



Orange Water and Sewer Authority

Our community's trusted partner for clean water and environmental protection.

Date December 11, 2024

Invitation to bid: Poinsett Drive pavement restoration.

You are invited to submit a bid for the Poinsett Drive pavement restoration project. The plans and specifications included with this invitation outline the work to be completed.

Our Construction Crew will be installing a new water main along Poinsett Drive. We anticipate the work to be complete in February/March 2025.

The hatched area shown of the plans is the general area of the overlay the trench repair will generally be the route of the pipe and services.

Paving Project duration: Substantial completion 30 days from NTP and Final completion at 45 days

Performance and Payment bonds required.

We look forward to receiving a submittal from your company.

Bids are to be submitted by:

January 14, 2025 by end of the day (11:59 PM) bids may be submitted by email to DBerger@owasa.org (the time stamp on the email will serve as the confirmed delivery date and time.) or delivered to 400 Jones Ferry Road Carrboro, NC 27510. **Please note delivery to our physical address will need to be completed before 5:00 PM on January 14, 2025.** Bids received after these times will not be accepted.

Darren Berger Project Manager

Orange Water and Sewer Authority

Email: DBerger@owasa.org

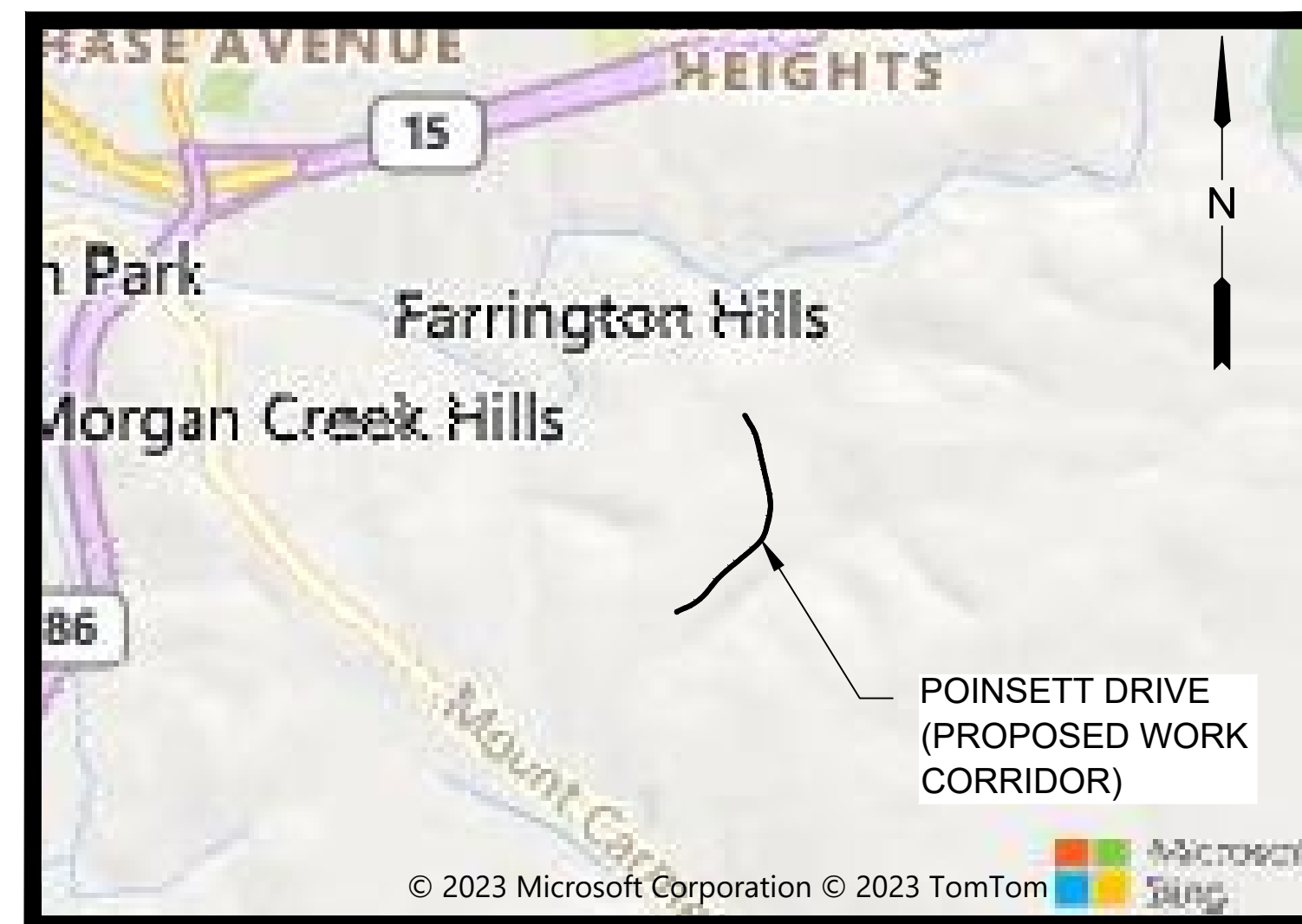
Phone: 919-537-4240

CONSTRUCTION DRAWINGS FOR POINSETT DRIVE 6" WATER MAIN REPLACEMENT

PREPARED FOR:



MM PROJECT NO.: 501100652
FEBRUARY 2024 – ISSUE FOR PERMIT



LOCATION MAP
SCALE: NTS



VICINITY MAP
SCALE: NTS

PROJECT LOCATION
POINSETT DRIVE
CHAPEL HILL, NC 27517
ORANGE COUNTY

M
M
MOTT
MACDONALD
Mott MacDonald I&E, LLC

7621 Purfoy Road, Suite 115
Fuquay-Varina, North Carolina 27526
Telephone: (919) 552-2253

INDEX OF DRAWINGS	
NO	TITLE
-	COVER
C-1	PLANS STA 0+00 TO 9+50
C-2	PLANS STA 9+50 TO 19+50
C-3	PLANS STA 19+50 TO 23+14
CD-1	CIVIL DETAILS

Project Contact Information:

Engineer of Record:
Karen Karvazy, P.E.
Senior Project Manager
D: 973-912-2446
karen.karvazy@mottmac.com



Mott MacDonald
7621 Purfoy Road, Ste 115
Fuquay Varina, NC 27256

OWASA (Owner) Contact:
Brad Barber, P.E.
Orange Water and Sewer Authority
919-537-4245

NOTES:

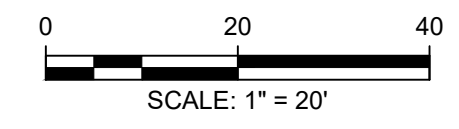
1. TRAFFIC CONTROL WILL BE INSTALLED PER MUTCD REGULATIONS
2. CONTACT NCDOT PRIOR TO BEGINNING CONSTRUCTION (BRAD ANDREWS 336-524-3388)
3. WATER MAINS SHALL BE INSTALLED 42" TO TOP OF PIPE AND PER OWASA SPECIFICATIONS SECTION 2275, TABLE 2275.1.A. WATER MAINS SHALL MEET THE REQUIREMENTS OF NCAC 15A SUBCHAPTER 18C SECTION .0904
4. EROSION CONTROL MEASURE IF NECESSARY SHALL BE INSTALLED PER DIRECTION OF THE OWASA ENGINEER OR AUTHORITY HAVING JURISDICTION
5. NOTICE SHALL BE PROVIDED TO EACH HOME OWNER 24 HOURS IN ADVANCE OF DRIVEWAYS BEING BLOCKED BY PIPE INSTALLATION.
6. OWASA CREWS SHALL PERFORM SERVICE CONNECTION BY TRENCHLESS HDD, WHERE FEASIBLE.
7. LANE CLOSURES SHALL BE PERMITTED BETWEEN 9:00 AM AND SUNSET, MONDAY-FRIDAY.
8. REPLACEMENT OF PAVEMENT MARKINGS IN KIND IS TO BE IN ACCORDANCE WITH NCDOT.

GENERAL LEGEND

- EXISTING R/W
- EDGE OF PAVEMENT
- PROPERTY LINE
- PROPOSED WATER MAIN
- PROPOSED WATER SERVICE LATERAL
- EXISTING WATER MAIN
- EXISTING GAS
- EXISTING TELEPHONE
- EXISTING FIBER OPTIC
- EXISTING CULVERT
- LIMIT OF DISTURBANCE

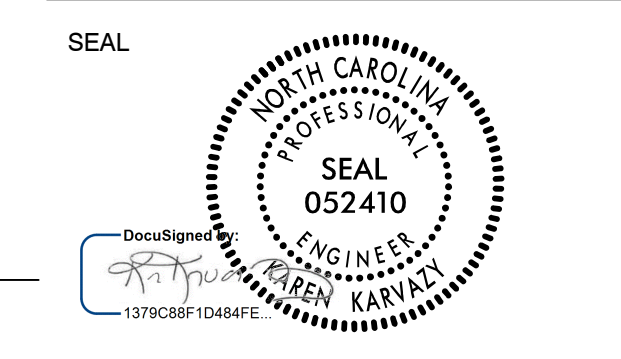
UTILITY SYMBOLS

- EXISTING WATER VALVE
- ◻ EXISTING WATER METER
- ◇ EXISTING GAS VALVE
- EXISTING SIGN
- EXISTING TELEPHONE PEDESTAL
- ★ EXISTING UTILITY POLE
- EXISTING GUY WIRE



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**POINSETT DRIVE
 6" DIP WATER MAIN
 REPLACEMENT**
 CHAPEL HILL
 NORTH CAROLINA



KEY PLAN

SCALE
 1" = 20'

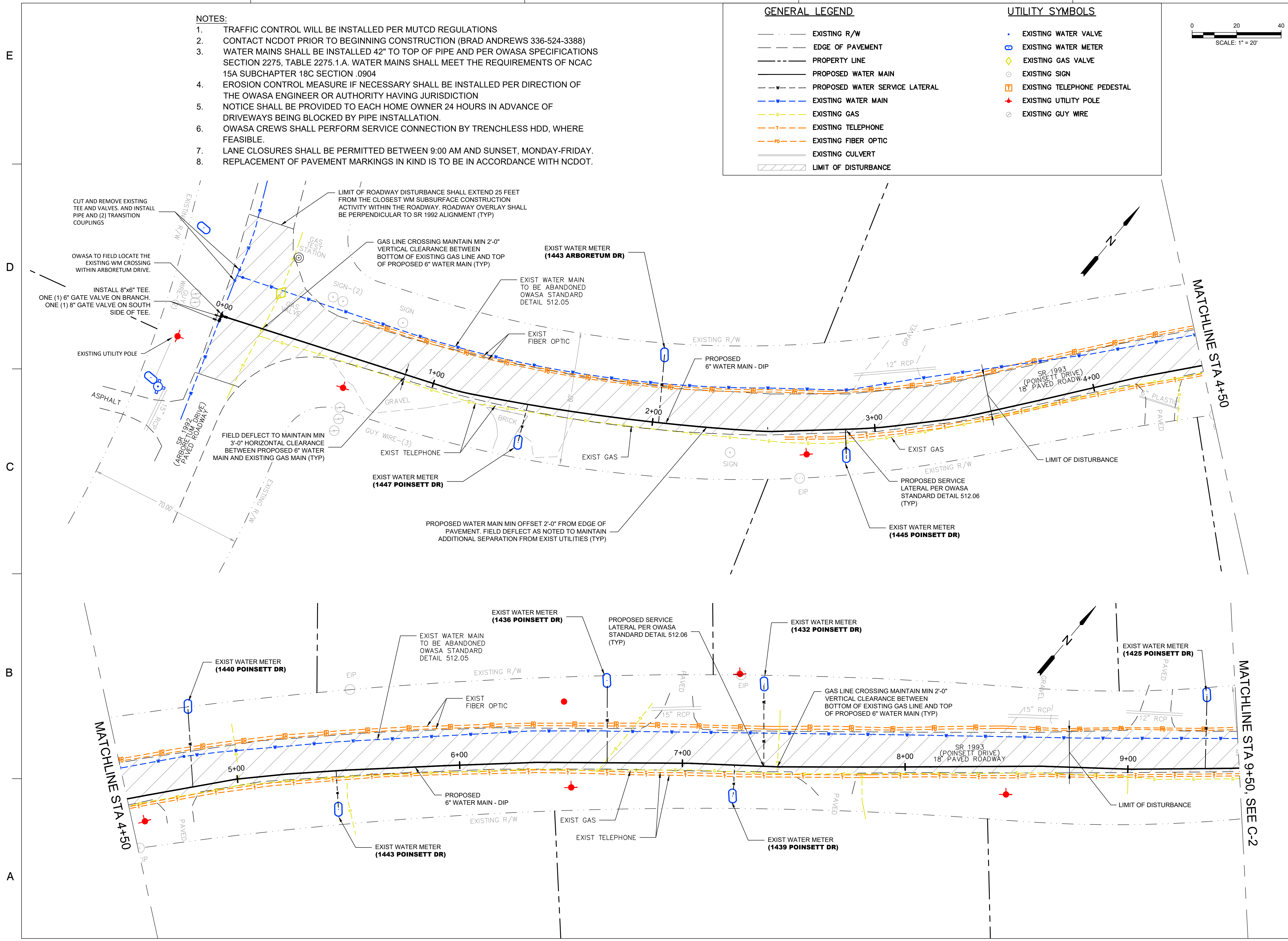
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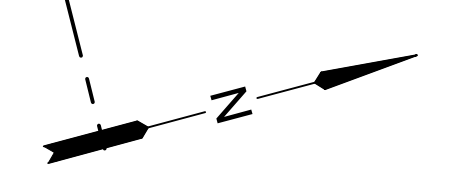
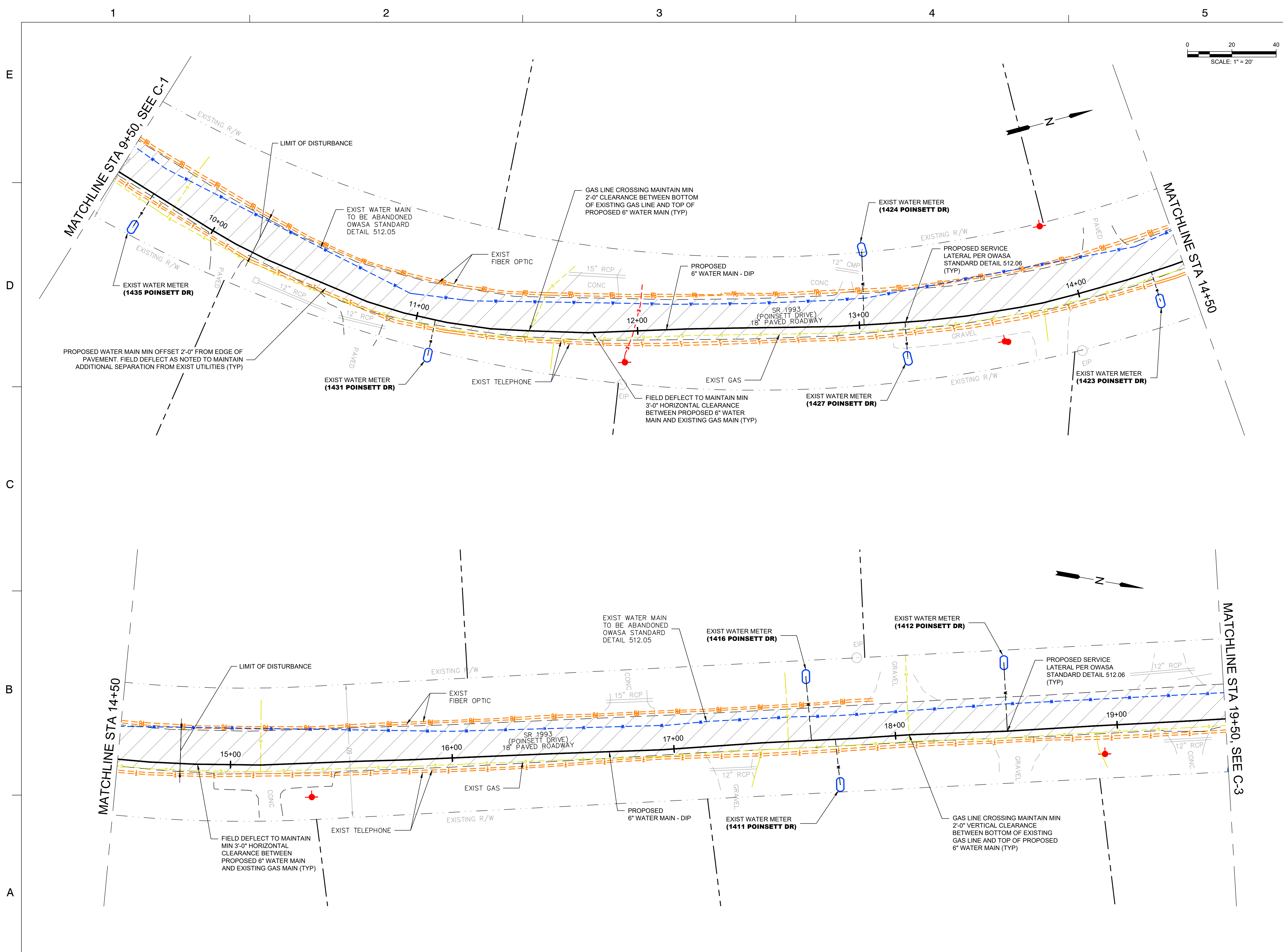
REVISIONS
 DRAWN BY: B. LEE
 APPROVED BY: K. KARVAZY
 CHECKED BY:
 DATE: 2/2024

**PLANS
 STA 0+00 TO 9+50**

PROJECT NO. 501100652

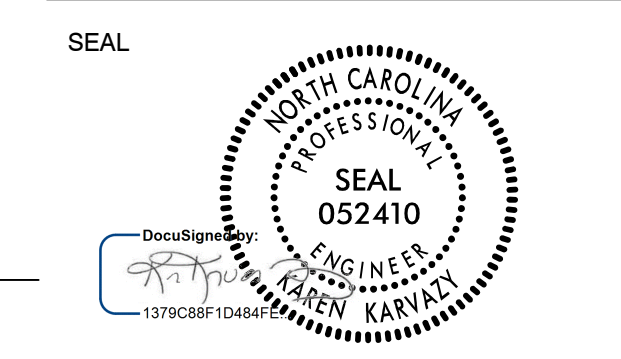
C-1





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KEY PLAN

SCALE
 1" = 20'

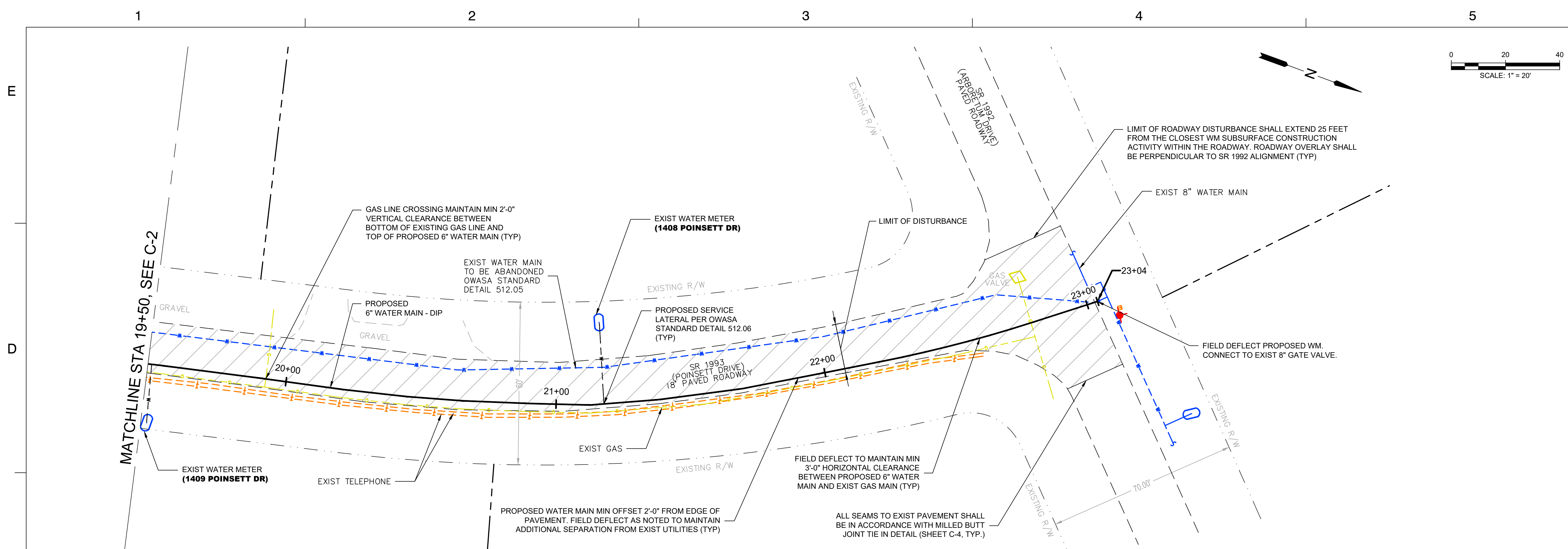
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REVISIONS
 DRAWN BY B. LEE
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 TITLE

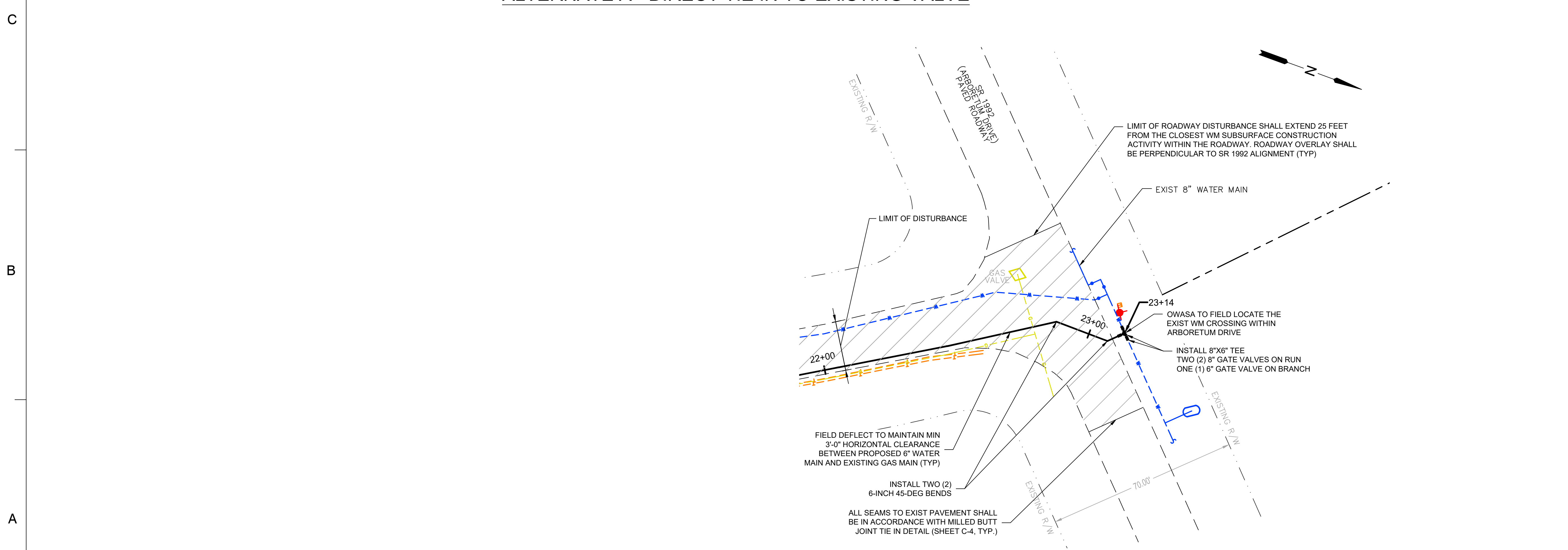
**PLANS
 STA 9+50 TO 19+50**

PROJECT NO. 501100652

C-2



ALTERNATE A - DIRECT TIE IN TO EXISTING VALVE

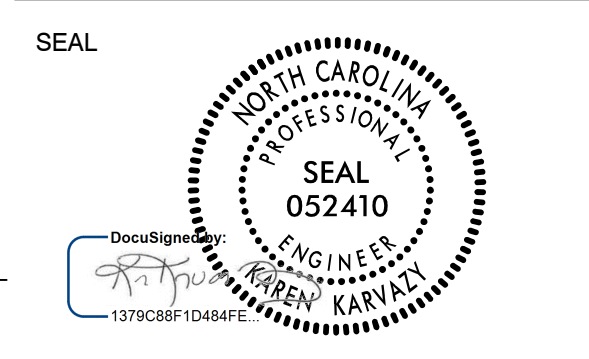


ALTERNATE B - TIE IN TO EXISTING MAIN ON ARBORETUM DRIVE



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 CHAPEL HILL
 NORTH CAROLINA



KEY PLAN

SCALE
 1" = 20'

No.	DATE	BY	Description

REVISIONS
 DRAWN BY: B. LEE
 APPROVED BY: K. KARVAZY
 CHECKED BY:
 DATE: 2/2024
 TITLE:

**PLANS
 STA 19+50 TO 23+14**

PROJECT NO. 501100652

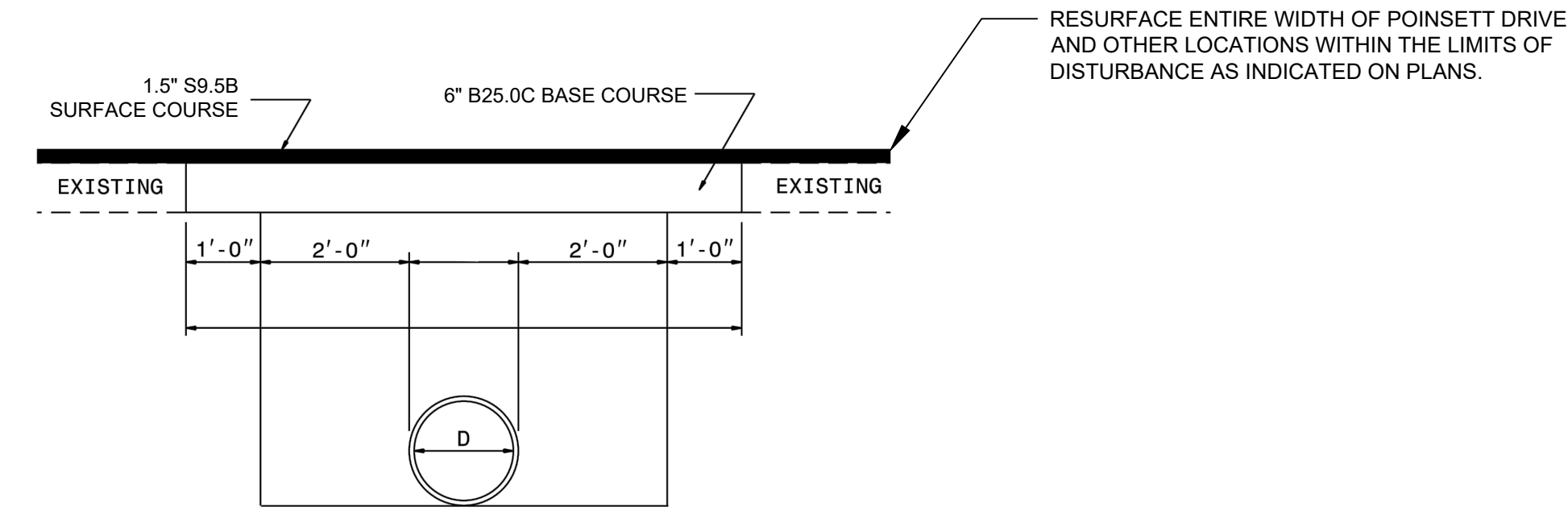
C-3

PROCEDURE:

1. SAW CUT PAVEMENT 12" WIDER THAN TRENCH ON ALL SIDES
2. EXCAVATE TRENCH AND INSTALL PIPE
3. PLACE BACKFILL AND COMPACT IN 6" UNIFORM LIFTS UNTIL 12.5: FROM SURFACE
4. PLACE ABC AND COMPACT. IF ASPHALT IS NOT PLACED ON THE SAME DAY, THEN A SECOND COMPACTED LIFT NEEDS TO BE PLACED FLUSH WITH THE EXISTING ROADWAY SURFACE.
5. WITHIN 72 HOURS, REMOVE STONE AND ALL LOOSE DEBRIS TO A 6.5: MINIMUM DEPTH. APPLY A TACK COAT TO THE ENTIRE VERTICAL EDGE.
6. PLACE 59.5B ASPHALT AND COMPACT TO A SMOOTH LEVEL PATCH.

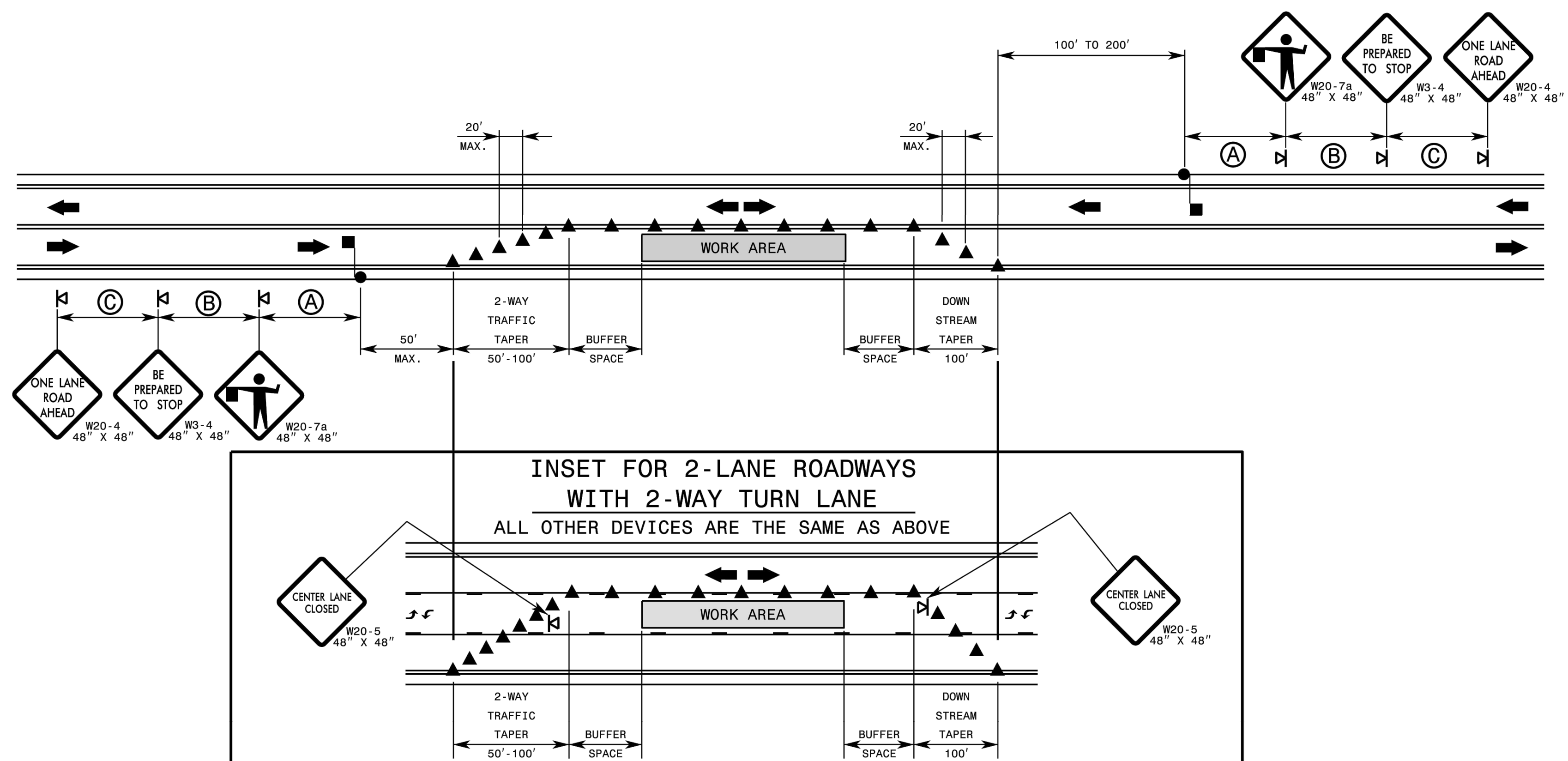
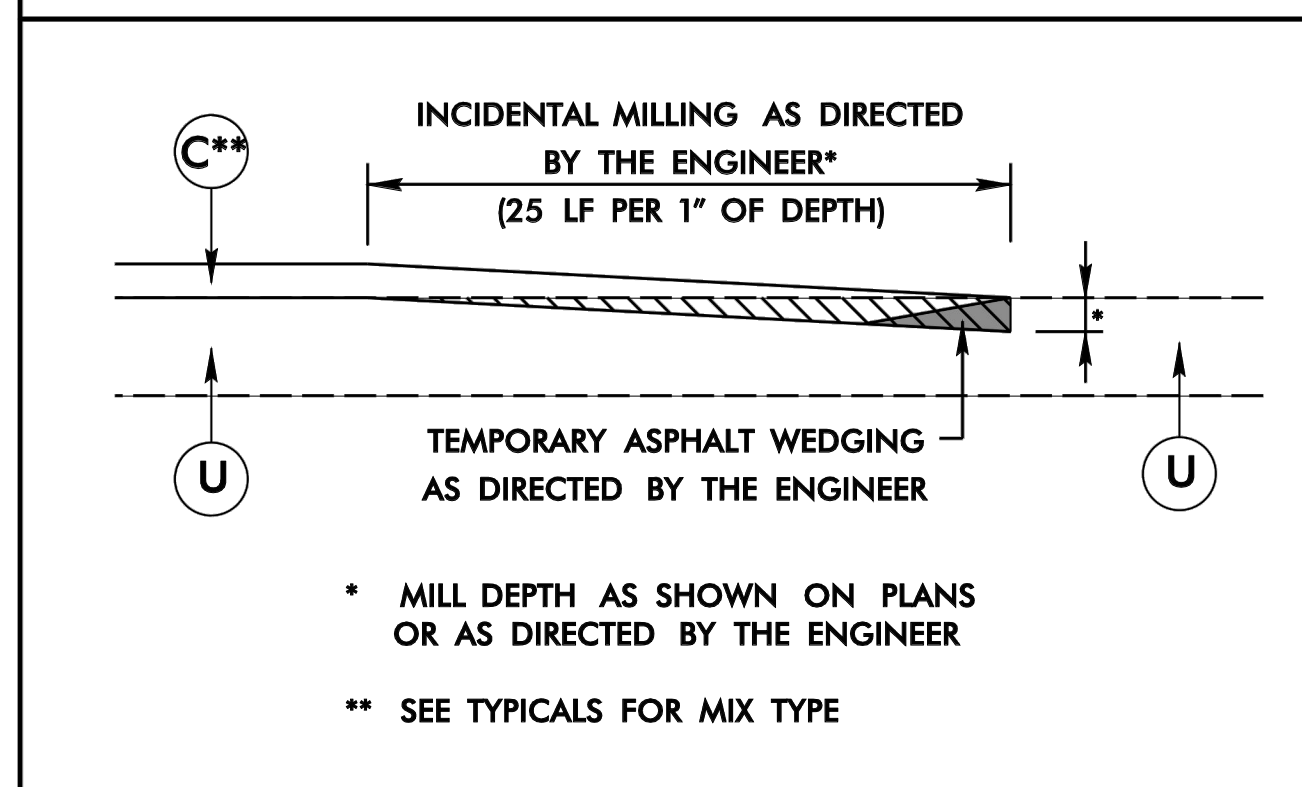
NOTES:

1. THE MINIMUM COVER ABOVE THE PIPE SHALL BE 42"
2. FOR THE PROPOSED 6" DIP PIPE, THE MINIMUM WIDTH OF TRENCH SHALL BE 2 FEET ON EITHER SIDE OF THE LAID PIPE
3. OVERLAY LIMITS SHALL BE TO THE LIMITS OF DISTURBANCE SHOWN ON THE PLANS IF CUT IS LESS THAN 24" FROM THE EDGE OF PAVEMENT, THEN ASPHALT SHALL BE REMOVED TO THE EDGE OF PAVEMENT
4. THE TRENCH IS TO BE BACKFILLED WITH SUITABLE MATERIAL AND COMPACTED TO A DENSITY OF AT LEAST 95% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-99 AS MODIFIED BY NCDOT UP TO WITHIN ONE FOOT OF THE BOTTOM OF THE PAVEMENT SECTION. TRENCH BACKFILL AND ABC WITHIN ONE FOOT OF THE BOTTOM OF PAVEMENT SURFACE SHALL BE COMPACTED TO A DENSITY EQUAL TO 100% OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO 7-80 AS MODIFIED BY NCDOT.
5. THE ABC MATERIAL SHALL BE COMPACTED TO A DENSITY EQUAL TO 100 PERCENT OF THAT OBTAINED BY COMPACTING A SAMPLE OF THE MATERIAL IN ACCORDANCE WITH AASHTO T-80 AS MODIFIED BY NCDOT.



PAVEMENT REPAIRS ON ROADS TO BE RESURFACED
(PIPE IS PLACED UNDER EXISTING PAVEMENT)
NCDOT PAVEMENT REPAIRS - DETAIL 654.01

MILLED BUTT JOINT TIE-IN DETAIL (PROFILE)



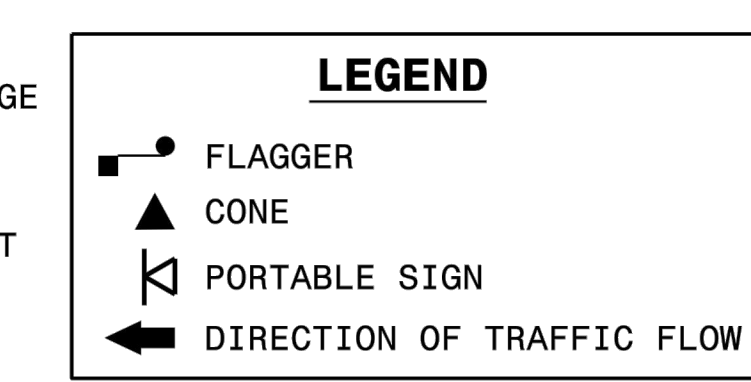
GENERAL NOTES FOR FLAGGING OPERATIONS

- 1- REFER TO RSD. 1101.11, SHEETS 1 & 4, FOR "L" DISTANCE AND SIGN SPACING.
- 2- INSTALL LANE CLOSURES WITH THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE UPSTREAM SIDE OF TRAFFIC.
- 3- REMOVE LANE CLOSURES AGAINST THE TRAFFIC FLOW, BEGINNING WITH DEVICES ON THE DOWNSTREAM SIDE OF TRAFFIC.
- 4- PLACE CONES THRU THE WORK AREA AT THE MAXIMUM SPACING EQUAL IN FEET TO 2 TIMES THE POSTED SPEED LIMIT.
- 5- EXTEND LANE CLOSURES AT THE BUFFER SPACE SUCH THAT STOPPING SIGHT DISTANCE IS PROVIDED TO THE FLAGGER (REFER TO RSD. 1101.11, SHEET 2).
- 6- DO NOT STOP TRAFFIC IN ANY ONE DIRECTION FOR MORE THAN 5 MINUTES AT A TIME.
- 7- DRUMS OR SKINNY DRUMS MAY BE USED IN LIEU OF CONES. REFER TO RSD. 1180.01 FOR SKINNY DRUM REQUIREMENTS.
- 8- USE FLAGGERS TO CONTROL TRAFFIC AT INTERSECTIONS AFFECTED BY THE LANE CLOSURE. SUPPLEMENT FLAGGERS LOCATED AT INTERSECTIONS WITH FLAGGER AHEAD SIGNS (W20-7a) PLACED APPROXIMATELY 250 FT. IN ADVANCE OF THE FLAGGER. FOR SIGNALIZED INTERSECTIONS PLACE SIGNALS IN THE FLASH MODE AND USE LAW ENFORCEMENT.
- 9- REFER TO THE CURRENT MUTCD FOR FLAGGER CONTROL, REQUIREMENTS, AND PROCEDURES.
- 10- DO NOT EXCEED A 1 MILE LANE CLOSURE LENGTH UNLESS OTHERWISE SHOWN IN THE TMP OR AS DIRECTED BY THE ENGINEER.

- 11- IF VEHICLE QUEUES WILL REACH WITHIN 15' OF EITHER SIDE OF ACTIVE RAILROAD TRACKS, PROVIDE A UNIFORMED LAW ENFORCEMENT OFFICER OR FLAGGER TO PREVENT VEHICLES FROM STOPPING WITHIN THE GRADE CROSSING. PROVIDE OFFICER OR FLAGGER EVEN IF AUTOMATIC WARNING MEASURES ALREADY EXIST.

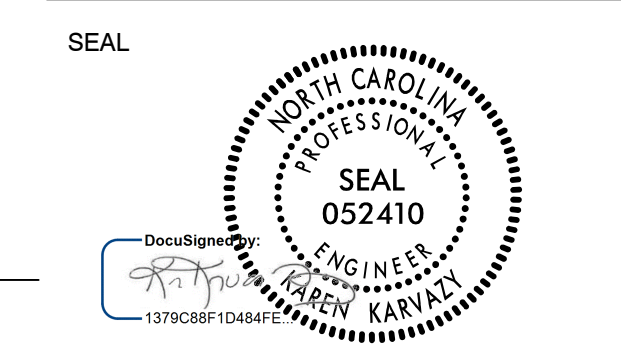
GENERAL NOTES FOR PILOT CAR OPERATIONS

- 1- USE PILOT CARS WHEN DIRECTED BY THE ENGINEER.
- 2- IF ROADWAY WIDTH IS LESS THAN 22 FEET (EOP TO EOP), CONES MAY NOT BE REQUIRED ALONG WORK AREA AND AT THE DISCRETION OF THE ENGINEER, CONES MAY BE OMITTED ALONG THE WORK AREA IF USING A PILOT CAR.
- 3- CONES ARE ALWAYS REQUIRED IN THE UPSTREAM AND DOWNSTREAM TAPERS.
- 4- MOUNT SIGN G20-4 "PILOT CAR FOLLOW ME" AT A CONSPICUOUS POSITION ON THE REAR OF THE PILOT VEHICLE.
- 5- DO NOT INSTALL MORE THAN ONE (1) MILE OF LANE CLOSURE MEASURED FROM THE BEGINNING OF THE MERGE TAPER TO THE END OF THE LANE CLOSURE.
- 6- ADVISE RESIDENTS AND BUSINESSES WITHIN THE LANE CLOSURE LIMITS ABOUT METHODS OF SAFE EGRESS AND INGRESS FROM DRIVEWAYS DURING FLAGGING AND PILOT CAR OPERATIONS.



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REPLACEMENT
CHAPEL HILL
NORTH CAROLINA



KEY PLAN

SCALE
NTS

No.	DATE	BY	Description

REVISIONS
DRAWN BY B. LEE
APPROVED BY K. KARVAZY
CHECKED BY
DATE 2/20234

TITLE
DETAILS

PROJECT NO. 501100652

CD-1

GENERAL INFORMATION:

The state of the project site will be a saw-cut 3-foot wide trench filled with compacted ABC, which OWASA shall complete for the installation of the water main prior to pavement work. Per Detail on the Engineering Drawings, six inches of the compacted ABC will need to be removed along the trench and the remaining ABC re-compacted prior to asphalt placement. The full roadway width will be overlain with 1.5-inch asphalt. Milling of pavement is required at each end of the project corridor to establish a clean seam at the end points for transition to existing roadways. All work is in NCDOT roadways, as noted on the plans shall be per the engineering drawing details and paid under the appropriate line item.

Acknowledgment of Addenda / _____

BASE BID:

Item No.	Description	Unit	Estimated Quantity	Unit Price	Bid Amount
1	6" Base Course, Per NCDOT Detail Sheet CD-1	SY	775		
2	1.5" Overlay	SY	4700		
3	NCDOT Milling and Filling of Asphalt Pavement (Select Areas)	SY	450		
4	Striping	LF	2,230		
5	Mobilization/Demobilization	EA	1		

TOTAL BASE BID PRICE for the construction of the Project complete as indicated by the Drawings and Items No. 1 — 5 above. (in words and figures):

_____ Dollars

and _____ Cents (\$ _____)

Bidder _____ (Print)

MEASUREMENT AND PAYMENT:

Payment for work required by the Drawings shall be based on the pay items described herein. The work associated with each pay item is intended to include all of the work and materials required for a complete paving installation. The descriptions herein may not be complete; however, the intent of the project is to provide a complete pavement installation.

Item 1 — NCDOT Trench Repair

This unit price bid item shall include furnishing all traffic control, materials, equipment, and labor for removal, disposal, and replacement of 6-inch ABC at location of WM installation and replacement with 6-inches of base course per procedure identified on Sheet CD-1 of the Engineering Drawings. Payment for NCDOT Trench Repair shall be made by the square yard of pavement installed per NCDOT trench repair details provided in the Drawings.

Item 2 — 1.5" Overlay of Asphalt Pavement

This unit price bid item includes furnishing all traffic control, materials, equipment, and labor for placement of 1.5" of SF9.5B pavement, where shown on the Engineering Drawings. Payment for asphalt pavement milling shall be made on a separate line item. Payment for the 1.5" pavement overlay shall be made per square yard of asphalt placement per the NCDOT repair detail on Engineering Drawing Sheet CD-1.

This line item may also be utilized for payment of additional pavement repair outside the trench area if and where directed by OWASA.

Item 3 — NCDOT Milling and Overlay of Asphalt Pavement

This unit price bid item pertains only to areas which require pavement milling at seams with existing asphalt at crossing of Arboretum Drive and includes furnishing all traffic control, materials, equipment, and labor for milling of 1.5" of asphalt, and placement of SF9.5B asphalt per Mill Butt Joint Tie-In Detail on Engineering Drawing Sheet CD-1, where shown on the Drawings. Payment for asphalt pavement milling and replacement shall be made per square yard of milling and asphalt placement per the NCDOT repair detail on Engineering Drawing Sheet CD-1.

Item 4 — Striping

This pay item includes replacement in kind of existing double yellow solid line pavement marking per NCDOT Specification 12.02 along the entirety of the roadway. White edge lines are not currently on this roadway corridor and are not included in this pay item. Payment for roadway striping shall be made per linear foot of roadway striping placement.

Item 5 — Mobilization/Demobilization

This unit price item is for the costs incurred for the Contractor to mobilize equipment to the site and to demobilize from the site once a particular phase (if multiple phases are required by the Owner) of work is complete. Coordinate work status and planned activities with the Owner prior to any mobilization or demobilization.

-END OF SECTION-