



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

September 25, 2019

U. S. Army Corps of Engineers
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

ATTN: Ms. Nicholle Braspennickx
NCDOT Coordinator

Dear Madam:

Subject: **Revision to Application for an Individual Section 404 and Section 401 Water Quality Certification** for the proposed I-40/I-77 interchange improvements including I-40 from west of SR 2003 (Radio Road) to SR 2158 (Old Mocksville Road) and I-77 from south of SR 2321 (East Broad Street) to south of SR 2171 (Jane Sower Road) in Iredell County. Division 12, TIP No. I-3819B. Debit \$570.00 from WBS 34192.3.2.

Since the permit application dated July 23rd, 2019 there has been a revision to the utility plans to include <0.01 acre of hand clearing in wetland WH (Utility Site U-3). This activity is not a permanent impact and does not affect the amount of mitigation required for this project. Please see revised utility impact summary, site description for Site U-3, and revised Table 4 below as well as attached revised utility plans.

Summary of Utility Impacts:

There will be a total of 0.02 acre of permanent wetland impacts, 0.27 acre of temporary wetland fill impacts, and <0.01 acre of hand clearing in wetlands.

Utility Site U-3: There will be <0.01 acre of hand clearing in wetlands to wetland WH where a utility easement runs through the wetland adjacent to Permit Site 8.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL ANALYSIS UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

Telephone: (919) 707-6000
Fax: (919) 250-4224
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
1000 BIRCH RIDGE DRIVE
RALEIGH NC 27610

Table 4 – Revised Summary of Utility Wetland Impacts for I-3819B

| Site | Wetland ID | Impact Type | Temporary Impacts (ac) | Permanent Fill (ac) | Mechanized Clearing (ac) | Hand Clearing (ac) | Mitigation Requirement (ac) |
|----------------------|------------|-------------|------------------------|---------------------|--------------------------|--------------------|-----------------------------|
| U-1 | WJ | Utility | 0.02 | -- | -- | -- | -- |
| U-2 | WD | Utility | 0.25 | <0.01 | 0.02 | -- | 0.02 |
| U-3 | WH | Utility | -- | -- | -- | <0.01 | -- |
| TOTAL IMPACTS | | | 0.27 | <0.01 | 0.02 | <0.01 | 0.02 |

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Erin Cheely at ekcheely@ncdot.gov or (919) 707-6108. A copy of this application and distribution list will also be posted on the NCDOT website at: <http://connect.ncdot.gov/resources/Environmental/Pages>.

Sincerely,



Philip S. Harris III, P.E., C.P.M.
Environmental Analysis Unit Head

cc:
NCDOT Permit Application Standard Distribution List

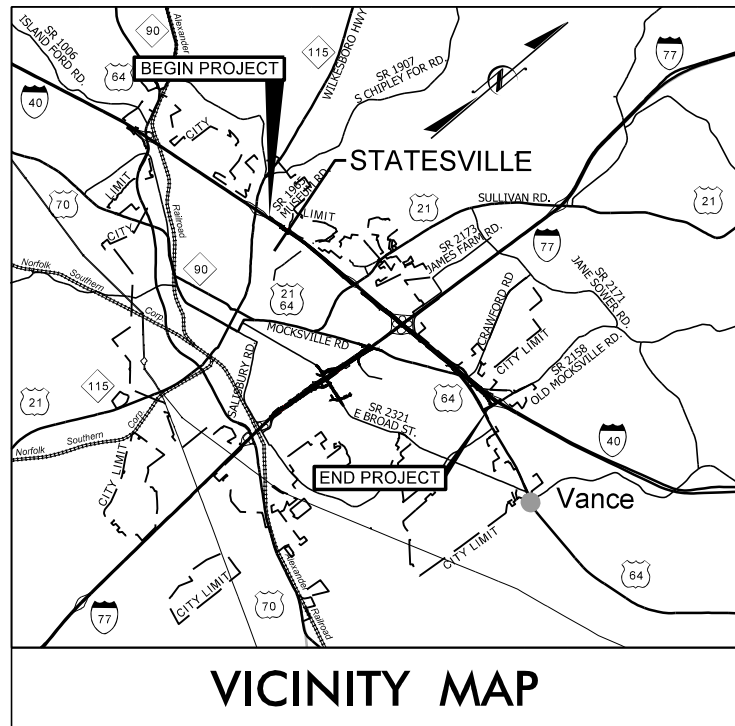
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
|-----------------|-----------------------------|--------------|--------------|
| N.C. | I-3819BU-6039 | 1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| 34192.1.2 | IMS-40-2(124) | P.E. | |
| 34192.3.2 | N/A | DESIGN BUILD | |
| | | | |
| | | | |
| | | | |

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

IREDELL COUNTY

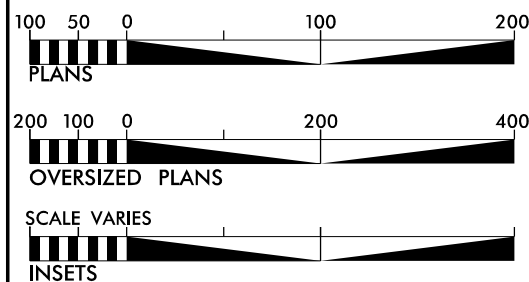
LOCATION: I-40/I-77 INTERCHANGE INCLUDING I-40 FROM WEST OF SR 2003 (RADIO RD.) TO SR 2158 (OLD MOCKSVILLE RD.) & I-77 FROM SOUTH OF SR 2321 (EAST BROAD ST.) TO SOUTH OF SR 2171 (JANE SOWERS RD.)
TYPE OF WORK: GRADING, DRAINAGE, PAVING, STRUCTURES, RETAINING WALLS, NOISE WALLS, AND TRAFFIC CONTROL

TIP PROJECT: I-3819BU-6039
PROJECT: 34192.1.2



VICINITY MAP

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF THE CITY OF STATESVILLE AND THE TOWNSHIP OF BETHANY

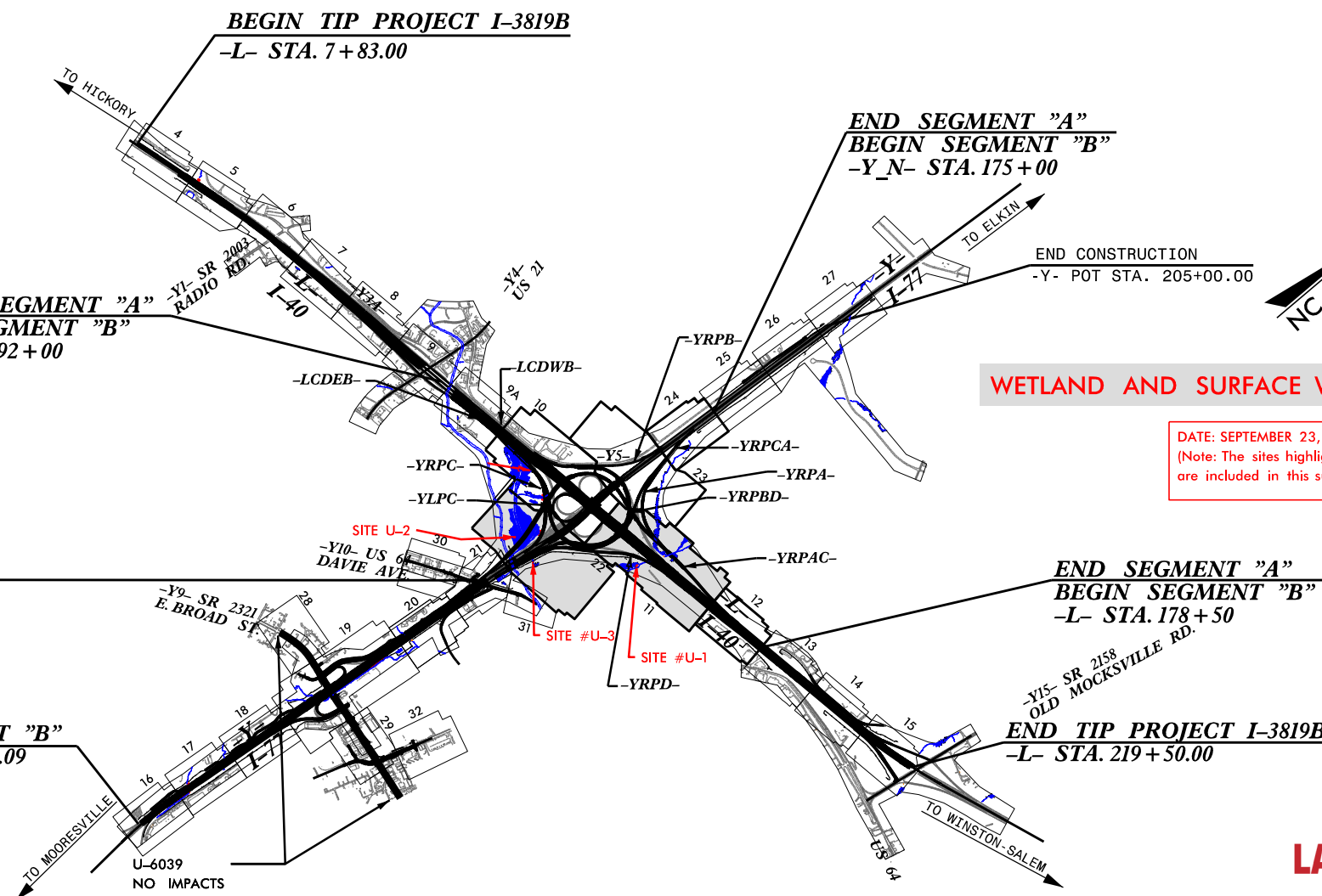


BEGIN SEGMENT "A"
END SEGMENT "B"
-L- STA. 92+00

BEGIN SEGMENT "A"
END SEGMENT "B"
-Y_S- STA. 111+00

BEGIN SEGMENT "B"
-Y_S- STA. 25+00.09

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.
THIS IS A CONTROLLED ACCESS PROJECT WITH ACCESS BEING LIMITED TO INTERCHANGES



WETLAND AND SURFACE WATER IMPACT PERMITS

DATE: SEPTEMBER 23, 2019
(Note: The sites highlighted in RED are included in this submittal.)

UTILITY PERMIT DRAWING SHEET 1 OF 8

LANE

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION

GRAPHIC SCALES

SEE ABOVE

| DESIGN DATA | |
|----------------------------|---------|
| I-40 | I-77 |
| ADT 2018 = 57,300 | 62,900 |
| ADT 2040 = 72,500 | 77,500 |
| DHV = 5,800 | 6,200 |
| D = 55 % | 55 % |
| T = 16 % | 19 % ** |
| V = 60 MPH | 60 MPH |
| * TTST 13 + DUAL 3 (I-40) | |
| ** TTST 16 + DUAL 3 (I-77) | |
| CLASSIFICATION: INTERSTATE | |

| PROJECT LENGTH | |
|---------------------------------------|---------|
| LENGTH ROADWAY TIP PROJECT I-3819B | = 3.885 |
| LENGTH STRUCTURES TIP PROJECT I-3819B | = 0.124 |
| TOTAL LENGTH OF TIP PROJECT I-3819B | = 4.009 |

Prepared in the Office of:
WSP
1001 Morehead Square Dr., Suite 610, Charlotte, NC 28203
NC LIC NO. F-0165

2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: OCTOBER 30, 2018

LETTING DATE: OCTOBER 30, 2018

CHRISTOPHER D. DAVIS, P.E.
PROJECT ENGINEER

ERIC W. SECKINGER, P.E.
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

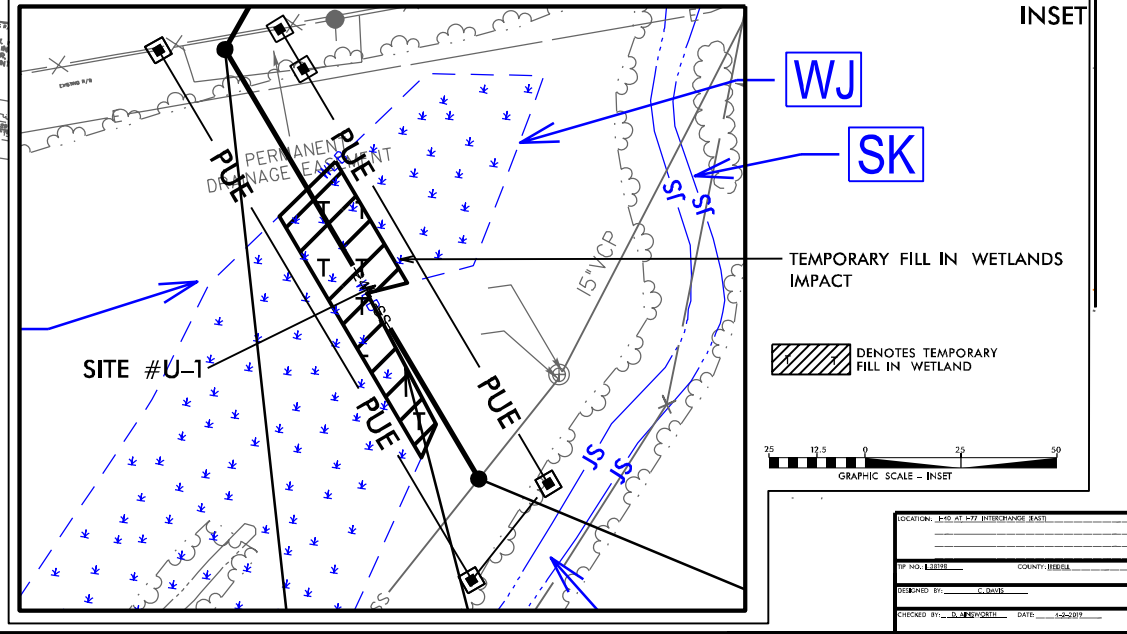
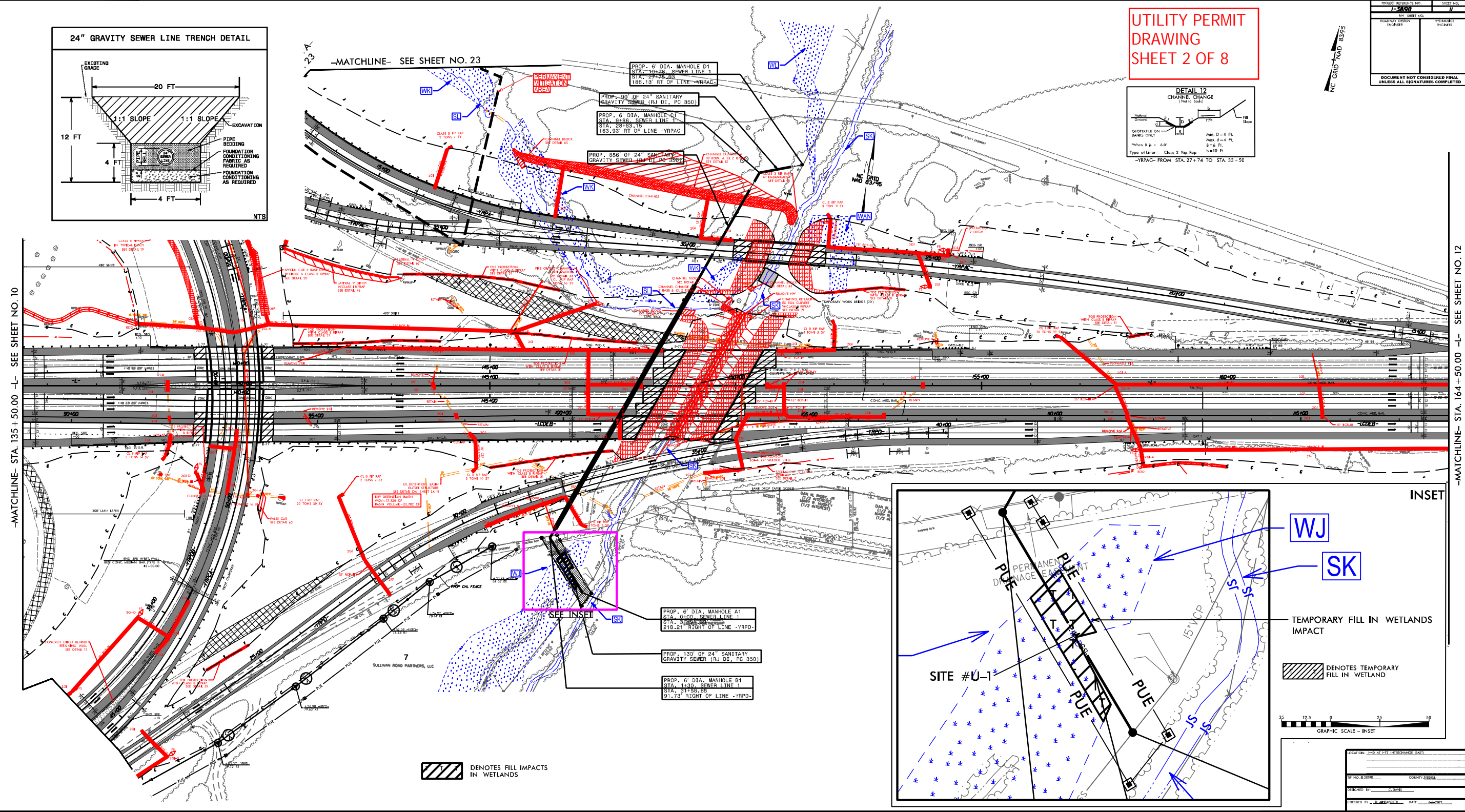
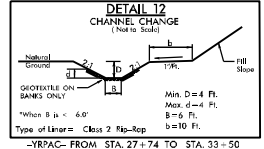
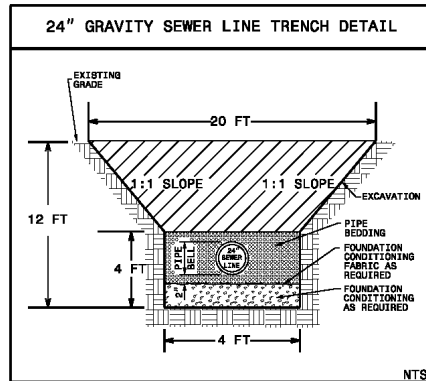
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

9/23/2019 c:\projectwise\pb\projectwise\gupton\d0350035\13819_nyd_prm_tsh_utility.dgn GupTon

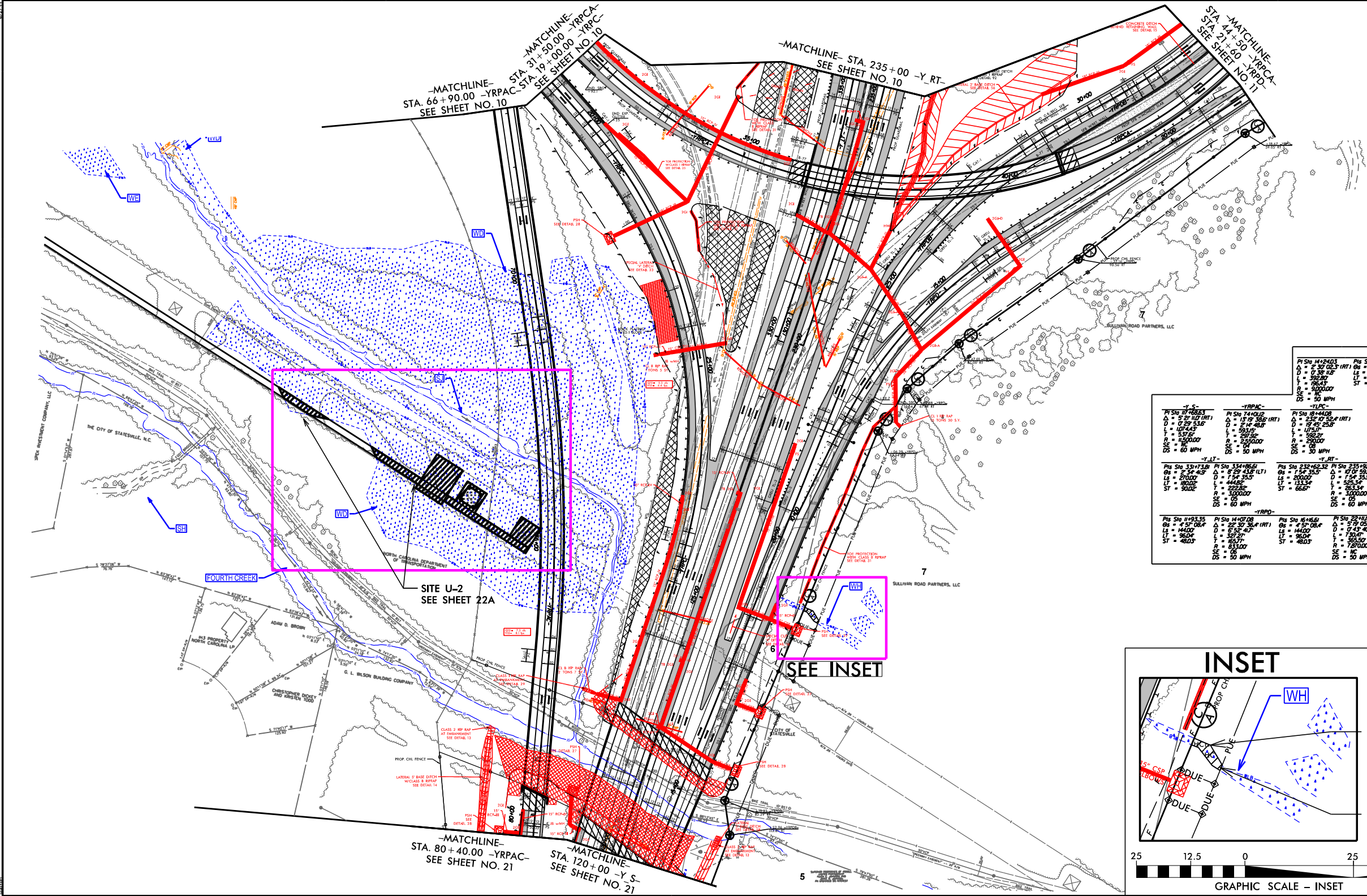
**UTILITY PERMIT
DRAWING
SHEET 2 OF 8**

| | | | |
|---|---------|-------------|---|
| PROJECT NUMBER | 1-2020 | SHEET NO. | 8 |
| ROADWAY DESIGN | INCHUCK | DESIGNED BY | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | | | |

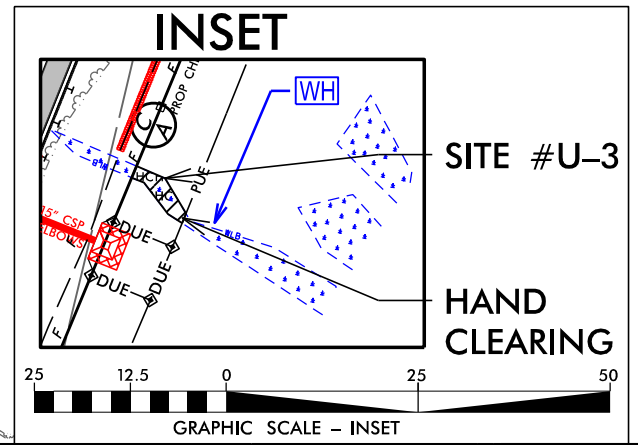


UTILITY PERMIT DRAWING SHEET 4 OF 8

Revised 9/24/19

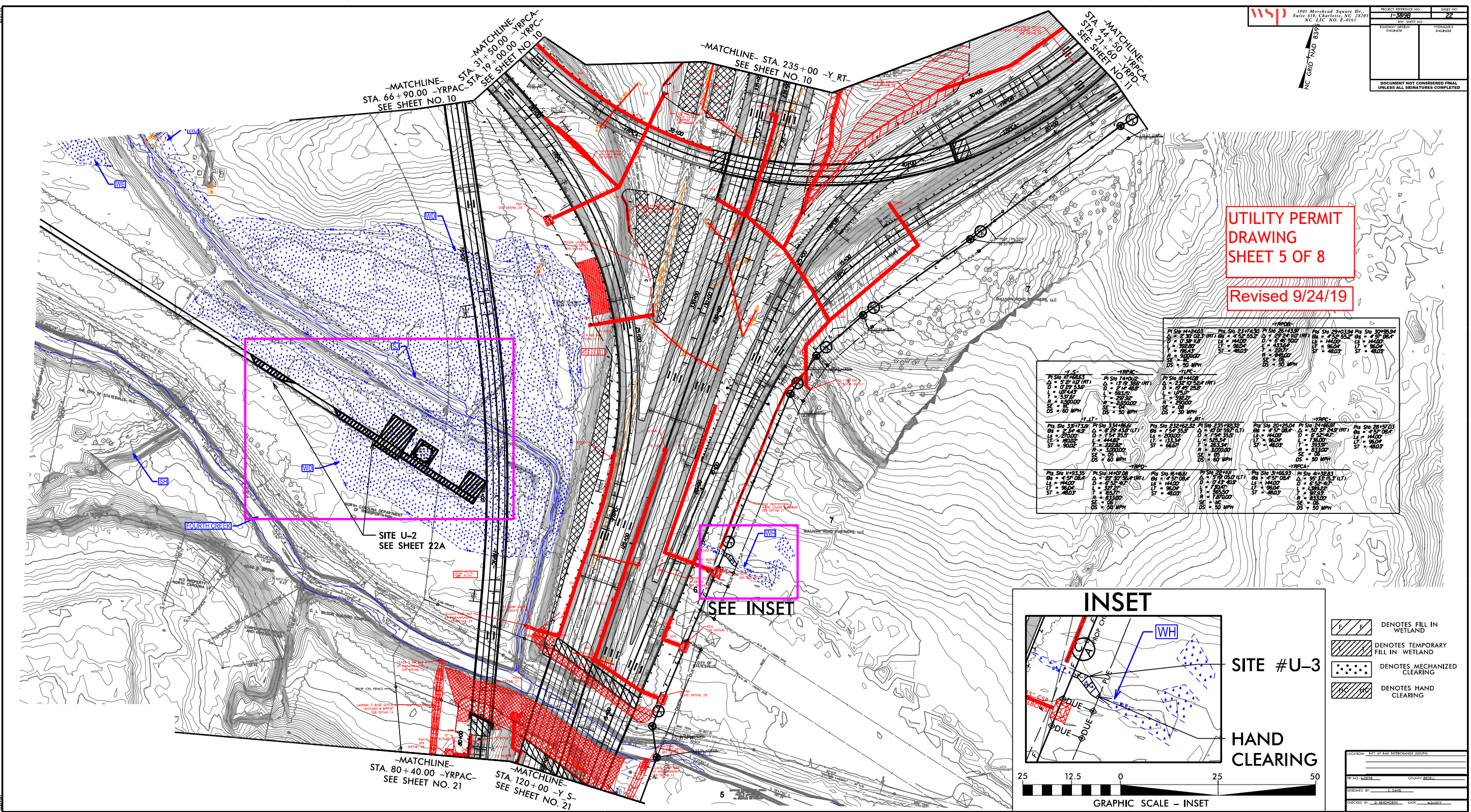


| -YRPA- | | -YRPA- | | -YRPA- | | -YRPA- | |
|-----------------------|------------------|-----------------------|------------------|------------------|------------------|------------------|------------------|
| PI STA | PT STA | PI STA | PT STA | PI STA | PT STA | PI STA | PT STA |
| 14+24.03 | 21+14.30 | 26+43.57 | 30+01.04 | 30+95.04 | 31+44.50 | 31+44.50 | 31+44.50 |
| Δ = 2° 30' 00.3" (RT) | Δ = 4° 52' 55.2" | Δ = 2° 24' 10.0" (RT) | Δ = 4° 52' 55.2" | Δ = 4° 52' 55.2" | Δ = 4° 52' 55.2" | Δ = 4° 52' 55.2" | Δ = 4° 52' 55.2" |
| D = 0° 30' 00.3" | D = 6° 40' 50.0" | D = 6° 40' 50.0" | D = 6° 40' 50.0" | D = 6° 40' 50.0" | D = 6° 40' 50.0" | D = 6° 40' 50.0" | D = 6° 40' 50.0" |
| L = 392.00' | L = 433.64' | L = 433.64' | L = 433.64' | L = 433.64' | L = 433.64' | L = 433.64' | L = 433.64' |
| T = 96.04' | T = 22.71' | T = 22.71' | T = 22.71' | T = 22.71' | T = 22.71' | T = 22.71' | T = 22.71' |
| R = 1520.00' | R = 665.00' | R = 665.00' | R = 665.00' | R = 665.00' | R = 665.00' | R = 665.00' | R = 665.00' |
| SE = 14' | SE = 0' | SE = 0' | SE = 0' | SE = 0' | SE = 0' | SE = 0' | SE = 0' |
| DS = 60 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH |



- DENOTES FILL IN WETLAND
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES HAND CLEARING

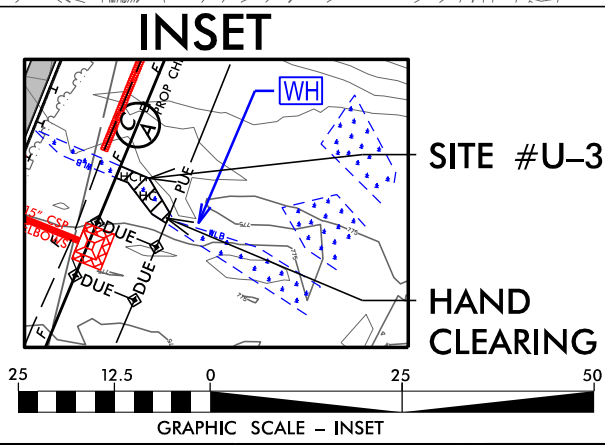
| |
|---|
| LOCATION: 1ST AT I-85 INTERCHANGE SOUTH |
| PROJECT NO. 17-3899R |
| COUNTY: MECKLENBURG |
| DESIGNED BY: C. GAINES |
| CHECKED BY: L. ANDREWS |
| DATE: 8-28-2019 |



**UTILITY PERMIT
DRAWING
SHEET 5 OF 8**

Revised 9/24/19

| YRPC | | YRPC | | YRPC | | YRPC | | YRPC | |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| PI STA | PT STA | PI STA | PT STA | PI STA | PT STA | PI STA | PT STA | PI STA | PT STA |
| 1424.00 | 1424.00 | 2174.50 | 2174.50 | 2644.50 | 2644.50 | 2901.00 | 2901.00 | 3095.00 | 3095.00 |
| Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" | Δ = 0° 30' 00" |
| L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 | L = 300.00 |
| T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 | T = 300.00 |
| R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 | R = 300.00 |
| SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" | SE = 0° 30' 00" |
| DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH | DS = 50 MPH |



- DENOTES FILL IN WETLAND
- DENOTES TEMPORARY FILL IN WETLAND
- DENOTES MECHANIZED CLEARING
- DENOTES HAND CLEARING

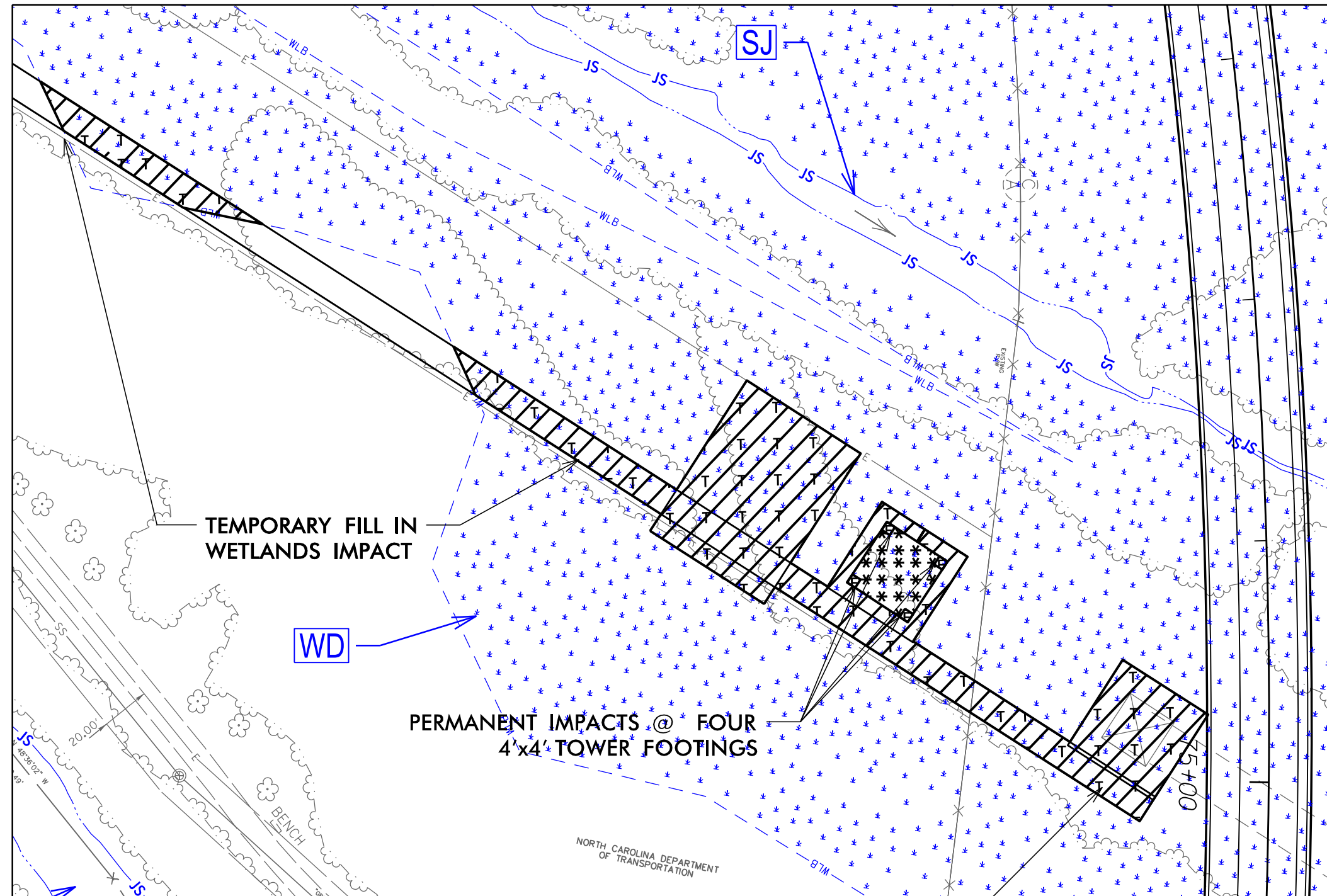
LOCATION: EST AT I-85 INTERCHANGE SOUTH

PROJECT NO. 7-3898 COUNTY: WILMINGTON

DESIGNED BY: C. GAY DATE: 6-20-17

CHECKED BY: L. ANDREWS DATE: 6-20-17

SITE U-2 INSET



UTILITY PERMIT
DRAWING
SHEET 6 OF 8



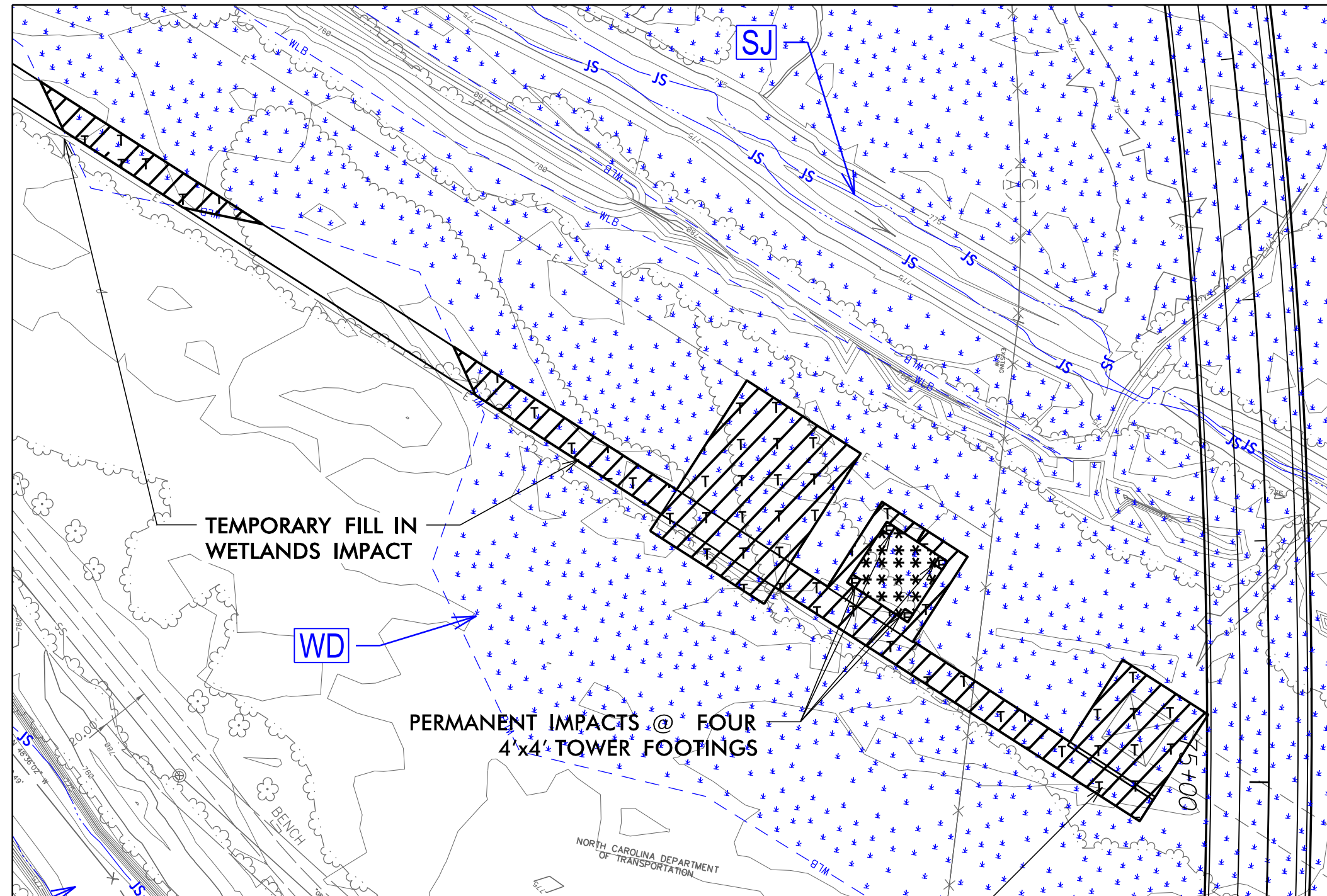
- F F DENOTES FILL IN WETLAND
- T T DENOTES TEMPORARY FILL IN WETLAND
- * * * * * DENOTES MECHANIZED CLEARING

AREA WITHIN 50' OF BRIDGE
ALSO COUNTED AS HAND-CLEARING
IMPACT IN ROADWAY & DRAINAGE
PERMIT PLANS



GRAPHIC SCALE - INSETS

SITE U-2 INSET



**UTILITY PERMIT
DRAWING
SHEET 7 OF 8**

NC GRID NAD 8395

- F F DENOTES FILL IN WETLAND
- T T DENOTES TEMPORARY FILL IN WETLAND
- * * * * * DENOTES MECHANIZED CLEARING

**AREA WITHIN 50' OF BRIDGE
ALSO COUNTED AS HAND-CLEARING
IMPACT IN ROADWAY & DRAINAGE
PERMIT PLANS**



GRAPHIC SCALE - INSETS

WETLAND AND SURFACE WATER IMPACTS SUMMARY

| Site No. | Station (From/To) | Structure Size / Type | WETLAND IMPACTS | | | | | SURFACE WATER IMPACTS | | | | |
|-----------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|---|-------------------------------------|----------------------------|
| | | | Permanent Fill In Wetlands (ac) | Temp. Fill In Wetlands (ac) | Excavation in Wetlands (ac) | Mechanized Clearing in Wetlands (ac) | Hand Clearing in Wetlands (ac) | Permanent SW impacts (ac) | Temp. SW impacts (ac) | Existing Channel Impacts Permanent (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) |
| U-1 | 31+50-YRPD- | Utility | | 0.02 | | | | | | | | |
| U-2 | 75+00-YRPAC-** | Utility | < 0.01 | 0.25 | | 0.02 | | | | | | |
| U-3 | 18+92-YRPDB- | Utility | | | | | < 0.01 | | | | | |
| TOTALS*: | | | < 0.01 | 0.27 | | 0.02 | < 0.01 | | | | | |

*Rounded totals are sum of actual impacts for entire project area

**Permanent Impacts from four (4) 4-ft x 4-ft concrete foundations for new transmission tower locations.

NC DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 06/05/2019
 IREDELL
 TIP NO. I-3819B
 WBS NO.

Revised 9/24/19

SHEET 8 OF 8