Mayor
M. Andy Moore

Mayor Pro-Tem
Roger A. Wood

Council Members
Marlon Lee
Sloan Stevens
Travis Scott
David Barbour
John A. Dunn
Stephen Rabil

Town Attorney
Robert Spence, Jr.

Town Manager
Michael L. Scott

Finance Director
Andrew Harris

Town Clerk
Elaine Andrews

Town Council Agenda Packet

Meeting Date: Tuesday, January 21, 2025
Meeting Time: 7:00 p.m.
Meeting Place: Town Hall Council Chambers
350 East Market Street
Smithfield, NC 27577

TOWN OF SMITHFIELD
TOWN COUNCIL AGENDA
REGULAR MEETING January 21, 2025
7:00 PM

Call to Order

Invocation

Pledge of Allegiance

Approval of Agenda

Presentations: **Page**

1. **Administering the Oath of Office to Seven Newly Hired Police Officers**
   (Mayor – M. Andy Moore) See attached information.....1

2. **Spring Branch Resiliency Study:** This presentation identifies the additional stormwater related capital improvement projects and development of a greenway concept connecting the Eva Ennis/Smith-Collins trails to the Buffalo Creek Greenway along the Neuse River.
   (Planning Director – Stephen Wensman) See attached information.....5

Citizens Comments:

Consent Agenda Items:

1. **Approval of Minutes**
   December 17, 2024 – Regular Session.....7

2. **Consideration and request for approval to promote one officer from the rank of Master Police Officer II (MPO) to Police Sergeant**
   (Police Chief – Pete Hedrick) See attached information.....27

3. **Consideration and request for approval to promote one officer from the rank of Police Detective to Police Sergeant**
   (Police Chief – Pete Hedrick) See attached information.....29

4. **Consideration and request for approval to purchase three used vehicles for the Police Department fleet**
   (Police Chief – Pete Hedrick) See attached information.....31

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5. **Board Reappointments**
   a. Sarah Edwards has submitted an application for reappointment to the Board of Adjustments as an ETJ Member
   b. Mark Lane has submitted an application for reappointment to the Planning Board

   (Town Clerk – Elaine Andrews) See attached information.....37

Business Items: None

Public Hearings:

1. **S-24-07 Buffalo Road Subdivision**: Vesta Enterprises, Inc. is requesting a preliminary subdivision of 138.63 acres of land with R-8 CZ designation into 117 detached single-family residential lots. The property considered for approval is located at 1176 and 1200 Buffalo Road.
   (Planning Director – Stephen Wensman) See attached information.....43

2. **ANX-24-02 Local 70 Annexation:** Smithfield Growth LLC has submitted a petition to voluntarily annex 85.85 acres to the Town of Smithfield. This is located at M. Durwood Stephenson Parkway and Booker Dairy Road and also known as Local 70 Subdivision.
   (Planning Director – Stephen Wensman) See attached information.....98

3. **S-24-08 Local 70 Subdivision:** Smithfield Growth, LLC is requesting a preliminary subdivision with 303 lots (209 single family homes and 94 townhomes) and 324 apartment units, for a total of 627 residential dwelling units. The properties considered for approval are located along M. Durwood Stephenson Parkway east of Eden Woods and north of Walmart.
   (Planning Director – Stephen Wensman) See attached information.....111

4. **ZA-24-03 Miscellaneous Multi-Family Amendments:** Staff is requesting to review updates to the multi-family (MF) regulations in the UDO, affecting Unified Development Ordinance Article 6 Section 6.2 and 6.6; Section, Article 7, Section 7.35, Article 8, Section 8.13.1; Article 10, Section 10.110.2 Private Streets; and Appendix A Definitions.
   (Planning Director – Stephen Wensman) See attached information.....195

Councilmember's Comments

Town Manager's Report:

- Manager's Report (Will be provided at the Meeting)

Closed Session NCGS 143-318 (a) (5)

Reconvene in Open Session

Adjourn

Presentations

Request for Town Council Action

Presentation:	**Oath of Office – Police Officers**
Date:	**1/21/25**

Subject:	Swearing in of seven new officers
Department:	Police Department
Presented by:	Police Chief - Pete Hedrick
Presentation:	Oath of Office

Issue Statement
The Police Chief is requesting to swear in 7 new police officers

Financial Impact
N/A

Action Needed
Mayor Moore to administer the Oath of Office to seven newly hired Police Officers

Recommendation
Administer the Oath of Office to newly hired Police Officers and welcome them to the Town of Smithfield

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:
1. Staff Report
2. Oath of Office

Staff Report

Presentation:	**Oath of Office**
Date:	**1/21/25**

The Police Chief is recommending the swearing in of 7 new police officers:

New Officers:

Officer Alysha Jones

Officer Michael Lashley

Officer Glendale Daniels

Officer Ian Landon

Officer Shahzeb Hameed

Officer Alexander Watts

Officer David Sholes

OATH OF OFFICE

SMITHFIELD POLICE DEPARTMENT

"I, _____, do solemnly swear or affirm that I will support the Constitution of the United States; that I will faithfully and bear true allegiance to the State of North Carolina and to the Constitutional powers and authorities which are, or may be established for the government thereof; that I will endeavor to support, maintain and defend the Constitution of said State, not inconsistent with the Constitution of the United States; that I will be alert and vigilant to enforce the criminal laws of this state; that I will not be influenced in any manner on account of personal bias or prejudice; and that I will faithfully and impartially execute the duties of my office as Police Lieutenant according to the best of my skill, abilities and judgment, so help me God."

_____ _____

Signature Date

Sworn to and subscribed before me this the _____ day of _____, _____.

_____ _____

Judge/Clerk Commission Expires

Request for Town Council Action

Presentation	**Spring Branch - Resiliency Study**
Date:	**1/21/25**

Subject: Spring Branch Resiliency Project Report
Department: Planning Department
Presented by: Planning Director - Stephen Wensman
Presentation: Presentation

Issue Statement

Presentation of the Spring Branch Resiliency Project Report

Financial Impact

Received a NCLWF grant for the Spring Branch Resiliency project in the amount of $95,000 to be used to secure additional funding in the watershed.

Action Needed

None

Recommendation

None

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:

1. Staff Report
2. Spring Branch Resiliency Project Report Final Report (Separate Attachment)

Staff Report

Presentation	**Spring Branch - Resiliency Study**
Date:	**1/21/25**

Overview:

In January 2022, the Town Council authorized McCormick Taylor to prepare grant applications to the NCLWF to conduct the study. The grant in the amount of $95,000 was received to help fund the study.

The project identifies additional stormwater related capital improvement projects and development of a greenway concept connecting the Eva Ennis/Smith-Collins trails to the Buffalo Creek Greenway along the Neuse River. The Town received stormwater grant funding from NCDEQ for the 2nd and 4th Street Bridge project which is in the planning phase currently. Data from this study is being used by Withers Ravenel in their project.

Consent Agenda Items

The Smithfield Town Council met in regular session on Tuesday, December 17, 2024 at 7:00 p.m. in the Council Chambers of the Smithfield Town Hall, Mayor M. Andy Moore presided.

Councilmen Present:
Roger Wood, Mayor Pro-Tem
Marlon Lee, District 1
Sloan Stevens, District 2
Travis Scott, District 3
John Dunn, At-Large
Stephen Rabil, At-Large
Dr. David Barbour, District 4

Councilmen Absent

Administrative Staff Present
Michael Scott, Town Manager
Elaine Andrews, Town Clerk
Ted Credle, Public Utilities Director
Jeremey Daughtry, Fire Chief
Lawrence Davis, Public Works Director
Andrew Harris, Finance Director
Pete Hedrick, Chief of Police
Gary Johnson, Parks & Rec Director
Shannan Parrish, HR Director
Stephen Wensman, Planning Director

Also Present
Robert Spence, Jr., Town Attorney

Administrative Staff Absent

CALL TO ORDER

Mayor Moore called the meeting to order at 7:00 pm.

INVOCATION

The invocation was given by Councilman David Barbour, followed by the Pledge of Allegiance.

APPROVAL OF AGENDA:

Mayor Pro Tem, Roger Wood made a motion, seconded by Councilman John Dunn, to approve the agenda, with a change to re-open the public hearing for the first business item, SUP-24-02, Heritage Townes at Waddell. Unanimously approved.

Citizens Comments: None.

Consent Agenda Items:

Councilman David Barbour made a motion, seconded by Councilman John Dunn, to approve the following items as listed on the consent agenda. Unanimously approved.

1. **Three Way Stop Request – North 2nd Street and Hancock Street**

2. **Resolution 760 (21-2024) and Budget Ordinance – Grant Funds Aged Sanitary Sewer Infrastructure Improvements SRP-D-134-0012**

TOWN OF SMITHFIELD
RESOLUTION NO. 760 (21-2024)

WHEREAS, the Town of Smithfield has received a Directed Projects grant for the Replace Aged Sanitary Sewer Infrastructure & PS#11 and Outfall Improvements – Phase II Project (SRP-W-134-0012) from the 2023 Appropriations Act, Session Law 2023-134, administered through the Drinking Water Reserve and Wastewater Reserve to assist eligible units of government with meeting their wastewater infrastructure needs, and

WHEREAS, the North Carolina Department of Environmental Quality has offered 2023 Appropriations Act funding in the amount of $2,500,000 to perform work detailed in the submitted applications,and

WHEREAS, the Town of Smithfield intends to perform said project in accordance with the agreed scope of work.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SMITHFIELD:

That the Town of Smithfield does hereby accept the 2023 Appropriations Act Directed Projects Grant offer of $2,500,000; and

That the Town of Smithfield does hereby give assurance to the North Carolina Department of Environmental Quality that any Conditions or Assurances contained in the Award Offer will be adhered to; and

That the Town Manager, and successors so titled, is hereby authorized and directed to furnish such information as the appropriate State agency may request in connection with this project; to make the assurances as contained above; and to execute such other documents as may be required by the Division of Water Infrastructure.

Adopted this the 17th day of December, 2024 in Smithfield, North Carolina.

_____
M. Andy Moore, Mayor

ATTEST:

_____
Elaine S. Andrews, Town Clerk

Ordinance #CP-12-2024

Capital Project Ordinance for the Town of Smithfield Sanitary Sewer Infrastructure & PS #11 and Outfall Improvements Project (Project #SRP-W-134-0012)

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF SMITHFIELD, NORTH CAROLINA that, pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following grant project ordinance is hereby adopted:

SECTION 1: This ordinance is to establish a budget for a project to be funded by the North Carolina Department of Environmental Quality ("NCDEQ") Division of Water Infrastructure Drinking Water / Wastewater Reserve. The project authorized is the construction of water infrastructure to be financed by state grants and reserves. These funds may be used for the following categories of expenditures, to the extent authorized by state law.

1. Pump Station #11 pumps wastewater under Interstate 95 and empties into a manhole on the opposite side. Previous funding has allowed the upsizing & improvements of the pump station and the first 500 feet of downstream gravity sewer line. This phase will complete the downstream improvements, all the way to the terminus point, in a separate Town pump station. These improvements will create sewer access for new developments east of I-95, where sewer access does not currently exist.

2. Town citizens residing between Holding Street & Stevens Street; bounded by Second Street to the south and Crescent Drive to the north get their sanitary sewer service from the alley ways located between the residences, in the rear of the yard. This infrastructure has been a "hot spot" of trouble – in need of frequent maintenance over the last few years. Field investigation shows that the bulk of the sewer main is in a state of disrepair and needs replacing. To this end, this project will replace the aged sewer infrastructure (including service lines) in that area of the Town.

SECTION 2: The officers of the Town are hereby directed to proceed with the capital project within the terms of the resolution and budget contained herein.

SECTION 3: The following amounts are appropriated for the project and authorized for expenditures:

Engineering costs	$ 416,550
Construction costs	2,083,450
Total	$ 2,500,000

SECTION 4: The following revenues are anticipated to be available to complete the project:

NC Department of Environmental Quality Division of Water Infrastructure Drinking Water / Wastewater Reserve	$ 2,500,000

SECTION 5: The Town intends to complete the project in accordance with the Drinking Water / Wastewater State Reserve, Session Law (S.L.) 2023-134. The Town's scope of work is a complete and concise scope of goods or services supported by this agreement and consistent with language in S.L. 2023-134. The Town agrees to use the funds in the amounts allocated for the budget cost items set forth in the Town's budget.

SECTION 6: The Finance Officer is hereby directed to maintain sufficient specific detailed accounting records to satisfy the requirements of the grantor agency, grant agreements, and federal regulations. The Town's accounting and fiscal records shall be maintained during the completion of the project, and these records shall be retained and made available for a period of at least three (3) years following completion of the project.

SECTION 7: Funds may be advanced from the General Fund for the purpose of making payments as due. Disbursement requests should be made to the grantor agency in an orderly and timely manner.

SECTION 8: The Finance Officer is hereby directed to report the financial status of the project to the governing board the appropriations and the total grant / loan revenues received or claimed.

SECTION 9: The Budget Officer is directed to include a detailed analysis of past and future costs and revenues on this grant project in every budget submission made to this board.

SECTION 10: Copies of this grant project ordinance shall be furnished to the Budget Officer, the Finance Officer and to the Clerk to Town Council five (5) days after adoption.

SECTION 11: This grant project ordinance is effective as of December 17, 2024, and expires when all the NCDEQ funds have been obligated and expended by the Town, whichever occurs sooner.

_____
M. Andy Moore, Mayor

ATTEST:

_____
Elaine S. Andrews, Town Clerk

3. Resolution 762 (23-2024) and Budget Ordinance – Acceptance of Grant Funds SRP-W-ARP-0063 Aged Sanitary Sewer Infrastructure Improvements

TOWN OF SMITHFIELD
RESOLUTION NO. 762 (23-2024)

WHEREAS, the Town of Smithfield has received an earmark for the American Rescue Plan (ARP) funded from the State Fiscal Recovery Fund established in S.L. 2021-180 to assist eligible units of government with meeting their water/wastewater infrastructure needs (SRP-W-ARP-0063), and

WHEREAS, the North Carolina Department of Environmental Quality has offered American Rescue Plan (ARP) funding in the amount of $3,000,000 to perform work detailed in the submitted application, and

WHEREAS, the Town of Smithfield intends to perform said project in accordance with the agreed scope of work,

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SMITHFIELD:

That Town of Smithfield does hereby accept the American Rescue Plan Grant offer of $3,000,000.

That the Town of Smithfield does hereby give assurance to the North Carolina Department of Environmental Quality that any Conditions or Assurances contained in the Award Offer will be adhered to.

That the Town Manager, and successors so titled, is hereby authorized and directed to furnish such information as the appropriate State agency may request in connection with this project; to make the assurances as contained above; and to execute such other documents as may be required by the Division of Water Infrastructure.

Adopted this the 17th day of December, 2024 in Smithfield, North Carolina.

_____
M. Andy Moore, Mayor

ATTEST:

_____
Elaine, S. Andrews, Town Clerk

Ordinance #CP-13-2024

Capital Project Ordinance for the Town of Smithfield PS #11 Outfall and PS #1 System Upgrades and D Stephenson Force Main Improvements Project (Project #SRP-W-ARP-0063)

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF SMITHFIELD, NORTH CAROLINA that, pursuant to Section 13.2 of Chapter 159 of the General Statutes of North Carolina, the following grant project ordinance is hereby adopted:

SECTION 1: This ordinance is to establish a budget for a project to be funded by the American Rescue Plan (ARP) from the State Fiscal Recovery Fund in the amount of $3,000,000. This offer was made by the NC Department of Environmental Quality Division of Water Infrastructure (DWI). These funds may be used for the following categories of expenditures, to the extent authorized by federal and state law.

1. System Improvements to PS #11 Outfall, PS #1 System Upgrades and D Stephenson Force Main

SECTION 2: The officers of the Town are hereby directed to proceed with the capital project within the terms of the resolution and budget contained herein.

SECTION 3: The following amounts are appropriated for the project and authorized for expenditures:

Engineering and construction costs	$ 3,000,000
Total	$ 3,000,000

SECTION 4: The following revenues are anticipated to be available to complete the project:

NC Department of Environmental Quality Division of Water Infrastructure via State Fiscal Recovery Fund	$ 3,000,000

SECTION 5: The Town intends to complete the project in accordance with the State Fiscal Recovery Funds established in Session Law (S.L.) 2021-180. The Town's scope of work is a complete and concise scope of goods or services supported by this agreement and consistent with language in federal laws associated with American Rescue Plan (ARP) and S.L. 2021-180. The Town agrees to use the funds in the amounts allocated for the budget cost items set forth in the Town's budget.

SECTION 6: The Finance Officer is hereby directed to maintain sufficient specific detailed accounting records to satisfy the requirements of the grantor agency, grant agreements, and federal regulations. The Town's accounting and fiscal records shall be maintained during the completion of the project, and these records shall be retained and made available for a period of at least five (5) years following completion of the project.

SECTION 7: Funds may be advanced from the General Fund for the purpose of making payments as due. Disbursement requests should be made to the grantor agency in an orderly and timely manner.

SECTION 8: The Finance Officer is hereby directed to report the financial status of the project to the governing board the appropriations and the total grant / loan revenues received or claimed.

SECTION 9: The Budget Officer is directed to include a detailed analysis of past and future costs and revenues on this grant project in every budget submission made to this board.

SECTION 10: Copies of this grant project ordinance shall be furnished to the Budget Officer, the Finance Officer and to the Clerk to Town Council five (5) days after adoption.

SECTION 11: This grant project ordinance is effective as of December 17, 2024, and expires when all the NCDEQ funds have been obligated and expended by the Town, whichever occurs sooner.

_____
M. Andy Moore, Mayor

ATTEST:

_____
Elaine, S. Andrews, Town Clerk

Business Item:

1. **Special Use Permit Request – (SUP-24-02) Heritage Townes at Waddell -** Samuel O'Brien (Shovel Ready Johnson, Inc.) is requesting a special use permit for Heritage Townes at Waddell, a 17-unit townhouse development on 1.88 acres of land in the R-8 Zoning District.

Mayor Andy Moore reminded the Board that this issue was tabled from the November 19th meeting for traffic and road questions. He asked if the Council agreed to re-open the public hearing on the matter, as there were parties present who may wish to speak to this matter, and answer any questions.

Councilman Travis Scott made a motion, seconded by Councilman Roger Wood to re-open the public hearing. Unanimously approved.

Town Clerk Elaine Andrews administered affirmations to those wishing to offer testimony during the Public Hearing.

Planning Director, Stephen Wensman gave a brief summary of the project as detailed in the minutes of record from the November 19, 2024 Town Council meeting. He restated that the developer is requesting approval for a 17-unit townhouse development on 1.88 acres of land on Waddell Drive. He noted that where the Board left off was the question of the sufficiency of the road leading into the development, and whether its infrastructure could support this project.

Planning Director Stephen Wensman incorporated his entire record and provided it to the Council in written form in the November 19, 2024 Town Council agenda packet. Thusly re-listed herein are staff's opinion of the findings of fact:

STAFF'S FINDING OF FACT:

The Town Council shall issue a special use permit if it has evaluated an application through a quasi-judicial process and determined that (Staff's opinion in **Bold/Italic**):

4.9.4.5.1. The establishment, maintenance, or operation of the special use will not be detrimental to or endanger the public health, safety, or general welfare. ***The project will not be detrimental to or endanger the public health, safety or general welfare. The development will adhere to all Town requirements.***

4.9.4.5.2. The establishment of the special use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district. ***The project will not impede the normal and orderly development and improvement of the surrounding properties. The neighborhood is fully developed with only redevelopment occurring, this townhouse project and commercial development along Brightleaf Boulevard. This development will potentially provide new customers in walking distance to the Brightleaf commercial establishments.***

4.9.4.5.3. Adequate utilities, drainage, parking, or necessary facilities have been or are being provided. ***The development will provide adequate utilities, drainage, parking and necessary facilities. For this project to proceed, an existing sanitary sewer line and easement will need to be relocated.***

4.9.4.5.4. The proposed use shall not be noxious or offensive by reason of vibration, noise, odor, dust, smoke, or gas. ***The use will not create such nuisances.***

4.9.4.5.5. Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets. ***Proper ingress and egress will be provided with a single driveway onto Waddell Drive. The developer will likely install a stop sign at the exit lane to Waddell Drive.***

4.9.4.5.6. That the use will not adversely affect the use or any physical attribute of adjoining or abutting property. ***The use will have no adverse impacts on the abutting or adjoining properties. The adjacent properties are residential. The design of the proposed buildings will be complementary to the mostly single-story homes surrounding with dormers that break up the scale of the buildings. Furthermore, the site will be well buffered along all property lines. The design of the home will be such that the front (good) side faces outward. All vehicular access is toward the center of the site.***

4.9.4.5.7. That the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located. **The proposed townhomes will be complementary and in harmony with the adjacent homes. The architectural style will blend well and dormers will break up the scale of the buildings. The buildings will be positions such that they will have minimal impact from the street.**

4.9.4.5.8. The special use shall, in all other respects, conform to all the applicable regulations of the district in which it is located. **The special use will meet all applicable regulations.**

Planning Staff recommends approval of SUP-24-02 with the following conditions:

1. *That the driveway be constructed in accordance with the Town's driveway apron detail.*
2. *That the existing sanitary sewer line and easement be relocated with the approval of the Town's Public Utilities Director.*
3. *That rollout trash containers be screened from the public right of way or stored within the garages.*
4. *That the developer constructs a 5' wide public sidewalk in the public right of way, or in an easement for the sidewalk along the right of way.*
5. *There shall be a homeowner's association to own and maintain all common amenities such as the parking lot, sidewalks, landscaping, mail kiosk, and stormwater management facility.*

Councilman David Barbour asked if the street was a DOT road or a Town road. Planning Director Stephen Wensman stated that it was a Town road. It is 18-feet wide with ditches, and that it's not a standard Road. A standard road is 27-feet back-to-back with curb and gutter.

Mayor Andy Moore asked if there were any further questions from staff. There were none.

Attorney Jason Wenzel, of 103 S. 3rd St., Smithfield spoke on behalf of the applicants for the project, stating he could answer questions about the road and the traffic. He presented a memorandum from engineers at Exult Engineering firm, asking that it be considered as evidence. He provided the copy of the three-page letter, along with documentation and incorporated exhibits to the Board.

Wenzel stated that although in the agenda packet, it was stated that no traffic study was needed for the project, a traffic study was completed by a traffic engineer. Wenzel stated the traffic study showed that Waddell was a suburban residential road within the Smithfield Town Development Plan, and it concludes that the road is more than adequate to handle the traffic projected for the development.
Wenzel outlined the following points from the study:

1. *The road can handle more than 4,400 cars per day. The projected development traffic is 770 cars per day.*
2. *The development will add 72 cars per day during the peak hour, which is approximately 6*

cars per hour and car one every 10 minutes.

Jason Helms, an engineer with Exult Engineering firm spoke. He stated Attorney Wenzel gave a good summary of the site impact as detailed in the study. He asked if there were any questions from the Board.

Councilman David Barbour questioned the number of cars per hour as related to peak times. He also discussed the difficulty in the ability for drivers to make left turns onto Hwy 301 out of the development.

Jason Helms explained that during the morning peak hours, when people typically leave for work, the traffic study for the 17-unit development shows a total of three trips, with two vehicles exiting. These exiting vehicles could turn left or right. He noted that the existing traffic patterns along the main road would provide adequate gaps between signals to allow these vehicles to exit safely. While the low number of trips might seem unreasonable, Helms assured that it's an accurate projection based on the size of the development.

Councilman Travis Scott noted that what the study pertained to additional traffic, not taking into account existing traffic.

Helms confirmed that the figures mentioned did represent new traffic generated by the proposed development. He explained that while they don't have comprehensive data on overall traffic, their projections are based on the available timeframe for the study. Helms noted that existing traffic from the area might add about 10 trips exiting during the morning peak hour. He acknowledged that if all these trips occurred simultaneously, there could be slightly longer wait times, but emphasized that these trips would likely be spread out over the hour.

Councilman David Barbour reiterated that turning left out of the development would be a problem. Helms noted, drivers would have to wait for a gap in traffic to exit, but noted that impact, based on the study, would be fairly insignificant.

Councilman John Dunn asked Helms whether their traffic study took into account further future development on Waddell Drive, noting there was an additional development on this street being heard by the Board at tonight's meeting. He asked if the two 9-foot lanes would be adequate. Helms stated the study did take into account the additional traffic.

Councilman David Barbour asked if there was anything being proposed to regulate speed, noting the driveway was short, so this should not be much of an issue. Helms stated there were natural deterrents to keep speed within reason such as driveways being close together, and also mailboxes.

Councilman Scott questioned the seven additional parking spaces proposed in the development, asking what happens if residents do not use their garages. Helms deferred that question to the developer, Dan Danvers.

Town Manager Mike Scott noted that the traffic study received as evidence was not authored by the engineer who gave testimony for this meeting. Jason Helms stated the author of the study is also an engineer, but was not available to attend the meeting tonight. Manager Scott asked the engineer to state his background and credentials for the expert testimony the Board was given. Mr. Helms stated that he has been a practicing engineer for 30 years, with 25 years devoted to traffic engineering. Helms stated that he agreed with the findings in the document presented by Wensman in its entirety.

Dan Danvers, Senior Project Manager with Bohler Construction spoke on behalf of the applicant. He noted his experience and asked if he could answer any technical questions from the Board regarding the merits of the project design.

Councilman Travis Scott re-stated his question regarding the parking if done outside the garages provided to the residents. Danvers stated there were additional storage closets proposed in the plans that should address this issue. He also noted that the development met the UDO minimum requirement with additional guest parking provided. He pointed out the location of the additional storage space closets, as well as the seven overflow parking spaces as shown on the master plan layout provided to the Board.

Mayor Moore asked if there were any further questions from the Board. There were none.

Attorney Jason Wenzel asked if a copy of the traffic study provided to the Board could be entered as evidence.

> Councilman John Dunn made a motion, seconded by Councilman David Barbour to accept the traffic study provided by Exult Engineering firm as evidence for the applicants. Unanimously approved.
>
> A copy of the *Technical Memorandum* from Exult Engineering dated December 13, 2024 was admitted to the record and is available in the office of the Town Clerk.

Mayor Andy Moore asked if there was anyone in the audience wishing to speak on the matter.

Charles E. Sanders of 15 Waddell Drive, a 6-year resident, testified that he lived down the road from the future development. He spoke to the difficulty of turning left from Waddel Drive onto the four-laned US Hwy 301. He also stated he was concerned about the future traffic on the narrow road of Waddell Drive. He told the Board of one accident he recalled. Sanders further commented as to the proposal of having traffic going one-way, as discussed in the prior meeting. Sanders spoke of potential buildup of traffic that would occur with only one way in. He also stated he welcomed the development for the area, having seen it sit vacant for three years. He asked the Board to work with the road as is for now, and to consider adjusting accordingly, if need be, in the future.

Councilman Travis Scott noted that for the record, although a one-way road was discussed at the last hearing, no one-way road was proposed in this development. The Board concurred.

Councilman Travis Scott asked if Town Engineer, Bill Driezler could discuss his review of the traffic study.

Mayor Andy Moore asked if there was anyone else in the audience who wished to speak on the matter. There was no one.

Town Engineer Bill Driezler stated he was asked to review the memorandum entered as evidence by Exult Engineering firm. He stated the firm used numbers from the Institute for Traffic Engineers, which is the gold standard for trip generation. He stated looking across both proposed developments, there were a total of about 152 trips per day. Driezler stated that in his professional opinion, this project can be adequately supported without any improvements.

Mayor Andy Moore asked if there were any further questions from the Board for staff or the applicant.

Councilman David Barbour commented that he would not be in favor of a one-way road for Waddell Drive because two opportunities are needed to accommodate the traffic.

Councilman Travis Scott asked about future plans to make Hwy 301 a divided highway. Mayor Andy Moore commented that this issue came up at his last Upper Coastal Rural Planning Organization meeting, for which he serves as a Board member. He stated they are planning surveys and public comment for the project in January 2025. He stated the proposal is for controlled access, the first phase being from Rick's Road in Selma to Bookerdairy Road in Smithfield. He noted a similar type design of highway already exists in front of Johnston Memorial Hospital in Smithfield, but the plan is to extend it with access turns along the way.

Councilman Travis Scott stated he was not speaking against the plans to divide the highway but he wanted to mention the future plans for this to occur. Mayor Moore stated that the mention of dividing Highway 301 at his meeting was that of informal discussion with no action taken.

Councilman Travis Scott stated that a one-way road would not be conducive to the development. Mayor Moore agreed.

> Councilman David Barbour made a motion, seconded by Mayor Pro Tem Roger Moore to close the public hearing. Unanimously approved.

Councilman Travis Scott asked where town rollout containers for garbage would be placed, and if they would be screened in. Planning Director Stephen Wensman stated that it is a standard condition for townhouse developments that trash containers be screened from the public right-of-way out of the view

of the public.

Councilman Travis Scott asked if there was any objection about the sanitary sewer easement. Wensman stated that it has to be moved because right now it is in the middle of the site under a building. He stated the developer would need to work with the town utilities director to figure out the appropriate solution to reroute it.

Councilman Travis Scott questioned whether storm water management was part of the plans for this development. Whether the pond is big enough to necessitate aeration, or if it will be a dry pond.

The developer wished to speak on the issue, Mayor Andy Moore announced that the public hearing was closed, and would need to be re-opened to receive further testimony.

> Councilman Travis Scott made a motion, seconded by Councilman David Barbour to re-open the public hearing. Unanimously approved.

Andrew Weitzel of Bohler Engineering addressed the Board. He stated his credentials as a licensed public engineer in civil construction, specializing in storm water. He stated that this site proposed a constructed wetland, designed to meet the Neuse River standards for phosphorus and nitrogen reduction. He added that pond would be a foot to 1.2-foot depth of water, not a large wet pond, but plenty of room for water storage.

Councilman Barbour asked about mosquitos that could breed as a result of the installation of the wet pond. Weitzel stated there are plants that they could introduce to address this concern, but they have not designed the site plan yet. Barbour asked if this could be added as a condition for the development.

Dan Danvers, project manager stated there were certain types of state-approved vegetation that is already required as part of storm water control measures, and that they would be happy to have it. However, they have not reached that level of detail in the landscape planning yet. The intent is to not have the pond become a mosquito habitat, and they have not experienced any issues with mosquitos with past developments across the state of North Carolina.

Councilman Barbour asked Planning Director Wensman if he was satisfied with the response regarding the pond from Danvers. Wensman stated he is not an expert, so we would have to trust that the developer's plan is going to meet the need.

There was general discussion among the Board regarding storm water ponds, where examples of the pond proposed are located, one being out on Kellie Drive in Smithfield. Also discussed was the efficiency and effectiveness of storm water ponds and which may be conducive for this location. Councilman David Barbour stated that given the strict measures the state requires, no additional conditions need to be placed on the developer regarding storm water ponds.

Mayor Moore asked if the type of architectural design and building materials were stated as a condition. Wensman stated that the developers are being held accountable to the standards as stated in their application.

Mayor Moore asked if there were any further questions or comments from the audience or from the Board. There were none.

> Councilman David Barbour made a motion, seconded by Councilman John Dunn to close the public hearing. Unanimously approved.
>
> Councilman David Barbour made a motion, seconded by Mayor Pro Tem Roger Wood to approve Special Use Permit SUP-24-02 for Heritage Homes at Waddell with 5 conditions based on the finding of fact for special use permits. The motion carried 6 to one with Councilman Travis Scott voting against the Special Use Permit request. The item is approved.
>
> *Conditions of approval are as follows:*
>
> *1. That the driveway be constructed in accordance with the Town's driveway apron detail.*

2. *That the existing sanitary sewer line and easement be relocated with the approval of the Town's Public Utilities Director.*
3. *That rollout trash containers be screened from the public right of way or stored within the garages.*
4. *That the developer constructs a 5' wide public sidewalk in the public right of way, or in an easement for the sidewalk along the right of way.*
5. *There shall be a homeowner's association to own and maintain all common amenities such as the*

parking lot, sidewalks, landscaping, mail kiosk, and stormwater management facility.

Business Item:

2. Annexation Request – (ANX-24-02) Resolution 761 (22-2024) for Contiguous Annexation Petition

Planning Director, Stephen Wensman addressed the Board stating that Smithfield Growth LLC has submitted a petition to voluntarily annex 85.85 acres contiguous to the Town of Smithfield. He stated the contiguous annexation request is related to the Local 70 project. This annexation involves land south of M. Durwood Stephenson Hwy, with additional land to the north and northeast slated for future annexation. The Local 70 project encompasses 290 attached single-family residential lots, 94 attached townhomes, and 324 apartment units.

The annexation survey covers land on both sides of Booker Dairy Road. A small parcel on the west side is already within Smithfield town limits, while the portion east of Booker Dairy Road, currently in the ETJ, is the focus of this annexation request.

Wensman explained that the first step in the annexation process requires the town clerk to certify the petition. To this end, the council was asked to adopt Resolution 761 (22-2024), which would authorize the town clerk to investigate the sufficiency of the annexation petition.

Mayor Andy Moore asked if there were any further questions for Stephen or staff. There were none.

Councilman David Barbour made a motion, seconded by Mayor Pro Tem Roger Wood to adopt Resolution No. 761 (22-2024) directing the Town Clerk to certify the annexation petition. Unanimously approved.

TOWN OF SMITHFIELD
RESOLUTION NO. 761 (22-2024)
DIRECTING THE CLERK TO INVESTIGATE AN
ANNEXATION PETITION RECEIVED UNDER G.S. 160A-31

WHEREAS, a petition requesting annexation of an area described in said petition was received on December 17, 2024 by the Smithfield Town Council; and

WHEREAS, G.S. 160A-31 provides that the sufficiency of the petition shall be investigated by the Town Clerk before further annexation proceedings may take place; and

WHEREAS, the Town Council of the Town of Smithfield deems it advisable to proceed in response to this request for annexation:

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SMITHFIELD THAT:

The Town Clerk is hereby directed to investigate the sufficiency of the above-described petition and to certify as soon as possible to the Town Council the result of her investigation.

Adopted this the 17th day of December, 2024 in Smithfield, North Carolina.

_____
M. Andy Moore, Mayor

ATTEST:

_____
Elaine S. Andrews, Town Clerk

Public Hearing:

1. **Subdivision Request – (S-24-06) Local 70 Interim Plat** Plan - Smithfield Growth, LLC is requesting a preliminary subdivision of +/- 85.79 acres of land in the Local 70 PUD Zoning District into 10 properties for land conveyance purposes.

Town Clerk Elaine Andrews administered affirmations to those wishing to offer testimony during the Public Hearing.

Mayor Pro Tem Roger Wood made a motion, seconded Councilman John Dunn, to open the public hearing. Unanimously approved.

Planning Director Stephen Wensman stated Smithfield Growth, LLC is requesting a preliminary subdivision of 85.79 acres of land in the Local 70 PUD Zoning District into 10 properties for land conveyance purposes. A subsequent residential preliminary plat has been submitted and will likely be reviewed by the Town Council with a public hearing in January 2025 in conformance with the Local 70 PUD Plans.

Planning Director Stephen Wensman incorporated his entire record and provided it to the Council in written form in with the December 17, 2024 agenda packet.

Wensman stated that he recommends that the Council approve subdivision request, S-24-06, without conditions based on the finding of fact for subdivisions listed below:

FINDING OF FACT (STAFF OPINION):
To approve a preliminary plat, the Town Council shall make the following finding (staff's opinion in Bold/Italic):

1.The plat is consistent with the adopted plans and policies of the town; ***The plat is consistent with the adopted comprehensive plan.***
2.The plat complies with all applicable requirements of this ordinance; ***The plan complies with all applicable requirements of this ordinance.***
3.There exists adequate infrastructure (transportation and utilities) to support the plat as proposed. ***There is adequate infrastructure (none required).***
4.The plat will not be detrimental to the use or development of adjacent properties or other neighborhood uses. ***The plat will not be detrimental to the use or development of adjacent properties or other neighborhood uses.***

Mayor Andy Moore asked if there were any questions from staff. Councilman Travis Scott asked for clarification for the location of roads in this development. Wensman stated there are no roads inside the development. He also pointed out the neighboring roads on the map provided to the Council.

The applicant, Corey Mabus of Smithfield Growth in Sanford, NC spoke regarding the project. He explained that this is another step in their ongoing process. The company has owned the land for several years and is preparing to break ground at the beginning of the year. They have already received their road control permit and submitted for staff review for TRC. Mabus clarified that the purpose of the interim subdivision is to facilitate the transfer of ownership from the holding company to the operating company before proceeding with groundbreaking. This transfer is necessary for them to transition from a holding company to an operational company. Mabus concluded by offering to answer any questions.

Councilman David Barbour asked where the developer planned to start the initial phase of the development. Mabus pointed out the first quarter of the project where he planned to break ground on the map before the Board.

There was some discussion regarding the installation of roads in the development, as to how best limit the impact on traffic. Mabus stated more details would come later with the preliminary plat. Councilman Travis Scott stated the controlled road access improvements for this development would help improve the traffic flow in the area, which is a major issue.

Mayor Moore asked the applicant if he agreed with the testimony from Planning Director Stephen Wensman regarding the subdivision request. The applicant, Corey Mabus stated he did agree with Wensman's testimony.

Mayor Moore asked if there was anyone in the audience who wished to speak on the issue. There was no one.

> Mayor Pro Tem Roger Wood made a motion, seconded by Councilman Steve Rabil to close the public hearing. Unanimously approved.
>
> Councilman David Barbour made a motion, seconded by Councilman John Dunn to approve the subdivision request local 70 preliminary plat S-24-06 with no conditions, based on the findings of fact for a subdivision request. Unanimously approved.

2. **Rezoning Request – (RZ-24-09) East Edgerton Street -** To review the application to rezone 36 East Edgerton Street from HI, Heavy Industrial to B-3, Highway Entranceway Business.

> Councilman John Dunn made a motion, seconded Mayor Pro Tem Roger Wood to open the public hearing. Unanimously approved.

Planning Director Stephen Wensman is explained:

1. A discrepancy was found between the County's GIS zoning designation and the Town's zoning map for certain properties.
2. The County's GIS shows these properties as zoned Heavy Industrial.
3. The Town's map shows the same properties as zoned B-3 Business.
4. The County only updates its GIS zoning when the town provides official rezoning documents.
5. Old Town zoning maps indicate a change occurred on March 4, 2008. However, there are two maps with this date, and only one shows the zoning change.
6. All zoning maps after March 4, 2008, consistently show the property as B-3 zoned.
7. Staff thoroughly searched Town Council minutes for 2008 and surrounding years but couldn't find any record of Town Council action or case files related to rezoning these properties.

This situation highlights a potential administrative oversight or documentation issue regarding the zoning change of these properties. To correct the issue, staff has notified the owners of both properties to obtain their support for rezoning as is reflected on the signed zoning application.

Planning Director Stephen Wensman incorporated his entire record and provided it to the Council in written form in with the December 17, 2024 agenda packet. He outlined staff's consistency statement:

Consistency Statement (Staff Opinion):

With approval of the rezoning, the Town Council is required to adopt a statement describing whether the action is consistent with adopted comprehensive plan, as hereby amended and other applicable adopted plans and that the action is reasonable and in the public interest.

Planning Staff considers the action to be consistent and reasonable:

- **Consistency with the Comprehensive Growth Management Plan -***The map amendment is consistent with the comprehensive growth management plan.*
- **Consistency with the Unified Development Code (UDO) –** *Any future use or development of the properties will be consistent with the UDO.*
- **Compatibility with Surrounding Land Uses –** *the map amendment is consistent with surrounding land uses. All the land to the surrounding is zoned B-3 with some O/I zoning in the Southeast of the site.*

Wensman recommended the Council move to approve zoning map amendment, RZ-24-09, finding it consistent with the Town of Smithfield Comprehensive Growth Management Plan, as hereby amended, and other adopted plans, and that the amendment is reasonable and in the public interest.

Councilman Travis Scott asked for further clarification for the discrepancy between the County and the Town's map for the B-3 indication. Wensman clarified.

Mayor Andy Moore asked if there were any additional questions from the Board for staff. There were none. He also asked if there was anyone in the audience who wished to speak on the issue. There was none.

Mayor Pro Tem Roger Wood made a motion, seconded by John Dunn to close the public hearing. Unanimously approved.

Councilman Travis Scott made a motion, seconded by Councilman John Dunn to allow staff to proceed with making the map error correction. Unanimously approved.

3. **Conditional Zoning Request – (CZ-24-07) Waddell Drive -** Terraeden Landscape & Design is requesting the conditional rezoning of approximately 1.63 acres of land located at 37 and 41 Waddell Drive, about 250 ft north of the N. Brightleaf Blvd. and Waddell Drive intersection, also identified by the Johnston County Tax ID 15005031, 15005029 and part of 15005031A, from R-8 and B-3 to R-8 CZ, Conditional with a masterplan for a 16-lot attached single-family residential townhome development.

Councilman John Dunn made a motion, seconded by Mayor Pro Tem Roger Wood to open the public hearing. Unanimously approved.

Planning Director, Stephen Wensman explained that the developer plans to build six two-story townhomes, each about 1,020 square feet. These units will face a private parking lot that provides over two spaces per unit. Each townhome will have two bedrooms and two and a half bathrooms. The development is conveniently located near commercial areas and community amenities. No parks are proposed in the development, however there will be a fee in lieu.

Wensman stated that the development includes a standard street yard as per UDO requirements and a Class A perimeter buffer. While the master plan lacks parking lot landscaping and foundation plantings at this scale, these will be addressed in future construction plans for review. A 6-foot-high screening fence is planned for the back of lots adjacent to existing residential areas. For developments with private parking lots, discussions are ongoing for including a liability waiver in restrictive covenants. This would allow the town to collect trash on private property without assuming liability for potential damages.

This development is below the threshold for a traffic study, although we had another case tonight that more or less covered it a 30-foot perimeter buffer is provided, whereas the code is requiring a 35-foot perimeter buffer.

The development includes a mail kiosk, public utilities with a fire hydrant requiring a 30-foot easement, and architectural standards. A subdivision sign will be placed 10 feet from the entrance. The project is planned as a single phase. The developer requests a 5-foot reduction in the perimeter yard but proposes a screening fence exceeding the code requirement. They're providing seven extra parking stalls and upgrading Waddell Drive with curb, gutter, and slight widening to match the adjacent car wash area.

Planning Director Stephen Wensman incorporated his entire record and provided it to the Council in written form in with the December 17, 2024 agenda packet.

Wensman stated that staff believes the proposed development is consistent with the growth management plan. It also will be consistent with unified development code and compatible with surrounding land use. Staff is recommending approval with seven conditions of approval. Wensman detailed staff's consistency statement and conditions of approval as listed below:

CONSISTENCY STATEMENT (STAFF'S FINDINGS)

With the approval of the rezoning, the Town Council is required to adopt a statement describing whether the action is consistent with the adopted comprehensive plan and other applicable adopted plans and that the action is reasonable and in the public interest. Planning Staff considers the action to be consistent and reasonable to the public interest:

- **Consistency with the Comprehensive Growth Management Plan –** *The development is consistent with the comprehensive plan.*
- **Consistency with the Unified Development Code –** *The property will be developed in conformance with the UDO conditional zoning provisions that allows a good faith negotiation of development standards.*
- **Compatibility with Surrounding Land Uses -** *The property considered for rezoning will be compatible with the surrounding land uses with the additional conditions of approval.*

STAFF RECOMMENDATION:

Planning Staff and the Planning Board recommend approval of CZ-24-07 with the following conditions:

1. *A landscape plan be submitted meeting UDO requirements.*
2. *The Y-hammerhead turnaround area shall be marked as no parking in accordance with the Fire Marshal's recommendations.*
3. *The HOA restrictive covenants shall require trash rollouts to be stored behind the units or in the utility closet outside of trash day.*
4. *Liability waiver should be provided in the restrictive covenants to allow town pick up of trash on private property.*
5. *The driveway apron in the public right-of-way be constructed in accordance with the Town's Standard Driveway Apron Detail.*
6. *There shall be a 30' wide public utility easement over the public water and sewer lines.*
7. *The townhomes shall be substantially similar to those presented with the rezoning, in design and materials.*

Mayor Andy Moore asked if there were any additional questions from the Council for staff.

Councilman David Barbour asked where the storm water pond would be located, as well as what type of storm water management is proposed. Wensman stated that staff did not have that level of detail at this time, and deferred the question to the developers who were present to speak.

Councilman Travis Scott questioned the existing house at the proposed development, noting that it is in the B-3 zoning district. Councilman Scott asked whether changing the zoning as proposed would bring the house into compliance. Wensman stated yes.

Mayor Moore asked if there were any additional questions from the Council. There were none.

The applicant, Paul Embler spoke regarding the development. He stated his credentials, giving a brief history of his experience to the board. He also noted having been the Town of Smithfield's Planning Director for fourteen years. He re-stated testimony congruent to that of Planning Director Wensman. He noted the only reason they asked for the five-foot reduction in perimeter yard was because they did not want to make the units too small. He provided a map to the Board, asking that it be entered as part of the record. He stated the map he provided contained markings that showed how the sidewalk and curb and gutter are proposed. He stated based on the center line of the right-of-way; they will meet the 27-foot setback for their half of the road. He noted that this will include the curb and gutter as well as the sidewalk. He further noted that some standards are above and beyond what the Town required. He asked if there were any questions from the Council.

Councilman David Barbour asked again about the type of storm water pond proposed. Embler deferred that question to Brian Leonard, the engineer, stating he could address the stormwater pond.

Mayor Andy Moore asked about the hammerhead turnaround, noting it is not something they have seen. Planning Director Wensman stated it meets fire code; however, it does not work when there are cars parked in it. Mayor Moore stated it looked as if it would be difficult to turn around. He asked Embler for further information. Embler stated that the turnaround is approved in the Town's ordinance and meets fire code, but it is not used that often. He stated that the town has increased the cul-de-sac size from approximately 87 feet cul-de-sac head to 96-97 feet due to fire code requirements. This change has resulted in a larger paved area. However, the new design, called a Hammerhead, actually uses less pavement than a traditional 96-foot diameter cul-de-sac. Consequently, this design reduces stormwater runoff compared to the alternative.

Mayor Moore asked how do we control it, noting that the driveway was private and that signs would be put up. Embler stated there would be an HOA for the development who would enforce no parking in the hammerhead turnaround. There was some discussion regarding HOAs and enforcement. Mayor Moore stated this needed to be a priority for access by emergency services. Embler concurred stating that they would also post no parking signs.

Councilman Sloan Stevens asked where the curb and gutter would extend. Embler stated from where the driveway is to the brick house; all the way to the third house, and it would stop at that property line. Councilman Stevens asked if they were tearing down both homes. Embler stated yes. Mayor Moore asked if there were any additional questions for Paul Embler.

Brian Leonard with BRL Engineering and Surveying at 112 East Johnston Street, Smithfield addressed the Board. He stated regarding the storm water the options are open because they do not have any detailed grading plans at this stage of development, and he did not know how high the site would be. Leonard stated that the preferred target pond type is a bio retention cell, which is a normally dry basin that filters water into the soil and ponds up during storm events. A wet pond is an alternative option. The final design choice depends on factors such as grading, existing soil types, and depth to water tables, which are yet to be determined. This flexibility allows for either bio retention or wet pond options to be considered.

Councilman David Barbour noted once the development is turned over to the Homeowners Association (HOA), they become responsible for maintaining everything. However, HOA members may lack the knowledge to properly maintain complex systems like stormwater ponds. He asked how can we ensure that these important features will be adequately maintained over time.

Planning Director Stephen Wensman stated that the town has a stormwater inspection program that requires annual certified inspection reports from developers or HOAs. These reports, including pictures, are reviewed by town staff. If maintenance is needed, it must be done immediately to ensure compliance. This process continues yearly. While there have been instances of non-compliance in the past, such as with Booker Dairy Plantation, the regular inspection routine has led to improvements. The ongoing inspections and enforcement help maintain stormwater systems in compliance over time.

Leonard added that the town has significantly improved its oversight of stormwater ponds in the last

2-3 years. They now maintain accurate records and ensure annual inspections are conducted, which wasn't the case in the early years of stormwater regulations. The town is now doing an excellent job of managing these inspections.

Councilman David Barbour asked the engineer if he could foresee any flooding issues in the area. Leonard stated water tends to flow and discharge into a lower line wooded area to the north east of the site. He stated the intent is to let the water flow naturally. He stated requirements are in place so that they mitigate downstream impacts.

Mayor Moore asked that the length of the hammerhead turnaround be clearly defined for him on the map. It was clarified to be sixty feet in both directions from the center. Mayor Moore stated that with only one way in and one way out, he wanted to make sure the length was adequate for emergency vehicles to get in. Leonard stated the movements are less sharp with the proposed development, than with a regular cul-de-sac turnaround, noting the angle of the turn was less than ninety degrees.

Mayor Moore asked Planning Director Wensman to confirm that there was a proposed six-foot fence. He stated that with adding this much development to an existing residential area, it is important to have the right buffer. Wensman pointed out the proposed fence line on the map on display before the Board.

Mayor Moore asked if there were any further questions from the Board. Councilman Sloan Stevens asked if the architectural standards proposed for the development need to be made a condition for approval, or if the developer is bound by what they proposed for materials in their application. Wensman stated they are bound by what they submitted, and that all building would be done at one time and not in phases, so staff was comfortable not adding architectural standards as a condition.

Mayor Moore asked if there was anyone in the audience who wished to speak regarding the issue. There was no one.

Councilman Roger Wood made a motion, seconded by Councilman John Dunn to close the public hearing. Unanimously approved.

Mayor Pro Tem Roger Wood made a motion, seconded by Councilman John Dunn to approve CZ-24-07 with the following conditions of approval, finding the Conditional Zoning consistent with the Town Smithfield's Comprehensive Growth Management Plan and other adopted plans, and that the amendment is reasonable in the public interest. Unanimously approved.

Conditions of approval are as follows:

1. *A landscape plan be submitted meeting UDO requirements.*
2. *The Y-hammerhead turnaround area shall be marked as no parking in accordance with the Fire Marshal's recommendations.*
3. *The HOA restrictive covenants shall require trash rollouts to be stored behind the units or in the utility closet outside of trash day.*
4. *Liability waiver should be provided in the restrictive covenants to allow town pick up of trash on private property.*
5. *The driveway apron in the public right-of-way be constructed in accordance with the Town's Standard Driveway Apron Detail.*
6. *There shall be a 30' wide public utility easement over the public water and sewer lines.*
7. *The townhomes shall be substantially similar to those presented with the rezoning, in design and materials.*

Councilmember Comments:

Councilman Travis Scott recognized Town of Smithfield Fire Department retiree Travis Byrd for his 25 years of dedicated service to the Town.

Councilman Scott also addressed the Board regarding the Lumos Networks fiber installation project, referencing the numerous calls and complaints he has received from citizens for dirt left piled up on roadways, with no little more than a traffic cone to warn drivers, damage to property and damage to water

and sewer lines. He wanted to be assured that the Town is doing all it can to address the complaints, inspect and locate lines to ensure those liabilities do not come back on the Town.

Councilman Scott also addressed the Town's Street sweeper as seemingly being more in disrepair rather than in operation. He noted this was a very important service the Town is not getting, to keep the streetways clear and storm drains unblocked.

Mayor Andy Moore also addressed the street cuts done by Lumos, stating the danger there. He also listed other issues with gas line cuts and gas leaks, as well as the water and sewer line cuts, noting the company works on multiple blocks at the time. He stated that his opinion is that work be stopped immediately with no further digging until the Town has discussion with the company to come up with a better plan for installing the infrastructure. He stated we need answers and cooperation from Lumos from a public safety standpoint.

Town Manager, Mike Scott addressed the Board, outlining how the Town is addressing the issues with Lumos, stating the town is actively monitoring the project and its impact. Town staff are:

1. Holding regular meetings with Lumos
2. Tracking all damages caused by the project
3. Ensuring Lumos pays for any damages they cause
4. Keeping a record of all street cuts made
5. Planning to hold Lumos accountable for future issues related to their work, even months later
6. Working to protect taxpayers from bearing the costs of repairs

Councilman Sloan Stevens stated he also received calls, but cautioned that we be careful so the result would be getting the company's attention, and not stopping the progress. While acknowledging the project has been problematic, the town is doing everything possible to manage the situation and minimize negative impacts on the community. Councilman Travis Scott stated that we need to take action, or nothing may change.

> Councilman Travis Scott made a motion for Lumos Networks to complete the tasks they have already been started, but to stop further digging until they can correct their issues.

Town Manager Mike Scott asked Public Utilities Director, Lawrence Davis to address the Board regarding the direction of work, issues how things should look over the holiday season.

Davis stated he has spoken to the site manager at Lumos, stating he informed them about our upcoming closure for the holiday season and specified the days we'd be closed. We instructed them to pause any drilling or major maintenance during this time. We asked them to install appropriate signage for completed work and report back to me. They've provided a list of all the streets they've worked on, which I have reviewed and will inspect again tomorrow. We'll maintain consistent oversight. We have a six-month follow-up plan for all contractors who work on our streets. This ensures that any street cuts remain intact, and if not, the contractor must return to make corrections. These standards and measures are in place to address any issues that may arise.

Councilman Steve Rabil asked Davis if he completed an incident report for every call or complaint received. Davis stated that he has not done incident reports, but that the Utilities Director and Water Sewer Superintendent have done so, because it has mainly been their utilities hit. He stated he does document and record where their street work has turned into potholes.

Councilman Rabil asked Lawrence for an update on the street sweeper. He asked if it was possible to borrow one from another Town. Davis stated he would look into the issue.

Town Attorney Bob Spence commented regarding Lumos installation issues. He stated we must remember that the Brightspeed Fiber Company is also coming, and the town should not be too precipitous. He stated that there were multi-level statutes that allowed these companies to do work, noting that for defense and other reasons the work has to continue. He noted that for the Public Works Director to stay on top of the issue is the right thing, rather than challenging the rights of the fiber company and interrupting perceived progress.

Councilman David Barbour asked whether the motion made by Councilman Travis Scott is a legal motion that the Board could make.

Attorney Spence stated if Councilman Scott's motion asked that the company to correct the defects, and stop until they do, we can ask them to do that. Mayor Andy Moore noted, that was what the motion said. In re-stating the motion, it is noted that:

> *Councilman Travis Scott made a motion for Lumos Networks to complete the tasks they have already been started, but to stop further digging until they can correct their issues.*
>
> Councilman David Barbour seconded the motion. Unanimously approved.

Councilman David Barbour asked if the Town has completed the project for cleaning all the street drains. Public Works Director, Lawrence Davis, stated that they have completed that task of the project, and that they were now going into phase two, which is trenching those ditches so the water could come out.

Mayor Moore stated more areas in Town also need the exact same attention. Davis concurred.

Councilman David Barbour addressed accusation made against a Town department that turned out to be unfounded. He complimented staff on their professionalism through harsh media attacks and accusations. He thanked the Chief and staff for handling the difficult situation. He stated that the department was truly appreciated for the work that they do and it's not an easy task.

Mayor Andy Moore gave a compliment to Parks & Recreation staff for a fantastic Christmas Parade and other events. He stated it was a job nicely done by staff and all who participated.

Town Manager's Report

Town Manager Mike Scott reminded the Council of the Employee Christmas Party on December 18, 2024 at 12 o'clock and encouraged attendance. He also wished everyone a merry and safe Christmas and holiday season.

Adjourn

Councilman David Barbour made a motion, seconded by Councilman John Dunn to adjourn the meeting at 9:02 PM. Unanimously approved.

_____
M. Andy Moore, Mayor

ATTEST:

_____
Elaine Andrews, Town Clerk

Request for Town Council Action

Consent Agenda Item: Promotion
Date: 1/21/25

Subject: Promotion
Department: Police Department
Presented by: Police Chief - Pete Hedrick
Presentation: Consent Agenda Item

Issue Statement

This is a request to promote one officer from the rank of Master Police Officer II (MPO) to Sergeant. Under the Town's Employee Handbook, all promotions to a higher pay grade will be accompanied by an increase to the next pay grade minimum salary or up to 10% increase, whichever is greater.

Financial Impact

Approved Budgeted Amount for FY 2023-2024: Covered by the Current Budget. This salary increase will be covered by the police department's current budget and will not require a budget amendment to the current salary line item. In this case the required salary increase for the 2024/2025 Budget cost will be covered by the budget.

Action Needed

The Officer has followed the attached career ladder policy previously approved by the Council found in the support documentation and has earned the promotion. The Police Chief recommends this promotion and up to a 10 percent salary increase, moving her to the next pay grade in the current Town salary schedule.

Recommendation

It is requested to allow this Officer to be promoted to Sergeant

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:

1. Staff Report

Staff Report

Consent Agenda Item:	**Promotion**
Date:	**1/21/25**

This is a request to promote one officer from the rank of Master Police Officer II (MPO) to Sergeant. Under the Town's Employee Handbook, all promotions to a higher pay grade will be accompanied by an increase to the next pay grade minimum salary or up to a 10% increase, whichever is greater.

Request for Town Council Action

Consent Agenda Item: Promotion
Date: 1/21/25

Subject: Promotion
Department: Police Department
Presented by: Police Chief - Pete Hedrick
Presentation: Consent Agenda Item

Issue Statement

This is a request to promote one officer from the rank of Detective to Sergeant. Under the Town's Employee Handbook, all promotions to a higher pay grade will be accompanied by an increase to the next pay grade minimum salary or up to a 10% increase, whichever is greater.

Financial Impact

Approved Budgeted Amount for FY 2023-2024: Covered by the Current Budget. This salary increase will be covered by the police department's current budget and will not require a budget amendment to the current salary line item. In this case the required salary increase for the 2024/2025 Budget cost will be covered by the budget.

Action Needed

The Officer has followed the career ladder policy previously approved by the Council and has earned the promotion. The Police Chief recommends this promotion and up to ten percent salary increase, moving her to the next pay grade in the current Town salary schedule

Recommendation

It is requested to allow this Officer to be promoted to Sergeant

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:

1. Staff Report

Staff Report

Consent Agenda Item:	**Promotion**
Date:	**1/21/25**

This is a request to promote one officer from the rank of Detective to Sergeant. Under the Town's Employee Handbook, all promotions to a higher pay grade will be accompanied by an increase to the next pay grade minimum salary or up to a 10% increase, whichever is greater.

Request for Town Council Action

Consent Agenda Item:	**Vehicle Purchases**
Date:	**1/21/25**

Subject: Police Department purchase of used vehicles
Department: Police Department
Presented by: Police Chief - Pete Hedrick
Presentation: Consent Agenda Item

Issue Statement
The Police Chief is requesting to purchase three used vehicles for the fleet.

Financial Impact
Budgeted $40,000

Action Needed
Approve or deny restructure request.

Recommendation
Approve

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:

- Staff Report
- Order sheets from vender

Staff Report

Consent Agenda Item:	Vehicle Purchases
Date:	1/21/25

The police Chief is requesting the purchase of three vehicles. Three 2018 Ford Taurus police package vehicles. All have very low miles and will be used for our detective division.

These vehicles are with Asia Motors that purchases used law enforcement vehicles and then resells them.

BILL OF SALE

SELLER	BUYER(S)
ASIA MOTORS INC 2300 NORTH MANNHEIM RD MELROSE PARK, IL 60164 847-447-3500 Date: 1/08/25 Salesman:	SMITHFIELD POLICE DEPARTMENT 110 S 5TH ST SMITHFIELD, NC 27577 County: JOHNSTON Phone: 919-989-1069
DESCRIPTION OF VEHICLE SOLD	DESCRIPTION OF TRADE-IN(S)
Stock #:24297 Year: 2018 Make: FORD Model: TAURUS Body Type: 4DR Color: WHITE Tag: Mileage: 20703 VIN: 1FAHP2L80JG141418	Trade # 1: N/A VIN: Mileage: Trade # 2: N/A VIN: Mileage:

WARRANTY DISCLAIMER Any warranties on the products sold hereby are those made by the manufacturer. The seller hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose and neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of said products.
Seller makes no warranty of any kind, express or implied, as to the merchantability or fitness for a particular purpose of the vehicle covered by this agreement, and buyer understands and agrees that such vehicle, whether new or used is sold "AS-IS" and "WITH ALL FAULTS".

LIEN HOLDER

SETTLEMENT

Price:	13,400.00
Less Trade Allowance:	N/A
Difference:	13,400.00
Payoff on Trade-In	N/A
Sales Tax:	N/A
:	N/A
Tag & Title Fee::	N/A
Total:	13,400.00
Less Cash Down Payment:	N/A
Deferred Down Payment:	N/A
BALANCE REMAINING:	13,400.00

TAX JURISDICTION BREAKDOWN

8.500 %	0.00
0.000 %	0.00
0.000 %	0.00
1.000 %	0.00

CONTRARY LANGUAGE DISCLOSURE The following applies to all vehicles sold as "DEMONSTRATOR" or "USED". The information you see on the window form (entitled "Buyer's Guide") for this vehicle is part of this contract. Information on the window form overrides any contrary provisions in the contract of sale. Buyer hereby acknowledges the presence of the above mentioned window form (BUYER'S GUIDE) on the purchased vehicle at time of delivery and receipt of the original of said form.

WILL NOT PROVIDE ANY LOANER VEHICLE

Buyer_____ Co-Buyer_____

I UNDERSTAND NO VERBAL AGREEMENT WILL BE HONORED BY DEALER

ALL SALES FINAL

BUYER AGREES THAT HE HAS READ AND UNDERSTANDS THE TERMS AND CONDITIONS AND LIMITATIONS OR LIABILITY SET FORTH HEREIN AND AFFIXES HIS SIGNATURE IN CONFIRMATION OF HIS OFFER.

Buyer_____ Co-Buyer_____ Accepted This Date 1/08/25

I UNDERSTAND NO VERBAL AGREEMENT WILL BE HONORED BY DEALER.

I HAVE RECEIVED A COPY OF MY PURCHASE OPTION CONTRACT ON DELIVERY.

By_____

Purchase Order must be accepted by an officer or manager of the Company.

BILL OF SALE

SELLER	BUYER(S)
ASIA MOTORS INC 2300 NORTH MANNHEIM RD MELROSE PARK, IL 60164 847-447-3500 Date: 1/08/25 Salesman:	SMITHFIELD POLICE DEPARTMENT 110 S 5TH ST SMITHFIELD, NC 27577 County: JOHNSTON Phone: 919-989-1069
DESCRIPTION OF VEHICLE SOLD	DESCRIPTION OF TRADE-IN(S)
Stock #:24202 Year: 2018 Make: FORD Model: TAURUS Body Type: 4DR Color: WHITE Tag: Mileage: 44943 VIN: 1FAHP2L82JG141467	Trade # 1: N/A VIN: Mileage: Trade # 2: N/A VIN: Mileage:

WARRANTY DISCLAIMER Any warranties on the products sold hereby are those made by the manufacturer. The seller hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose and neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of said products.

Seller makes no warranty of any kind, express or implied, as to the merchantability or fitness for a particular purpose of the vehicle covered by this agreement, and buyer understands and agrees that such vehicle, whether new or used is sold "AS-IS" and "WITH ALL FAULTS".

LIEN HOLDER

TAX JURISDICTION BREAKDOWN

8.500 %	0.00
0.000 %	0.00
0.000 %	0.00
1.000 %	0.00

SETTLEMENT

Price:	12,200.00
Less Trade Allowance:	N/A
Difference:	12,200.00
Payoff on Trade-In	N/A
Sales Tax:	N/A
:	N/A
Tag & Title Fee::	N/A
Total:	12,200.00
Less Cash Down Payment:	N/A
Deferred Down Payment:	N/A
BALANCE REMAINING:	12,200.00

CONTRARY LANGUAGE DISCLOSURE The following applies to all vehicles sold as "DEMONSTRATOR" or "USED". The information you see on the window form (entitled "Buyer's Guide") for this vehicle is part of this contract. Information on the window form overrides any contrary provisions in the contract of sale. Buyer hereby acknowledges the presence of the above mentioned window form (BUYER'S GUIDE) on the purchased vehicle at time of delivery and receipt of the original of said form.

WILL NOT PROVIDE ANY LOANER VEHICLE

Buyer_____ Co-Buyer_____

I UNDERSTAND NO VERBAL AGREEMENT WILL BE HONORED BY DEALER

ALL SALES FINAL

BUYER AGREES THAT HE HAS READ AND UNDERSTANDS THE TERMS AND CONDITIONS AND LIMITATIONS OR LIABILITY SET FORTH HEREIN AND AFFIXES HIS SIGNATURE IN CONFIRMATION OF HIS OFFER.

Buyer_____ Co-Buyer_____ Accepted This Date 1/08/25

I UNDERSTAND NO VERBAL AGREEMENT WILL BE HONORED BY DEALER.

I HAVE RECEIVED A COPY OF MY PURCHASE OPTION CONTRACT ON DELIVERY.

By_____

Purchase Order must be accepted by an officer or manager of the Company

BILL OF SALE

SELLER	BUYER(S)
ASIA MOTORS INC 2300 NORTH MANNHEIM RD MELROSE PARK, IL 60164 847-447-3500 Date: 1/08/25 Salesman:	SMITHFIELD POLICE DEPARTMENT 110 S 5TH ST SMITHFIELD, NC 27577 County: JOHNSTON Phone: 919-989-1069
DESCRIPTION OF VEHICLE SOLD	DESCRIPTION OF TRADE-IN(S)
Stock #:24203 Year: 2018 Make: FORD Model: TAURUS Body Type: 4DR Color: WHITE Tag: Mileage: 21217 VIN: 1FAHP2L81JG141458	Trade # 1: N/A VIN: Mileage: Trade # 2: N/A VIN: Mileage:

WARRANTY DISCLAIMER Any warranties on the products sold hereby are those made by the manufacturer. The seller hereby expressly disclaims all warranties, either express or implied, including any implied warranty of merchantability or fitness for a particular purpose and neither assumes nor authorizes any other person to assume for it any liability in connection with the sale of said products.
Seller makes no warranty of any kind, express or implied, as to the merchantability or fitness for a particular purpose of the vehicle covered by this agreement, and buyer understands and agrees that such vehicle, whether new or used is sold "AS-IS" and "WITH ALL FAULTS".

LIEN HOLDER

TAX JURISDICTION BREAKDOWN

8.500 %	0.00
0.000 %	0.00
0.000 %	0.00
1.000 %	0.00

SETTLEMENT

Price:	14,400.00
Less Trade Allowance:	N/A
Difference:	14,400.00
Payoff on Trade-In	N/A
Sales Tax:	N/A
:	N/A
Tag & Title Fee::	N/A
Total:	14,400.00
Less Cash Down Payment:	N/A
Deferred Down Payment:	N/A
BALANCE REMAINING:	14,400.00

CONTRARY LANGUAGE DISCLOSURE The following applies to all vehicles sold as "DEMONSTRATOR" or "USED". The information you see on the window form (entitled "Buyer's Guide") for this vehicle is part of this contract. Information on the window form overrides any contrary provisions in the contract of sale. Buyer hereby acknowledges the presence of the above mentioned window form (BUYER'S GUIDE) on the purchased vehicle at time of delivery and receipt of the original of said form.

WILL NOT PROVIDE ANY LOANER VEHICLE

Buyer_____ Co-Buyer_____

I UNDERSTAND NO VERBAL AGREEMENT WILL BE HONORED BY DEALER

ALL SALES FINAL

BUYER AGREES THAT HE HAS READ AND UNDERSTANDS THE TERMS AND CONDITIONS AND LIMITATIONS OR LIABILITY SET FORTH HEREIN AND AFFIXES HIS SIGNATURE IN CONFIRMATION OF HIS OFFER.

Buyer_____ Co-Buyer_____ Accepted This Date 1/08/25

I UNDERSTAND NO VERBAL AGREEMENT WILL BE HONORED BY DEALER. By_____

I HAVE RECEIVED A COPY OF MY PURCHASE OPTION CONTRACT ON DELIVERY.

Purchase Order must be accepted by an officer or manager of the Company.

Request for Town Council Action

Consent Agenda Item:	Advisory Board Appointments
Date:	1/21/25

Subject: Advisory Board Appointments
Department: General Government
Presented by: Town Clerk – Elaine Andrews
Presentation: Consent Agenda Item

Issue Statement
The Town Council is asked to consider reappointments for members of the Board of Adjustment and the Planning Board.

Financial Impact
N/A

Action Needed
The Town Council is asked to consider the reappointment of Sarah Edwards as a Board of Adjustment ETJ member and Mark Lane as a Planning Board ETJ member

Recommendation
Staff recommends approval of these reappointments

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:

- Staff Report
- Sarah Edwards – Board Application
- Mark Lane – Board Application

Staff Report

Consent Agenda Item:	Advisory Board Appointments
Date:	1/21/25

Board Reappointment:

Sarah Edwards has submitted an application for consideration to be reappointed to a new term on the Board of Adjustment as an ETJ Member.

Mark Lane has submitted an application for consideration to be appointed to a new term on the Planning Board.

Current Board vacancies are as follows:

- Appearance Commission – 3 Positions
- Board of Adjustment – 3 Positions
- Historic Properties Commission – 2 Positions
- Parks and Recreation Advisory Commission - 5 Positions
- Planning Board – 2 Positions

Town of Smithfield
Board, Commission, or Committee Application

Name: *Edwards* *Sarah*
(Last) (First)

Home Address: 1282E Packing Plant Road

Business Name & Address:

Telephone Numbers: 919) 796-2899 sarahelizabethedwards@gmail.com
(Home) (Mobile) (Email)

Please check the Board(s) that you wish to serve on:

☐	Appearance Commission	☐	Parks/Recreation Advisory Commission
☐	Board of Adjustment In Town Resident	☐	Planning Board In-Town Resident
X	Board of Adjustment ETJ Member	☐	Planning Board ETJ Resident
☐	Historic Properties Commission	☐	Other: _____
☐	Library Board of Directors		_____

Interests & Skills: Economic and community development, appropriate growth and high quality development for Smithfield

Circle highest level of education completed: (High School) 10 11 12 GED College 1 2 3 **4** 5 6

Recent Job Experiences: Executive Director, Downtown Smithfield Development Corporation

Civic or Service Organization Experience: Currently: Junior Women's League of Smithfield (former President), North Carolina Main Street Partners Board, Town of Smithfield Board of Adjustment
Formerly: North Carolina Downtown Development Association Board, Ava Gardner Museum Board

Town Boards previously served on and year(s) served: Board of Adjustment, 2009-present

Please list any other Boards/Commissions/Committees on which you currently serve: NC Main Street Partners Board, various Junior Women's League of Smithfield committees

Why are you interested in serving on this Board/Commission/Committee? Smithfield is poised for significant growth and redevelopment. I think it is critical to balance the needs and wants of current citizens with the change that comes with new growth, particularly when it comes to ensuring that the Town's standards support quality development that Smithfield's current and future citizens can be proud of and will benefit the Town in the long run.

Affirmation of Eligibility:

Has any formal charge of professional misconduct, criminal misdemeanor or felony ever been filed against you in any jurisdiction?

□Yes **x** No If yes, please explain disposition: _____

_____

Is there any conflict of interest or other matter that would create problems or prevent you from fairly and impartially discharging your duties as an appointee of the Smithfield Town Council? □ Yes **x** No If yes, please explain: _____

_____

_____

I understand this application is public record and I certify that the facts contained in this application are true and correct to the best of my knowledge. I authorize and consent to background checks and to the investigation and verification of all statements contained herein as deemed appropriate and if necessary. I further authorize all information concerning my qualifications to be investigated and release all parties from all liability for any damages that may result from this investigation. I understand and agree that any misstatement may be cause for my removal from any Board/Commission/Committee. I understand regular attendance to any Council Board/Commission/Committee is important and, accordingly, I further understand that if my attendance is less than the standards established for any such body that this is cause for removal. Lacking any written standards for attendance by any Board/Commission/Committee, it is expected that I will attend at least 75% of all meetings during any one calendar year to maintain my seat on any Board/Commission/Committee to which I may be appointed. This form will remain on file in the Office of the City Clerk and requests for updates will be sought prior to any consideration for reappointment (or future appointment) to any Board/Commission/Committee. Further, I have received a copy of the Policy adopted 03-04-2008 and understand its contents.

Printed Name: Sarah Edwards

Signature: s/ Sarah Edwards Date: 12/30/2024

Return completed for to:
Elaine Andrews
Town Clerk
P. O. Box 761
Smithfield, North Carolina 27577
Phone: (919) 934-2116 Fax: (919) 989-8937 E-Mail: elaine.andrews@smithfield-nc.com

Applicants are required to be a resident of the Town of Smithfield for In-Town positions and within the Town's ETJ for ETJ positions

Town of Smithfield
Board, Commission, or Committee
Application

Name: Lane (Last) Mark (First) E (MI)

Home Address: 2108 Yelverton Grove Rd Smithfield NC 27577

Business Name & Address:

Telephone Numbers: 9196693615 (Home) (Mobile) markfd12@aol.com (Email)

Please check the Board(s) that you wish to serve on:

- ☐ Appearance Commission
- ☐ Board of Adjustment In Town Resident
- ☐ Board of Adjustment ETJ Member
- ☐ Historic Properties Commission
- ☐ Library Board of Directors
- ☐ Parks/Recreation Advisory Commission
- ☐ Planning Board In-Town Resident
- ☒ Planning Board ETJ Resident
- ☐ Other:

Interests & Skills: Interested in how muncipal government works and how decisions made effect our community

Circle highest level of education completed: (High School) 10 11 12 GED College 1 2 3 4 5 6

Recent Job Experiences: presently I am owner of a grounds maintenance/greenhouse company

Civic or Service Organization Experience: Smithfield Fire Dept,retired,

Town Boards previously served on and year(s) served: Smithfield Planning Board
Smithfield Board of Adjustments

Please list any other Boards/Commissions/Committees on which you currently serve: Smithfield Planning Board

Why are you interested in serving on this Board/Commission/Committee? I want to continue to help make recommendations to the town council that will make our community with controlled growth

Affirmation of Eligibility:

Has any formal charge of professional misconduct, criminal misdemeanor or felony ever been filed against you in any jurisdiction?

□ Yes ■ No If yes, please explain disposition: _____

Is there any conflict of interest or other matter that would create problems or prevent you from fairly and impartially discharging your duties as an appointee of the Smithfield Town Council? □ Yes ■ No If yes, please explain: _____

I understand this application is public record and I certify that the facts contained in this application are true and correct to the best of my knowledge. I authorize and consent to background checks and to the investigation and verification of all statements contained herein as deemed appropriate and if necessary. I further authorize all information concerning my qualifications to be investigated and release all parties from all liability for any damages that may result from this investigation. I understand and agree that any misstatement may be cause for my removal from any Board/Commission/Committee. I understand regular attendance to any Council Board/Commission/Committee is important and, accordingly, I further understand that if my attendance is less than the standards established for any such body that this is cause for removal. Lacking any written standards for attendance by any Board/Commission/Committee, it is expected that I will attend at least 75% of all meetings during any one calendar year to maintain my seat on any Board/Commission/Committee to which I may be appointed. This form will remain on file in the Office of the Town Clerk and requests for updates will be sought prior to any consideration for reappointment (or future appointment) to any Board/Commission/Committee.

Printed Name: Mark Lane

Signature: Mark E Lane Date: 1/8/2024

Return completed for to:
Shannan Parrish
Town Clerk
P. O. Box 761
Smithfield, North Carolina 27577
Phone: (919) 934-2116 Fax: (919) 989-8937 E-Mail: shannan.parrish@smithfield-nc.com

Applicants are required to be a resident of the Town of Smithfield for In-Town positions and within the Town's ETJ for ETJ positions

Public Hearings

Request for Town Council Action

Public Hearing: S-24-07
Date: 1/21/25

Subject: Buffalo Road Subdivision Preliminary Plat
Department: Planning Department
Presented by: Planning Director - Stephen Wensman
Presentation: Public Hearing

Issue Statement

Becker Morgan Group, Inc. is requesting a preliminary subdivision of 138.63 acres of land with R-8 CZ designation into 117 detached single-family residential lots.

Financial Impact

The new lots will contribute to the town's tax base.

Action Needed

The Town Council is respectfully requested to hold a public hearing and to decide whether to approve, approve with conditions or deny the preliminary plat request, S-24-07, based on the finding of fact for preliminary subdivisions.

Recommendation

Staff recommends approval of the Buffalo Road Subdivision Preliminary Plat, S-24-07, with 11 conditions based on the finding of fact for preliminary subdivisions.

Approved: ☑Town Manager ☐ Town Attorney

Attachments:

1. Staff report
2. Draft Finding of Fact
3. Application and narrative
4. Preliminary Plat
5. Preliminary Subdivision Submittal Revision Responses
6. NCDOT Traffic Review
7. Adjacent Property Owners

Staff Report

Public Hearing: S-24-07
Date: 1/21/25

REQUEST:

Becker Morgan Group, Inc. is requesting a preliminary subdivision of 138.63 acres of land with R-8 CZ designation into 117 detached single-family residential lots.

PROPERTY LOCATION:

The property considered for approval is located at 1176 and 1200 Buffalo Road (Southeastern side of Buffalo Road, further identified as Johnston County Tax ID 14A033005.

APPLICATION DATA:

Owner:	Vesta Enterprises, Inc.
Applicant/Consultant:	Eva King/Eva Stancil of Becker Morgan Group, Inc.
Project Name:	Buffalo Road Subdivision
Tax ID:	14A033005
Acreage:	138.63 acres
Present Zoning:	R-8 CZ
Town/ETJ:	Town
Existing Use:	Vacant woods/Residential lots
Proposed Use:	Detached single-family residential
Fire District:	Smithfield
School Impacts:	Additional households with school-age children
Parks and Recreation:	Dedication of 58.97 acres of park land.
Water and Sewer Provider:	Town of Smithfield
Electric Provider:	Town of Smithfield

ENVIRONMENTAL:

The property consists of woodland and wetland areas, 500-yr and 100-yr floodplain, and a buffered blueline stream.

ADJACENT ZONING AND LAND USES:
(See attached map)

	Zoning	Existing Land Uses
North	R-10 and O/I	Radio Station and Single-family residential
South	R-20A	Vacant woodland
East	R-10/R-20A	Single family residential
West	R-20A	Residential/Agricultural.

PRELIMINARY PLAT/ANALYSIS:

Overview. The proposed preliminary plat is consistent with the conditional zoning master plan approved on 7/9/24, with 117 detached single-family residential lots with a minimum lot size of 5,500 sq. ft. with dedication of +/- 58 Acres of open space, east of Buffalo Creek Greenway. The submitted plans show adequate drainage away from the Bradford Park subdivision and show areas where existing vegetation is to remain and where planted buffers will be required. The plat will be conditioned on staff approval of construction plans, not yet submitted.

Subdivision Summary.

- Gross density is 1.23 units per acre.
- Minimum lot size is 5,500 sf.
- Minimum lot width is 55 feet.
- Minimum side yard setback is 6 feet.
- The open space along Buffalo Road is 60' wide.
- All lots will be maintenance free, maintained by HOA.
- Architectural Standards:

ARCHITECTURAL STANDARDS

- **Foundations**
  - Slab Foundations
- **Siding**
  - All siding must be Hard Siding
  - Must have a minimum of TWO of the following:
    - Lap Siding
    - Shake Siding
    - Board and Batten Siding
    - Masonry
- **True Street Facing Windows**
  - Must have a minimum of ONE of the following:
    - Decorative header
    - Oversized trim
    - Shutters where space allows
- **Garage**
  - Must have an attached garage
  - Must have a minimum of ONE of the following:
    - Decorative header
    - Oversized trim
- **Roofs**
  - Must have a minimum of ONE of the following:
    - Asphalt Shingles
    - Metal allowed as an accent roof over window bay or porch

- 3 parking spaces per dwelling with 94 overflow parking spaces.
- The development will be providing decorative street signs and lights.
- Open Space: 103.64 acres of open space, including 58.97 acres to be dedicated to the town for parkland, with bocce ball, dog park, open play areas and +/- 3,376 lineal feet of walking trails connected to the Town's greenway.
- 7,604 lineal feet of new town streets with sidewalks on both sides.
- Main "collector" street will be 31' wide back-to-back.
- Local streets will be 27' wide back-to-back.
- All curbs will be standard curbs.
- Emergency fire road connection to Parkway Drive with gates with Knox boxes.
- Storm Water Ponds will be aerated.
- TIA recommended improvements.

Traffic Impact Analysis. Kimley-Horn completed a Traffic Impact Analysis, studying trip generation, distribution, traffic analyses, and recommendations for transportation improvements required to meet anticipated traffic demands in conjunction with the development. Traffic conditions studied include the existing (2024) and projected (2028) background and build-out traffic conditions for the AM and PM peak hours. The study area for this development included the following intersections:

- M. Durwood Stephenson Parkway at Buffalo Road
- Buffalo Road at Hospital Road
- Brightleaf Boulevard (US 301) at Hospital Road
- Buffalo Road at North Site Driveway
- Buffalo Road at South Site Driveway
-

The recommended transportation improvements are:

<u>Buffalo Road at North Site Driveway:</u>

- Construct the North Site Driveway with one ingress lane and one egress lane
- Construct an exclusive southbound left-turn lane on Buffalo Road with 75 feet of storage and appropriate tapers

<u>Buffalo Road at South Site Driveway:</u>

- Construct the South Site Driveway with one ingress lane and one egress lane
- Construct an exclusive northbound right-turn lane on Buffalo Road with 50 feet of storage and appropriate tapers

FINDING OF FACT (STAFF OPINION):

To approve a preliminary plat, the Town Council shall make the following finding (staff's opinion in Bold/Italic):

1. The plat is consistent with the adopted plans and policies of the town; ***The plat is consistent with the adopted comprehensive plan and conditional zoning master plan.***
2. The plat complies with all applicable requirements of this ordinance; ***The plan complies with all applicable requirements of this ordinance and conditional zoning master plan with conditions.***
3. There exists adequate infrastructure (transportation and utilities) to support the plat as proposed. ***There is adequate infrastructure.***
4. The plat will not be detrimental to the use or development of adjacent properties or other neighborhood uses. ***The plat will not be detrimental to the use or development of adjacent properties or other neighborhood uses.***

RECOMMENDATION:

Staff recommend approval of the Buffalo Road Subdivision preliminary plat, S-24-07, with the following 11 conditions:

1. That the preliminary plat is conditioned on the staff approval of the construction documents meeting all UDO requirements and conditions of zoning approval.
2. Enhance the landscaping at the development entrances onto Buffalo Road.
3. Dedicate 58.97 acres for parkland with final plat.
4. Provide aeration of the wet (stormwater) ponds to assist with mosquito control.
5. Loop the watermains with the Bradford Park neighborhood (upside to an 8" line if feasible)
6. Provide a fire hydrant beyond the cul-de-sac on the greenway for fire protection.
7. Include architectural standards as presented with conditional zoning into the homeowner's association (HOA) declarations.
8. Submit homeowner's association (HOA) declarations for the Town Attorney's review.
9. Incorporate the architectural standards into the HOA declarations.
10. Provide decorative street lighting and street signs throughout the development.
11. Provide a 6' high screening fence along the Bradford Park boundary.

RECOMMENDED MOTION:

"Move to approve the Buffalo Road Subdivision preliminary plat, S-24-07, with the 11 conditions found in the staff report based on the finding of fact for preliminary subdivisions."

Town of Smithfield
Preliminary Plat
Finding of Fact / Approval Criteria

Application Number: S-24-07 **Project Name:** Buffalo Road Subdivision Preliminary Plat

Request: Vesta Enterprises, Inc. is requesting approval of a preliminary plat for a 170 detached single-family lot subdivision over 138.63 acres. The property considered for approval is located at 1176 and 1200 Buffalo Road (Southeastern side of Buffalo Road, further identified as Johnston County Tax ID 14A033005.

In approving an application for a preliminary plat in accordance with the principles, conditions, safeguards, and procedures specified herein, the Town Council may impose reasonable and appropriate conditions and safeguards upon the approval. The petitioner will have a reasonable opportunity to consider and respond to any additional requirements prior to approval or denial by the Town Council. The Town Council shall include in its comments a statement as to the consistency of the application with the Town's currently adopted Comprehensive Plan. The applicant has the burden of producing competent, substantial evidence tending to establish the facts and conditions which the below requires.

The Town Council shall issue a preliminary plat if it has evaluated an application through a quasi-judicial process and determined that:

1. The plan is consistent with the adopted plans and policies of the town;
2. The plan complies with all applicable requirements of this ordinance;
3. There exists adequate infrastructure (transportation and utilities) to support the plan as proposed; and
4. The plan will not be detrimental to the use or development of adjacent properties or another neighborhood uses

Once all findings have been decided one of the two following motions must be made:

Motion to Approve: *Based upon satisfactory compliance with the above stated findings and fully contingent upon acceptance and compliance with all conditions as previously noted herein and with full incorporation of all statements and agreements entered into the record by the testimony of the applicant and applicant's representative, I move to approve Preliminary Plat Application # S-24-07 with conditions:*

1. That the preliminary plat is conditioned on the staff approval of the construction documents meeting all UDO requirements and conditions of zoning approval.
2. Provide concrete curb and gutter along Buffalo Road with NCDOT approval.
3. Provide decorative street lighting and street signs throughout the development and submit a lighting plan for approval.
4. Enhance the landscaping at the development entrances onto Buffalo Road.
5. Dedicate the land east of the Buffalo Creek Greenway for parkland.
6. Provide aeration of the wet (stormwater) ponds to assist with mosquito control.
7. Loop the watermains with the Bradford Park neighborhood (upside to an 8" line if feasible)
8. provide a fire hydrant beyond the cul-de-sac on the greenway for fire protection.

9. Provide a 6' high screening fence along the Bradford Park boundary.

Motion to Deny: *Based upon failure to meet all of the above stated findings and for reasons stated therein, I move to deny Preliminary Plat Application # S-24-07 for the following stated reason:*

_____

_____

Record of Decision:

Based on a motion and majority vote of the Town of Smithfield Town Council for the Preliminary Plat Application # S-24-07 is hereby:

_____ approved upon acceptance and conformity with the following conditions:

1. That the preliminary plat is conditioned on the staff approval of the construction documents meeting all UDO requirements and conditions of zoning approval.
2. Provide concrete curb and gutter along Buffalo Road with NCDOT approval.
3. Provide decorative street lighting and street signs throughout the development and submit a lighting plan for approval.
4. Enhance the landscaping at the development entrances onto Buffalo Road.
5. Dedicate the land east of the Buffalo Creek Greenway for parkland.
6. Provide aeration of the wet (stormwater) ponds to assist with mosquito control.
7. Loop the watermains with the Bradford Park neighborhood (upside to an 8" line if feasible)
8. provide a fire hydrant beyond the cul-de-sac on the greenway for fire protection.
9. Provide a 6' high screening fence along the Bradford Park boundary.

_____ denied for the noted reasons.

_____

_____

Decision made this 17th day of January, 2025 while in regular session.

_____

M. Andy Moore, Mayor

ATTEST:

_____

Elaine Andrews, Town Clerk

Town of Smithfield
Planning Department
350 E. Market St Smithfield, NC 27577
P.O. Box 761, Smithfield, NC 27577
Phone 919-934-2116
Fax: 919-934-1134

Preliminary Subdivision Application
General Information

Development Name Buffalo Road Subdivision

Proposed Use Single-family Residences

Property Address(es) 1176 & 1200 Buffalo Road (Southeastern side of Buffalo Road SR 1003)

Johnston County Property Identification Number(s) and Tax ID Number (s) for each parcel to which these guidelines will apply:

PIN# 260-412-06-3802	TAX ID# 14A033005

Project type? ☒ Single Family ☐ Townhouse ☐ Multi-Family ☐ Non-Residential ☐ Planned Unit Development (PUD)

OWNER/DEVELOPER INFORMATION

Company Name Vesta Enterprises, Inc.	Owner/Developer Name Sagan Lampe

Address PO Box 1457, Smithfield, NC 27577

Phone 919-631-9524	Email sagan@vestaenterprises.com	Fax N/A

CONSULTANT/CONTACT PERSON FOR PLANS

Company Name Becker Morgan Group, Inc.	Contact Name Eva King / Amy Stancil

Address 314 East Main Street, Clayton, NC 27520

Phone 919-243-1332	Email eking@beckermorgan.com/ astancil@beckermorgan.com	Fax N/A

DEVELOPMENT TYPE AND SITE DATE TABLE (Applicable to all developments)

ZONING INFORMATION

Zoning District(s) R-8 CZ

If more than one district, provide the acreage of each:

Overlay District? ☐ Yes ☒ No

Inside City Limits? ☒ Yes ☐ No

FOR OFFICE USE ONLY

File Number:_____ Date Submitted:_____ Date Received: _____ Amount Paid:_____

Project Narrative

As part of a complete application, a written project narrative that provides detailed information regarding your proposal must be included. On a separate sheet of paper, please address each of the lettered items listed below (answers must be submitted in both hard copy and electronic copy using the Adobe .PDF or MS Word .DOCX file formats):

a) A listing of contact information including name(s), address(es) and phone number(s) of: the owner of record, authorized agents or representatives, engineer, surveyor, and any other relevant associates;

b) A listing of the following site data: Address, current zoning, parcel size in acres and square feet, property identification number(s) (PIN), and current legal description(s);

c) A listing of general information including: the proposed name of the subdivision, the number of proposed lots, acreage dedicated for open space or public use, acreage dedicated within rights of way;

d) A narrative explaining the intent of the project and/or your original or revised vision for the finished product;

e) A statement showing the proposed density of the project with the method of calculating said density shown;

f) Discuss proposed infrastructure improvements and phasing thereof (i.e. proposed roadways, sewer systems, water systems, sidewalks/trails, parking, etc.) necessary to serve the subdivision;

g) A narrative addressing concerns/issues raised by neighboring properties (discussing your proposal with the neighboring land owners is recommended to get a sense of what issues may arise as your application is processed);

h) A description of how conflicts with nearby land uses (livability, value, potential future development, etc.) and/or disturbances to wetlands or natural areas are being avoided or mitigated;

i) Provide justification that the proposal will not place an excessive burden on roads (traffic), sewage, water supply, parks, schools, fire, police, or other public facilities/services (including traffic flows) in the area;

j) A description of proposed parks and/or open space. Please include a brief statement on the proposed ownership and maintenance of said areas;

k) A proposed development schedule indicating the approximate date when construction of the project, or stages of the same, can be expected to begin and be completed (including the proposed phasing of construction of public improvements and recreational and common space areas).

STORMWATER INFORMATION

Existing Impervious Surface	±0.59 acres/ ±25,674 sf acres/sf	Flood Hazard Area	☐ Yes ☒ No
Proposed Impervious Surface	22.78 acres/ 992,198 sf acres/sf	Neuse River Buffer	☐ Yes ☐ No
Watershed protection Area	Yes ☐ ☒ No	Wetlands	☒ Yes ☐ No

If in a Flood Hazard Area, provide the FEMA Map Panel # and Base Flood Elevation

NUMBER OF LOTS AND DENSITY

Total # of Single Family Lots 170 lots	Overall Unit(s)/Acre Densities Per Zoning Districts 1.23 units/acre
Total # of Townhouse Lots N/A	Acreage in active open space ±2.05 acres
Total # of All Lots 170 Lots	Acreage in passive open space ±101.59 acres

SIGNATURE BLOCK (Applicable to all developments)

In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed subdivision plan as approved by the Town.

I hereby designate Adams & Hodge Engineering, A Division of Becker Morgan to serve as my agent regarding this application, to receive and respond to administrative comments, to resubmit plans on my behalf, and to represent me in any public meeting regarding this application.

I/we have read, acknowledge, and affirm that this project is conforming to all application requirements applicable with the proposed development use.

Signature _____ Date 11/1/2024
President, Vesta Enterprises, Inc.

Signature _____ Date _____

REVIEW FEES

☒ Major Subdivision (Submit 7 paper copies & 1 Digital copy on CD) $500.00 + $5.00 a lot

FOR OFFICE USE ONLY

File Number:_____ Date Submitted:_____ Date Received:_____ Amount Paid:_____

INFORMATION TO BE PROVIDED ON PRELIMINARY AND FINAL PLATS.

The preliminary plats shall depict or contain the information indicated in the following table. An "X" indicates that the information is required.

Information	Preliminary Plat
Vicinity map (6" W x 4" H) showing location of subdivision in relation to neighboring tracts, subdivision, roads, and waterways (to include streets and lots of adjacent developed or platted properties). Also include corporate limits, Town boundaries, county lines if on or near subdivision tract.	✓X
Boundaries of tract and portion to be subdivided, including total acreage to be subdivided, distinctly and accurately represented with all bearings and distances shown.	✓X
Proposed street layout and right-of-way width, lot layout and size of each lot. Number lots consecutively throughout the subdivision.	✓X
Name of proposed subdivision.	✓X
Statement from the Johnston County Health Department that a copy of the sketch plan has been submitted to them, if septic tanks or other onsite water or wastewater systems are to be used in the subdivision, AND/OR statement from the County Public Utilities that application has been made for public water and/or sewer permits.	X
Graphic scale.	✓X
North arrow and orientation.	✓X
Concurrent with submission of the Preliminary Plat to the Town, the subdivider or planner shall submit copies of the Preliminary Plat and any accompanying material to any other applicable agencies concerned with new development, including, but not limited to: District Highway Engineer, County Board of Education, U.S. Army Corps of Engineers, State Department of Natural Resources and Community Development, for review and recommendation.	✓X
List the proposed construction sequence.	X
Storm water plan – see Article 10, Part VI.	✓X
Show existing contour lines with no larger than five-foot contour intervals.	✓X
New contour lines resulting from earth movement (shown as solid lines) with no larger than five-foot contour intervals (existing lines should be shown as dotted lines).	✓X
Survey plat, date(s) survey was conducted and plat prepared, the name, address, phone number, registration number and seal of the Registered Land Surveyor.	✓X
Names, addresses, and telephone numbers of all owners, mortgagees, land planners, architects, landscape architects and professional engineers responsible for the subdivision (include registration numbers and seals, where applicable).	✓X
Date of the drawing(s) and latest revision date(s).	✓X

Information	Preliminary Plat
The owner's name(s) of adjoining properties and Zoning District of each parcel within 100' of the proposed site.	✓X
State on plans any variance request(s).	N/A X
Show existing buildings or other structures, water courses, railroads, bridges, culverts, storm drains, both on the land to be subdivided and land immediately adjoining. Show wooded areas, marshes, swamps, rock outcrops, ponds or lakes, streams or stream beds and any other natural features affecting the site.	✓ X
The exact location of the flood hazard, floodway and floodway fringe areas from the community's FHBM or FIRM maps (FEMA). State the base flood elevation data for subdivision.	✓X
Show the minimum building setback lines for each lot.	✓X
Provide grading and landscape plans. Proposed plantings or construction of other devices to comply with the screening requirements of Article 10, Part II.	✓X
Show location of all proposed entrance or subdivision signage (see Section 10.23.1).	✓X
Show pump station detail including any tower, if applicable.	N/A X
Show area which will not be disturbed of natural vegetation (percentage of total site).	X
Label all buffer areas, if any, and provide percentage of total site.	✓X
Show all riparian buffer areas.	✓X
Show all watershed protection and management areas per Article 10, Part VI.	✓X
Soil erosion plan.	✓X
Show temporary construction access pad.	✓X
Outdoor illumination with lighting fixtures and name of electricity provider.	✓X
The following data concerning proposed streets:	
Streets, labeled by classification (see Town of Smithfield construction standards) and street name showing linear feet, whether curb and gutter or shoulders and swales are to be provided and indicating street paving widths, approximate grades and typical street cross-sections. Private roads in subdivisions shall also be shown and clearly labeled as such.	✓X
Traffic signage location and detail.	X
Design engineering data for all corners and curves.	✓X
For office review; a complete site layout, including any future expansion anticipated; horizontal alignment indicating general curve data on site layout plan; vertical alignment indicated by percent grade, PI station and vertical curve length on site plan layout; the District Engineer may require the plotting of the ground profile and grade line for roads where special conditions or problems exist; typical section indicating the pavement design and width and the slopes, widths and details for either the curb and gutter or the shoulder and ditch proposed; drainage facilities and drainage.	X

Information	Preliminary Plat
Type of street dedication; all streets must be designated public. (Where public streets are involved which will be dedicated to the Town, the subdivider must submit all street plans to the UDO Administrator for approval prior to preliminary plat approval).	✓X
When streets have been accepted into the municipal or the state system before lots are sold, a statement explaining the status of the street in accordance with the Town of Smithfield construction standards.	X
If any street is proposed to intersect with a state maintained road, a copy of the application for driveway approval as required by the Department of Transportation, Division of Highways Manual on Driveway Regulations.	X
(1) Evidence that the subdivider has applied for such approval.	X
(2) Evidence that the subdivider has obtained such approval.	X
The location and dimensions of all:	
Utility and other easements.	✓X
Pedestrian and bicycle paths.	✓X
Areas to be dedicated to or reserved for public use.	✓X
The future ownership (dedication or reservation for public use to governmental body or for owners to duly constituted homeowners' association) of recreation and open space lands.	X
Required riparian and stream buffer per Article 10, Part VI.	✓X
The site/civil plans for utility layouts including:	
Sanitary sewers, invert elevations at manhole (include profiles).	✓X
Storm sewers, invert elevations at manhole (include profiles).	✓X
Best management practices (BMPs)	✓X
Stormwater control structures	✓X
Other drainage facilities, if any.	✓X
Impervious surface ratios	✓X
Water distribution lines, including line sizes, the location of fire hydrants, blow offs, manholes, force mains, and gate valves.	✓X
Gas lines.	X
Telephone lines.	X
Electric lines.	X
Plans for individual water supply and sewage disposal systems, if any.	N/A X
Provide site calculations including:	
Acreage in buffering/recreation/open space requirements.	✓X
Linear feet in streets and acreage.	✓X
The name and location of any property or buildings within the proposed subdivision or within any contiguous property that is located on the US Department of Interior's National Register of Historic Places.	X

Information	Preliminary Plat
Sufficient engineering data to determine readily and reproduce on the ground every straight or curved line, street line, lot line, right-of-way line, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, central angles and tangent distance for the center line of curved property lines that is not the boundary line of curved streets. All dimensions shall be measured to the nearest one-tenth of a foot and all angles to the nearest minute.	X
The accurate locations and descriptions of all monuments, markers, and control points.	X
Proposed deed restrictions or covenants to be imposed upon newly created lots. Such restrictions are mandatory when private recreation areas are established. Must include statement of compliance with state, local, and federal regulations.	X WORKING ON!
A copy of the erosion control plan submitted to the Regional Office of NC- DNRCD, when land disturbing activity amounts to one acre or more.	X
All certifications required in Section 10.117.	X
Any other information considered by either the subdivider, UDO Administrator, Planning Board, or Town Council to be pertinent to the review of the plat.	X
Improvements guarantees (see Section 5.8.2.6).	

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File Number:_____ Date Submitted:_____ Date Received:_____ Amount Paid:_____

REQUIRED FINDING OF FACT

Article 4 of the Town of Smithfield Unified Development Ordinance requires applications for a preliminary subdivision plat approval to address the following findings. The applicant has the burden of producing competent, substantial evidence tending to establish the facts and conditions which this section requires. The Town Council shall grant preliminary subdivision approval if it has evaluated an application through a quasi-judicial process and determined that:

1) The plan is consistent with the adopted plans and policies of the town;

   See attached.

2) The plan complies with all applicable requirements of this ordinance;

   See attached.

3) There exists adequate infrastructure (transportation and utilities) to support the plan as proposed; and

   See attached.

4) The plan will not be detrimental to the use or development of adjacent properties or other neighborhood uses.

   See attached.

BUFFALO ROAD SUBDIVISION

PROJECT NARRATIVE

The plan for the Buffalo Road Subdivision promotes a neighborhood form established by a relaxed grid defined largely by the existing wetlands and road connection. This pattern establishes a hierarchy of neighborhood streets and sidewalks which support a pedestrian friendly environment adapted to the landform. This is a +/- 138.63 acre parcel consisting of +/- 170 single family lots.

Throughout the development are large open space areas incorporating active areas such as pavilion shelter with a fireplace, bocce ball courts, a dog park, open play areas, and extensive walking trails with a connection to the Town of Smithfield's Greenway Trail.

Contacts

Engineering Firm: Adams & Hodge Engineering, A Division of Beck Morgan Group

Address: 314 E Main Street
Clayton, NC 27520

Phone Number: 919-243-1332

Email address: eking@beckermorgan.com and astancil@beckermorgan.com

Owner: Guy & Ross Lampe

Address: PO Box 608
Smithfield, NC 27577

Phone Number: Sagan Lampe 919-631-9524

Email address: sagan@vestaenterprises.com

Surveyor: Stokes Surveying & Mapping, PLLC

Address: 1425-105 B Rock Quarry Road
Raleigh, NC 27610

Phone Number: Mike Stokes, 919-971-7897

Email address: mike@stokes-surveying.com

Site Data

NC Pin: 260412-06-3802

Tax ID: 14A03005

Parcel Size: 138.63 acres/6,038,914 sf

Parcel Zoning: R-8 CZ

General Information

Name: Buffalo Road Subdivision

Proposed Lots: 170 Lots (Single-Family)

Proposed Impervious Area of Total Site: 22.78 acres/ 992,198 sf/16%

Proposed Open Space: 103.64 acres/4,514,410 sf

Proposed Rights of Way Dedication: 10.30 acres/448,726 sf

Proposed Density: 170 lots/138.63 acres = ± 1.23 units/acre

Proposed Infrastructure

No phasing is proposed at this time.

Proposed Roadways: There will be a required widening on Buffalo Road per NCDOT and Town of Smithfield. There will be two (2) main entrances off Buffalo Road, (2) stub outs to adjacent properties, as well as a 20' fire and emergency access road connection to Bradford Park subdivision (Parkway Drive).

The proposed Typical Collector Street has 60' Proposed Public Right of Way, 31' back of curb to back of curb, and sidewalks on both sides of all collector streets.

The proposed Typical Residential Street has 60' Proposed Public Right of Way, 27' back of curb to back of curb, and 5' sidewalks on both sides of all residential streets.

The proposed pedestrian system will include approximately 15,058 linear feet of sidewalks, including the proposed sidewalk adjacent to Buffalo Road, and 3,376 linear feet of walking trails. The walking trails are to be 10' wide with connections to the Town of Smithfield Greenway Trail.

Parking: Per the Town's UDO, the required parking for a single-family residential subdivision is 2 spaces per dwelling. 170 dwellings require 340 parking spaces. There are 605 proposed parking spaces within this subdivision, which is 265 spaces more than required per Town's ordinance. Each dwelling will have a minimum of a 1 car garage with a 2-car parking pad, providing at least 3 spaces per dwelling. There is overflow parking of +/- 86 spaces located and scattered along most of the subdivision streets and within the CBU parking area off street 'B'.

Mail Kiosks: The mail kiosks are located close to the most northern entrance on Buffalo Road, adjacent to a proposed parking area with at least one ADA space. The parking lot will also accommodate parking for use of active open space areas.

Public Sewer: The estimated wastewater flow is 61,200 gallons per day. There are +/- 7,171 linear feet of proposed sewer main extensions, connecting to the Town's existing sewer system that is located on site, adjacent to the Town of Smithfield's greenway trail to the east of the proposed project. Prior to construction, the system shall be approved by the Town's Engineering Department in accordance with the general guidelines and regulations of the Town and permitted by the State.

Public Water: Public water is available via an existing 12" water main along Buffalo Road. There are +/- 7,665 linear feet of proposed waterline. Connections to the existing 12" main shall be made and extended throughout the development. The level of inner connectivity shall provide for adequate domestic water as well as appropriate fire protection flow. Prior to construction, the system shall be approved by the Town's Engineering Department in accordance with the general guidelines and regulations of the Town and permitted by the State.

DESCRIPTION OF HOW CONFLICTS /CONCERNS WITH NEARBY LAND USES AND OR DISTURBANCES ARE BEING AVOIDED OR MITIGATED

There is a 10' Class 'A' landscape buffer proposed internally along the boundary of all adjacent properties. There is also passive open space along with the 10' Class 'A' landscape buffer behind the property owners in the Bradford Park subdivision, giving more separation from the lots within the proposed subdivision.

Appropriate additional survey and specific grading and stormwater plan design is provided to ensure that all stormwater will be directed downhill and away from that area and any other surrounding adjacent residences.

All potential conflicts with disturbances of wetlands, flood zones, and impacts to riparian buffers are being avoided altogether by not proposing any disturbances in those areas. There is one disturbance of a stream crossing which will be mitigated by receiving the appropriate permits.

There should not be any conflicts of use. The proposed use is single-family and most of the adjacent properties are single-family residential as well or vacant.

JUSTIFICATION THAT PROPOSAL WILL NOT PLACE BURDEN ON SURROUNDINGS

The distribution of traffic has been given much consideration when laying out the site's access point to serve the subdivision. There will be a required widening on Buffalo Road per NCDOT and Town of Smithfield. There will be two (2) main entrances off Buffalo Road, (2) stub outs to adjacent properties, as well as a 20' fire and emergency access road connection to Bradford Park subdivision (Parkway Drive). Care has been exercised in the subdivision to protect the environment by prudent use of buffers and landscaping. The public's safety and health have been addressed by providing public water and sewer that meet the Town and State requirements. The road system is designed to be safe for pedestrians and vehicles alike by providing adequate separation, traffic control and lighting, along with proposed stubs to the adjacent parcels on Streets 'D' and 'F' for future connections. Site grading and stormwater control measures will be designed to meet Town and State standards. Furthermore, the stormwater from the site will be properly directed downhill and away from the Bradford Park neighborhood. The public's health and welfare are further addressed by the proposed subdivision providing passive and active recreation opportunities offsite utilizing municipal recreation facilities via recreation assessment fees.

DESCRIPTION OF OPEN SPACE AREAS

+/- 104.37 acres of open space is proposed for this subdivision. Within the +/- of 104.37 acres, there will be +/- 2.05 acres of active open space including a bocce ball court, dog park, open play areas as well as extensive walking trails which will connect to the Town of Smithfield's Greenway trail. Maintenance of the open space areas will be the responsibility of the HOA.

DEVELOPMENT SCHEDULING

If the project is approved, the construction drawings will begin as soon as we have planning approval. After construction drawing approval and all other permits have been successfully acquired, the subdivision construction will begin immediately.

BUFFALO ROAD SUBDIVISION

FINDINGS OF FACT

1) **The plan is consistent with the adopted plans and policies of the town:**
   The plan is consistent with the adopted plans and policies of the town and UDO regulations with deviations that were approved through Conditional Zoning (CZ-23-01 Buffalo Road Subdivision) which was granted July 9, 2024.
2) **The plan complies with all applicable requirements of this ordinance;**
   The plan complies with all applicable requirements of the UDO with deviations that were approved through Conditional Zoning procedures.
3) **There exists adequate infrastructure (transportation and utilities) to support the plan as proposed;**
   There are adequate utilities for sewer by connecting to the Town's existing sewer system located on site and adjacent to the Town of Smithfield's greenway trail. Connections to the existing 12" water main along Buffalo Road shall be made and extended throughout the development. Also, connections to the Town's existing power lines shall be made and extended throughout the development for power.
   There will be a required widening on Buffalo Road per NCDOT and Town of Smithfield. There will be two (2) main entrances off Buffalo Road, (2) stub outs to adjacent properties, as well as a 20' fire and emergency access road connection to Bradford Park subdivision (Parkway Drive).
4) **The plan will not be detrimental to the use or development of adjacent properties or other neighborhood uses.**
   The plan will not be detrimental to the use or development of adjacent properties or other neighborhood uses by directing the stormwater from the site, downhill and away from the adjacent properties. As noted above, numerous access points and stubs to adjacent properties provide additional connectivity options for future adjacent developments. The proposed use of single-family residences is similar to adjacent properties.

Buffalo Road Subdivision

File Number:
S-24-07

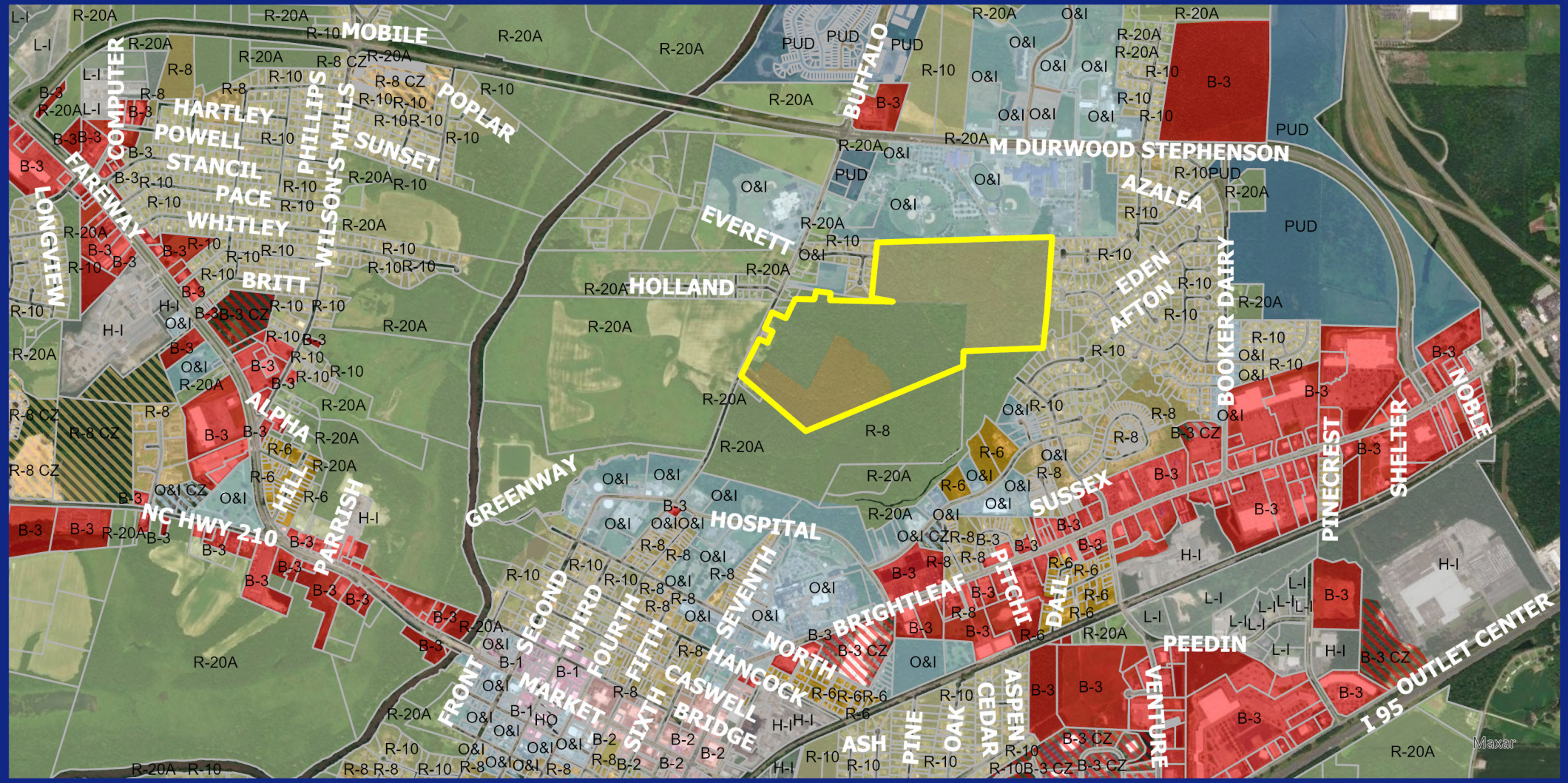
Project Name:
Buffalo Rd Subdivision

Location:
Buffalo Road

Tax ID#:
14057011X
14057011Y

Existing Zoning:
R-8 CZ

Owner/Applicant:
Vesta Enterprises, Inc



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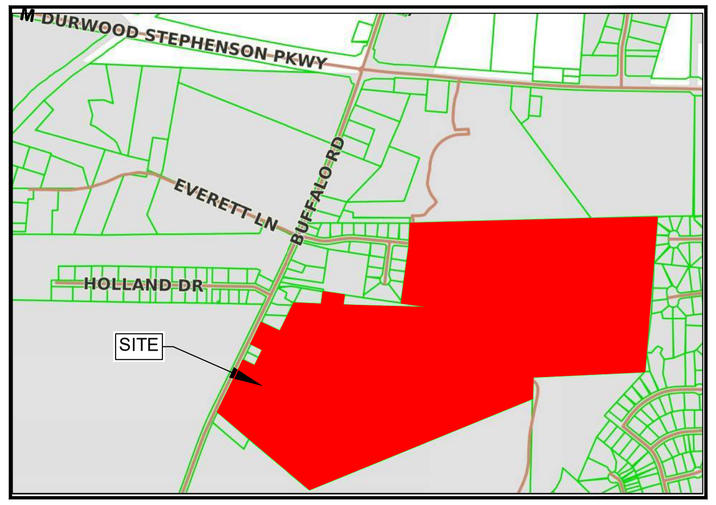
1:22,515
Map created by Chloe Allen
Planner I on 11/25/2024



VICINITY MAP
1"=1000'

PRELIMINARY SUBDIVISION PLAN

FOR

BUFFALO ROAD SUBDIVISION

IN

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

SHEET INDEX

DEVELOPER/APPLICANT:

VESTA ENTERPRISES, INC.
PO BOX 1457
SMITHFIELD, NC 27577

CONTACT: SAGAN LAMPE, PRESIDENT
919-631-9524

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:42 PM

PRELIMINARY

ADAMS & HODGE ENGINEERING, PC + BECKER MORGAN GROUP ARCHITECTURE ENGINEERING

A DIVISION OF BECKER MORGAN GROUP, INC.

314 EAST MAIN STREET
CLAYTON, NC 27520
919-243-1332 RDUinfo@beckermorgan.com
FIRM # C-4743

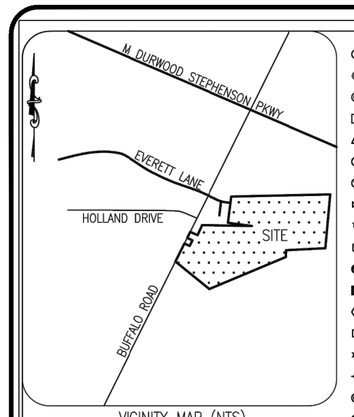
2021356.00-BUFFALO ROAD SUBDIVSION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

NOVEMBER 1, 2024

SOURCES OF INFORMATION:
1. EXISTING SURVEY OF SITE & TOPO PROVIDED BY STOKES SURVEYING & MAPPING. PLLC, 1425-105B ROCK QUARRY RD, RALEIGH, NC 27610, DATED 12/28/2021
2. PARCEL INFORMATION OUTSIDE OF SURVEYED BOUNDARY FROM JOHNSTON COUNTY GIS DATED 2023
3. PRELIMINARY WETLAND INFORMATION PROVIDED BY BROWN'S ENVIRONMENTAL GROUP, INC., 242 BATTEN FARM RD SELMA, NC 27576, DATED 6/23/2020

BOUNDARY A ND TOPOGRAPHICAL SURVEY FOR:
ADAMS AND HODGE ENGINEERING PA.
OF:
THE PROPERTY DESCRIBED IN DEED BOOK 6041 PAGE 987
JOHNSTON COUNTY REGISTRY
SMITHFIELD TOWNSHIP, JOHNSTON COUNTY, NORTH CAROLINA



VICINITY MAP (NTS)

- EXISTING IRON PIPE
- EXISTING IRON ROD
- EXISTING AXLE
- EXISTING CONCRETE MONUMENT
- CALCULATED/SET POINT
- TELEPHONE PEDESTAL
- CATV PEDESTAL
- WATER VALVE
- FIRE HYDRANT
- WATER METER
- WELL
- DROP INLET
- GAS VALVE
- ELECTRIC PEDESTAL
- LIGHT POLE
- POWER POLE
- CLEANOUT
- SEWER MANHOLE
- STORM MANHOLE
- MONITORING WELL

Note 'A'
This property is located in Zone 'X' (minimal flood risk) and is within a Special Flood Hazard Area.
FIRM # 3720260400K, 3720169400K
Effective Date: 06/20/2018

Note 'B'
This property is currently Zoned 'R-20A, R-10 and R-8'

Note 'C'
All distances are horizontal ground unless otherwise stated

Note 'D'
All areas computed by coordinate method

Note 'E'
The parcel(s) shown hereon are subject to any and all easements, rights of way and restrictions of record

Note 'F'
No evidence of landfill or wetlands was found at the time of survey. There exists a cemetery on the parcel, no deed reference found. Cemetery is contained inside chain link fence shown hereon.

Note 'G'
Underground utilities were not considered on this survey

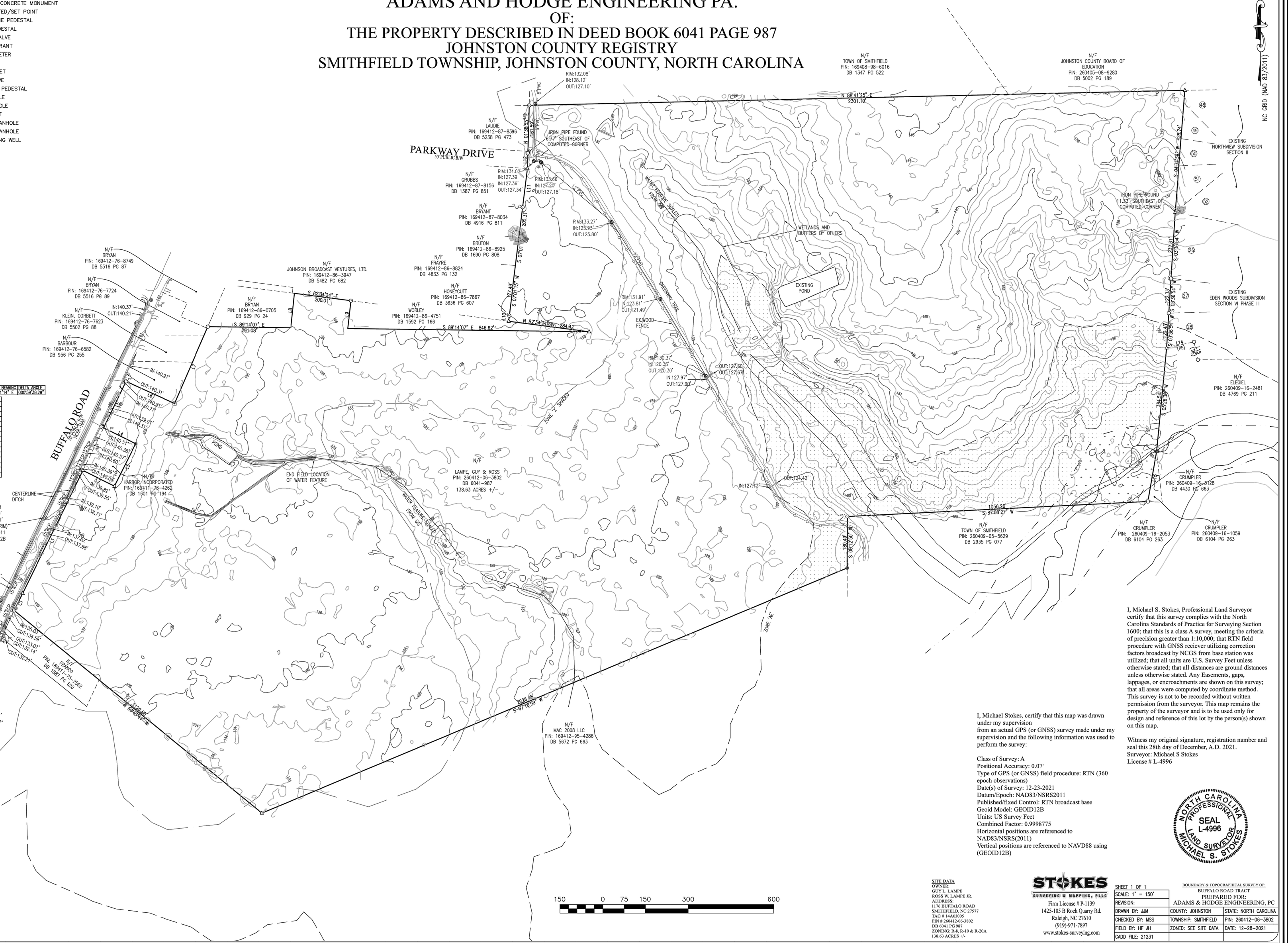
REFERENCES

PB 71 PG 3995
PB 17 PG 101
PB 44 PG 211
PB 79 PG 376
PB 66 PG 398
DB 6041 PG 987
DB 1601 PG 194
DB 956 PG 255
DB 5502 PG 88
DB 5516 PG 89
DB 5516 PG 88
DB 929 PG 24
DB 5482 PG 682
DB 1592 PG 166
DB 3863 PG 607
DB 4833 PG 132
DB 1690 PG 808
DB 4916 PG 811
DB 1387 PG 851
DB 5238 PG 473
DB 1347 PG 522
DB 5002 PG 189
DB 2489 PG 841
DB 5009 PG 278
DB 5434 PG 901
DB 4745 PG 300
DB 1812 PG 921
DB 5830 PG 681
DB 4769 PG 211
DB 4430 PG 663
DB 6104 PG 263
DB 2935 PG 77
DB 5672 PG 663
DB 1887 PG 620

OTHER REFERENCES SHOWN HEREON

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	1983.67'	67.03'	67.03'	N 26°21'14" E	000°59'38.29"

LINE	BEARING	DISTANCE
L1	N 26°05'18" E	480.19'
L2	S 63°27'23" E	123.54'
L3	N 26°32'39" E	166.20'
L4	N 63°24'35" W	124.86'
L5	N 20°30'56" E	180.55'
L6	S 65°33'46" E	187.62'
L7	N 23°24'33" E	293.66'
L8	N 06°01'23" E	121.46'
L9	S 06°28'49" W	98.23'
L10	N 07°01'15" E	119.78'
L11	N 07°01'15" E	137.20'
L12	N 01°37'50" E	60.08'
L13	S 09°49'23" W	178.15'
L14	N 77°27'54" E	188.73'
L15	S 12°15'53" E	164.36'



I, Michael S. Stokes, Professional Land Surveyor certify that this survey complies with the North Carolina Standards of Practice for Surveying Section 1600; that this is a class A survey, meeting the criteria of precision greater than 1:10,000; that RTN field procedure with GNSS reciever utilizing correction factors broadcast by NCGS from base station was utilized; that all units are U.S. Survey Feet unless otherwise stated; that all distances are ground distances unless otherwise stated. Any Easements, gaps, lappages, or encroachments are shown on this survey; that all areas were computed by coordinate method. This survey is not to be recorded without written permission from the surveyor. This map remains the property of the surveyor and is to be used only for design and reference of this lot by the person(s) shown on this map.

Witness my original signature, registration number and seal this 28th day of December, A.D. 2021.
Surveyor: Michael S Stokes
License # L-4996

I, Michael Stokes, certify that this map was drawn under my supervision from an actual GPS (or GNSS) survey made under my supervision and the following information was used to perform the survey:

Class of Survey: A
Positional Accuracy: 0.07'
Type of GPS (or GNSS) field procedure: RTN (360 epoch observations)
Date(s) of Survey: 12-23-2021
Datum/Epoch: NAD83/NSRS2011
Published/fixed Control: RTN broadcast base
Geoid Model: GEOID12B
Units: US Survey Feet
Combined Factor: 0.9998775
Horizontal positions are referenced to NAD83/NSRS(2011)
Vertical positions are referenced to NAVD88 using (GEOID12B)

NORTH CAROLINA PROFESSIONAL LAND SURVEYOR SEAL L-4996 MICHAEL S. STOKES

SITE DATA
OWNER:
GUY L. LAMPE
ROSS W. LAMPE JR.
ADDRESS:
1176 BUFFALO ROAD
SMITHFIELD, NC 27577
TAG # 14A03005
PIN # 260412-06-3802
DB 6041 PG 987
ZONING: R-8, R-10 & R-20A
138.63 ACRES +/-

STOKES SURVEYING & MAPPING, PLLC
Firm License # P-1139
1425-105 B Rock Quarry Rd.
Raleigh, NC 27610
(919)-971-7897
www.stokes-surveying.com

SHEET 1 OF 1	
SCALE: 1" = 150'	
REVISION:	
DRAWN BY: JJM	COUNTY: JOHNSTON / STATE: NORTH CAROLINA
CHECKED BY: MSS	TOWNSHIP: SMITHFIELD / PIN: 260412-06-3802
FIELD BY: HF JH	ZONED: SEE SITE DATA / DATE: 12-28-2021
CADD FILE: 21231	

BOUNDARY & TOPOGRAPHICAL SURVEY OF:
BUFFALO ROAD TRACT
PREPARED FOR:
ADAMS & HODGE ENGINEERING, PC

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-4182
FIRM # C-4743

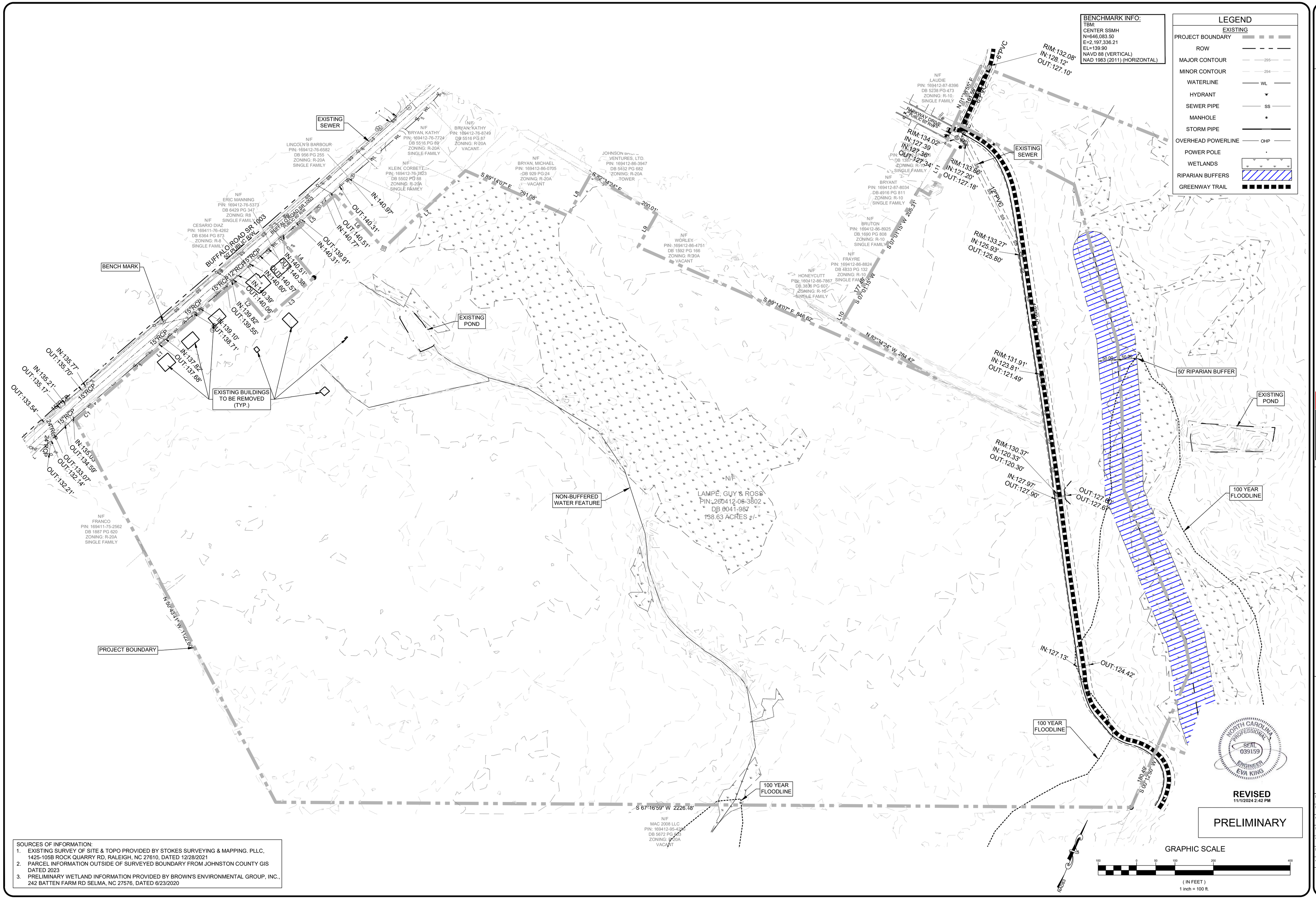
BECKER MORGAN GROUP

A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

SEALED BOUNDARY

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C1.00



REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-4232
FIRM # C-4743

BECKER MORGAN GROUP

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

EXISTING CONDITIONS AND DEMOLITION PLAN

DESIGN: DCA
DRAWN: ADS/APH/BTA
CHECKED: DCA
HORIZONTAL SCALE: SEE GRAPHIC SCALE
VERTICAL SCALE: N/A
DATE: 11/01/2023
JOB NO.:
SHEET: C1.01

LEGEND

EXISTING		PROPOSED
▬ ▪ ▪ ▬	PROJECT BOUNDARY	▬ ▪ ▪ ▬
— - - —	ROW	— - - —
—— – ——	EASEMENTS	— — — —
N/A	LOT LINE	——
N/A	HANDICAP PARKING	♿
N/A	HANDICAP RAMP	▪
N/A	ADA ACCESS AISLE	⌂
N/A	16-UNIT MAIL KIOSK	▨
N/A	PEDESTRIAN CROSSING	
N/A	CONCRETE WALK	▭
▭	WETLANDS	N/A
▨	RIPARIAN BUFFERS	N/A
N/A	OPEN SPACE	🟩
N/A	SCM POND	▭
▪ ▪ ▪ ▪ ▪ ▪ ▪	GREENWAY TRAIL	■ ■ ■ ■ ■ ■ ■

NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 039159
EVA KING

REVISED
11/1/2024 2:42 PM

PRELIMINARY

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)
1 inch = 150 ft.

NAD83

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-243-1332
FIRM # C-4743

BECKER MORGAN GROUP

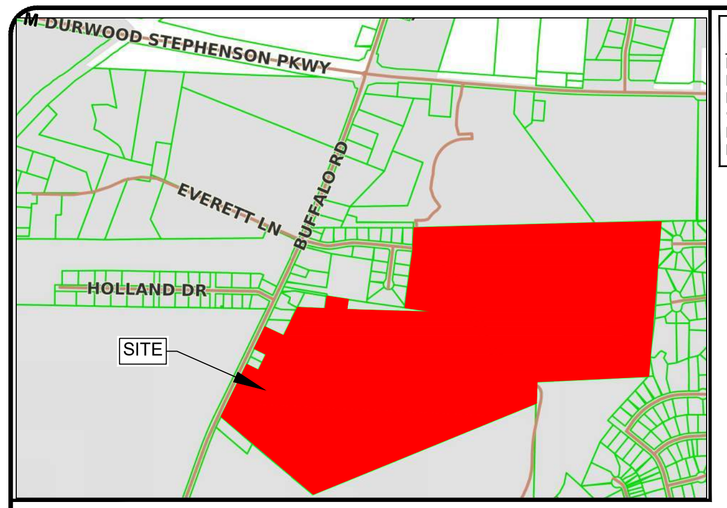
A&H ADAMS & HODGE
ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

,TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

OVERALL SITE

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C2.00



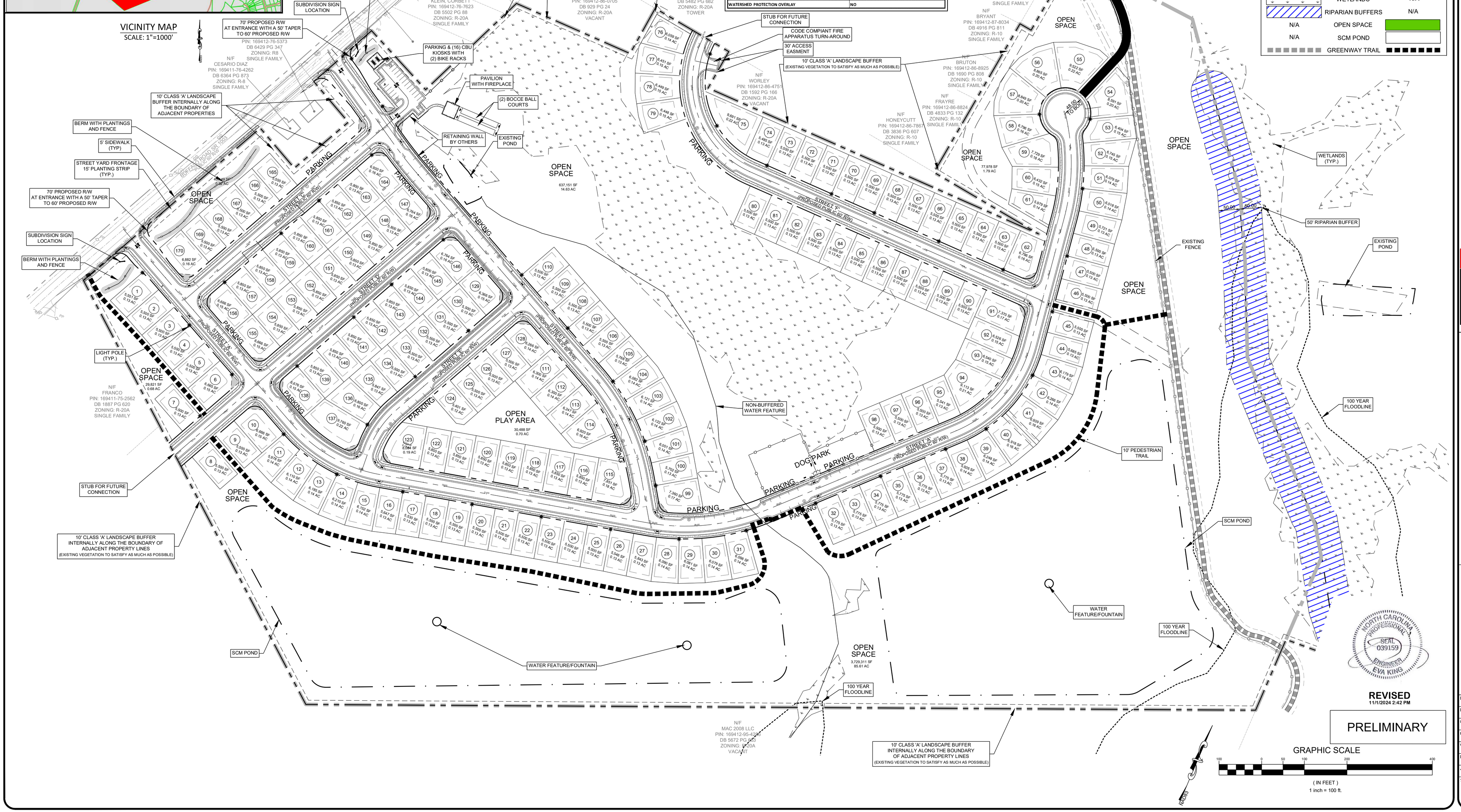
VICINITY MAP
SCALE: 1"=1000'

PARKING CALCULATIONS:

REQUIRED PARKING 2 SPACES PER DWELLING = 170 LOTS = 340 REQUIRED SPACES
PROPOSED PARKING SPACES = 604 SPACES (3 SPACES/DWELLING & 94 OVERFLOW PARKING SPACES)
REQUIRED ADA PARKING = 1 SPACES
PROPOSED ADA PARKING - 1 SPACES

OPEN SPACE TABLE	
	SQUARE FEET
PROPOSED ACTIVE OPEN SPACE	89,298
PROPOSED PASSIVE OPEN SPACE	4,425,112
OPEN SPACE PROVIDED	4,514,410

BUFFALO ROAD SITE DATA CHART	
PARCEL OWNER	GUY & ROSS LAMPE
PARCEL OWNER ADDRESS	PO BOX 608, SMITHFIELD, NC 27577
PARCEL IDENTIFICATION	260412-06-3802 / 14A03005
PROPERTY SIZE (SF)	138.63 AC / 6,038,914 SF
PROPERTY LOCATION	TOWN OF SMITHFIELD
EXISTING ZONING	R-8 CZ
EXISTING USE	VACANT
PROPOSED USE	SINGLE-FAMILY DWELLINGS
PROPOSED NUMBER OF SINGLE FAMILY LOTS	170 LOTS
PROPOSED GROSS DENSITY	170 UNITS / 138.63 ACS= 1.23 UNITS PER AC
PROPOSED IMPERVIOUS AREA (% OF TOTAL SITE)	MAXIMUM PROPOSED 4,227,239 SF / 70%
PROPOSED PERVIOUS AREA (% OF TOTAL SITE)	MINIMUM PROPOSED 1,811,674 SF / 30%
ACREAGE IN BUFFERS/RECREATION/OPEN SPACE	4,514,410 SF/103.64 AC
STREET LINEAR FEET/SF/ ACREAGE	7,604 LF/201,792 SF/4.63 AC
BUFFER AREAS (PERCENTAGE OF TOTAL SITE)	182,434 SF/6,038,914 SF = .03 (3% OF TOTAL SITE)
R/W SF/ACREAGE	448,726 SF/10.30AC
ELECTRIC PROVIDER	TOWN OF SMITHFIELD
WATER PROVIDER	TOWN OF SMITHFIELD
SEWER PROVIDER	TOWN OF SMITHFIELD
FIRM MAP AND DATE	3720169400K DATED 06/20/2018
FLOOD CLASSIFICATION	100-YEAR FLOOD PLAIN LOCATED ON SITE
WATERSHED PROTECTION OVERLAY	NO



LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
N/A	HANDICAP PARKING	
N/A	HANDICAP RAMP	
N/A	ADA ACCESS AISLE	
N/A	16-UNIT MAIL KIOSK	
N/A	PEDESTRIAN CROSSING	
N/A	CONCRETE WALK	
	WETLANDS	N/A
	RIPARIAN BUFFERS	N/A
N/A	OPEN SPACE	
N/A	SCM POND	
	GREENWAY TRAIL	

REVISED
11/1/2024 2:42 PM

PRELIMINARY

GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

314 EAST MAIN STREET
CLAYTON, NC 27520
ROUNTREE@ADAMSANDHODGE.COM
919-266-2432
FIRM # C-4743

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.
BECKER MORGAN GROUP

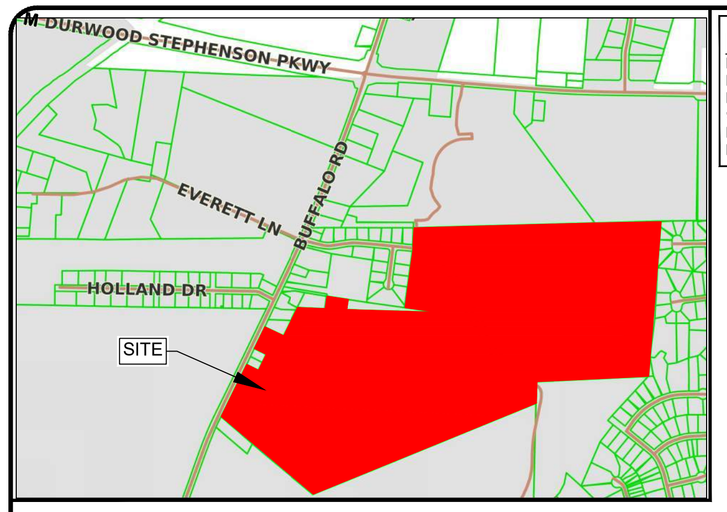
REVISIONS:

BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

MASTER SITE PLAN

DESIGN: DCA
DRAWN: ADS/APH/BTA
CHECKED: DCA
HORIZONTAL SCALE: SEE GRAPHIC SCALE
VERTICAL SCALE: N/A
DATE: 11/01/2023
JOB NO.:
SHEET: C2.01



VICINITY MAP
SCALE: 1"=1000'

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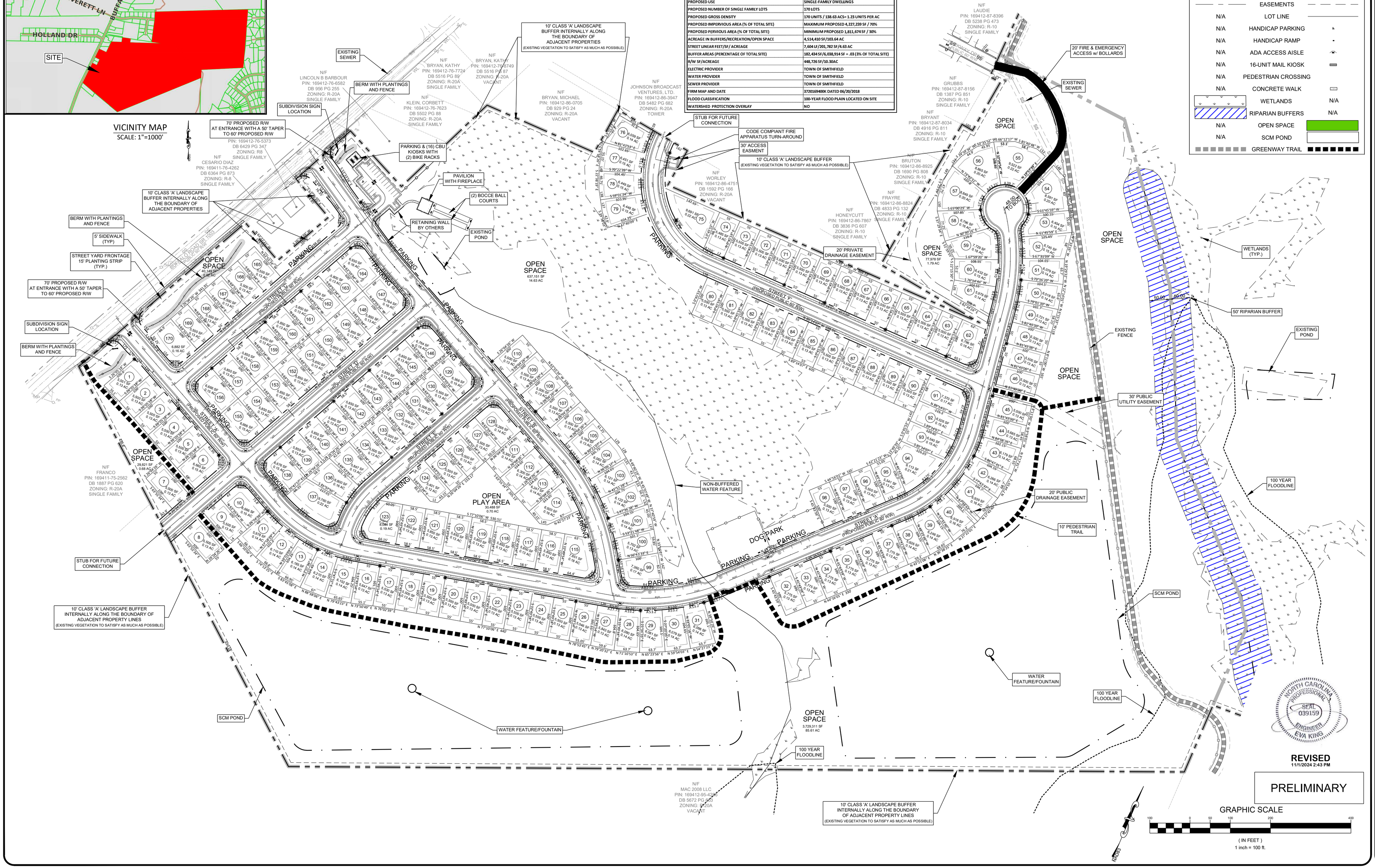
WATER PROVIDER	TOWN OF SMITHFIELD
SEWER PROVIDER	TOWN OF SMITHFIELD
FIRM MAP AND DATE	3720169400K DATED 06/20/2018
FLOOD CLASSIFICATION	100-YEAR FLOOD PLAIN LOCATED ON SITE
WATERSHED PROTECTION OVERLAY	NO

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
N/A	HANDICAP PARKING	
N/A	HANDICAP RAMP	
N/A	ADA ACCESS AISLE	
N/A	16-UNIT MAIL KIOSK	
N/A	PEDESTRIAN CROSSING	
N/A	CONCRETE WALK	
	WETLANDS	N/A
	RIPARIAN BUFFERS	N/A
N/A	OPEN SPACE	
N/A	SCM POND	
	GREENWAY TRAIL	



NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:43 PM

PRELIMINARY

GRAPHIC SCALE
(IN FEET)
1 inch = 100 ft.

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.
314 EAST MAIN STREET
CLAYTON, NC 27520
ROUNTREE@ADAMSANDHODGEGROUP.COM
919-553-4302
FIRM # C-4743
BECKER MORGAN GROUP

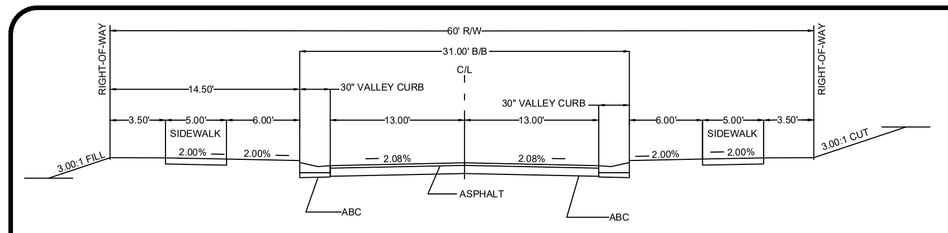
REVISIONS:

BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PRELIMINARY PLAT

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C2.02



TYPICAL COLLECTOR RESIDENTIAL STREET
60' RIGHT-OF-WAY W/ SIDEWALK
(STREETS A & B)

*PAVEMENT STRUCTURE TO BE DETERMINED BY METHOD PRESCRIBED IN TOWN OF SMITHFIELD MANUAL OF DESIGN

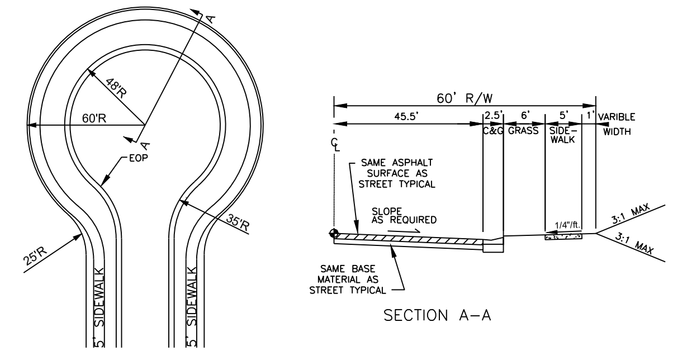
NOT TO SCALE

TYPICAL LOCAL RESIDENTIAL STREET
60' RIGHT-OF-WAY W/ SIDEWALK
(STREETS C, D, E, & F)

*PAVEMENT STRUCTURE TO BE DETERMINED BY METHOD PRESCRIBED IN TOWN OF SMITHFIELD MANUAL OF DESIGN

NOT TO SCALE

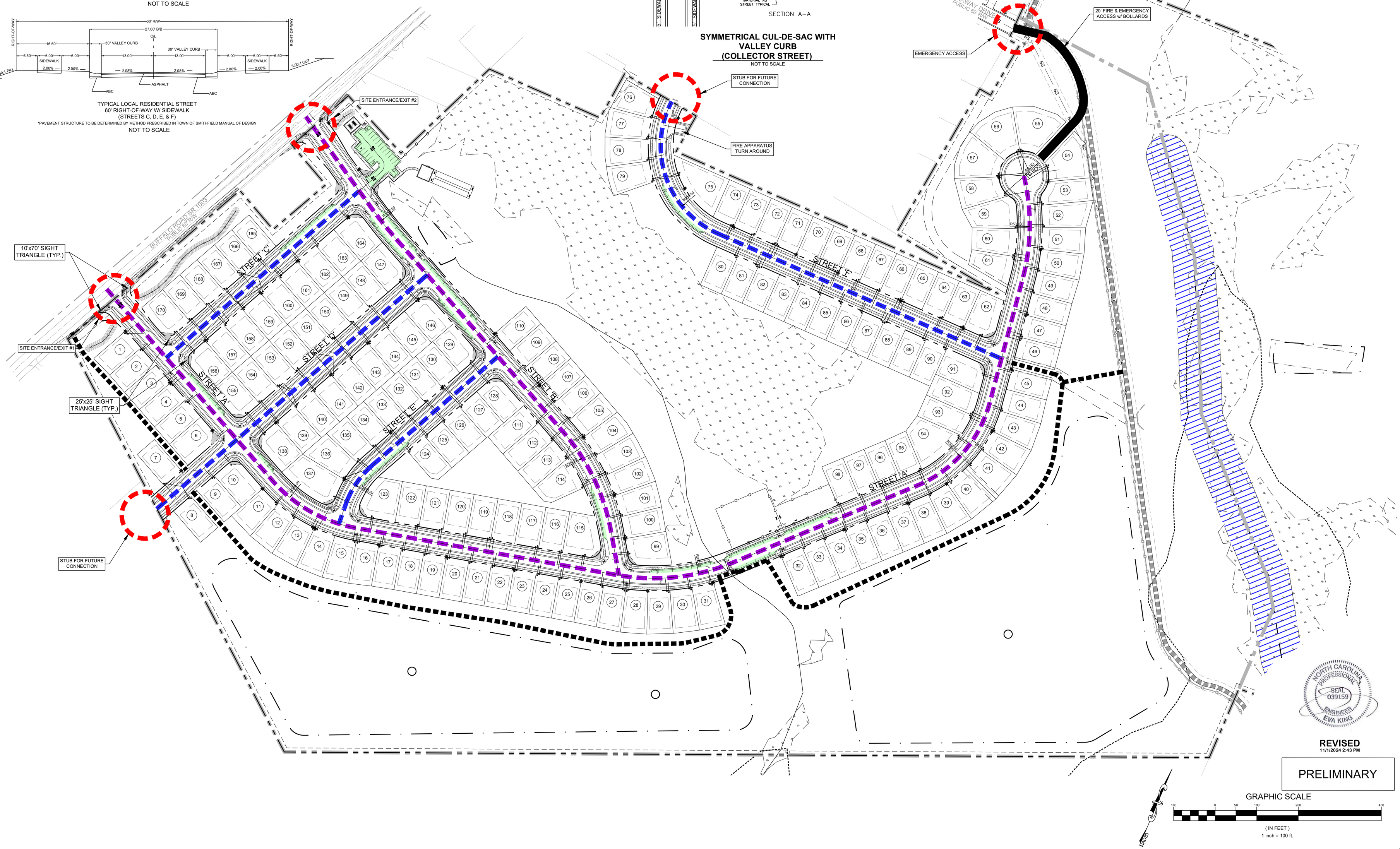
PEDESTRIAN & VEHICULAR LENGTHS
+/- 3,165 LF LOCAL STREETS
+/- 4,439 LF COLLECTOR STREETS
+/- 3,376 LF PROPOSED 10' WALKING TRAILS
+/- 15,058 LF PROPOSED SIDEWALK



SYMMETRICAL CUL-DE-SAC WITH
VALLEY CURB
(COLLECTOR STREET)

NOT TO SCALE

LEGEND
PARKING AREAS
LOCAL STREETS
COLLECTOR STREETS
PROPOSED 10' WALKING TRAILS
EXISTING 10' GREENWAYTRAIL



REVISIONS

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-4302
FIRM # C-4743

BECKER MORGAN GROUP

A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

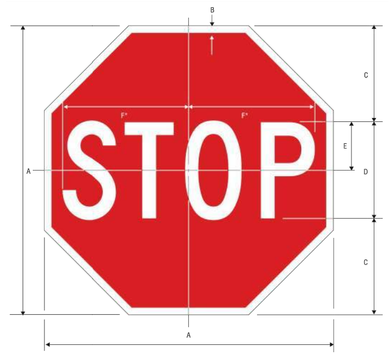
BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

UPDATED PEDESTRIAN & VEHICULAR ROUTING

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C2.03

STREET NAME SIGNS TO BE ATTACHED TO TOP OF STOP SIGNS



R1-1
STOP

*Reduce spacing 40%

	A	B	C	D	E	F
	18	.375	6	6 C	3	2.75
	24	.625	8	8 C	4	10
C	30	.75	10	10 C	5	12.5
	36	.875	12	12 C	6	15
	48	1.25	16	16 C	8	20

COLORS: LEGEND -- WHITE (RETROREFLECTIVE)
BACKGROUND -- RED (RETROREFLECTIVE)

1-1

STOP SIGN DETAIL

NOT TO SCALE

R2-1
SPEED LIMIT (ENGLISH)

*Optically space numerals about centerline

	A	B	C	D	E	F	G	H	J	K	L
	18	24	.375	.625	3	3 E	2	8 E	7.88	5.5	1.5
C	24	30	.375	.625	4	4 E	2	10 E	9.940	2.313	1.5
	36	48	.625	.875	6	6 E	5	14 E	14.125	11	2.25
	48	60	.75	1.25	8	8 E	6	16 E	19.125	14.625	3

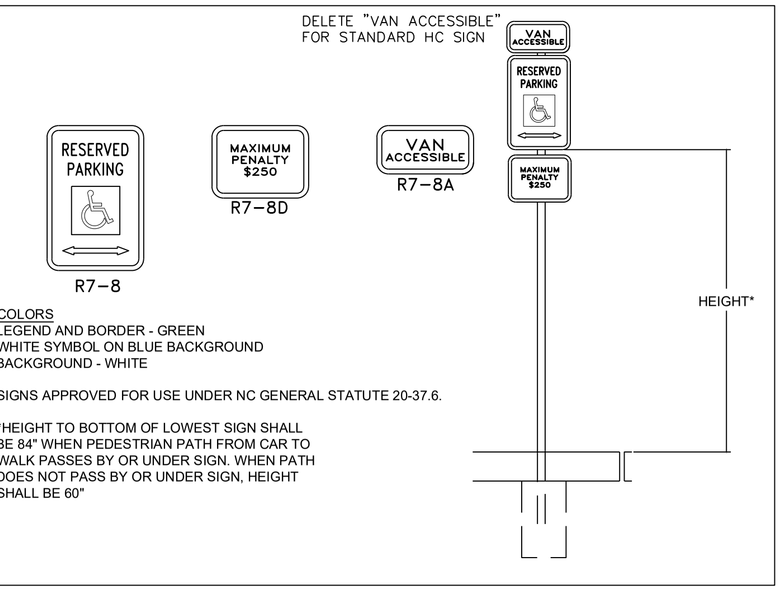
COLORS: LEGEND -- BLACK
BACKGROUND -- WHITE (RETROREFLECTIVE)

1-10

SPEED LIMIT DETAIL

NOT TO SCALE

DELETE "VAN ACCESSIBLE" FOR STANDARD HC SIGN



COLORS
LEGEND AND BORDER - GREEN
WHITE SYMBOL ON BLUE BACKGROUND
BACKGROUND - WHITE

SIGNS APPROVED FOR USE UNDER NC GENERAL STATUTE 20-37.6.

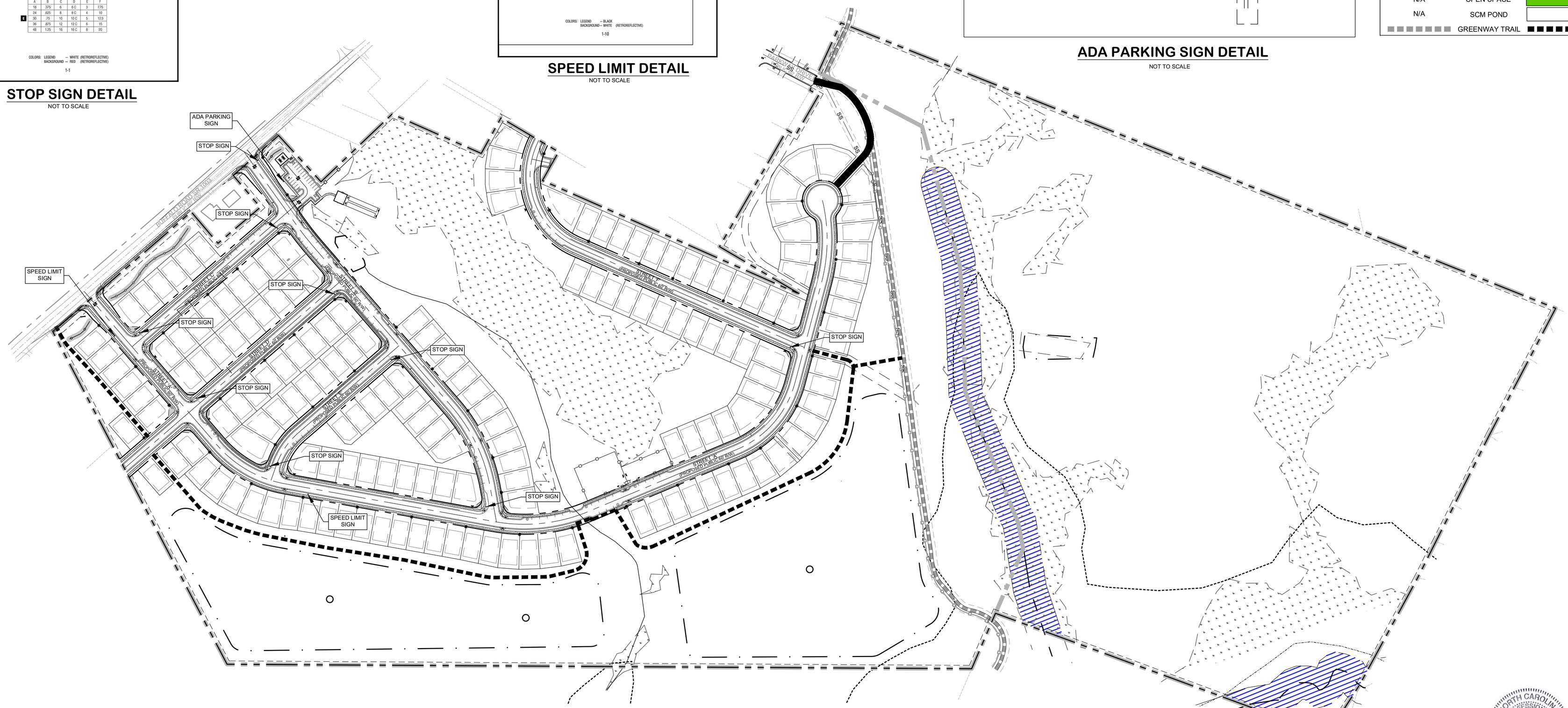
*HEIGHT TO BOTTOM OF LOWEST SIGN SHALL BE 84" WHEN PEDESTRIAN PATH FROM CAR TO WALK PASSES BY OR UNDER SIGN. WHEN PATH DOES NOT PASS BY OR UNDER SIGN, HEIGHT SHALL BE 60"

ADA PARKING SIGN DETAIL

NOT TO SCALE

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
N/A	HANDICAP PARKING	
N/A	HANDICAP RAMP	
N/A	ADA ACCESS AISLE	
N/A	16-UNIT MAIL KIOSK	
N/A	PEDESTRIAN CROSSING	
N/A	CONCRETE WALK	
	WETLANDS	N/A
	RIPARIAN BUFFERS	N/A
N/A	OPEN SPACE	
N/A	SCM POND	
	GREENWAY TRAIL	



NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:43 PM

PRELIMINARY

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.

NORTH

REVISIONS

314 EAST MAIN STREET
CLAYTON, NC 27520
ROUNTREE@ADAMSANDHODGEPA.COM
919-934-1532
FIRM # C-4743

BECKER MORGAN GROUP

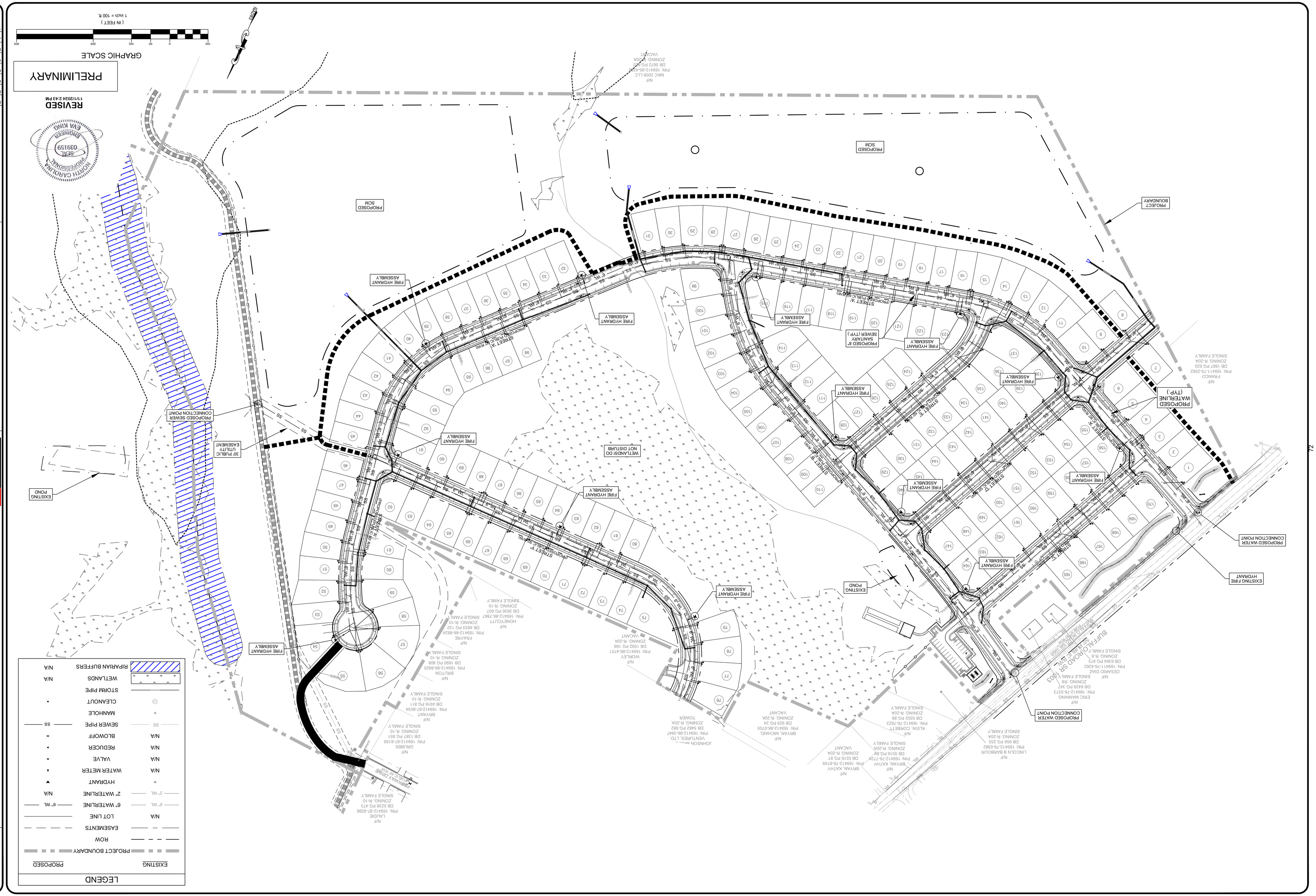
A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

SIGNAGE PLAN

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C2.04



BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PRELIMINARY UTILITY PLAN

ADAMS & HODGE ENGINEERING, PC

A DIVISION OF BECKER MORGAN GROUP, INC.

BECKER MORGAN GROUP

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-4313
FIRM # C-1743

REVISIONS:

DESIGN	DCA
DRAWN	ADS/AHP/BIA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C3.01

PRELIMINARY EROSION CONTROL SEQUENCE OF CONSTRUCTION

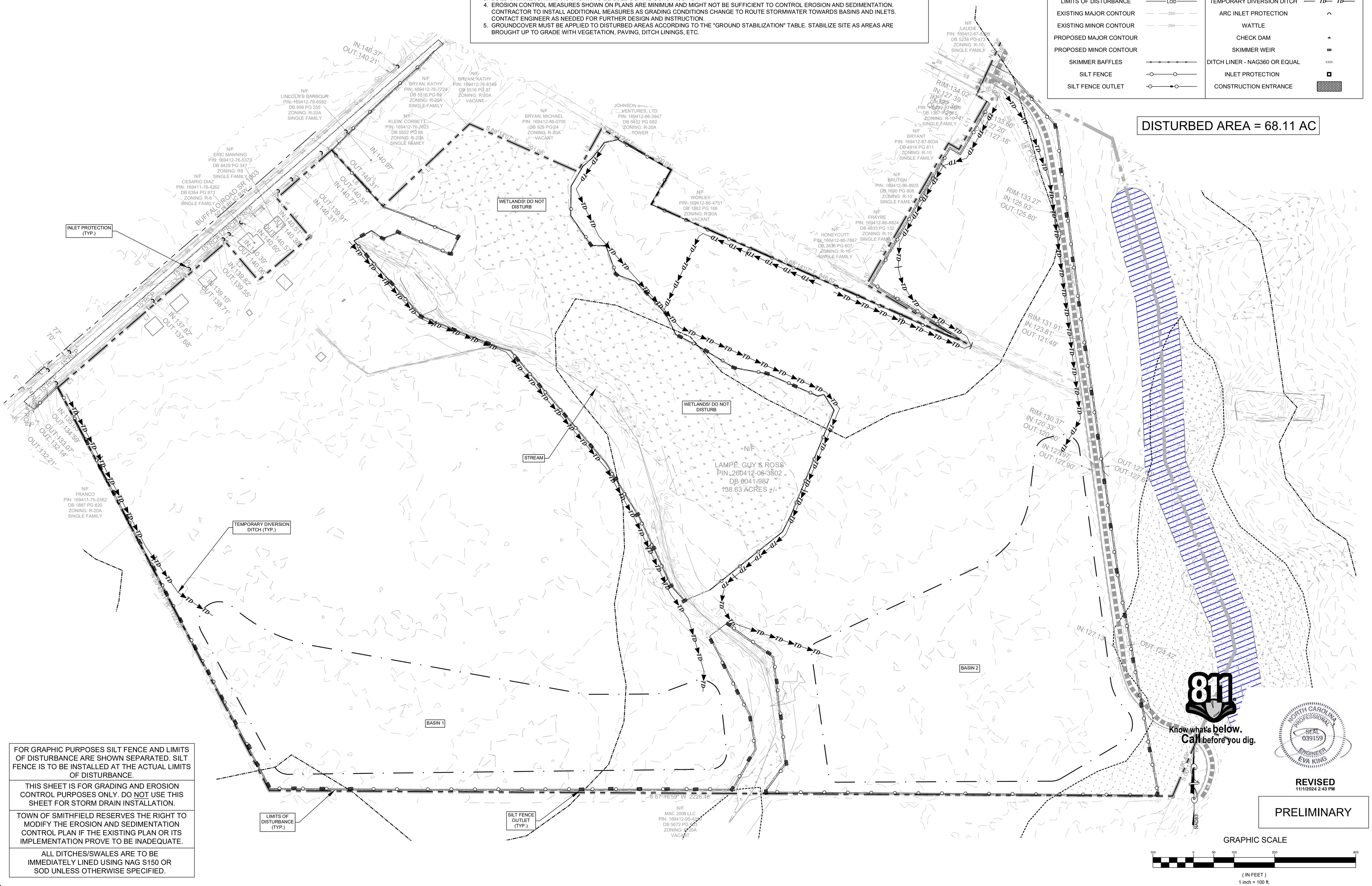
BEGIN EROSION CONTROL

1. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE AND CONCRETE WASHOUT STATION.
2. INSTALL ALL SILT FENCING AND WIRE & WASHED STONE OUTLETS IN SILT FENCE AS SHOWN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
3. BUILD SKIMMER BASINS AS SHOWN TO BE USED DURING CONSTRUCTION.
4. EROSION CONTROL MEASURES SHOWN ON PLANS ARE MINIMUM AND MIGHT NOT BE SUFFICIENT TO CONTROL EROSION AND SEDIMENTATION. CONTRACTOR TO INSTALL ADDITIONAL MEASURES AS GRADING CONDITIONS CHANGE TO ROUTE STORMWATER TOWARDS BASINS AND INLETS. CONTACT ENGINEER AS NEEDED FOR FURTHER DESIGN AND INSTRUCTION.
5. GROUNDCOVER MUST BE APPLIED TO DISTURBED AREAS ACCORDING TO THE "GROUND STABILIZATION" TABLE. STABILIZE SITE AS AREAS ARE BROUGHT UP TO GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC.

LEGEND

PROJECT BOUNDARY		PERMANENT DIVERSION DITCH	—PD— —PD—
LIMITS OF DISTURBANCE	—LOD—	TEMPORARY DIVERSION DITCH	—TD— —TD—
EXISTING MAJOR CONTOUR	—295—	ARC INLET PROTECTION	
EXISTING MINOR CONTOUR	—294—	WATTLE	
PROPOSED MAJOR CONTOUR		CHECK DAM	
PROPOSED MINOR CONTOUR		SKIMMER WEIR	
SKIMMER BAFFLES		DITCH LINER - NAG360 OR EQUAL	xxxx
SILT FENCE		INLET PROTECTION	
SILT FENCE OUTLET		CONSTRUCTION ENTRANCE	

DISTURBED AREA = 68.11 AC



FOR GRAPHIC PURPOSES SILT FENCE AND LIMITS OF DISTURBANCE ARE SHOWN SEPARATED. SILT FENCE IS TO BE INSTALLED AT THE ACTUAL LIMITS OF DISTURBANCE.
THIS SHEET IS FOR GRADING AND EROSION CONTROL PURPOSES ONLY. DO NOT USE THIS SHEET FOR STORM DRAIN INSTALLATION.
TOWN OF SMITHFIELD RESERVES THE RIGHT TO MODIFY THE EROSION AND SEDIMENTATION CONTROL PLAN IF THE EXISTING PLAN OR ITS IMPLEMENTATION PROVE TO BE INADEQUATE.
ALL DITCHES/SWALES ARE TO BE IMMEDIATELY LINED USING NAG S150 OR SOD UNLESS OTHERWISE SPECIFIED.

314 EAST MAIN STREET
CLAYTON, NC 27520
RDJUNFO@BECKERMORGAN.COM
919.553.4223
FIRM # C-4743

REVISIONS:

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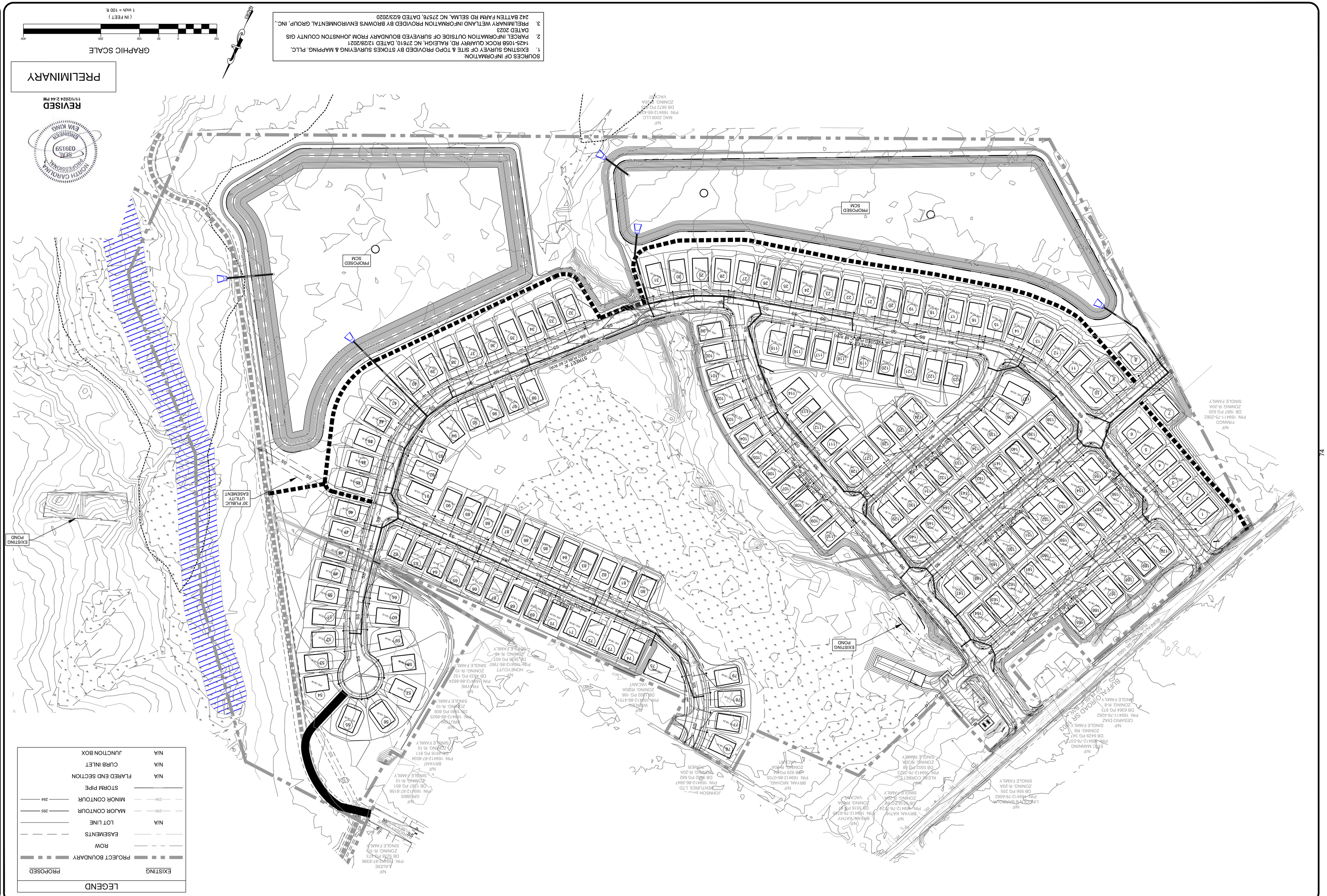
A DIVISION OF BECKER MORGAN GROUP, INC.

BECKER MORGAN GROUP

BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PRELIMINARY EROSION CONTROL PLAN

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C4.01



BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PRELIMINARY GRADING & DRAINAGE PLAN

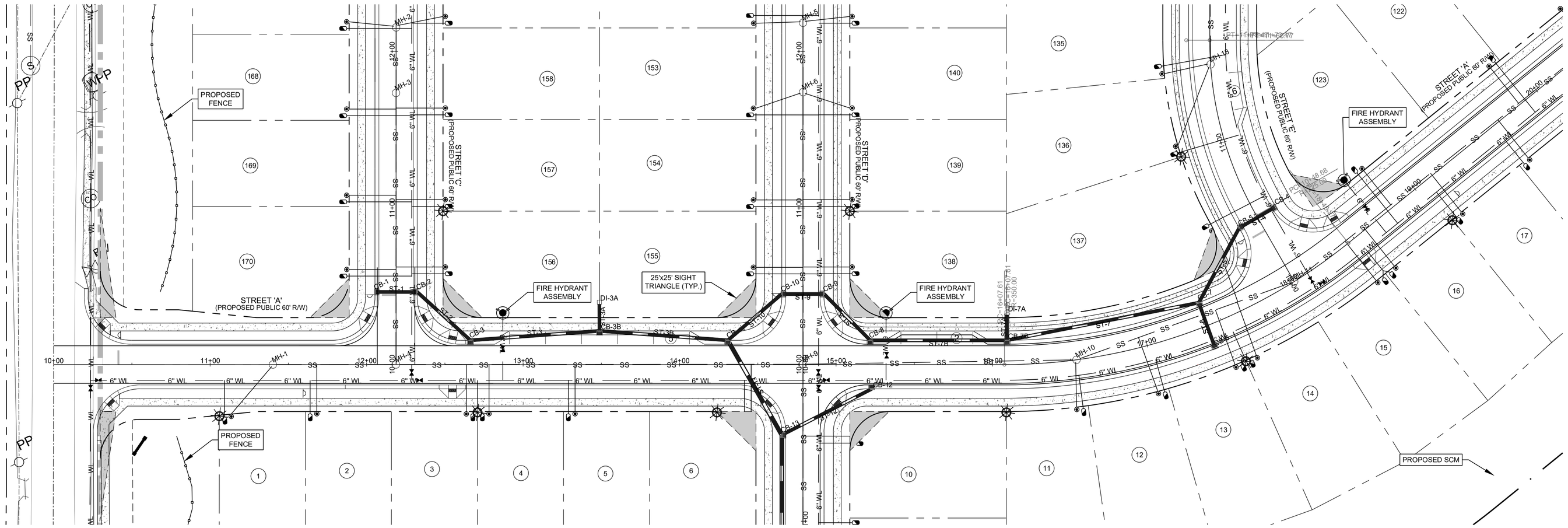
ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BECKER MORGAN GROUP

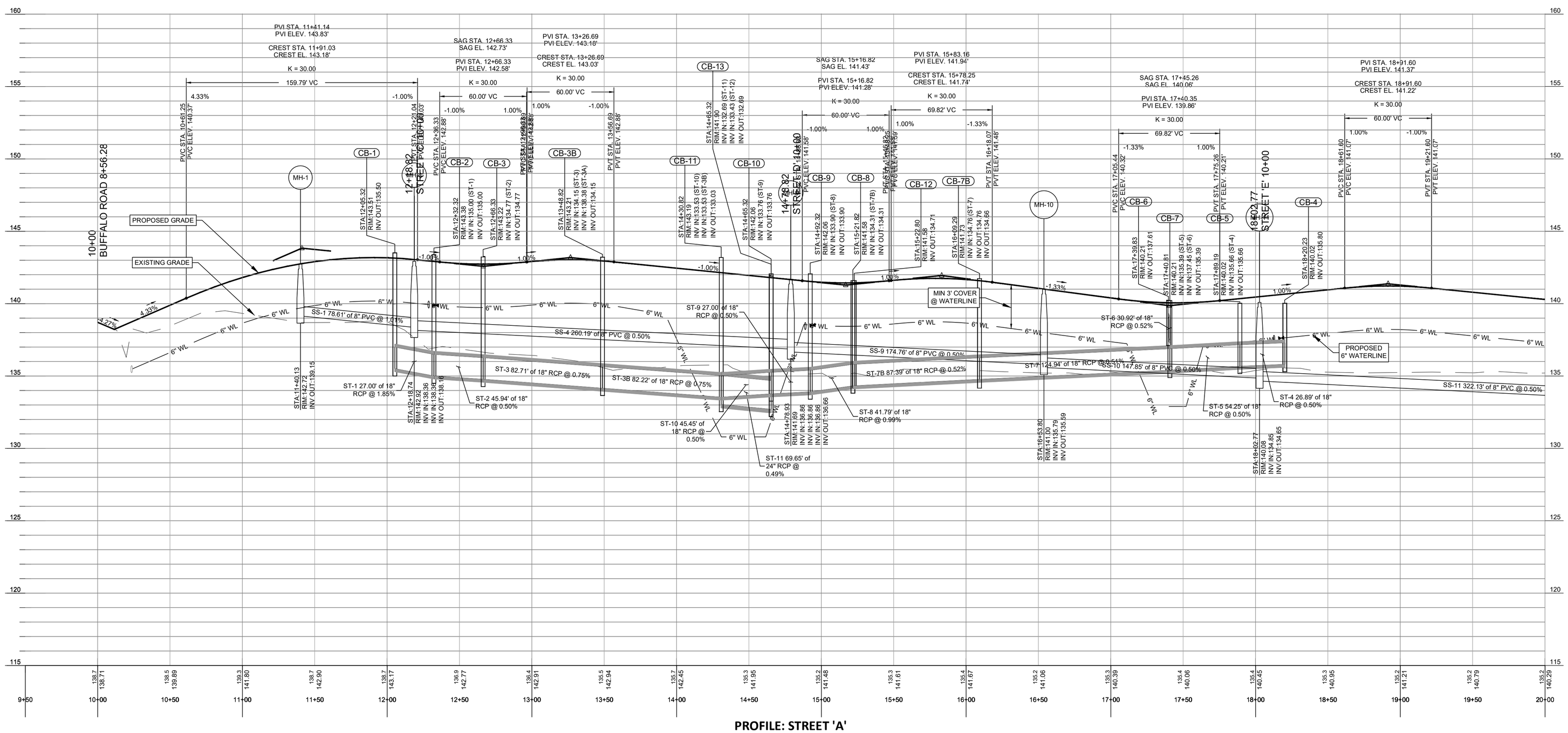
314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-243-1332
FIRM # C-4743

REVISIONS:

DESIGN	DCA
DRAWN	ADS/APH/BIA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	C5.01



PLAN: STREET 'A'
STA 10+00 TO 20+00



PROFILE: STREET 'A'
STA 10+00 TO 20+00

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

REVISED
11/1/2024 2:49 PM

PRELIMINARY

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919.553.2672
FIRM # C-4743

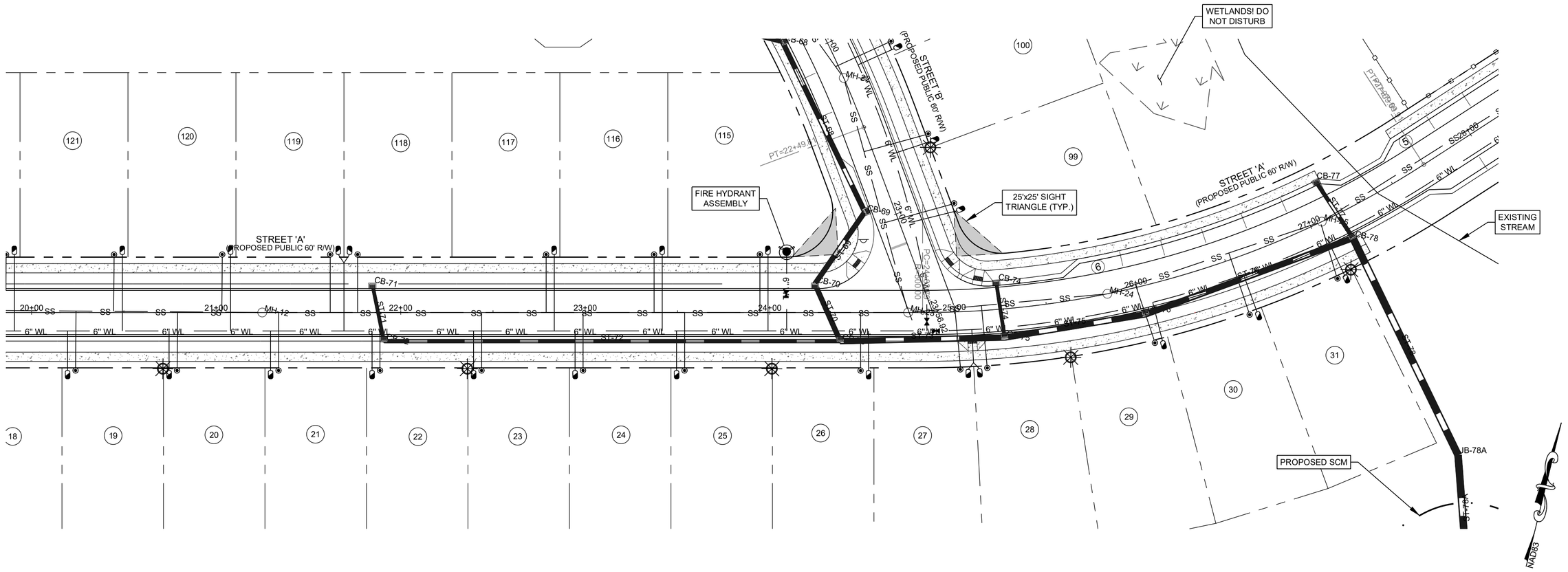
BECKER MORGAN GROUP

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

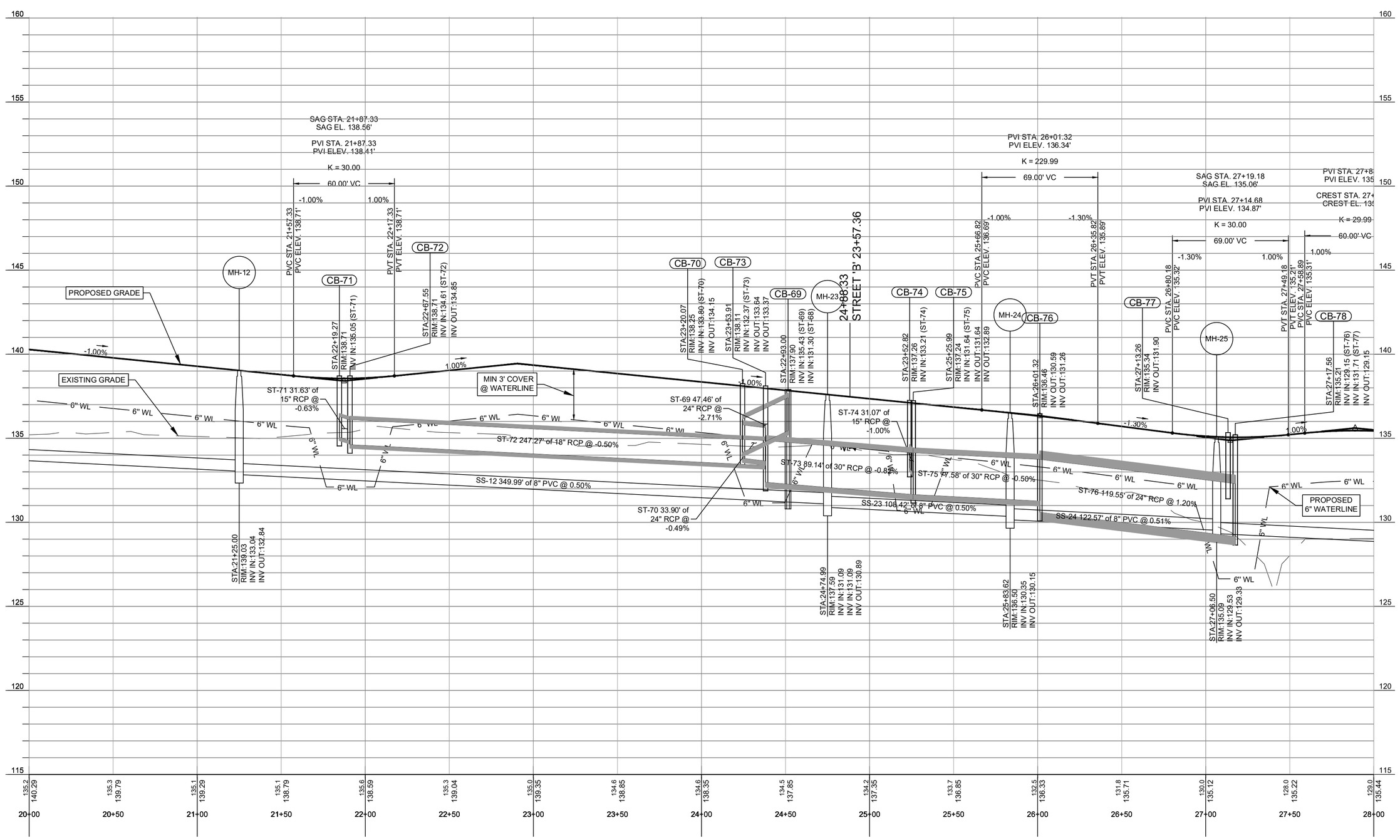
BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'A'
STA 10+00 - 20+00

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.01



PLAN: STREET 'A'
STA 20+00 TO 28+00



PROFILE: STREET 'A'
STA 20+00 TO 28+00

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

REVISED
11/1/2024 2:50 PM

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-4232
FIRM # C-4743

BECKER MORGAN GROUP

A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

REVISIONS:

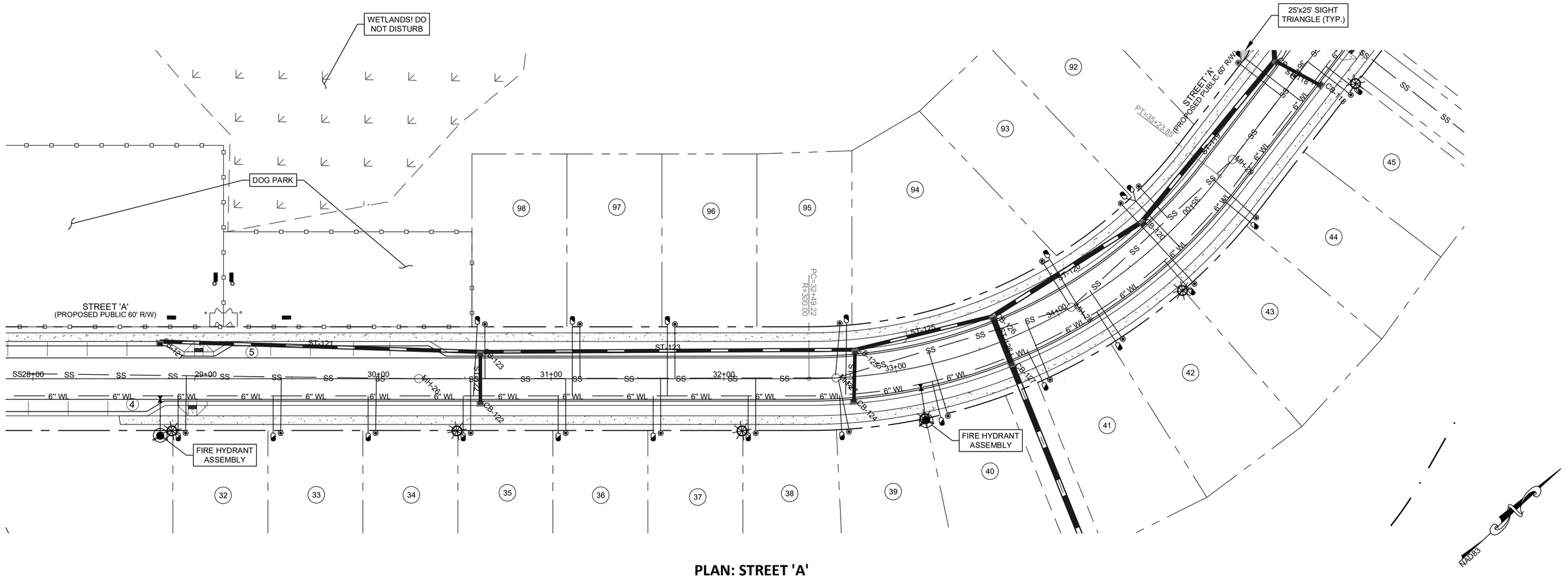
BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

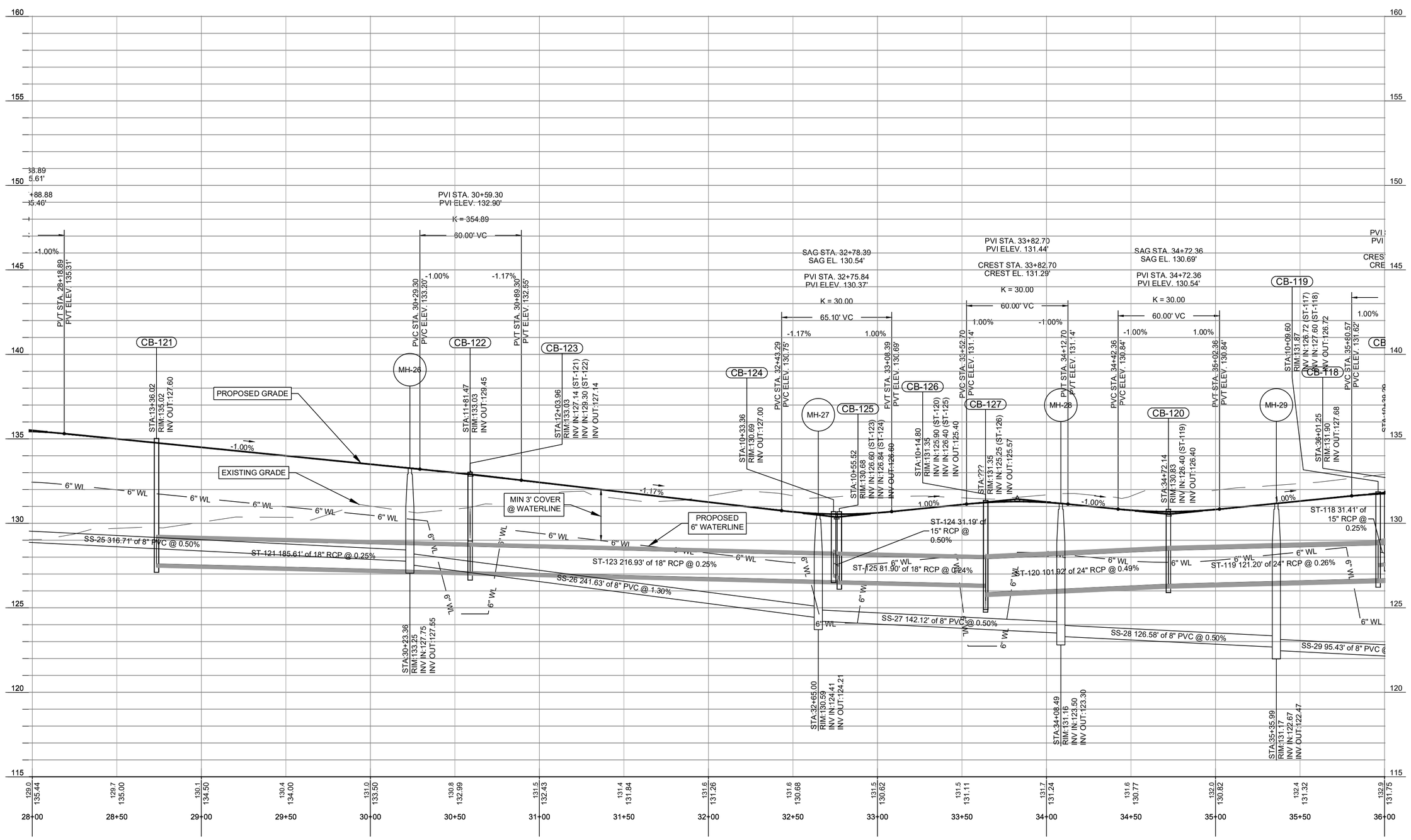
PLAN & PROFILE STREET 'A' STA 20+00 - 28+00

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.02



PLAN: STREET 'A'
STA 28+00 TO 36+00



PROFILE: STREET 'A'
STA 28+00 TO 36+00

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

REVISED
11/1/2024 2:50 PM

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919.553.4672
FIRM # C-4743

BECKER MORGAN GROUP

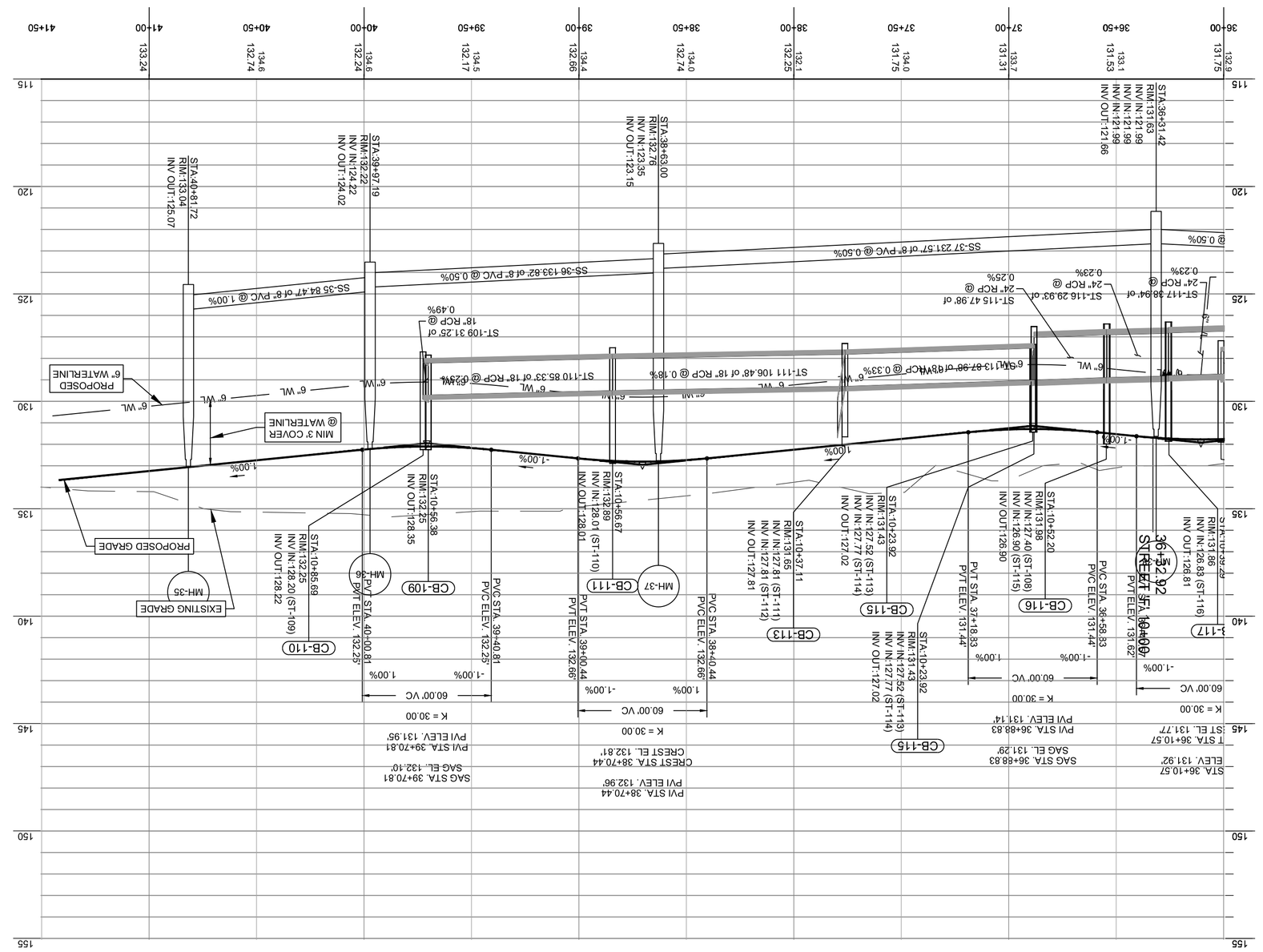
A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

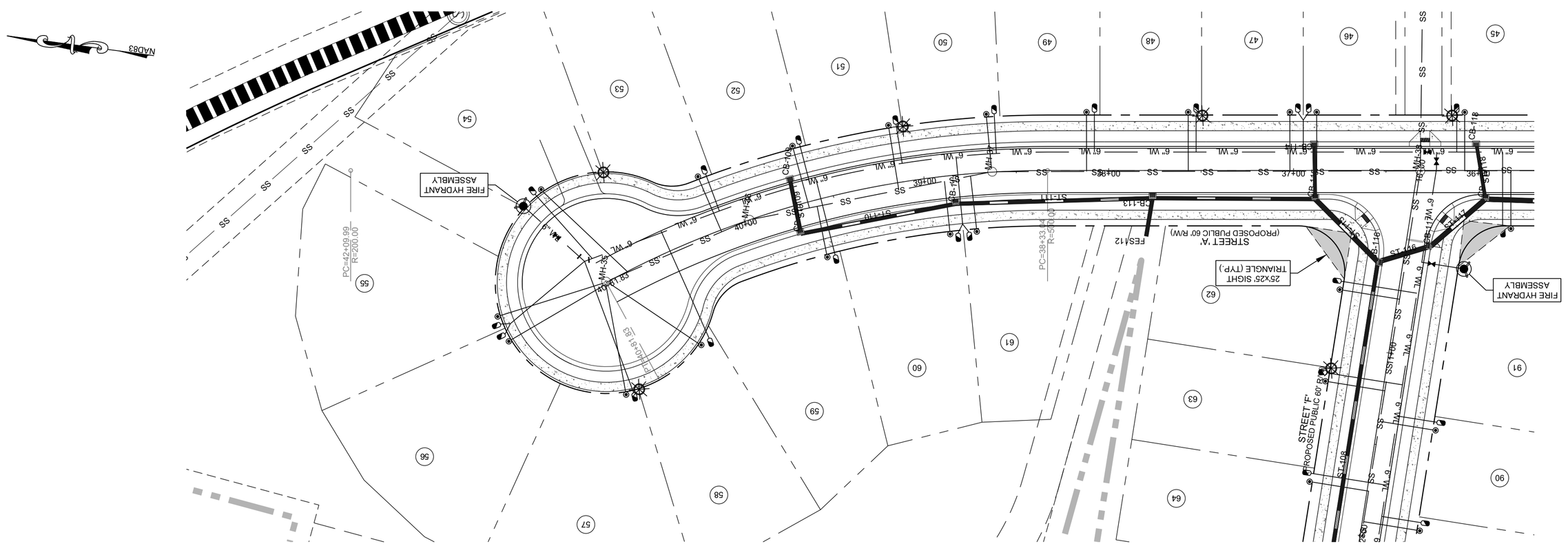
BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'A'
STA 28+00 - 36+00

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.03





78

LEGEND

EXISTING		PROPOSED
PROJECT BOUNDARY		
ROW		
EASEMENTS		
LOT LINE	N/A	
6" WATERLINE	6" WL	6" WL
2" WATERLINE	2" WL	N/A
HYDRANT		
WATER METER	N/A	
VALVE	N/A	
REDUCER	N/A	
BLOWOFF	N/A	
SEWER PIPE	SS	
MANHOLE		
CLEANOUT	N/A	
STORM PIPE		

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

PRELIMINARY

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11/1/2024 2:50 PM

NORTH CAROLINA UNPROFESSIONAL SEAL 039159 ENGINEER EVA KING

DESIGN	DCA
DRAWN	ADS/AKH/BIA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.04

PLAN & PROFILE
STREET 'A'
STA 36+00 - END

BUFFALO RD SUBDIVISION

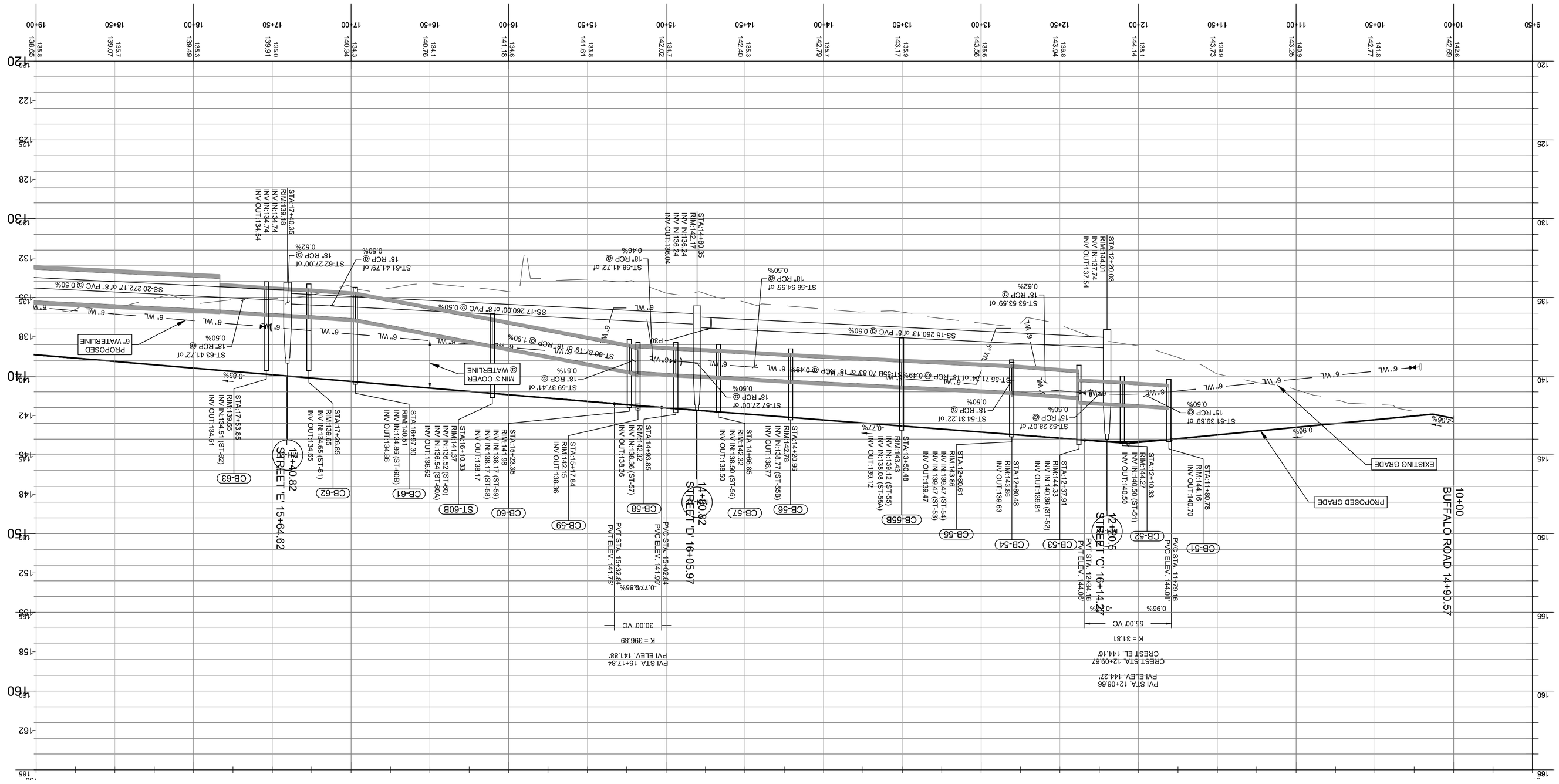
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

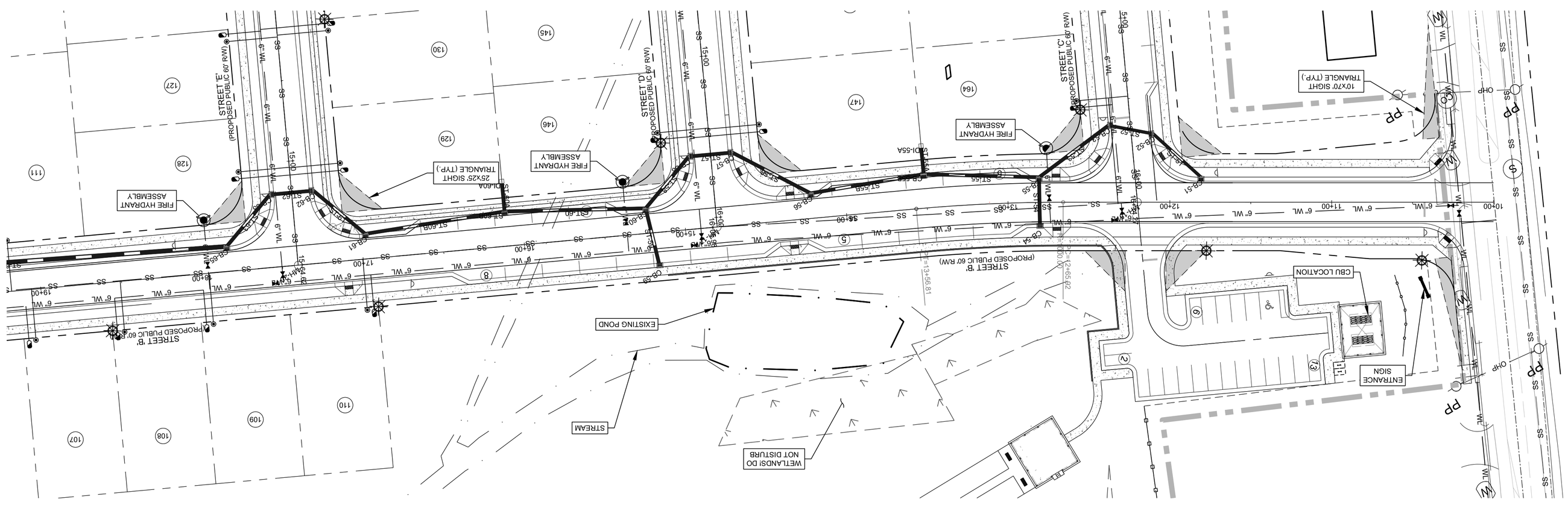
ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BECKER MORGAN GROUP

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-5202
FIRM # C-4743

REVISIONS





PRELIMINARY

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11/1/2024 2:50 PM

GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

LEGEND

EXISTING	PROPOSED	
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
	LOT LINE	N/A
	6" WATERLINE	6" WL
	2" WATERLINE	N/A
	HYDRANT	
	WATER METER	N/A
	VALVE	N/A
	REDUCER	N/A
	BLOWOFF	N/A
	SEWER PIPE	SS
	MANHOLE	
	CLEANOUT	N/A
	STORM PIPE	

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.
BECKER MORGAN GROUP
314 EAST MAIN STREET
CLAYTON, NC 27520
919-553-2672
RDUINFO@BECKERMORGAN.COM
FIRM # C-4743

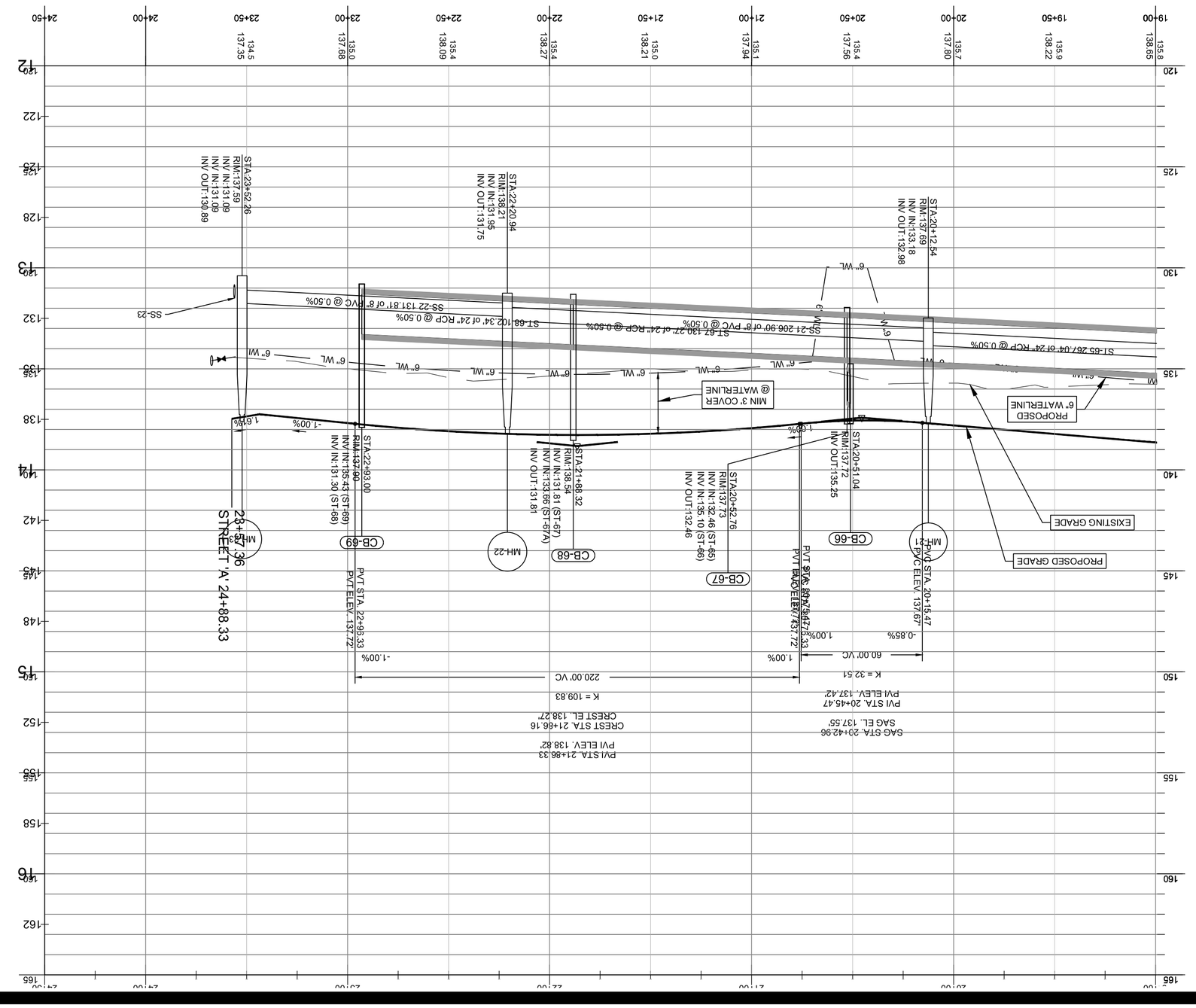
REVISIONS:

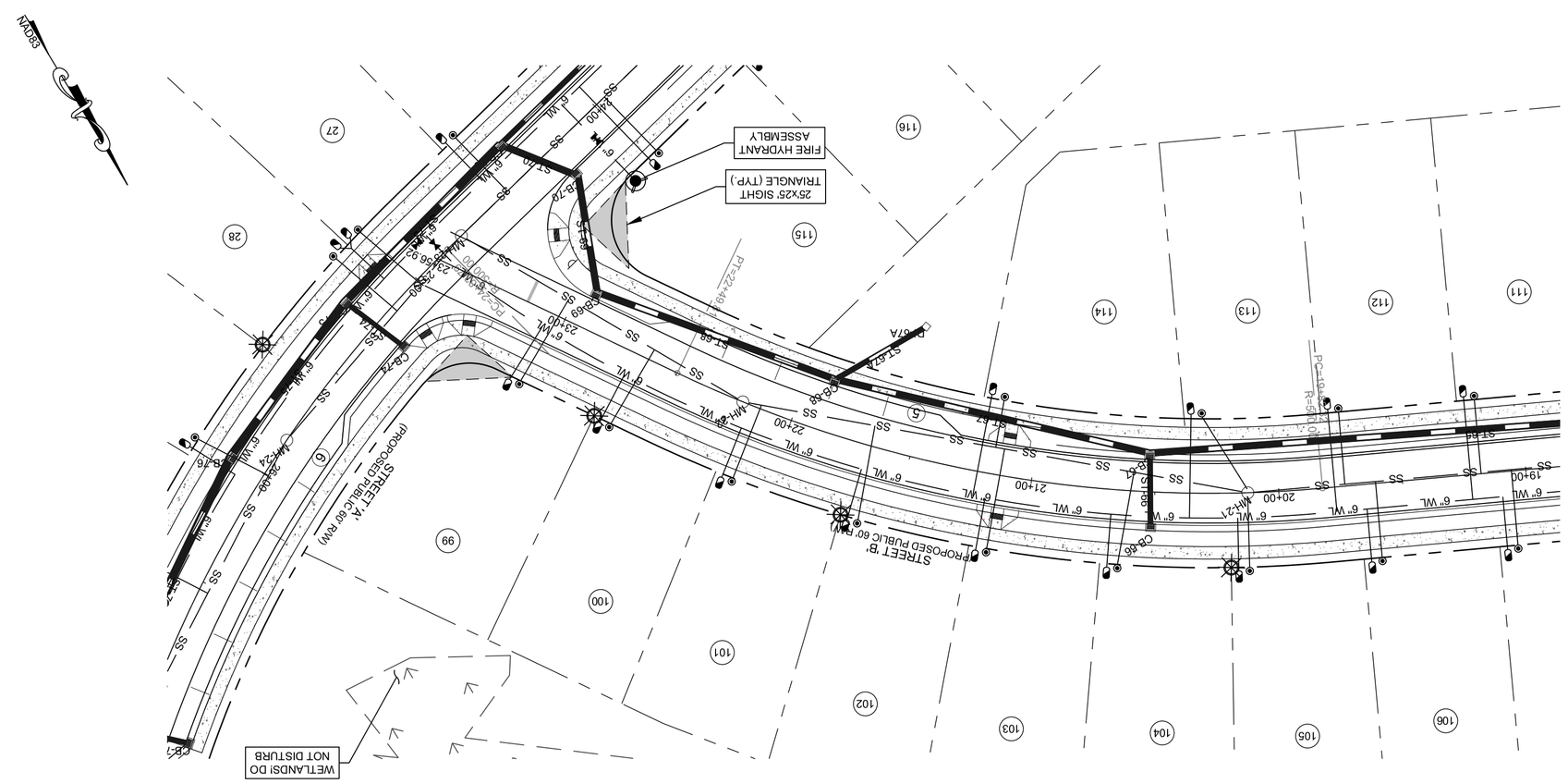
BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'B'
STA. 10+00 - 19+00

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.05





LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
	LOT LINE	
6" WL	6" WATERLINE	6" WL
6" WL	6" WATERLINE	
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

PRELIMINARY

REVISED
11/1/2024 2:50 PM

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 039159 EVA KING

DESIGN	DCA
DRAWN	ADS/APH/BIA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.06

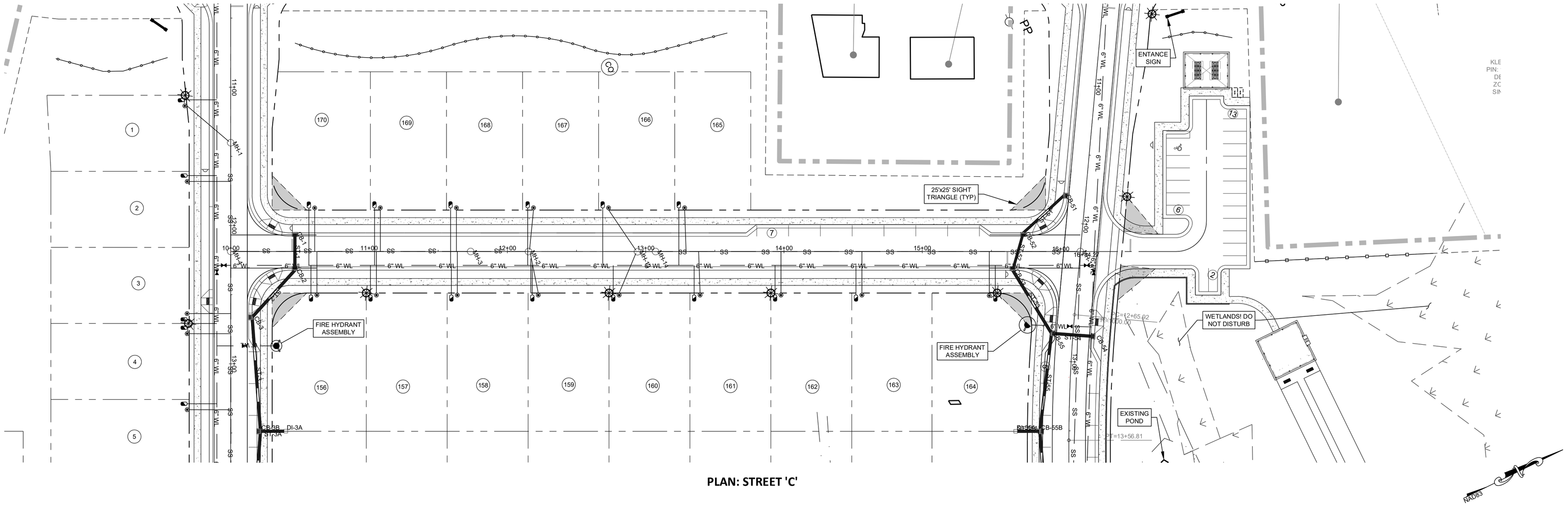
PLAN & PROFILE
STREET 'B'
STA 19+00 - END

BUFFALO RD SUBDIVISION

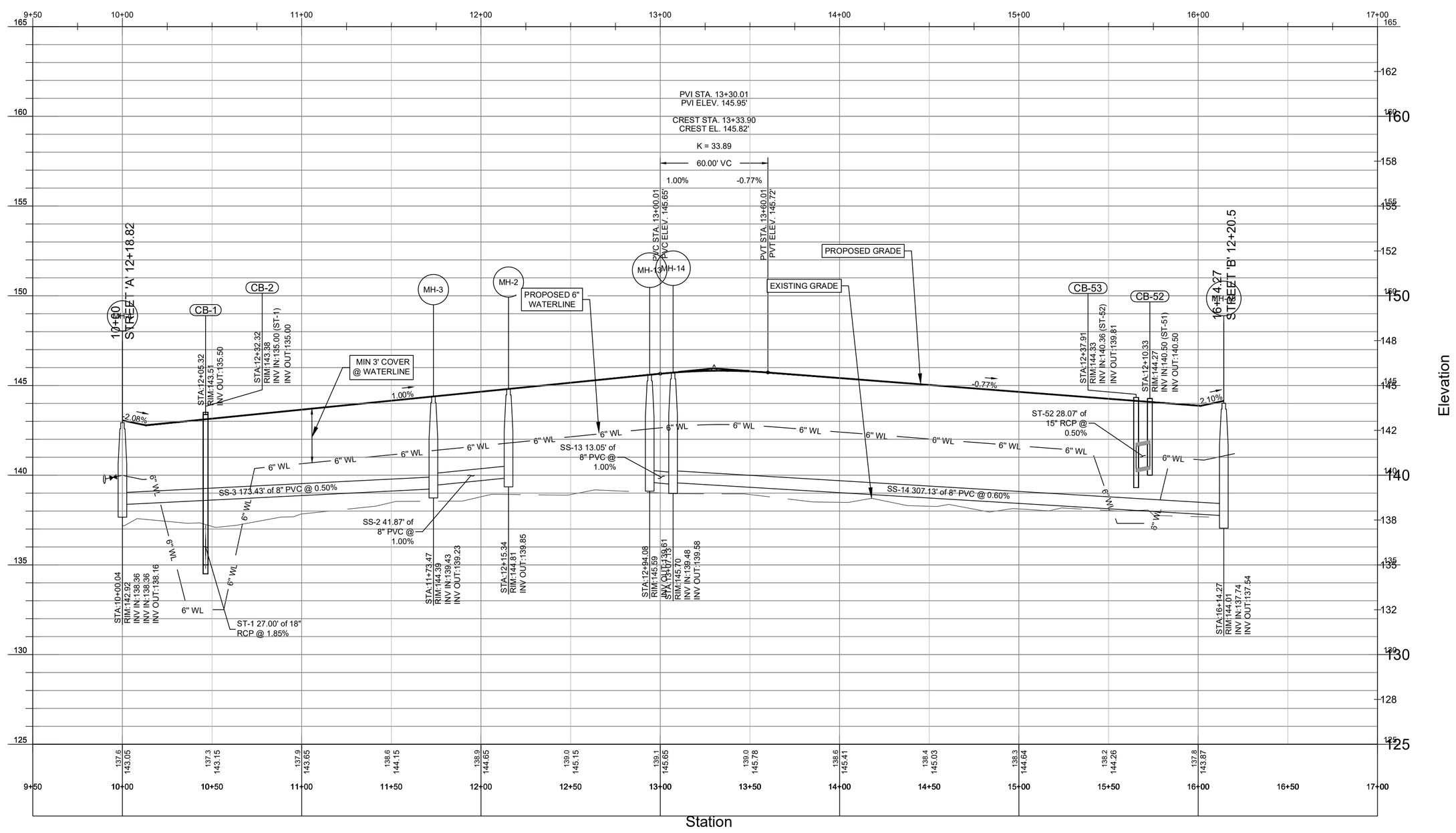
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.
BECKER MORGAN GROUP
314 EAST MAIN STREET
CLAYTON, NC 27520
919-553-4202
RDUINFO@BECKERMORGAN.COM
FIRM # C-4743

REVISIONS:



PLAN: STREET 'C'



PROFILE: STREET 'C'

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:51 PM

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-1372
FIRM # C-4743

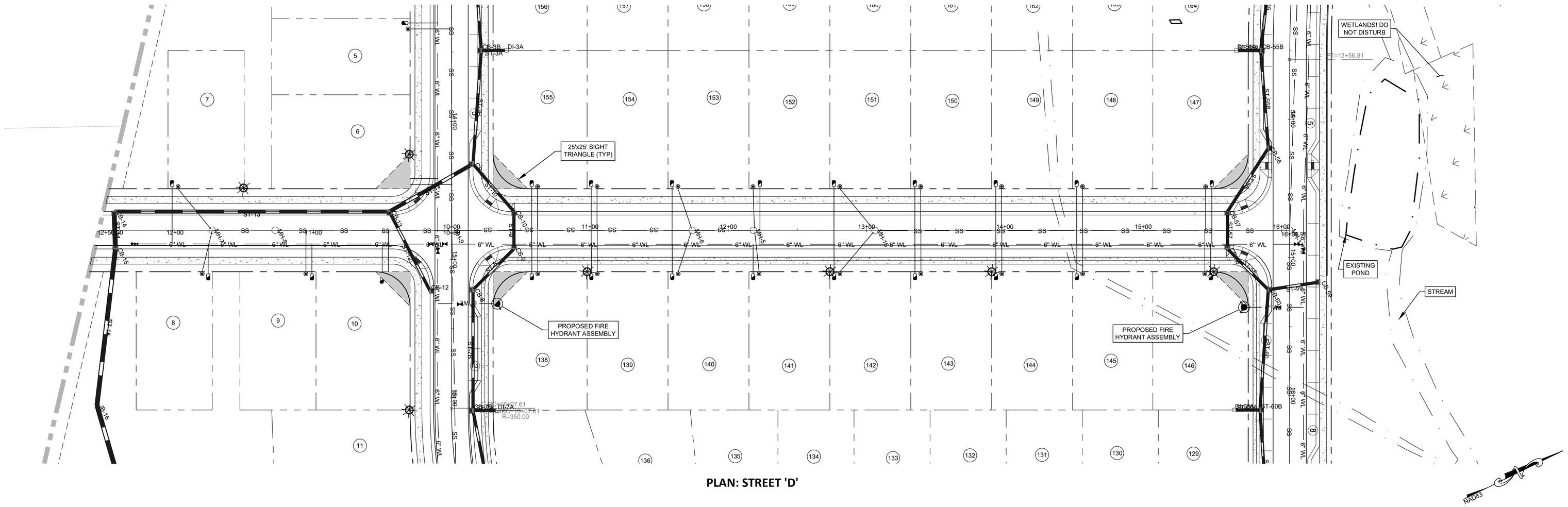
BECKER MORGAN GROUP

A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

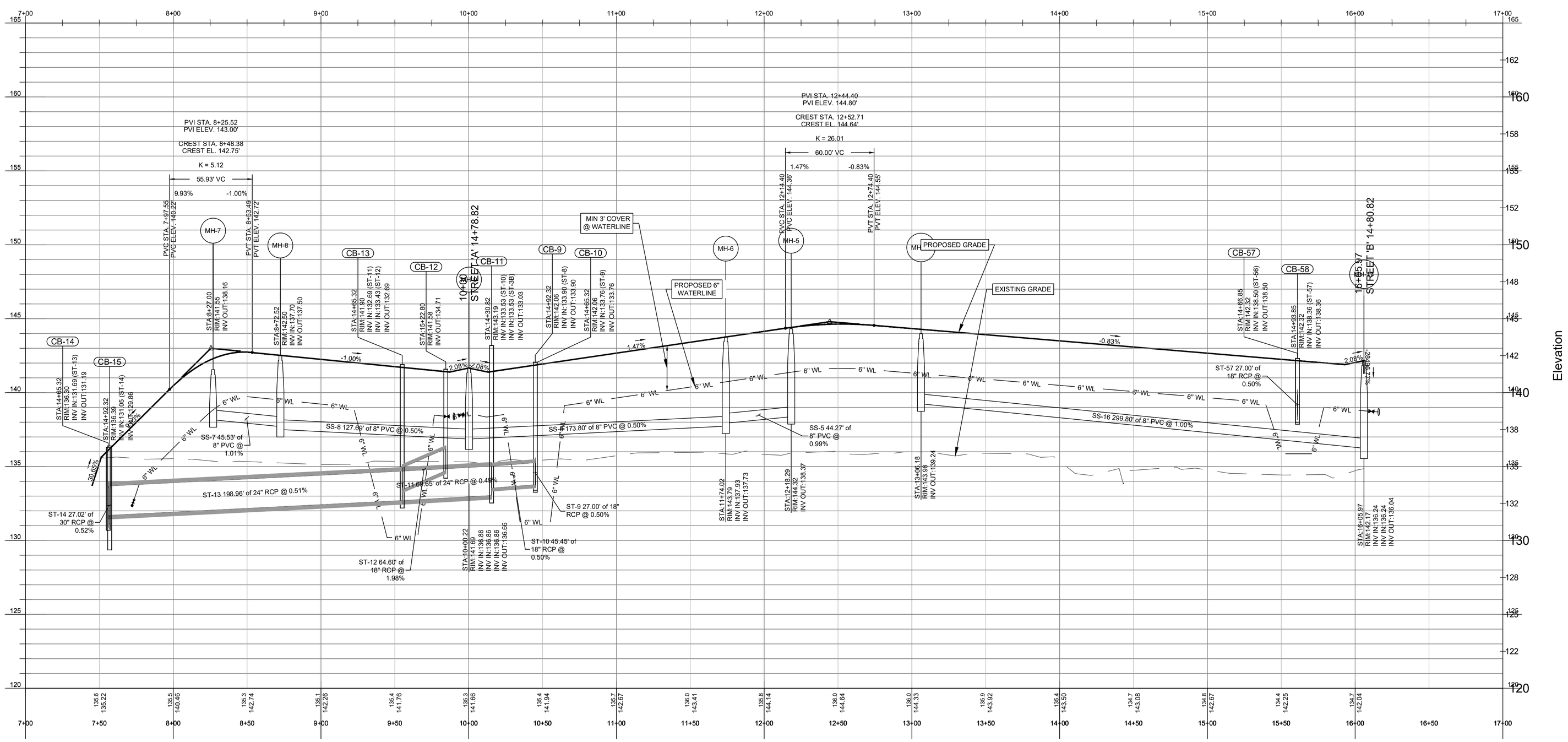
BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'C'

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.07



PLAN: STREET 'D'



PROFILE: STREET 'D'

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

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11/1/2024 2:51 PM

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919.553.1372
919.553.1373
FIRM # C-4743

BECKER MORGAN GROUP

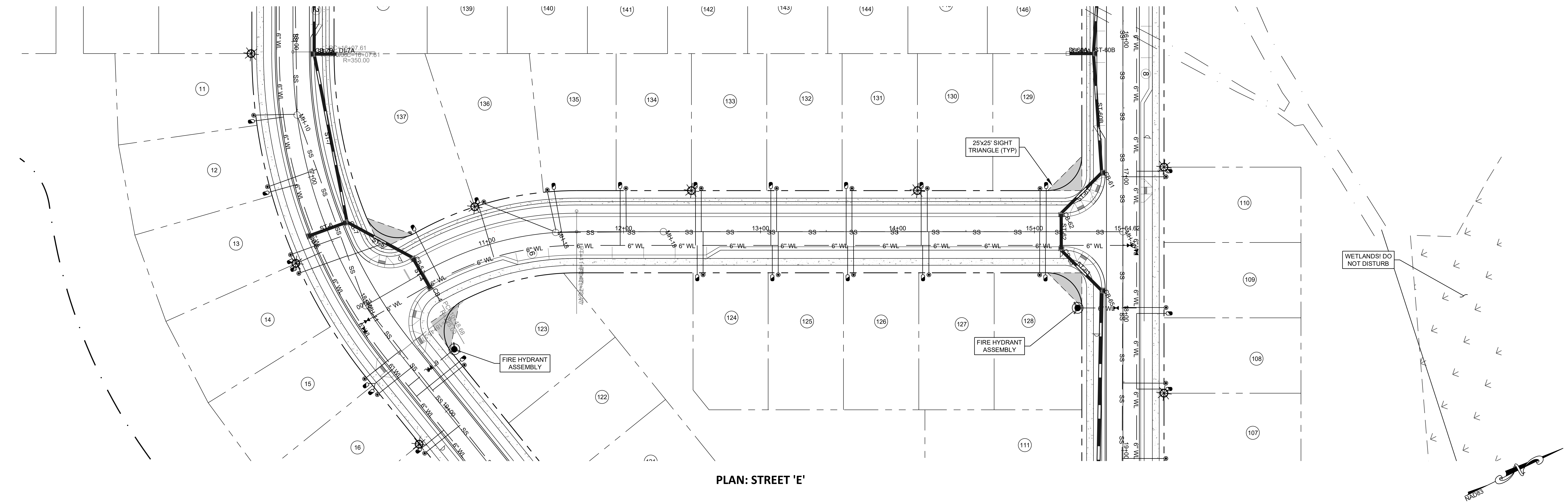
ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

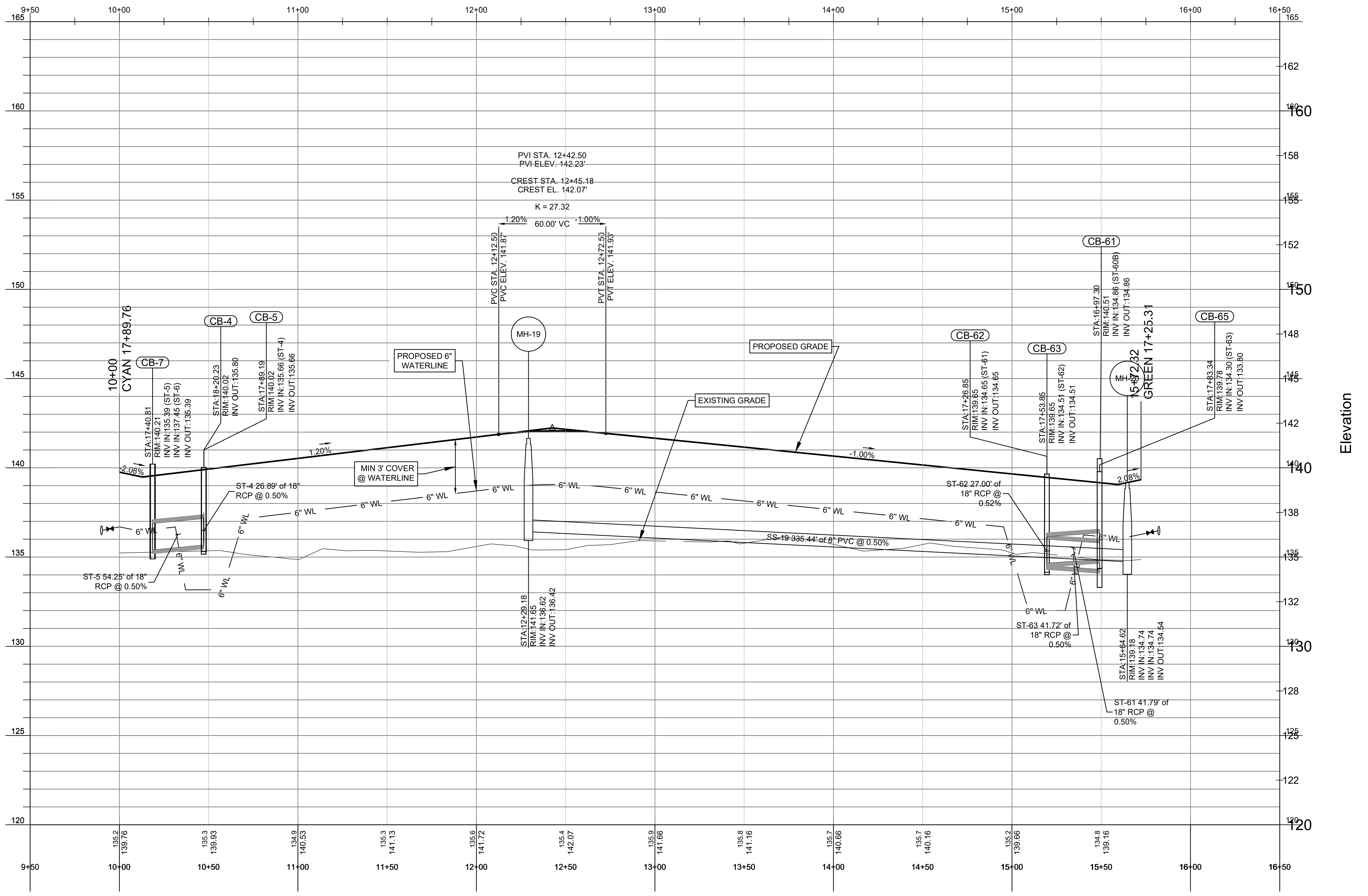
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE STREET 'D'

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.08



PLAN: STREET 'E'



PROFILE: STREET 'E'

LEGEND

EXISTING		PROPOSED
▬ ▬ ▬	PROJECT BOUNDARY	▬ ▬ ▬
— — —	ROW	— — —
— — —	EASEMENTS	— — —
N/A	LOT LINE	— — —
— 6" WL —	6" WATERLINE	— 6" WL —
— 2" WL —	2" WATERLINE	N/A
●	HYDRANT	●
N/A	WATER METER	●
N/A	VALVE	⋈
N/A	REDUCER	▶
N/A	BLOWOFF	⋈
— SS —	SEWER PIPE	— — —
◎	MANHOLE	N/A
N/A	CLEANOUT	●
▬▬▬	STORM PIPE	▬▬▬

REVISED
11/1/2024 2:51 PM

SEAL 039159 EVA KING

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-243-1332
FIRM # C-4743

BECKER MORGAN GROUP

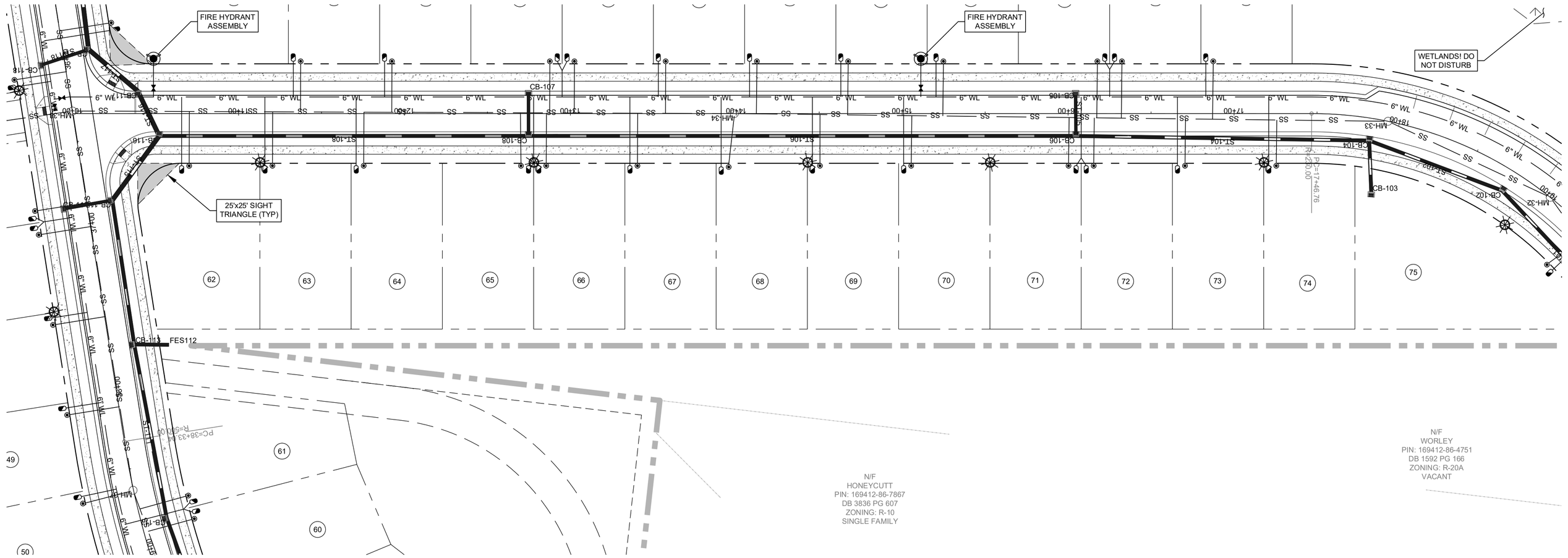
A&H ADAMS & HODGE
ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

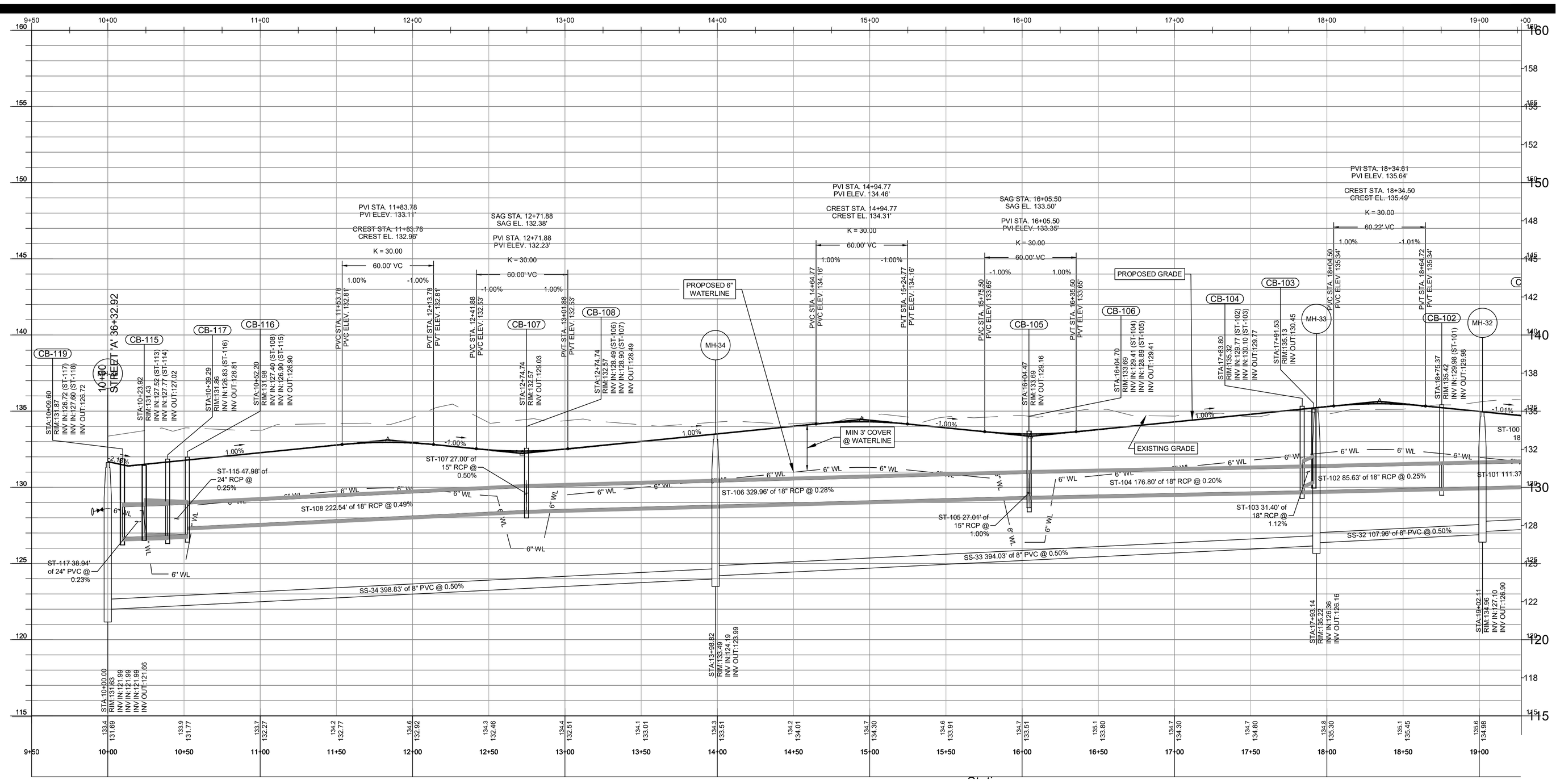
,TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'E'

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.09



PLAN: STREET 'F'
STA 10+00 - STA 19+00



PROFILE: STREET 'F'
STA 10+00 - STA 19+00

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:51 PM

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919.553.4182
FIRM # C-4743

BECKER MORGAN GROUP

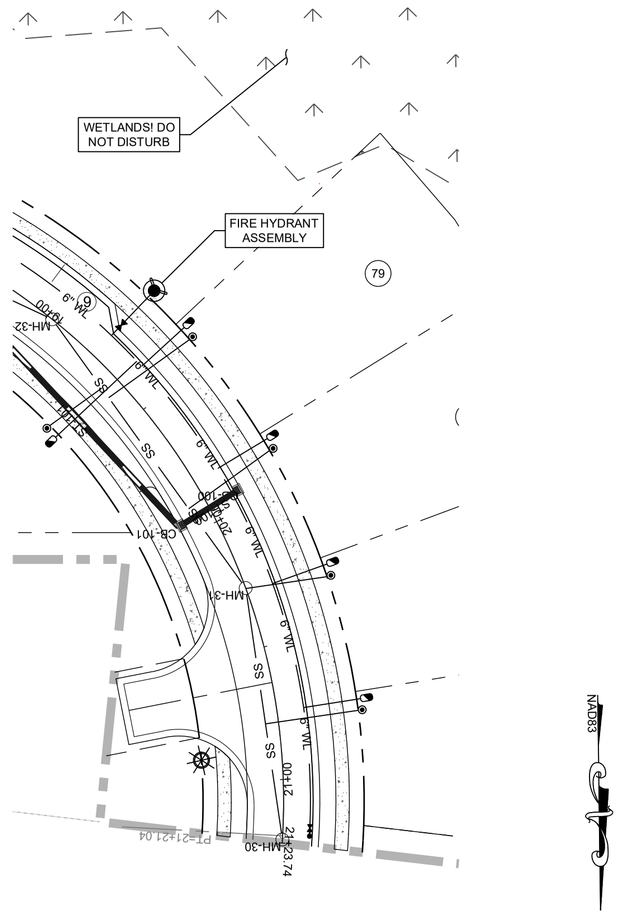
ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

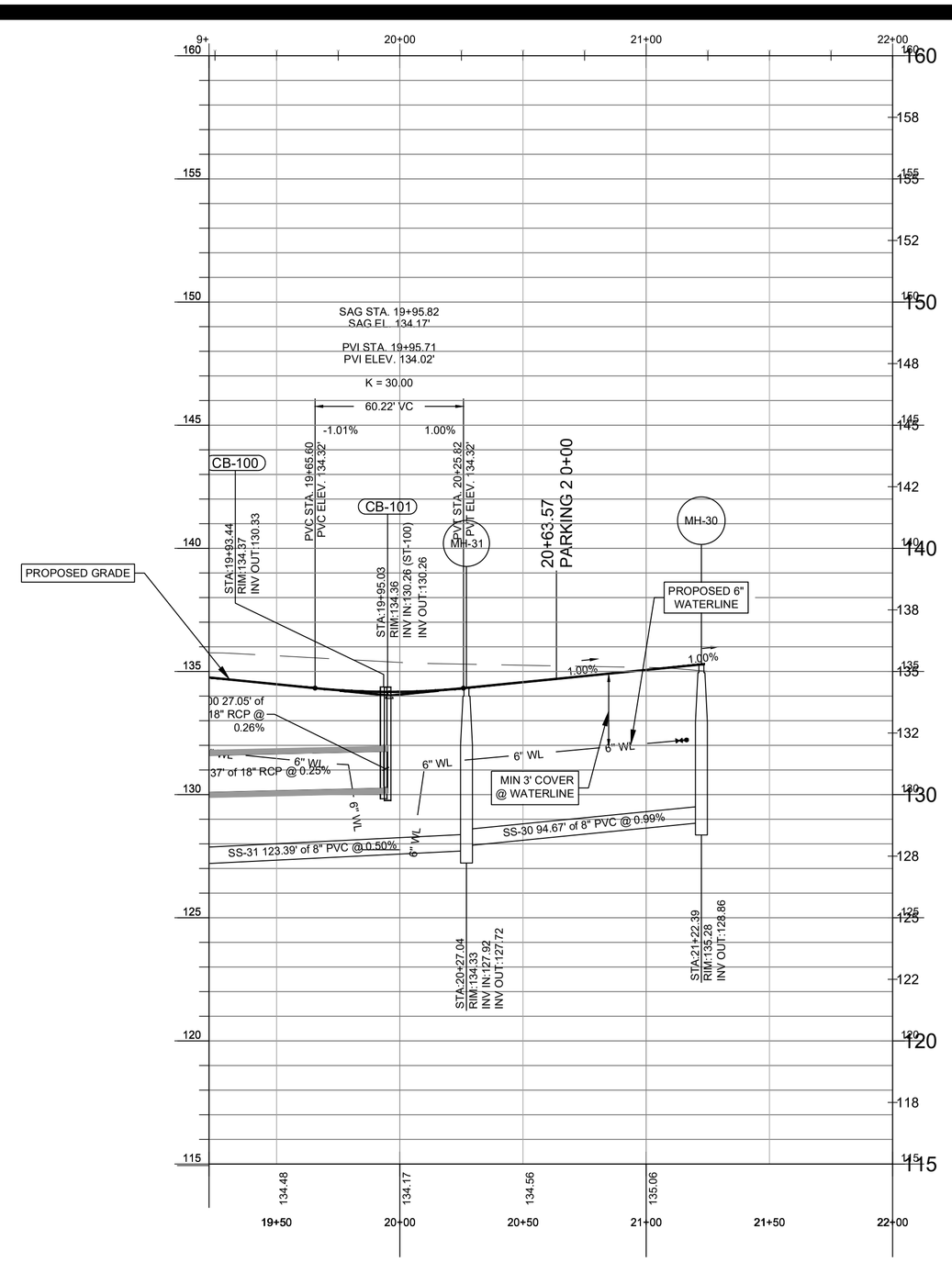
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'F'
STA 10+00 - 19+00

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1"=4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.10



PLAN: STREET 'F'
STA 19+00 - STA 21+23.74



PROFILE: STREET 'F' STA
19+00 - STA 21+23.74

LEGEND

EXISTING		PROPOSED
	PROJECT BOUNDARY	
	ROW	
	EASEMENTS	
N/A	LOT LINE	
6" WL	6" WATERLINE	6" WL
2" WL	2" WATERLINE	N/A
	HYDRANT	
N/A	WATER METER	
N/A	VALVE	
N/A	REDUCER	
N/A	BLOWOFF	
SS	SEWER PIPE	
	MANHOLE	
N/A	CLEANOUT	
	STORM PIPE	

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:51 PM

PRELIMINARY

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-1372
FIRM # C-4743

BECKER MORGAN GROUP

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PLAN & PROFILE
STREET 'F'
STA 10+00 - 19+00

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	1" =4'
DATE	11/01/2023
JOB NO.	
SHEET	C6.10

LEGEND

UNDERSTORY TREE

SHRUB

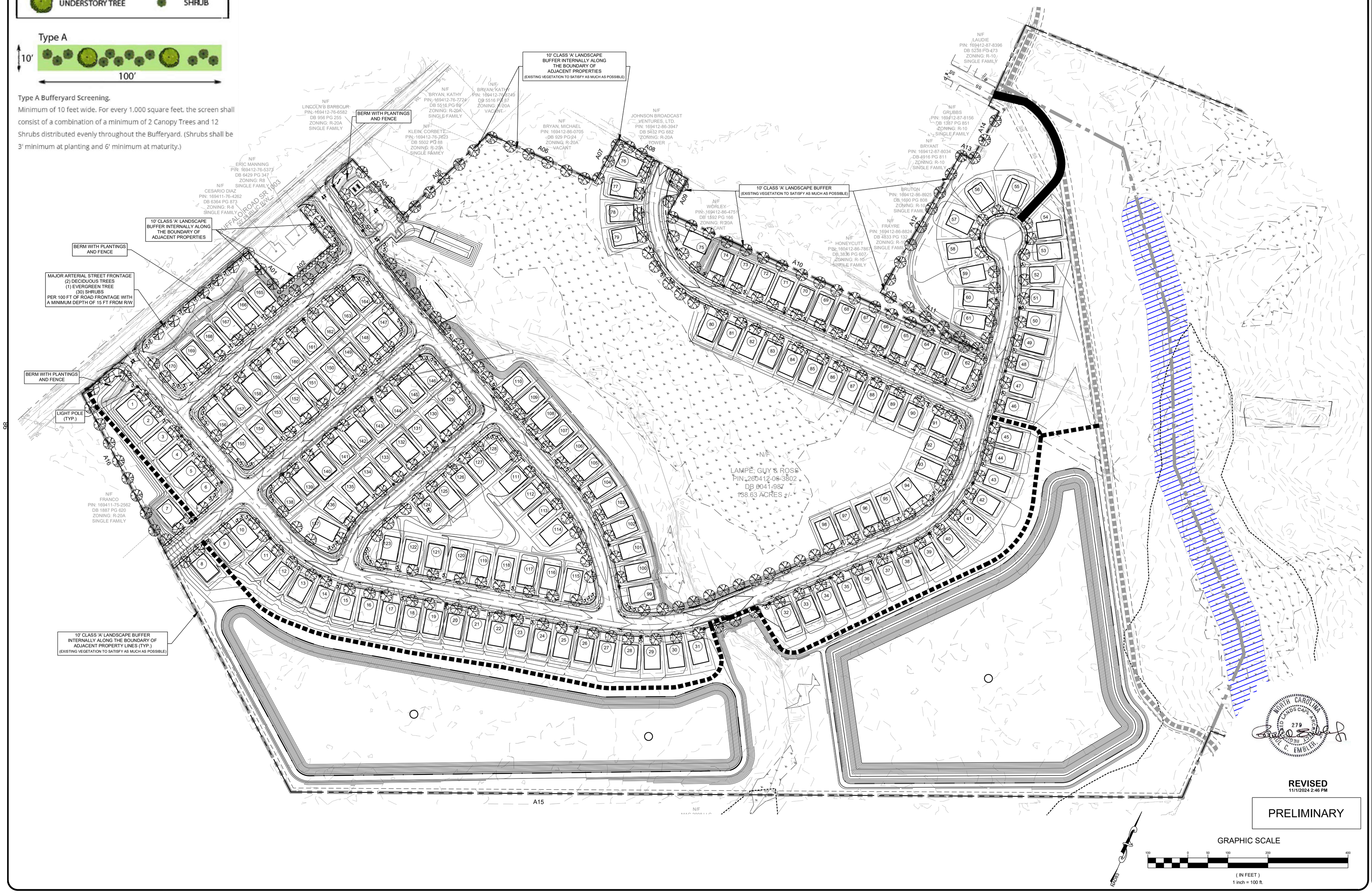
Type A

10'

100'

Type A Bufferyard Screening.

Minimum of 10 feet wide. For every 1,000 square feet, the screen shall consist of a combination of a minimum of 2 Canopy Trees and 12 Shrubs distributed evenly throughout the Bufferyard. (Shrubs shall be 3' minimum at planting and 6' minimum at maturity.)



REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDJUNFO@BECKERMORGAN.COM
919-553-2232
FIRM # C-4743

BECKER MORGAN GROUP

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BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

PRELIMINARY LANDSCAPE PLAN & LIGHTING PLAN

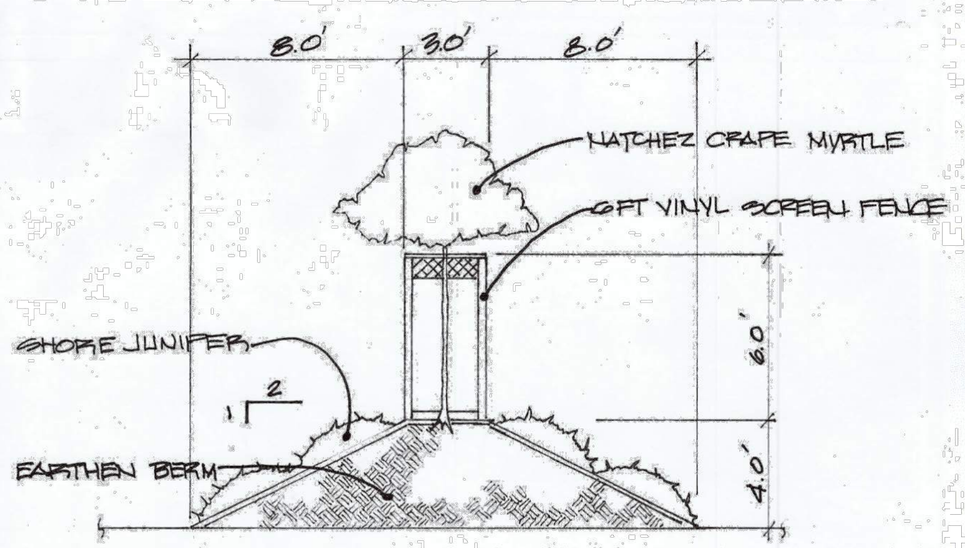
DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	L1.01

LANDSCAPE CALCULATIONS

TYPE OF LANDSCAPE PER CODE	PLANTING REQUIREMENTS			QUANTITY	REQUIRED			PROVIDED		
	LARGE TREE	SMALL TREE	SHRUB		LARGE TREE	SMALL TREE	SHRUB	LARGE TREE	SMALL TREE	SHRUB
ARTERIAL STREET BUFFER YARD	2	1	30	565 LF	11	6	170	11	6	170
(PLANTINGS PER 100 FT BUFFALO ROAD)										
LOCAL STREET BUFFER YARD	2	1								
(PLANTINGS PER 100 FT)										
STREET 'A'				5450 LF	109	55	-	109	55	
STREET 'B'				2400 LF	48	24	-	40	25	
STREET 'C'				1150 LF	23	12	-	18	12	
STREET 'D'				1450	29	15	-	25	16	
STREET 'E'				1050 LF	21	11	-	17	11	
STREET 'F'				2200 LF	44	22	-	39	19	
TYPE "A" BUFFER YARD	2	-	12							
(PLANTINGS PER 100FT)										
A01				125 LF	3	-	15	2	-	12
A02				165 LF	3	-	20	0	-	12
A03				125 LF	3	-	15	0	-	8
A04				190 LF	4	-	23	4	-	24
A05				295 LF	6	-	36	5	-	36
A06				290 LF	6	-	35	6	-	36
A07				120 LF	2	-	14	2	-	12
A08				200 LF	4	-	24	4	-	21
A09				100 LF	2	-	12	2	-	9
A10				850 LF	17	-	102	17	-	102
A11				290 LF	6	-	35	6	-	36
A12				400 LF	8	-	48	8	-	45
A13				30 LF	-	-	0	6	-	6
A14				140 LF	3	-	17	3	-	18
A15				850 LF	17	-	102	17	-	102
A16				400 LF	8	-	48	8	-	48
				TOTAL	**98**	**-**	**546**	**84**	**-**	**527**
FOUDATION PLANTINGS	-	-	3	170 HOUSES			510			510
(PER HOUSE)										
PARING LOT	1	-	6	3 ISLANDS	3		18	3	-	18
(PER ISLAND)										

NOTE:

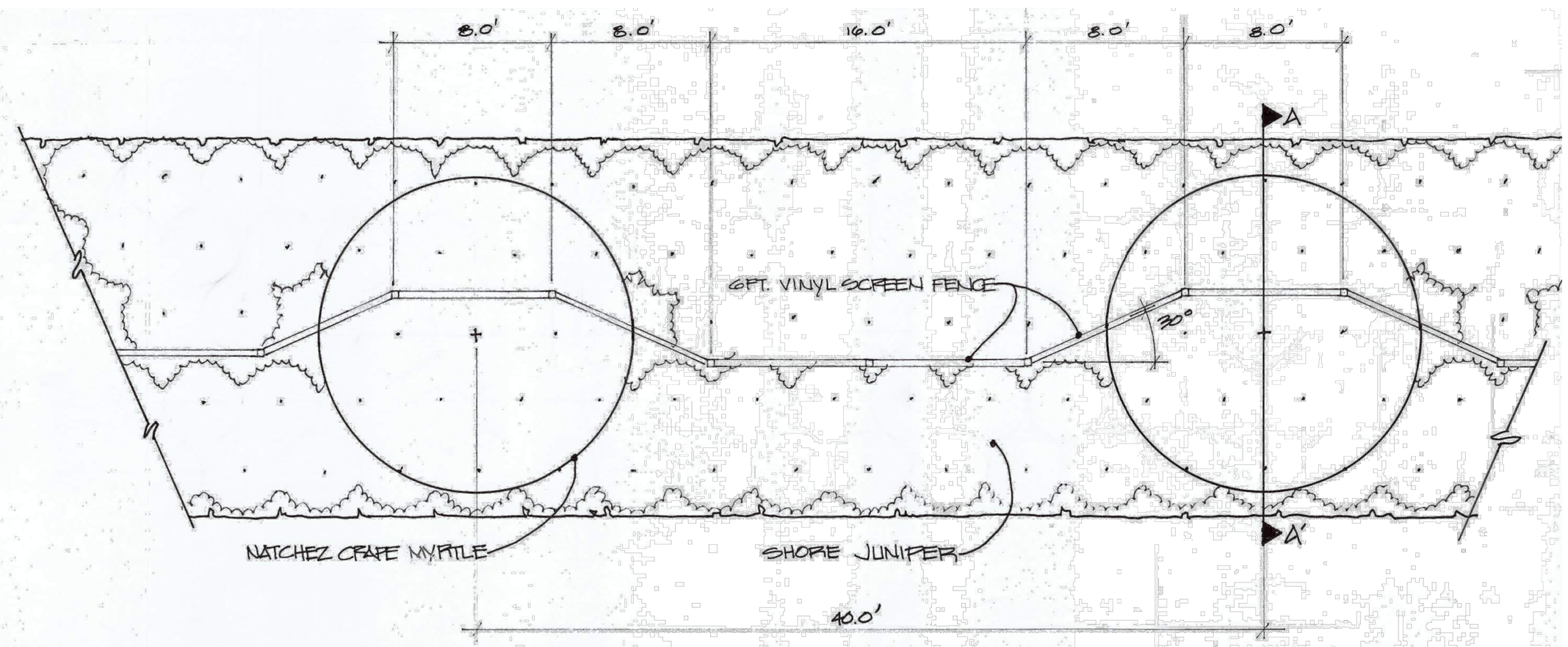
1. ANY PROPOSED LANDSCAPE PLANT MATERIALS THAT CANNOT BE PLANTING IN PROPOSED LOCATIONS SHOWN ON THE PLANS DUE TO CONFLICT WITH UTILITIES, PAVEMENTS, STRUCTURES OR OTHER EXISTING PLANT MATERIALS WILL BE PLANTED IN THE PROPOSED OPEN SPACES SHOWN ON THE PLANS. IT IS THE INTENT OF THE LANDSCAPE PLANTING TO PLANT ALL REQUIRED QUANTITIES OF PLANT MATERIAL WITHIN THE BOUNDRY OF THE SUBDIVISION. TOTAL PLANTS TO BE PLANTED IN OPEN SPACES 53 CANOPY TREES, 23 EVERGREEN TREES AND 19 SHRUBS.
2. IT IS PROPOSED THAT AS MUCH OF THE EXISTING VEGETATION (TREES AND SHRUBS) THAT ARE IN PROXIMITY TO ADJACENT PROPERTIES BE RETAINED AS A NATURAL BUFFER. WHERE THERE IS NOT SUFFICIENT PLANT MATERIAL TO PROVIDE A NATURAL BUFFER IT IS PROPOSED TO PLANT A TYPE "A" BUFFER TO PROVIDE LANDSCAPING TO SCREEN ADJACENT PROPERTIES.
3. TO PROVIDE ADDITIONAL SCREENING AND BUFFERING ALONG BUFFALO ROAD IN ADDITION TO THE ARTERIAL BUFFER YARD PLANTINGS, A LANDSCAPED FOUR FOOT HIGH BERM WILL BE CONSTRUCTED AND WILL INCORPORATE A ORNAMENTAL SCREEN FENCE THE LENGTH OF THE BERM. SEE ATTACHED DETAIL.



SECTION A-A' LANDSCAPE BERM
SCALE: 1/4" = 1'-0"

PLANT LIST

SYMBOL	QUANITY	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	ROOT	COMMENTS
Canopy Trees							
Rm		Acer rubrum	Sunset Red Maple	10' to 12'	4' to 5'	B&B	
Wo		Quercus phellos	Willow Oak	10' to 12'	4' to 5'	B&B	
Bc		Taxodium distichum	Bald Cypress	10' to 12'	4' to 5'	B&B	
Evergreen Trees							
Mp		Ilex x latifolia	Miss Patricia Holly	6' to 8'	3' to 4'	15 gal	
Small Trees							
Cm		Lagerstroemia indica X fauriei	Natchez Crape Myrtle	6" to 8"	3' to 4'	15 gal	
Shrubs							
Bh		Ilex burfordii nana	Dwarf Buford Holly	36" min.	-	7 gal	
Li		Ligustrium lucidium	Japanese privet	36" min.	-	7 gal	
Sj		Juniperus horizontalis x Youngstown		-	15" to 18"	3 gal	



PLAN VIEW LANDSCAPE BERM
SCALE: 1/4" = 1'-0"

REVISED
11/1/2024 2:46 PM

PRELIMINARY

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
ROUINF@BECKERMORGAN.COM
919-553-4232
FIRM # C-4743

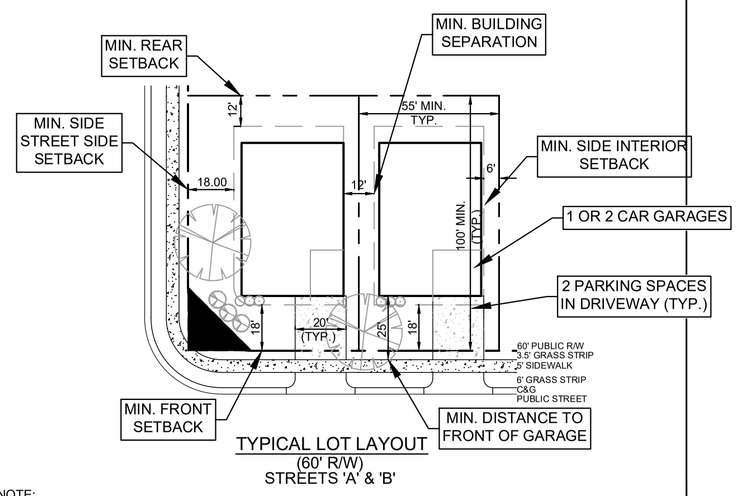
BECKER MORGAN GROUP

ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

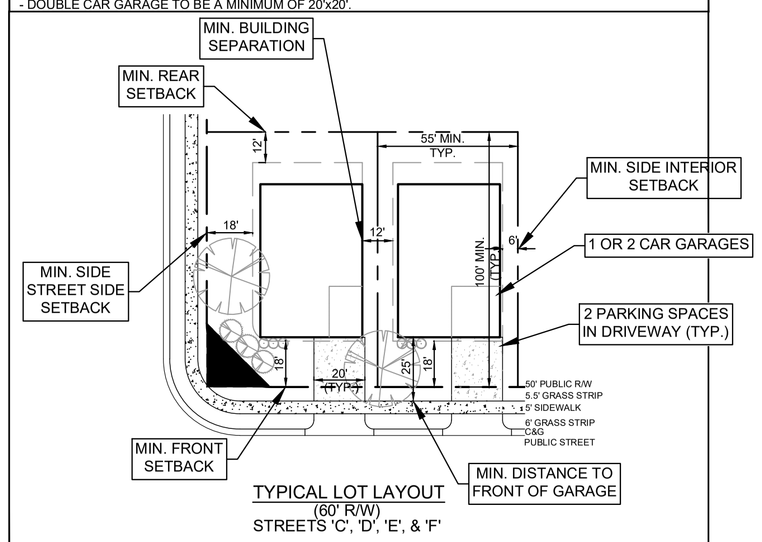
PRELIMINARY
LANDSCAPE DETAILS

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	L1.02



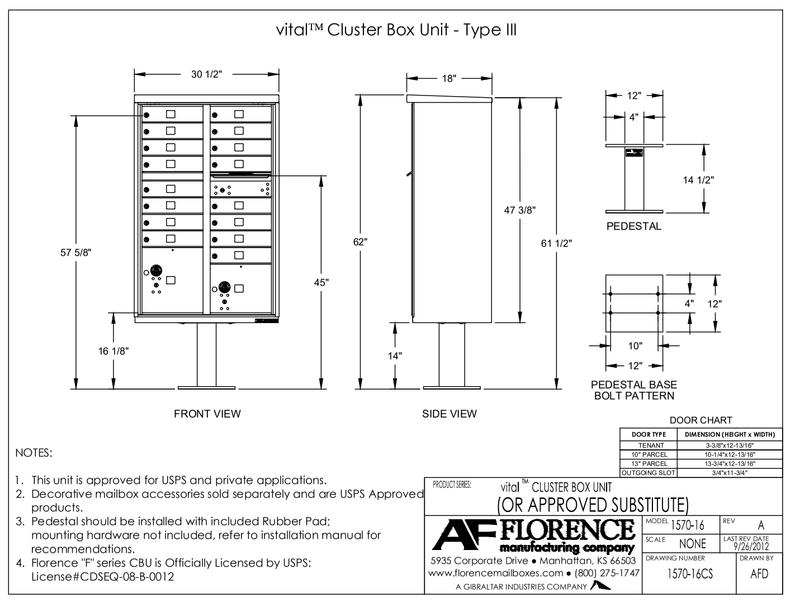
TYPICAL LOT LAYOUT
(60' R/W)
STREETS 'A' & 'B'

NOTE:
- SINGLE CAR GARAGE TO BE A MINIMUM OF 12'x20'
- DOUBLE CAR GARAGE TO BE A MINIMUM OF 20'x20'.



TYPICAL LOT LAYOUT
(60' R/W)
STREETS 'C', 'D', 'E', & 'F'

NOTE:
- SINGLE CAR GARAGE TO BE A MINIMUM OF 12'x20'
- DOUBLE CAR GARAGE TO BE A MINIMUM OF 20'x20'.



CLUSTER MAILBOX UNIT
NOT TO SCALE

MINIMUM BUILDING SETBACKS
FRONT = 18'
SIDE = 6'
REAR = 12'
STREET SIDE 18'
BUILDING SEPARATION = 12'
MINIMUM LOT WIDTH = 55'
MINIMUM LOT DEPTH = 100'

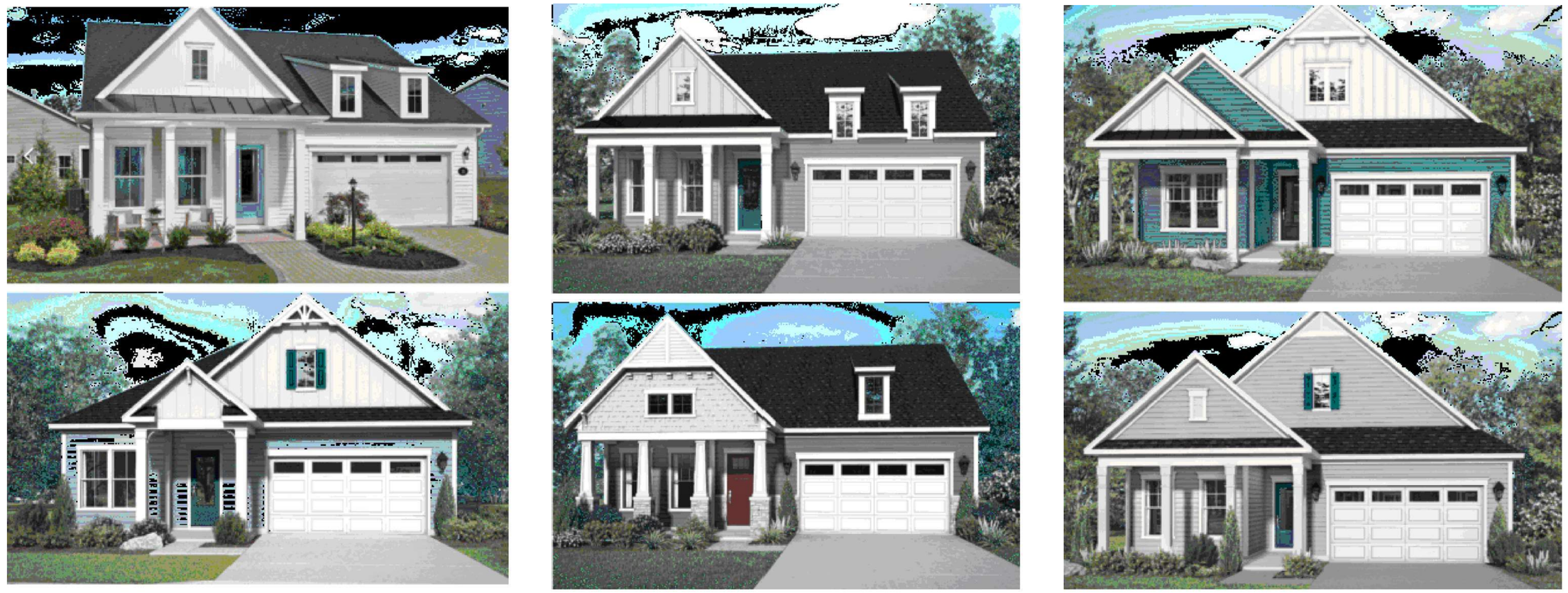
PARKING
1. MINIMUM 1 CAR GARAGE
2. 2 CAR PARKING IN DRIVEWAY
3. MINIMUM 3 CAR PARKING SPACES PROVIDED
4. GARAGE SHALL BE A MINIMUM OF 25' FROM THE BACK OF SIDEWALK.

NOTES
1. MAXIMUM BUILDING HEIGHT = 35'
2. MAXIMUM LOT COVERAGE = 50%
3. MINIMUM LOT SIZE - 5,500 SF
4. TRASH COLLECTION SHALL BE ROLL-OUT TRASH BINS.

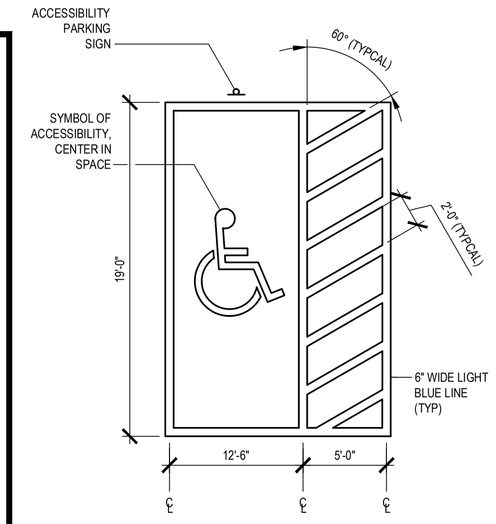
ARCHITECTURAL STANDARDS

- **Foundations**
  - Slab Foundations
- **Siding**
  - All siding must be Hard Siding
  - Must have a minimum of TWO of the following:
    - Lap Siding
    - Shake Siding
    - Board and Batten Siding
    - Masonry
- **True Street Facing Windows**
  - Must have a minimum of ONE of the following:
    - Decorative header
    - Oversized trim
    - Shutters where space allows
- **Garage**
  - Must have an attached garage
  - Must have a minimum of ONE of the following:
    - Decorative header
    - Oversized trim
- **Roofs**
  - Must have a minimum of ONE of the following:
    - Asphalt Shingles
    - Metal allowed as an accent roof over window bay or porch

EXAMPLE ELEVATIONS
NOT TO SCALE

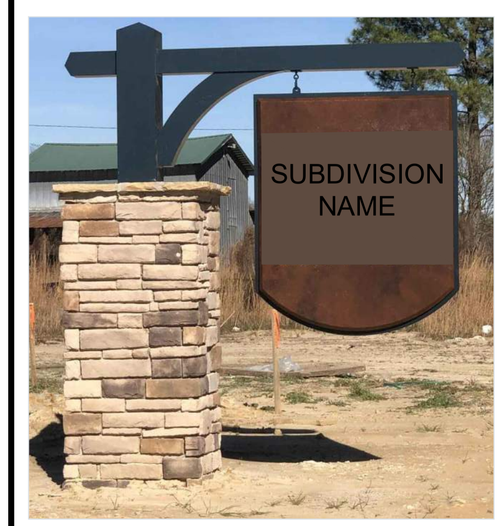


EXAMPLE OF STREET VIEW
NOT TO SCALE



ACCESSIBLE PARKING DETAIL

DECORATIVE LIGHT POST



EXAMPLE SUBDIVISION SIGN
NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

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11/1/2024 2:46 PM

PRELIMINARY

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-243-1332
FIRM # C-4743

BECKER MORGAN GROUP

A&H ADAMS & HODGE ENGINEERING, PC
A DIVISION OF BECKER MORGAN GROUP, INC.

BUFFALO RD SUBDIVISION

TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

REGULATORY STANDARDS

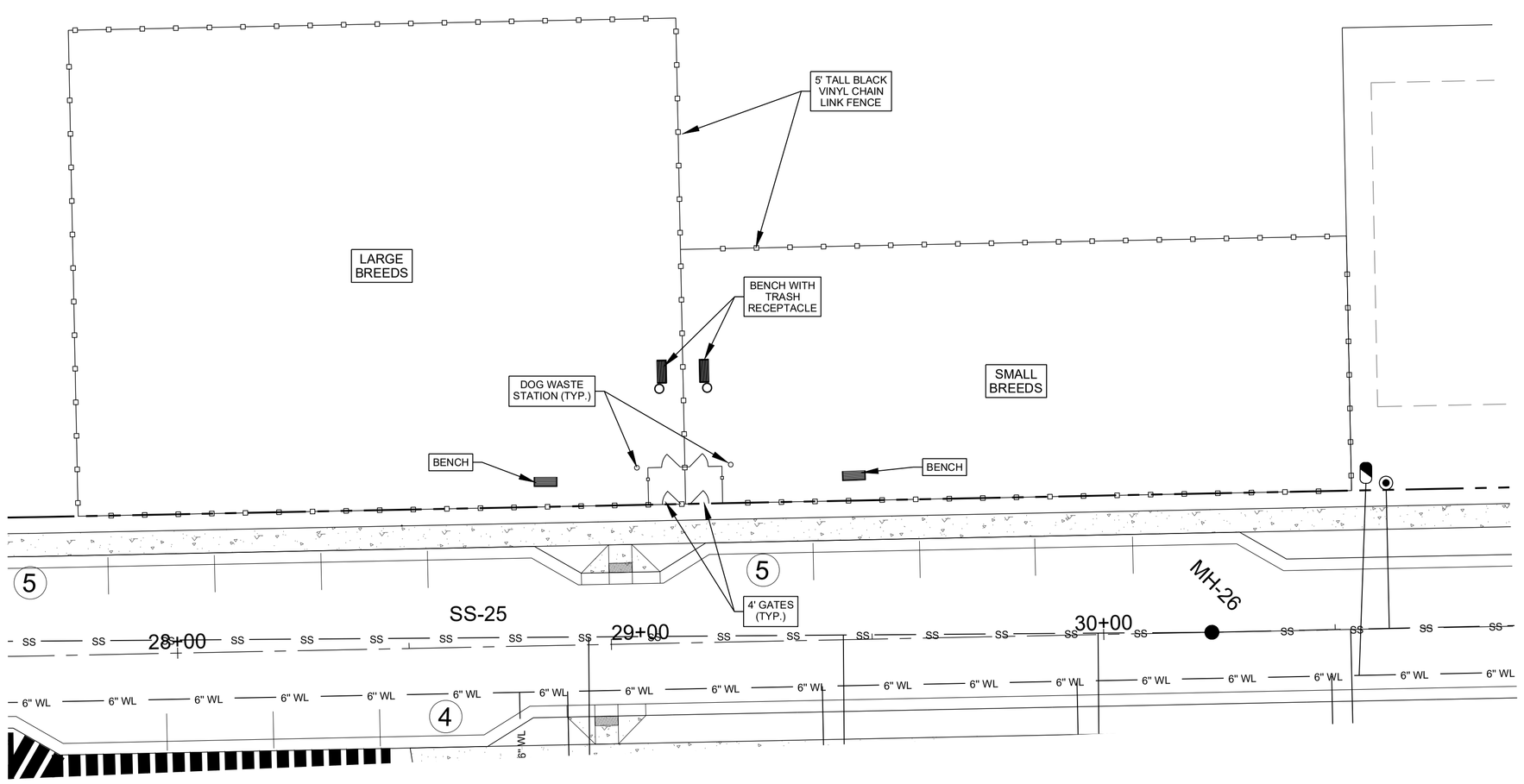
DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	
DATE	11/01/2023
JOB NO.	
SHEET	DT1.00

OPEN SPACE POND TRAIL EXAMPLE

POND FOUNTAIN EXAMPLE

OPEN SPACE PLAY FIELD EXAMPLE

DOG PARK



PARK BENCH EXAMPLE

5' BLACK CHAIN LINK FENCE

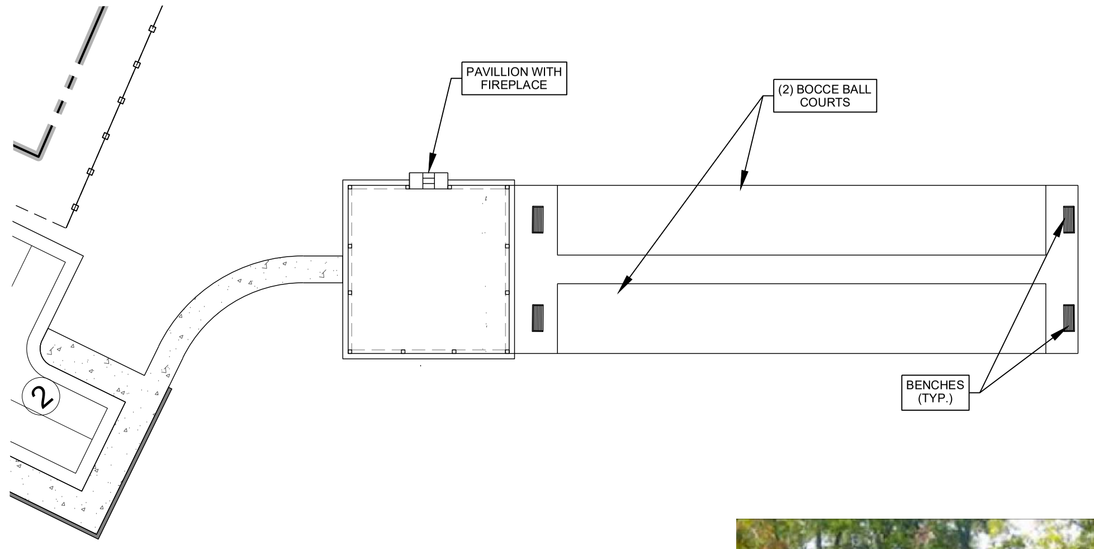
DOG WASTE STATION EXAMPLE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

PAVILION SHELTER & BOCCE BALL COURT



FIREPLACE EXAMPLE

BOCCE BALL COURT EXAMPLE

PAVILION SHELTER EXAMPLE

BENCH EXAMPLE

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

NORTH CAROLINA PROFESSIONAL SEAL 039159 ENGINEER EVA KING

REVISED
11/1/2024 2:46 PM

PRELIMINARY

REVISIONS:

314 EAST MAIN STREET
CLAYTON, NC 27520
RDUINFO@BECKERMORGAN.COM
919-553-4232
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BUFFALO RD SUBDIVISION
TOWN OF SMITHFIELD, JOHNSTON COUNTY, NORTH CAROLINA

AMENITIES

DESIGN	DCA
DRAWN	ADS/APH/BTA
CHECKED	DCA
HORIZONTAL SCALE	SEE GRAPHIC SCALE
VERTICAL SCALE	N/A
DATE	11/01/2023
JOB NO.	
SHEET	DT1.01

November 14, 2024

Stephen Wensman
Planning Director
Johnston County Planning & Zoning
350 E. Market St., PO Box 761
Smithfield, NC 27577

Subject: Preliminary Subdivision Submittal Revision Responses
Buffalo Road Subdivision

Stephen,

Please see for responses from your comments sent November 4th, 2024.

1. The preliminary plat should be consistent with the conditional zoning approval:
   I have added the approved Conditions of Approval to the cover page.

   - Curb and gutter along Buffalo Road was a condition of approval and is not shown on the plans. This has been added to the plans.
   - Within the development, curb and gutter should be standard curbing, not valley curbs. Update the "typical local residential street" details to show standard curbs. The typical sections have been revised to show 30" STANDARD C&G.
   - The driveway apron to the CBU parking lot should be concrete matching the town's standard detail. Show this on the future construction plans, but add a not to the preliminary plat. A note has been added.
   - Provide an exhibit that clearly shows where existing vegetation will remain. Sheet C4.00 has been added to show where the existing vegetation will remain.
   - Show a detail and location on the plans for a 6' high screening fence between proposed residential lots and the Brandford Park boundary. The 6' fence location has been added to the plans. The detail is has been added to sheet DT1.00.
   - Show a detail for decorative street signs. The detail has been added to sheet DT1.00.

2. Other comments:
   - The sidewalk to the left of the dog park should continue over the creek. Sidewalk to the left of the dog park has been added.
   - Should there be a culvert under the road where the "non-buffered water feature" crosses Street A? A culvert has been added at Street A where the non-buffered feature is shown.
   - Please provide proposed street names. The client is working on the proposed street names. We should have them prior to the Town Council public hearing.
   - Can the drainage easement be moved off of lot 61? We have looked into this, and the easement cannot be moved.

- I will be discussing with the town engineer whether the SCMs meet the town standards for access. Noted
- Provide draft HOA declarations for the Town Attorney review. The client is currently working on this with their lawyer. This will be completed prior to final plat. Please add as a condition.
- The landscape plan should be updated for the construction submittal with the correct plan counts and plants identified. Noted.
- Please look at the Rezoning Conditions and address as many as possible at this time. There should be some indication on the preliminary plat about the park dedication the open space at final plat.
  We believe we have addressed as many rezoning conditions as we can at this time. The indication of the park dedication has been added to the preliminary plat.
- Be sure to provide a phasing plan.
  Sheet C2.02 has been added to show the phasing map.

If you have any questions or comments, please contact us.

Sincerely,

Amy D. Stancil
astancil@beckermorgan.com
919-812-2654

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

DELIVERY VIA EMAIL

November 26, 2024

Stephen Wensman
Planning Director
Town of Smithfield
350 East Market Street
Smithfield, NC 27577

COUNTY: Johnston

SUBJECT: **NCDOT Review of Proposed Buffalo Road Subdivision TIA**

Dear Mr. Wensman,

Highway Division Four (Division) has reviewed the Traffic Impact Analysis (TIA) for the subject development and offers the following comments. All requirements or recommendations included herein are based on current Department policies. **This review should not be mistaken for approval of the driveway permit, design/construction plans, or final plat.** A driveway permit must be obtained prior to construction. All design aspects of any submitted plans shall comply with current NCDOT Standard Specifications for Roads and Structures and Policy on Street and Driveway Access to North Carolina Highways.

GENERAL COMMENTS

- Any roadway improvements and right-of-way dedication necessary to accommodate the road construction shall be the responsibility of the owner/developers. All required ROW shall be dedicated as public ROW in the final plat. Installation of right turn lanes will typically require at least 15' of dedication.
- Lane Closures for required improvement construction will only be permitted under restricted hours due to heavy traffic volumes in the vicinity of the proposed development. These restrictions will be determined during the driveway permitting application and approval.
- These conditions are based on current traffic volumes and projected growth for the study area. If the proposed build out year for this development, as stated in the TIA, varies more than one year an addendum or revised TIA may be required.
- Improvements being identified by a TIA for an adjacent development does not dismiss or release this development from installation and/or participation of these improvements. It is recommended that the Developers coordinate this installation with other committed developments. The Department will not participate in determining the value of each individual contribution to this roadway improvement.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS | DIV. 4 DIST. 3
67 JR RD SUITE 700
SELMA, NC 27576

Telephone: (919) 739-5300
Fax: (919) 731-2017
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
67 JR RD SUITE 700
SELMA, NC 27576

- Any additional improvements that are constructed after the completion of this TIA must be maintained while constructing the improvements required by this letter.

INTERSECTIONS / SITE ACCESSES AND ASSOCIATED IMPROVEMENTS

Buffalo Road at North Site Driveway:

- North Site Driveway
  - Two-lane cross-section; one ingress, one egress
  - 100' Internal Protected Stem
- Buffalo Road
  - NB Buffalo Road – 50' Right-Turn Lane with appropriate deceleration and taper length.
  - SB Buffalo Road – 75' Left-Turn Lane with appropriate deceleration and taper length.

Buffalo Road at South Site Driveway:

- South Site Driveway
  - Two-lane cross-section; one ingress, one egress
  - 100' Internal Protected Stem
- Buffalo Road
  - NB Buffalo Road – 50' Right-Turn Lane with appropriate deceleration and taper length.
  - SB Buffalo Road – 50' Left-Turn Lane with appropriate deceleration and taper length.

Please note additional development may require additional improvements in the future. Feel free to contact me if you have any additional questions or concerns.

Sincerely,

DocuSigned by:
Jennifer K. Collins
F47E03DD04B84F2...

Jennifer K. Collins
District Engineer

cc: Andy Brown, PE – Acting Division Engineer
Paul Marak, PE - Division Traffic Engineer
Doumit Y. Ishak, Congestion Mgmt. Regional Engineer
Charles Sorrell – Congestion Management Project Design Engineer
Kevin Dean, PE – Kimley-Horn
Driveway Permit File

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J.R. "JOEY" HOPKINS
SECRETARY

November 15, 2024

Buffalo Road Subdivision

Traffic Impact Analysis Review Report

Congestion Management Section

TIA Project: SC-2024-192
Division: 4
County: Johnston

Clarence B. Bunting, P.E. Regional Engineer
Madonna Saleh, Design Engineer

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
TRANSPORTATION MOBILITY & SAFETY DIVISION
TRAFFIC MANAGEMENT UNIT
1561 MAIL SERVICE CENTER
RALEIGH, NC 27699-1561

Telephone: (919) 814-5000
Fax: (919) 771-2745
Customer Service: 1-877-368-4968

Website: www.ncdot.gov

Location:
750 N. GREENFIELD PARKWAY
GARNER, NC 27529

Buffalo Road Subdivision		
SC-2024-192	Smithfield	Johnston County

Per your request, the Congestion Management Section (CMS) of the Transportation Mobility and Safety Division has completed a review of the subject site. The comments and recommendations contained in this review are based on data for background conditions presented in the Traffic Impact Analysis (TIA) and are subject to the approval of the local District Engineer's Office and appropriate local authorities.

Date Initially Received by CMS	10/17/24	Date of Site Plan	06/30/23
Date of Complete Information	10/17/24	Date of Sealed TIA	10/17/24

Proposed Development

The TIA assumes the development is completed by 2028 and consists of the following:

Land Use	Land Use Code	Size
Single-Family Detached Housing	210	170 d.u.

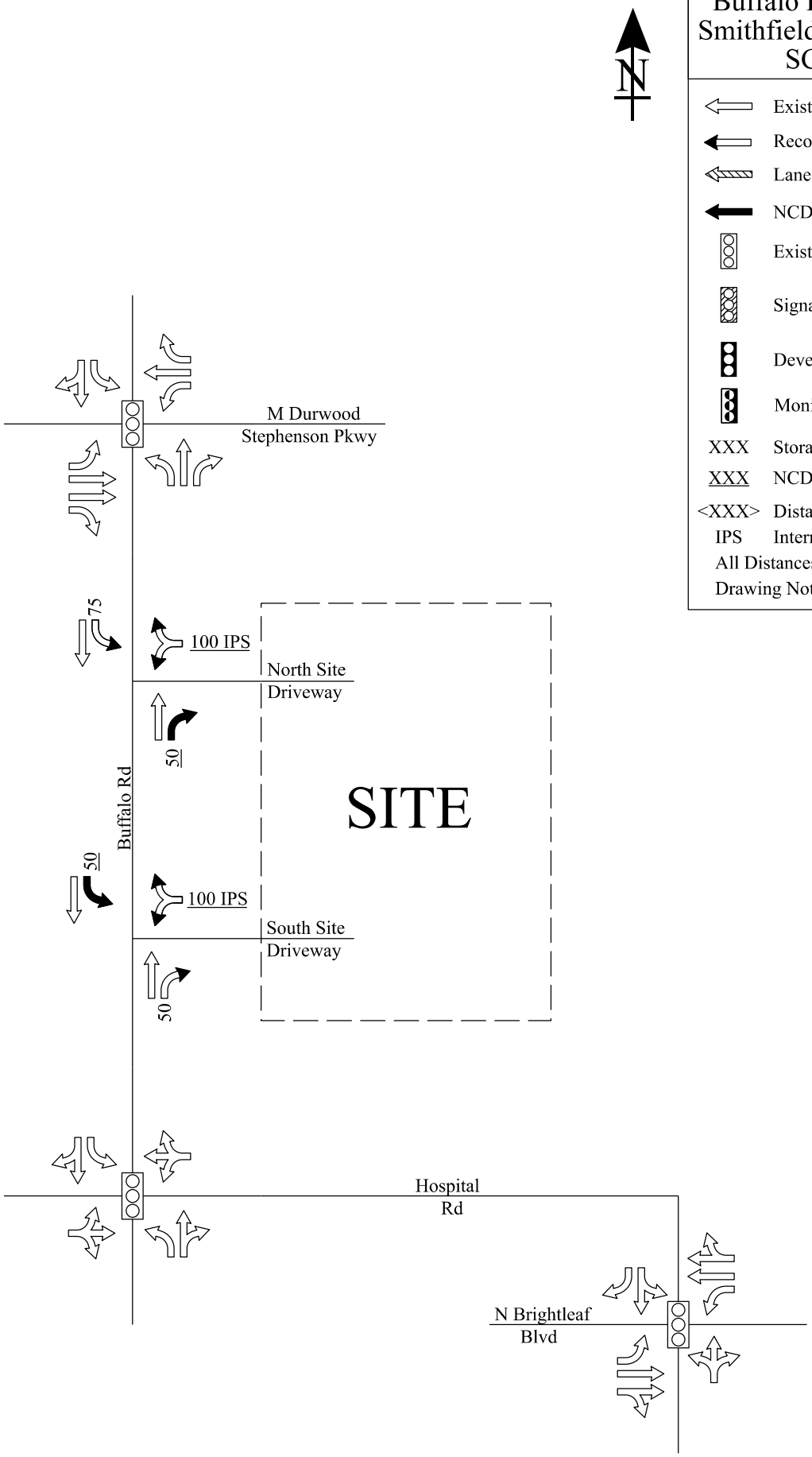
Trip Generation - Unadjusted Volumes During a Typical Weekday			
	IN	**OUT**	**TOTAL**
AM Peak Hour	30	91	121
PM Peak Hour	103	61	164
Daily Trips			1,644

General Reference

For reference to various documents applicable to this review please reference the following link: ***https://connect.ncdot.gov/resources/safety/Pages/Congestion-Management.aspx***

Once the driveway permit has been approved and issued, a copy of the final driveway permit requirements should be forwarded to this office. If we can provide further assistance, please contact the Congestion Management Section.

Buffalo Road Subdivision
Smithfield, Johnston County
SC-2024-192



Existing Laneage
Recommended Laneage
Laneage Built By Others
NCDOT Recommendation
Existing Signal
Signal Proposed By Others
Developer Proposed Signal
Monitor for Signal
XXX Storage
XXX NCDOT Recommended Storage
<XXX> Distance Between Intersections
IPS Internal Protected Stem
All Distances in Feet
Drawing Not to Scale

S-24-07 Buffalo Road Subdivision Adjacent Properties List					
ParcelID	**Name1**	**Name2**	**Address1**	**Address2**	**CityStateZip**
14A03007	MAC 2008 LLC		2790 MARRIOTTSVILLE RD		MARRIOTTSVL, MD 21104-1626
15004021J	DAVIDSON, SAMANTHA		9 RUNNEYMEDE PL		SMITHFIELD, NC 27577-4811
14057013B	VESTA ENTERPRISES, INC.			PO BOX 1457	SMITHFIELD, NC 27577-1457
14057010P	MORGAN, GARNELL A.	MORGAN, LISA	91 BROOKWOOD DR		SMITHFIELD, NC 27577-4864
14057010O	DIMSDALE, B KEITH	DIMSDALE, ANGELA W	92 BROOKWOOD DRIVE		SMITHFIELD, NC 27577-4863
14057010N	ASC REALTY LLC		PO BOX 883		CLAYTON, NC 27528-0883
14057154S	PETRY, MAHLEN D	PETRY, BRENDA W	63 WHITE OAK DR		SMITHFIELD, NC 27577-4806
14057154R	G2 PROPERTIES I, LLC		402 DIXIE DR		SELMA, NC 27576-2308
14057154P	DOWNS, FAYE D.		66 WHITE OAK DR		SMITHFIELD, NC 27577-4807
14057154N	BEGEAL, JEFFREY PAUL		62 WHITE OAK DR		SMITHFIELD, NC 27577-0000
14075033	JOHNSTON COUNTY BOARD OF	EDUCATION		PO BOX 1336	SMITHFIELD, NC 27577-0000
14075029B	CAREY, JORDAN	CAREY, ASHLEY	105 PARKWAY DR		SMITHFIELD, NC 27577-8332
14075038G	LAUDIE, RICHARD L.	LAUDIE, PATSY E.	203 PARKWAY DR		SMITHFIELD, NC 27577-8334
14075031C	GRUBBS, JAMES FRANKLIN	GRUBBS, KAREN M	101 COBBLESTONE CT		SMITHFIELD, NC 27577-7102
14075038I	BRYANT, WANDA B.		103 COBBLESTONE CT		SMITHFIELD, NC 27577-7102
14075038O	BRUTON, EUGENE	BRUTON, SHEILA H	105 COBBLESTONE CT		SMITHFIELD, NC 27577-7102
14075038P	FRAYRE, MARIBEL		107 COBBLESTONE CT		SMITHFIELD, NC 27577-7102
14075038R	HONEYCUTT, LARRY D	HONEYCUTT, MARIA C	109 COBBLESTONE COURT		SMITHFIELD, NC 27577-0000
14K09007	WORLEY, RONALD GLENN	WORLEY, MICHAEL LYNN	108 QUAIL RUN		SMITHFIELD, NC 27577-0000
14075035	STEVEN, JOSE JR.	GORILLA BROADCASTING NC LLC	1270 BUFFALO RD		SMITHFIELD, NC 27577-7443
14075037	BRYAN, MICHAEL D		905 OCEAN PINES CT		N MYRTLE BCH, SC 29582-4498
14A03011A	LAMPE, GUY L.	LAMPE, ROSS W.		PO BOX 608	SMITHFIELD, NC 27577-0608
14075038B	BRYAN, KATHY M.		905 OCEAN PINES CT		N MYRTLE BCH, SC 29582-4498
14A03001	AE&E PROPERTIES, LLC		5529 NC HIGHWAY 39		SELMA, NC 27576-8529
14A03002	BARBOUR, B LINCOLN		1222 BUFFALO RD		SMITHFIELD, NC 27577-7443
14A03004A	MANNING, ERIC		1148 BUFFALO RD		SMITHFIELD, NC 27577
14A03004	DIAZ, CESARIO	PERAZA, DINORA S CORDOVA	1136 BUFFALO RD		SMITHFIELD, NC 27577
14001021	SMITHFIELD LAND GROUP, LLC		2075 JUNIPER LAKE RD		WEST END, NC 27376-8919

Request for Town Council Action

Public Hearing: ANX-24-02
Date: 1/21/25

Subject: Contiguous Annexation Petition
Department: Planning & Administration Departments
Presented by: Planning Director - Stephen Wensman
Presentation: Public Hearing

Issue Statement

Smithfield Growth LLC has submitted a petition to voluntarily annex 85.85 acres to the Town of Smithfield.

Financial Impact

The annexation will bring the Local 70 residential development project into the Town's corporate limits adding to the town's tax base

Action Needed

The Town Council is asked to consider adoption of Ordinance No. 523-2025 extending the Corporate Limits of the Town of Smithfield. This can be done immediately or within six months.

Recommendation

Consider adopting Ordinance No. 523-2025 Extending the Corporate Limits of the Town of Smithfield.

Approved: ☑ Town Manager ☐ Town Attorney

Attachments:

1. Staff Report
2. Annexation Petition
3. Ordinance No. 523-2025
4. Legal Advertisement
5. Certificate of Sufficiency
6. Annexation Plat Maps

Staff Report

Public Hearing: ANX-24-02
Date: 1/21/25

OVERVIEW:

Smithfield Growth LLC has submitted a petition to voluntarily annex 85.85 acres to the Town of Smithfield, Johnston County Tax ID#14057011Y, in conjunction with its development of the property into the Local 70 Residential Development consisting of 209 detached single-family residential lots, 94 attached single-family townhouses and 324 apartment units in the Local 70 PUD Conditional District. The future development will include new public streets, sidewalks, trails, water and sewer lines, electrical service and a pump station.

The property to be annexed is part of the larger Local 70 PUD Conditional District that includes future commercial/industrial uses that are not proposed for development or annexation at this time (north and east of M. Durwood Stephenson Parkway).

The area considered for annexation is fully within the Town's Fire Protection District.

PAST ACTIONS ON PETITION:

On December 17, 2024, the Town Council adopted Resolution #761 (22-2024) directing the Town Clerk to investigate the sufficiency of the petition. The petition has been found to be sufficient.

On January 7, 2024, the Town Council adopted a resolution setting the date for the Public Hearing for January 21, 2024.

ANALYSIS:

Utilities. Smithfield sewer and water and electric utilities which will be extended into the site by the developer to service future residential development. A pump station is planned for the northwest corner of the site.

Police. The Town Police Department will provide police protection in the area.

Fire Protection. The area is already within the Town's fire district.

Public Works. Trash and yard pickup services will be provided to the new single-family and townhouse lots in the development, and the new public streets and sidewalks will need to be maintained.

Code Enforcement. Code enforcement will expand into that area, however, the future HOA will likely address most issues.

FINDINGS:

Pursuant to NCGS 160A-58.2, If the council then finds and determines that:

i. the area described in the petition meets all of the standards set out in G.S. 160A-58.1(b),
ii. the petition bears the signatures of all of the owners of real property within the area proposed for annexation (except those not required to sign by G.S. 160A-58.1(a)),
iii. the petition is otherwise valid, and
iv. the public health, safety and welfare of the inhabitants of the city and of the area proposed for annexation will be best served by the annexation,

then council may adopt an ordinance annexing the area described in the petition. The ordinance may be made effective immediately or on any specified date within six months from the date of passage.

ACTION REQUESTED:

Pursuant to NCGS 160A-58.2, the Town Council shall accept public comments and consider adopting Ordinance No. 523 - 2025 extending the Corporate Limits of the Town of Smithfield. The Ordinance may be adopted immediately or within six months.

The Town Council has three options:

1. Approve the contiguous annexation petition and adopt Ordinance No. 523-2025
2. Table the decision for no longer than 6 months
3. Deny the annexation petition.

Town of Smithfield
Planning Department
350 E. Market St. Smithfield, NC 27577
P.O. Box 761, Smithfield, NC 27577
Phone: 919-934-2116
Fax: 919-934-1134

Annexation Petition

Submittal Checklist

Please include all of the following (check off). If any information is missing from the application package, you will be asked to complete the application and re-submit the petition, so please check the list below carefully before you submit:		
☒	**Electronic Word document of the written metes and bounds** must be e-mailed to: Stephen.Wensman@smithfield-nc.com or Mark.Helmer@smithfield-nc.com.	
☒	**Boundary Survey to be recorded upon approval or an existing recorded plat** showing the above written metes and bounds description of the property to be annexed. This document must be submitted electronically in .pdf format.	
☐	**Copy of Approved Preliminary Site Plan or Final Site Plan** showing Town Permit number (Z-__-__, etc.) **or**	**Copy of Subdivision Plat** submitted for lot recording approval with Town file number (S-____-___, etc.)
☐	**Projected Market Value of Development** at build-out (land and improvements).	
☐	**General Annexation Area Data:** Linear feet of public streets, total annexation area acreage, number of proposed residential units or square footage of commercial space, type of utility connections involved, specific land uses proposed.	
☐	**This application form** completed, dated and signed by the property owner(s) and attested **submitted by the deadlines.**	
Required, but often missing information. Please make sure to include the following:		
☐	**Correct Parcel Identification Number(s) (PIN).** Call Johnston County Geographic Information Services at 919-989-5153, if there is any question about the parcel identifier. **This is very important.** Please indicate if the property being requested for annexation is only a portion of an existing parcel.	
☐	**Owner's Signatures and Date of Signatures.** See page 3 of this application. All real property owners must sign the application, and the date of signature MUST be filled in!	
☐	**Corporate Seal** for property owned by a corporation.	
☐	Rezoning Application, if the property is currently outside Town of Smithfield.	

Annexation Petition

Submittal Deadlines

Petitions for annexation are accepted by the Town of Smithfield Planning Department at any time. There is no fee required for submittal of an annexation petition. **The annexation will become effective immediately upon adoption of the annexation ordinance at the scheduled public hearing unless notified otherwise by the Town Clerk.**

(The Town of Smithfield reserves the right to make exceptions to this general processing schedule when necessary.)

Summary Information / Metes and Bounds Descriptions

Development Project Name Smithfield Growth, LLC		
Street Address 1600 Colon Rd Sanford, NC 27330		
Town of Smithfield Subdivision approval # (S-_____-_____) or	**Building Permit Transaction #** _____ or	**Site Plan approval # for multi-family** (SP-_____-_____-_____)
Johnston County Property Identification Number(s) list below		
P.I.N. 260410-47-7462	**P.I.N.**	**P.I.N.**
P.I.N.	**P.I.N.**	**P.I.N.**
Acreage of Annexation Site 85.85 +/-	**Linear Feet of Public Streets within Annexation Boundaries** 0	
Annexation site is requesting Town of Smithfield	Water and/or Sewer Yes	
Number of proposed dwelling units 627		

Type of Units:	**Single Family** 209	**Townhouse** 94	**Condo** 0	**Apartment** 324

Building Square Footage of Non-Residential Space
Specific proposed use (office, retail, warehouse, school, etc.)
Projected market value at build-out (land and improvements) $
Person to contact if there are questions about the petition
Name Corey Mabus
Address 1600 Colon Rd Sanford, NC 27330

Phone 910-728-5714	**Fax #** n/a	**Email** corey@carolinacommercialnc.com

Annexation Petition

State of North Carolina, County of Johnston, Petition of Annexation of Property to the Town of Smithfield, North Carolina

Part 1 The undersigned, being all the owners of the real property described in this application respectfully request the annexation of said property to the Town of Smithfield , North Carolina. **The petitioners understand and agree that all streets and utilities within the annexed area will be constructed and installed by the developer according to the Unified Development Ordinance and any utilities that must be extended to the annexed area are the responsibility of the developers or successive property owners.** The property to be annexed is:

☒	**Contiguous** to the present corporate limits of the Town Of Smithfield, North Carolina, or
☐	**Not Contiguous** to the municipal limits of the Town of Smithfield, North Carolina, not closer to the limits of any other municipality and is located within three miles of the municipal limits of the Town of Smithfield, North Carolina (pursuant to Chapter 989 of the Sessions Law of North Carolina, 1967) ☐ ☐

Part 2 NC General Statutes require petitioners of both contiguous and satellite annexations to file a signed statement declaring whether vested rights have been established in accordance with G.S.160A-385.1 or 153A-344.1 for properties subject to the petition.

Do you declare such vested rights for the property subject to this petition? Yes (No)

If yes, please submit proof that vested rights have been granted by governing board. I hereby declare that my failure to disclose existence of a vested right terminates any vested right previously acquired for this property.

Signed this 5 day of November, 20 24 by the owners of the property described in Section C.

Owner's Signature(s)

Signature [signature] Date 11/5/2024

Signature _____ Date _____

Signature _____ Date _____

Signature _____ Date _____

Corporate Seal

Print owner name(s) and information

Name W. Carter Keller Phone 919-776-4641
Address 1600 Colon Road, Sanford, NC 27330

Name _____ Phone _____
Address _____

Name _____ Phone _____
Address _____

Name _____ Phone _____
Address _____

Above signature(s) attested by

Received by the Town of Smithfield, North Carolina, this 6th day of NOVEMBER 20 24, at a Council meeting duly held.
Signature of Town Clerk _____

TOWN OF SMITHFIELD
North Carolina

ORDINANCE NO. 523-2025 TO EXTEND THE CORPORATE LIMITS OF THE TOWN OF SMITHFIELD

WHEREAS, the Town Council has been petitioned under NCGS 160A-31 to annex the area described below; and

WHEREAS, a public hearing on the question of this annexation was held in the Smithfield Town Hall Council Chamber located at 350 East Market Street, Smithfield, North Carolina at approximately 7:00 pm on January 21, 2025, after due notice; and

WHEREAS, the Town Council finds that the petition meets the requirements of NCGS 160A-31.

NOW THEREFORE BE IT ORDAINED by the Town Council of the Town of Smithfield that:

Section 1. By virtue of the authority granted by NCGS 160A-31, the following described contiguous property owned by the Town of Smithfield is hereby annexed and made a part of the Town of Smithfield effective immediately.

The legal description of the area proposed for annexation is described as follows:
Beginning at an existing right of way monument, said monument being located in the southern right of way of M. Durwood Stephens Parkway (Public right of way width varies); Thence along said M. Durwood Stephens Parkway southern right of way the following courses and distances: 1) S 89°34'03" E 377.15 feet to an existing right of way monument, said monument having NAD 83 (2011) Coordinates of N: 648,650.44 and E: 2,204,096.63; 2) with a curve to the right, having a radius of 1,850.00 feet, an arc length of 1,517.35 feet and a chord bearing and distance of, S 65°30'42" E 1,475.17 feet to an existing right of way monument, said monument having NAD 83 (2011) Coordinates of N: 648,038.97 and E: 2,205,439.11; 3) with a curve to the right, having a radius of 1,850.00 feet, an arc length of 1,408.41 feet and a chord bearing and distance of, S 20°19'49" E 1,374.64 feet to an existing right of way monument; 4) S 03°02'35" W 338.37 feet to an existing 1" iron pipe, said iron pipe being located in said M. Durwood Stephens Parkway and being the northeast corner of Wal-Mart Real Estate Business Trust, Id No: 14057012D (Deed Book 1751, Page 775); Thence leaving said M. Durwood Stephens Parkway and along the northern line of said Wal-Mart Real Estate Business Trust, N 89°09'23" W 1,023.53 feet to an existing ½" iron pipe, said iron pipe being the northwest corner of said Wal-Mart Real Estate Business Trust and being a point in the eastern line of Tanisha C. Medina, Id No: 14074002D (Deed Book 6015, Page 691); Thence leaving said Wal-Mart Real Estate Business Trust and along the eastern of said Tanisha Medina, N 00°41'34" E 63.92 feet to an existing ½" iron in concrete, said iron being the northeast corner of said Tanisha Medina; Thence leaving and along said Tanisha Medina and along the northern line of Vu Nguyen, Id No: 14074002E (Deed Book 3072, Page 971) and Booker Dairy Homeowners Association, Id No: 14074002M (Deed Book 3274, Page 19), N 89°40'00" W 764.38 feet to an existing axle, said axle being in the northern line of said Booker Dairy Homeowners Association and being the southeast corner of Jose Benitez and Jenny Benitez, Id No: 14057016 (Deed Book 5304, Page 733); Thence leaving said Booker Dairy Homeowners Association and along the eastern line of said Benitez, N 01°29'10" E 239.09 feet to an existing 1" iron pipe, said iron pipe being the northeast corner of said Benitez and being the southeast corner of Thomas E. Sullivan and Shirley P. Sullivan, Tanya S. Mustgrave and Shannon S. Haywood, Id No: 14057016A (Deed Book 5424, Page 469); Thence leaving said Benitez and along said Sullivan, Mustgrave and Haywood (Id No: 14057016A) eastern line, N 00°53'22" E 236.70 feet to an existing 1" iron pipe, said iron pipe being the northeast corner of said Sullivan,

Mustgrave and Haywood (Id No: 14057016A); Thence along said Sullivan, Mustgrave and Haywood northern line and along Thomas E. Sullivan Shirley P. Sullivan, Tanya S. Mustgrave and Shannon S. Haywood, Id No: 14057015 (Deed Book 5424, Page 472), N 89°40'12" W 468.72 feet to an existing 1" iron pipe, said iron pipe being the northwest corner of said Sullivan, Mustgrave and Haywood (Id No: 14057015) and being located in the eastern right of way of Booker Dairy Road (Public right of way width varies); Thence leaving said Sullivan, Mustgrave and Haywood (Id No: 14057015) and along said Booker Dairy Road eastern right of way the following courses and distances: 1) N 00°01'45" W 731.46 feet to an existing right of way monument; 2) S 89°58'21" E 19.66 feet to an existing right of way monument; 3) N 00°10'53" W 216.42 feet to an existing 1" iron pipe, said iron pipe being located in said Booker Dairy Road eastern right of way and being the southwest corner of Elizabeth Cortes Jaurez and Juan Manuel Perez, Id No: 14057013 (Deed Book 6409, Page 895); Thence leaving said Booker Dairy Road and along the southern line of said Juarez and Perez, S 89°44'14" E 127.14 feet to an existing 1" iron rod, said iron rod being the southeast corner of said Juarez and Perez and being the southwest corner of Margie B. Olsen, Id No: 14057012 (Deed Book 4866, Page 272 and Deed Book 929, Page 45); Thence leaving said Juarez and Perez and along the southern, eastern and northern lines of said Olsen the following courses and distances: 1) S 89°43'49" E 347.00 feet to an existing 36" Pine tree; 2) N 01°01'26" E 558.60 feet to an existing 1" iron pipe; 3) N 89°21'39" W 229.03 feet to an existing 1" iron pipe; 4) S 50°50'06" W 329.90 feet to an existing 1" iron pipe, said iron pipe being located in said Booker Dairy Road eastern right of way; Thence leaving said Olsen and along said Booker Dairy Road eastern right of way, N 00°06'50" W 332.71 feet to an existing right of way monument; Thence leaving said Booker Dairy Road, N 45°35'05" E 69.07 feet to the Point of Beginning, Containing 85.85± Acres.

Section 2. The Mayor of the Town of Smithfield shall cause to be recorded in the office of the Register of Deeds of Johnston County, and in the office of the Secretary of State in Raleigh, North Carolina an accurate map of the annexed territory, described in Section 1 above, together with a duly certified copy of this ordinance. Such a map shall be delivered to the Johnston County Board of Elections, as required by NCGS 163-288.1

Adopted this the 21st day of January, 2025

_____
M. Andy Moore, Mayor

ATTEST

_____
Elaine Andrews, Town Clerk

APPROVED AS TO FORM:

_____
Robert Spence, Jr., Town Attorney

TOWN OF SMITHFIELD
TOWN COUNCIL
NOTICE OF PUBLIC HEARINGS

Notice is hereby given that a Public Hearing will be held before the Town Council of the Town of Smithfield, N.C., on Tuesday, January 21st, 2025, at 7:00 P.M., in the Town Hall Council Chambers located at 350 East Market Street to consider the following requests:

ANX-24-02 Local 70 Annexation: Smithfield Growth LLC has submitted a petition to voluntarily annex 85.85 acres to the Town of Smithfield. This is located at M. Durwood Stephenson Parkway and Booker Dairy Road and also known as Local 70 Subdivision. This has previously been identified as Johnston County Tax ID #14057011Y, but has recently been subdivided into 10 parcels: #14057012O, #14057012M, #14057012H,#14057012G,#14057012I, #14057012K,#14057012N, #14057012J, #14057012L, #14057011Y.

S-24-08 Local 70 Subdivision: Smithfield Growth, LLC is requesting a preliminary subdivision with 303 lots (209 single family homes and 94 townhomes) and 324 apartment units, for a total of 627 residential dwelling units. The properties considered for approval are located along M. Durwood Stephenson Parkway east of Eden Woods and north of Walmart. These properties are further identified as Johnston County Tax ID #s 14057011Y and 14057011X.

S-24-07 Buffalo Road Subdivision: Vesta Enterprises, Inc. is requesting a preliminary subdivision of 138.63 acres of land with R-8 CZ designation into 117 detached single-family residential lots. The property considered for approval is located at 1176 and 1200 Buffalo Road (Southeastern side of Buffalo Road and M Durwood Stephenson Parkway intersection, further identified as Johnston County Tax ID # 14A033005.

ZA-24-03 Miscellaneous Multi-Family Amendments: Staff is requesting to review updates to the multi-family (MF) regulations in the UDO, affecting Unified Development Ordinance Article 6 Section 6.2 and 6.6; Section, Article 7, Section 7.35, Article 8, Section 8.13.1; Article 10, Section 10.110.2 Private Streets; and Appendix A Definitions.

All interested people are encouraged to attend. To accommodate disabilities and to comply with ADA regulations, please contact the office if you need assistance. Further inquiries regarding this matter may be directed to the Town of Smithfield at (919) 934-2116 ext. 1111 or online at www.smithfield-nc.com.

Certification of Sufficiency

Contiguous Annexation ANX-24-02

To the Town Council of the Town of Smithfield, North Carolina:

I, Elaine S. Andrews, Town Clerk, do hereby certify that I have investigated the attached petition and hereby make the following findings:

a. The petition contains an adequate property description of the area proposed for annexation.
   Attached hereto are the metes and bounds for the property.

b. The area described in the petition is contiguous to the Town of Smithfield primary corporate limits, as defined by GS 130A-31.
   Attached hereto is a map showing property is contiguous to the Town of Smithfield's corporate limits.

c. The petition is signed by and includes address of all owners of real property lying in the area described therein
   Attached hereto is the annexation petition and map from Johnston County GIS showing the addresses on the petition and addresses of the property owners are the same.

In witness whereof, I have herunto set my hand and affixed the seal of the Town of Smithfield this the 7th day of January 2025.

Elaine S. Andrews, Town Clerk

TOWN OF SMITHFIELD
SMITHFIELD
NORTH CAROLINA
APRIL 23, 1777

Local 70 Annexation

File Number:
ANX-24-02

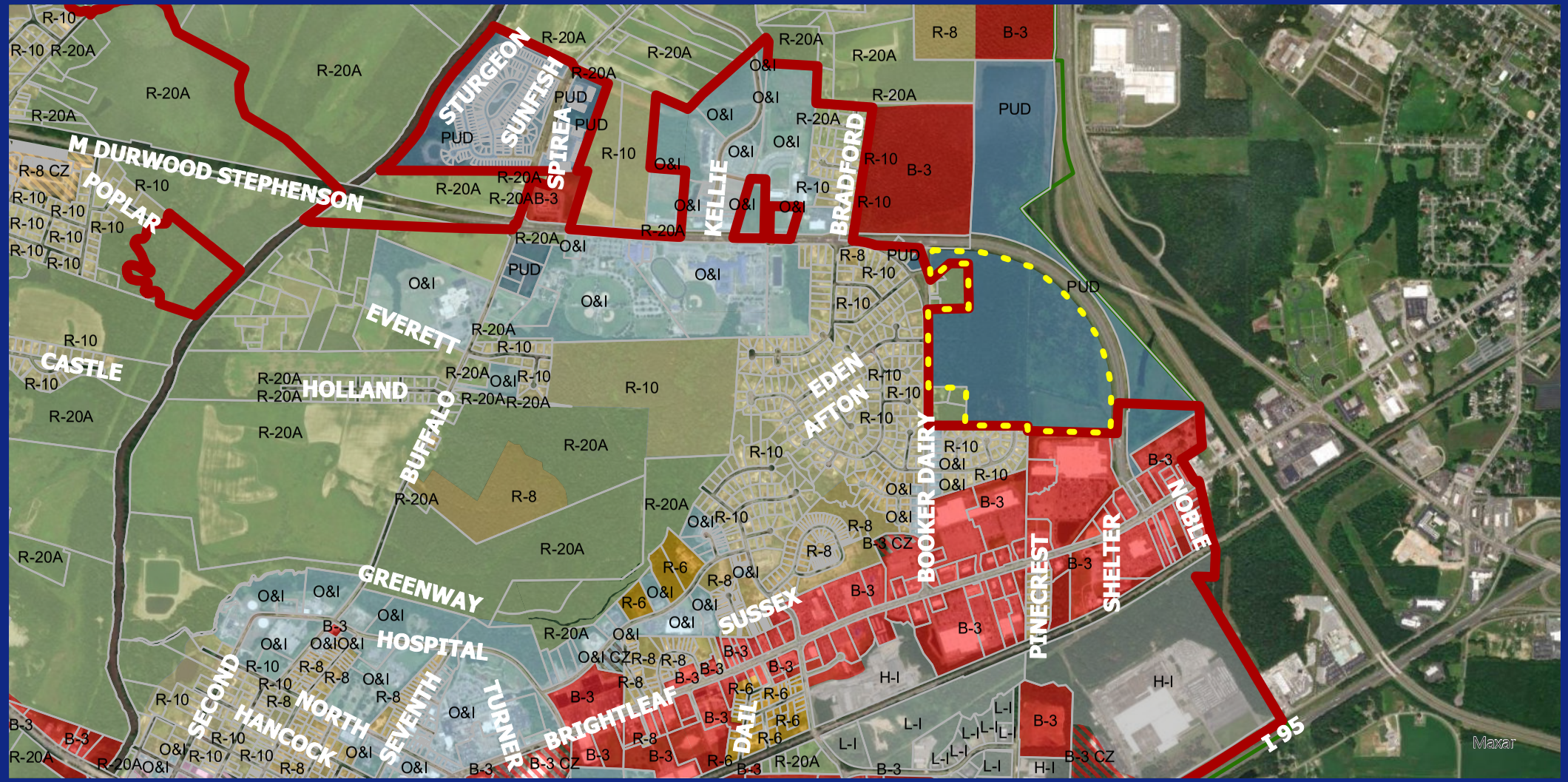
Project Name:
Local 70 Annexation

Location:
M. Durwood Stephenson
Booker Dairy Rd

Tax ID#:
14057011Y

Existing Zoning:
PUD

Owner:
Smithfield Growth, LLC



N
W E
S

1:20,973
Map created by Chloe Allen
Planner I on 12/19/2024

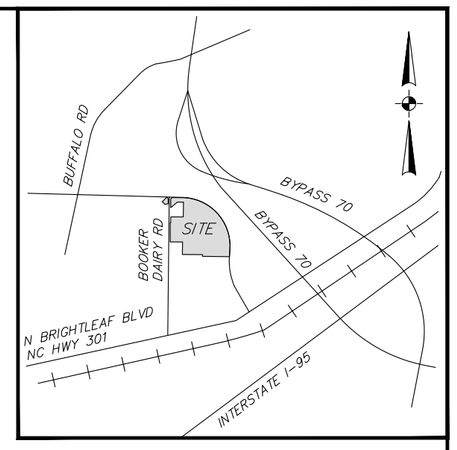
OWNER:
SMITHFIELD GROWTH LLC
1600 COLON ROAD
SANFORD, NC 27330

ABBREVIATIONS

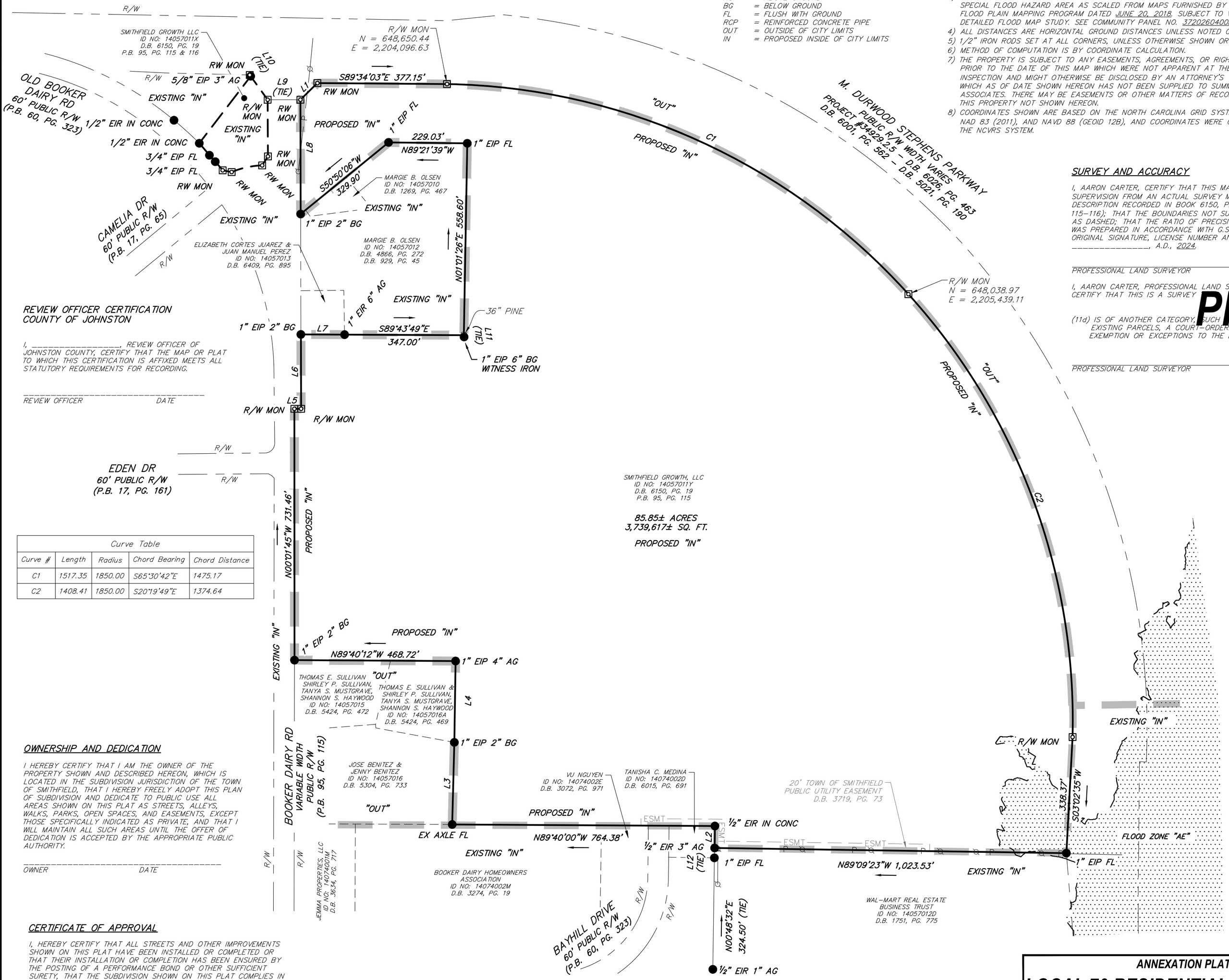
EIP	=	EXISTING IRON PIPE/PIN
EIR	=	EXISTING IRON ROD
IRS	=	NEW IRON ROD SET
R/W	=	RIGHT OF WAY
AG	=	ABOVE GROUND
BG	=	BELOW GROUND
FL	=	FLUSH WITH GROUND
RCP	=	REINFORCED CONCRETE PIPE
OUT	=	OUTSIDE OF CITY LIMITS
IN	=	PROPOSED INSIDE OF CITY LIMITS

GENERAL NOTES

1) THE PURPOSE OF THIS PLAT IS TO SHOW THE PROPOSED ANNEXATION OF PROPERTY ID NO: 14057011Y INTO THE CITY OF SMITHFIELD.
2) SUBJECT PROPERTY ID NO: 14057011Y, DEED BOOK 6150, PAGE 19 AND PLAT BOOK 95, PAGES 115–116.
3) FLOOD CERTIFICATION: A PORTION OF THE SUBJECT PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA AS SCALED FROM MAPS FURNISHED BY NORTH CAROLINA FLOOD PLAIN MAPPING PROGRAM DATED JUNE 20, 2018, SUBJECT TO VERIFICATION BY DETAILED FLOOD MAP STUDY. SEE COMMUNITY PANEL NO. 3720260400K.
4) ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES UNLESS NOTED OTHERWISE.
5) 1/2" IRON RODS SET AT ALL CORNERS, UNLESS OTHERWISE SHOWN OR NOTED.
6) METHOD OF COMPUTATION IS BY COORDINATE CALCULATION.
7) THE PROPERTY IS SUBJECT TO ANY EASEMENTS, AGREEMENTS, OR RIGHTS–OF–WAY PRIOR TO THE DATE OF THIS MAP WHICH WERE NOT APPARENT AT THE TIME OF MY INSPECTION AND MIGHT OTHERWISE BE DISCLOSED BY AN ATTORNEY'S TITLE OPINION WHICH AS OF DATE SHOWN HEREON HAS NOT BEEN SUPPLIED TO SUMMEY ENGINEERING ASSOCIATES. THERE MAY BE EASEMENTS OR OTHER MATTERS OF RECORD AFFECTING THIS PROPERTY NOT SHOWN HEREON.
8) COORDINATES SHOWN ARE BASED ON THE NORTH CAROLINA GRID SYSTEM (NC3200), NAD 83 (2011), AND NAVD 88 (GEOID 12B), AND COORDINATES WERE OBTAINED USING THE NCVRS SYSTEM.



VICINITY MAP
NOT TO SCALE



REVIEW OFFICER CERTIFICATION
COUNTY OF JOHNSTON

I, _____, REVIEW OFFICER OF JOHNSTON COUNTY, CERTIFY THAT THE MAP OR PLAT TO WHICH THIS CERTIFICATION IS AFFIXED MEETS ALL STATUTORY REQUIREMENTS FOR RECORDING.

_____
REVIEW OFFICER DATE

Curve Table				
Curve #	Length	Radius	Chord Bearing	Chord Distance
C1	1517.35	1850.00	S65°30'42"E	1475.17
C2	1408.41	1850.00	S20°19'49"E	1374.64

SURVEY AND ACCURACY

I, AARON CARTER, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION (DEED DESCRIPTION RECORDED IN BOOK 6150, PAGE 19 AND PLAT BOOK 95, PAGES 115–116); THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DASHED; THAT THE RATIO OF PRECISION IS 1:10,000+; THAT THIS PLAT WAS PREPARED IN ACCORDANCE WITH G.S. 47–30 AS AMENDED. WITNESS MY ORIGINAL SIGNATURE, LICENSE NUMBER AND SEAL THIS _____ DAY OF _____, A.D., 2024.

_____
PROFESSIONAL LAND SURVEYOR L–5519

I, AARON CARTER, PROFESSIONAL LAND SURVEYOR, L–5519, CERTIFY THAT THIS IS A SURVEY

(11d) IS OF ANOTHER CATEGORY, SUCH AS RECOMBINATION OF EXISTING PARCELS, A COURT–ORDERED SURVEY, OR OTHER EXEMPTION OR EXCEPTIONS TO THE DEFINITION OF SUBDIVISION.

_____
PROFESSIONAL LAND SURVEYOR DATE

NORTH CAROLINA PROFESSIONAL SEAL L–5519 LAND SURVEYOR AARON CARTER

PRELIMINARY

I, AARON CARTER, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL GPS SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY:
(1) CLASS OF SURVEY: A
(2) POSITIONAL ACCURACY: 0.10'
(3) TYPE OF GPS FIELD PROCEDURE: RTK
(4) DATE OF SURVEY: 06/14/24
(5) DATUM/EPOCH: NAD 83 (2011)
(6) PUBLISHED/FIXED–CONTROL USE: NCVRS
(7) GEOID MODEL: 12B
(8) COMBINED GRID FACTOR(S): 0.99988214
(9) UNITS: U.S. FEET

Line Table		
Line #	Direction	Length
L1	N45°35'05"E	69.07
L2	N00°41'34"E	63.92
L3	N01°29'10"E	239.09
L4	N00°53'22"E	236.70
L5	S89°58'21"E	19.66
L6	N00°10'53"W	216.42
L7	S89°44'14"E	127.14
L8	N00°06'50"W	332.71
L9	N89°56'03"E	95.37
L10	S35°50'07"E	4.53
L11	N07°37'00"W	5.07
L12	N01°26'48"E	28.79

GRID NORTH NAD 83 (2011)

OWNERSHIP AND DEDICATION

I HEREBY CERTIFY THAT I AM THE OWNER OF THE PROPERTY SHOWN AND DESCRIBED HEREON, WHICH IS LOCATED IN THE SUBDIVISION JURISDICTION OF THE TOWN OF SMITHFIELD, THAT I HEREBY FREELY ADOPT THIS PLAN OF SUBDIVISION AND DEDICATE TO PUBLIC USE ALL AREAS SHOWN ON THIS PLAT AS STREETS, ALLEYS, WALKS, PARKS, OPEN SPACES, AND EASEMENTS, EXCEPT THOSE SPECIFICALLY INDICATED AS PRIVATE, AND THAT I WILL MAINTAIN ALL SUCH AREAS UNTIL THE OFFER OF DEDICATION IS ACCEPTED BY THE APPROPRIATE PUBLIC AUTHORITY.

_____
OWNER DATE

CERTIFICATE OF APPROVAL

I, HEREBY CERTIFY THAT ALL STREETS AND OTHER IMPROVEMENTS SHOWN ON THIS PLAT HAVE BEEN INSTALLED OR COMPLETED OR THAT THEIR INSTALLATION OR COMPLETION HAS BEEN ENSURED BY THE POSTING OF A PERFORMANCE BOND OR OTHER SUFFICIENT SURETY, THAT THE SUBDIVISION SHOWN ON THIS PLAT COMPLIES IN ALL RESPECTS WITH THE SUBDIVISION REGULATIONS OF THE TOWN OF SMITHFIELD AND THEREFORE, HAS BEEN APPROVED BY THE SMITHFIELD TOWN COUNCIL, SUBJECT TO ITS BEING RECORDED WITHIN (6) MONTHS OF THE BELOW DATE.

_____
TOWN CLERK DATE

_____
PLANNING DIRECTOR DATE

SYMBOLS

- EXISTING IRON PIPE/ROD
- NEW ½" IRON ROD SET
- COMPUTED POINT (NOT SET)
- UTILITY POLE

LEGEND

- ADJOINER LINE
- LINE SURVEYED
- RIGHT OF WAY
- ANNEXATION LINE
- OVERHEAD POWER
- FLOODWAY LINE
- EASEMENT LINE
- FLOOD ZONE "AE"

GRAPHIC SCALE
200 100 0 200 400
1" = 200 FEET

ANNEXATION PLAT FOR

LOCAL 70 RESIDENTIAL DEVELOPMENT

M. DURWOOD STEPHENSON PARKWAY
SELMA TOWNSHIP - JOHNSTON COUNTY - NORTH CAROLINA

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968, Asheboro, NC 27204
Ph: 336-328-0902 Fx: 336-328-0922 www.summeyengineering.com
NC ENGINEERING & SURVEYING FIRM CERTIFICATE OF AUTHORIZATION: P-0336

Scale:	1" = 200'
Date:	11/19/2024
Drawn By:	SKM
Checked By:	AJC
Job No.:	2201004

Request for Town Council Action

Public Hearing: S-24-08

Date: 1/21/25

Subject: Local 70 Residential Development Preliminary Plat
Department: Planning Department
Presented by: Planning Director - Stephen Wensman
Presentation: Public Hearing

Issue Statement

Smithfield Growth, LLC is requesting a preliminary subdivision of 86.64 acres of land in the Local 70 PUD Zoning District into 209 detached single-family residential lots, 94 attached single-family townhouses and 324 apartment units.

Financial Impact

The subdivision will provide tax-base, park dedication fee-in-lieu, and utilities system development fees.

Action Needed

The Town Council is respectfully requested to hold a public hearing to review the preliminary subdivision plat and make a decision to approve, approve with conditions or to deny based on the finding of fact for subdivisions.

Recommendation

Staff recommend approval of the Local 70 Residential Development preliminary plat, S-24-08, based on the finding of fact for subdivisions.

Approved: ☑Town Manager ☐ Town Attorney

Attachments:

1. Staff report
2. Draft Finding of Fact
3. Application, narrative
4. Preliminary Plat & Plans
5. Adjacent Property Owners Listing

Staff Report

Public Hearing: S-24-08

Date: 1/21/25

REQUEST:

Smithfield Growth, LLC is requesting a preliminary subdivision of 86.64 acres of land in the 163-acre Local 70 PUD Zoning District into 209 detached single-family residential lots, 94 attached single-family townhouses and 324 apartment units.

PROPERTY LOCATION:

The property is located south of M. Durwood Stephenson Parkway, primarily east of Booker Dairy Road and north of Walmart on US 301 North.

APPLICATION DATA:

Applicant/Owner:	Smithfield Growth LLC
Consultant:	Summey Engineering Associates (Christian Vestal)
Project Name:	Local 70 Residential
Tax ID:	14057011X and 14057011Y
Acreage:	86.64-acres
Present Zoning:	Local 70 PUD District
Town/ETJ:	ETJ (Annexation petition submitted)
Existing Use:	Vacant Woods/open field
Proposed Use:	Mixed Use PUD
Fire District:	Smithfield
School Impacts:	Additional households with school-age children
Parks and Recreation:	Fee in lieu to be collected with final plat
Proposed Public Streets:	11,501 +/- linear feet of public and private.
Private Streets:	4,540 LF +/-
Proposed Sidewalks:	20,579 LF +/-
Proposed Trail	3,981 LF +/-
Proposed Sewer Line	11,754 LF +/- gravity and 1,835 LF +/- forced main.
Proposed Water Line	16,600 LF +/-
Public Utilities Provider	Town of Smithfield

ENVIRONMENTAL:

- There is 100-year flood area located in the southeast portion of the site adjacent to Walmart and M. Durwood Stephenson Parkway.

ADJACENT ZONING AND LAND USES: (SEE ATTACHED MAP)

	Zoning	Existing Land Uses
North	B-3	Vacant
South	B-3	Retail Commercial
West	R-10 Single Family Residential	Single Family Residential
East	N/A	N/A

PRELIMINARY PLAT/ANALYSIS:

Overview. The proposed subdivision has been designed to be in accordance with the approved Local 70 PUD Master Plan. The Preliminary Plat is in accordance with the conditional zoning with a few exceptions:

- Lacking the required 8' wide multi-purpose trail along M. Durwood Stephenson Parkway.
- Lacking the 5' wide public sidewalk along Booker Dairy Road.
- Lacking tree resource management, interior landscaping (street trees and foundation plantings) and lighting plans.
- Lacking Screening fence plans and details.
- Lacking distinction of public vs. private streets.

These items can be addressed with conditioning the construction plan approval meeting all UDO requirements.

HOA. The residential component of the community will have a master homeowners association governing open space and for-sale residential homes. There will be two sets of design guidelines for the community. The first set of design guidelines is for new construction and will be applied to the residential homes and the apartment complex. The guidelines will be administered by a Design Review Board (DRB) set up by the developers of Local 70. The design guidelines coupled with the Design Review Board will ensure that all design elements presented to the Town of Smithfield Planning Board and Town Council will be enforced. Such items include insuring that no vinyl siding will be allowed on the for-sale residential homes, appropriate screening, building setbacks (lot fit) and building heights. The DRB will also review the architectural submittals for the multi-family buildings and similar reviews of exterior building materials, massing, and access.

The Homeowners Association will have responsibility for the maintenance of all public open space and amenities provided in the landscape.

Architectural Requirements. The Conditional zoning established the architectural requirements:

- Residential lots with single car garages shall be at least 14' x 22' to accommodate a standard vehicle.
- That all single-family detached homes have standard sized 2-car garages.

- That all building facades be clad with cementitious siding (Hardy Board or sim product), masonry, EIFS or a combination of materials and that there be no vinyl siding.

1. Townhouses – Front Loaded (parking in the front).

a. Buildings with no more than 7 units.
b. Single or double garages.
c. Garages setback 25' from the back of the public sidewalk.
d. Units to be unique through the use of exterior materials, entrance features, house and trim colors.
e. Front façade setbacks will stagger.
f. Front facades will be cementitious siding, masonry, EIFS or a combination of materials.
g. Building trim, soffits, railings and shutters may be of low maintenance materials.
h. Garage door must have windows and visible hardware – doors will vary from door to door (style and color).
i. Porches, if provided, will be a minimum of 4'-6' in depth.

2. Townhouses – Rear Loaded (parking in the rear).

a. Front setback - minimum of 10'-0" from public sidewalk.
b. Garages must be either 4'-0" from edge of ally pavement or min. 20'-0" from alley pavement.
c. Units shall be individualized through the use of exterior materials, entrance features, primary house color, trim color.
d. Front facades facing a public street, pedestrian pathway, or open space the materials may be cementitious siding, masonry, EIFS or a combination of materials.

3. Single-family Detached Homes – Front Loaded (parking in front).

a. Front elevations on the same side of the street may only be repeated every fourth home.
b. Garage doors must be a minimum of 25'-0" from back of public sidewalk or R.O.W.
c. It is encouraged to have the garage door recede a minimum of 2'-0" from the primary front facade of the home or have the front porch project past the front elevation of the garage.
d. Homes shall be individualized through the use of exterior materials, entrance features, primary house color, trim color.
e. Primary building materials: For frontages facing a public street, pedestrian pathway, or open space the materials may be cementitious siding, masonry, EIFS or a combination of materials.
f. It is encouraged to individualize each home with unique garage doors appropriate to the architectural style of the home. Garage doors must have windows and encouraged to have visible hardware.
g. If front porches are provided, they must be a minimum of 6'-0" in depth.

4. Single-family Detached Homes – Rear Loaded (parking in rear).

a. Front elevations on the same side of the street may only be repeated every fourth home.
b. Homes are encouraged to be sited so that the front expression of the home (porch/stoop) is place a minimum of 10'-0" from the back of the public sidewalk.
c. Garages must be either 4'-0" from edge of alley pavement or min. 20'-0" from alley pavement.
d. The same color may not be repeated on homes next door to each other. The exception is the "Three Sister" rule allowing that within a mid-block application three homes may have the same elevation and color.

e. Homes shall be individualized through the use of exterior materials, entrance features, primary house color, trim color.
f. Primary building materials: For frontages facing a public street, pedestrian pathway, or open space the materials may be cementitious siding, masonry, or a combination of the two materials.
g. It is encouraged to individualize each home with unique garage doors appropriate to the architectural style of the home.
h. If front porches are provided, they must be a minimum of 6'-0" in depth.

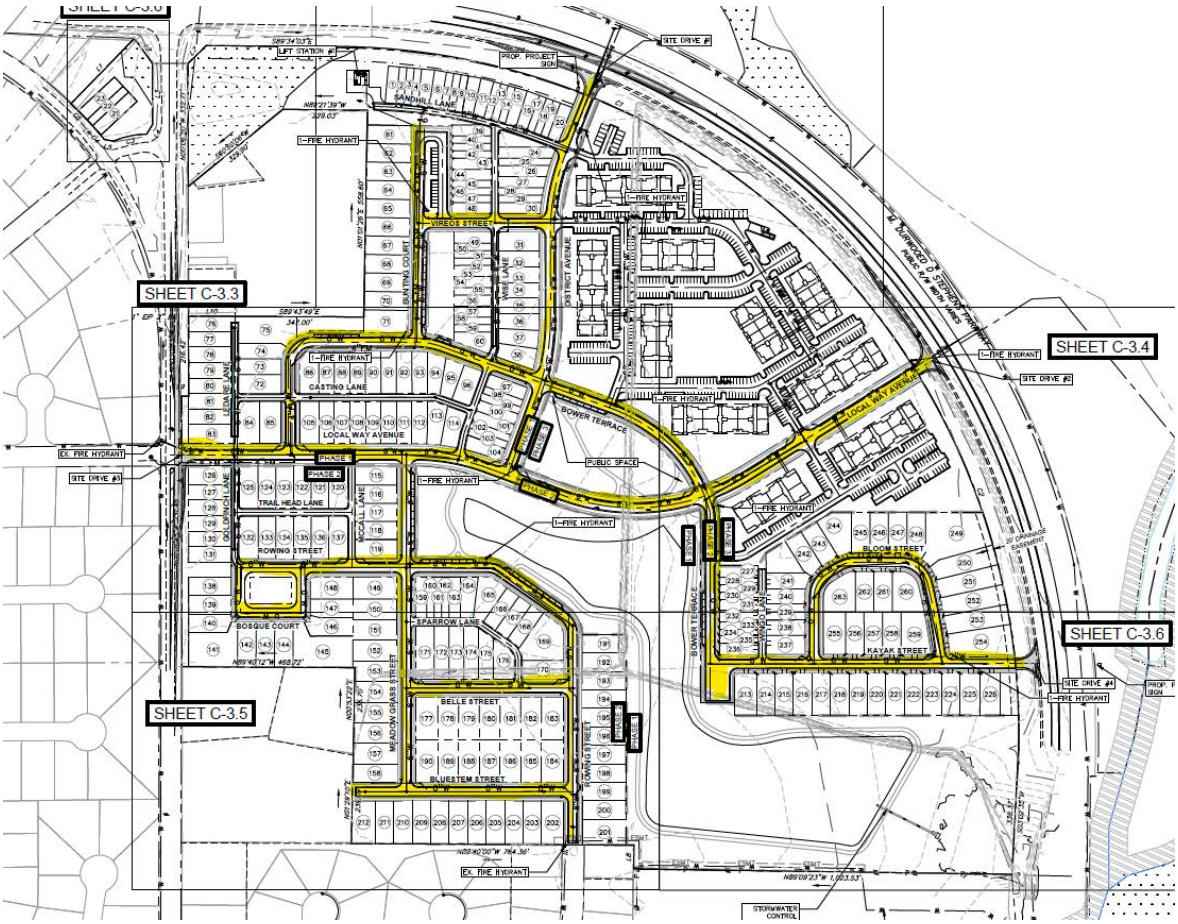
5. Multi-Family Residential.

a. Multi-family buildings facing a public right-of-way must be set back a minimum of 14'-0" from the public sidewalk.
b. For multi-family buildings with ground floor storefronts and uses other than residential the building may be placed a minimum of 14'-0" from the back of the public sidewalk.
c. Primary building materials may be a combination of the following materials; Stucco/EIFS, masonry, cementitious siding, metal panels or vinyl siding. Note that buildings fronting on public streets, pathways or open space vinyl siding may be used only on the second floor and above.
d. Architecture and building design should promote a consistent language across each building. Care should be taken to place windows, balconies, and entryways in an organized fashion.
e. Buildings are encouraged to have elevations that articulate features of the buildings, creating shadow lines and breaks within the overall facade.
f. Entries facing public streets, open spaces or pathways should be celebrated with additional architectural feature.

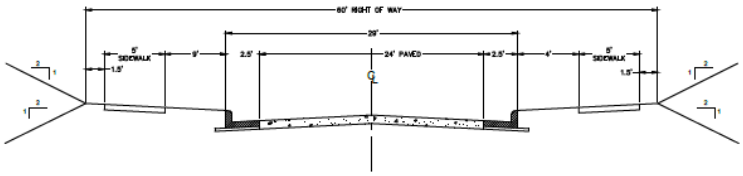
TIA. A TIA was completed, and the required improvements are shown in the plan set.

Streets. The development is a mix of public streets and private alleys generally consistent with the PUD Masterplan.

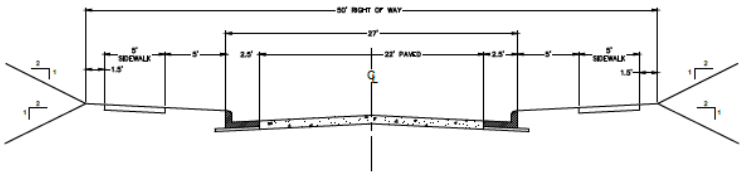
Public streets are highlighted in yellow below:



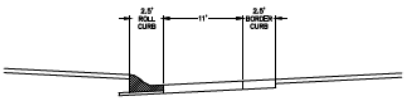
Local streets are proposed to be 27' wide b/b in 50' wide R/W with standard curb and gutter. The main thoroughfares are to be 29' wide b/b in 60' wide R/W with standard curb and gutter. Private alleys will be 11' wide with 2.5' roll curb and/or border curb. Lateral street stubs are appropriately placed. Sidewalks are proposed for both sides of streets.



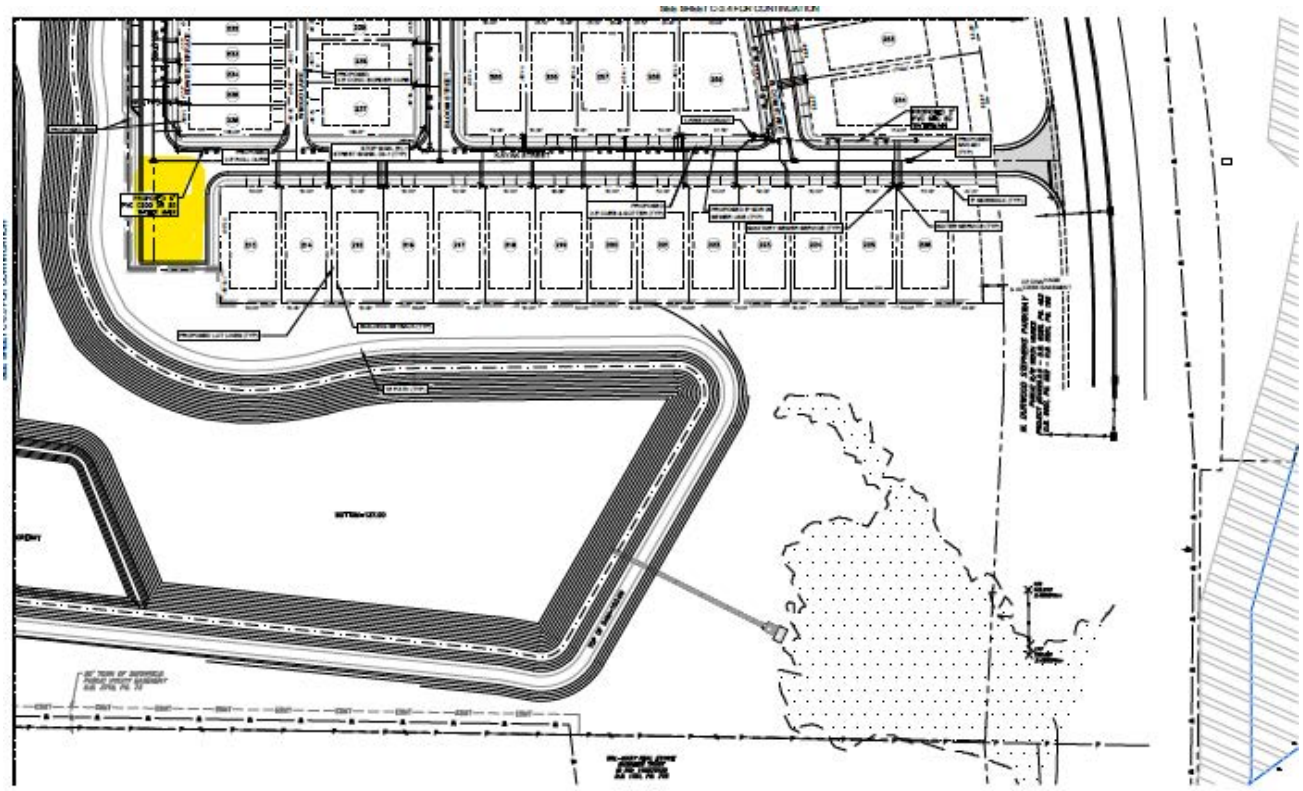
60' STANDARD CURB AND GUTTER ROAD



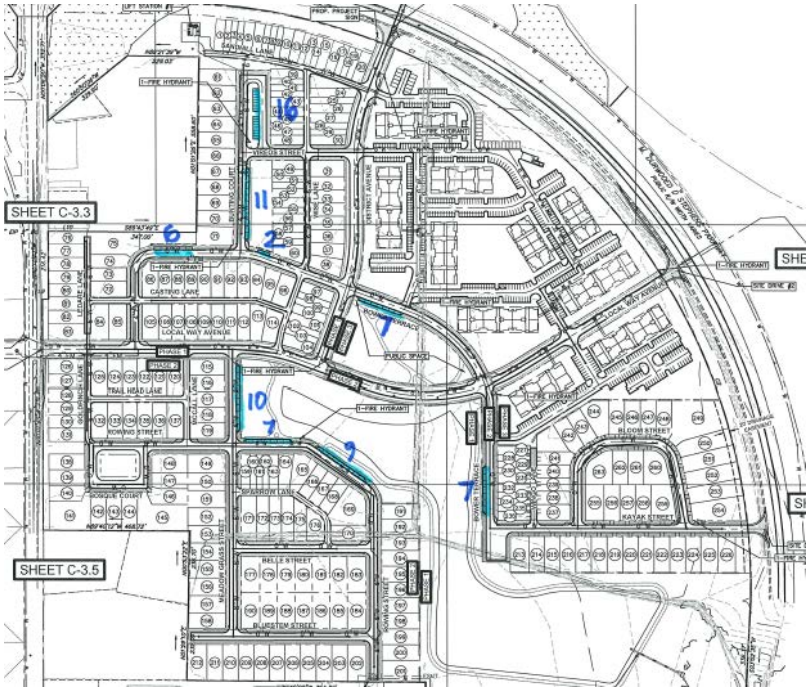
50' STANDARD CURB AND GUTTER ROAD



A dead-end extension is proposed at the end of Bower Terrace that should be removed as it will likely be used for parking. This dead-end would be better designed as an auxiliary parking lot.



Parking. The plans show the required parking plus approximately 75-overflow parking distributed throughout the townhome and single-family development areas. The apartment complex parking will be evaluated with a separate site plan submittal.



Minimum Lot widths. The minimum lot widths in the preliminary plat submittal are compliant with the PUD Master Plan and conditions.

Utilities. Water, sewer, electric will be Town of Smithfield. A new pump station is planned for the northwest corner of the site.

FINDING OF FACT (STAFF OPINION):

To approve a preliminary plat, the Town Council shall make the following finding (staff's opinion in Bold/Italic):

1. The plat is consistent with the adopted plans and policies of the town; ***The plat is consistent with the adopted comprehensive plan and conditional zoning master plan.***
2. The plat complies with all applicable requirements of this ordinance; ***The plan complies with all applicable requirements of this ordinance with conditions.***
3. There exists adequate infrastructure (transportation and utilities) to support the plat as proposed. ***There is adequate infrastructure.***
4. The plat will not be detrimental to the use or development of adjacent properties or other neighborhood uses. ***The plat will not be detrimental to the use or development of adjacent properties or other neighborhood uses.***

RECOMMENDATION:

Staff recommend approval of the Local 70 Residential Development preliminary plat, S-24-08, with 12 conditions.

1. The preliminary plat approval is contingent on approval of construction documents meeting all UDO regulations and PUD Master Plan & conditions of approval.
2. That required minimum street frontages be provided for all lots in the development consistent with the Rezoning Master Plan Approval.
3. Subdivision entrance signs be shown on the construction plans and that separate sign permits be obtained prior to sign construction.
4. Draft HOA declarations be submitted that incorporates the architectural standards and other PUD CZ conditions of approval. The HOA declarations shall be reviewed by the Town Attorney prior to approval.
5. That the stormwater ponds be aerated.
6. A separate site plan application shall be submitted for the apartment complex.
7. Eliminate the street stub adjacent to Lot 216.
8. Provide an 8' wide public multi-use trail along M. Durwood Stephenson Parkway and 5' wide public sidewalk along Booker Dairy Road.
9. That a 50' setback be maintained along M. Durwood Stephenson Parkway and 35' setback along Booker Dairy Road.
10. All trees in the public right of way shall be maintained & replaced when needed by a homeowners/property Owners Association.

11. The homeowners association limit parking to one side of streets where street parking is allowed and that the parking stalls be marked in accordance with NCDOT Standards.
12. The fence along Booker Dairy Road and along the Booker Dairy Plantation subdivision be a 6-foot heigh opaque fence.

RECOMMENDED MOTION:

"Move to approve Local 70 Residential Development preliminary plat, S-24-08, with twelve conditions contained in the staff report based on the finding of fact for preliminary plat approval"

Town of Smithfield
Preliminary Plat
Finding of Fact / Approval Criteria

Application Number: S-24-08 **Project Name:** Local 70 Residential Development Preliminary Plat

Request: Smithfield Growth, LLC is requesting a preliminary subdivision of 86.64 acres of land in the Local 70 PUD Zoning District into 209 detached single-family residential lots, 94 attached single-family townhouses and 324 apartment units. The property is located south of M. Durwood Stephenson Parkway, primarily east of Booker Dairy Road and north of Walmart on US 301 North, further identified as Johnston County Tax IDs 14057011X and 14057011Y.

In approving an application for a preliminary plat in accordance with the principles, conditions, safeguards, and procedures specified herein, the Town Council may impose reasonable and appropriate conditions and safeguards upon the approval. The petitioner will have a reasonable opportunity to consider and respond to any additional requirements prior to approval or denial by the Town Council. The Town Council shall include in its comments a statement as to the consistency of the application with the Town's currently adopted Comprehensive Plan. The applicant has the burden of producing competent, substantial evidence tending to establish the facts and conditions which the below requires.

The Town Council shall issue a preliminary plat if it has evaluated an application through a quasi-judicial process and determined that:

1. The plan is consistent with the adopted plans and policies of the town;
2. The plan complies with all applicable requirements of this ordinance;
3. There exists adequate infrastructure (transportation and utilities) to support the plan as proposed; and
4. The plan will not be detrimental to the use or development of adjacent properties or another neighborhood uses

Once all findings have been decided one of the two following motions must be made:

Motion to Approve: *Based upon satisfactory compliance with the above stated findings and fully contingent upon acceptance and compliance with all conditions as previously noted herein and with full incorporation of all statements and agreements entered into the record by the testimony of the applicant and applicant's representative, I move to approve Preliminary Plat Application # S-24-08 with conditions:*

1. The preliminary plat approval is contingent on approval of construction documents meeting all UDO regulations and PUD conditions of approval.
2. Draft HOA declarations be submitted that incorporates the architectural standards and other PUD CZ conditions of approval.
3. That the stormwater ponds be aerated.
4. That tree resource management, landscaping and lighting plans be submitted for staff review.
5. Subdivision entrance signs be shown on the construction plans and that separate sign permits be obtained prior to sign construction.
6. A separate site plan application shall be required for the apartment complex.

7. Eliminate the street stub adjacent to Lot 216.
8. Maximize parallel parking stalls along open spaces in the development.
9. Provide an 8' wide public multi-use trail along M. Durwood Stephenson Parkway and 5' wide public sidewalk along Booker Dairy Road.

Motion to Deny: *Based upon failure to meet all of the above stated findings and for reasons stated therein, I move to deny Preliminary Plat Application # S-24-08 for the following stated reason:*

_____

_____

Record of Decision:

Based on a motion and majority vote of the Town of Smithfield Town Council for the Preliminary Plat Application # S-24-08 is hereby:

_____ approved upon acceptance and conformity with the following conditions:

1. The preliminary plat approval is contingent on approval of construction documents meeting all UDO regulations and PUD conditions of approval.
2. Draft HOA declarations be submitted that incorporates the architectural standards and other PUD CZ conditions of approval.
3. That the stormwater ponds be aerated.
4. That tree resource management, landscaping and lighting plans be submitted for staff review.
5. Subdivision entrance signs be shown on the construction plans and that separate sign permits be obtained prior to sign construction.
6. A separate site plan application shall be required for the apartment complex.
7. Eliminate the street stub adjacent to Lot 216.
8. Maximize parallel parking stalls along open spaces in the development.
9. Provide an 8' wide public multi-use trail along M. Durwood Stephenson Parkway and 5' wide public sidewalk along Booker Dairy Road.

_____ denied for the noted reasons.

_____

_____

Decision made this ____ day of _____ 2025 while in regular session.

_____

M. Andy Moore, Mayor

ATTEST:

_____

Elaine Andrews, Town Clerk

Town of Smithfield
Planning Department
350 E. Market St Smithfield, NC 27577
P.O. Box 761, Smithfield, NC 27577
Phone 919-934-2116
Fax: 919-934-1134

Preliminary Subdivision Application
General Information

Development Name Smithfield Growth 70

Proposed Use Residential

Property Address(es) Durwood Stevenson Pkwy

Johnston County Property Identification Number(s) and Tax ID Number (s) for each parcel to which these guidelines will apply:

PIN# 260410-47-7462 | TAX ID# 14057011Y

Project type? ☒ Single Family ☒ Townhouse ☒ Multi-Family ☐ Non-Residential ☐ Planned Unit Development (PUD)

OWNER/DEVELOPER INFORMATION

Company Name Smithfield Growth, LLC | Owner/Developer Name Carter Keller

Address 1600 Colon Rd Sanford, NC 27330

Phone 910-728-5714 | Email corey@carolinacommercialnc.com | Fax n/a

CONSULTANT/CONTACT PERSON FOR PLANS

Company Name Summey Engineering Associates, PLLC | Contact Name Christian Vestal

Address PO Box 968 Asheboro, NC 27204

Phone 336-328-0902 | Email christian@summeyengineering.com | Fax n/a

DEVELOPMENT TYPE AND SITE DATE TABLE (Applicable to all developments)

ZONING INFORMATION

Zoning District(s)

If more than one district, provide the acreage of each:

Overlay District? ☐ Yes ☐ No

Inside City Limits? ☐ Yes ☒ No

FOR OFFICE USE ONLY

File Number:_____ Date Submitted:_____ Date Received:_____ Amount Paid:_____

Project Narrative

As part of a complete application, a written project narrative that provides detailed information regarding your proposal must be included. On a separate sheet of paper, please address each of the lettered items listed below (answers must be submitted in both hard copy and electronic copy using the Adobe .PDF or MS Word .DOCX file formats):

a) A listing of contact information including name(s), address(es) and phone number(s) of: the owner of record, authorized agents or representatives, engineer, surveyor, and any other relevant associates;

b) A listing of the following site data: Address, current zoning, parcel size in acres and square feet, property identification number(s) (PIN), and current legal description(s);

c) A listing of general information including: the proposed name of the subdivision, the number of proposed lots, acreage dedicated for open space or public use, acreage dedicated within rights ofway;

d) A narrative explaining the intent of the project and/or your original or revised vision for the finished product;

e) A statement showing the proposed density of the project with the method of calculating said density shown;

f) Discuss proposed infrastructure improvements and phasing thereof (i.e. proposed roadways, sewer systems, water systems, sidewalks/trails, parking, etc.) necessary to serve the subdivision;

g) A narrative addressing concerns/issues raised by neighboring properties (discussing your proposal with the neighboring land owners is recommended to get a sense of what issues may arise as your application isprocessed);

h) A description of how conflicts with nearby land uses (livability, value, potential future development, etc.) and/or disturbances to wetlands or natural areas are being avoided or mitigated;

i) Provide justification that the proposal will not place an excessive burden on roads(traffic), sewage, water supply, parks, schools, fire, police, or other public facilities/services (including traffic flows) in thearea;

j) A description of proposed parks and/or open space. Please include a brief statement on the proposed ownership and maintenance of said areas;

k) A proposed development schedule indicating the approximate date when construction of the project, or stages of the same, can be expected to begin and be completed (including the proposed phasing of construction of public improvements and recreational and common space areas).

STORMWATER INFORMATION

Existing Impervious Surface	0 ac acres/sf	Flood Hazard Area	■ Yes ☐ No
Proposed Impervious Surface	55 ac +/- acres/sf	Neuse River Buffer	■ Yes ☐ No
Watershed protection Area Yes	☒ ☐ No	Wetlands	■ Yes ☐ No

If in a Flood Hazard Area, provide the FEMA Map Panel # and Base Flood Elevation 3720260400K/2604

NUMBER OF LOTS AND DENSITY

Total # of Single Family Lots 209	Overall Unit(s)/Acre Densities Per Zoning Districts
Total # of Townhouse Lots 94	Acreage in active open space 1.6 ac
Total # of All Lots 303	Acreage in passive open space 16.0 ac

324 apartment units

627 total residential

SIGNATURE BLOCK (Applicable to all developments)

In filing this plan as the property owner(s), I/we do hereby agree and firmly bind ourselves, my/our heirs, executors, administrators, successors and assigns jointly and severally to construct all improvements and make all dedications as shown on this proposed subdivision plan as approved by the Town.

I hereby designate Corey Mabus/Christian Vestal to serve as my agent regarding this application, toreceive and respond to administrative comments, to resubmit plans on my behalf, and to represent me in any public meeting regarding this application.

I/we have read, acknowledge, and affirm that this project is conforming to all application requirements applicable with the proposed development use.

Signature _____ Date 11/5/2024

Signature _____ Date _____

REVIEW FEES

■ Major Subdivision (Submit 7 paper copies & **1 Digital copy on CD**) $500.00 + $5.00 a lot

FOR OFFICE USE ONLY

File Number:_____ Date Submitted:_____ Date Received:_____ Amount Paid:_____

INFORMATION TO BE PROVIDED ON PRELIMINARY AND FINAL PLATS.

The preliminary plats shall depict or contain the information indicated in the following table. An "X" indicates that the information is required.

Information	*Preliminary Plat*
Vicinity map (6" W x 4" H) showing location of subdivision in relation to neighboring tracts, subdivision, roads, and waterways (to include streets and lots of adjacent developed or platted properties). Also include corporate limits, Town boundaries, county lines if on or near subdivision tract.	X
Boundaries of tract and portion to be subdivided, including total acreage to be subdivided, distinctly and accurately represented with all bearings and distances shown.	X
Proposed street layout and right-of-way width, lot layout and size of each lot. Number lots consecutively throughout the subdivision.	X
Name of proposed subdivision.	X
Statement from the Johnston County Health Department that a copy of the sketch plan has been submitted to them, if septic tanks or other onsite water or wastewater systems are to be used in the subdivision, AND/OR statement from the County Public Utilities that application has been made for public water and/or sewer permits.	X
Graphic scale.	X
North arrow and orientation.	X
Concurrent with submission of the Preliminary Plat to the Town, the subdivider or planner shall submit copies of the Preliminary Plat and any accompanying material to any other applicable agencies concerned with new development, including, but not limited to: District Highway Engineer, County Board of Education, U.S. Army Corps of Engineers, State Department of Natural Resources and Community Development, for review and recommendation.	X
List the proposed construction sequence.	X
Storm water plan – see Article 10, Part VI.	X
Show existing contour lines with no larger than five-foot contour intervals.	X
New contour lines resulting from earth movement (shown as solid lines) with no larger than five-foot contour intervals (existing lines should be shown as dotted lines).	X
Survey plat, date(s) survey was conducted and plat prepared, the name, address, phone number, registration number and seal of the Registered Land Surveyor.	X
Names, addresses, and telephone numbers of all owners, mortgagees, land planners, architects, landscape architects and professional engineers responsible for the subdivision (include registration numbers and seals, where applicable).	X
Date of the drawing(s) and latest revision date(s).	X

Information	Preliminary Plat
The owner's name(s) of adjoining properties and Zoning District of each parcel within 100' of the proposed site.	X
State on plans any variance request(s).	X
Show existing buildings or other structures, water courses, railroads, bridges, culverts, storm drains, both on the land to be subdivided and land immediately adjoining. Show wooded areas, marshes, swamps, rock outcrops, ponds or lakes, streams or stream beds and any other natural features affecting the site.	X
The exact location of the flood hazard, floodway and floodway fringe areas from the community's FHBM or FIRM maps (FEMA). State the base flood elevation data for subdivision.	X
Show the minimum building setback lines for each lot.	X
Provide grading and landscape plans. Proposed plantings or construction of other devices to comply with the screening requirements of Article 10, Part II.	X
Show location of all proposed entrance or subdivision signage (see Section 10.23.1).	X
Show pump station detail including any tower, if applicable.	X
Show area which will not be disturbed of natural vegetation (percentage of total site).	X
Label all buffer areas, if any, and provide percentage of total site.	X
Show all riparian buffer areas.	X
Show all watershed protection and management areas per Article 10, Part VI.	X
Soil erosion plan.	X
Show temporary construction access pad.	X
Outdoor illumination with lighting fixtures and name of electricity provider.	X
The following data concerning proposed streets:	
Streets, labeled by classification (see Town of Smithfield construction standards) and street name showing linear feet, whether curb and gutter or shoulders and swales are to be provided and indicating street paving widths, approximate grades and typical street cross-sections. Private roads in subdivisions shall also be shown and clearly labeled as such.	X
Traffic signage location and detail.	X
Design engineering data for all corners and curves.	X
For office review; a complete site layout, including any future expansion anticipated; horizontal alignment indicating general curve data on site layout plan; vertical alignment indicated by percent grade, PI station and vertical curve length on site plan layout; the District Engineer may require the plotting of the ground profile and grade line for roads where special conditions or problems exist; typical section indicating the pavement design and width and the slopes, widths and details for either the curb and gutter or the shoulder and ditch proposed; drainage facilities and drainage.	X

Information	Preliminary Plat
Type of street dedication; all streets must be designated public. (Where public streets are involved which will be dedicated to the Town, the subdivider must submit all street plans to the UDO Administrator for approval prior to preliminary plat approval).	X
When streets have been accepted into the municipal or the state system before lots are sold, a statement explaining the status of the street in accordance with the Town of Smithfield construction standards.	X
If any street is proposed to intersect with a state maintained road, a copy of the application for driveway approval as required by the Department of Transportation, Division of Highways Manual on Driveway Regulations. (1) Evidence that the subdivider has applied for such approval. (2) Evidence that the subdivider has obtained such approval.	X X X
The location and dimensions of all:	
Utility and other easements.	X
Pedestrian and bicycle paths.	X
Areas to be dedicated to or reserved for public use.	X
The future ownership (dedication or reservation for public use to governmental body or for owners to duly constituted homeowners' association) of recreation and open space lands.	X
Required riparian and stream buffer per Article 10, Part VI.	X
The site/civil plans for utility layouts including:	
Sanitary sewers, invert elevations at manhole (include profiles).	X
Storm sewers, invert elevations at manhole (include profiles).	X
Best management practices (BMPs)	X
Stormwater control structures	X
Other drainage facilities, if any.	X
Impervious surface ratios	X
Water distribution lines, including line sizes, the location of fire hydrants, blow offs, manholes, force mains, and gate valves.	X
Gas lines.	X
Telephone lines.	X
Electric lines.	X
Plans for individual water supply and sewage disposal systems, if any.	X
Provide site calculations including:	
Acreage in buffering/recreation/open space requirements.	X
Linear feet in streets and acreage.	X
The name and location of any property or buildings within the proposed subdivision or within any contiguous property that is located on the US Department of Interior's National Register of Historic Places.	X

Information	Preliminary Plat
Sufficient engineering data to determine readily and reproduce on the ground every straight or curved line, street line, lot line, right-of-way line, easement line, and setback line, including dimensions, bearings, or deflection angles, radii, central angles and tangent distance for the center line of curved property lines that is not the boundary line of curved streets. All dimensions shall be measured to the nearest one-tenth of a foot and all angles to the nearest minute.	X
The accurate locations and descriptions of all monuments, markers, and control points.	X
Proposed deed restrictions or covenants to be imposed upon newly created lots. Such restrictions are mandatory when private recreation areas are established. Must include statement of compliance with state, local, and federal regulations.	X
A copy of the erosion control plan submitted to the Regional Office of NC- DNRCD, when land disturbing activity amounts to one acre or more.	X
All certifications required in Section 10.117.	X
Any other information considered by either the subdivider, UDO Administrator, Planning Board, or Town Council to be pertinent to the review of the plat.	X
Improvements guarantees (see Section 5.8.2.6).	

FOR OFFICE USE ONLY
File Number:_____ Date Submitted:_____ Date Received:_____ Amount Paid:_____

REQUIRED FINDING OF FACT

Article 4 of the Town of Smithfield Unified Development Ordinance requires applications for a preliminary subdivision plat approval to address the following findings. The applicant has the burden of producing competent, substantial evidence tending to establish the facts and conditions which this section requires. The Town Council shall grant preliminary subdivision approval if it has evaluated an application through a quasi-judicial process and determined that:

1) The plan is consistent with the adopted plans and policies of the town;

   The proposed Local 70 subdivision plan will strive to be consistent with the adopted plans and policies of the town. This development will be consistent with the previously approved CZ-24-02 PUD

2) The plan complies with all applicable requirements of this ordinance;

   The proposed Local 70 subdivision plan will comply with all applicable requirements of the ordinance.

3) There exists adequate infrastructure (transportation and utilities) to support the plan as proposed; and

   The Town of Smithfield has existing infrastructure in place to support this proposed plan. Water supply, sanitary sewer, and DOT permits will be obtained prior to final completion of plat and CO's

4) The plan will not be detrimental to the use or development of adjacent properties or other neighborhood uses.

   The proposed Local 70 subdivision will not be detrimental to the surrounding properties or neighborhoods. Adequate buffers, stormwater retention, and provided open spaces will keep this development harmoniious with the surrounding developments.

Smithfield Local 70 Preliminary Plat Narrative

Local 70 is a new, 163-acre, community within the Town of Smithfield, North Carolina. The community will be comprised of single-family homes for sale, a multi-family apartment complex, retail offerings, potential office space and potential industrial space. The community benefits from the existing M. Durwood Stephenson Parkway bifurcating the site to provide access to north side and south side of Local 70. The residential component will exist on the south and east side of M. Durwood Stephenson Parkway.

The Local 70 Preliminary Plat single family residential project is part of a mixed-use community (CZ 24-02) which has been guided by the current town of Smithfield zoning map and future land use plan.

The current preliminary plat design reflects a total of 16,019 +/- linear feet of roadway. This roadway is both a mixture of public right-of-way and private streets. All streets are proposed in accordance with the design standards adopted and approved for the CZ-24-02 plan. The plat also shows a total of 20,579 LF +/- of sidewalk, 3,981 LF +/- of trails with common open space and access.

The Town of Smithfield will provide both water and sewer service to the proposed development. The new water supply system will connect to the existing system in 4 locations. The new water system will contain 16,600 +/- LF of public extension. The new sewer system will connect to the existing public main in one location and will consist of 11,754 +/- LF of gravity sanitary sewer, 1 Pump station, and 1,835 +/- LF of force main.

The residential component of the community will have a master homeowners association governing the open space and for-sale residential homes. There will be two sets of design guidelines for the community. The first set of design guidelines is for new construction and will be applied to the residential homes and the apartment complex. The guidelines will be administered by a Design Review Board (DRB) set up by the developers of Local 70. The design guidelines coupled with the Design Review Board will insure that all design elements presented to the Town of Smithfield Planning Board and Town Council will be enforced. Such items include insuring that no vinyl siding will be allowed on the for-sale residential homes, appropriate screening, building setbacks (lot fit) and building heights. The DRB will also review the architectural submittals for the multifamily buildings and similar review of exterior building materials, massing, and access.

The Homeowners Association will have responsibility for the maintenance of all public open space and amenities provided in the landscape.

Local 70 Preliminary Plat

File Number:
S-24-08

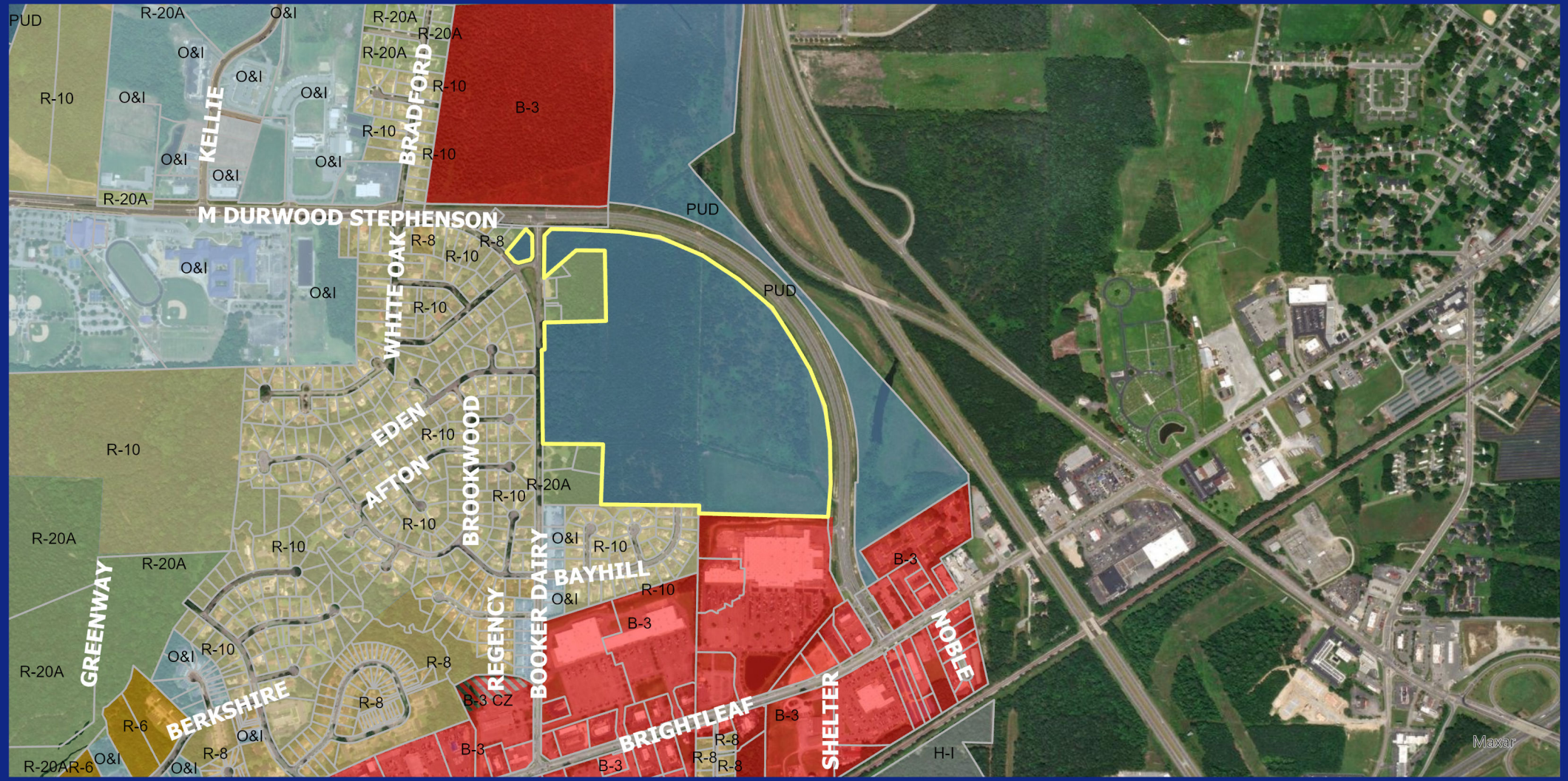
Project Name:
Local 70

Location:
Booker Dairy Rd
M. Durwood Stephenson Pkwy

Tax ID#:
14057011X
14057011Y

Existing Zoning:
PUD

Owner/Applicant:
Smithfield Growth, LLC



N
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1:13,345
Map created by Chloe Allen
Planner I on 11/25/2024

S-24-08 Local 70 Preliminary Plat Adjacent Properties List				
Name1	**Name2**	**Address1**	**Address2**	**CityStateZip**
SMITHFIELD GROWTH LLC		1600 COLON RD		SANFORD, NC 27330-9577
SULLIVAN, SHIRLEY P. JOINT TENANTS (WROS)	MUSTGRAVE, TANYA S. JOINT TENANTS (WROS)	1505 E BOOKER DAIRY RD		SMITHFIELD, NC 27577-9472
BENITEZ, JOSE	BENITEZ, JENNY	1511 E BOOKER DAIRY RD		SMITHFIELD, NC 27577-9472
OLSEN, MARGIE B	OLSEN, PAUL A	1211 E BOOKER DAIRY RD		SMITHFIELD, NC 27577-9419
JUAREZ, ELIZABETH CORTES	PEREZ, JUAN MANUEL	525 DEVILS RACETRACK RD		FOUR OAKS, NC 27524-9304
OLSEN, PAUL A	OLSEN, MARGIE B	1211 E BOOKER DAIRY RD		SMITHFIELD, NC 27577-9419
RESENDIZ, JOSE E.		215 LITTLE DOVE RD		PIKEVILLE, NC 27863-8341
DEMERITT, TAMMY SANDRA		1111 E BOOKER DAIRY RD		SMITHFIELD, NC 27577-9417
LMR RENTALS		201 S BRIGHTLEAF BLVD STE 1		SMITHFIELD, NC 27577-4077
AUSTIN, DALE L	AUSTIN, SANDRA W	1116 OLD BOOKER DAIRY RD		SMITHFIELD, NC 27577-9416
NORRIS, NELDA ELAINE WRIGHT LIFE ESTATE	NORRIS, BRANDY MICHELLE REMAINDER	1204 OLD BOOKER DAIRY RD		SMITHFIELD, NC 27577-3751
MOORE, JAMES H JR	MOORE, YVONNE C	713 CHESTNUT DR		SMITHFIELD, NC 27577-0000
CHAPPELL, LUCILLE		1302 BOOKER DAIRY RD		SMITHFIELD, NC 27577
JIMENEZ, LILA GUADALUPE GUTIERREZ	CASTRO, OSVALDO DIAZ	2 EDEN DR		SMITHFIELD, NC 27577-4805
HEATH, NICOLE JOINT TENANTS (WROS)	HEATH, WYATT JOINT TENANTS (WROS)	2 EDEN DR		SMITHFIELD, NC 27577-4805
ATKINSON, ROBERT WESLEY JR.			PO BOX 1765	SMITHFIELD, NC 27577-1765
BEAN, LYNDSAY		10 ALPINE CT		SMITHFIELD, NC 27577-4818
GILMORE, RODNEY	GILMORE, JENNIFER	9 SHERWOOD CT		SMITHFIELD, NC 27577-4835
SILVA, RUTH M		12 HAZELWOOD CT		SMITHFIELD, NC 27577-0000
EASTERLING, JULIEANNE G	DONAHUE, GEORGE C	721 N OAK ST		MCPHERSON, KS 67460-3443
JEMMA PROPERTIES LLC		3717 ROLSTON DR		RALEIGH, NC 27609-7226
BOOKER DAIRY HOMEOWNERS ASSOCIATION		154 BAYHILL DR		SMITHFIELD, NC 27577-8936
GRIFFIN, BETH CAPPS	OLIVER, LAURA TALTON	161 CREEKWOOD CIR		SMITHFIELD, NC 27577-9411
TITMUS, HENRY EDWARD	TITMUS, SANELA BEKTIC	169 CREEKWOOD CIR		SMITHFIELD, NC 27577-9411
CORDON, GERBER DE JESUS REINOSO		172 CREEKWOOD CIR		SMITHFIELD, NC 27577-9411
PITTMAN, HARRY M	PITTMAN, NELLIE G	151 VALLEYWOOD CIR		SMITHFIELD, NC 27577-9435
ATKINSON, FRANZ C.			PO BOX 70407	BROOKLYN, NY 11207-0407
NGUYEN, TRONG MINH	TRAN, PHUONG	152 VALLEYWOOD CIR		SMITHFIELD, NC 27577-9435
NGUYEN, VU		373 BAYHILL DR		SMITHFIELD, NC 27577-9434
HARRIS, CLEMMON LIFE ESTATE	MEDINA, TANISHA C. REMAINDER	388 BAYHILL DR		SMITHFIELD, NC 27577-9433
SANCHEZ, VICTOR M	MACEDO, ROSDELIA	353 BAYHILL DR		SMITHFIELD, NC 27577-9434
PACHECO, FAUSTO H.		368 BAYHILL DR		SMITHFIELD, NC 27577-9433
WALMART REAL ESTATE TRUST	SAM M WALTON DEVELOPMENT COMPLEX		PO BOX 8050M	BENTONVILLE, AR 72712
DEPARTMENT OF TRANSPORTATION		1546 MAIL SERVICE CTR		RALEIGH, NC 27699-1500
HLK COMMERCIAL LLC	DICKY EVERETT PARRISH REVOCABLE TRUST	2533 LITTLE DIVINE RD		SELMA, NC 27576-7833
H O I LIMITED PARTNERSHIP OF SMITHFIELD			PO BOX 26405	GREENSBORO, NC 27404-0000
LEE 1996 FAMILY LTD PTNRP			PO BOX 237	SMITHFIELD, NC 27577-0237
NELL M HOWELL REVOCABLE TRUST	HOWELL, NELL M TRUSTEE		PO BOX 528	SMITHFIELD, NC 27577-0000
TMG WC CCH SELMA 35, LLC		1700 W HIGGINS RD STE 400		DES PLAINES, IL 60018
SYSCO FOOD SERVICES OF RAL LLC		1390 ENCLAVE PKWY		HOUSTON, TX 77077-2025
ROBERTS & WELLONS, INC.	NELL M. HOWELL REVOCABLE TRUST		PO BOX 1046A	SMITHFIELD, NC 27577
WC JOCO 50 LLC		10 PARKWAY NORTH BLVD STE 120		DEERFIELD, IL 60015-2526

SUBDIVISION DEVELOPMENT PLANS

FOR

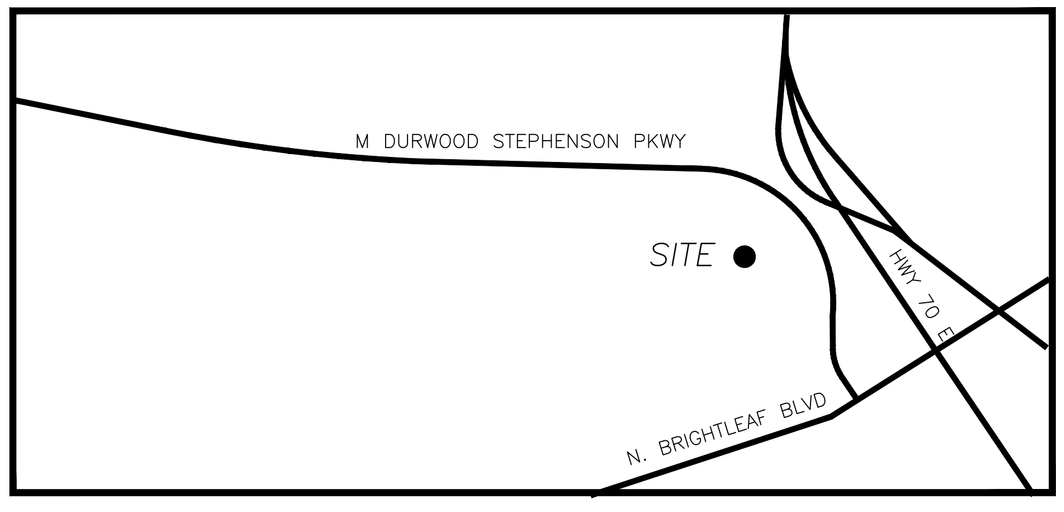
LOCAL 70 RESIDENTIAL DEVELOPMENT

M DURWOOD STEPHENSON PKWY

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

PROJECT NO.: E-9516

SEPTEMBER 2024



VICINITY MAP
N.T.S.

Summey Engineering Associates, PLLC
Engineering - Land Planning - Consulting
P.O. Box 968
Asheboro, NC 27204
ph: (336) 328-0902 fx: (336) 328-0922
email: info@summeyengineering.com

Sheet List Table

GENERAL SITE NOTES:

1. THE INFORMATION SHOWN HEREIN WAS TAKEN FROM BOUNDARY AND TOPOGRAPHIC SURVEY (PROVIDED BY: SUMMEY SURVEYING).
2. THE LOCATIONS OF ALL UTILITIES SHOWN ON THESE PLANS ARE BASED ON THE AVAILABLE INFORMATION. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF UTILITIES WITH THE UTILITY OWNERS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. ALL HANDICAP SITE FEATURES SHALL BE CONSTRUCTED TO MEET ALL FEDERAL, STATE AND LOCAL CODES.
4. ANY DISCREPANCY IN THIS PLAN, ARCHITECTURAL PLANS, AND/OR ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL SETBACKS, EASEMENTS, AND DIMENSIONS SHOWN HEREIN BEFORE BEGINNING CONSTRUCTION.
5. THE CONTRACTOR SHALL CONTACT ALL OWNERS OF EASEMENTS, UTILITIES, AND R.O.W.'S. PUBLIC OR PRIVATE, PRIOR TO WORKING IN THESE AREAS.
6. ACCESS TO UTILITIES, FIRE HYDRANTS, STREET LIGHTING, ET, SHALL REMAIN UNDISTURBED, UNLESS COORDINATED WITH RESPECTIVE UTILITY.
7. DO NOT SCALE THIS DRAWING AS IT IS A REPRODUCTION AND SUBJECT TO DISTORTION.
8. THE CONTRACTOR IS RESPONSIBLE FOR DAMAGE TO ANY EXISTING ITEM AND/OR MATERIAL DUE TO CONSTRUCTION OPERATIONS. ALL STREET SURFACES, DRIVEWAYS, CULVERTS, CURBS AND GUTTERS, ROADSIDE DRAINAGE DITCHES, AND OTHER STRUCTURES THAT ARE DISTURBED OR DAMAGED IN ANY MATTER AS A RESULT OF CONSTRUCTION SHALL BE REPLACED OR REPAIRED IN ACCORDANCE WITH THE SPECIFICATIONS
9. ALL PERMITS RELATIVE TO PROJECT MUST BE OBTAINED PRIOR TO CONSTRUCTION. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH PERMITS ISSUED AND APPLICABLE TO STATE, COUNTY, AND LOCAL CODES.
10. THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES. THE LOCATION OF ALL EXISTING UTILITIES IS NOT NECESSARILY SHOWN ON PLANS AND WHERE SHOWN ARE ONLY APPROXIMATE. THE CONTRACTOR ON HIS INITIATIVE AND AT NO EXTRA COST SHALL HAVE LOCATED ALL UNDERGROUND LINES AND STRUCTURES AS NECESSARY. NO CLAIMS FOR DAMAGES OR EXTRA COMPENSATION SHALL ACCRUE TO THE CONTRACTOR FROM THE PRESENCE OF ITEMS SUCH AS PIPE OR OTHER OBSTRUCTIONS OR FROM ANY DELAY DUE TO REMOVAL OR REARRANGEMENT OF THE SAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DUE TO UNDERGROUND STRUCTURES. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL NONSUBSCRIBING UTILITIES. THE CONTRACTOR(S) SHALL CALL 811 FOR ASSISTANCE IN LOCATING EXISTING UTILITIES. CALL AT LEAST 5 WORKING DAYS PRIOR TO ANY DIGGING.
11. SEEDING TO BE INSTALLED TO NCDEQ REQUIREMENT & STANDARD PRACTICES.
12. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION OF ANY ITEM SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED ALL PLANS AND ANY OTHER DOCUMENTATION FROM ALL OF THE PERMITTING AND ANY OTHER REGULATORY AUTHORITIES. FAILURE OF THE CONTRACTOR TO FOLLOW THIS PROCEDURE SHALL CAUSE THE CONTRACTOR TO ASSUME FULL RESPONSIBILITY FOR ANY SUBSEQUENT MODIFICATION OF THE WORK MANDATED BY ANY REGULATORY AUTHORITY.
13. VISIT SITE AND BRING TO THE ENGINEER'S ATTENTION IN WRITING ANY PROBLEMS OR DISCREPANCIES WITH THE SITE OR PROJECT PRIOR TO CONSTRUCTION.
14. CHECK ALL "VERIFY" DIMENSIONS NOTED ON PLANS. REPORT ANY DISCREPANCIES TO THE ENGINEER IN WRITING PRIOR TO ANY FURTHER CONSTRUCTION.
15. USE THE ARCHITECT'S DRAWINGS FOR BUILDING DIMENSIONS.

CONTRACTOR NOTES:

1. ALL DIMENSIONS AND RADII ARE OUTSIDE FACE OF BUILDING OR TO FACE OF CURB, OR TO THE CENTER OF STRUCTURES SUCH AS INLETS, SIGN POSTS, ETC., UNLESS OTHERWISE NOTED.
2. CONTACT ENGINEER FOR OBSERVATION OF CONSTRUCTION RELATED TO REQUIRED FEDERAL, STATE, OR LOCAL CERTIFICATIONS INCLUDING BUT NOT LIMITED TO PROOF ROLL AND ASPHALT PLACEMENT. PROVIDE 24 HOUR NOTICE TO ENGINEER FOR REQUIRED CONSTRUCTION OBSERVATION RELATED TO CERTIFICATION OF ROADWAY, WATER SYSTEM, PAVEMENT, ETC.
3. KEEP ALL PLANTING AND GRASS AREAS FREE OF DEBRIS, STONES, CONSTRUCTION MATERIALS, ETC., RESPONSIBLE FOR NOT DAMAGING EXISTING PLANTING TO REMAIN.
4. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND AVOIDING ALL UNDERGROUND UTILITIES WHETHER SHOWN ON THE SITE PLAN OR NOT. THOSE SHOWN ARE BASED ON THE SURVEY PROVIDED AND MAY NOT BE ALL INCLUSIVE. CONTACT UTILITY LOCATION SERVICE OR OTHER APPROPRIATE UTILITY LOCATION SERVICE FOR UTILITY IDENTIFICATION PRIOR TO ANY WORK. CONTRACTOR TO PROTECT ALL UTILITIES TO REMAIN – TYPICAL. CONTACT ALL UTILITY COMPANIES TO INSURE THE UTILITIES ARE SHUT DOWN PRIOR TO THE START OF ANY DEMOLITION AND/ OR SITE WORK.
5. PATCH / REPAIR STREETS, STRUCTURES, ETC. AS NECESSARY AFTER CONNECTION OF PROPOSED UTILITIES.
6. SEE PLAN SET FOR PROPOSED GRADES AND EROSION CONTROL.
7. CIVIL/SITE CONTRACTOR SHALL FIELD VERIFY VERTICAL AND HORIZONTAL LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION. CIVIL/SITE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE LOCAL MUNICIPALITY AND ARCHITECT PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY. CONTRACTOR SHALL CALL 811 5 WORKING DAYS HOURS PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.
8. CONTRACTOR SHALL NOTIFY THE LOCAL MUNICIPALITY PUBLIC WORKS PRIOR TO ANY CONSTRUCTION ON STREET RIGHTS-OF-WAY
9. ANY CONSTRUCTION WITHIN THE LOCAL MUNICIPALITY RIGHTS-OF WAY ARE TO BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY STANDARDS AND SPECIFICATIONS REGARDING MATERIALS, INSTALLATION, AND TESTING, UNLESS OTHERWISE IN THE CONTRACT DOCUMENTS. ANY CONSTRUCTION WITHIN THE RIGHT-OF-WAY SHALL BE
10. PROTECTED WITH SIGNAGE AND TRAFFIC SAFETY DEVICES IN ACCORDANCE WITH THE NORTH CAROLINA STANDARDS AND GUIDELINES ALSO THE CONTRACTOR SHALL HAVE "UTILITY WORK AHEAD" SIGNS LOCATED AT ALL LOCATIONS WHEN ENTERING THE RIGHTS-OF-WAY.

UTILITY NOTES: (IF APPLICABLE)

1. UTILITY INFORMATION SHOWN HEREON WAS OBTAINED FROM THE BEST AVAILABLE SOURCE AND MAY OR MAY NOT BE EITHER ACCURATE OR COMPLETE. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXACT LOCATIONS OF EXISTING UTILITIES AND IS RESPONSIBLE FOR ANY DAMAGE TO ANY UTILITIES, EITHER PUBLIC OR PRIVATE, SHOWN HEREON OR NOT SHOWN HEREON. ANY REPAIRS SHALL BE DONE TO THE SATISFACTION OF THE APPROPRIATE UTILITY COMPANY.
2. THE GENERAL CONTRACTOR SHALL CONFIRM ALL NEW UTILITY TAP LOCATIONS WITH THE UTILITY OWNERS. ALL FEES SHALL BE THE RESPONSIBILITY OF CONTRACTOR OR GENERAL CONTRACTOR.
3. SEE ELECTRICAL ENGINEERING SITE PLAN FOR LOCATION OF ALL SITE LIGHTING AND REQUIREMENTS
4. ALL NEW LOT LIGHTS AND THE MAIN IDENTIFICATION SIGN SHALL HAVE A MINIMUM 10 FEET CLEARANCE FROM ALL OVERHEAD UTILITIES.
5. GENERAL CONTRACTOR IS RESPONSIBLE FOR PERMITS AND/OR APPROVALS NECESSARY FOR ANY WORK IN ROADWAY OR RIGHT-OF-WAY.
6. MINIMUM COVER FOR CONDUITS SHALL BE 36" UNLESS OTHERWISE SHOWN OR NOTED IN THESE PLANS.
7. ALL MANHOLES, VALVES, AND MONUMENT FRAMES SHALL BE SET TO FINISH GRADE AFTER PAVING.
8. THE CONTRACTOR SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE STATE CONSTRUCTION SAFETY ORDERS. TRENCHES SHALL BE SHORED IN ACCORDANCE WITH OSHA.
9. THE MINIMUM SLOPE FOR SANITARY SEWER LINES SHALL BE AS FOLLOWS: 1) 1/4"/FT FOR 4" LINES AND 2) 1/8"/FT FOR 6" LINES. 6" CLEANOUTS SHALL BE PLACED AT 75' INTERVALS. 4" CLEANOUTS SHALL BE PLACED AT 50' INTERVALS
10. ALL SEWER LINES SHALL HAVE A FINAL COVER DEPTH 4'-0 IN NON-TRAFFIC AREAS AND 5'-0 MINIMUM IN TRAFFIC AREAS UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS.
11. CABLE TV SERVICE ROUTING IS NOT PART OF THIS PLAN, CONTRACTOR TO COORDINATE WITH CABLE COMPANY.
12. EXISTING MANHOLES SHOULD BE FIELD VERIFIED FOR RIMS AND INVERTS.
13. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL INSPECTIONS, CERTIFICATIONS, EQUIPMENT, ETC. THAT MAY BE REQUIRED.
14. THE ENGINEER AND/OR OWNER DISCLAIM ANY ROLE IN THIS CONSTRUCTION MEANS/METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
15. OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA) STANDARDS FOR EXCAVATIONS; FINAL RULE 29CFR PART 1926, SUBPART "P" APPLIES TO ALL EXCAVATIONS EXCEEDING 5 FEET IN DEPTH.
16. EXCAVATION EXCEEDING TWENTY (20) FEET IN DEPTH REQUIRES THE DESIGN OF A TRENCH SAFETY SYSTEM BY A REGISTERED PROFESSIONAL ENGINEER.
17. CONTRACTOR SHALL MAINTAIN AN "AS BUILT" SET OF DRAWINGS TO RECORD THE EXACT LOCATION OF ALL PIPING PRIOR TO CONCEALMENT. DRAWINGS SHALL BE GIVEN TO THE OWNER UPON COMPLETION OF THE PROJECT WITH A COPY OF THE TRANSMITTAL LETTER TO THE ENGINEER.
18. WATER PIPING SHALL BE CONNECTED TO BUILDING STUBS, VERIFY LOCATIONS PRIOR TO BEGINNING WATER PIPE INSTALLATION.
19. WASTE PIPING SHALL BE CONNECTED TO BUILDING STUBS, VERIFY LOCATIONS AND INVERTS PRIOR TO BEGINNING ANY WASTE PIPE INSTALLATION.
20. ALL UTILITY CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY PUBLIC WORKS AND CROSS CONNECTION CONTROL, REGULATIONS AND STANDARDS.
21. SITE UTILITY CONTRACTOR TO PROVIDE WATER AND SANITARY SEWER TO WITHIN 5 FEET OF THE BUILDING, CONTRACTOR SHALL COORDINATE SITE PLAN CONNECTIONS WITH THE ARCHITECTURAL BUILDING PLANS.
22. SANITARY CLEANOUTS SHALL BE PLACED NO MORE THAN 75 FEET APART. CLEAN OUTS LOCATED IN PAVEMENT AREAS SHALL HAVE A HEAVY DUTY TRAFFIC RATED CONSTRUCTION.
23. CONNECTION OF SANITARY SEWER SERVICE TO AN EXISTING MANHOLE SHALL COMPLY WITH THE LOCAL MUNICIPALITY PUBLIC WORKS STANDARDS, INCLUDING: CORE DRILL FOR OPENING INTO MANHOLE AND INSTALL WITH FLEXIBLE BOOT. IF PAVEMENT CUT IS REQUIRED, CONTRACTOR SHALL PATCH PAVEMENT WITH A SECTION TO MATCH EXISTING PAVEMENT
24. ALL WORK SHALL BE GOVERNED BY THE LATEST EDITIONS OF THE STATE MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION, BUILDING CODE, ENERGY CONSERVATION, HANDICAPPED ACCESSIBILITY, NATIONAL ELECTRICAL CODES, AND NATIONAL FIRE PROTECTION ASSOCIATION CODES AS APPLICABLE AND AS ADOPTED BY THE AUTHORITIES HAVING JURISDICTION AND LATEST VERSION OF NC DOT POLICIES & PROCEDURES FOR ACCOMMODATING UTILITIES ON HIGHWAY RIGHTS-OF-WAY.
25. LOCATIONS OF EXISTING UTILITIES SHOWN ON THESE PLANS ARE APPROXIMATE OR SCHEMATIC. THE LOCATIONS ARE BASED ON ACTUAL FIELD SURVEYS AND AVAILABLE RECORDS, CONTRACTOR SHALL FIELD VERIFY LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND UNDERGROUND STRUCTURES AND VERIFY REQUIRE COVER AND CLEARANCES PRIOR TO CONSTRUCTION AND REPORT ANY CONFLICTS TO THE ENGINEER.
26. CONTRACTOR SHALL CALL 811 AT LEAST 5 WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION OR EXCAVATION TO HAVE UTILITIES LOCATED. CONTRACTOR SHALL CONTACT ANY LOCAL UTILITIES THAT PROVIDE THEIR OWN LOCATOR SERVICES INDEPENDENTLY.
27. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR RELOCATION OF ALL EXISTING UTILITIES IN COORDINATION WITH THE APPROPRIATE UTILITY, AGENCY, OR COMPANY.
28. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACTUAL LOCATION AND AVAILABILITY OF ALL EXISTING AND PROPOSED UTILITIES IN THE FIELD PRIOR TO GROUND BREAKING.
29. ALL UTILITIES MUST BE LOCATED UNDERGROUND AND COORDINATED WITH THE LOCAL MUNICIPALITY OR LOCAL UTILITIY COMPANY.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 029563 ENGINEER JAMES MICHAEL SUMMEY, JR.

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

No.	Date:	Description:	By:

GENERAL NOTES

LOCAL 70 RESIDENTIAL DEVELOPMENT

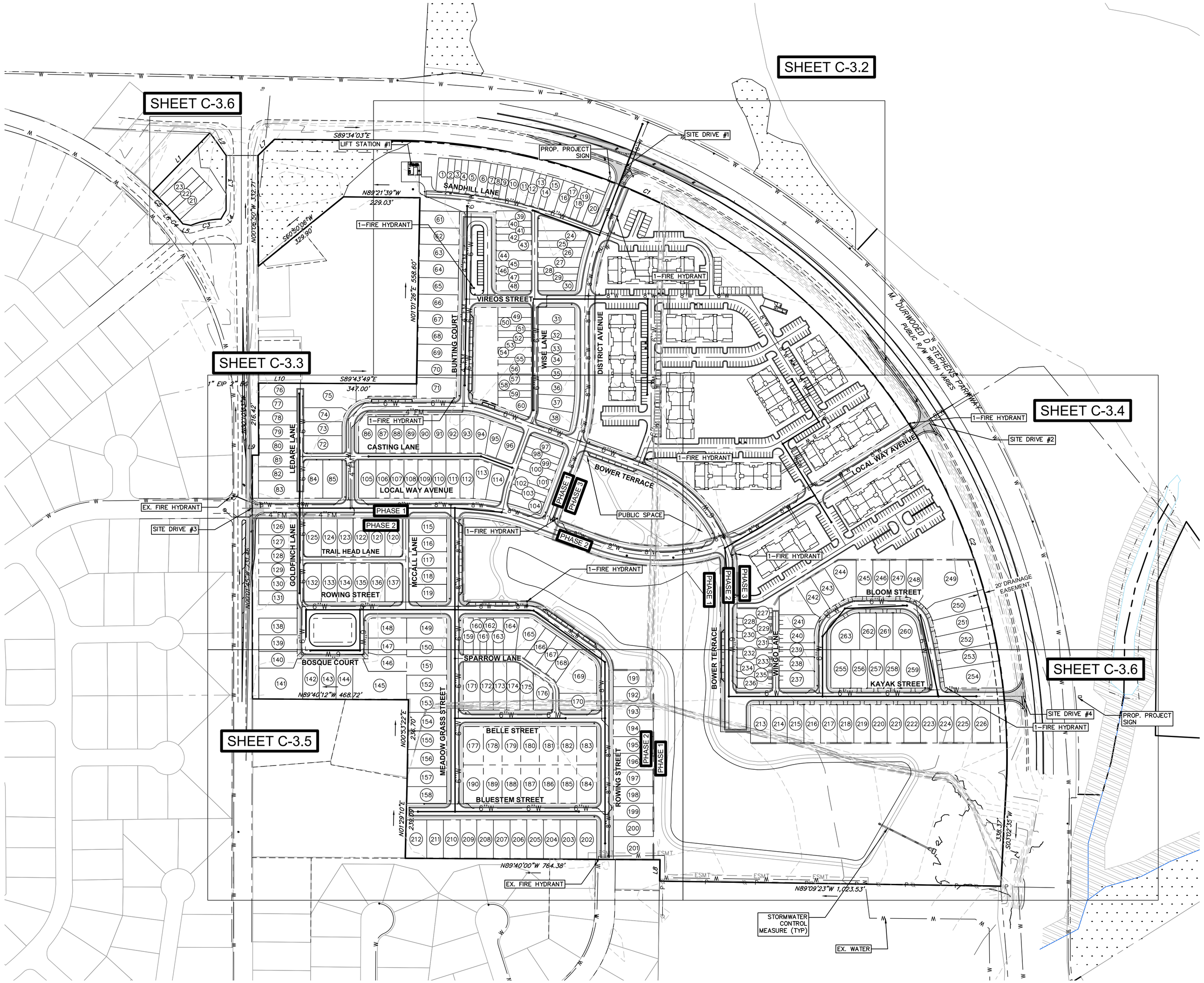
HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

Sheet No.

C-1.1



LEGEND

PUBLIC RIGHT-OF-WAY

PRIVATE RIGHT-OF-WAY

SITE DATA

1. TOTAL PARCEL AREA: 86.72 AC.
2. TOTAL AREA IN ROW: 15.07 AC
   PARCEL AREA MINUS ROW: 71.65 AC
3. TOTAL AREA IN LOTS: 31.30 AC

TOTAL NUMBER OF RESIDENCES: 590

TOTAL NUMBER OF TOWNHOMES: 75 (60 PHASE 1) (15 PHASE 2)
TOTAL NUMBER OF SFR: 188 (43 - 42' REAR LOTS PHASE 1)(37 - 42' REAR LOTS PHASE 2)
(4- 40' FRONT LOTS PHASE 2)
(11 - 50' FRONT LOTS PHASE 1)(93 - 50 FRONT LOTS PHASE 2)
TOTAL NUMBER OF MFU: 324 (PHASE 3)

4. TOTAL OPEN SPACE AREA: 40.02 AC (46.15%)
5. TOTAL RECREATION SPACE: 7.1 AC (8.19%)
6. TOTAL PARKING REQUIRE

TOWNHOMES: 150
SINGLE FAMILY 376
MULTI-FAMILY: 624

TOTAL PROVIDE: 1,152

7. LOTS PER ACRE: 6.8
8. PARCEL NO. 260410-47-746, 260406-38-4591
9. EXISTING ZONING - PUD
10. PROPOSED ZONING - PUD
11. NCFIRM PANEL NO.: 3720260400K
12. WATER AND WASTEWATER SERVICES PROVIDED BY CITY OF SMITHFIELD
13. PROPOSED STREETS, WATER, SEWER, AND STORMWATER TO BE MAINTAINED BY THE CITY OF SMITHFIELD
14. PERMITS TO BE OBTAINED INCLUDE:

- NCDOT DRIVEWAY PERMIT
- CITY OF SMITHFIELD PLANNING AND ENGINEERING APPROVALS
- NCDEQ EROSION CONTROL PERMIT
- NCDEQ PUBLIC WATER AND SEWER EXTENSIONS

14. DETAILED CONSTRUCTION AND CIVIL ENGINEERING PLANS TO INCLUDE:

- SITE GRADING, EROSION CONTROL, AND STORM DRAINAGE
- STREET AND UTILITY PLAN AND PROFILES
- ALL SUPPORTING PLANS, DETAILS, AND SPECIFICATIONS

DISTRICT AVENUE (PUBLIC ROW) - 1,062 LF
SANDHILL LANE (PRIVATE ROW) - 538 LF
WISE LANE (PRIVATE ROW) - 923 LF
VIREOS STREET (PUBLIC ROW) - 356 LF
BUNTING COURT (PUBLIC) - 322 LF
BUNTING COURT (PRIVATE ROW) - 507 LF
BOWER TERRACE (PUBLIC ROW) - 2,090 LF
LEDARE LANE (PRIVATE ROW) - 311 LF
CASTING LANE (PRIVATE ROW) - 649 LF
LOCAL WAY AVENUE (PUBLIC ROW) - 2,106 LF
GOLDFINCH LANE (PRIVATE ROW) - 312 LF
TRAIL HEAD LANE (PRIVATE ROW) - 316 LF
MCCALL LANE (PRIVATE ROW) - 305 LF
ROWING STREET (PUBLIC ROW) - 1,536 LF
BOSQUE COURT (PUBLIC ROW) - 409 LF
MEADOW GRASS STREET (PUBLIC ROW) - 911 LF
SPARROW LANE (PRIVATE ROW) - 423 LF
BELLE STREET (PUBLIC ROW) - 450 LF
BLUESTEM STREET (PUBLIC ROW) - 586 LF
WINGO LANE (PRIVATE ROW) - 256 LF
BLOOM STREET (PUBLIC ROW) - 784 LF
KAYAK STREET (PUBLIC ROW) - 889 LF

PUBLIC ROW TOTAL LINEAL FEET - 11,501 LF
PRIVATE ROW TOTAL LINEAL FEET - 4,540 LF

ROW TOTAL AREA - 664,806 SF

TOTAL LINEAL FEET OF SIDEWALK - 20579 LF

TOTAL LINEAL FEET OF TRAIL - 3981 LF

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.

NAD 83 GRID NORTH

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049449 ENGINEER JAMES NOLAN SUMMEY, JR.

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Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

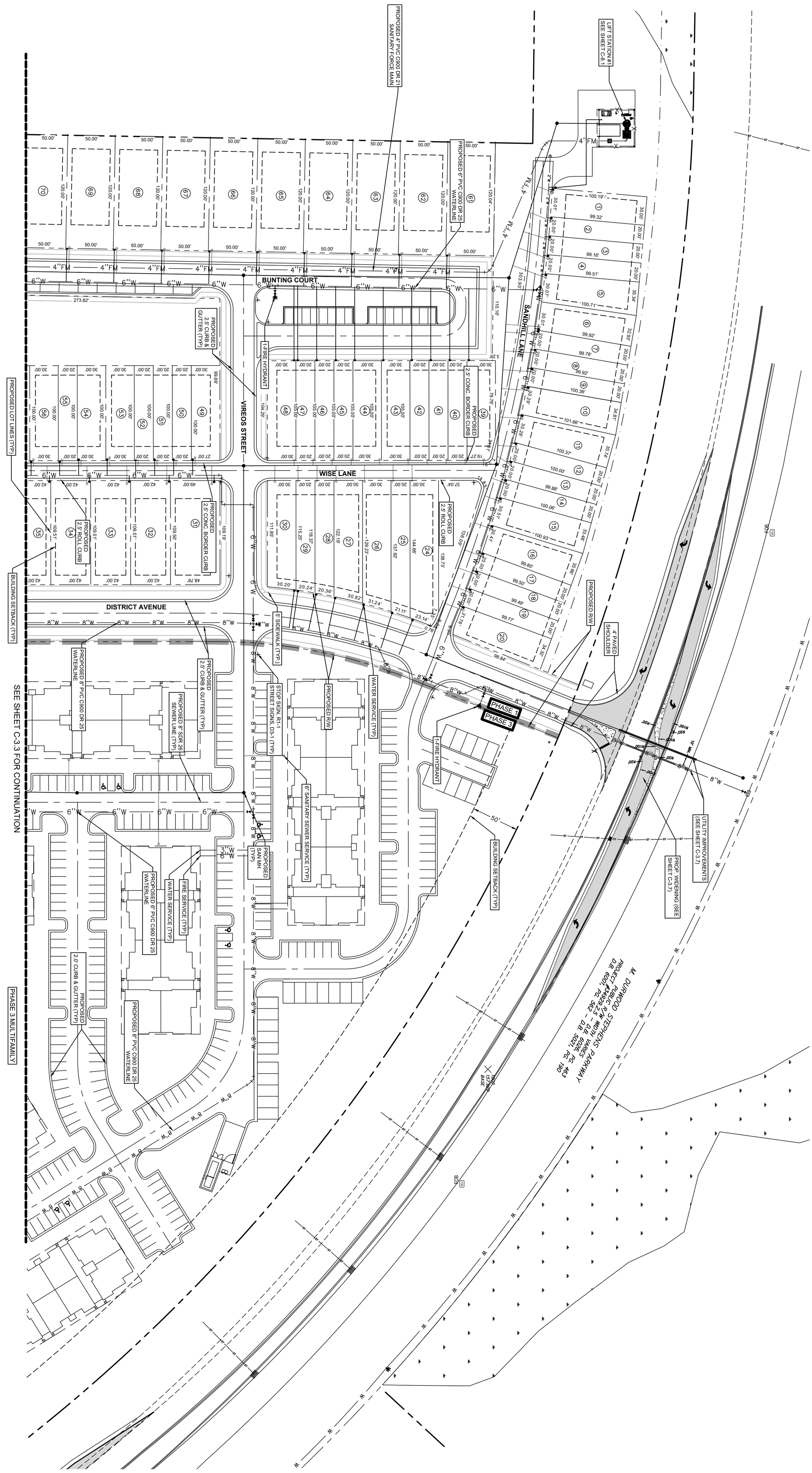
No.	Date:	Description:	By:

OVERALL SITE AND UTILITY PLAN
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM / JM
Checked By:	HWSJ
Job No.:	E-9916

Sheet No. C-3.1



PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.						
C-3.2	Scale: AS NOTED	SITE AND UTILITY PLAN	No.	Date:	Description:	By:
	Date: MONTH YEAR	LOCAL 70 RESIDENTIAL DEVELOPMENT				
	Drawn By: CM/ JM	HWY 70				
	Checked By: HMSJ	SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA				
	Job No.: E-9516					

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Email - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

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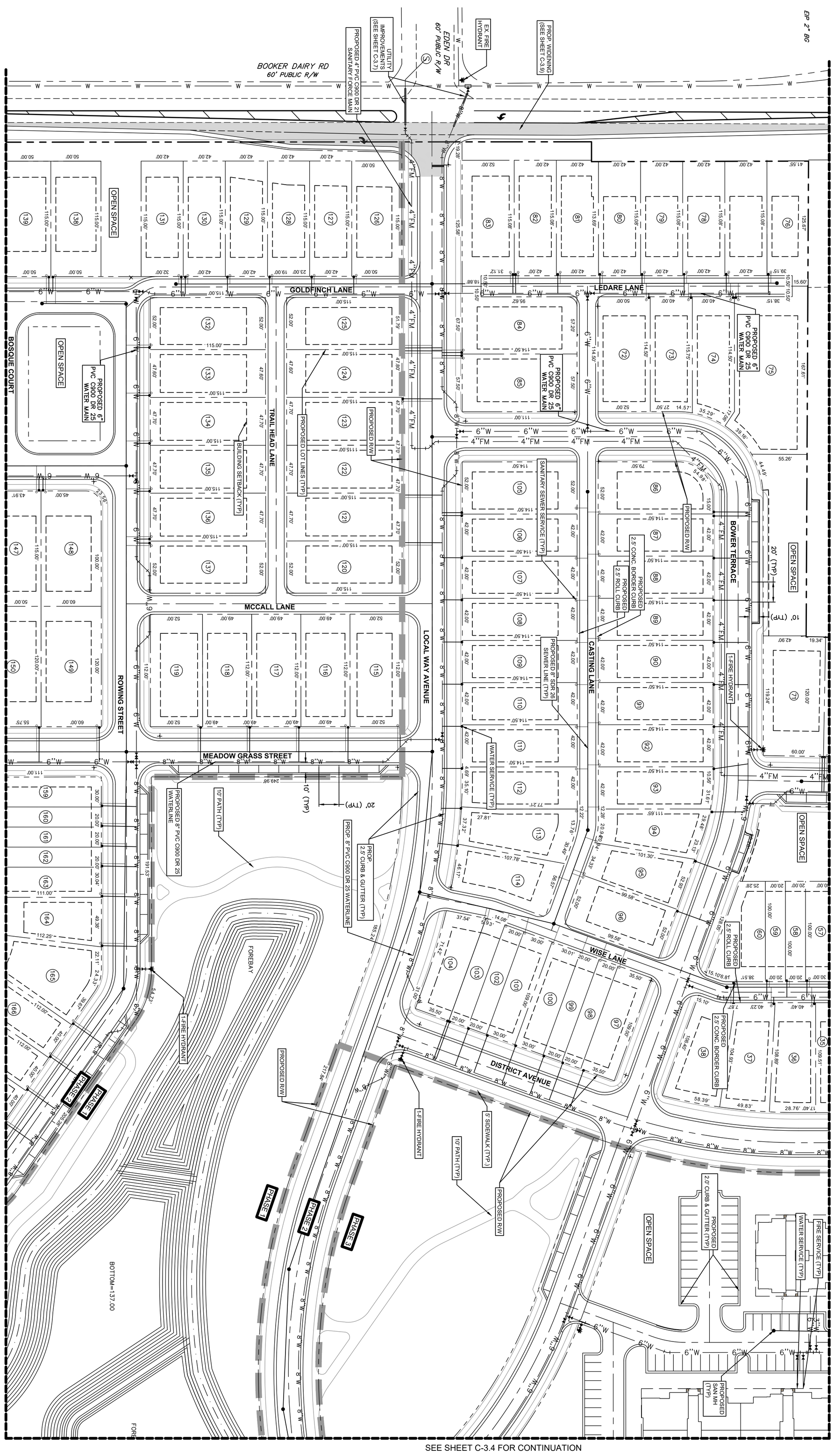

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PRELIMINARY PLANS NOT FOR REVIEW

Sheet No. C-3.3	Scale: AS NOTED	SITE AND UTILITY PLAN	No.	Date:	Description:	By:
	Date: MONTH YEAR	LOCAL 70 RESIDENTIAL DEVELOPMENT				
	Drawn By: CM/ JM	HWY 70				
	Checked By: HMSJ	SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA				
	Job No.: E-9516					

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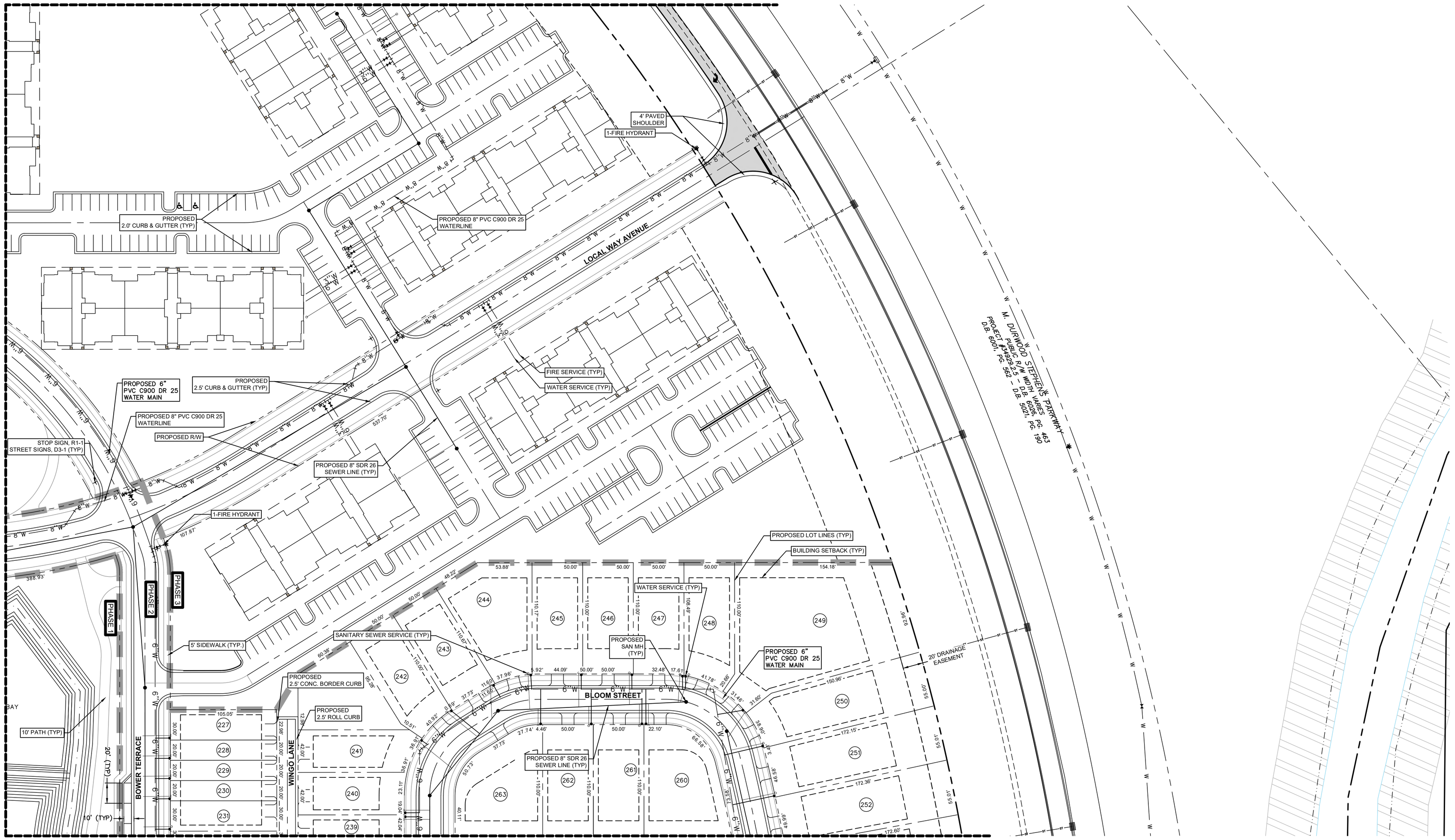
NC Professional Engineering Firm License No. P-0336

SEE SHEET C-3.2 FOR CONTINUATION

SEE SHEET C-3.3 FOR CONTINUATION



SEE SHEET C-3.6 FOR CONTINUATION

SEE PLAN & PROFILE SHEETS C-6.1 - C-6.23 FOR WATERLINE VALVES AND APPURTENANCES

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

NAD 83 GRID NORTH

PRELIMINARY PLANS NOT FOR REVIEW

Know what's below. Call before you dig.

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES CHARLES NOVACK SUMMEY, JR.

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NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

SITE AND UTILITY PLAN

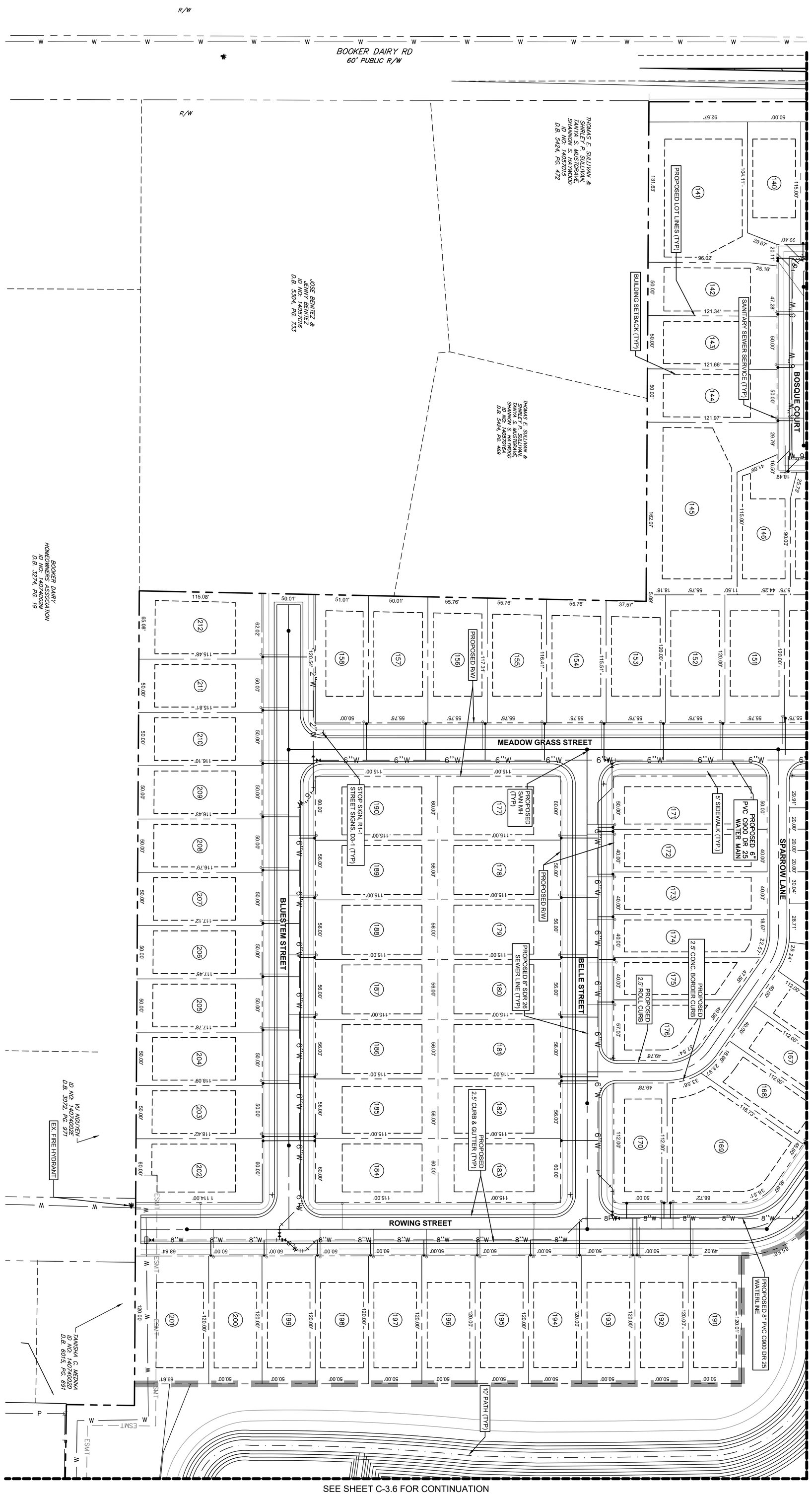
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-6916

Sheet No. C-3.4



Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.	C-3.5
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

SITE AND UTILITY PLAN

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

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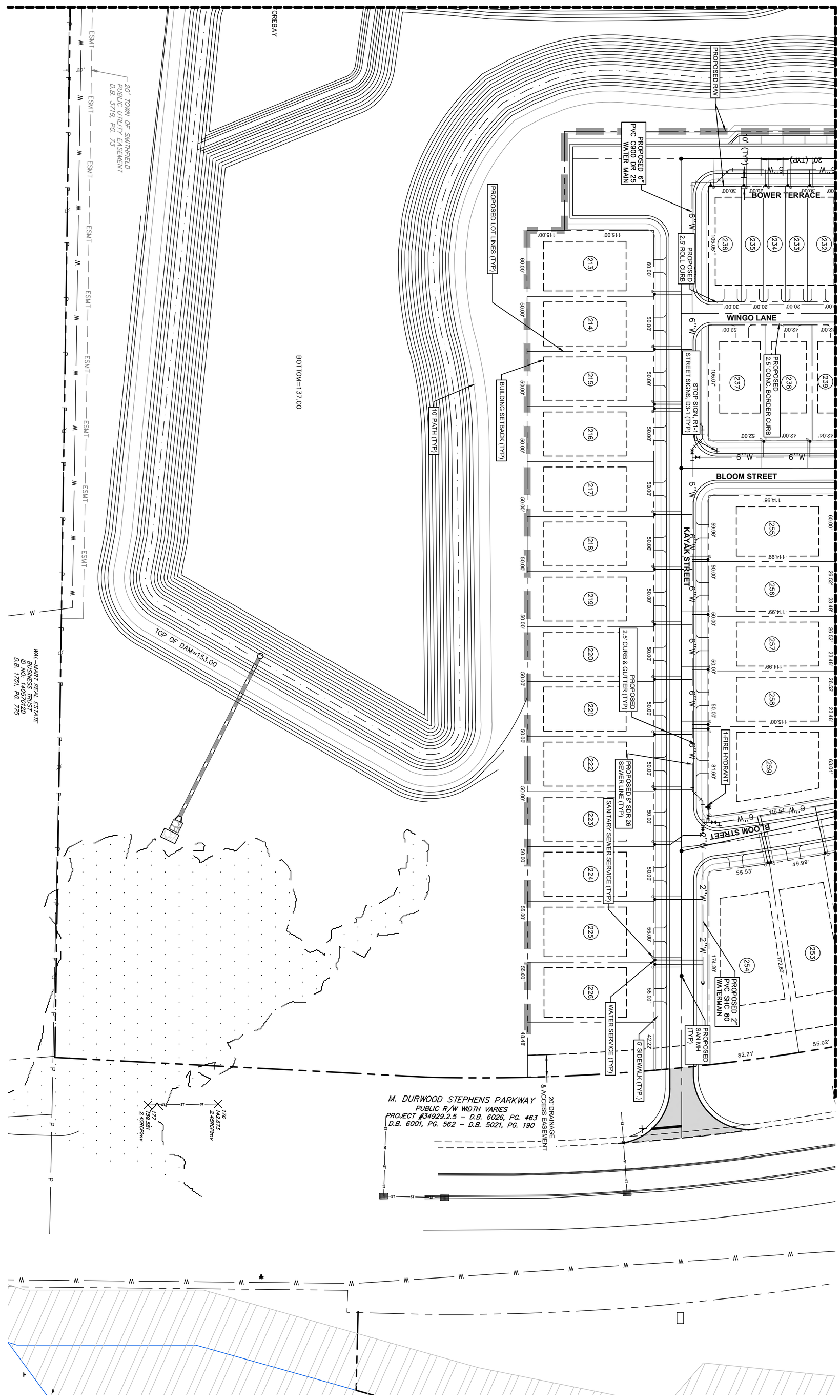
NC Professional Engineering Firm License No. P-0336

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 019864 HOWARD MINTON SUMMEY, JR.

SEE SHEET C-3.5 FOR CONTINUATION



SEE SHEET C-3.4 FOR CONTINUATION

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

NAD 83
GRID NORTH

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.	C-3.6
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

SITE AND UTILITY PLAN

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

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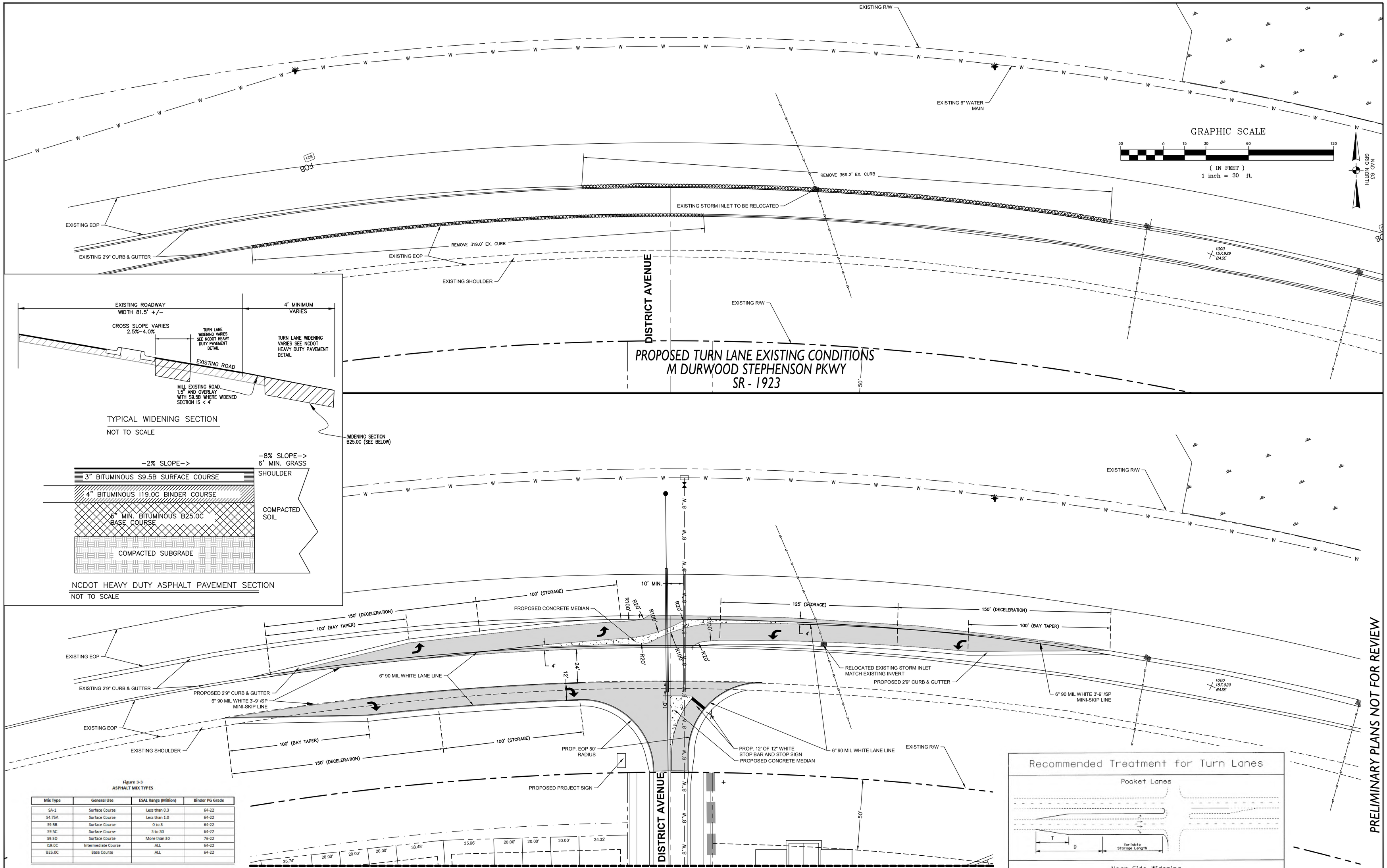

Figure 3-3
ASPHALT MIX TYPES

Mix Type	General Use	ESAL Range (Million)	Binder PG Grade
SA-1	Surface Course	Less than 0.3	64-22
S4.75A	Surface Course	Less than 1.0	64-22
S9.5B	Surface Course	0 to 3	64-22
S9.5C	Surface Course	3 to 30	64-22
S9.5D	Surface Course	More than 30	76-22
I19.0C	Intermediate Course	ALL	64-22
B25.0C	Base Course	ALL	64-22

3.3 PAVEMENT LAYER DEPTH GUIDELINES (FOR PAVEMENT DESIGN PURPOSES)

Mix Type	Lift Thickness (Inches)		
	Minimum Lift (1)	Maximum Lift	Normal Total Layer
SA-1	0.50	1.0	2.0
S4.75A	0.75	1.0	2.0
S9.5B	1.0 (2)	1.5	3.0
S9.5C, D	1.5	2.0	3.0
I19.0 C	2.5	4.0	4.0
B25.0 C	3.0 (3)	5.5	---

(1) Approximate Minimum Thickness; lower rates may be used for leveling courses.
(2) For S9.5B placed on top of an AST MAT coat, minimum lift thickness is 1.5 in.
(3) For B25.0C placed on unstabilized subgrade, minimum lift thickness is 4.0 in.

SEE SHEET C-3.2 FOR CONTINUATION

PROPOSED TURN LANE IMPROVEMENTS
M DURWOOD STEPHENSON PKWY
SR - 1923

TURNING LANE NOTES:

DESIGN SPEED = 50 MPH A=(12)(50) = 600 LF

NOTE; NO RAISED REFLECTORS ARE PROPOSED AS PART OF THIS PROJECT. ALL STRIPING TO BE IN ACCORDANCE WITH NCDOT STD 1205

ALL PROPOSED ROADWAY IMPROVEMENTS TO BE COORDINATED WITH NCDOT

Design Speed (mph)	Posted Speed (mph)	Minimum Deceleration Length (D)	Desirable Deceleration Length (D)	Bay Taper Length (T)	Approach / Departure Taper (A)
30	≤ 25	100'	150'	75'	A = WS²/60 (IF S ≤ 40 MPH)
35	30	100'	150'	75'	A = WS (IF S > 40 MPH)
40	35	150'	200'	100'	S = Design Speed
45	40	150'	250'	100'	W = Width of Lateral Shift
50	45	150'	300'	100'	* Storage length for waiting vehicles should be calculated based on the latest version of the Highway Capacity Manual or Policy on Street and Driveway Access to North Carolina Highways.
55	50	200'	500'	150'	
60	55	250'	575'	200'	

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PRELIMINARY PLANS NOT FOR REVIEW

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19448 NOBLE JAMES SUMMEY, JR.

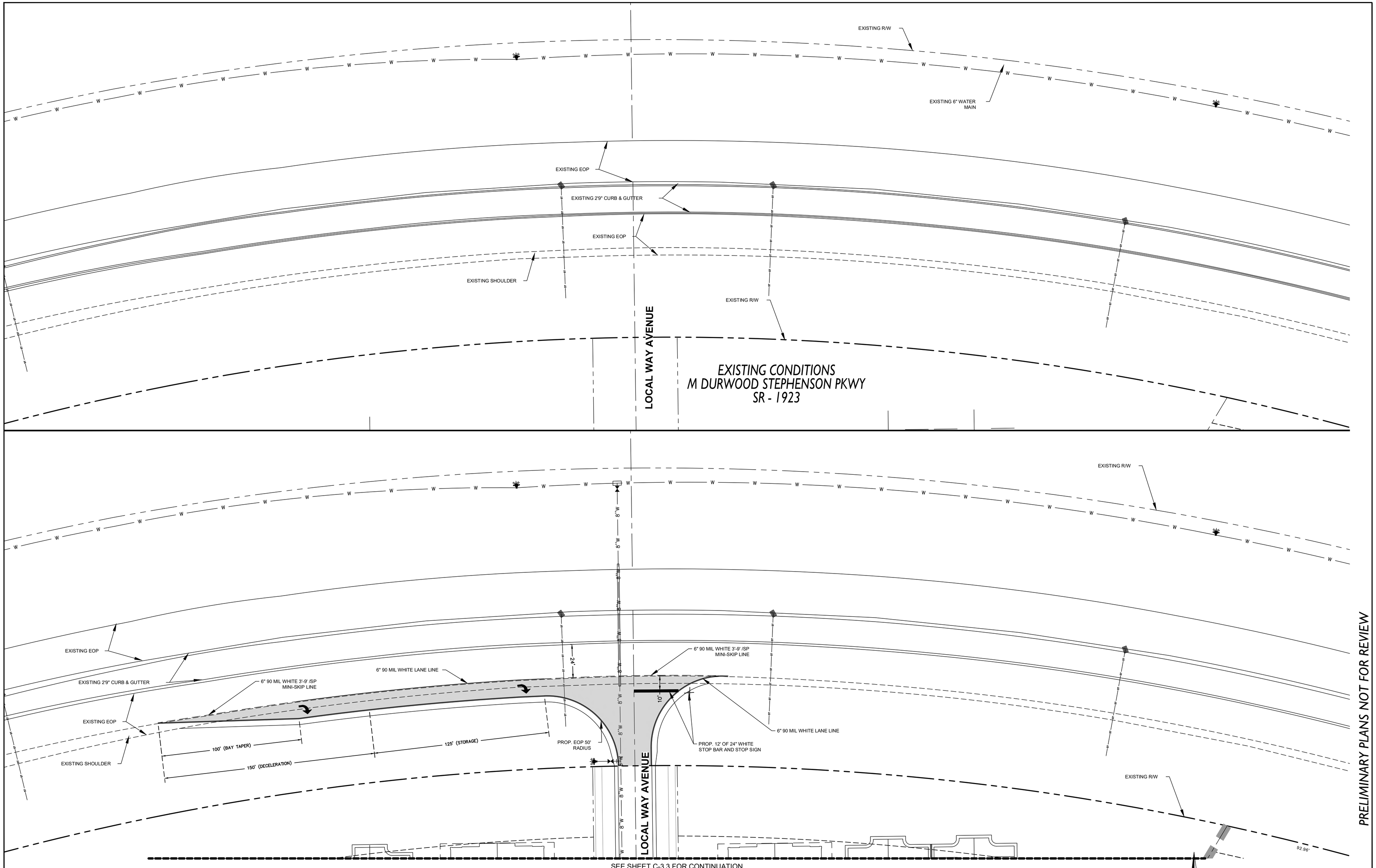
SEA

No.	Date:	Description:	By:

ENTRANCE #1 IMPROVEMENTS
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale: AS NOTED	Date: MONTH YEAR	Drawn By: CM/JM	Checked By: HMSJ
Job No.: 3-9916			

Sheet No. C-3.1



SEE SHEET C-3.3 FOR CONTINUATION

TURNING LANE NOTES:

DESIGN SPEED = 50 MPH A=(12)(50) = 600 LF

NOTE; NO RAISED REFLECTORS ARE PROPOSED AS PART OF THIS PROJECT. ALL STRIPING TO BE IN ACCORDANCE WITH NCDOT STD 1205

ALL PROPOSED ROADWAY IMPROVEMENTS TO BE COORDINATED WITH NCDOT

PROPOSED TURN LANE IMPROVEMENTS
M DURWOOD STEPHENSON PKWY
SR - 1923

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES HERMACK SUMMEY, JR.

SEA

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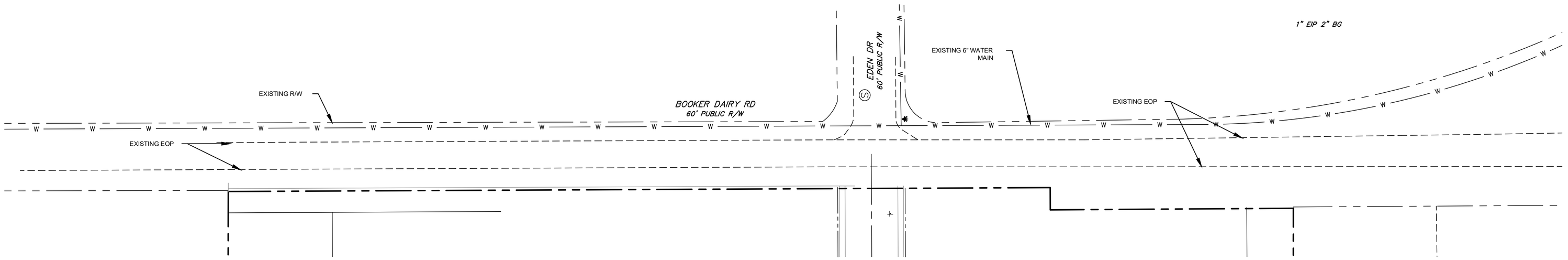
No.	Date:	Description:	By:

ENTRANCE #2 IMPROVEMENTS
LOCAL 70 RESIDENTIAL DEVELOPMENT

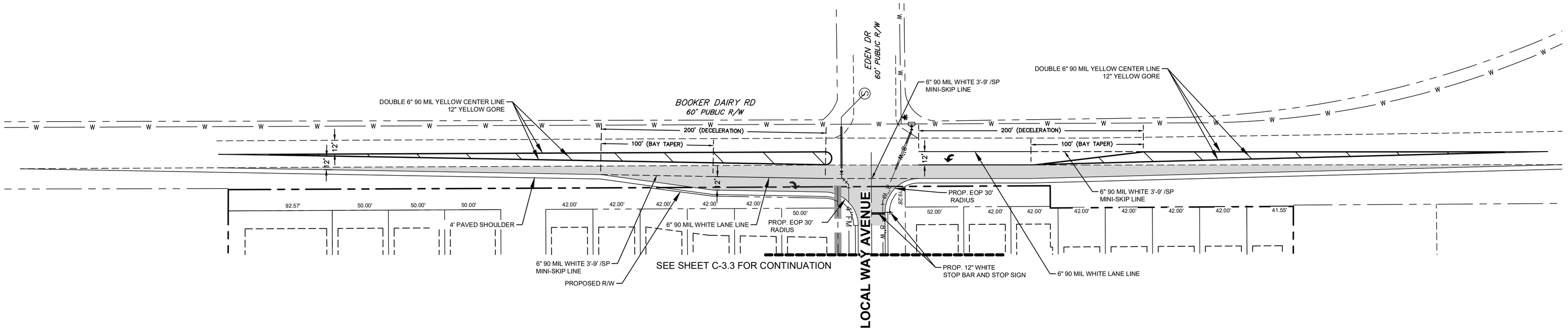
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-9916

Sheet No. C-3.8



EXISTING CONDITIONS
BOOKER DAIRY RD
SR - 2889



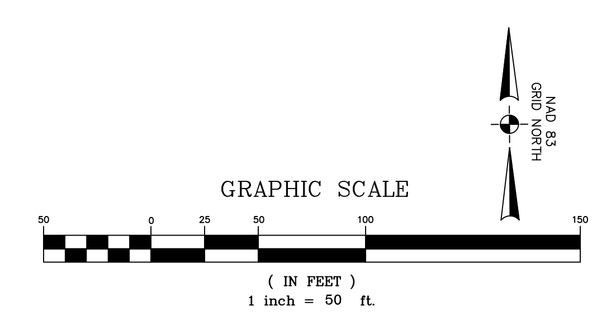
PROPOSED TURN LANE IMPROVEMENTS
BOOKER DAIRY RD
SR - 2889

TURNING LANE NOTES:

DESIGN SPEED = 50 MPH A=(12)(50) = 600 LF

NOTE: NO RAISED REFLECTORS ARE PROPOSED AS PART OF THIS PROJECT. ALL STRIPING TO BE IN ACCORDANCE WITH NCDOT STD 1205

ALL PROPOSED ROADWAY IMPROVEMENTS TO BE COORDINATED WITH NCDOT



811
Know what's below.
Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES CHRISTOPHER MONACK SUMMEY, JR.

SEA

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No.	Date:	Description:	By:

ENTRANCE #2 IMPROVEMENTS
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
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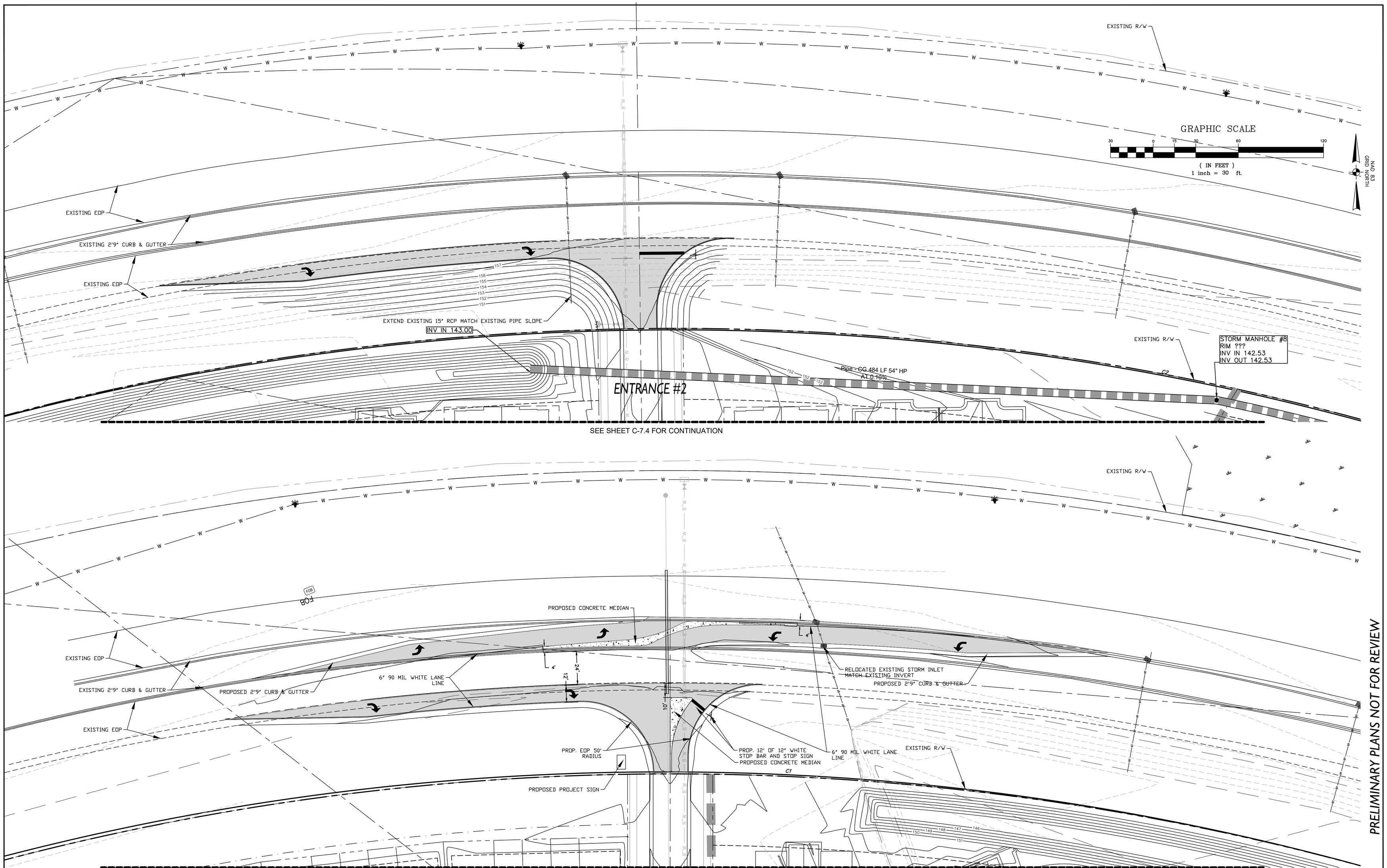
Checked By:	HMSJ
Job No.:	E-9516

Sheet No.
C-3.9



PRELIMINARY PLANS NOT FOR REVIEW

Know what's below. Call before you dig.

NORTH CAROLINA PROFESSIONAL SEAL 5449 ENGINEER JAMES HERMACK SUMMEY, JR.

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NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

ENTRANCE #1 & #2 GRADING
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
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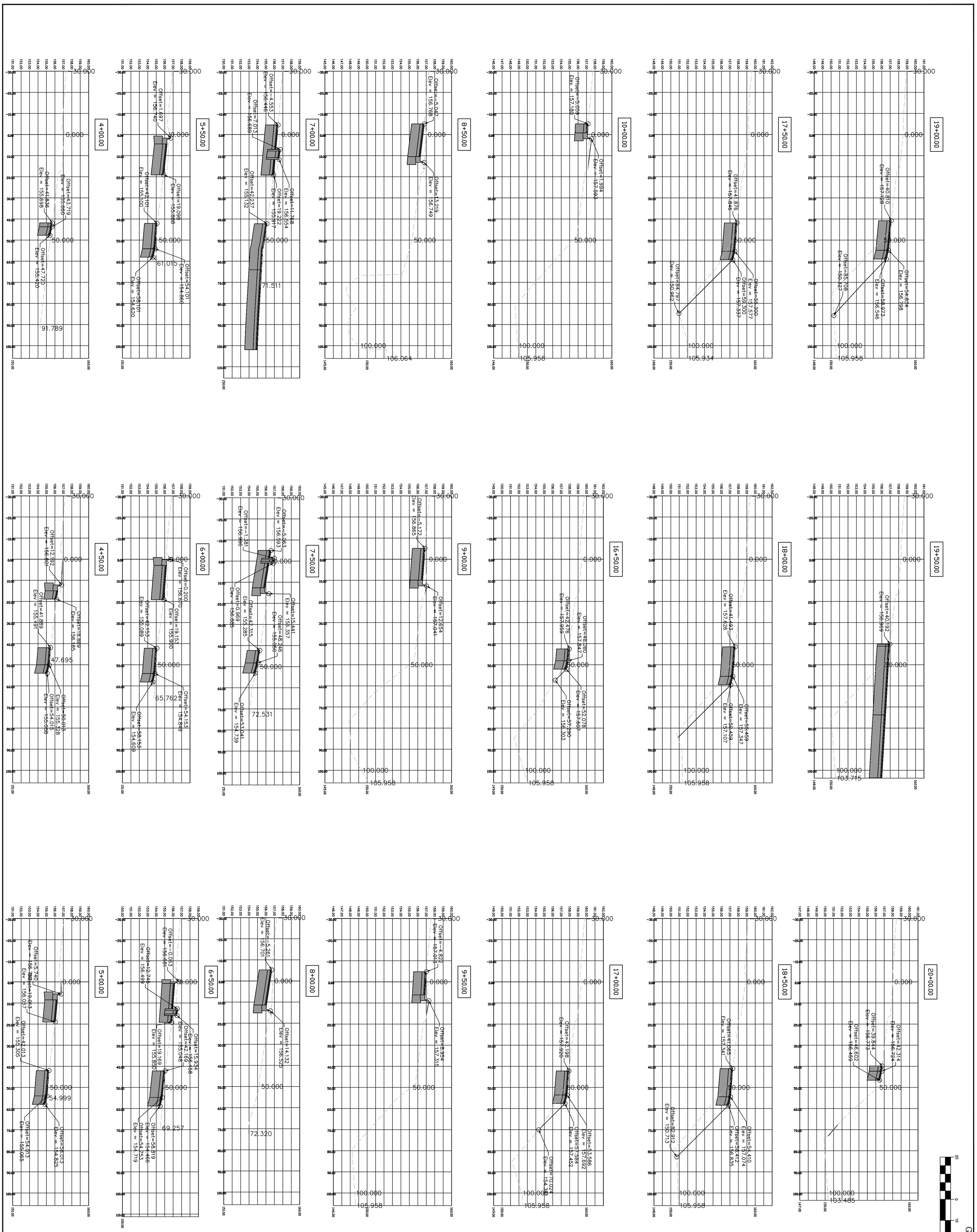
Job No.:	E-9516

Sheet No.
C-3.10



Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No. C-3.11

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

ENTRANCES CROSS SECTIONS

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
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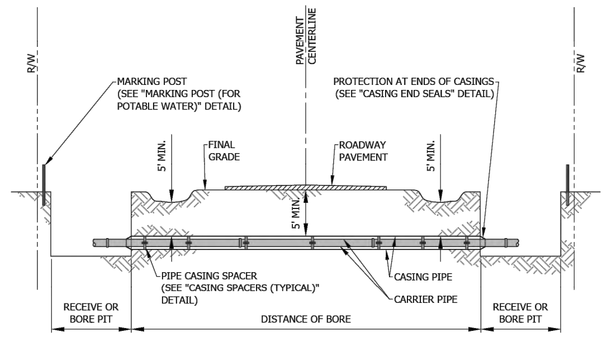
NC Professional Engineering Firm License No. P-0336

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER SUMMEY JR.



WELDING:
STEEL CASING SECTIONS SHALL BE CONNECTED BY WELDING. WELD SHALL CONFORM TO AWWA C206.

NOTE:
1. ALL PIPE JOINTS WITHIN THE CASING ARE TO BE RESTRAINED.

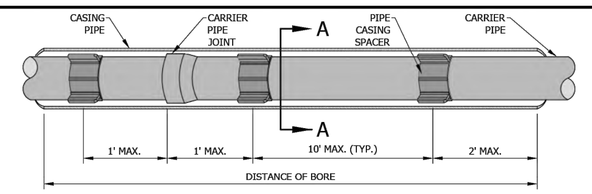
2. TRACING WIRE TO BE INSTALLED THROUGH ALL CASED BORINGS AND CONNECTED TO MARKING POSTS.

3. STEEL PIPE CASING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A283, GRADE B, C, OR D. ALL JOINTS SHALL BE WELDED. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C206, "AWWA STANDARD FOR FIELD WELDING OF STEEL WATER PIPE". COATING FOR STEEL CASING IS NOT REQUIRED.

4. STEEL PIPE CASING SHALL BE INSTALLED SYMMETRICAL ABOUT WATER MAIN CENTERLINE (TYP). PIPE CASING SHALL BE LAID TRUE TO LINE AND GRADE WITH NO BENDS OR CHANGES IN GRADE FOR THE FULL LENGTH OF THE CASING.

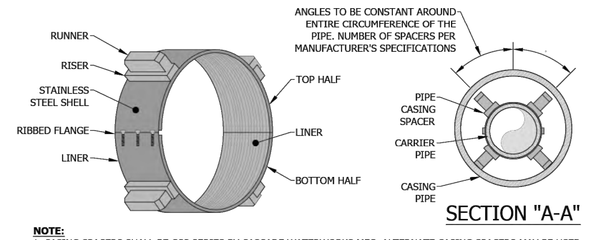
DW17 - TYPICAL JACK AND BORE CASING PIPE

SCALE: N.T.S.



CARRIER PIPE		
PIPE SIZE	CASING O.D.	THICKNESS *
6"	16"	1/4"
8"	18"	1/4"
10"	20"	5/16"
12"	24"	5/16"
16"	30"	3/8"
18"	30"	3/8"
20"	36"	1/2"
24"	42"	1/2"

* UNLESS OTHERWISE REQUIRED BY IN.D.O.T., RAILROAD OR OTHER SUCH GOVERNING AUTHORITY.



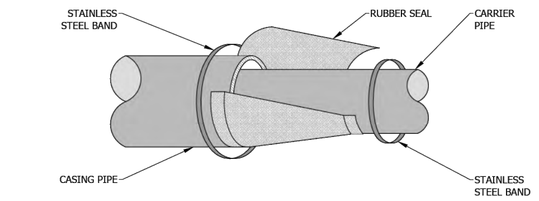
SECTION "A-A"

NOTE:
1. CASING SPACERS SHALL BE CCS SERIES BY CASCADE WATERWORKS MFG. ALTERNATE CASING SPACERS MAY BE USED WITH PRIOR APPROVAL FROM CITY UTILITIES PROJECT ENGINEER.

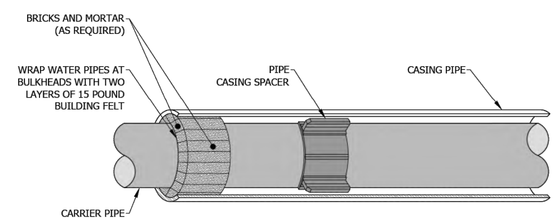
2. CITY UTILITIES APPROVED CASING SPACERS AND END SEALS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. USE A "CENTERED" CONFIGURATION AND PROVIDE THE MANUFACTURER WITH THE FOLLOWING INFORMATION: CARRIER PIPE O.D., CASING PIPE I.D., AND CASING LENGTH.

DW18 - TYPICAL CASING SPACERS

SCALE: N.T.S.



METHOD 'A'

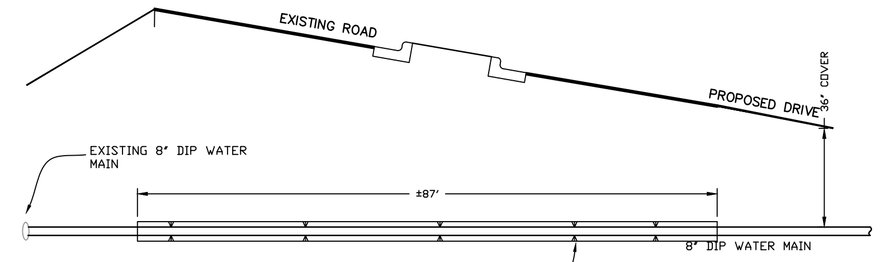


NOTE:
1. THIS STANDARD IS APPLICABLE FOR 4" DIAMETER AND LARGER CARRIER PIPE.

METHOD 'B'

DW19 - TYPICAL CASING END SEALS

SCALE: N.T.S.



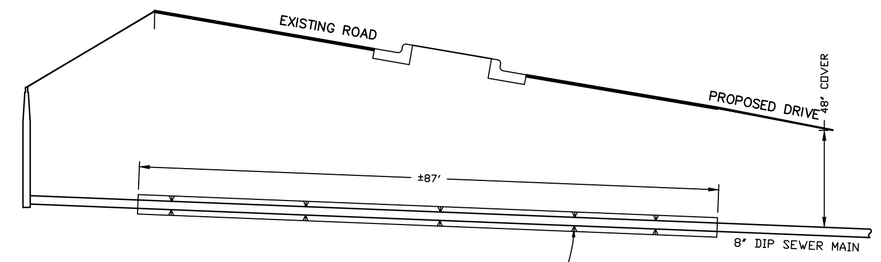
NOTE:

1. ALL BORES AND TAPS TO BE IN LOCATION THAT IS SHOWN ON PLANS, ANY VARIATION TO BE COORDINATED WITH THE MUNICIPALITY AND ENGINEER.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ANY UNDERGROUND UTILITIES AND FOR ANY DAMAGE RESULTING TO LOCATED UTILITIES.
3. IF THE GRADE OF THE PIPE AT THE JACKING END IS BELOW THE GROUND SURFACE, SUITABLE PITS OR TRENCHES SHALL BE EXCAVATED FOR THE PURPOSE OF CONDUCTING THE JACKING OPERATIONS AND FOR PLACING END JOINTS OF THE PIPE. SUCH WORK SHALL BE SHEETED SECURELY AND BRACED IN ACCORDANCE WITH OSHA TRENCH SAFETY REQUIREMENTS.
4. WHEN JACKING OF CASING HAS BEGUN, THE OPERATION SHALL BE CARRIED ON WITHOUT INTERRUPTION, INSOFAR AS PRACTICAL, TO PREVENT THE CASING FROM BECOMING FIRMLY SET IN THE SOIL.
5. IT IS THE CONTRACTOR'S/OWNER'S RESPONSIBILITY TO ENSURE SUFFICIENT TRAFFIC CONTROL MEASURES ARE PROVIDED, INSTALLED, AND MAINTAINED CORRECTLY PRIOR TO BORING OPERATION.
6. PER NCAC RULES: 12" MIN. SEPARATION BETWEEN WATER AND OTHER UTILITIES. A MIN. OF 18" MIN SHALL BE PROVIDED BETWEEN WATER AND SAN. SEWER.

CASING SPACERS SHALL BE SPACED A MAXIMUM OF EIGHT (8) FEET APART ALONG THE LENGTH OF THE CARRIER PIPE WITH ONE CASING SPACER WITHIN TWO (2) FEET OF EACH SIDE OF A PIPE JOINT AND THE REST EVENLY SPACED.

WATER BORE DETAIL

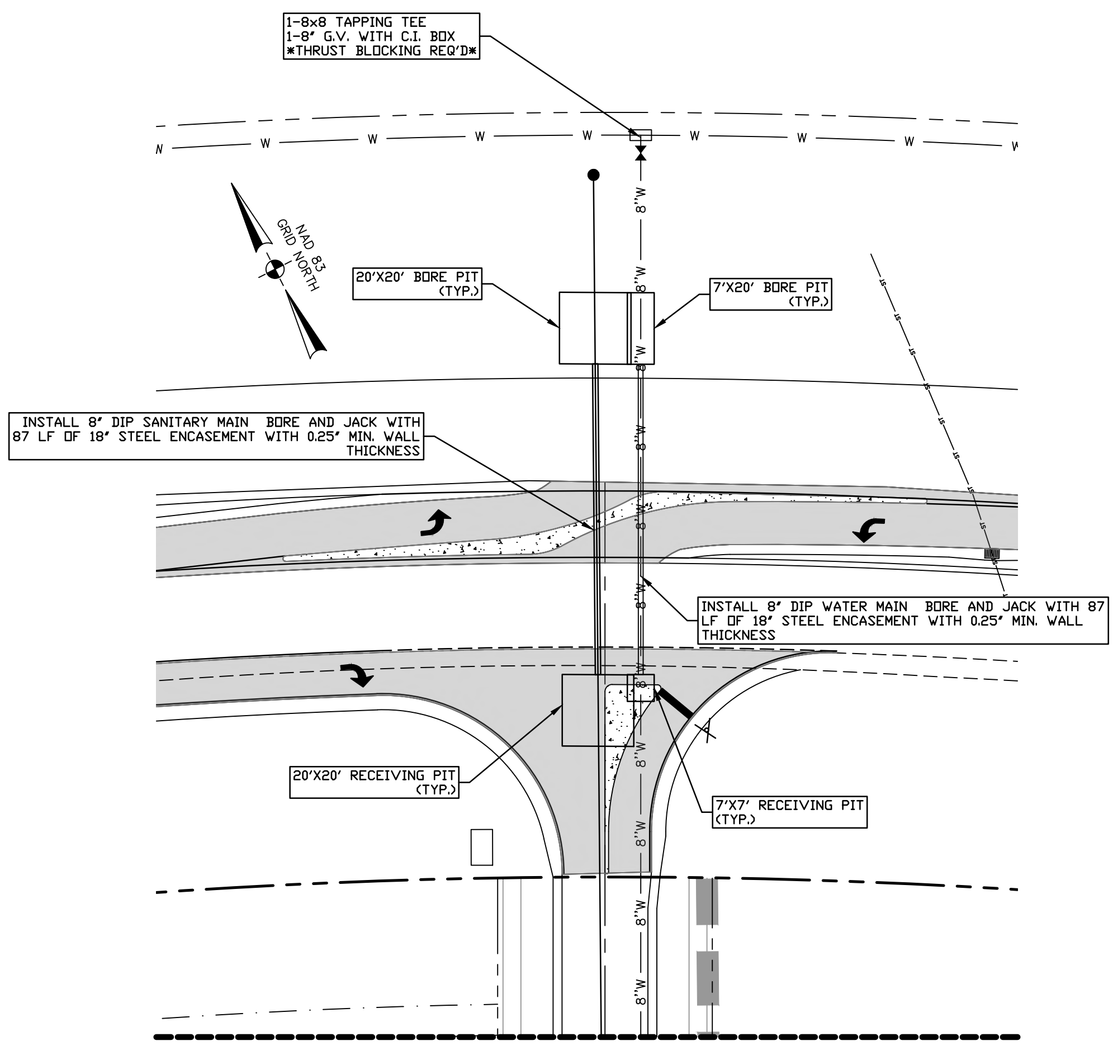
SCALE: NONE



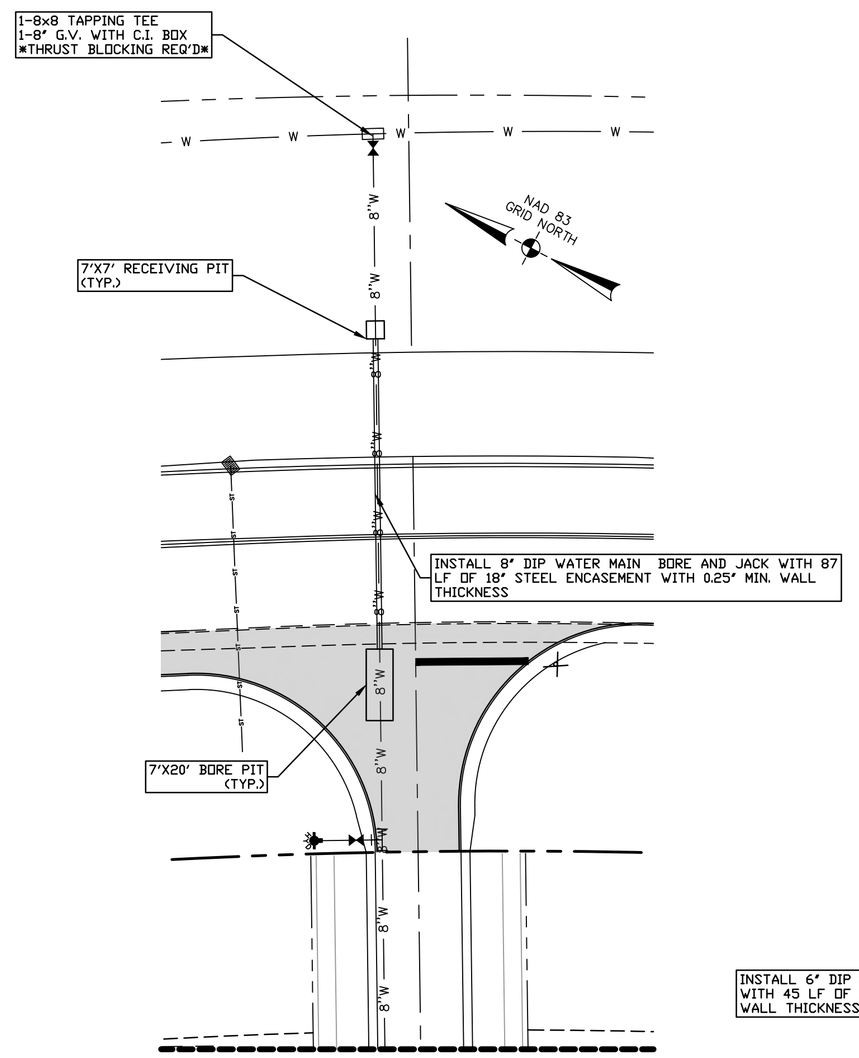
CASING SPACERS SHALL BE SPACED A MAXIMUM OF EIGHT (8) FEET APART ALONG THE LENGTH OF THE CARRIER PIPE WITH ONE CASING SPACER WITHIN TWO (2) FEET OF EACH SIDE OF A PIPE JOINT AND THE REST EVENLY SPACED.

SEWER BORE DETAIL

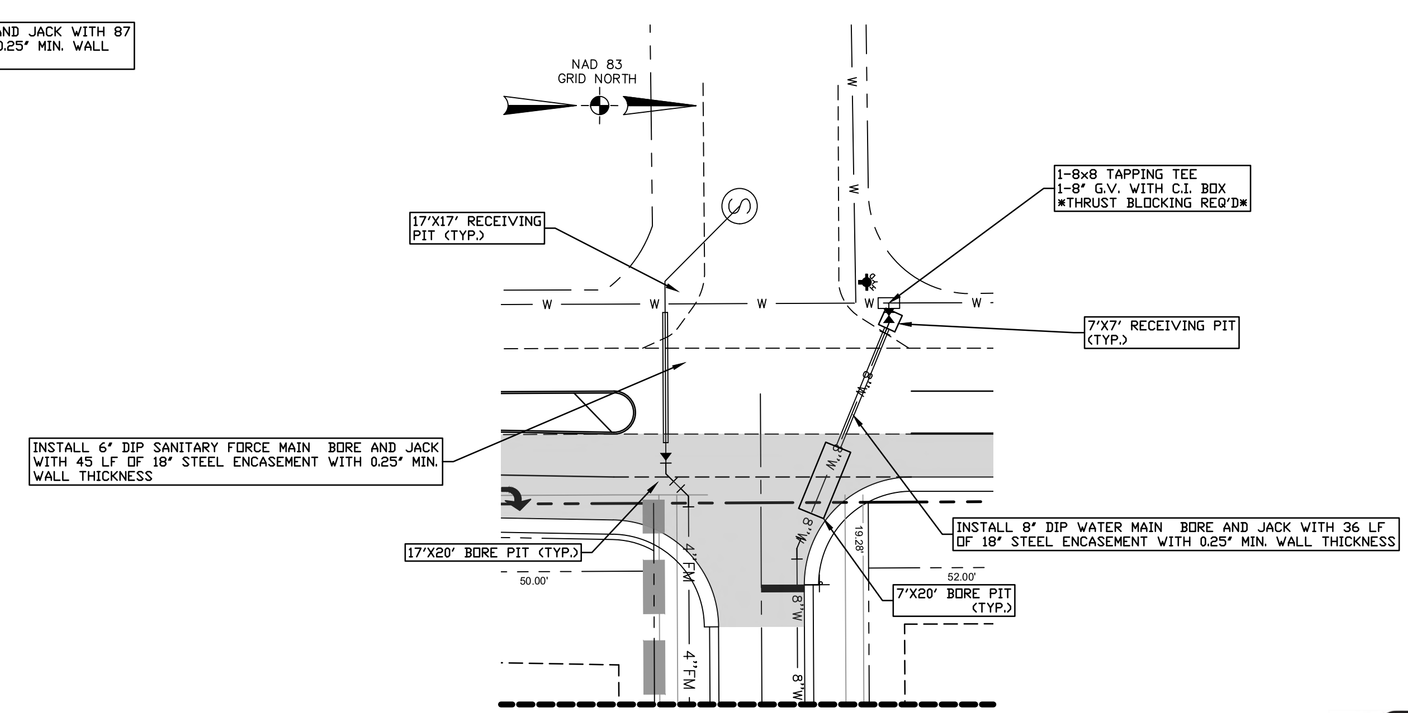
SCALE: NONE



SEE SHEET C-3.4 FOR CONTINUATION



SEE SHEET C-3.6 FOR CONTINUATION



SEE SHEET C-3.3 FOR CONTINUATION

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PROPOSED UTILITY IMPROVEMENTS
M DURWOOD STEPHENSON PKWY
SR - 1923

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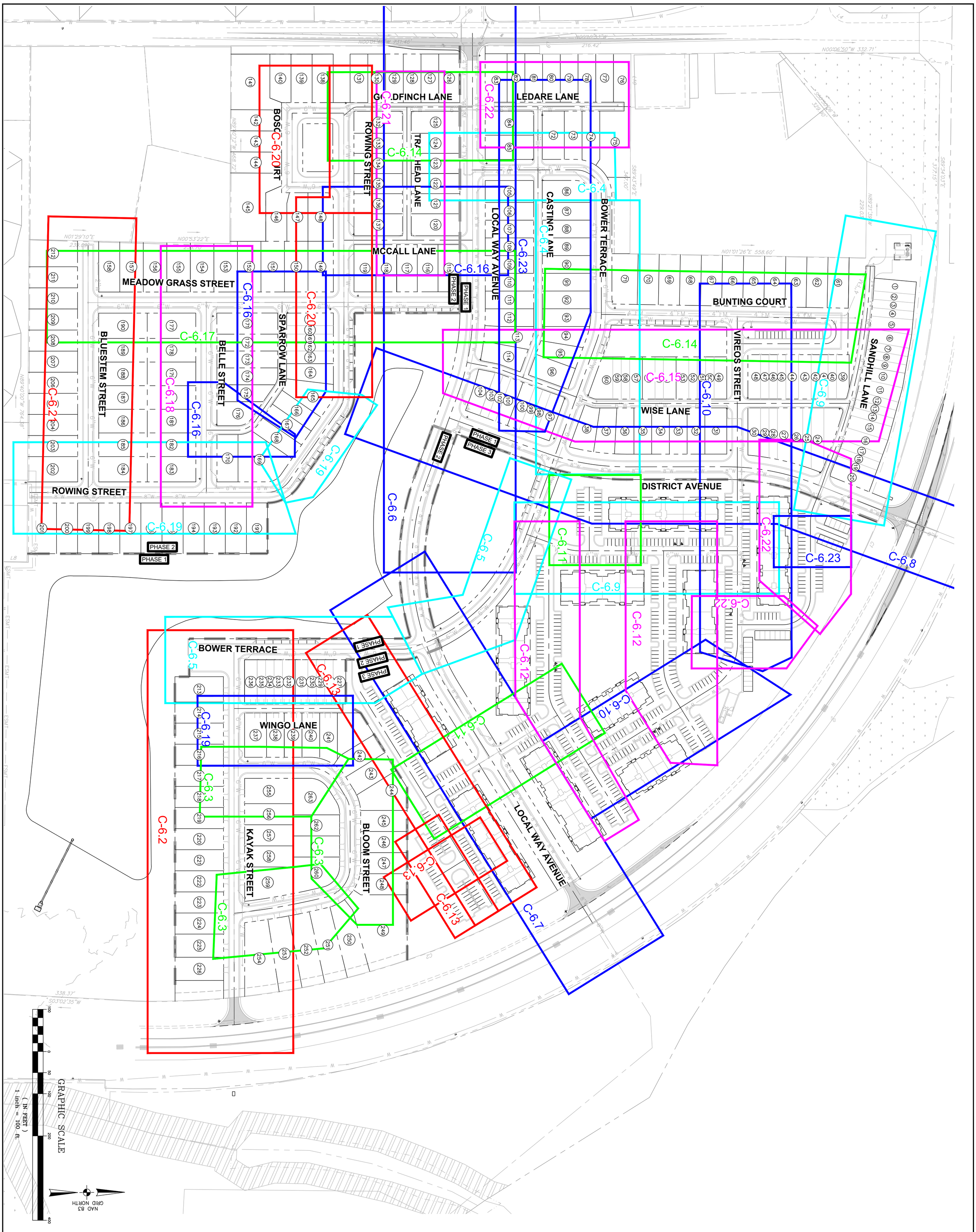
No.	Date:	Description:	By:

ENCROACHMENT PLAN
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	HMSJ
Job No.:	E-9916

Sheet No. C-3.12



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Sheet No. C-6.1

Scale:	AS NOTED
Date:	MONTH YEAR
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Job No.:	E-9516

OVERALL PLAN & PROFILE

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

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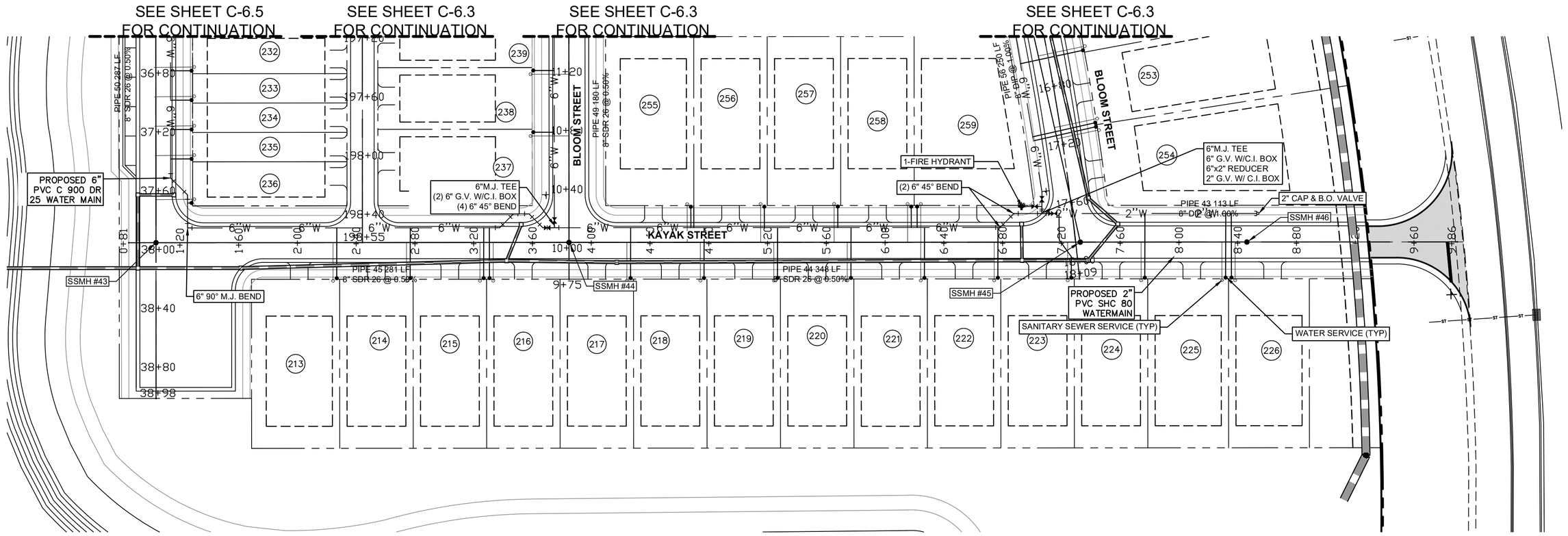
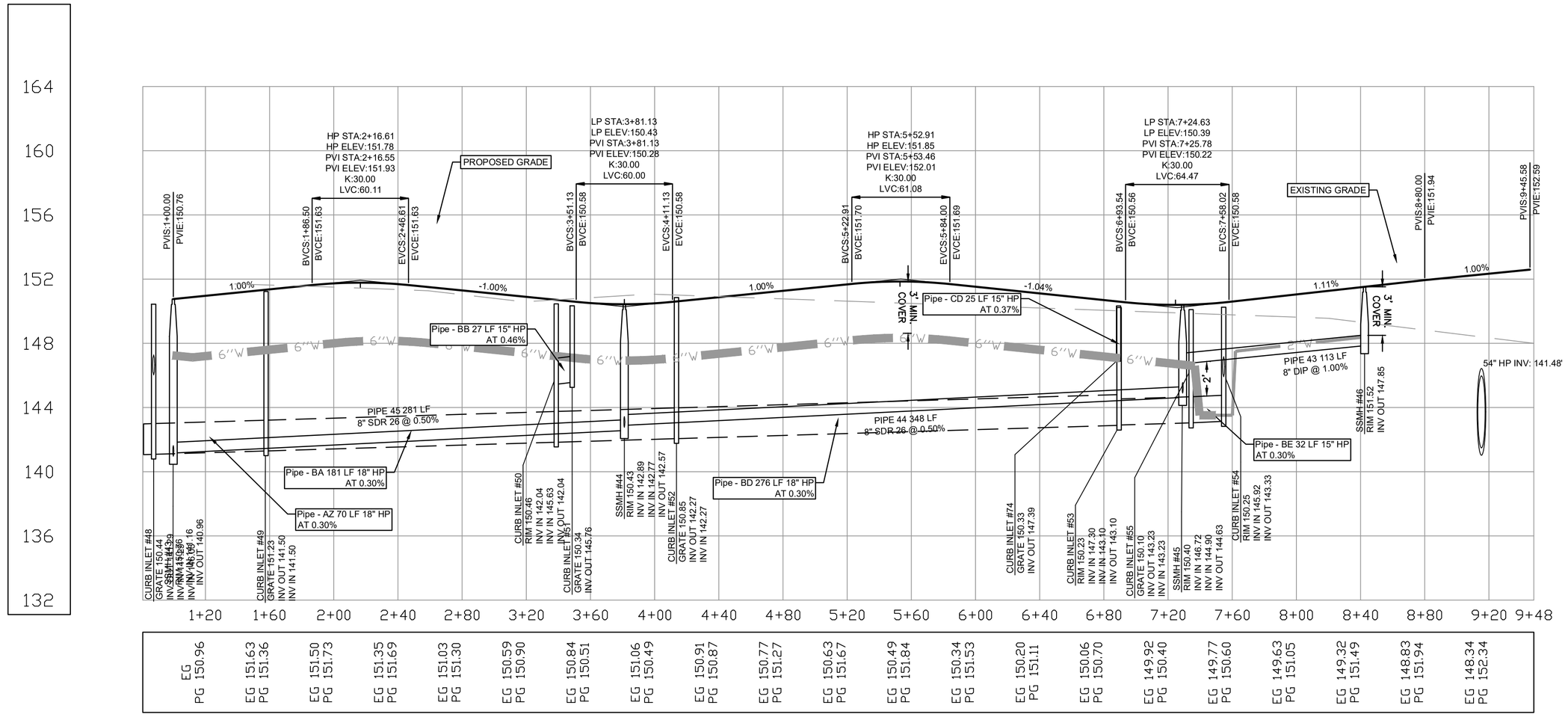
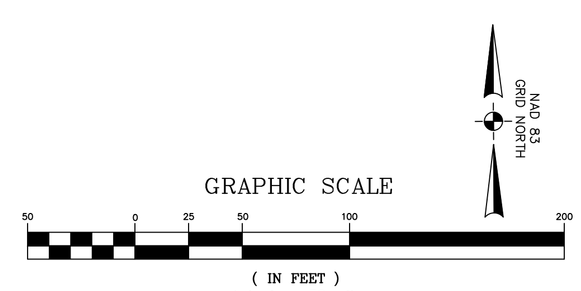
NORTH CAROLINA PROFESSIONAL SEAL ENGINEER HOWARD MINTON SUMMEY, JR.



KAYAK STREET
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





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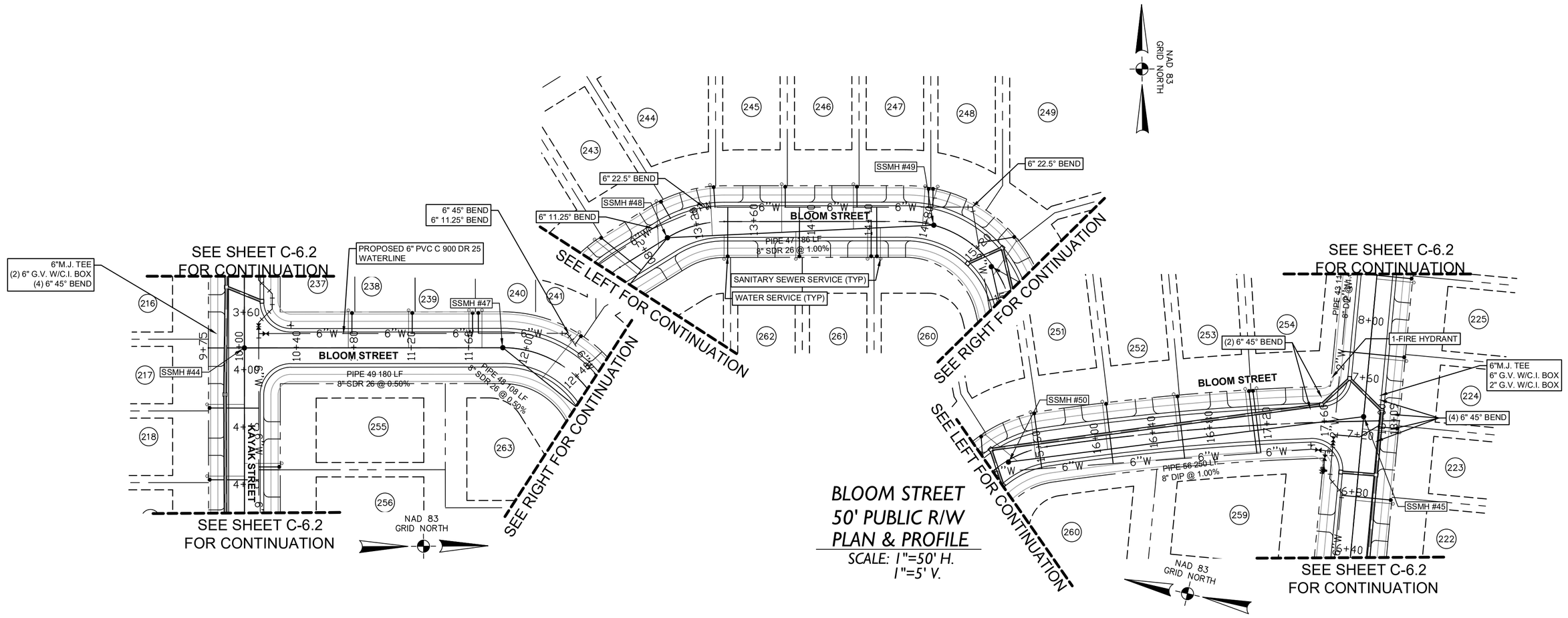
No.	Date:	Description:	By:

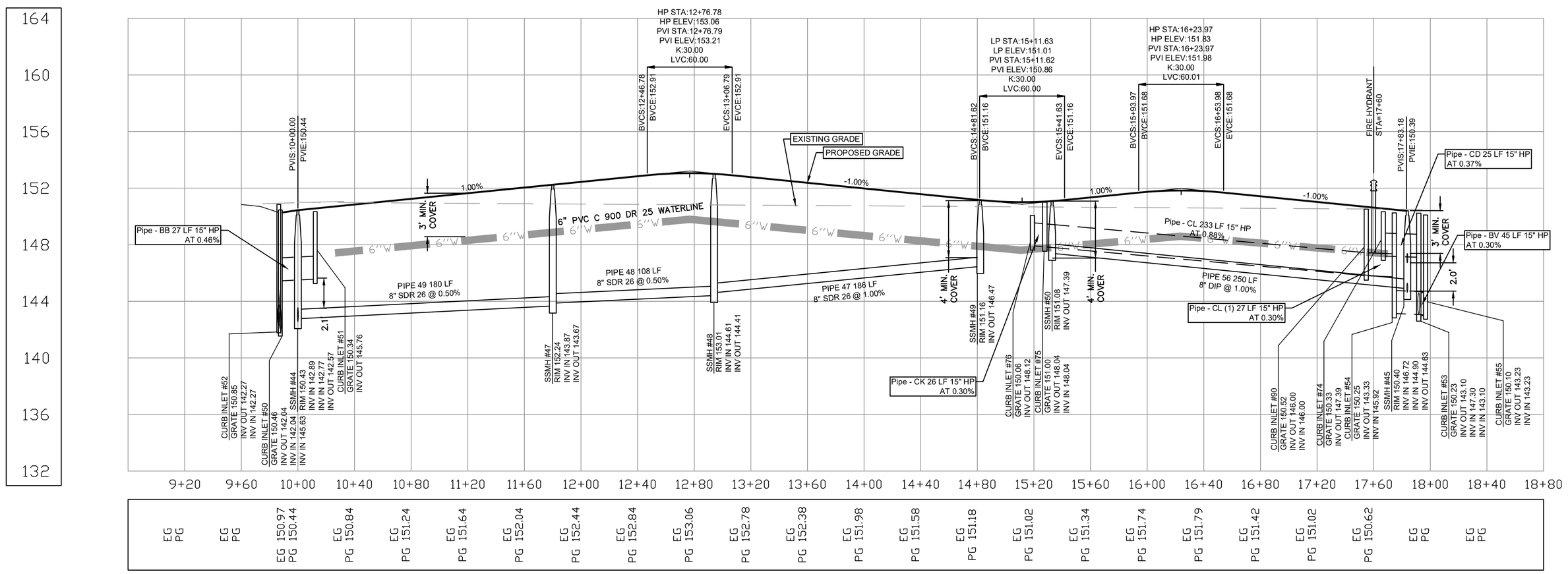
KAYAK STREET PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED		
Date:	MONTH YEAR		
Drawn By:	CM / JM	Checked By:	HWSJ
Job No.:	E-9916		

Sheet No. C-6.2



BLOOM STREET
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

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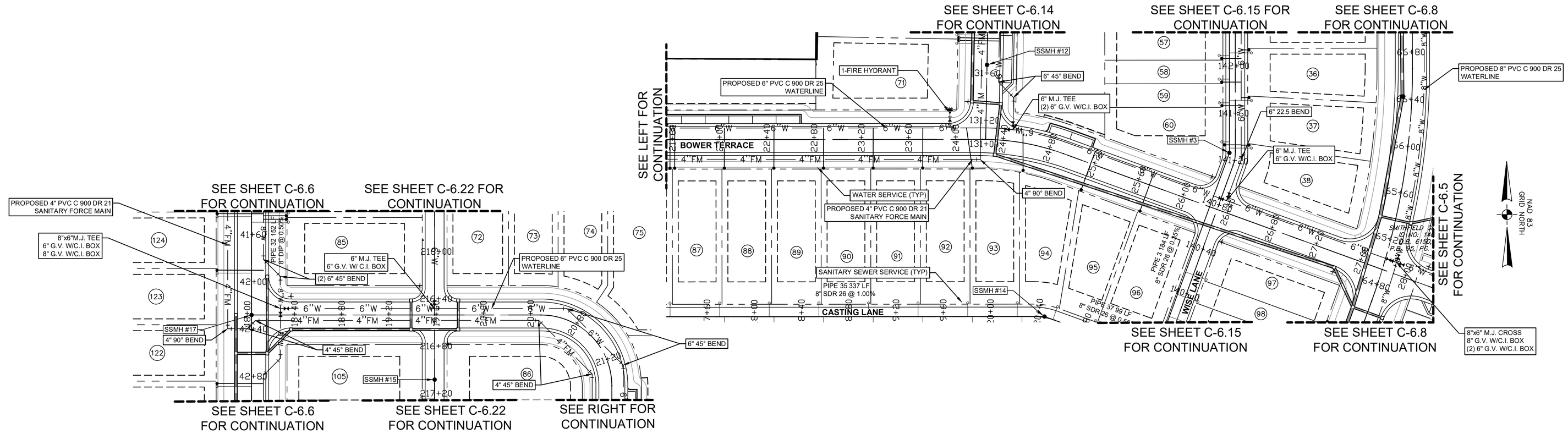
BLOOM STREET PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

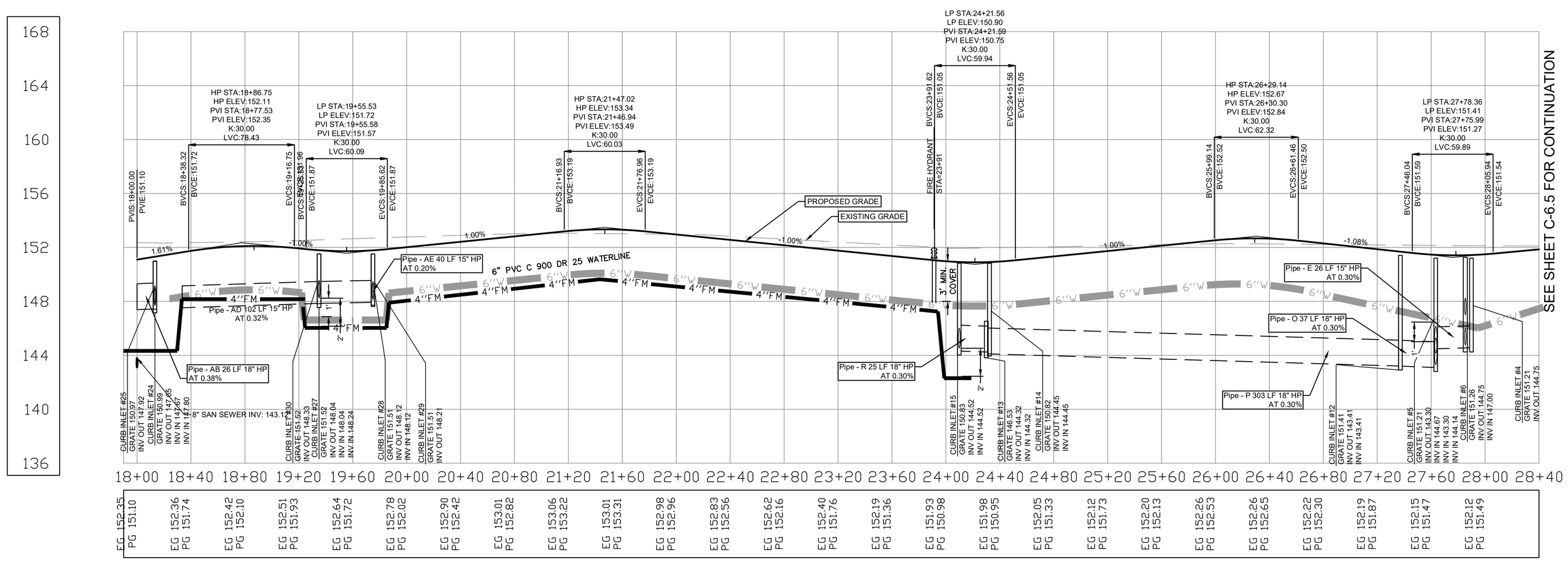
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMS
Job No.:	3-9916

Sheet No. C-6.3



BOWER TERRACE
50' PUBLIC R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.



PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

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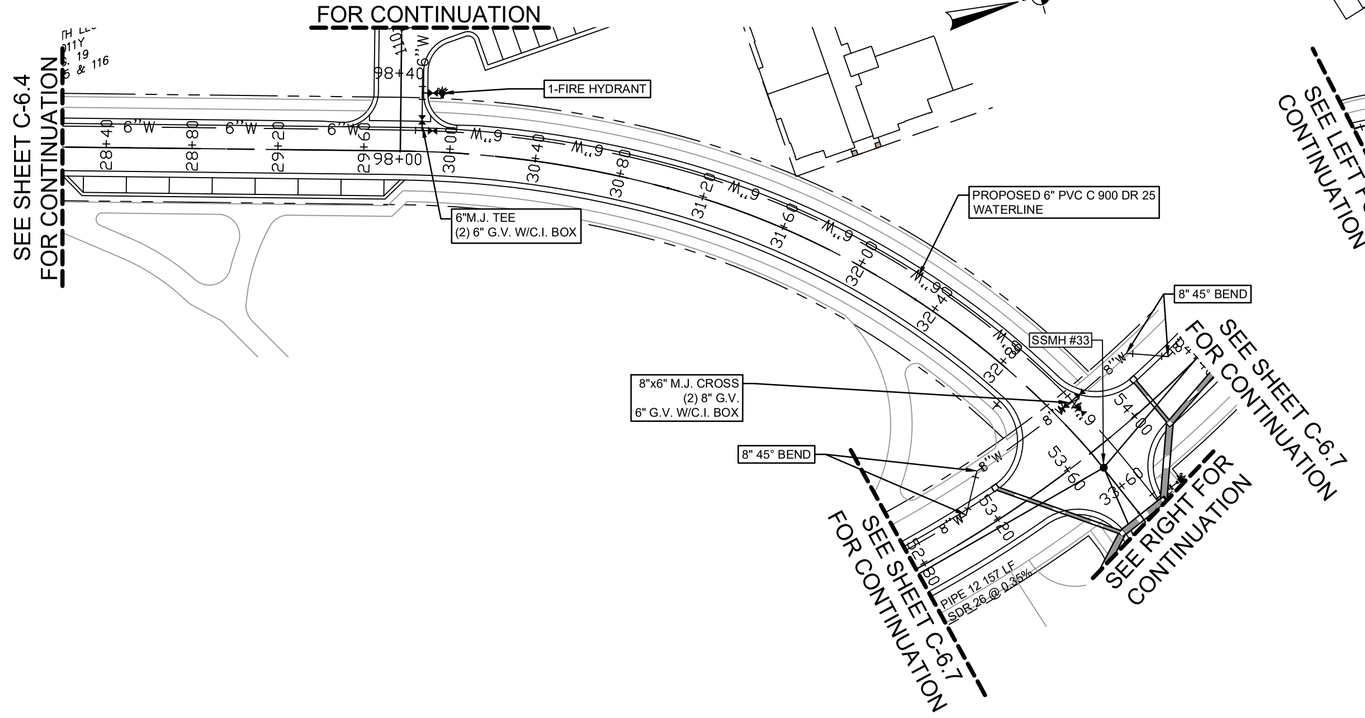
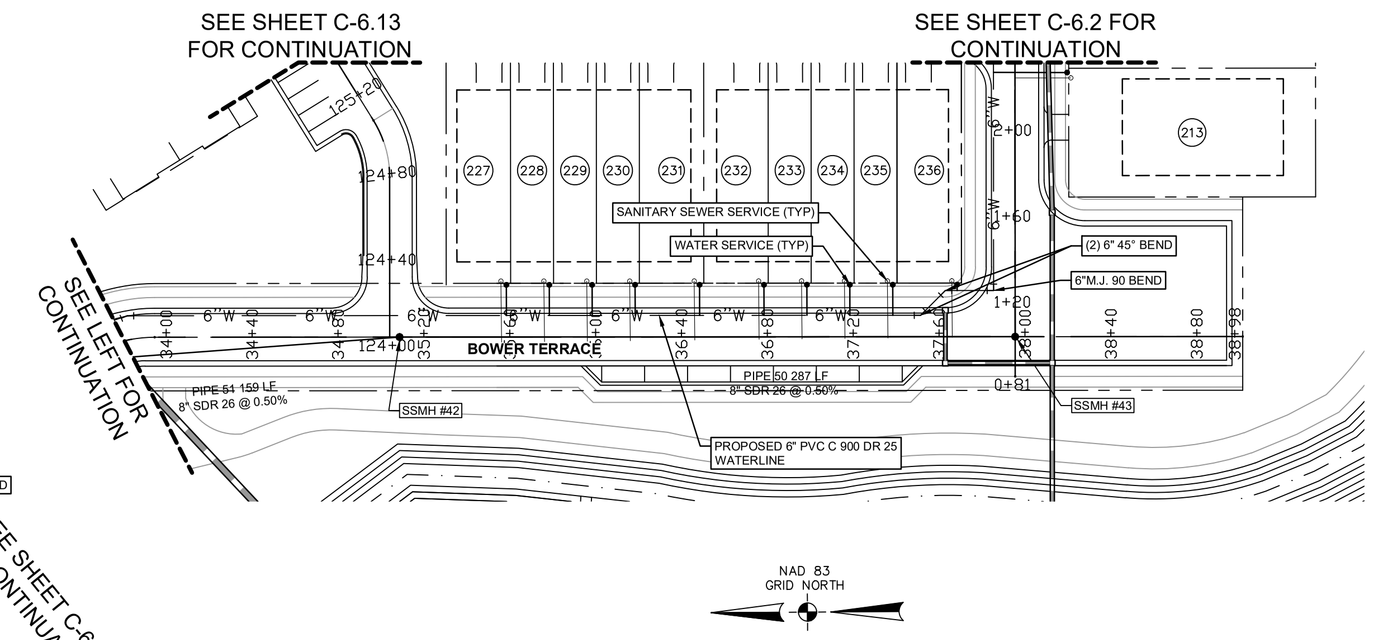
No.	Date:	Description:	By:

BOWER TERRACE PLAN AND PROFILE I
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	HMSJ
Job No.:	E-9516

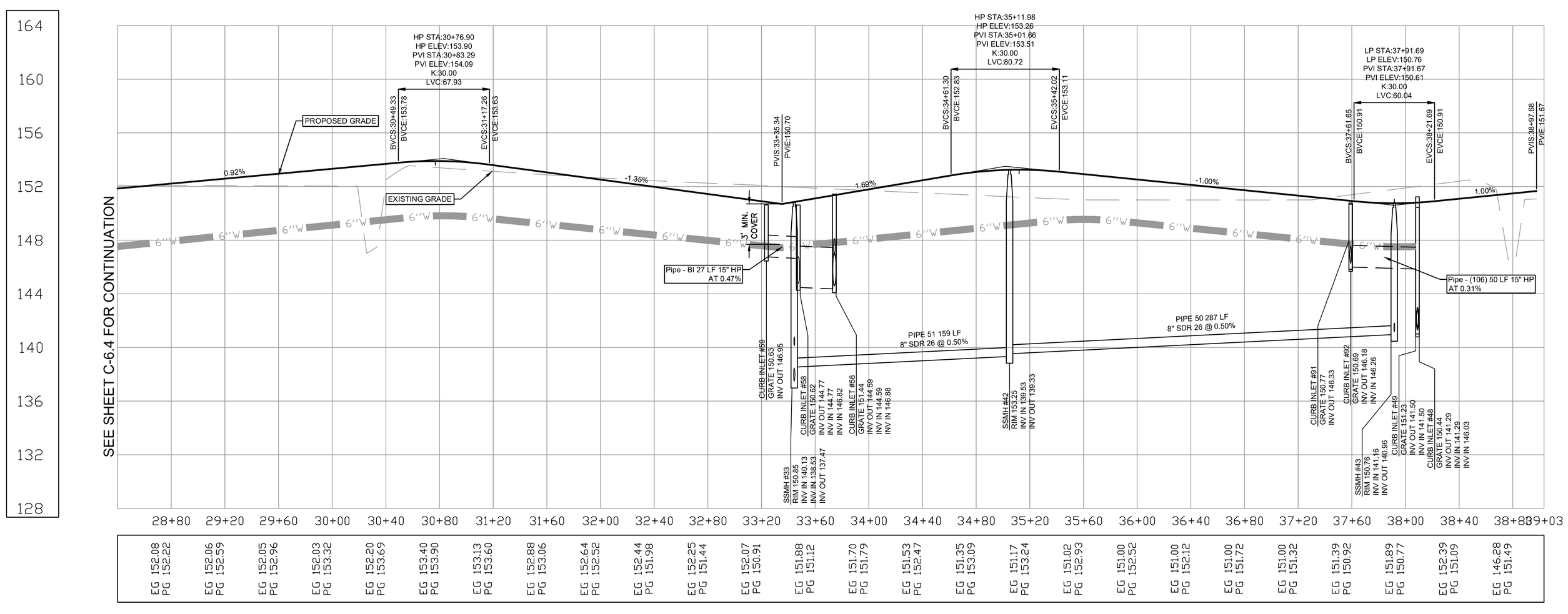
Sheet No. C-6.4





BOWER TERRACE
50' PUBLIC R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.



GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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BOWER TERRACE PLAN AND PROFILE 2
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
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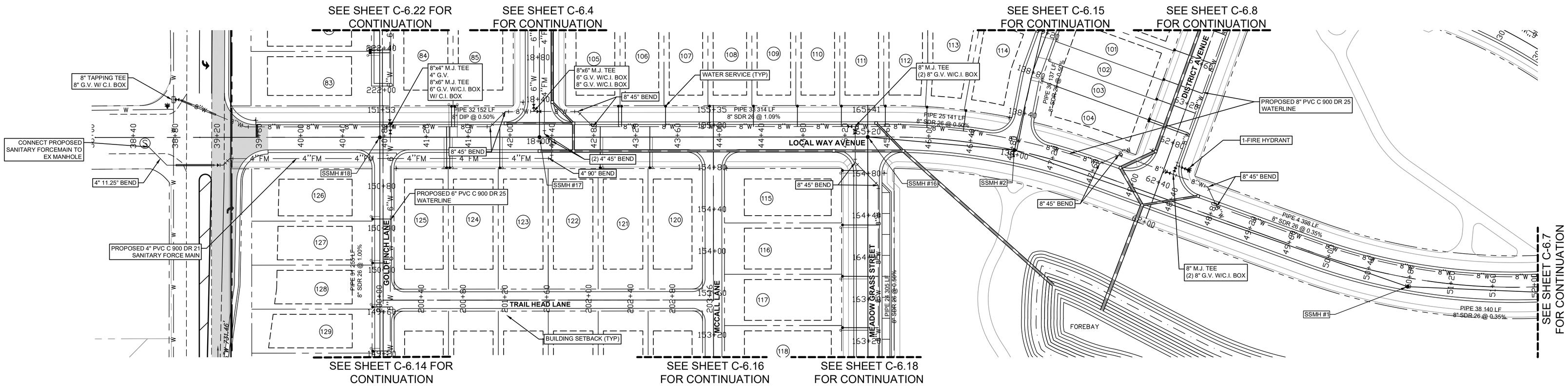
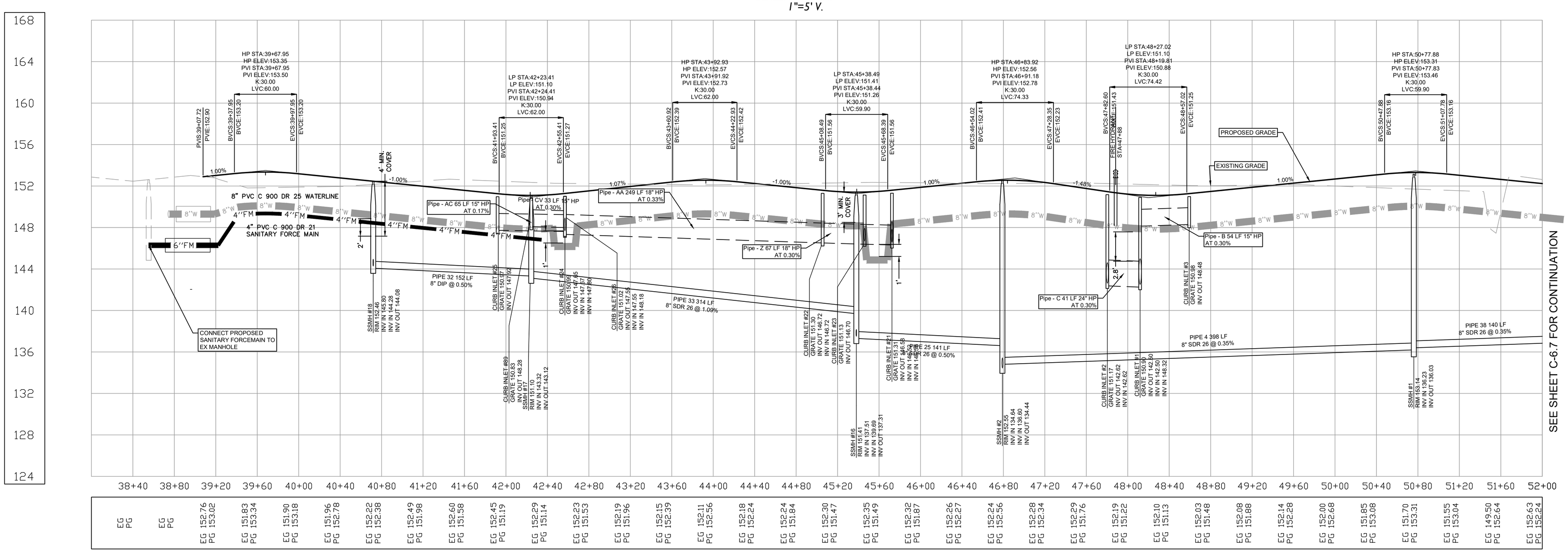
Job No.:	E-9516

Sheet No. C-6.5



LOCAL WAY AVENUE
60' PUBLIC R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.



GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

MAP 83
GRID NORTH

PRELIMINARY PLANS NOT FOR REVIEW

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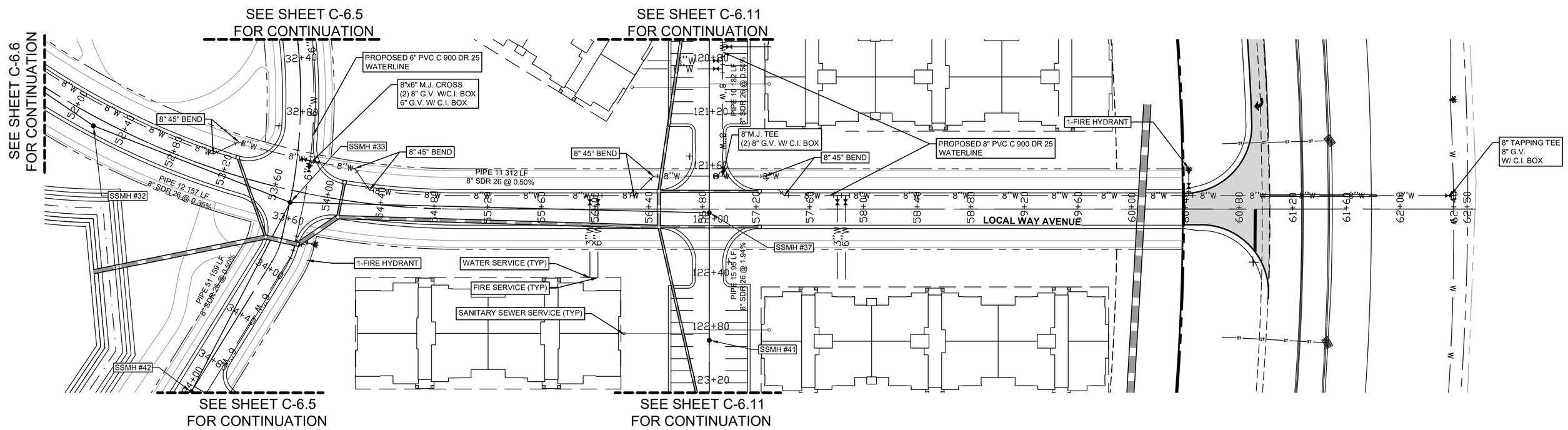
No.	Date:	Description:	By:

LOCAL WAY AVENUE PLAN AND PROFILE I
LOCAL 70 RESIDENTIAL DEVELOPMENT

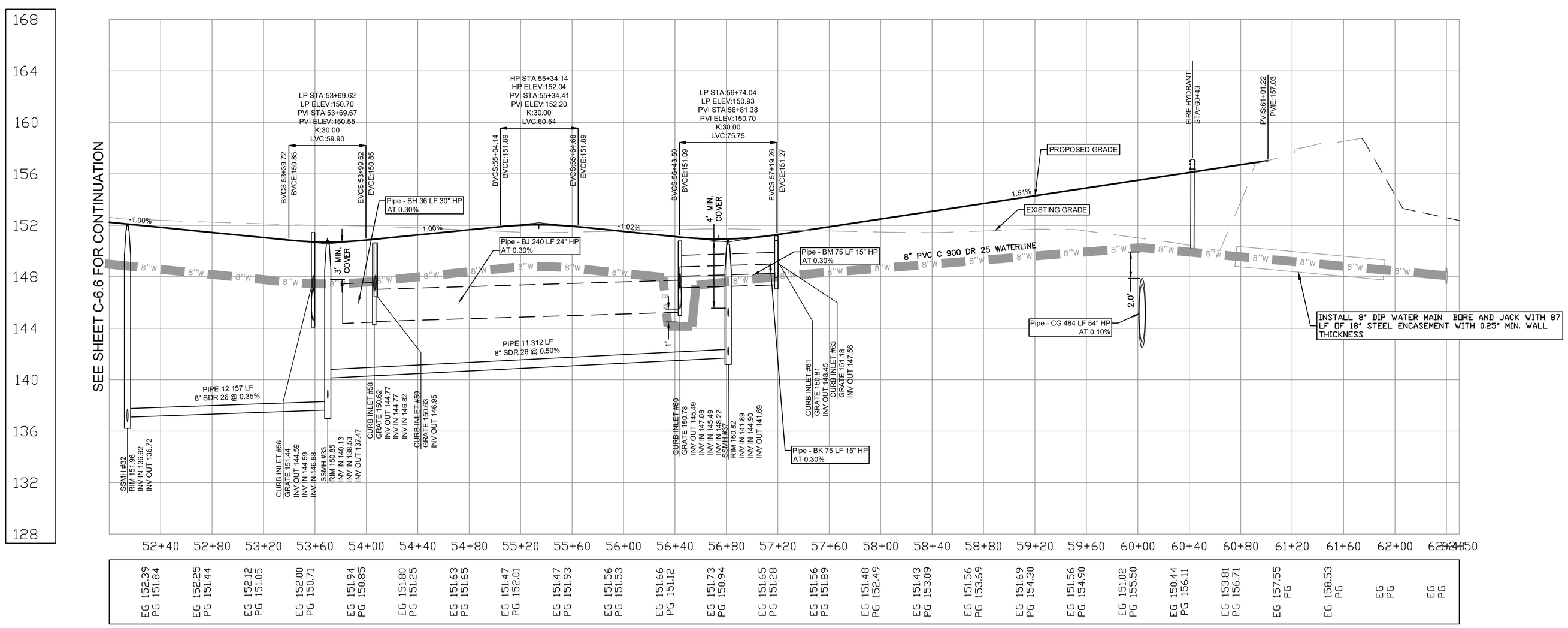
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

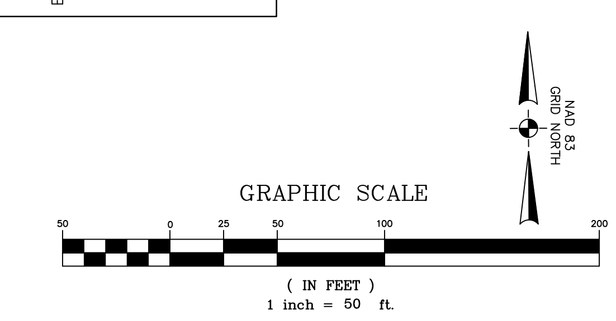
Scale: AS NOTED	Date: MONTH YEAR	Drawn By: CM/ JM	Checked By: HMSJ
Job No.: 3-9516			

Sheet No. C-6.6



LOCAL WAY AVENUE
60' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





811
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NORTH CAROLINA PROFESSIONAL SEAL 049449 ENGINEER JAMES MICHAEL SUMMEY, JR.

SEA

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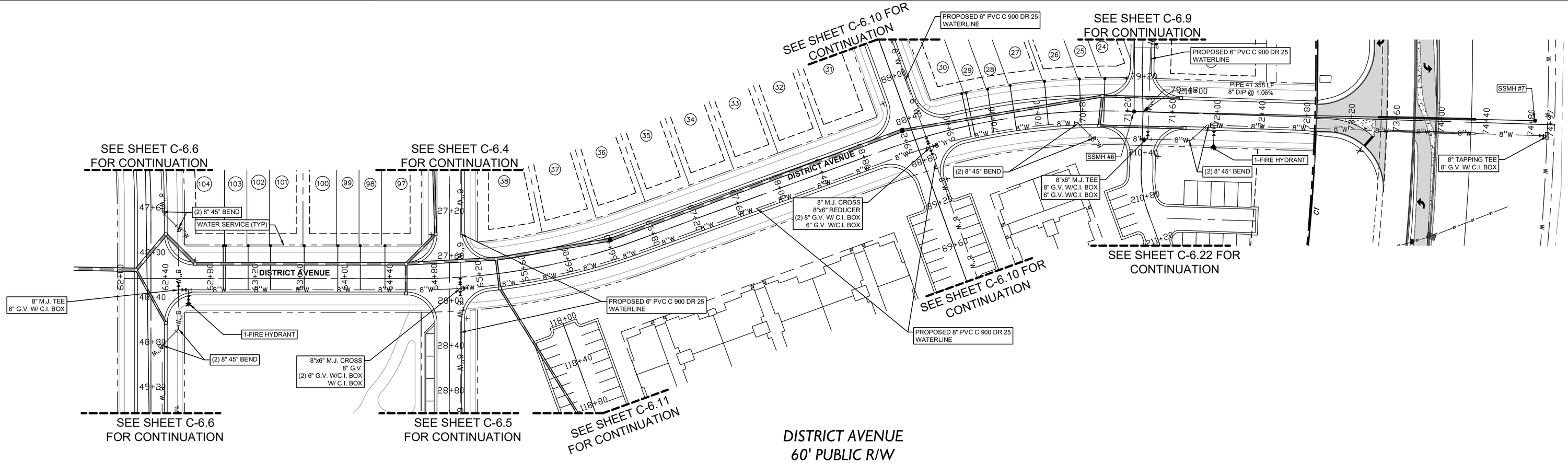
No.	Date:	Description:	By:

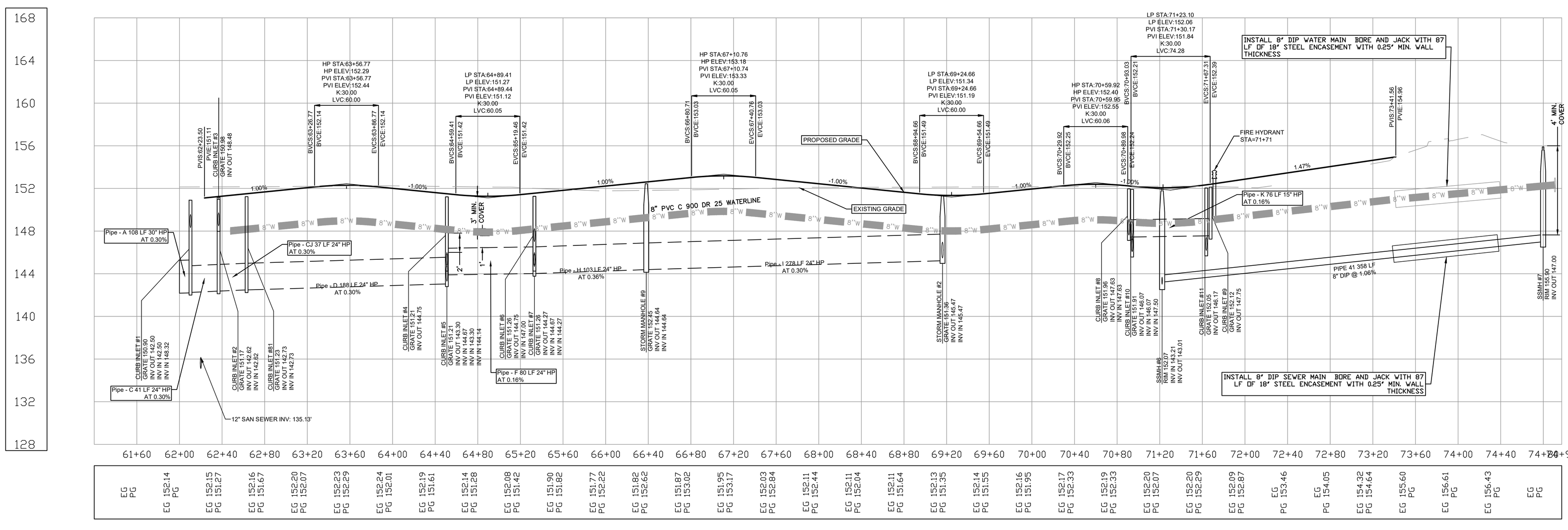
LOCAL WAY AVENUE PLAN AND PROFILE 2
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM / JM
Checked By:	PMSJ
Job No.:	E-9516

Sheet No.
C-6.7



DISTRICT AVENUE
60' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

NAD 83 GRID NORTH

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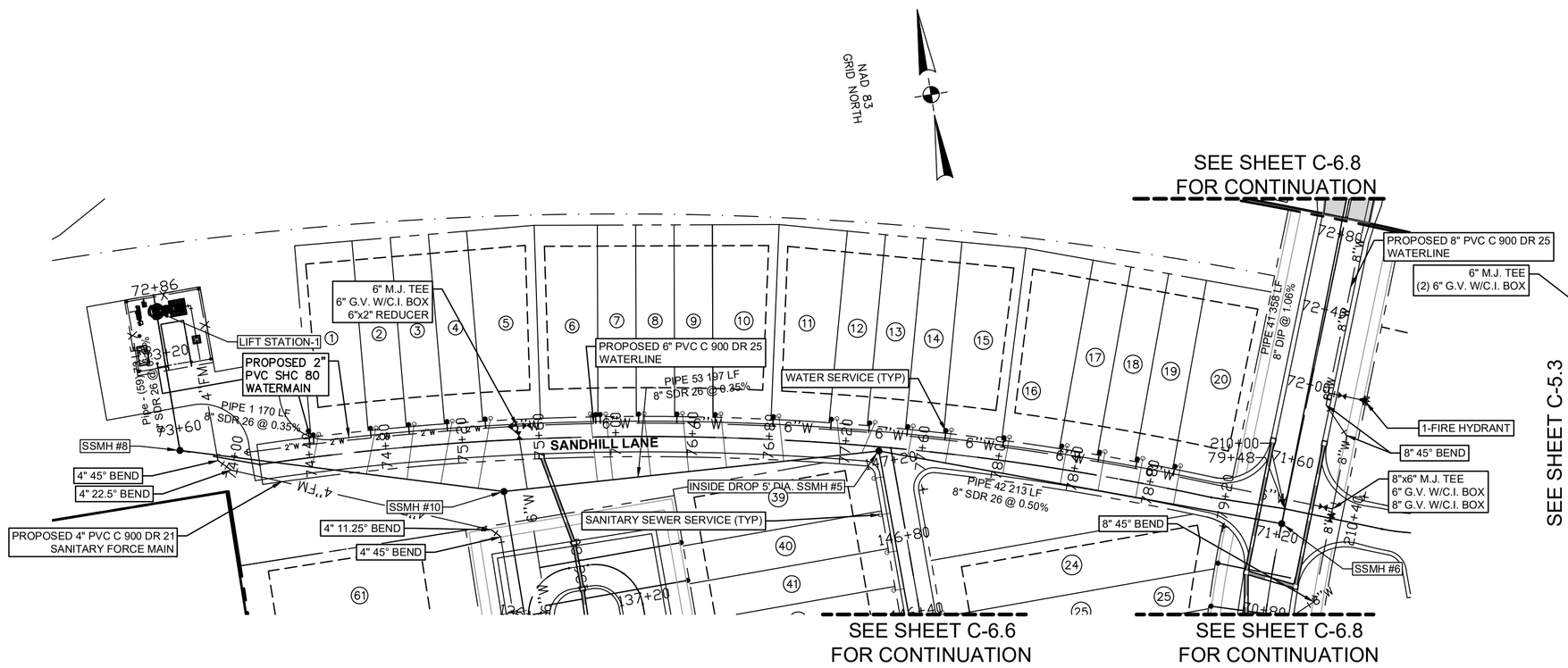
NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES HERACK SUMMEY, JR.

No.	Date:	Description:	By:

DISTRICT AVENUE PLAN AND PROFILE I
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

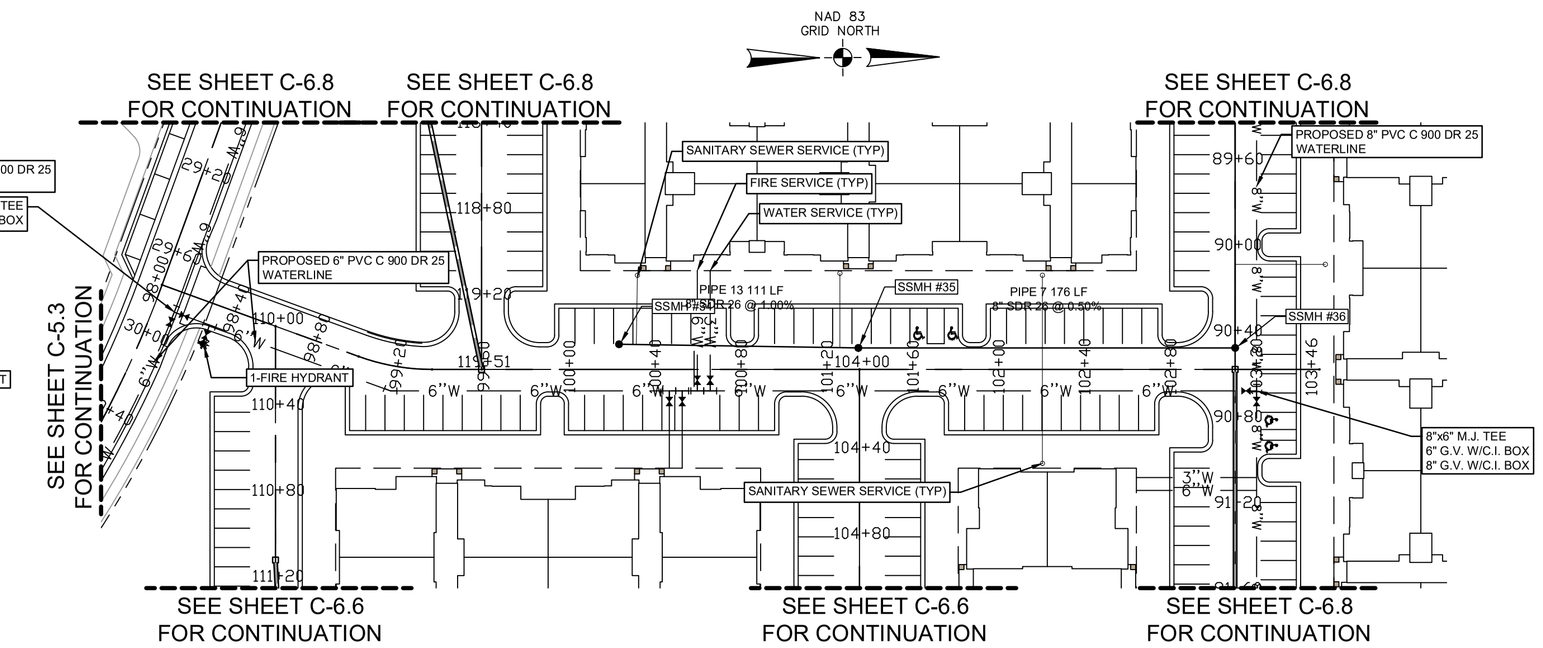
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

Sheet No. C-6.8



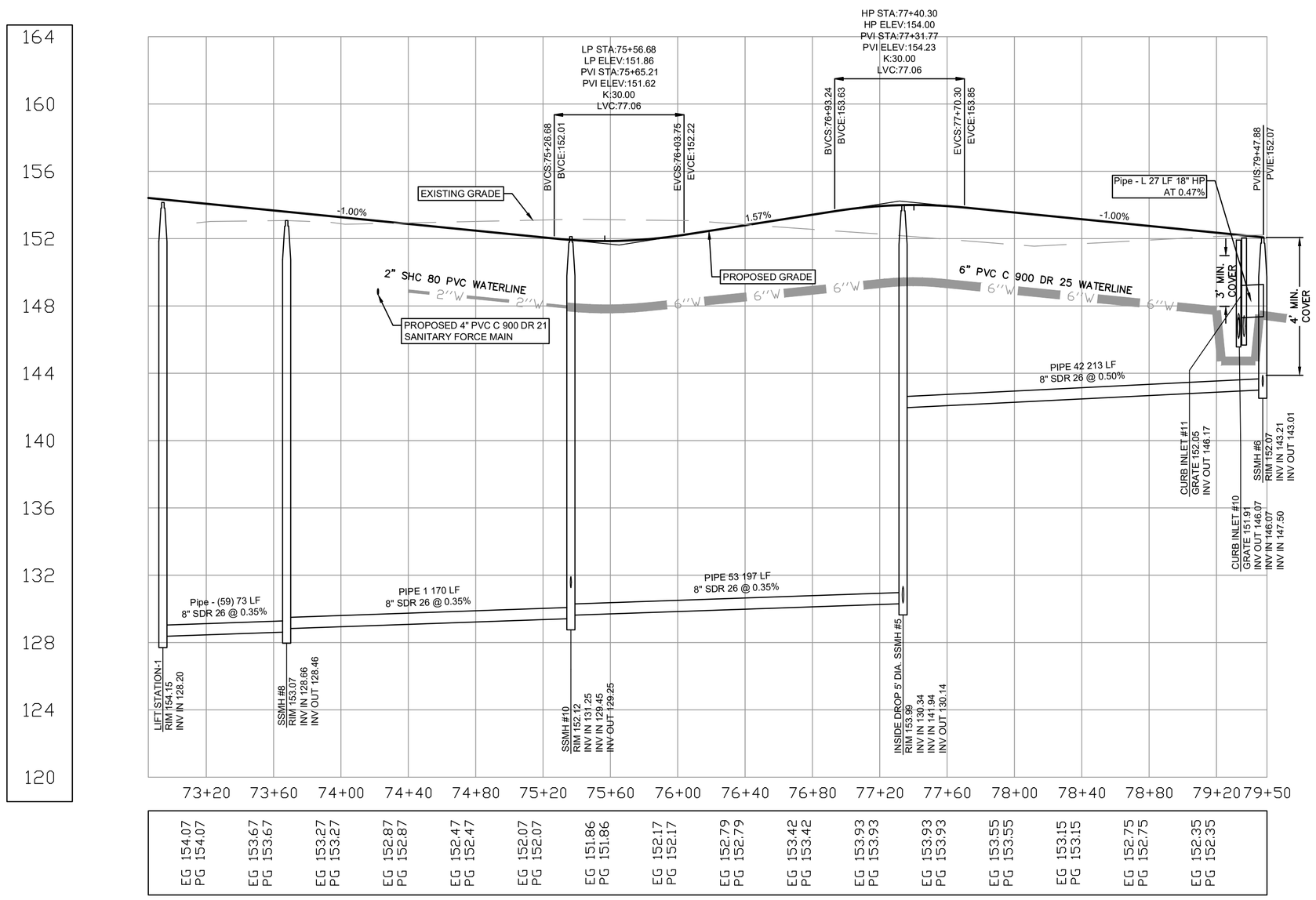
SANDHILL LANE
21' PRIVATE R/W
PLAN & PROFILE

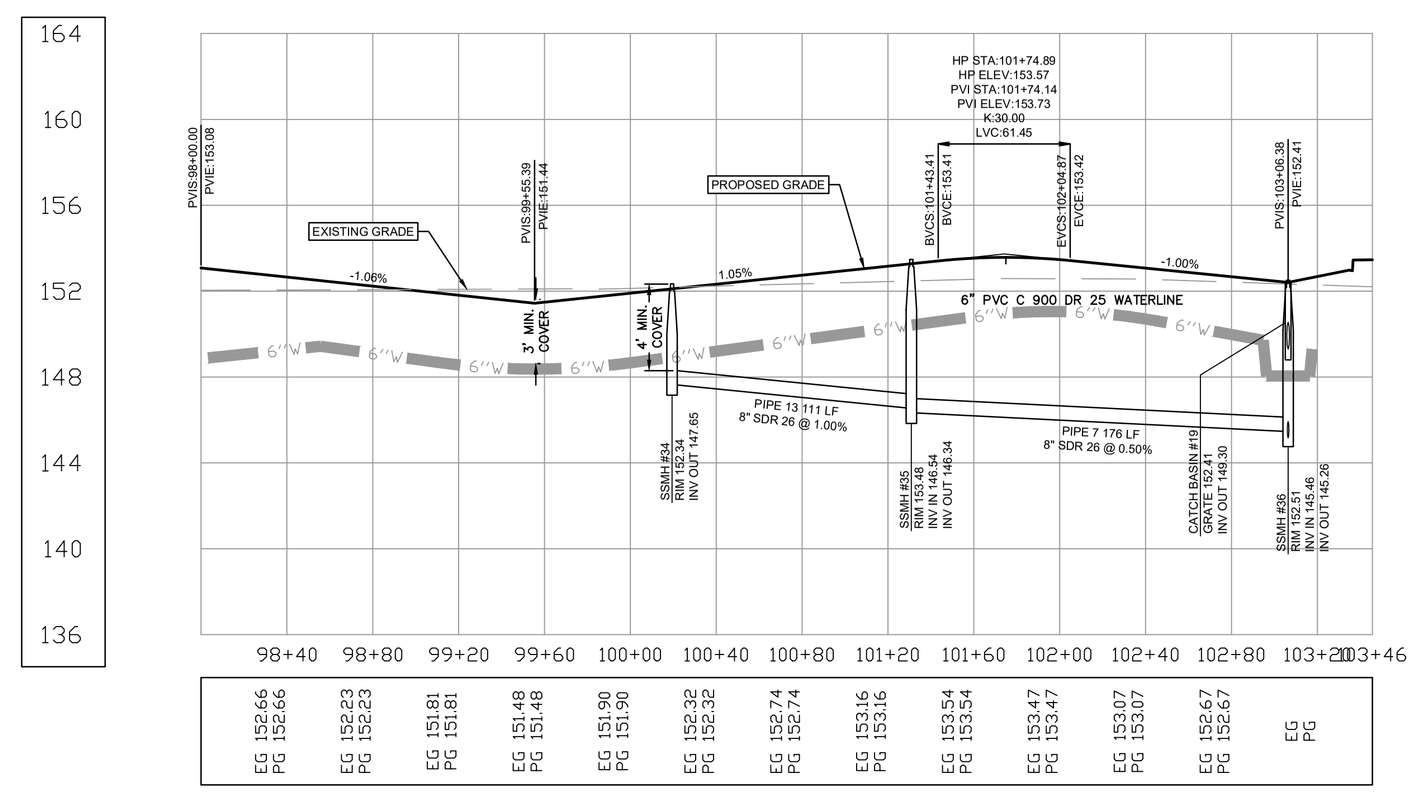
SCALE: 1"=50' H.
1"=5' V.



PARKING LOT
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.





GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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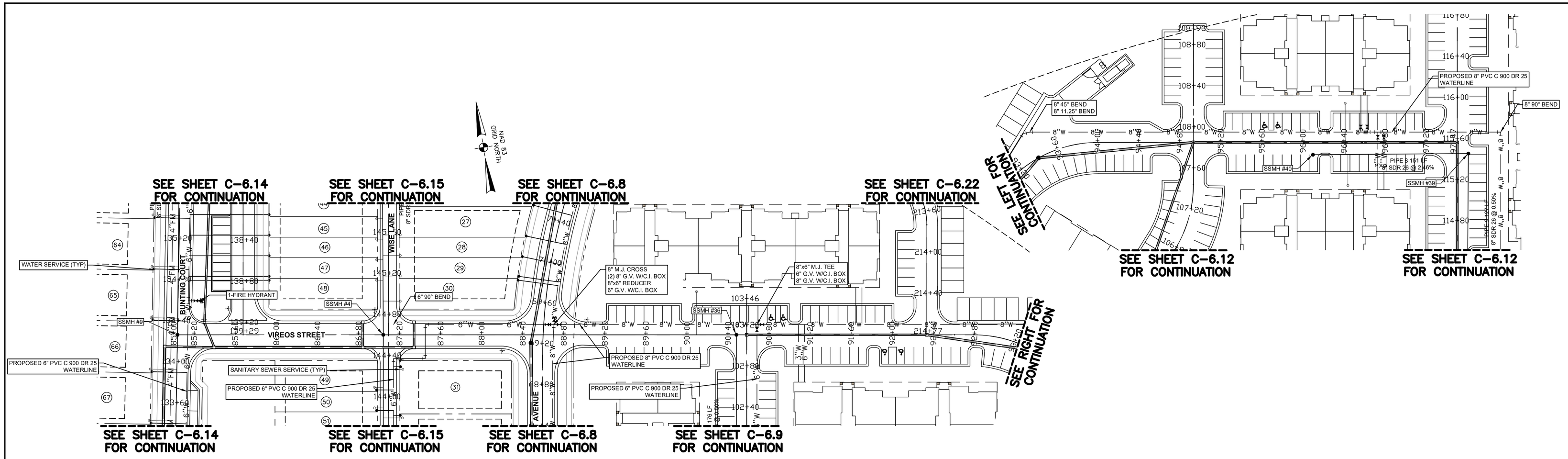
No.	Date:	Description:	By:

SANDHILL LANE PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT

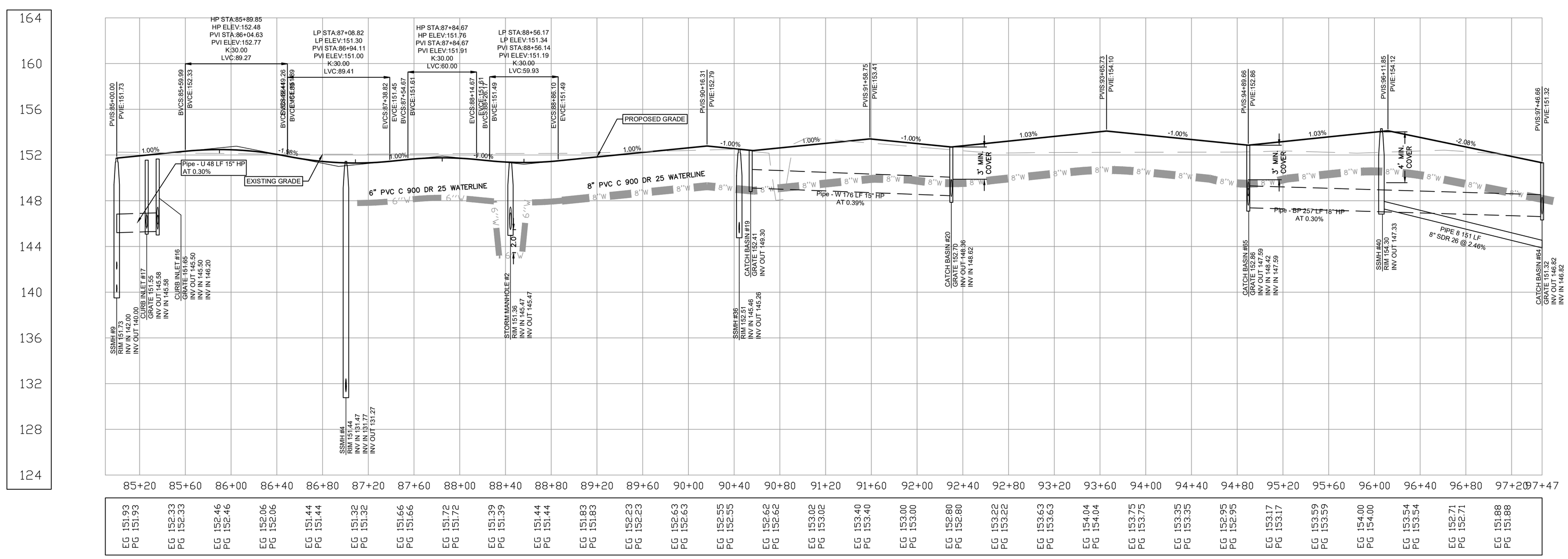
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED		
Date:	MONTH YEAR		
Drawn By:	CM/JM	Checked By:	HMSJ
Job No.:	E-9916		

Sheet No. C-6.9



VIREOS STREET
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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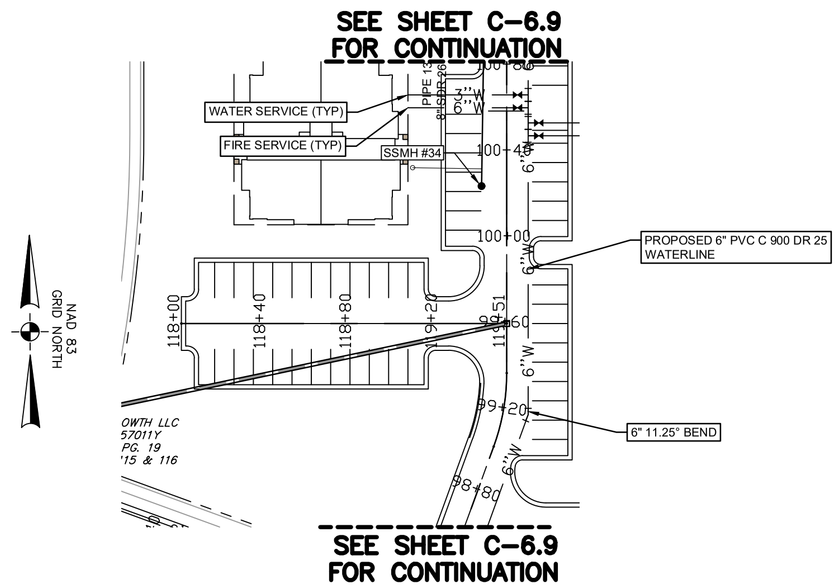
No.	Date:	Description:	By:

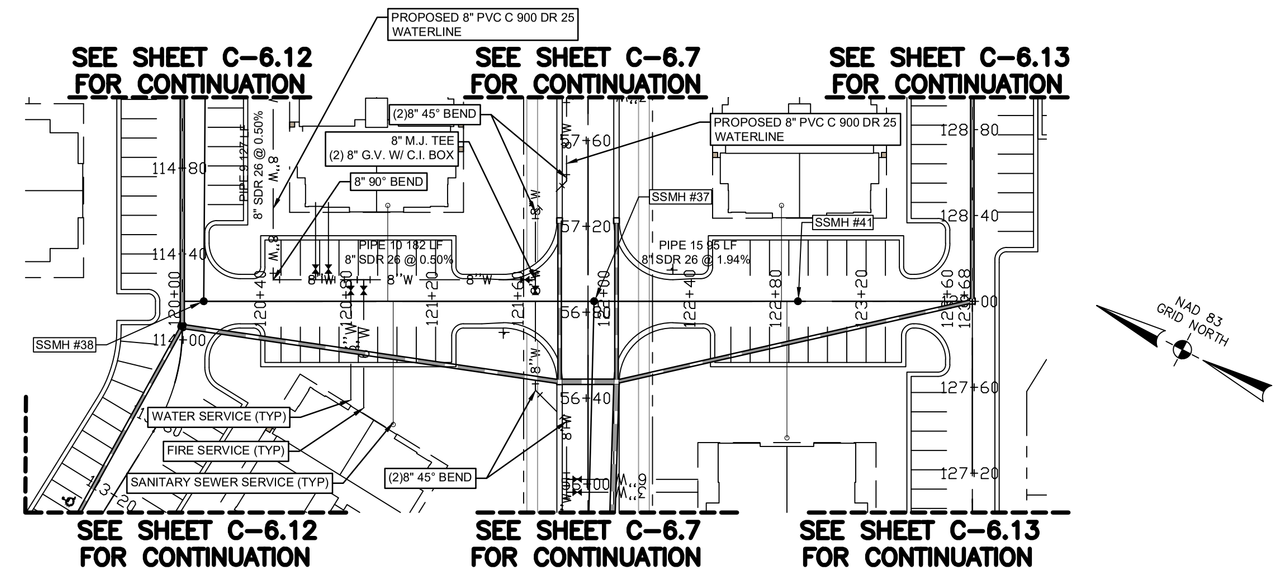
VIREOS STREET PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CMV/JM
Checked By:	HMSJ
Job No.:	E-6916

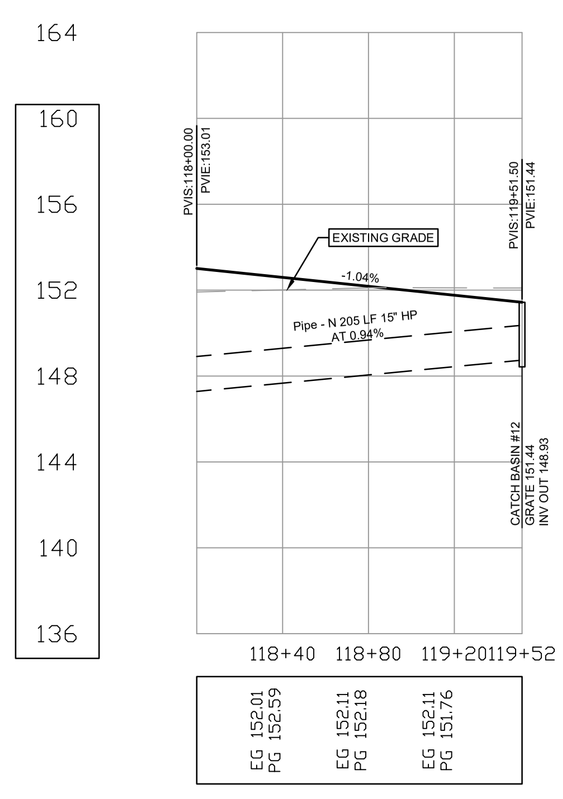
Sheet No. C-6.10

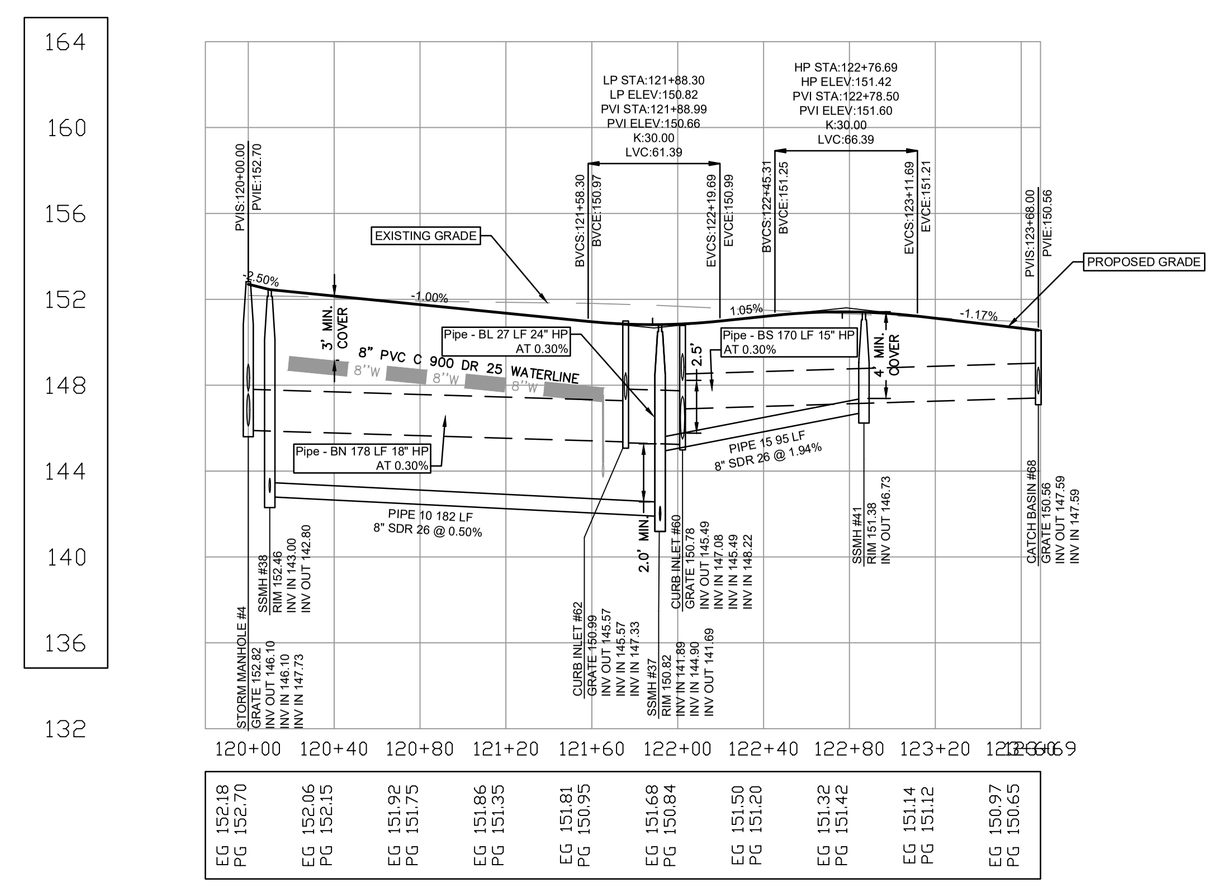


PARKING LOT
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



PARKING LOT
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Know what's below.
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PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049 JAMES CARLTON SUMMEY, JR. ENGINEER

SEA

Summey Engineering Associates, PLLC
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Asheboro, NC 27204
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E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

PLAN AND PROFILE 1

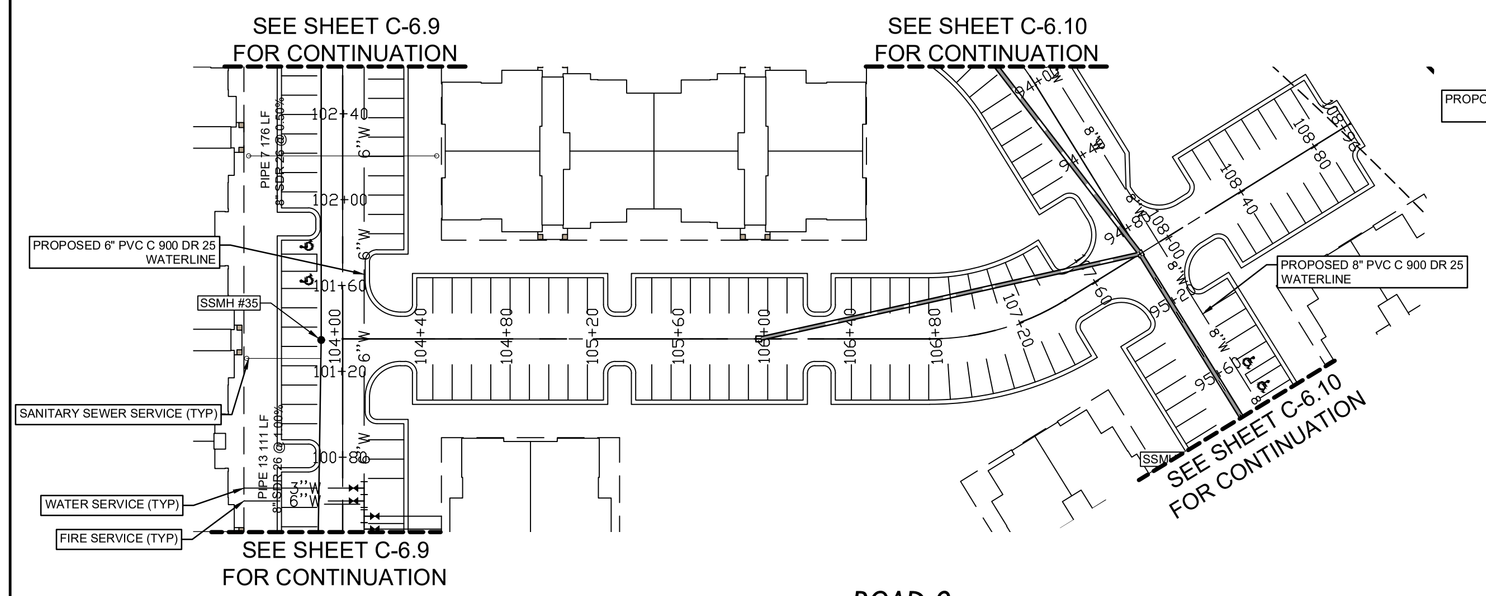
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

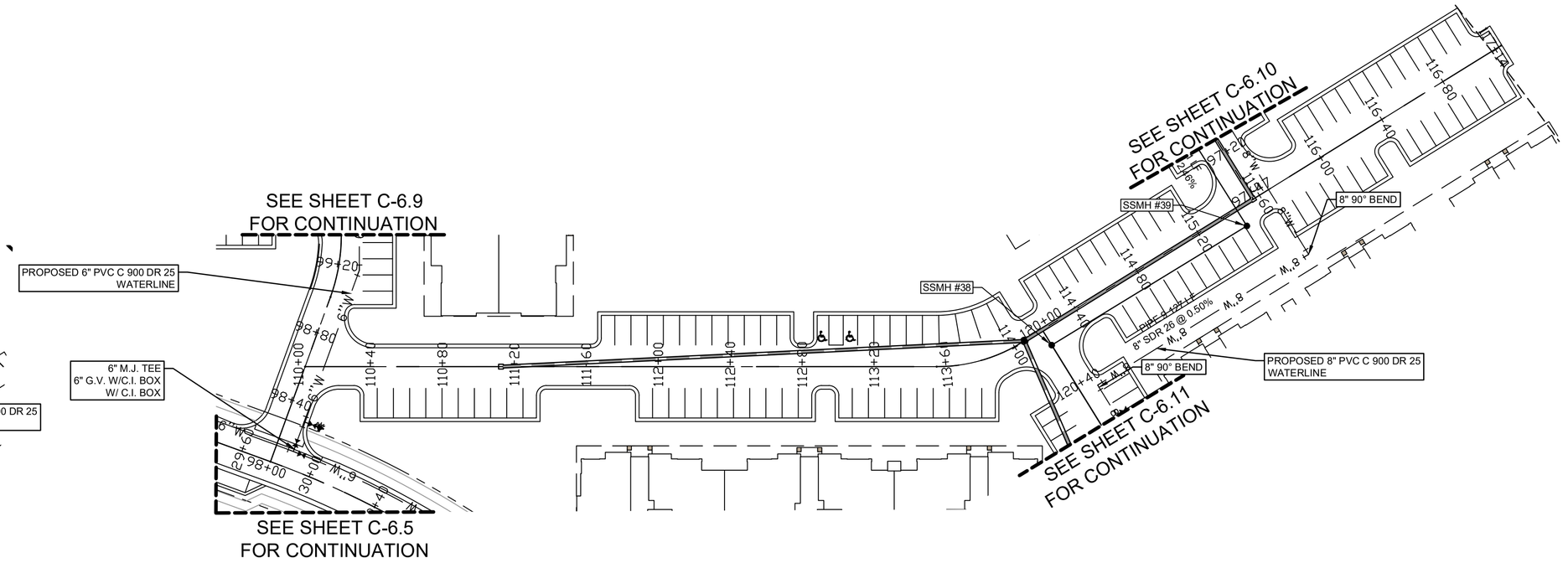
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM / JM
Checked By:	HMSJ
Job No.:	E-9916

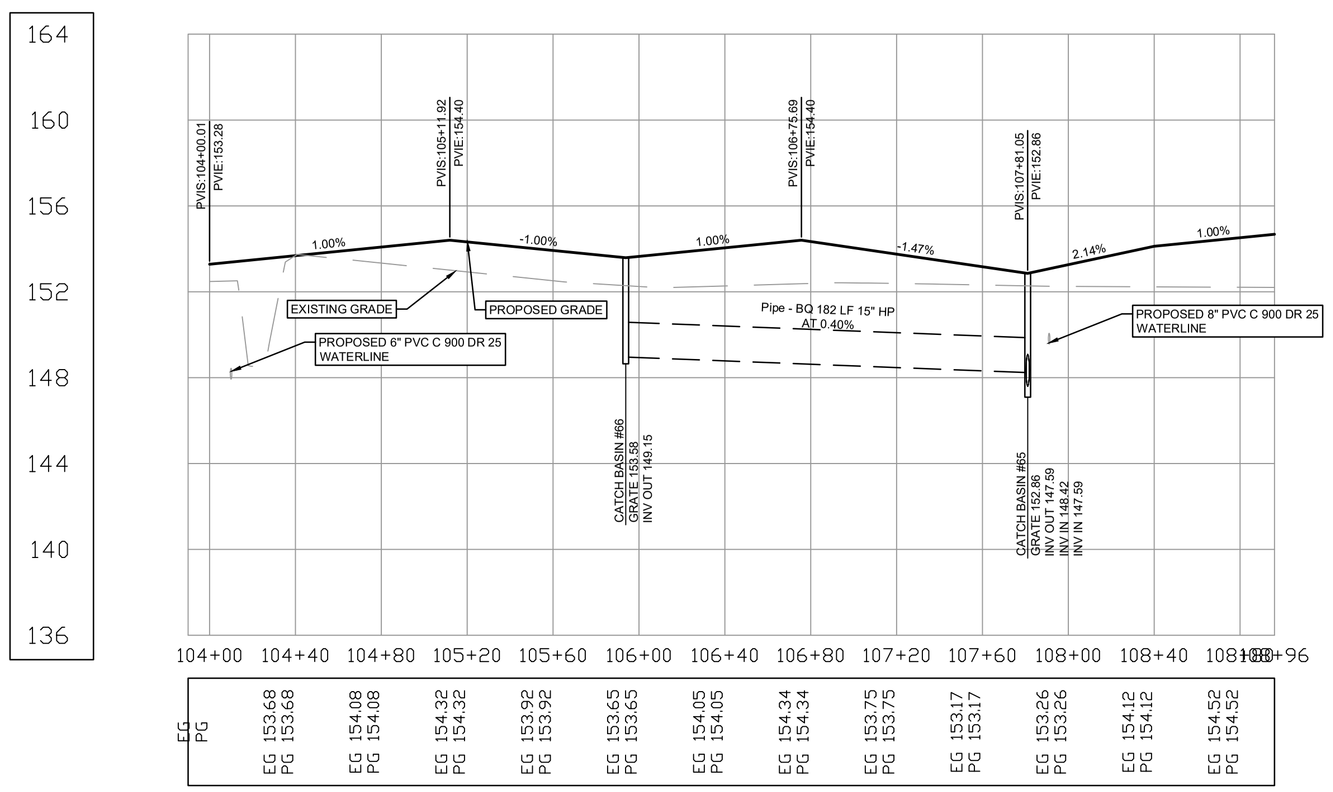
Sheet No.
C-6.11

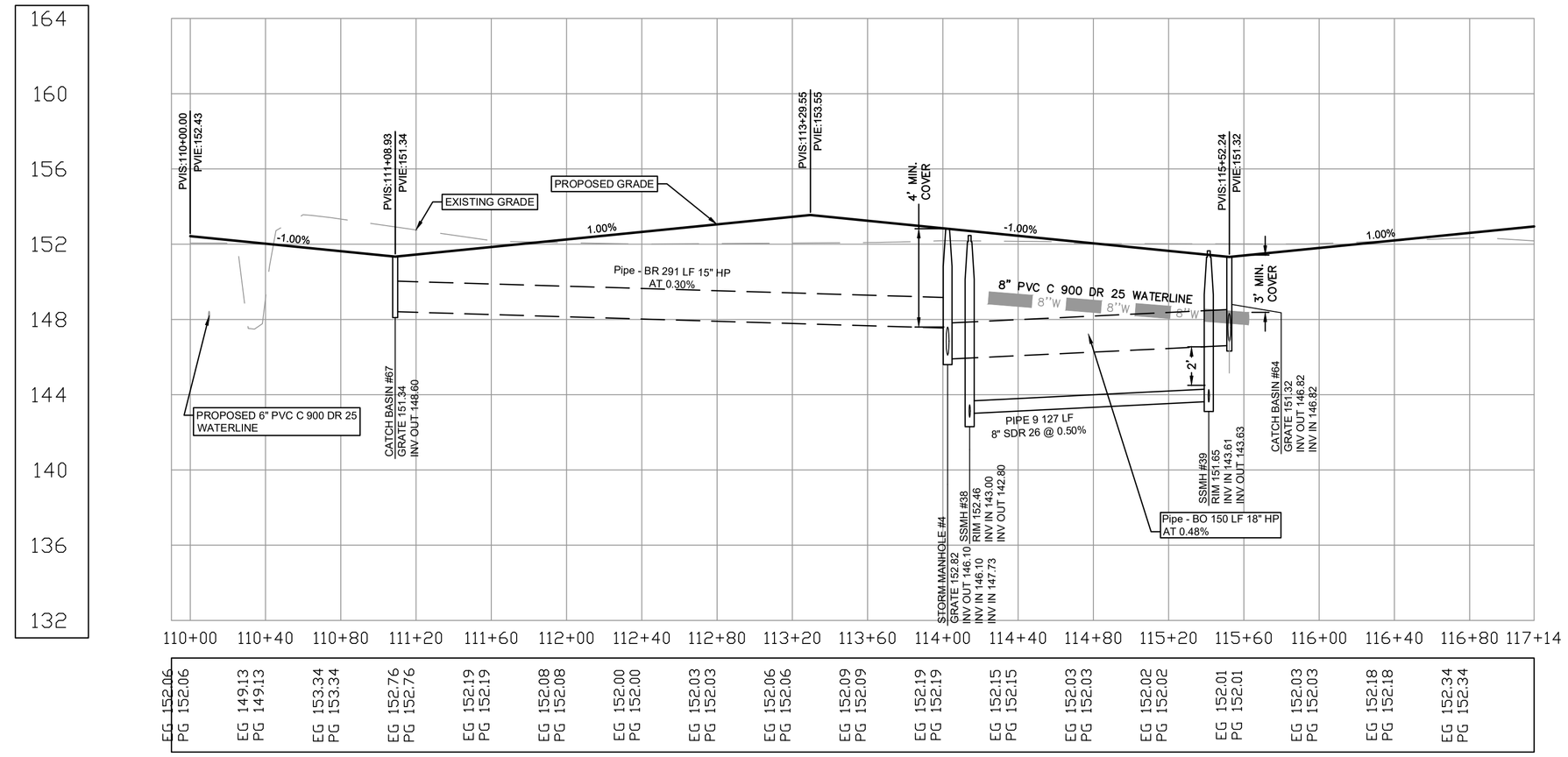


ROAD 9
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



ROAD 10
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

NAD 83
GRID NORTH

811
Know what's below.
Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES HOMACK SUMMEY, JR.

SEA

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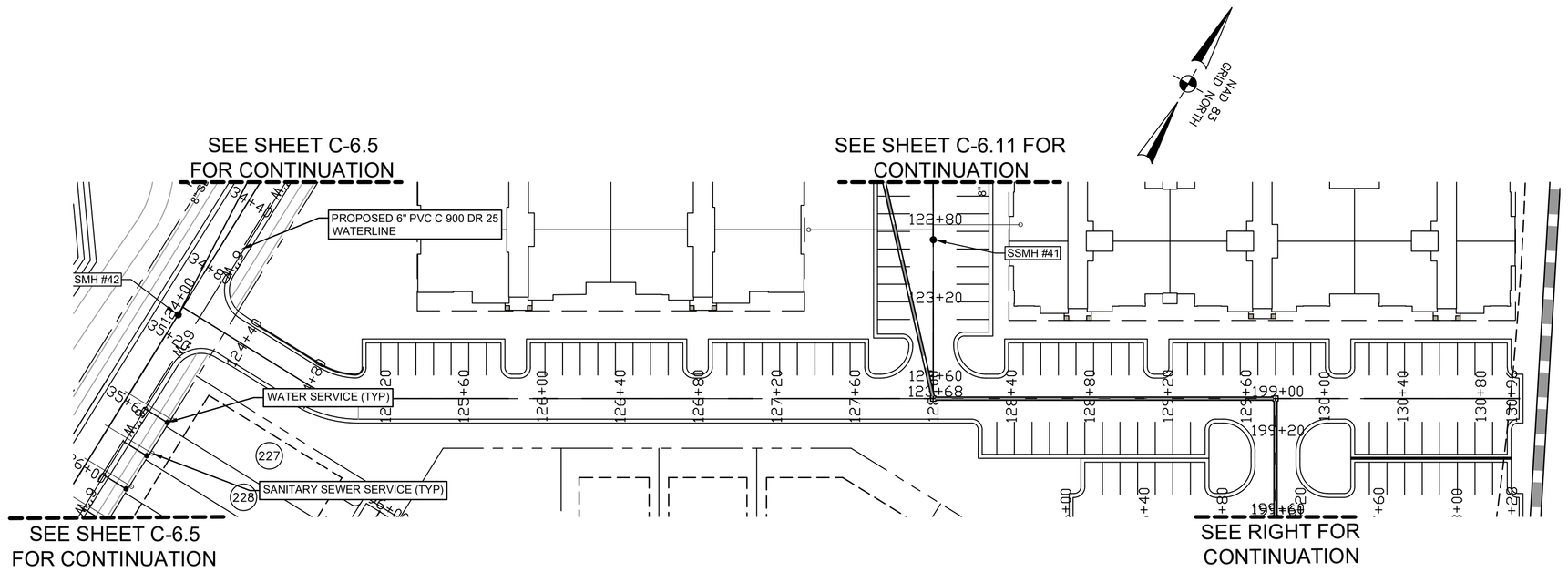
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

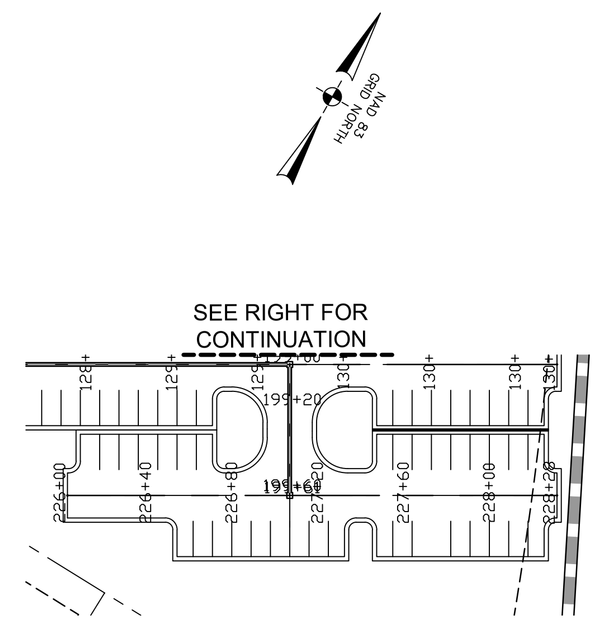
PLAN AND PROFILE 2
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9916

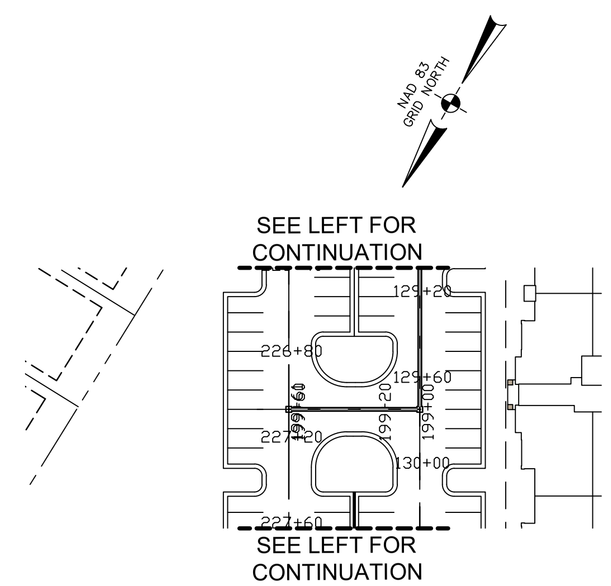
Sheet No.
C-6.12



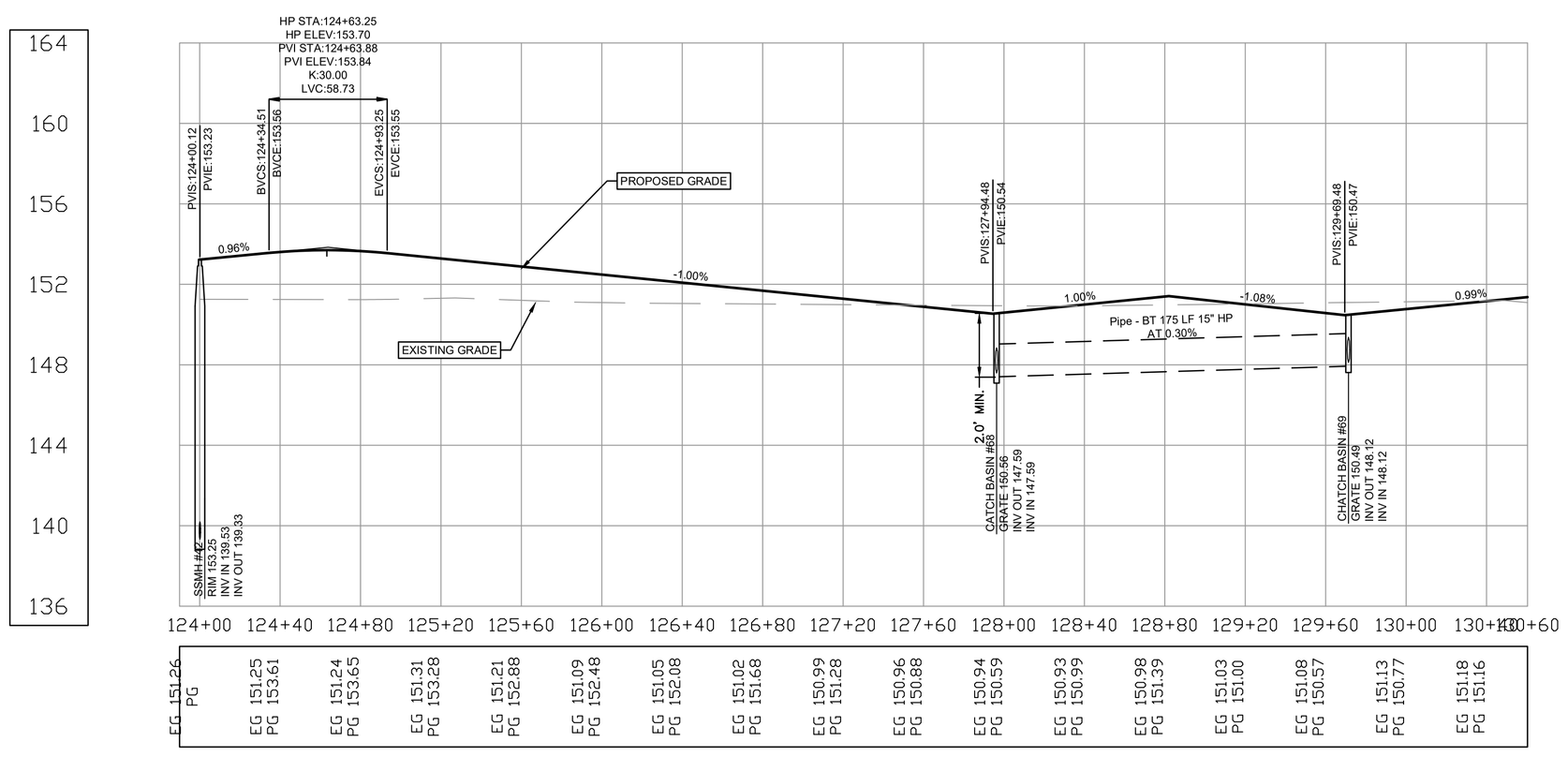
PARKING LOT
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.

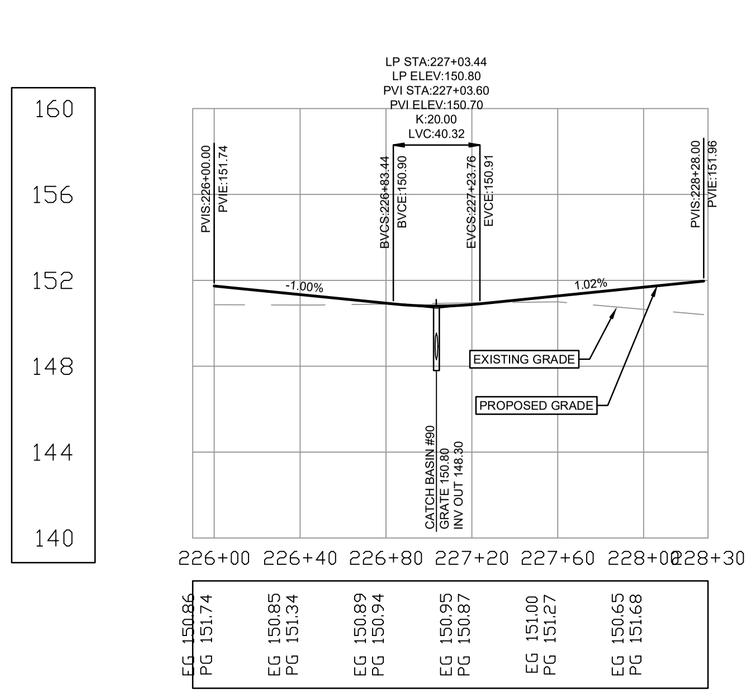


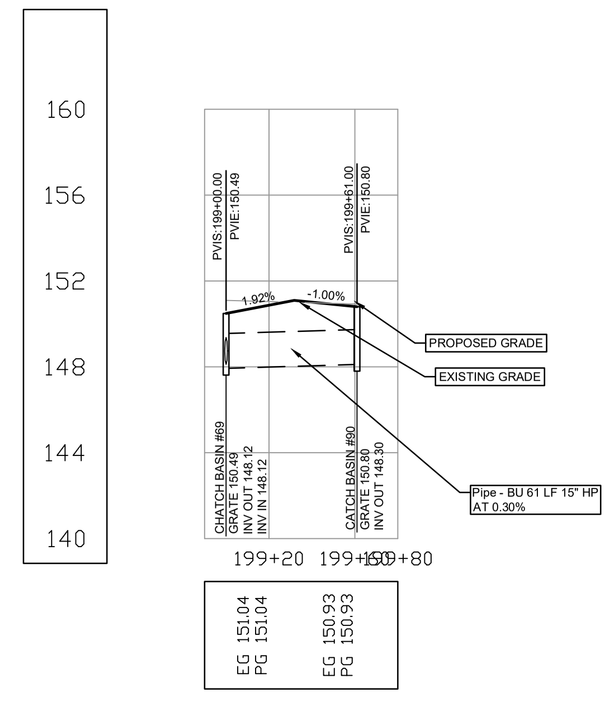
PARKING LOT
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



PARKING LOT
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.







GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.

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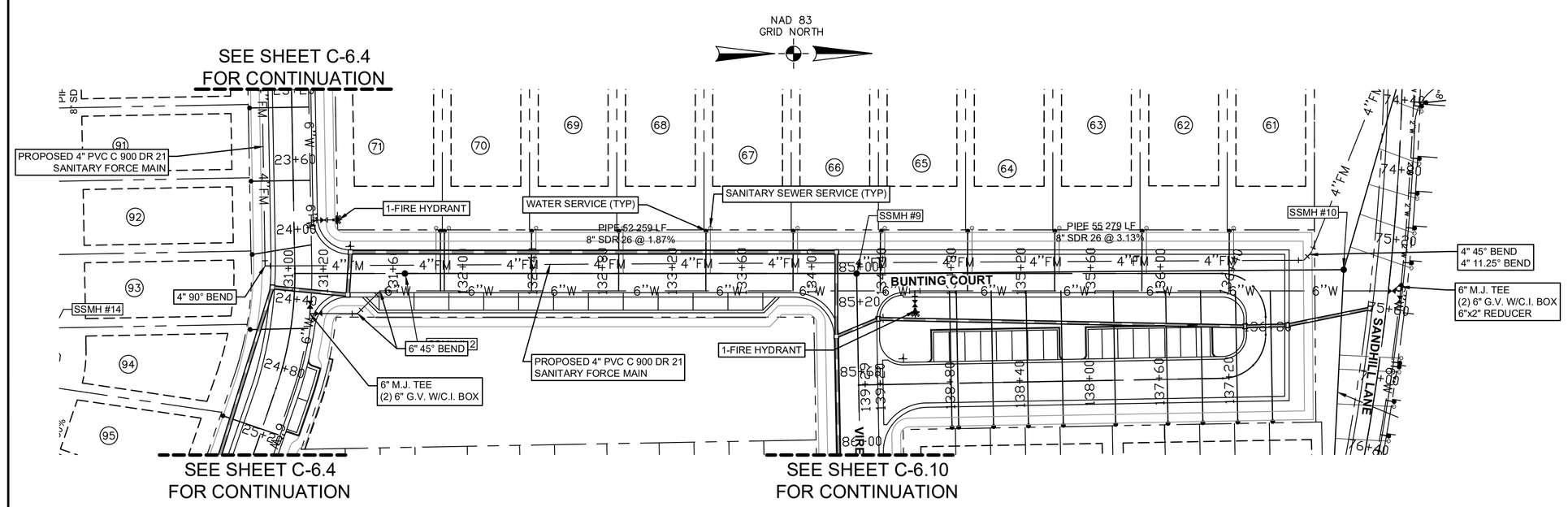
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

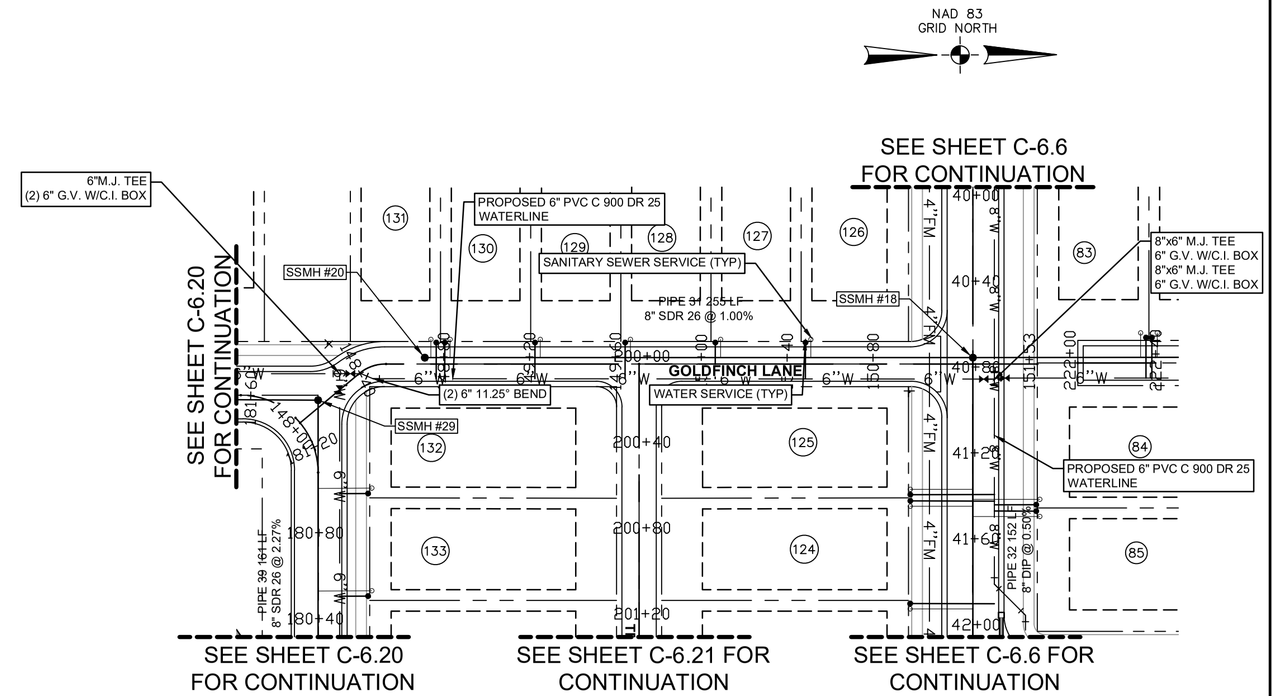
PLAN AND PROFILE 3
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED		
Date:	MONTH YEAR		
Drawn By:	CM/JM	Checked By:	HMSJ
Job No.:	3-6-916		

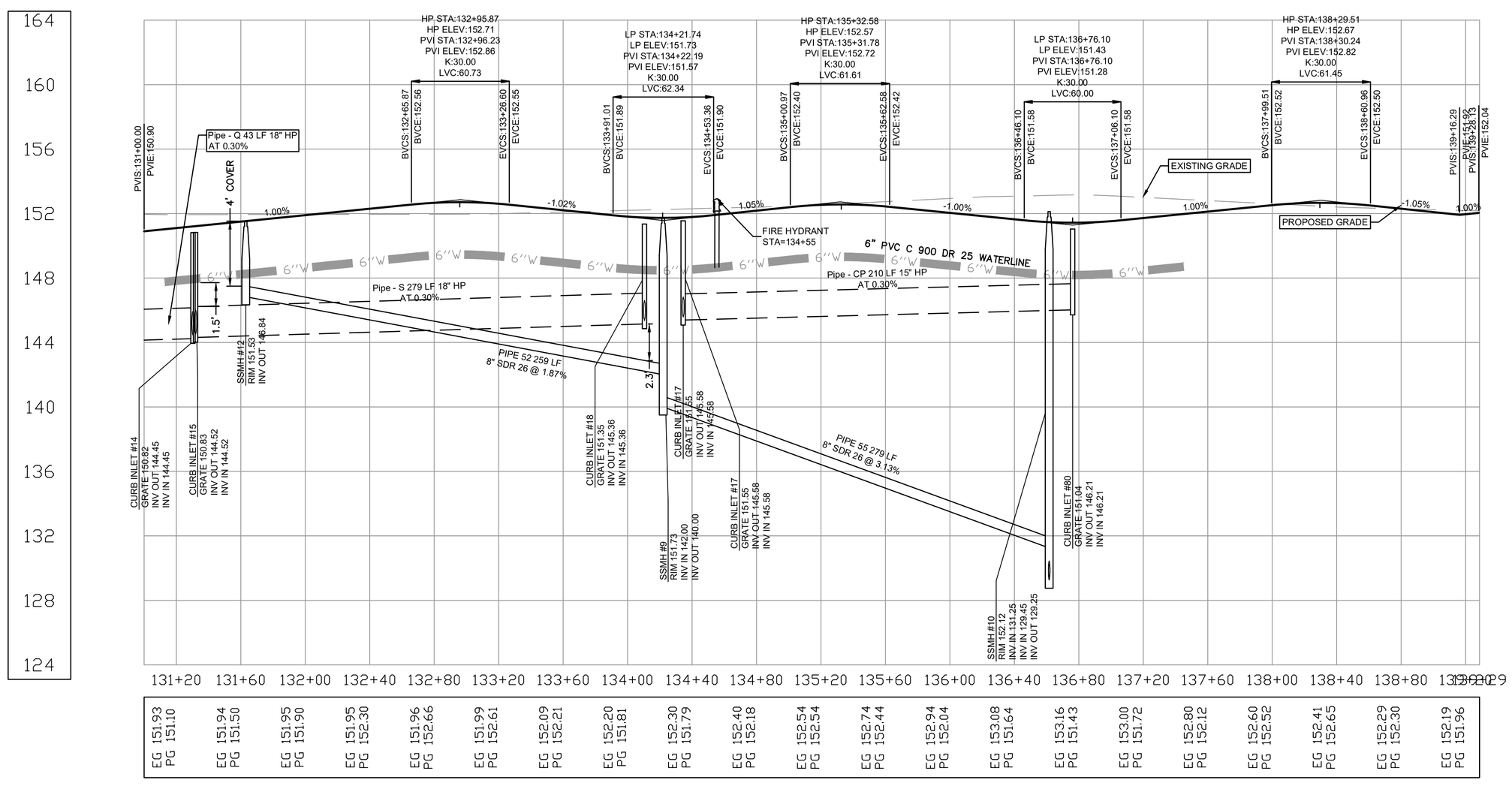
Sheet No. C-6.13

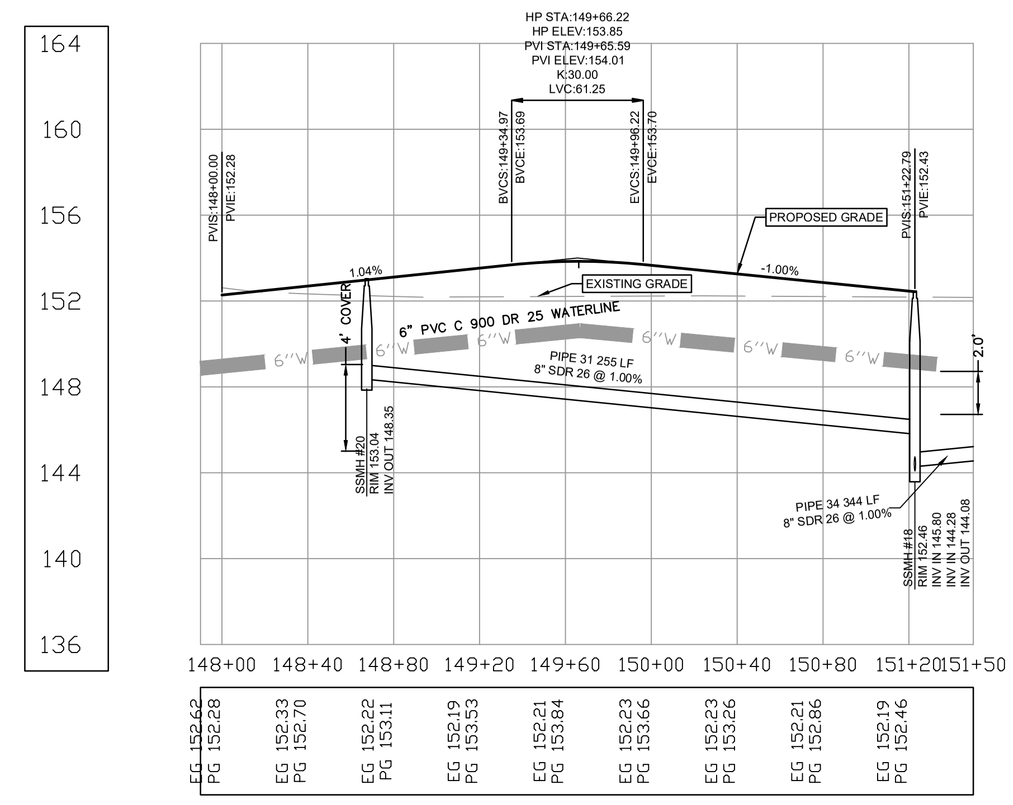


BUNTING COURT
50' PUBLIC R/W &
PRIVATE R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



GOLDFINCH LANE
21' PRIVATE R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

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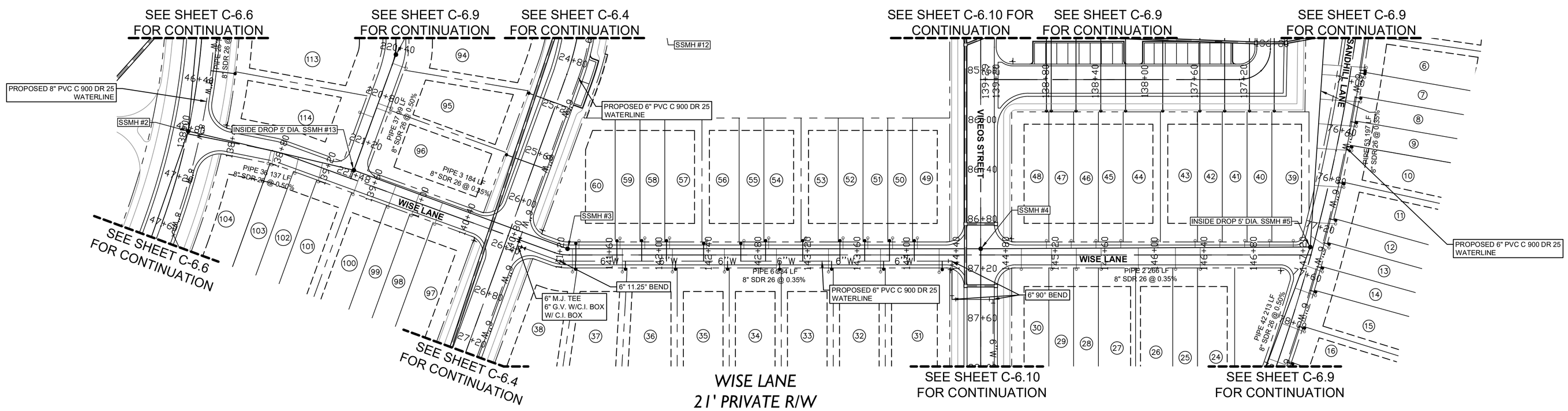
No.	Date:	Description:	By:

BUNTING COURT & GOLDFINCH LANE
PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

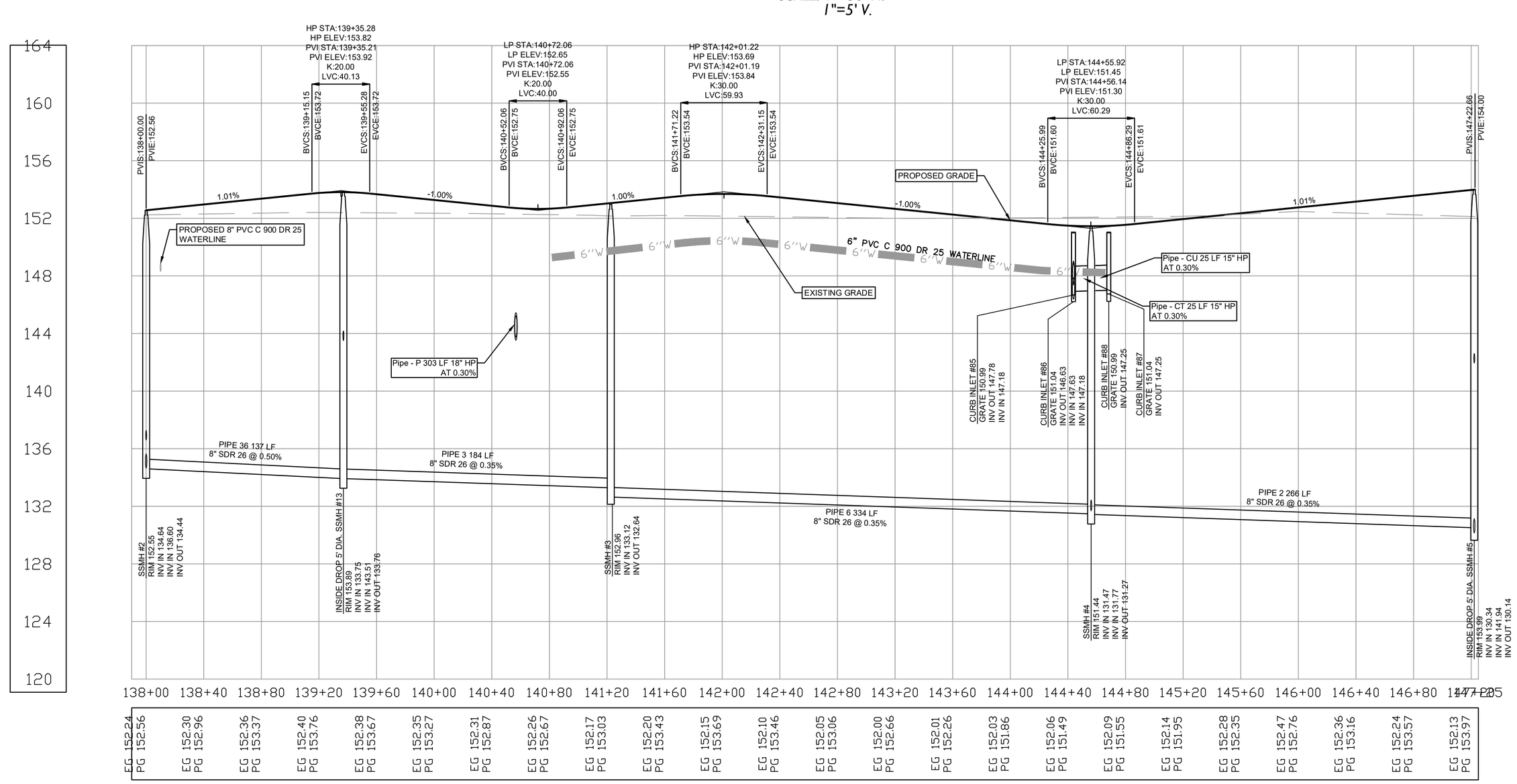
Scale:	AS NOTED		
Date:	MONTH YEAR		
Drawn By:	CM/JM	Checked By:	HMSJ
Job No.:	E-9916		

Sheet No. C-6.14



WISE LANE
21' PRIVATE R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.



NAD 83
GRID NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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Asheboro, NC 27204
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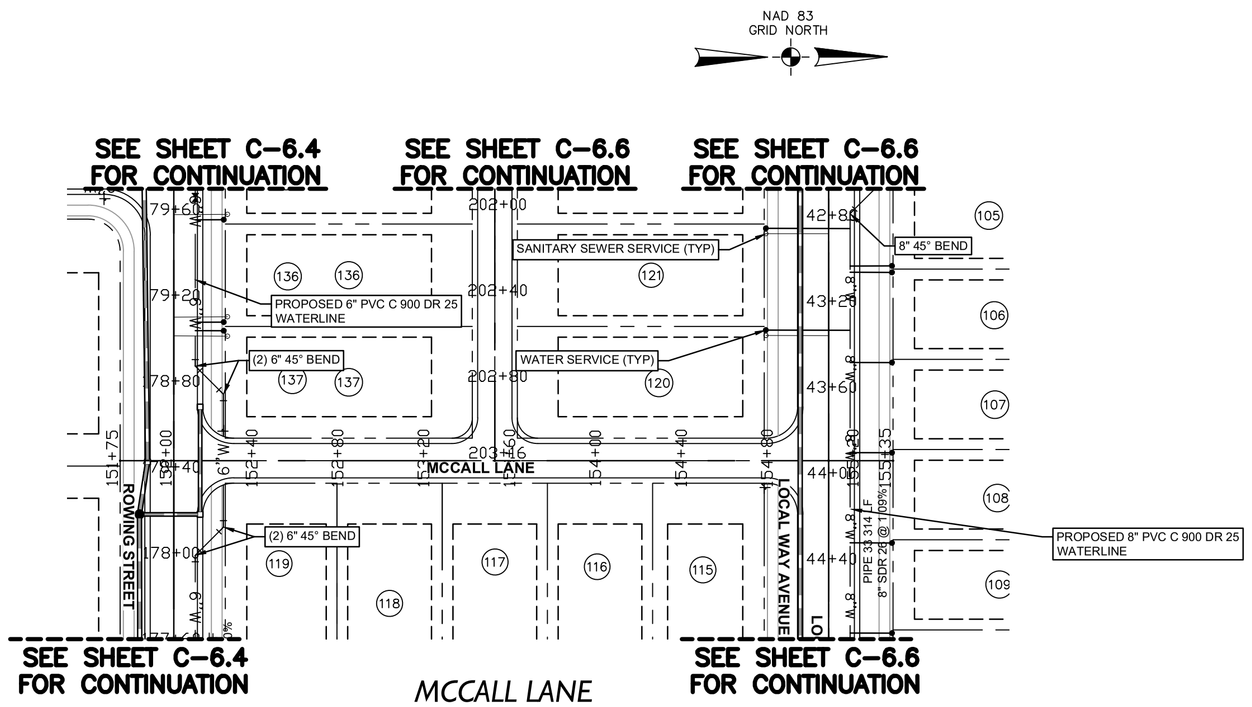
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

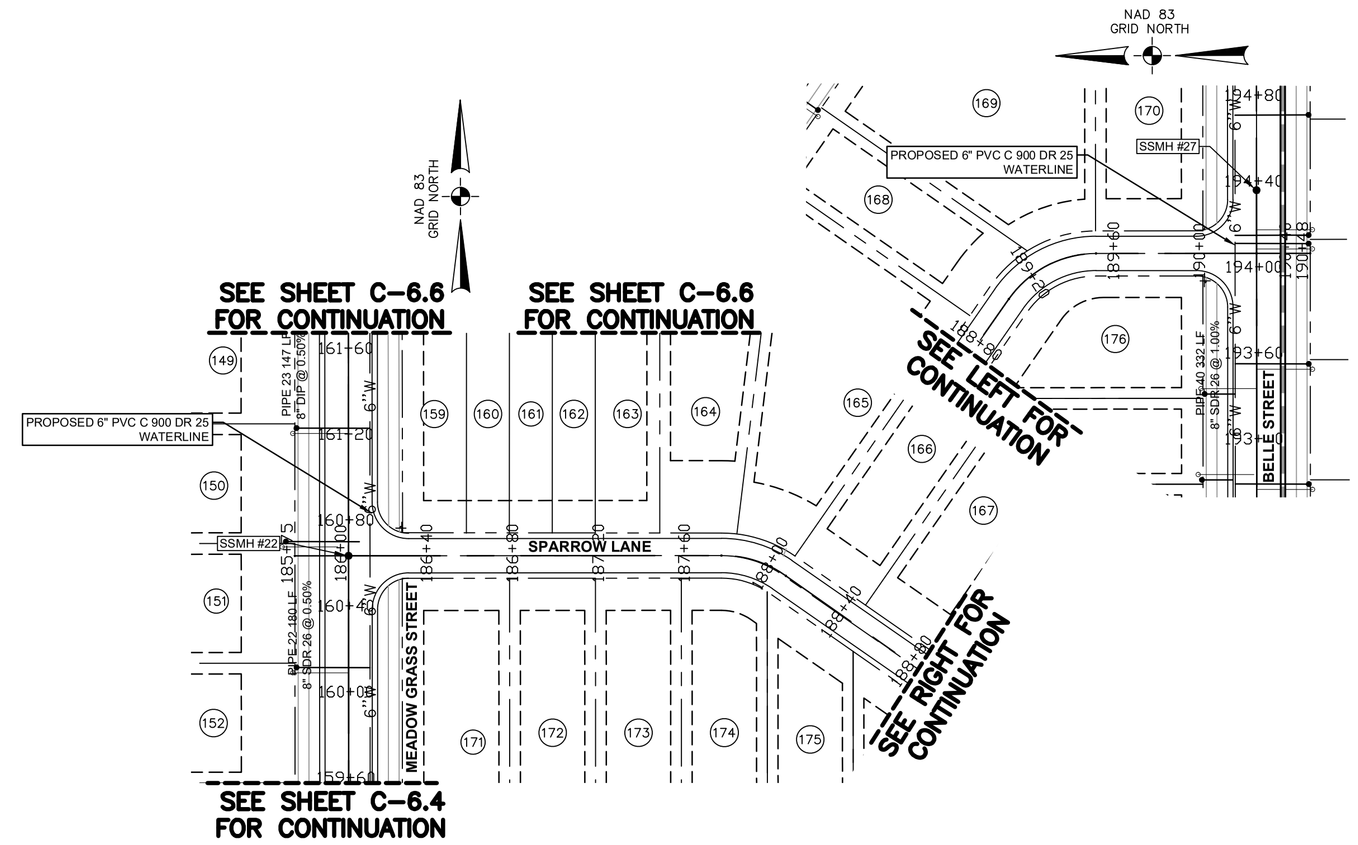
WISE LANE PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale: AS NOTED	Date: MONTH YEAR	Drawn By: CM/ JM	Checked By: HMSJ
Job No.: E-9516			

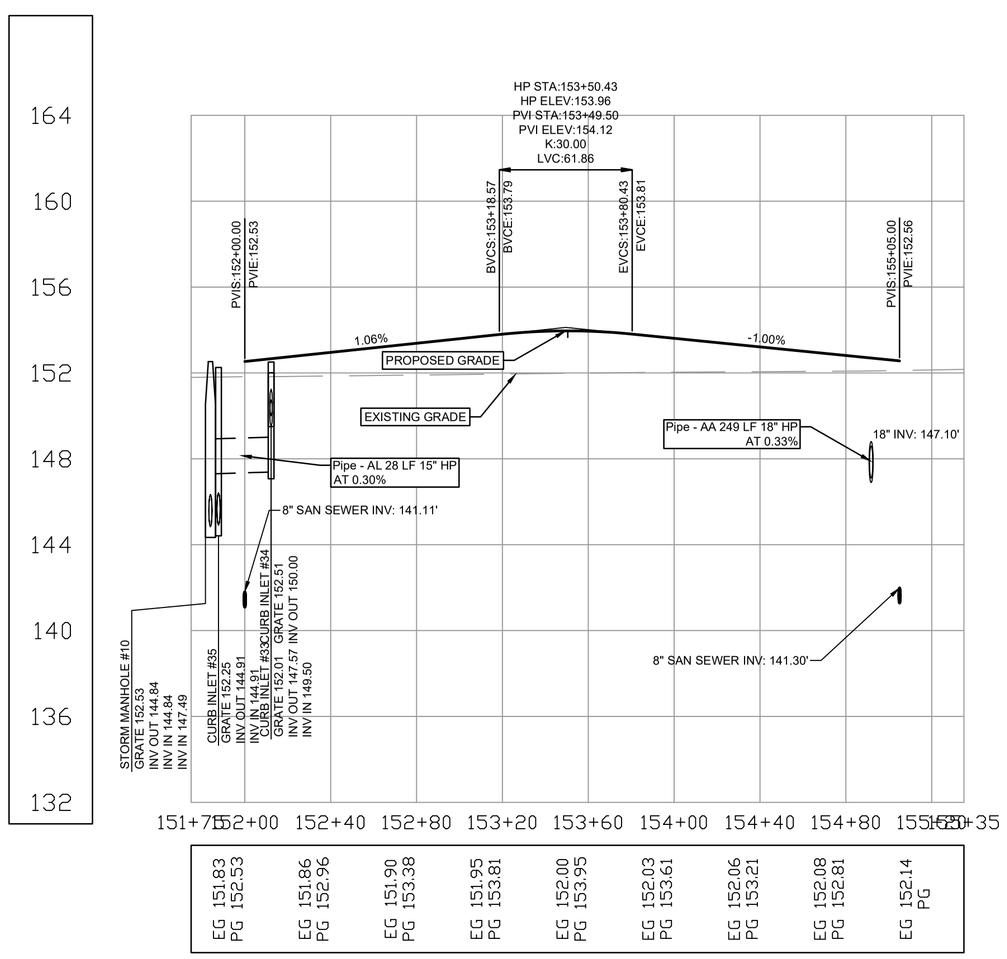
Sheet No. C-6.15

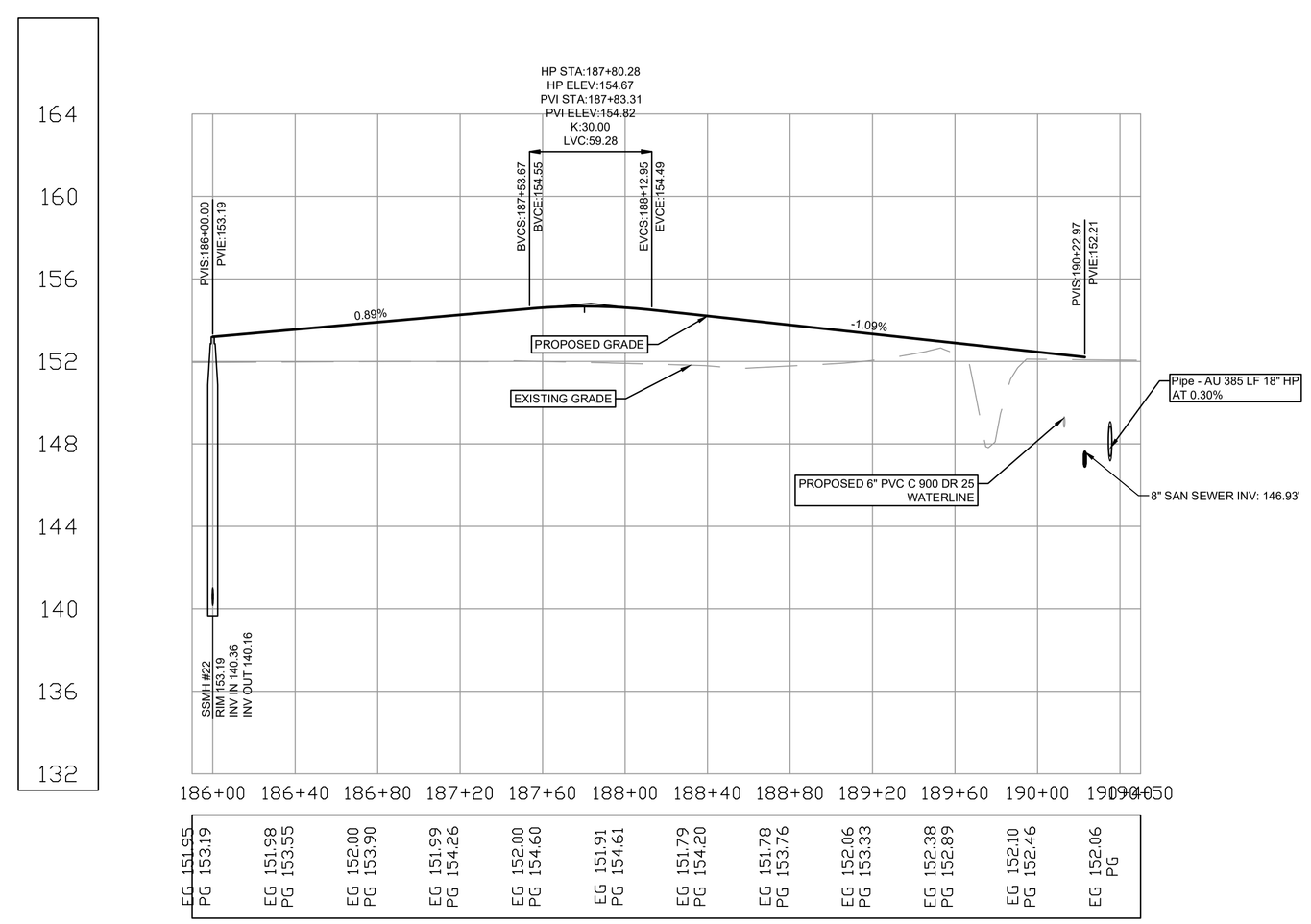


MCCALL LANE
21' PRIVATE R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



SPARROW LANE
21' PRIVATE R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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NORTH CAROLINA PROFESSIONAL SEAL 049 JAMES HOMACK SUMMEY, JR. PROFESSIONAL ENGINEER

SEA

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Engineering - Consulting - Surveying
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Asheboro, NC 27204
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E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

MCCALL LANE & SPARROW LANE PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
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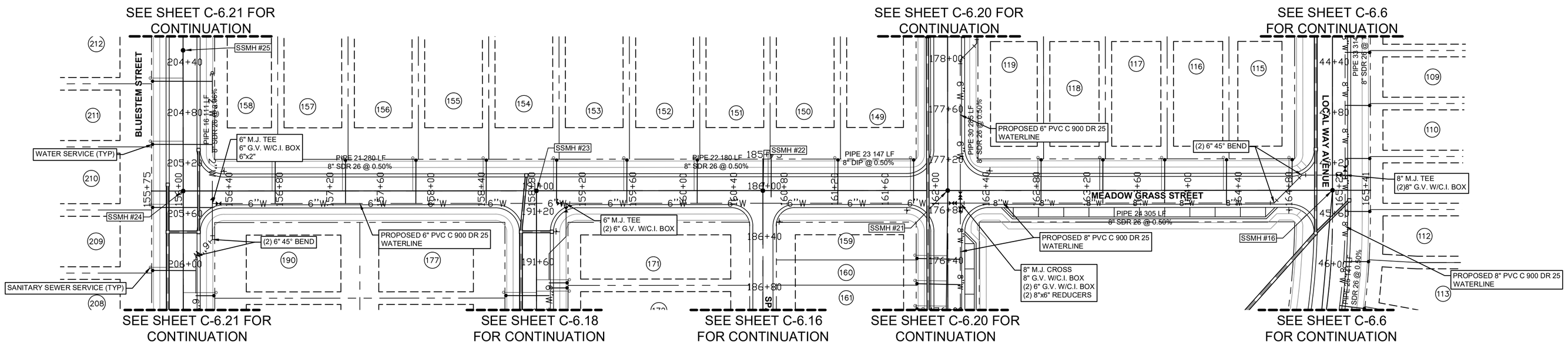
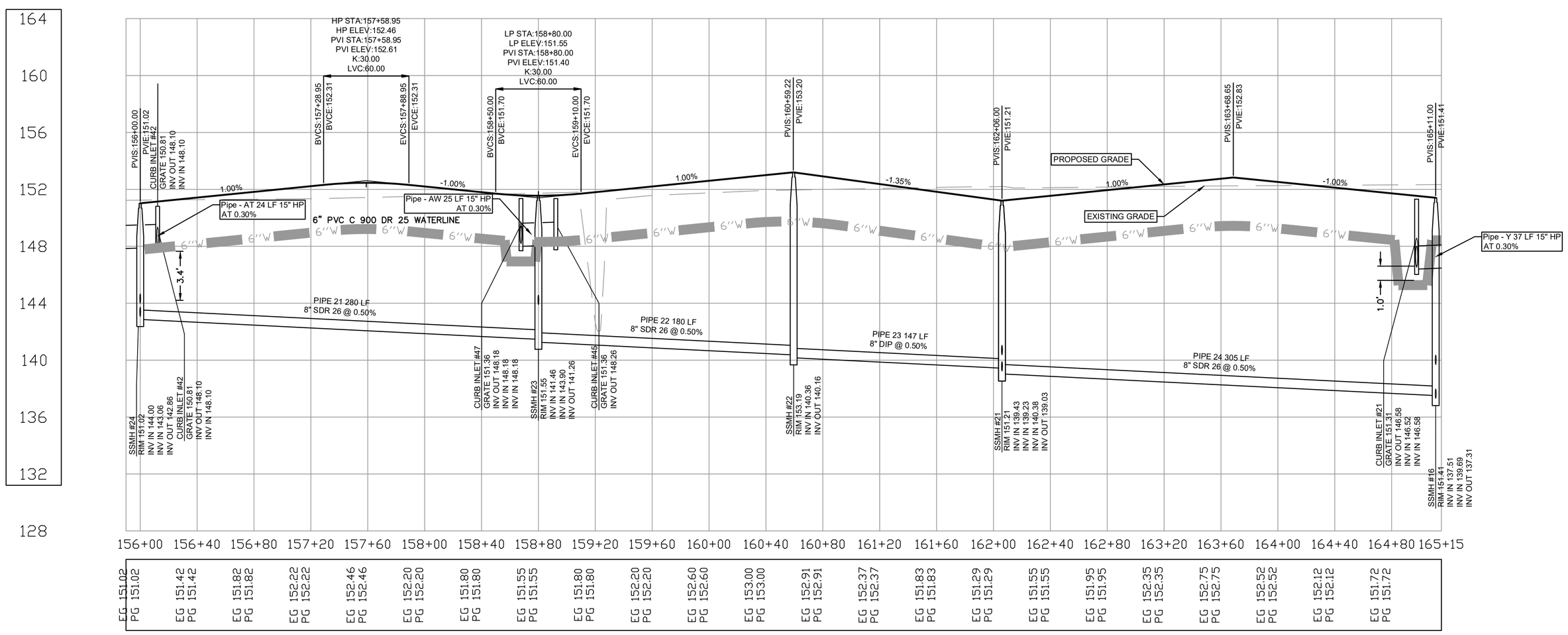
C-6.16



MEADOW GRASS STREET
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



PRELIMINARY PLANS NOT FOR REVIEW

NAD 83
GRID NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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Engineering - Consulting - Surveying
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Asheboro, NC 27204
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E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

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MEADOW GRASS STREET PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

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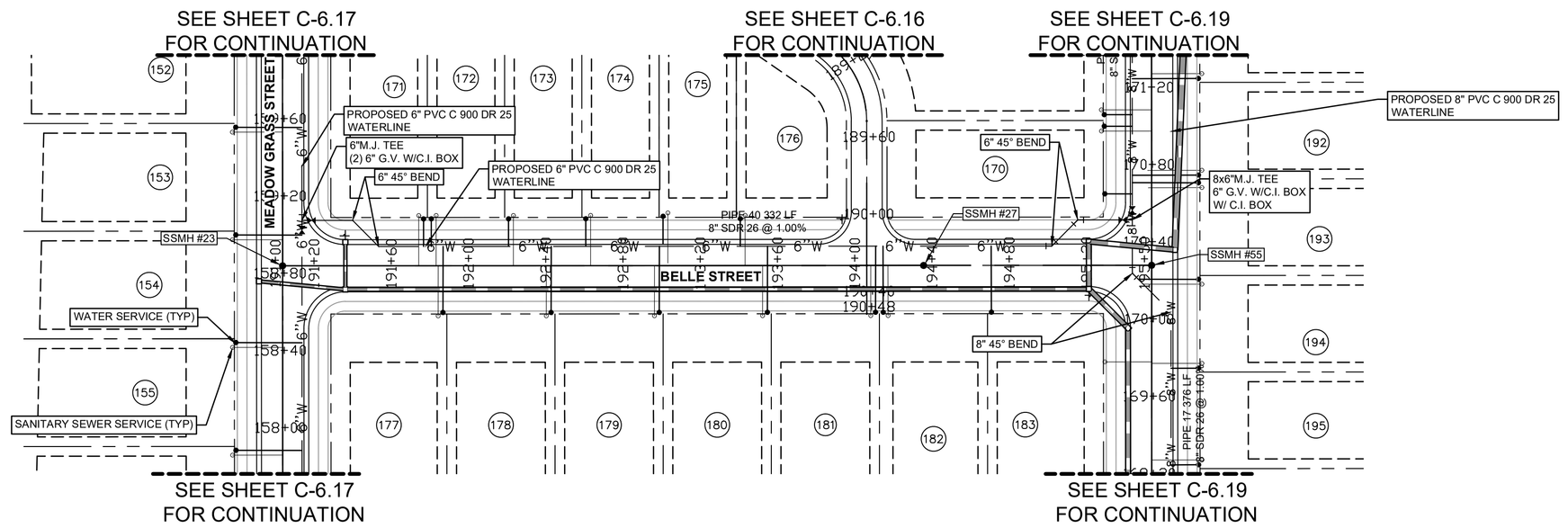
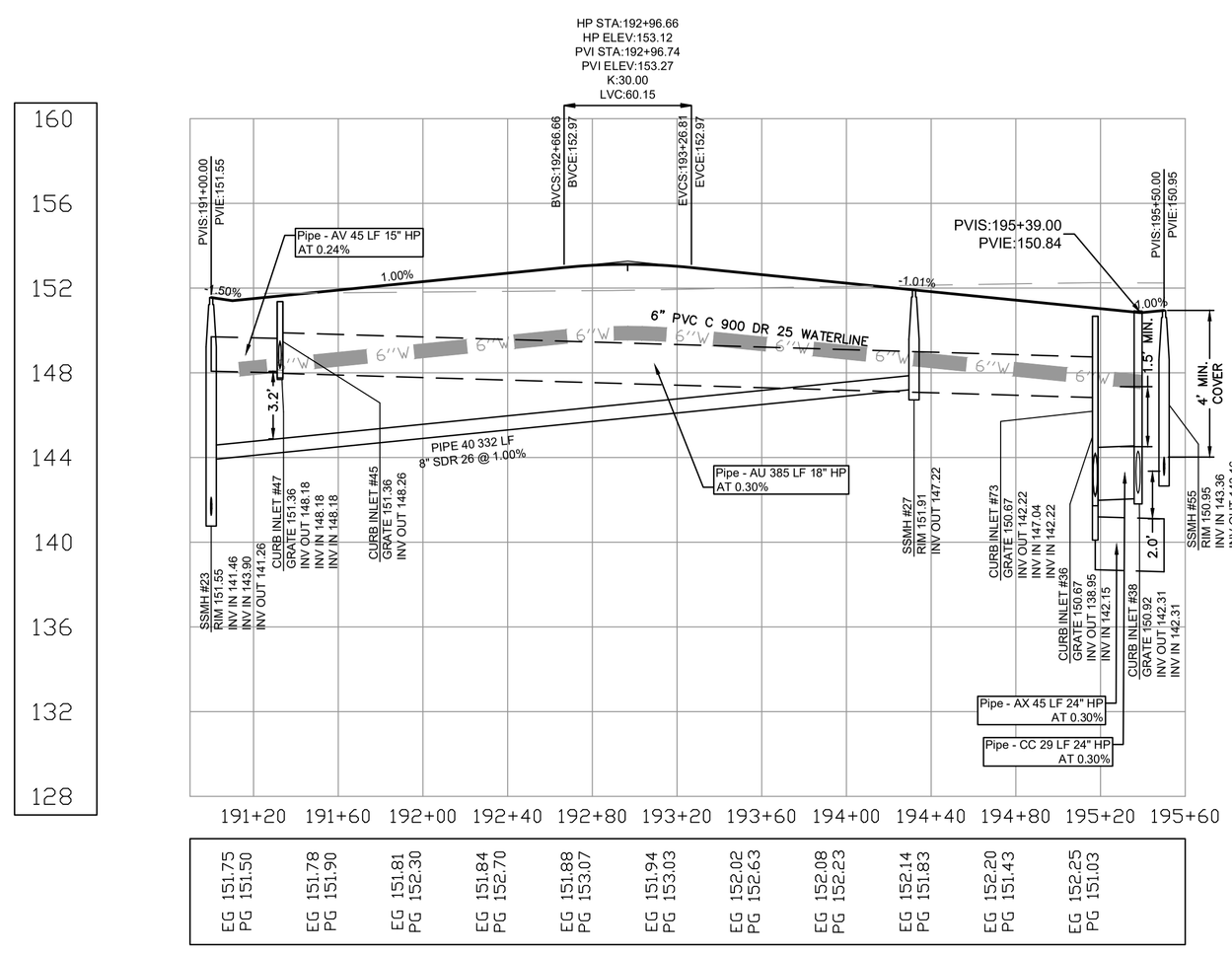
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-9516

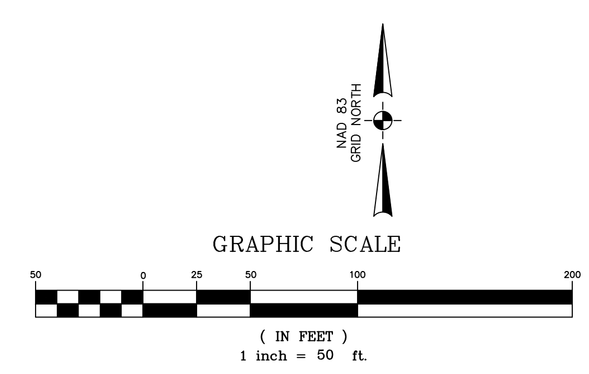
Sheet No.
C-6.17



BELLE STREET
50' PUBLIC R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.





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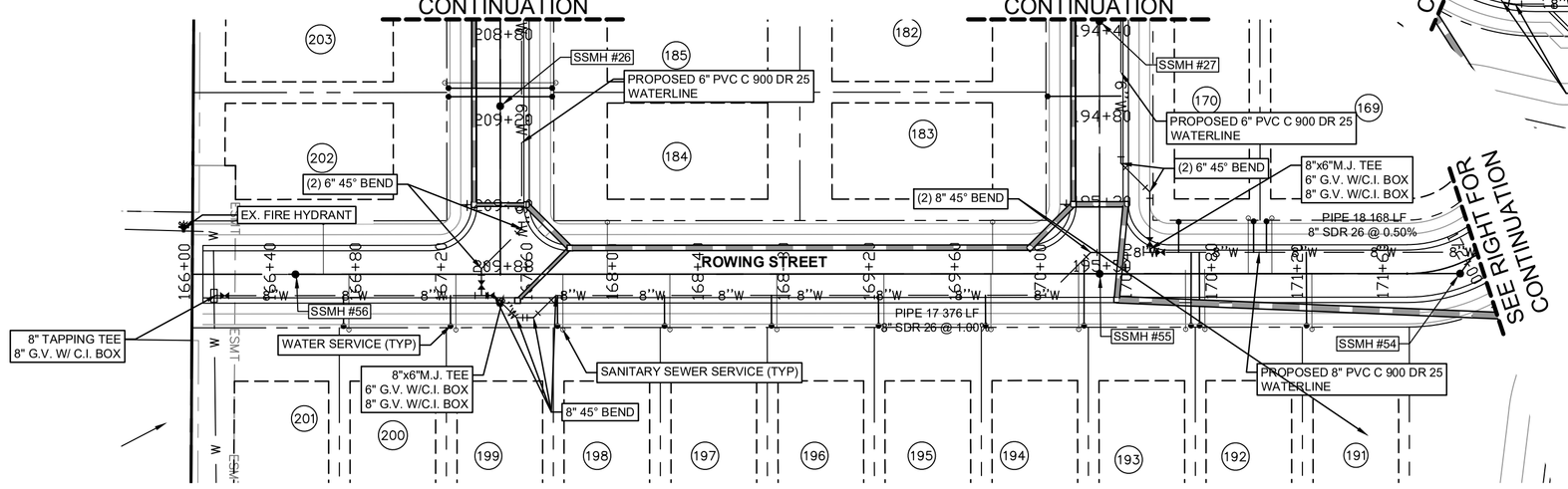
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

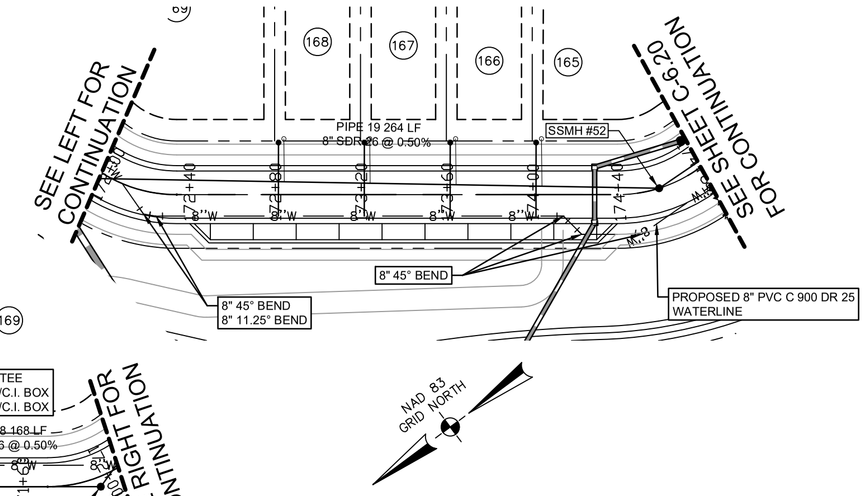
No.	Date:	Description:	By:

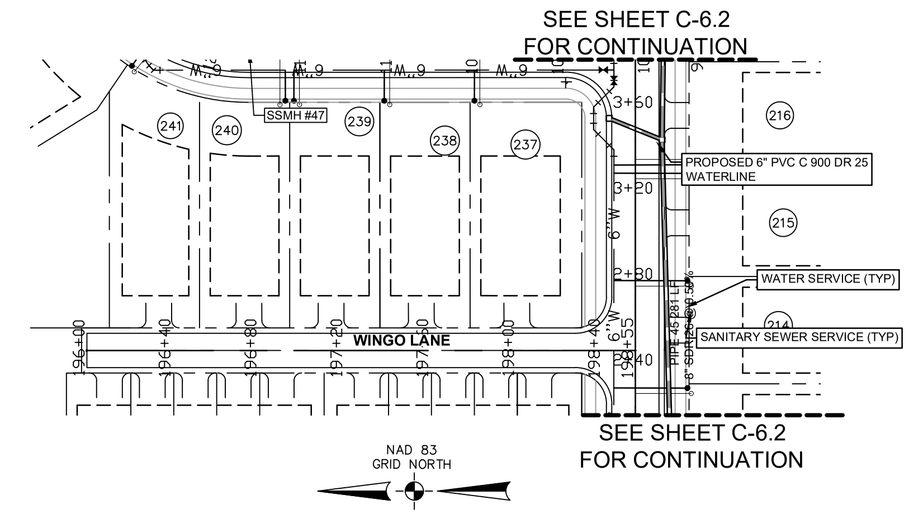
BELLE STREET PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-9516

Sheet No. C-6.18

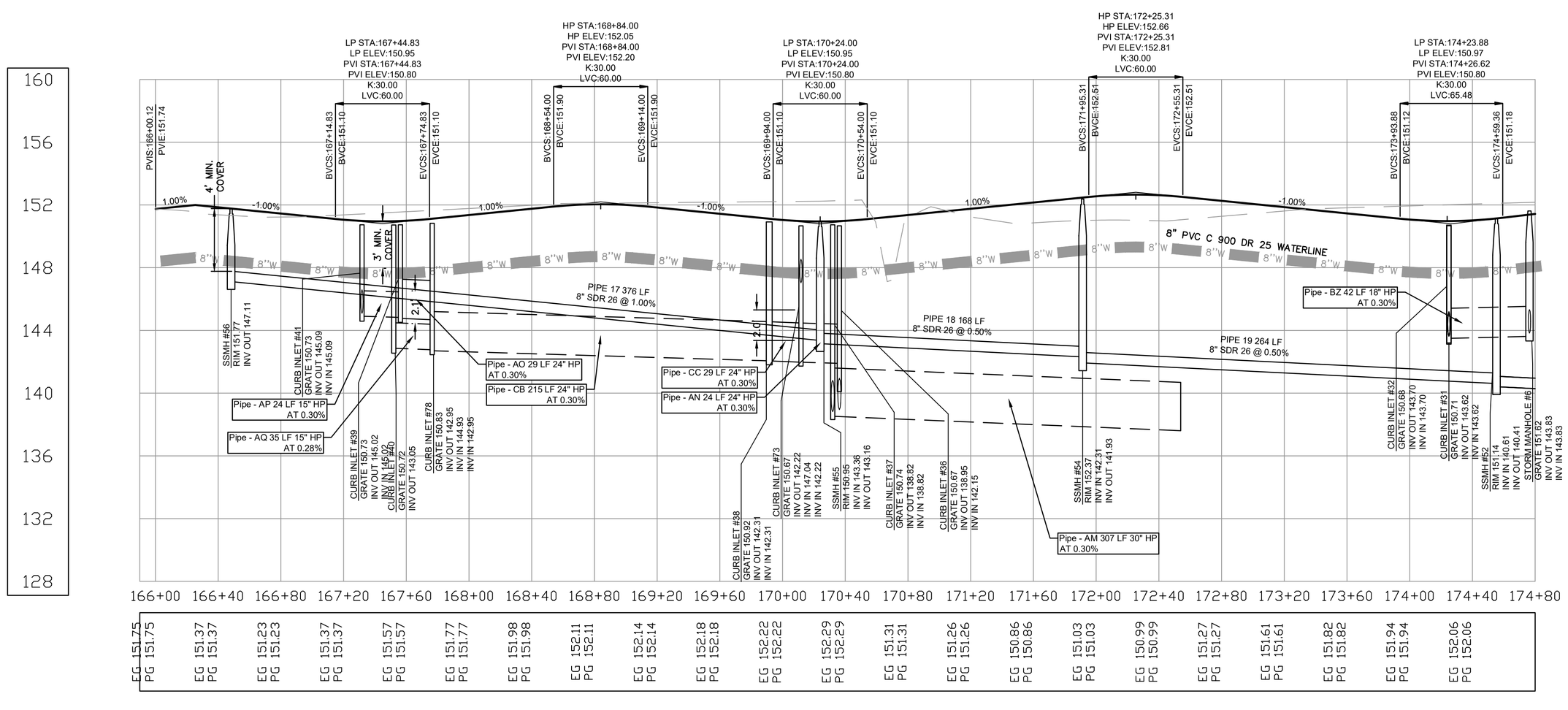


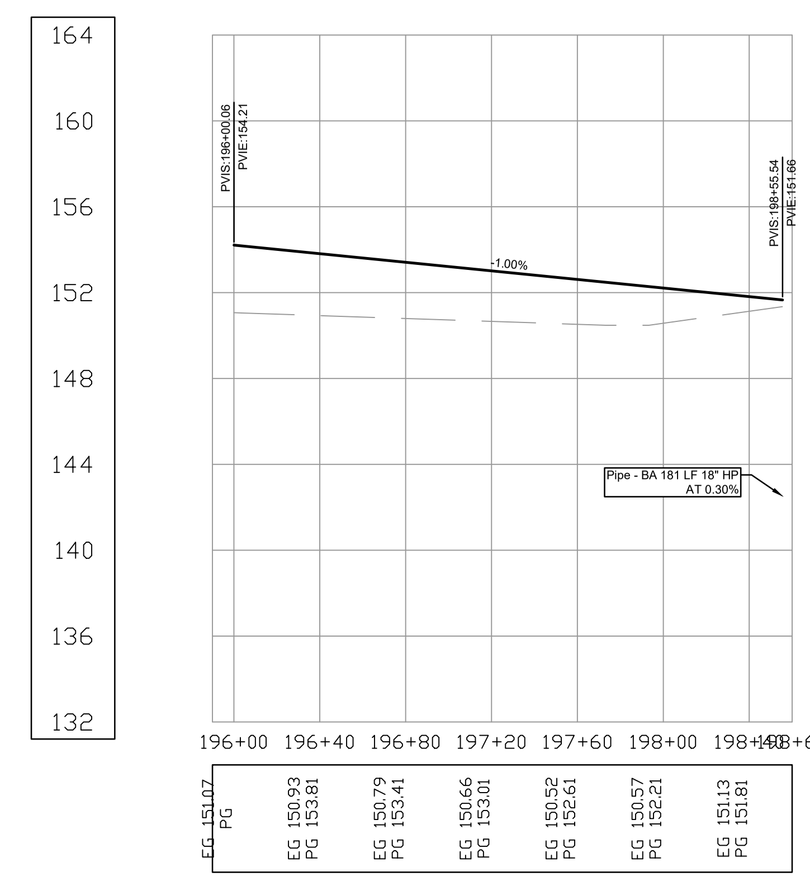




ROWING STREET
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.

WINGO LANE
21' PRIVATE R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Summey Engineering Associates, PLLC
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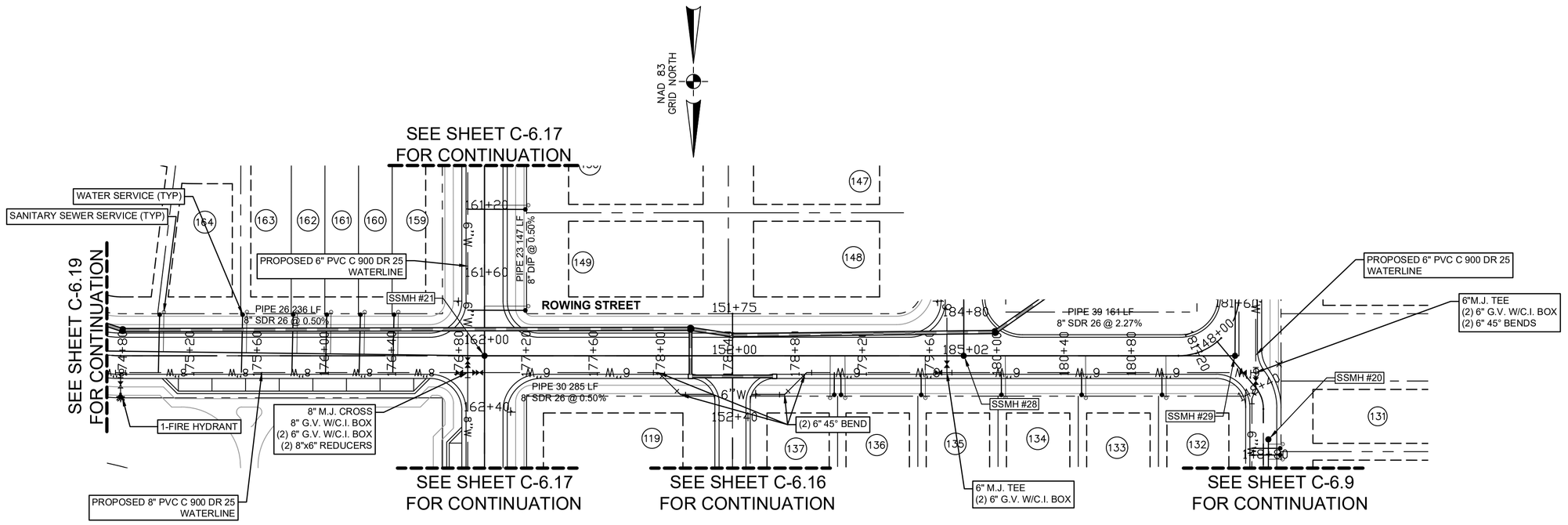
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

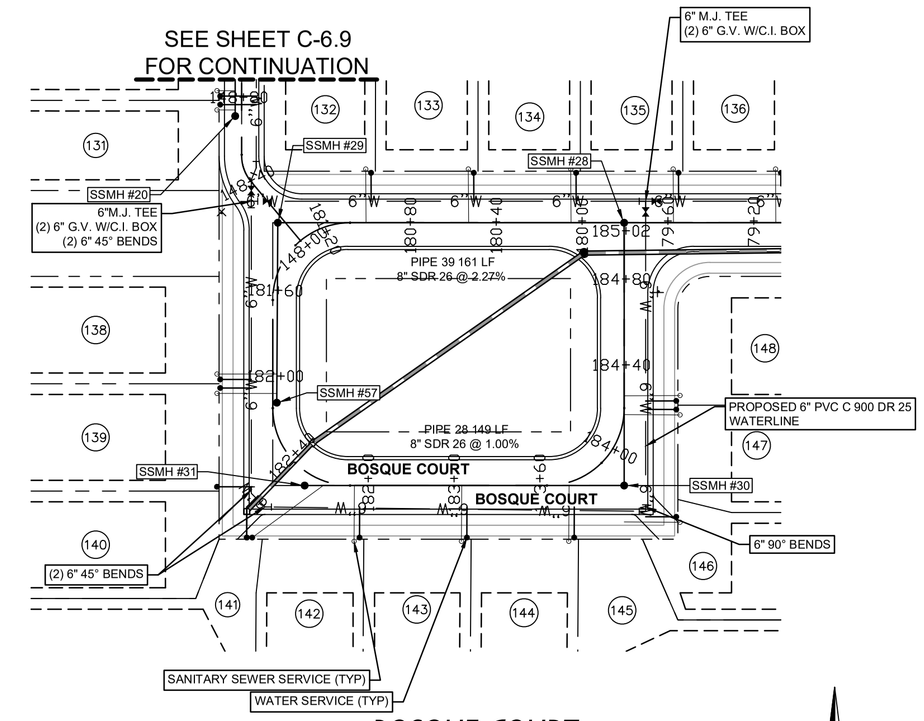
WINGO LANE & ROWING STREET
PLAN AND PROFILE I
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9916

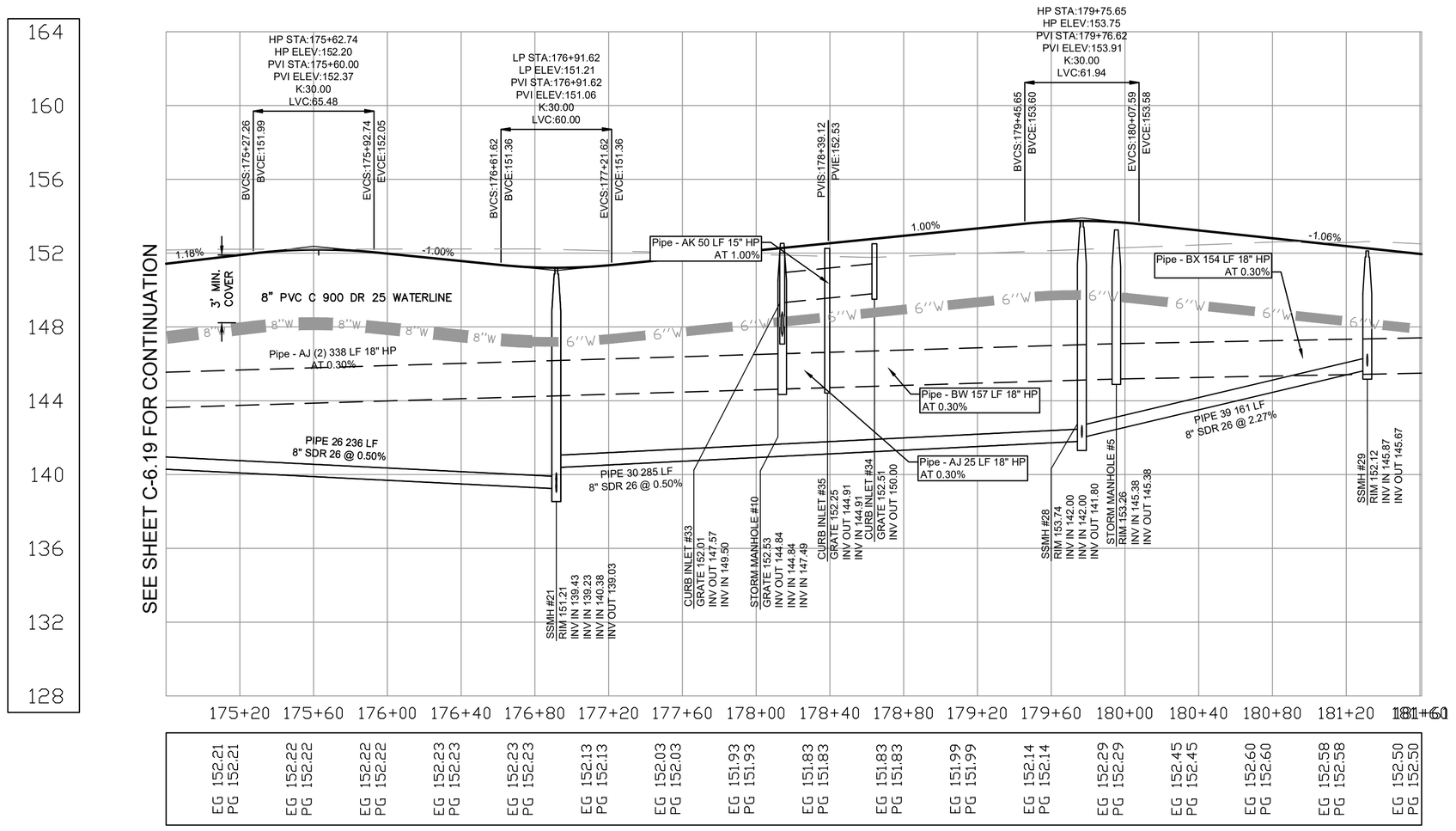
Sheet No.
C-6.19

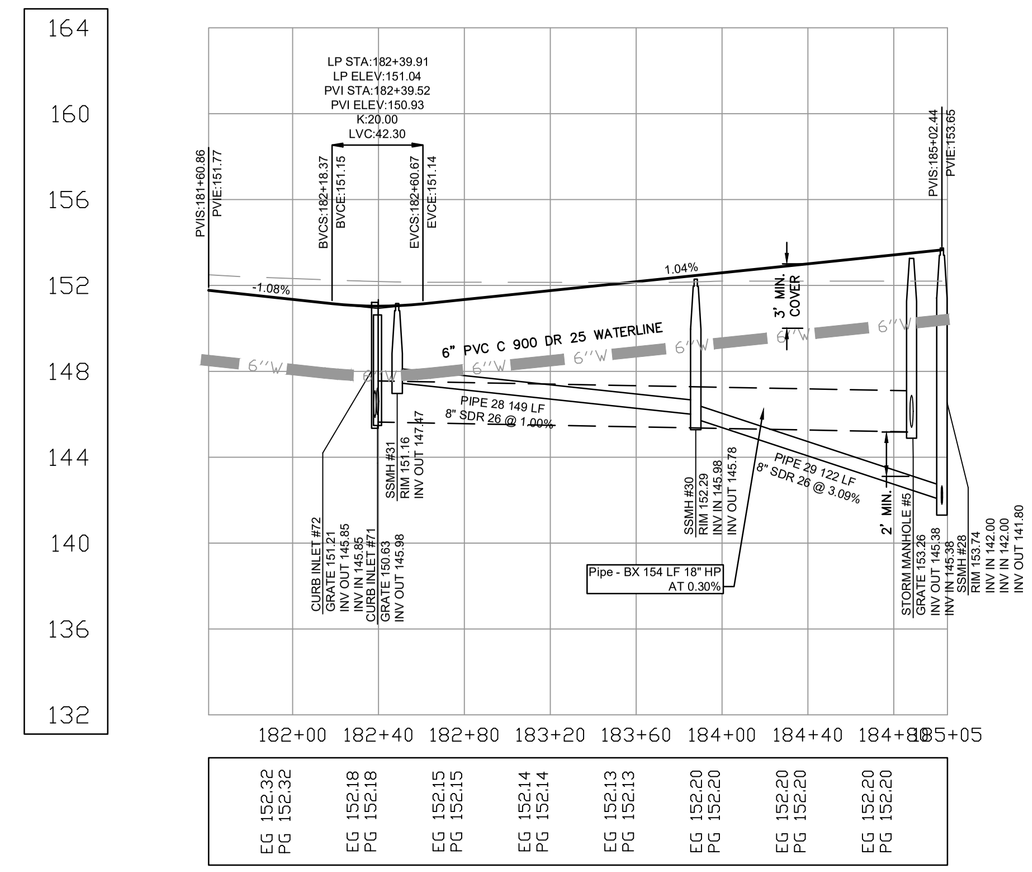


ROWING STREET
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



BOSQUE COURT
50' PUBLIC R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

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Engineering - Consulting - Surveying
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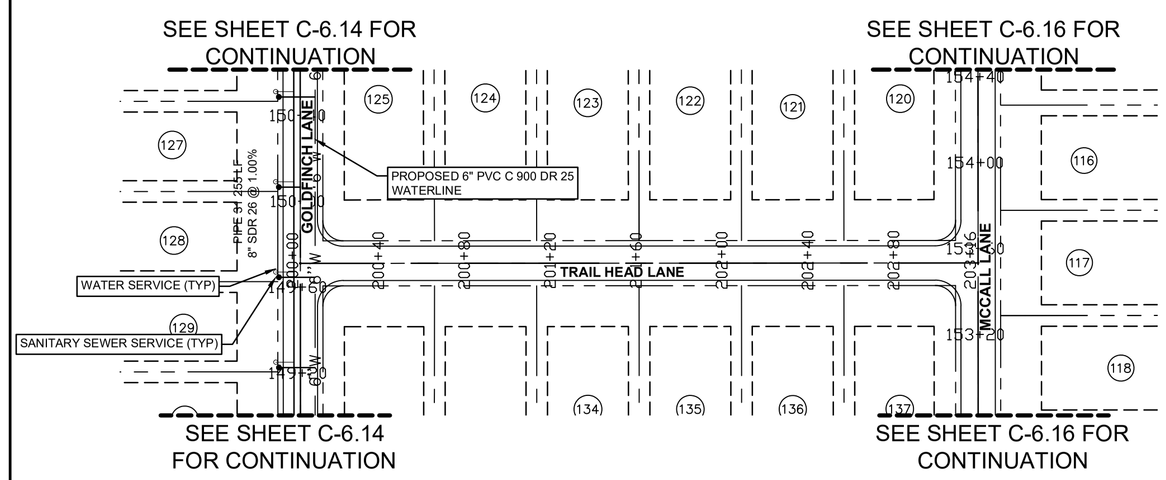
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

ROWING STREET PLAN AND PROFILE 2
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

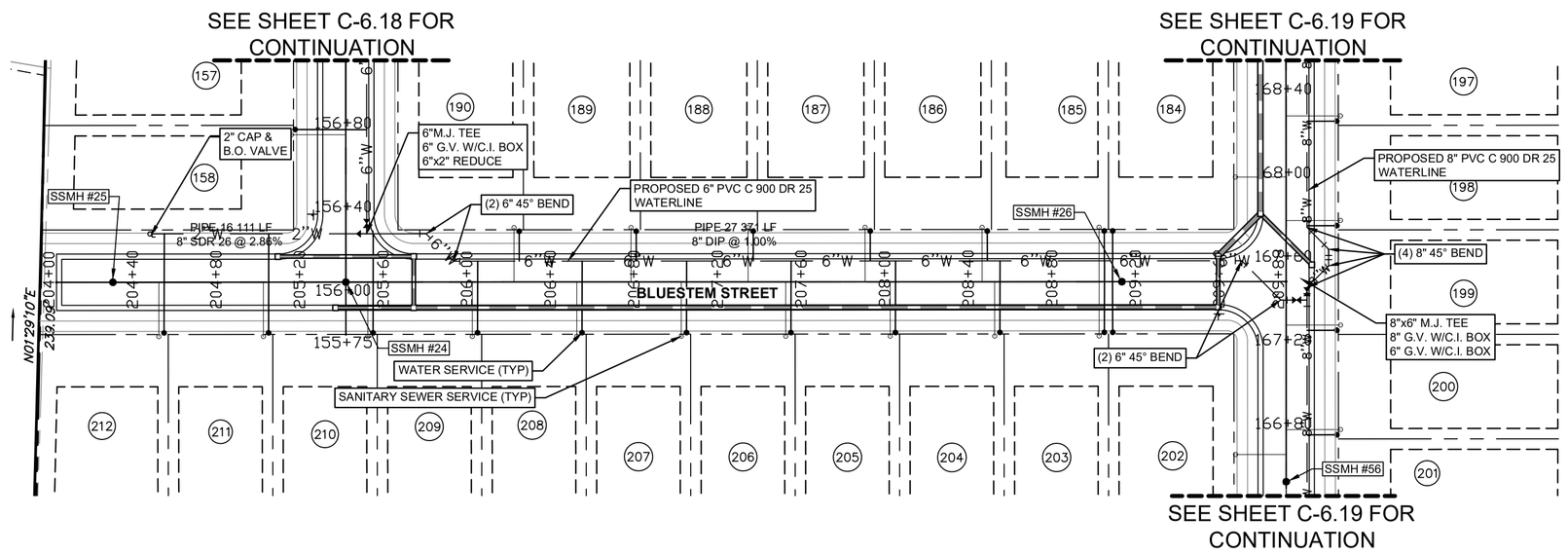
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-9516

Sheet No. C-6.20



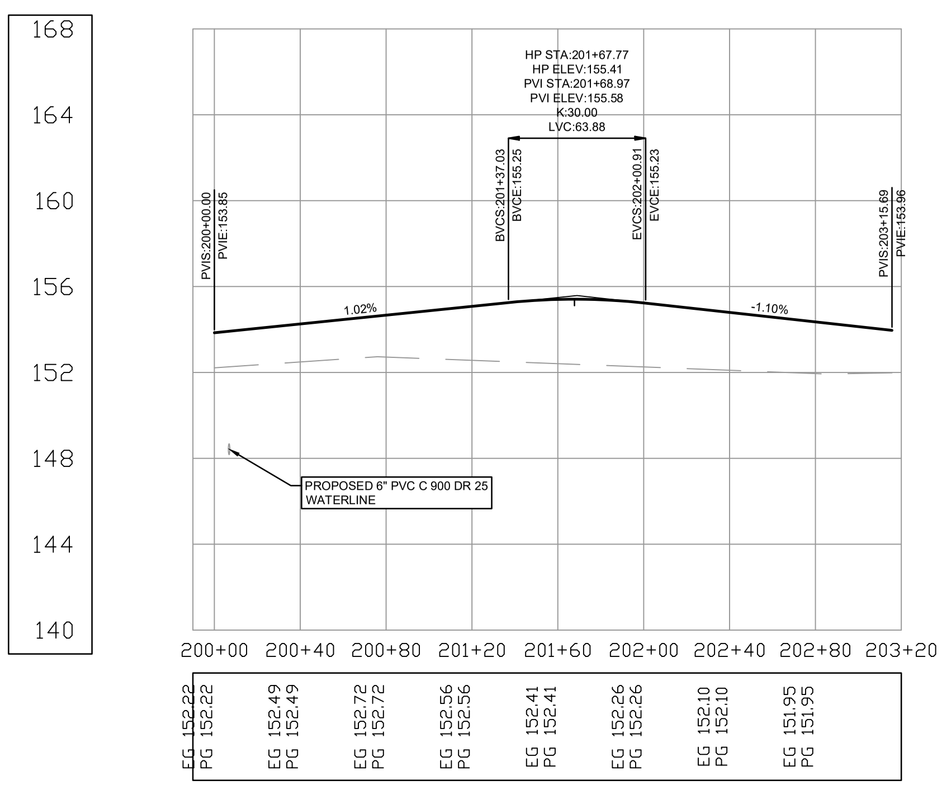
TRAIL HEAD LANE
21' PRIVATE R/W
PLAN & PROFILE

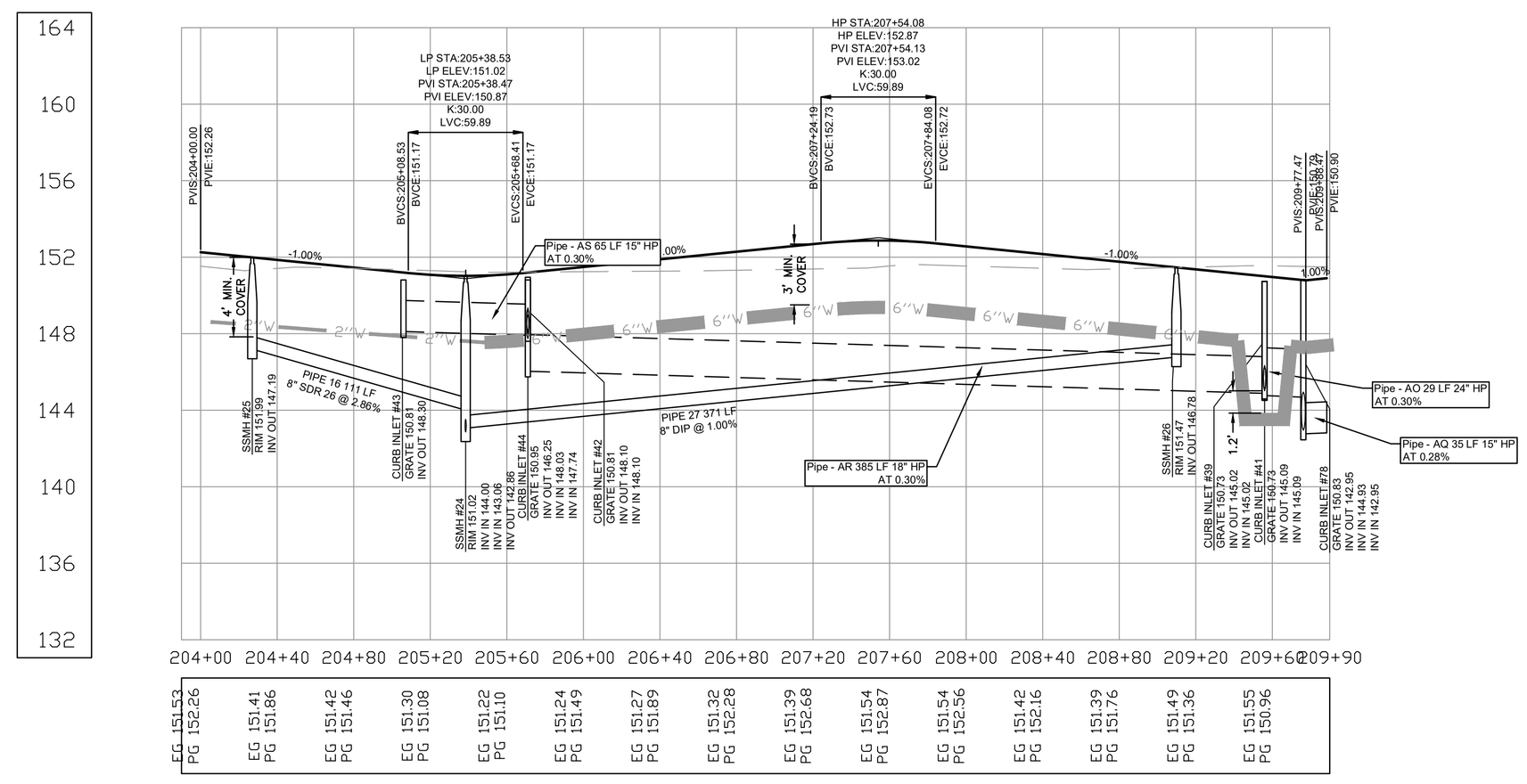
SCALE: 1"=50' H.
1"=5' V.



BLUESTEM STREET
50' PUBLIC R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.





NAD 83
GRID NORTH

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax 336-328-0922
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

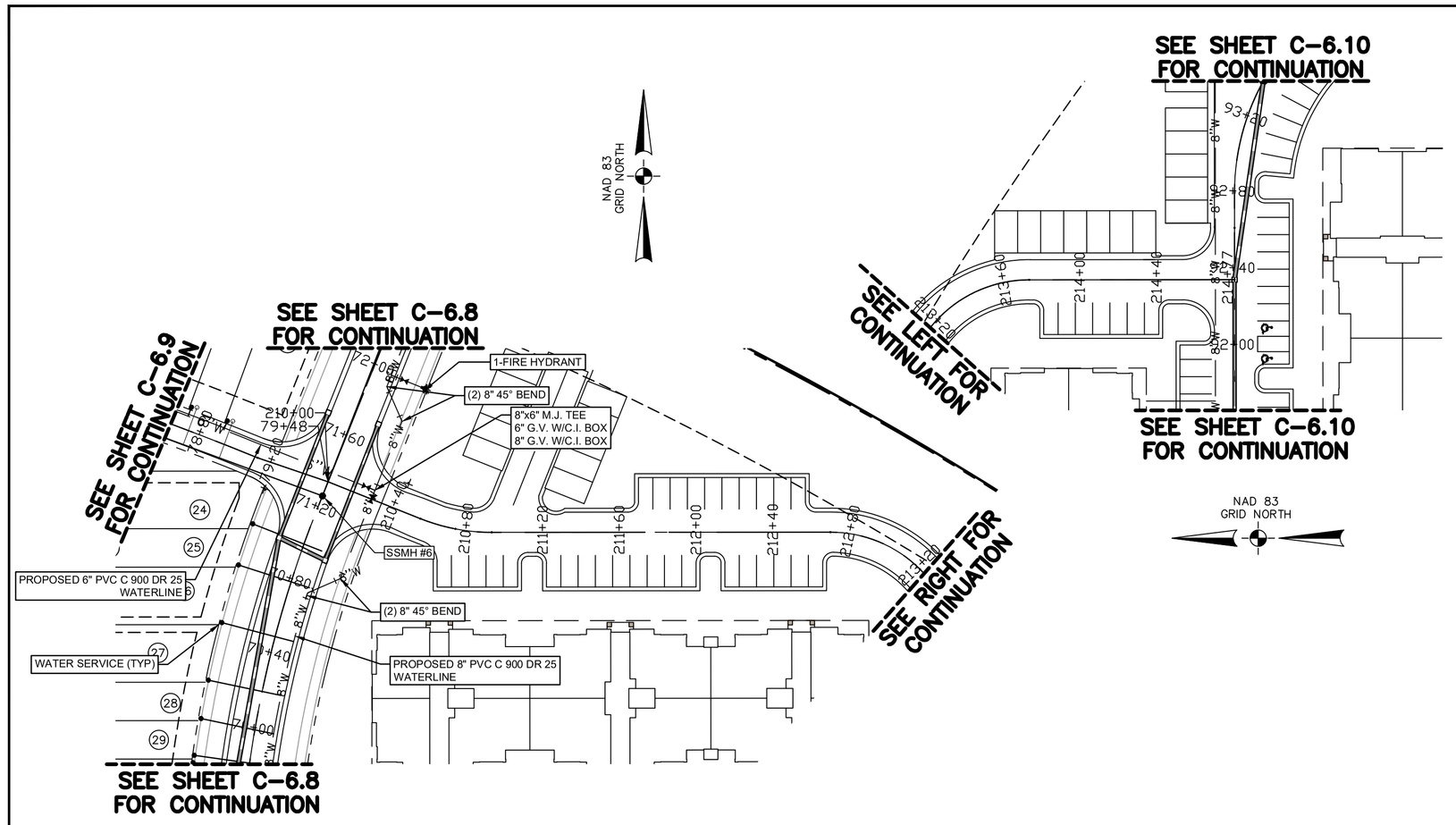
No.	Date:	Description:	By:

BLUESTEM STREET & TRAIL HEAD LANE
PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT

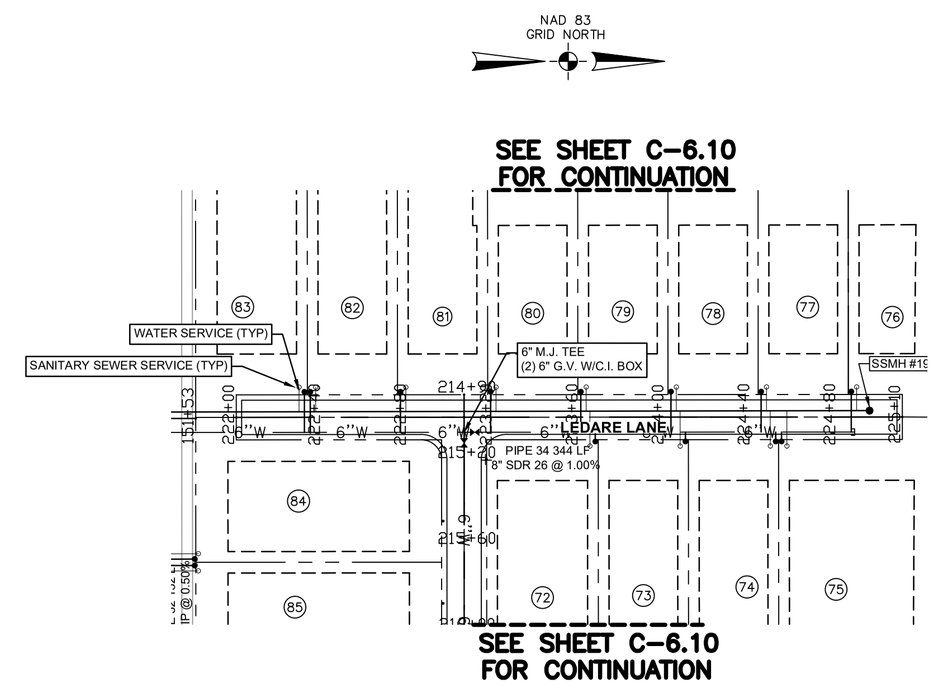
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED		
Date:	MONTH YEAR		
Drawn By:	CM/JM	Checked By:	HMSJ
Job No.:	E-9916		

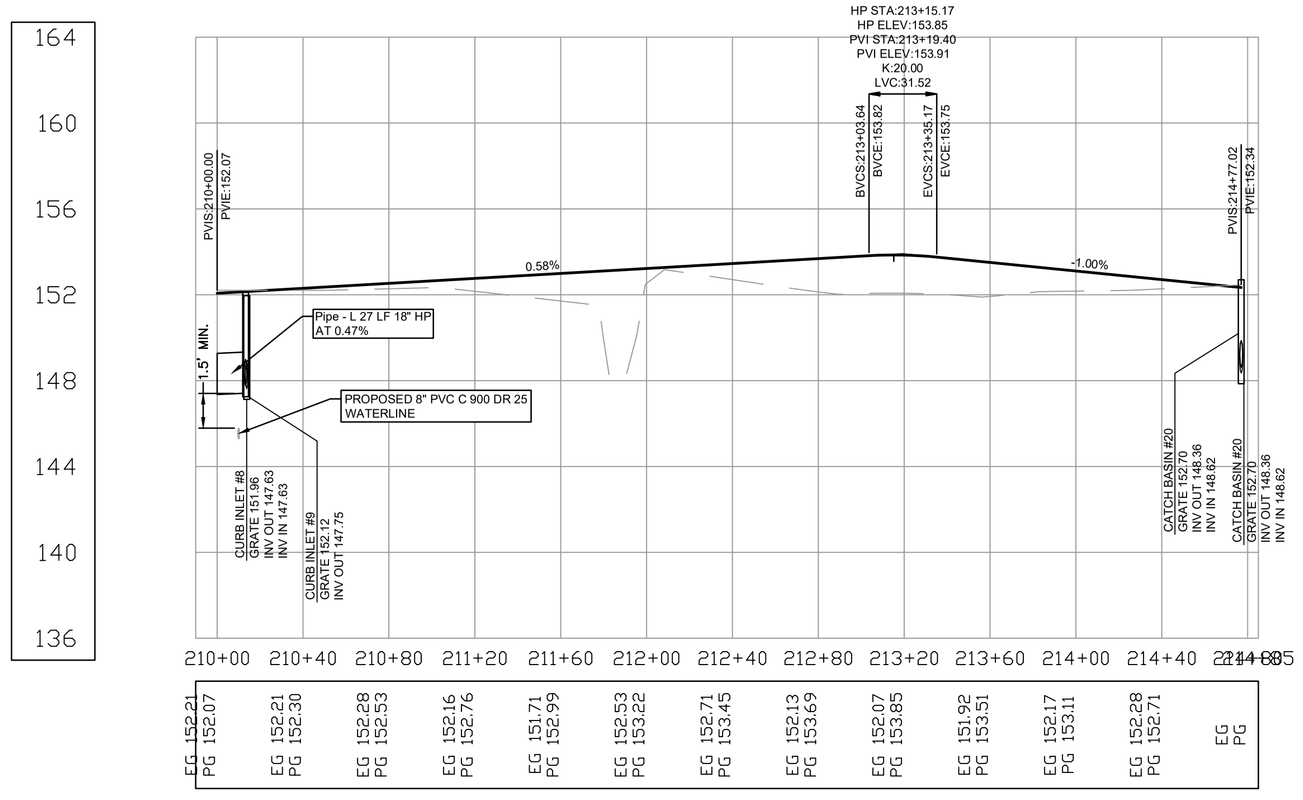
Sheet No.
C-6.21

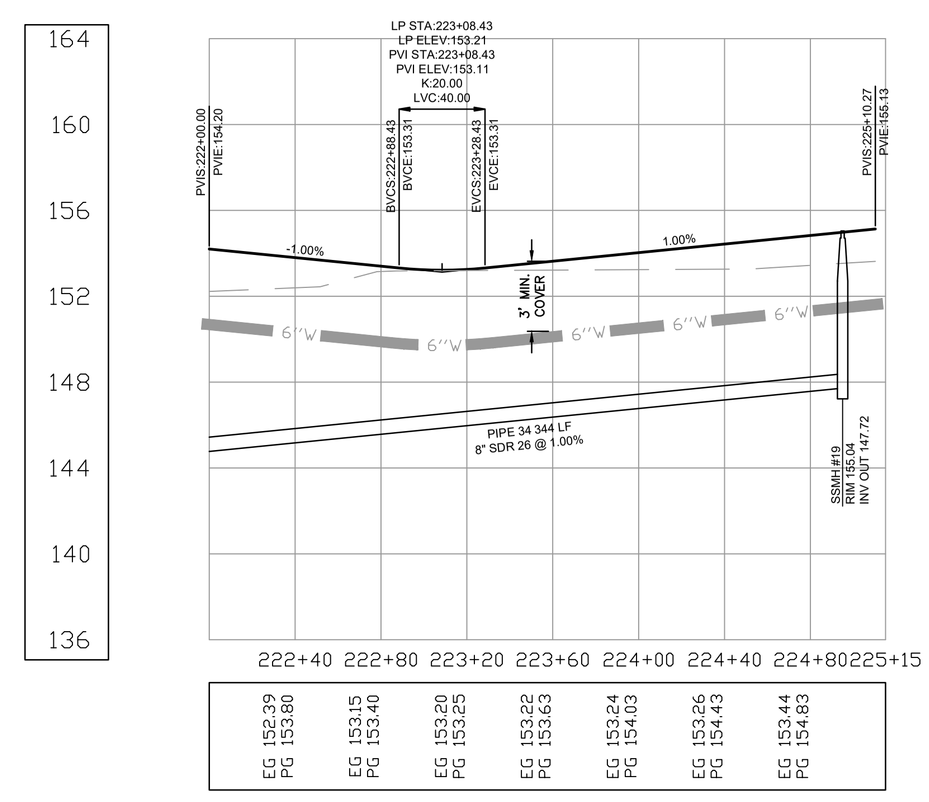


PARKING LOT
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.



LEDARE LANE
21' PRIVATE R/W
PLAN & PROFILE
SCALE: 1"=50' H.
1"=5' V.





GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Know what's below.
Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 040 ENGINEER JAMES CARLTON SUMMEY, JR.

SEA

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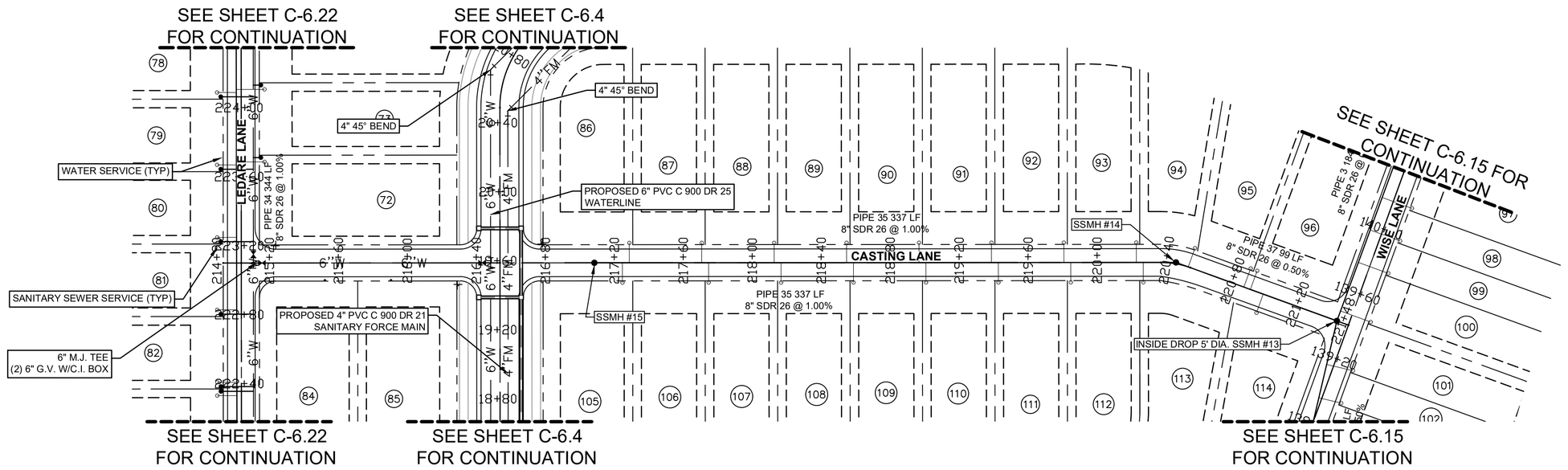
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

LEDARE LANE PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

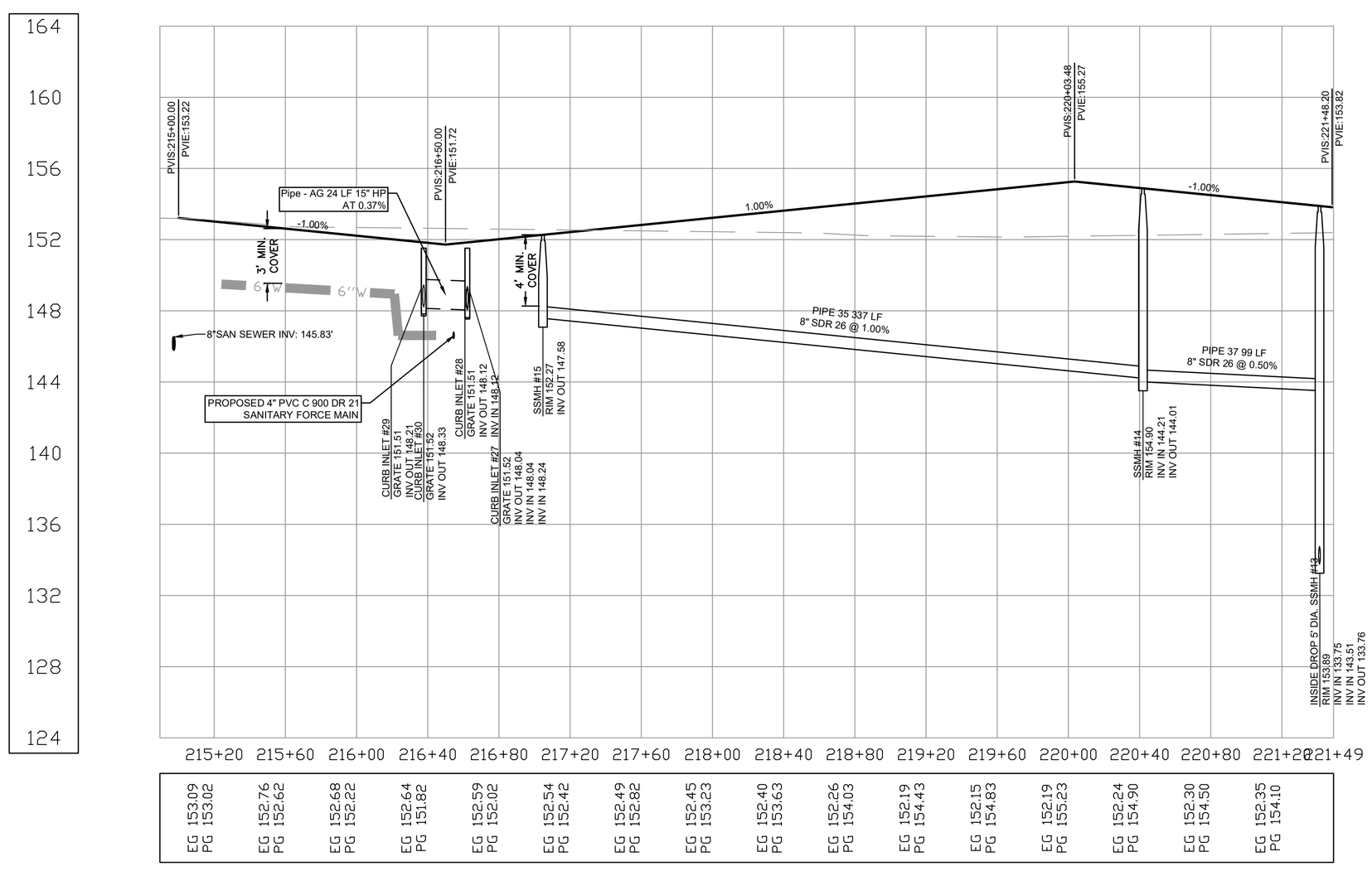
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-6-916

Sheet No.
C-6.22



CASTING LANE
21' PRIVATE R/W
PLAN & PROFILE

SCALE: 1"=50' H.
1"=5' V.



PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE
50 0 25 50 100 200
(IN FEET)
1 inch = 50 ft.

NAD 83
GRID NORTH

811
Know what's below.
Call before you dig.

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES HOMACK SUMMEY, JR.

SEA

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

CASTING LANE PLAN AND PROFILE
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM / JM
Checked By:	HMSJ
Job No.:	E-9516

Sheet No.
C-6.23

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.							
C-7.1	Scale:	AS NOTED	OVERALL GRADING AND DRAINAGE LOCAL 70 RESIDENTIAL DEVELOPMENT HWY 70 SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA	No.	Date:	Description:	By:
	Date:	MONTH YEAR					
	Drawn By:	CM/ JM					
	Checked By:	HMSJ					
	Job No.:	E-9516					

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Engineering - Consulting - Surveying
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Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
Email - info@summeyengineering.com
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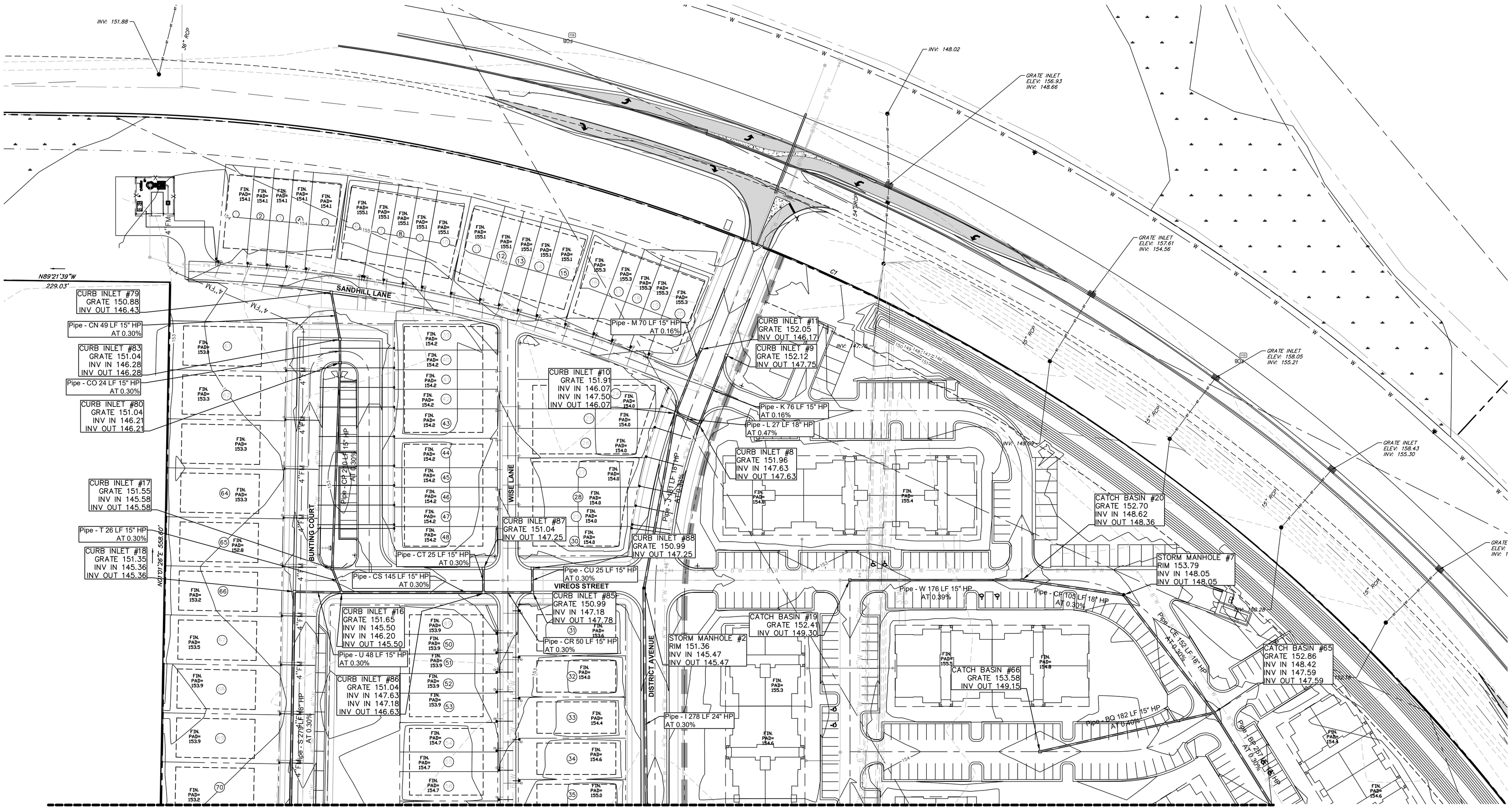


GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

NAD 83
GRID NORTH

811
Know what's below.
Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 9445 JAMES HOWARD SUMMEY, JR. ENGINEER

SEA

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

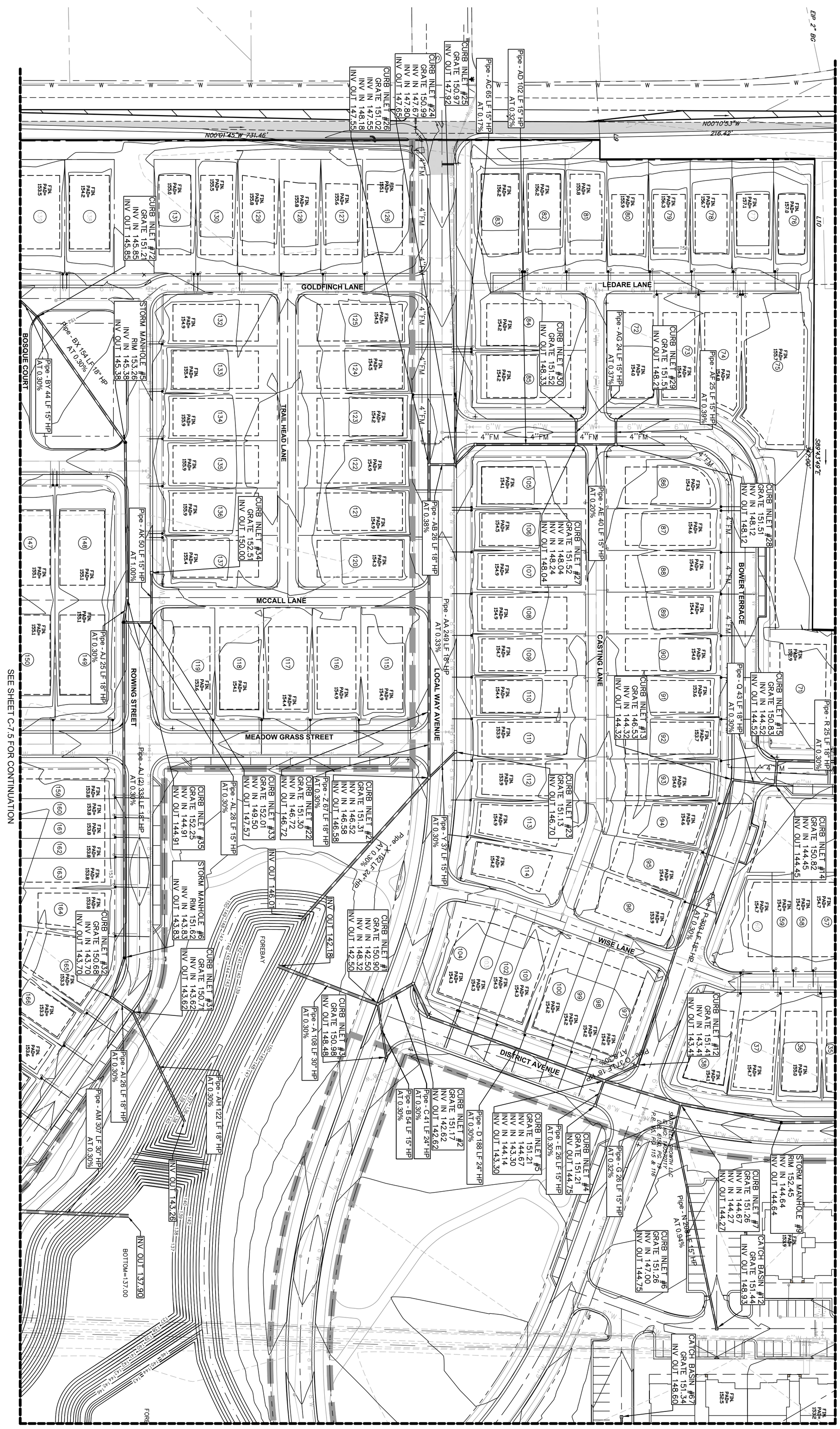
GRADING AND DRAINAGE I

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-9916

Sheet No.
C-7.2



Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.	C-7.3
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

GRADING AND DRAINAGE 2

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

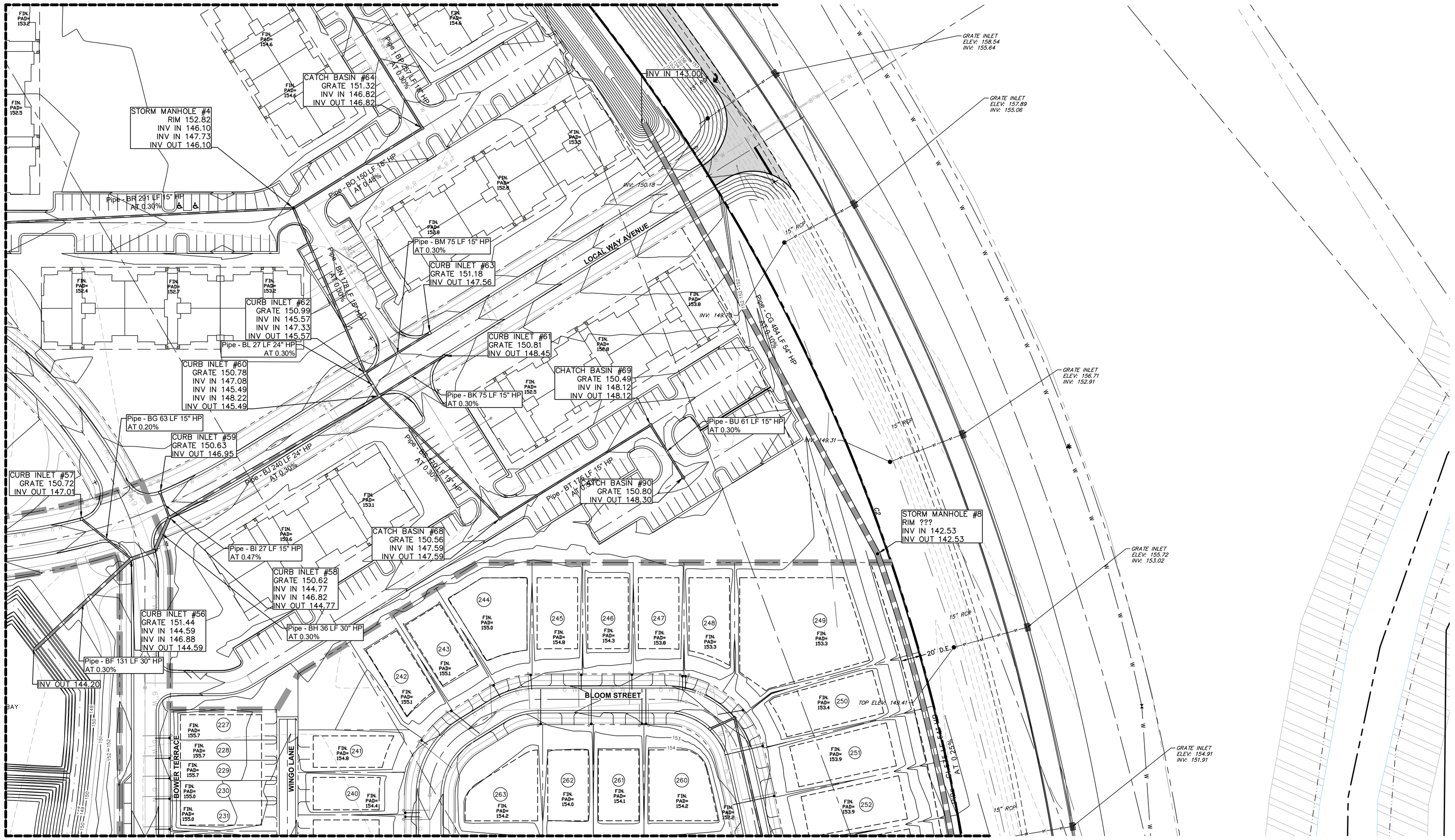
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
Email - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

SEE SHEET C-7.2 FOR CONTINUATION

SEE SHEET C-7.3 FOR CONTINUATION



SEE SHEET C-7.6 FOR CONTINUATION

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

MAD 83
GRID NORTH

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER JAMES HOWARD SUMMEY, JR.

SEA

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

No.	Date:	Description:	By:

GRADING AND DRAINAGE 3
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM / JM
Checked By:	HMSJ
Job No.:	3-9516

Sheet No.
C-7.4

SEE SHEET C-7.3 FOR CONTINUATION

SEE SHEET C-7.3 FOR CONTINUATION

Know what's below. Call before you dig.

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.	C-7.5
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

GRADING AND DRAINAGE 4

LOCAL 70 RESIDENTIAL DEVELOPMENT

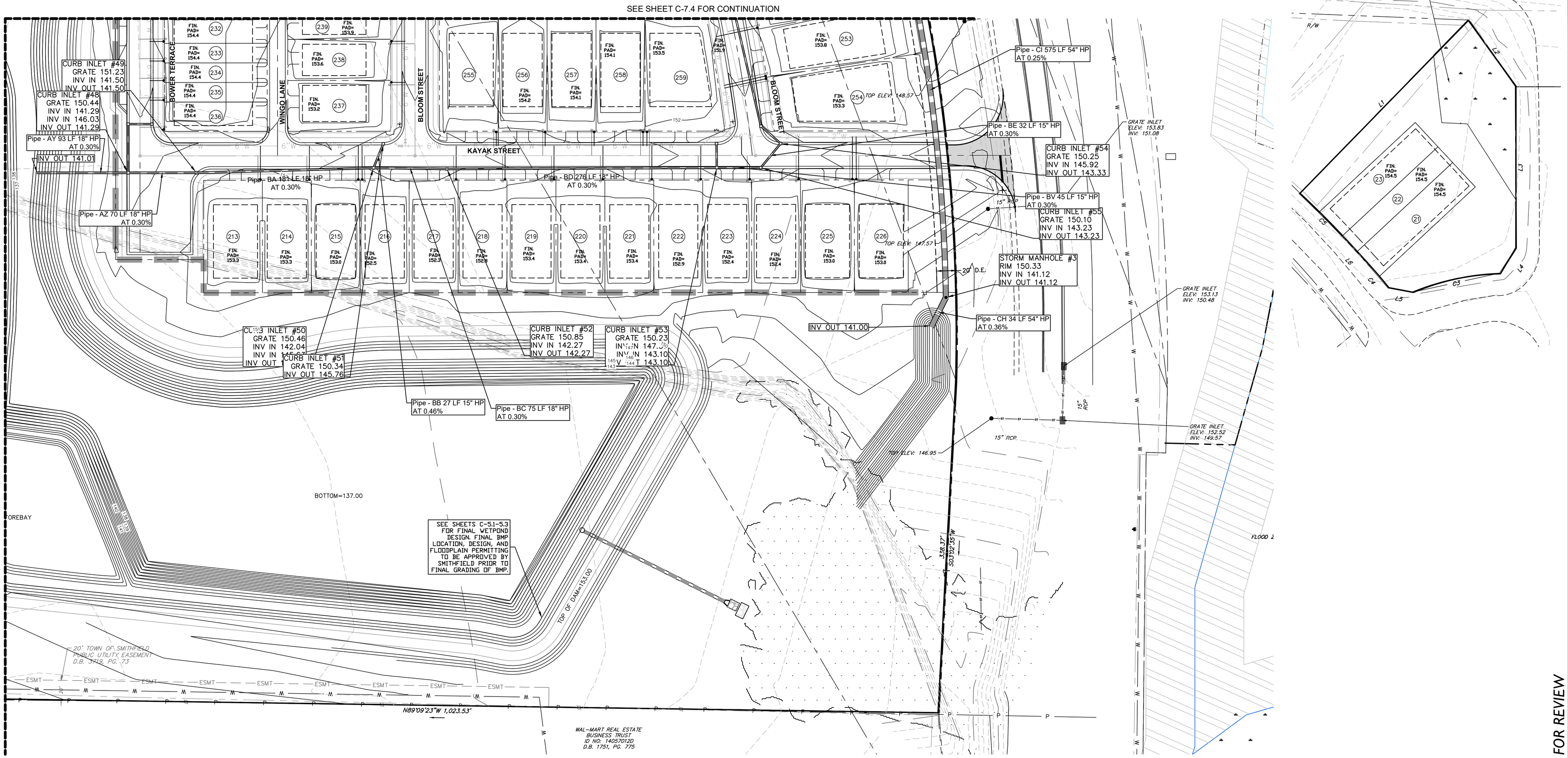
HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
Email - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 019824 HOWARD MINGO SUMMEY JR.



PRELIMINARY PLANS NOT FOR REVIEW

GRAPHIC SCALE

(IN FEET)
1 inch = 50 ft.

NAD 83 GRID NORTH

Know what's below. Call before you dig.

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Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail: info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

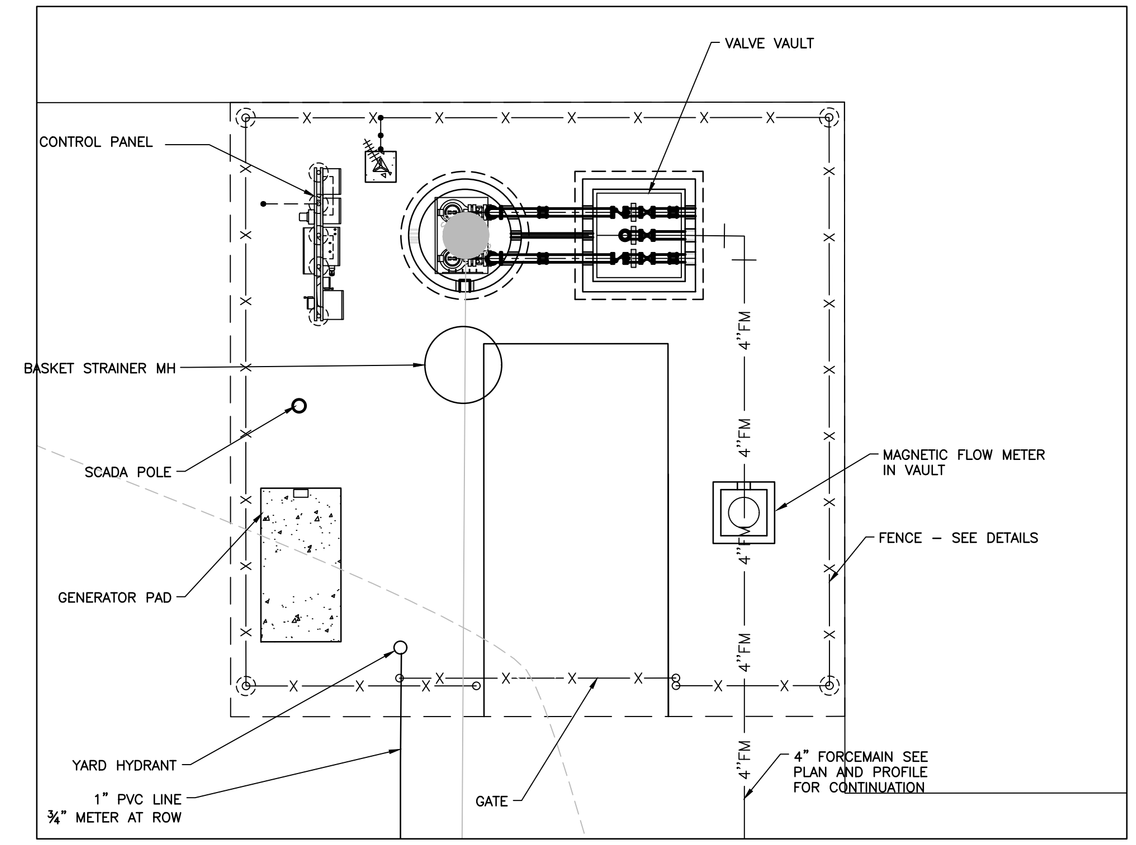
No.	Date:	Description:	By:

GRADING AND DRAINAGE 5
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

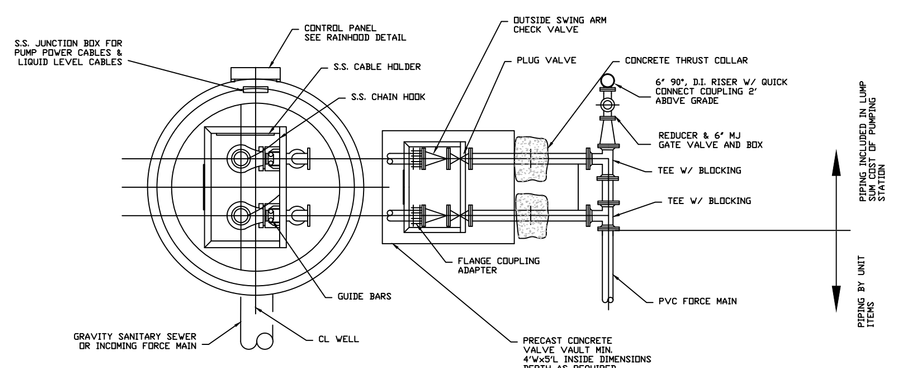
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	3-6916

Sheet No. C-7.6



PUMP STATION LAYOUT

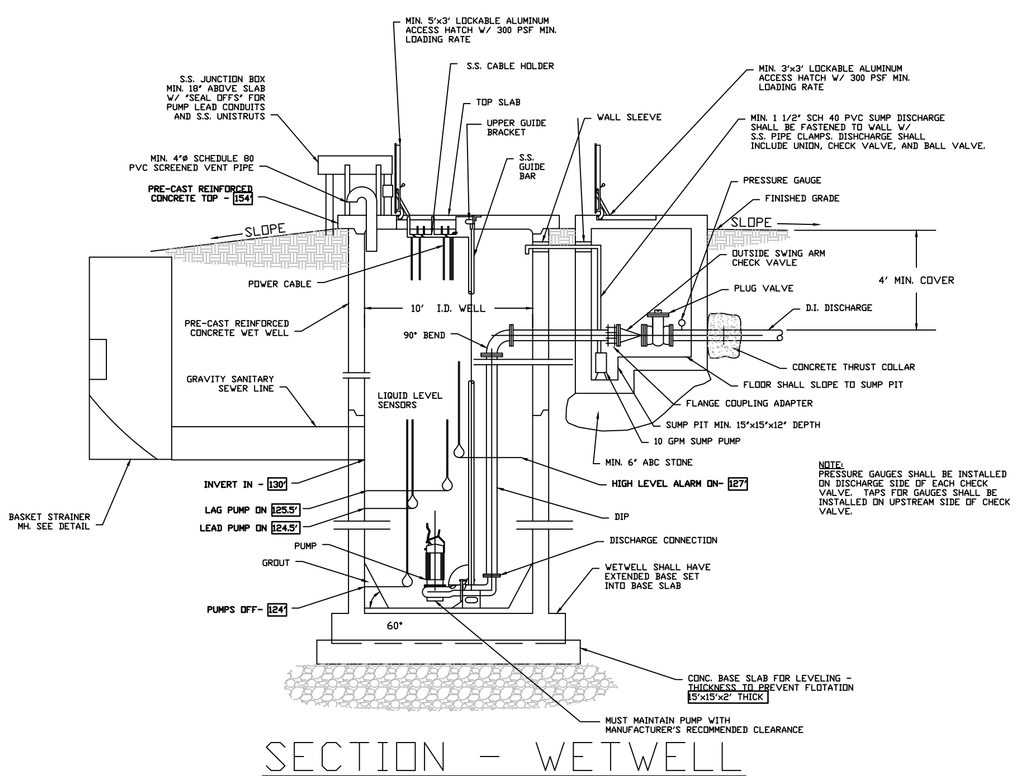
NOT TO SCALE



PLAN – WETWELL

NOT TO SCALE

NOTE:
INSIDE OF WETWELL INCLUDING ALL PIPING SHALL BE FACTORY EPOXY COATED MIN. 50 MIL SURFACE DRY. EPOXY SEALER PRIME COATING AND FINISH COATING SHALL BE APPROVED BY COUNTY PRIOR TO INSTALLATION.



SECTION – WETWELL

NOT TO SCALE

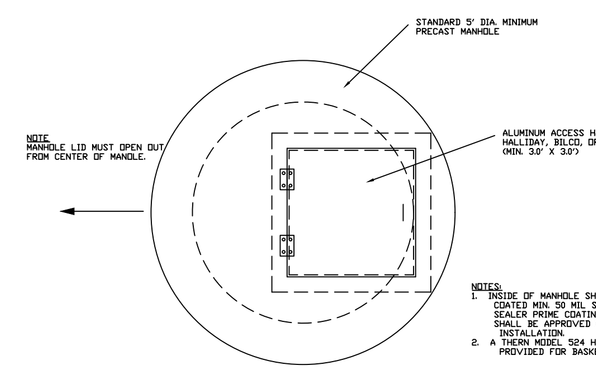
NOTE:
PRESSURE GAUGES SHALL BE INSTALLED ON DISCHARGE SIDE OF EACH CHECK VALVE. 1/4" TAPS FOR GAUGES SHALL BE INSTALLED ON UPSTREAM SIDE OF CHECK VALVE.

PUMPING SYSTEM SHALL BE A SUBMERSIBLE DUPLEX ALTERNATING SYSTEM AS MANUFACTURED BY GOULDS PUMPS, OR APPROVED EQUAL. PUMPING SYSTEM SHALL BE INSTALLED IN A 10 FOOT DIAMETER PRECAST CONCRETE WETWELL. EACH PUMP SHALL BE GOULDS WS7504 SUBMERSIBLE SEWAGE PUMP AS MANUFACTURED BY GOULDS PUMPS, OR APPROVED EQUAL.
PUMPS SHALL BE (7 1/2 HP), 460V AC, 3 PHASE, AND CONTROLLED BY SEALED MERCURY FLOAT SWITCHES, AND HAVE A CAPACITY OF 75 GPM @ 40 FT. TDH. PUMPS SHALL HAVE 3" QUICK DISCONNECT DISCHARGE CONNECTION AND BE CAPABLE OF PASSING A 3" SPHERICAL SOLID. THE CONTROL PANEL SHALL BE A FACTORY PREWIRED NEMA 4X ENCLOSURE WITH THE FOLLOWING ITEMS AS A MINIMUM:

1. VOLTAGE TRANSFORMER FOR 120V AC.
2. PUMP RUNNING LIGHTS
3. PUMP FAILURE LIGHTS AND ALARMS.
4. H-O-A SELECTOR SWITCH WITH LOCK.
5. OVERLOAD PROTECTION
6. AUDIBLE AND VISIBLE HIGH WATER ALARM.
7. ELAPSED TIME METER FOR EACH PUMP.
8. AUTOMATIC SEQUENCER.
9. 120V CONVENIENCE OUTLET
10. TELEMETRY SYSTEM.

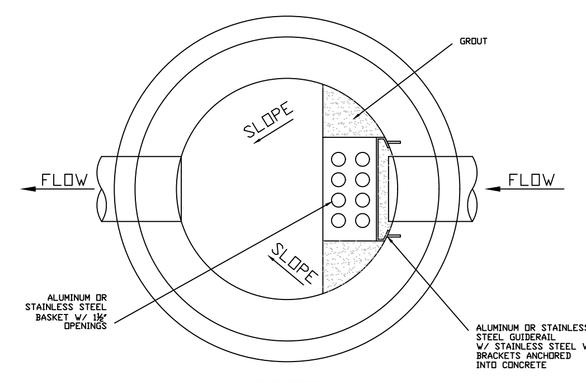
NOTE:
ALL HARDWARE AND FASTENERS IN THE WET WELL SHALL BE STAINLESS STEEL UNLESS OTHERWISE NOTED. ALL PIPING IN WET WELL AND VALVE VAULT SHALL BE FIELD PAINTED AS

FIELD VERIFY ALL DIMENSIONS ASSOCIATED WITH PUMP STATION PRIOR TO BEGINNING WORK.



NOTES:
1. INSIDE OF MANHOLE SHALL BE FACTORY EPOXY COATED MIN. 50 MIL SURFACE DRY. EPOXY SEALER PRIME COATING AND FINISH COATING SHALL BE APPROVED BY THE COUNTY PRIOR TO INSTALLATION.
2. A THERM MODEL 524 HOIST BASE MUST BE PROVIDED FOR BASKET REMOVAL.

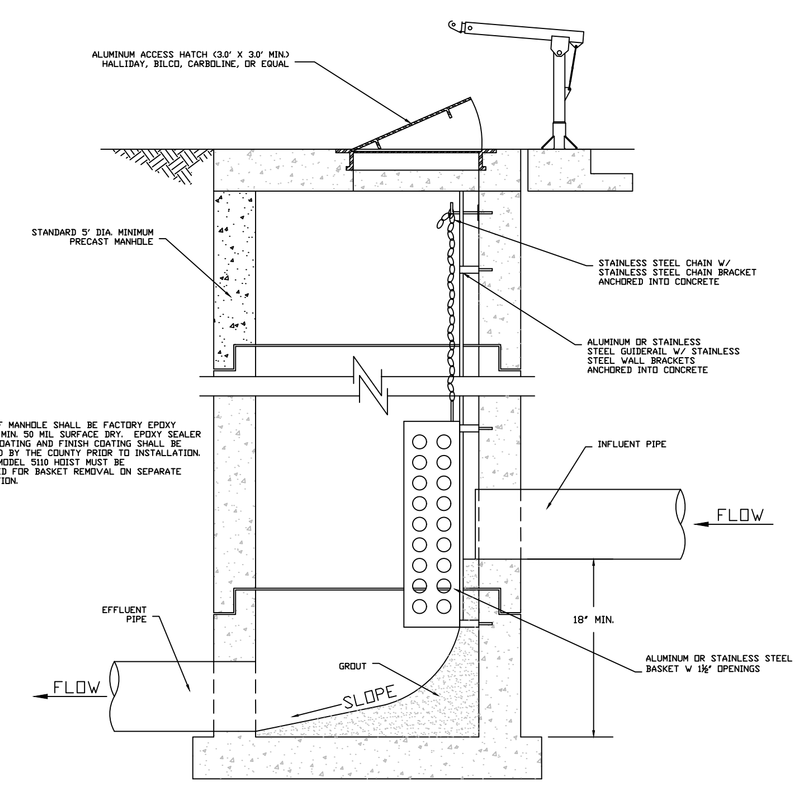
PLAN



SECTION

BASKET STRAINER MANHOLE

NOT TO SCALE



NOTES:
1. DIFFERENCE IN INLET AND OUTLET INVERT ELEVATIONS SHALL BE 1.5' MINIMUM.
2. ALL CONCRETE EXPANSION ANCHORS SHALL BE TYPE 316 STAINLESS STEEL.
3. A SEPARATE BASKET STRAINER MANHOLE IS REQUIRED FOR CIRCULAR WETWELL INSTALLATIONS.

SECTION

BASKET STRAINER MANHOLE

NOT TO SCALE

PRELIMINARY PLANS NOT FOR REVIEW

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Ashboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

No.	Date:	Description:	By:

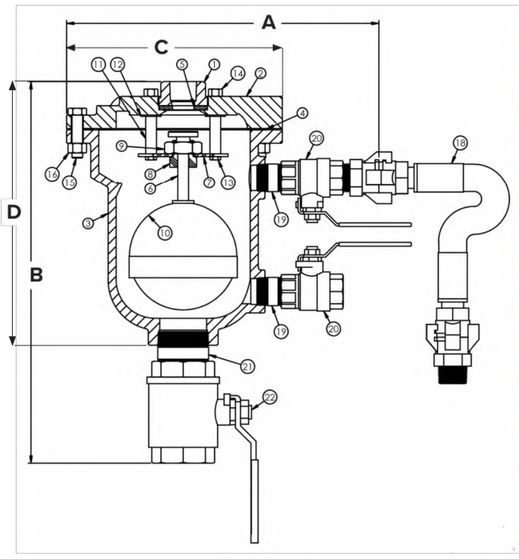
PUMP STATION #1
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CW, JM
Checked By:	HWSJ
Job No.:	3-9516

Sheet No.
C-8.1

CRISPIN AIR & VACUUM SEWER VALVES: THE SL(A) & S(A) SERIES

S(AS) Series Short Body Air & Vacuum Sewer Valve, Sizes 1"-2"



S(AS) Series Parts List		
ITEM	DESCRIPTION	MATERIAL
1	TOP	Ductile Iron
2	COVER FLANGE	Ductile Iron
3	BODY	Ductile Iron
4	COVER GASKET	Armstrong
5	SEAT	Buna-N Rubber
6	VALVE	Stainless Steel (SS)
7	ROD GUIDE STAND	SS
8	FLOAT ROD GUIDE	Nylatron
9	ROD GUIDE NUT	SS
10	FLOAT	SS
11	STAND OFF	SS
12	STAND OFF WASHER	Fiber
13	STAND OFF BOLT	SS
14	STAND OFF NUT	Steel
15	COVER BOLT	Steel
16	COVER NUT	Steel

OPTIONAL BACKFLUSH ATTACHMENTS		
ITEM	DESCRIPTION	MATERIAL
18	HOSE	CAD. Plated Steel, Rubber
19	NIPPLE	Steel
20	BALL VALVE	Bronze
21	NIPPLE	Steel
22	BALL VALVE	Bronze

S(AS) & S(ASB) Series Dimensional Data

ALL DIMENSIONS ARE IN INCHES. CERTIFIED DIMENSIONS ALSO AVAILABLE.

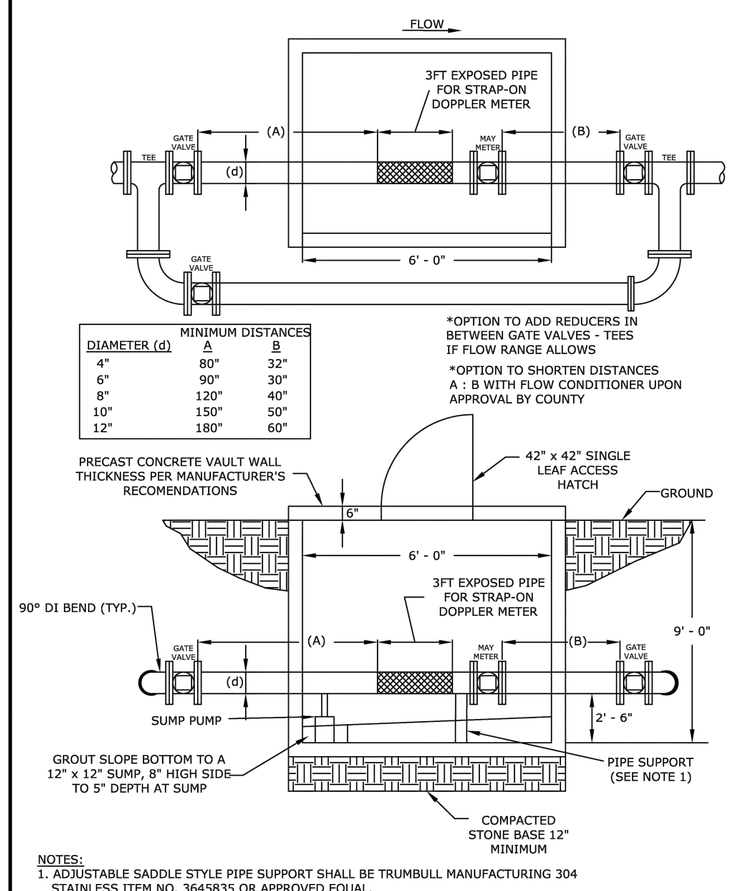
MODEL	INLET	OUTLET	HT (D)	HT w/ BF (B)	WD (C)	WD w/ BF (A)	WT (lbs)	WT w/ BF
S10AS	2" NPT	1" NPT	12.31		10.06		47	
S10ASB	2" NPT	1" NPT		17.81		14.56		62
S20AS	2" NPT	2" NPT	12.75		10.06		47	
S20ASB	2" NPT	2" NPT		18.25		14.56		62

Optional Backflush Attachment includes an isolation ball valve, two 1" blow-off valves and five feet of 1" hose with quick disconnect attachments.

Crispin's S(A) and SL(A) Series Valves are available in pressure ratings of 2-40psi, 20-150psi or 151-300psi.

Materials and prices are subject to change without notice. Metric and special class flange ratings are available.

Crispin Valve, 600 Fowler Ave., Berwick, PA 18603 • 1-800-247-VALV
T: (570)752-4524 • F: (570) 752-4962 • WWW.CRISPINVALVE.COM • info@crispinvalve.com



NOTES:
1. ADJUSTABLE SADDLE STYLE PIPE SUPPORT SHALL BE TRUMBULL MANUFACTURING 304 STAINLESS ITEM NO. 3645835 OR APPROVED EQUAL.

WASTEWATER MAGNETIC FLOW METER

NOT TO SCALE

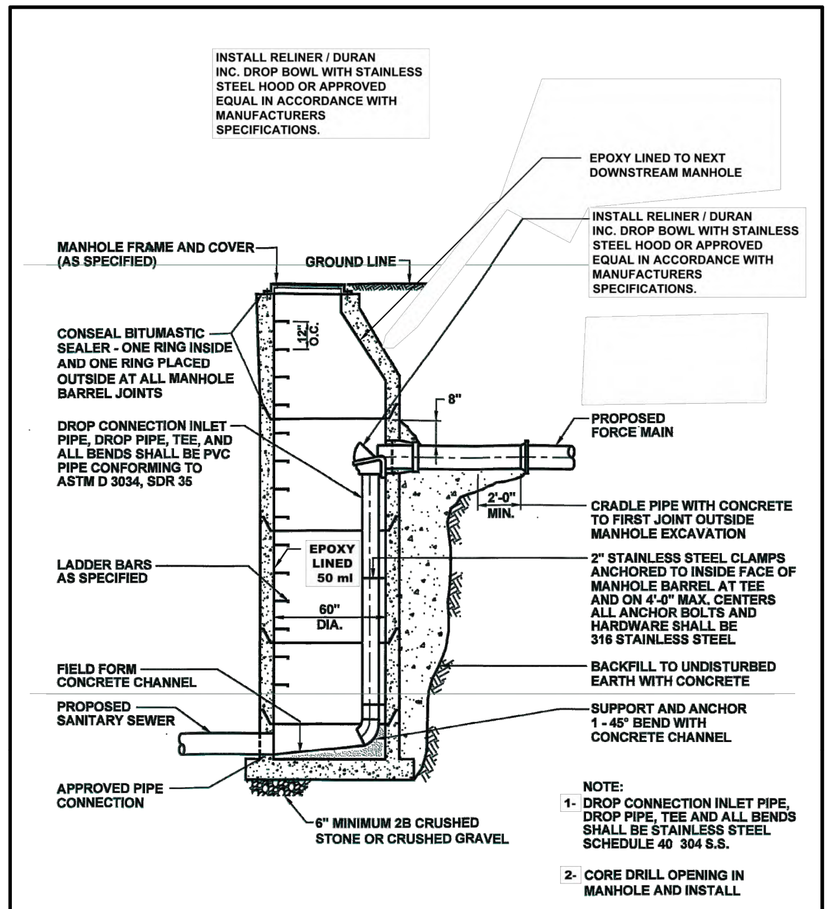
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
Wastewater Magnetic Flow Meter

PAGE 61



CONNECTION OF FORCE MAIN TO GRAVITY MANHOLE

NOT TO SCALE

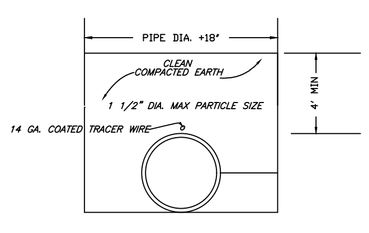
	Name	Date
Drawn By:		
Checked By:		
Approved By:		
Scale:		

Rev.	Description	Date	Init.

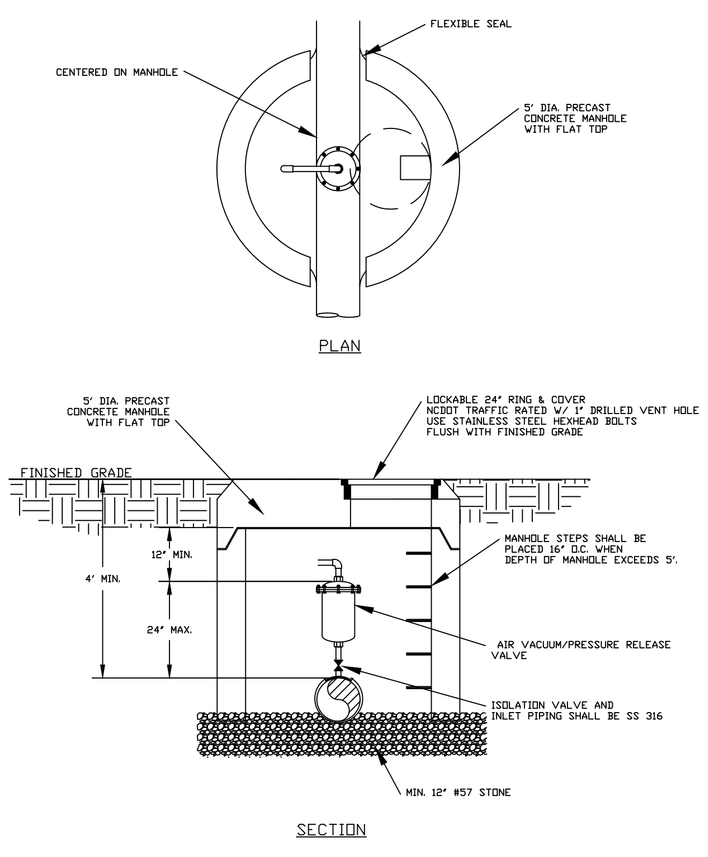
JOHNSTON COUNTY
Department of Public Utilities
P.O. Box 2263
Smithfield, NC 27577

SANITARY SEWER STANDARD DETAIL
CONNECTION OF FORCE MAIN TO GRAVITY MANHOLE

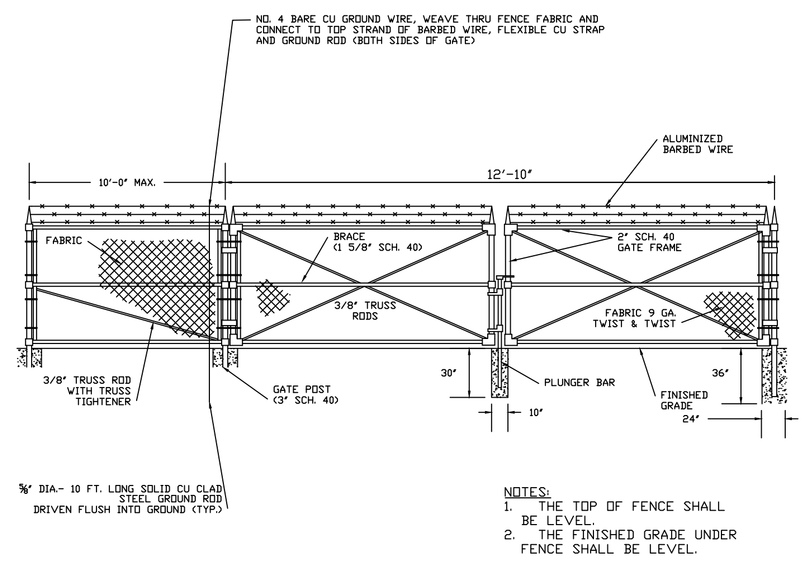
PAGE 75



PVC PRESSURE PIPE BACKFILL



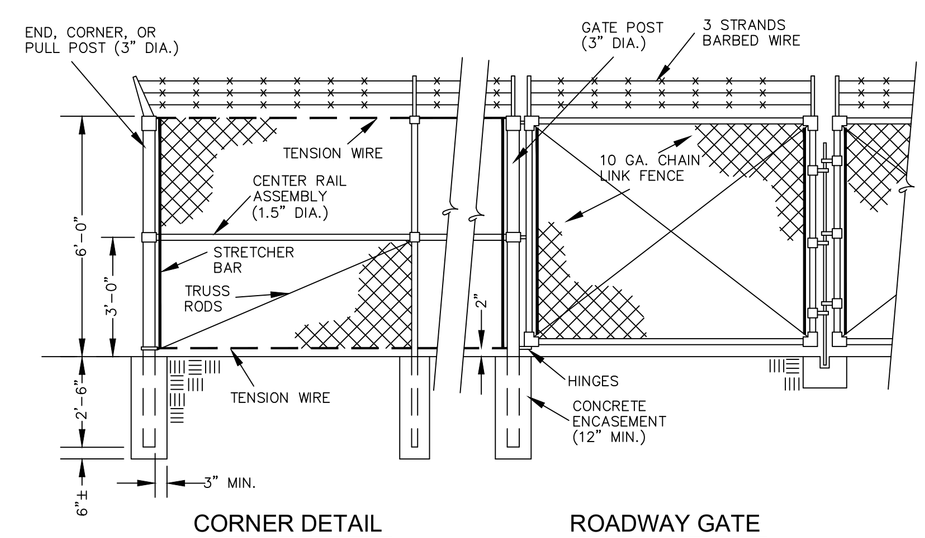
STANDARD AIR RELEASE MANHOLE FOR FORCE MAIN



NOTES:
1. THE TOP OF FENCE SHALL BE LEVEL.
2. THE FINISHED GRADE UNDER FENCE SHALL BE LEVEL.

GATE DETAILS

NOT TO SCALE



FENCE DETAILS

NO SCALE

PRELIMINARY PLANS NOT FOR REVIEW

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
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Asheboro, NC 27204
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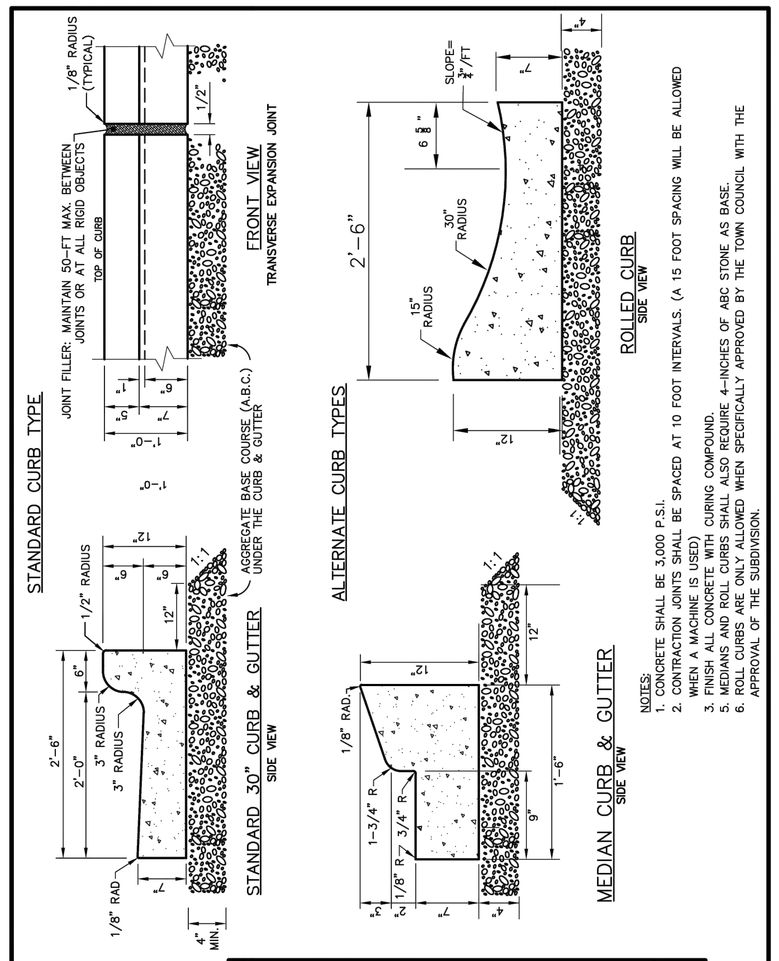
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

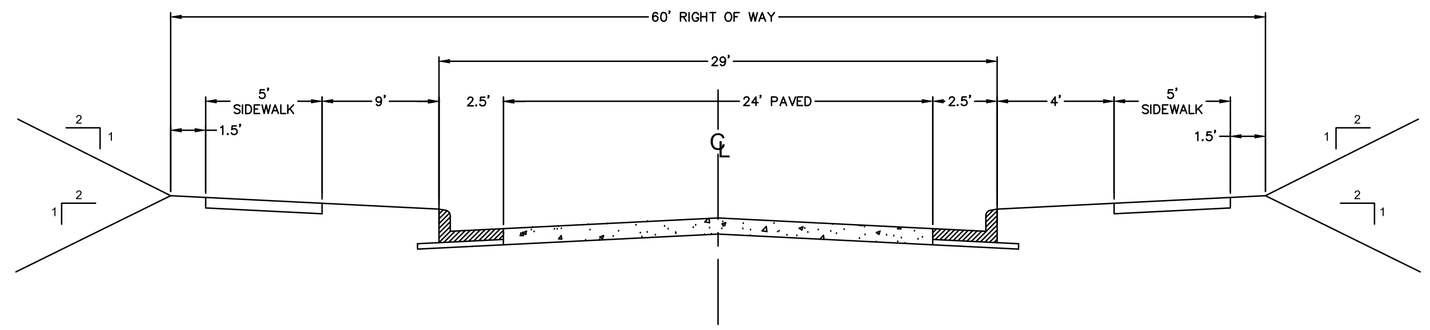
No.	Date:	Description:	By:

PUMP STATION AND FORCEMAIN DETAILS
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

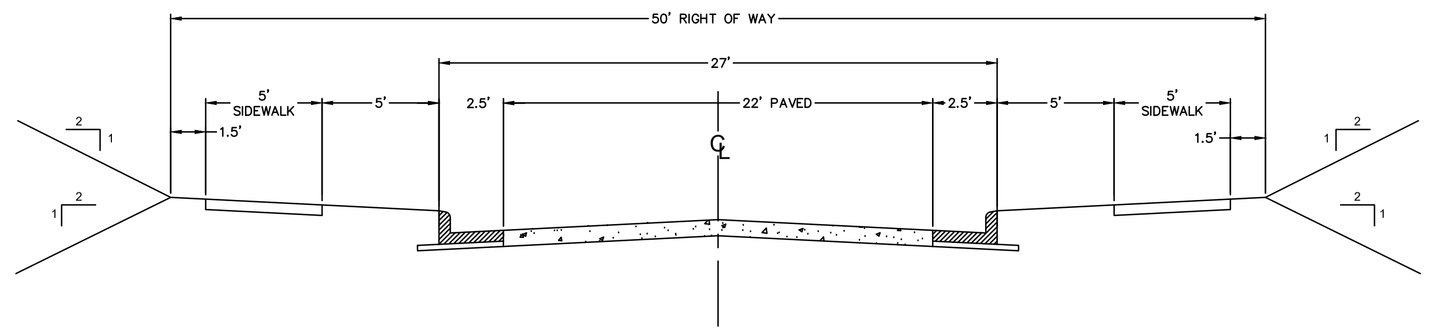
Scale: AS NOTED	Date: MONTH YEAR	Drawn By: CM/ JM	Checked By: HMSJ
Job No.: E-9516			

Sheet No. C-8.2

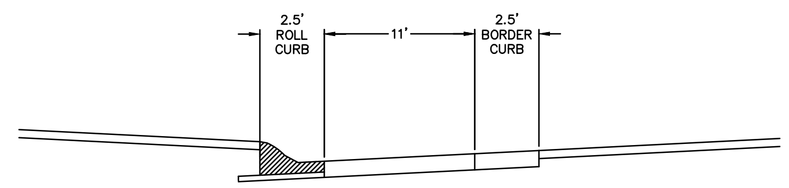




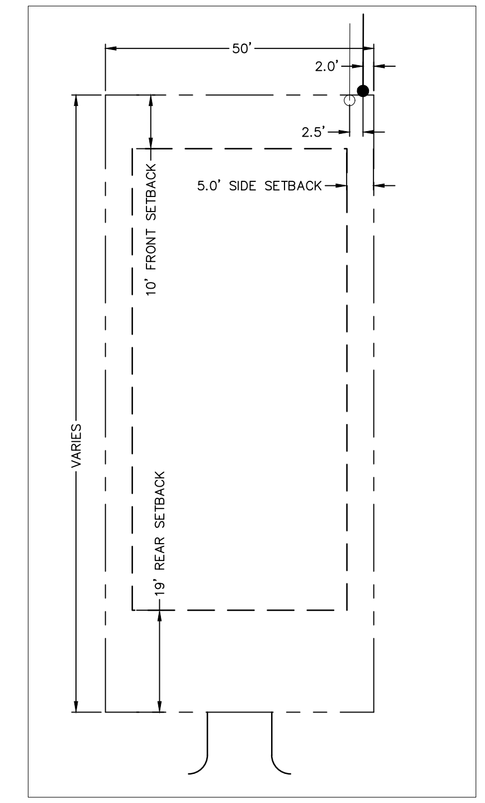
60' STANDARD CURB AND GUTTER ROAD



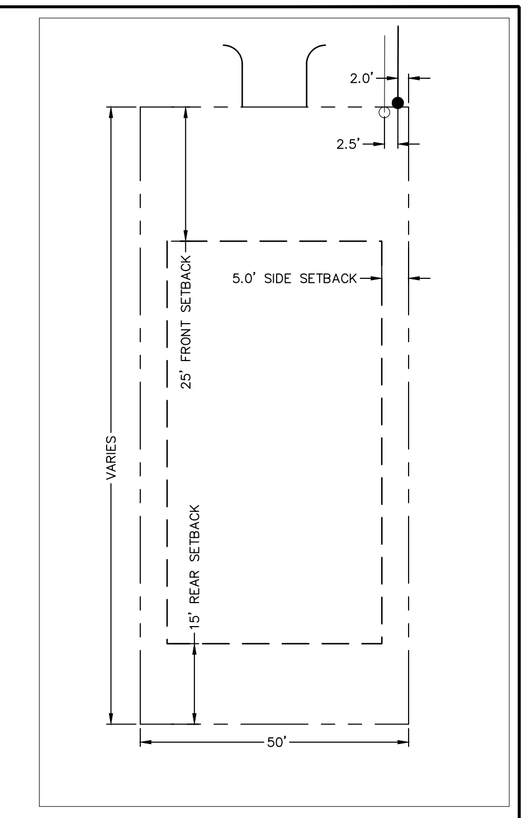
50' STANDARD CURB AND GUTTER ROAD



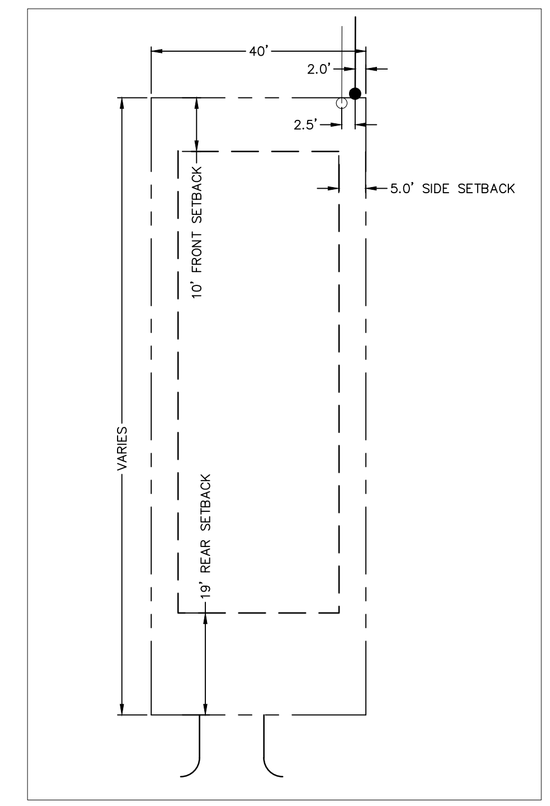
STANDARD ALLEY



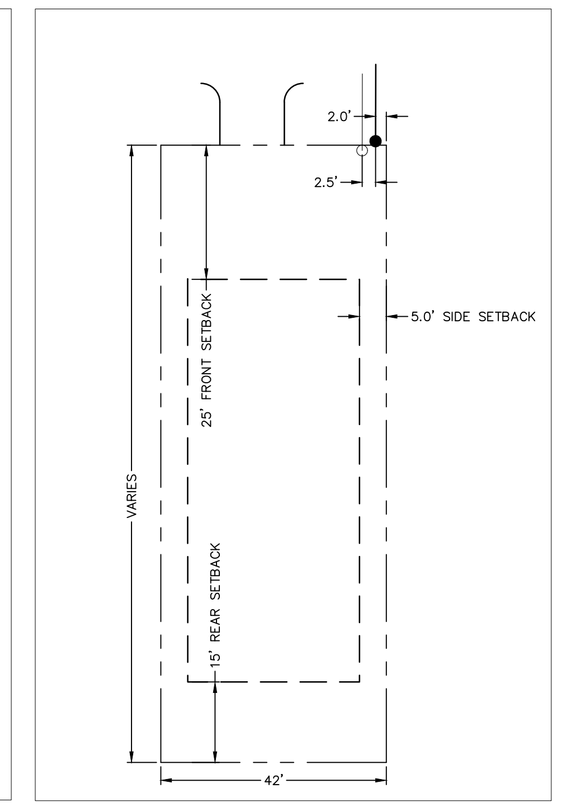
TYPICAL 50' SINGLE-FAMILY REAR LOADED LOT



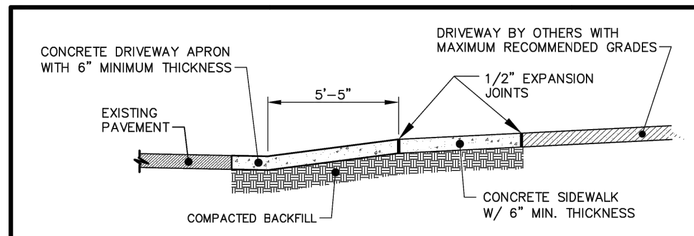
TYPICAL 50' SINGLE-FAMILY FRONT LOADED LOT



TYPICAL 40' SINGLE-FAMILY REAR LOADED LOT

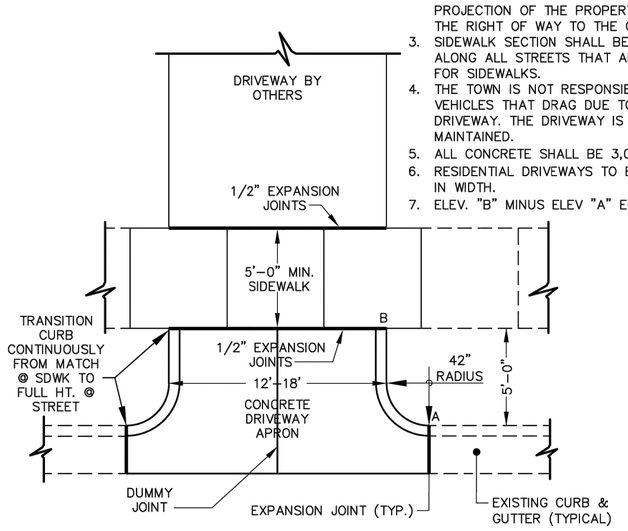


TYPICAL 42' SINGLE-FAMILY FRONT LOADED LOT



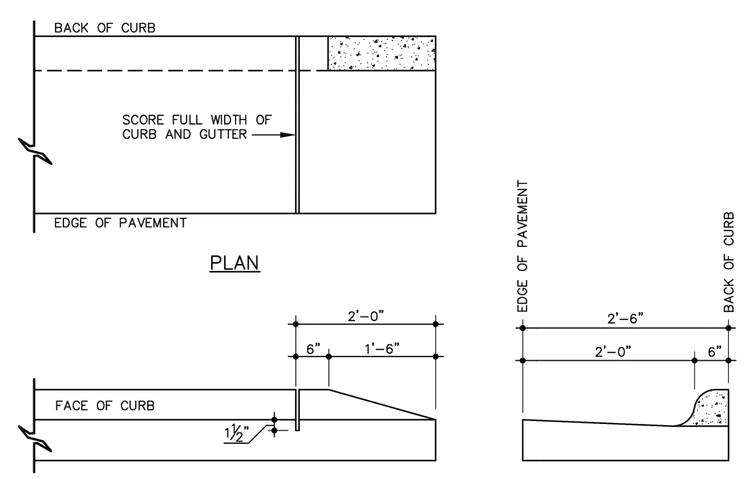
TYPICAL SECTION

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 THAT ARE PLANNED FOR SIDEWALKS.
4. THE TOWN IS NOT RESPONSIBLE FOR VEHICLES THAT DRAG DUE TO GRADE OF DRIVEWAY. THE DRIVEWAY IS PRIVATELY MAINTAINED.
5. ALL CONCRETE SHALL BE 3,000 PSI (MIN).
6. RESIDENTIAL DRIVEWAYS TO BE 12' TO 18' IN WIDTH.
7. ELEV. "B" MINUS ELEV "A" EQUALS 1 INCH

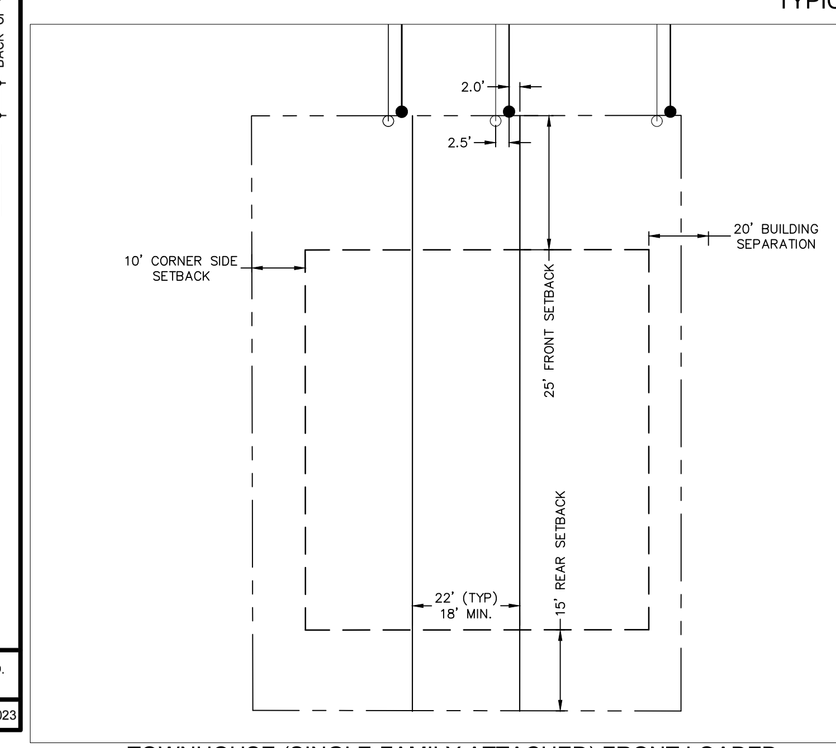


PLAN VIEW

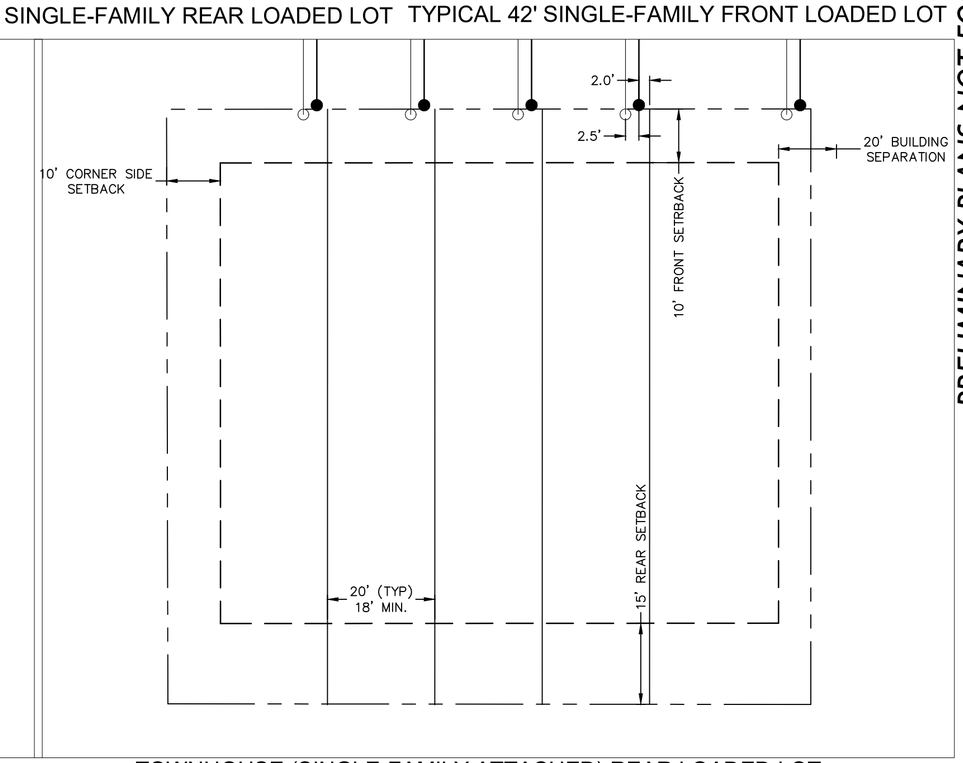
SMITHFIELD NORTH CAROLINA
STANDARD RESIDENTIAL DRIVEWAY APRON DETAIL
SMITHFIELD, NORTH CAROLINA PLANNING DEPARTMENT
SCALE: NTS
DETAIL NO. 03.10
DATE:06/16/2023



SMITHFIELD NORTH CAROLINA
STANDARD METHOD OF ENDING CURB & GUTTER
SMITHFIELD, NORTH CAROLINA PLANNING DEPARTMENT
SCALE: NTS
DETAIL NO. 03.09
DATE: 06/16/2023



TOWNHOUSE (SINGLE-FAMILY ATTACHED) FRONT LOADED



TOWNHOUSE (SINGLE-FAMILY ATTACHED) REAR LOADED LOT

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 030181 ENGINEER NORMAN JAMES CONSTANTINO JR. NORMAN JACK SUMMEY, JR.

SEA

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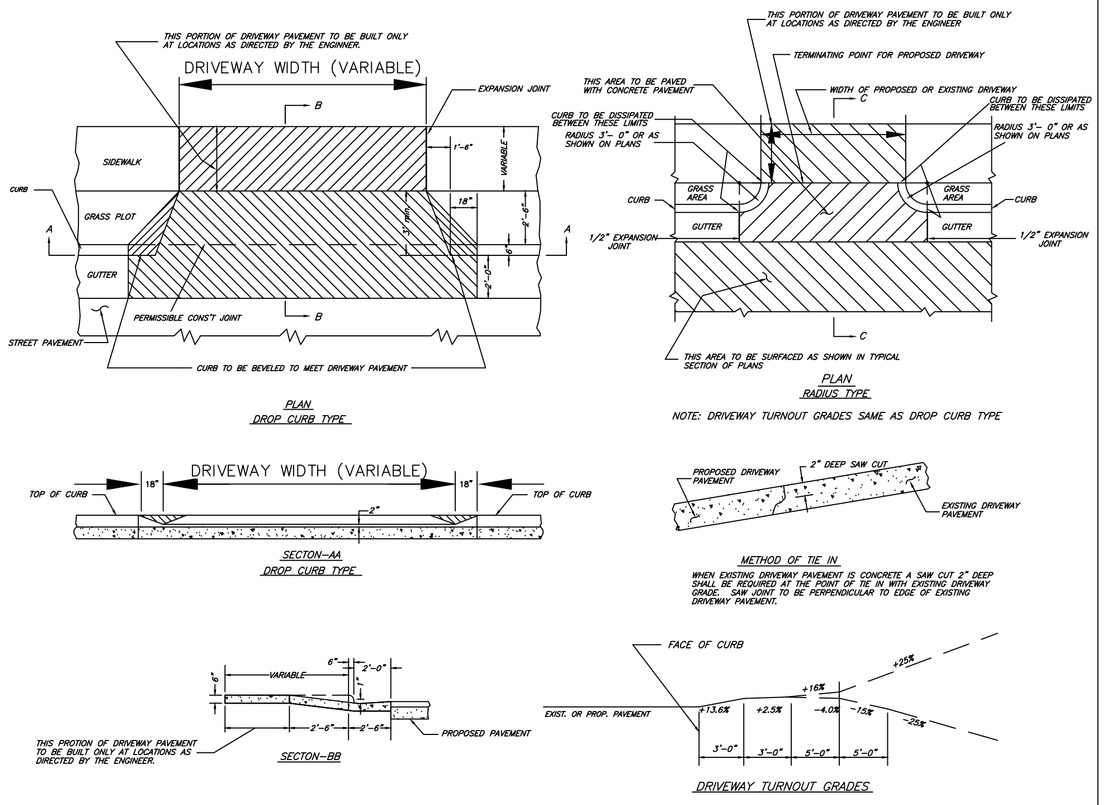
No.	Date:	Description:	By:

STREET DETAILS
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

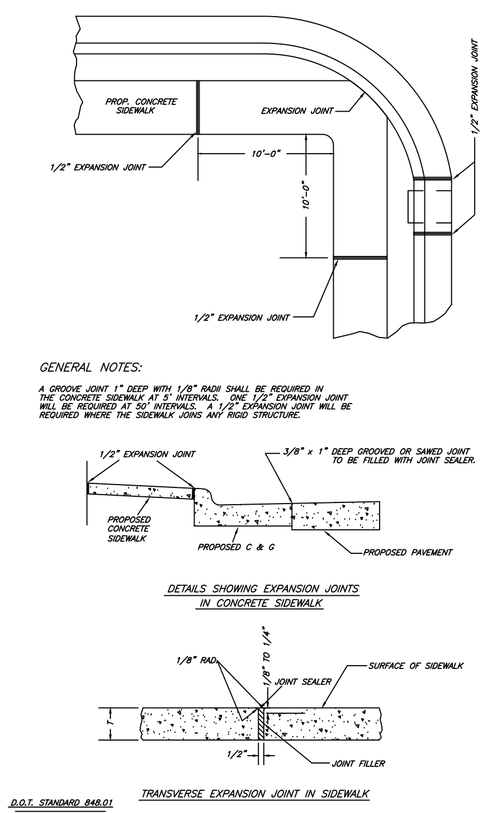
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	HMSJ
Job No.:	E-9916

Sheet No.
C-9.1



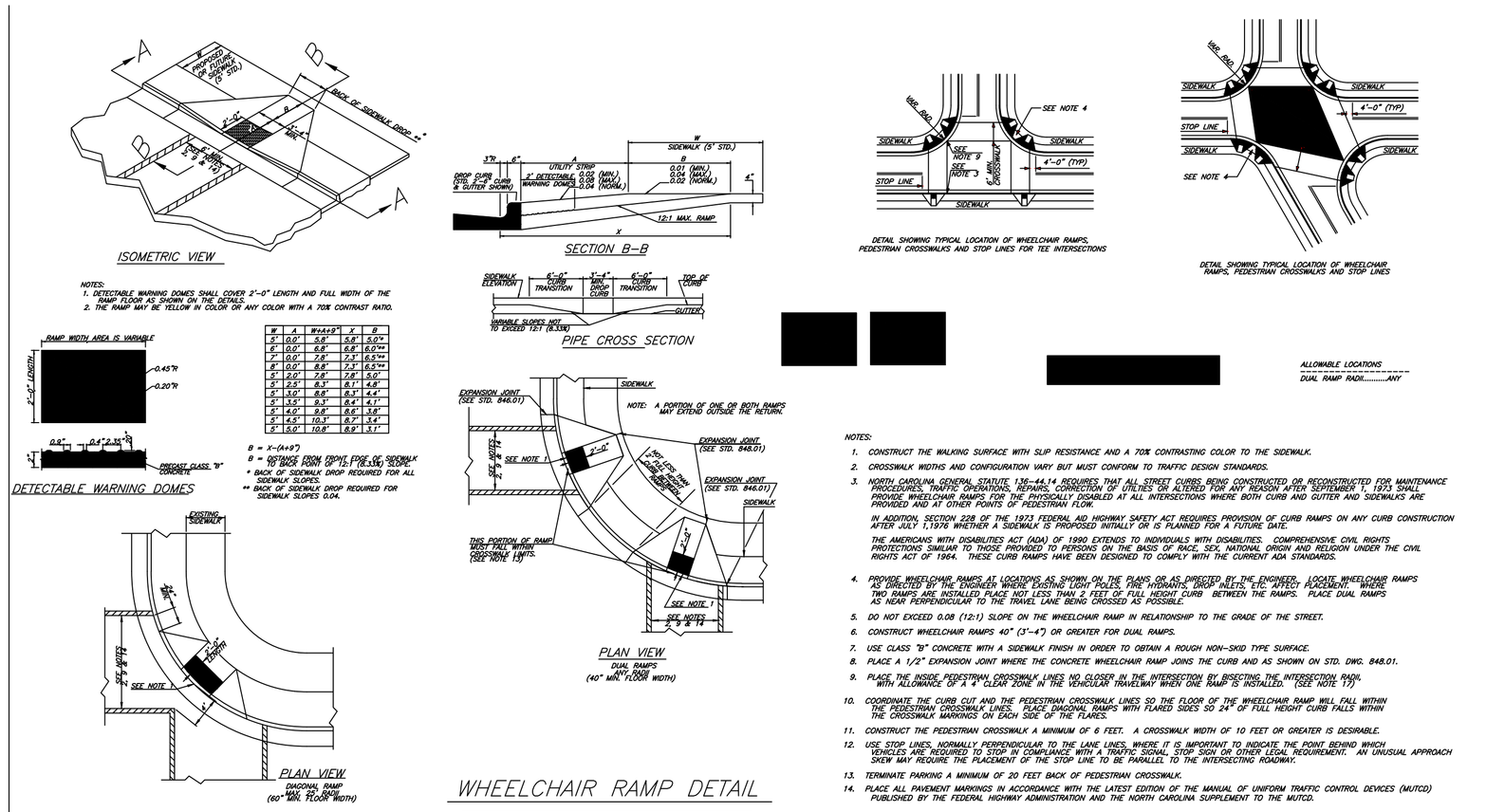
D.O.T. STANDARD 848.02 AND 848.03.

STANDARD DRIVEWAY TURNOUT



D.O.T. STANDARD 848.01

STANDARD CONCRETE SIDEWALK



WHEELCHAIR RAMP DETAIL

NOTE:

ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROADS & STRUCTURES LATEST EDITION.

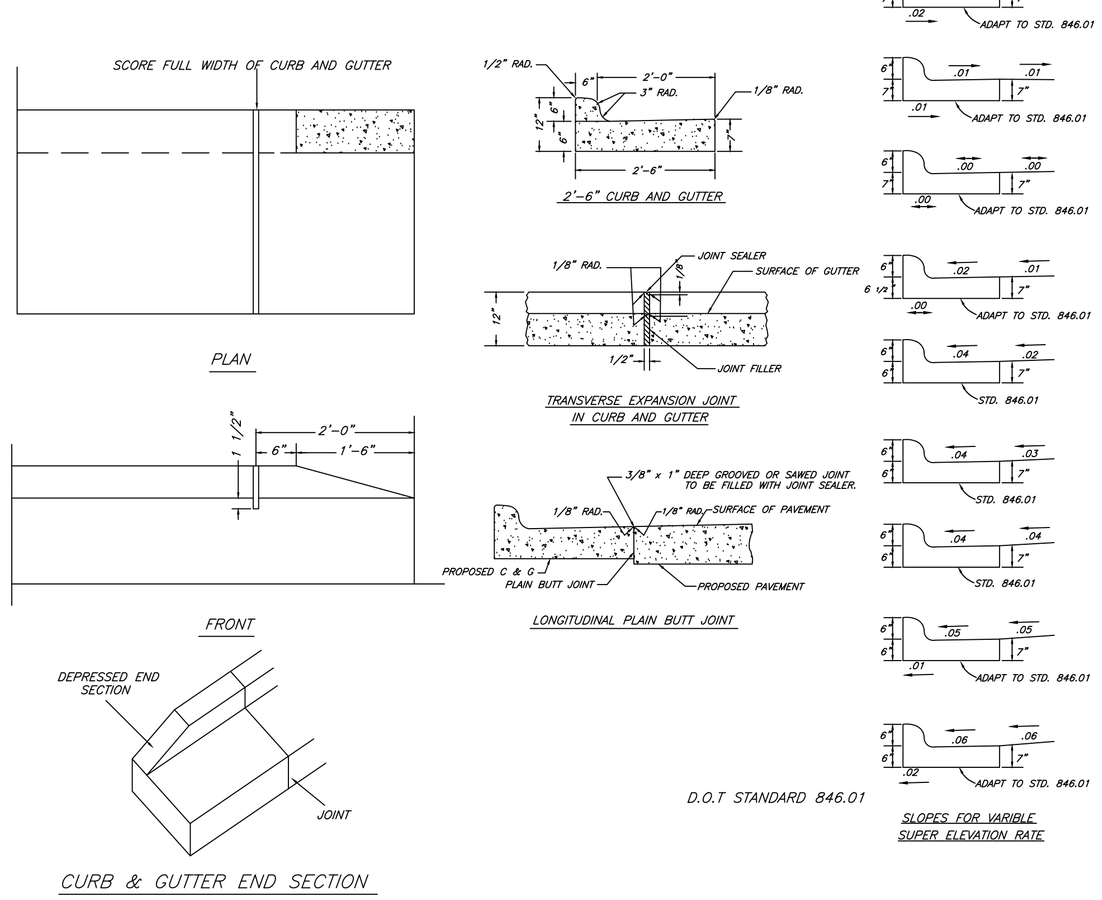
GENERAL NOTES:

CONTRACTION JOINTS SHALL BE SPACED AT 10 FOOT INTERVALS, EXCEPT THAT A 15 FOOT SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED WITHOUT THE USE OF TEMPLATES AT 10 FOOT INTERVALS. JOINT SPACING MAY BE ALTERED BY THE ENGINEER TO PREVENT UNCONTROLLED CRACKING.

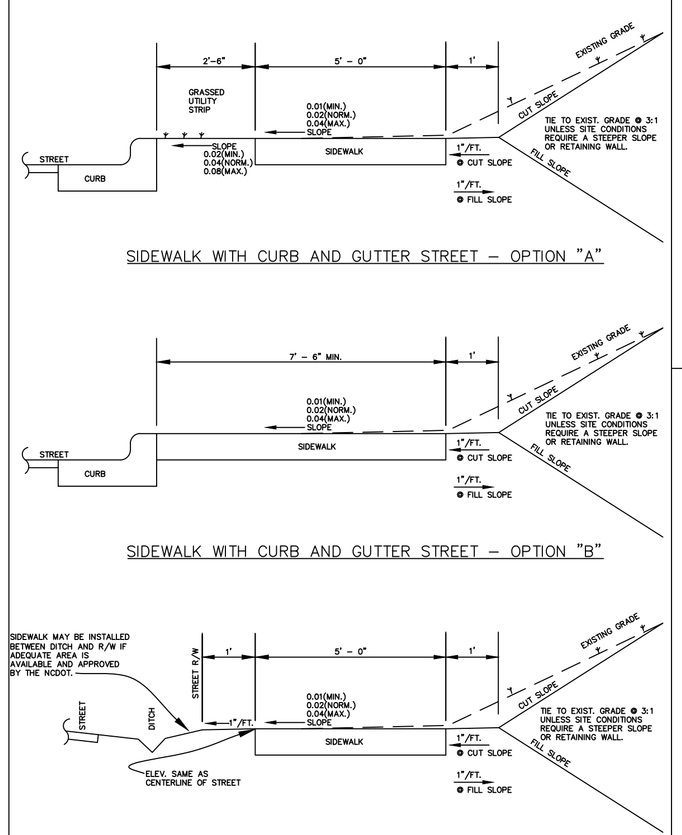
CONTRACTION JOINTS MAY BE INSTALLED BY THE USE OF TEMPLATES OR FORMED BY OTHER APPROVED METHODS. WHERE SUCH JOINTS ARE NOT FORMED BY TEMPLATES A MINIMUM DEPTH OF 1 1/2" SHALL BE OBTAINED.

ALL CONTRACTION JOINTS EXCEPT IN 8"x6" MEDIAN CURB SHALL BE FILLED WITH JOINT SEALER.

EXPANSION JOINTS SHALL BE SPACED AT 80 FOOT INTERVALS AND ADJACENT TO ALL RIGID OBJECTS.



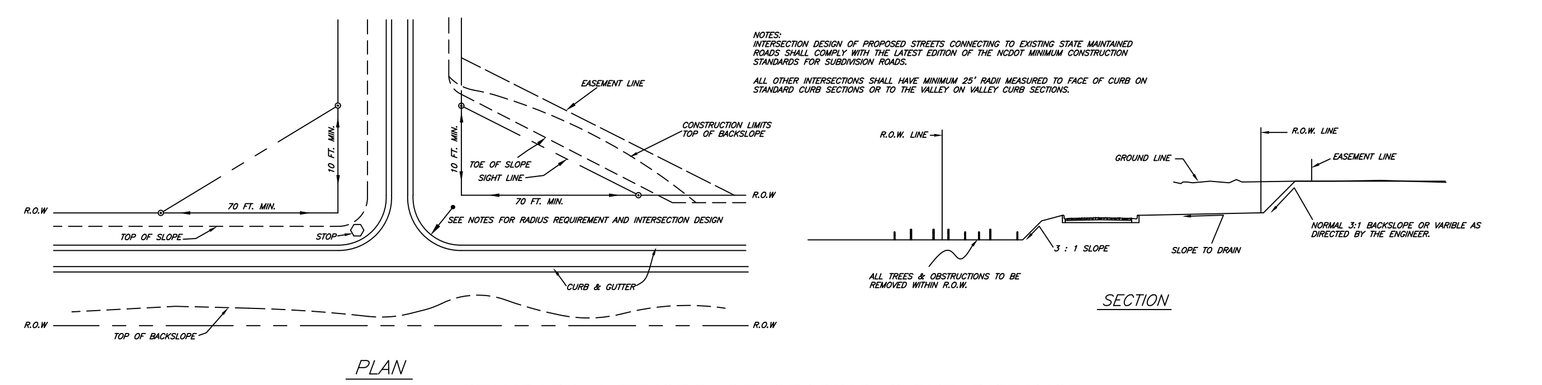
STANDARD CONCRETE CURB AND CURB & GUTTER



NOTES

- THE NCDOT WILL NOT ALLOW SIDEWALK ON THE SHOULDER OF A STREET WITHOUT CURB AND GUTTER.
- OPTION "A" OR OPTION "B" MAY BE USED ALONG STREETS WITH CURB AND GUTTER, AS NEEDED TO BE COMPATIBLE WITH THE CHARACTER OF THE AREA BEING DEVELOPED AND THE LOCATION OF EXISTING UTILITY POLES.
- DIMENSIONS MAY VARY IF REQUIRED BY THE NCDOT.
- USE 4" THICK SIDEWALK ALONG STANDARD CURB AND GUTTER.
- USE 6" THICK SIDEWALK ACROSS DRIVEWAYS AND ALONG VALLEY CURB.

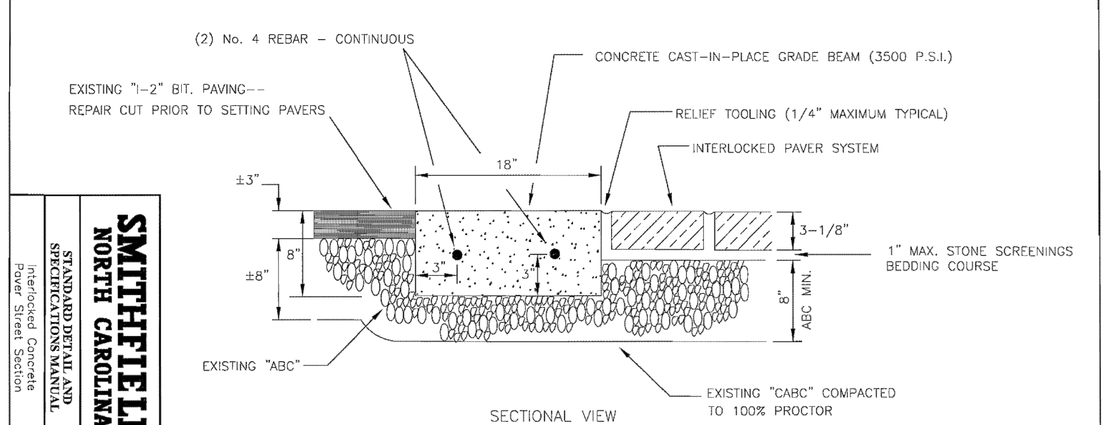
SIDEWALK STANDARDS



STANDARD METHODS OF GRADING SIGHT DISTANCE AT INTERSECTIONS

NOTES:

1. EXISTING "CABC" IN ROADWAY MAY BE USED AS BASE COURSE AFTER COMPACTING TO ACHIEVE 100% PROCTOR. LOCALIZED UNDERCUTTING AND REPAIR SHALL BE REQUIRED WHERE PROOFROLLING RESULTS IN PUMPING OR AS DIRECTED BY THE TOWN. TESTING OF SUBGRADE/"CABC" COMPACTION SHALL BE REQUIRED.
2. EXISTING ROADWAY PAVING SHALL BE SAW-CUT TO RECEIVE PLACEMENT OF GRADE BEAMS. A THREE-DAY CURING PERIOD SHALL BE REQUIRED FOR GRADE BEAMS PRIOR TO REMOVAL OF REMAINING BITUMINOUS PAVING. BASE BELOW GRADE BEAMS SHALL BE COMPACTED TO 100% PROCTOR.
3. BRICK PAVED STREETS SHALL NOT BE MAINTAINED BY THE TOWN OF SMITHFIELD.



SMITHFIELD NORTH CAROLINA

STANDARD DETAIL AND SPECIFICATIONS MANUAL

Interlocked Concrete Paver Street Section

Drawing 0304

Date 1/10/2000

PRELIMINARY PLANS NOT FOR REVIEW

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No.	Date:	Description:	By:

STREET DETAILS

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

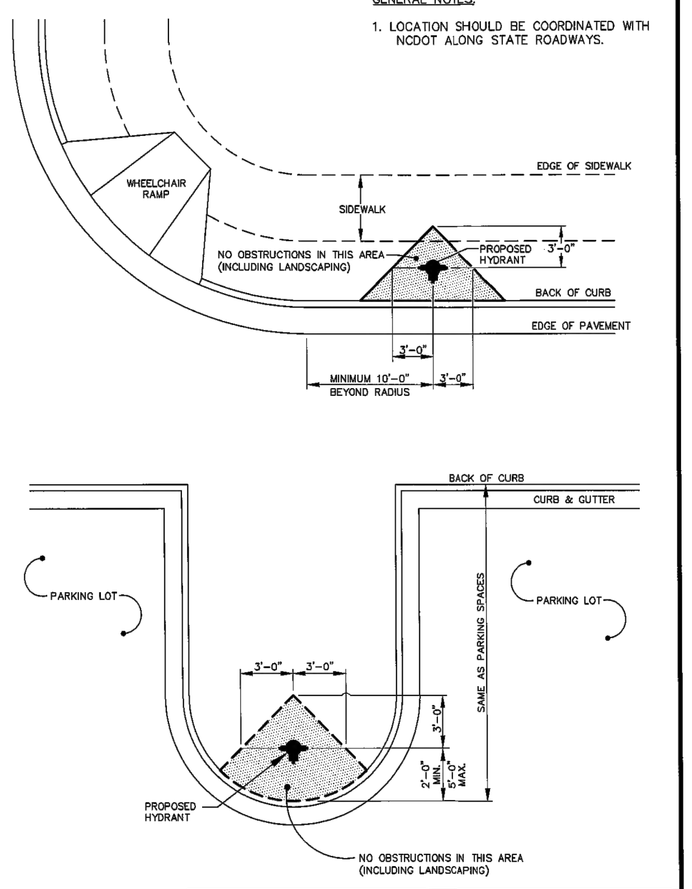
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale: AS NOTED	Date: MONTH YEAR	Drawn By: CW/JM	Checked By: HMSJ
Job No.: 3-9-516			

Sheet No. C-9.2

GENERAL NOTES:

1. LOCATION SHOULD BE COORDINATED WITH NCDOT ALONG STATE ROADWAYS.



SMITHFIELD NORTH CAROLINA

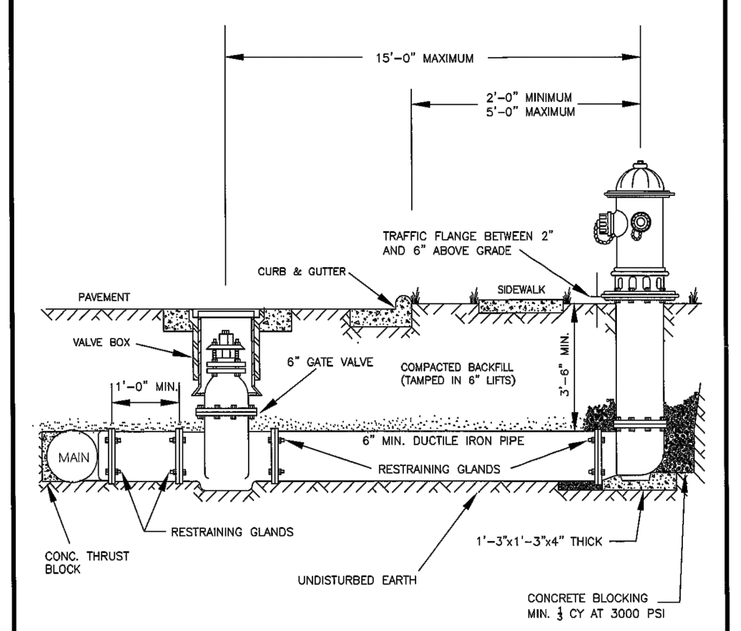
STANDARD HYDRANT LOCATION

SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.07

DATE: 06/05/2018



NOTE:
1. 6" PIPE SHALL MEET AWWA C150-96
2. 6" GATE VALVE SHALL BE AWWA C500-86 OPEN LEFT
3. STEEL BOLTS SHALL BE ⅜" HOT DIPPED GALVANIZED
4. HYDRANT TO BE PLACED WITH PUMPER NOZZLE FACING THE CLOSEST CURB
5. HYDRANT SHALL HAVE 36" MINIMUM CLEARANCE TO ALL OBJECTS

SMITHFIELD NORTH CAROLINA

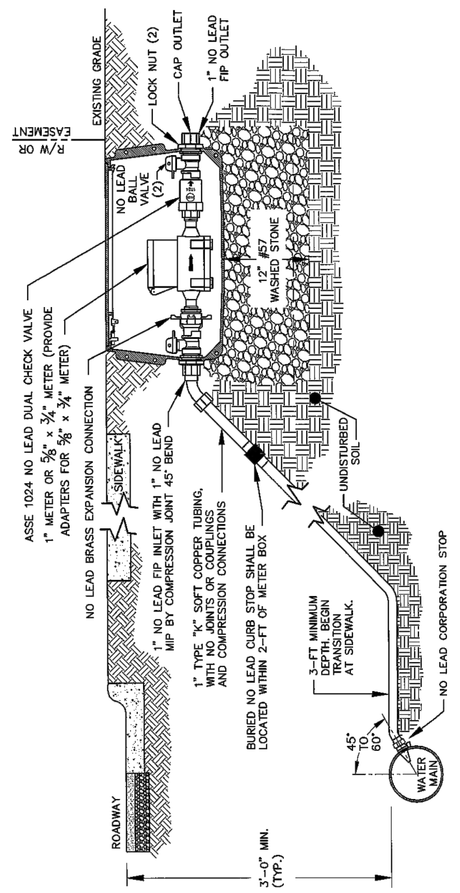
STANDARD HYDRANT INSTALLATION

SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.06

DATE: 06/05/2018



NOTES:
1. THE METER SHALL NOT BE LOCATED IN AREAS SUBJECT TO VEHICULAR TRAFFIC.
2. WATER METER SEALS, VALVES AND FITTINGS SHALL COMPLY WITH AWWA C800.
3. ALL BRASS COMPONENTS SHALL BE "NO LEAD" BRASS MEETING UNS C89833 AS PER ASTM B584.
4. ALL PIPE, FITTINGS, VALVES, AND FITTINGS SHALL BE "NO LEAD" AND COMPATIBLE WITH THE METER.
5. FOR ALL NEW CONSTRUCTION OR RETROFIT INSTALLATIONS USING OPEN TRENCH METHODS.3
6. 100% MAINTENANCE ENDS AT METER OUTLET CONNECTION

SMITHFIELD NORTH CAROLINA

STANDARD 3/4 AND 1 INCH METER INSTALLATION

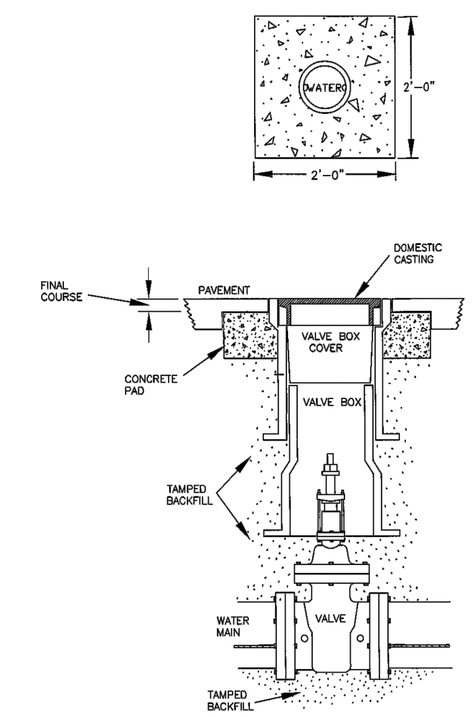
SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.01

DATE: 06/05/2018

NOTE:
2"X2"X6" CONCRETE PAD REQUIRED ON ALL VALVES.
NO PRECAST CONCRETE DOUGHNUT ALLOWED.



NOTE:
1. VALVE BOX NOT TO CONTACT WATER MAIN
2. ALL TRAFFIC CASTINGS MUST BE CLASS 35 OR GREATER
3. FOR ANY VALVES OVER 10' DEEP, A VALVE STEM EXTENSION MUST BE USED TO BRING TO A DEPTH OF NO MORE THAN 5', EXTENSION MUST BE A MINIMUM OF 1" SOLID STOCK

SMITHFIELD NORTH CAROLINA

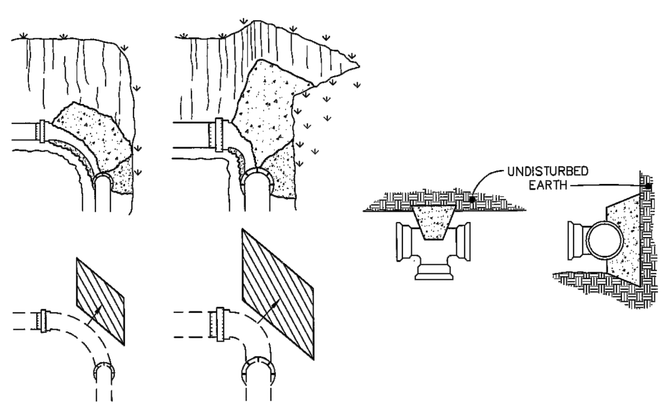
STANDARD VALVE BOX INSTALLATION

SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.08

DATE: 06/05/2018



MINIMUM CONCRETE BLOCKING (C.Y.)					
NOMINAL PIPE DIAMETER INCHES	TEES & DEAD ENDS	90° BEND	45° BEND	22½° BEND	11¼° BEND
4	⅓	⅓	⅓	⅓	⅓
6	⅓	⅓	⅓	⅓	⅓
8	⅓	½	⅓	⅓	⅓
10	⅔	¾	½	⅓	⅓
12	¾	1.0	⅔	⅓	⅓

NOTES:
1. FITTING SHALL BE WRAPPED WITH A MINIMUM 4 MIL PLASTIC.
2. NO CONCRETE SHALL COVER BOLTS OR GLANDS.
3. CONCRETE SHALL BE 3,000 PSI MIX.
4. PIPE DIAMETERS BEYOND 12 INCHES SHALL UTILIZE A PROFESSIONAL ENGINEER'S SEALED DESIGN CONSISTING OF RESTRAINED JOINT PIPE OR BLOCKING.

SMITHFIELD NORTH CAROLINA

STANDARD REACTION BLOCKING

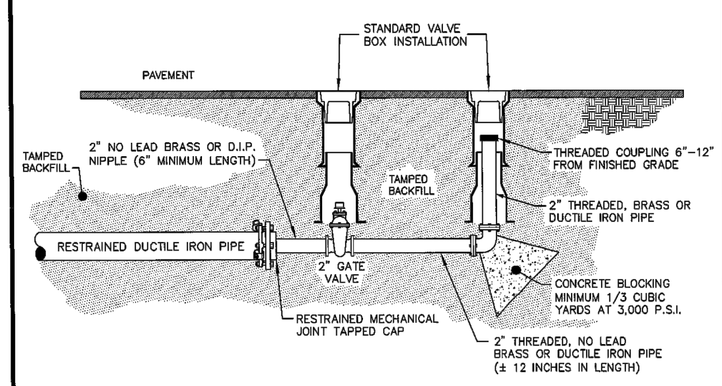
SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.13

DATE: 06/05/2018

MAIN SIZE	END PIPE SIZE
4" – 12"	2" BLOW-OFF
14" & GREATER	APPROVED BY UTILITY DIRECTOR



NOTE:
1. FOR MAINS THAT RE TO BE EXTENDED, USE A VALVE EQUAL TO THE MAIN SIZE AS THE BLOW-OFF VALVE AND THEN REDUCE TO THE 2-INCH STANDARD PIPE
2. WHEN BLOW-OFF IS EXPOSED TO TRAFFIC, THE DETAIL FOR A PAVED AREA SHALL BE USED EVEN IF THE BLOW-OFF IS OUTSIDE THE PAVEMENT

SMITHFIELD NORTH CAROLINA

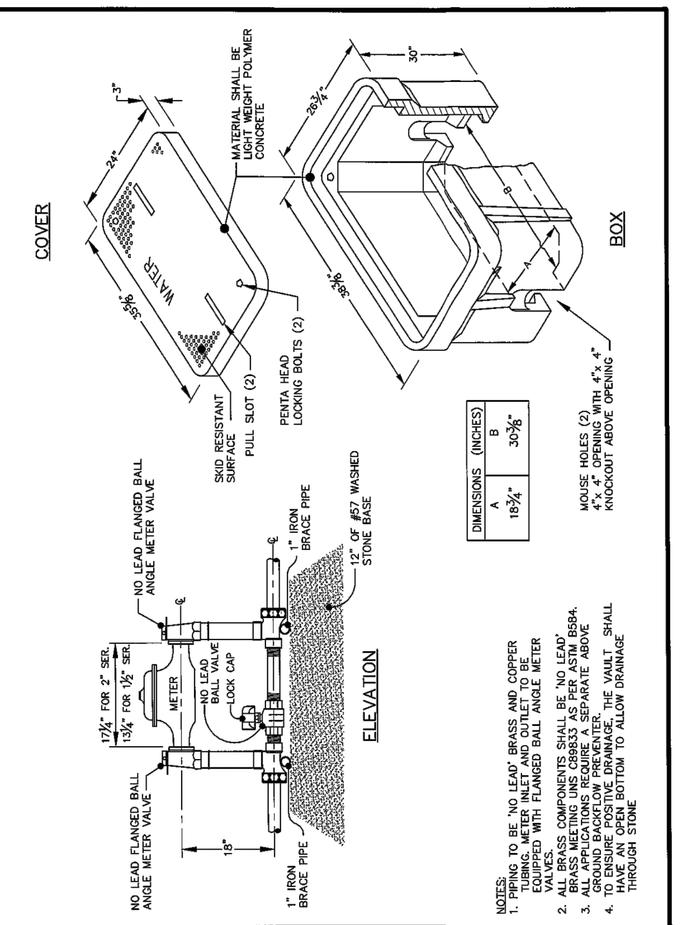
STANDARD 2" BLOW-OFF ASSEMBLY

SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.04

DATE: 06/05/2018



NOTES:
1. PIPING TO BE "NO LEAD" BRASS AND COPPER ONLY. ALL BALL VALVES SHALL BE LOCKING EQUIPPED WITH FLANGED BALL ANGLE METER VALVES.
2. ALL BRASS COMPONENTS SHALL BE "NO LEAD" BRASS MEETING UNS C89833 AS PER ASTM B584.
3. ALL BRASS MEETING UNS C89833 AS PER ASTM B584.
4. GROUND BACKFLOW PREVENTER: THE VAULT SHALL HAVE AN OPEN BOTTOM TO ALLOW DRAINAGE THROUGH STONE

SMITHFIELD NORTH CAROLINA

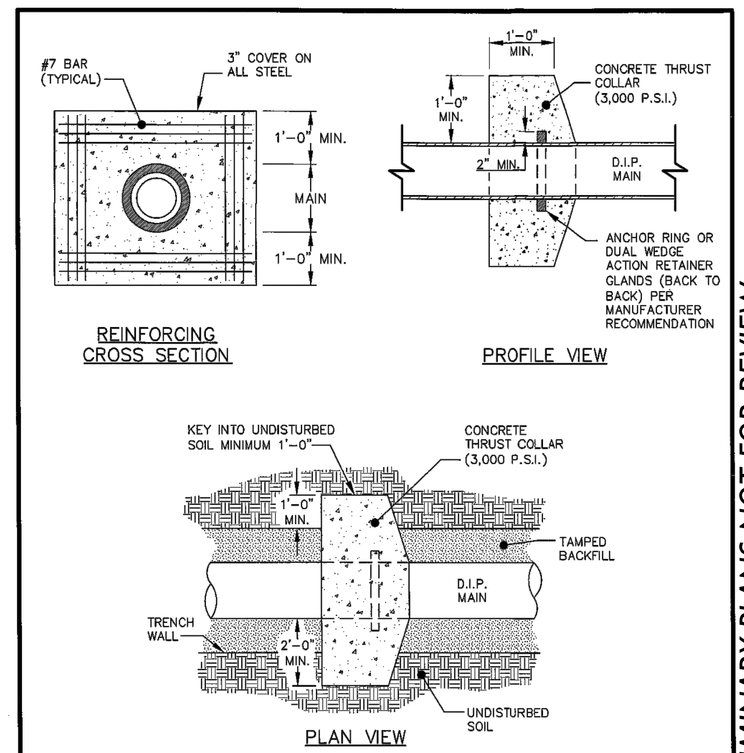
STANDARD 1-1/2 AND 2 INCH METER INSTALLATION

SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.02

DATE: 06/05/2018



NOTES:
1. THRUST COLLAR SHALL ONLY BE USED IF OTHER RESTRAINING METHODS CANNOT.
2. THRUST COLLARS FOR PIPE BEYOND 12 INCHES SHALL BE DESIGNED BY THE ENGINEER.
3. TWELVE (12) #7 BARS SHALL BE USED IN EACH COLLAR.

SMITHFIELD NORTH CAROLINA

STANDARD THRUST COLLAR INSTALLATION

SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES

SCALE: NTS

DETAIL NO. 06.10

DATE: 06/05/2018

PRELIMINARY PLANS NOT FOR REVIEW

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No.	Date:	Description:	By:

WATER DETAILS

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CMV, JM
Checked By:	PMSJ
Job No.:	3-6916

Sheet No. C-9.3

SECTION 6.00
POTABLE WATER

6.01 WATER DISTRIBUTION

A. DESIGN

LOCATION, WATER LINES SHALL BE EXTENDED ALONG THE ROADWAY TO THE ADJACENT PROPERTY LINE. ALL PUBLIC WATER MAINS SHALL BE LOCATED WITHIN DEDICATED RIGHT OF WAY OR DEDICATED EASEMENTS WITH A MINIMUM WIDTH OF 20 FEET. SEE SECTION 2.10 FOR LANDSCAPE PLANTINGS WITHIN A TOWN EASEMENT.

SIZING; MAJOR TRANSMISSION LINES SHALL BE SIZED IN ACCORDANCE WITH THE "WATER DISTRICT WATER PLAN OF THE TOWN OF SMITHFIELD" OR AS DIRECTED BY THE PUBLIC UTILITIES DIRECTOR. IN RESIDENTIAL AREAS, MAINS SHALL BE 6-INCH AND 8-INCH IN DIAMETER. SIX (6) INCH MAINS SHALL BE USED ONLY WHEN A GOOD GRID EXISTS. THE TOTAL MAXIMUM LENGTH OF 6-INCH AND 8-INCH MAIN WITHOUT A CONNECTION TO A LARGER MAIN IS 1200 FEET AND 2000 FEET, RESPECTIVELY. WHERE A GOOD GRID DOES NOT EXIST, LINES SHALL BE UPSIZED TO PROVIDE ADEQUATE FIRE FLOW AS DIRECTED BY THE PUBLIC UTILITIES DIRECTOR.

B. MATERIAL

MATERIALS TO BE UTILIZED SHALL BE THOSE AS SPECIFIED HEREIN, UNLESS AN APPROVED EQUAL IS AUTHORIZED BY THE PUBLIC UTILITIES DIRECTOR, UNLESS OTHERWISE AUTHORIZED, ANY WATER LINE 12" OR LARGER SHALL BE DUCTILE IRON PIPE, DUCTILE IRON PIPE OR C-900 PVC SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C150 AND C151 FOR A LAYING CONDITION TYPE 2 AND A WORKING PRESSURE AS FOLLOWS:

3" – 12"	350 PSI
14" – 20"	250 PSI
24"	200 PSI
30" – 54"	150 PSI

PIPE JOINTS SHALL BE OF THE PUSH-ON TYPE AS PER AWWA C111. PIPE LINING SHALL BE CEMENT MORTAR WITH A SEAL COAT OF BITUMINOUS MATERIAL IN ACCORDANCE WITH AWWA C104. GALVANIZED STEEL PIPE WILL NOT BE ALLOWED AS A MATERIAL FOR MAINS OR SERVICES.

C. INSTALLATION

ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF 3 FEET UNLESS AS INSTALLED ALONG A ROADWAY WHICH DOES NOT HAVE CURB & GUTTER, LINES ARE INSTALLED ALONG THE TOP OF THE FINISHED SUBGRADE, WHEN WATER MAIN SHALL BE INSTALLED AT EXTRA DEPTH TO PREVENT CONFLICT WITH FUTURE ROAD IMPROVEMENTS OR VERTICAL ALIGNMENT CHANGES.

ALL CONSTRUCTION RELATING TO THE UTILITY IMPROVEMENTS MUST BE PERFORMED BY A CONTRACTOR LICENSED IN NORTH CAROLINA.

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B. SPECIFICATIONS; HYDRANTS SHALL CONFORM TO AWWA C502 WITH A MINIMUM VALVE OPENING OF 4½ INCHES. HYDRANTS SHALL BE FURNISHED WITH A 4½ INCH STEAMER CONNECTION ON THE BRANCH. SEALING GASKETS SHALL BE O-RING. MAXIMUM CONNECTION PRESSURE OF 250 PSI. SADDLES SHALL BE EQUIPPED WITH A AWWA C110 FLANGE MOLDED RUBBER; HAVING APPROXIMATELY 70 DUROMETER HARDNESS, PLACED INTO A GROOVE ON THE SADDLE SURFACE AND SHALL BE ALLOWED TO EXPAND. STRAPS SHALL BE ALLOY STEEL.

THE MAXIMUM SIZED SADDLE OUTLET FOR EACH SIZE OF PIPE TO BE TAPPED SHALL BE AS FOLLOWS:

SIZE PIPE TO BE TAPPED	MAXIMUM SIZE SADDLE OUTLET
16"	8"
18"	8"
20"	10"
24" AND LARGER	12"

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C. INSTALLATION; HYDRANTS SHALL BE PLUMB, PROPERLY LOCATED WITH THE PUMPER NOZZLE FACING THE CLOSEST STREET. THE BACK OF THE HYDRANT OPPOSITE THE PIPE CONNECTION SHALL BE FREE BLOCKED AGAINST THE VERTICAL FACE OF THE TRENCH WITH 1 CUBIC YARD OF CONCRETE. DOUBLE BRACE RODS OVER COLLARS SHALL BE DIMENSIONED STOCK AND COATED WITH BITUMINOUS PAINT, A MINIMUM OF 8 CUBIC FEET OF STONE SHALL BE PLACED AROUND THE DRAINS. THE BACKFILL AROUND THE HYDRANTS SHALL BE COMPACTED. HYDRANT INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD ROD VALVE ROBBING DETAIL.

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A. LOCATION; ALL FIRE HYDRANTS SHALL BE INSTALLED ON A WATER LINE WITH A DIAMETER NO SMALLER THAN 6 INCHES. ONLY ONE FIRE HYDRANT SHALL BE INSTALLED ON A DEAD END 6-INCH LINE. THERE SHALL BE AT LEAST ONE FIRE HYDRANT AT EACH STREET INTERSECTION. THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS, MEASURED ALONG STREET CENTERLINES, SHALL BE 500 FEET. WHEN REQUIRED BETWEEN THE INTERSECTIONS IN BUSINESS, OFFICE AND INSTITUTIONAL RESIDENTIAL INTERSECTIONS ARE NOT MORE THAN 700 FEET APART, NO HYDRANT IS REQUIRED BETWEEN INTERSECTIONS. IN MAJOR THOROUGHFARES OR ARTERIALS AND INDUSTRIAL DISTRICTS, THE MAXIMUM DISTANCE BETWEEN HYDRANTS, MEASURED ALONG STREET CENTERLINE, SHALL BE 300 FEET WHEN BUSINESS, OFFICE AND INSTITUTIONAL INTERSECTIONS ARE NOT MORE THAN 450 FEET APART, NO HYDRANT IS REQUIRED BETWEEN INTERSECTIONS. IN MAJOR THOROUGHFARES OR ARTERIALS AND COLLECTOR STREETS WITH ACCESS POINTS ONLY AT STREET INTERSECTIONS, HYDRANTS SHALL BE LOCATED AT EACH STREET INTERSECTION AND AT 1,000 FOOT INTERVALS ALONG THE STREET. WHERE THESE INTERSECTIONS ARE LESS THAN 1,200 FEET APART, NO HYDRANT IS REQUIRED BETWEEN THE INTERSECTIONS. THE MINIMUM STANDARD FOR OTHER DISTRICTS. FIRE HYDRANTS SHALL BE PLACED IN A STAGGERED ARRANGEMENTS ON BOTH SIDES OF ANY ROADWAY CLASSIFIED AS A MAJOR OR MINOR THOROUGHFARE WITH THE HYDRANT SPACING AS REFERENCED ABOVE. VALVES ASSOCIATED WITH FIRE HYDRANT ASSEMBLIES SHALL BE LOCATED WITHIN FIFTEEN (15) FEET OF THE FIRE HYDRANT.

WHEN NEW BUILDINGS ARE CONSTRUCTED ON EXISTING BUILDINGS ARE EXPANDED AND CONTAIN 10,000 SQUARE FEET OR MORE OF FLOOR SPACE (ALL FLOORS OF BUILDINGS, ADDED TOGETHER), HYDRANTS SHALL BE INSTALLED AT 300 FOOT INTERVALS ALONG ALL SIDES OF THE BUILDING THAT ARE ACCESSIBLE TO FIRE PUMPERS. THESE HYDRANTS SHALL BE AT LEAST 40 FEET AWAY FROM THE BUILDING. THE TOTAL NUMBER OF HYDRANTS REQUIRED SHALL NOT EXCEED ONE HYDRANT PER SEPARATION OF BUILDINGS PLUS ONE HYDRANT FOR 10,000 SQUARE FEET OF FLOOR SPACE.

WHERE SPRINKLER SYSTEMS ARE USED, A FIRE DEPARTMENT CONNECTION SHALL BE PROVIDED ON THE BUILDING. THE FIRE DEPARTMENT CONNECTIONS SHALL BE LOCATED WITHIN FIFTY (50) FEET OF A FIRE HYDRANT OR AS OTHERWISE DIRECTED BY THE FIRE MARSHALL. WHERE SPRINKLER SYSTEMS ARE INSTALLED, ALL HYDRANTS SHALL HAVE ACCESS IN ACCORDANCE WITH NORTH CAROLINA BUILDING CODE SHALL BE PROVIDED. BACKFLOW PREVENTION FOR SPRINKLER SYSTEMS SHALL BE AS SPECIFIED IN SECTION 6.06 OF THESE STANDARDS.

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C. INSTALLATION; HYDRANTS SHALL BE PLUMB, PROPERLY LOCATED WITH THE PUMPER NOZZLE FACING THE CLOSEST STREET. THE BACK OF THE HYDRANT OPPOSITE THE PIPE CONNECTION SHALL BE FREE BLOCKED AGAINST THE VERTICAL FACE OF THE TRENCH WITH 1 CUBIC YARD OF CONCRETE. DOUBLE BRACE RODS OVER COLLARS SHALL BE DIMENSIONED STOCK AND COATED WITH BITUMINOUS PAINT, A MINIMUM OF 8 CUBIC FEET OF STONE SHALL BE PLACED AROUND THE DRAINS. THE BACKFILL AROUND THE HYDRANTS SHALL BE COMPACTED. HYDRANT INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD ROD VALVE ROBBING DETAIL.

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COMBINATION MAN VALVES SHALL BE MADE FREEPENDICULAR FROM MAIN LINE AND INCHES IN DIAMETER ON LARGER MAIN AT OTHER LOCATIONS AS DIRECTED BY THE TOWN ENGINEER.

BLOWOFFS SHALL BE INSTALLED AT THE END OF ALL DEAD-END WATERLINES.

2.000 FEET BETWEEN VALVES.

INSTALLED AT EVERY 1200 FEET PER 1 MINI DIAMETER MAIN UP TO A DISTANCE OF 2,000 FEET BETWEEN VALVES.

6.03 VALVES AND APPURTENANCES

A. LOCATION; VALVES SHALL BE INSTALLED ON ALL BRANCHES FORM FEEDER MAINS AND HYDRANTS ACCORDING TO THE FOLLOWING SCHEDULE. 3 VALVES AT CROSSES, 2 VALVES AT TEES, AND ONE VALVE ON EACH HYDRANT BRANCH. WHEN A LOOP SECTION OF WATERLINE IS CONNECTED BACK INTO THE HYDRANT BRANCH, WITHIN A DISTANCE OF 200 FEET, OR LESS, ONLY ONE VALVE WILL BE REQUIRED IN THE FEEDER MAIN.

WHERE ALL WATERLINE INTERSECTIONS ARE EXISTING, IN THE MAIN VALVE SHALL BE INSTALLED AT THE END OF ALL DEAD-END MAINS.

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ALL VALVES TO BE 16 INCHES AN GREATER SHALL BE INSTALLED IN A MANHOLE AS SHOW IN THE STANDARD DETAILS.

ALL VALVES ARE TYPE AND ALLOWED ON THE SIDES OF THE TRENCH.

RESILIENT SEAT WEDGE GATE VALVES SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA C509

VALVE BOXES SHALL BE CAST IRON AT THE SCREW OR THE TELESCOPIC WITH A 5-INCH OPENING WITH "WATER" STAMPED ON THE COVER. VALVE BOX RING ADJUSTMENTS WILL NOT BE ALLOWED.

BUTTERFLY VALVES SHALL BE INSTALLED IN WATERLINES SIXTEEN (16) INCHES, OR GREATER. ALL SHALL MEET THE REQUIREMENTS OF AWWA C504 WITH MECHANICAL JOINTS. 2-INCH OPERATING NUT AND OPEN LEFT. VALVES SIZE 18 INCHES AND GREATER SHALL BE INSTALLED IN A MANHOLE AS SHOWN IN STANDARD DETAILS.

BLOW-OFF ASSEMBLIES SHALL BE CONSTRUCTED AS SHOWN IN STANDARD DETAILS. THE VALVE SHALL BE GATE TYPE AND A NON-RISING STEM AND A 2-INCH OPERATING NUT.

PIPE FITTINGS SHALL BE DUCTILE IRON DESIGNED AND MANUFACTURED AS PER AWWA C110. SIZES OF FITTINGS UP TO AN INCLUDING 12 INCH MAIN SHALL BE DESIGNED FOR AN INTERIOR PRESSURE OF 250 PSI; LARGER SIZE FITTINGS SHALL BE DESIGNED FOR AN ARE ALSO ACCEPTABLE. JOINTS FOR FITTINGS SHALL BE MECHANICAL AND LINED WITH CEMENT MORTAR WITH A SEAL COAT OF BITUMINOUS MATERIAL. ALL IN ACCORDANCE WITH AWWA C104.

REACTION BLOCKING FOR ALL FITTINGS OR COMPONENTS SUBJECT TO HYDROSTATIC THRUST SHALL BE SECURELY ANCHORED BY THE USE OF CONCRETE THRUST BLOCKS CONCRETE SHALL INTERFERE WITH THE REMOVAL OF FITTINGS. MATERIAL FOR REACTION BLOCKING SHALL BE 3,000 PSI CONCRETE. ALTERNATIVE RESTRAINING METHODS MUST BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN NORTH CAROLINA AND APPROVED BY THE TOWN ENGINEER.

TAPPING SLEEVES SHALL BE TWO PIECE SPLIT CAST IRON SLEEVES. THE SLEEVE SHALL BE MECHANICAL JOINT TO THE MAIN LINE AND FLANGED TO THE TAPPING VALVE. STAINLESS STEEL TAPPING SLEEVES SHALL ONLY BE ALLOWED ON ASBESTOS-CEMENT PIPE.

TAPPING SADDLES SHALL BE MADE OF DUCTILE IRON PROVIDING A FACTOR OF SAFETY OF 2.5 WITH A WORKING PRESSURE OF 250 PSI. SADDLES SHALL BE EQUIPPED WITH A AWWA C110 FLANGE CONNECTION ON THE BRANCH. SEALING GASKETS SHALL BE O-RING. MAXIMUM DEPTH OF SADDLE SHALL BE ALLOY STEEL.

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NO BURNED TAPS WILL BE ALLOWED AND EACH CORPORATION STOP WILL BE WRAPPED WITH TEFLON TAPE FOR DUCTILE IRON PIPE WATER MAINS.

SERVICE SADDLES SHALL BE BRONZE BODY (85-5-5 WATERWORKS BRASS) AND DOUBLE STRAP FOR TAPS OVER 1 INCH WITH SILICON BRONZE NUTS CONFORMING TO ASTM A98 AND FACTORY INSTALLED GRADE 60 RUBBER GASKETS.

COPPER SERVICE TUBING SHALL BE TYPE K SOFT COPPER TUBING PER ASTM B88. THE LONGEST AVAILABLE LENGTH OF SERVICE LINE SHOULD BE USED WITH NO UNIONS. AS AN EXAMPLE, FOR A 3/4 INCH SERVICE CONNECTION, NO UNION SHALL BE USED IN THE INSTALLATION OF 100 FEET OR LESS. FOR 3/4 INCH, ONLY ONE (1) UNION WILL BE ALLOWED FOR EACH 100 FOOT SECTION OF FRACTION THEREOF. UNIONS SHALL BE MADE WITH FLARE TYPE COUPLINGS.

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METER BOXES FOR 3/4 INCH SERVICES SHALL BE CAST IRON A COMPLETE UNIT MANUFACTURED FOR A 150 PSIG WORKING PRESSURE AND BE SIZED BY THE ENGINEER ACCORDING WITH STANDARD DETAILS.

THE VALVE MUST MEET THE REQUIREMENTS OF AWWA C512 AND BE INSTALLED IN METER BOX GRADE ADJUSTER RINGS ARE NOT ACCEPTABLE.

METER BOXES FOR 1 INCH SERVICES SHALL BE CAST IRON BOX AND COVER WITH A METER YOKE AND A COPPER RESETTER.

METER BOXES FOR 1-1/2 AND 2 INCH SERVICES SHALL BE LIGHT WEIGHT POLYMER CONCRETE AS SHOWN ON THE STANDARD DETAILS. PRINTING BETWEEN FIRE SERVICES SHALL BE CONSTRUCTED FROM BRASS AND COPPER TUBING AND SHALL BE EQUIPPED WITH ANGLE CHECK VALVE OUTLETS AND BY-PASS FLANGED VALVE OR BY-PASS FLANGED BALL VALVE INLETS.

WATER SERVICES GREATER THAN 2 INCHES SHALL BE MADE BY A PRIVATE CONTRACTOR OF THE PROPERTY OWNER OR DEVELOPER. A STRAINER SHALL BE PROVIDED UPSTREAM OF THE METER ON LINES GREATER THAN 2 INCHES.

METER VAULTS WITHIN STREET RIGHT-OF-WAY SHALL MEET HS-20 LOADING REQUIREMENTS AND SHALL BE LOCATED OUTSIDE OF TRAVEL AREAS. THE ACCESS DOOR SHALL BE STAINLESS STEEL SLAM LOCK, AN AUTOMATIC HOLD OPEN ARM, AND PROVIDED FOR ALL METER VAULTS.

SERVICE CONNECTIONS SHALL BE MADE FREEPENDICULAR FROM MAIN LINE AND METER FOR SINGLE FAMILY RESIDENCE IN ACCORDANCE WITH STANDARD DETAILS.

B. INDIVIDUAL WATER SERVICES SHALL BE PROVIDED FROM THE MAIN TO EACH WATER METER FOR SINGLE FAMILY RESIDENCE IN ACCORDANCE WITH STANDARD DETAILS. CONNECTIONS TO EXISTING MAINS SHALL BE MADE BY WET TAPS.

SERVICE CONNECTIONS SHALL BE MADE FREEPENDICULAR FROM MAIN LINE AND SHALL RUN STRAIGHT TO THE METER WHICH SHALL BE LOCATED AT THE EDGE OF THE SERVICE LOT'S RIGHT-OF-WAY, OR EASEMENT, WATER BOX AND METER BOX OR VAULT SHALL BE LOCATED IN STREETS, SIDEWALKS, OR PARKING AREAS IN RESIDENTIAL AREAS, IN NON-RESIDENTIAL AREAS, METER LOCATION SHALL BE CONSIDERED ON A CASE-BY-CASE BASIS. PROVISIONS FOR BACKFLOW PREVENTION SHALL BE AS SPECIFIED IN SECTION 6.06 OF THESE STANDARDS.

SERVICE TAPS TO WATER MAINS SHALL BE MADE BY THE UTILITY CONTRACTOR THAT IS LICENSED IN NORTH CAROLINA AND SHALL BE THE RESPONSIBILITY OF THE OWNER OR DEVELOPER. TAPS SHALL BE INSPECTED BY THE TOWN OF SMITHFIELD UTILITY DEPARTMENT AND SHALL BE IN ACCORDANCE WITH STANDARD DETAILS.

THE WATER METER SHALL BE SIZED BASED ON THE WATER DEMAND. WATER METER SIZE CAN BE DETERMINED AS FOLLOWS:

TABLE 5.1
WATER METER SIZING FOR FLUSH TANKS

METER SIZE (INCHES)	LOAD RANGE (FIXTURES)	FLOW RANGE (FIXTURES)
3/4" PD	22 – 140	20 – 50
1" PD	1 – 22	0 – 20
1-1/2" PD	140 – 450	50 – 100
2" PD	450 – 1000	100 – 200
3" T or C	1000 – 2500	200 – 400
4" T or C	2500 – 5000	400 – 600

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WATER METER SIZING FOR FLUSH VALVES

METER SIZE (INCHES)	LOAD RANGE (FIXTURES)	FLOW RANGE (FIXTURES)
3/4" PD	9 – 50	20 – 50
1" PD	1 – 8	0 – 20
1-1/2" PD	50 – 275	50 – 100
2" PD	275 – 1000	100 – 200
3" T or C	1000 – 2500	200 – 400
4" T or C	2500 – 5000	400 – 600

PD = POSITIVE DISPLACEMENT
T = TURBINE
C = COMPOUND (MUST BE SIZED ON A CASE BY CASE BASIS)

6.05 RELATION OF WATER MAINS TO SANITARY AND STORM SEWERS

A. LATERAL SEPARATION OF SEWERS AND WATER MAINS; WATER MAINS SHALL BE LAID AT LEAST TEN (10) FEET LATERALLY FORM EXISTING OR PROPOSED SEWERS, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT A 10-FOOT LATERAL SEPARATION; IN WHICH CASE:
1. THE WATER MAIN IS LID IN A SEPARATE TRENCH WITH THE ELEVATION OF THE BOTTOM MAN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER; OR
2. THE WATER MAIN LAID IN THE SAME TRENCH AS THE SEWER WITH THE WATER MAIN LOCATED AT ONE SIDE ON A BENCH OF UNDISTURBED EARTH, AND WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAN AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER.

B. CROSSING A WATER MAIN OVER A SEWER; WHENEVER IT IS NECESSARY FRO A WATER MAIN TO CROSS OVER A SEWER, THE WATER MAIN SHALL BE LAID AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST EIGHTEEN (18) INCHES ABOVE THE TOP OF THE SEWER, UNLESS LOCAL CONDITIONS OR BARRIERS PREVENT AN ACCEPTABLE CONSTRUCTION. IN WHICH CASE BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH OF THE POINT OF CROSSING.

C. CROSSING A WATER MAIN UNDER A SEWER, WHENEVER IT IS NECESSARY FOR A WATER MAIN TO CROSS UNDER A SEWER, BOTH THE WATER MAIN AND THE SEWER SHALL BE CONSTRUCTED OF FERROUS MATERIALS AND WITH JOINTS THAT ARE EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF TEN (10) FEET ON EACH OF THE POINT OF CROSSING. A SECTION OF WATER MAIN PIPE SHALL BE CENTERED AT THE POINT OF CROSSING.

6.06 BACKFLOW PREVENTION

WHEN A FIRE PROTECTION SYSTEM IS PROPOSED AND NO ANTI-FREEZE CHEMICALS ARE TO BE USED, A DOUBLE CHECK VALVE ASSEMBLY INCLUDING 2 CHECK VALVES, 2 GATE VALVES, AND 4 TEST COCKS SHOULD BE INSTALLED ON THE SPRINKLER FIRE PROTECTION LINE. IF ANY CHEMICALS ARE PROPOSED TO BE ADDED TO A SPRINKLER FIRE PROTECTION SYSTEM, A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER, APPROVED BY THE UNDERWRITERS LABORATORIES AND/OR THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH, UNIVERSITY OF SOUTHERN CALIFORNIA SHALL BE USED.

ALL WATER SERVICES SHALL BE PROVIDED WITH BACKFLOW PREVENTION DEVICES ADJACENT TO OR WITHIN THE METER BOX VAULT

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PRELIMINARY PLANS NOT FOR REVIEW

WATER DETAILS
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

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Engineering - Consulting - Surveying
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 019158 JAMES E. SUMMEY, JR.

SEA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	JM / MV
Checked By:	TSMH
Job No:	E-3916

Sheet No.
C-9.4

ALL IRRIGATION SYSTEMS WITH CHEMICAL ADDITIVES OR BOOSTER PUMP, SHALL BE PROVIDED WITH REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION, INSTALLED IN ACCORDANCE WITH THE FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH. REDUCED PRESSURE ZONE BACKFLOW PREVENTERS MUST HAVE AN APPROPRIATELY SIZED DRAINAGE SYSTEM OR BE INSTALLED ABOVE GROUND. ABOVE GROUND INSTALLATION SHALL HAVE AN INSULATED BOX.

A POST INDICATOR VALVE SHALL BE PROVIDED AT THE RIGHT-OF-WAY OR EDGE OF EASEMENT. WHEN BACKFLOW PREVENTION DEVICES ARE CONTAINED WITHIN A BUILDING; OUTSIDE ACCESS, ABOVE THE FINISHED FLOOR ELEVATION, SHALL BE PROVIDED. THE TOP OF THE POST INDICATOR VALVE SHALL BE INSTALLED AT 36 INCHES ABOVE THE FINISHED GRADE. THE TOWN SHALL MAINTAIN UP TO AND INCLUDING THE POST INDICATOR VALVE, BUT NOT BEYOND.

6.07 AUTOMATIC FIRE SPRINKLER SYSTEM STANDARD

A. GENERAL
FOUR (4) COMPLETE SETS OF WORKING PLANS FOR ALL FIRE SPRINKLER SYSTEMS AND STANDPIPE SYSTEMS ARE TO BE SUBMITTED TO THE TOWN WITH A CURRENT AND PROPERLY SIGNED AND SEALED N.C.P.E. STAMP. ALL FIRE SPRINKLER SYSTEMS SHALL BE INSTALLED WITH AN ALARM CHECK VALVE INSTALLED IN EACH RISER, WITH ALL THE TRIMMINGS (EXAMPLE: RETARD CHAMBER, WATER MOTOR GONG, PRESSURE GAUGES, ETC.) COMPLETE WORKING PLANS SHALL BE APPROVED BY THE TOWN BEFORE AN INSTALLATION OF THE SPRINKLER SYSTEMS BEGINS. IF TWENTY (20) SPRINKLER HEADS OR MORE ARE ADDED TO AN EXISTING SPRINKLER SYSTEM, OR IF A NEW SPRINKLER SYSTEM IS INSTALLED, COMPLETE PLANS AND CALCULATIONS ARE REQUIRED. EXISTING SYSTEM ADDITIONS OR THE DISABLING OF ANY SPRINKLER SYSTEM SHALL REQUIRE NOTIFICATION TO THE FIRE OFFICIAL TWENTY-FOUR (24) HOURS IN ADVANCE.

B. DESIGN
FULL WORKING PLANS ARE TO BE IN COMPLETE COMPLIANCE WITH NFPA #13, 13D, 13R, 14 231C AND TOWN OF SMITHFIELD SPECIFICATIONS. AN NFPA ABOVE GROUND MATERIAL AND TEST CERTIFICATE AND AN NFPA UNDERGROUND MATERIAL AND TEST CERTIFICATE ARE REQUIRED TO BE PRESENTED AFTER COMPLETION OF DESIGNATED, APPROVED WORK.

C. HYDRAULIC DESIGN
IF A SYSTEM IS HYDRAULICALLY DESIGNED, THE FOLLOWING DESIGN CRITERIA MUST BE FOLLOWED:
1. SAFETY MARGIN: A TEN (10) PERCENT SAFETY MARGIN MUST BE INCLUDED IN ALL HYDRAULIC CALCULATIONS. SYSTEM SUPPLY MUST EQUAL OR EXCEED 1.1 TIMES THAT OF THE SYSTEM DEMAND. (EXAMPLE: DEMAND = 50 psi; SUPPLY > 55 psi)
2. HOSE ALLOWANCE: A MINIMUM OF 500 GPM OUTSIDE HOSE ALLOWANCE MUST BE CALCULATED ON ALL SPRINKLER SYSTEMS. INTERIOR HOSE ALLOWANCES ARE TO FOLLOW NFPA 13 REQUIREMENTS.

D. POST INDICATOR VALVE
POST INDICATOR VALVES SHALL BE IN ACCORDANCE WITH SECTION 6.06

E. BACKFLOW PREVENTION
BACKFLOW PREVENTION SHALL BE IN ACCORDANCE WITH SECTION 6.06

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F. FIRE DEPARTMENT CONNECTION
WHERE AUTOMATIC FIRE SPRINKLER SYSTEMS ARE USED, A FIRE DEPARTMENT CONNECTION SHALL BE PROVIDED ON THE BUILDING. THE FIRE DEPARTMENT CONNECTION SHALL BE LOCATED WITHIN FIFTY (50) FEET OF A FIRE HYDRANT OR AS OTHERWISE DIRECTED BY THE FIRE OFFICIAL. WHEN A SPRINKLER SYSTEM SERVES ONLY PART OF A LARGE STRUCTURE, THE FIRE DEPARTMENT CONNECTION SHALL BE LABELED AS TO WHICH SECTION OF THE STRUCTURE THAT SPRINKLER RISER SERVES. THIS LABELING SHALL BE A MINIMUM OF TWO (2) INCH LETTERING ON A PERMANENT SIGN.

G. DEDICATED RISER ROOM
A DEDICATED SPRINKLER RISER ROOM IS REQUIRED PROVIDING AN ENTRY DOOR TO THE ROOM FROM THE EXTERIOR OF THE BUILDING.

H. ALARM COMMUNICATION
ALL SPRINKLER SYSTEMS ARE TO HAVE ALARM COMMUNICATION EQUIPMENT TO FULLY COMPLY WITH NFIPA 72. EQUIPMENT MUST BE FULLY FUNCTIONAL AND REPORTING TO A U.L. APPROVED CENTRAL RECEIVING STATION (NFIPA 71) BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED FOR THE FACILITY.

I. ACCESS
ALL BUILDINGS WHICH HAVE A FIRE SPRINKLER PROTECTION SYSTEM SHALL PROVIDE A "KNOX BOX" KEY ENTRY SYSTEM. THIS KNOX BOX SHALL BE MOUNTED ON THE MAIN EXTERIOR ENTRANCE TO THE BUILDING OR AS OTHERWISE DIRECTED BY THE FIRE OFFICIAL. MOUNT KNOX BOX ON WALL AT 5 FEET A.F.F. ON DOOR HANDLE SIDE OF THE DEDICATED RISER ROOM DOOR. THIS KNOX BOX SHALL BE ORDERED THROUGH THE TOWN OF SMITHFIELD FIRE DEPARTMENT AND SHALL BE IN PLACE BEFORE A CERTIFICATE OF OCCUPANCY IS ISSUED. FORMS ARE AVAILABLE FROM THE TOWN OF SMITHFIELD FIRE DEPARTMENT. AVERAGE DELIVERY TIME IS FIVE (5) TO SIX (6) WEEKS. KEYS SHALL BE PROVIDED TO THE TOWN OF SMITHFIELD FIRE DEPARTMENT BY THE OWNER/MANAGER.

J. IDENTIFICATION
THE EXTERIOR DOOR LEADING TO THE DEDICATED SPRINKLER RISER ROOM SHALL BE LABELED WITH MINIMUM TWO (2) INCH LETTERING DESIGNATING "SPRINKLER RISER ROOM" IN A CONTRASTING COLOR. DURABLE VINYL LETTERING IS SUGGESTED.

K. FIRE ALARM PANEL LOCATION
WHEN A BUILDING ID PROTECTED BY AN AUTOMATIC SPRINKLER SYSTEM AND HAS A FIRE ALARM SYSTEM, THE FIRE ALARM CONTROL PANEL OR A REMOTE ANNUNCIATOR OF THE FIRE ALARM CONTROL PANEL SHALL BE PLACED WHERE THE FIRE DEPARTMENT IS MOST LIKELY TO ACCESS THE BUILDING OR AS DIRECTED BY THE FIRE OFFICIAL. THIS CONTROL PANEL SHALL HAVE THE CAPACITY OF SILENCING AND RESETTING. A FRAMED ZONE MAP SHALL BE ADJACENT TO THE FIRE ALARM CONTROL PANEL. NOMENCLATURE SHALL CORRESPOND WITH THE ZONE MAP.

6.08 TESTING AND INSPECTION

ALL MATERIALS USED MUST HAVE A PRELIMINARY INSPECTION BY THE INSPECTOR BEFORE THEY SHALL BE ALLOWED TO BE INSTALLED. MATERIALS REJECTED BY THE INSPECTOR SHALL BE IMMEDIATELY REMOVED FROM THE JOBSITE.

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THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, AND EQUIPMENT TO PERFORM ALL TESTING AND INSPECTIONS TO THE SATISFACTION OF THE INSPECTOR. THE TOWN OF SMITHFIELD SHALL PROVIDE WATER FOR TESTING PURPOSES ON WATER MAINS.

A. PIGGING AND FLUSHING
ALL NEW MAINS LESS THAN SIXTEEN (16) INCHES IN DIAMETER SHALL BE PIGGED WITH A POLYETHYLENE "PIG". PIGGING SHALL OCCUR PRIOR TO HYDROSTATIC TESTING AND CHLORINATION. THE PIG SHOULD BE INSERTED IN THE FIRST JOINT OF PIPE AND BLOWN OUT ALONG WATER LINE THROUGH A BLOW-OFF ASSEMBLY OR A FIRE HYDRANT. THE USE OF A DISASSEMBLED FIRE HYDRANT TO REMOVE THE PIG MAY ONLY OCCUR ON SMALL WATER LINES. A BLOW-OFF ASSEMBLY IN ACCORDANCE WITH STANDARD DETAILS IS REQUIRED AT THE END OF ALL MAINS.

FOLLOWING PIGGING OF THE WATER LINE, FLUSHING MUST OCCUR UNTIL CLEAR WATER IS DISCHARGED FORM THE BLOW-OFF. EXCESSIVE FLUSHING IS DISCOURAGED IN AN EFFORT TO CONSERVE WATER.

WHEN A NEW SHORT WATER LINE IS INSTALLED BETWEEN TWO (2) EXISTING WATER LINES, THE TOWN ENGINEER MAY WAIVE THE REQUIREMENT FOR PIGGING. IF THE WTAER LINE IS LONG, TEMPORARY PIG LAUNCHING AND RETRIEVING STATIONS MUST BE INSTALLED NEAR THE TIE POINTS TO THE EXISTING LINES.

B. HYDROSTATIC TESTING
NO VALVE IN THE EXISTING TOWN OF SMITHFIELD WATER SYSTEM SHALL BE OPERATED WITHOUT AUTHORIZATION FOR THE PUBLIC UTILITIES DEPARTMENT. A SECTION OF LINE WHICH IS TO BE HYDROSTATICALLY TESTED, SHALL BE SLOWLY FILLED WITH WATER AT A RATE WHICH WILL ALLOW COMPLETE EVACUATION OF AIR FROM THE LINE. HAND PUMPS SHALL NOT BE USED FOR THE PRESSURE TESTING OF WATER MAINS.TAPS USED FOR TESTING PURPOSES SHALL BE REMOVED AFTER TESTING AND REPAIRED USING A STAINLESS STEEL FULL CIRCLE REPAIR CLAMP IN ACCORDANCE WITH STANDARD DETAILS.

THE LINE SHALL BE TESTED TO A PRESSURE OF 200 PSI, AS MEASURED AT THE LOWEST ELEVATION OF THE LINE, FOR A DURATION OF TWO (2) HOURS. THE PRESSURE GAUGE USED IN THE HYDROSTATIC TEST SHALL BE CALIBRATED IN INCREMENTS OF 10 PSI, OR LESS. AT THE END OF THE TEST PERIOD, THE LEAKAGE SHALL BE MEASURED WITH AN ACCURATE WATER METER.

PIPE SIZE (INCHES)	ALLOWABLE LEAKAGE (GALLONS PER 1,000 FEET OF PIPE)
4	0.85
6	1.28
8	1.70
12	2.56
16	3.40
20	4.24
24	5.10

ALL VISIBLE LEAKS ARE TO BE REPAIRED, REGARDLESS OF THE AMOUNT OF LEAKAGE.

C. CHLORINATION
ALL ADDITIONS OR REPLACEMENTS TO THE WATER SYSTEM SHALL BE CHLORINATED BEFORE BEING PLACED IN SERVICE. SUCH CHLORINATION MUST TAKE PLACE UNDER THE SUPERVISION OF AN INSPECTOR.

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 06.00_P10 | DATE: 06/05/2018

CHLORINATION OF A COMPLETED LINE SHALL BE CARRIED OUT IN THE FOLLOWING MANNER:

a) TAPS WILL BE MADE AT THE CONTROL VALVE AT THE UPSTREAM END OF THE LINE. THE LINE SHALL HAVE A UNIFORM CONCENTRATION OF 100 PPM TOTAL CHLORINE AT ALL EXTREMITIES, INCLUDING VALVES.

b) A SOLUTION OF WATER CONTAINING HIGH TEST HYPOCHLORITE (70%) AVAILABLE CHLORINE SHALL BE INTRODUCED INTO THE LINE BY REGULATED PUMPING AT THE CONTROL VALVE TAP. THE CHART BELOW SHOWS THE REQUIRED QUANTITY OF 70% HTH COMPOUND TO BE CONTAINED IN A SOLUTION IN EACH 1,000 FEET SECTION OF LINE TO PRODUCE THE DESIRED CONCENTRATION OF 100 PPM.

PIPE SIZE (INCHES)	POUNDS HIGH TEST HYPOCHLORITE (70%) PER 1,000 FEET OF LINE
6	1.76
8	3.12
10	4.84
12	7.00
14	9.52
16	12.44
20	19.52
24	28.00

THE HTH SOLUTION SHALL BE CIRCULATED IN THE MAIN BY OPENING THE CONTROL VALVE AND SYSTEMATICALLY MANIPULATING HYDRANTS AND TAPS AT THE LINE EXTREMITIES. THE HTH SOLUTION MUST BE PUMPED IN AT A CONSTANT RATE FOR EACH DISCHARGE RATE IN ORDER THAT A UNIFORM CONCENTRATION WILL BE PRODUCED IN MAINS.

HTH SOLUTION SHALL REMAIN IN LINES FOR NO LESS THAN 24 HOURS OR AS DIRECTED BY THE TOWN ENGINEER.

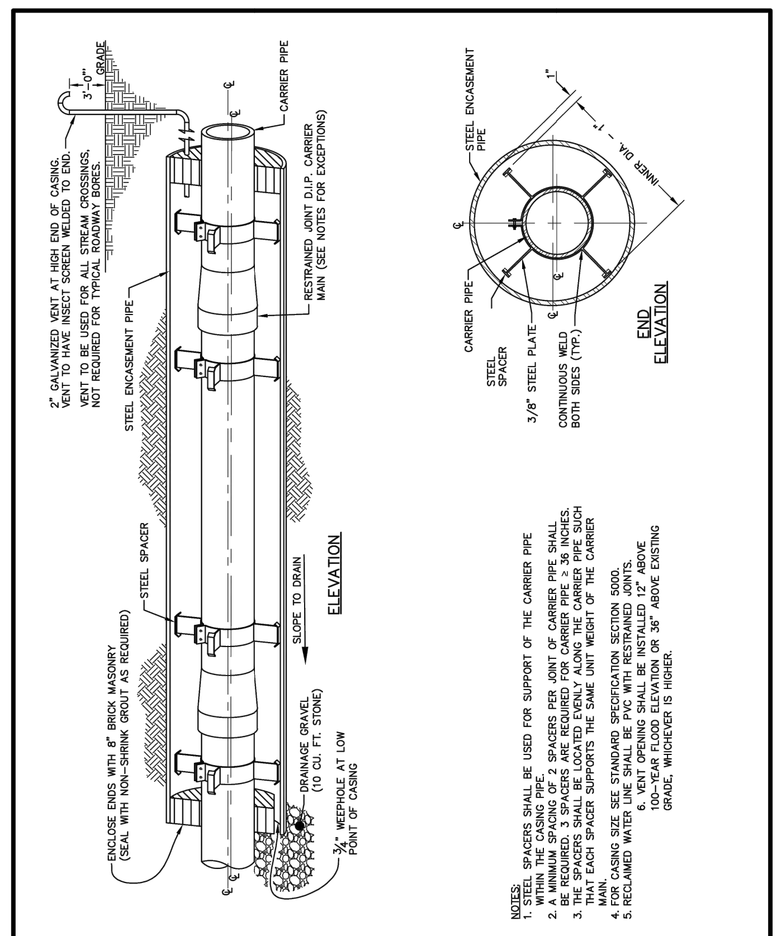
EXTREME CARE WILL BE EXERCISED AT ALL TIMES TO PREVENT THE HTH SOLUTION FORM ENTERING EXISTING MAINS.

D. BACTERIOLOGICAL SAMPLING
FREE RESIDUAL CHLORINE AFTER 24 HOURS SHALL BE AT LEAST 10 PPM OR THE INSPECTOR WILL REQUIRE THAT THE LINES BE RECHLORINATED.

FLUSHING OF LINES MAY PROCEED AFTER 24 HOURS, PROVIDED THE FREE RESIDUAL CHLORINE ANALYSIS IS SATISFACTORY. FLUSHING SHALL BE CONTAINED UNTIL AN ORTHOTOLIDINE CHECK SHOWS THAT THE LINES CONTAIN ONLY THE NORMAL CHLORINE RESIDUAL. SAMPLES FOR BACTERIOLOGICAL ANALYSIS SHALL BE COLLECTED IN THE PRESENCE OF A TOWN OFFICIAL 24 HOURS AFTER FLUSHING IS COMPLETED. THE CONTRACTOR SHALL PROVIDE PROPER CERTIFICATION OF THE BACTERIOLOGICAL ANALYSIS TO THE TOWN UPON COMPLETION OF TESTING AND PRIOR TO UTILIZATION OF THE LINE.

IF TEST RESULTS ARE UNSATISFACTORY, THE CONTRACTOR SHALL IMMEDIATELY RECHLORINATE LINES AND PROCEED WITH SUCH MEASURES AS ARE NECESSARY TO SECURE STERILE LINES.

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 06.00_P11 | DATE: 06/05/2018



NOTES:
1. STEEL SPACERS SHALL BE USED FOR SUPPORT OF THE CARRIER PIPE WITHIN THE CASING PIPE.
2. A MINIMUM SPACING OF 2 SPACERS PER JOINT OF CARRIER PIPE SHALL BE REQUIRED. SPACERS ARE REQUIRED TO CLOSE TO EACH SIDE OF JOINTS.
3. THE SPACERS SHALL BE LOCATED EVENLY ALONG THE CARRIER PIPE SUCH THAT EACH SPACER SUPPORTS THE SAME UNIT WEIGHT OF THE CARRIER MAIN.
4. FOR CASING SIZE SEE STANDARD SPECIFICATION SECTION 5000.
5. RECLAIMED WATER LINES SHALL BE PVC WITH RESILIENT JOINTS.
6. VENT OPENING SHALL BE INSTALLED 12" ABOVE 100-YEAR FLOOD ELEVATION OR 36" ABOVE EXISTING GROUND, WHICHEVER IS HIGHER.

SMITHFIELD NORTH CAROLINA | CARRIER PIPE | SMITHFIELD, NORTH CAROLINA PLANNING DEPARTMENT | SCALE: NTS | DETAIL NO. 05.02 | DATE:06/16/2023

THE NEW WATER SYSTEM SHALL BE VALVED OFF FROM THE EXISTING SYSTEM UNTIL A SATISFACTORY BACTERIOLOGICAL SAMPLE HAS BEEN OBTAINED AND THE INSPECTOR HAS AUTHORIZED THE USE OF THE NEW WATER SYSTEM.

6.09 FIRE PROTECTION DURING CONSTRUCTION

THE FIRE PROTECTION WATER SUPPLY SYSTEM, INCLUDING FIRE HYDRANTS, SHALL BE INSTALLED AND BE IN AT LEAST THE FUNCTIONAL STATUS PRIOR TO PLACING COMBUSTIBLE MATERIALS ON THE PROJECT SITE. IF PHASED CONSTRUCTION IS PLANNED, COORDINATED INSTALLATION OF THE FIRE PROTECTION WATER SYSTEM IS PERMITTED. COORDINATION OF THE WATER SYSTEM WILL BE DONE THROUGH THE PUBLIC UTILITIES DEPARTMENT AND THE SMITHFIELD FIRE DEPARTMENT. FUNCTIONAL STATUS WOULD INCLUDE MEETING ALL STANDARDS SET FORTH IN SECTION 6.08 – TESTING AND INSPECTION.

6.10 IRRIGATION SYSTEMS

ALL IRRIGATION SYSTEMS WITHIN PUBLIC STREET RIGHT OF WAY SHALL OBTAIN AN ENCROACHMENT AGREEMENT FOR THE TOWN, PRIOR TO INSTALLATION OF THE SYSTEM. PLANS DESIGNATING THE LOCATION, SIZE, MATERIAL DEPTH, ETC. SHALL BE SUBMITTED WITH THE APPLICATION FOR AN ENCROACHMENT AGREEMENT.

PIPE MATERIAL FOR THE MAINLINE PROPOSED TO BE USED WITHIN THE PUBLIC RIGHT OF WAY SHALL BE SCHEDULE 40 PVC OR GREATER. A DISTANCE OF AT LEAST TWO (2) FEET SHALL BE PROVIDED FROM THE BACK OF THE CURB. A MINIMUM DEPTH OF TWO (2) FEET SHALL BE PROVIDED.

THE IRRIGATION MAINLINE PIPE SYSTEM SHALL BE HYDROSTATICALLY TESTED AS PER SECTION 6.08, WITH A MINIMUM PRESSURE OF 250 PSI OR 50 PSI ABOVE WORKING PRESSURE.

IRRIGATION SYSTEMS SHALL HAVE A BACKFLOW PREVENTER INSTALLED IN ACCORDANCE WITH SECTION 6.06

ALL STREET CROSSINGS OF IRRIGATION SYSTEMS SHALL BE CONTAINED WITHIN AN ENCASEMENT CONDUIT. DUCTILE IRON CASING SHALL BE USED. IRRIGATION SYSTEMS INSTALLED IN THE MEDIANS OF TOWN MAINTAINED ROADWAYS MUST ALSO HAVE FRENCH DRAINS INSTALLED BEHIND THE CURB AND GUTTER, WHICH IS PIPED TO A STORM DRAIN SYSTEM.

6.11 REPAIR OF WATER LINES

JOINT LEAKS OF CAST IRON PIPE, DUCTILE IRON PIPE, AND PVC PIPE SHALL USE A BELL JOINT LEAK REPAIR CLAMP, AS MANUFACTURED BY ROCKWELL, OR OTHER APPROVED EQUAL.

LINE BREAKS OR PUNCTURES SHALL BE REPAIRED BY A FULL CIRCLE CLAMP AS MANUFACTURED BY ROCKWELL, OR OTHER APPROVED EQUAL.

LINE SPLITS OR BLOW OUTS SHALL BE REPAIRED BY REPLACING THE DAMAGED SECTION WITH DUCTILE IRON PIPE, OR C900 PVC PIPE, WITH REPAIR COUPLINGS AT EACH END. REPAIR COUPLING SHALL BE KRAUSZ HYMAX COUPLING, OR APPROVED EQUAL.

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 06.00_P12 | DATE: 06/05/2018

A. WATER SERVICE LINE REPAIRS
A WATER SERVICE LINE SEVERED BETWEEN THE WATER MAINS AND THE WATER METER SHALL BE REPAIRED USING NEW TYPE K COPPER TUBING AND BRASS THREE (3) PIECE COMPRESSION UNIONS.

A CORPORATION STOP PULLED OUT OF A PVC PIPE WATER MAIN SHALL HAVE A NEW SERVICE SADDLE AND A NEW CORPORATION STOP INSTALLED ON THE WATER MAIN.

A CORPORATION STOP PULLED OUT OF A DUCTILE IRON PIPE WATER MAIN SHALL HAVE A FULL CIRCLE REPAIR CLAMP PLACE OVER THE OLD TAP HOLE. A NEW TAP SHALL BE MADE AND A NEW CORPORATION STOP INSTALLED ON THE WATER MAIN.

END OF SECTION 6.00

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 06.00_P13 | DATE: 06/05/2018

PRELIMINARY PLANS NOT FOR REVIEW

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No.	Date:	Description:	By:

WATER DETAILS
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CW/JM
Checked By:	PMSJ
Job No.:	3-9-16

Sheet No. C-9.5

SECTION 7.00
SANITARY SEWER

A. DESIGN

LOCATION

1. ALL PUBLIC SANITARY SEWER MAINS SHALL BE INSTALLED IN DEDICATED STREET RIGHT-OF-WAY OR IN DEDICATED UTILITY EASEMENTS. SANITARY SEWER MAINS INSTALLED IN TOWN OF SMITHFIELD MAINTAINED STREETS SHALL BE LOCATED IN THE CENTER OF THE PAVEMENT. MAINS LOCATED WITHIN NCDOT RIGHT-OF-WAY SHALL BE PLACED OUTSIDE OF PAVEMENT LIMITS, IN ACCORDANCE WITH NCDOT STANDARDS.

2. MINIMUM WIDTHS OF PUBLIC SANITARY SEWER EASEMENTS SHALL BE 30 FEET FOR ALL MAIN SIZES UP TO 24". FOR SANITARY SEWER MAINS GREATER THAN 24", THE EASEMENT SHALL BE 40 FEET. SEE SECTION 2.10 FOR LANDSCAPE PLANTINGS WITHIN UTILITY EASEMENTS.

3. SEWER MAINS SHALL BE CENTERED WITHIN THEIR EASEMENTS UNLESS OTHERWISE DETERMINED BY THE TOWN ENGINEER.

4. PROPOSED SANITARY SEWER PARALLELING A CREEK SHALL BE DESIGNED TO A PROPER DEPTH TO ALLOW LATERAL CONNECTIONS SUCH THAT ALL CREEK CROSSINGS WILL BE BELOW STREAM BED ELEVATION UNLESS APPROVED BY THE TOWN ENGINEER. THE TOP OF THE SEWER MAIN SHALL HAVE AT LEAST THREE (3) FEET OF COVER BETWEEN THE MAIN AND THE STREAM BED. WHEN SUFFICIENT COVER CANNOT BE ACHIEVED, THE SEWER MAIN MUST BE MADE OF DUCTILE IRON PIPE WITH RESTRAINED JOINTS EQUIVALENT TO WATER MAIN STANDARDS. NO CROSSING WILL BE PERMITTED WITH LESS THAN ONE (1) FOOT OF COVER.

5. SANITARY SEWER MAINS SHALL NOT BE INSTALLED UNDER ANY PART OF WATER IMPOUNDMENT.

6. THE FOLLOWING MINIMUM SEPARATIONS MUST BE MAINTAINED:

   a) ANY PRIVATE OF PUBLIC WATER SUPPLY SOURCE – 100 FEET
   b) ANY OTHER STREAM, LAKE, OR IMPOUNDMENT – 10 FEET

   WHERE THE REQUIRED MINIMUM SEPARATION CANNOT BE MAINTAINED, DUCTILE IRON PIPE WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS MUST BE USED. THE MINIMUM SEPARATIONS SHALL NOT BE LESS THAN 50 FEET FROM A PRIVATE WELL OR A PUBLIC WATER SUPPLY SOURCE.

7. SANITARY SEWER LINES SHALL BE EXTENDED ALONG NATURAL DRAINAGE COURSES TO THE ADJACENT PROPERTY LINES.

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.01_P1 | DATE: 04/03/2018

SIZE

1. THE MINIMUM SIZE OF A PUBLIC GRAVITY SANITARY SEWER MAIN SHALL BE 8".

2. MAJOR INTERCEPTORS SHALL BE SIZED IN ACCORDANCE WITH THE MOST CURRENT TOWN OF SMITHFIELD LONG RANGE DEVELOPMENT PLAN. NEW SEWER SYSTEMS SHALL BE SIZED IN ACCORDANCE WITH THE FOLLOWING FLOW FACTORS:

LAND USE	FLOW FACTOR
RESIDENTIAL	120 GAL/BEDROOM (MINIMUM 2 BEDROOMS)
OFFICE & INSTITUTIONAL	0.09 GPD/SQ.FT. BLDG. SPACE
COMMERCIAL	0.12 GPD/SQ.FT. BLDG. SPACE
INDUSTRIAL	0.20 GPD/SQ.FT. BLDG. SPACE

   FLOW FACTORS NOT LISTED HEREIN SHALL BE IN ACCORDANCE WITH THE FACTORS RECOMMENDED BY THE NCDEQ.

   THESE FIGURES COVER NORMAL INFILTRATION; HOWEVER, AN ADDITIONAL ALLOWANCE SHALL BE MADE WHERE CONDITIONS ARE UNFAVORABLE.

3. FOR EXISTING SEWER SYSTEMS AN ADDITIONAL ALLOWANCE SHALL BE MADE TO THE ABOVE FLOW FACTORS WHERE THE EXISTING FLOW EXCEEDS THESE VALUES AND IMMEDIATE REMEDIAL MEASURES ARE NOT PROPOSED.

4. THE RATIO OF PEAK TO AVERAGE DAILY FLOW SHALL BE 2.5.

5. SANITARY SEWERS SHALL BE DESIGNED TO CARRY THE PROJECTED PEAK FLOW AT NO MORE THAN ½ FULL. THE MINIMUM VELOCITY FOR SANITARY SEWER LINES IS 2.0 FPS.

6. THE MINIMUM GRADES FOR PUBLIC SANITARY SEWER SHALL BE AS FOLLOWS:

MAIN SIZE (IN)	MINIMUM SLOPE (%)
8	0.50
10	0.40
12	0.28
15	0.15
18	0.12
21	0.10
24	0.08
30	0.06

   THE MINIMUM SLOPE FOR THE UPPERMOST REACH OF A SANITARY SEWER LINE SHALL BE 1.00%, REGARDLESS OF LINE SIZE.

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.01_P2 | DATE: 04/03/2018

7. THE MAXIMUM GRADE FOR SANITARY SEWER SHALL BE 10%". THE MAXIMUM VELOCITY IN SANITARY SEWERS IS 15 FT/SEC. THESE LIMITS MAY BE EXCEEDED WITH THE APPROVAL OF THE TOWN ENGINEER AND THE INCORPORATION OF THE FOLLOWING PROVISIONS:

   a. ALL SEWERS OF GREATER THAN 10% SLOPE SHALL BE DUCTILE IRON PIPE.
   b. CONCRETE ANCHORS SHALL BE INSTALLED ON ALL SEWERS OF GREATER THAN 10% SLOPE AT THE FOLLOWING SPACINGS:

      1. NOT OVER 36' CENTER TO CENTER ON GRADES FROM 10% TO 25%
      2. NOT OVER 24' CENTER TO CENTER ON GRADES FROM 25% TO 40%
      3. NOT OVER 16' CENTER TO CENTER ON GRADES OVER 40%

8. SEWER EXTENSIONS SHOULD BE DESIGNED FOR PROJECTED FLOWS.

9. PIPE DIAMETER CHANGES SHALL OCCUR IN A MANHOLE WITH AN INVERT OF THE LARGER PIPE LOWERED SUFFICIENTLY TO MAINTAIN THE SAME ENERGY GRADIENT.

10. ALL RESIDENTIAL SUBDIVISION LOTS SHALL BE SERVED BY GRAVITY SEWER UNLESS OTHERWISE APPROVED BY THE TOWN ENGINEER. IF A PUMP IS APPROVED, IT SHALL BE PRIVATELY MAINTAINED, MUST PUMP INTO A SERVICE CONNECTION PLACED ON THE RESIDENTIAL LOT, AND MUST HAVE A NOTE ON THE RECORDED PLAT INDICATING A PRIVATE PUMP MAY BE REQUIRED TO SERVE THAT LOT WITH SANITARY SEWER SERVICE.

INSTALLATION

1. SANITARY SEWER MAINS SHALL BE DEEP ENOUGH TO SERVE THE ADJOINING PROPERTY AND ALLOW FOR SUFFICIENT SLOPE IN LATERAL LINES. ALL SANITARY SEWER MAINS SHALL HAVE THE FOLLOWING MINIMUM COVERS:

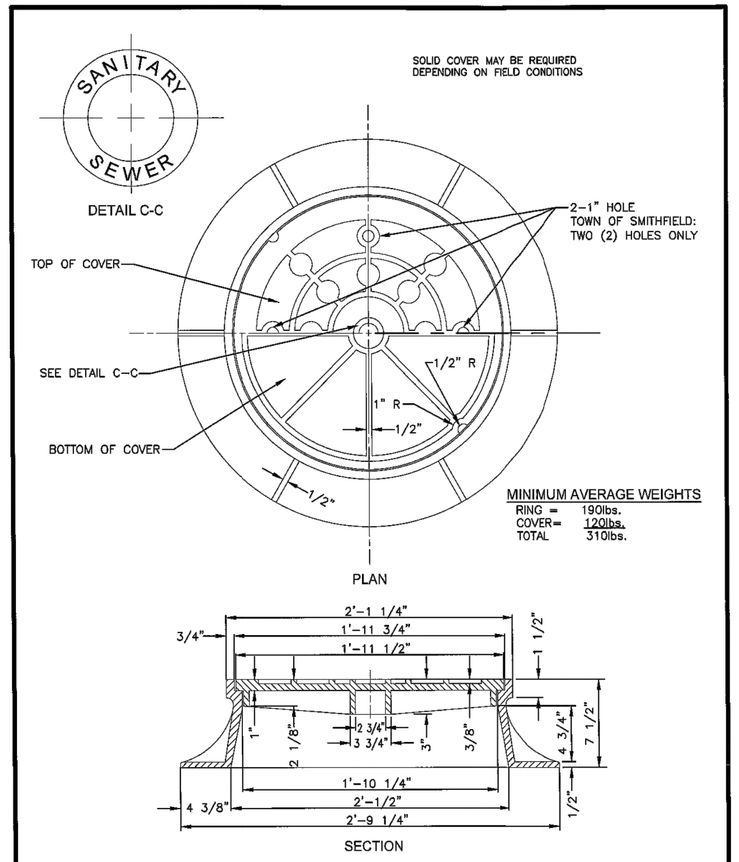
   a. FOUR (4) FEET FROM THE TOP OF THE PIPE TO THE FINISHED SUBGRADE WHEN UNDER A ROADWAY
   b. THREE (3) FEET FROM THE TOP OF PIPE TO THE FINISHED GRADE WHEN OUTSIDE A ROADWAY

   THE ABOVE REQUIREMENTS MAY BE WAIVED AT THE DIRECTION OF THE TOWN ENGINEER, IN WHICH CASE DUCTILE IRON PIPE SHALL BE INSTALLED.

2. ALL CONSTRUCTION RELATING TO THE UTILITY IMPROVEMENTS WHICH WILL MAINTAINED BY THE TOWN MUST BE PERFORMED BY A CONTRACTOR LICENSED FOR UTILITIES IN THE STATE OF NORTH CAROLINA..

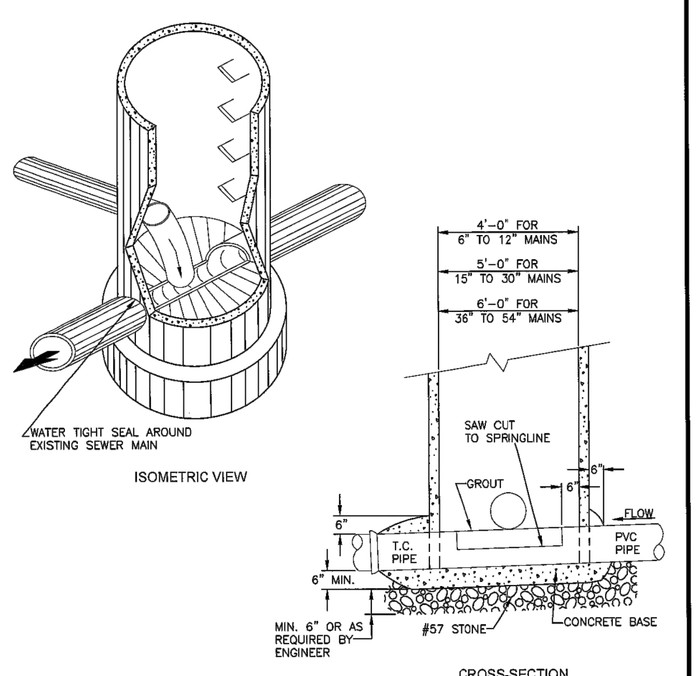
3. SEWER MAINS FROM 14 TO 20 FEET DEEP SHALL REQUIRE SPECIAL BEDDING IN ACCORDANCE WITH STANDARD DETAILS.

SMITHFIELD NORTH CAROLINA | STANDARD DETAIL AND SPECIFICATIONS MANUAL | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.01_P3 | DATE: 04/03/2018



PROVIDE MANHOLE INSERTS MANUFACTURED FROM HIGH DENSITY POLYETHYLENE, MEETING THE REQUIREMENTS OF ASTM D-1248, CLASS A, CATEGORY 5, TYPE III. INSERTS SHALL BE EQUIPPED WITH 1 GAS RELIEF VALVE, 1 VACUUM RELIEF VALVE, A CROSS-LINKED POLYETHYLENE GASKET AND ONE HEAVY WEIGHT POLYPROPYLENE LIFTING STRAP.

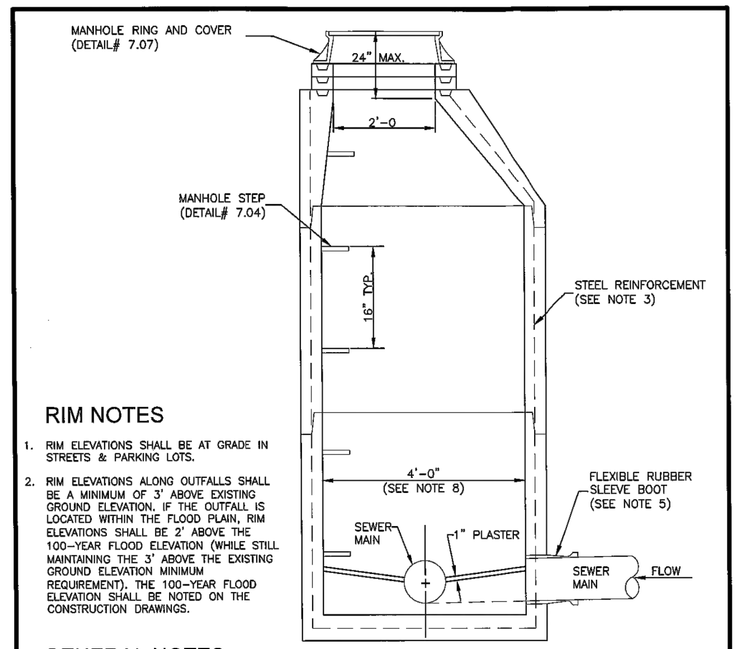
SMITHFIELD NORTH CAROLINA | STANDARD MANHOLE RING & COVER | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.06 | DATE: 04/03/2018



NOTES:

1. MANHOLE TO BE SET ON CONCRETE BASE AND BASE TO BE ONE POUR.
2. FOR VITRIFIED CLAY PIPE, CONCRETE SHALL BE POURED TO NEXT EXISTING JOINT (BOTH SIDES OF MANHOLE).
3. PIPE OPENING SHALL BE PRECAST BY MANUFACTURER.
4. FLOW SHALL BE MAINTAINED DURING CONSTRUCTION.
5. MINIMUM OF 4000 PSI CONCRETE REQUIRED.
6. THE CONTRACTOR SHALL PROVIDE A MINIMUM 6" COMPACTED #57 STONE BASE.
7. INVERT TO BE BUILT FROM PROPOSED PIPE TO EFFLUENT PIPE, ACCORDING TO DETAIL ON INVERTS.

SMITHFIELD NORTH CAROLINA | DOGHOUSE MANHOLE INSTALLED OVER EXISTING SEWER MAIN | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.04 | DATE: 04/03/2018



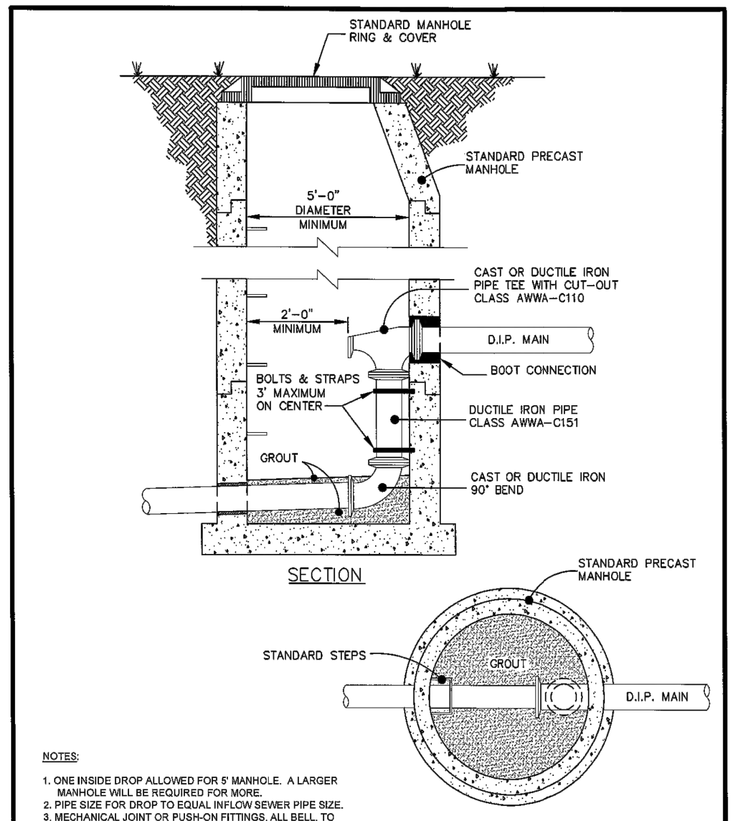
RIM NOTES

1. RIM ELEVATIONS SHALL BE AT GRADE IN STREETS & PARKING LOTS.
2. RIM ELEVATIONS ALONG OUTFALLS SHALL BE A MINIMUM OF 3' ABOVE EXISTING GROUND ELEVATION. IF THE OUTFALL IS LOCATED WITHIN THE FLOOD PLAIN, RIM ELEVATIONS SHALL BE 2' ABOVE THE 100-YEAR FLOOD ELEVATION (WHILE STILL MAINTAINING THE 3' ABOVE THE EXISTING GROUND ELEVATION MINIMUM REQUIREMENT). THE 100-YEAR FLOOD ELEVATION SHALL BE NOTED ON THE CONSTRUCTION DRAWINGS.

GENERAL NOTES

1. ALL PRE CAST CONCRETE MANHOLES SHALL CONFORM TO THE LATEST REVISION OF ASTM C478.
2. CONCRETE SHALL BE 4000 PSI AT 28 DAYS MINIMUM.
3. STEEL REINFORCEMENT SHALL BE GRADE 40 BILLET STEEL CONFORMING TO THE LATEST REVISION OF ASTM-A-185 FOR WALL REINFORCEMENT, AND THE LATEST REVISION OF ASTM-A615 FOR THE BASE REINFORCEMENT.
4. STANDARD JOINTS SHALL BE; SEALED WITH PUTTY TYPE PLASTIC CEMENT PER FED. SPEC. SS-C-153 OR AN O-RING TYPE JOINT CONFORMING TO THE LATEST REVISION OF ASTM-C443.
5. MANHOLE INLETS AND OUTLETS SHALL BE CAST IN PLACE FLEXIBLE RUBBER SLEEVES BOOTS PER THE LATEST REVISION OF ASTM-C923.
6. INVERTS TO BE CONSTRUCTED OF BRICK WITH A CONCRETE BENCH (DETAIL# 07.xx).
7. THE MAXIMUM SEPARATION OR INVERT IN TO INVERT OUT WITHIN A MANHOLE IS 0.50 FEET.
8. MANHOLES GREATER THAN 18 FEET IN DEPTH SHALL HAVE AN INSIDE DIAMETER OF 5'-0". FOR SANITARY SEWER MAINS GREATER THAN EIGHTEEN INCHES (18") IN DIAMETER, MANHOLES SHALL BE A MINIMUM OF 5'-0" IN DIAMETER.

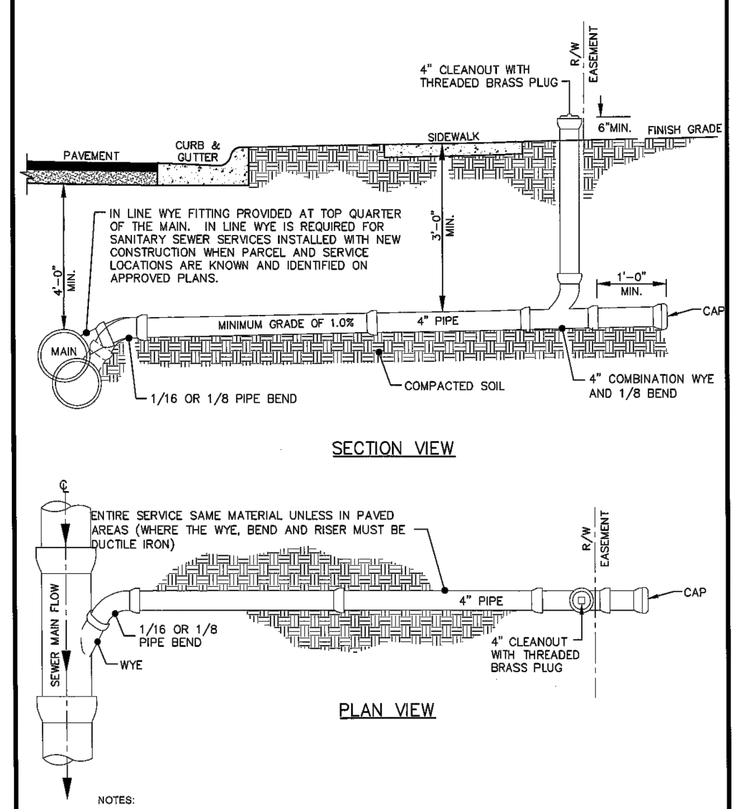
SMITHFIELD NORTH CAROLINA | STANDARD SANITARY SEWER MANHOLE | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.03 | DATE: 04/03/2018



NOTES:

1. ONE INSIDE DROP ALLOWED FOR 5' MANHOLE. A LARGER MANHOLE WILL BE REQUIRED FOR MORE.
2. PIPE SIZE FOR DROP TO EQUAL INFLOW SEWER PIPE SIZE.
3. MECHANICAL JOINT OR PUSH-ON FITTINGS, ALL BELL, TO BE USED.
4. SAW-CUT OR DRILL ALL HOLES FOR PIPE AND BOLTS.
5. DROP MANHOLE MANDATORY WHEN DIFFERENTIAL BETWEEN INVERTS IS GREATER THAN 20 INCHES.
6. STAINLESS STEEL STRAPS SHALL BE USED ON ALL DROPS GREATER THAN 5 FEET AT 18 INCH INTERVALS.

SMITHFIELD NORTH CAROLINA | INSIDE DROP MANHOLE | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.09 | DATE: 04/03/2018



NOTES:

1. CLEANOUT SHALL BE PLACED AT RIGHT-OF-WAY OR EDGE OF EASEMENT.
2. DO NOT INSTALL CLEANOUT INSIDE A FENCE.
3. CONNECTIONS TO 15 INCH OUTFALLS AND GREATER MUST BE MADE INTO MANHOLE.
4. MARKING TAPE SHALL BE INSTALLED FOR ALL SERVICE CONNECTIONS FROM THE MAIN LINE TO THE CLEANOUT FOR ALL NEW CONSTRUCTION OR RETROFIT INSTALLATIONS USING OPEN TRENCH METHODS.

SMITHFIELD NORTH CAROLINA | STANDARD SANITARY SEWER TAP AND SERVICE | SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES | SCALE: NTS | DETAIL NO. 07.05 | DATE: 04/03/2018

PRELIMINARY PLANS NOT FOR REVIEW

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No.	Date:	Description:	By:

SANITARY SEWER DETAILS I
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	PMSJ
Job No.:	E-9516

Sheet No. C-9.6

4. SEWERS OVER TWENTY (20) FEET DEEP SHALL REQUIRE DUCTILE IRON PIPE FOR THE ENTIRE RUN BETWEEN MANHOLES.

5. PIPE TRENCH EXCAVATION AND BACKFILLING SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 5.00 OF THESE SPECIFICATIONS.

6. TRANSITIONS OF PIPE MATERIAL SHALL OCCUR ONLY AT MANHOLES.

7. SANITARY SEWERS SHALL BE LAID TEN (10) FEET LATERALLY EDGE TO EDGE FROM EXISTING OR PROPOSED WATER MAINS UNLESS THE TOP OF THE SEWER MAIN IS AT LEAST EIGHTEEN (18) INCHES BELOW THE BOTTOM OF THE WATER MAIN AND THERE IS A HORIZONTAL SEPARATION OF AT LEAST THREE (3) FEET FORM THE CLOSEST EDGED OF THE PIPE.

8. WHERE SANITARY SEWERS CROSS BENEATH WATER MAINS WITH A VERTICAL SEPARATION OF EIGHTEEN (18) INCHES, OR LESS, OR WHERE WATER MAINS CROSS UNDER SEWER MAINS, THE ENTIRE LEG OF SEWER LINE SHALL BE DUCTILE IRON PIPE. THE WATER LINE PIPE SHALL BE CENTERED AT THE POINT OF CROSSING AND SHALL CROSS SANITARY SEWER LINES AT AN APPROXIMATE NINETY (90) DEGREE ANGLE.

9. SANITARY SEWERS SHALL HAVE THE TOP OF THE PIPE AT LEAST TWELVE (12) INCHES BELOW THE BOTTOM OF THE STORM SEWER PIPE WHEN THE HORIZONTAL SEPARATION BETWEEN THE CLOSEST EDGES OF THE TWO PIPES IS THREE (3) FEET OR LESS. WHERE SANITARY AND STORM SEWERS CROSS WITH A VERTICAL SEPARATION OF LESS THAN TWELVE (12) INCHES THE ENTIRE LEG OF SANITARY SEWER SHALL BE DUCTILE IRON PIPE WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS.

10. THERE SHALL BE A MINIMUM FIVE (5) FOOT HORIZONTAL SEPARATION BETWEEN PARALLEL GRAVITY AND/OR FORCE MAINS.

11. SEWER LINE EASEMENTS SHALL BE GRADED SMOOTH, FREE FROM ROCKS, BOULDERS, ROOTS, STUMPS, AND OTHER DEBRIS AND SEEDED & MULCHED UPON THE COMPLETION OF CONSTRUCTION.

12. THE DOWNSTREAM MANHOLES OF A SANITARY SEWER LINE EXTENSION UNDER CONSTRUCTION SHALL BE PLUGGED TO PREVENT THE INTRUSION OF GROUNDWATER, RUNOFF AND SEDIMENT INTO THE SANITARY SEWER SYSTEM. ALL WATER UPSTREAM OF THE PLUG SHALL BE PUMPED OUT OF THE SANITARY SEWER LINE AND ALL SEDIMENT AND SOLIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF BY THE CONTRACTOR. THE PLUG SHALL NOT BE REMOVED UNTIL THE LINE HAS BEEN INSPECTED BY THE TOWN TO ENSURE THAT ALL POSSIBLE POINTS OF INFLOW AND INFILTRATION HAVE BEEN SECURED.

MANHOLES

1. ALL MANHOLE CONE SECTIONS SHALL BE THE ECCENTRIC TYPE

2. MANHOLES SHALL BE SPACED AT A MAXIMUM DISTANCE OF 400 FEET APART FROM CENTER OF MANHOLE TO CENTER OF MANHOLE.

3. MANHOLES FOR SEWERS UNDER 21 INCHES IN DIAMETER SHALL BE A MINIMUM OF FOUR (4) FEET IN DIAMETER. MANHOLES FOR SEWERS LARGER THAN 21 INCHES IN DIAMETER SHALL BE FIVE (5) FEET IN DIAMETER. MANHOLES WITH INSIDE DROPS SHALL BE A MINIMUM OF FIVE (5) FEET IN DIAMETER.

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4. MANHOLES SHALL BE INSTALLED AT EACH DEFLECTION OF THE LINE AND/OR GRADE. THE FLOW CHANNEL THROUGH MANHOLES SHOULD BE SMOOTH AND SHALL CONFORM TO THE SHAPE AND SLOPE OF THE ENTERING SANITARY SEWER MAIN. CENTERLINE INVERTS OF THE FLOW CHANNEL SHALL BE PROVIDED WITH THE "INVERT IN" ELEVATION COMPUTED AS PER THE ENTERING SEWER LINE SLOPE. THERE SHALL BE A MINIMUM DROP OF 0.2' ACROSS THE MANHOLE TO THE EXITING SEWER LINE, OR "INVERT OUT". ANY DEVIATION FROM THIS DESIGN WILL NEED THE APPROVAL OF THE PUBLIC UTILITIES DIRECTOR.

MANHOLE FLOW PATHS SHALL BE CONSTRUCTED OF SLICK SIDED RED BRICK OR PRECAST CONCRETE. THE INVERT SHALL BE SMOOTH AND UNIFORM IN SHAPE ALONG THE ENTIRE LENGTH. MANHOLES SHALL HAVE A MINIMUM OF FOUR (4) FEET IN DIAMETER, UNLESS THERE IS AN INSIDE DROP. FOR INSIDE DROP MANHOLES, A MINIMUM DIAMETER OF FIVE(5) FEET SHALL BE USED.

FOR INSIDE DROP MANHOLES, THE LAST LEG OF THE INCOMING SEWER MAIN SHALL BE DUCTILE IRON.

5. MANHOLES NOT LOCATED IN ROADWAYS SHALL HAVE A TOP ELEVATION BETWEEN 18" AND 36" ABOVE FINISHED GRADE.

6. MANHOLE TOPS SHALL BE ELEVATED TWO (2) FEET ABOVE THE FUTURE 500-YEAR FLOOD PLAIN, PER NCDEQ REQUIREMENTS, OR SHALL BE EQUIPPED WITH WATERTIGHT FRAMES AND COVERS.

7. MANHOLES LOCATED WITHIN THE 100-YEAR FLOODPLAIN, OR IN AREAS OF HIGH GROUND WATER SHALL BE WATERPROOFED AT THE JOINTS.

B. MATERIALS

MATERIALS TO BE UTILIZED SHALL BE THOSE AS SPECIFIED HEREIN, UNLESS AN APPROVED EQUAL IS AUTHORIZED BY THE PUBLIC UTILITIES DIRECTOR.

EACH LENGTH OF PIPE TO BE USED SHALL HAVE PLAINLY AND PERMANENTLY MARKED THEREON THE FOLLOWING INFORMATION, AS WELL AS, ANY ADDITIONAL INFORMATION SPECIFICALLY NOTED IN THE SECTIONS BELOW:

a) PIPE CLASS DESIGNATION
b) MANUFACTURER'S NAME OR TRADEMARK
c) NOMINAL PIPE SIZE

ALL NEW CONSTRUCTION FOR SEWER MAINS SHALL BE MADE OF EITHER DUCTILE IRON PIPE (DIP) OR POLYVINYL CHLORIDE PIPE (PVC). NO OTHER MATERIAL WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM THE PUBLIC UTILITIES DIRECTOR.

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DUCTILE IRON PIPE (DIP)

DUCTILE IRON PIPE SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C150 AND C151 FOR A LAYING CONDITION TYPE 2 AND A WORKING PRESSURE AS FOLLOWS:

3" – 12"	350 PSI
15" – 21"	250 PSI
24"	200 PSI
GREATER THAN 24"	150 PSI

PIPE JOINTS SHALL BE OF THE PUSH-ON TYPE AS PER AWWA CIII. PIPE LINING SHALL BE EPOXY COATED PROTECTO 401, OR APPROVED EQUAL, IN ACCORDANCE WITH AWWA C104.

POLYVINYL CHLORIDE PIPE (PVC)

PVC PIPE SHALL BE MADE OF PVC PLASTIC HAVING A CELL CLASSIFICATION OF 12454-B, 12454-C, OR 13364-B WITH MINIMUM TENSILE MODULUS OF 500,000 PSI. PVC PIPE SHALL HAVE INTEGRAL WALL BELL AND SPIGOT JOINTS FOR THE CONVEYANCE OF DOMESTIC SEWAGE. ALL FITTINGS SHALL BE MADE OF PVC PLASTIC. PVC FITTINGS MUST BE MANUFACTURED BY PIPE SUPPLIER, OR APPROVED EQUAL, AND HAVE BELL & SPIGOT CONFIGURATIONS COMPATIBLE WITH THAT OF THE PIPE.

ALL PIPE LESS THAN 18 INCHES IN DIAMETER SHALL HAVE A MAXIMUM STANDARD DIMENSION RATIO (SDR) OF 35. WHERE LAYING CONDITIONS SO WARRANT, AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, LOWER SDR VALUES (STRONGER PIPE) MAY BE REQUIRED.

PVC PIPE 18 INCHES IN DIAMETER AND LARGER MUST BE SPIRAL WOUND AS DEFINED IN ASTM F-794, SERIES 46. PIPE STRENGTH SHALL BE EQUAL TO OR EXCEED THAT REQUIRED FOR PIPE LESS THAN 18 INCHES IN SIZE.

INSTALLATION SHALL CONSIST OF CLASS I BEDDING MATERIAL PLACED 4 INCHES BELOW THE PIPE BARREL AND CONTINUING TO A MINIMUM OF THE PIPE SPRING LINE, AS PER ASTM D2321. IN ADDITION, THE INSTALLATION OF PVC PIPE SHALL INCLUDE A METALLIC LOCATION STRIP BURIED IN THE BACKFILL, IN ACCORDANCE WITH STANDARD DETAILS.

C. ADDITIONAL REQUIREMENTS FOR SEMI-RIGID PIPE (PVC)

THE INSTALLATION SHALL SATISFY THE REQUIREMENTS OF THE MANUFACTURER, AND/OR THE FOLLOWING, WHICHEVER IS MORE STRINGENT:

1) INSTALLATION OF PVC PIPE SHALL FOLLOW THE RECOMMENDATIONS OF ASTM D-2321 "UNDERGROUND INSTALLATION OF FLEXIBLE THERMOPLASTIC SEWER PIPE". FOR SEMI-RIGID PIPES BEDDING MATERIAL SHALL BE CLASS I. IN ANY AREA WHERE THE PIPE WILL BE INSTALLED BELOW EXISTING OR FUTURE GROUND WATER LEVELS OR WHERE THE TRENCH COULD BE SUBJECT TO UNDULATION, ADDITIONAL CLASS I MATERIAL SHALL BE USED FOR BEDDING. REFER TO STANDARD DETAILS FOR EMBEDMENT REQUIREMENTS.

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2) THE MANUFACTURER'S SPECIFICATIONS OR OTHERWISE APPROVED METHOD SHALL BE USED IN DETERMINING THE STIFFNESS CLASS OF THE PIPE TO BE INSTALLED SO AS TO ATTAIN THE REQUIRED DEFLECTION CONTROL. THE CLASS OF THE PIPE MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR.

3) THE MAXIMUM ALLOWABLE DEFLECTION AFTER INSTALLATION SHALL BE LESS THAN 3% FOR SEMI-RIGID PIPE. A MANDREL TEST ON TRUSS PIPE SHALL BE REQUIRED IF THE INSPECTOR FINDS A PROBLEM DURING VISUAL INSPECTION. THE MANDREL (GO/NO-GO) DEFLECTION TEST MUST BE PERFORMED ON EACH LINE PRIOR TO ACCEPTANCE, AND NO LESS THAT 30 DAYS AFTER INSTALLATION. THE CONTRACTOR SHALL SUPPLY THE MANDREL USED FOR THIS PERFORMANCE TEST. THE MANDREL DEVICE SHALL BE CYLINDRICAL IN SHAPE HAVING NINE (9) POSSIBLE CONTACT POINTS WITH THE PIPE. THE MANDREL'S LENGTH AND DIAMETER SHALL EQUAL THE DIMENSIONS IN THE FOLLOWING TABLE, AND SHALL BE SUBJECT TO THE INSPECTOR'S APPROVAL.

NOMINAL DIAMETER	MIN. LENGTH	DIA. MANDREL
8"	8"	7.52"
10"	10"	9.45"
12"	10"	11.40"
15"	12"	14.31"

4) FOR PVC PIPE, THE PIPE SHALL BE PRODUCED WITH BELL AND SPIGOT END CONSTRUCTION. JOINING SHALL BE ACCOMPLISHED BY RUBBER GASKET, IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION, UNLESS OTHERWISE DIRECTED BY THE PUBLIC UTILITIES DIRECTOR. EACH PIPE LENGTH SHALL BE CLEARLY MARKED WITH INFORMATION INCLUDING PIPE SIZE, PROFILE NUMBER AND CLASS NUMBER.

5) A MINIMUM TRENCH WIDTH SHALL BE THREE (3) FEET

6) THE BEDDING (6" MINIMUM) AND EMBEDMENT MATERIALS SHALL BE PER ASTM D2321. THE EMBEDMENT MATERIALS SHALL BE INSTALLED FROM TRENCH WALL TO TRENCH WALL AND FROM FOUR (4) INCHES BELOW THE INVERT TO A MINIMUM OF SIX (6) INCHES ABOVE THE CROWN OF THE PIPE.

7) THE BEDDING AND EMBEDMENT MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 90% STANDARD PROCTOR DENSITY FOR CLASS I MATERIALS.

8) IF HYDRAULIC JACK SHORING IS UTILIZED FOR TRENCH WALLS, WHERE SHORING IS USED, IT SHALL BE KEPT TO THE AREA JUST ABOVE THE TOP OF THE PIPE. THIS WILL ENSURE THE EMBEDMENT MATERIALS AND PIPE WILL NOT BE DISTURBED WHEN REMOVAL IS MADE.

BEDDING AND EMBEDMENT MATERIAL CLASSIFICATIONS SHALL BE DEFINED AS FOLLOWS:

CLASS I – ANGULAR, (1/4 TO 3/4 INCH) GRADED STONE, INCLUDING A NUMBER OF FILL MATERIALS THAT HAVE REGIONAL SIGNIFICANCE SUCH AS CRUSHED STONE AND CRUSHED GRAVEL.

CLASS II – COARSE SANDS AND GRAVEL WITH A MAXIMUM PARTICLE SIZE OF 1/2 INCH, INCLUDING VARIOUSLY GRADED SANDS AND GRAVELS CONTAINING SMALL PERCENTAGES OF FINES, GENERALLY GRANULAR AND NON-COHESIVE, EITHER WET OR DRY. SOIL TYPES GW, GP, SW AND SP ARE INCLUDED IN THIS CLASS.

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CLASS III – FINE SAND AND CLAYEY GRAVELS, INCLUDING FINE SANDS, SAND-CLAY MIXTURES, AND GRAVEL-CLAY MIXTURES, SOIL TYPES GM, GC, SM AND SC ARE INCLUDED IN THIS CLASS.

CLASS IV – SILT, SILTY CLAYS, AND CLAYS, INCLUDING INORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY AND LIQUID LIMITS. SOIL TYPES MH. ML. CH, AND CL ARE INCLUDED IN THIS CLASS. THESE MATERIALS ARE NOT RECOMMENDED FOR EMBEDMENT.

7.02 FORCE SEWER MAINS

A. MATERIALS

DUCTILE IRON PIPE SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C150 AND C151 FOR AL LAYING CONDITION TYPE 2 AND A WORKING PRESSURE AS FOLLOWS:

3" – 12"	350 PSI
14" – 20"	250 PSI
24"	200 PSI
> 24"	150 PSI

PIPE JOINTS SHALL BE PUSH-ON TYPE AS PER AWWA CIII. PIPE LINING SHALL BE CEMENT MORTAR WITH A SEAL COAT OF BITUMINOUS MATERIAL, ALL IN ACCORDANCE WITH AWWA C104.

PVC PIPE SHALL MEET THE REQUIREMENTS OF AWWA C900. PIPE SHALL BE CLASS 150, SDR 18, INTEGRAL BELL WITH STRENGTH EQUAL TO THE PIPE WALL, CAST IRON O.C., 18 FOOT LENGTH, WITH A SOLID ELASTROMERIC RING

PVC PIPE FOR FORCE MAINS WITH A DIAMETER OF THREE (3) INCHES OR LESS SHALL BE SDR 21 OF SCHEDULE 40 IN ACCORDANCE WITH ASTM D1785.

PVC PIPE WILL REQUIRE THE INSTALLATION OF A DETECTOR TAPE PLACED A MAXIMUM OF TWO (2) FEET BELOW THE COVERING SURFACE. THE DETECTOR TAPE SHALL BE THREE (3) INCH WIDE TAPE.

PIPE FITTINGS SHALL BE DUCTILE IRON DESIGNED AND MANUFACTURED AS PER AWWA c110. SIZES OF FITTINGS UP TO AND INCLUDING 12 INCH SHALL BE DESIGNED FOR AN INTERNAL PRESSURE OF 250 PSI; LARGER SIZE FITTINGS SHALL BE DESIGNED FOR AN INTERNAL PRESSURE OF 150 PSI. JOINTS FOR FITTINGS SHALL BE MECHANICAL JOINT AND LINED WITH CEMENT MORTAR WITH A SEAL COAT OF BITUMINOUS MATERIAL, ALL IN ACCORDANCE WITH AWWA C104.

B. INSTALLATION

REACTION BLOCKING FOR ALL FITTINGS OR COMPONENTS SUBJECT TO HYDROSTATIC THRUST SHALL BE SECURELY ANCHORED BY THE USE OF CONCRETE THRUST BLOCKS POURED IN PLACE. THE REACTION AREAS ARE SHOWN IN STANDARD DETAILS. NO CONCRETE SHALL INTERFERE WITH THE REMOVAL OF FITTINGS. MATERIAL FOR REACTION BLOCKING SHALL BE 3000 PSI CONCRETE.

FORCE MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF THREE (3) FEET MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED SUBGRADE.

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CLASS III – FINE SAND AND CLAYEY GRAVELS, INCLUDING FINE SANDS, SAND-CLAY MIXTURES, AND GRAVEL-CLAY MIXTURES, SOIL TYPES GM, GC, SM AND SC ARE INCLUDED IN THIS CLASS.

CLASS IV – SILT, SILTY CLAYS, AND CLAYS, INCLUDING INORGANIC CLAYS AND SILTS OF MEDIUM TO HIGH PLASTICITY AND LIQUID LIMITS. SOIL TYPES MH. ML. CH, AND CL ARE INCLUDED IN THIS CLASS. THESE MATERIALS ARE NOT RECOMMENDED FOR EMBEDMENT.

7.02 FORCE SEWER MAINS

A. MATERIALS

DUCTILE IRON PIPE SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH AWWA C150 AND C151 FOR AL LAYING CONDITION TYPE 2 AND A WORKING PRESSURE AS FOLLOWS:

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24"	200 PSI
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PVC PIPE SHALL MEET THE REQUIREMENTS OF AWWA C900. PIPE SHALL BE CLASS 150, SDR 18, INTEGRAL BELL WITH STRENGTH EQUAL TO THE PIPE WALL, CAST IRON O.C., 18 FOOT LENGTH, WITH A SOLID ELASTROMERIC RING

PVC PIPE FOR FORCE MAINS WITH A DIAMETER OF THREE (3) INCHES OR LESS SHALL BE SDR 21 OF SCHEDULE 40 IN ACCORDANCE WITH ASTM D1785.

PVC PIPE WILL REQUIRE THE INSTALLATION OF A DETECTOR TAPE PLACED A MAXIMUM OF TWO (2) FEET BELOW THE COVERING SURFACE. THE DETECTOR TAPE SHALL BE THREE (3) INCH WIDE TAPE.

PIPE FITTINGS SHALL BE DUCTILE IRON DESIGNED AND MANUFACTURED AS PER AWWA c110. SIZES OF FITTINGS UP TO AND INCLUDING 12 INCH SHALL BE DESIGNED FOR AN INTERNAL PRESSURE OF 250 PSI; LARGER SIZE FITTINGS SHALL BE DESIGNED FOR AN INTERNAL PRESSURE OF 150 PSI. JOINTS FOR FITTINGS SHALL BE MECHANICAL JOINT AND LINED WITH CEMENT MORTAR WITH A SEAL COAT OF BITUMINOUS MATERIAL, ALL IN ACCORDANCE WITH AWWA C104.

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REACTION BLOCKING FOR ALL FITTINGS OR COMPONENTS SUBJECT TO HYDROSTATIC THRUST SHALL BE SECURELY ANCHORED BY THE USE OF CONCRETE THRUST BLOCKS POURED IN PLACE. THE REACTION AREAS ARE SHOWN IN STANDARD DETAILS. NO CONCRETE SHALL INTERFERE WITH THE REMOVAL OF FITTINGS. MATERIAL FOR REACTION BLOCKING SHALL BE 3000 PSI CONCRETE.

FORCE MAINS SHALL BE INSTALLED WITH A MINIMUM COVER OF THREE (3) FEET MEASURED FROM THE TOP OF THE PIPE TO THE FINISHED SUBGRADE.

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SEWAGE AIR RELEASE VALVES SHALL BE INSTALLED AT ALL THE HIGH POINTS OF THE FORCE MAINS IN ACCORDANCE WITH THE STANDARDS DETAILS. MANHOLES CONTAINING AIR RELEASE VALVES SHALL RECEIVE AN EPOXY COATING ON THE INSIDE. THE THICKNESS OF THE COATING SHALL BE DETERMINED BY THE PUBLIC UTILITIES DIRECTOR.

SEWER FORCE MAINS SHALL BE INSTALLED IN DEDICATED PUBLIC RIGHTS-OF-WAY OR IN DEDICATED UTILITY EASEMENTS. SEE SECTION 2.10 FOR LANDSCAPE PLANTING REQUIREMENTS WITHIN EASEMENTS. THE EASEMENTS SHALL HAVE THE FOLLOWING DIMENSIONS:

LINE SIZE	MINIMUM EASEMENT WIDTH
12" AND UNDER	30'
OVER 12"	30'

FORCE MAIN VALVES SHALL BE SPACED AT APPROPRIATE INTERVALS AS DETERMINED BY THE PUBLIC UTILITIES DIRECTOR, AND SHALL HAVE BOX CAPS MARKED "SEWER". FORCE MAIN VALVES SHALL BE RESILIENT WEDGE GATE TYPE.

THE RECEIVING MANHOLE FOR A FORCE MAIN SHALL RECEIVE AN INTERIOR EPOXY COATING WITH A THICKNESS OF 10 MILLS. THE FORCE MAIN SHALL DISCHARGE AT THE INVERT OF THE RECEIVING MANHOLE AND SHALL BE AS CLOSE AS POSSIBLE TO 180 DEGREES FROM THE OUTLET PIPE.

FORCE MAINS SHALL BE APPROPRIATELY IDENTIFIED UPON INSTALLATION SO THEY WILL NOT BE CONFUSED WITH POTABLE WATER LINES. THE PIPE MATERIAL SHALL BE DESIGNATED ON EACH JOINT OF PIPE AS "SEWER".

7.03 MANHOLES

MANHOLES SHALL BE PRECAST CONCRETE. ALL MANHOLES SHALL HAVE ECCENTRIC CONE SECTIONS.

PRECAST CONCRETE MANHOLES SHALL MEET ASTM C478 AS TO DESIGN AND MANUFACTURE. THE STANDARD JOINT SHALL BE SEALED WITH A PLASTIC CEMENT PUTTY MEETING FEDERAL SPECIFICATION SS-S-00210, SUCH AS RAM-NEK, OR A BUTYL RUBBER SEALANT. ALL LIFT HOLES MUST BE PLUGGED WITH NON-SHRINKING GROUT AFTER INSTALLATION. FOR PRECAST CONCRETE MANHOLES, SEE STANDARD DETAILS.

MANHOLE FRAMES AND COVERS SHALL BE CAST OR DUCTILE IRON WITH "SANITARY SEWER" STAMPED ON THE COVER AND TWO 1-INCH, PERFORATED HOLES. CASTINGS SHALL BE MACHINED TO GIVE EVEN AND CONTINUOUS BEARING TO THE FULL LENGTH OF THE FRAME. CASTINGS SHALL BE FREE OF POROSITY AND BLOW HOLES, AND SHALL RECEIVE ONE COAT OF EPOXY PAINT. PAINT SHALL BE KEPT OFF OF BOLT THREADS AND SURFACES SHALL BE THOROUGHLY WIRE BRUSHED BEFORE PAINTING. MANHOLE FRAMES SHALL BE BOLTED TO THE MANHOLE. ALL MANHOLE RINGS IN ROADWAYS SHALL BE ENCASED IN A CONCRETE COLLAR EIGHTEEN (18) INCHES BY SIX (6) INCHES OF 3000 PSI CONCRETE BENEATH THE ASPHALT, WITH THE COVER FLUSH TO THE TOP OF THE PAVEMENT, PER STANDARD DETAILS. MANHOLES LOCATED OUTSIDE OF THE PAVEMENT SHALL BE AT LEAST TWELVE (12) INCHES ABOVE THE FINISHED GRADE.

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WATERTIGHT MANHOLE FRAMES AND COVERS SHALL HAVE NEOPRENE GASKET, BRONZE TIGHTENING BOLT, MACHINED BEARING SURFACES AND CHANNEL IRON LOCKING BAR. BOLTS SHALL BE STANDARD HEXAGONAL-HEAD, COUNTERSUNK SUCH THAT WHEN FULLY TIGHTENED BOLT HEAD IS FLUSH WITH THE TOP OF THE COVER. CASTINGS SHALL BE FREE OF POROSITY AND BLOW HOLES, AND SHALL RECEIVE ONE COAT OF EPXOY PAINT. PAINT SHALL BE KEPT OFF OF THE BOLT THREADS AND SURFACES SHALL BE THOROUGHLY WIRE BRUSHED BEFORE PAINTING.

MANHOLE STEPS SHALL BE FURNISHED WITH THE PRECAST SECTIONS. STEPS SHALL BE OF POLYPROPYLENE MATERIAL. REINFORCED WITH A 1/2" REINFORCING ROD. MANHOLE STEPS SHALL BE DESIGNED FOR A VERTICAL LOAD OF 400 POUNDS AND A HORIZONTAL PULL OUT LOAD OF 1,000 POUNDS. STEPS SHALL BE SET SIXTEEN (16) INCHES APART ON CENTER. HOLES FOR THE INSTALLATION OF MANHOLE STEPS SHALL NOT PROJECT THROUGH THE MANHOLE WALL. THERE SHALL BE A MINIMUM OF ONE (1) INCH WALL THICKNESS FORM THE DEEPEST PENETRATION OF THE STEP INSTALLATION HOLE AND THE OUTSIDE WALL. STEPS SHALL BE AT LEAST TEN (10) INCHES CLEAR WIDTH AND SHALL PROJECT AT LEAST FOUR (4) INCHES FROM THE WALL INTO WHICH IT IS EMBEDDED. STEPS SHALL NOT BE LOCATED OVER THE INFLUENT OR EFFLUENT PIPES AND SHALL BE INSTALLED ALONG A VERTICAL MANHOLE WALL FORM THE SHELF TO THE TOP OF THE CONE.

ALL MANHOLES SHALL HAVE 6 INCH, 3,000 PSI CONCRETE BOTTOMS RESTING ON A MINIMUM OF 6 INCHES OF #57 STONE. SEWER MAINS SHALL ENTER AND EXIT RADIALLY THROUGH THE MANHOLES. INVERTS SHALL BE CONSTRUCTED WITH A WIDTH AND HEIGHT EQUAL TO 1/2 THAT OF THE EFFLUENT PIPE AND SHALL BE SO BRUSHED AND TROWELED THAT A MINIMUM ENERGY LOSS OCCURS IN THE MANHOLE. AT EACH INLET AND OUTLET OF LINE EIGHT (8) INCHES, OR GREATER, WASTEWATER LINES ARE TO BE CONNECTED TO THE MANHOLES BY MEANS OF COMPRESSION CONNECTORS (FLEXIBLE SLEEVES) CAST INTO THE MANHOLE SECTION. FLEXIBLE CONNECTORS ARE TO BE MANUFACTURED OF HIGH QUALITY RUBBER OR SYNTHETIC RUBBER AND ALL STRAP CLAMPS OR DRAW BOLTS ARE TO BE MANUFACTURED FROM STAINLESS STEEL.

7.03 SERVICE CONNECTIONS

A. MATERIALS

PVC PIPE SHALL BE SCHEDULE 40 OR GREATER SUPPLIED IN EIGHTEEN (18) FEET LENGTHS. THE PIPE MAY BE JOINED BY ELASTOMERIC GASKETS.

DUCTILE IRON PIPE SHALL BE USED FOR SANITARY SEWER WITH SERVICES WITH LESS THAN THREE (3) FEET OF COVER OR WITH GREATER THAN FIFTEEN (15) FEET OF COVER.

SERVICE SADDLES FOR PVC SERVICES SHALL BE OF THE SAME MATERIAL AS THE MAIN; SOLVENT WELDED AND FASTENED WITH DOUBLE STAINLESS STEEL BANDS AS SHOWN IN THE STANDARD DETAILS.

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PRELIMINARY PLANS NOT FOR REVIEW

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NORTH CAROLINA PROFESSIONAL SEAL 042 ENGINEER JACK SUMMEY, JR.

No.	Date:	Description:	By:

SANITARY SEWER DETAILS 2

LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CW/JM
Checked By:	PMSJ
Job No.:	E-9516

Sheet No.
C-9.7

B. INSTALLATION

INDIVIDUALLY OWNED STRUCTURES SHALL REQUIRE INDIVIDUAL SEWER TAPS TO PUBLIC SEWER. ALL SERVICE CONNECTIONS TO EXISTING SANITARY SEWER MAINS SHALL BE MADE BY, OR UNDER THE SUPERVISION OF THE TOWN OF SMITHFIELD PUBLIC UTILITIES DEPARTMENT. SERVICE CONNECTIONS TO NEW LINES ARE THE RESPONSIBILITY OF THE DEVELOPER/OWNER AND SHALL BE MADE BY A NORTH CAROLINA LICENSED UTILITY CONTRACTOR. SERVICE TAPS INTO MAINS SHALL BE MADE ON THE TOP QUARTER OF THE MAIN WITH THE WYE SADDLE ANGLED WITH THE DIRECTION OF FLOW IN THE MAIN.

SERVICE LINES BETWEEN THREE (3) AND TWELVE (12) FEET IN DEPTH DO NOT REQUIRE SPECIAL BEDDING. ALL SERVICE LINES BETWEEN TWELVE (12) AND FIFTEEN (15) FEET IN DEPTH SHALL REQUIRE CLASS I BEDDING FORM FOUR (4) INCHES BELOW THE PIPE TO FOUR (4) INCHES ABOVE THE PIPE. SERVICE LINES GREATER THAN FIFTEEN (15) FEET, OR LESS THAN THREE (3) FEET IN DEPTH SHALL BE DUCTILE IRON PIPE.

SERVICE CONNECTIONS TO THE MAIN LINES SHALL BE PERPENDICULAR TO THE MAIN LINE TO THE EDGE OF THE RIGHT-OF-WAY OR EASEMENT LINE. FOUR (4) INCH LINES SHALL HAVE A MINIMUM SLOPE OF 1.0 FT./100 FT. AND SIX (6) INCH LINES SHALL HAVE A MINIMUM SLOPE OF 0.60 FT./100 FT. CLEANOUTS SHALL BE REQUIRED ON ALL SEWER SERVICES WITH A MAXIMUM SPACING OF 75 FEET ON FOUR (4) INCH SERVICES AND 100 FEET ON SIX (6) INCH SERVICES. A CLEANOUT SHALL BE PLACED ON ALL SERVICE LINES AT THE RIGHT-OF-WAY OR AT THE EDGE OF THE EASEMENT. ALL CLEANOUTS SHALL EXTEND A MINIMUM OF SIX (6) INCHES ABOVE FINISHED GRADE OR MEET THE OPTIONAL CLEANOUT METHOD REQUIREMENTS IN ACCORDANCE WITH STANDARD DETAILS. SEWER CLEANOUTS LOCATED IN PAVED AREAS MUST HAVE CAST IRON RISERS, CAST IRON FITTINGS AND BRASS CAPS.

ALL SIX (6) INCH, OR GREATER, SERVICE CONNECTIONS SHALL BE INTO A MANHOLE UNLESS OTHERWISE APPROVED BY THE PUBLIC UTILITIES DIRECTOR.

ALL SERVICE LINES WHICH ARE CONNECTED INTO MANHOLES SHALL BE INSTALLED ON THE MANHOLE BENCH, OR HAVE LESS THAN THIRTY (30) INCHES OF CLEARANCE TO THE INVERT OF THE FLOW LINE. SERVICE LINE CONNECTIONS SHALL NOT BE INSTALLED THROUGH MANHOLE CONE SECTIONS OR AT MANHOLE JOINTS. THE USE OF WYES IN THE LINE IS PREFERRED OVER THE USE OF SERVICE SADDLES.

7.05 TESTING AND INSPECTION

ALL MATERIALS USED MUST HAVE PRELIMINARY INSPECTION BY THE CONSTRUCTION INSPECTOR BEFORE MATERIALS ARE USED FOR THE CONSTRUCTION PURPOSES. REJECTION OF MATERIAL NOT MEETING THESE SPECIFICATIONS WILL BE ORDERED AND SUCH MATERIALS SHALL BE IMMEDIATELY REMOVED FORM THE JOB.

SANITARY SEWER LINES SHALL BE FREE AND CLEAN FROM OBSTRUCTIONS AND SHALL BE VISUALLY INSPECTED FROM EVERY MANHOLE TO ENSURE ALL LINES EXHIBIT A FULLY CIRCULAR PATTERN. LINES WHICH DO NOT EXHIBIT A TRUE LINE AND GRADE OR HAVE STRUCTURAL DEFECTS SHALL BE CORRECTED. SANITARY SEWER SERVICE CONNECTIONS SHALL BE VISUALLY INSPECTED PRIOR TO BACK FILLING.

SMITHFIELD NORTH CAROLINA	STANDARD DETAIL AND SPECIFICATIONS MANUAL SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES	SCALE: NTS DETAIL NO. 07.01_P11 DATE: 04/03/2018

THE CONTRACTOR SHALL FURNISH ALL MATERIALS, LABOR, AND EQUIPMENT TO PERFORM ALL TESTING TO THE SATISFACTION OF THE CONSTRUCTION INSPECTOR. WATER FOR TESTING WILL BE PROVIDED BY THE TOWN OF SMITHFIELD.

SEE SECTION 7.01C FOR ADDITIONAL TESTING REQUIREMENTS FOR SEMI-RIGID PIPE.

THE LOW-PRESSURE AIR TESTING SHALL BE PERFORMED BEFORE ALL LATERALS OR STUBS ARE INSTALLED ON THE LINE AND AFTER THE MAIN HAS BEEN BACKFILLED TO FINISHED GRADE. PLUGS SHALL BE INSTALLED AT EACH MANHOLE TO SEAL OFF THE TEST SECTION. THE LINE WILL BE PRESSURIZED WITH A SINGLE HOSE AND MONITORED BY A SEPARATE HOSE CONNECTION FORM THE PLUG. AIR THEN SHALL BE SLOWLY INTRODUCED INTO THE SEALED LINE UNTIL THE INTERNAL AIR PRESSURE REACHES 4.0 PSIG. THE AIR PRESSURE SHALL THEN BE ALLOWED TO STABILIZE FOR A MINIMUM OF 2 MINUTES AT NO LESS THAN 3.5 PSIG. WHEN THE PRESSURE REACHES 3.5 PSIG, THE TIME REQUIRED FOR THE PRESSURE TO DROP 1.0 PSI WILL BE OBSERVED AND RECORDED. THE LINE SHALL BE TERMED "ACCEPTABLE" IF THE PRESSURE DOES NOT DROP MORE THAN FOR THE TEST IN THE TOWN OF SMITHFIELD STANDARD DETAILS FOR AIR TEST TABLE.

IF THE SECTION FAILS TO MEET THESE REQUIREMENTS, THE SOURCE OF LEAKAGE SHALL BE DETERMINED AND REPAIRED. THE PIPE SECTION SHALL BE RETESTED AND MEET THE SPECIFIED REQUIREMENTS.

7.06 REPAIR OF SANITARY SEWER LINES

THE REPAIR OF DAMAGED SANITARY SEWER LINES SHALL BE AS FOLLOWS:

VC PIPE – REPLACE DAMAGED SECTION WITH PVC PIPE AND INSTALL A FERNCO COUPLING AT EACH END.

PVC PIPE – REPLACE DAMAGED SECTION WITH PVC PIPE AND INSTALL A FERNCO COUPLING AT EACH END.

DIP PIPE – REPLACE DAMAGED SECTION WITH DIP PIPE AND INSTALL A FERNCO COUPLING AT EACH END.

ALL OTHER TYPES OF PIPE SHALL BE REPLACED FROM MANHOLE TO MANHOLE (ENTIRE RUN) WHEN DAMAGE OCCURS. THE REPLACEMENT PIPE SHALL BE EITHER DIP OR PVC, AS CONDITIONS WARRANT.

ALL REPAIRS TO ABANDONED SANITARY SEWER LINES SHALL BE BACKFILLED WITH ABC STONE (CRUSHER RUN) TO A DENSITY OF 95 PERCENT STANDARD PROCTOR.

7.07 WASTEWATER PUMP STATIONS

SIZING, DESIGN, AND APPROVED MANUFACTURERS OF WASTEWATER PUMP STATIONS WHICH ARE TO BE MAINTAINED BY THE TOWN SHALL BE AS DETERMINED BY THE PUBLIC UTILITIES DIRECTOR. ALL PUMP STATIONS THAT WILL BE PRIVATELY OPERATED AND MAINTAINED MUST MEET THE NORTH CAROLINA BUILDING CODE IN ADDITION TO ANY OTHER SPECIFICATIONS REQUIRED BY THE TOWN.

7.08 STEP SYSTEM

SEPTIC TANK EFFLUENT PUMP SYSTEMS SHALL BE APPROVED ON A CASE BY CASE BASIS BY THE PUBLIC UTILITIES DIRECTOR.

END OF SECTION 7.00

SMITHFIELD NORTH CAROLINA	STANDARD DETAIL AND SPECIFICATIONS MANUAL SMITHFIELD, NORTH CAROLINA PUBLIC UTILITIES	SCALE: NTS DETAIL NO. 07.01_P12 DATE: 04/03/2018

PRELIMINARY PLANS NOT FOR REVIEW

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

NORTH CAROLINA PROFESSIONAL SEAL 5420 ENGINEER JACK SUMMEY, JR.

No.	Date:	Description:	By:

SANITARY SEWER DETAILS 3

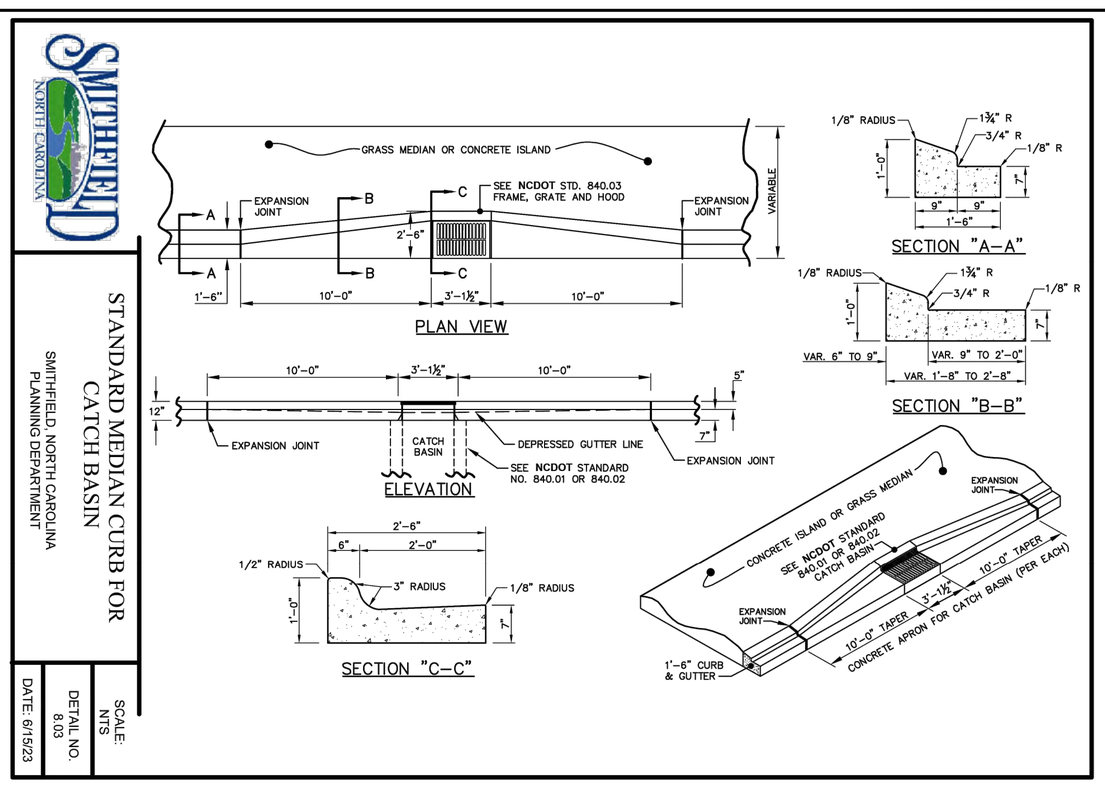
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	PMSJ
Job No.:	E-9516

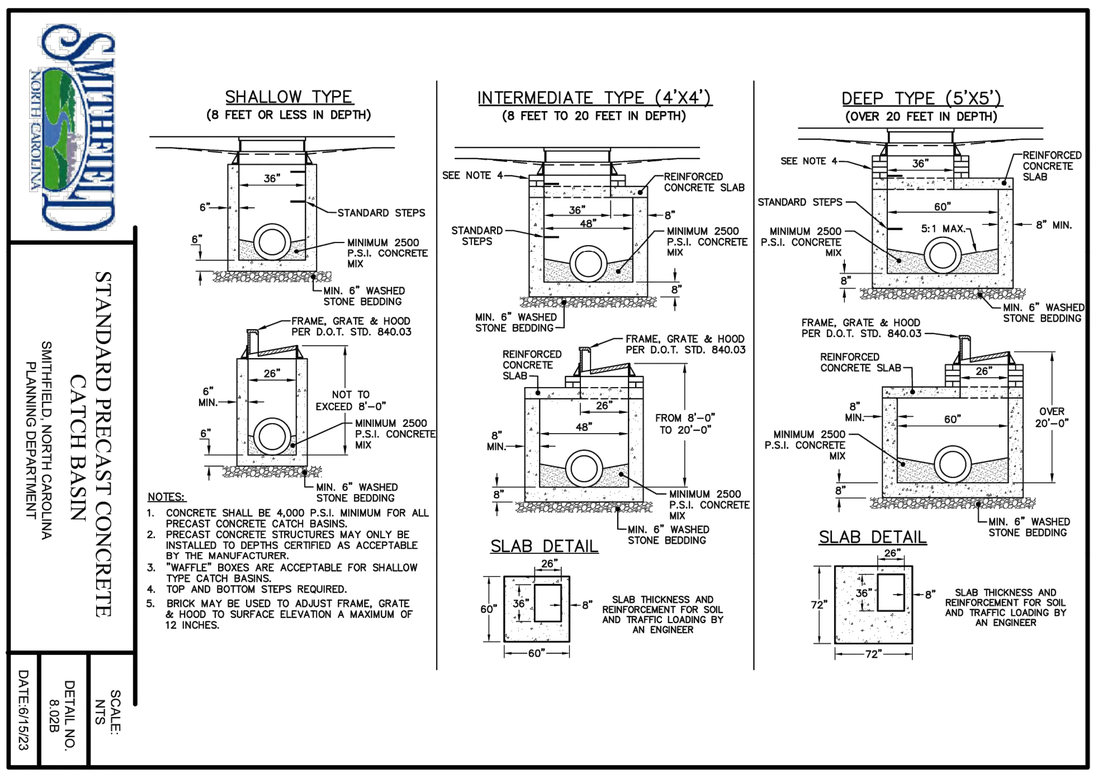
Sheet No.
C-9.8



STANDARD MEDIAN CURB FOR CATCH BASIN

SMITHFIELD, NORTH CAROLINA
PLANNING DEPARTMENT

SCALE: NTS | DETAIL NO. 8.03 | DATE: 6/15/23



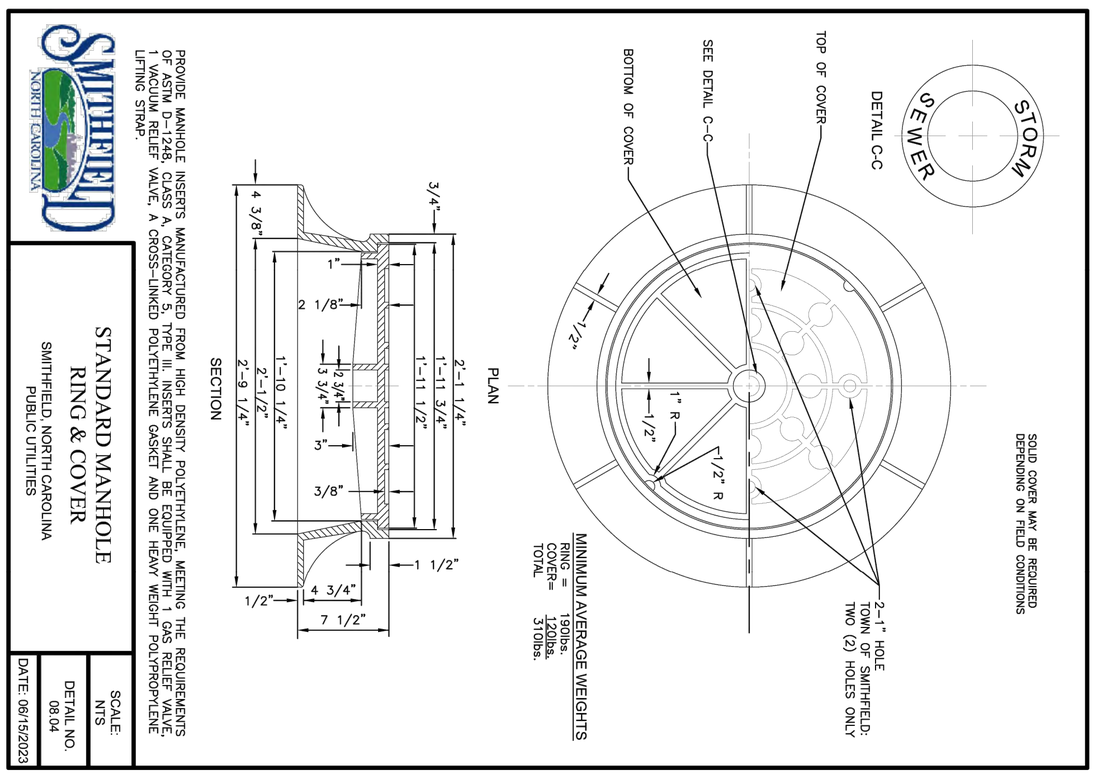
NOTES:

1. CONCRETE SHALL BE 4,000 P.S.I. MINIMUM FOR ALL PRECAST CONCRETE CATCH BASINS.
2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
3. "WAFFLE" BOXES ARE ACCEPTABLE FOR SHALLOW TYPE CATCH BASINS.
4. TOP AND BOTTOM STEPS REQUIRED.
5. BRICK MAY BE USED TO ADJUST FRAME, GRATE & HOOD TO SURFACE ELEVATION A MAXIMUM OF 12 INCHES.

STANDARD PRECAST CONCRETE CATCH BASIN

SMITHFIELD, NORTH CAROLINA
PLANNING DEPARTMENT

SCALE: NTS | DETAIL NO. 8.02B | DATE:6/15/23

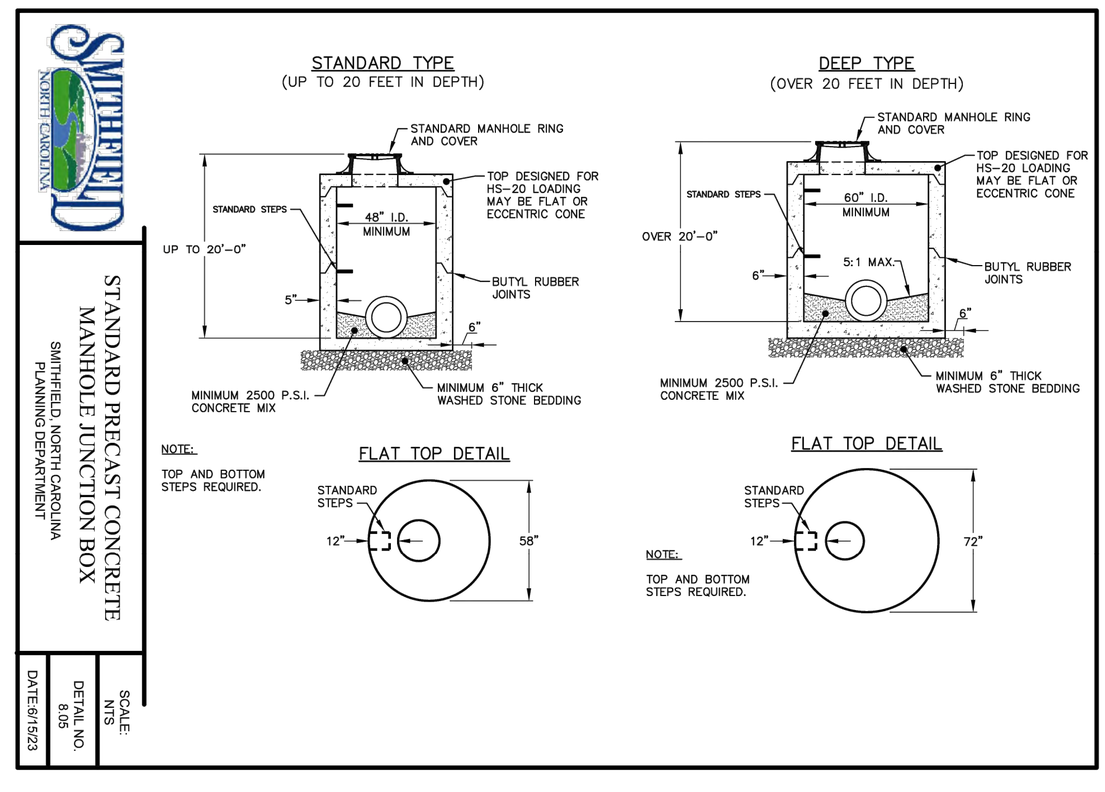


PROVIDE MANHOLE INSERTS MANUFACTURED FROM HIGH DENSITY POLYETHYLENE MEETING THE REQUIREMENTS OF ASTM D-1248, CLASS A, CATEGORY 5, TYPE III. INSERTS SHALL BE EQUIPPED WITH 1 GAS RELIEF VALVE, 1 VACUUM RELIEF VALVE, A CROSS-LINKED POLYETHYLENE GASKET AND ONE HEAVY WEIGHT POLYPROPYLENE LIFTING STRAP.

STANDARD MANHOLE RING & COVER

SMITHFIELD, NORTH CAROLINA
PUBLIC UTILITIES

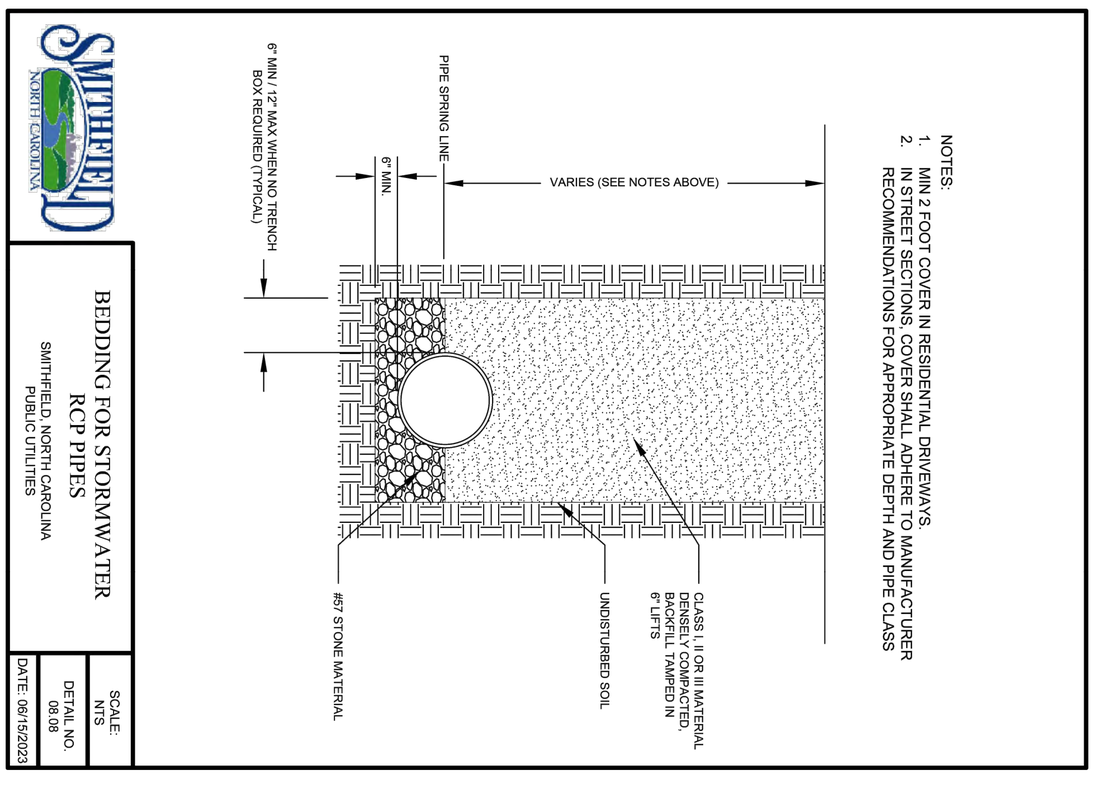
SCALE: NTS | DETAIL NO. 08.04 | DATE: 06/15/2023



STANDARD PRECAST CONCRETE MANHOLE JUNCTION BOX

SMITHFIELD, NORTH CAROLINA
PLANNING DEPARTMENT

SCALE: NTS | DETAIL NO. 8.05 | DATE:6/15/23



NOTES:

1. MIN 2 FOOT COVER IN RESIDENTIAL DRIVEWAYS.
2. IN STREET SECTIONS, COVER SHALL ADHERE TO MANUFACTURER RECOMMENDATIONS FOR APPROPRIATE DEPTH AND PIPE CLASS

BEDDING FOR STORMWATER RCP PIPES

SMITHFIELD, NORTH CAROLINA
PUBLIC UTILITIES

SCALE: NTS | DETAIL NO. 08.08 | DATE: 06/15/2023

PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.	C-9.9
Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMSJ
Job No.:	E-9516

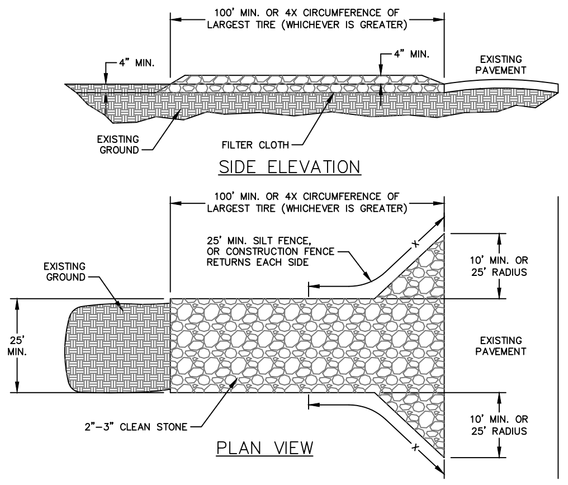
STORM SEWER DETAILS

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

No.	Date:	Description:	By:

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
Email - info@summeyengineering.com
NC Professional Engineering Firm License No. P-0336

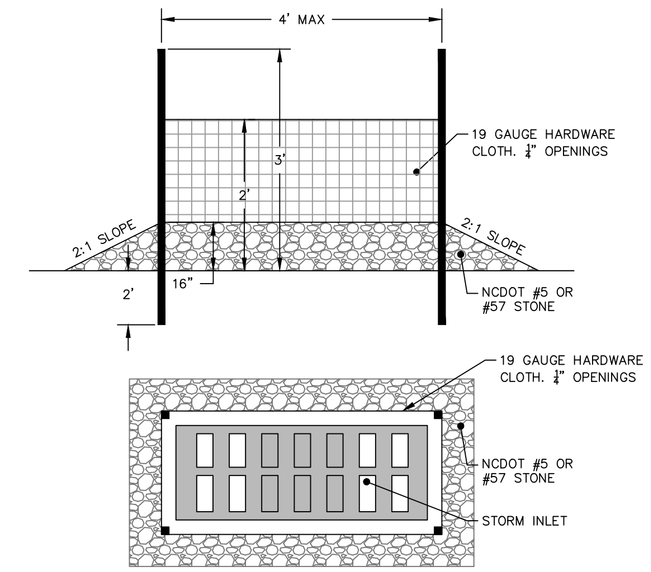


CONSTRUCTION SPECIFICATIONS

1. STONE – USE COARSE AGGREGATE (2–3 INCH STONE)
2. LENGTH – AS EFFECTIVE, BUT NOT LESS THAN 100 FEET
3. THICKNESS – NOT LESS THAN EIGHT(8) INCHES
4. WIDTH – NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS
5. WASHING – WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE. THROUGH USE OF SAND BAGS, GRAVEL, BOARDS OR OTHER APPROVED METHODS.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

TEMPORARY CONSTRUCTION ENTRANCE

NTS

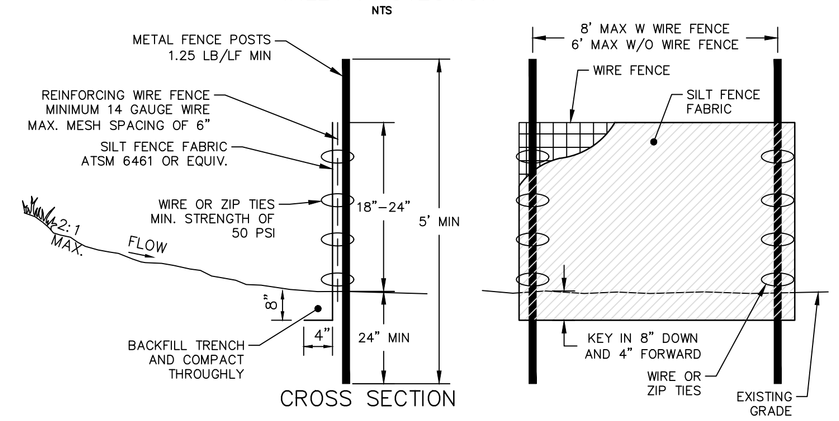


MAINTENANCE REQUIREMENTS:

- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- CLEAR WIRE MESH OF ANY DEPRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

HARDWARE CLOTH AND GRAVEL INLET PROTECTION

NTS



MAINTENANCE REQUIREMENTS:

- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
- REMOVE ALL FENCING MATERIAL AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TEMPORARY SILT FENCE

NTS

PERMANENT SEEDING

DEFINITION

Seeding disturbed areas with perennial grasses and (or) legumes to provide a permanent vegetative cover to lessen runoff and soil erosion.

PURPOSE

To lessen soil erosion and permanently stabilize disturbed areas created by grading of construction sites.

CONDITIONS WHERE PRACTICE APPLIES

All bare soil areas on construction sites which are not covered by structures or other erosion control devices.

PREPARATION

Prepare seedbed by ripping, chiseling, harrowing or plowing to depth of six inches so as to produce a loose, friable surface. Remove all stones, boulders, stumps or debris from the surface which would prohibit germination or plant growth. Spread topsoil in a layer 3" – 6" depth.

Incorporate into the soil 800 to 1,000 pounds of 10–10–10 fertilizer plus 500 pounds of twenty percent (20%) superphosphate per acre and two tons of dolomitic lime per acre unless soil tests indicate that a lower rate of lime can be used.

Mulch after seeding with 1.5 tons of grain straw per acre and either crimp straw into soil or tack with liquid asphalt at 400 gallons per acre or emulsified asphalt at 300 gallons per acre.

PLANTS & MIXTURE	PLANTING RATE/ACRE	PLANTING DATES
Tall Fescue (Low Maintenance)	100–150 lbs.	Aug. 15 – Oct. 15 Feb. 15 – May 1
Tall fescue Waterways and Lawns (High Maint.)	200–250 lbs.	Aug. 15 – Oct. 15 Feb. 15 – May 1
Blend of two turf-type tall Fescues (90%) and two or more improved Kentucky bluegrass varieties (10%) (high maintenance)	200–250 lbs.	Aug. 15 – Oct. 15 Feb. 15 – May 1
Tall Fescue and Kobe or Korean Lespedeza	100 lbs. and 20–25 lbs.	Feb. 15 – May 1 Aug. 15 – Oct. 15
Tall Fescue	50 lbs./acre	Nov. 1 – Feb. 1 (Unscarified)
Tall Fescue and German Millet or Sudangrass 2	60 lbs. and 30 lbs.	July and August
Tall Fescue and Ryegrain 2	70 lbs. and 25 lbs.	Nov. 1 – Jan. 30
Common Bermudagrass	8 lbs. (hulled) 15–20 lbs. (unhulled)	April 15 – June 30 Feb. 1 – March 30

1 For spring seedings, use Scarified Lespedeza seed. For late fall and winter seedings, use unscarified seed.

2 Annuals such as Millet, Sudangrass and Ryegrain must be kept at 10–12" maximum height.

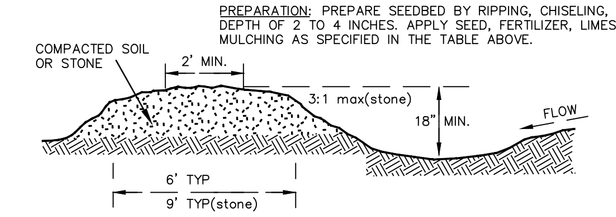
PERMANENT GROUNDCOVER

Permanent groundcover is to be provided for all disturbed areas within 15 working days or 90 calender days (whichever is shorter) following completion of construction or development.

TEMPORARY SEEDING SPECIFICATIONS COASTAL PLAIN REGION

Recommended Seeding Dates	Species	Application Rates (lb/ac)			
		Seed	10–10–10 Fertilizer	Agricultural Limestone	Straw
Dec. 1 – May 1	Winter Wheat Annual Lespedeza (Kobe)	120 50	750	2,000	4,000
April 15 – Aug 15	German Millet	40	750	2,000	4,000
Aug 15 – Dec 30	Ryegrain	120	1,000	2,000	4,000

PREPARATION: PREPARE SEEDBED BY RIPPING, CHISELING, HARROWING OR PLOWING TO DEPTH OF 2 TO 4 INCHES. APPLY SEED, FERTILIZER, LIMESTONE, AND STRAW MULCHING AS SPECIFIED IN THE TABLE ABOVE.



CONSTRUCTION SPECIFICATIONS

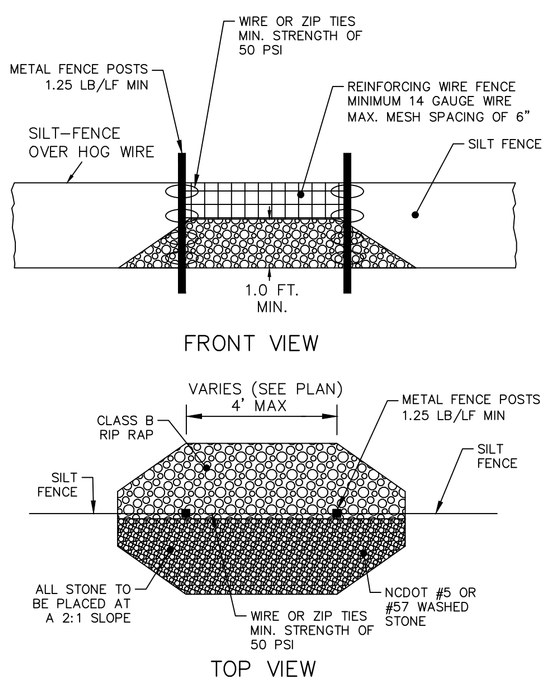
REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONAL MATERIAL.
ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.
VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

MAINTENANCE

INSPECT TEMPORARY DIVERSION ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL END APPROPRIATELY STABILIZE IT.

TEMPORARY DIVERSION DITCH

NTS



MAINTENANCE REQUIREMENTS:

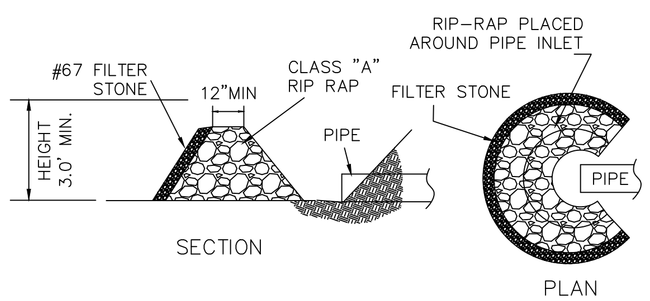
- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
- SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE, OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
- REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
- REMOVE ALL FENCING MATERIAL AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

NOTE:

- REFER TO SILT FENCE DETAIL FOR MORE INFORMATION.

SILT FENCE STONE OUTLET

N.T.S.



RIP-RAP INLET PROTECTION STRUCTURE

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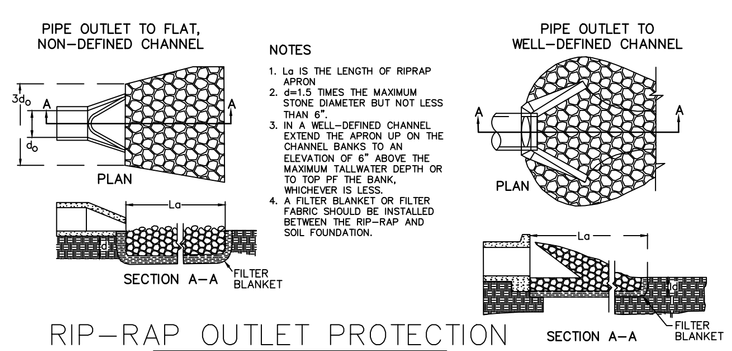

RIP-RAP OUTLET PROTECTION

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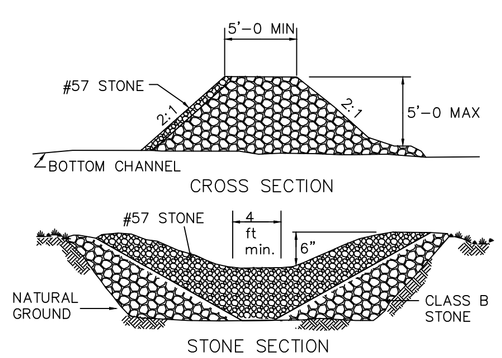
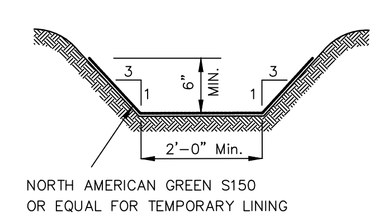


TEMPORARY ROCK CHECK DAM

NTS



CLEAN WATER DITCH

NTS

PRELIMINARY PLANS NOT FOR REVIEW

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Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

No.	Date:	Description:	By:

EROSION CONTROL DETAILS I

LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	PMSJ
Job No.:	E-9516

Sheet No.

C-9.10

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 or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and 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 of 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 a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 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 a stream 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, and 2. Records of the 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 an 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	Documentation 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 or if 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 shown to provide equal access and utility as the hard-copy 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 Timeframes [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 causes, 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.

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

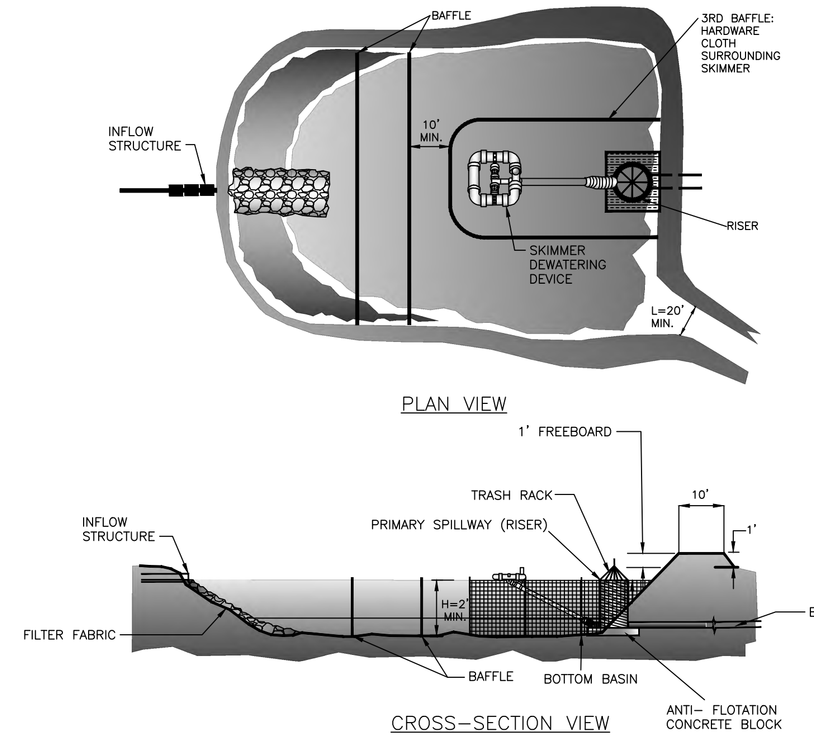
Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw 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.

NORTH CAROLINA Environmental Quality

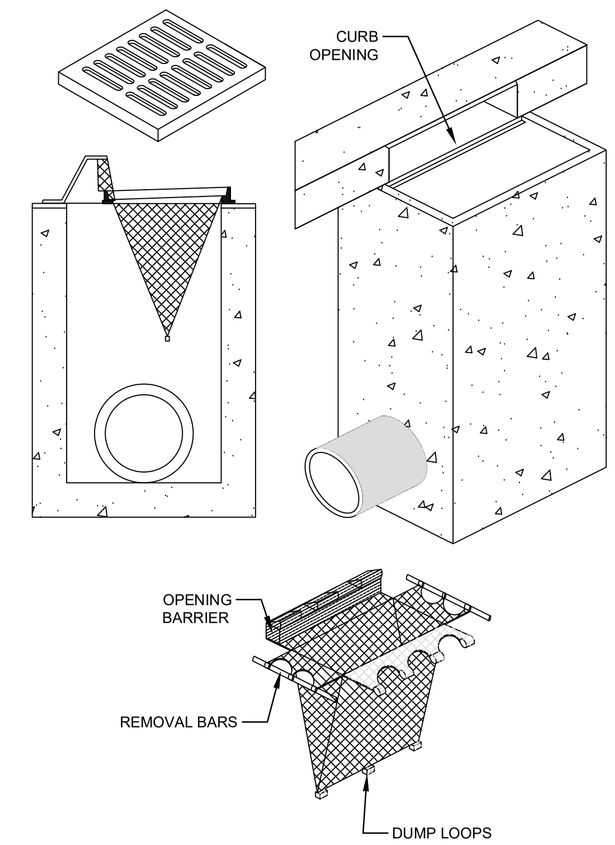
NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19



RISER BASIN DETAIL

NTS



INLET INSERT SEDIMENT CONTAINMENT SYSTEM OR EQUIVALENT

NTS

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' 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.

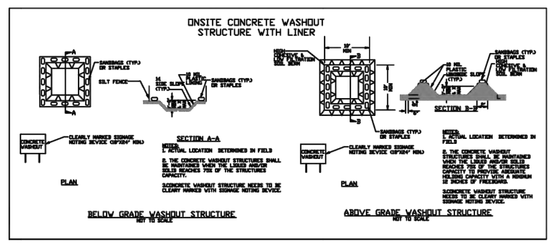
PORTABLE TOILETS

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.

NORTH CAROLINA Environmental Quality



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

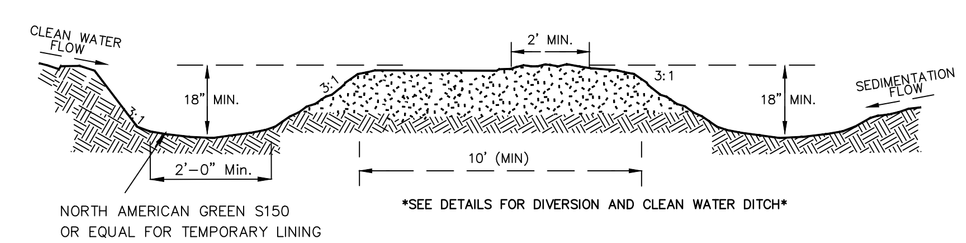
1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store 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.

HAZARDOUS AND TOXIC WASTE

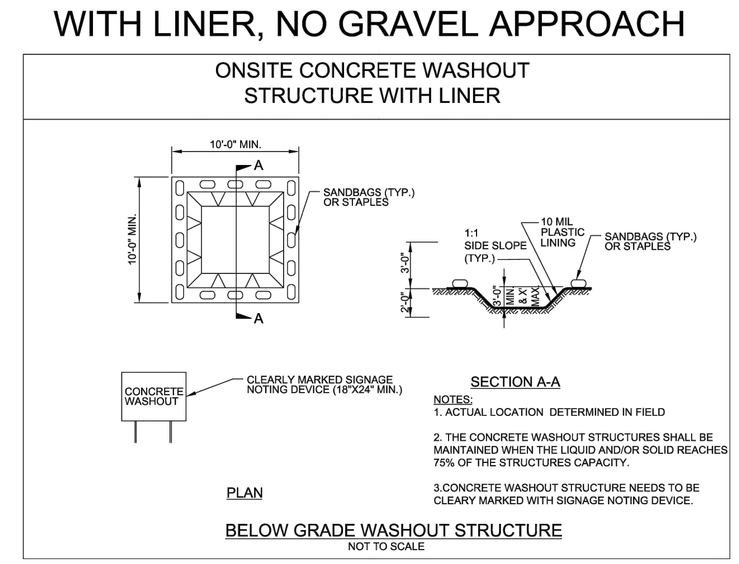
1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19



WITH LINER, NO GRAVEL APPROACH



CONCRETE WASHOUT DETAIL

NTS

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E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

PRELIMINARY PLANS NOT FOR REVIEW

No.	Date:	Description:	By:

EROSION CONTROL DETAILS 2

LOCAL 70 RESIDENTIAL DEVELOPMENT

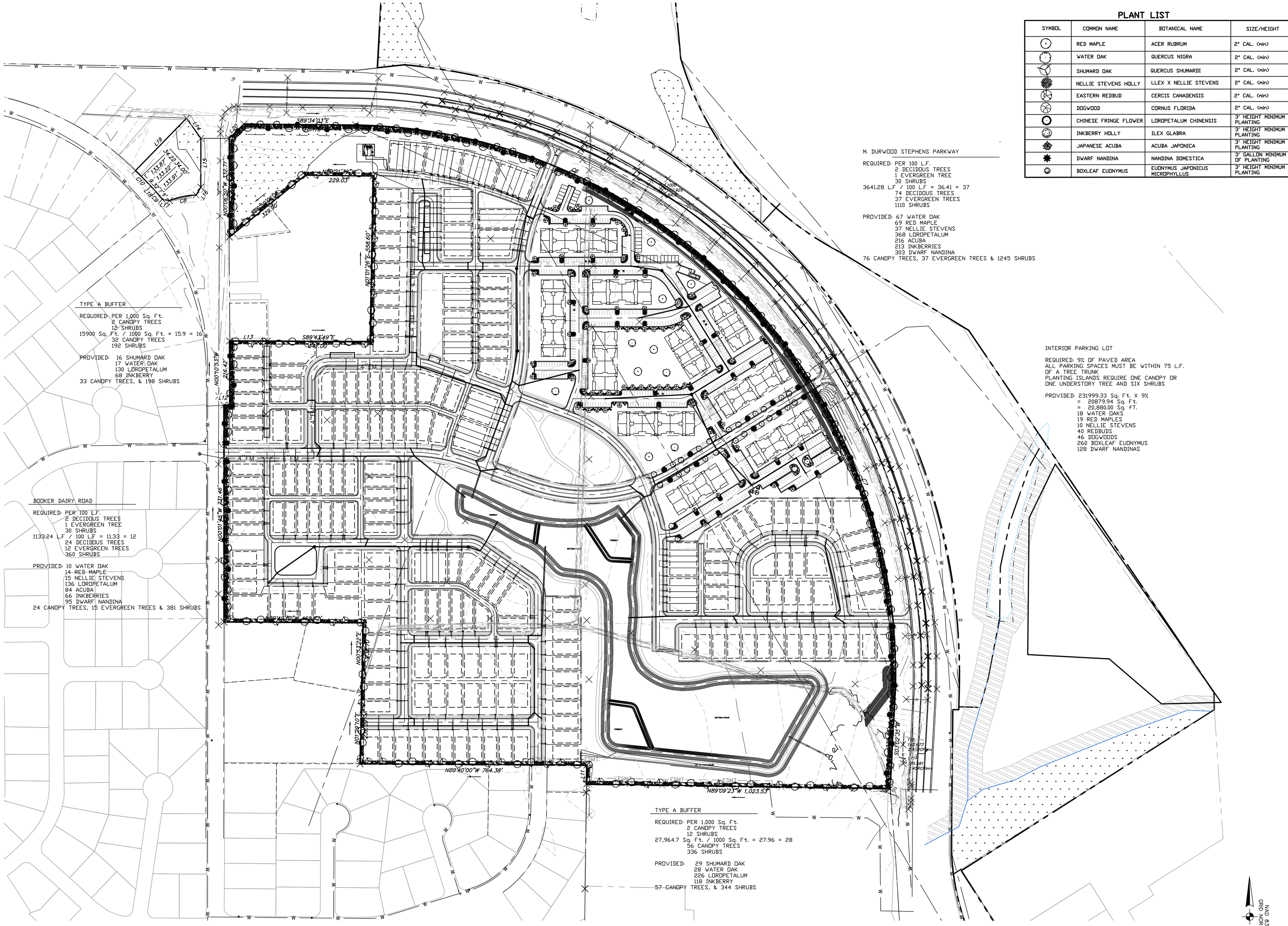
HWY 70

SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	HMSJ
Job No.:	E-9516

Sheet No.

C-9.11



TYPE A BUFFER

REQUIRED: PER 1,000 Sq. Ft.
2 CANOPY TREES
12 SHRUBS
15900 Sq. Ft. / 1000 Sq. Ft. = 15.9 = 16
32 CANOPY TREES
192 SHRUBS

PROVIDED: 16 SHUMARD OAK
17 WATER OAK
130 LORDPETALUM
68 INKBERRY
33 CANOPY TREES, & 198 SHRUBS

BOOKER DAIRY ROAD

REQUIRED: PER 100 L.F.
2 DECIDOUS TREES
1 EVERGREEN TREE
30 SHRUBS
1133.24 L.F / 100 L.F = 11.33 = 12
24 DECIDOUS TREES
12 EVERGREEN TREES
360 SHRUBS

PROVIDED: 10 WATER OAK
14 RED MAPLE
15 NELLIE STEVENS
136 LORDPETALUM
84 ACUBA
66 INKBERRIES
95 DWARF NANDINA
24 CANOPY TREES, 15 EVERGREEN TREES & 381 SHRUBS

M. DURWOOD STEPHENS PARKWAY

REQUIRED: PER 100 L.F.
2 DECIDOUS TREES
1 EVERGREEN TREE
30 SHRUBS
3641.28 L.F / 100 L.F = 36.41 = 37
74 DECIDOUS TREES
37 EVERGREEN TREES
1110 SHRUBS

PROVIDED: 67 WATER OAK
69 RED MAPLE
37 NELLIE STEVENS
368 LORDPETALUM
216 ACUBA
213 INKBERRIES
303 DWARF NANDINA
76 CANOPY TREES, 37 EVERGREEN TREES & 1245 SHRUBS

TYPE A BUFFER

REQUIRED: PER 1,000 Sq. Ft.
2 CANOPY TREES
12 SHRUBS
27,964.7 Sq. Ft. / 1000 Sq. Ft. = 27.96 = 28
56 CANOPY TREES
336 SHRUBS

PROVIDED: 29 SHUMARD OAK
28 WATER OAK
226 LORDPETALUM
118 INKBERRY
57 CANOPY TREES, & 344 SHRUBS

INTERIOR PARKING LOT

REQUIRED: 9% OF PAVED AREA
ALL PARKING SPACES MUST BE WITHIN 75 L.F.
OF A TREE TRUNK
PLANTING ISLANDS REQUIRE ONE CANOPY OR
ONE UNDERSTORY TREE AND SIX SHRUBS

PROVIDED: 231999.33 Sq. Ft. X 9%
= 20879.94 Sq. Ft.
= 20,880.00 Sq. FT.
18 WATER OAKS
19 RED MAPLES
10 NELLIE STEVENS
40 REDBUDS
46 DOGWOODS
260 BOXLEAF EUONYMUS
128 DWARF NANDINAS

PLANT LIST

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE/HEIGHT	PLANT CATEGORY	COUNT
	RED MAPLE	ACER RUBRUM	2" CAL. (min)	CANOPY TREE	102
	WATER OAK	QUERCUS NIGRA	2" CAL. (min)	CANOPY TREE	140
	SHUMARD OAK	QUERCUS SHUMARDI	2" CAL. (min)	CANOPY TREE	45
	NELLIE STEVENS HOLLY	LLEX X NELLIE STEVENS	2" CAL. (min)	EVERGREEN	62
	EASTERN REDBUD	CERCIS CANADENSIS	2" CAL. (min)	UNDERSTORY TREE	40
	DOGWOOD	CORNUS FLORIDA	2" CAL. (min)	UNDERSTORY TREE	46
	CHINESE FRINGE FLOWER	LORDPETALUM CHINENSIS	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	860
	INKBERRY HOLLY	ILEX GLABRA	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	465
	JAPANESE ACUBA	ACUBA JAPONICA	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	300
	DWARF NANDINA	NANDINA DOMESTICA	3' GALLON MINIMUM AT TIME OF PLANTING	SHRUB	526
	BOXLEAF EUONYMUS	EUONYMUS JAPONICUS MICROPHYLLUS	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	260

GRAPHIC SCALE

150 0 75 150 300 600

(IN FEET)
1 inch = 150 ft.

NAD 83
GRID NORTH

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER JACK SUMMEY, JR.

SEA

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E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

No.	Date:	Description:	By:

OVERALL LANDSCAPE PLAN
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CW/ JM
Checked By:	HMSJ
Job No.:	3-6916

Sheet No.

L-1

TYPE A BUFFER

REQUIRED: PER 1,000 Sq. Ft.
2 CANOPY TREES
12 SHRUBS
15900 Sq. Ft. / 1000 Sq. Ft. = 15.9 = 16
32 CANOPY TREES
192 SHRUBS

PROVIDED: 16 SHUMARD OAK
17 WATER OAK
130 LOROPETALUM
68 INKBERRY
33 CANOPY TREES, & 198 SHRUBS

MATCH LINE - SEE SHEET LA-3 FOR CONTINUATION

MATCH LINE - SEE SHEET LA-2 FOR CONTINUATION

PRELIMINARY PLANS NOT FOR REVIEW

0' 150' 300' 450'
DRAWING SCALE

GRID NORTH
83 NAD

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NC Professional Engineering Firm License No. F-0336

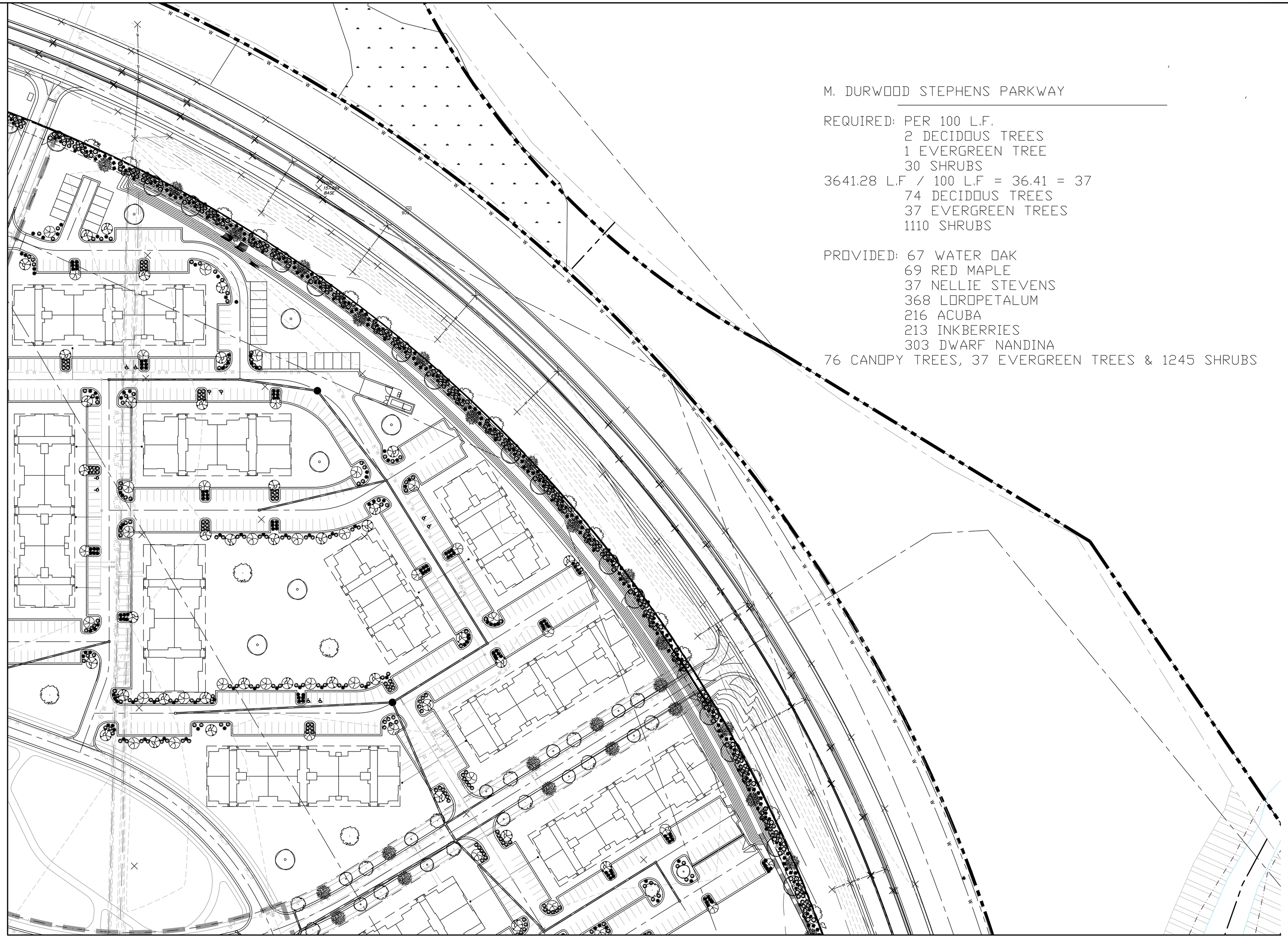
No.	Date:	Description:	By:

LANDSCAPE PLAN - BLOWUP
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CW/JM
Checked By:	HWSJ
Job No.:	E-9916

Sheet No.
LA-1

MATCH LINE - SEE SHEET LA-1 FOR CONTINUATION



MATCH LINE - SEE SHEET LA-4 FOR CONTINUATION

PRELIMINARY PLANS NOT FOR REVIEW

NORTH CAROLINA PROFESSIONAL SEAL 049 ENGINEER NORMAN JACK SUMMEY, JR.

SEA

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NC Professional Engineering Firm License No. F-0336

No.	Date:	Description:	By:

LANDSCAPE PLAN - BLOWUP
LOCAL 70 RESIDENTIAL DEVELOPMENT

HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	HMSJ
Job No.:	E-9516

Sheet No.
LA-2

MATCH LINE - SEE SHEET LA-1 FOR CONTINUATION

BOOKER DAIRY ROAD

REQUIRED: PER 100 L.F.
2 DECIDOUS TREES
1 EVERGREEN TREE
30 SHRUBS
1133.24 L.F / 100 L.F = 11.33 = 12
24 DECIDOUS TREES
12 EVERGREEN TREES
360 SHRUBS

PROVIDED: 10 WATER OAK
14 RED MAPLE
15 NELLIE STEVENS
136 LOROPETALUM
84 ACUBA
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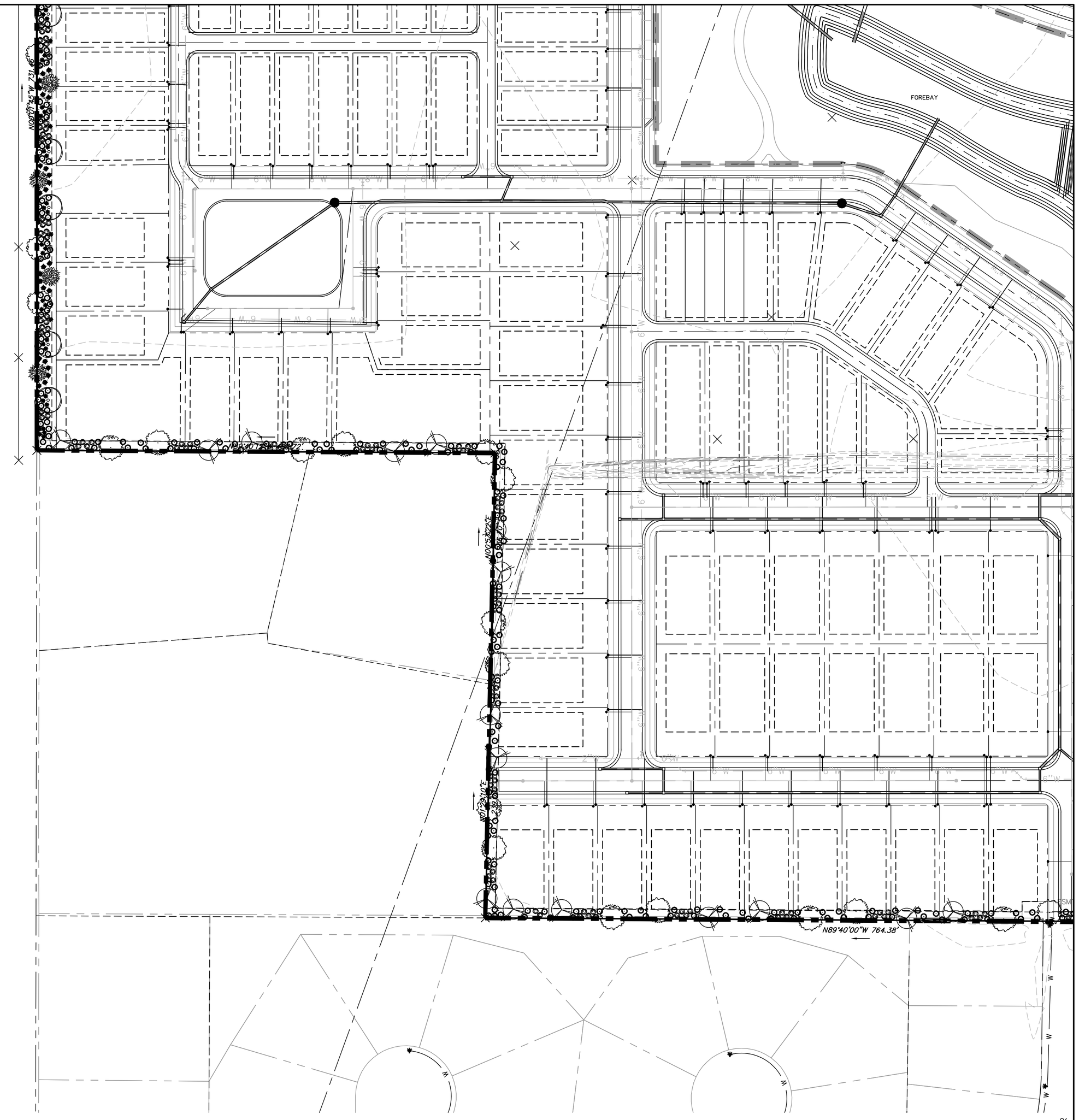

MATCH LINE - SEE SHEET LA-4 FOR CONTINUATION

0' 60' 120' 180'
DRAWING SCALE

PRELIMINARY PLANS NOT FOR REVIEW

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NC Professional Engineering Firm License No. F-0336

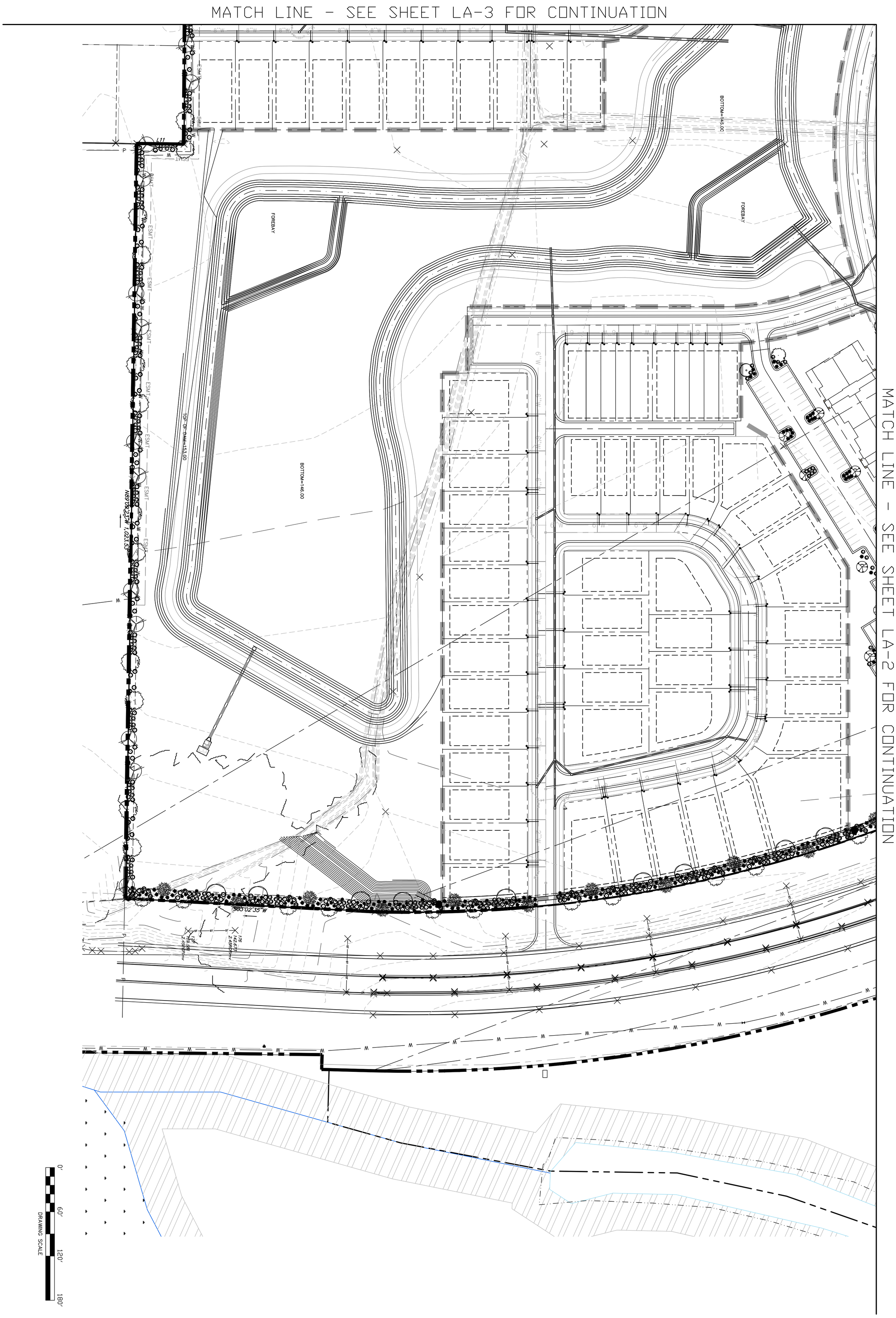
NORTH CAROLINA PROFESSIONAL SEAL 5809 ENGINEER HERMAN MACK SUMMEY, JR.

No.	Date:	Description:	By:

LANDSCAPE PLAN - BLOWUP
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/ JM
Checked By:	HMS.J
Job No.:	E-9516

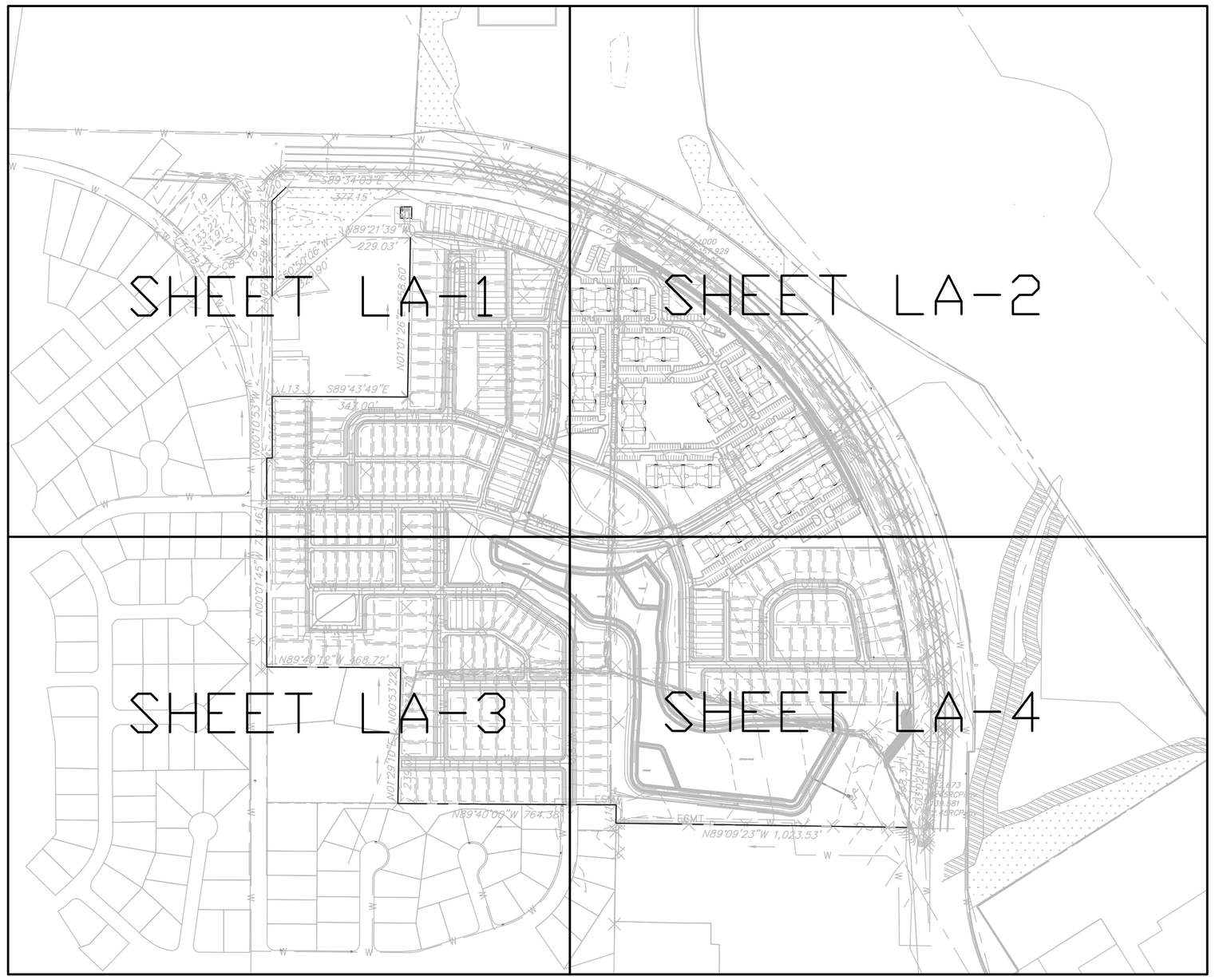
Sheet No.
LA-3



PRELIMINARY PLANS NOT FOR REVIEW

Sheet No.							
LA-4	Scale: AS NOTED	LANDSCAPE PLAN - BLOWUP	No.	Date:	Description:	By:	Summey Engineering Associates, PLLC
	Date: MONTH YEAR	LOCAL 70 RESIDENTIAL DEVELOPMENT					Engineering - Consulting - Surveying
	Drawn By: CM/ JM	HWY 70					PO Box 968
	Checked By: HMSJ	SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA					Asheboro, NC 27204
	Job No.: E-9516						Phone: 336-328-0902 Fax: 336-328-0922
							Email - info@summeyengineering.com
							NC Professional Engineering Firm License No. P-0336

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER HOWARD MITCH SUMMEY, JR.



PLANT MATERIAL SPECIFICATIONS:

1. CANOPY TREE SIZE
   - CANOPY TREES SHALL HAVE A MINIMUM HEIGHT AT MATURITY OF 40 FEET OR A MINIMUM CROWN WIDTH OF 30 FEET.
   - ALL CANOPY TREES SHALL HAVE A MINIMUM CALIPER SIZE OF 2 INCHES AT PLANTING.
   - EVERGREEN TREES SHALL BE A MINIMUM OF 6 FEET IN HEIGHT AT PLANTING.

2. UNDERSTORY TREE SIZE
   - UNDERSTORY TREES SHALL HAVE A MINIMUM HEIGHT AT MATURITY OF 25 TO 40 FEET, EXCEPT THAT TREES TO BE PLACED BELOW OVERHEAD UTILITY LINES MAY NOT EXCEED A MATURE HEIGHT OF 20 FEET.
   - DROUGHT TOLERANT UNDERSTORY TREES MUST HAVE A MINIMUM CALIPER SIZE OF 1 INCH AT PLANTING.
   - ALL OTHER UNDERSTORY TREES MUST HAVE A MINIMUM CALIPER SIZE OF 2 INCHES AT PLANTING.

3. SHRUB SIZE AND TYPE
   - REQUIRED SHRUBS IN A TYPE A LANDSCAPE YARD OR SHRUBS LOCATED PARALLEL TO THE EDGE OF PARKING LOTS, ACCESS DRIVES, LOADING SPACE, AND OUTDOOR STORAGE SHALL BE EVERGREEN.
   - REQUIRED SHRUBS IN A TYPE B LANDSCAPE YARD SHALL BE 50 PERCENT OR MORE EVERGREEN.
   - REQUIRED SHRUBS IN A TYPE C LANDSCAPE YARD SHALL BE 25 PERCENT OR MORE EVERGREEN.
   - REQUIRED SHRUBS IN A STREETYARD OR IN A TYPE D LANDSCAPE YARD MAY BE EVERGREEN OR DECIDUOUS.
   - ALL SHRUBS MUST BE AT LEAST A 3-GALLON SIZE AND HAVE A MINIMUM HEIGHT OR SPREAD OF 15 INCHES AT THE TIME OF PLANTING. SHRUBS SHALL REACH A MINIMUM HEIGHT OF 36 INCHES AND A SPREAD OF 30 INCHES WITHIN 3 YEARS OF PLANTING.

LANDSCAPE YARD MAINTENANCE NOTES:

1. GENERAL - THE LANDOWNER IS RESPONSIBLE FOR MAINTAINING ALL REQUIRED PLANT MATERIALS AND LANDSCAPE YARDS IN GOOD HEALTH AND APPEARANCE. ANY DEAD, UNHEALTHY, SEVERELY DAMAGED, OR MISSING PLANTS (WHETHER PRESERVED OR INSTALLED) MUST BE REPLACED WITH NEW PLANT MATERIAL EQUAL IN QUANTITY AND QUALITY. REPLACEMENT PLANT MATERIAL SHALL BE INSTALLED WITHIN 180 DAYS OF THE DATE OF OWNER NOTIFICATION. THE OBLIGATION FOR CONTINUOUS MAINTENANCE IS BINDING ON ANY SUBSEQUENT OWNERS OF THE LAND, OR ANY OTHER PARTIES HAVING A CONTROLLING INTEREST IN THE PROPERTY.
2. PROTECTION OF PLANT MATERIAL - THE LANDOWNER OR DEVELOPER SHALL TAKE ACTIONS TO PROTECT TREES AND LANDSCAPING FROM UNNECESSARY DAMAGE DURING ALL FACILITY AND SITE MAINTENANCE OPERATIONS. WHEN LANDSCAPE YARDS ARE ADJACENT TO PARKING LOTS OR DRIVES, PLANTS SHALL BE PROTECTED FROM DAMAGE BY VEHICLES, LUBRICANTS, OR FUELS.
3. MAINTAIN SHAPE AND FUNCTION - ALL REQUIRED TREES (WHETHER CANOPY OR UNDERSTORY) SHALL BE MAINTAINED IN THEIR CHARACTERISTIC NATURAL SHAPE, BE ALLOWED TO REACH THEIR MATURE SIZE, AND SHALL NOT BE SEVERELY PRUNED, SHEARED, TOPPED, OR SHAPED AS SHRUBS. TREES (INCLUDING, BUT NOT LIMITED TO CREPE MYRTLES) THAT HAVE BEEN SO ALTERED, SUCH THAT THEY NO LONGER SERVE THEIR INTENDED FUNCTION AS TREES WITHIN THE LANDSCAPING YARD, SHALL BE CONSIDERED AS DAMAGED VEGETATION AND SHALL BE REPLACED IN ACCORDANCE WITH THIS SECTION.
4. TRIMMING AND PRUNING - TRIMMING AND PRUNING OF TREES SHALL BE CONDUCTED IN COMPLIANCE WITH ANSI STANDARDS AND THE DEVELOPMENT GUIDE. SHRUBS SHALL BE MAINTAINED IN A WAY THAT DOES NOT OBSTRUCT SIGHT DISTANCES AT PUBLIC STREET INTERSECTIONS, OBSTRUCT TRAFFIC SIGNS OR DEVICES, OR INTERFERE WITH THE USE OF SIDEWALKS OR PEDESTRIAN TRAILS.

PLANT LIST

SYMBOL	COMMON NAME	BOTANICAL NAME	SIZE/HEIGHT	PLANT CATEGORY	COUNT
	RED MAPLE	ACER RUBRUM	2" CAL. (min)	CANOPY TREE	102
	WATER OAK	QUERCUS NIGRA	2" CAL. (min)	CANOPY TREE	140
	SHUMARD OAK	QUERCUS SHUMARDI	2" CAL. (min)	CANOPY TREE	45
	NELLIE STEVENS HOLLY	LLEX X NELLIE STEVENS	2" CAL. (min)	EVERGREEN	62
	EASTERN REDBUD	CERCIS CANADENSIS	2" CAL. (min)	UNDERSTORY TREE	40
	DOGWOOD	CORNUS FLORIDA	2" CAL. (min)	UNDERSTORY TREE	46
	CHINESE FRINGE FLOWER	LOROPETALUM CHINENSIS	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	860
	INKBERRY HOLLY	ILEX GLABRA	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	465
	JAPANESE ACUBA	ACUBA JAPONICA	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	300
	DWARF NANDINA	NANDINA DOMESTICA	3' GALLON MINIMUM AT TIME OF PLANTING	SHRUB	526
	BOXLEAF EUONYMUS	EUONYMUS JAPONICUS MICROPHYLLUS	3' HEIGHT MINIMUM AT TIME OF PLANTING	SHRUB	260

PRELIMINARY PLANS NOT FOR REVIEW

Summey Engineering Associates, PLLC
Engineering - Consulting - Surveying
PO Box 968
Asheboro, NC 27204
Phone: 336-328-0902 Fax: 336-328-0922
E-mail - info@summeyengineering.com
NC Professional Engineering Firm License No. F-0336

No.	Date:	Description:	By:

LANDSCAPE PLAN - BLOWUP
LOCAL 70 RESIDENTIAL DEVELOPMENT
HWY 70
SMITHFIELD - JOHNSTON COUNTY - NORTH CAROLINA

Scale:	AS NOTED
Date:	MONTH YEAR
Drawn By:	CM/JM
Checked By:	HMSJ
Job No.:	E-9516

Sheet No. LA-5

Request for Town Council Action

Public Hearing: ZA-24-03
Date: 1/21/25

Subject: Multi-Family Regulations
Department: Planning Department
Presented by: Planning Director - Stephen Wensman
Presentation: Public Hearing

Issue Statement

The Town Council is respectfully requested to hold a public hearing to review and approve the proposed UDO amendments to the multi-family regulations, ZA-24-03.

Financial Impact

None

Action Needed

The Town Council is respectfully requested to hold a public hearing to review the multi-family regulations and to approve, approve with changes or deny them.

Recommendation

Staff recommends approval of UDO Amendment, ZA-24-03, updating the multi-family regulations in the UDO.

Approved: ☑Town Manager ☐ Town Attorney

Attachments:

1. Staff report
2. Legal Ad
3. Petition for Amendment to UDO
4. Draft Ordinance
5. Consistency Statement

Staff Report

Public Hearing: ZA-24-03
Date: 1/21/25

REQUEST:
The Town Council is respectfully requested to hold a public hearing to review updates to the multi-family (MF) regulations.

ISSUE:
Recent development in the town has highlighted issues with the MF residential regulations in the code:

- Private streets
- Setbacks
- Buffers
- Definitions
- Open space and recreation.
- Special Use Permits vs. Conditional Zoning and table of uses.

The MF regulations are found across the UDO in Sections 2.19, 7.35, 8.13, 10.2 10.110. and Appendix A.

DRAFT AMENDMENT:

The intent of this amendment is to minimally address the issue mentioned above.

Part I of the amendment:

- Will require all MF developments to be approved through conditional zoning rather than the special use process, except in the R-MH Zoning District, where special use permits will still be allowed for MF projects.

Part II of the amendment:

- Strengthens and simplifies the recreation and open space standards and reorder for clarification.

Part III of the amendment:

- Updates Section 8.13.1 MF dimensional standards setback requirements.

Part IV of the amendment:

- Updates 10.110.2 Private Street requirements, allowing private streets only in the ETJ with affirmative restrictive covenants and references the Standard Detail and Specifications Manual.

Part IV of the amendment amends Appendix A Definitions:

- New driveway definition
- Amends *Dwelling, Two-family* to include vertically stacked duplexes
- Strike *Major and /or multi-unit development* definition.
- Update *Parking lot* definition.
- Strike *Private driveway* definition.
- Update townhouse definition, striking the townhouse standard from the definition and moving it to 10.13.1.4

Other future amendments to consider:

The amendment above is intended to address existing issues in the MF standards. What is not addressed that might be considered includes:

- Should there be any additional standards for MF units fronting on parking lots.
    - Allowing parking enforcement.
    - Liability protection for trash pickup.
- Should there be additional standards for MF?
    - Additional or building material standards for apartments beyond current.
    - Townhouse width requirements.
    - Building height requirements/percentages
    - Garage door to façade percentages.
    - Requirements for alley access.
    - Open space/recreation requirements.
    - Standard provision for storing rollout bins.
    - Define what is allowed in the perimeter setback (limit parking).
    - Greater buffer requirements.

CONSISTENCY STATEMENT (STAFF OPINION):

Staff find the zoning text amendment consistent with the Town of Smithfield Comprehensive Growth Management Plan and other adopted plans, and that the amendment is reasonable and in the public interest.

PLANNING BOARD RECOMMENDATION:

The Planning Board voted 6-0 to recommend of approval of ZA-24-03 with the condition that there be two items removed (the requirement for a strictly CZ process and the elimination of new private streets) and the Board recommended the addition of one item (that there be a greater buffer requirement be implemented for privacy, requiring either a vinyl fence or berm with multi-family development, to be determined by administrative decision).

RECOMMENDATION:

Staff recommend approval of the zoning text amendment ZA-24-03, with a statement declaring the request consistent with the Town of Smithfield Comprehensive Growth Management Plan and that the request is reasonable and in the public interest.

RECOMMENDED MOTION:

"Move to recommend approval of the zoning text amendment, ZA-24-03, finding the amendment consistent with the Town of Smithfield Comprehensive Growth Management Plan and other adopted plans, and that the amendment is reasonable and in the public interest."

Town of Smithfield
Planning Department
350 E. Market St Smithfield, NC 27577
P.O. Box 761, Smithfield, NC 27577
Phone: 919-934-2116
Fax: 919-934-1134

Petition for Amendment to the Unified Development Ordinance

Pursuant to Article 4 of the Town of Smithfield Unified Development Ordinance, Proposed amendments may be initiated by the Town Council, Planning Board, Board of Adjustment, members of the public, or by one or more interested parties. The application for any amendment shall contain a description of the proposed zoning regulation.

APPLICANT INFORMATION:

Stephen Wensman
Petitioner's Name

Address or PO Box

Smithfield NC 27577
City, State, Zip Code

919-934-2116
Telephone

Proposed amendment to the Town of Smithfield Unified Development Ordinance:

Amendments to UDO as they pertain to Multi-family development

Section 10.110.1, 10.110.2, 2.19, 7.35,8.13, 10.3, Appendix A

(Attach additional sheets as necessary)

This application must be accompanied by a Statement of Justification which addresses the following:

1. How the amendment proposed would serve the public interest or correct an obvious error in the existing ordinance.

2. How the amendment proposed will enhance or promote the purposes and goals of the adopted plans and policies of the governing body.

The undersigned hereby authorizes the filing of this petition and certifies that the information contained herein stands alone based on the merits of this request and is accurate to the best of their knowledge and belief.

Stephen Wensman
Signature of Petitioner

10/7/24
Date

FOR OFFICE USE ONLY

File Number: _____ Date Received: _____ Amount Paid: _____

Statement of Justification:

The existing codes are in conflict with each other and do not provide sufficient regulation of multi-family development.

The amendment proposed will enhance or promote the purposes and goals of the adopted plans and policies of the governing body by providing proper regulation of MF development that is more easily understood and not in conflict with other provisions of the UDO.

Town of Smithfield, NC
Notice of Public Hearing

Notice is hereby given that a Public Hearing will be held before the Town Council of the Town of Smithfield, N.C., on Tuesday, January 21st, 2025, at 7:00 P.M., in the Town Hall Council Chambers located at 350 East Market Street to consider the following requests:

ZA-24-03 Miscellaneous Multi-Family Amendments: Staff is requesting to review updates to the multi-family (MF) regulations in the UDO, affecting Unified Development Ordinance Article 6 Section 6.2 and 6.6; Section, Article 7, Section 7.35, Article 8, Section 8.13.1; Article 10, Section 10.110.2 Private Streets; and Appendix A Definitions.

All interested people are encouraged to attend. To accommodate disabilities and to comply with ADA regulations, please contact the office if you need assistance. Further inquiries regarding this matter may be directed to the Town of Smithfield at (919) 934-2116 ext. 1111 or online at www.smithfield-nc.com.

ORDINANCE # ZA-24-03
AN ORDINANCE TO AMEND THE TOWN OF SMITHFIELD UNIFIED DEVELOPMENT ORDINANCE AS IT PERTAINS TO MULT-FAMILY DEVEOPMENT.

WHEREAS, the Smithfield Town Council wishes to amend certain provisions in the Town of Smithfield Unified Development Ordinance by making changes to Unified Development Ordinance Article 6 Section 6.2 and 6.6; Section, Article 7, Section 7.35, Article 8, Section 8.13.1; Article 10, Section 10.110.2 Private Streets; and Appendix A Definitions.

WHEREAS, it is the objective of the Smithfield Town Council to have the UDO promote regulatory efficiency and consistency and the health, safety, and general welfare of the community;

NOW, THEREFORE, be it ordained that the following Articles are amended to make the following changes set forth in the deletions (strikethroughs) and additions (double underlining) below:

PART 1

[Revise Article 10, Section 6.6 to require conditional zoning for multi-family land uses in the B-3 zoning district]

Sec. 6.2. - Interpretation.

Zoning districts have uses specified as permitted by right, special uses, conditional zoning district uses and uses permitted with supplemental regulations. Detailed use tables are provided in Section 6.6 showing the uses allowed in each district. The following describes the processes of each of the categories that the uses are subject to:

• Permitted by Right (P): Administrative review and approval subject to district provisions and other applicable requirements only.

• Permitted with Supplemental Regulations (PS): Administrative review and approval subject to district provisions, other applicable requirements, and supplemental regulations outlined in Article 7.

• Special Uses (S): Town Council review and approval of special use permit subject to district provisions, other applicable requirements, and conditions of approval as specified in Section 4.9. Some special uses may also be subject to supplemental regulations outlined in Article 7.

• Special Uses with Supplemental Regulations (SS): Some special uses may also be subject to supplemental regulations outlined in Article 7.

• Conditional Zoning Required (CZ): A CZ in Section 6.6 Table of Uses and Activities indicates that a specific use type is permitted as part of the approval of a conditional zoning district, provided the conditional zoning district request is accompanied by a site plan or master plan.

• Uses Not Permitted: Uses not marked with a P, PS, S, CZ or SS are not permitted.

…

Sec. 6.6. Tables of Uses and Activities—Primary Zoning Districts.

…

	Primary Zoning Districts												
Uses	R-20A	R-10	R-8	R-6	R-MH	O/I	B-1	B-2	B-3	LI (Sect. 7.2)	HI (Sect. 7.2)	AHH	Supplemental Regulations
RESIDENTIAL													
Residential Cluster development	PS	PS	PS										Section 7.34
Dwelling, single-family attached (townhomes)/multi-family/condominiums			~~SS~~ CZ	~~SS~~ CZ	SS	~~SS~~ CZ	~~SS~~ CZ	~~SS~~ CZ	~~SS~~ CZ				Section 7.35
Dwelling, single-family detached	P	P	P	P	P	S		S					
Dwelling, two family (duplex) on single lot			P	P		S		S					

…

PART 2

[Revise Article 7.35, Multi-Family/Townhouse/Apartment/Condominium to update recreation and open space standards and reorder for clarification.]

Sec. 7.35. Multi-Family/Townhouse/Apartment/Condominium.

7.35.1. Multi-family Apartment Complexes.

Multi-family apartment complexes shall comply with the following standards:

7.35.1.1. No off-street parking space shall be located closer than ten (10) feet to any residential building wall.

7.35.1.2. Sidewalks shall be constructed within the interior of the development to link residential buildings with other destinations such as, but not limited to: parking, adjoining streets, mailboxes, trash disposal, adjoining sidewalks or greenways and on-site amenities such as recreation areas.

7.35.1.3. Individual storage space containing at least twenty-four (24) square feet of enclosed floor area with a minimum height of seven (7) feet shall be provided for each dwelling unit in a multi-family development.

Such storage space shall be located either in the same building as the dwelling unit it serves or in an accessory building that may also house parking, recreational, laundry, or other facilities that serve the residents of the development

7.35.1.4. Multi-family Apartment Complex Building Design and Appearance Requirements.

All buildings, including community building/club house, storage buildings, maintenance buildings, garages and buildings containing dwelling units shall be constructed with at least four (4) of the following five (5) building design and appearance requirements:

7.35.1.4.1. Multiple building materials (e.g., brick, fieldstone, limestone, marble, granite, textured block, architectural pre-cast concrete, concrete composite siding, wood clapboard siding, wood beaded siding, stucco, E.F.I.S., aluminum siding, etc.); Multiple surface textures (e.g., rough, striated, imprinted, etc.);

7.35.1.4.2. Multiple surface textures (e.g., rough, striated, imprinted, etc.);

7.35.1.4.3. Façade modulations (e.g., building off-sets of at least two (2) feet in depth for every forty (40) feet of building wall length);

7.35.1.4.4. Architectural elements (e.g., quoins, pilasters, soldier courses, friezes, cornices, dentils, etc.) or roof line changes (e.g., changes in direction of ridge, changes in elevation of ridge, inclusion of dormers, etc.);

7.35.1.4.5. Multiple colors (the maximum number of colors shall not be limited, provided however, that there shall be no more than three (3) discernable colors and the primary color shall constitute a minimum of sixty (60) percent of the façade (excluding windows, doors, roofing, fascia materials, or soffit materials).

7.35.1.4.6. All multi-family or apartment complex developments with one (1) or more dumpsters or a trash compactor must provide a recycling area and a cardboard dumpster; both shall be screened with similar materials to the dumpster or compactor enclosure.

~~**7.35.1.5.** Open Space (Recreation) Area Requirements. New multifamily developments of twenty-five (25) units or more shall be required, as a condition of site plan approval, to provide a minimum of eight hundred (800) square feet of unpaved, usable open space with lawn or other soft surface for an outdoor children's play area, plus an additional fifty (50) square feet of usable open space for each additional unit beyond the initial ten (10) units, up to a maximum of ten thousand (10,000) square feet, except that this requirement does not apply to multifamily development located downtown or to developments devoted exclusively to senior citizens.~~

~~**7.35.1.5.1.** The features and spaces should enhance the building and center as integral parts of the community. The use of such features as plazas, patios, and courtyards should be used when practical.~~

~~**7.35.1.5.2.** Active open space shall meet the minimum design criteria:~~

~~**7.35.1.5.2.1.** The minimum dimension shall be twenty-five (25) feet; and~~

~~**7.35.1.5.2.2.** Earth berms, vegetative screening, or fencing should separate the play area from driving and parking areas; and~~

~~**7.35.1.5.2.3.** Residents should have convenient access; and~~

~~**7.35.1.5.2.4.** The design should invite a variety of active and passive recreational activities appropriate for children by utilizing unique natural features, creating gentle slopes or berms, and providing other amenities such as seating benches or play equipment.~~

~~**7.35.1.5.3.** The children's play area shall not be located in any required landscape yard or buffer.~~

~~**7.35.1.5.4.** The children's play area may be dispersed on the site; provided, that the minimum size of each area is five hundred (500) square feet or larger.~~

7.35.2. Townhouses and Condominiums.

Townhouses and condominiums shall comply with the following standards:

7.35.2.1. Maintenance. A property owners association shall be established and shall maintain everything on the outside of the townhouses, including, but not limited to, open space, landscaping, siding, roofing, porches, trim, mailboxes, driveways, and alleys.

7.35.2.2. The applicant shall file in the Johnston County Register of Deeds office at the time of site development approval, legal documents which shall provide guarantees for reserving the use of open space for the use and enjoyment of the residents of the development and provide:

7.35.2.2.1. Continuity of proper maintenance for those portions of open space land requiring maintenance;

7.35.2.2.2. Availability of funds required for such maintenance;

7.35.2.2.3. Adequate insurance protection; and

7.35.2.2.4. Recovery for loss sustained by casualty, condemnation, or otherwise.

7.35.3. Multi-family Open Space (Recreation) Area Requirements.

7.35.3.1. New multifamily developments of twenty-five (25) units or more shall be required to provide a minimum of 5% usable open space

7.35.3.2. For purposes of this section, usable open space means an area that:

7.35.3.2.1. Is not encumbered with any substantial structure;

7.35.3.2.2. Is not devoted to use as a roadway, parking area, or sidewalk, provided, however that multi-use trails may be counted towards required open space;

7.35.3.2.3. Reflects the character of the land as of the date development began. Wooded areas shall be left in their natural or undisturbed state except for the cutting of trails for walking, bicycling or jogging. Areas not wooded shall be landscaped for open play fields, picnic areas or similar facilities, or be properly vegetated and landscaped with the objective of creating a wooded area or other area that is consistent with the objectives of this section;

7.35.3.2.4. Is capable of being used and enjoyed for purposes of informal and unstructured recreation and relaxation;

7.35.3.2.5. Is part of an independent lot shown on the plan as being reserved for open space; and

7.35.3.2.6. Is legally and practicably accessible to the residents of the development from which the required open space subdivided or to the public if the open space is dedicated to the town.

7.35.3.3. Location.

7.35.3.3.1. Land for usable open space (park space) shall be centrally and internally located as to serve the needs of the residents of the neighborhood.

7.35.3.3.2. Usable open space (park space) shall serve as focal points for developments.

7.35.3.3.3. All usable open space (park space) shall be conveniently accessible to all residents of the development.

7.35.3.4. Minimum Amenities within Usable Open Space.

7.35.3.4. 1. Required usable open space (park space) shall contain two or more of the following amenities: landscaping, walls or pathways, fences, walks, lighting and electricity, fountains, ball fields, and/or playground equipment.

7.35.3.4.2. Public Seating: Provide seating areas appropriate to the intended use of the park space (e.g., park benches and durable theft/vandalism-resistant chairs and garden wall seats).

PART 3

[Revise Article 8, Section 8.13.1 multi-family design standards.]

8.13.1. Multi-Family Dwellings.

8.13.1.1. Density. Maximum allowable density shall not exceed four thousand five hundred (4,500) square feet of gross site area per dwelling unit.

8.13.1.2. Building Separation. More than one (1) building may be located on the site provided that building separation shall be determined as follows:

Height of Taller Building	**Minimum Horizontal Distance Between Vertical Projections**
20 feet or less	16 feet
Between 20.1 and 25.0 feet	25 feet
Between 25.1 and 30.0 feet	30 feet
Between 30.1 and 35.0 feet	40 feet

8.13.1.3. Distance Related to Windows. The minimum distance between the centers of facing windows shall be twenty (20) feet.

8.13.1.4. ~~Yard~~ Building Setback Requirements.

8.13.1.4.1. Front Setback ~~Yard~~—general district setback shall apply for lots that front on a public or private street.; Corner Side Setback ~~Yard~~—same as front yard for lots that front on a public or private street;

8.13.1.4.2. Townhouses lots without public or private street frontage shall be exempt from front and corner side yard setbacks.

8.13.1.4.2. Other Setbacks ~~Yards~~—a perimeter building setback ~~yard~~ shall be provided around the perimeter of the site (~~other than front and corner side yards)~~ in accordance with the following based on the number of units proposed.

Number of Units	**Width of ~~Required Yard~~ Perimeter Setback**
3 to 10 units	30 feet
11 to 30 units	35 feet
31 or more units	40 feet

PART 4

[Revise Article 10, Section 10.110 to update street standards as they pertain to multi-family developments.]

...

10.110.2. Private Streets.

10.110.2.1. Streets designated as private may be allowed in subdivisions in the Town's extra-territorial jurisdiction when in the opinion of the Town Council they provide adequate ingress and egress onto collector streets, and sufficient assurance is provided through a legally established affirmative restrictive covenants ~~homeowners' association~~, that the street shall be properly maintained.

10.110.2.2. All such streets shall be designated a "private street" on the preliminary plans and final plats. Whenever a private street intersects a U.S. or North Carolina highway or North Carolina secondary road, a statement of approval for the intersection, signed by the District Engineer, North Carolina Department of Transportation, Division of Highways for Johnston County, shall be submitted concurrent with the final plat.

10.110.2.3. All private streets and right-of-way shall conform to the Town's Standard Detail and Specifications Manual for construction and maintenance.

10.110.2.4. A homeowners' association shall be established for each subdivision containing private streets and drainage systems. The final plat for each such subdivision shall contain a certificate indicating the book and page number of the homeowners' association covenants, conditions, and restrictions. The covenants, conditions, and restrictions shall specify lot owners' responsibilities for maintenance of private streets and drainage systems and shall provide for assessments to finance all maintenance activities. Covenants shall provide that the homeowners' association will construct all stub streets prior to offering any connecting for acceptance by NCDOT or the town. Final plats for subdivisions containing private streets and drainage improvements will not be approved until the subdivider's ~~homeowner's association~~ affirmative restrictive covenants documents have been submitted and approved by the Town Attorney.

...

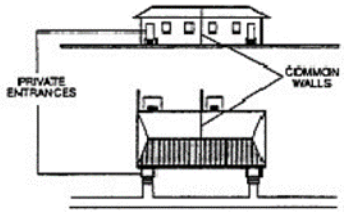
PART 6

[Revise Appendix A, Definitions as they pertain to multi-family development.]

Driveway. ~~That portion of the vehicle accommodation area that consists of a travel lane bounded on either side by an area that is not part of the vehicle accommodation area~~. A paved or unpaved access

strip of land providing a vehicular connector between the paved portion of a public right-of-way and the parking space or garage of a private or public property. A driveway generally is located on both the public right-of-way and on the adjacent private property.

Dwelling, two family (duplex). A detached residential building containing two (2) dwelling units, designed for occupancy by not more than two (2) families. Units must share a common wall or be stacked vertically.



~~**Major and/or multi-unit development.** Development consisting of:~~

~~(1) Structures on a tract of two (2)] acres or more, or~~

~~(2) Nonresidential structures having a total floor area of ten thousand (10,000) square feet or more.~~

Multifamily development. A single building on a single lot or tract containing more than two (2) dwelling units.

Parking lot~~, commercial~~. An open area (except as an accessory use), outside of the public or private right-of-way, for the storage of a vehicle or vehicles. The term "parking area" shall be included in this definition. Each parking lot shall have an approved means of ingress and egress.

~~**Private driveway**. A roadway serving two (2) or fewer lots, building sites, or other division of land, and not intended to be public ingress or egress~~.

Townhouse. A principal structure containing two (2) or more single-family attached dwelling units with each unit on its own individual lot. All townhouse developments shall be subject to multiple family dwelling provisions ~~of this chapter~~ in Article 8, with the following exceptions:

(1) All townhouse developments shall comply with the multiple family density requirements of Article 8 of this ordinance; this standard can be met by individual lot area, by provision of common open space, or by a combination of lot area and common open space.

(2) No unit shall be connected on more than two (2) sides by common walls.

~~(3) All yard dimensional requirements shall apply to the property lines of the entire development. No individual unit shall be required to meet the yard dimensions.~~

PART 7

That the Unified Development Ordinance shall be page numbered and revision dated as necessary to accommodate these changes.

PART 8

That these amendments of the Unified Development Ordinance shall become effective upon adoption.
Duly adopted this the _____ of ___, 2024.

_____

M. Andy Moore, Mayor

ATTEST

_____

Elaine Andrews, Town Clerk

THE TOWN OF SMITHFIELD
UNIFIED DEVELOPMENT ORDINANCE
AMENDMENT CONSISTENCY STATEMENT
BY THE SMITHFIELD TOWN COUNCIL
ZA-24-03

Whereas the Smithfield Town Council, upon acting on a zoning ordinance amendment to the *Unified Development Ordinance* and pursuant to NCGS §160D-605, is required to approve a statement describing how the action is consistent with the Town of Smithfield *Comprehensive Growth Management Plan*; and

Whereas the Smithfield Town Council, upon acting on a zoning ordinance amendment to the *Unified Development Ordinance* and pursuant to NCGS §160D-605, is required to provide a brief statement indicating how the action is reasonable and in the public interest.

NOW THEREFORE, BE IT ADOPTED BY THE SMITHFIELD TOWN COUNCIL AS APPROPRIATE:

IN THE EVENT THAT THE MOTION TO RECOMMEND APPROVAL OF THE ORDINANCE AMENDMENT,

That the final action regarding zoning ordinance amendment ZA-24-03 is based upon review of and consistency with the Town of Smithfield *Comprehensive Growth Management Plan* and any other officially adopted plan that is applicable, along with additional agenda information provided to the Town Council and information provided at the regularly scheduled meeting of Town Council; and

It is the objective of the Town of Smithfield Town Council to have the *Unified Development Ordinance* promote regulatory efficiency and consistency and the health, safety, and general welfare of the community. The zoning ordinance amendment promotes this by offering fair and reasonable regulations for the citizens and business community of the Town of Smithfield as supported by the staff report and attachments provided to the Town Council at their regularly scheduled meeting. Therefore, the ordinance amendment is reasonable and in the public interest.

IN THE EVENT THAT THE MOTION TO RECOMMEND APPROVAL OF THE ORDINANCE FAILS,

That the final action regarding zoning ordinance amendment ZA-24-03 is based upon review of, and consistency, the Town of Smithfield Comprehensive Growth Management Plan and other officially adopted plans that are applicable; and

It is the objective of the Town Council to have the *Unified Development Ordinance* promote regulatory efficiency and consistency and the health, safety, and general welfare of the community. The zoning ordinance amendment does not promote this and therefore is neither reasonable nor in the public interest.