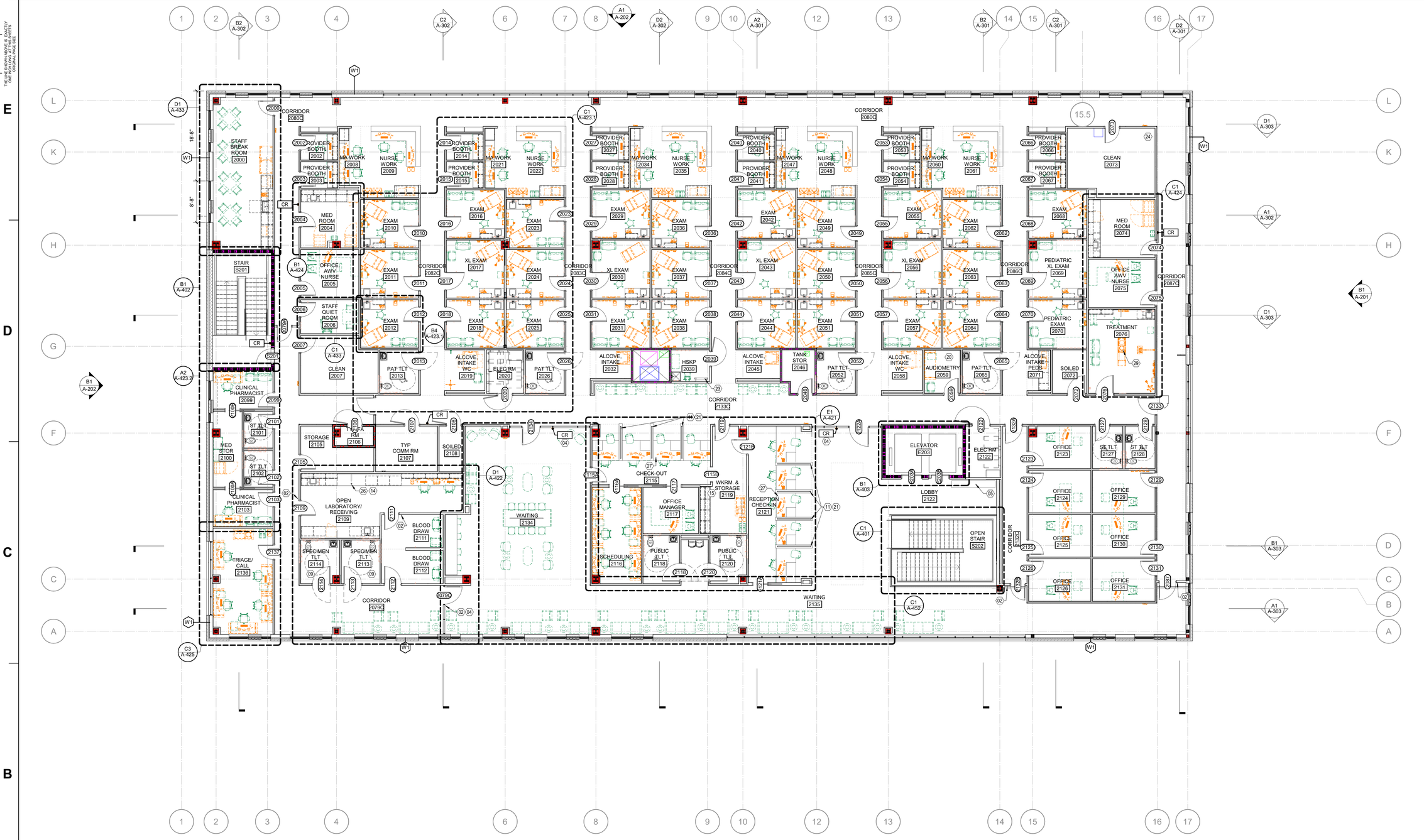
Δ	DATE	DESCRIPTION

SHEET NAME:
DEPARTMENTAL PLAN- LEVEL 2

ORIG SUBMISSION: 2025.04.14

SHEET:
A-102A

DESIGN DEVELOPMENT



B1 OVERALL FLOOR PLAN- LEVEL 2

1/8" = 1'-0"

TRUE NORTH | PROJECT NORTH

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FLOOR PLAN NOTES BY NUMBER

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FLOOR PLAN NOTES BY NUMBER

# NUMBER	NOTE
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LS3P
14 O'HENRY AVENUE, SUITE 210
ASHEVILLE, NC 28801
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HENDERSON CO. & UNCH PARDEE SH MOB

1427 OLD SPARTANBURG ROAD
HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

SHEET NAME: REFERENCE PLAN- LEVEL 2

ORIG SUBMISSION: 2025.04.14

SHEET: A-102B

DESIGN DEVELOPMENT

4/14/2025 11:30:38 AM

ARCH- MATERIAL FINISHES (EXTERIOR)

TAG	PRODUCT TYPE	MANUFACTURER	PRODUCT NAME	PRODUCT SIZE	PRODUCT COLOR	PRODUCT FINISH	INSTALLATION	CONTACT
ACP-1	ARCHITECTURAL COMPOSITE PANEL	PAC-CLAD, BOD	3000 RS	VARIES	GRAY(ZINC-61438 OR WEATHERED ZINC -614382)	SMOOTH	FIELD FABRICATED. MOUNTED TO Z-FURRING SYSTEM (GREEN GIRT OR SIM). RAINSCREEN INSTALLATION.	
BRV-1	BRICK VENEER, RANDOM MIX	(T) TAYLOR, (G) GLEN-GERY	#375 CHOCOLATE WIRE CUT(T), GRANITE RED SMOOTH IRON SPOT (G)	MODULAR	80% RED, 20% CHOCOLATE	VARIES	RUNNING BOND	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-2	BRICK VENEER, RANDOM MIX	(T) TAYLOR, (G) GLEN-GERY	#375 CHOCOLATE WIRE CUT(T), GRANITE RED SMOOTH IRON SPOT (G)	MODULAR	20% RED, 80% CHOCOLATE	VARIES	RUNNING BOND	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-3	BRICK VENEER, SPECIAL MIX	PAC-CLAD OR SIMILAR	WEATHERED ZINC	MODULAR	50% RED, 50% CHOCOLATE	VARIES	CORBELED STRETCHER BRICKS WITHIN RUNNING BOND PATTERN. SEE DETAILS	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-4	BRICK VENEER, SOLDIER AND SIMILAR	TAYLOR	EXECUTIVE GRAY, SAWCUT	MODULAR BRICK	GRAY	SAWCUT	SOLDIER COURSE INSTALLATION, SILL INSTALLATION, OR SHINER COUSE INSTALLATION. SEE ELEVATIONS	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-5	BRICK VENEER, SPECIAL MIX	(T) TAYLOR, (G) GLEN-GERY	#375 CHOCOLATE WIRE CUT(T), GRANITE RED SMOOTH IRON SPOT (G)	MODULAR	20% RED, 80% CHOCOLATE	VARIES	CORBELED RUNNING BOND PATTERN. SEE DETAILS.	
FAS-1	ALUMINUM COIL FASCIA, 16 GA.	PAC-CLAD, BOD	COIL	VARIES - MAX 12' LENGHTS	GRAY(ZINC-61438 OR WEATHERED ZINC -614382)	SMOOTH	PER DETAILS	
STU-1	3 PART / HARD COAT STUCCO				SELECTED BY ARCHITECT	FINE	3 PART STUCCO, TOTAL 7/8" THICK. SCRATCH COAT , HARD COAT, FINISH COAT.	

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SHEETS (ORIGINAL PAGE SIZE)

BUILDING ELEVATION SHEET NOTES

A. SEE A-103 FOR SHEET-SPECIFIC GRAPHICS & SYMBOLS.
B. LOCATIONS AND SIZES OF MECHANICAL EQUIPMENT ARE APPROXIMATE. COORDINATE WITH STRUCTURAL, MECHANICAL PLAN AND EQUIPMENT SHOP DRAWINGS.
C. SEE PLUMBING DRAWINGS FOR ADDITIONAL THROUGH WALL SCUPPER INFORMATION.
D. COORDINATE EXTERIOR LIGHTING WITH ELECTRICAL DRAWINGS. WALL PACKS TO BE NOTED AT 10'4" AFF UNO
E. CONTROL JOINTS ARE REQUIRED IN BRICK VENEER MASONRY, RECOMMENDED AT 20' O.C. MAX. MARKED WITH "CJ"
F. CONTROL JOINTS ARE REQUIRED IN STUCCO. MAX SPACING AT 3'-8" O.C.

BRICK VENEER TYPE NOTES

BRV-1 80 RED / 20 CHOCOLATE MIX, RUNNING BOND, MODULAR

BRV-2 20 RED / 80 CHOCOLATE MIX, RUNNING BOND, MODULAR

BRV-3 50 RED / 50 CHOCOLATE MIX, RUNNING BOND WITH CORBELLED STRETCHERS.

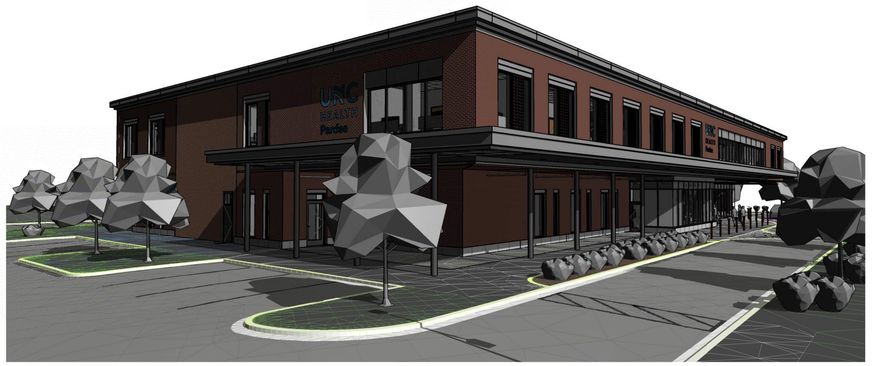
BRV-4 EXECUTIVE GRAY. ROWLOCK AT SILLS, SOLDIERS AT LINTELS. SHINER COURSE AT HORIZONTAL BAND. SEE WALL SECTIONS.

BRV-5 20 RED / 80 CHOCOLATE BLEND, RUNNING BOND. CORBEL RED BRICK 3/8" FROM PLANE

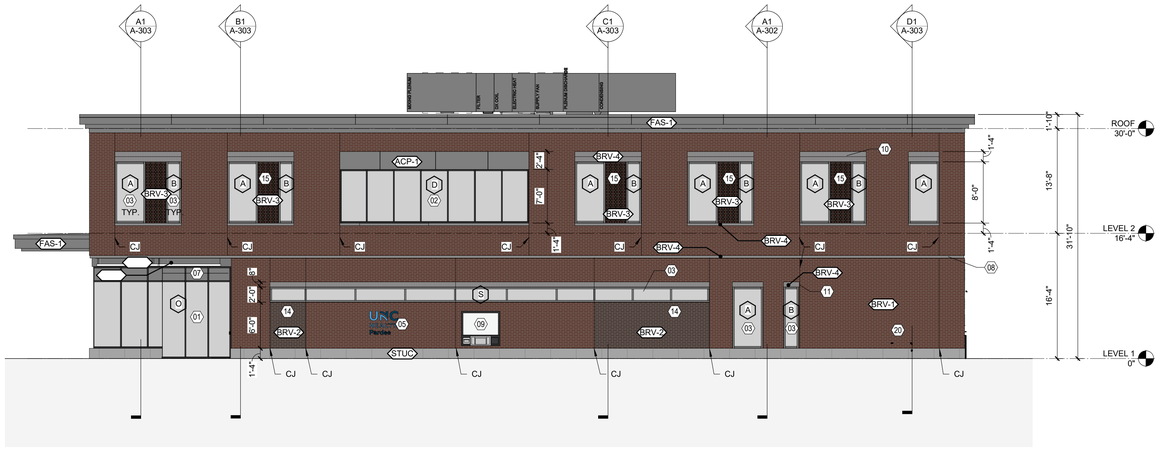
ELEVATION NOTES BY NUMBER

NUMBER	NOTE
01	SF-1 STRUCTURAL SILICONE GLAZED STOREFRONT SYSTEM. 2" X 6" FRONTSET
02	SF-2 STRUCTURAL SILICONE GLAZED STOREFRONT SYSTEM. 2" X 4-1/2" FRONTSET
03	SF-3 STANDARD STOREFRONT SYSTEM. 2" X 4-1/2" CENTER SET. TYPICAL AT PUNCHED WINDOWS
04	8" TUBE COLUMN. SEE STRUCT. PAINT SELECTED BY ARCHITECT
05	EXTERIOR SIGNAGE, BY OWNER. COORDINATE POWER AND BLOCKING REQTS.
06	DOWNSPOUT, CONNECTED TO STORMWATER SYSTEM. 8" OUTSIDE DIA. PAINT, SELECTED BY OWNER
07	INSULATED OPAQUE SPANDREL PANEL, PER STOREFRONT SYSTEM
08	SHINER BOND BRICK COURSE. SUPPORTED BY SHELF ANGLE AT CANTILEVERS. SEE STRUCT.
09	UNIT TRANSACTION WINDOW W/ SECURITY DRAWER AND VOICE AMPLIFICATION. COORD W/ ELECTRICAL
10	DOUBLE SOLDIER COURSE (16" DEEP), WRACKED. TYPICAL AT 2ND STORY PUNCHED WINDOW OPENINGS
11	SINGLE SOLDIER COURSE (8" DEEP), WRACKED. TYPICAL AT 1ST STORY PUNCHED WINDOW OPENINGS
12	ROOF TOP EQUIPMENT. SEE ROOF PLAN.
13	6" GUTTER
14	WRACKED PANEL. SEE SECTIONS
15	CORBELED STRETCHER PANEL. SEE DETAIL
16	WALL PACK, TYP. SEE ELECTRICAL DRAWINGS.
17	DISCONNECT FOR IMAGING. SEE ELECTRICAL DRAWINGS.
18	LAMBSTONGUE OVER FLOW
19	RUNNING BOND PANEL WITH CORBELLED BRICKS. SEE DETAIL.
20	NG SERVICE ENTRANCE
21	LOUVER. COLOR SHALL MATCH EXTERIOR STOREFRONT. COORDINATE SIZE WITH MECHANICAL
22	ROOF HATCH, SEE ROOF PLAN

D1 EXTERIOR PERSPECTIVE- SOUTHEAST

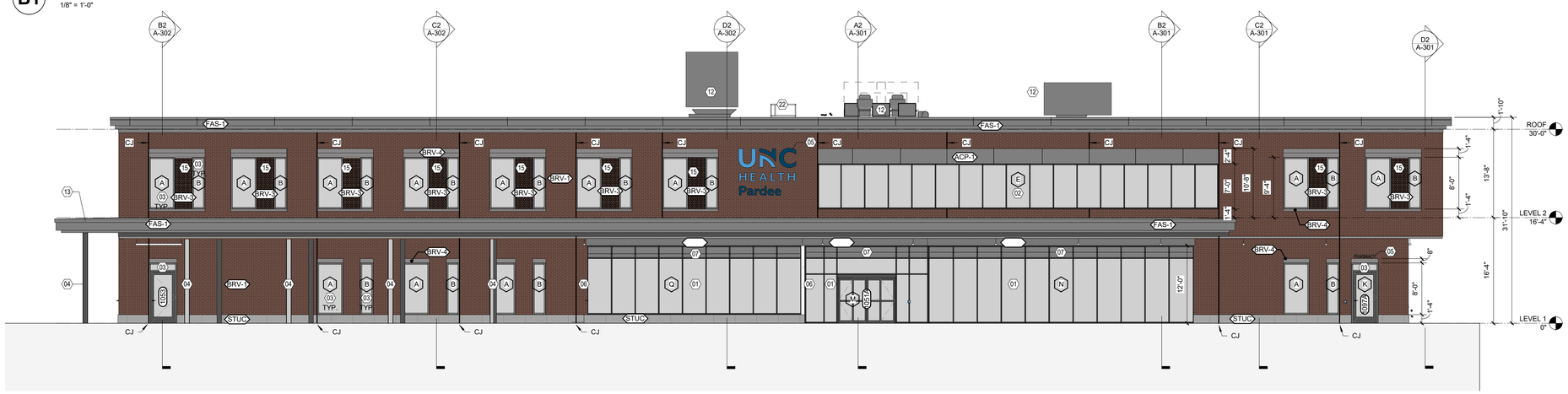


D3 EXTERIOR PERSPECTIVE- SOUTHWEST



B1 ELEVATION- EXTERIOR- EAST

1/8" = 1'-0"



A1 ELEVATION- EXTERIOR- SOUTH

1/8" = 1'-0"

4/14/2025 11:31:59 AM

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HENDERSON CO. & UNCH PARDEE SH MOB

1427 OLD SPARTANBURG ROAD
HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

SHEET NAME:
BUILDING ELEVATIONS & PERSPECTIVES

ORIG SUBMISSION: 2025.04.14

SHEET:
A-201

DESIGN DEVELOPMENT

ARCH- MATERIAL FINISHES (EXTERIOR)

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ALL SHEETS ORIGINAL PAGE SIZE

TAG	PRODUCT TYPE	MANUFACTURER	PRODUCT NAME	PRODUCT SIZE	PRODUCT COLOR	PRODUCT FINISH	INSTALLATION	CONTACT
ACP-1	ARCHITECTURAL COMPOSITE PANEL	PAC-CLAD, BOD	3000 RS	VARIES	GRAY(ZINC-61438 OR WEATHERED ZINC -614382)	SMOOTH	FIELD FABRICATED. MOUNTED TO Z-FURRING SYSTEM (GREEN GIRT OR SIM). RAINSCREEN INSTALLATION.	
BRV-1	BRICK VENEER, RANDOM MIX	(T) TAYLOR, (G) GLEN-GERY	#375 CHOCOLATE WIRE CUT(T), GRANITE RED SMOOTH IRON SPOT (G)	MODULAR	80% RED, 20% CHOCOLATE	VARIES	RUNNING BOND	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-2	BRICK VENEER, RANDOM MIX	(T) TAYLOR, (G) GLEN-GERY	#375 CHOCOLATE WIRE CUT(T), GRANITE RED SMOOTH IRON SPOT (G)	MODULAR	20% RED, 80% CHOCOLATE	VARIES	RUNNING BOND	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-3	BRICK VENEER, SPECIAL MIX	PAC-CLAD OR SIMILAR	WEATHERED ZINC	MODULAR	50% RED, 50% CHOCOLATE	VARIES	CORBELED STRETCHER BRICKS WITHIN RUNNING BOND PATTERN. SEE DETAILS	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-4	BRICK VENEER, SOLDIER AND SIMILAR	TAYLOR	EXECUTIVE GRAY, SAWCUT	MODULAR BRICK	GRAY	SAWCUT	SOLDIER COURSE INSTALLATION, SILL INSTALLATION, OR SHINER COUSE INSTALLATION. SEE ELEVATIONS	CASON BUILDER SUPPLY (JALEN ASHE 828-775-3452;Jashe@casonbuildersupply.com)
BRV-5	BRICK VENEER, SPECIAL MIX	(T) TAYLOR, (G) GLEN-GERY	#375 CHOCOLATE WIRE CUT(T), GRANITE RED SMOOTH IRON SPOT (G)	MODULAR	20% RED, 80% CHOCOLATE	VARIES	CORBELED RUNNING BOND PATTERN. SEE DETAILS.	
FAS-1	ALUMINUM COIL FASCIA, 16 GA.	PAC-CLAD, BOD	COIL	VARIES - MAX 12' LENGHTS	GRAY(ZINC-61438 OR WEATHERED ZINC -614382)	SMOOTH	PER DETAILS	
STU-1	3 PART / HARD COAT STUCCO				SELECTED BY ARCHITECT	FINE	3 PART STUCCO, TOTAL 7/8" THICK. SCRATCH COAT , HARD COAT, FINISH COAT.	

BUILDING ELEVATION SHEET NOTES

A. SEE A-103 FOR SHEET-SPECIFIC GRAPHICS & SYMBOLS.
B. LOCATIONS AND SIZES OF MECHANICAL EQUIPMENT ARE APPROXIMATE. COORDINATE WITH STRUCTURAL, MECHANICAL PLAN AND EQUIPMENT SHOP DRAWINGS.
C. SEE PLUMBING DRAWINGS FOR ADDITIONAL THROUGH WALL SCUPPER INFORMATION.
D. COORDINATE EXTERIOR LIGHTING WITH ELECTRICAL DRAWINGS. WALL PACKS TO BE NOTED AT 10'4" AFF UNO
E. CONTROL JOINTS ARE REQUIRED IN BRICK VENEER MASONRY, RECOMMENDED AT 20' O.C. MAX. MARKED WITH "CJ"
F. CONTROL JOINTS ARE REQUIRED IN STUCCO. MAX SPACING AT 3'-8" O.C.

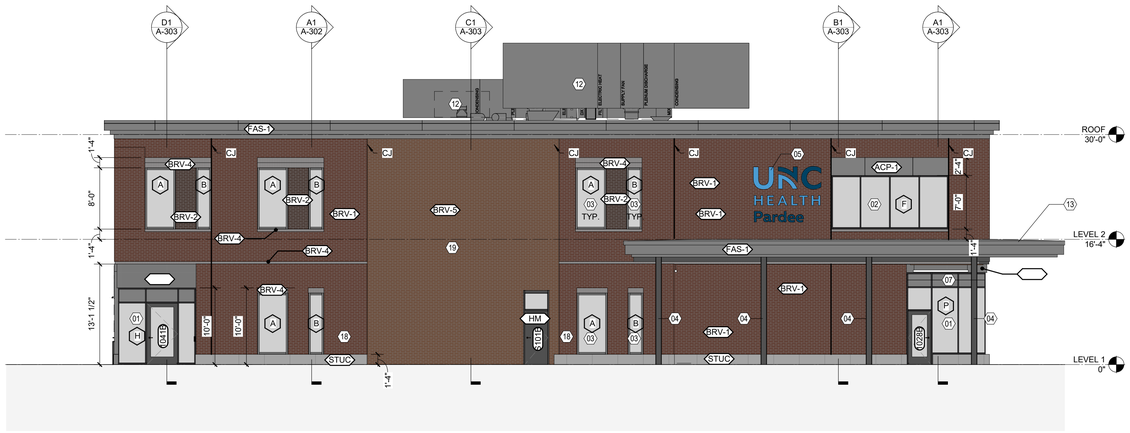
BRICK VENEER TYPE NOTES
BRV-1 80 RED / 20 CHOCOLATE MIX, RUNNING BOND, MODULAR
BRV-2 20 RED / 80 CHOCOLATE MIX, RUNNING BOND, MODULAR
BRV-3 50 RED / 50 CHOCOLATE MIX, RUNNING BOND WITH CORBELLED STRETCHERS.
BRV-4 EXECUTIVE GRAY. ROWLOCK AT SILLS, SOLDIERS AT LINTELS. SHINER COURSE AT HORIZONTAL BAND. SEE WALL SECTIONS.
BRV-5 20 RED / 80 CHOCOLATE BLEND, RUNNING BOND. CORBEL RED BRICK 3/8" FROM PLANE

ELEVATION NOTES BY NUMBER

NUMBER	NOTE
01	SF-1 STRUCTURAL SILICONE GLAZED STOREFRONT SYSTEM. 2" X 6" FRONTSET
02	SF-2 STRUCTURAL SILICONE GLAZED STOREFRONT SYSTEM. 2" X 4-1/2" FRONTSET
03	SF-3 STANDARD STOREFRONT SYSTEM. 2" X 4-1/2" CENTER SET. TYPICAL AT PUNCHED WINDOWS
04	6" TUBE COLUMN. SEE STRUCT. PAINT SELECTED BY ARCHITECT
05	EXTERIOR SIGNAGE, BY OWNER. COORDINATE POWER AND BLOCKING REQTS.
06	DOWNSPOUT, CONNECTED TO STORMWATER SYSTEM. 8" OUTSIDE DIA. PAINT, SELECTED BY OWNER
07	INSULATED OPAQUE SPANDREL PANEL, PER STOREFRONT SYSTEM
08	SHINER BOND BRICK COURSE. SUPPORTED BY SHELF ANGLE AT CANTILEVERS. SEE STRUCT.
09	UNIT TRANSACTION WINDOW W/ SECURITY DRAWER AND VOICE AMPLIFICATION. COORD W/ ELECTRICAL
10	DOUBLE SOLDIER COURSE (16" DEEP), WRACKED. TYPICAL AT 2ND STORY PUNCHED WINDOW OPENINGS
11	SINGLE SOLDIER COURSE (8" DEEP), WRACKED. TYPICAL AT 1ST STORY PUNCHED WINDOW OPENINGS
12	ROOF TOP EQUIPMENT. SEE ROOF PLAN.
13	6" GUTTER
14	WRACKED PANEL. SEE SECTIONS
15	CORBELED STRETCHER PANEL. SEE DETAIL
16	WALL PACK, TYP. SEE ELECTRICAL DRAWINGS.
17	DISCONNECT FOR IMAGING. SEE ELECTRICAL DRAWINGS.
18	LAMBSTONGUE OVER FLOW
19	RUNNING BOND PANEL WITH CORBELLED BRICKS. SEE DETAIL.
20	NG SERVICE ENTRANCE
21	LOUVER. COLOR SHALL MATCH EXTERIOR STOREFRONT. COORDINATE SIZE WITH MECHANICAL
22	ROOF HATCH, SEE ROOF PLAN

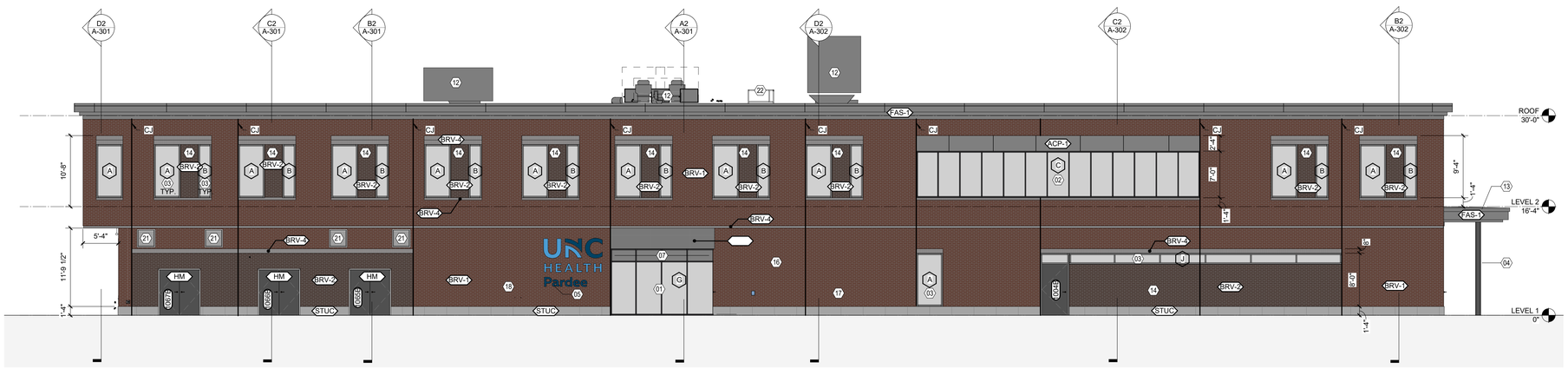
D1 EXTERIOR PERSPECTIVE- NORTHWEST

D4 EXTERIOR PERSPECTIVE- NORTHEAST



B1 ELEVATION- EXTERIOR- WEST

1/8" = 1'-0"



A1 ELEVATION- EXTERIOR- NORTH

1/8" = 1'-0"

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LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

SHEET NAME:
BUILDING ELEVATIONS & PERSPECTIVES

ORIG SUBMISSION: 2025.04.14

SHEET: A-202

DESIGN DEVELOPMENT

4/14/2025 11:32:53 AM

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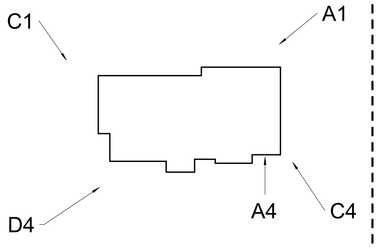

KEYPLAN

D4 EXTERIOR PERSPECTIVE - FROM THE SOUTHWEST
NTS

C1 EXTERIOR PERSPECTIVE - FROM THE NORTH WEST
NTS

C4 EXTERIOR PERSPECTIVE - ENTRANCE
NTS

A1 EXTERIOR PERSPECTIVE - FROM THE NORTHEAST
NTS

A4 EXTERIOR PERSPECTIVE - FROM THE SOUTHEAST
NTS

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HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

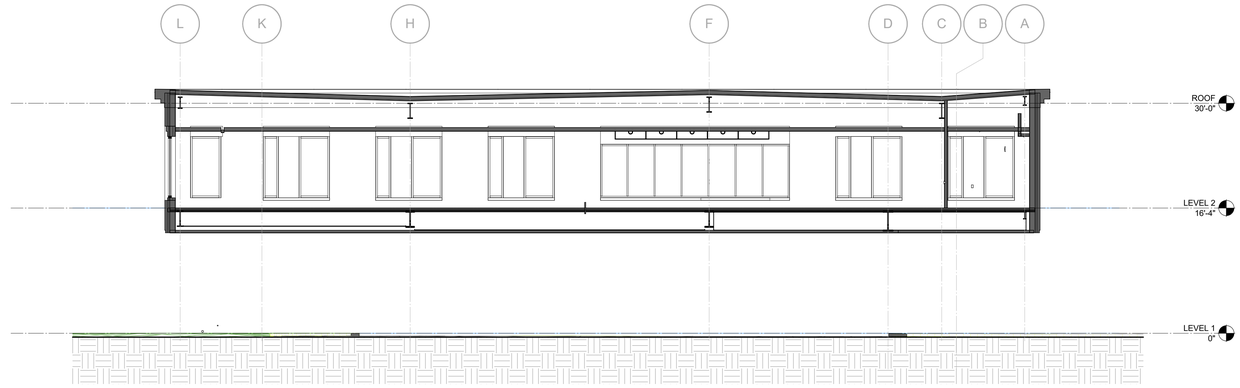
SHEET NAME:
BUILDING PERSPECTIVES

ORIG SUBMISSION: 2025.04.14

SHEET:
A-203

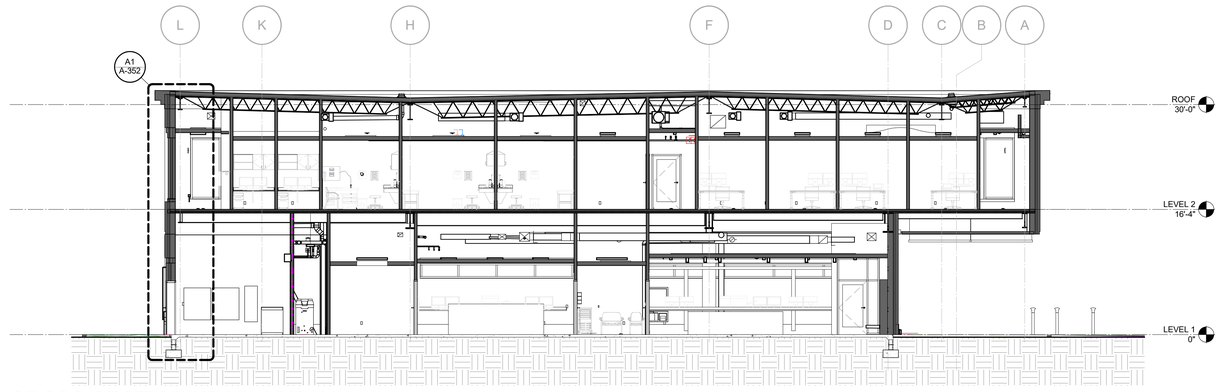
DESIGN DEVELOPMENT

4/14/2025 11:32:54 AM



D2 CROSS SECTION BETWEEN GRIDS 16 AND 17

1/8" = 1'-0"

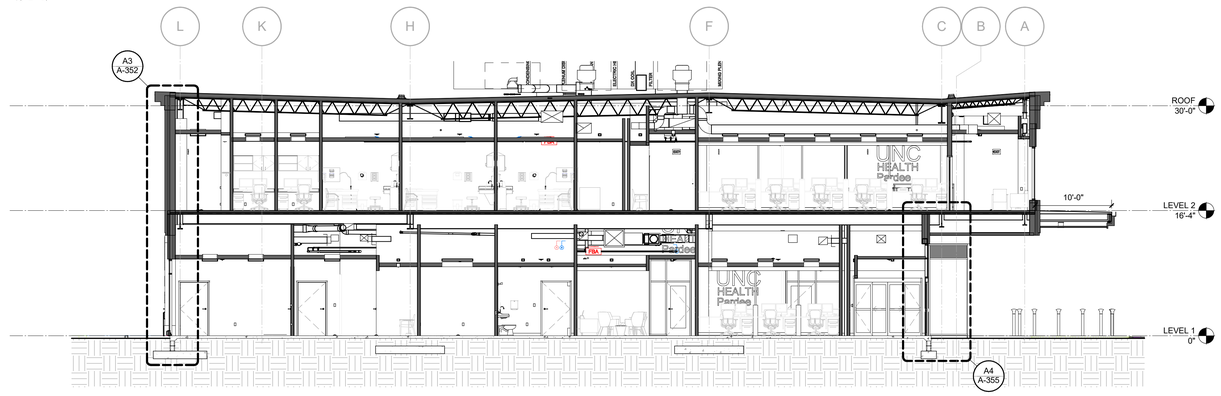


C2 CROSS SECTION NEAR GRID 15

1/8" = 1'-0"

B2 CROSS SECTION BETWEEN GRIDS 13 AND 14

1/8" = 1'-0"



A2 CROSS SECTION NEAR GRID 10

1/8" = 1'-0"

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HENDERSON CO. & UNC HEALTH PARDEE SH MOB

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HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

SHEET NAME:
BUILDING SECTIONS

ORIG SUBMISSION: 2025.04.14

SHEET: A-301

DESIGN DEVELOPMENT

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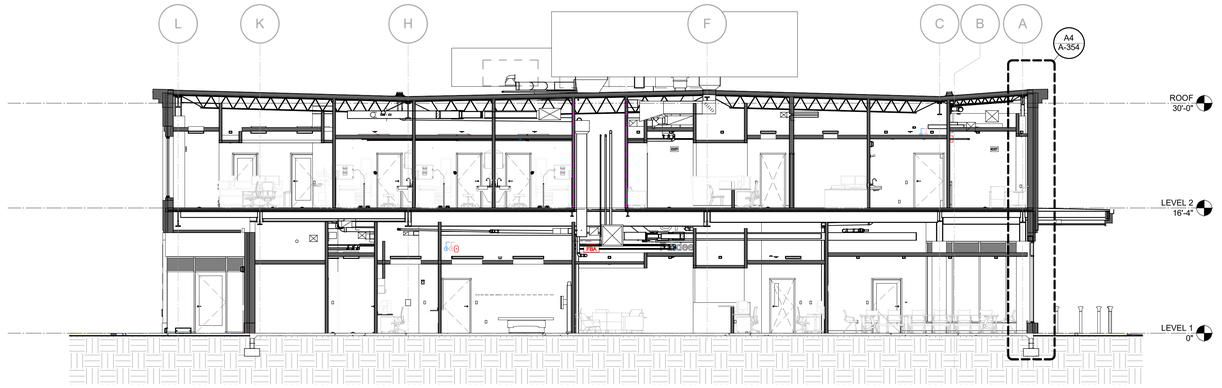
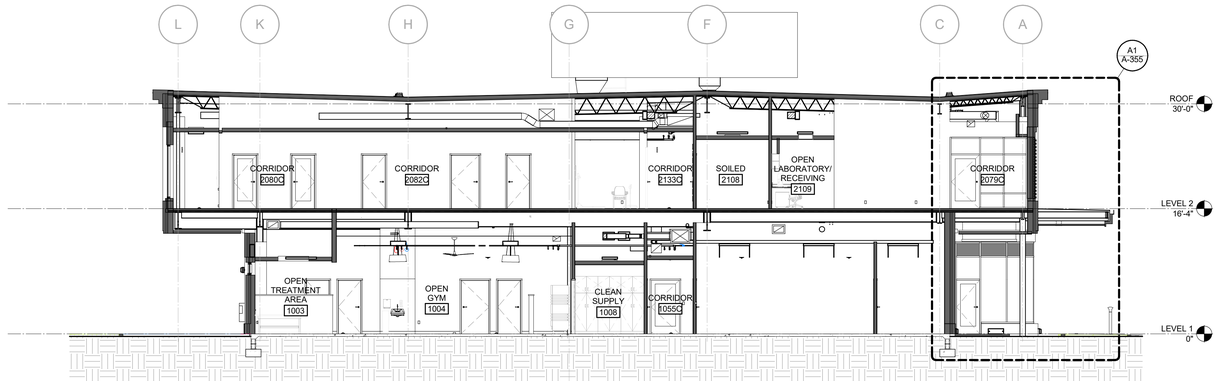


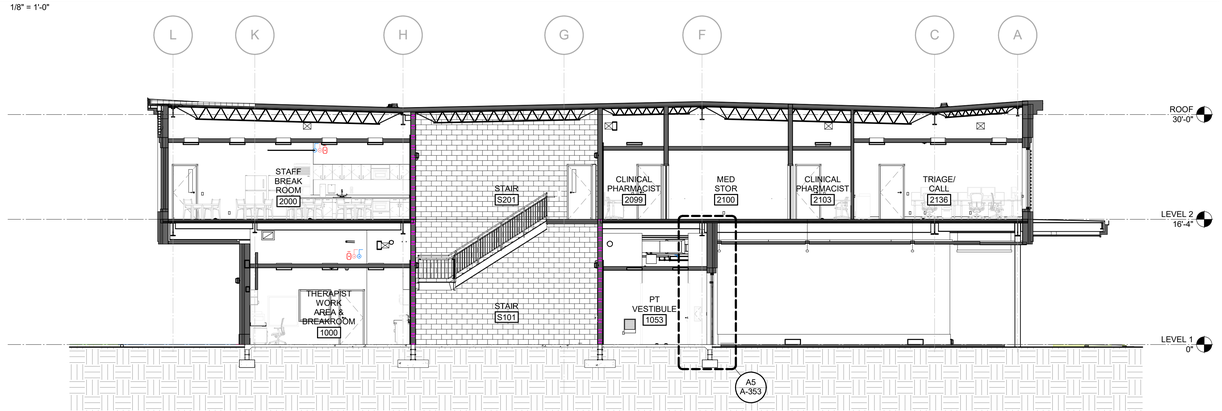
D2 CROSS SECTION BETWEEN GRIDS 8 AND 9

1/8" = 1'-0"



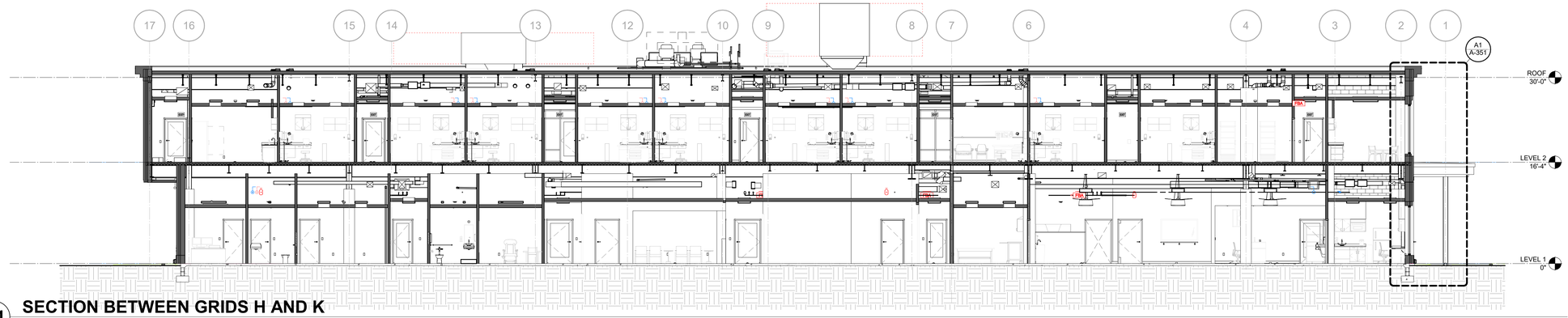
C2 CROSS SECTION BETWEEN GRIDS 4 AND 5

1/8" = 1'-0"



B2 CROSS SECTION BETWEEN GRIDS 2 AND 3

1/8" = 1'-0"



A1 SECTION BETWEEN GRIDS H AND K

1/8" = 1'-0"

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PARDEE SH MOB

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HENDERSONVILLE, NC 28792

LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

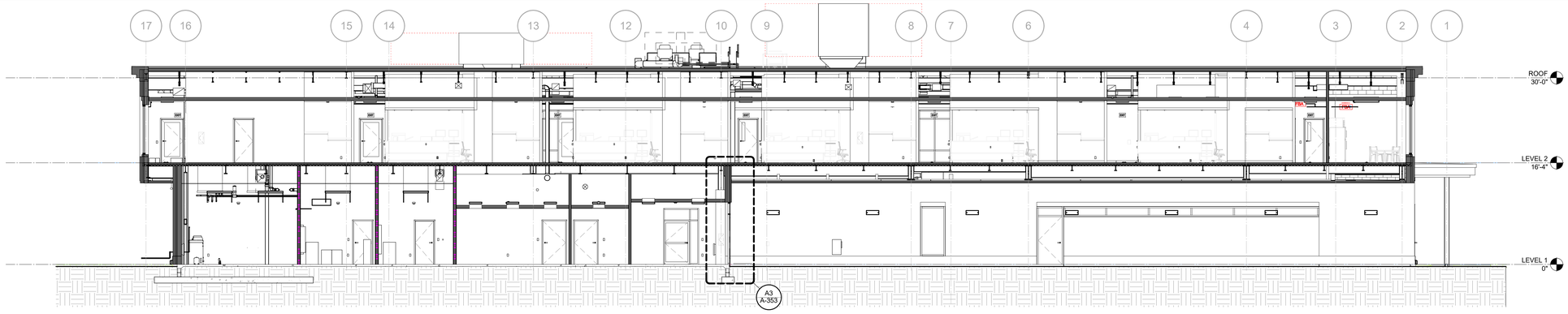
SHEET NAME:
BUILDING SECTIONS

ORIG SUBMISSION: 2025.04.14

SHEET:
A-302

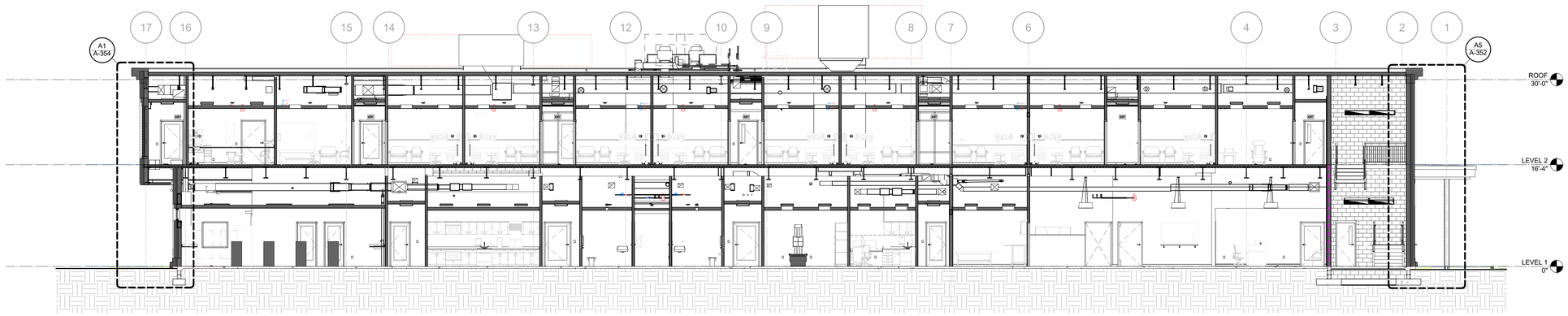
DESIGN DEVELOPMENT

THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG ON ALL ORIGINAL PLOT SIZES



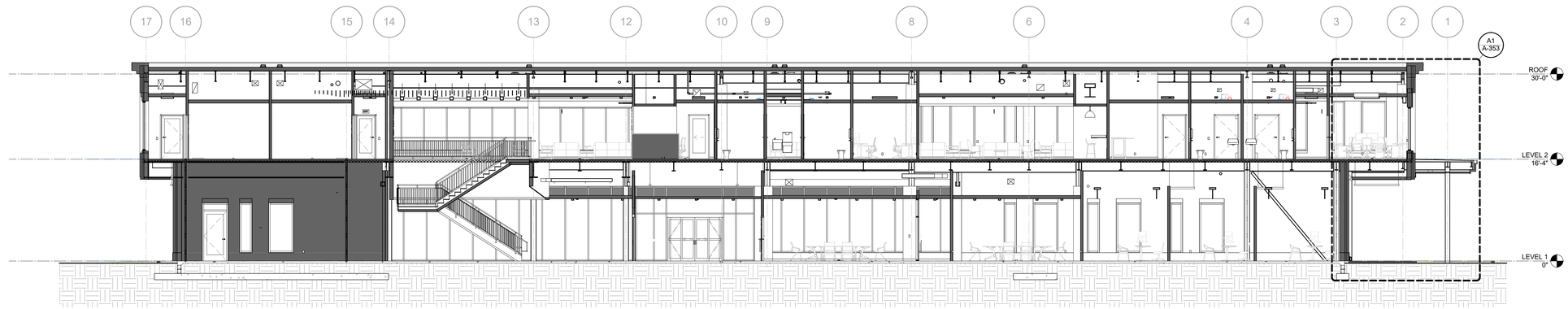
D1 SECTION BETWEEN GRIDS L AND K

1/8" = 1'-0"



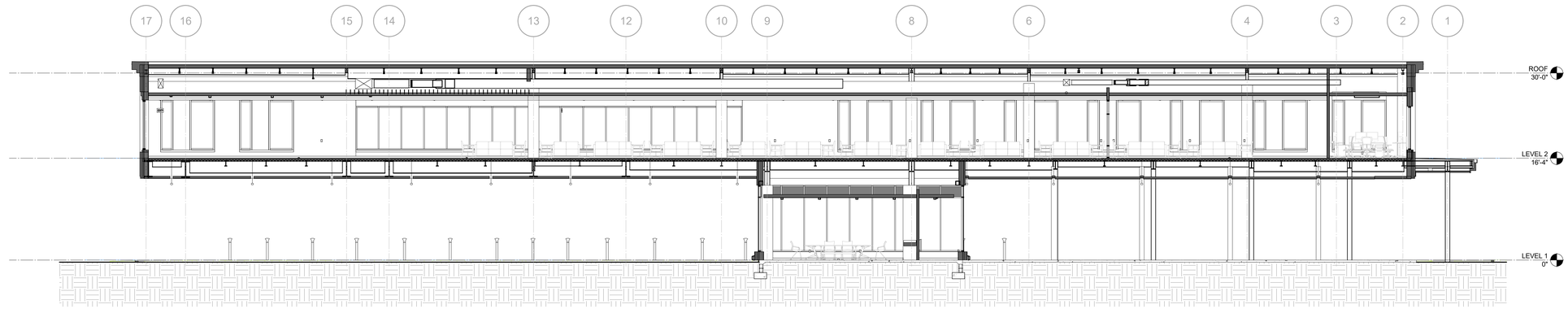
C1 SECTION BETWEEN GRIDS H AND F

1/8" = 1'-0"



B1 SECTION BETWEEN GRIDS F AND C

1/8" = 1'-0"



A1 SECTION BETWEEN GRIDS C AND A

1/8" = 1'-0"

4/14/2025 11:34:14 AM

HENDERSON COUNTY

UNC HEALTH Pardee

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LS3P PROJECT: 0403-240301

Δ	DATE	DESCRIPTION

SHEET NAME:
BUILDING SECTIONS

ORIG SUBMISSION: 2025.04.14

SHEET:
A-303

DESIGN DEVELOPMENT

NEIGHBORHOOD COMPATIBILITY MEETING REPORT
SPARTANBURG HIGHWAY MEDICAL OFFICE BUILDING (25-23-CZD)
NCM MEETING DATE: APRIL 29TH, 2025

PETITION REQUEST: Rezoning: Commercial Highway Mixed Use-Conditional Zoning District (CHMU-CZD)

APPLICANT/PETITIONER: John Bryant, Vice President, Operations and Support Services for UNC Health Pardee [Applicant] & Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government [Owner]

NEIGHBORHOOD COMPATIBILITY MEETING SUMMARY:

A Neighborhood Compatibility Meeting was held for this project on April 19th, 2025, at 2pm in the 3rd floor conference room of City Hall,160 6th Ave. East. and via Zoom. The meeting lasted approximately 1 hour and 10 minutes.

There were 2 members of the public in attendance in-person and 1 attended virtually. The applicant and their development team were present as were 3 members of City staff.

Staff gave the formal introduction and a brief overview of the request.

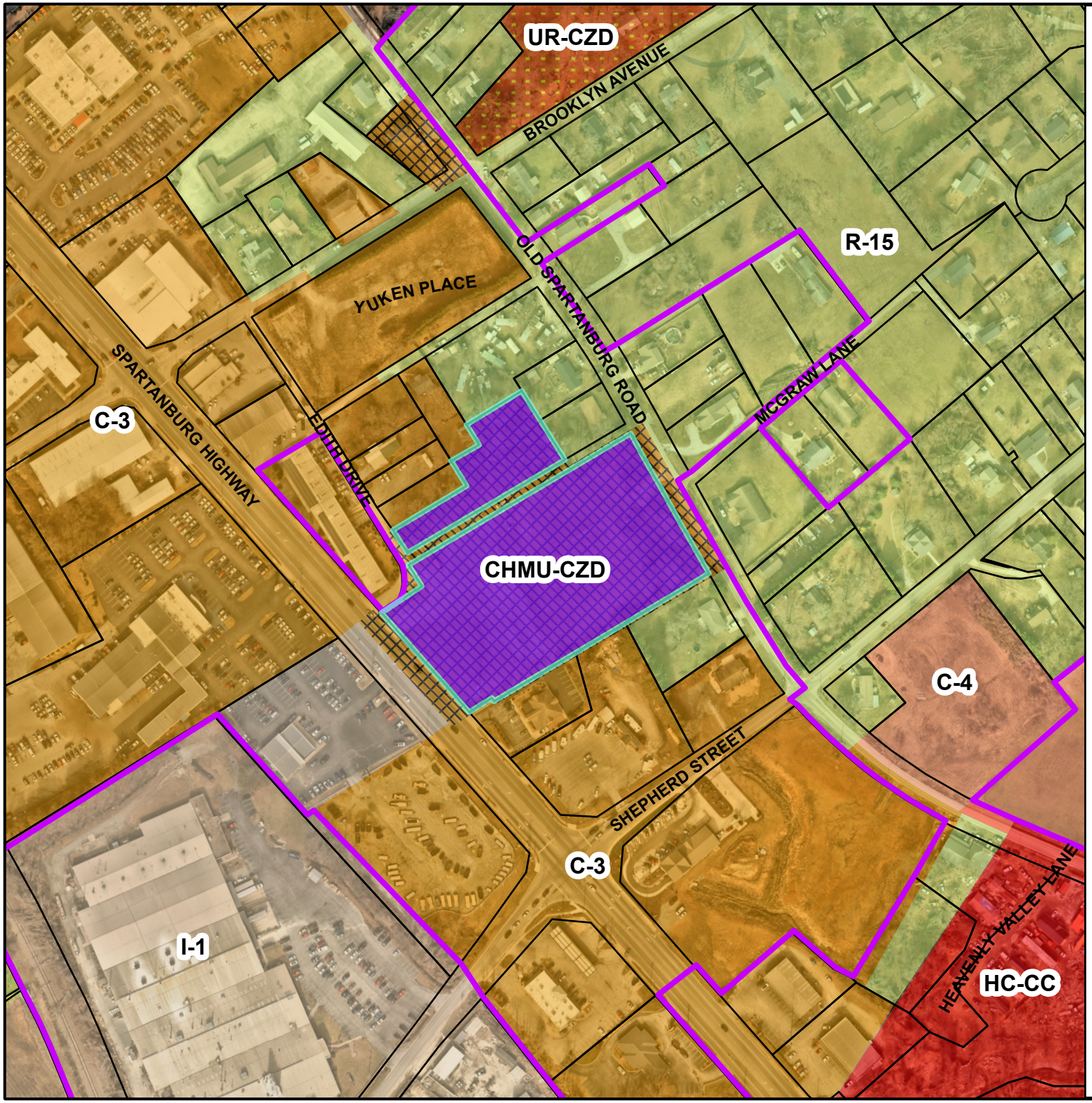
There were 0 pre-submitted public comments.

The development team presented their project proposal for the 42,520 square foot medical office building.

Concerns and questions from the public related to:

- The type of medical services that would be provided.
- Whether or not behavioral health programs would be incorporated into the development.
- How the open space along Spartanburg highway would be maintained and landscaped.
- The Duke Energy transmission line easement impacts on the project.
- Drainage, stormwater and the blueline stream shown on the USGS maps were discussed.
- It was noted that Pardee is an incredible asset to our community.
- Funding for the project and Henderson County's involvement.

Full minutes from the Neighborhood Compatibility Meeting and pre-submitted public comments are available for review by request.



0 100 200 400 N
Feet E
City of Hendersonville S
May 2025

Spartanburg Highway Medical Office Building

25-23-CZD

PIN: 9578-41-6876 & -42-5074

Acreage: 4.54

Proposed Zoning

Subject Property (CHMU-CZD)

Hendersonville City Limits

Hendersonville Zoning

- CZD Conditional Zoning Districts
- R-15 Medium Density Residential
- UR Urban Residential
- C-4 Neighborhood Commercial
- C-3 Highway Business
- C-3SU Highway Business Special Use
- I-1 Industrial

Henderson County Zoning

- Community Commercial

THE CITY OF HENDERSONVILLE · N C 1847

Community Development Depa

Ordinance #___-____

AN ORDINANCE OF THE CITY OF HENDERSONVILLE CITY COUNCIL TO AMEND THE OFFICIAL ZONING MAP OF THE CITY OF HENDERSONVILLE FOR A PARCELS POSSESSING PIN NUMBERS: 9578-41-6876 & 9578-42-5074 BY CHANGING THE ZONING DESIGNATION FROM C-3 SU, HIGHWAY BUSINESS SPECIAL USE TO CHMU-CZD, COMMERCIAL HIGHWAY MIXED USE CONDITIONAL ZONING DISTRICT

IN RE: Parcel Numbers: 9578-41-6876 & 9578-42-5074
Address: 0 Spartanburg Highway
Spartanburg Highway Medical Office Building: (File # 25-23-CZD)

WHEREAS, the City is in receipt of a Conditional Rezoning application from applicant, John Bryant, Vice President, Operations and Support Services for UNC Health Pardee, and property owner, Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government, for the construction of a 42,520 square foot medical office building on approximately 4.54 acres, and

WHEREAS, the Planning Board took up this application at its regular meeting on June 12th 2025; voting 0-0 to recommend/not recommend City Council approve an ordinance amending the official zoning map of the City of Hendersonville, and

WHEREAS, City Council took up this application at its regular meeting on July 2nd, 2025, and

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Hendersonville, North Carolina:

1. Pursuant to Article XI of the Zoning Ordinance of the City of Hendersonville, North Carolina, the Zoning Map is hereby amended by changing the zoning designation of the following: Parcel Numbers: 9578-41-6876 & 9578-42-5074, changing the zoning designation from C-3 SU, Highway Business Special Use to CHMU-CZD, Commercial Highway Mixed Use Conditional Zoning District.

2. Development of the parcel pursuant to this Ordinance is subject to the following.

   a. Development shall comply with the master site plan submitted by the applicant dated June 4th, 2025, including the conditions listed therein, [and/or as modified and presented to City Council][and/or including modifications approved by City Council which shall be added to the site plan. The updated site shall be submitted to the City at or before the applicant's execution of this Ordinance].

   b. Permitted uses shall include:

      i. Offices, business, professional and public

   c. Additional conditions that shall be satisfied prior to final site plan approval include:
      i.

3. Except where modified by the terms of this Ordinance, development of the parcel(s) shall occur in accordance with the final site plan requirements of Article VII of the Zoning Ordinance of the City of Hendersonville, North Carolina.

4. Except where explicit relief is granted by the terms of this Ordinance, the development of the parcel(s) shall occur in accordance with all applicable standards within local ordinances and policies.

   This ordinance shall be not be effective until the list of use(s) and conditions, established herein, is consented to in writing by the applicant and all owners of the subject property. Upon such written consent, this ordinance shall be effective retroactive to the date of its adoption.

Adopted this 2nd day of July 2025.

Attest: _____
Barbara G. Volk, Mayor, City of Hendersonville

_____
Jill Murray, City Clerk

Approved as to form:

_____
Angela S. Beeker, City Attorney

With their signatures below, the undersigned applicant(s) and property owner(s) consent to and agree to all conditions imposed pursuant to the terms of this Ordinance.

IN RE: Parcel Numbers: 9578-41-6876 & 9578-42-5074
Address: 0 Spartanburg Highway
Spartanburg Highway Medical Office Building: (File # 25-23-CZD)

Applicant/Developer: John Bryant, Vice President, Operations and Support Services for UNC Health Pardee

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Property Owner: Bryan Rhodes, Capital Projects Construction Manager for Henderson County Government

Signature: _____

Printed Name: _____

Title: _____

Date: _____

Community Development Department-Planning Division

160 6th Ave. E. Hendersonville NC 28792

For use by Principal Authority / Para uso de la Autoridad Principal
Cloudpermit application number / Número de solicitud de Cloudpermit US-NC30720-P-2025-56
PIN / Número de rollo 9578416876
Application submitted to / Solicitud presentada a Hendersonville, NC, North Carolina / Hendersonville, NC, Carolina del Norte

Description of Subject Property
Address / Dirección 0 NO ADDRESS ASSIGNED
Municipality / Municipio Hendersonville, NC, North Carolina / Hendersonville, NC, Carolina del Norte
PIN / Número de rollo 9578416876

Purpose of Application
Application type / Tipo de solicitud Conditional Rezoning

Applicant		
Last name / Apellido Bryant	First name / Nombre de pila John	Corporation or partnership / Corporación o sociedad UNC Health Pardee
Street address / Dirección de la calle 800 N Justice Street	Unit number / Número de unidad	Lot / Con.
Municipality / Municipio Hendersonville	State / Provincia Default	ZIP code / Código postal 28791
Other phone / Otro teléfono +1 8285514326	Mobile phone / Teléfono móvil +1 8286964719	
Fax	Email / Correo electrónico john.bryant@unchealth.unc.edu	

Property owner		
Last name / Apellido Rhodes	First name / Nombre de pila Bryan	Corporation or partnership / Corporación o sociedad Henderson County
Street address / Dirección de la calle 100 N. King St.	Unit number / Número de unidad	Lot / Con.
Municipality / Municipio Hendersonville	State / Provincia North Carolina	ZIP code / Código postal 28792
Other phone / Otro teléfono +1 828-694-6525	Mobile phone / Teléfono móvil +1 828-606-9094	
Fax	Email / Correo electrónico brhodes@hendersoncountync.gov	

Declaration and Signatures

Applicant

I, John Bryant (The Applicant), do hereby declare that the information contained in this application, the attached schedules and forms, the attached plans and specifications, and other attached documentation is true to the best of my knowledge. If a permit is granted, I agree to comply with Local Ordinances and the conditions of the permit. If the Applicant is a corporation or partnership, I have the authority to bind the corporation or partnership by signing off, I understand that it constitutes a legal signature confirming that I acknowledge and agree to the above declaration.

Digitally signed on 05/20/2025, 12:21:37 PM EDT by John Bryant. / Firmado digitalmente el 20/5/25 12:21:37 EDT por John Bryant.

Property owner

I, Bryan Rhodes (The Property owner), do hereby declare that the information contained in this application, the attached schedules and forms, the attached plans and specifications, and other attached documentation is true to the best of my knowledge. If a permit is granted, I agree to comply with Local Ordinances and the conditions of the permit. If the Property owner is a corporation or partnership, I have the authority to bind the corporation or partnership by signing off, I understand that it constitutes a legal signature confirming that I acknowledge and agree to the above declaration.

Digitally signed on 05/22/2025, 8:08:41 AM EDT by Bryan Rhodes. / Firmado digitalmente el 22/5/25 8:08:41 EDT por Bryan Rhodes.

Required Information	
Scheduled Neighborhood Compatibility Meeting - NCM Date 04/29/2025	NCM Time 2:00 PM
Transportation Impact Analysis - (if applicable) Required for complete application but not due until 24 calendar days prior to Planning Board Meeting	

Information				
Type of Development: Commercial	Current Zoning C-3SU	Proposed Zoning: CHMU- CZD	Total Acerage 4	Proposed Building Square Footage: 42520.0 sq.ft.
Number of Dwelling Units: 0				List of Requested Uses: Medical Office Building

BOOK 4198 PAGE 714 (3)

1001018891

This document presented and filed:
08/16/2024 03:02:41 PM

WILLIAM LEE KING, Henderson COUNTY, NC
Transfer Tax: $4,000.00

NORTH CAROLINA GENERAL WARRANTY DEED

This instrument was prepared by Sherri L. Brewer, a licensed North Carolina Attorney. Delinquent taxes, if any, will be paid by the Closing Attorney to the Henderson County Tax Collector upon disbursement of closing proceeds.

Excise Tax: $4,000.00

Parcel Identifier No: 105531 & 110896 Verified by _____ County on the ____ day of _____, 20____
By: _____

Mail/Box to: Prince, Massagee & Alexander, PLLC, 240 3rd Avenue West, Hendersonville, NC 28739
This instrument was prepared by: Sherri L. Brewer – DEED PREP ONLY – NO TITLE EXAMINED

Brief description for the Index: 4.5 acres +/- off Old Spartanburg Highway

THIS DEED made this _____ day of August, 2024, by and between

GRANTOR	GRANTEE
BRYAN EASLER ENTERPRISES, INC., a North Carolina Corporation	**HENDERSON COUNTY, one of the 100 Counties of the State of North Carolina**
1409 Spartanburg Hwy Hendersonville, NC 28792	**800 N. Justice Street Hendersonville, NC 28791**

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.

WITNESSETH, that the Grantor, for a valuable consideration paid by the Grantee, the receipt of which is hereby acknowledged, has and by these presents does grant, bargain, sell and convey unto the Grantee in fee simple, all that certain lot or parcel of land situated in the City of Hendersonville, Henderson County, North Carolina and more particularly described as follows:

SEE ATTACHED EXHIBIT A.

A portion of that property hereinabove described was acquired by Grantor by instrument recorded in Book 1393 at Page 180.

All or a portion of the property herein conveyed _ includes or _X_ does not include the primary residence of a Grantor.

A map showing the above-described property is recorded in Plat Slide.

NC Bar Association Form No. 3 © 1976, Revised © 1/1/2010
Printed by Agreement with the NC Bar Association

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 the Grantor covenants with the Grantee, that Grantor is seized of the premises in fee simple, has the right to convey the same in fee simple, that title is marketable and free and clear of all encumbrances, and that Grantor will warrant and defend the title against the lawful claims of all persons whomsoever, other than the following exceptions:

Subject to Hendersonville City ad valorem taxes.
Subject to Henderson County ad valorem taxes.
Subject to Restrictions, Easements, and Rights of Way of Record.

IN WITNESS WHEREOF, the Grantor has duly executed the foregoing as of the day and year first above written.

Stephanie Easler, President (SEAL)
STEPHANIE EASLER, President of
BRYAN EASLER ENTERPRISES, INC.,
a North Carolina Corporation

HEATHER M. REYNOLDS NOTARY PUBLIC HENDERSON COUNTY, NC

(Affix Seal)

State of NORTH CAROLINA- County of HENDERSON

I, the undersigned Notary Public of the County and State aforesaid, certify that Stephanie Easler personally came before me this day and acknowledged that she is the President of Bryan Easler Enterprises, Inc. a North Carolina Corporation, and that by authority duly given and as the act of such entity, she signed the foregoing instrument in its name on its behalf as its act and deed. Witness my hand and Notarial stamp or seal this 5th day of August, 2024.

My Commission Expires:
10-16-27

Heather M. Reynolds Notary Public
Heather M. Reynolds
Notary's Printed or Typed Name

NC Bar Association Form No. 3 © 1976, Revised © 1/1/2010
Printed by Agreement with the NC Bar Association

EXHIBIT A

Tract One

BEING all of that 3.79 acre tract as depicted on plat of record at Plat Slide 15794 in the office of the Register of Deeds for Henderson County, North Carolina, reference to which plat is hereby made for a more particular description.

ALSO BEING all of Tract One described in that deed of record in Deed Book 1275, Page 77 in the office of the Register of Deeds for Henderson County, North Carolina and being a portion of the property described in deed of record in Deed Book 1393, Page 180, Henderson County Registry.

Tract Two

BEING all of that 0.74 acre tract as depicted on plat of record at Plat Slide 15794 in the office of the Register of Deeds for Henderson County, North Carolina, reference to which plat is hereby made for a more particular description.

ALSO BEING all of Tract Two described in that deed of record in Deed Book 1275, Page 77 in the office of the Register of Deeds for Henderson County, North Carolina and being a portion of the property described in deed of record in Deed Book 1393, Page 180, Henderson County Registry.

SUBJECT to the right-of-way of Blue Ridge Avenue, a fifteen (15') foot right of way along the margin of Old Spartanburg Highway, (SR 172), that 20' private road depicted on plat of record in Plat Cabinet B, Slide 299A in the office of the Register of Deeds for Henderson County, North Carolina and utilities rights of way as shown on the above-described plat.

CITY OF HENDERSONVILLE

AGENDA ITEM SUMMARY
PLANNING DIVISION

SUBMITTER: Sam Hayes

MEETING DATE: June 12th, 2025

AGENDA SECTION: New Business

DEPARTMENT: Community Development

TITLE OF ITEM: Rezoning: Standard Rezoning–Quattlebaum Properties F LLC (Sheetz Upward Road) (25-37-RZO) – *Sam Hayes–Planner II*

SUGGESTED MOTION(S):

For Recommending Approval:

I move Planning Board recommend City Council **adopt** an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject property (PIN 9588-40-7325) from Henderson County Zoning RC – Regional Commercial to CHMU – Commercial Highway Mixed Use, based on the following:

1. The petition is found to be consistent with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan.

2. Furthermore, we find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because:

1. The proposed map amendment would rezone the property to an appropriate zoning district meant for the Upward Road corridor.
2. The adjacent property uses are congruent with the proposed use.

[DISCUSS & VOTE]

For Recommending Denial:

I move Planning Board recommend City Council **deny** an ordinance amending the official zoning map of the City of Hendersonville changing the zoning designation of the subject property (PIN 9588-40-7325) from Henderson County Zoning RC – Regional Commercial to CHMU – Commercial Highway Mixed Use, based on the following:

1. **The petition is found to be consistent with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:**

   The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan.

2. **We do not find this petition to be reasonable and in the public interest based on the information from the staff analysis, public hearing and because:**

   1. The proposed zoning district and rezoning is not appropriate for the type of development in this area.

[DISCUSS & VOTE]

SUMMARY: *The City of Hendersonville has initiated a standard rezoning for a property located along Upward Road. The property owner has submitted a petition to annex the parcel, identified as PIN 9588-40-7325. If annexed into the City, the property must be assigned a zoning designation. Because the applicant did not request a specific zoning district in the annexation petition, the City has proposed CHMU (Commercial Highway Mixed Use) zoning.*

CHMU was established specifically for properties along the Upward Road corridor. The proposed use for the property—a gas station—is permitted within the CHMU district. Additionally, surrounding parcels that have been annexed into the City through satellite annexations are also predominantly zoned CHMU.

PROJECT/PETITIONER NUMBER:	25-37-RZO
PETITIONER NAME:	• City of Hendersonville (Initial zoning only done if the property is successfully annexed into the City)
ATTACHMENTS:	1. Staff Report 2. Comprehensive Plan Review 3. Annexation Plat for Reference 4. Proposed Zoning Map 5. Draft Ordinance

REZONING: STANDARD REZONING –QUATTLEBAUM PROPERTIES F LLC (SHEETZ UPWARD ROAD) (25-37-RZO) CITY OF HENDERSONVILLE - COMMUNITY DEVELOPMENT STAFF REPORT

PROJECT SUMMARY 2
EXISTING ZONING & LAND USE 3
SITE IMAGES 4
SITE IMAGES 5
FUTURE LAND USE 6
REZONING ANALYSIS – GENERAL REZONING STANDARDS (ARTICLE 11-4) 7
DRAFT COMPREHENSIVE PLAN CONSISTENCY AND REZONING REASONABLENESS STATEMENT 8

PROJECT SUMMARY

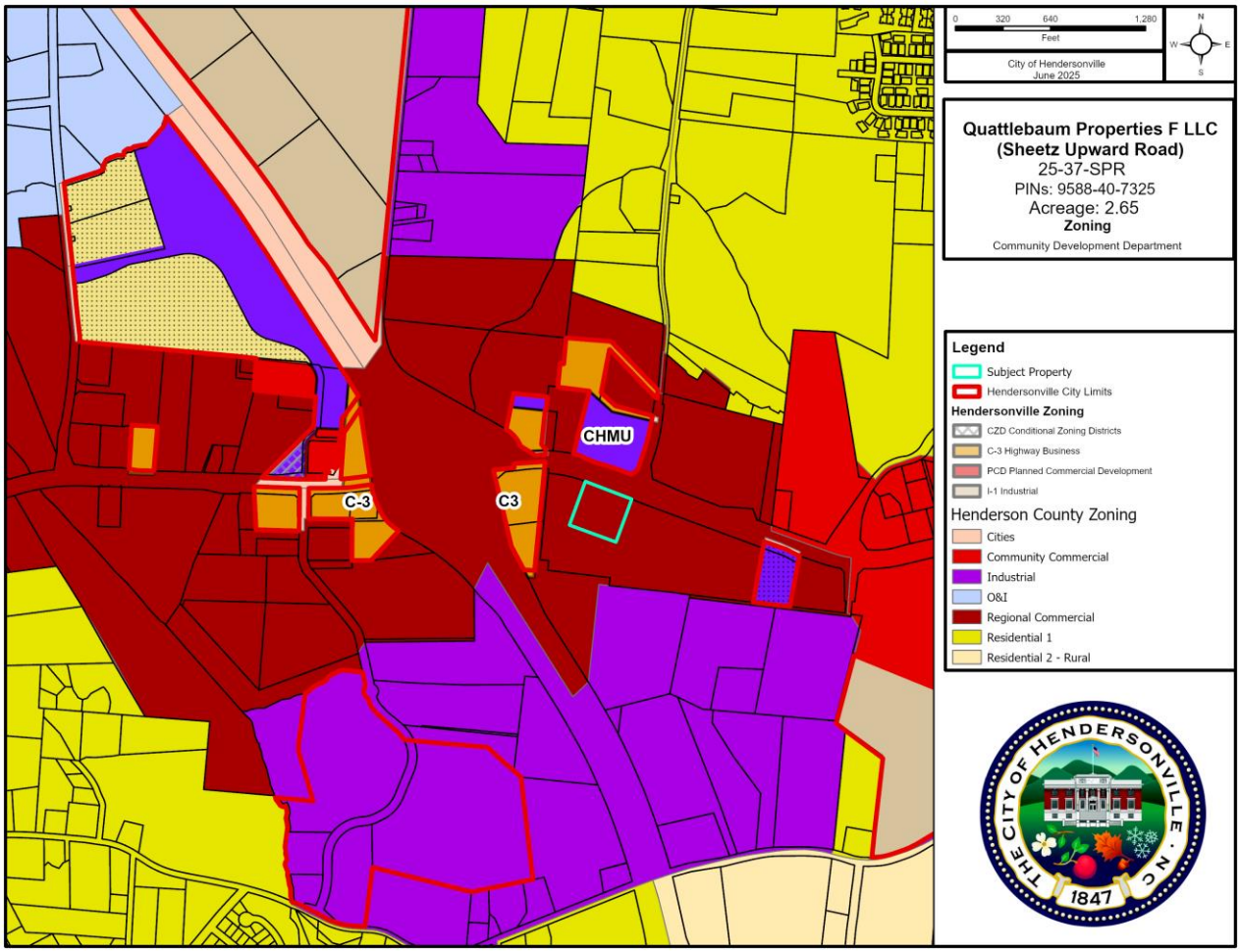
- Project Name & Case #:
  - Quattlebaum Properties F LLC (Sheetz Upward Road)
  - 25-37-RZO
- Applicant & Property Owner:
  - City of Hendersonville [Applicant]
- Property Address:
  - 0 Upward Road
- Project Acreage:
  - 2.65 Acres
- Parcel Identification (PIN):
  - 9588-40-7325
- Current Parcel Zoning:
  - RC – Regional Commercial (County Zoning)
- Future Land Use Designation:
  - Mixed-Use Commercial
- Requested Zoning:
  - CHMU – Commercial Highway Mixed Use
- Requested Uses:
  - Convenience stores with gasoline sales

SITE VICINITY MAP

The City of Hendersonville has initiated a standard rezoning for a property located along Upward Road. The property owner has submitted a petition to annex the parcel, identified as PIN 9588-40-7325. If annexed into the City, the property must be assigned a zoning designation. Because the applicant did not request a specific zoning district in the annexation petition, the City has proposed CHMU (Commercial Highway Mixed Use) zoning.

CHMU was established specifically for properties along the Upward Road corridor. The proposed use for the property—a gas station—is permitted within the CHMU district. Additionally, surrounding parcels that have been annexed into the City through satellite annexations are also zoned CHMU.

EXISTING ZONING & LAND USE



City of Hendersonville Current Zoning & Land Use Map

The subject property is currently zoned Henderson County RC – Regional Commercial, given that it is located within the County jurisdiction. If annexed, there are several other satellite annexations that have occurred in the surrounding area. The zoning districts for these properties include CHMU, C-3, and PCD.

In 2011, City planning staff brought forward a proposal for the creation of the Commercial Highway Mixed Use District. Additionally, City Council created the Upward Road Planning District in line with the City's sewer extension policy.

SITE IMAGES

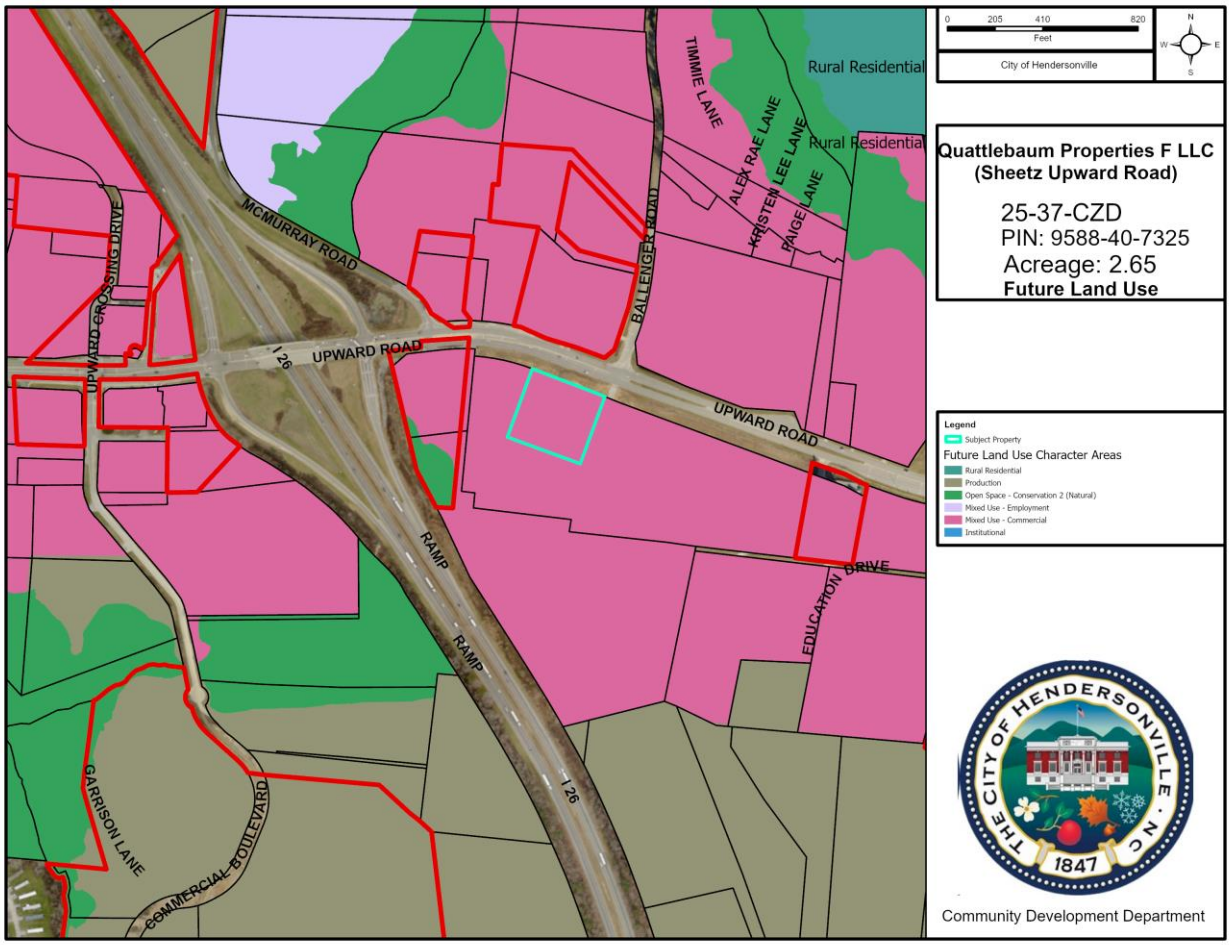
View of property looking east from Upward Road.

View south onto property from Upward Road.

SITE IMAGES

View west onto property from Upward Road.

FUTURE LAND USE



City of Hendersonville Future Land Use Map

The subject property is designated as mixed-use commercial in the future land use map in the Gen H Comprehensive Plan. Almost all of the parcels along Upward Road are classified as this in the comprehensive plan. The designation states, "These areas are centers of activity with a mix of retail, restaurant, service, office, and civic uses, as well as various residential housing types. The mix can be horizontal or vertical, with changes in use between floors of the same building. Buildings of two or more stories are common, and streets feature short block lengths and pedestrian facilities. Open spaces include plazas, formal greens, and pocket parks. This activity center is intended to be the City's most intense district outside of the Downtown character area."

REZONING ANALYSIS – GENERAL REZONING STANDARDS (ARTICLE 11-4)

GENERAL REZONING STANDARDS	
1) Comprehensive Plan Consistency	**LAND SUPPLY, SUITABILITY & INTENSITY** The subject property is was excluded from the analysis for the Land Supply Map and therefore is not ranked for Suitability for Residential, Commercial and Industrial uses. The subject property is located in an area designated as "High" for Development Intensity. The subject property is not located in one of the the 5 Focus Areas. The subject property is located in a Focused Intensity Node. A Focused Intensity Node is classified as: "Concentration of more intense development are envisioned for key nodes where 'Mixed-Use Commercial Center (MU-C)' character areas are delineated on the Future Land Use Map. These nodes are intended to be the largest activity centers outside of downtown and support a broad range of compatible uses."
	FUTURE LAND USE & CONSERVATION MAP **Character Area Designation:** Mixed Use - Commercial **Character Area Description:** Consistent **Zoning Crosswalk:** Consistent **Focus Area Map:** NA
2) Compatibility	**Whether and the extent to which the proposed amendment is compatible with existing and proposed uses surrounding the subject property –**
	The proposed use as a gas station is compatible with other uses along this corridor. Additionally, the zoning to CHMU is compatible with the City's desire to utilize this zoning district along this corridor.
3) Changed Conditions	**Whether and the extent to which there are changed conditions, trends or facts that require an amendment -**
	The property is currently going through the annexation process.
4) Public Interest	**Whether and the extent to which the proposed amendment would result in a logical and orderly development pattern that benefits the surrounding neighborhood, is in the public interest and promotes public health, safety and general welfare -**
	Rezoning to this zoning district will enable this corridor to be developed in the same zoning district over time, ensuring cohesive progression of development.
5) Public	**Whether and the extent to which adequate public facilities and services such as water supply, wastewater treatment, fire and**

Facilities	**police protection and transportation are available to support the proposed amendment**
	If annexed, the parcel would have the option to access City sewer. The property would be able to access City water without annexation.
6) Effect on Natural Environment	**Whether and the extent to which the proposed amendment would result in significantly adverse impacts on the natural environment including but not limited to water, air, noise, storm water management, streams, vegetation, wetlands and wildlife -**
	The development must comply with all the City of Hendersonville zoning ordinance provisions regarding the protection of the natural environment.

DRAFT COMPREHENSIVE PLAN CONSISTENCY AND REZONING REASONABLENESS STATEMENT

The petition is found to be **consistent** with the City of Hendersonville Gen H 2045 Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:

The petition is consistent with a range of Goals, Guiding Principles and the Future Land Use Designation of Chapter IV of the Gen H Comprehensive Plan.

We **[find/do not find]** this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:

DRAFT [Rationale for Approval]

- *The proposed map amendment would rezone the property to an appropriate zoning district meant for the Upward Road corridor.*
- *The adjacent property uses are congruent with the proposed use.*

DRAFT [Rational for Denial]

- *The proposed zoning district and rezoning is not appropriate for the type of development in this area.*

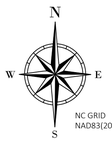
Chapter 4 - The Vision for the Future	Consistent	Inconsistent
SUPPLY, SUITABILITY, & INTENSITY		
LAND SUPPLY MAP (Pg. 81, Figure 4.4)	NA	NA
LAND SUITABILITY MAP (Pg. 84-86, Figure 4.5-4.7)	NA	NA
DEVELOPMENT INTENSITY MAP (Pg. 89, Figure 4.9)	Consistent	
FUTURE LAND USE & CONSERVATION MAP		
Future Land Use and Conservation Map (Note classification here, Pg. 117, Figure 4.12)	**Mixed Use - Commercial**	
Character Area Description (Pg. 122-131)	Consistent	
Zoning Crosswalk (Pg. 132-133, Figure 4.18)	Consistent	
Focus Area Map (Pg. 134-159)	NA	NA

Chapter 4 - The Vision for the Future	Consistent
GOALS	
Vibrant Neighborhoods (Pg. 93)	
Promote lively neighborhoods that increase local safety.	Consistent
Enable well-maintained homes, streets, and public spaces.	NA
Promote diversity of ages (stage of life), income levels, and a range of interests.	NA
The design allows people to connect to nearby destinations, amenities, and services.	Consistent
Abundant Housing Choices (Pg. 93)	
Housing provided meets the need of current and future residents.	NA
Range of housing types provided to help maintain affordability in Hendersonville.	NA
Housing condition/quality exceeds minimum standards citywide	NA
Healthy and Accessible Natural Environment (Pg. 94)	
Recreational (active and passive) open spaces are incorporated into the development.	Consistent
Water quality is improved with the conservation of natural areas that serve as filters and soil stabilizers.	Consistent
Natural system capacity (floodplains for stormwater; habitats to support flora/fauna; tree canopy for air quality, stormwater management, and microclimate) is maintained.	Consistent
Development is compact (infill/redevelopment) to minimize the ecological footprint.	Consistent
New development respects working landscapes (e.g., orchards, managed forests), minimizing encroachment.	Consistent
Authentic Community Character (Pg. 94)	
Downtown remains the heart of the community and the focal point of civic activity	Consistent
A development near a gateway sets the tone, presenting the image/brand of the community.	Consistent
Historic preservation is utilized to maintain the city's identity.	NA
City Centers and neighborhoods are preserved through quality development.	Consistent
Safe Streets and Trails (Pg. 95)	
Interconnectivity is promoted between existing neighborhoods through the building out of street networks, including retrofits and interconnectivity of new developments.	Consistent
Access is increased for all residents through the provision of facilities that promote safe walking, biking, transit, automobile, ride share, and bike share.	Consistent
Design embraces the principles of walkable development.	Consistent
Reliable & Accessible Utility Services	
Wastewater treatment (service and capacity) adequately serves existing and future development	Consistent
A compact service area (infill, redevelopment) maximizes the utilization of existing infrastructure and feasible service delivery.	NA
Satisfying Work Opportunities (pg. 96)	
The development promotes quality job options.	NA

The lives of residents are enriched with opportunities to learn, build skills, and grow professionally.	NA
Welcoming & Inclusive Community	
Accessibility exceeds minimum standards of ADA, fostering residents' and visitors' sense of belonging.	Consistent
An inviting public realm (i.e., parks, public buildings) reflects the attitudes of city residents and leaders, and helps residents develop a sense of place and attachment to Hendersonville.	NA
Accessible & Available Community Uses and Services (Pg. 97)	
Private development is plentiful, meeting the demands of current and future populations.	Consistent
Resilient Community	
stormwater management, and microclimate) is maintained.	Consistent
GUIDING PRINCIPALS (pg. 98)	
Mix of Uses (Pg. 98)	
Revitalization of Outdated Commercial Areas	NA
New business and office space promotes creative hubs.	NA
Compact Development (Pg. 100)	
Development is consistent with efforts in the area to establish 15-minute neighborhoods.	
The infill project is context sensitive [Small Infill Site].	NA
Sense of Place (Pg. 102)	
The development contributes to Hendersonville's character and the creation of a sense of place through its architecture and landscape elements. [Placekeeping and Placemaking and 3rd Places]	NA
Conserved & Integrated Open Spaces (Pg. 106)	
A diverse range of open space elements are incorporated into the development.	Consistent
Desirable & Affordable Housing (Pg. 108)	
Missing middle housing concepts are used in the development.	Consistent
Connectivity (Pg. 112)	
The development encourages multimodal design solutions to enhance mobility.	Consistent
Efficient & Accessible Infrastructure (Pg. 114)	
The development utilizes existing infrastructure	Consistent

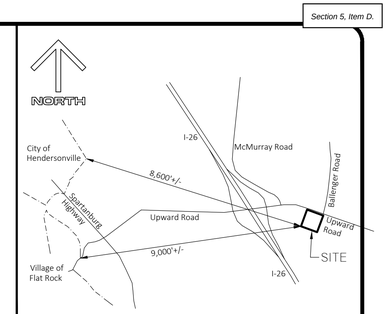
Inconsistent
NA
NA
NA
NA
NA
NA
NA
NA

NA
NA
NA
NA
Inconsistent
NA
NA

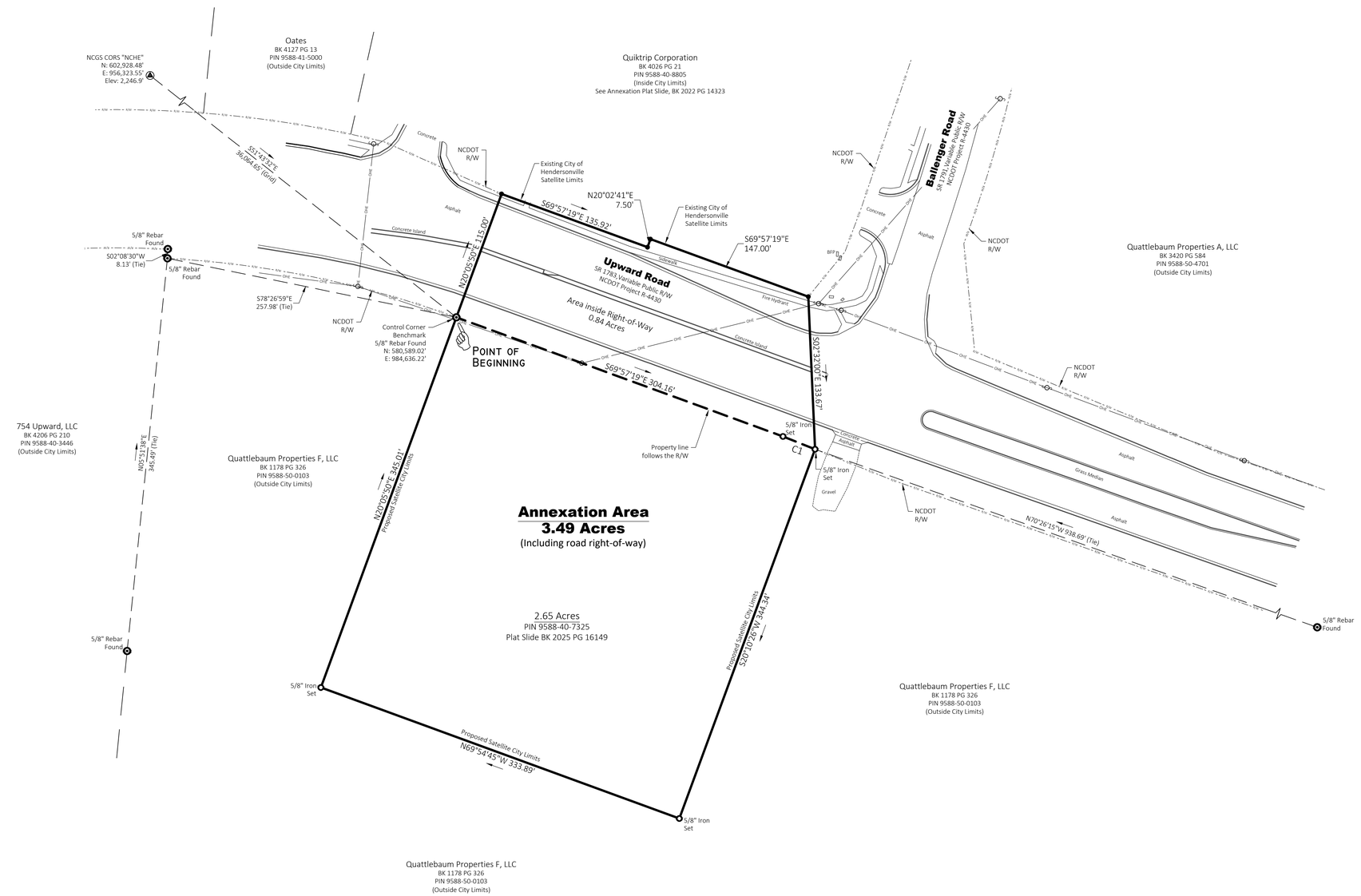


NC GRID
NAD83(2011)

Curve Data				
Curve #	Length	Radius	Chord Bearing	Chord Length
C1	30.20'	9000.00'	S68° 12' 29"E	30.20'



Vicinity Map



LEGEND

- Annexation Boundary
- Tie Line (surveyed)
- Adjoiner Line (not surveyed)
- Easement
- Overhead Electric
- Right-of-Way
- Computed Point
- Utility Pole
- Water Meter

Surveyor's Certification

I certify that this plat was drawn under my supervision from an actual survey made under my supervision (see description and/or deed references below); that the boundaries not surveyed are indicated as drawn from the information noted on this plat of survey; that this survey is classified as an Urban Land Survey (Class A) having a calculated ratio of precision better than 1:10,000 before adjustments, and/or neither axis of the 95 percent confidence level error ellipse for any control point or property corner exceeds 0.10 feet; that this plat meets the requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56.1603);

The provisions of G.S. 47-30 do not apply to the boundary plat of areas annexed by municipalities nor to plats of of municipal boundaries, whether or not required by law to be recorded in the State of North Carolina.

Witness my signature, seal and date.

3/26/25

Jason O. Wall, PLS #L-5637

NORTH CAROLINA PROFESSIONAL SEAL L-5637 LAND SURVEYOR JASON O. WALL

Surveyor's Notes:

1. The purpose of this Plat is to annex parcel PIN # 9588-40-7325 (2.65 acres, and 0.84 acres within road right-of-way, totaling 3.49 acres) into the City Limits of Hendersonville as shown hereon.
2. The property which is the subject of this survey is a portion of the land described in Deed Book 1178, Page 326, being shown in Plat Silde Book 2025, Page 16149, Henderson County Registry. The property owner shown in the deed at the time of survey was: Quattlebaum Properties F, LLC.
3. This plat reflects information discovered by the surveyor in the normal course of work and does not necessarily show every possible condition affecting the property. A complete title abstract was not performed by Survey Pros. Underground utilities may exist which are not shown. This property may be subject to easements and/or rights-of-way of record not shown. Other easements, rights-of-way, building ordinances, zoning, and other legal encumbrances may also exist. Adjoining property owner information was obtained from the local GIS.
4. The GPS portion of this survey meets the classification requirements of The Standards of Practice for Land Surveying in North Carolina (21 NCAC 56.1607) for an Urban Land Survey (Class A) such that neither axis of the 95 percent confidence level error ellipse for the project control point(s) exceeds 0.10 feet. The static GPS survey was performed on October 28, 2024 with Trimble R8s receivers. National Geodetic Survey (NGS) CORS station "NCHE" was used as the fixed control station having published NC Grid coordinates NAD83(2011) and orthometric height (elevation) NAVD 88 as shown hereon. Vectors were adjusted utilizing Trimble Geomatics Office Business Solutions software. The geoid model used was GEOID18. The horizontal positional accuracy relative to the remote control station was 0.07 feet prior to adjustment. The vertical positional accuracy relative to the remote control station was 0.31 feet prior to adjustment. The combined grid factor at the project control point is 0.9997760478. All bearings shown are relative to NC Grid, NAD 83(2011). All elevations shown are relative to NAVD 88. All distances shown are horizontal distances in U.S. Survey Feet unless otherwise noted. All areas shown were computed by coordinate computation.
5. Revised on 3/26/2025; add certification, update notes, update vicinity map, and proposed satellite city limits per City of Hendersonville planner comments.

City Clerk Certification

This plat represents the area being annexed to the City of Hendersonville, N.C pursuant to NCGS 160A-31, by ordinance duly adopted (Annexation Ordinance _____).

This the ____ day of _____, 2025.

_____

City Clerk of Hendersonville Date

Annexation Plat

PIN 9588-40-7325

City of Hendersonville

Scale: 1 inch

0 50'

Annexation Plat for:

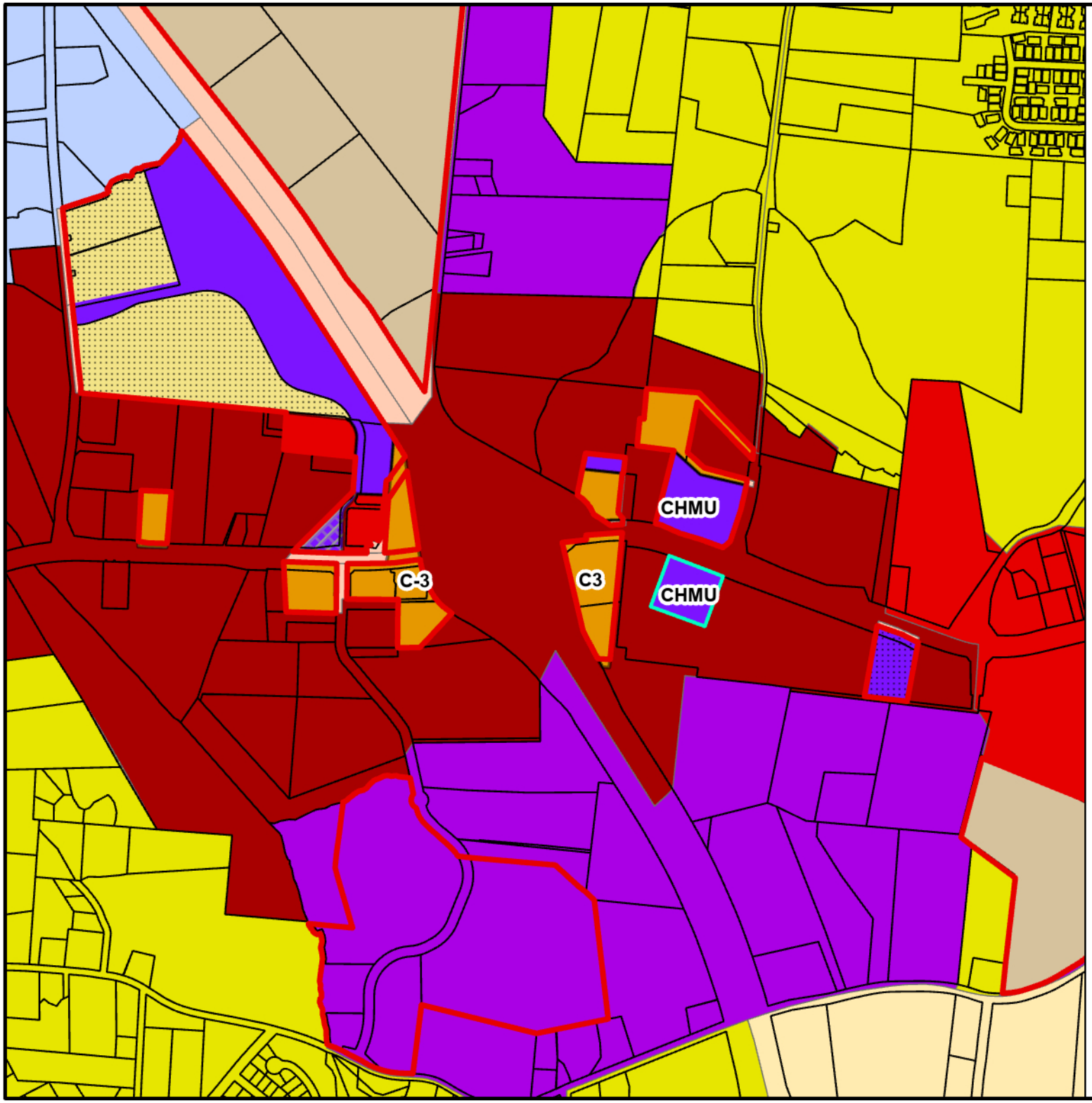
City of Hendersonville

Property Location:
Upward Road, Flat Rock, NC 28731
Blue Ridge Township, Henderson County, North Carolina

SurveyPros
(336) 667-5533

Survey Pros, PLLC
924 Main Street, Suite 300
North Wilkesboro, NC 28659
www.NCSurveyPros.com

Firm Number: P-2218	
Crew Chief: WW	
File Number: 24-160	
Date: 1-17-2025	



0 320 640 1,280
Feet

N
E
S

City of Hendersonville
June 2025

Quattlebaum Properties F LLC
(Sheetz Upward Road)
25-37-SPR
PINs: 9588-40-7325
Acreage: 2.65
Zoning
Community Development Department

Legend

- Subject Property
- Hendersonville City Limits

Hendersonville Zoning

- CZD Conditional Zoning Districts
- C-3 Highway Business
- PCD Planned Commercial Development
- I-1 Industrial

Henderson County Zoning

- Cities
- Community Commercial
- Industrial
- O&I
- Regional Commercial
- Residential 1
- Residential 2 - Rural

THE CITY OF HENDERSONVILLE · N.C. 1847

Ordinance #___-____

AN ORDINANCE OF THE CITY OF HENDERSONVILLE CITY COUNCIL TO AMEND THE OFFICIAL ZONING MAP OF THE CITY OF HENDERSONVILLE FOR A CERTAIN PARCEL (POSSESSING PIN NUMBER 9588-40-7325) BY CHANGING THE ZONING DESIGNATION FROM HENDERSON COUNTY RC (REGIONAL COMMERCIAL) ZONING DISTRICT TO CITY OF HENDERSONVILLE CHMU (COMMERCIAL HIGHWAY MIXED USE) ZONING DISTRICT

IN RE: Parcel Numbers: 9588-40-7325
Quattlebaum Properties F LLC (Sheetz Upward Road) (File # 25-37-RZO)

WHEREAS, the Planning Board took up this application at its regular meeting on June 12th, 2025; voting ___ to recommend City Council adopt an ordinance amending the official zoning map of the City of Hendersonville, and

WHEREAS, City Council took up this application at its regular meeting on July 2nd, 2025, and

WHEREAS, City Council has found that this zoning map amendment is consistent with the City's comprehensive plan, and that it is reasonable and in the public interest for the reasons stated, and

WHEREAS, City Council has conducted a public hearing as required by the North Carolina General Statutes on July 2nd, 2025,

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Hendersonville, North Carolina:

1. Pursuant to Article XI of the Zoning Ordinance of the City of Hendersonville, North Carolina, the Zoning Map is hereby amended by changing the zoning designation of the following: Parcel Number: 9588-40-7325 from Henderson County RC (Regional Commercial) Zoning District to City of Hendersonville CHMU (Commercial Highway Mixed Use) Zoning District.

2. Any development of this parcel shall occur in accordance with the Zoning Ordinance of the City of Hendersonville, North Carolina.

3. This ordinance shall be in full force and effect from and after the date of its adoption.

Adopted this 2nd day of July 2025.

Attest: _____ Barbara G. Volk, Mayor, City of Hendersonville

_____
Jill Murray, City Clerk

Approved as to form:

_____
Angela S. Beeker, City Attorney

CITY OF HENDERSONVILLE

AGENDA ITEM SUMMARY
PLANNING DIVISION

SUBMITTER: Lew Holloway

MEETING DATE: June 12, 2025

AGENDA SECTION: New Business

DEPARTMENT: Community Development

TITLE OF ITEM: Zoning Text Amendment: Tree Canopy Preservation & Enhancement Clarifying Edits (25-15-ZTA)

SUGGESTED MOTION(S):

For Approval:	**For Denial:**
I move Planning Board recommend City Council **adopt** an ordinance amending the official City of Hendersonville Zoning Ordinance, Article VII, Section 7-3-4 and Article XV to clarify requirements for the provision and protection of trees: **1. The petition is found to be consistent with the Gen H Comprehensive Plan based on the information from the staff analysis and the public hearing, and because**: The proposed amendments aligns with the Gen H Comprehensive Plan goal for Healthy & Accessible Natural Environment. **2. We [find] this petition, in conjunction with the recommendations presented by staff, to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because:** 1. The proposed text amendment adds clarity to a previously adopted ordinance. 2. The proposed text amendment aligns with the intent of the previously adopted ordinance. **[DISCUSS & VOTE]**	I move Planning Board recommend City Council **deny** an ordinance amending the official City of Hendersonville Zoning Ordinance, Article VII, Section 7-3-4 and Article XV to clarify requirements for the provision and protection of trees:: **1. The petition is found to be consistent with the Gen H Comprehensive Plan based on the information from the staff analysis and the public hearing, and because:** The proposed amendments aligns with the Gen H Comprehensive Plan goal for Healthy & Accessible Natural Environment. **2. We [do not find] this petition to be reasonable and in the public interest based on the information from the staff analysis and the public hearing, and because**: I. The proposed text amendment does not align with the intent of the previously adopted ordinance. **[DISCUSS & VOTE]**

SUMMARY: *The City of Hendersonville is initiating a zoning text amendment to clarify aspects of Article 15 as it relates to the recently adopted tree canopy preservation ordinance. The original ordinance amendment was initiated at the request of the City of Hendersonville Tree Board and guided by an Ad Hoc Tree Ordinance Committee. That committee met for approximately 1 year before a final ordinance was passed by City Council in May of 2024.*

After being in place for 1 year, Planning staff have identified points of clarification that need to be made to the ordinance to eliminate confusion or potential application of the ordinance that is out of context with the original intent of the ordinance. No substantive changes to the ordinance are proposed.

These propose changes were presented to both the Legislative Committee and the Tree Board for the feedback. The Legislative Committee and Tree Board concurred with the changes that were presented at those meetings. Members of the Tree Board also suggested additional substantive changes to the ordinance that have not been included in the draft provided in this packet.

PROJECT/PETITIONER NUMBER:	25-15-ZTA
PETITIONER NAME:	City of Hendersonville
ATTACHMENTS:	1. Staff Report 2. Draft Ordinance Changes

ARTICLE VII – DEVELOPMENT REVIEW

Sec. 7-3-4. Review of final site plans.

Sec. 7-3-4.3 Contents of final site plan. A site plan showing the following shall accompany an application for site plan approval:

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~~m) A landscape plan showing wood line before site preparation with typical species and average diameter of trees indicated and showing areas to be screened, fenced, walled and/ or landscaped, including required buffers, existing and proposed, with details of fences or walls and plant locations, sizes and species;~~

m) A landscaping plan showing tree line before site preparation, identifying existing tree canopy, tree canopy proposed to be preserved, and new canopy installation areas, identifying the acreage of each, as well as areas to be screened, fenced, walled and/or landscaped.

***

~~w) A plan showing tree line before site preparation, identifying existing tree canopy, tree canopy proposed to be preserved, and new canopy installation areas, identifying the acreage of each, as well as areas to be screened, fenced, walled and/or landscaped.~~

~~x)~~w) Proposed limits of land disturbing activity.

ARTICLE XV. BUFFERING, SCREENING AND LANDSCAPING

Sec. 15-1. Purpose and intent.

The City of Hendersonville has an abundant and diverse tree and vegetative cover that contributes to the aesthetic value of the city and provides numerous ecological and economic benefits. The landscaping, buffering and screening standards set forth below require landscaping in certain circumstances and locations in order to:

a) Encourage the preservation of existing trees and vegetation and replenish removed vegetation;

b) Improve the visual quality of the City of Hendersonville and minimize potential negative impacts of development such as noise, dust, glare of lights, parking lots, traffic, heat, overcrowding, and odor;

c) Provide environmental benefits such as climate modification, decreased energy consumption, reduced stormwater runoff, decreased erosion, improved water and air quality, and protection of wildlife habitat;

d) Provide a transition between dissimilar land uses to protect abutting properties from potential negative impacts of neighboring development and preserve the character and value of a property and provide a sense of privacy;

e) Improve standards for quantity, location, size, spacing, protection, and maintenance of plants and other screening materials to assure a high level of quality in the appearance of Hendersonville while allowing flexibility to promote well designed and creative landscape plantings;

f) Require the maintenance of landscaping installed to meet the requirements of these standards to ensure that the landscaping continues to thrive and enhance the visual quality of the City of Hendersonville.

Sec. 15-2. Landscaping, buffering and screening required.

Landscaping, buffering and screening shall be required for developments within the planning jurisdiction of the City of Hendersonville, including its extraterritorial jurisdiction, as set forth herein.

a) Unless exempted pursuant to section 15-4(c)(10) below, the following developments must bring the entire site into full compliance with the requirements of this article:

1) Any new public or private development, with the exception of single or two-family homes on lots that were created by a method excluded from subdivision authority pursuant to G.S. 160D-802(1)—(5);

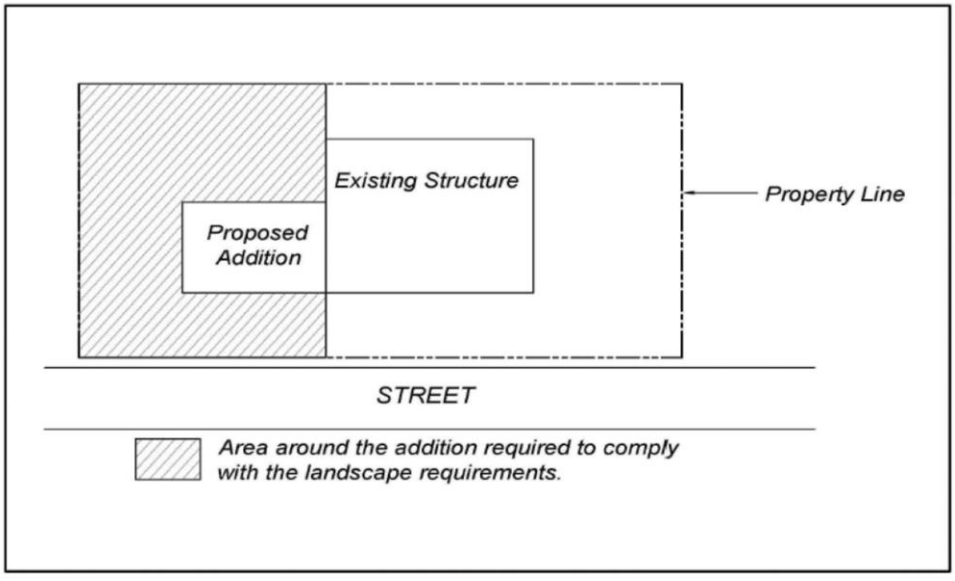
2) A change of use to a higher impact. For purposes of this section, the following list ranks differing uses from lowest to highest impact: residential, mobile home park, institutional and cultural, commercial, industrial;

3) Renovations with a total cost exceeding 50 percent of the assessed value of the building according to Henderson County tax records or an appraisal by a state licensed appraiser;

4) Expansions exceeding 50 percent of the pre-expansion floor area or paved surface;

5) Existing unpaved parking lots which are paved over.

b) Expansions or additions that are less than 50 percent of the pre-expansion floor area and/or pavement surface must meet the landscaping requirements only in the area around the addition which is parallel to any edge of the expansion area and extending to the property line or street pavement edge.



(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-3. Alternative compliance.

The landscape requirements are intended to set minimum standards for quality development and environmental protection and are not intended to be arbitrary or inhibit creative solutions. Site conditions or other reasons may justify the need to request an alternate method of compliance with the landscape requirements. The reviewing authority, as specified in article VII, above, may alter the requirements of this section as long as existing or added landscape features of the development site comply with the intent of this article. Requests for alternative compliance shall be accepted if one or more of the following conditions are met:

a) Topography, geologic features, drainage channels or streams, existing natural vegetation, overhead or underground utilities, or other conditions make it unreasonable or meaningless to plant a buffer or meet other landscape requirements;

b) Space limitations, unusually shaped lots, unique relationships to other properties, and/or prevailing practices in the surrounding neighborhood (such as use of a specific type of vegetation) may justify alternative compliance when changing the use type of an existing building in an established mature neighborhood or when developing in an historic district; or

c) An alternative compliance proposal is equal or better than normal compliance in its ability to fulfill the intent of this article and exhibits superior design quality.

Sec. 15-4. Existing vegetation.

a) **Preservation of existing vegetation.** Preserving trees can improve the aesthetic quality of the site and improve property values, provide environmental benefits, mitigate the impacts of development on the community, and help minimize opposition to a proposed development. It is recommended that groups of trees be preserved, as well as individual trees. Existing preserved trees and shrubs may be credited towards ~~required buffer trees, street trees, and parking lot trees,~~ tree and shrub planting requirements in Sections 15-5 through 15-11 of this Article in accordance with paragraph b), below.

b) **Credits and other incentives to preserve vegetation.** Preserved trees may be credited at the following rate:

2—12 inch DBH (diameter at breast height) tree = 1 tree

13—18 inch DBH tree = 2 trees

19—24 inch DBH tree = 3 trees

25+ inch DBH tree = 4 trees

In order to receive credit, preserved vegetation must be in good health and condition, and must not be listed as an invasive plant on the recommended species list. Preserved trees utilized for Tree Credits must meet the requirements and standards established by sections 15-5 through 15-11 to replace the planting requirement established therein. For example, a preserved tree that is credited to replace a required street tree planting per section 15-9 must meet the standards established by section 15-9 (spacing, size at maturity, placement, planting strip, etc.). Tree credits shall not be used to meet any New Tree Canopy Installation requirements established under section 15-4 c) Tree Canopy Preservation. Trees designated to be preserved and utilized for Tree Credits must be indicated on the site plan and on landscape and grading plans. Protective barriers, if utilized in accordance with paragraph d), below, must also be shown on the landscape and grading plans. A preserved tree shall be replaced with the total number of trees which were credited to the existing tree if the preserved tree dies within ten years of completion of the project.

c) **Tree canopy preservation.** All developments required to comply with this article pursuant to section 15-2 herein shall preserve existing tree canopy in compliance with this section, with the exception of development of sites ~~with existing tree canopy of less than 30,000 square feet,~~ meeting the criteria

established under section 15-4 c) 1) below. ~~shall preserve existing tree canopy in compliance with this section.~~

1) **Tree canopy preservation exemptions.** The following development sites shall be exempt from the tree canopy preservation requirements of this section 15-4(c):

a. The development site has less than or equal to 30,000 square feet of existing tree canopy;

b. Less than one acre of the site will be disturbed; or

c. The site is less than one acre in area.

~~1)~~2) **Tree canopy coverage map**: The tree canopy coverage map is hereby adopted. The tree canopy coverage map is based on the existing tree canopy data as established by the city's tree canopy cover assessment. The tree canopy coverage map shall be rendered digitally and maintained via GIS or similar software. The tree canopy coverage map shall be updated at least every five years to reflect the city's most recent tree canopy cover assessment.

~~2)~~3) **Existing tree canopy:** Any reference in this chapter to existing tree canopy shall refer to the most recent tree canopy coverage map created by the City of Hendersonville.

~~3)~~4) **Methodology**: Developers must comply with the requirements of sections 7-3-3.2(n) and 7-3-4.3(w) by one of the following methods:

a. Using the tree canopy data shown on the tree canopy coverage map (reference definition of tree canopy in section 12-2);

b. For any development site for which the tree canopy coverage map does not provide data, the developer shall submit a plan, showing the dripline of the existing tree canopy, and such plan shall be prepared by a land surveyor, civil engineer, landscape architect licensed by the State of North Carolina or arborist certified by the International Society of Arboriculture; or

c. A developer may submit a plan showing the existing tree canopy as of the date of the most recent tree canopy coverage map, such plan prepared and sealed by a land surveyor, civil engineer, landscape architect licensed by the State of North Carolina or arborist certified by the International Society of Arboriculture.

~~4)~~5) **Preservation requirements.**

a. **Tier one requirement:** Twenty percent of the existing tree canopy on the site shall be preserved. The specific tree canopy preserved shall be at the discretion of the developer. Tier one canopy is not eligible for fee-in-lieu without a variance issued by the board of adjustment.

b. **Tier two requirement:** In addition to the tier one requirement, existing tree canopy on the site shall be preserved, and new tree canopy shall be installed, in accordance with one of the options in the table below:

Tier Two Tree Canopy Requirement			
Select One:	**Percentage of Tier Two Tree Canopy Preserved (in addition to Tier One Canopy)[1]**	**Percentage of New Tree Canopy Installation Required[2&3]**	**Percentage of Total Tier Two Canopy Required**
Option 1	10%	0%	10%
Option 2	5%	7%	12%
Option 3	0%	15%	15%

[1] Percentages of tier two tree canopy preserved refer to the total existing tree canopy on a site before calculation of the tier one requirement and are in addition to the tier one requirement.
[2] Percentages of New tree canopy installation refer to the total existing tree canopy on a site and shall be installed in accordance with the credit for new tree canopy installation table below.
[3] New tree canopy installation may be achieved through the installation of other tree plantings required by this article (ex. A large maturing street tree required per Section 15-9 shall provide 872 sq. ft. of credit towards Tier II new canopy installation as may be required Section 15-4).

Credit for New Tree Canopy Installation	
Size of Tree*	**Tree Canopy Credit**
Large maturing	872 sq. ft.
Medium maturing	350 sq. ft.
Small maturing	144 sq. ft.
*As designated in the recommended species list	

The developer may request to pay a fee-in-lieu of the tier two canopy preservation requirements pursuant to this section.

c. In calculating the percentage preserved, only trees that are fixtures on the site shall be counted towards existing tree canopy preserved.

d. Specimen trees preserved shall receive 1.5 times their actual canopy coverage in the calculation of preserved tree canopy if such tree is protected during construction in accordance with the standards contained in section 15-4(d) below. Actual canopy coverage shall be determined to be equivalent to the critical root zone and calculated based on the protection standards established under section 15-4 (d) 1)

e. As an example, a five-acre development site with two-acres, or 87,120 sq. ft., of existing tree canopy would be required to preserve existing tree canopy as shown in the table below:

Example of Tree Canopy Preservation Requirement				
Select One:	**Tier One Tree Canopy Preservation Requirement**	**Tier Two Tree Canopy Preserved (in addition to Tier One Canopy)**	**Tier Two New Tree Canopy Installation Required**	**Total Tree Canopy Requirement**
Option 1	17,424 sq. ft. (20%)	8,712 sq. ft. (10%)	0 sq. ft. (0%)	26,136 sq. ft. (30 %)
Option 2	17,424 sq. ft. (20%)	4,356 sq. ft. (5%)	6,098 sq. ft. (7%)	27,878 sq. ft. (32%)
Option 3	17,424 sq. ft. (20%)	0 sq. ft. (0%)	13,068 sq. ft. (15%)	30,492 sq. ft. (35%)

~~5)~~6) **Protection of trees during construction:** All trees required to be preserved by this section shall be protected during construction in accordance with the standards contained in section 15-4(d) below.

~~6~~)7) **Credit for existing vegetation:** All trees preserved pursuant to this section may be credited towards the requirements of ~~this article~~ sections 15-5 through 15-11, below, in accordance with the provisions of section 15-~~4~~(b) above.

~~7~~)8) **Fee in lieu.** Where specifically provided, community development director shall, in lieu of preserving trees pursuant to this section, allow the developer to pay a fee-in-lieu of tree preservation to the city's tree fund. The fee-in-lieu shall be established in the city's fee schedule.

The fee-in-lieu shall be based on the average cost of tree canopy replacement per square foot, and shall be calculated using a weighted average of large, medium, and small maturing trees as shown below:

Calculation of Fee-in-Lieu of Tree Canopy Preservation			
Size of Tree	**Average Tree Canopy**	**Trees per Acre**	**Weight Factor**
Large maturing	872 sq. ft.	49.943	0.105
Medium maturing	350 sq. ft.	124.305	0.261
Small maturing	144 sq. ft.	301.507	0.634
Weighted average:			228.84 sq. ft. per tree

As an example, assume the city's cost to plan and establish a tree is $350.00. Three hundred fifty dollars divided by 228.84 square feet equals $1.53 per square foot of tree canopy. Now assume the tier two requirement for tree canopy preservation is 8,712 square feet. The fee-in-lieu of tree canopy preservation would be 8,712 square feet multiplied by $1.53 for a total fee-in-lieu of $13,329.36.

~~8~~)9) **Delay of development approval.** In addition to any other method of enforcement or remedy available, the city may refuse to issue a development approval for a period of three years following the removal of all or substantially all of the trees that are required to be protected under this article.

~~9~~)10) **Civil penalties.** Civil penalties for violation of this subsection, including but not limited to removal of tree canopy required to be preserved and failure to protect trees during construction, shall be assessed on a per tree basis.

d) **Protection of existing trees during construction.** The regulations contained in this paragraph shall apply in those circumstances when a developer has either: (1) elected to protect trees during construction in order to receive credit under section 15-2(b), or (2) been required to preserve canopy under section 15-2(c).

1) No grading or other land-disturbing activity can occur on a site with existing trees which are designated to be preserved in order to meet landscaping requirements until protective barriers are installed by the developer and approved by the community development director or a designee appointed by the community development director. Trees designated for preservation which are counted toward the landscape requirements must be protected by barriers, while trees designated for preservation which do not count toward the landscape requirements are encouraged to be protected by barriers. The diameter of the preserved trees and the location of protective barriers must be shown on landscape and grading plans with the dimension between the tree trunk and barrier indicated.

Barricades shall be placed around the critical root zone of preserved trees that are within 50 feet of any grading or construction activity. The critical root zone is a circle extending around the tree with a one-foot radius for every one inch of tree diameter. For example, a ten-inch diameter tree would have a barricade surrounding it, erected ten feet away from the trunk. All protective barriers must be maintained throughout the building construction process.

Protective barriers shall consist of either:

A) A fence which is at least three feet high and constructed in a post and rail configuration, using two-by-four posts and one-by-four rails; or

B) A fence with two-by-four posts placed no farther than ten feet apart covered with a four-foot orange polyethylene laminar safety fencing.

2) All contractors must be made aware of the areas designated for protection. No disturbance can occur within the tree protection areas including the following:

A) Grading;

B) Filling, unless an aeration system, certified by a registered landscape architect, certified arborist, or North Carolina Agricultural Extension Specialist, is installed to protect the tree from suffocation;

C) Parking;

D) Storage of debris or materials, including topsoil;

E) Disposal of hazardous wastes or concrete washout; and

F) Attaching of nails, ropes, cables, signs, or fencing to any tree designated for preservation.

If any area within the critical root zone will be disturbed for any reason, a registered landscape architect, certified arborist, or North Carolina Agricultural Extension Specialist must recommend measures to minimize any potential impact and certify that the activity will not damage the tree under normal circumstances.

3) The developer should coordinate with utility companies early in the design process to resolve potential conflicts about the placement of utilities and landscape requirements. Utilities must either be placed outside of the tree protection area or, with planning department approval, tunneled at least two feet directly below the tree roots, to minimize root damage.

4) If silt fencing is required to control sedimentation, the fencing must be placed along the uphill edge of a tree protection zone in order to prevent sediment from accumulating in the critical root zone area.

e) **Trees in public rights-of-way.** Trees located in any public right-of-way cannot be pruned or removed without a permit from the public works department in accordance with the City of Hendersonville Tree Ordinance.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-5. General standards.

The following general standards shall apply to all landscaping requirements in this article.

a) Unless otherwise specified, the exact placement of required plants and structures shall be the decision of the developer. The type of plants used shall be limited to those on the Approved Landscape Plant List ~~recommended species list~~. No plants listed as an invasive plant in the ~~recommended species list~~ Approved Species Plant List may be used to meet the requirements of this ordinance. Required landscaping shall be designed in such a manner as to impart its aesthetic character when viewed from any area accessible to the public or from adjacent properties.

b) **Plant material.** Plant materials used for installation shall conform to the standards established by the American Association of Nurserymen in the "American Standard for Nursery Stock," for each type (i.e., canopy tree, shrub, etc.) with minimum size as appropriate for the minimum caliper size designated in paragraph a), above. Grass sod, when made a part of a buffer, must be healthy, clean and reasonably free of weeds, noxious pests or diseases.

c) **Installation.** All landscaping/screening shall be installed in a sound, workmanlike manner and according to accepted good planting procedures with the quantity and quality of plant materials as described. All elements of landscaping shall be installed so as to meet all other applicable ordinances and code requirements.

d) **Maintenance.** The owner, occupant, tenant and the respective agent of each, if any, shall be jointly and severally responsible for the maintenance of all buffer and landscaping. Buffers and landscaping shall be maintained in a good condition so as to present a healthy, neat and orderly appearance at least equal to the original installation and shall be kept free from refuse and debris. Dead vegetation and landscaping material shall be promptly replaced with healthy, living plantings. Evergreen hedges shall be trimmed annually or as needed to provide a full visual screen and, in any event, shall not be allowed to exceed eight feet in height without written approval of the zoning administrator.

e) **Walls and fences.** Any walls used for screening or as part of a buffer shall be constructed in a durable fashion of brick, stone, or other masonry materials. When concrete block is utilized, it shall be finished with stucco on both sides. Wood posts and planks or metal or other materials specifically designed as fencing materials may be approved by the zoning administrator for use in a Type C Buffer. Other materials may also be considered through the alternative buffer and screening process described in section 15-3. No more than ten percent of the surface of a fence or wall shall be left open and the finished side of the fence or wall shall face the abutting property. A chain link fence may not be used to satisfy the requirements of this article.

f) **Overhead utilities.** Landscaping plans, including plant spacing and species selection shall be such that landscaping required under this article does not conflict with overhead utilities.

g) **Species diversity.** When the total number of trees required under the provisions of this article equals 20 or more, then no single tree species shall comprise more than 25 percent of the trees planted on the development site.

h) **Native species.** For each development site, at least 75 percent of the trees required to be planted under the provisions of this article shall be native species as listed on the recommended species list.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-6. Bufferyards.

Certain land uses may create an adverse impact when developed adjacent to other less intensive land uses. A bufferyard is a permanent unit of land together with plantings and structure(s), if any, which is designed to ameliorate such adverse impacts. Bufferyards, as required in this section, shall be depicted on any site plans reviewed under this ordinance and shall be depicted and described on drawings submitted for the purpose of zoning compliance review. Unless deferred pursuant to a letter of compliance issued under section 15-~~8~~12, below, buffers shall be emplaced and approved prior to issuance of any certificate of occupancy for the development.

a) **Location of buffers.** Buffers shall be located on lot or parcel boundary lines. Buffers shall not be located on any portion of an existing public or private street or right-of-way, whether opened or unopened.

b) **Determination of buffer requirements.** To determine a buffer required between two adjacent parcels or between a parcel and a street, the following procedure shall be followed:

1) Identify the proposed land use;

2) Identify the use or, if vacant, the zoning district classification, of land adjacent to the proposed use;

3) Determine the buffer required on each boundary (or segment thereof) of the subject parcel by referring to the following Table of Buffer Requirements. This specifies the buffer required between proposed land uses and existing adjacent land uses or zoning districts.

TABLE OF BUFFER REQUIREMENTS

Proposed Land Use	Existing Land Use/Zoning District[1]					
	Residential[2]	Residential, Multi-family[3]	Mobile Home Park[4]	Institutional & Cultural[5]	Commercial[6]	Industrial[7]
Residential	X	X	X	X	X	X
Residential, multi-family	8-foot A	X	X	X	X	X
Mobile home park	10-foot B	10-foot B	X	8-foot A	10-foot B	X
Institutional & cultural	10-foot B	10-foot B	8-foot A	X	X	X
Commercial	10-foot B	10-foot B	10-foot B	8-foot A	X	X
Industrial	25-foot C	25-foot C	25-foot C	15-foot B	15-foot B	X

Notes for Table of Buffer Requirements:

1 Buffering is required if adjacent parcel of land is used or zoned for the category noted regardless whether adjacent parcel is located in the city, the city's extraterritorial jurisdiction (ETJ), or the planning jurisdiction of another governmental entity. Existing adjacent land use takes precedence over zoning district. Buffer requirement for the district will be used if adjacent land is vacant.

2 Includes the following use districts: R-40, R-20, R-15, R-10, R-6, RCT, PRD.

3 Includes only those sites developed as multi-family.

4 Includes the PMH district or an existing mobile/manufactured home park.

5 This category includes religious, recreational, child care and educational uses and the following use districts: MIC and PID.

6 Includes the following use districts: C-1, C-2, C-3, C-4, PCD, CMU, GHMU, HMU, UV, UR and CHMU.

7 Includes the following use districts: I-1, PMD.

c) **Buffer specifications.**

1) The following schedule sets forth the specifications of each of the buffers included in the Table of Buffer Requirements. Unless noted differently, the column entitled planting requirements refers to number of individual plants required per 100 linear feet of the buffer. The column entitled size requirements refers to the minimum size of individual plants at the time of planting. Unless otherwise noted, dimensions refer to height.

Type of Buffer	Planting Requirements per 100 Linear Feet	Size Requirements
A	3 broadleaf canopy trees ~~20~~ 15 evergreen shrubs (4-foot centers) ~~25~~ 20 flowering shrubs	5—6 feet 18—24 inches 12—18 inches

B	4 broadleaf canopy tree ~~25~~ 20 evergreen shrubs (4-foot centers) ~~33~~ 26 flowering shrubs	1½—1¾ inch caliper 18—24 inches 18—24 inches
C	4 broadleaf canopy tree 10 understory trees ~~33~~ 26 flowering shrubs Berm Fence or wall on top of berm	1¾—2 inch caliper 5—6 feet 18—24 inches 6 feet 8 feet
X	No buffer required	Not applicable

2) For type A and B buffers, the developer may, at their option, substitute a masonry wall for the evergreen shrubs. A wooden fence may be incorporated into a buffer but shall not be allowed to substitute for evergreen shrubs.

d) **Use of buffer.** If approved by the planning department, a buffer may be used for passive recreation; however, no plant material may be removed and such use shall not be a nuisance.

e) **Buffers part of required yards.** Where front, side and rear yards are required by this ordinance, buffers may be established within such required yards.

f) **Buffer requirements when a street separates incompatible uses.** If a street with right-of-way of less than 30 feet lies between two land uses which would require a bufferyard between them, a buffer shall be required along the affected side or rear property lines of the developing use. No bufferyard is required along the front property line.

g) **Bufferyards in the Central Business District.** In order to preserve and promote existing development patterns within the C-1, Central Business District, the bufferyard requirements of article XV shall not apply within the Central Business District.

h) **Special provisions regarding residential dwellings in nonresidential zoning designations.** Residential uses developed after January 8, 1998 and situated in areas zoned C-2, C-3, C-4 or I-1 shall receive special treatment with regard to these buffering, screening and landscaping regulations. They shall be treated as if they were commercial uses, if located in a commercial designation, or industrial uses, if located in an industrial designation, for the purpose of determining what buffering requirements will be imposed on adjacent uses which develop subsequent to such residential uses.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-~~13~~ 7. Common open space landscaping.

In addition to all other landscaping required by this zoning ordinance, each development parcel required to provide Common Open Space pursuant to section 6-16 shall contain a minimum of one tree and five shrubs for every 1,200 square feet of Common Open Space on such development parcel. A minimum of 50 percent of the trees shall be ~~canopy~~ large maturing trees.

~~At least 70 percent of the street trees planted shall be large-maturing trees (>50 feet in height). The remaining trees shall be medium maturing trees (25—50 feet in height).~~

No landscaped area shall be constructed with more than ten percent of the total area of gravel, stone, concrete, asphalt, or other similar material, excepting necessary walks.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-~~14~~ 8. Open space landscaping.

In addition to all other landscaping required by this zoning ordinance, each development parcel required to provide Open Space shall contain a minimum of one tree and five shrubs for every 4,000 square feet of ~~common~~ Open Space which is not assigned for tree canopy preservation on such development parcel.

A minimum of 50 percent of the trees shall be ~~canopy trees.~~ large maturing trees.

~~At least 70 percent of the street trees planted shall be large-maturing trees (>50 feet in height). The remaining trees shall be medium maturing trees (25—50 feet in height).~~

No landscaped area shall be constructed with more than ten percent of the total area of gravel, stone, concrete, asphalt, or other similar material, excepting necessary walks.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-~~15~~ 9. Street trees.

Street trees shall be required at the rate of one tree for every 35 linear feet of property abutting a street. Trees do not need to be spaced evenly. They may be clustered with a minimum spacing of 15 feet and a maximum spacing of 75 feet.

At least 70 percent of the street trees planted shall be large-maturing trees (>50 feet in height). The remaining street trees shall be medium maturing trees (25—50 feet in height).

Where overhead utility lines are present, streets trees shall be planted at the rate of one small-maturing tree (<25 feet in height) for every 25 linear feet of property abutting a street. Nothing herein shall be construed to prohibit a deviation from the mature height requirements or planting distance from the street right-of-way to accommodate existing overhead utility lines.

Street trees shall be placed in a planting strip on private property and not within the street right-of-way. No street tree can be planted farther than 35 feet from the edge of the right-of-way to count as a street tree. The width of the planting strip may vary, but the minimum width cannot be less than seven feet and the average width shall be at least ten feet. The planting area must be covered with living material, including ground cover and/or shrubs, except for mulched areas directly around trees and shrubs, so that no soil is exposed. When a sidewalk is proposed to be constructed on a development site and right-of-way configuration requires that it be constructed on the developer's property, the width of the planting strip may be reduced to an average of seven feet.

Street trees shall not be required on a property line abutting a street when the minimum setback provided is less than ten feet. By way of example, if the minimum setback required for a development is less than ten feet from a property line abutting a street, but the setback provided is ten feet or more, street trees are required.

During the development review process, the approving authority for the city may permit minor deviations in the placement of trees in order to avoid conflict with utility structures and utility lines.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-10. Screening.

These screening requirements shall apply to any development or use other than single-family or two-family residences. A buffer as specified in this article may be used to meet the requirements of this section. Where practicable, the following uses must be screened from abutting property and from public view from a public right-of-way or a parking lot:

a) Dumpsters or trash handling areas;

b) Utility structures associated with a building;

c) Loading docks or spaces;

d) Outdoor storage of materials, stock and equipment, which shall not include the display of goods for sale; and

e) Any other uses for which screening is required under this ordinance.

As far as practicable, any screening used to comply with the provisions of this section shall consist of a planting area which is at least five feet wide. This area may contain any type screening materials sufficient to separate visually the land uses, provided such materials meet the requirements of this article. If only a wall or fence is used, then the area devoted to the screen need only be wide enough to accommodate the wall or fence and allow for its maintenance. Where practicable, screening shall be designed and maintained in such a manner as to conceal the use from view from the street, from vehicular use areas, and from adjoining properties.

Sec. 15-11. Landscaping for vehicular use areas.

Trees and shrubs are required in and around vehicular use areas with more than six spaces to provide attractive views from roads and adjacent properties, provide shade to reduce the heat generated by impervious surfaces, reduce glare from vehicular use areas, and to help filter exhaust from vehicles.

a) **Perimeter and interior plantings**. Vehicular use areas must be planted with at least one tree and two shrubs for every 3,000 square feet of vehicular use area, which includes parking spaces, aisles, driveways, and loading areas. Trees shall be evenly distributed throughout the vehicular use area. At least 75 percent of the required parking lot trees must be broadleaf canopy trees. Trees and shrubs must be planted within 20 feet of the vehicular use area to count as parking lot landscaping; provided, however, all street trees required by other provisions of this zoning ordinance shall count as parking lot landscaping.

When a parking lot contains 20 or more parking spaces, 50 percent of the trees and shrubs required by paragraph a), above, must be planted in islands or medians located within the parking lot. Tree islands shall be evenly distributed throughout the parking lot in order to provide an even tree canopy throughout the lot. At a minimum, such tree islands shall consist of an area at least equal in size to two parking places side-by-side (~~360~~ 324 square feet). Parking bays shall be broken up with landscaped islands or medians to avoid long monotonous rows of parking. Planting trees in groups is encouraged to increase the total amount of planting area for roots to grow.

b) **Planting strips**. When a vehicular use area lot is located within 100 feet of an abutting property and no bufferyard is required, a planting strip which is a minimum of five feet wide shall be planted between the vehicular use area and the abutting property, except along approved driveway openings which run perpendicular to the planting strip. One large evergreen or deciduous tree and five evergreen or deciduous shrubs shall be planted for every 40 linear feet of property line that parallels the vehicular use area. Fifty percent of these trees and shrubs may be counted toward the parking lot trees and shrubs required in paragraph a), above, if the planting strip is located within 20 feet of the vehicular use area. Adjacent businesses on separate lots which share parking or driveways shall be exempt from this requirement provided that the required planting strip would interfere with the reasonable use of the shared parking or driveway. Vehicular use areas located behind buildings and screened from view from public rights-of-way shall be exempt from this requirement.

c) **Buffering from street.** Vehicular use areas greater than 4,000 square feet any portion of which is located within 50 feet of the right-of-way of a street must be buffered from the street. The buffer shall be at least three feet high at maturity and can consist of plant material alone, or berms, fences, walls, or grade changed combined with plant material. A vegetative buffer shall consist of at least one evergreen or deciduous shrub planted for every five linear feet of buffer required. If a fence or wall is

used, it must be constructed of wood, brick, stone or other masonry and be architecturally compatible with the proposed structure. Seventy-five percent of the fence or wall must be opaque with any spaces evenly distributed. The finished side of the fence or wall shall face the street. At least one shrub shall be planted on the street side for each eight linear feet of fence or wall. Berms and grade changes must be completely covered with vegetation. All shrubs planted can count toward the parking lot landscaping requirements.

d) **Structured parking facilities.** Structured parking facilities, or parking decks, shall be excused from the parking lot landscaping requirements contained in this section but shall comply with the provisions of this paragraph. In the event that any openings for ventilation, service, or emergency access are located at the first floor level in the building facade, then they shall be an integral part of the overall building design. These openings as well as pedestrian and vehicular entrances shall be designed to minimize visibility of parked cars. The remainder of street level frontage shall be either commercial space or an architecturally articulated facade designed to minimize the visibility of parked cars. All levels of a structured parking facility shall be designed and screened in such a way as to minimize visibility of parked cars. In no instance will rails or cabling alone be sufficient to meet this screening requirement.

The design elements of this paragraph shall only apply to building facades which are visible from a public right-of-way.

e) **Automobile sales facilities.** Automobile sales facilities, due to the fact that inventory is typically stored and displayed for sale on vehicular use areas, require separate analysis with regard to the parking lot landscaping requirements in this section. Automobile sales facilities are, accordingly, exempted from the need to comply with interior parking lot landscaping requirements for that portion of an automobile sales facility utilized exclusively for the display of goods for sale. Automobile sales facilities are required to comply with the perimeter and planting strip requirements of this section; provided, however, such facilities shall be permitted one display area, which shall not be required to be screened, for each 100 feet of roadway frontage. Each display area shall extend no more than 50 feet in length.

f) **Effect on other regulations.** Areas devoted to meeting the landscaping requirements of this section may count toward the common open space requirements contained in section 6-16, above. Where site characteristics and development considerations make it prudent and feasible, landscaping proposed to meet the requirements of this section may also contribute toward meeting the buffering and screening requirements contained in this article.

g) **Small lots.** Small lots, defined as lots with less than 100 feet of frontage on a roadway or with less than 100 feet of depth, may have site constraints which make strict compliance with the regulations contained in this section a hardship. In such cases, the approving authority for the city may approve deviations from such regulations so long as the plans of development are consistent with the goals and objectives stated herein.

(Ord. No. O-24-08, § 3, 4-4-24)

Sec. 15-12. Letter of compliance.

It is recognized that land development occurs continuously and that vegetation used in buffers should be planted at certain times of the year to ensure the best chance of survival. In order to ensure compliance with this article and to reduce the potential expense of replacing buffering, landscaping or screening materials which were installed in an untimely or improper fashion, a letter of compliance must be filed with the zoning administrator at the time of zoning compliance review. A letter of compliance will allow the issuance of a conditional certificate of occupancy. This letter will acknowledge that the applicant for a certificate of zoning compliance is aware of any buffer, landscaping or screening requirements which may apply to their property and that the applicant will comply with those requirements by a specific date, generally to be within the next planting season, but in no case

more than one year after the completion of construction of that portion of the project or building for which the certificate was issued. In no event shall a final certificate of occupancy be issued prior to emplacement and approval of the required buffer, landscaping or screening. Failure to comply with the provisions of this section within the time noted in the letter of compliance will be a violation of the zoning ordinance.