



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

JOSH STEIN  
GOVERNOR

J.R. "JOEY" HOPKINS  
SECRETARY

July 14, 2025

Contract No.: DL00353  
WBS No.: 17BP.12.R.78  
TIP No.: None  
F.A. No.: State Funded  
County: Iredell  
Description: Proposed Replacement of Bridge 254 on SR 1512  
Let Date: July 22, 2025

**RE: Addendum #1 to Contract DL00353**

To Whom It May Concern:

Reference is made to the plans furnished to you for this project.

The following revisions have been made to the advertised plans:

| Page No.                                    | Revision  |
|---|---|
| Structure Plan<br>Sheets S-8, S-9 &<br>S-11 | Plan details related to the exterior cored slab units were revised. |

No pay items were revised.

Please replace the above listed pages with the attached revised pages. Please download the revised plans which include Addendum No. 1.

If you have any questions please contact Greg Brittain at (980) 552-4222.

The contract will be prepared accordingly.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
DIVISION 12  
PO BOX 47  
SHELBY, NC 28151-0047

*Telephone:* (980) 552-4200  
*Fax:* (704) 480-5401  
*Courier:* 06-53-03  
*Website:* www.ncdot.gov

*Location:*  
1710 E. MARION STREET  
SHELBY, NC 28152

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Stafford". The signature is written in a cursive, slightly slanted style.

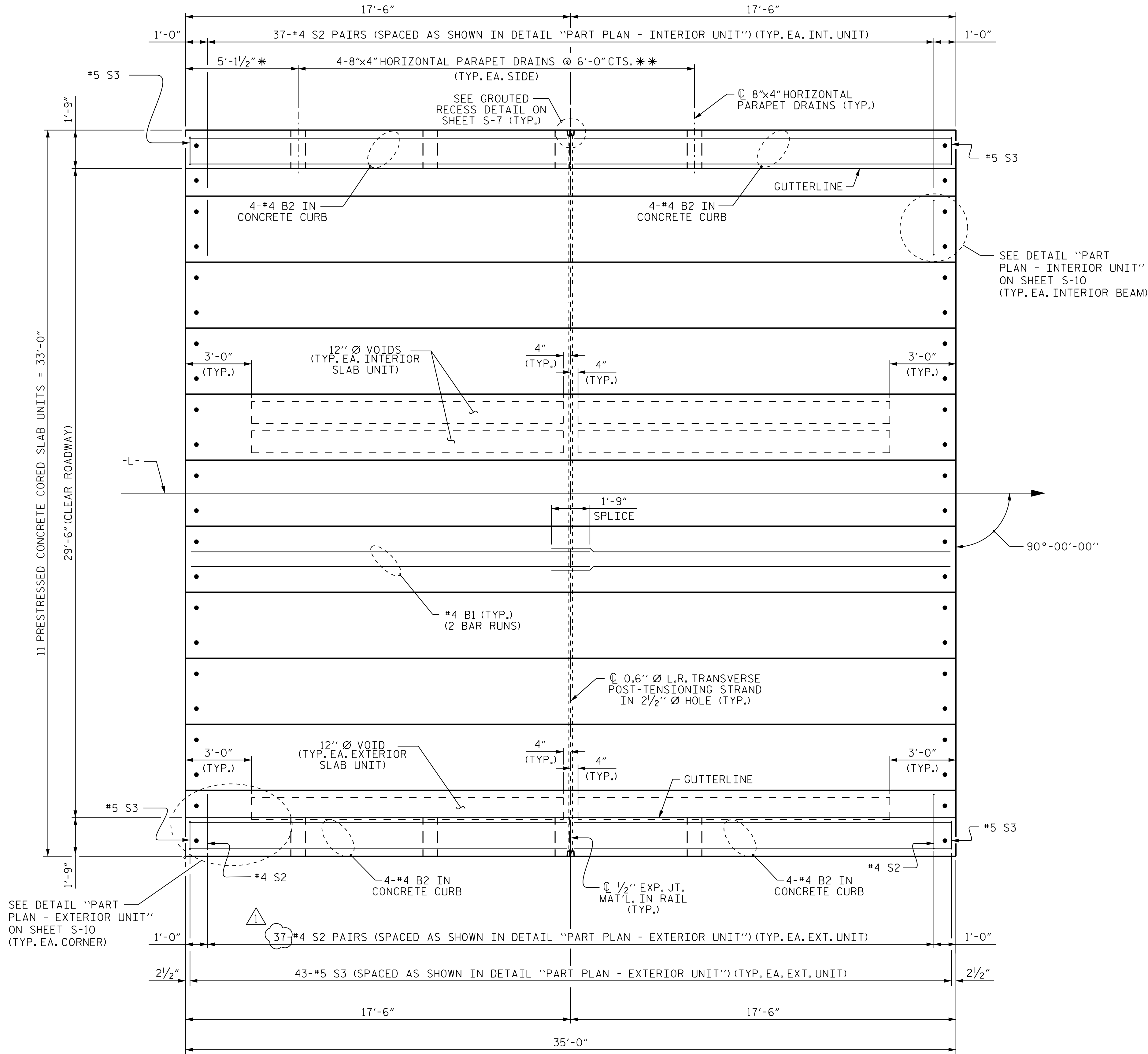
Mark E. Stafford, P.E.  
Division Engineer

MES/ghb

Attachments

Cc: Cole Gurley, PE, Deputy Division Engineer  
Rodney Gantt, Division Construction Engineer  
Bryan Sowell, PE, Division Project Development Engineer  
Christian Listoe, PE, Asst. Division Construction Engineer

K:\BRI-Structures\Bridges\NC\01036418 - Div 12.17BP.12.R.78 (254)\Cadd\Drawings\17BP.12.R.78\_SMLCS2\_480254.dgn 7/10/2025

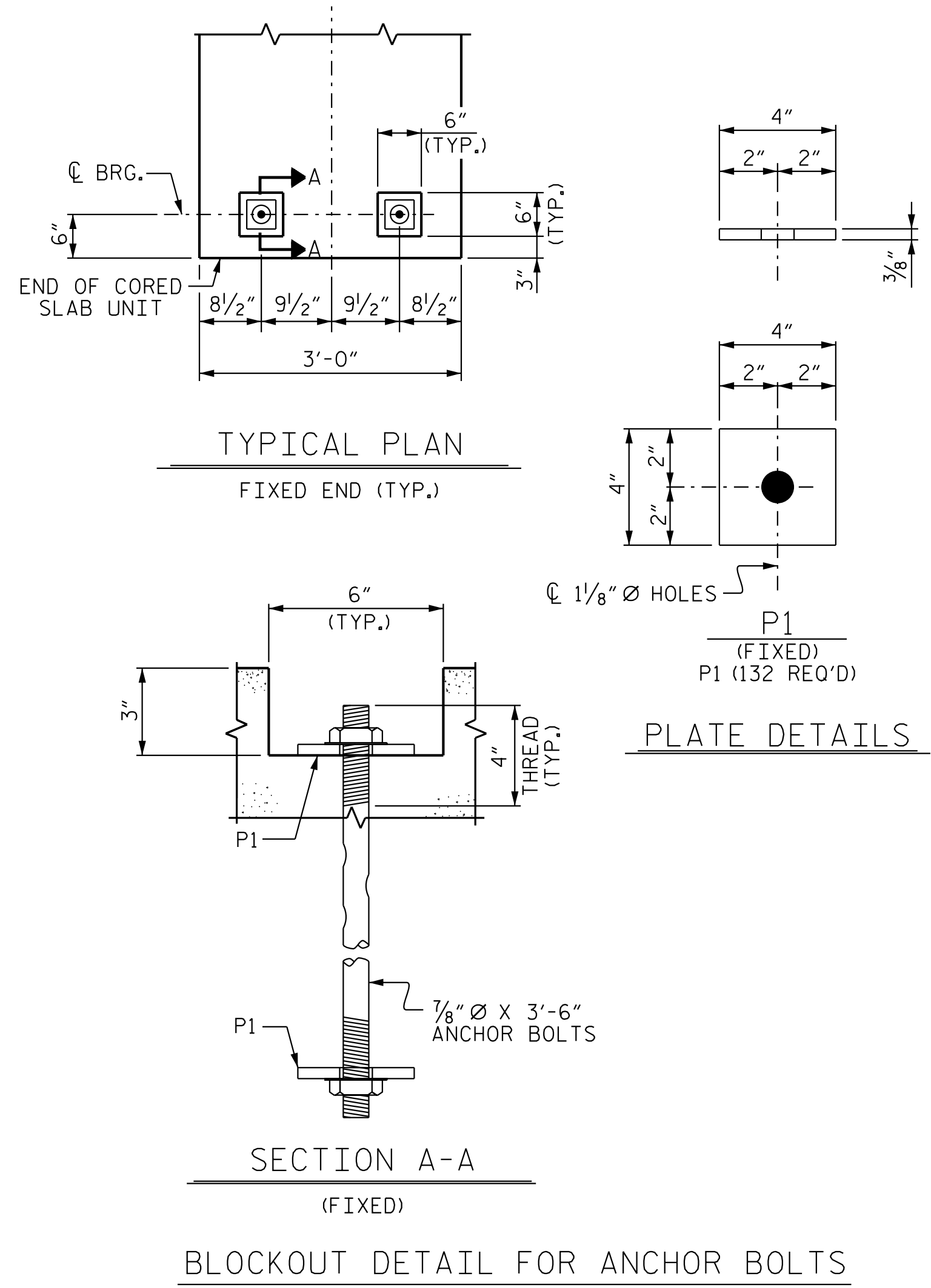


PLAN OF UNIT  
(SPANS A & C)

\* MEASURED FROM BEGIN BRIDGE (W.P. #1) SIDE FOR SPAN A AND END BRIDGE (W.P. #4) SIDE SPAN C

\*\* FROM STA.13+15 -L- TO STA.13+33 -L- IN SPAN A.FROM STA.14+12 -L- TO STA.14+30 -L- IN SPAN C.8"x4"HORIZONTAL PARPET DRAINS ARE TO BE INSTALLED IN LEFT AND RIGHT CURBS AT THE STATION RANGES INDICATED.

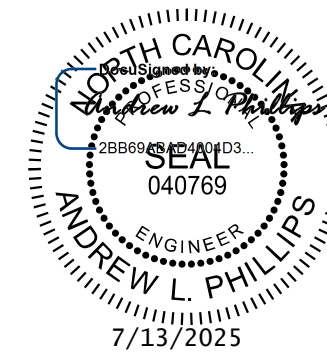
1 REVISED S2 BARS IN EXTERIOR CORED SLAB UNITS



BLOCKOUT DETAIL FOR ANCHOR BOLTS

PROJECT NO. 17BP.12.R.78  
IREDELL COUNTY  
STATION: 13+72.50 -L-

SHEET 2 OF 5



**Kimley»Horn**

421 Fayetteville Street, Suite 600  
Raleigh, NC 27601-1772  
Phone (919) 677-2000 NC LICENSE # F-0102

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STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

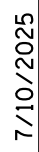
STANDARD  
PLAN OF 35' UNIT  
29'-6" CLEAR ROADWAY  
90° SKEW

| REVISIONS |     |            |     |     |       | SHEET NO.<br>S-8   |
|-----------|-----|------------|-----|-----|-------|--------------------|
| NO.       | BY: | DATE:      | NO. | BY: | DATE: |                    |
| 1         | ALP | 07/10/2025 | 3   |     |       | TOTAL SHEETS<br>25 |
| 2         |     |            | 4   |     |       |                    |

STD. NO. 21" PCS\_33\_90S\_35L

DRAWN BY: T.K. BOYD DATE: 01/2025  
CHECKED BY: J.R. LOGAN DATE: 01/2025  
DESIGN ENGINEER OF RECORD: A.L. PHILLIPS DATE: 01/2025

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UNLESS ALL SIGNATURES COMPLETED**



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# Kimley»Horn

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NC LICENSE #  
F-0102

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SHEET 3 OF 5

STANDARD  
PLAN OF 55' UNIT  
29'-6" CLEAR ROADWAY  
90° SKEW

| REVISIONS |     |            |     |     |       | SHEET NO.<br>5-9   |
|-----------|-----|------------|-----|-----|-------|--------------------|
| NO.       | BY: | DATE:      | NO. | BY: | DATE: |                    |
| 1         | ALP | 07/10/2025 | 3   |     |       | TOTAL SHEETS<br>25 |
| 2         |     |            | 4   |     |       |                    |

STD. NO. 21" PCS\_33\_90S\_55L



| CORED SLABS REQUIRED |        |        |              |
|----------------------|--------|--------|--------------|
|                      | NUMBER | LENGTH | TOTAL LENGTH |
| 35' UNIT             |        |        |              |
| EXTERIOR C.S.        | 4      | 35'-0" | 140'-0"      |
| INTERIOR C.S.        | 18     | 35'-0" | 630'-0"      |
| TOTAL                | 22     |        | 770'-0"      |

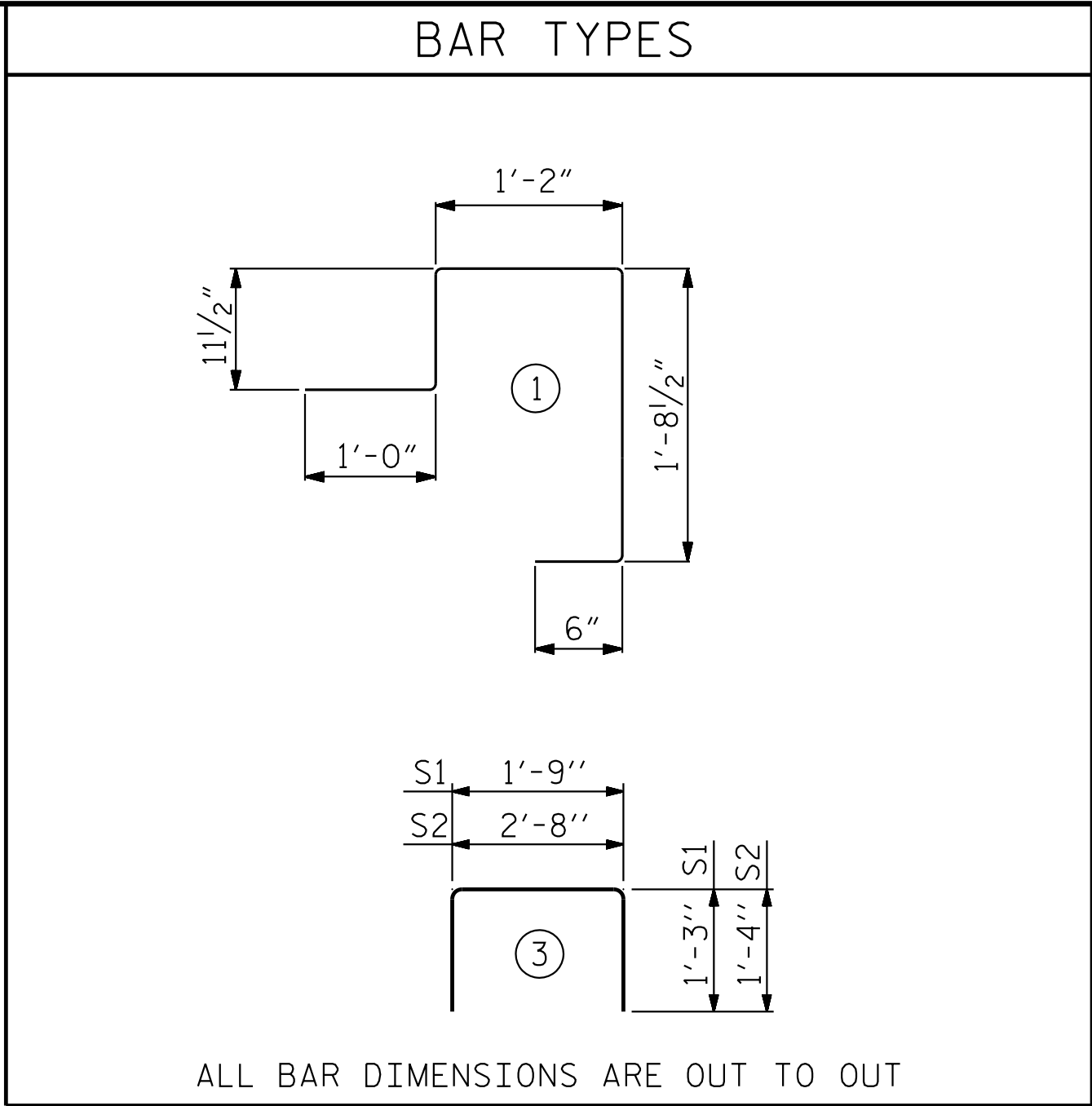
| CORED SLABS REQUIRED |        |        |              |
|----------------------|--------|--------|--------------|
|                      | NUMBER | LENGTH | TOTAL LENGTH |
| 55' UNIT             |        |        |              |
| EXTERIOR C.S.        | 2      | 55'-0" | 110'-0"      |
| INTERIOR C.S.        | 9      | 55'-0" | 495'-0"      |
| TOTAL                | 11     |        | 605'-0"      |

| DEAD LOAD DEFLECTION AND CAMBER            |                    |
|--|--------------------|
|  | 3'-0" x 1'-9"      |
| 35' CORED SLAB UNIT                        | 0.6" Ø L.R. STRAND |
| CAMBER (SLAB ALONE IN PLACE )              | 3/4" ↑             |
| DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD** | 1/8" ↓             |
| FINAL CAMBER                               | 5/8" ↑             |

\*\* INCLUDES FUTURE WEARING SURFACE

| DEAD LOAD DEFLECTION AND CAMBER            |                    |
|--|--------------------|
|  | 3'-0" x 1'-9"      |
| 55' CORED SLAB UNIT                        | 0.6" Ø L.R. STRAND |
| CAMBER (SLAB ALONE IN PLACE )              | 1 1/2" ↑           |
| DEFLECTION DUE TO SUPERIMPOSED DEAD LOAD** | 3/8" ↓             |
| FINAL CAMBER                               | 1 1/8" ↑           |

\*\* INCLUDES FUTURE WEARING SURFACE



## NOTES

ALL PRESTRESSING STRANDS SHALL BE 7-WIRE LOW RELAXATION GRADE 270 STRANDS AND SHALL CONFORM TO AASHTO M203 EXCEPT FOR SAMPLING REQUIREMENTS WHICH SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

ALL REINFORCING STEEL CAST WITH THE CORED SLAB SECTIONS SHALL BE GRADE 60 AND SHALL BE INCLUDED IN THE UNIT PRICE BID FOR PRESTRESSED CONCRETE CORED SLABS.

RECESSES FOR TRANSVERSE STRANDS SHALL BE GROUTED AFTER THE TENSIONING OF THE STRANDS.

THE 2 1/2" Ø ANCHOR BOLT HOLES AT FIXED ENDS OF SLAB SECTIONS SHALL BE FILLED WITH NON-SHRINK GROUT.

THE BACKER RODS SHALL CONFORM TO THE REQUIREMENTS OF TYPE M BOND BREAKER. SEE SECTION 1028 OF THE STANDARD SPECIFICATIONS.

WHEN CORED SLABS ARE CAST, AN INTERNAL HOLD-DOWN SYSTEM SHALL BE EMPLOYED TO PREVENT VOIDS FROM RISING OR MOVING SIDWAYS. AT LEAST SIX WEEKS PRIOR TO CASTING CORED SLABS, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND COMMENT, DETAILED DRAWINGS OF THE PROPOSED HOLD-DOWN SYSTEM. IN ADDITION TO STRUCTURAL DETAILS, LOCATION AND SPACING OF THE HOLD-DOWNS SHALL BE INDICATED.

ALL REINFORCING STEEL IN THE CONCRETE CURBS SHALL BE EPOXY COATED.

PRESTRESSING STRANDS SHALL BE CUT FLUSH WITH THE CORED SLAB UNIT ENDS.

APPLY EPOXY PROTECTIVE COATING TO CORED SLAB UNIT ENDS.

GROOVED CONTRACTION JOINTS, 1#2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE CONCRETE CURB AND IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. A CONTRACTION JOINT SHALL BE LOCATED AT EACH THIRD POINT BETWEEN CONCRETE CURB EXPANSION JOINTS. ONLY ONE CONTRACTION JOINT IS REQUIRED AT MIDPOINT OF CONCRETE CURB SEGMENTS LESS THAN 20 FEET IN LENGTH AND NO CONTRACTION JOINTS ARE REQUIRED FOR THOSE SEGMENTS LESS THAN 10 FEET IN LENGTH.

FLAME CUTTING OF THE TRANSVERSE POST-TENSIONING STRAND IS NOT ALLOWED.

THE TRANSFER OF LOAD FROM THE ANCHORAGES TO THE CORED SLAB UNIT SHALL BE DONE WHEN THE CONCRETE HAS REACHED A COMPRESSIVE STRENGTH OF NOT LESS THAN THE REQUIRED STRENGTH SHOWN IN THE "CONCRETE RELEASE STRENGTH" TABLE.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE PERMITTED THREADED INSERTS ARE DETAILED AS AN OPTION FOR THE CONTRACTOR TO ATTACH FALSEWORK AND FORMWORK DURING CONSTRUCTION.

THE PERMITTED THREADED INSERTS IN THE EXTERIOR UNITS SHALL BE SIZED BY THE CONTRACTOR, SPACED AT 4'-0" CENTERS AND GALVANIZED IN ACCORDANCE WITH SECTION 1076 OF THE STANDARD SPECIFICATIONS. STAINLESS STEEL THREADED INSERTS MAY BE USED AS AN ALTERNATE.

THE PERMITTED THREADED INSERTS SHALL BE GROUTED BY THE CONTRACTOR IMMEDIATELY FOLLOWING REMOVAL OF THE FALSEWORK.

THE COST OF THE PERMITTED THREADED INSERTS SHALL BE INCLUDED IN THE PRICE BID FOR THE PRECAST UNITS.

THE DRAIN OPENING AT THE GUTTERLINE SHALL BE 4" X 8". THE HEIGHT OF THE BLOCKOUT IN THE CONCRETE CURB SHALL EXTEND FROM THE TOP OF THE CORED SLAB UNIT TO THE TOP OF THE DRAIN OPENING.

APPLY EPOXY PROTECTIVE COATING TO EXTERIOR FACE OF THE EXTERIOR CORED SLAB UNITS THAT REQUIRE DRAINS IN THE CURB.

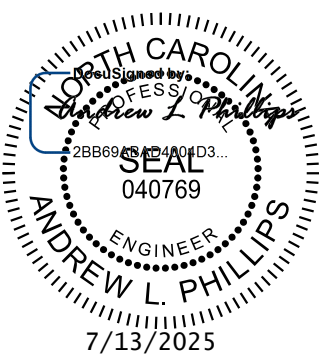
| BILL OF MATERIAL FOR ONE<br>35' CORED SLAB UNIT |        |      |      |               |        |               |        |
|---|--------|------|------|---------------|--------|---------------|--------|
|   |        |      |      | EXTERIOR UNIT |        | INTERIOR UNIT |        |
| BAR   | NUMBER | SIZE | TYPE | LENGTH        | WEIGHT | LENGTH        | WEIGHT |
| B1  | 4      | #4   | STR  | 18'-3"        | 49     | 18'-3"        | 49     |
| S1  | 8      | #5   | 3    | 4'-3"         | 35     | 4'-3"         | 35     |
| S2  | 94     | #4   | 3    | 5'-4"         | 335    |               |        |
| S2  | 74     | #4   | 3    |               |        | 5'-4"         | 264    |
| * S3  | 43     | #5   | 1    | 5'-4"         | 239    |               |        |
| REINFORCING STEEL                               |        |      |      | LBS.          |        |               |        |
| * EPOXY COATED                                  |        |      |      |               |        |               |        |
| REINFORCING STEEL                               |        |      |      | LBS.          |        |               |        |
| 5000 P.S.I. CONCRETE                            |        |      |      | CU. YDS.      |        |               |        |
|   |        |      |      |               |        |               |        |
| 0.6" Ø L.R. STRANDS                             |        |      |      | No.           |        |               |        |
|   |        |      |      |               |        |               |        |

| BILL OF MATERIAL FOR ONE<br>55' CORED SLAB UNIT |        |      |      |               |        |               |        |
|---|--------|------|------|---------------|--------|---------------|--------|
|   |        |      |      | EXTERIOR UNIT |        | INTERIOR UNIT |        |
| BAR   | NUMBER | SIZE | TYPE | LENGTH        | WEIGHT | LENGTH        | WEIGHT |
| B3  | 4      | #4   | STR  | 28'-3"        | 75     | 28'-3"        | 75     |
| S1  | 8      | #5   | 3    | 4'-3"         | 35     | 4'-3"         | 35     |
| S2  | 134    | #4   | 3    | 5'-4"         | 477    |               |        |
| S2  | 114    | #4   | 3    |               |        | 5'-4"         | 406    |
| * S3  | 64     | #5   | 1    | 5'-4"         | 356    |               |        |
| REINFORCING STEEL                               |        |      |      | LBS.          |        |               |        |
| * EPOXY COATED                                  |        |      |      |               |        |               |        |
| REINFORCING STEEL                               |        |      |      | LBS.          |        |               |        |
| 6500 P.S.I. CONCRETE                            |        |      |      | CU. YDS.      |        |               |        |
|   |        |      |      |               |        |               |        |
| 0.6" Ø L.R. STRANDS                             |        |      |      | No.           |        |               |        |
|   |        |      |      |               |        |               |        |

| GUTTERLINE ASPHALT THICKNESS & RAIL HEIGHT |                           |             |
|--|---------------------------|-------------|
|  | ASPHALT OVERLAY THICKNESS | CURB HEIGHT |
|  | @ MID-SPAN                | @ MID-SPAN  |
| 35' UNITS                                  | 2 1/2"                    | 11"         |
| 55' UNIT                                   | 2"                        | 10 1/2"     |

PROJECT NO. 17BP.12.R.78  
IREDELL COUNTY  
STATION: 13+72.50 -L-

SHEET 5 OF 5



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△ REVISED S2 BARS AND CONCRETE IN EXTERIOR CORED SLAB UNITS

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UNLESS ALL SIGNATURES COMPLETED**

| STATE OF NORTH CAROLINA<br>DEPARTMENT OF TRANSPORTATION<br>RALEIGH<br>SUPERSTRUCTURE |     |            |     |     |              |
|--|-----|------------|-----|-----|--------------|
| PRESTRESSED CONCRETE<br>CORED SLAB DETAILS   |     |            |     |     |              |
| REVISIONS  |     |            |     |     | SHEET NO.    |
| NO.  | BY: | DATE:      | NO. | BY: | DATE:        |
| 1  | ALP | 07/10/2025 | 3   |     |              |
| 2  |     |            | 4   |     |              |
|  |     |            |     |     | TOTAL SHEETS |
|  |     |            |     |     | 25           |

DRAWN BY: T. K. BOYD DATE: 01/2025  
CHECKED BY: J. R. LOGAN DATE: 01/2025  
DESIGN ENGINEER OF RECORD: A. L. PHILLIPS DATE: 01/2025