

09/05/2025

TIP PROJECTS: R-5963A

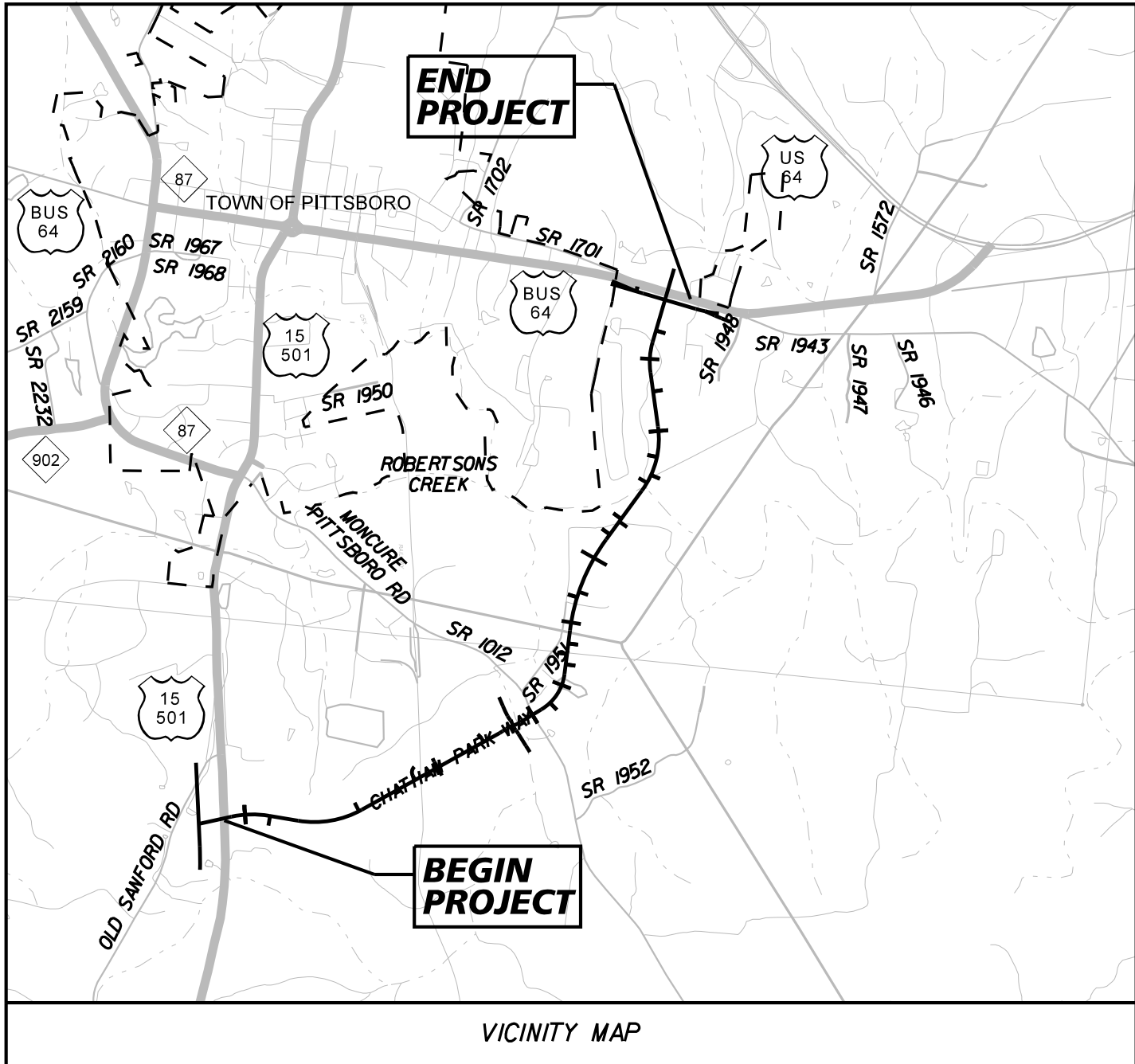
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

T.I.P. NO.	SHEET NO.
R-5963A	UC-1

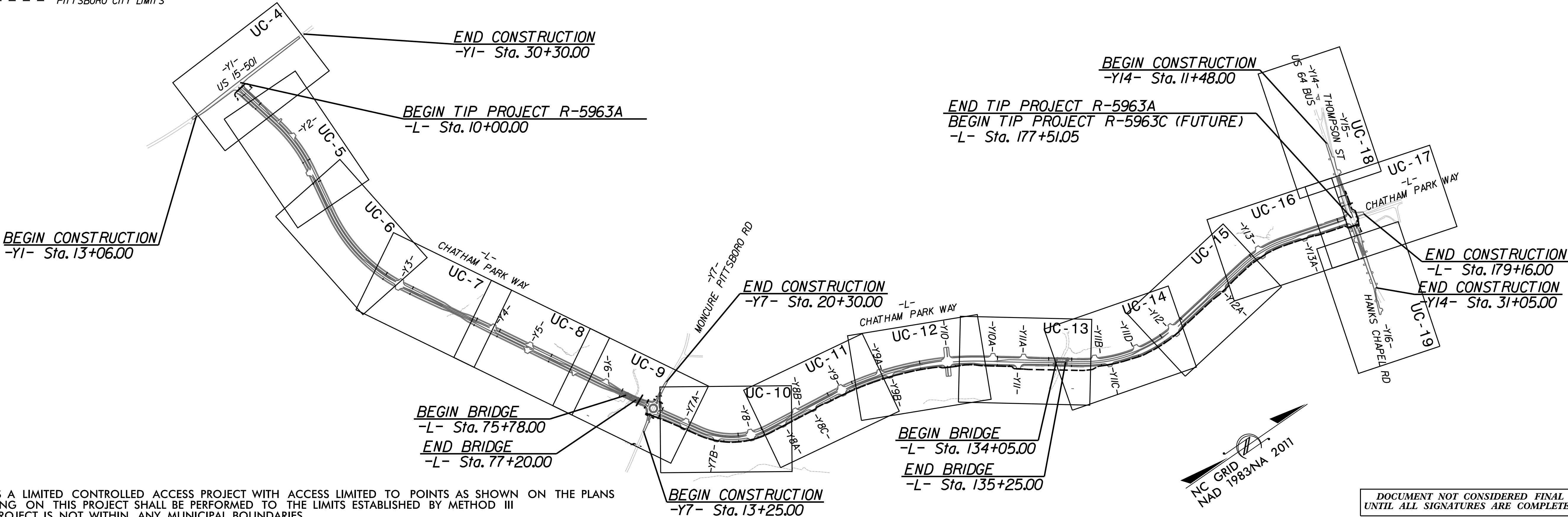
UTILITY CONSTRUCTION PLANS
CHATHAM COUNTY

LOCATION: NEW ROUTE, CHATHAM PARK WAY: US 64 BUSINESS
TO US 15/US 501 SOUTH OF PITTSBORO, CONSTRUCT
ROADWAY ON NEW LOCATON

TYPE OF WORK: POTABLE WATERLINE, RECLAIMED WATERLINE,
AND SANITARY SEWER FORCE MAIN CONSTRUCTION

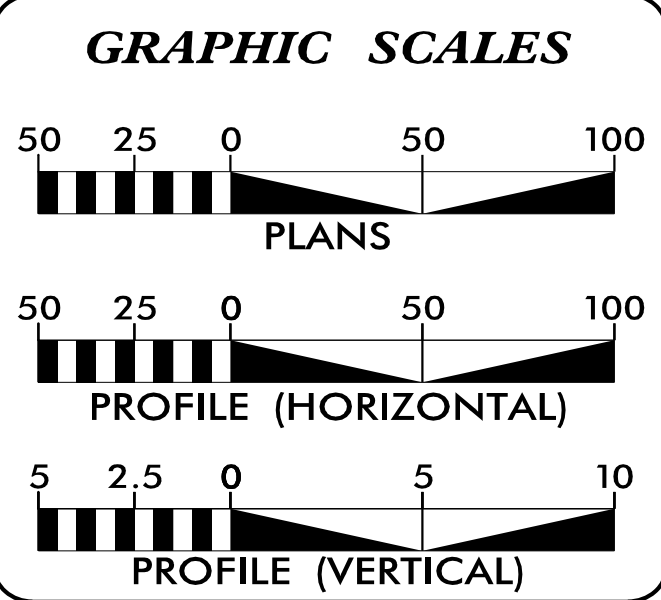


--- PITTSBORO CITY LIMITS



THIS IS A LIMITED CONTROLLED ACCESS PROJECT WITH ACCESS LIMITED TO POINTS AS SHOWN ON THE PLANS
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III
THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES

DOCUMENT NOT CONSIDERED FINAL
UNTIL ALL SIGNATURES ARE COMPLETED



INDEX OF SHEETS	
SHEET NO.:	DESCRIPTION:
UC-1	TITLE SHEET
UC-2	UTILITY SYMBOLOGY
UC-3	UTILITY NOTES
UC-3A AND UC-3B	UTILITY DETAILS
UC-4 THRU UC-19	UTILITY PLAN SHEETS
UC-20 THRU UC-24	UTILITY PROFILE SHEETS

WATER AND SEWER OWNERS ON PROJECT	
(A) POTABLE WATER, RECLAIMED WATER, FORCE MAIN SANITARY SEWER - TRIRIVER WATER	

PREPARED IN THE OFFICE OF	
Kimley»Horn	
NATE HARVEY, P.E. UTILITIES ENGINEER JACK BAJERSKI, E.I. UTILITIES DESIGNER	

SEAL
Professional Engineer Seal for Michael L. Harvey, License No. 045249, State of North Carolina.

DIVISION OF HIGHWAYS UTILITIES UNIT 1555 MAIL SERVICES CENTER RALEIGH NC 27699-1555 PHONE (919) 707-6690 FAX (919) 250-4151	
MICHAEL RICKETTS	DIVISION 8 UTILITY ENGINEER
TRENT CAVINESS	DIVISION 8 UTILITY COORDINATOR

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-2

DESIGNED BY: NLH

DRAWN BY: JNB

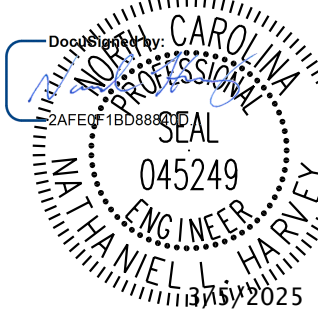
CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151



UTILITY CONSTRUCTION
PLANS ONLY

UTILITIES PLAN SHEET SYMBOLS

UTILITY CONSTRUCTION

PROPOSED WATER SYMBOLS

Water Line (Sized as Shown) 12" WL

11¼ Degree Bend

22½ Degree Bend

45 Degree Bend

90 Degree Bend

Plug

Tee

Cross

Reducer

Gate Valve

Butterfly Valve

Tapping Valve

Line Stop

Line Stop with Bypass

Blow Off

Fire Hydrant

Relocate Fire Hydrant

Remove Fire Hydrant

Water Meter

Relocate Water Meter

Remove Water Meter

Water Pump Station

RPZ Backflow Preventer

DCV Backflow Preventer

Relocate RPZ Backflow Preventer

Relocate DCV Backflow Preventer

PROPOSED SEWER SYMBOLS

Gravity Sewer Line (Sized as Shown) 12" SS

Force Main Sewer Line (Sized as Shown) 12" FSS

Manhole (Sized per Note)

Sewer Pump Station

PROPOSED MISCELLANEOUS UTILITIES SYMBOLS

Power Pole

Telephone Pole

Joint Use Pole

Telephone Pedestal

Utility Line by Others (Type as Shown) PROP. O/H POW. LINES

Trenchless Installation 12" TL INSTALL

Encasement by Open Cut 24" ENCAS. BY OC

Encasement 24" ENCASUREMENT

Thrust Block

Air Release Valve

Utility Vault

Concrete Pier

Steel Pier

Plan Note

Pay Item Note

NOTE

PAY ITEM

EXISTING UTILITIES SYMBOLS

Power Pole

Telephone Pole

Joint Use Pole

Utility Pole

Utility Pole with Base

H-Frame Pole

Power Transmission Line Tower

Water Manhole

Power Manhole

Telephone Manhole

Sanitary Sewer Manhole

Hand Hole for Cable

Power Transformer

Telephone Pedestal

CATV Pedestal

Gas Valve

Gas Meter

Located Miscellaneous Utility Object

Abandoned According to Utility Records AATUR

End of Information E.O.I.

*Underground Power Line

*Underground Telephone Cable

*Underground Telephone Conduit

*Underground Fiber Optics Telephone Cable

*Underground TV Cable

*Underground Fiber Optics TV Cable

*Underground Gas Pipeline

Aboveground Gas Pipeline

*Underground Water Line

Aboveground Water Line

*Underground Gravity Sanitary Sewer Line

Aboveground Gravity Sanitary Sewer Line

*Underground SS Forced Main Line

Underground Unknown Utility Line

SUE Test Hole

Water Meter

Water Valve

Fire Hydrant

Sanitary Sewer Cleanout

*For Existing Utilities

Utility Line Drawn from Record (Type as Shown)

Designated Utility Line (Type as Shown)

5/14/99

NCDOT GENERAL UTILITY NOTES:

1. THE PROPOSED UTILITY CONSTRUCTION SHALL MEET THE APPLICABLE REQUIREMENTS OF THE NC DEPARTMENT OF TRANSPORTATION'S "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES" DATED JANUARY 2024.
2. THE EXISTING UTILITIES BELONG TO TRIRIVER WATER.
3. ALL WATER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, DIVISION OF WATER RESOURCES, PUBLIC WATER SUPPLY SECTION. ALL SEWER LINES TO BE INSTALLED WITHIN COMPLIANCE OF THE RULES AND REGULATIONS OF THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL AND NATURAL RESOURCES, WATER QUALITY SECTION. PERFORM ALL WORK IN ACCORDANCE WITH THE APPLICABLE PLUMBING CODES.
4. THE UTILITY OWNER OWNS THE EXISTING UTILITY FACILITIES AND WILL OWN THE NEW UTILITY FACILITIES AFTER ACCEPTANCE BY THE DEPARTMENT AND THE UTILITY OWNER THE DEPARTMENT OWNS THE CONSTRUCTION CONTRACT AND HAS ADMINISTRATIVE AUTHORITY. COMMUNICATIONS AND DECISIONS BETWEEN THE CONTRACTOR AND UTILITY OWNER ARE NOT BINDING UPON THE DEPARTMENT OR THIS CONTRACT UNLESS AUTHORIZED BY THE ENGINEER. AGREEMENTS BETWEEN THE UTILITY OWNER AND CONTRACTOR FOR THE WORK THAT IS NOT PART OF THIS CONTRACT OR IS SECONDARY TO THIS CONTRACT ARE ALLOWED, BUT ARE NOT BINDING UPON THE DEPARTMENT.
5. PROVIDE ACCESS FOR THE DEPARTMENT PERSONNEL AND THE OWNER'S REPRESENTATIVES TO ALL PHASES OF CONSTRUCTION. NOTIFY DEPARTMENT PERSONNEL AND THE UTILITY OWNER TWO WEEKS PRIOR TO COMMENCEMENT OF ANY WORK AND A MINIMUM OF ONE WEEK PRIOR TO SERVICE INTERRUPTIONS AND TESTING. KEEP UTILITY OWNERS' REPRESENTATIVES INFORMED OF WORK PROGRESS AND PROVIDE OPPROTUNITY FOR INSPECTION OF CONSTRUCTION AND TESTING.
6. THE PLANS DEPICT THE BEST AVAILABLE INFORMATION FOR THE LOCATION, SIZE, AND TYPE OF MATERIAL FOR ALL EXISTING UTILITIES. MAKE INVESTIGATIONS FOR DETERMINING THE EXACT LOCATION, SIZE AND TYPE MATERIAL OF THE EXISTING FACILITIES AS NECESSARY FOR THE CONSTRUCTION OF THE PROPOSED UTILITIES AND FOR AVOIDING DAMAGE TO EXISTING FACILITIES. REPAIR ANY DAMAGE INCURRED TO EXISTING FACILITIES TO THE ORIGINAL OR BETTER CONDITION AT NO ADDITONAL COST TO THE DEPARTMENT.
7. MAKE FINAL CONNECTIONS OF THE NEW WORK TO THE EXISTING SYSTEM WHERE INDICATED ON THE PLANS, AS REQUIRED TO FIT THE ACTUAL CONDITIONS, OR AS DIRECTED.
8. MAKE CONNECTIONS BETWEEN EXISTING AND PROPOSED UTILITIES AT TIMES MOST CONVENIENT TO THE PUBLIC, WITHOUT ENDANGERING THE UTILITY SERVICE, AND IN ACCORDANCE WITH THE UTILITY OWNER*S REQUIREMENTS. MAKE CONNECTIONS ON WEEKENDS, AT NIGHT, AND ON HOLIDAYS IF NECESSARY.
9. ALL UTILITY MATERIALS SHALL BE APPROVED PRIOR TO DELIVERY TO THE PROJECT. SEE 1500-7, " SUBMITTALS AND RECORDS" IN SECTION 1500 OF THE STANDARD SPECIFICATIONS.

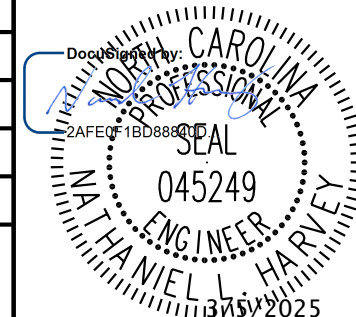
2/21/2025

PROJECT SPECIFIC UTILITY NOTES:

1. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR WRITTEN CONSENT OF THE UTILITY OWNER OR THEIR REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.
2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SHOULD ANY FIELD CONDITIONS BE ENCOUNTERED THAT VARY FROM THE INFORMATION PROVIDED IN THE CONTRACT DOCUMENTS. ANY NECESSARY FIELD REVISIONS ARE SUBJECT TO REVIEW & APPROVAL OF AN AMENDED PLAN &/OR PROFILE BY THE UTILITY OWNER PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY OWNER AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION, OR AS OTHERWISE SPECIFIED HEREIN.
4. CONTRACTOR SHALL PROVIDE PLS-SEALED AS-BUILT SURVEY FOR ALL UTILITY CONSTRUCTION PRIOR TO PLACING THE PIPELINE(S) IN SERVICE
5. PIPE ALIGNMENT SHOWN IS BASED ON STANDARD DUCTILE IRON MECHANICAL JOINT FITTINGS. JOINT DEFLECTIONS SHALL NOT EXCEED 75 PERCENT OF MANUFACTURER'S RECOMMENDED DEFLECTION. CONTRACTOR SHALL ADJUST PIPELINE ALIGNMENT AND DEFLECT JOINTS AS NECESSARY TO ACCOMMODATE THE STANDARD BENDS SHOWN.
6. ALL PIPE FITTINGS SHALL BE DUCTILE IRON RESTRAINED MECHANICAL JOINT WITH PRESSURE RATING EQUAL TO OR HIGHER THAN HOST PIPE, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.
7. ALL MECHANICAL JOINT CONNECTIONS SHALL BE RESTRAINED WITH WEDGE-TYPE MECHANICAL RESTRAINT ACCESSORY KITS DESIGNED FOR THE INTENDED USE AND MATERIAL, AS APPROVED BY UTILITY OWNER.
8. ALL UTILITY PIPING SHALL BE IDENTIFIED WITH DETECTABLE WARNING TAPE AND MARKER BALLS IN ACCORDANCE WITH OWNER SPECIFICATIONS.

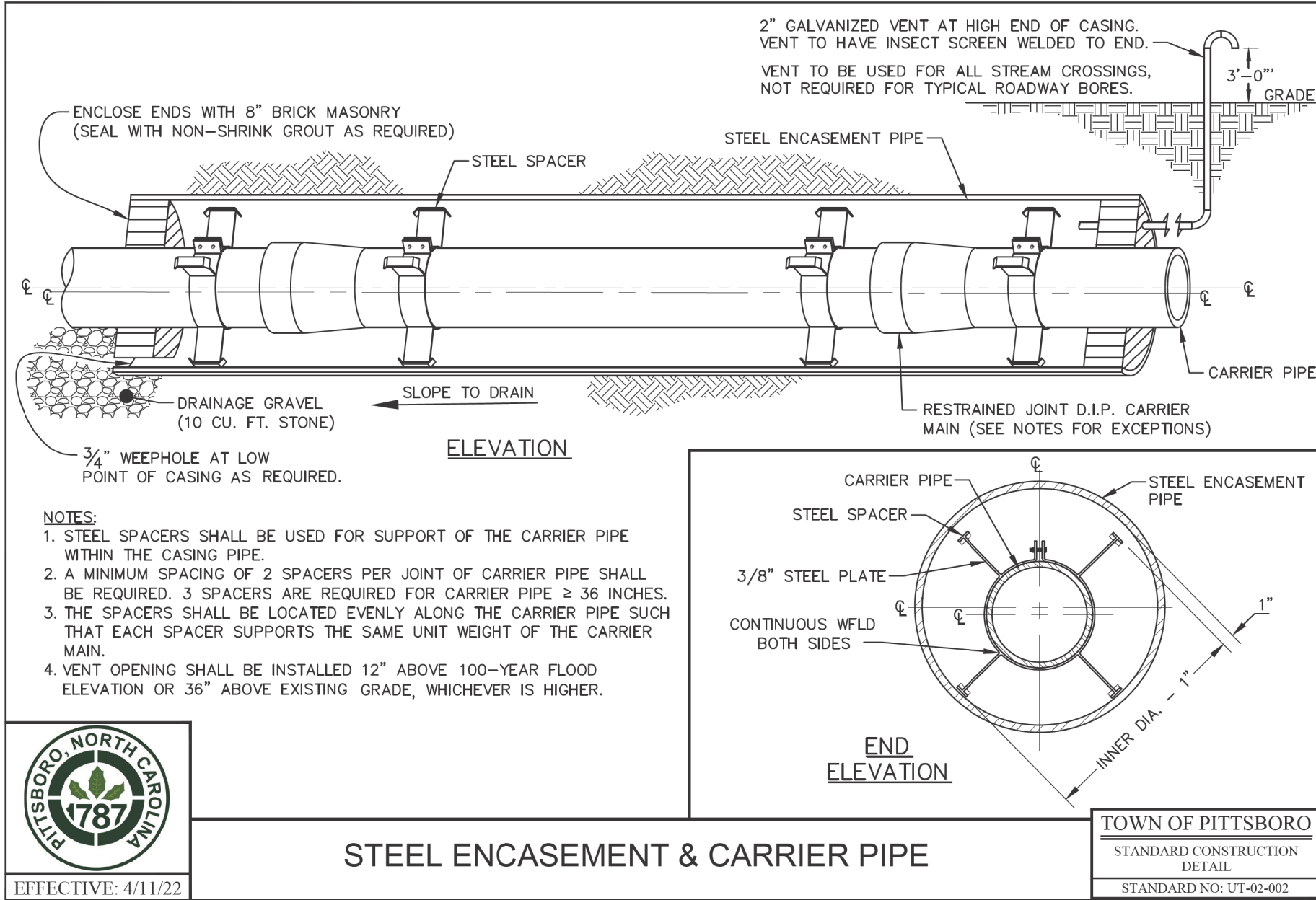
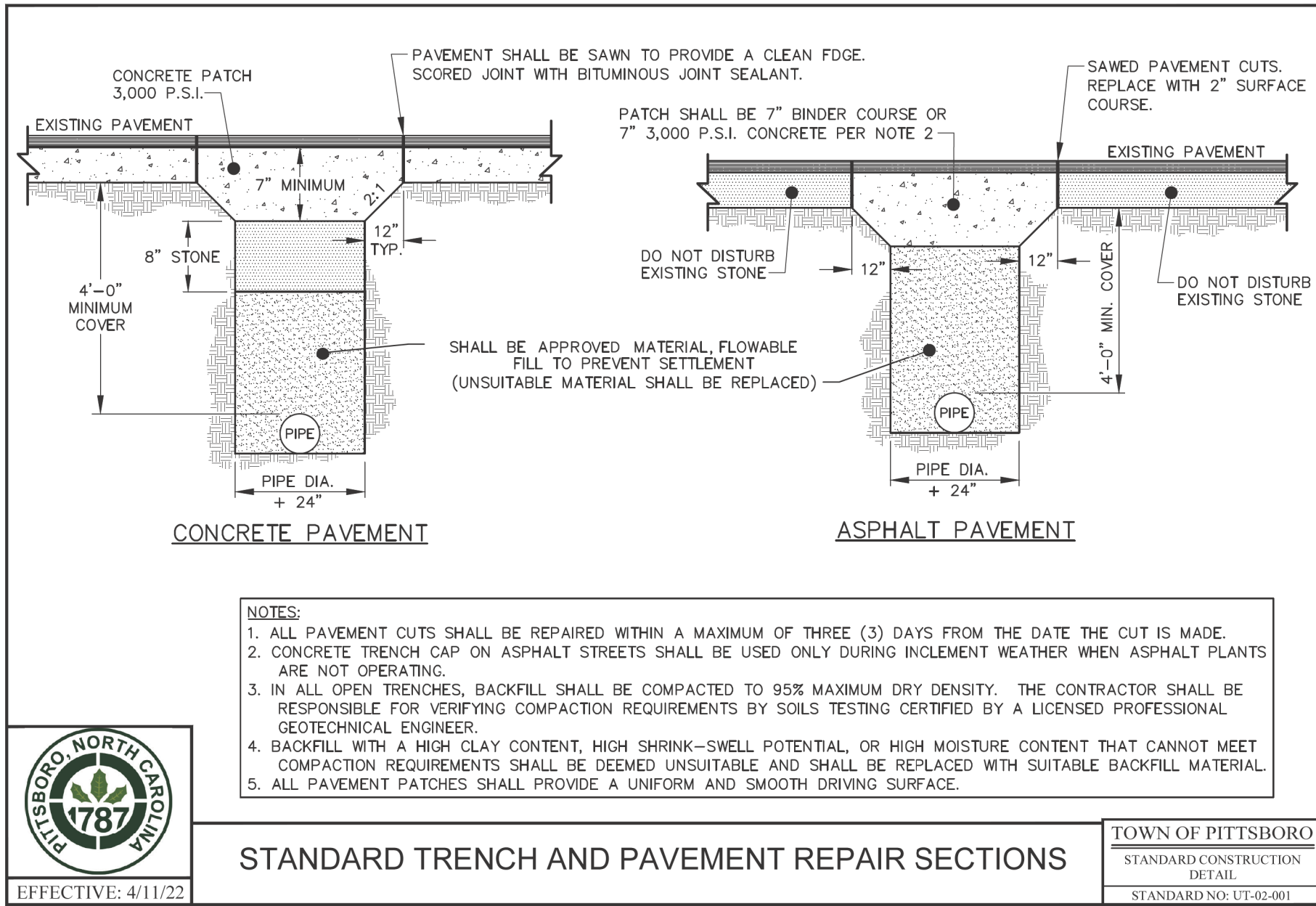
Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.		SHEET NO.	
R-5963A		UC-3	
DESIGNED BY:	NLH		UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY:	JNB		
CHECKED BY:	NDR		
APPROVED BY:	NLH		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION

5/14/99

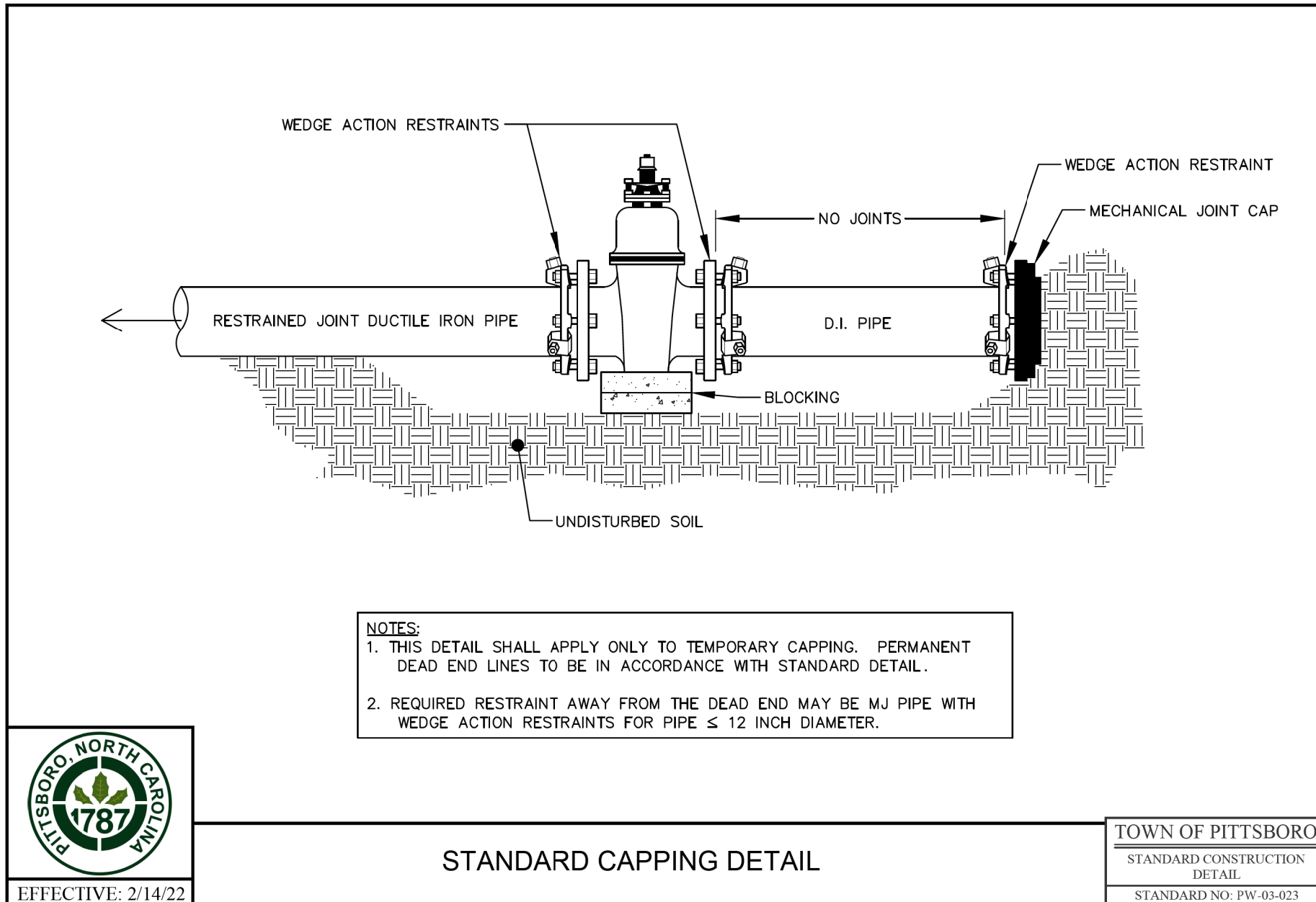
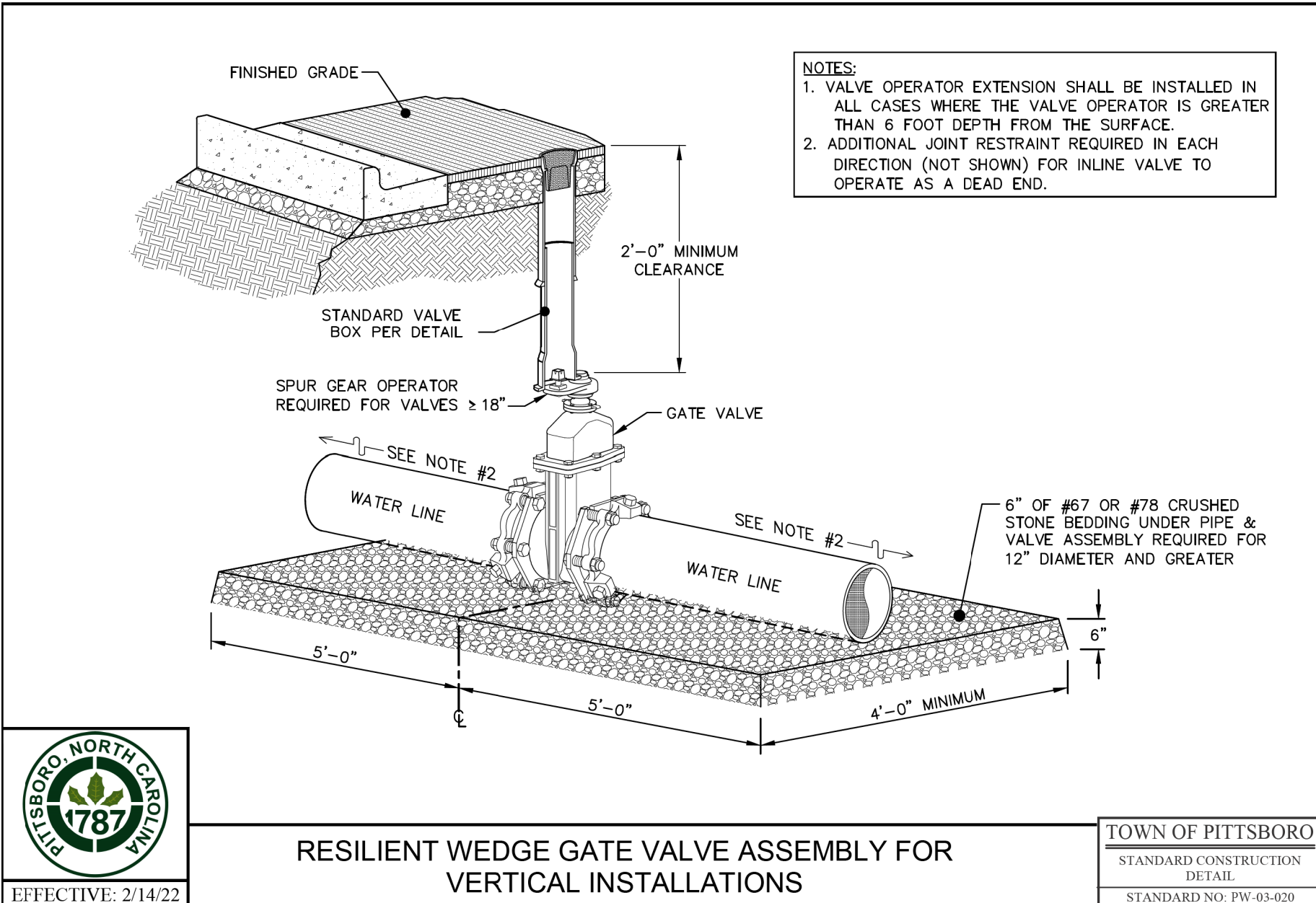
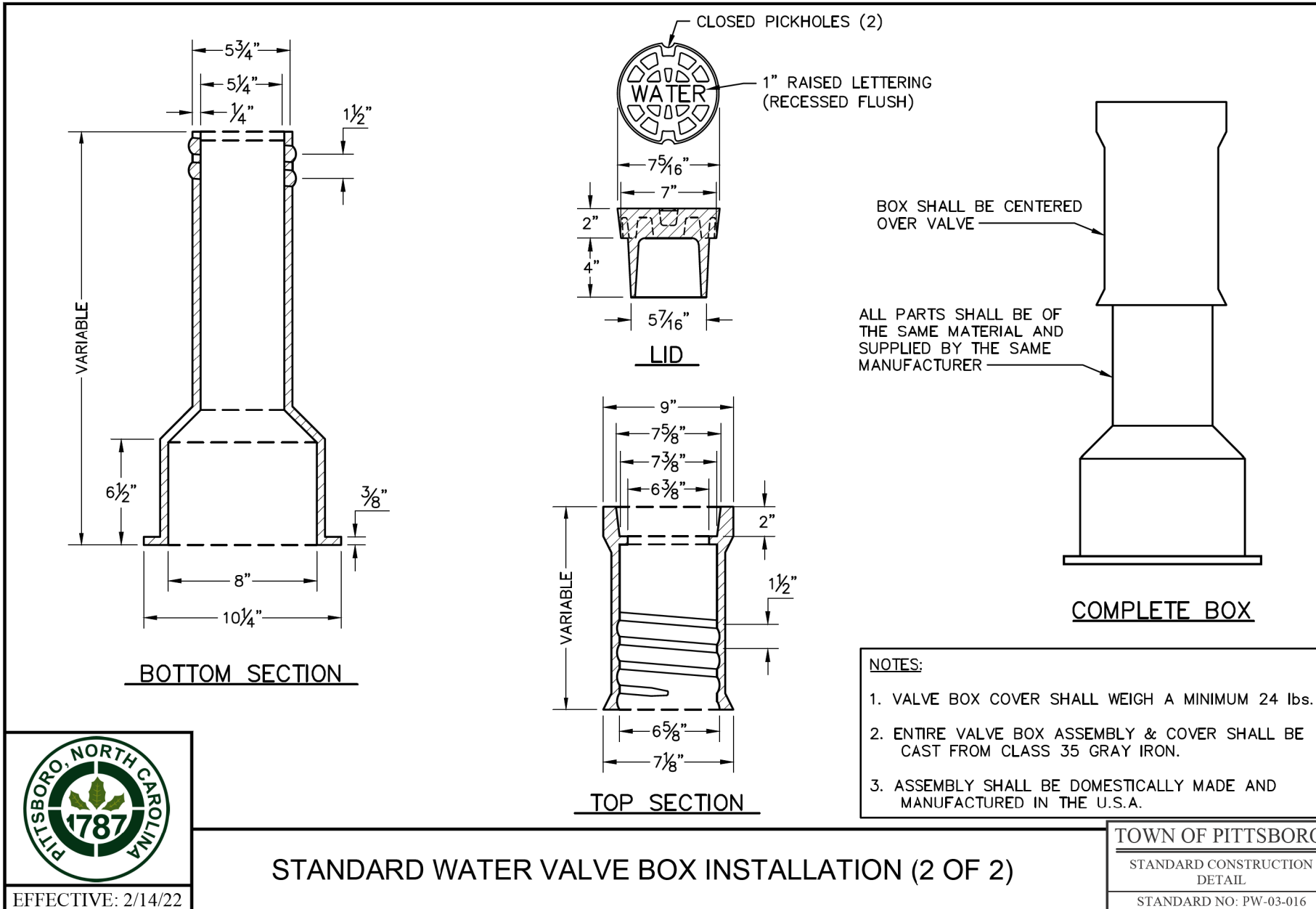
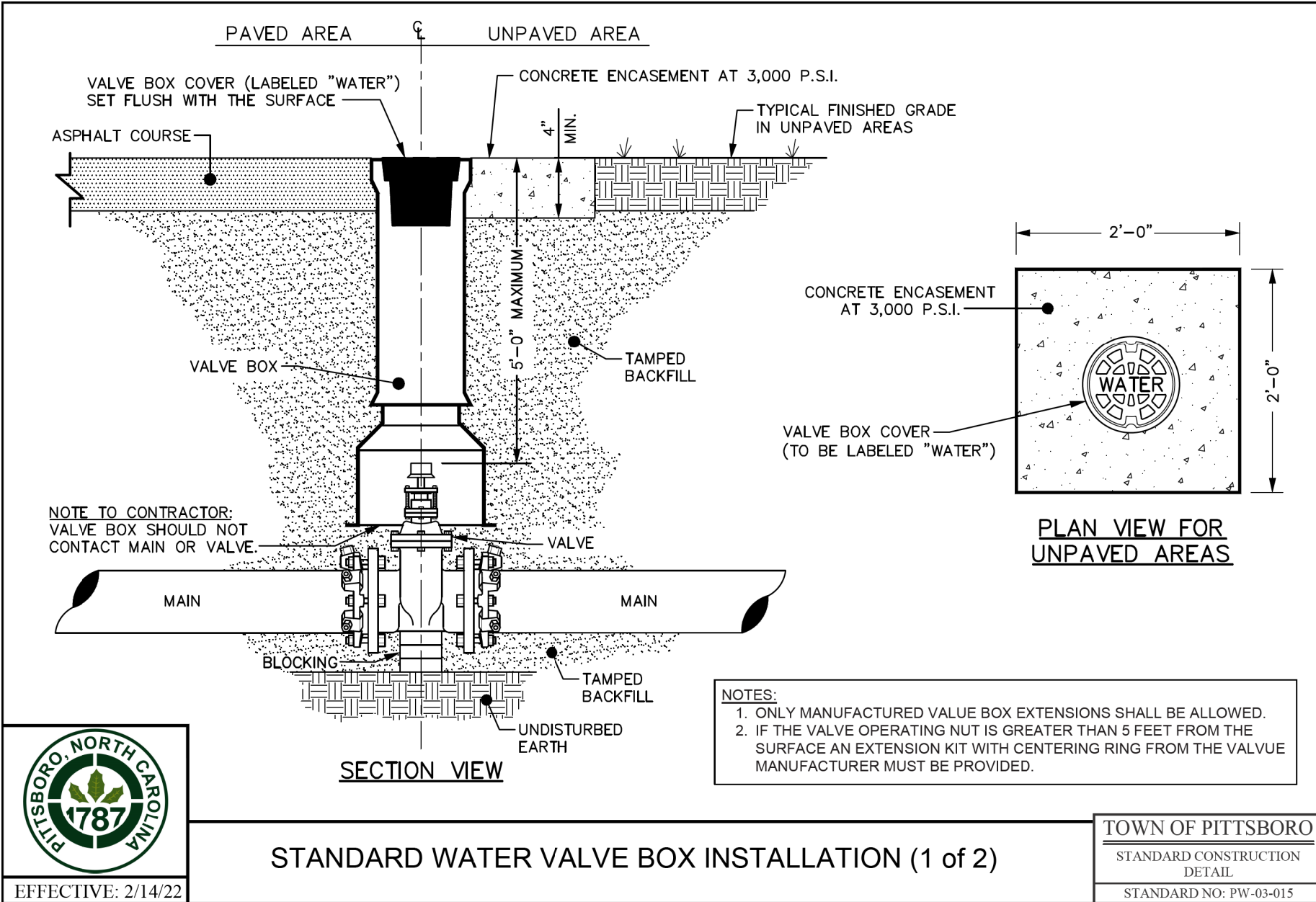
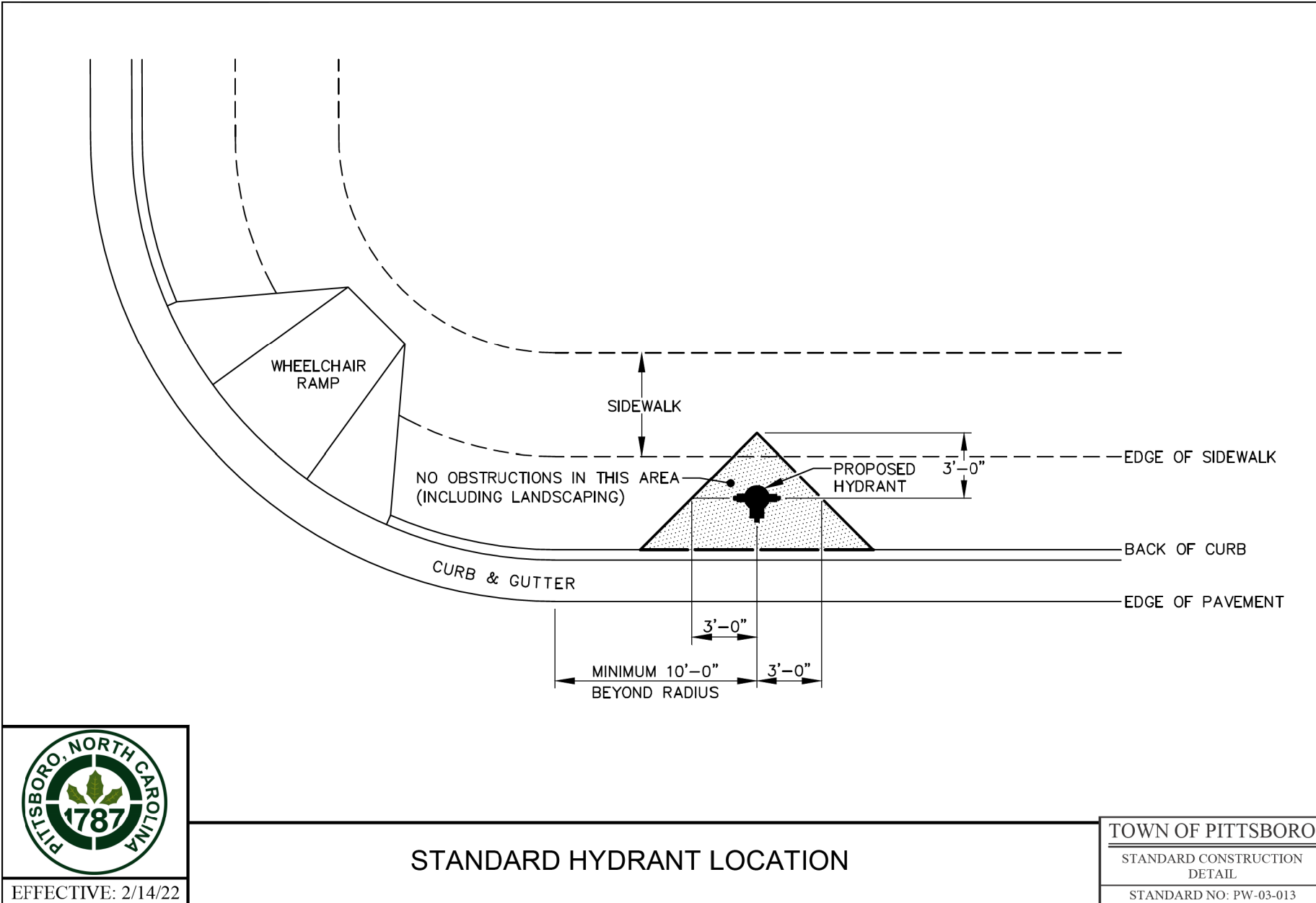
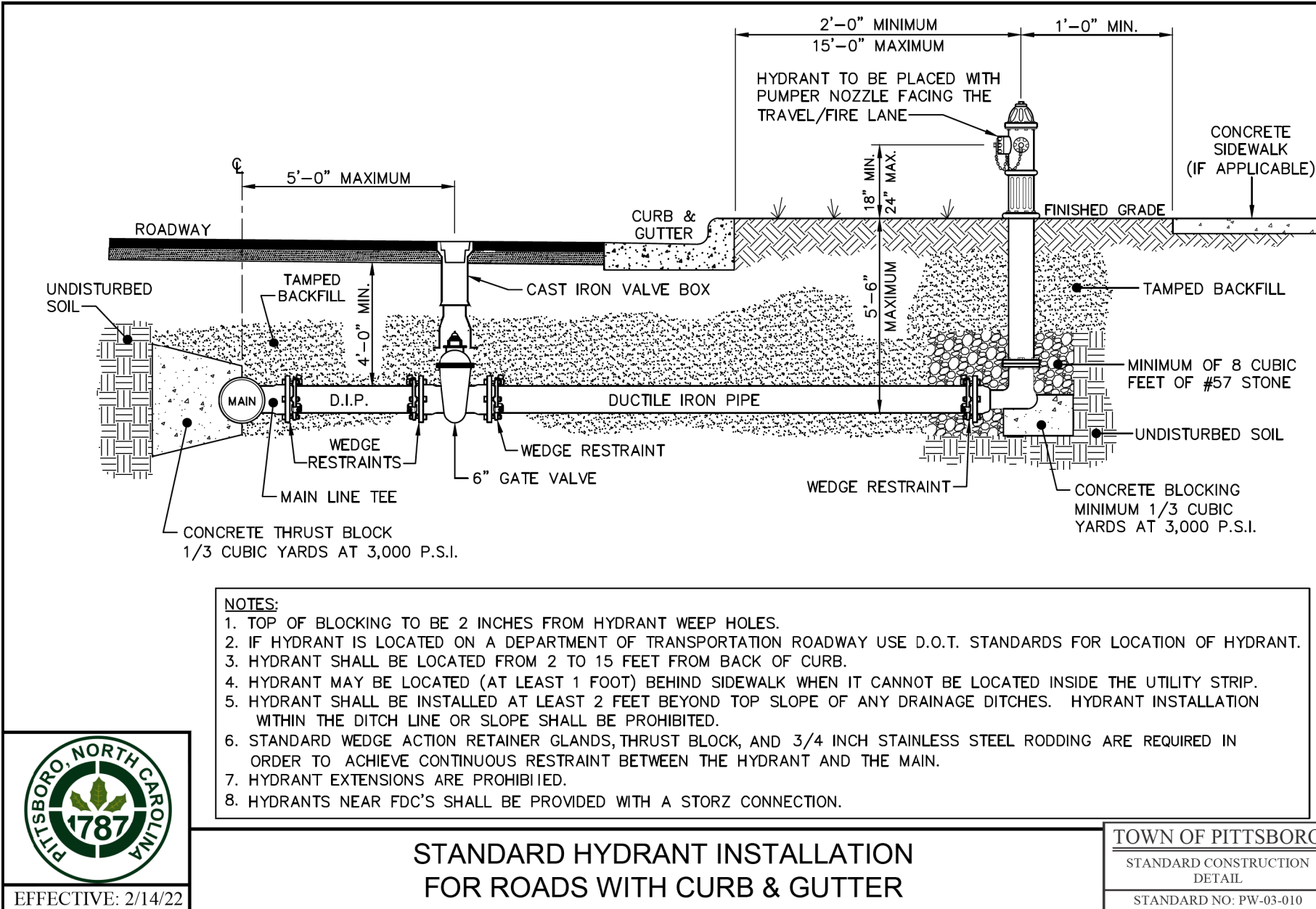


Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.		SHEET NO.	
R-5963A		UC-3A	
DESIGNED BY:	NLH		UTILITY CONSTRUCTION PLANS ONLY
DRAWN BY:	JNB		
CHECKED BY:	NDR		
APPROVED BY:	NLH		
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION			
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151			

UTILITY CONSTRUCTION



2/21/2025

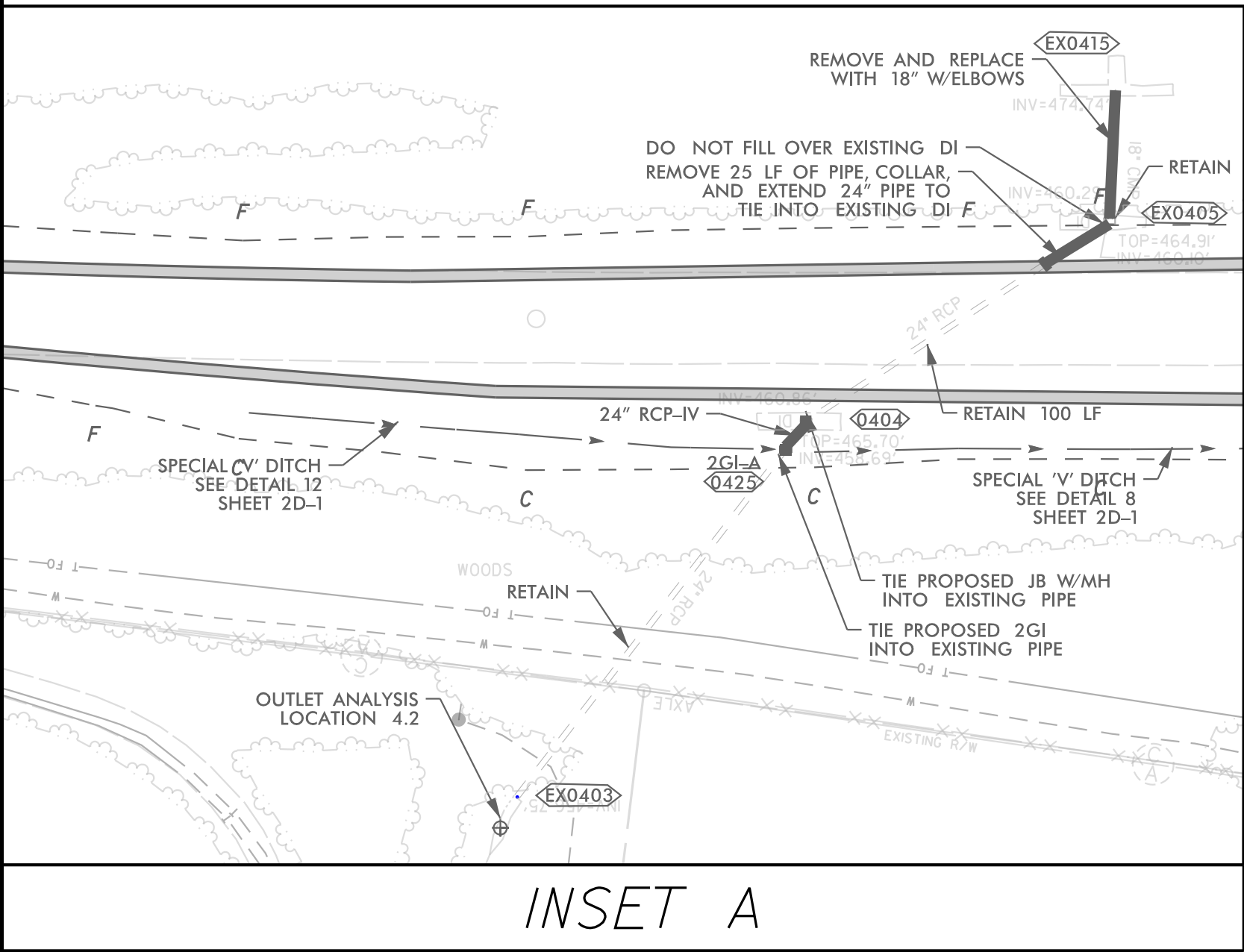
2	TAPPING SLEEVE AND VALVE
UC-3B	SCALE: NTS



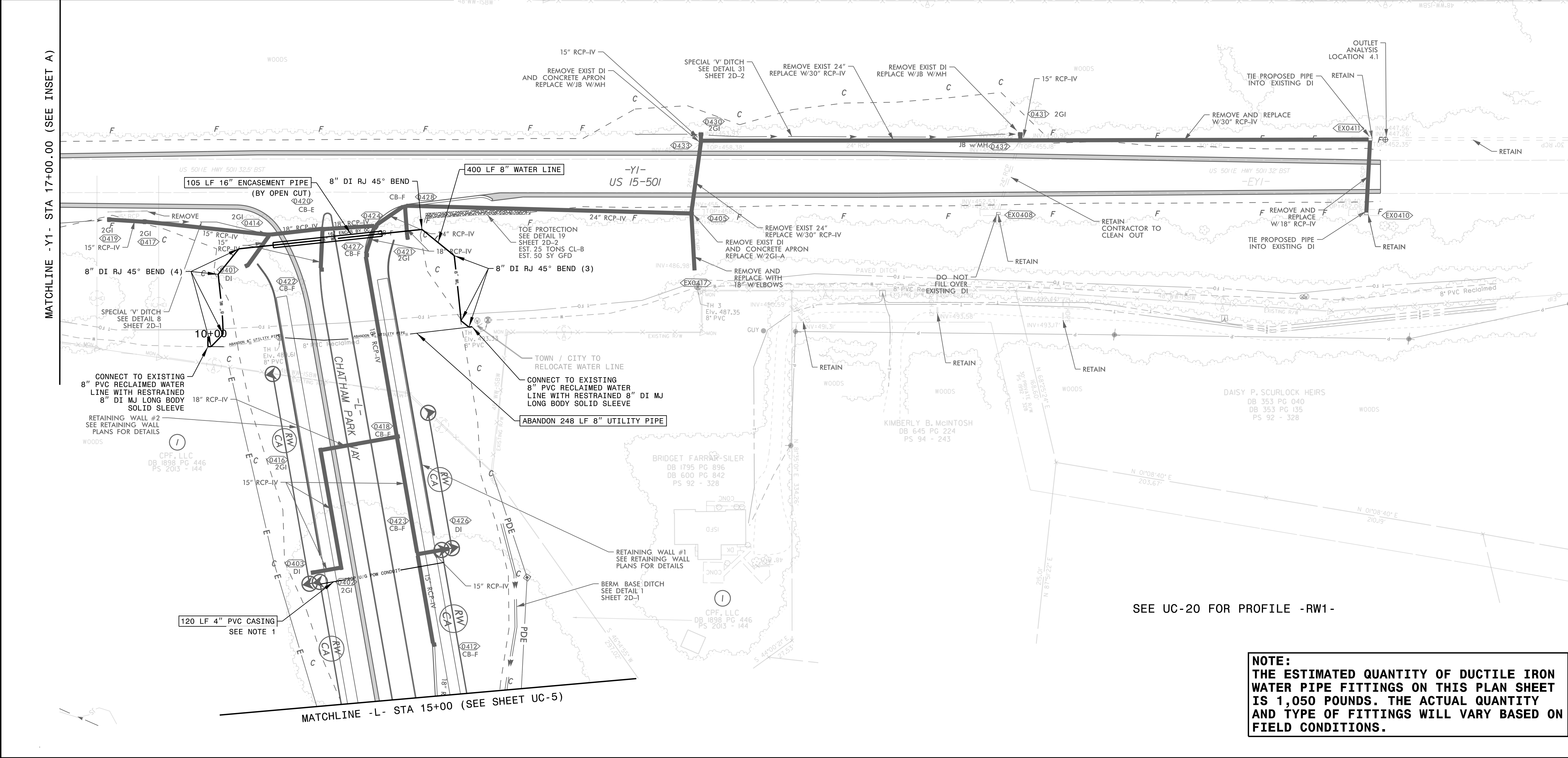
1	RESTRAINED MJ SOLID SLEEVE
UC-3B	SCALE: N.T.S.

5/14/99

3/5/2025



INSET A



SEE UC-20 FOR PROFILE -RW1-

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1,050 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701



UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-4

PROJECT REFERENCE NO.		SHEET NO.
R-5963A		UC-4
DESIGNED BY:	NLH	North Carolina Professional Engineer Seal 045249 Daniel L. Harville 10/15/2025
DRAWN BY:	JNB	
CHECKED BY:	NDR	
APPROVED BY:	NLH	
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP. SEE INSET DETAIL FOR CONFIGURATION AND COVER REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

JEFFREY THOMAS WILLIAMS
DB 683 PG 975

HERMAN RAY DOWDY
AND WIFE
CLARISSA G. DOWDY
DB 529 PG 578
PS 88 - 228

BRIDGET FARRAR-SILER
DB 1795 PG 896
DB 600 PG 842
PS 92 - 328

KIMBERLY B. MCINTOSH
DB 645 PG 224
PS 94 - 243

DAISY P. SCURLOCK HEIRS
DB 353 PG 040
DB 353 PG 135
PS 92 - 328

CPF, LLC
DB 1898 PG 446
PS 2013 - 144

5/14/99
0273081
253.02'

2/21/2025

NOTES:

1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING
PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE
R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP.
SEE INSET DETAIL FOR CONFIGURATION AND COVER
REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT
CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL
PROVISIONS FOR ADDITIONAL INFORMATION.

CARLOS GONZALEZ
AND WIFE
SANDRA HIMENEZ
DB 2293 PG 895
PS 94 - 243

CPF, LLC
DB 1898 PG 446
PS 2013 - 144

Kimley»Horn

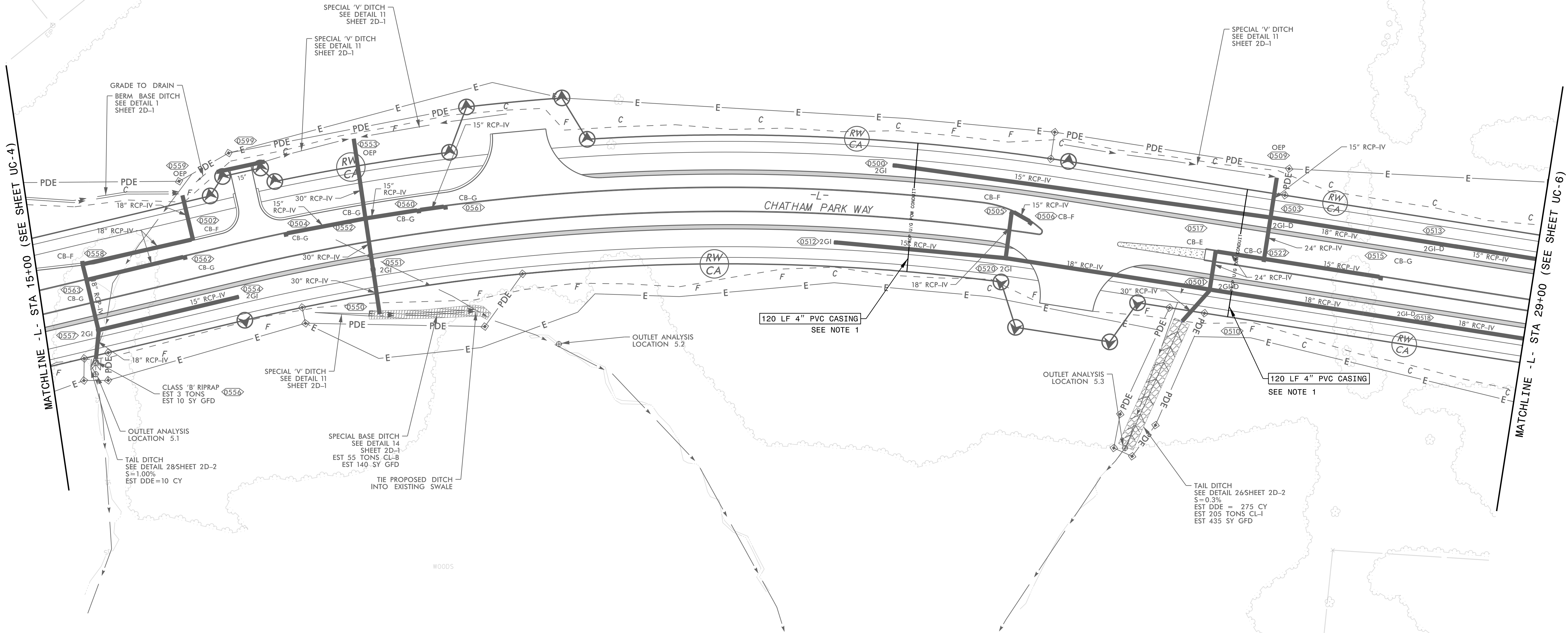
300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.		SHEET NO.
R-5963A		UC-5
DESIGNED BY:	NLH	North Carolina Professional Seal 045249 NORTH CAROLINA ENGINEER 11/15/2025
DRAWN BY:	JNB	
CHECKED BY:	NDR	
APPROVED BY:	NLH	
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-5

NAD 83 / NA 2011



5/14/99

2/21/2025

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING
PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE
R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP.
SEE INSET DETAIL FOR CONFIGURATION AND COVER
REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT
CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL
PROVISIONS FOR ADDITIONAL INFORMATION.

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-6

DESIGNED BY: NLH

DRAWN BY: JNB

CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION
PLANS ONLY

Professional Engineer
Seal
045249
NORTH CAROLINA
HARVEY L. HARRIS
11/15/2025

UTILITY CONSTRUCTION
THIS SHEET CORRESPONDS TO RDY-6

The diagram is a detailed utility construction plan for Chatham Park Way. It shows the layout of various underground utilities, including 15-inch and 18-inch RCP-IV pipes, manholes, catch basins (CB-F, CB-G), and easements (E, C, F). The plan includes matchlines to sheets UC-5 and UC-7. Key features include:

- Chatham Park Way**: The main road shown, with a centerline and right-of-way (RW) line.
- Utilities**: 15" RCP-IV and 18" RCP-IV pipes, manholes, and catch basins. Specific manholes are labeled with IDs like <0604>, <0608>, <0610>, <0615>, <0616>, <0619>, <0620>, <0650>, <0651>, <0652>, <0653>, <0654>, and <0655>.
- Easements**: Various easements are shown, including E, C, F, and PDE (Public Ditch Easement).
- Matchlines**: The plan is bounded by matchlines to sheets UC-5 (left) and UC-7 (right).
- Other Features**: A tail ditch, a class 'B' riprap area, and an outlet analysis location are also indicated.

CPF, LLC
DB 1898 PG 446
PS 2015 - 012

CPF, LLC
DB 1898 PG 446
PS 2013 - 144

CPF, LLC
DB 1898 PG 446
PS 2013 - 144

5/14/2025

2/21/2025

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP. SEE INSET DETAIL FOR CONFIGURATION AND COVER REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-7

DESIGNED BY: NLH

DRAWN BY: JNB

CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION
PLANS ONLY

CP SOUTH, LLC
DB 2023 PG 905
DB 1363 PG 435
PS 35 - 66

CP SOUTH, LLC
DB 2023 PG 905
DB 1363 PG 435
PS 35 - 66

The diagram is a detailed utility construction plan for Chatham Park Way. It shows a network of underground utilities including 15-inch, 18-inch, and 24-inch reinforced concrete pipe (RCP-IV) lines. Key features include:
- **Matchlines:** The plan is bounded by matchlines at stationing STA 42+00 (left) and STA 56+00 (right), both referring to sheet UC-6.
- **Manholes and PDEs:** Numerous manholes (e.g., 0703, 0704, 0706, 0707, 0708, 0709, 0710, 0711, 0712, 0715, 0716, 0717, 0719, 0720) and pipe depth elevations (PDE) are marked along the lines.
- **Ditches:** Several ditches are shown, including a berm 'V' ditch, lateral base ditches, special base ditches, and a toe protection ditch, each with specific details and estimates.
- **Other Utilities:** The plan also shows 15-inch and 18-inch water mains (WB), 24-inch water mains (WB), and 120 LF 4-inch PVC casing sections.
- **Geographic Context:** The plan includes a north arrow pointing towards the upper right, a scale bar for NAD 83 / N.A. 2011, and labels for 'WOODS' and 'CP SOUTH, LLC' project areas.
- **Notes:** Two callout boxes specify '120 LF 4" PVC CASING SEE NOTE 1' for specific sections of the plan.

UTILITY CONSTRUCTION
THIS SHEET CORRESPONDS TO RDU-7

5/14/99

2/21/2025

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING
PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE
R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP.
SEE INSET DETAIL FOR CONFIGURATION AND COVER
REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT
CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL
PROVISIONS FOR ADDITIONAL INFORMATION.

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

DESIGNED BY: NLH

DRAWN BY: JNB

CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

PROJECT REFERENCE NO.
R-5963A

SHEET NO.
UC-8

045249

05/16/2025

UTILITY CONSTRUCTION
PLANS ONLY

The diagram is a utility construction plan for Chatham Parkway. It shows a cross-section of the road with various utility lines and structures. Key features include:

- Chatham Parkway**: The main road shown, with a centerline and right-of-way (RW) and centerline (CA) lines.
- Pipes**: Various sizes and materials of pipes are shown, including 18" RCP-IV, 15" RCP-IV, and 24" RCP-IV. Some are labeled with diameters like Ø803, Ø805, Ø807, and Ø810.
- Manholes**: Several manholes are indicated with circular symbols and labels like "PDE" (Paved Ditch End) or "RW CA".
- Ditches**: Several ditches are shown, including "SPECIAL BASE DITCH" and "BERM 'V' DITCH". Some are labeled with details like "SEE DETAIL 16", "SEE DETAIL 9", "SEE DETAIL 2", "SEE DETAIL 10", "SEE DETAIL 14", and "SEE DETAIL 3".
- Matchlines**: The plan is bounded by matchlines to sheets UC-7 (left) and UC-9 (right), both at station 70+00.
- Notes**: Several notes are present, including "120 LF 4" PVC CASING SEE NOTE 1" and "120 LF 4" PVC CASING SEE NOTE 1".
- Other Labels**: Labels like "OUTLET ANALYSIS LOCATION 8.1", "OUTLET ANALYSIS LOCATION 8.2", "FALSE SUMP", and "SPECIAL BASE DITCH SEE DETAIL 10" are also present.

CP SOUTH, LLC
DB 2023 PG 905
DB 1363 PG 435
PS 35 - 66

CP SOUTH, LLC
DB 2023 PG 905
DB 1363 PG 1032
PS 35 - 66

CP SOUTH, LLC
DB 2023 PG 905
DB 1363 PG 435
PS 35 - 66

1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP. SEE INSET DETAIL FOR CONFIGURATION AND COVER REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

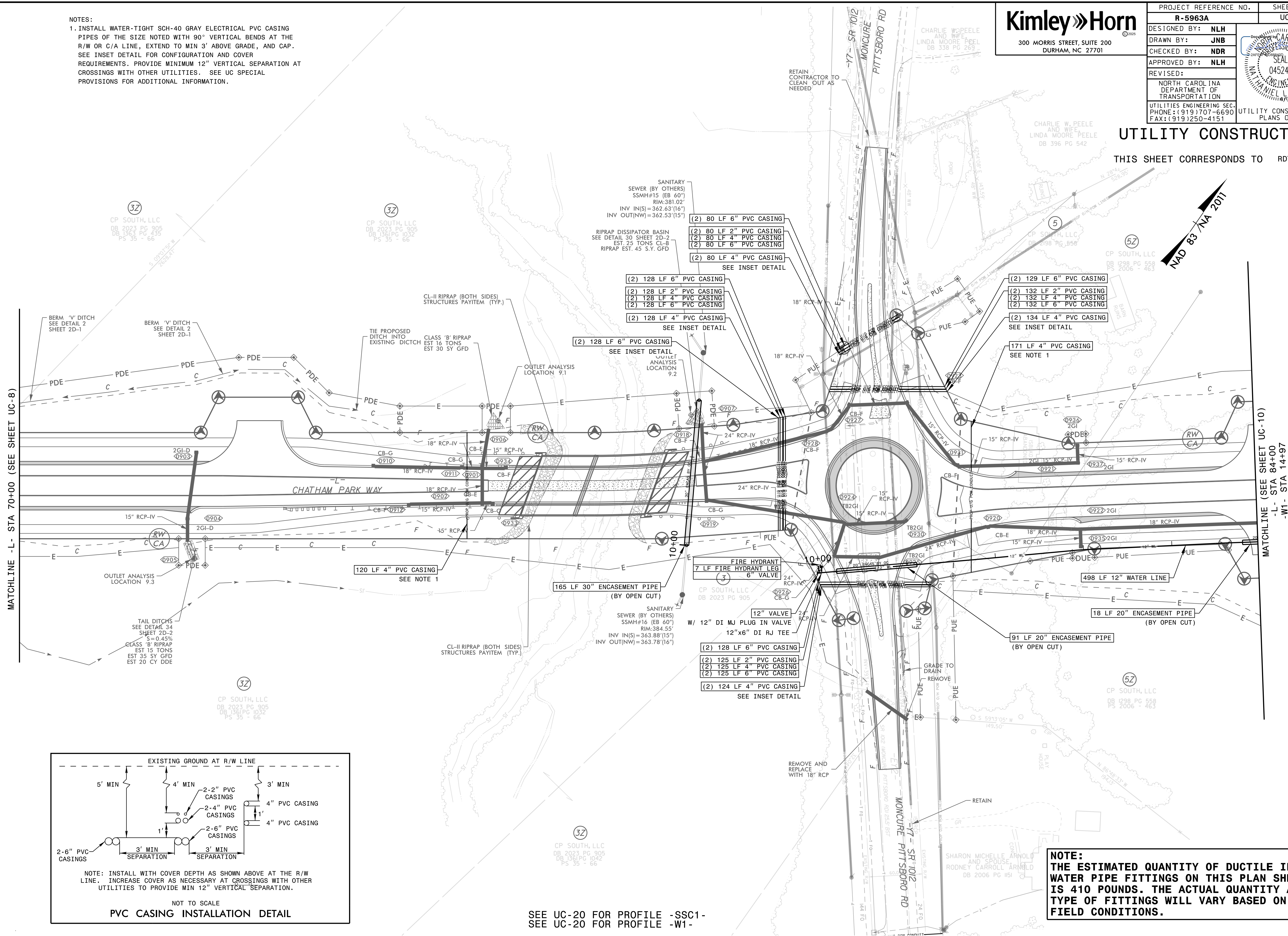
SEE UC-20 FOR PROFILE -SSC1-
SEE UC-20 FOR PROFILE -W1-

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 410 POUNDS. THE ACTUAL QUANTITY AND
TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-9

~~NAD 83 / NA 2011~~



PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-10

DESIGNED BY:

NLH

DRAWN BY:

JNB

CHECKED BY:

NDR

APPROVED BY:

NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION
PLANS ONLY

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

045249

04/15/2025

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-10

NOTES:

1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP. SEE INSET DETAIL FOR CONFIGURATION AND COVER REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

SEE UC-20 AND UC-21 FOR PROFILE -W1-

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 975 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.



SEE UC-21 FOR PROFILE -W1-

**NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 1,510 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.**

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-11

5/14/99

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING
PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE
R/W OR C/A LINE, 'EXTEND TO MIN 3' ABOVE GRADE, AND CAP.
SEE INSET DETAIL FOR CONFIGURATION AND COVER
REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT
CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL
PROVISIONS FOR ADDITIONAL INFORMATION.

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.
R-5963A

SHEET NO.
UC-12

DESIGNED BY: NLH

DRAWN BY: JNB

CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

North Carolina
Professional Seal
045249
NORTH CAROLINA
ENGINEER
10/15/2025

UTILITY CONSTRUCTION
PLANS ONLY

NAD 83

NA 2011

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-12

The diagram is a detailed utility construction plan for water lines. It shows a main water line running horizontally across the sheet, with various branches, valves, and hydrants. Key features include:
- Stationing: The plan is marked with stationing from 42+00 to 55+00.
- Materials: Various pipe materials and sizes are specified, such as 18" RCP-IV, 24" RCP-IV, 15" RCP-IV, 12" DI RJ, and 20" encasement pipe.
- Valves and Hydrants: Two fire hydrants are shown with 6" valves. Other valves include 12" valves and 12" x 6" DI RJ tees.
- Encasement: Sections of pipe are shown encased in 20" encasement pipe by open cut.
- Callouts: Numerous callouts provide specific details for each component, including dimensions, materials, and references to other sheets (e.g., SHEET 2D-1, SHEET 2D-2).
- Matchlines: The plan includes matchlines at both ends, referring to sheets UC-11 and UC-13.
- Topography: The background shows topographic contours and existing features like a road (RW CA) and a ditch (BERM 'V' DITCH).
- Orientation: A north arrow is located in the upper right corner, pointing towards the top right of the sheet.

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 1,090 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.

3/5/2025

5/14/99

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING
PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE
R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP.
SEE INSET DETAIL FOR CONFIGURATION AND COVER
REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT
CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL
PROVISIONS FOR ADDITIONAL INFORMATION.

PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-13

DESIGNED BY:

NLH

DRAWN BY:

JNB

CHECKED BY:

NDR

APPROVED BY:

NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION
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300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

045249

05/14/2025

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-13

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 1,365 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.

SEE UC-22 FOR PROFILE -W1-

3/5/2025

5/14/99

3/5/2025

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP. SEE INSET DETAIL FOR CONFIGURATION AND COVER REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-14

DESIGNED BY: NLH

DRAWN BY: JNB

CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
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UTILITIES ENGINEERING SEC.
PHONE: (919) 707-6690
FAX: (919) 250-4151

UTILITY CONSTRUCTION
PLANS ONLY

045249

04/15/2025

NAD 83

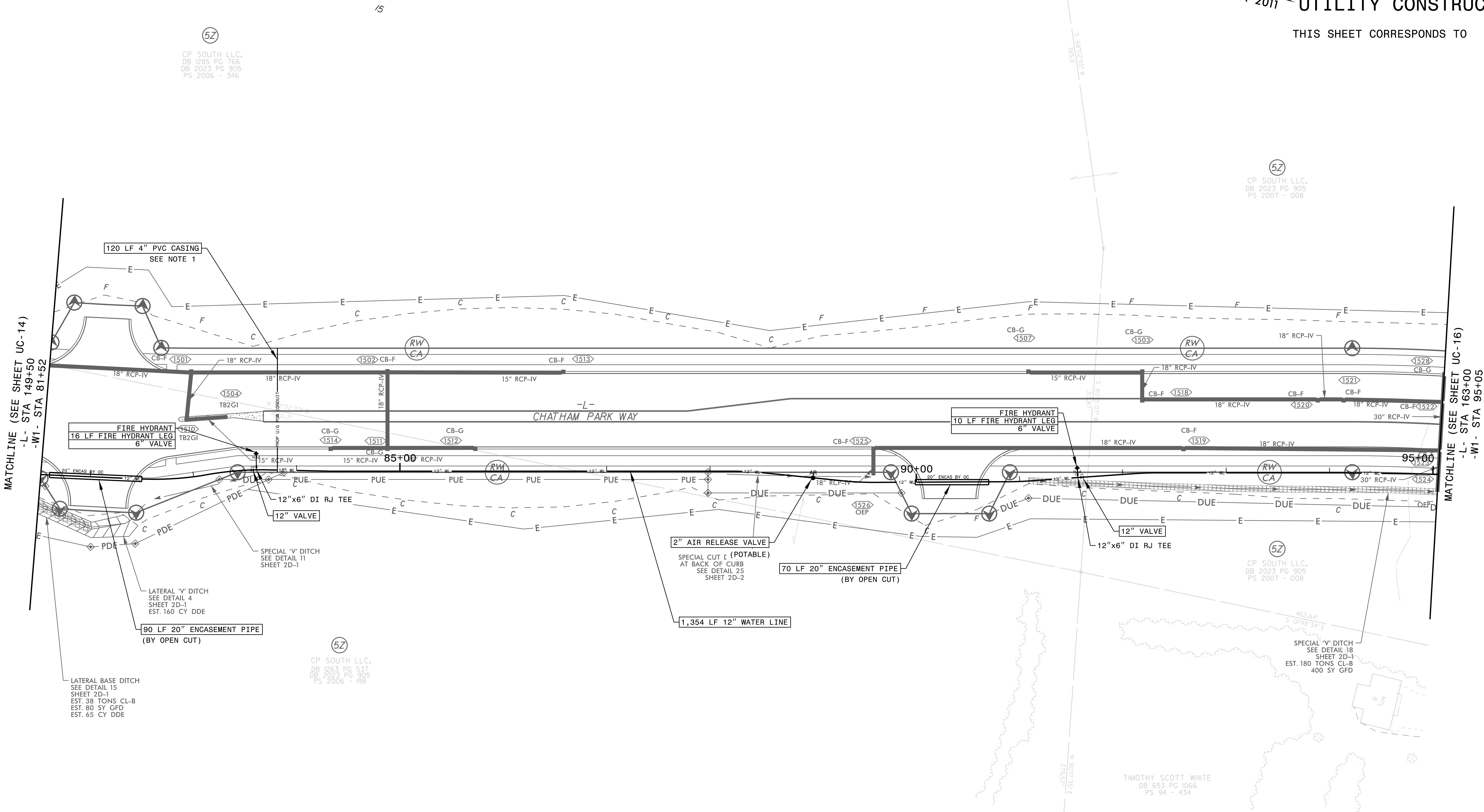
NA 2011

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-14

The diagram is a detailed utility construction plan for a water line project. It shows a 1,255 LF 12" water line running along Chatham Park Way. Key features include two fire hydrants (17 LF and 18 LF), several valves (12" and 6"), and various pipe segments (18" RCP-IV, 15" RCP-IV, 24" RCP-IV, 48" RCP-IV, 12" DI RJ). The plan also shows encasement pipes (80 LF 20" and 132 LF 4" PVC), riprap (Class B and Class I), and various ditch types (lateral, toe protection, special). Stationing is marked from 70+00 to 81+52. The plan includes matchlines to sheets UC-13 and UC-22/UC-23. A note at the bottom right states: "THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1,625 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS."

SEE UC-22 AND UC-23 FOR PROFILE -W1-



**NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON
WATER PIPE FITTINGS ON THIS PLAN SHEET
IS 1,080 POUNDS. THE ACTUAL QUANTITY
AND TYPE OF FITTINGS WILL VARY BASED ON
FIELD CONDITIONS.**

PROJECT REFERENCE NO.		SHEET NO.	
R-5963A		UC-15	
DESIGNED BY: NLH			
DRAWN BY: JNB			
CHECKED BY: NDR			
APPROVED BY: NLH			
REVISED:			
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY	

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-15

5/14/99

3/5/2025

NOTES:
1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP. SEE INSET DETAIL FOR CONFIGURATION AND COVER REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL PROVISIONS FOR ADDITIONAL INFORMATION.

SEE UC-23 FOR PROFILE -W1-

Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.
R-5963A

SHEET NO.
UC-16

DESIGNED BY: NLH

DRAWN BY: JNB

CHECKED BY: NDR

APPROVED BY: NLH

REVISED:

North Carolina
Professional Engineer
045249
HARVEY
11/15/2025

UTILITY CONSTRUCTION
PLANS ONLY

This utility construction plan sheet details the layout of water lines and related infrastructure along Chatham Park Way. The plan includes several key features:

- Water Lines:** A main 12" water line runs horizontally across the center, with various fittings and valves. A 1,229 LF 12" water line is shown with a 140 TONS CL-B 10 SY GFD. A 90 LF 20" encasement pipe (by open cut) is also indicated.
- Fire Hydrants:** Two fire hydrants are shown, each with a 16 LF fire hydrant leg and a 6" valve. One is located near station 100+00 and the other near station 105+00.
- Encasement Pipes:** An 80 LF 20" encasement pipe (by open cut) is shown near station 105+00.
- Special Base Ditches:** Several special base ditches are shown, including one near station 100+00 and another near station 105+00.
- Other Features:** The plan includes various other utilities such as 36" RCP-IV, 18" RCP-IV, 15" RCP-IV, 12" RCP-IV, and 12" RCP-IV. It also shows a 120 LF 4" PVC casing and a 12"x6" DI RJ TEE.

The plan is oriented with North at the top and includes a north arrow pointing towards the top right. The sheet is labeled "MATCHLINE (SEE SHEET UC-17) -L- STA 175+50 -W1- STA 107+34" on the right side. A note at the bottom right states: "NOTE: THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1,940 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS."

NOTE:
THE ESTIMATED QUANTITY OF DUCTILE IRON WATER PIPE FITTINGS ON THIS PLAN SHEET IS 1,940 POUNDS. THE ACTUAL QUANTITY AND TYPE OF FITTINGS WILL VARY BASED ON FIELD CONDITIONS.

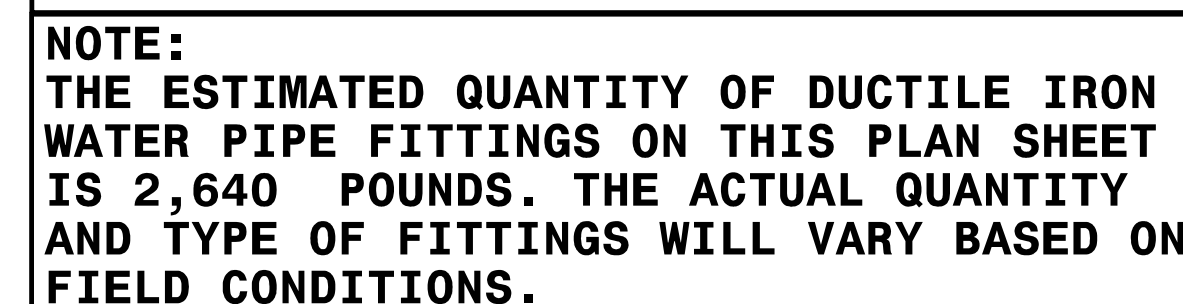
Document by: **NORTH CAROLINA PROFESSIONAL SEAL**
22AFC01BC8844B
045249
NATHANIEL L. HARVEY
ENGINEER
RMA 2025

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

1. INSTALL WATER-TIGHT SCH-40 GRAY ELECTRICAL PVC CASING
PIPES OF THE SIZE NOTED WITH 90° VERTICAL BENDS AT THE
R/W OR C/A LINE, EXTEND TO MIN 3' ABOVE GRADE, AND CAP.
SEE INSET DETAIL FOR CONFIGURATION AND COVER
REQUIREMENTS. PROVIDE MINIMUM 12" VERTICAL SEPARATION AT
CROSSINGS WITH OTHER UTILITIES. SEE UC SPECIAL
PROVISIONS FOR ADDITIONAL INFORMATION.

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-17



5/14/99

2/21/2025

NO UTILITY CONSTRUCTION
ON THIS SHEET

PROJECT REFERENCE NO.

R-5963A

SHEET NO.

UC-18

DESIGNED BY:

NLH

DRAWN BY:

JNB

CHECKED BY:

NDR

APPROVED BY:

NLH

REVISED:

NORTH CAROLINA
DEPARTMENT OF
TRANSPORTATION

UTILITIES ENGINEERING SEC.
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UTILITY CONSTRUCTION
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Kimley»Horn

300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

Professional Seal

045249

2025

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-18

MATCH LINE - Y14 - STA 16+60 (SEE SHEET UC-17)

The diagram is a detailed utility construction plan for a residential area. It shows several property lots with owner names and addresses, such as James Patrick Schwankl (DB 2099 PG 793, PB 2015 PG 89), Rea Pittsboro, LLC (DB 2336 PG 585, PB 18 PG 41), and others. The plan includes existing and proposed utility lines, including 18-inch RCP pipes, 12-inch PVC pipes, and 6-inch CHL pipes. It also shows manholes, structures, and various other features like septic tanks, planters, and sheds. The plan is oriented with North at the top, indicated by a north arrow pointing towards the top right. The match line on the right indicates that the plan continues on sheet UC-17.

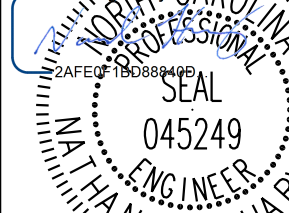
5/14/2025

2/21/2025

NO UTILITY CONSTRUCTION
ON THIS SHEET

Kimley»Horn

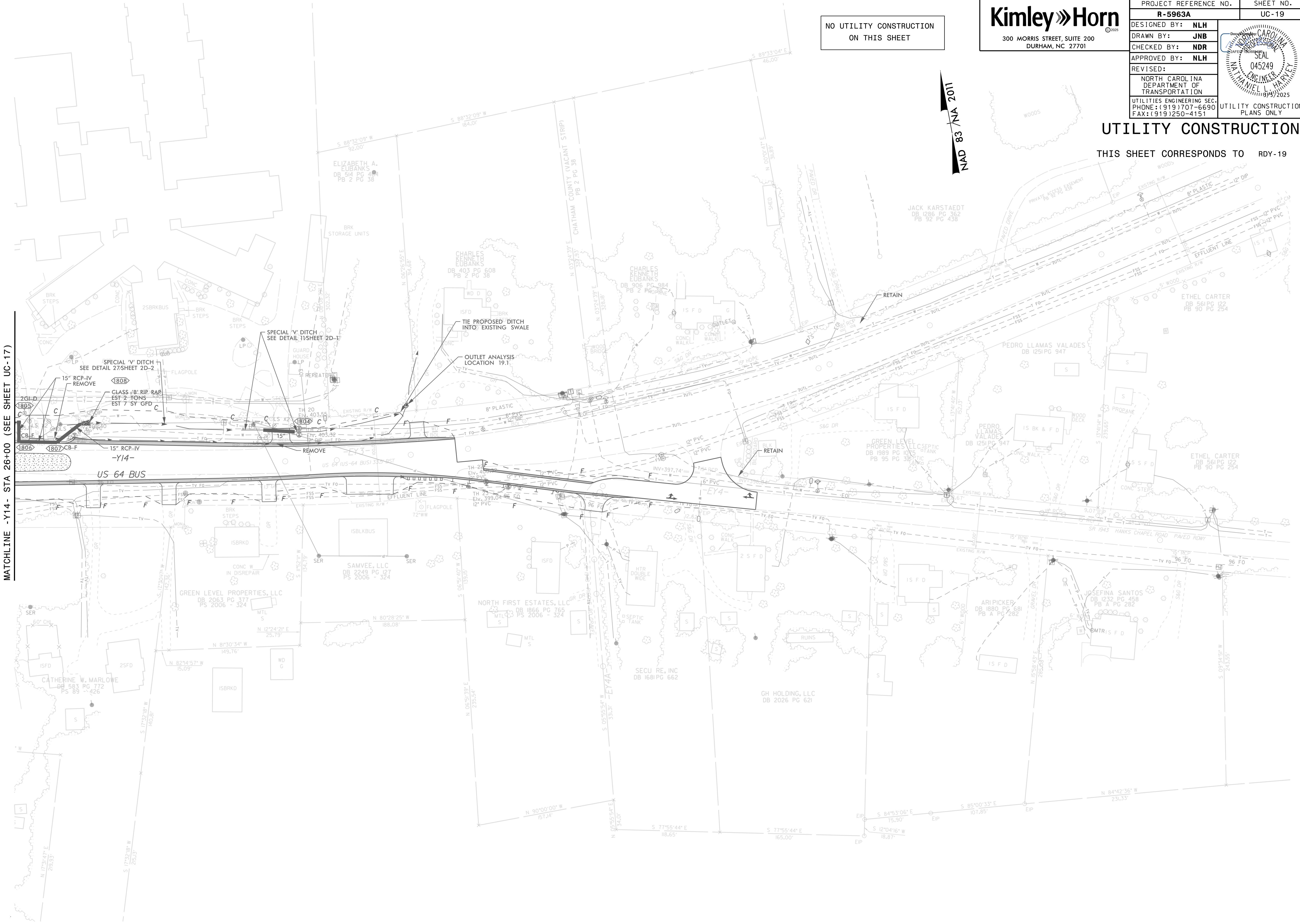
300 MORRIS STREET, SUITE 200
DURHAM, NC 27701

PROJECT REFERENCE NO.		SHEET NO.
R-5963A		UC-19
DESIGNED BY: NLH		
DRAWN BY: JNB		
CHECKED BY: NDR		
APPROVED BY: NLH		
REVISED:		
NORTH CAROLINA DEPARTMENT OF TRANSPORTATION		
UTILITIES ENGINEERING SEC. PHONE: (919) 707-6690 FAX: (919) 250-4151		UTILITY CONSTRUCTION PLANS ONLY

UTILITY CONSTRUCTION

THIS SHEET CORRESPONDS TO RDY-19

MATCHLINE -Y14- STA 26+00 (SEE SHEET UC-17)



5/14/99

4/3/2025

