

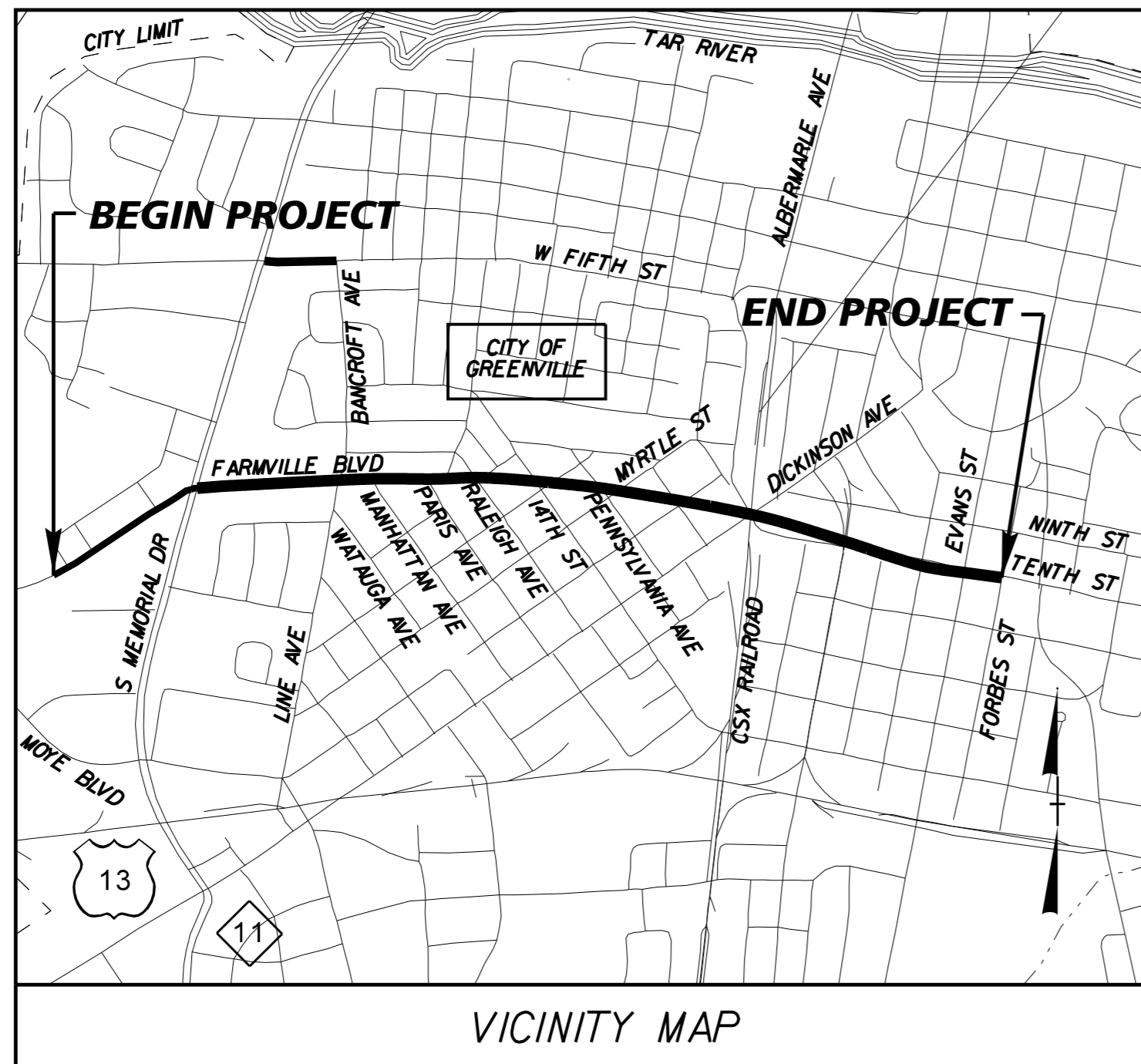
SEE SHEET 1-A FOR INDEX OF SHEETS
SEE SHEET 1-B FOR CONVENTIONAL PLAN SHEET SYMBOLS

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PITT COUNTY

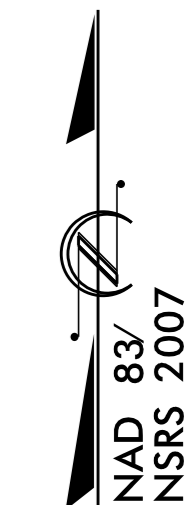
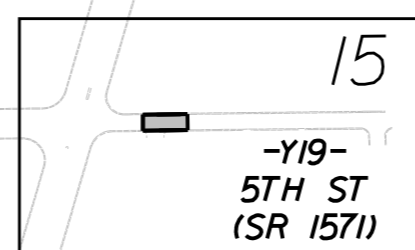
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3315	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
35781.1.2	HPPSTP-0220(53)	P.E.	
35781.2.1	MULTIPLE	RIGHT-OF-WAY	
35781.2.1	MULTIPLE	UTILITIES	
35781.3.FD1	STP-0220(72)	CONSTRUCTION	

TIP PROJECT: U-3315



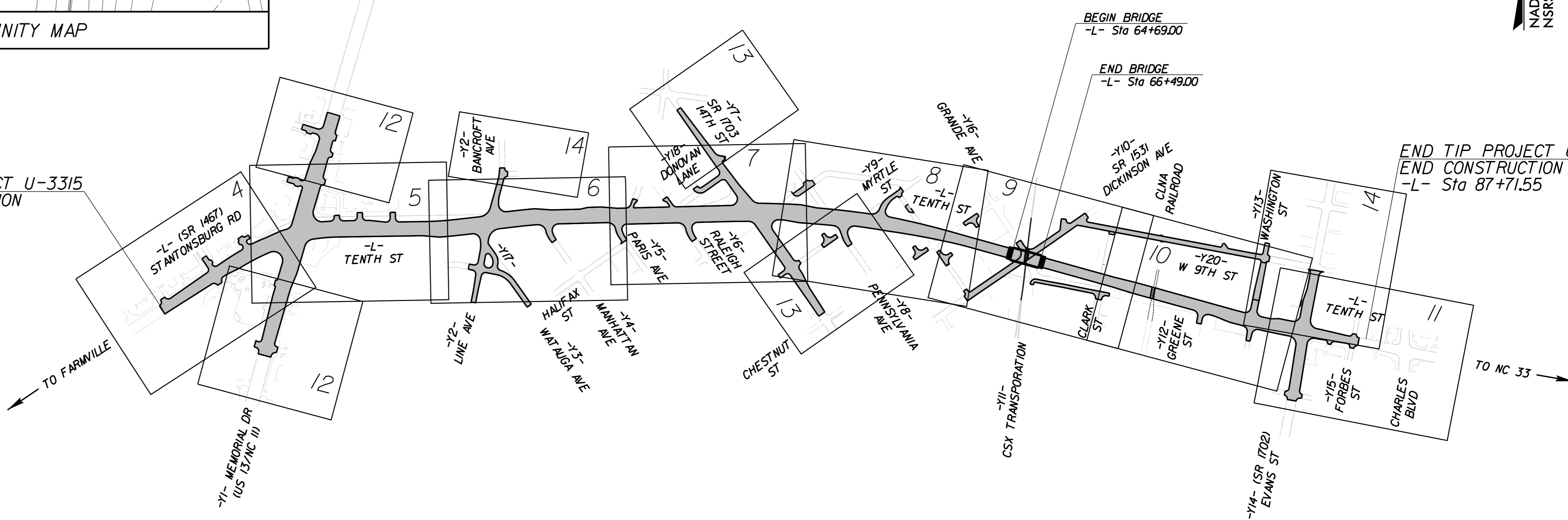
LOCATION: STANTONSBURG ROAD - TENTH STREET CONNECTOR
FROM US 13/NC 11 (MEMORIAL DRIVE) TO SR 1702 (EVANS STREET)

TYPE OF WORK: GRADING, DRAINAGE, PAVING, SIGNING, SIGNALS, AND STRUCTURES



BEGIN TIP PROJECT U-3315
BEGIN CONSTRUCTION
-L- Sta 11+32.00

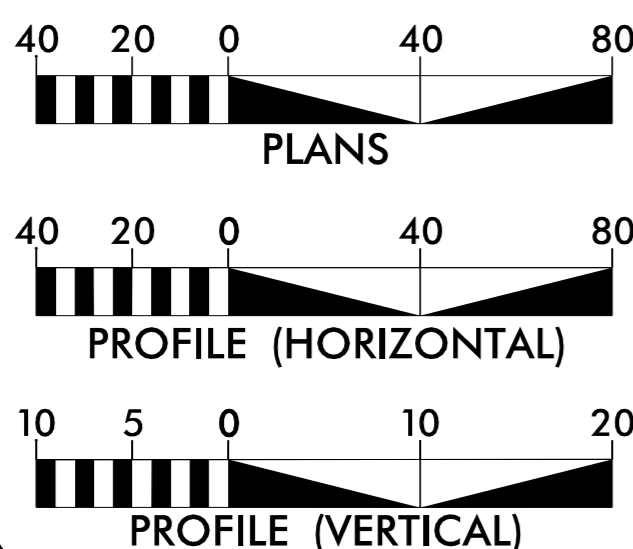
END TIP PROJECT U-3315
END CONSTRUCTION
-L- Sta 87+71.55



NCDOT CONTACT: BRENDA MOORE, P.E.
PROJECT ENGINEER
ROADWAY DESIGN UNIT

THIS IS A PARTIAL CONTROLLED-ACCESS PROJECT WITH ACCESS
BEING LIMITED TO POINTS AS SHOWN ON THE PLANS

GRAPHIC SCALES



DESIGN DATA

ADT 2014 = 22,900 VPD
ADT 2034 = 30,500 VPD
K = 9%
D = 65%
T = 8% *
V = 40 mph
* (TTST 4% + DUAL 4%)

FUNCTIONAL CLASSIFICATION:
URBAN ARTERIAL
SUB-REGIONAL TIER

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-3315 = 1.413 MILES
LENGTH STRUCTURE TIP PROJECT U-3315 = 0.034 MILES
TOTAL LENGTH TIP PROJECT U-3315 = 1.447 MILES

PLANS PREPARED FOR
THE NCDOT BY:



2012 STANDARD SPECIFICATIONS

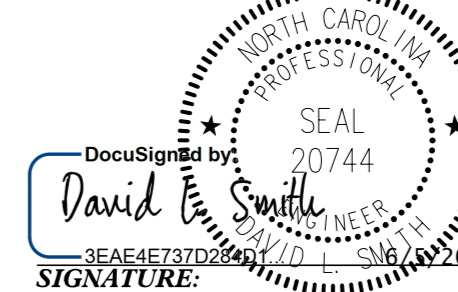
RIGHT OF WAY DATE:
MAY 18, 2012

LETTING DATE:
AUGUST 18, 2015

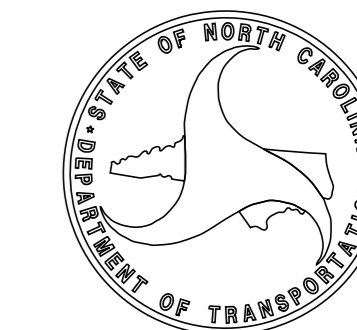
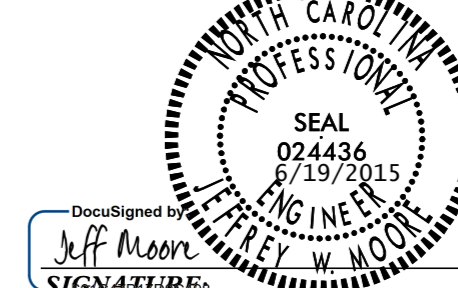
JEFFREY W. MOORE, P.E.
PROJECT ENGINEER

J. JASON PACE, P.E.
PROJECT DESIGN ENGINEER

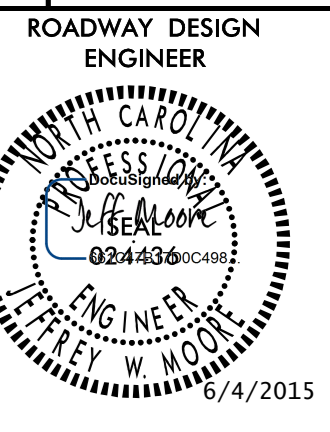
HYDRAULICS ENGINEER



ROADWAY DESIGN ENGINEER



CONTRACT: C203513



GENERAL NOTES: 2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 07/30/12

**GRADE LINE:
GRADING AND SURFACING:**

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III AND SHALL INCLUDE ALL RIGHT-OF-WAY AND EASEMENTS.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

UNDERDRAINS:

UNDERDRAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 815.03 AT LOCATIONS DIRECTED BY THE ENGINEER.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3' RADIUS OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADI NOTED ON PLANS.

GUARDRAIL:

THE GUARDRAIL LOCATIONS SHOWN ON THE PLANS MAY BE ADJUSTED DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER PRIOR TO ORDERING GUARDRAIL MATERIAL.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC NOT SHOWN ON THE PLANS WILL BE PAID FOR AT THE CONTRACT PRICE FOR "TEMPORARY SHORING".

END BENTS:

THE ENGINEER SHALL CHECK THE STRUCTURE END BENT PLANS, DETAILS, AND CROSS-SECTION PRIOR TO SETTING OF THE SLOPE STAKES FOR THE EMBANKMENT OR EXCAVATION APPROACHING A BRIDGE.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE

Greenville Utilities Commission (Gas, Water, Electric)

CenturyLink

Suddenlink

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS IN ACCORDANCE WITH STD. NO. 848.05 AND/OR THE DETAILS IN THE PLANS.

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO. TITLE

DIVISION 2 - EARTHWORK

- 200.03 Method of Clearing - Method III
- 225.02 Guide for Grading Subgrade - Secondary and Local
- 225.04 Method of Obtaining Superlevation - Two Lane Pavement
- 225.06 Method of Grading Sight Distance at Intersections

DIVISION 3 - PIPE CULVERTS

- 300.01 Method of Pipe Installation

DIVISION 6 - ASPHALT BASES AND PAVEMENTS

- 654.01 Pavement Repairs

DIVISION 8 - INCIDENTALS

- 815.03 Pipe Underdrain and Blind Drain
- 840.00 Concrete Base Pad for Drainage Structures
- 840.01 Brick Catch Basin - 12" thru 54" Pipe
- 840.02 Concrete Catch Basin - 12" thru 54" Pipe
- 840.03 Frame, Grates and Hood - for Use on Standard Catch Basin
- 840.14 Concrete Drop Inlet - 12" thru 30" Pipe
- 840.15 Brick Drop Inlet - 12" thru 30" Pipe
- 840.16 Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15
- 840.17 Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
- 840.18 Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
- 840.20 Frames and Wide Slot Flat Grates
- 840.22 Frames and Wide Slot Sag Grates
- 840.24 Frames and Narrow Slot Sag Grates
- 840.25 Anchorage for Frames - Brick or Concrete or Precast
- 840.26 Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe
- 840.27 Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe
- 840.29 Frames and Narrow Slot Flat Grates
- 840.30 Driveway Drop Inlet
- 840.31 Concrete Junction Box - 12" thru 66" Pipe

- 840.35 Traffic Bearing Grated Drop Inlet - for Cast Iron Double Frame and Grates
- 840.45 Precast Drainage Structure
- 840.46 Traffic Bearing Precast Drainage Structure
- 840.54 Manhole Frame and Cover
- 840.66 Drainage Structure Steps
- 840.71 Concrete and Brick Pipe Plug
- 840.72 Pipe Collar
- 846.01 Concrete Curb, Gutter and Curb & Gutter
- 848.01 Concrete Sidewalk
- 848.02 Driveway Turnout - Radius Type
- 848.04 Street Turnout
- 848.05 Curb Ramp - Proposed Curb & Gutter
- 852.01 Concrete Islands
- 852.04 Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter
- 852.05 Median Curb for Catch Basin - for Use with 1'-6" Curb and Gutter
- 852.06 Method for Placement of Drop Inlets in Concrete Islands
- 862.01 Guardrail Placement
- 862.02 Guardrail Installation
- 862.03 Structure Anchor Units
- 866.01 Chain Link Fence - 4', 5' and 6' High Fence

U-3315
PITT COUNTY

<u>INDEX OF SHEETS</u>	
<u>SHEET NUMBER</u>	<u>SHEET</u>
1	TITLE SHEET
1A	INDEX OF SHEETS, GENERAL NOTES, LIST OF ROADWAY STANDARD DRAWINGS
1B	CONVENTIONAL SYMBOLS
1C-1 THRU 1C-2	SURVEY CONTROL SHEETS
2A-1 THRU 2A-7	TYPICAL SECTIONS, PAVEMENT SCHEDULE, AND MISCELLANEOUS DETAILS
2B-1 THRU 2B-3	INTERSECTION DETAILS
2C-1 THRU 2C-4	CURB RAMP DETAILS
2C-5	DETAIL FOR MINIMUM DEPTH OF CONCRETE CATCH BASIN
2C-6	DETAIL FOR TRAFFIC BEARING JUNCTION BOX FOR PROPOSED 54" RCP
2C-7	DETAIL FOR TRAFFIC BEARING JUNCTION BOX FOR PROPOSED 60" RCP
2C-8	DETAIL FOR TRAFFIC BEARING JUNCTION BOX - 48" PIPE
2C-9	DETAIL FOR CONCRETE JUNCTION BOX WITH 6"-12" UTILITY PIPE PASSING THRU
2C-10	DETAIL FOR TRAFFIC BEARING JUNCTION BOX FOR PROPOSED 84" RCP
2C-11	DETAIL FOR STRUCTURE ANCHOR UNITS
2C-12	DETAIL FOR CONCRETE FLUME IN 2'-0" C&G
2C-13	DETAIL FOR SPECIAL DROP INLET
2C-14	DETAIL FOR TEMPORARY 1" STEEL COVER OVER DRAINAGE STRUCTURE
2C-15	DETAIL FOR TRAFFIC BEARING 2GI
2C-16	ANTI-SEEP COLLAR
2C-17	DETAIL FOR CONCRETE JUNCTION BOX WITH 6"-12" UTILITY PIPE PASSING THRU
2D-1	ROOF DRAIN DETAIL
2G-1	DETAIL FOR TEMPORARY SHORING
2G-2 THRU 2G-4	EMBANKMENT MONITORING DETAILS
2H-1	DETAIL FOR TEMPORARY CONTAINMENT OF PETROLEUM CONTAMINATED SOIL
3B-1	SUMMARY OF EARTHWORK
3B-2	SUMMARY OF GUARDRAIL AND SUMMARY OF PAVEMENT REMOVAL
3D-1 THRU 3D-14	SUMMARY OF DRAINAGE QUANTITIES
3G-1	GEOTECHNICAL SUMMARIES
3P-1 THRU 3P-4	PARCEL INDEX SHEETS
4 THRU 15	PLAN SHEETS
16 THRU 26	PROFILE SHEETS
TMP-1 THRU TMP-47	TRANSPORTATION MANAGEMENT PLANS
SD-1 THRU SD-2	SPECIAL SIGN DESIGNS
PMP-1 THRU PMP-14	PAVEMENT MARKING PLANS
E-1 THRU E-11	STREET LIGHTING PLANS
EC-1 THRU EC-15	EROSION CONTROL PLANS
L-1 THRU L-10	LANDSCAPE PLANS
LD-1 THRU LD-4	LANDSCAPE DETAILS
SIGN-1 THRU SIGN-9	SIGNING PLANS
SIG. 1.0 THRU SIG. 5.10	SIGNAL PLANS
SIG. M1 THRU SIG. M9	METAL POLE STANDARDS
SIG. P1 THRU SIG. P3	PUSHBUTTON DETAILS
ITS-1 THRU ITS-10	INTERCONNECT PLANS
UC-1 THRU UC-25	UTILITY CONSTRUCTION PLANS
UO-1 THRU UO-13	UTILITIES BY OTHERS PLANS
X-0	CROSS-SECTION INDEX
X-1A THRU X-1C	CROSS-SECTION SUMMARY SHEETS
X-1 THRU X-83	CROSS-SECTIONS
S-1 THRU S-33	STRUCTURE PLANS
W-1 THRU W-9	RETAINING WALL PLANS
A-1 THRU A-2	ARCHITECTURAL PLANS

K:\RAL_Roadway\0103675 (U-3315)\Roadway\Proj\U-3315_rdy_tsh.dgn

6/3/2015

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○ IP
Property Corner	----->
Property Monument	□ ECM
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	-WLB-
Proposed Wetland Boundary	-WLB-
Existing Endangered Animal Boundary	-EAB-
Existing Endangered Plant Boundary	-EPB-
Existing Historic Property Boundary	-HPB-
Known Soil Contamination: Area or Site	☠
Potential Soil Contamination: Area or Site	?

BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○ S
Well	○ W
Small Mine	⊗
Foundation	□
Area Outline	□
Cemetery	□ +
Building	□
School	□ +
Church	□ +
Dam	▬

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	□
Jurisdictional Stream	----- JS
Buffer Zone 1	----- BZ 1
Buffer Zone 2	----- BZ 2
Flow Arrow	←
Disappearing Stream	----->
Spring	○
Wetland	▽
Proposed Lateral, Tail, Head Ditch	----- FLW
False Sump	▽

RAILROADS:

Standard Gauge	----- CSX TRANSPORTATION
RR Signal Milepost	○ MILEPOST 35
Switch	□ SWITCH
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	----- R/W
Proposed Right of Way Line with Iron Pin and Cap Marker	----- R/W
Proposed Right of Way Line with Concrete or Granite R/W Marker	----- R/W
Proposed Control of Access Line with Concrete CA Marker	----- C/A
Existing Control of Access	----- C/A
Proposed Control of Access	----- C/A
Existing Easement Line	----- E
Proposed Temporary Construction Easement	----- E
Proposed Temporary Drainage Easement	----- TDE
Proposed Permanent Drainage Easement	----- PDE
Proposed Permanent Drainage / Utility Easement	----- DUE
Proposed Permanent Utility Easement	----- PUE
Proposed Temporary Utility Easement	----- TUE
Proposed Aerial Utility Easement	----- AUE
Proposed Permanent Easement with Iron Pin and Cap Marker	----- ◆

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	----- C
Proposed Slope Stakes Fill	----- F
Proposed Curb Ramp	----- CR
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	⊕
Pavement Removal	▨

VEGETATION:

Single Tree	☼
Single Shrub	☼
Hedge	-----
Woods Line	-----

Orchard	☼☼☼☼
Vineyard	□ Vineyard

EXISTING STRUCTURES:

MAJOR:	
Bridge, Tunnel or Box Culvert	----- CONC
Bridge Wing Wall, Head Wall and End Wall	----- CONC WW
MINOR:	
Head and End Wall	----- CONC HW
Pipe Culvert	-----
Footbridge	-----
Drainage Box: Catch Basin, DI or JB	□ CB
Paved Ditch Gutter	-----
Storm Sewer Manhole	⊕
Storm Sewer	----- S

UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	□
H-Frame Pole	●
Recorded U/G Power Line	----- P
Designated U/G Power Line (S.U.E.*)	----- P

TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	⊕
Telephone Cell Tower	⊗
U/G Telephone Cable Hand Hole	□
Recorded U/G Telephone Cable	----- T
Designated U/G Telephone Cable (S.U.E.*)	----- T
Recorded U/G Telephone Conduit	----- TC
Designated U/G Telephone Conduit (S.U.E.*)	----- TC
Recorded U/G Fiber Optics Cable	----- T FO
Designated U/G Fiber Optics Cable (S.U.E.*)	----- T FO

WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	----- W
Designated U/G Water Line (S.U.E.*)	----- W
Above Ground Water Line	----- A/G Water

TV:

TV Satellite Dish	☼
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	----- TV
Designated U/G TV Cable (S.U.E.*)	----- TV
Recorded U/G Fiber Optic Cable	----- TV FO
Designated U/G Fiber Optic Cable (S.U.E.*)	----- TV FO

GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	----- G
Designated U/G Gas Line (S.U.E.*)	----- G
Above Ground Gas Line	----- A/G Gas

SANITARY SEWER:

Sanitary Sewer Manhole	⊕
Sanitary Sewer Cleanout	⊕
U/G Sanitary Sewer Line	----- SS
Above Ground Sanitary Sewer	----- A/G Sanitary Sewer
Recorded SS Forced Main Line	----- FSS
Designated SS Forced Main Line (S.U.E.*)	----- FSS

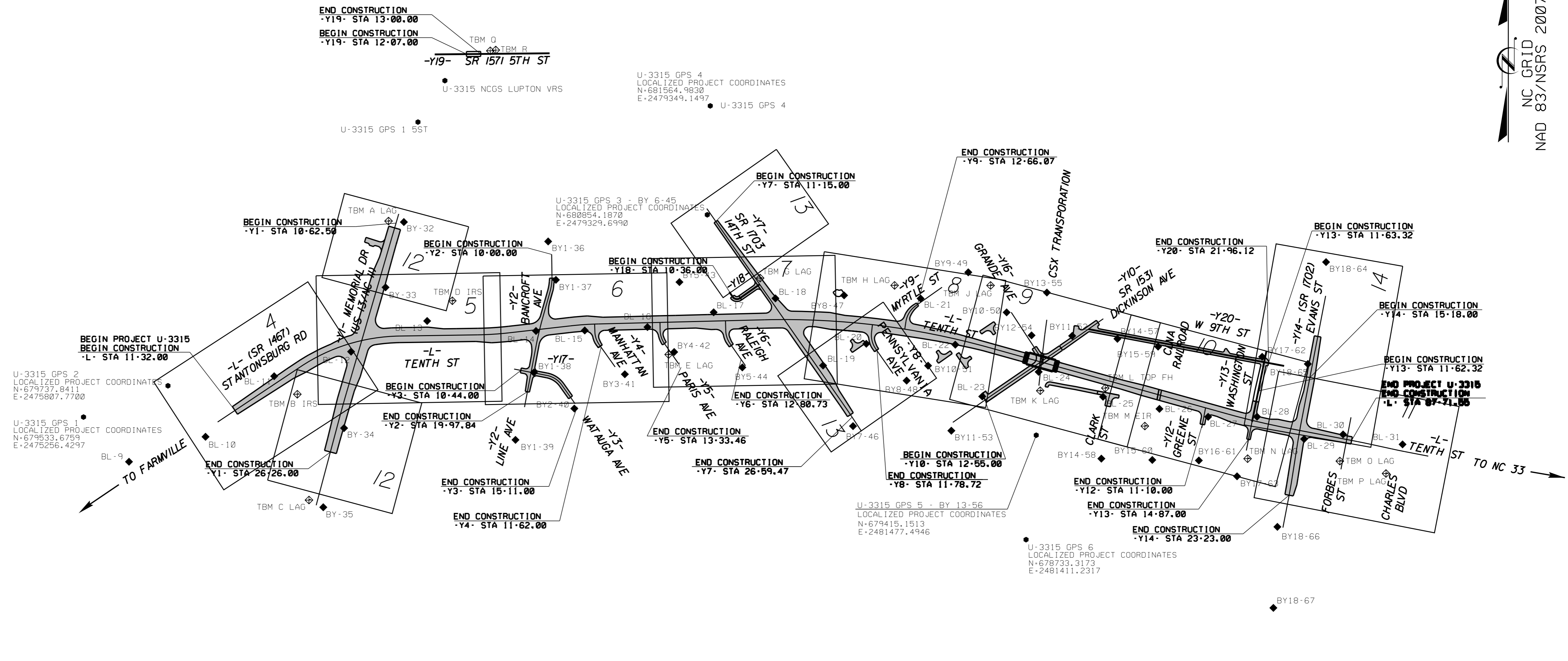
MISCELLANEOUS:

Utility Pole	●
Utility Pole with Base	□
Utility Located Object	○
Utility Traffic Signal Box	⊕
Utility Unknown U/G Line	----- ?UTL
U/G Tank; Water, Gas, Oil	□
Underground Storage Tank, Approx. Loc.	⊕ UST
A/G Tank; Water, Gas, Oil	□
Geoenvironmental Boring	⊕
U/G Test Hole (S.U.E.*)	⊕
Abandoned According to Utility Records	AATUR
End of Information	E.O.I.

SURVEY CONTROL SHEET U-3315

PITT COUNTY

**LOCATION: STANTONSBURG ROAD - TENTH STREET CONNECTOR
FROM US 13/NC 11 (MEMORIAL DRIVE) TO SR 1702 (EVANS STREET)**



U-3315 GPS 2
LOCALIZED PROJECT COORDINATES
N-679737.8411
E-2475807.7700

U-3315 GPS 1
LOCALIZED PROJECT COORDINATES
N-679833.6759
E-2475256.4297

U-3315 GPS 4
LOCALIZED PROJECT COORDINATES
N-681564.9830
E-2479349.1497

U-3315 GPS 3 - BY 6-45
LOCALIZED PROJECT COORDINATES
N-680854.1870
E-2479329.6990

U-3315 GPS 5 - BY 13-56
LOCALIZED PROJECT COORDINATES
N-679415.1513
E-2481477.4946

U-3315 GPS 6
LOCALIZED PROJECT COORDINATES
N-678733.3173
E-2481411.2317

U-3315 GPS 7
LOCALIZED PROJECT COORDINATES
N-677427.6519
E-2482778.2385

U-3315 GPS 8
LOCALIZED PROJECT COORDINATES
N-676982.2303
E-2482767.2522

I, PATRICK W. HARTMAN, PLS, CERTIFY THAT THE NORTH CAROLINA STATE PLANE GRID COORDINATES AND ELEVATIONS LISTED WERE DERIVED FROM AN ACTUAL GPS SURVEY AND DIFFERENTIAL LEVELING MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED DURING THE PERFORMANCE OF THE WORK:

- | | |
|-------------------------------------|--|
| 1) CLASS OF SURVEY: | CLASS A (HORIZONTAL), CLASS A (VERTICAL) |
| 2) POSITIONAL ACCURACY: | 2 CM |
| 3) TYPE OF GPS FIELD PROCEDURE: | NORTH CAROLINA RTK VRS |
| 4) DATE OF SURVEY WORK: | 12/3/10, 12/6/10, 12/10/10 |
| 5) DATUM/EPOCH: | NAD83/NSRS2007 |
| 6) PUBLISHED CONTROL/FIXED CONTROL: | AS LISTED BELOW AND NORTH CAROLINA RTK VRS |
| 7) GEIOD MODEL: | GE01009 |
| 8) COMBINED GRID FACTOR: | 0.99989453 |
| 9) UNITS: | US SURVEY FEET |

PUBLISHED VERTICAL CONTROL MONUMENTS
 NC85 LUPTON
 NGVD 29 ELEVATION - 62.10 FEET (18.928 METERS)
 NAVD 88 ELEVATION - 60.95 FEET (NGVD 29 + (-) 1.15 FEET)

NC85 STADIUM
 NGVD 29 ELEVATION - 55.51 FEET (16.919 METERS)
 NAVD 88 ELEVATION - 54.36 FEET (NGVD 29 + (-) 1.15 FEET)

NOTES:
 VERTICAL DATUM IS NAVD88 ESTABLISHED FROM NC85 LUPTON AND NC85 STADIUM. (NAVD88 - NGVD29 (-) 1.15 FEET).
 PROJECT GPS CONTROL ESTABLISHED USING NORTH CAROLINA REAL TIME KINEMATIC VIRTUAL REFERENCE SOLUTION AND BASELINE POINTS WERE ESTABLISHED VIA CONVENTIONAL TRAVERSE METHODS.

DATUM DESCRIPTION

THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY RIVERS AND ASSOCIATES, INC. FOR MONUMENT "GPS U-3315-4" WITH NAD 1983/2007 STATE PLANE COORDINATES OF NORTHING: 681,564.9830 (FT) EASTING: 2,479,349.1497 (FT) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99989453

THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "GPS U-3315-4" TO L STATION 11+36.00 IS
 S 57°21'38.8" W 3686.12'

ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

NOTE: DRAWING NOT TO SCALE

SURVEY CONTROL SHEET U-3315

STATE PROJECT REFERENCE NO.	SHEET NO.
U-3315	1C-2

Point	Description	North	East	Elevation	L STATION	Offset
1	U-3315 GPS 1	679533.6759	2475256.4297	71.06	OUTSIDE PROJECT LIMITS	
2	U-3315 GPS 2	679737.8411	2475807.7700	71.74	OUTSIDE PROJECT LIMITS	
3	U-3315 GPS 4	681564.9830	2479349.1497	69.29	OUTSIDE PROJECT LIMITS	
5	U-3315 GPS 5 - BY 13-56	679415.1513	2481477.4946	55.7900	OUTSIDE PROJECT LIMITS	
6	U-3315 GPS 6	678733.3173	2481411.2317	54.5900	OUTSIDE PROJECT LIMITS	
7	U-3315 GPS 7	677427.6519	2482778.2385	50.7200	OUTSIDE PROJECT LIMITS	
8	U-3315 GPS 8	678982.2303	2482767.2522	45.4000	OUTSIDE PROJECT LIMITS	
9	U-3315 GPS 3 - BY 6-45	680854.1870	2479329.6990	70.1700	10+34.86	20.41 RT
116	BL-18	680308.3542	2479774.3148	63.2100	47+96.63	138.44 LT
117	BL-17	680217.3668	2479370.8711	71.0600	43+93.01	57.00 LT
118	BL-19	679869.9852	2480085.1607	63.0100	51+22.08	293.26 RT
119	BL-16	680120.8253	2478938.5805	68.3900	39+58.45	28.75 RT
122	BL-15	680098.7810	2478529.3076	67.9100	35+47.03	38.59 RT
124	BL-14	680095.4613	2478210.7265	68.7400	32+28.37	7.85 RT
126	BL-13	680160.6591	2477499.9122	69.9200	25+18.20	95.40 LT
130	BL-12	679960.5813	2477003.3606	70.7400	19+99.81	52.38 RT
131	BL-11	679800.2075	2476501.1115	72.1800	14+72.85	43.95 LT
134	BL-10	679404.8344	2476052.8039	74.4800	OUTSIDE PROJECT LIMITS	
135	BL-9	679241.8098	2475553.0184	75.9600	OUTSIDE PROJECT LIMITS	
140	BL-29	679390.1338	2483226.3973	47.9300	83+45.42	49.64 RT
141	BL-30	679420.2799	2483481.1406	50.3000	85+89.83	28.26 LT
143	BL-28	679535.8145	2482919.3543	44.3500	80+14.95	30.60 LT
146	BL-27	679534.9145	2482599.7921	45.7600	77+06.12	52.40 RT
148	BL-26	679587.0507	2482281.7555	46.8000	73+85.75	87.41 RT
151	BL-25	679665.5807	2481913.5840	46.3900	70+10.00	110.44 RT
154	BL-24	679828.6156	2481493.1033	58.3400	65+61.21	66.07 RT
159	BL-23	679667.8177	2481124.8354	63.9800	62+49.51	319.69 RT
161	BL-22	680006.0660	2480948.6168	62.1700	59+87.42	36.27 RT
165	BL-21	680307.4304	2480722.0082	59.9400	57+10.41	214.23 LT
167	BL-20	680011.9426	2480367.5510	61.7500	54+03.71	128.43 RT
174	BL-31	679355.1502	2483869.1980	53.8900	89+82.93	43.18 LT

Point	Description	North	East	Elevation	Station	Offset
163	BY10-50	680217.0886	2481283.8012	62.5100	OUTSIDE PROJECT LIMITS	
164	BY10-51	679868.8962	2480771.0314	61.2200	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y10 STATION	Offset
154	BL-24	679828.6156	2481493.1033	58.3400	16+48.57	46.08 RT
156	BY11-52	680003.3606	2481712.1135	53.4300	OUTSIDE PROJECT LIMITS	
159	BL-23	679667.8177	2481124.8354	63.9800	12+53.95	29.15 LT
162	BY11-53	679444.4135	2480922.9656	63.7100	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y16 STATION	Offset
158	BY12-54	680066.7776	2481446.5156	61.4100	11+77.39	28.19 RT

Point	Description	North	East	Elevation	Station	Offset
5	U-3315 GPS 5 - BY 13-56	679415.1513	2481477.4946	55.7900	OUTSIDE PROJECT LIMITS	
157	BY13-55	680346.2684	2481546.8434	58.2800	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Station	Offset
152	BY14-58	679262.1409	2481902.5769	46.7000	OUTSIDE PROJECT LIMITS	
153	BY14-57	680044.4147	2482007.3869	48.5600	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Station	Offset
149	BY15-60	679253.5309	2482235.3519	49.2000	OUTSIDE PROJECT LIMITS	
150	BY15-59	679993.3426	2482273.0640	47.3000	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y12 STATION	Offset
146	BL-27	679534.9145	2482599.7921	45.7600	10+54.80	27.16 LT
147	BY16-61	679250.0118	2482539.0579	51.4500	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y13 STATION	Offset
143	BL-28	679535.8145	2482919.3543	44.3500	13+29.10	25.57 LT
144	BY17-63	679146.6385	2482788.7338	49.2900	OUTSIDE PROJECT LIMITS	
145	BY17-62	679926.9652	2482952.7073	40.8400	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y14 STATION	Offset
138	BY18-67	678287.8013	2483025.7588	54.3700	OUTSIDE PROJECT LIMITS	
139	BY18-66	678816.7435	2483051.8879	55.3800	OUTSIDE PROJECT LIMITS	
140	BL-29	679390.1338	2483226.3973	47.9300	19+45.67	37.46 LT
142	BY18-65	679879.9694	2483250.6847	45.3600	14+59.11	29.91 RT
173	BY18-64	680545.4537	2483369.8376	38.9900	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Station	Offset
732	TBM B IRS	679682.6123	2476652.2832	71.7500	-L- 15+33.47	137.72 RT
919	TBM A LAG	680813.1827	2477248.0291	71.2600	-Y1- 10+63.50	50.90 RT
1524	TBM C LAG	678992.1739	2476728.4981	73.7900	-Y1- 29+55.99	54.57 RT
2966	TBM E LAG	679941.8134	2479076.9036	69.9800	-Y5- 12+18.26	18.84 RT
3820	TBM G LAG	680440.9307	2479674.6114	65.8500	-Y7- 15+71.25	26.07 LT
13555	TBM H LAG	680393.3310	2480552.6224	60.5400	-Y9- 11+58.65	190.10 LT
13557	TBM J LAG	680392.9112	2481179.1656	57.7500	-L- 61+14.76	394.35 LT
13559	TBM K LAG	679705.5765	2481503.3853	58.7700	-Y10- 15+87.63	153.46 RT
13561	TBM L TOP FH	679723.1326	2481928.4618	48.9600	-L- 70+08.91	51.00 RT
13563	TBM M EIR	679475.0404	2482186.5725	48.3900	-L- 73+24.07	220.84 RT
13565	TBM N LAG	679261.9851	2482857.4619	49.1800	-L- 80+18.00	250.12 RT
13567	TBM O LAG	679246.3831	2483460.0431	54.7200	-Y15- 12+94.37	17.21 RT
13569	TBM P LAG	679165.0304	2483781.3061	55.0400	-L- 89+17.29	185.03 RT
13579	TBM O IRS	680292.8637	2477664.4376	70.5500	-L- 26+84.68	225.13 LT

Point	Description	North	East	Elevation	Y1 STATION	Offset
130	BL-12	679960.5813	2477003.3606	70.74	19+50.50	46.42 RT
132	BY-34	679461.4914	2476957.4210	70.95	24+43.57	45.84 LT
133	BY-33	680380.3014	2477228.2335	70.08	14+84.53	51.60 LT
177	BY-32	680806.6427	2477348.0205	71.19	10+41.71	46.98 LT
178	BY-35	678944.7046	2476821.8241	71.37	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	ELEVATION	Y2 STATION	Offset
124	BL-14	680095.4613	2478210.7265	68.7400	15+15.87	21.11 RT
127	BY-38	679824.3385	2478197.0003	68.3900	17+83.88	18.03 LT
129	BY-37	680429.2884	2478340.8294	69.6200	11+65.38	25.61 LT
175	BY-36	680680.0029	2478290.1472	68.4500	OUTSIDE PROJECT LIMITS	
176	BY-39	679384.5184	2478076.8747	70.8300	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y3 STATION	Offset
127	BY-38	679824.3385	2478197.0003	68.3900	11+30.87	2.40 LT
128	BY2-40	679588.8964	2478461.0446	67.1200	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y4 STATION	Offset
122	BL-15	680098.7810	2478529.3076	67.9100	10+39.64	65.73 RT
125	BY3-41	679813.0190	2478791.0254	67.4700	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y5 STATION	Offset
119	BL-16	680120.8253	2478938.5805	68.3900	10+28.75	82.55 RT
123	BY4-42	679958.2892	2479112.9224	68.7700	12+25.40	20.11 LT

Point	Description	North	East	Elevation	Y6 STATION	Offset
120	BY5-44	679857.6294	2479558.0405	69.4000	13+28.36	23.27 RT
121	BY5-43	680414.8782	2479147.5602	71.0600	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y7 STATION	Offset
9	U-3315 GPS 3 - BY 6-45	680854.1870	2479329.6990	70.1700	10+34.86	20.41 RT
116	BL-18	680308.3542	2479774.3148	63.2100	17+37.03	31.97 LT

Point	Description	North	East	Elevation	Y7 STATION	Offset
118	BL-19	679869.9852	2480085.1607	63.0100	22+74.40	36.03 LT
171	BY7-46	679474.3350	2480280.8323	64.7700	27+11.47	27.57 RT


Point	Description	North	East	Elevation	Y8 STATION	Offset
167	BL-20	680011.9426	2480367.5510	61.7500	11+13.80	41.57 RT
168	BY8-48	679771.4957	2480630.8655	61.9200	OUTSIDE PROJECT LIMITS	
169	BY8-47	680328.0651	2480222.3891	59.7700	OUTSIDE PROJECT LIMITS	

Point	Description	North	East	Elevation	Y9 STATION	Offset
165	BL-21	680307.4304	2480722.0082	59.9400	12+27.80	20.46 LT
166	BY9-49	680478.4429	2481033.6054	55.0400	OUTSIDE PROJECT LIMITS	

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5/12/2015

- NOTES:**
- MILL NOTCH TO KEY-IN S9.5C FROM -L- STA 11+32.00 TO 11+82.00
 - REMOVE EXISTING ASPHALT PAVEMENT TO EXISTING SUBGRADE EXCEPT WHERE NOTED.
 - REMOVE EXISTING ASPHALT PAVEMENT TO THE TOP OF EXISTING ABC AND REPLACE WITH 119.0C PRIOR TO PLACING THE OVERLAY FROM -L- STA 27+50 TO 32+50.
 - PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED
 - REFER TO TMP SHEETS FOR TEMPORARY ASPHALT PAVEMENT WIDTHS
 - MILL ASPHALT PAVEMENT 3" TO 0" FROM -L- STA 11+82.00 TO 14+72.00 AND FROM -L- STA 18+11.00 TO 19+11.00
 - MILL ASPHALT PAVEMENT 3" TO 0" FROM -L- STA 51+67.00 TO 52+32.00




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PROJECT REFERENCE NO. U-3315
SHEET NO. 2A-1

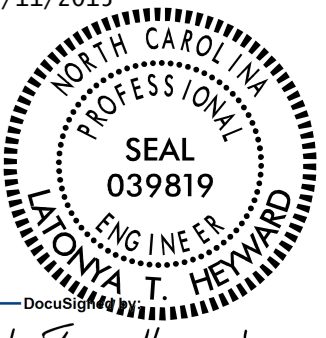
R/W SHEET NO.

ROADWAY ENGINEER



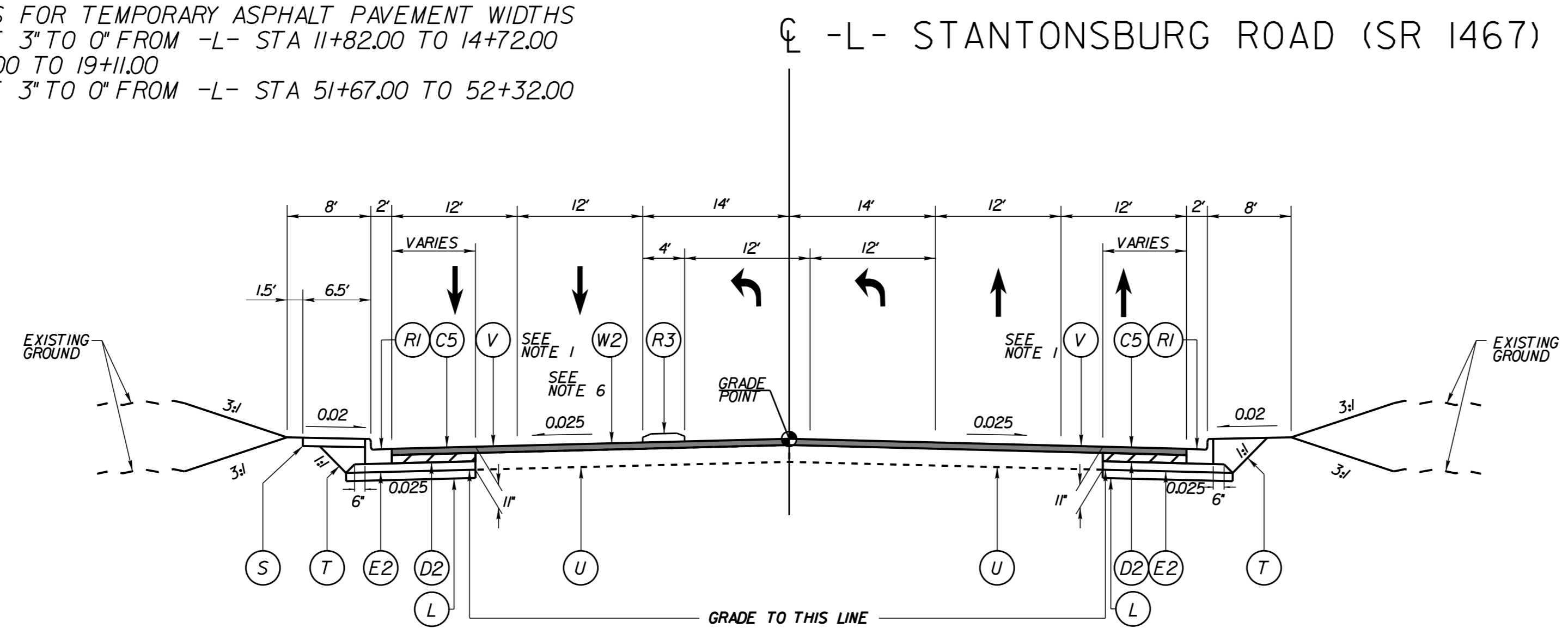
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PAVEMENT DESIGN ENGINEER

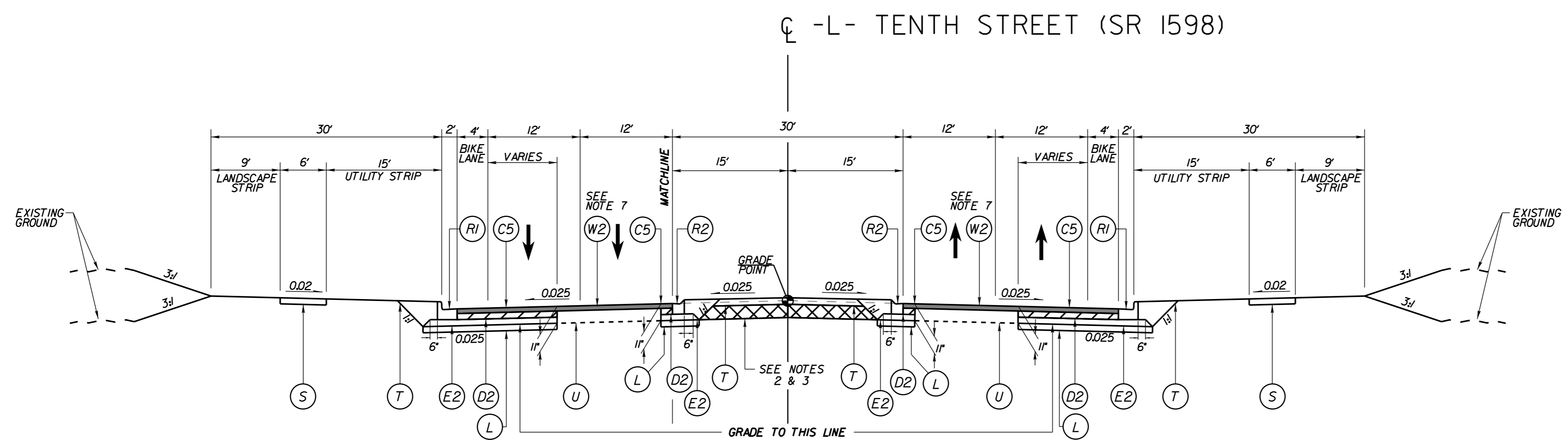


6/11/2015

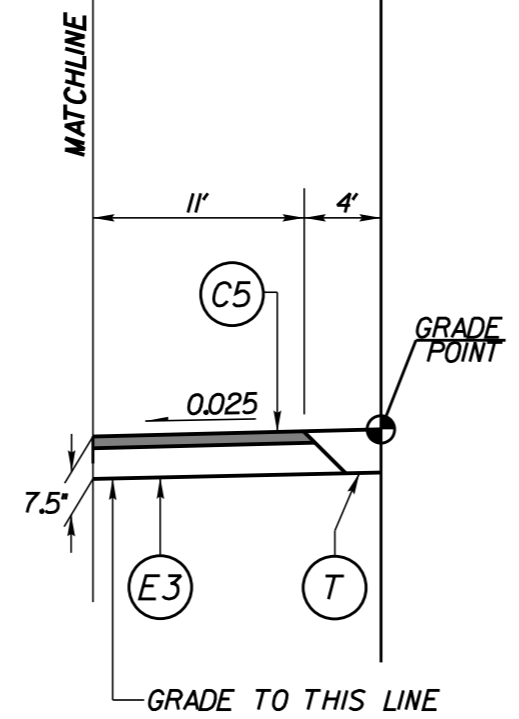
REVISIONS



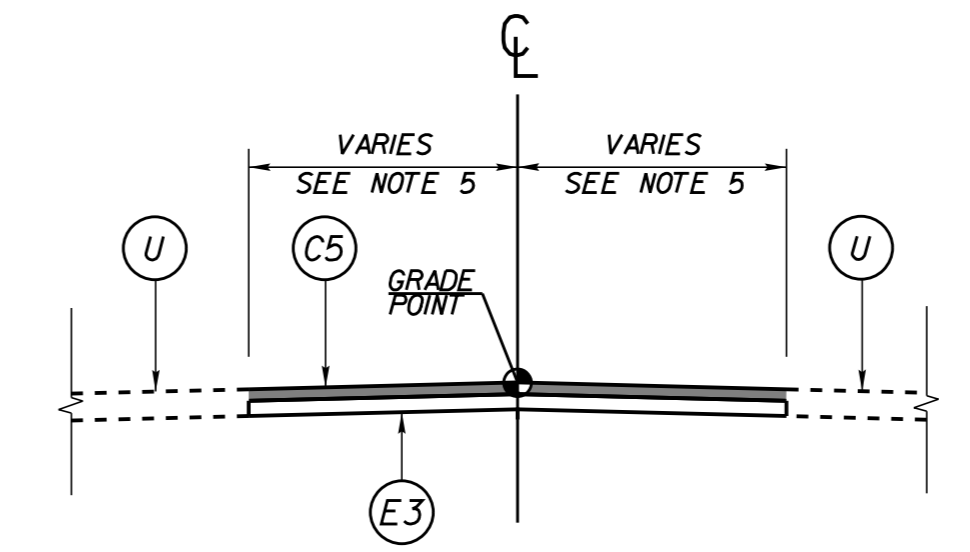
TYPICAL SECTION NO. 1
-L- STA 11+32.00 TO STA 20+34.32



TYPICAL SECTION NO. 2
-L- STA 21+39.61 TO STA 57+00.00



TYPICAL SECTION NO. 2A
TEMPORARY WIDENING
-L- STA 25+88.00 TO STA 31+82.00



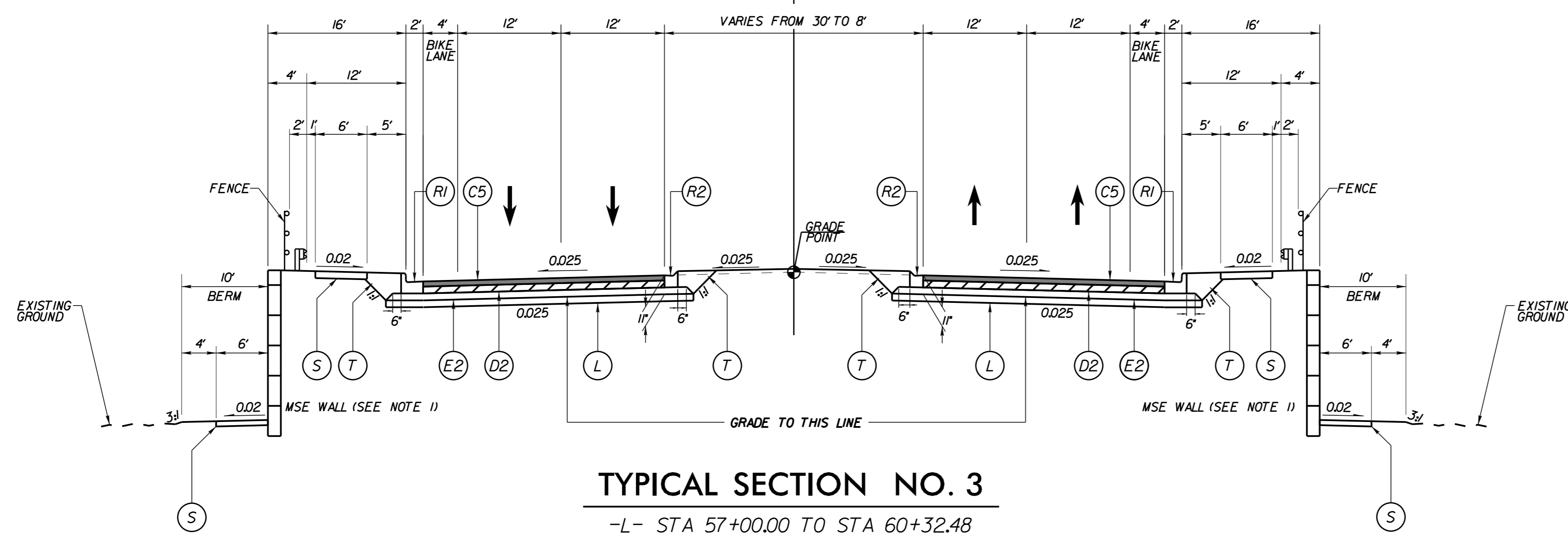
TYPICAL SECTION NO. 2B
TEMPORARY ASPHALT PAVEMENT
-L- STA 25+88.00 TO STA 31+72.50
-L- STA 33+32.15 TO STA 34+67.46
-L- STA 45+85.00 TO STA 47+60.35

PAVEMENT SCHEDULE	
C2	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C3	PROPOSED APPROX 1.5" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C4	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C5	PROPOSED APPROX 3" ASPHALT CONCRETE SURFACE COURSE TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C6	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 1.5" IN DEPTH OR GREATER THAN 2" IN DEPTH.
C7	PROPOSED VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 1.5" IN DEPTH OR GREATER THAN 2" IN DEPTH.
D1	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 119.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROPOSED APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE TYPE 119.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D3	PROPOSED VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 2.5" OR GREATER THAN 4" IN DEPTH.
D4	PROPOSED VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 119.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 2.5" OR GREATER THAN 4" IN DEPTH.
E1	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE TYPE B25.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E2	PROPOSED APPROX. 4" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
E3	PROPOSED APPROX. 4.5" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 513 LBS. PER SQ. YD.
E4	PROPOSED APPROX. 5" ASPHALT CONCRETE BASE COURSE TYPE B25.0C, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E5	PROPOSED VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
E6	PROPOSED VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 5.5" IN DEPTH.
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
R1	PROPOSED 2'-6" CONCRETE CURB & GUTTER
R2	PROPOSED 1'-6" CONCRETE CURB & GUTTER
R3	PROPOSED 5" MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	PROPOSED 4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (SEE DETAIL, SHEET 2A-2)
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE DETAILS, SHEET 2A-2)

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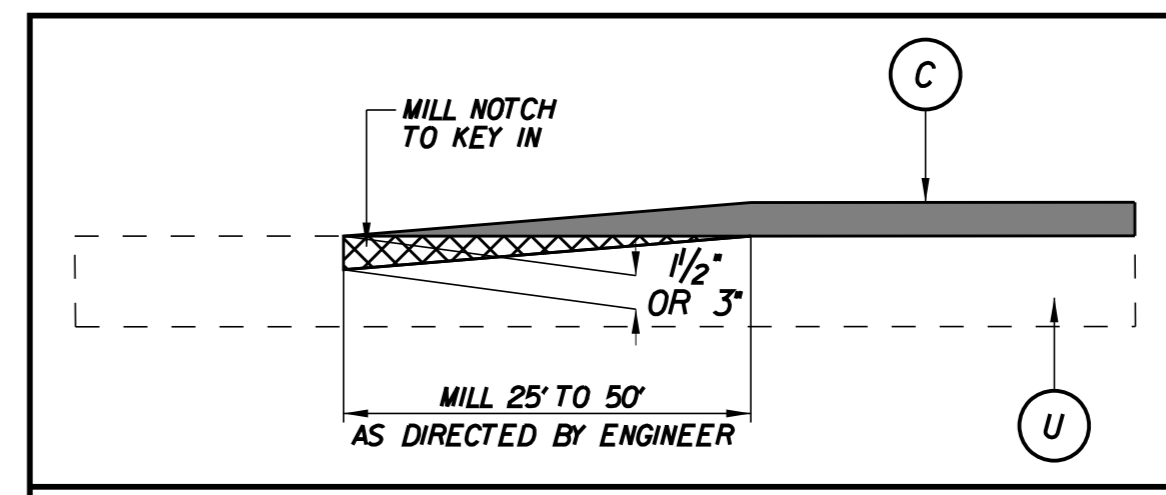
PROJECT REFERENCE NO. U-3315	SHEET NO. 2A-2
R/W SHEET NO.	
ROADWAY ENGINEER	PAVEMENT DESIGN ENGINEER
6/15/2015	6/11/2015

CL -L- TENTH STREET (SR 1598)

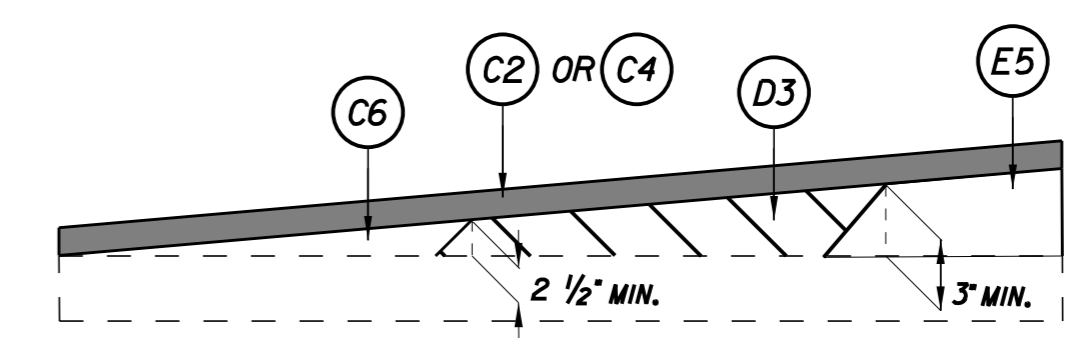


TYPICAL SECTION NO. 3

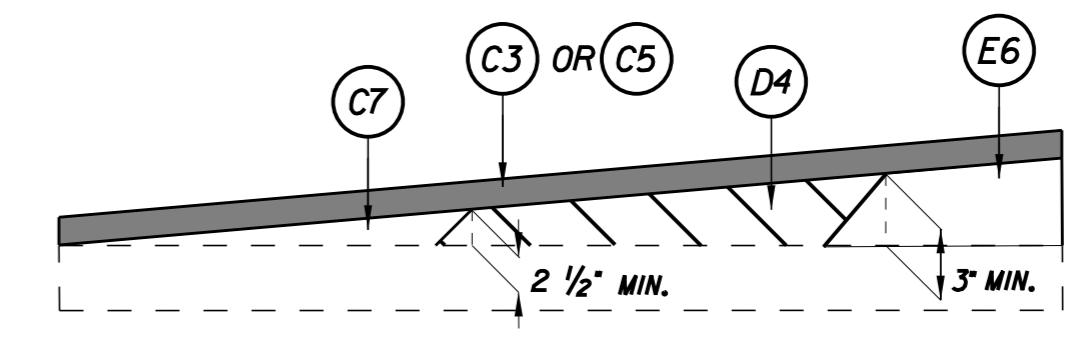
-L- STA 57+00.00 TO STA 60+32.48



MILLING DETAIL V

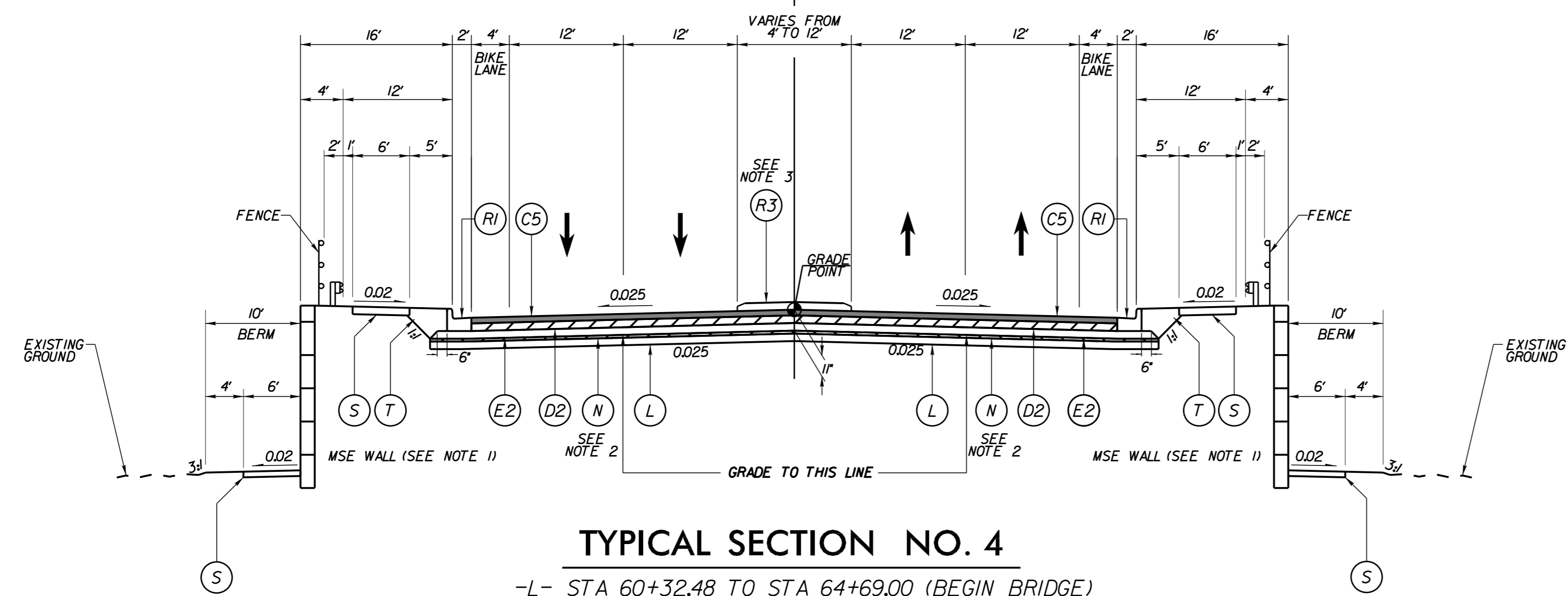


WEDGING DETAIL FOR RESURFACING W1



WEDGING DETAIL FOR RESURFACING W2

CL -L- TENTH STREET (SR 1598)



TYPICAL SECTION NO. 4

-L- STA 60+32.48 TO STA 64+69.00 (BEGIN BRIDGE)
-L- STA 66+49.00 (END BRIDGE) TO STA 73+55.62

NOTES:

1. SEE PLANS FOR MSE WALL LOCATIONS.
2. USE GEOTEXTILE FOR PAVEMENT STABILIZATION FROM -L- STA 61+00 TO 64+69 AND -L- STA 66+49 TO 71+00.
3. SEE TYPICAL SECTION NO. 3 FOR MEDIAN SECTION FROM -L- STA 72+30.58 TO 73+40.00.
4. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED.

PAVEMENT SCHEDULE

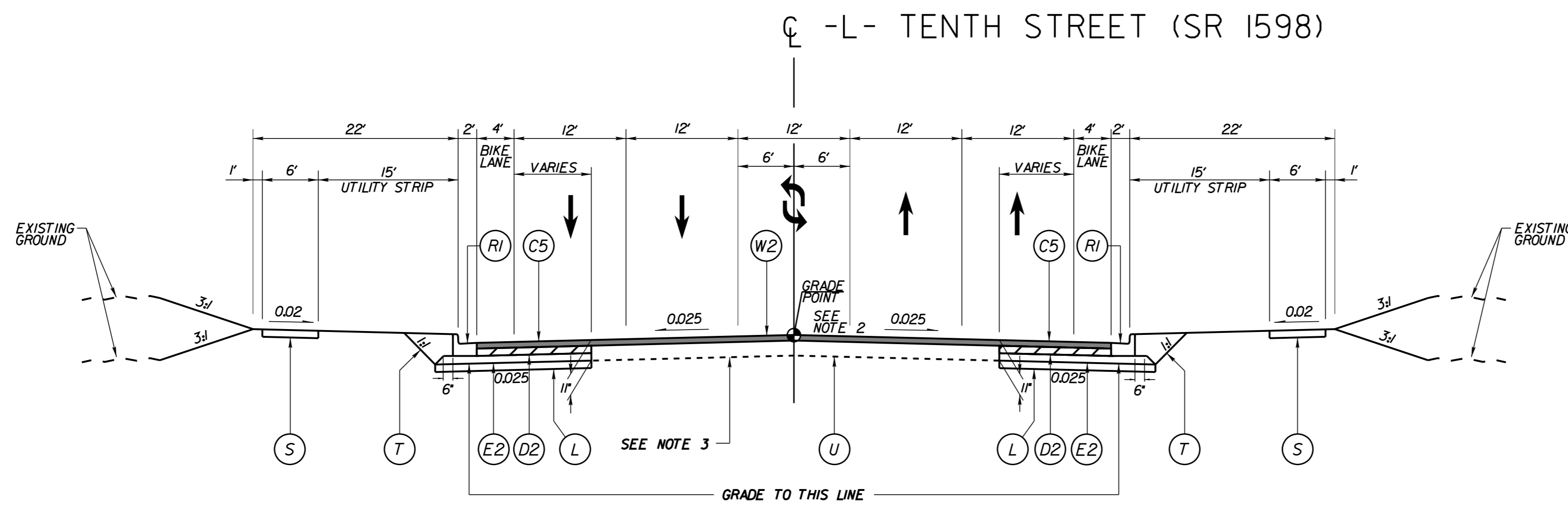
C2	1.5" S9.5B
C3	1.5" S9.5C
C4	3" S9.5B
C5	3" S9.5C
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	4" 119.0B
D2	4" 119.0C
D3	VAR. DEPTH 119.0B
D4	VAR. DEPTH 119.0C
E1	4" B25.0B
E2	4" B25.0C
E3	4.5" B25.0C
E4	5" B25.0C
E5	VAR. DEPTH B25.0B
E6	VAR. DEPTH B25.0C
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
R1	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER
R3	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (VARIABLE)
W	VARIABLE DEPTH ASPHALT PAVEMENT

REVISIONS

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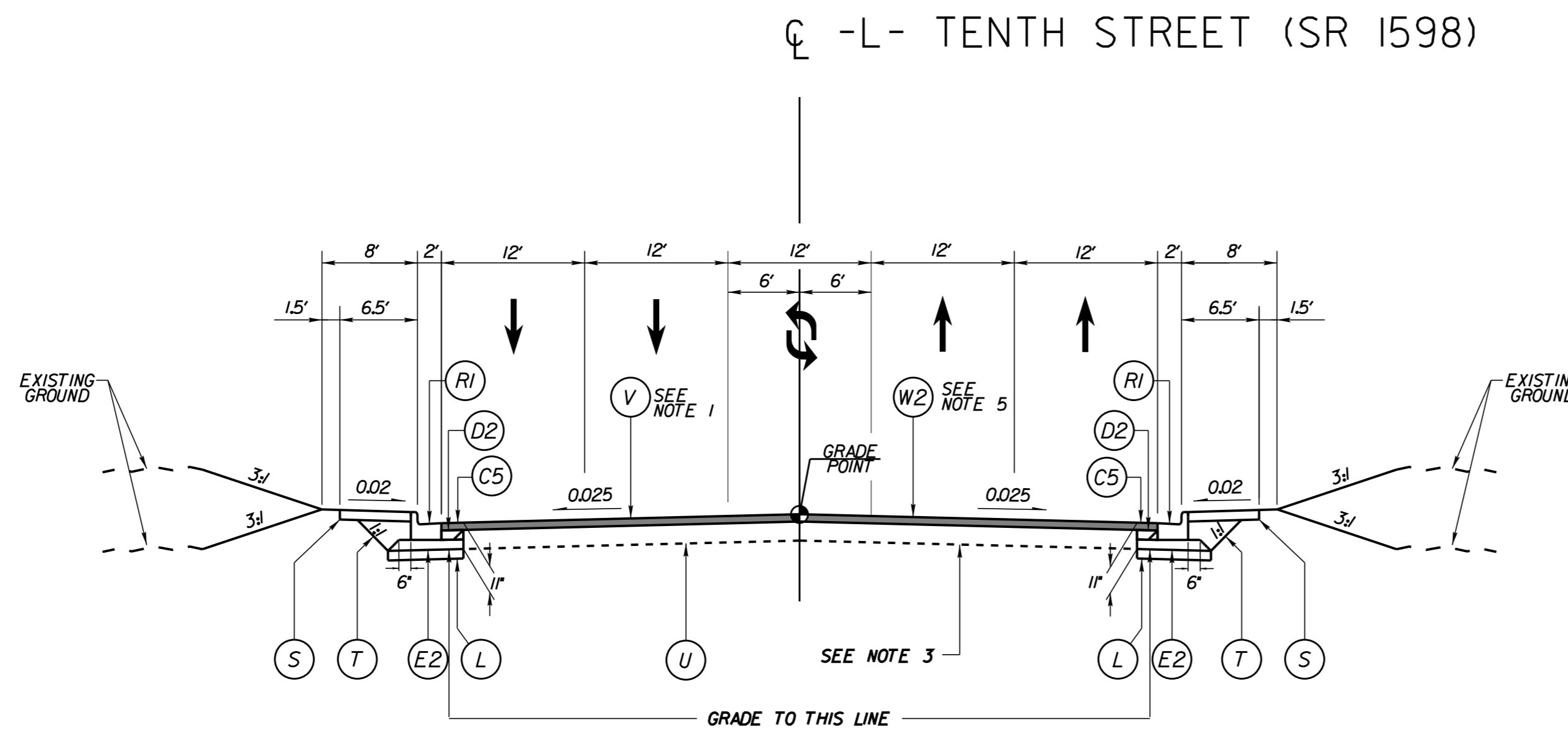
5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 2A-3
R/W SHEET NO.	
ROADWAY ENGINEER 6/11/2015	PAVEMENT DESIGN ENGINEER 6/11/2015



TYPICAL SECTION NO. 5

-L- STA 73+65.66 TO STA 83+06.89



TYPICAL SECTION NO. 6

-L- STA 83+06.89 TO STA 86+52.00

NOTES:

1. MILL NOTCH TO KEY-IN S9.5C FROM -L- STA 86+02.00 TO STA 86+52.00
2. SEE TYPICAL SECTION NO.3 FOR MEDIAN SECTION FROM -L- STA 73+81.00 TO STA 74+90.00
3. REMOVE EXIST ASPHALT PAVEMENT TO THE TOP OF EXISTING ABC AND/OR REMOVE CONCRETE ENTIRELY AND REPLACE WITH 119.0C PRIOR TO PLACING THE OVERLAY FROM -L- STA 77+50 TO 86+52
4. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED
5. MILL ASPHALT PAVEMENT 3" TO 0" FROM -L- STA 84+59.00 TO 86+02.00

PAVEMENT SCHEDULE

C2	1.5" S9.5B
C3	1.5" S9.5C
C4	3" S9.5B
C5	3" S9.5C
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	4" 119.0B
D2	4" 119.0C
D3	VAR. DEPTH 119.0B
D4	VAR. DEPTH 119.0C
E1	4" B25.0B
E2	4" B25.0C
E3	4.5" B25.0C
E4	5" B25.0C
E5	VAR. DEPTH B25.0B
E6	VAR. DEPTH B25.0C
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
RI	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER
R3	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (VARIABLE)
W	VARIABLE DEPTH ASPHALT PAVEMENT

REVISIONS

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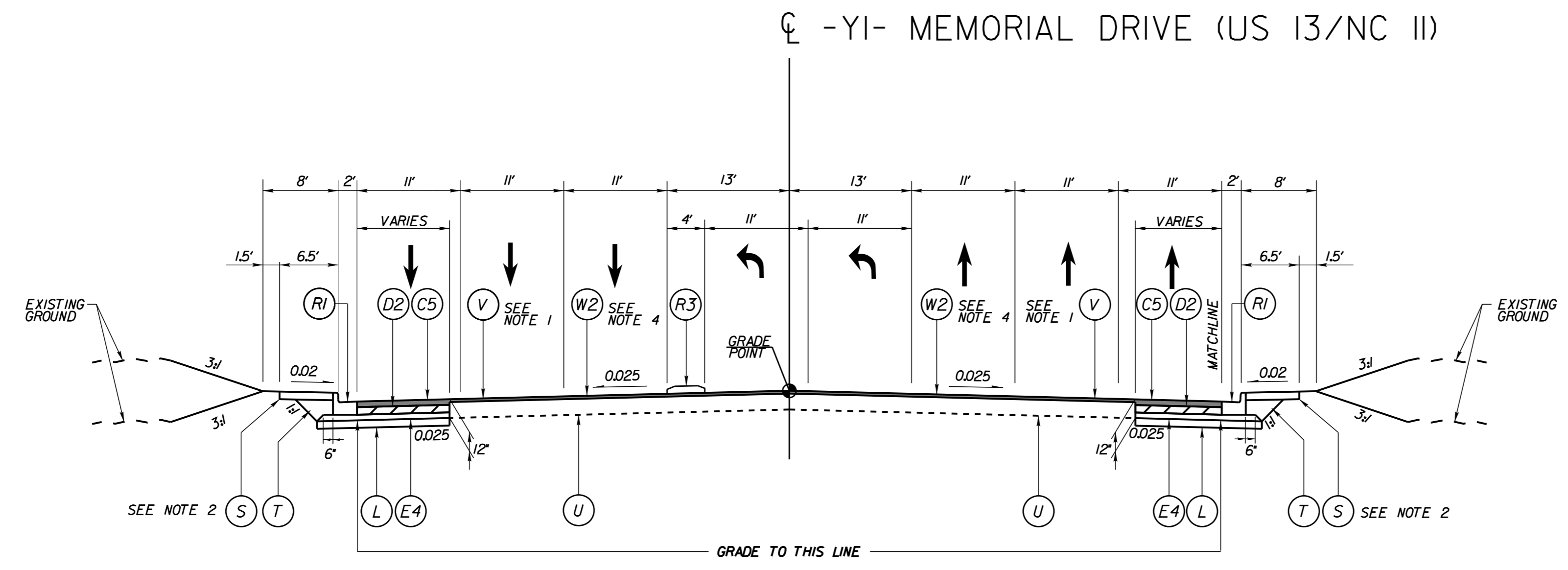
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PROJECT REFERENCE NO. U-3315	SHEET NO. 2A-4
R/W SHEET NO.	
ROADWAY ENGINEER 6/11/2015	PAVEMENT DESIGN ENGINEER 6/11/2015
6/15/2015	

PAVEMENT SCHEDULE

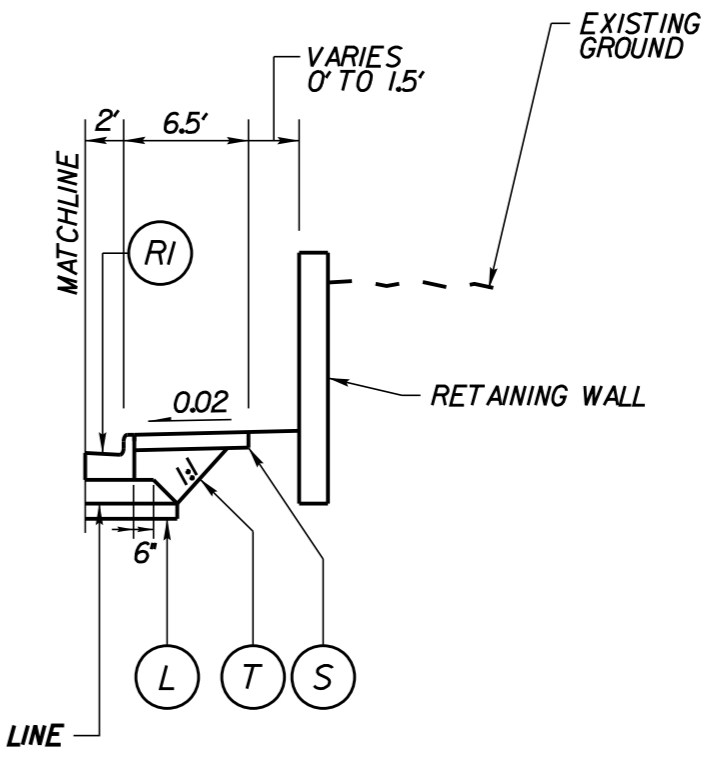
C2	1.5" S9.5B
C3	1.5" S9.5C
C4	3" S9.5B
C5	3" S9.5C
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	4" 119.0B
D2	4" 119.0C
D3	VAR. DEPTH 119.0B
D4	VAR. DEPTH 119.0C
E1	4" B25.0B
E2	4" B25.0C
E3	4.5" B25.0C
E4	5" B25.0C
E5	VAR. DEPTH B25.0B
E6	VAR. DEPTH B25.0C
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
R1	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER
R3	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (VARIABLE)
W	VARIABLE DEPTH ASPHALT PAVEMENT

REVISIONS



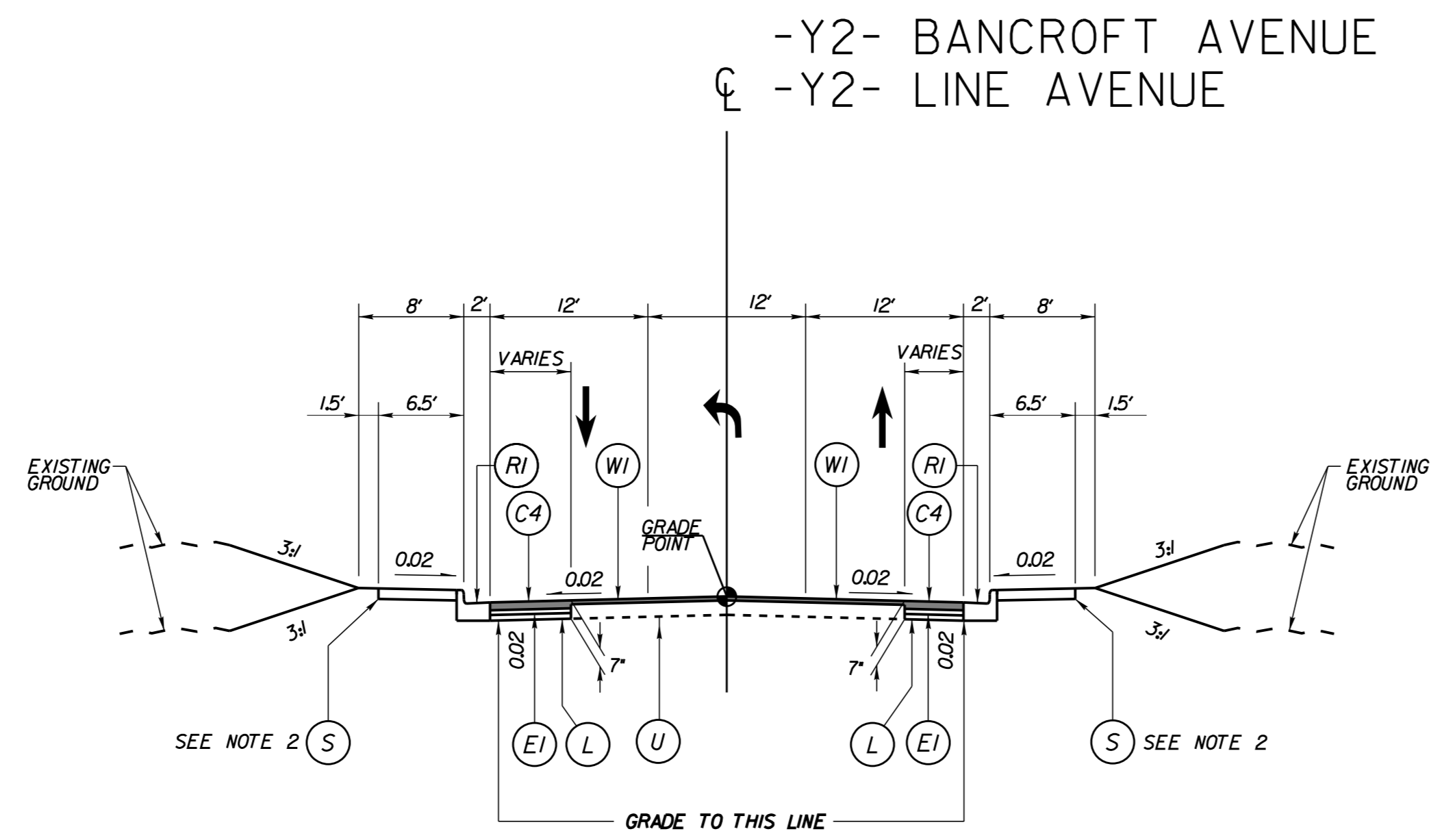
TYPICAL SECTION NO. 7

-Y1- STA 10+95.00 TO STA 26+26.00



TYPICAL SECTION NO. 7A

-Y1- STA 14+08.00 TO STA 15+02.00
-Y1- STA 15+83.00 TO STA 17+50.00



TYPICAL SECTION NO. 8

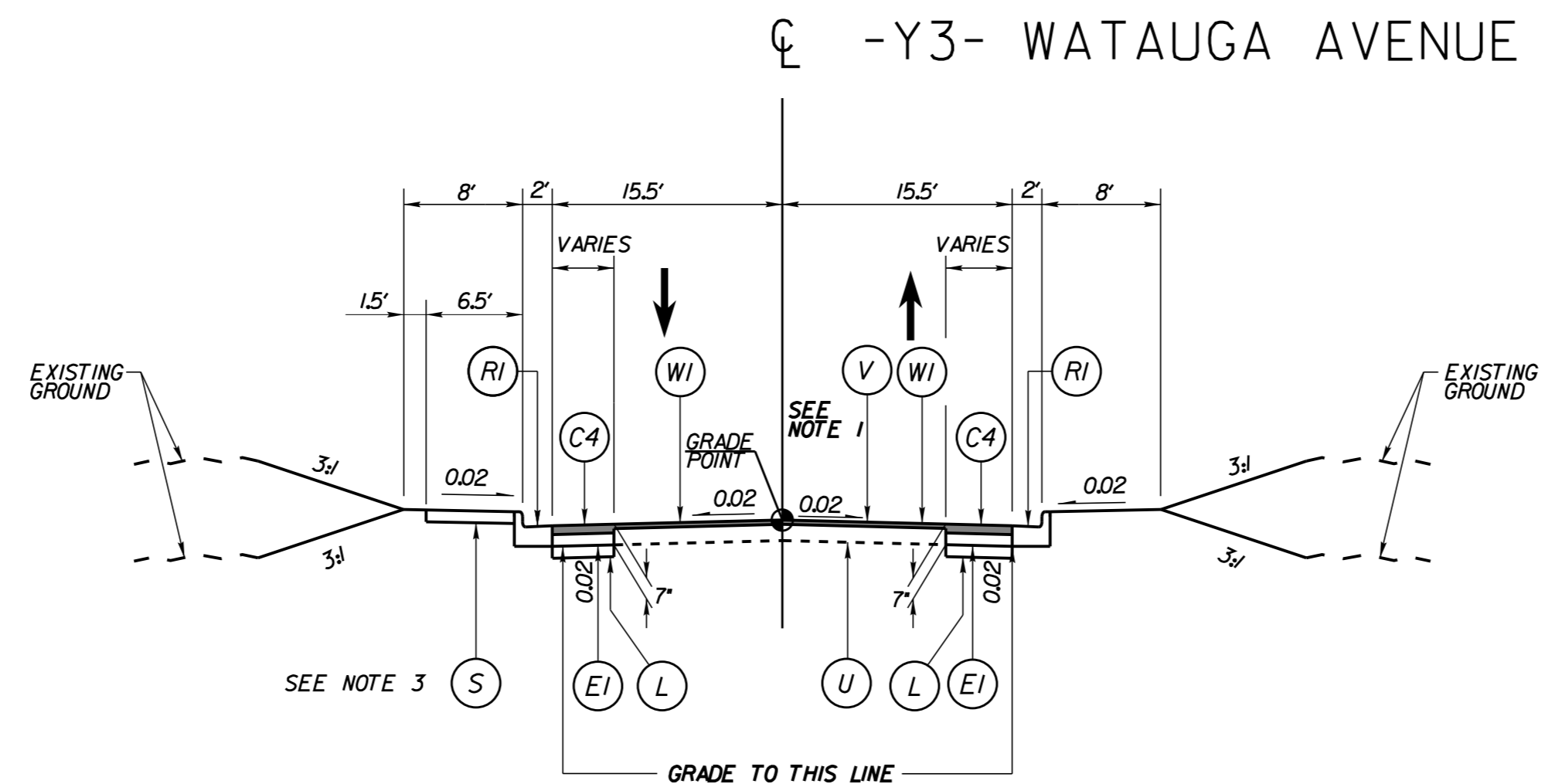
-Y2- STA 11+55.00 TO STA 14+53.87
-Y2- STA 15+45.55 TO STA 19+95.00

- NOTES:**
- MILL NOTCH TO KEY-IN S9.5C FROM -Y1- STA 10+95.00 TO 11+45.00 AND STA 25+76.00 TO 26+26.00
 - SIDEWALK LOCATIONS VARY (SEE PLANS)
 - PAVEMENT EDGE SLOPES ARE 1% UNLESS OTHERWISE INDICATED.
 - MILL ASPHALT PAVEMENT 3" TO 0" FROM -Y1- STA 11+45.00 TO 17+58.00 AND FROM 25+76.00 TO 26+26.00

K:\RAL_Roadway\01036175 U-3315\Roadway\Pro\U-3315_rdy_7yp.dgn

5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 2A-5
R/W SHEET NO.	
ROADWAY ENGINEER 6/11/2015	PAVEMENT DESIGN ENGINEER 6/11/2015



TYPICAL SECTION NO. 9

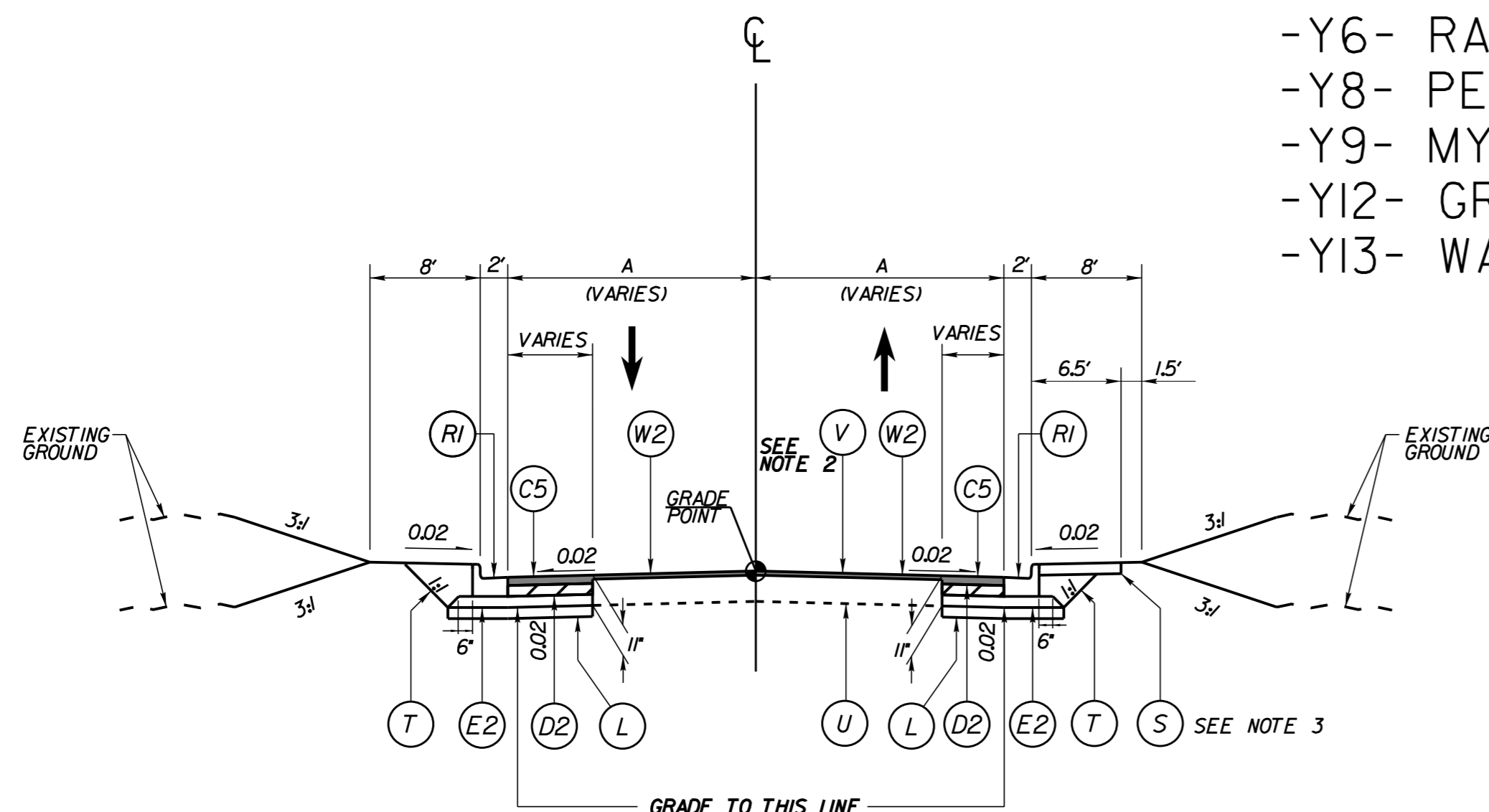
-Y3- STA 10+44.00 TO STA 10+94.85
-Y3- STA 11+30.85 TO STA 14+37.00 (SEE NOTE 5)

NOTES:

- MILL NOTCH TO KEY-IN S9.5B AT ENDS OF -Y3- LINE.
- MILL NOTCH TO KEY-IN S9.5C AT ENDS OF -Y4-, -Y5-, -Y6-, -Y7-, -Y8-, -Y9- AND -Y13- LINES.
- SIDEWALK LOCATIONS VARY (SEE PLANS)
- PAVEMENT SECTIONS APPLY TO TYPE "T" TURNAROUNDS (SEE PLANS)
- MILL AND RESURFACE FROM -Y3- STA 14+37.00 TO 15+11.00
- MILL AND RESURFACE FROM -Y9- STA 11+90.00 TO 12+54.00
- PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

- Y4- MANHATTAN AVENUE
- Y5- PARIS AVENUE
- Y6- RALEIGH STREET
- Y8- PENNSYLVANIA AVENUE
- Y9- MYRTLE STREET
- Y12- GREENE STREET
- Y13- WASHINGTON STREET

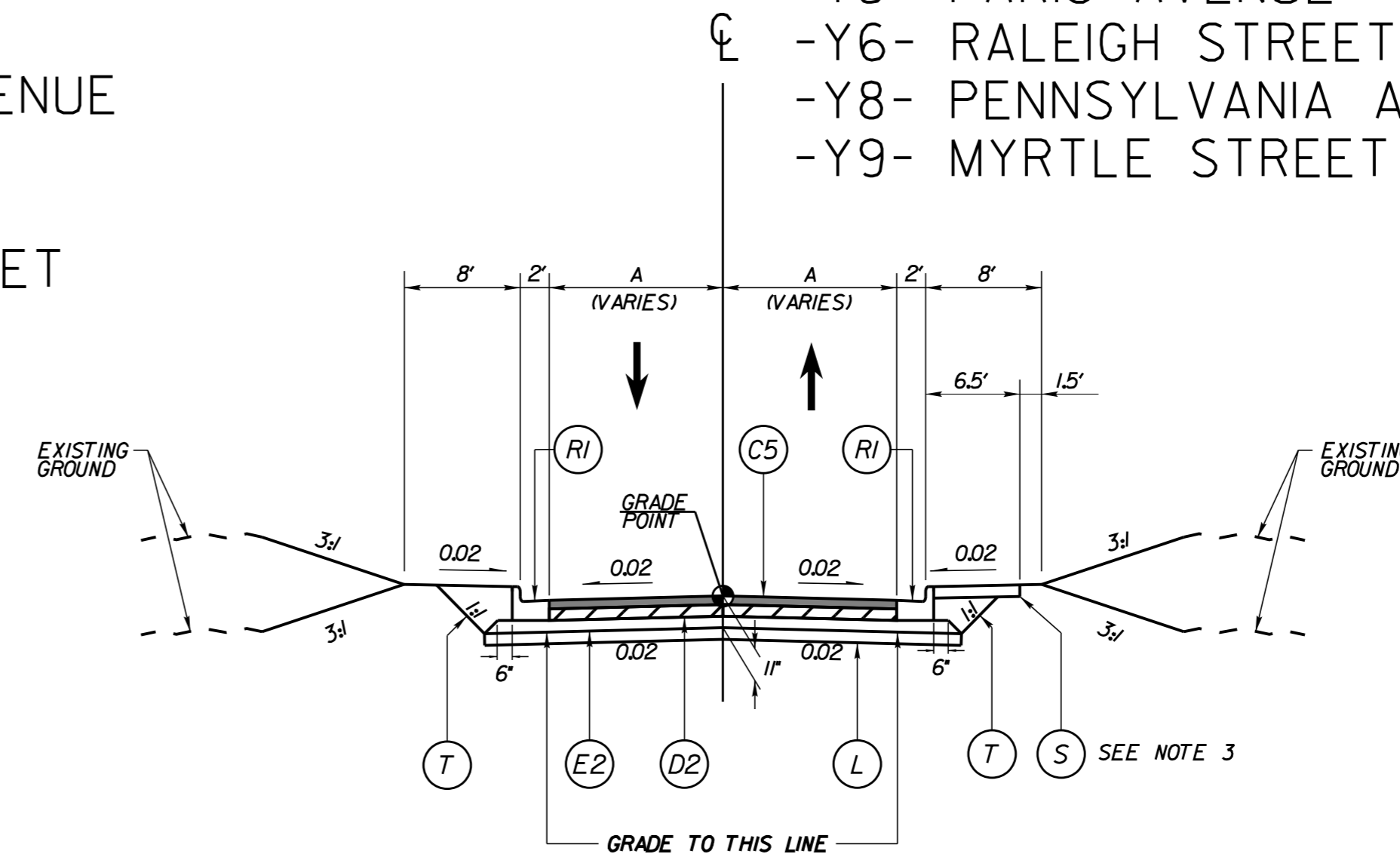
- Y4- MANHATTAN AVENUE
- Y5- PARIS AVENUE
- Y6- RALEIGH STREET
- Y8- PENNSYLVANIA AVENUE
- Y9- MYRTLE STREET



TYPICAL SECTION NO. 10

-Y4- STA 11+00.00 TO STA 11+55.00
-Y5- STA 11+00.00 TO STA 11+67.00
-Y6- STA 11+35.00 TO STA 11+70.00
-Y8- STA 11+00.00 TO STA 11+75.00
-Y9- STA 11+25.00 TO STA 11+90.00 (SEE NOTE 6)
-Y12- STA 10+34.00 TO STA 11+04.00
-Y13- STA 8+80.00 TO STA 13+24.80
-Y13- STA 14+04.86 TO STA 14+87.00

	A
-Y4-	16'
-Y5-	15.5'
-Y6-	16'
-Y8-	16'
-Y9-	VARIES
-Y12-	15'
-Y13-	VARIES



TYPICAL SECTION NO. 11

-Y4- STA 10+43.00 TO STA 11+00.00
-Y5- STA 10+43.00 TO STA 11+00.00
-Y6- STA 10+55.00 TO STA 11+35.00
-Y8- STA 10+43.00 TO STA 11+00.00
-Y9- STA 10+43.00 TO STA 11+25.00

PAVEMENT SCHEDULE

C2	1.5' S9.5B
C3	1.5' S9.5C
C4	3' S9.5B
C5	3' S9.5C
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	4' 119.0B
D2	4' 119.0C
D3	VAR. DEPTH 119.0B
D4	VAR. DEPTH 119.0C
E1	4' B25.0B
E2	4' B25.0C
E3	4.5' B25.0C
E4	5' B25.0C
E5	VAR. DEPTH B25.0B
E6	VAR. DEPTH B25.0C
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
R1	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER
R3	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4' CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (VARIABLE)
W	VARIABLE DEPTH ASPHALT PAVEMENT

REVISIONS

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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 2A-6
R/W SHEET NO.	
ROADWAY ENGINEER 6/11/2015	PAVEMENT DESIGN ENGINEER 6/11/2015

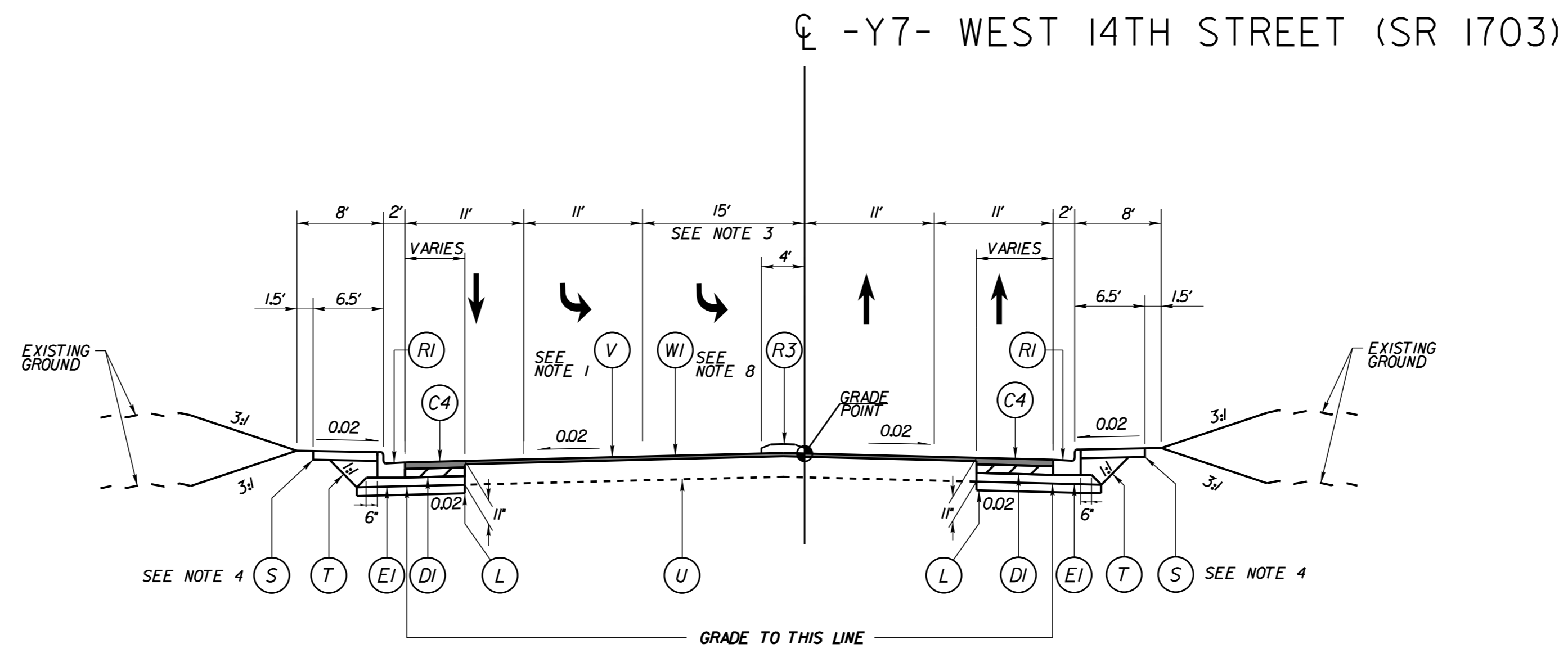
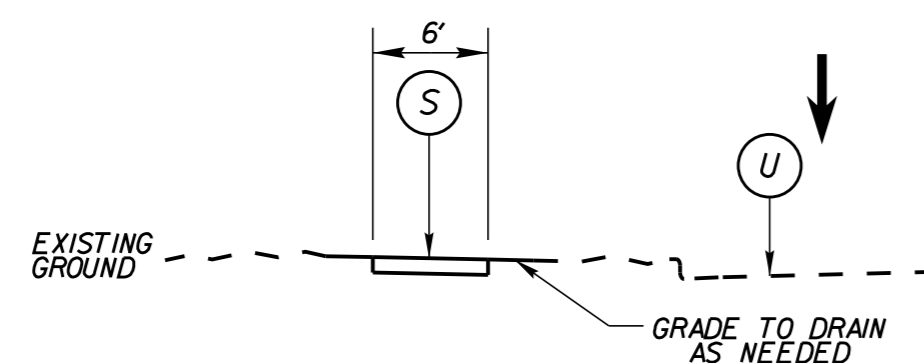
PAVEMENT SCHEDULE

C2	1.5" S9.5B
C3	1.5" S9.5C
C4	3" S9.5B
C5	3" S9.5C
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	4" 119.0B
D2	4" 119.0C
D3	VAR. DEPTH 119.0B
D4	VAR. DEPTH 119.0C
E1	4" B25.0B
E2	4" B25.0C
E3	4.5" B25.0C
E4	5" B25.0C
E5	VAR. DEPTH B25.0B
E6	VAR. DEPTH B25.0C
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
R1	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER
R3	5' MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (VARIABLE)
W	VARIABLE DEPTH ASPHALT PAVEMENT

REVISIONS

TYPICAL SECTION NO. 12A

TEMPORARY CONCRETE SIDEWALK (SEE NOTE 7)
-Y7- STA 10+89.00 TO STA 14+97.00



TYPICAL SECTION NO. 12

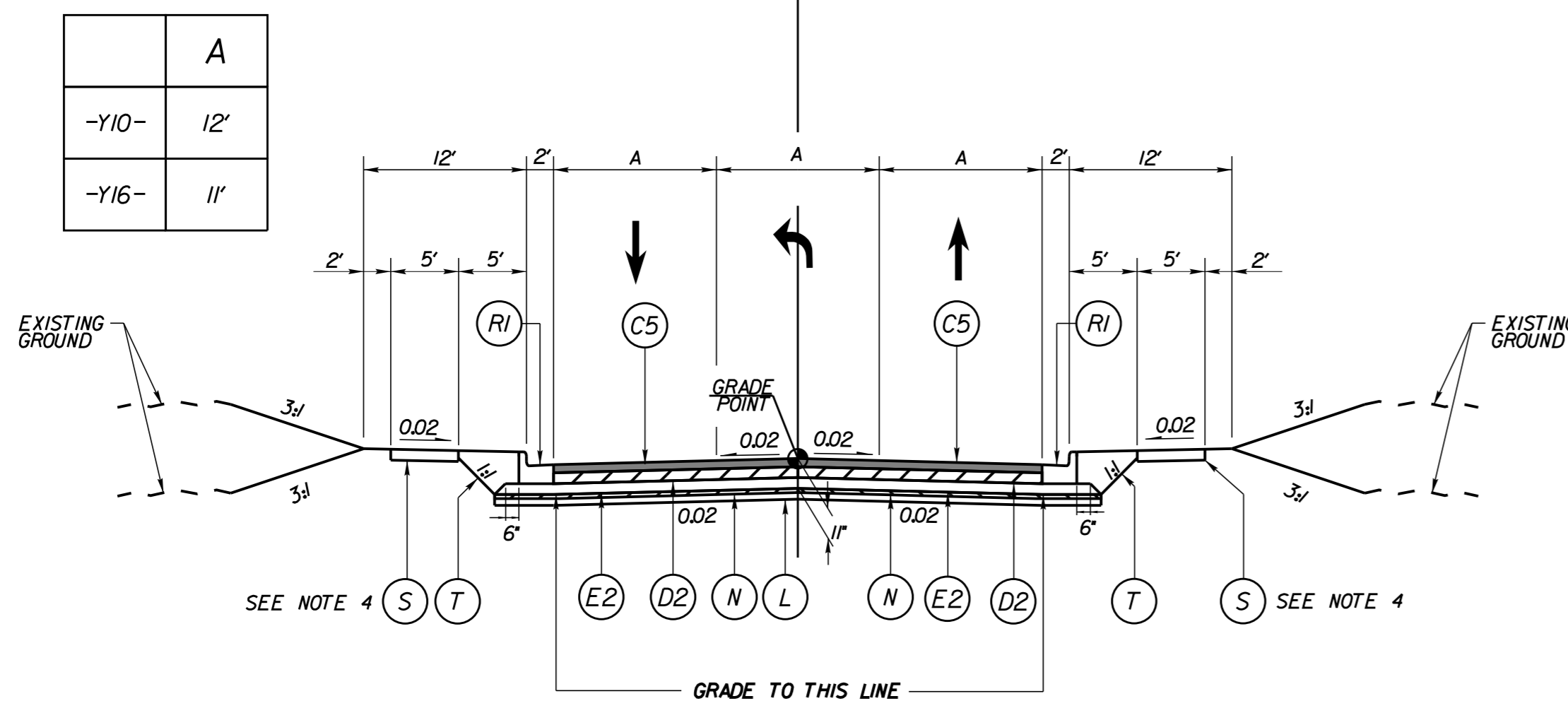
-Y7- STA 11+15.00 TO STA 18+30.83
-Y7- STA 19+35.74 TO STA 26+40.00

NOTES:

- MILL NOTCH TO KEY-IN S9.5B AT ENDS OF -Y7- & -Y14- LINES
- MILL NOTCH TO KEY-IN S9.5C AT ENDS OF -Y10- & -Y16- LINES
- PAVEMENT WIDTHS VARY (SEE PLANS)
- SIDEWALK LOCATIONS VARY (SEE PLANS)
- PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED
- CONSTRUCT 10' SIDEWALK FROM -Y14- STA 16+34.78 TO 18+09.04 LT
- REFER TO TMP SHEETS FOR TEMPORARY CONCRETE SIDEWALK LOCATIONS
- MILL ASPHALT PAVEMENT 3" TO 0" FROM -Y7- STA 11+65.00 TO 18+00.00
- MILL ASPHALT PAVEMENT 3" TO 0" FROM -Y14- STA 15+68.00 TO 18+48.00

-Y10- DICKINSON AVENUE (SR 1531)
-Y16- GRANDE AVENUE

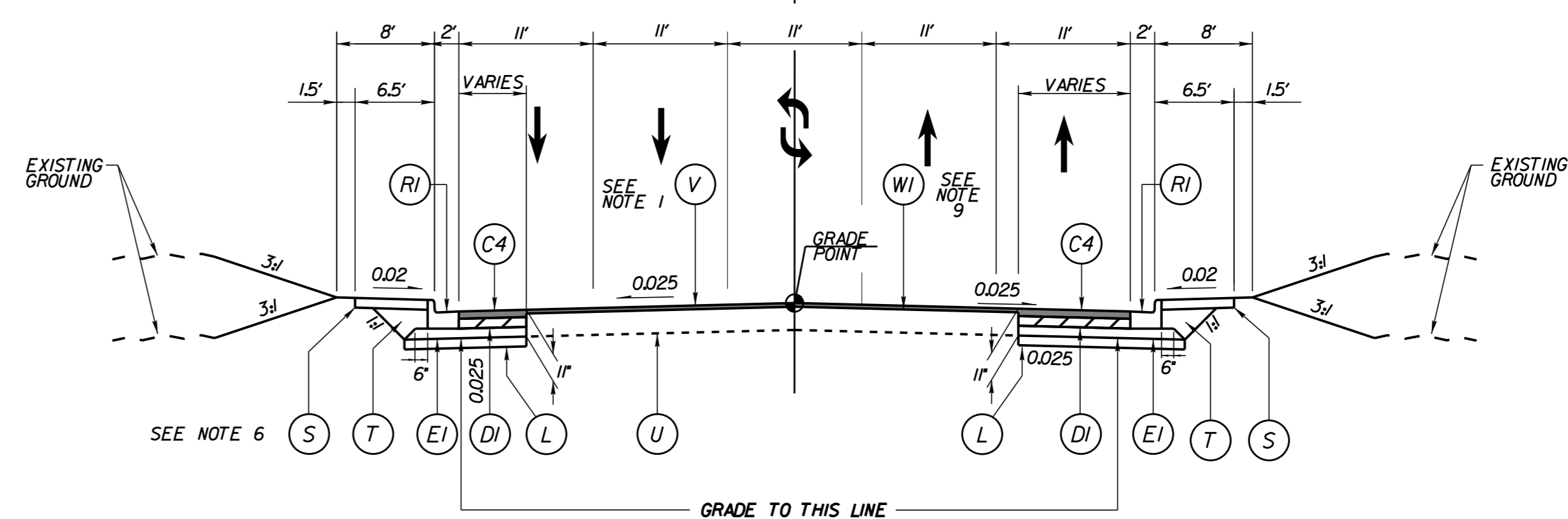
	A
-Y10-	12'
-Y16-	11'



TYPICAL SECTION NO. 13

-Y10- STA 12+55.00 TO STA 16+97.26
-Y10- STA 17+10.49 TO STA 21+50.00
-Y16- STA 10+24.07 TO STA 11+05.00

-Y14- EVANS STREET (SR 1702)



TYPICAL SECTION NO. 14

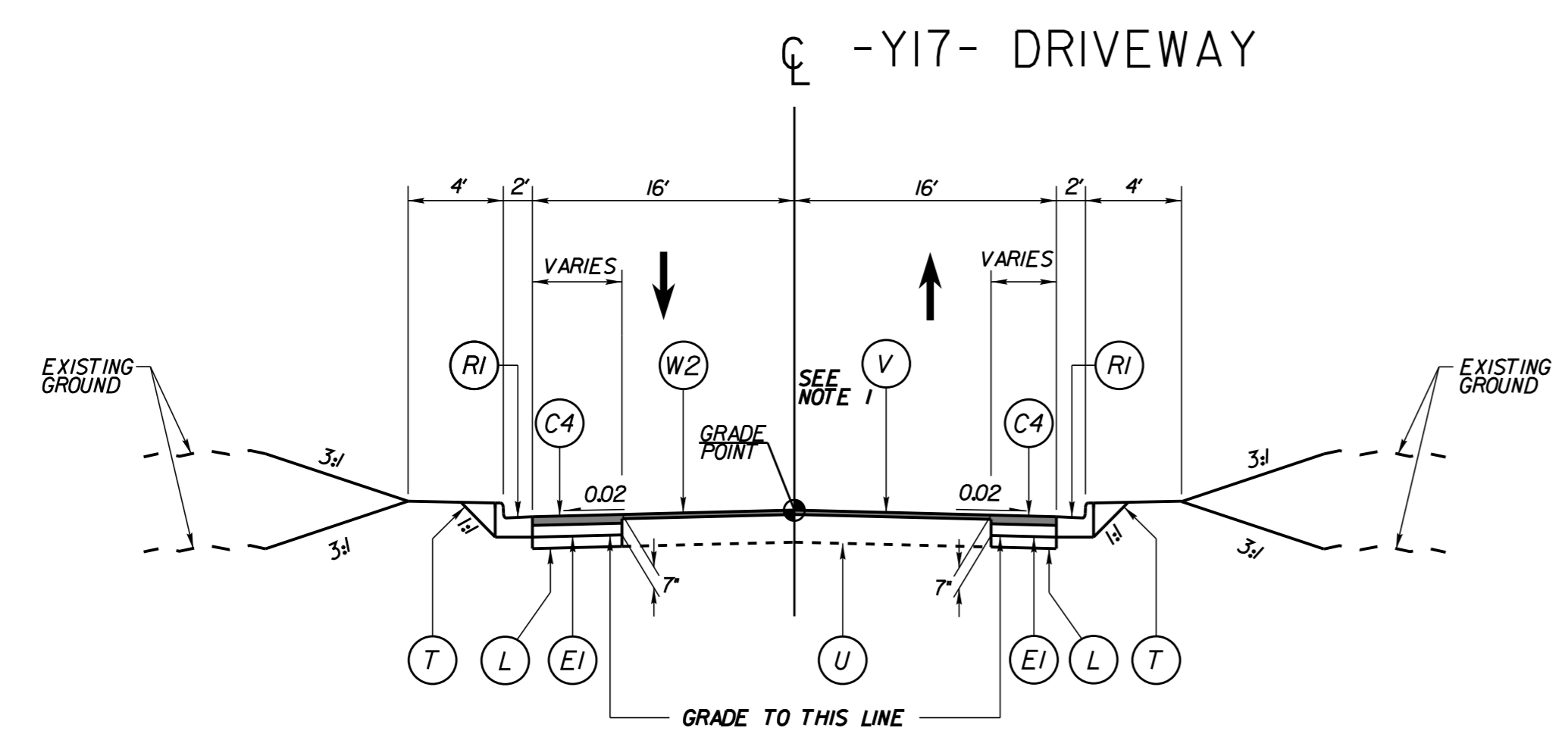
-Y14- STA 15+18.00 TO STA 18+61.03
-Y14- STA 19+29.03 TO STA 23+23.00

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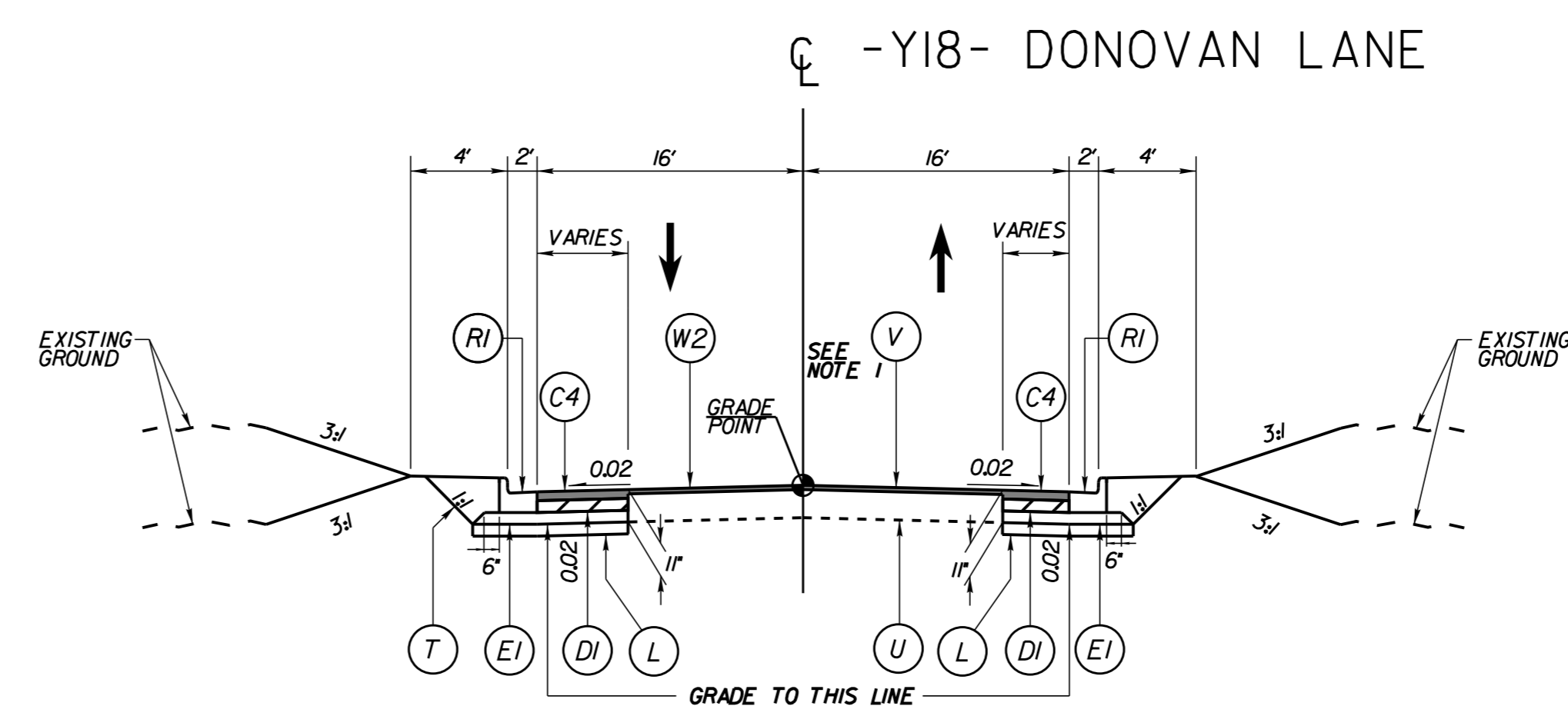
5/12/2015

Kimley»Horn
 P.O. BOX 33068 • RALEIGH, N.C. 27636-3068
 RIGHT-OF-WAY REV.
 CONST. REV.

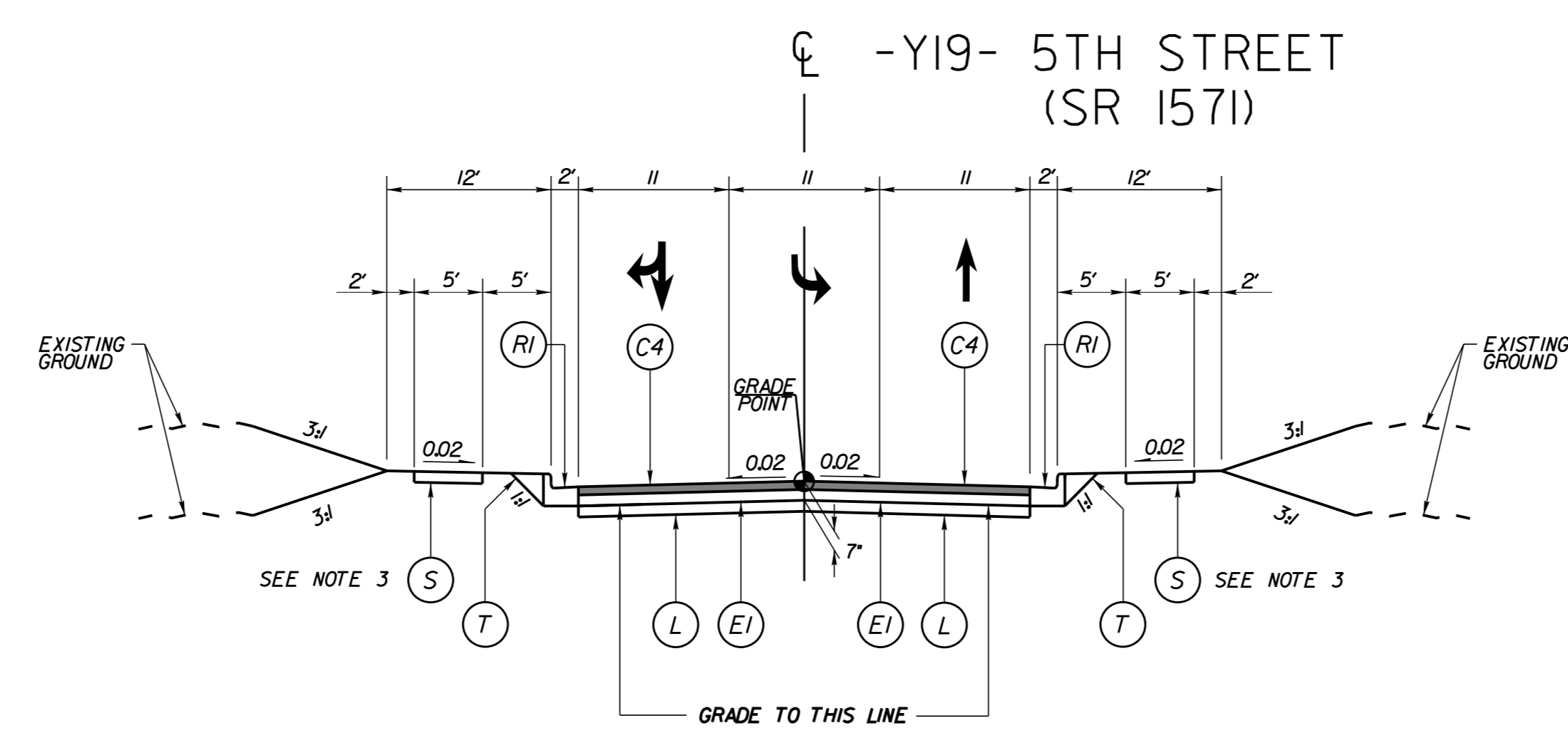
PROJECT REFERENCE NO. U-3315	SHEET NO. 2A-7
RW SHEET NO.	
ROADWAY ENGINEER 6/11/2015	PAVEMENT DESIGN ENGINEER 6/11/2015



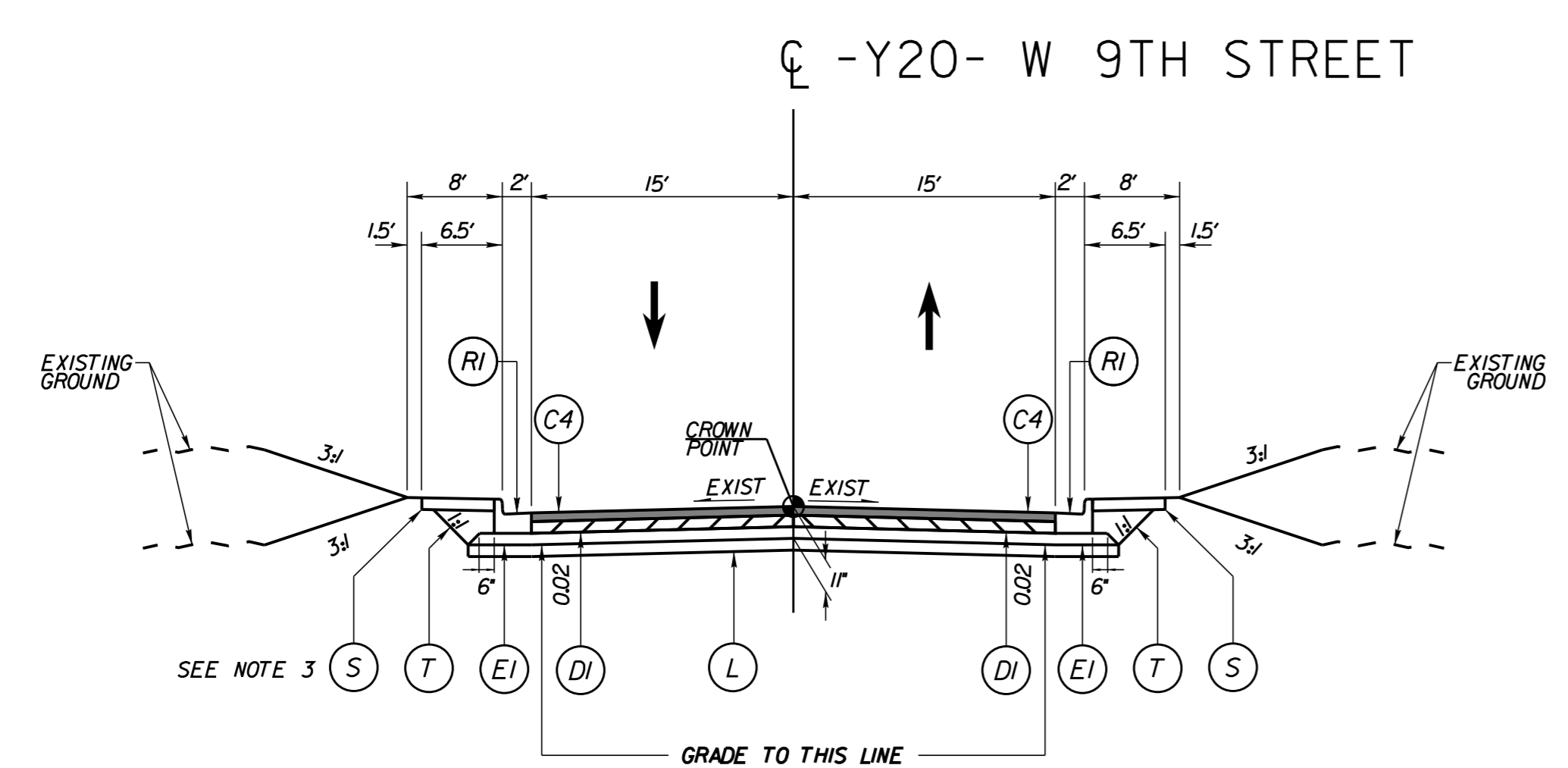
TYPICAL SECTION NO. 15
 -Y17- STA 10+26.33 TO STA 11+79.07



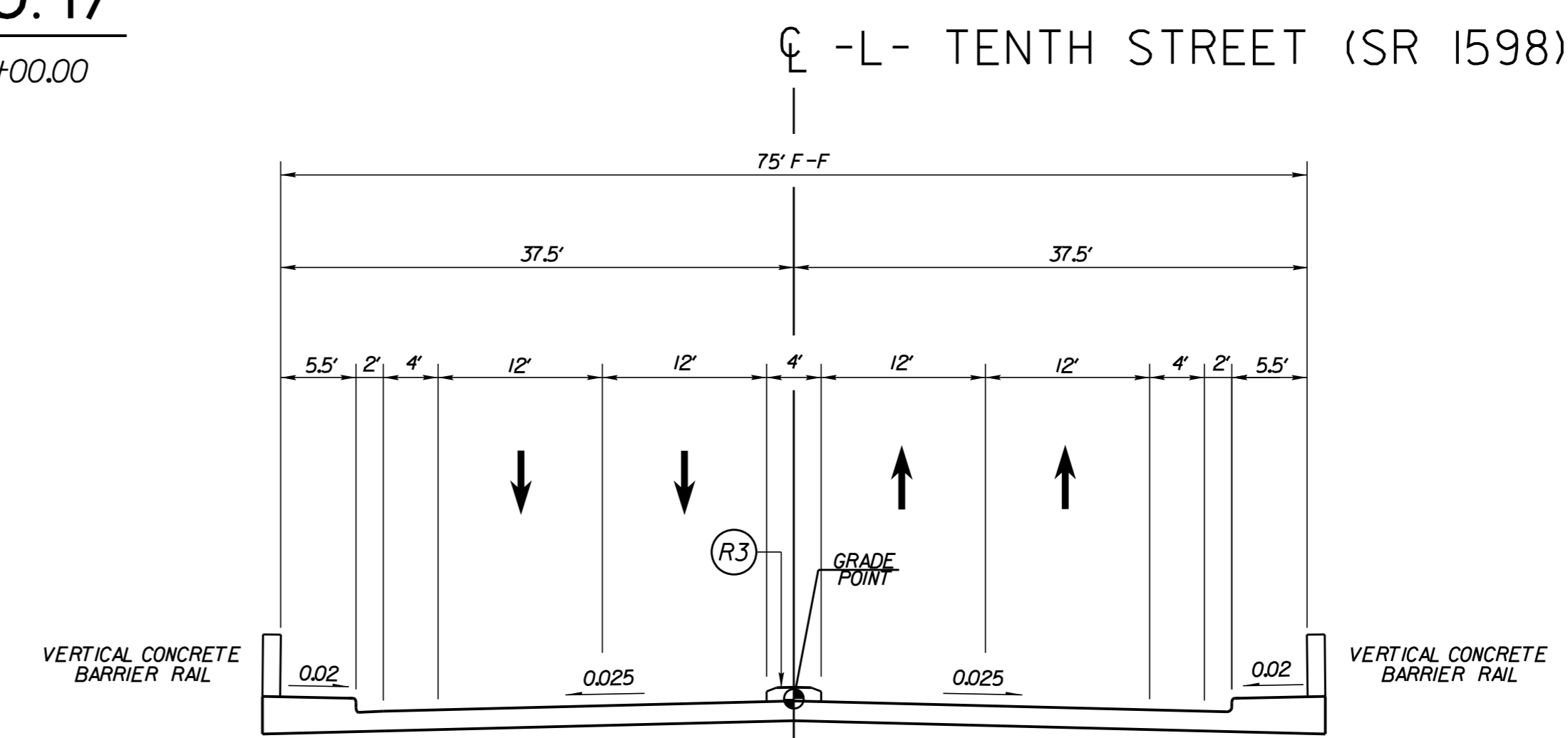
TYPICAL SECTION NO. 16
 -Y18- STA 10+36.00 TO STA 12+36.50



TYPICAL SECTION NO. 17
 -Y19- STA 12+07.00 TO STA 13+00.00



TYPICAL SECTION NO. 18
 -Y20- STA 10+24.22 TO STA 15+18.00
 -Y20- STA 15+36.00 TO STA 21+96.00



TYPICAL SECTION ON STRUCTURE
 -L- STA 64+69.00 TO STA 66+49.00

PAVEMENT SCHEDULE

C2	1.5" S9.5B
C3	1.5" S9.5C
C4	3" S9.5B
C5	3" S9.5C
C6	VAR. DEPTH S9.5B
C7	VAR. DEPTH S9.5C
D1	4" 119.0B
D2	4" 119.0C
D3	VAR. DEPTH 119.0B
D4	VAR. DEPTH 119.0C
E1	4" B25.0B
E2	4" B25.0C
E3	4.5" B25.0C
E4	5" B25.0C
E5	VAR. DEPTH B25.0B
E6	VAR. DEPTH B25.0C
L	CLASS IV AGGREGATE STABILIZATION
N	GEOTEXTILE FOR PAVEMENT STABILIZATION
RI	2'-6" CONCRETE CURB & GUTTER
R2	1'-6" CONCRETE CURB & GUTTER
R3	5" MONOLITHIC CONCRETE ISLAND (KEYED-IN)
S	4" CONCRETE SIDEWALK
T	EARTH MATERIAL
U	EXISTING PAVEMENT
V	MILLING EXISTING PAVEMENT (VARIABLE)
W	VARIABLE DEPTH ASPHALT PAVEMENT

- NOTES:**
 1. MILL NOTCH TO KEY-IN S9.5B/S9.5C AT ENDS OF -Y- LINES
 2. SIDEWALK LOCATIONS AND WIDTHS VARY (SEE PLANS)
 3. MATCH EXISTING SIDEWALK WIDTH
 4. PAVEMENT EDGE SLOPES ARE 1:1 UNLESS OTHERWISE INDICATED

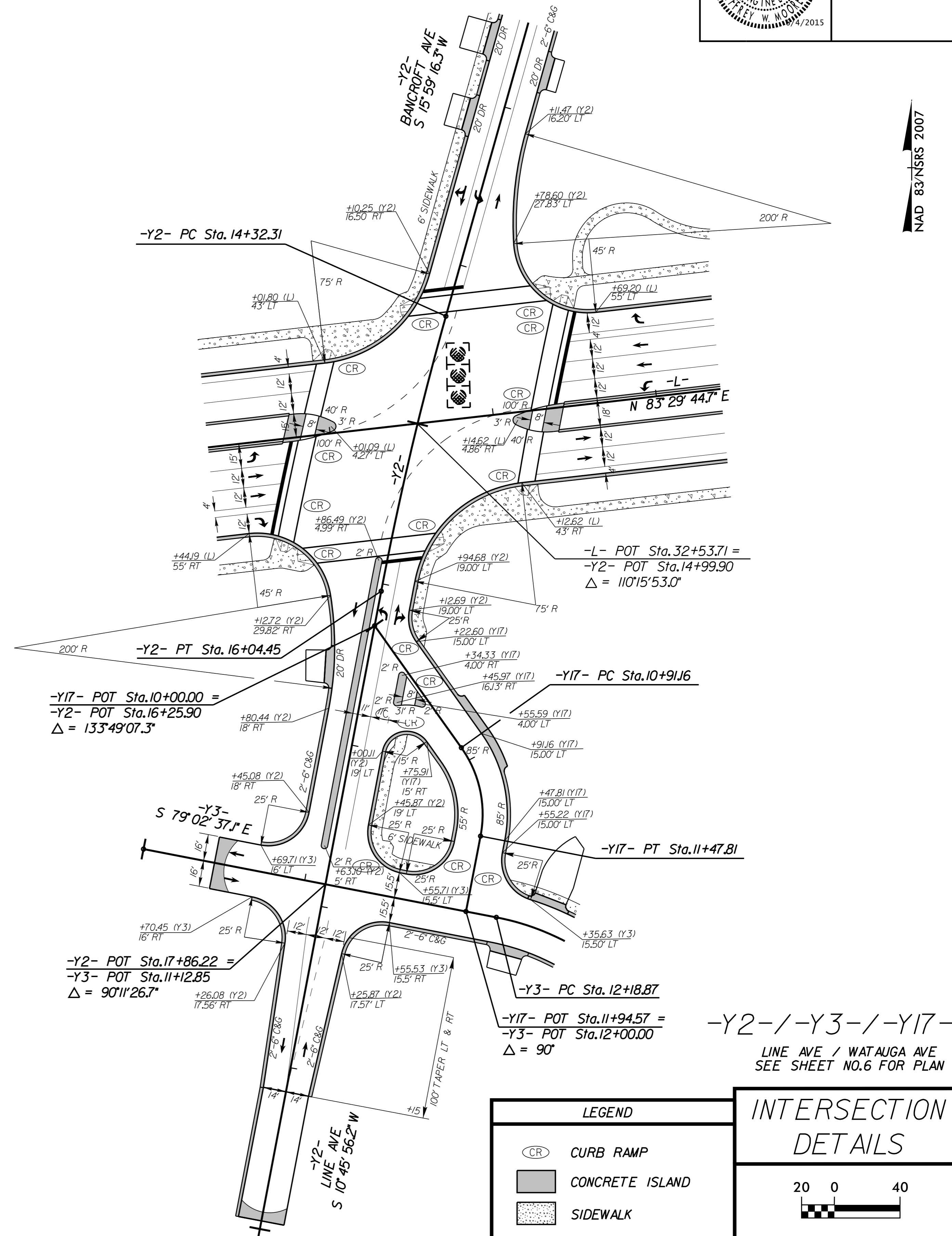
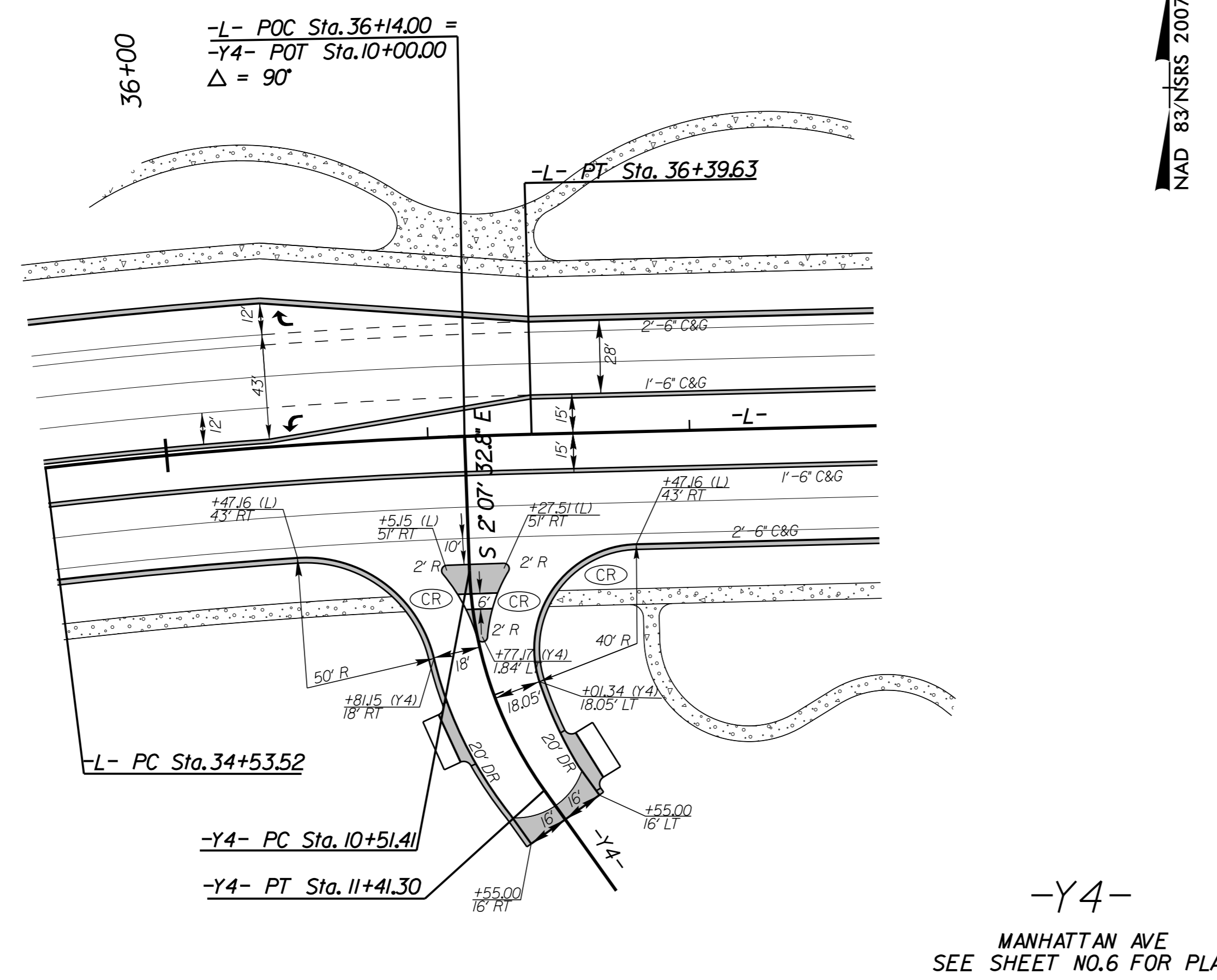
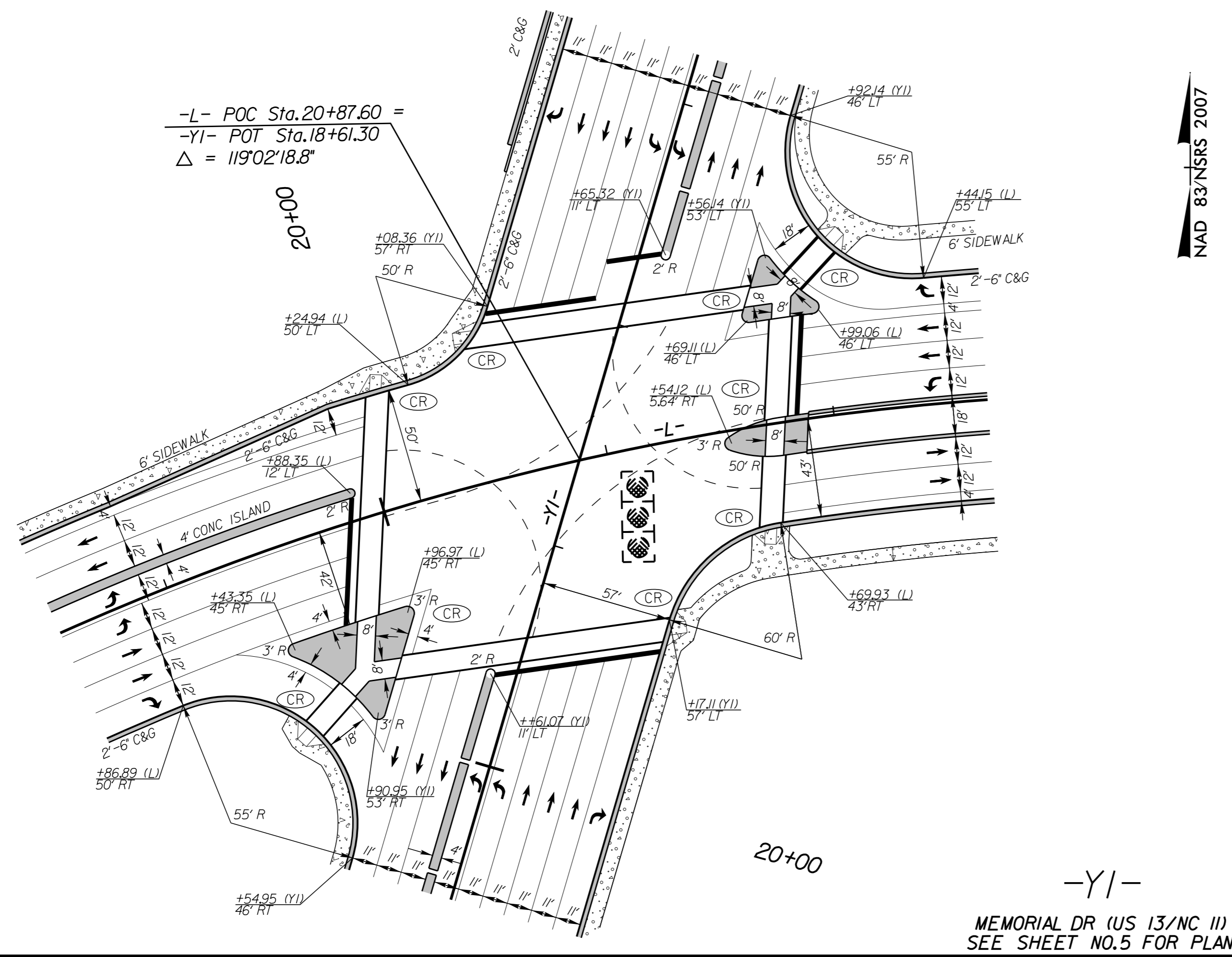
REVISIONS

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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 2B-1
ROADWAY DESIGN ENGINEER	

REVISIONS



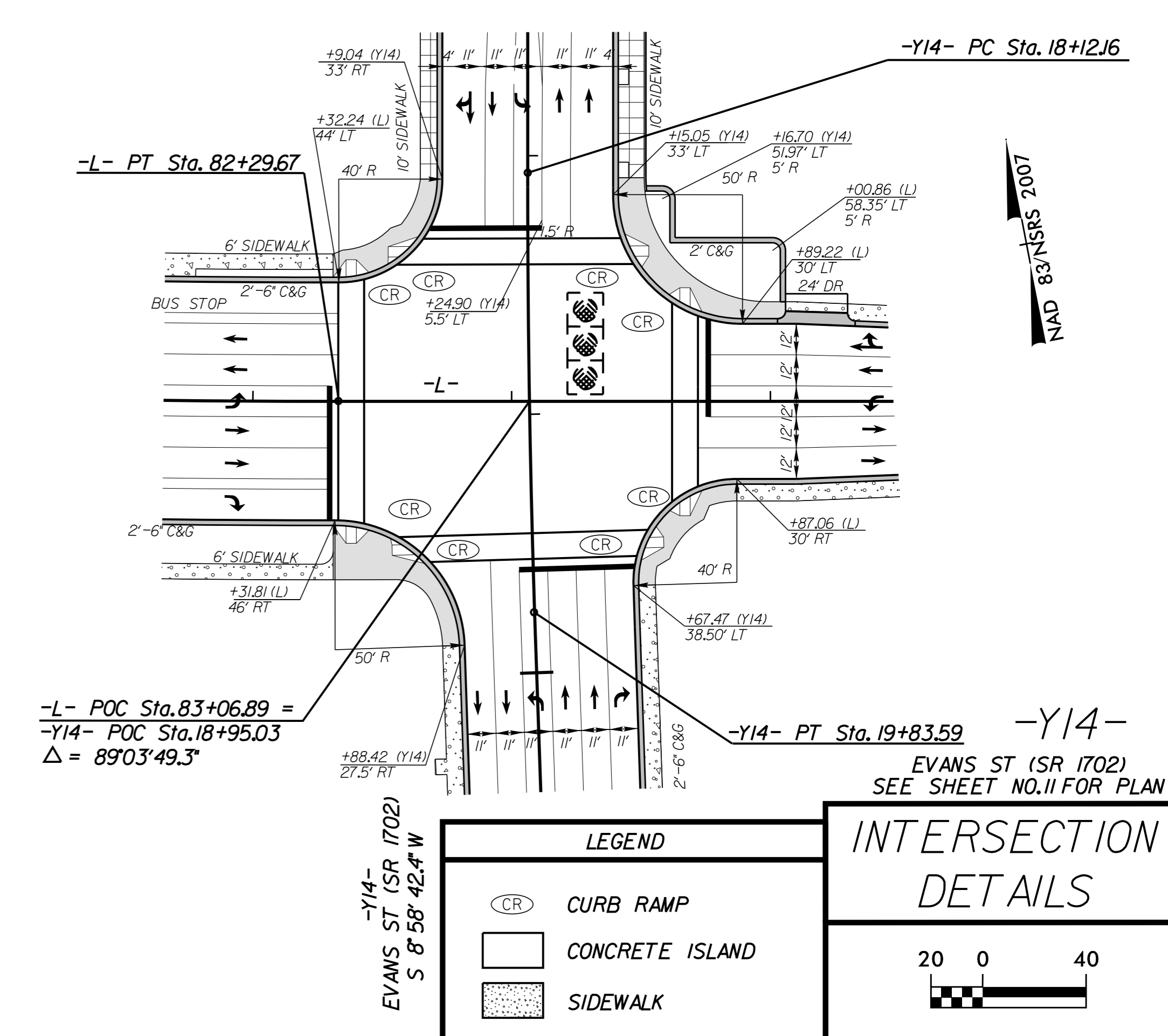
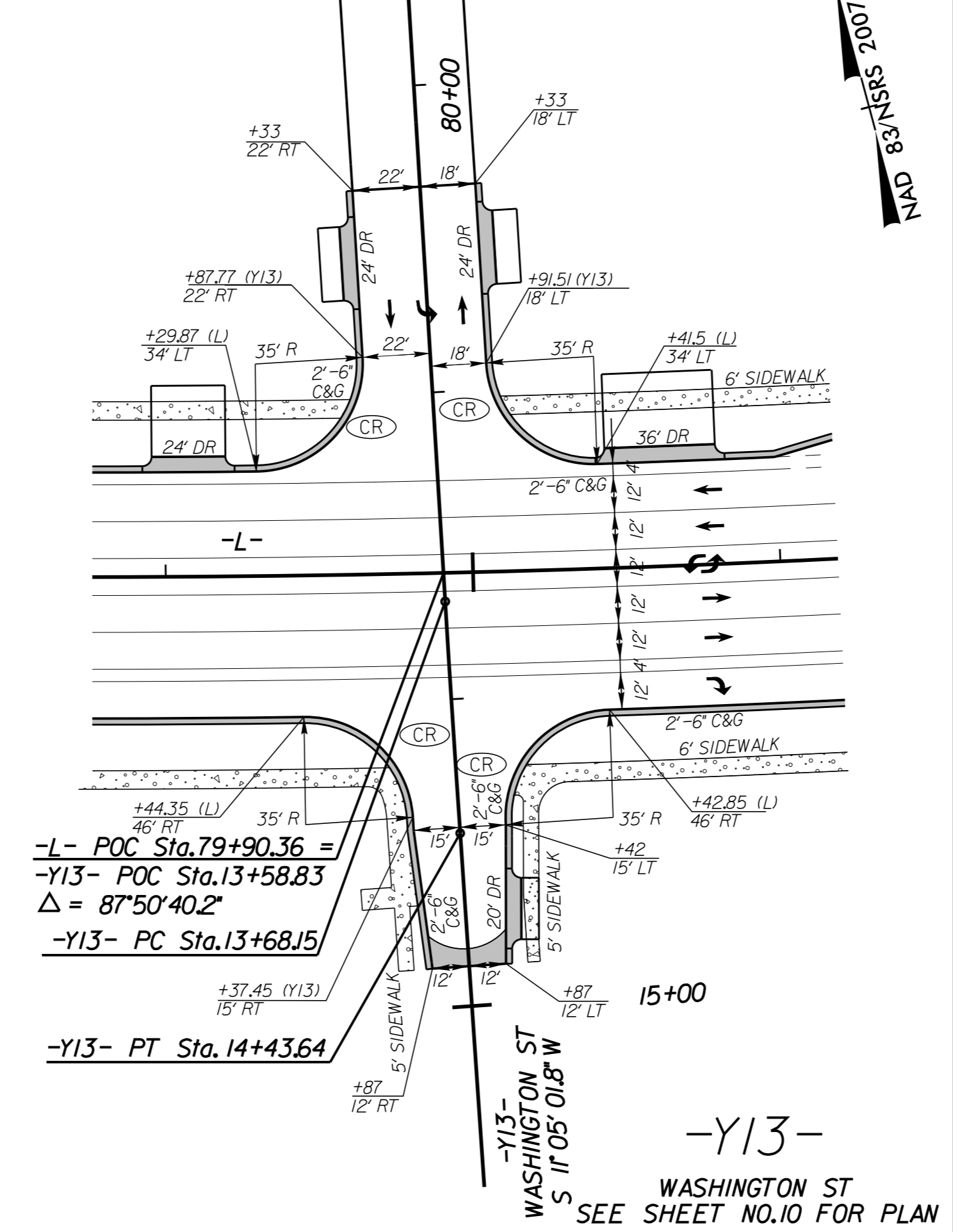
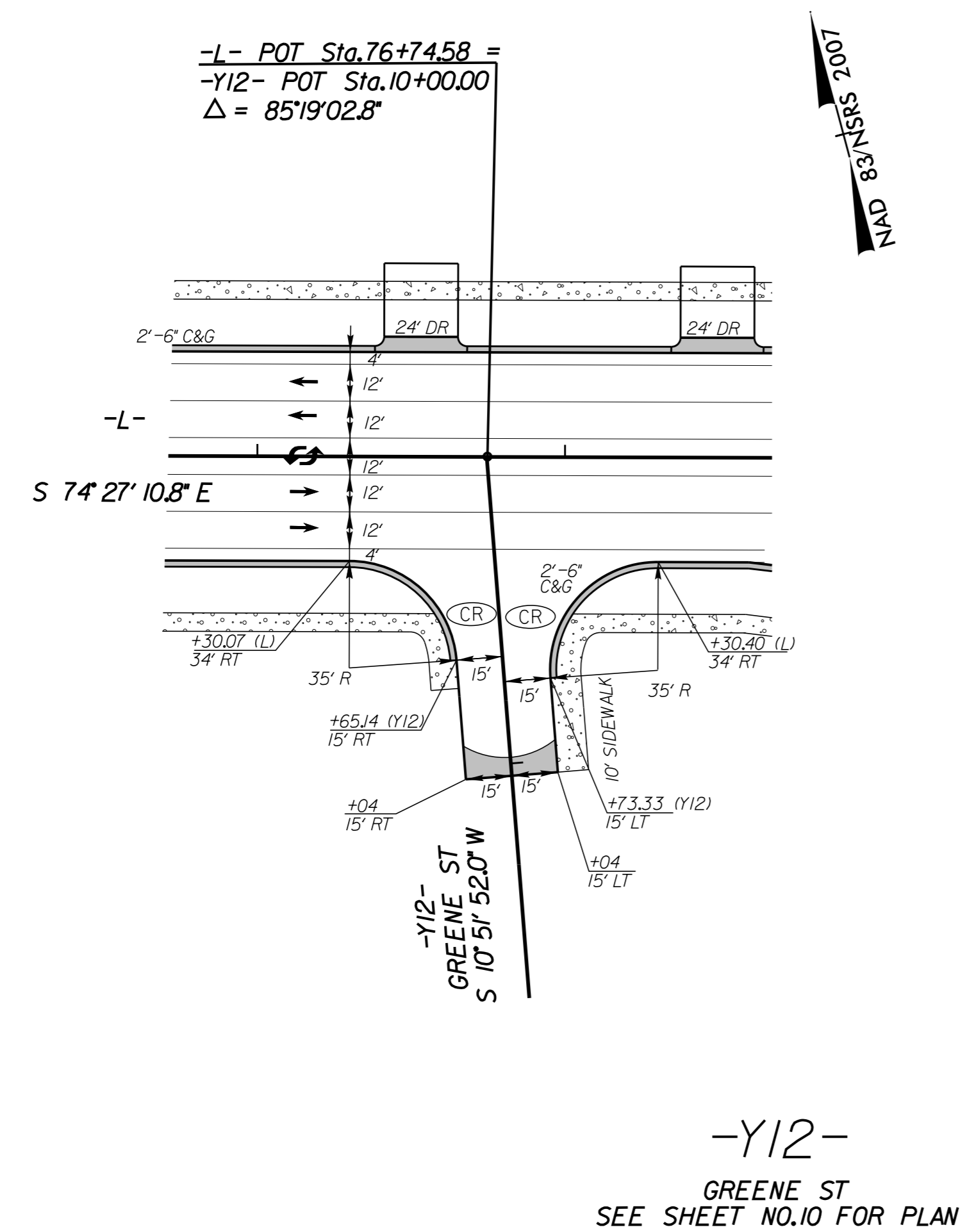
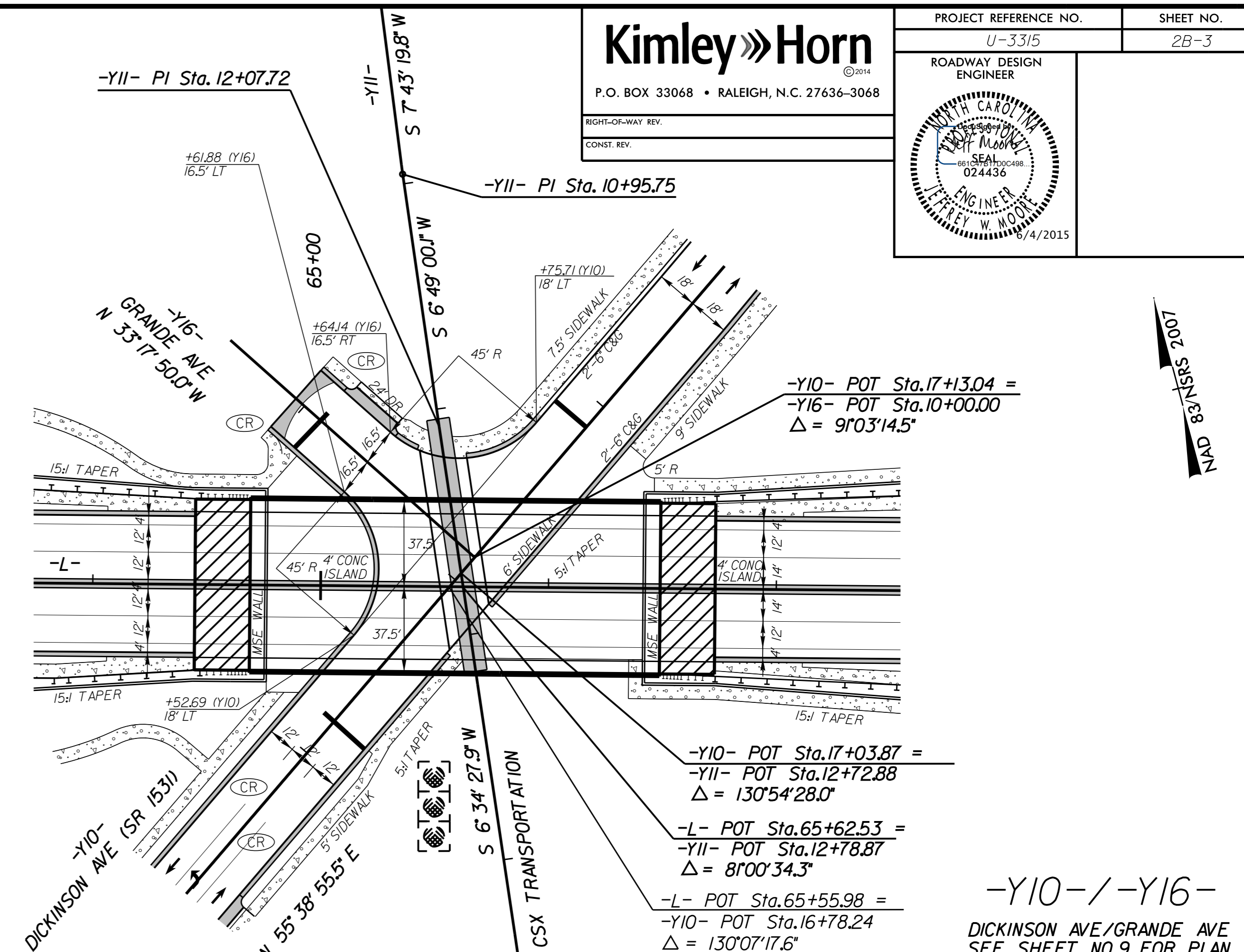
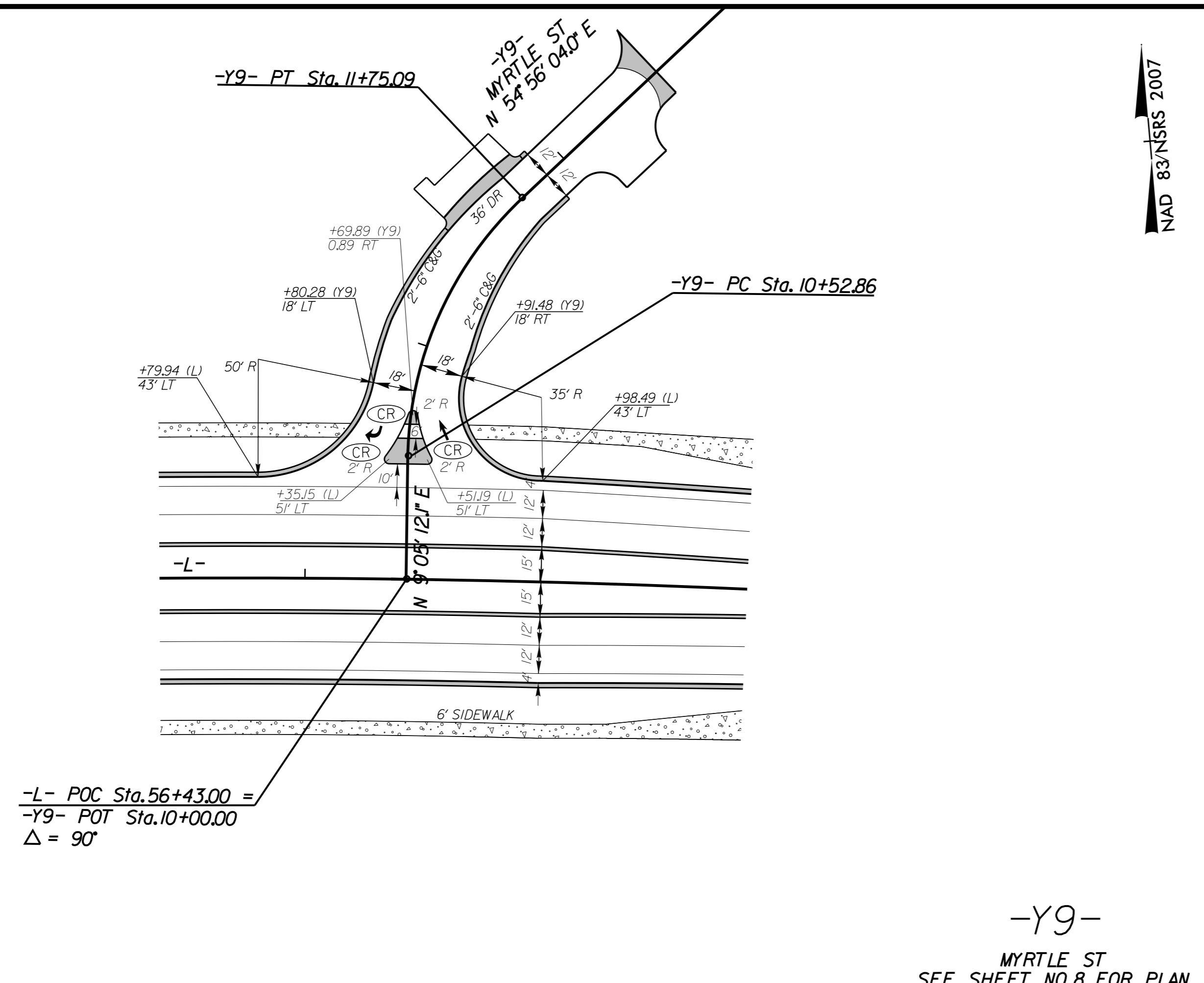
LEGEND

- (CR) CURB RAMP
- CONCRETE ISLAND
- SIDEWALK

INTERSECTION DETAILS

K:\RAL_Roadway\0103675 (U-3315)\Roadway\Proj\U3315_rdy_intersection01.dgn 5/12/2015

REVISIONS



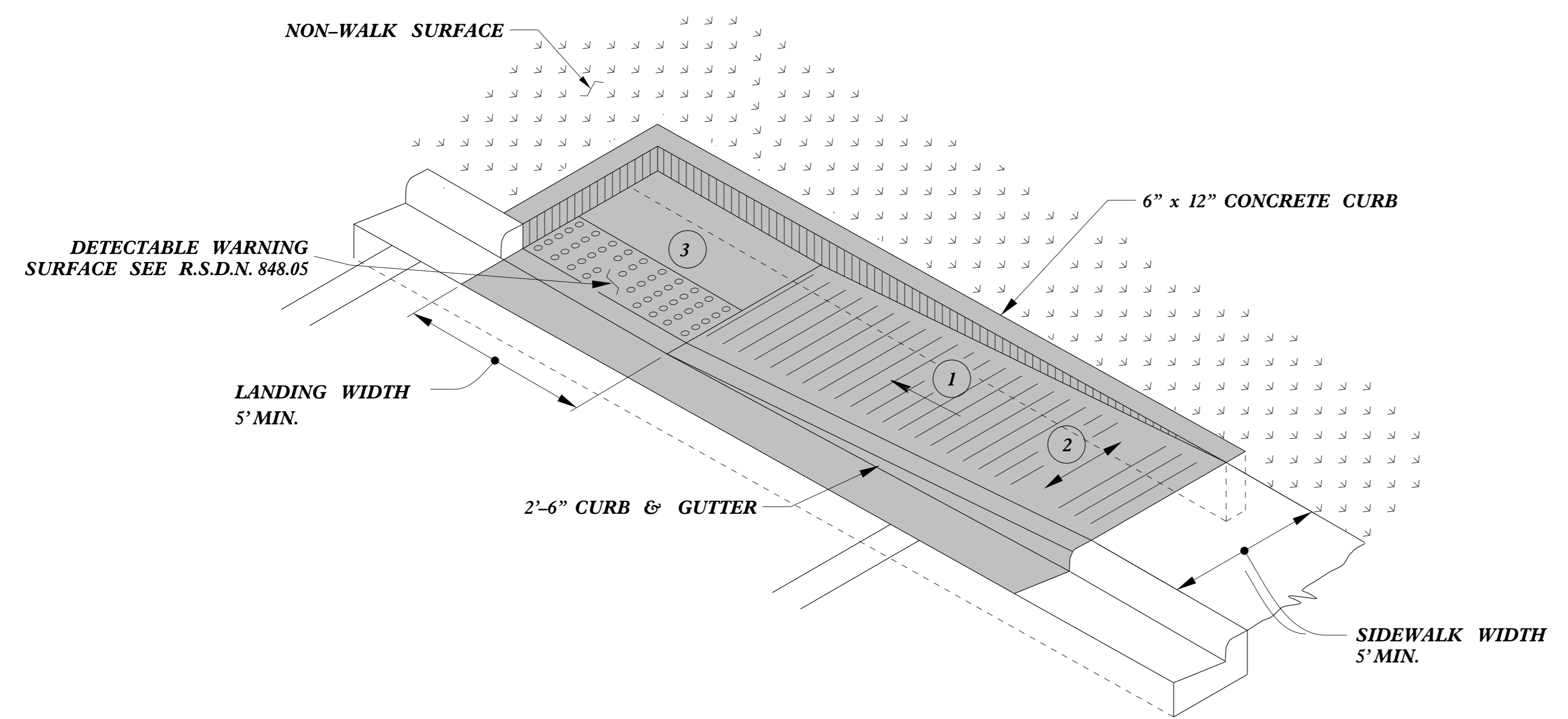
LEGEND

- CURB RAMP
- CONCRETE ISLAND
- SIDEWALK

INTERSECTION DETAILS

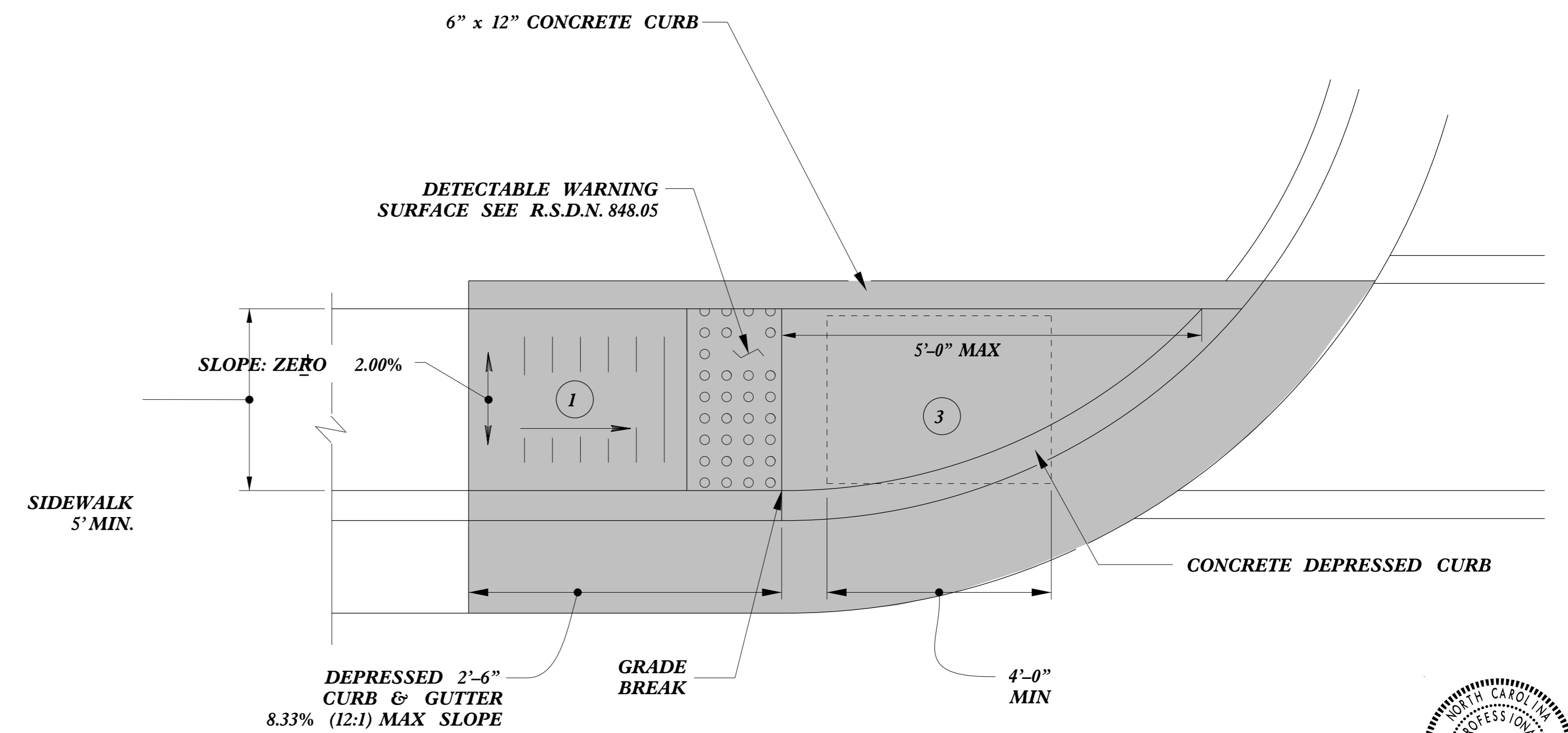
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5/14/99



PAY LIMITS FOR 1 CURB RAMP

TYPE 1A



TYPE 1

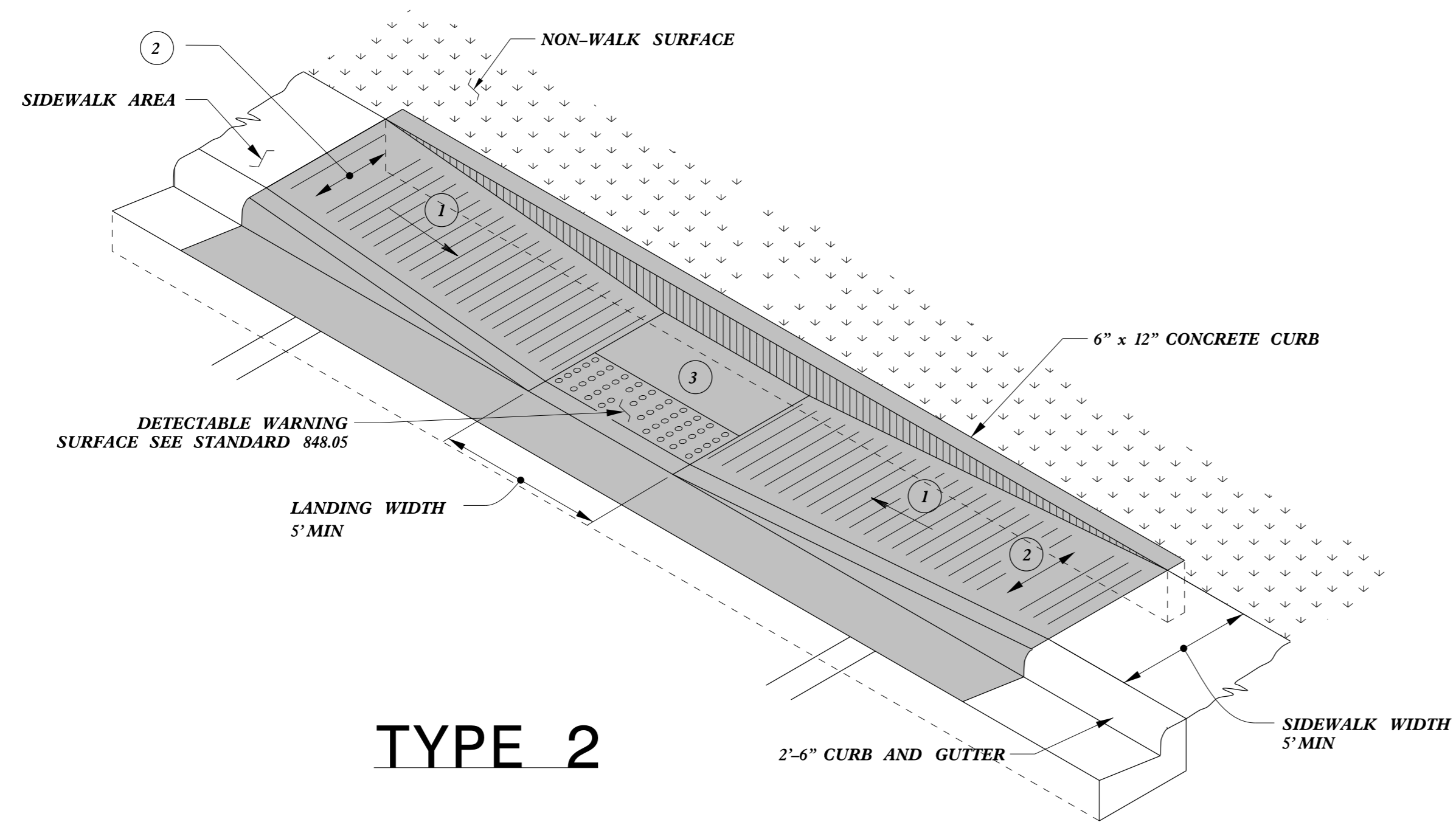
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



CONTRACT STANDARDS AND DEVELOPMENT UNIT	
Office 919-707-6950	FAX 919-250-4119
CURB RAMPS	
Directional Ramps	
ORIGINAL BY: J.S. HOWERTON	DATE: 7/7/11
MODIFIED BY:	DATE:
CHECKED BY:	DATE:
FILE SPEC. :stds/2012CurbRamp/CurbRampDetails.dgn	

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

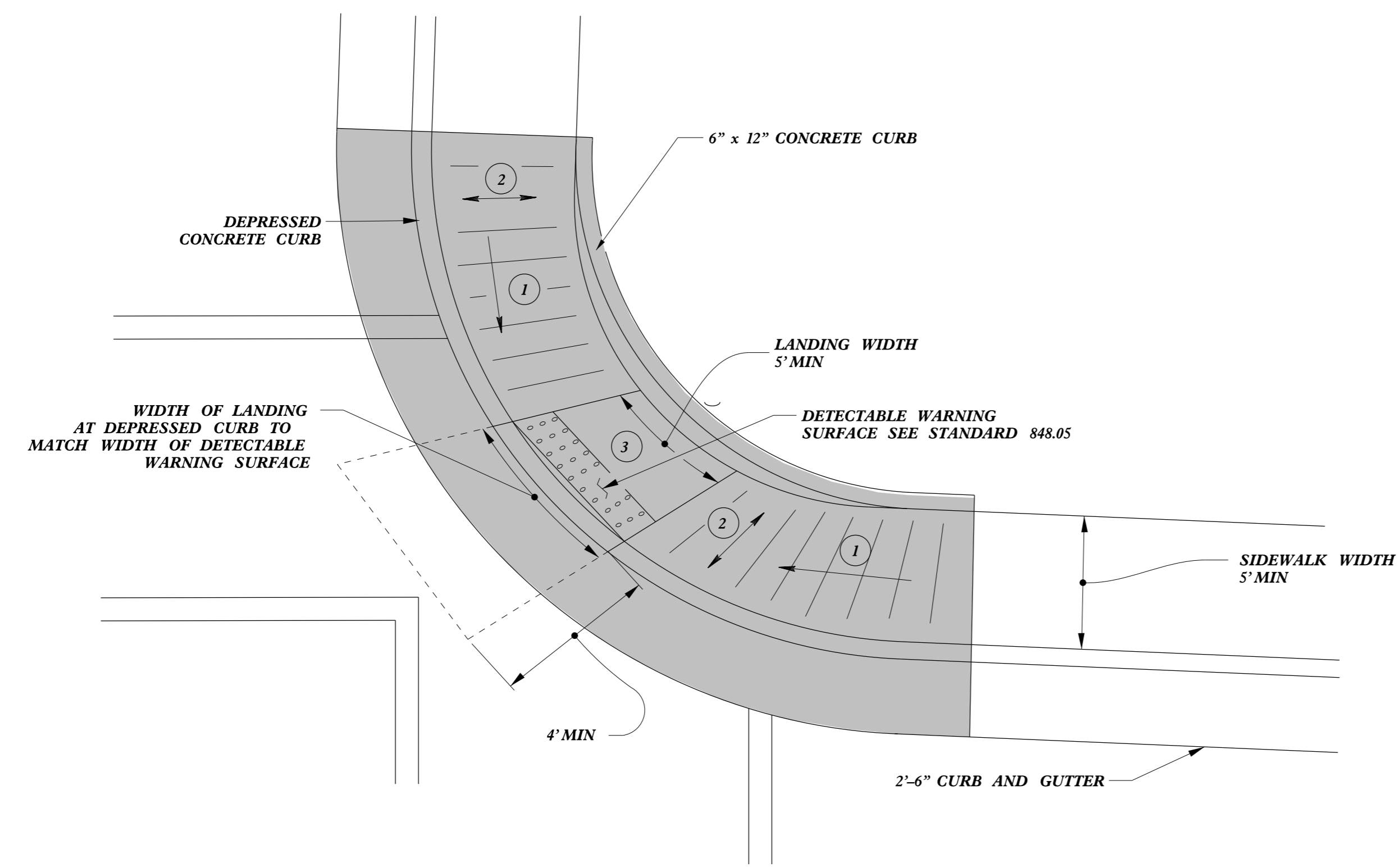
DATE PLOTTED: 6/4/2015 10:00 AM USER: JSH



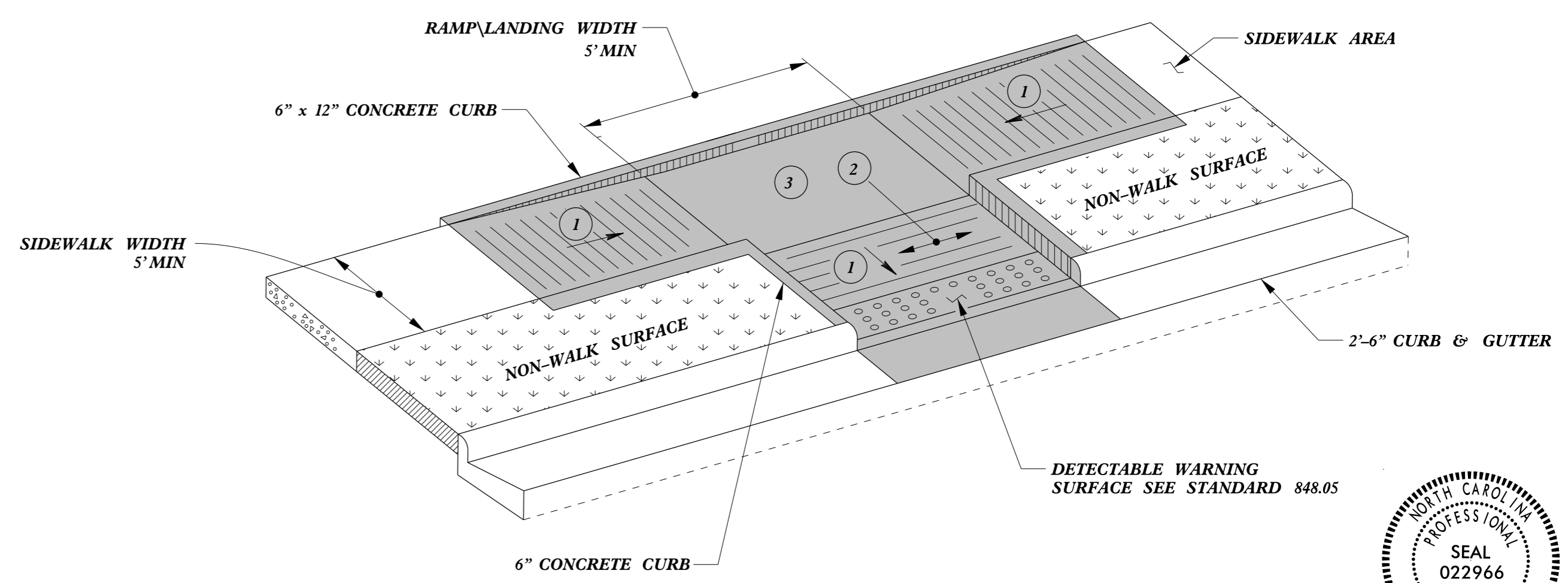
TYPE 2

PAY LIMITS FOR 1 CURB RAMP

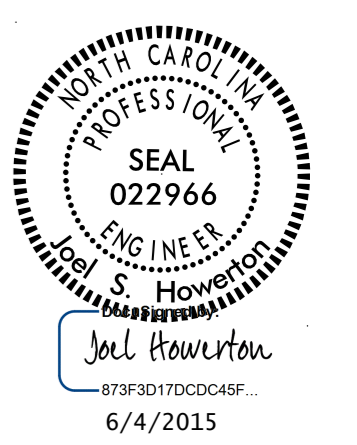
- 1 8.33% (12:1) MAX RAMP SLOPE
- 2 CROSS SLOPE: 2.00%
- 3 CURB RAMPS REQUIRE A (4'-0") MINIMUM LANDING WITH A MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 2.00% WHERE PEDESTRIANS PERFORM TURNING MANEUVERS. SLOPE TO DRAIN TO CURB.



TYPE 2A



TYPE 3



CONTRACT STANDARDS AND DEVELOPMENT UNIT
 Office 919-707-6950 FAX 919-250-4119

CURB RAMPS
 Parallel Ramps

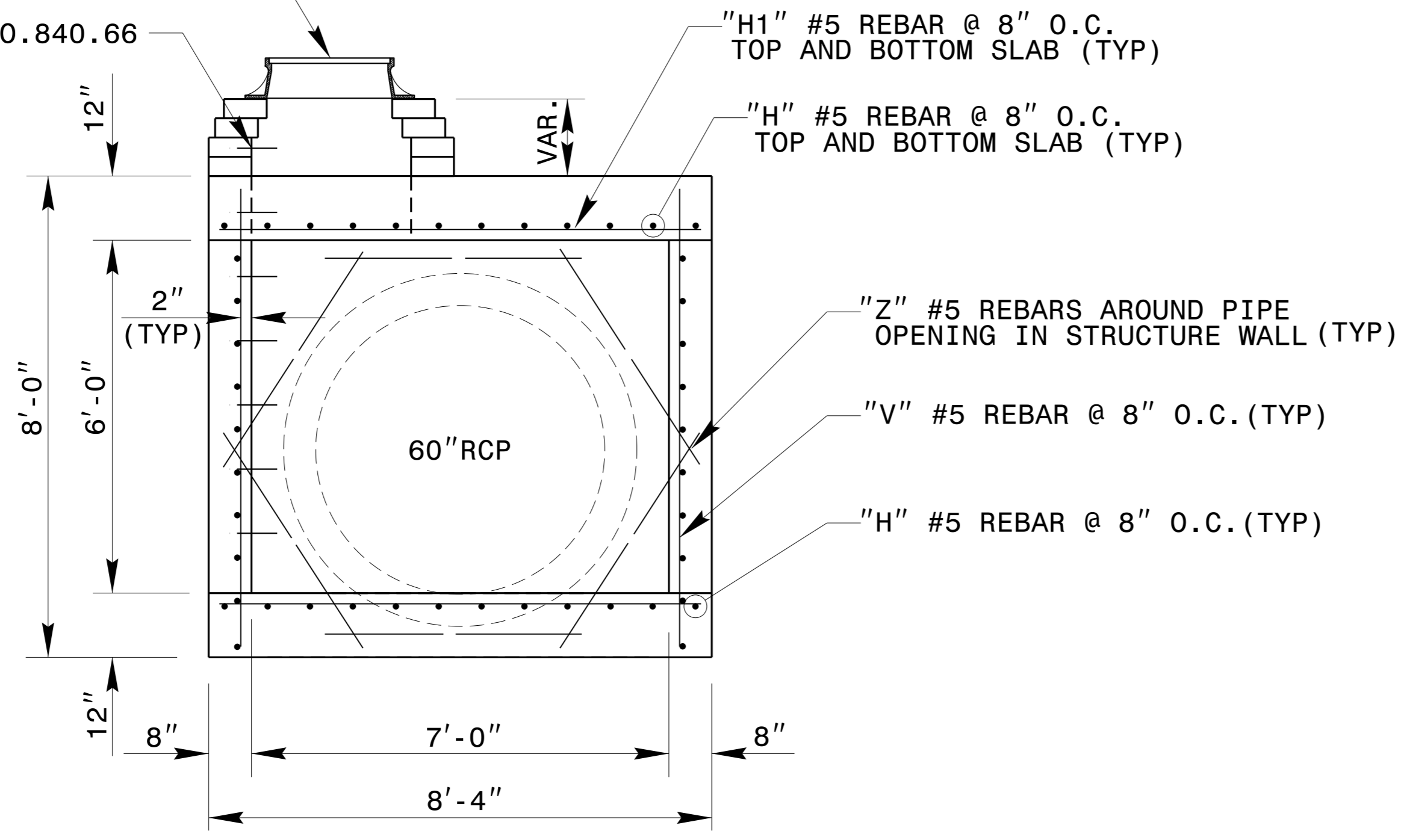
ORIGINAL BY: J.S. HOWERTON DATE: 7/7/11
 MODIFIED BY: DATE:
 CHECKED BY: DATE:
 FILE SPEC: stds\2012CurbRamp\CurbRampDetails.dgn

REFER TO ROADWAY STANDARD DRAWING NUMBER 848.05 SHEET 3 OF 3 FOR ALL RAMP NOTES

5/14/99
 TIME \$\$\$\$\$\$
 CURB RAMPS
 USER: J.S. HOWERTON
 DATE: 6/4/2015

5/14/99

SEE STANDARD 840.54 FOR MANHOLE FRAME & COVER
SEE STEP STD.NO.840.66



SECTION A-A

GENERAL NOTES:
 USE CLASS "AA" CONCRETE THROUGHOUT.
 PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 THIS DETAIL MAY BE USED TO CONSTRUCT A TRAFFIC BEARING DROP INLET OR TRAFFIC BEARING 2GI WITH PIPES OF A SIMILAR SIZE.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 INSTALL MANHOLE IN POSITION AS DIRECTED BY THE ENGINEER. CUT AND BEND ALL REBAR CROSSING THIS OPENING TO ALLOW 2" MINIMUM CONCRETE COVERAGE.
 CHAMFER ALL EXPOSED CORNERS 1".
 2" MINIMUM CONCRETE COVERAGE ON ALL REBAR.
 IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OR BOX, ADD TO BASE AS SHOWN IN STD. NO. 840.00.
 MAKE ALL ADJUSTMENTS AS DIRECTED BY THE ENGINEER

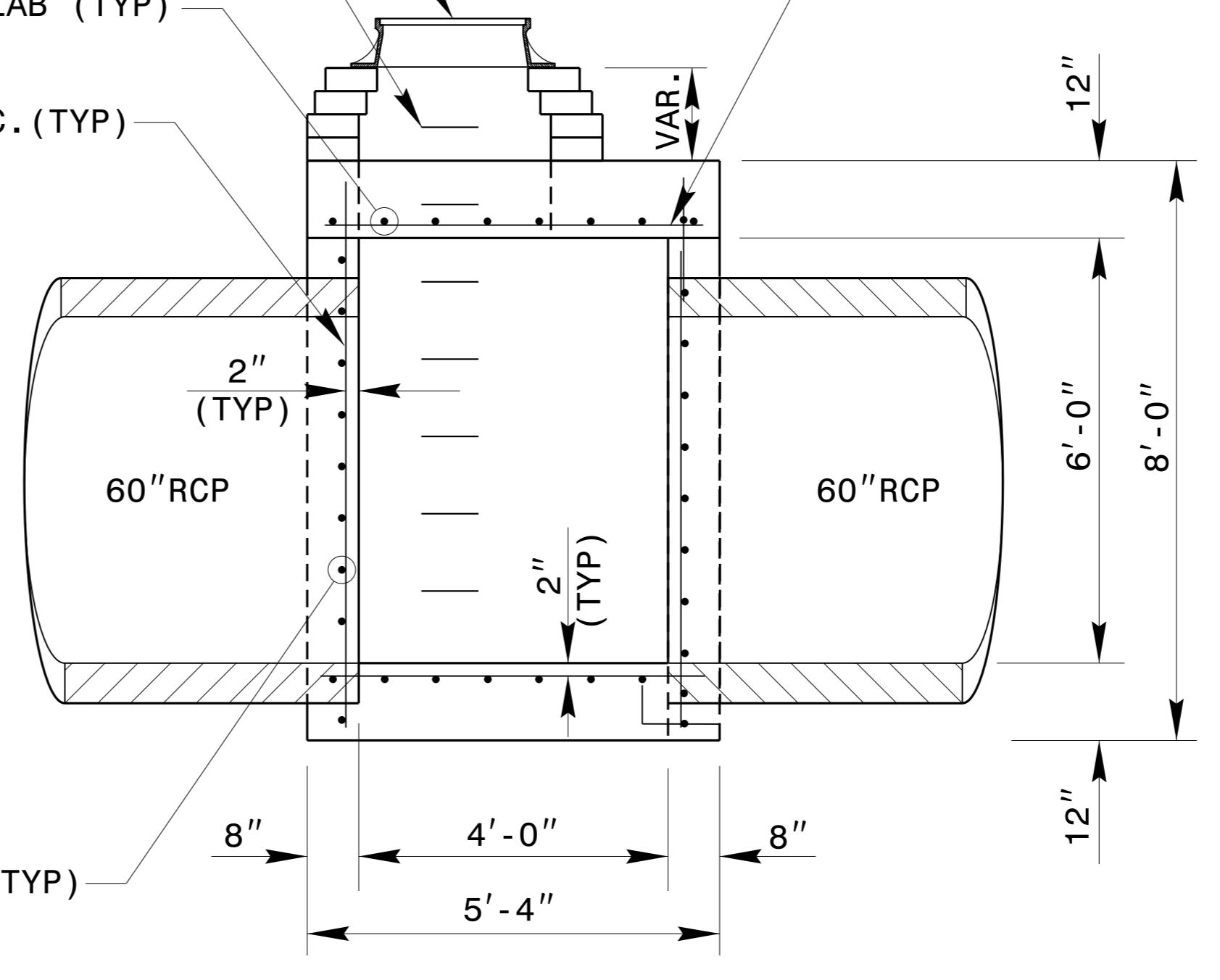
SEE STANDARD 840.54 FOR MANHOLE FRAME & COVER

SEE STEP STD.NO.840.66

TOP AND BOTTOM SLAB (TYP)

"V" #5 REBAR @ 8" O.C. (TYP)

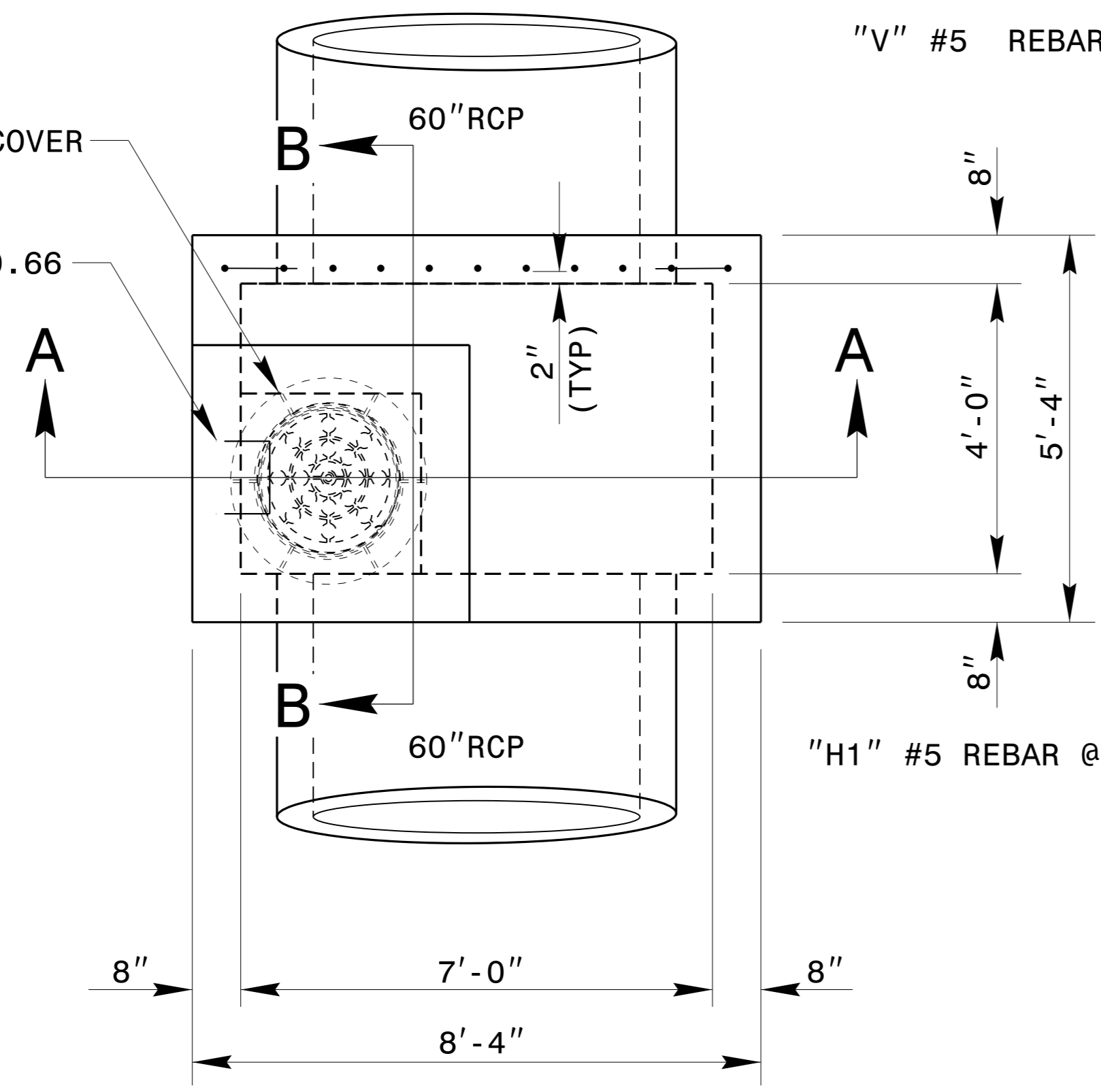
"H" #5 REBAR @ 8" O.C. TOP & BOTTOM SLAB (TYP)



SECTION B-B

SEE STANDARD 840.54 FOR MANHOLE FRAME & COVER

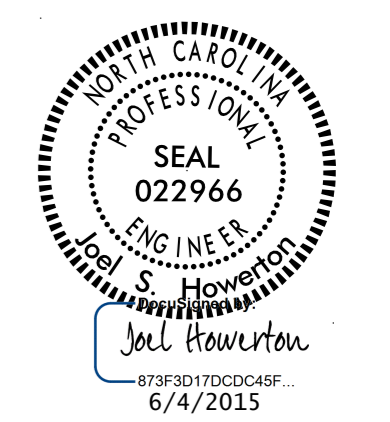
SEE STEP STD.NO.840.66



PLAN VIEW

BILL OF MATERIALS				
BAR	NO.	SIZE	LENGTH	WEIGHT
H	48	#5	5'-0"	251
H1	25	#5	8'-0"	209
V	24	#5	7'-6"	219
Z	12	#5	4'-0"	50
TOTAL REINF. STEEL (LBS.)				719
TOTAL CONC. (CU. YDS.)				8.8

* NO DEDUCTION HAS BEEN MADE FOR PIPE OR CULVERT



**CONTRACT STANDARDS & DEVELOPMENT UNIT
STANDARDS AND SPECIAL DESIGN**
 Office 919-707-6950 FAX 919-250-4119

**TRAFFIC BEARING JUNCTION BOX
FOR PROPOSED 60" RCP**

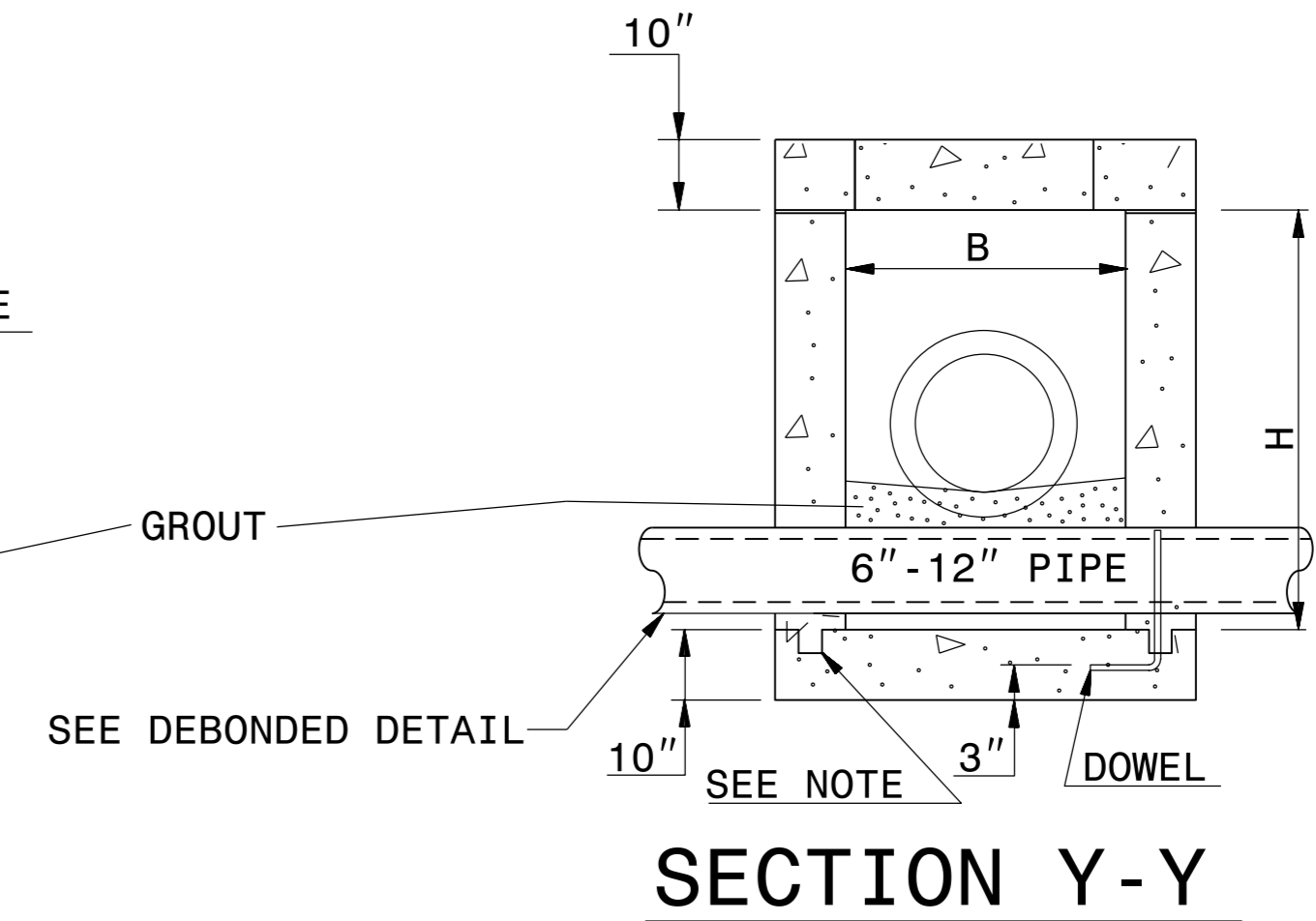
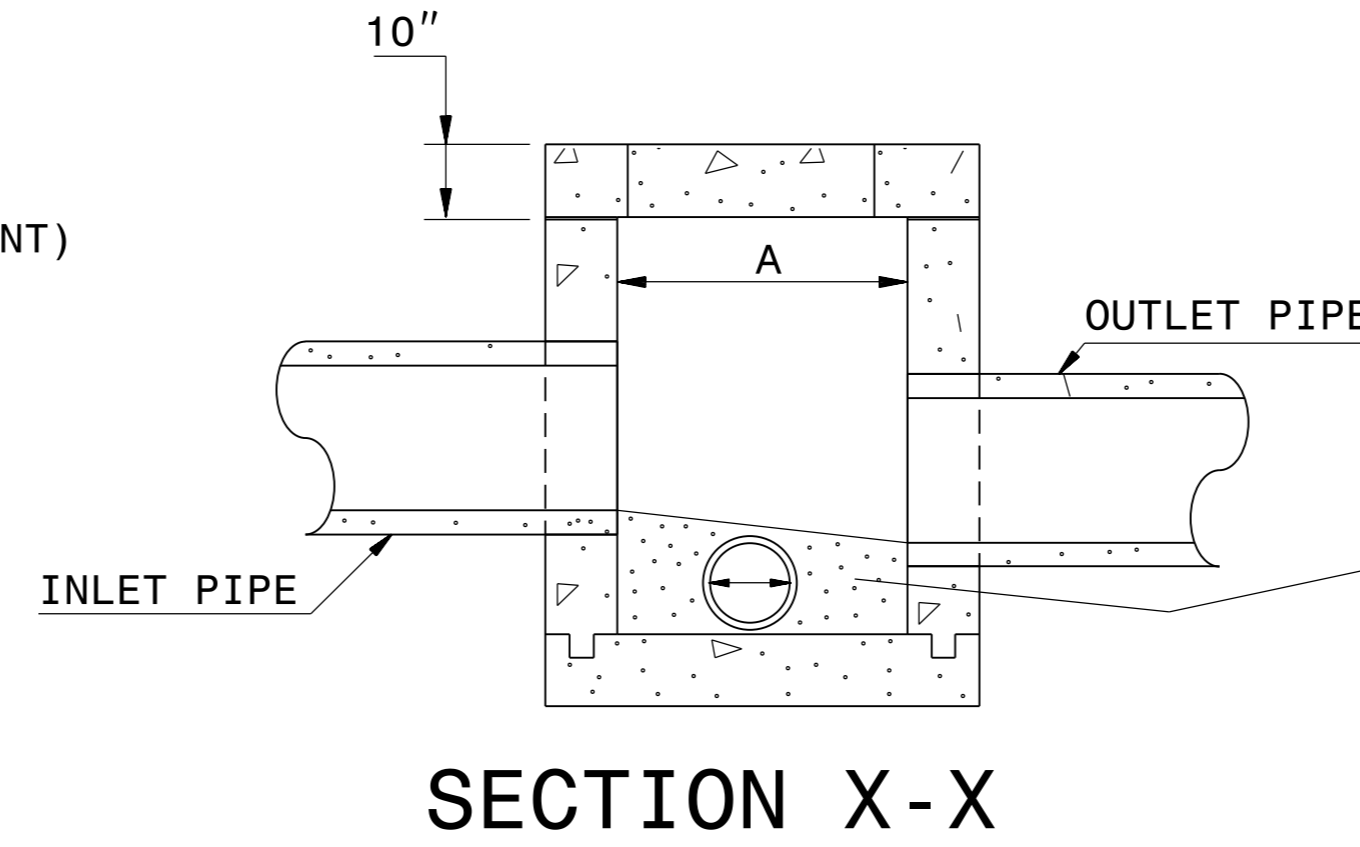
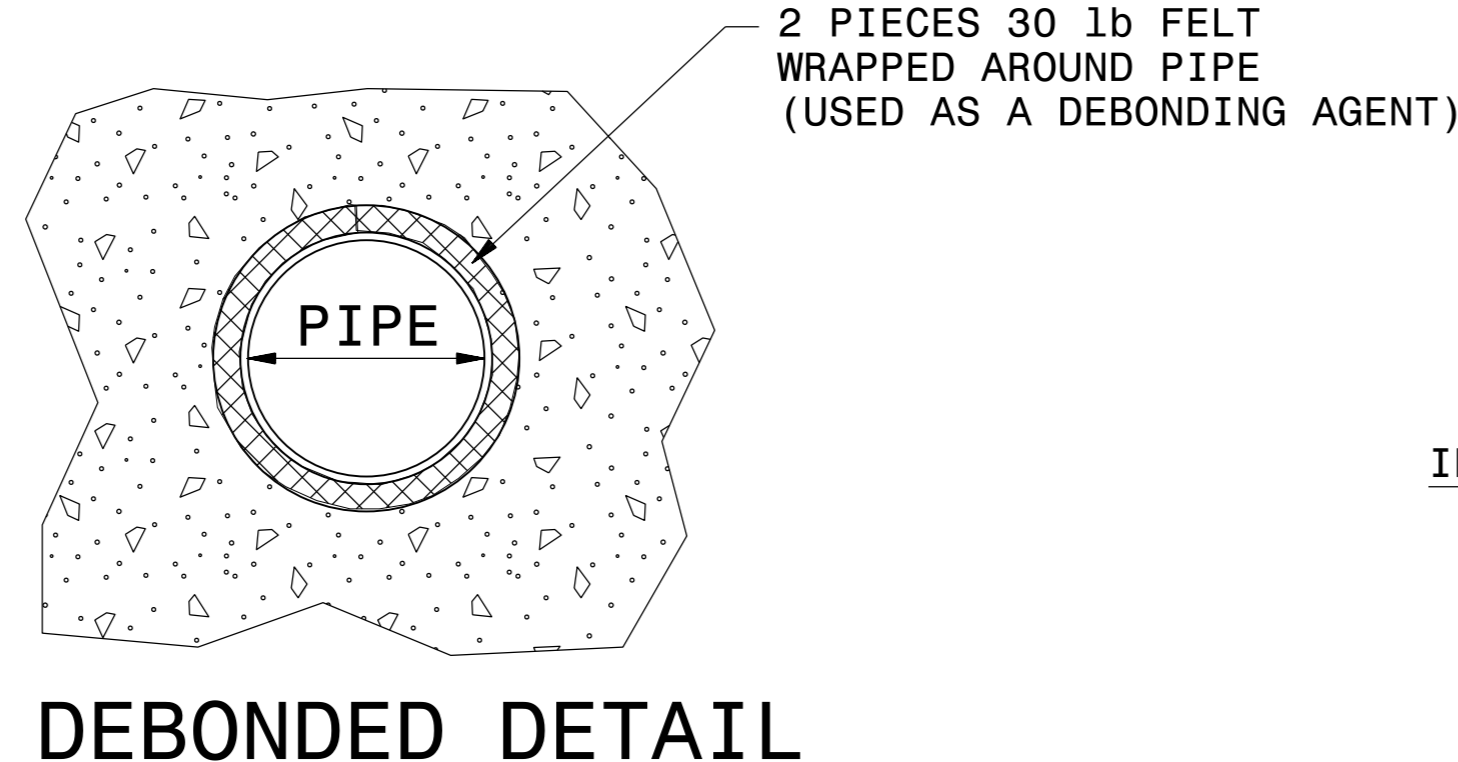
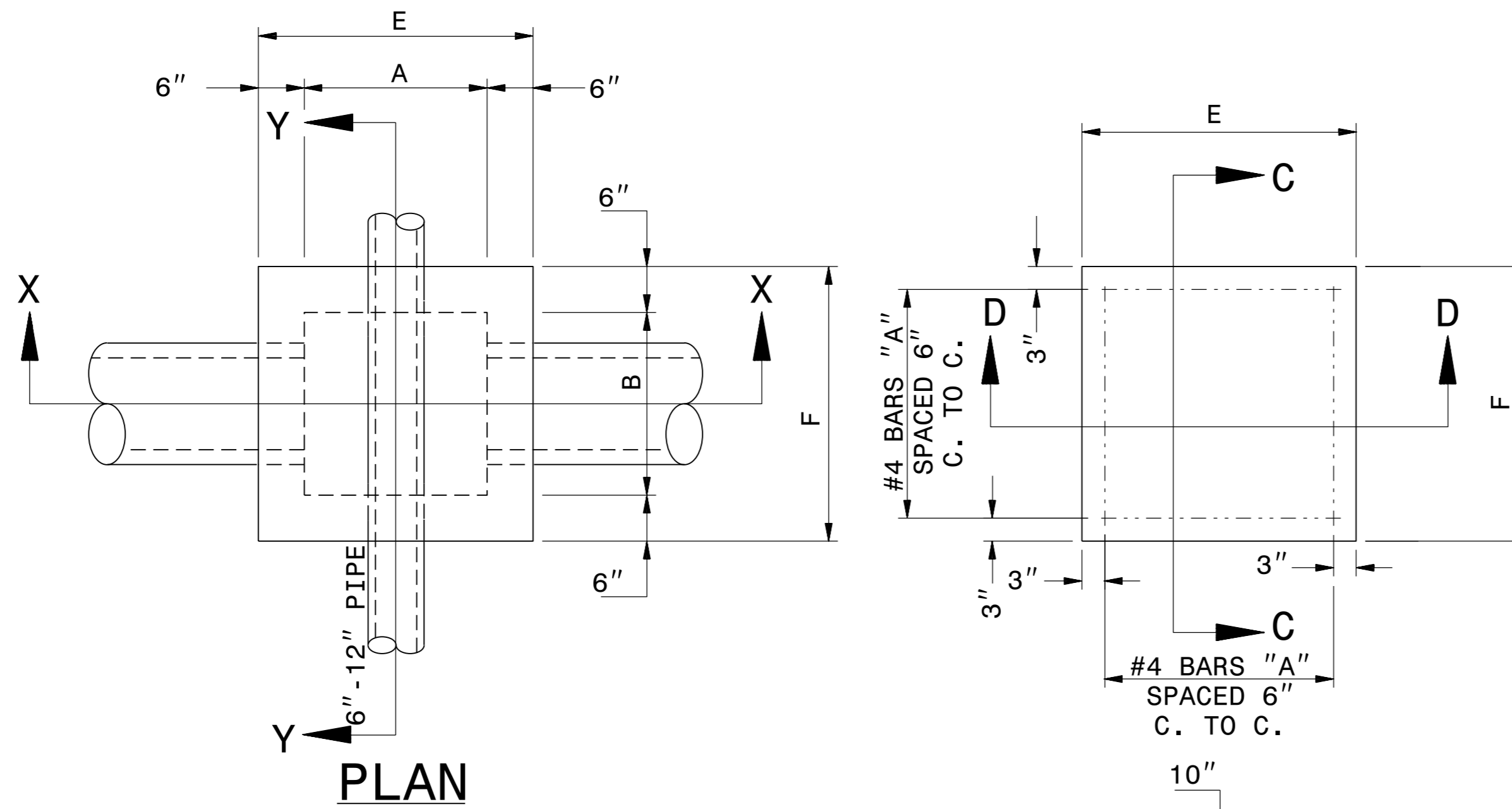
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 DATE: 12/22/09
 TIME: 10:00 AM
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DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

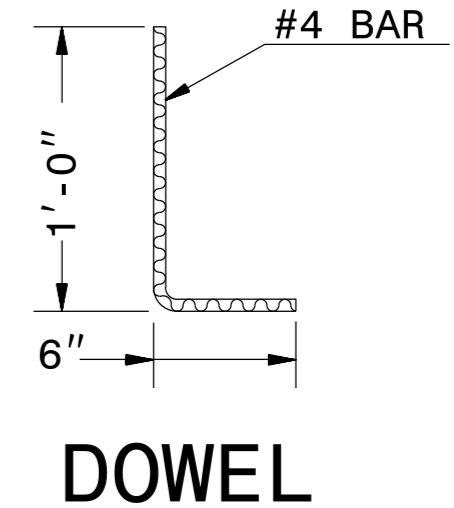
ENGLISH DETAIL DRAWING FOR
**CONCRETE JUNCTION BOX WITH
6" - 12" UTILITY PIPE PASSING THRU
12" THRU 66" PIPE**

SHEET 1 OF 1
840D31



GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.
REFER TO R.S.D.N. 840.31 FOR PLACEMENT OF MANHOLE COVER IN JUNCTION BOX.

DIMENSIONS AND QUANTITIES FOR CONCRETE JUNCTION BOXES															
DIMENSIONS OF BOX AND PIPE				REINFORCEMENT BARS "A"		COVER DIMENSIONS		CUBIC YARDS IN BOX			TOTAL QUANTITIES BOX AND COVER		DEDUCTIONS FOR ONE PIPE CU.YDS.		
PIPE	SPAN	WIDTH	HEIGHT	NO.	LENGTH	E	F	COVER	FLOOR	WALL/ FT. OF HT.	LBS. REINF	CU. YDS. MIN. "H"	C.S.	R.C.	
12"	2'-0"	2'-0"	2'-3"	12	2'-9"	3'-0"	3'-0"	0.222	0.222	0.185	22	0.750	0.015	0.024	
15"	2'-3"	2'-3"	2'-6"	12	3'-0"	3'-3"	3'-3"	0.261	0.261	0.204	24	0.902	0.023	0.036	
18"	2'-6"	2'-6"	2'-9"	14	3'-3"	3'-6"	3'-6"	0.302	0.302	0.222	30	1.065	0.033	0.049	
24"	3'-0"	3'-0"	3'-3"	16	3'-9"	4'-0"	4'-0"	0.395	0.395	0.259	40	1.434	0.059	0.091	
30"	3'-6"	3'-6"	3'-9"	18	4'-3"	4'-6"	4'-6"	0.500	0.500	0.296	51	1.860	0.092	0.138	
36"	4'-0"	4'-0"	4'-3"	20	4'-9"	5'-0"	5'-0"	0.617	0.617	0.333	64	2.341	0.132	0.196	
42"	4'-6"	4'-6"	4'-9"	22	5'-3"	5'-6"	5'-6"	0.747	0.747	0.370	77	2.878	0.180	0.284	
48"	5'-0"	5'-0"	5'-3"	24	5'-9"	6'-0"	6'-0"	0.889	0.889	0.407	92	3.471	0.235	0.364	
54"	5'-6"	5'-6"	5'-9"	26	6'-3"	6'-6"	6'-6"	1.043	1.043	0.444	109	4.283	0.297	0.440	
60"	6'-0"	6'-0"	6'-3"	28	6'-9"	7'-0"	7'-0"	1.210	1.210	0.481	127	5.090	0.367	0.546	
66"	6'-6"	6'-6"	6'-9"	30	7'-3"	7'-6"	7'-6"	1.389	1.389	0.518	146	5.917	0.444	0.655	



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ENGLISH DETAIL DRAWING FOR
**CONCRETE JUNCTION BOX WITH
6" - 12" UTILITY PIPE PASSING THRU
12" THRU 66" PIPE**

SHEET 1 OF 1
840D31

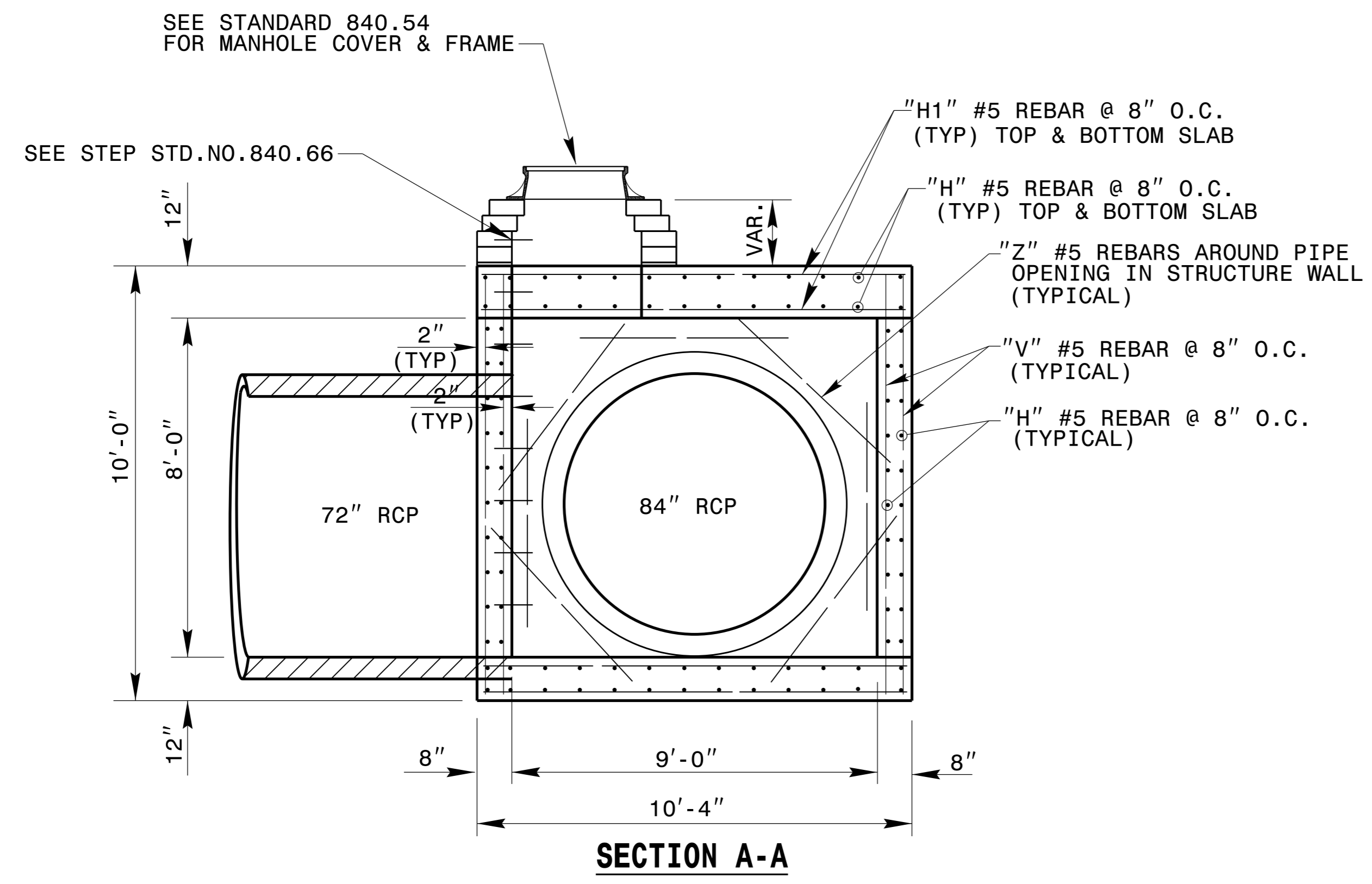


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SEE PLATE FOR TITLE

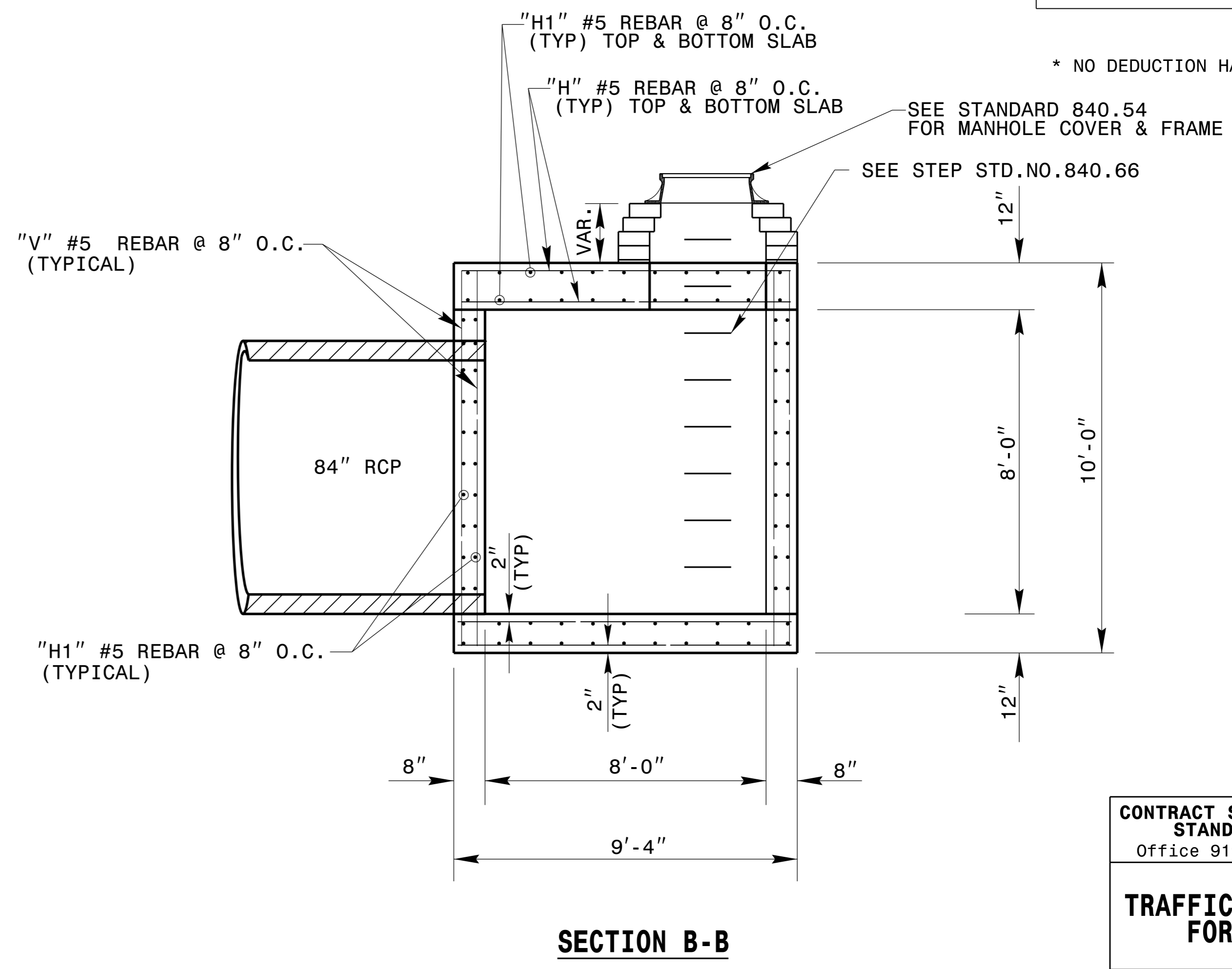
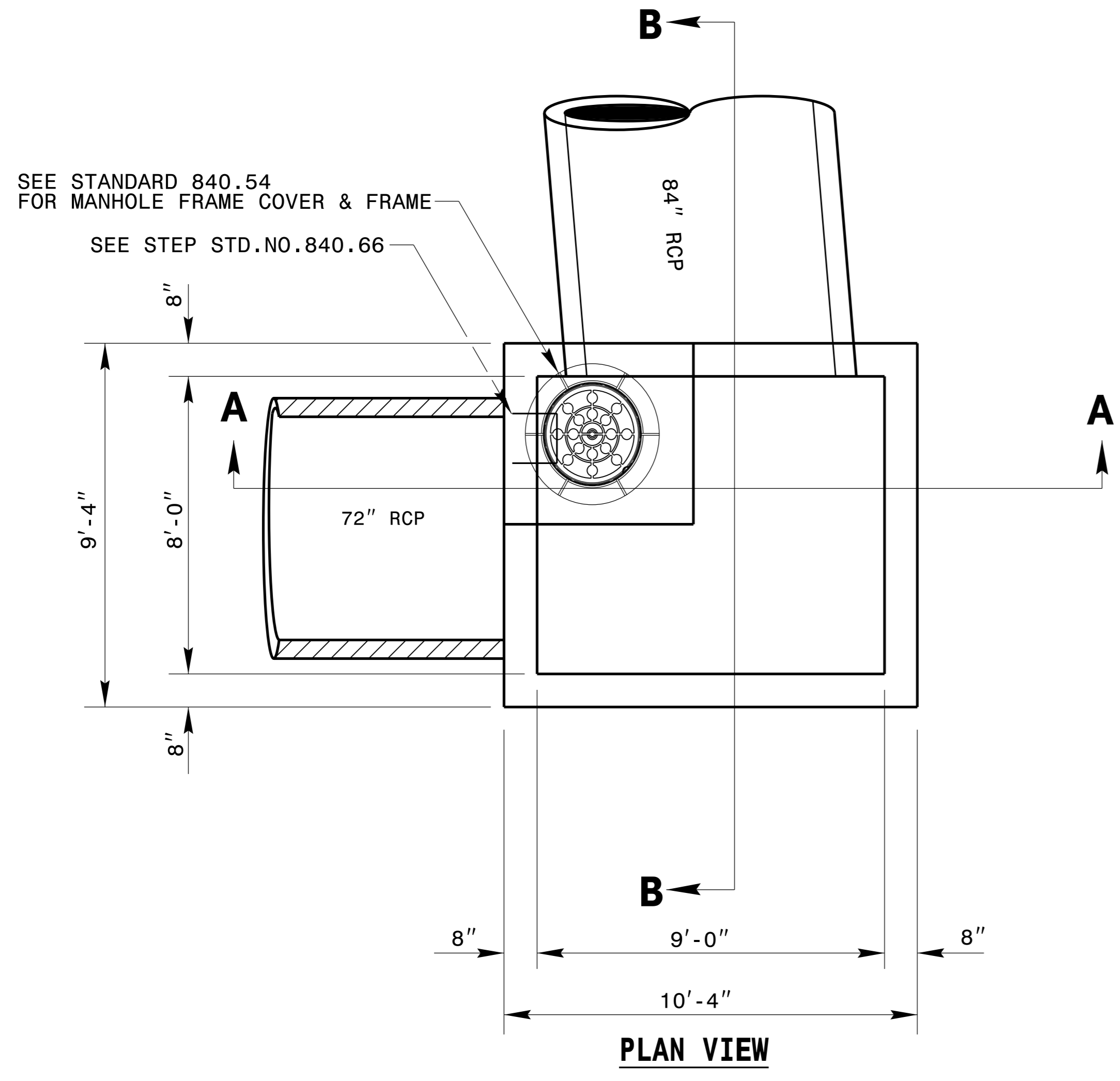
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MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC.:usr/details/stand/conflict_box.dgn

5/14/99
\$\$\$\$\$TIME\$\$\$\$\$
\$\$\$\$\$CONFLICT_BOX\$\$\$\$\$
\$\$\$\$\$USERNAME\$\$\$\$\$



GENERAL NOTES:
 USE CLASS "AA" CONCRETE THROUGHOUT.
 PROVIDE ALL JUNCTION BOXES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.
 THIS DETAIL MAY BE USED TO CONSTRUCT A TRAFFIC BEARING DROP INLET OR TRAFFIC BEARING 2GI WITH PIPES OF A SIMILAR SIZE.
 USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.
 INSTALL MANHOLE IN POSITION AS DIRECTED BY THE ENGINEER. CUT AND BEND ALL REBAR CROSSING THIS OPENING TO ALLOW 2" MINIMUM CONCRETE COVERAGE.
 CHAMFER ALL EXPOSED CORNERS 1".
 2" MINIMUM CONCRETE COVERAGE ON ALL REBAR.
 HEIGHT DIMENSIONS MAY BE ADJUSTED DOWN FOR SMALLER PIPES AS DIRECTED BY THE ENGINEER.

BILL OF MATERIALS				
BAR	NO.	SIZE	LENGTH	WEIGHT
H	104	#5	9'-0"	976
H1	104	#5	10'-0"	1085
V	128	#5	9'-8"	1290
Z	14	#5	4'-0"	59
TOTAL REINF. STEEL (LBS.)				3355
TOTAL CONC. (CU. YDS.)				14.4



* NO DEDUCTION HAS BEEN MADE FOR PIPES

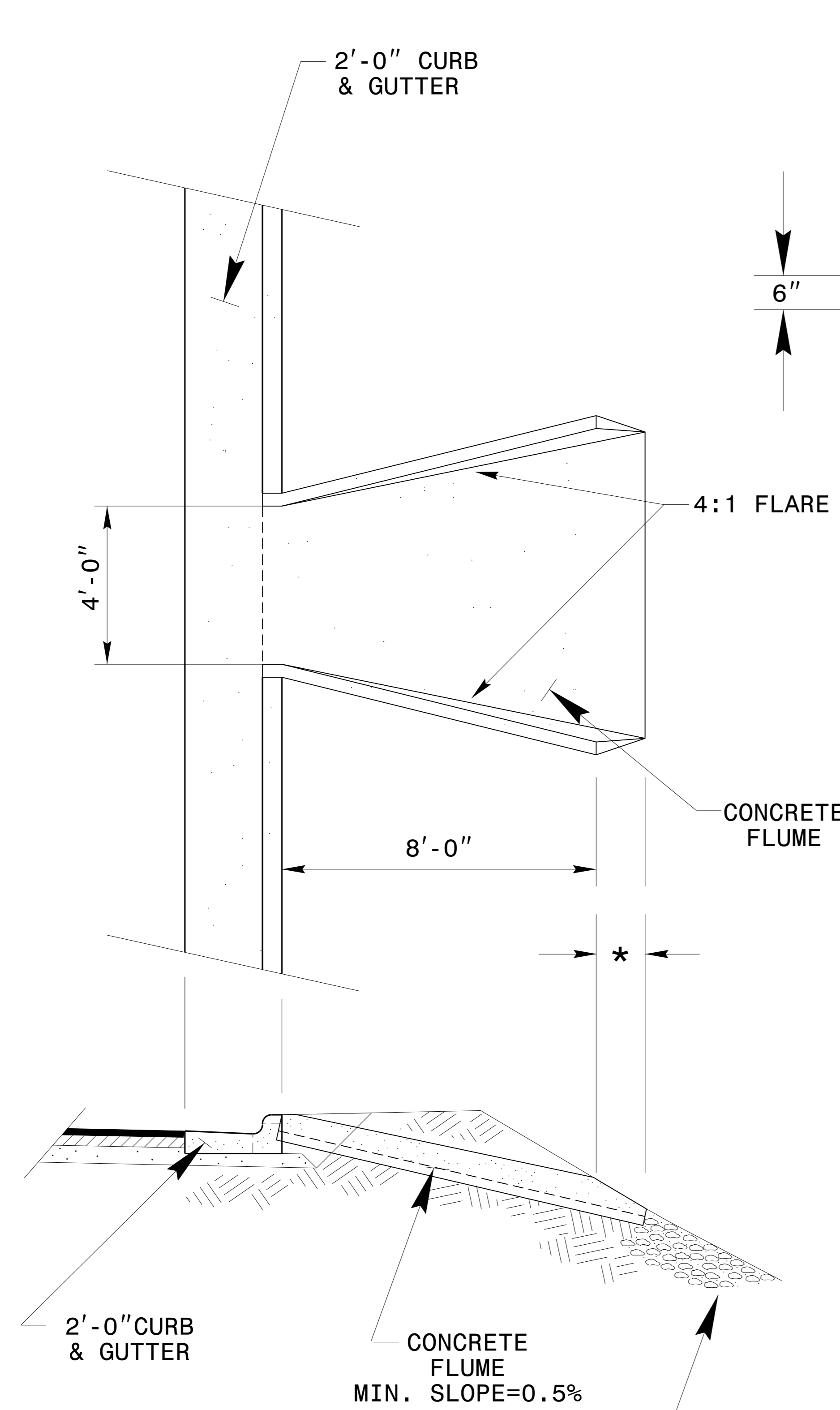


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TRAFFIC BEARING JUNCTION BOX
FOR PROPOSED 84" RCP

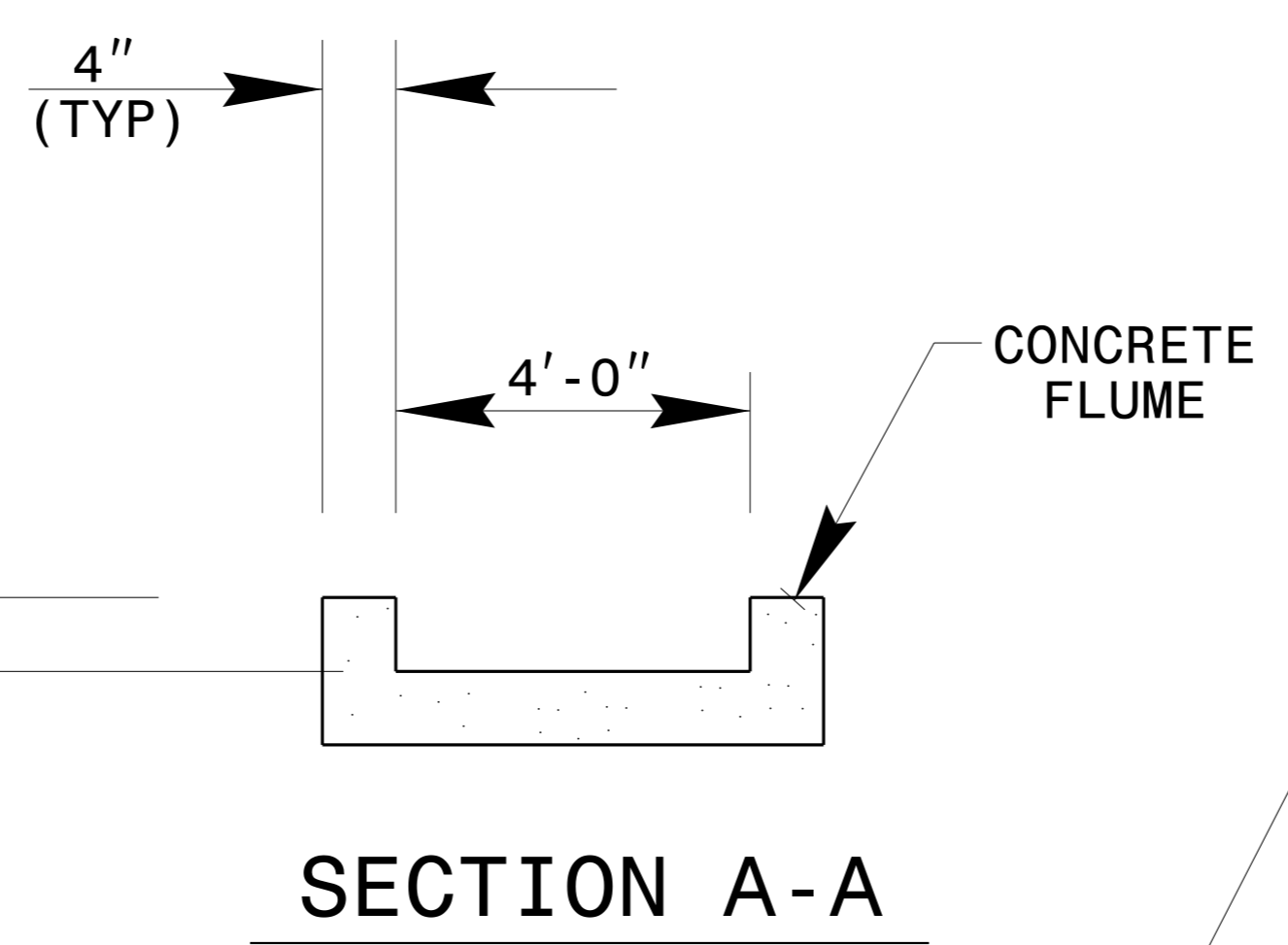
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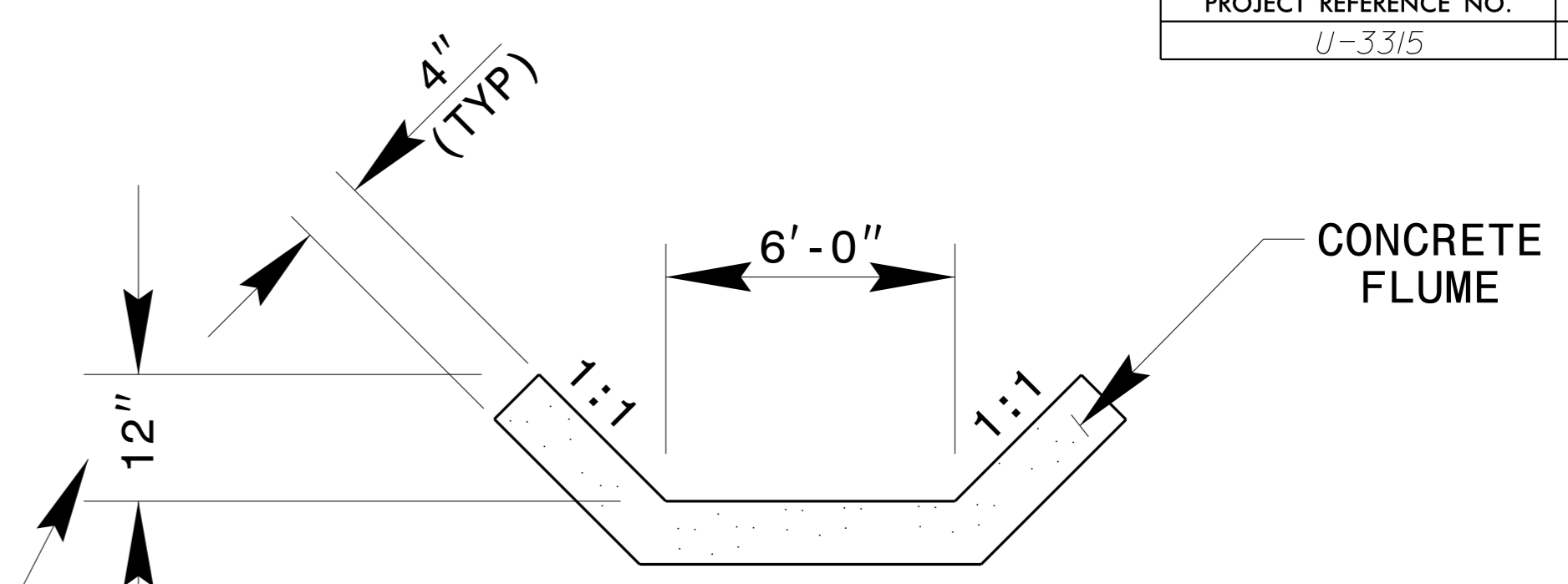
ELEVATION

* LENGTH VARIABLE WITH DITCH SLOPE

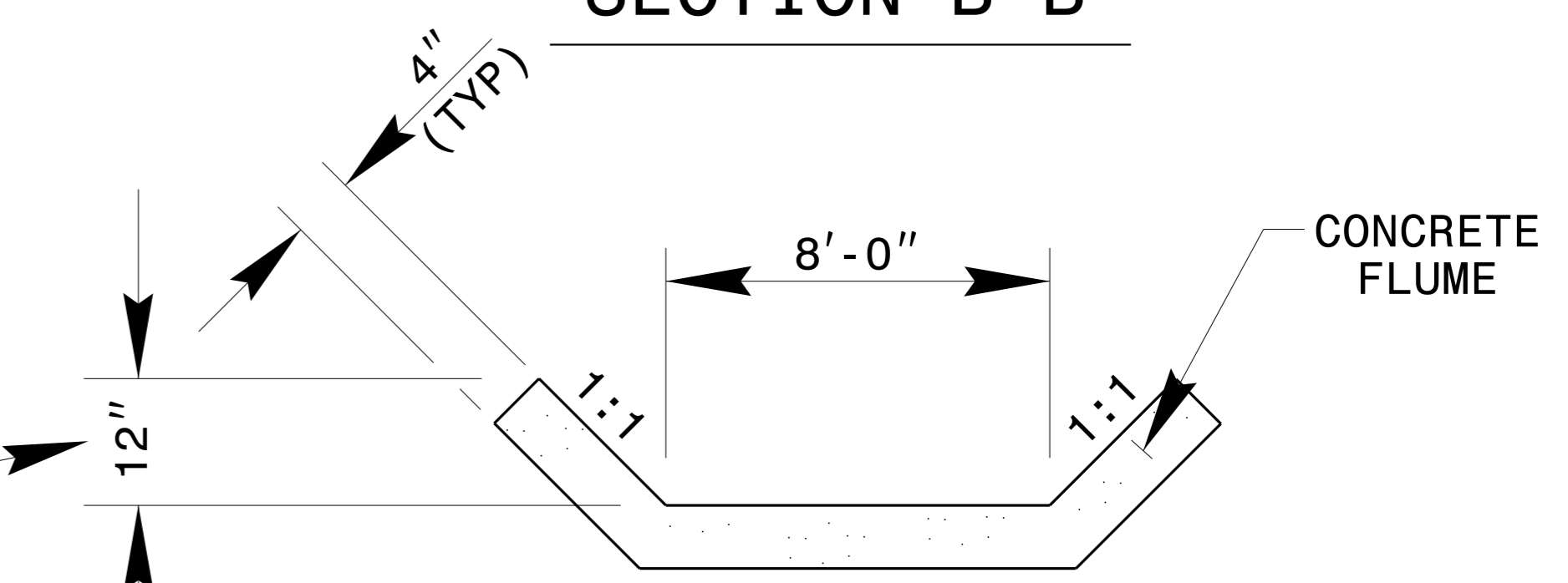


SECTION A-A

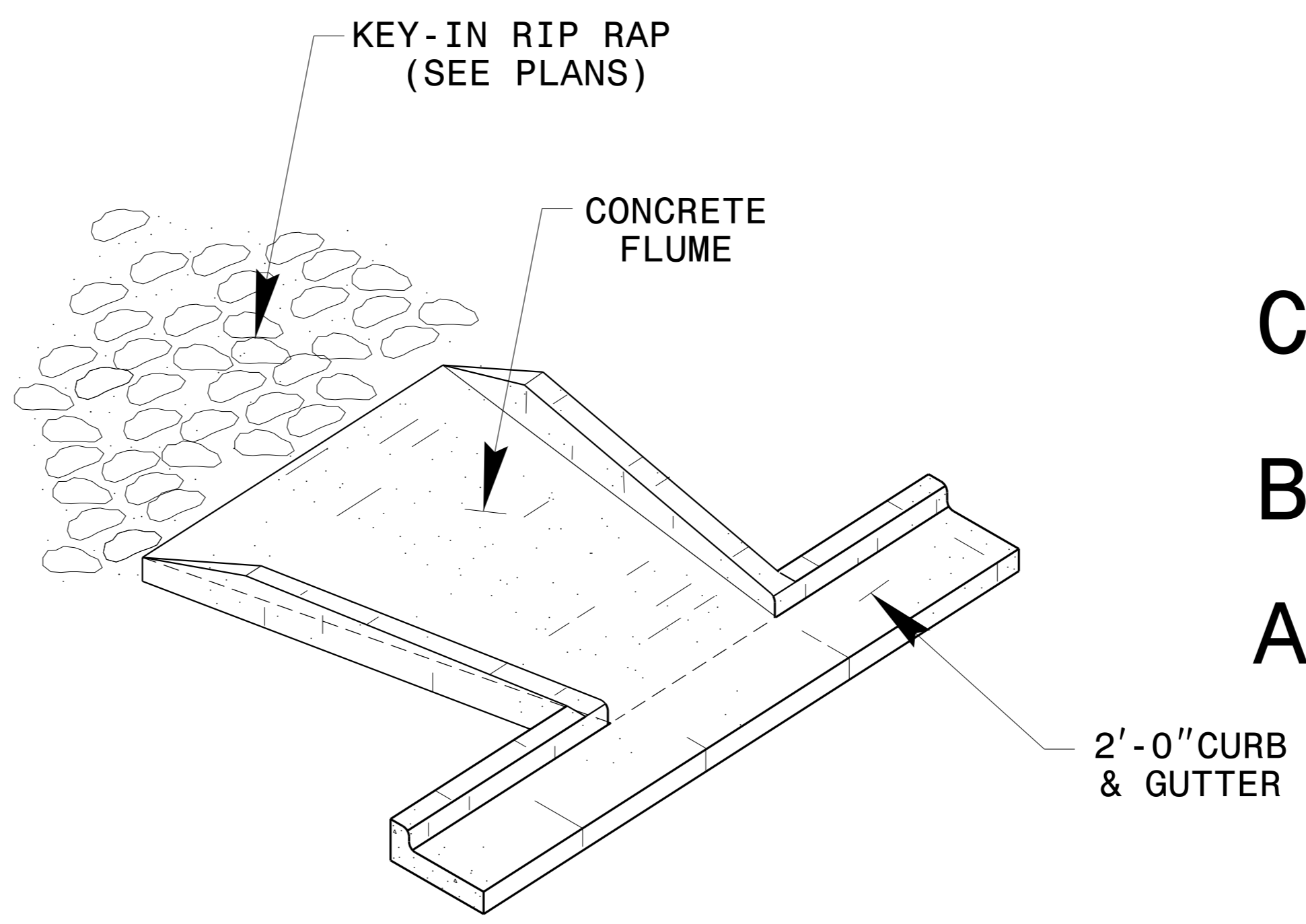
FLUME SIDES SHOULD BE FLUSH WITH ADJACENT GROUND LINE TO A MAX. HEIGHT OF 12"



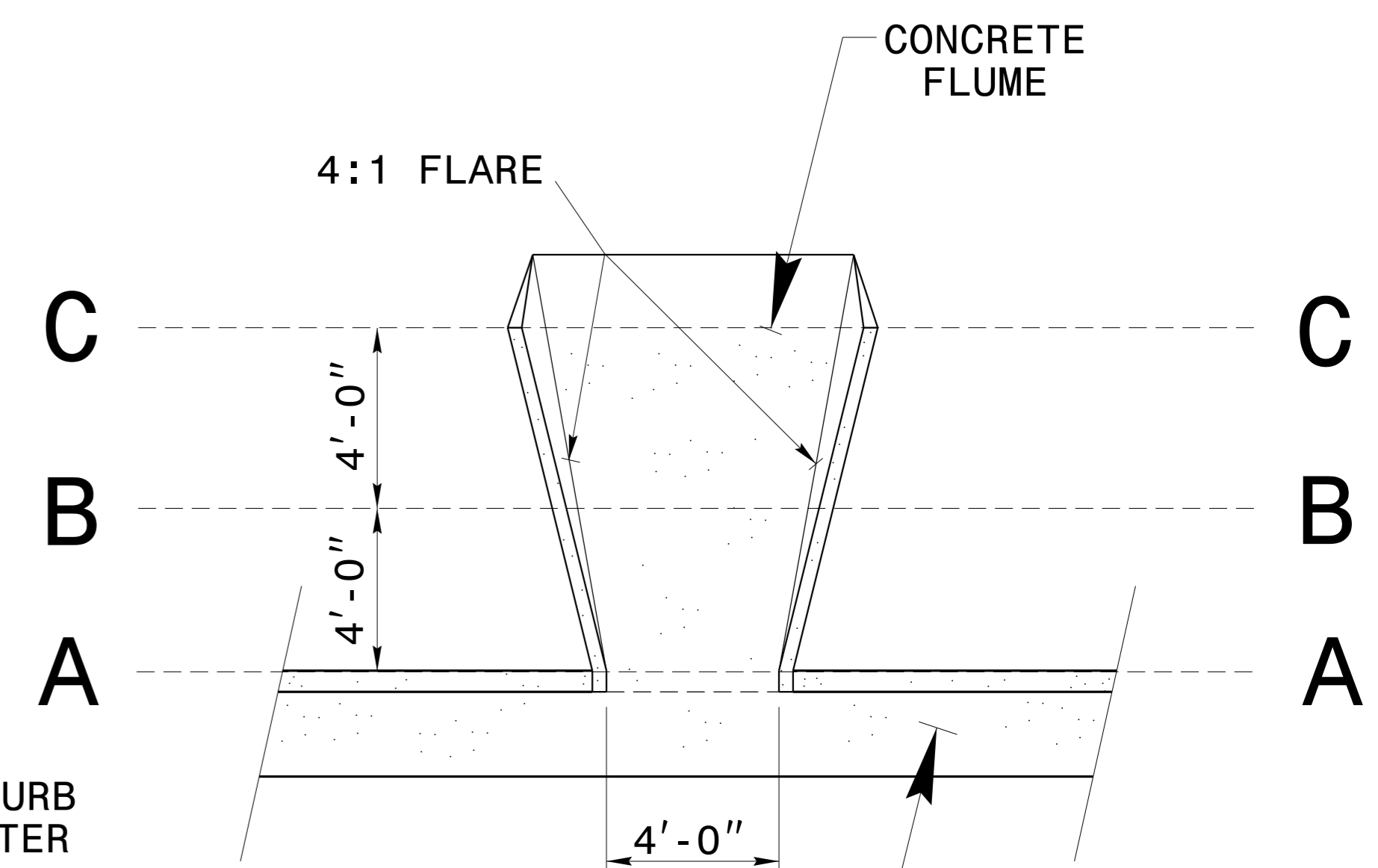
SECTION B-B



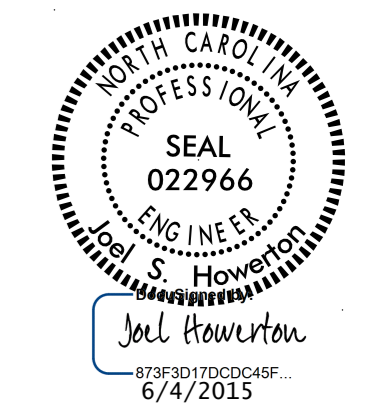
SECTION C-C



PERSPECTIVE



PLAN

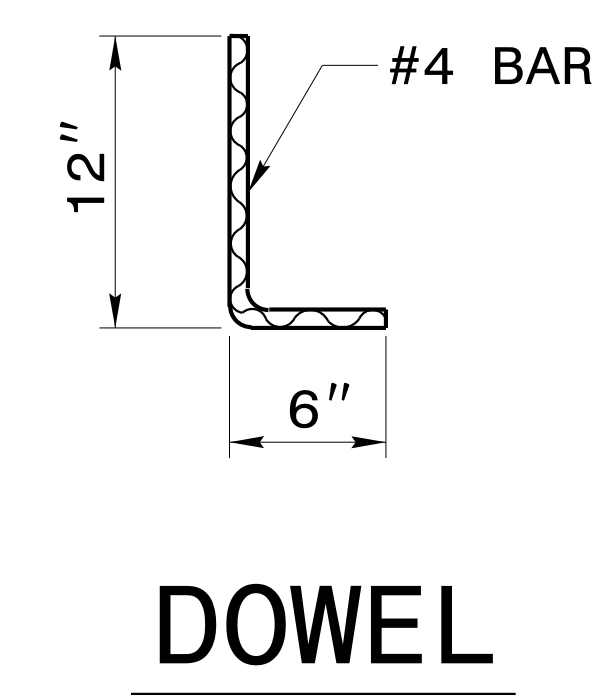
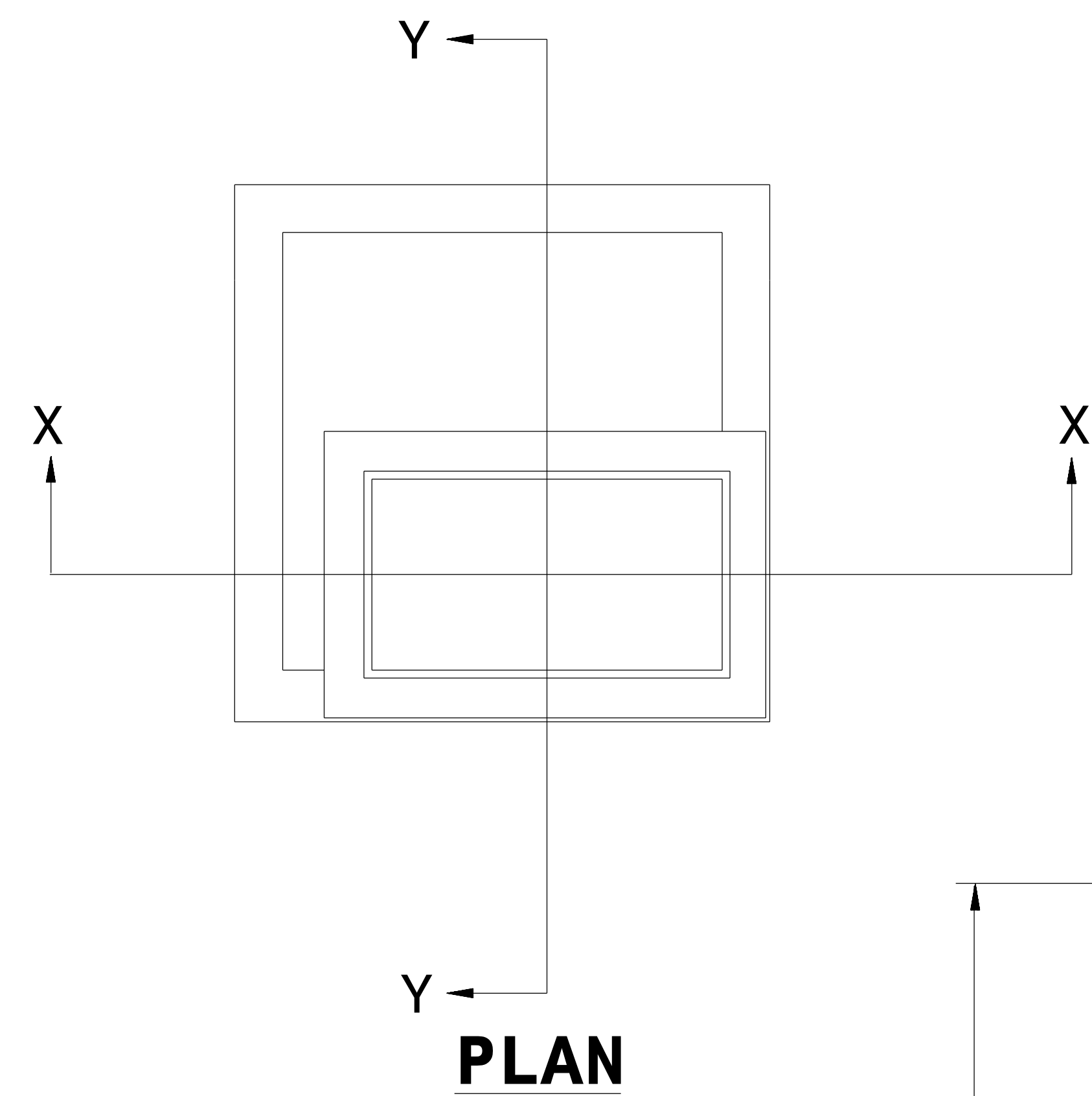


- NOTES:**
- CONSTRUCT CONCRETE FLUME IN ACCORDANCE WITH THIS DETAIL.
 - RIP RAP LINED DITCH WILL BE THE TYPE AND LENGTH SPECIFIED BY THE ROADWAY PLANS. PLACE RIP-RAP AT THE END OF THE DITCH AS INDICATED BY STD. DWG. 876.02 FOR AN 18" PIPE.
 - MODIFICATIONS MAY BE MADE AS DIRECTED BY THE ENGINEER.

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**CONCRETE FLUME
IN 2'-0" C&G**

ORIGINAL BY: _____	DATE: _____
MODIFIED BY: nbritt	DATE: 05-11-04
CHECKED BY: _____	DATE: _____
FILE SPEC.: details\nbritt\metricr2201modifiedflume.dgn	



GENERAL NOTES:

USE CLASS "B" CONCRETE THROUGHOUT.

PROVIDE ALL DROP INLETS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66.

OPTIONAL CONSTRUCTION - MONOLITHIC POUR 2" KEYWAY OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.

USE FORMS FOR THE CONSTRUCTION OF THE BOTTOM SLAB.

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLAB AS SHOWN ON STD. NO. 840.00.

CONSTRUCT WITH PIPE CROWNS MATCHING.

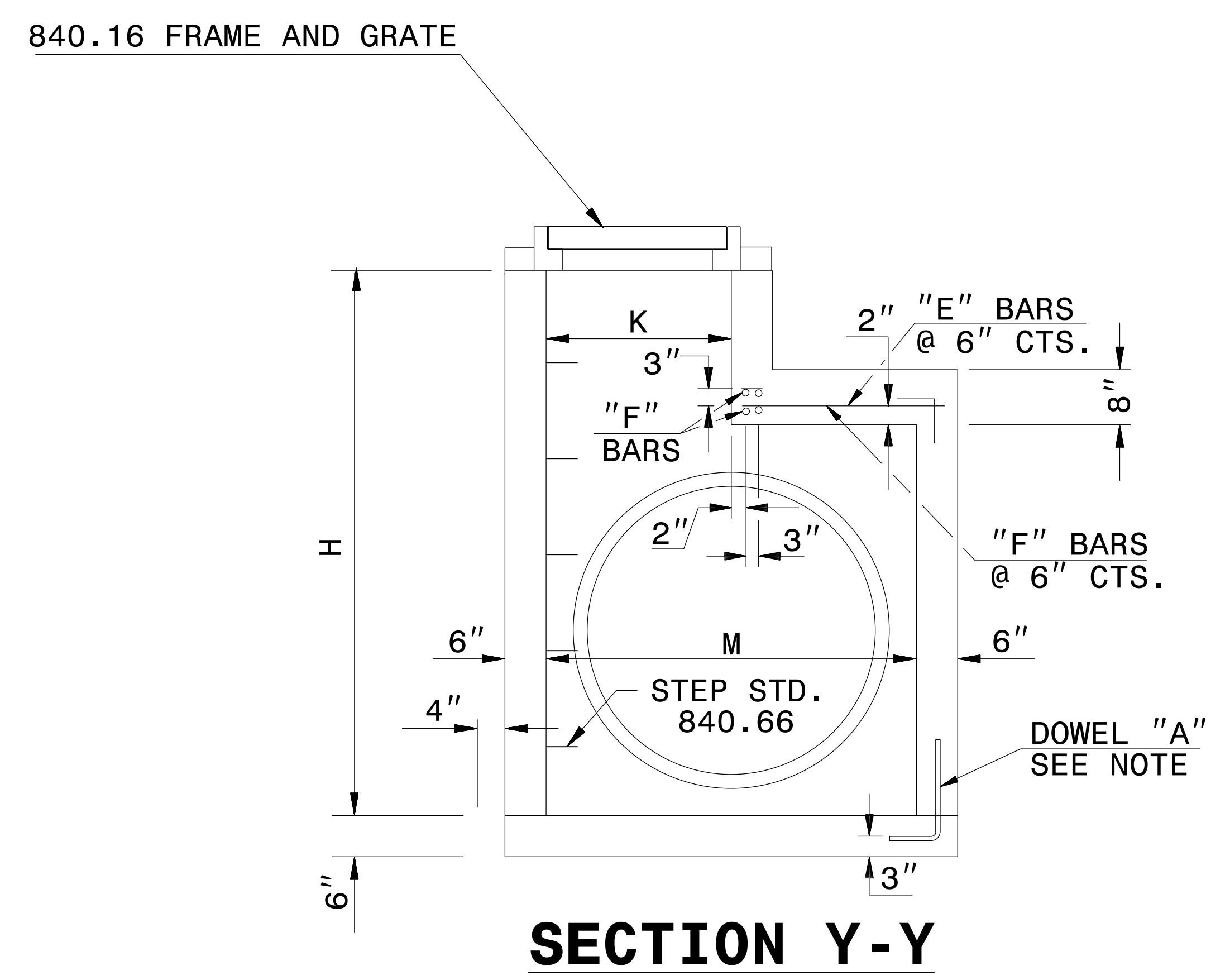
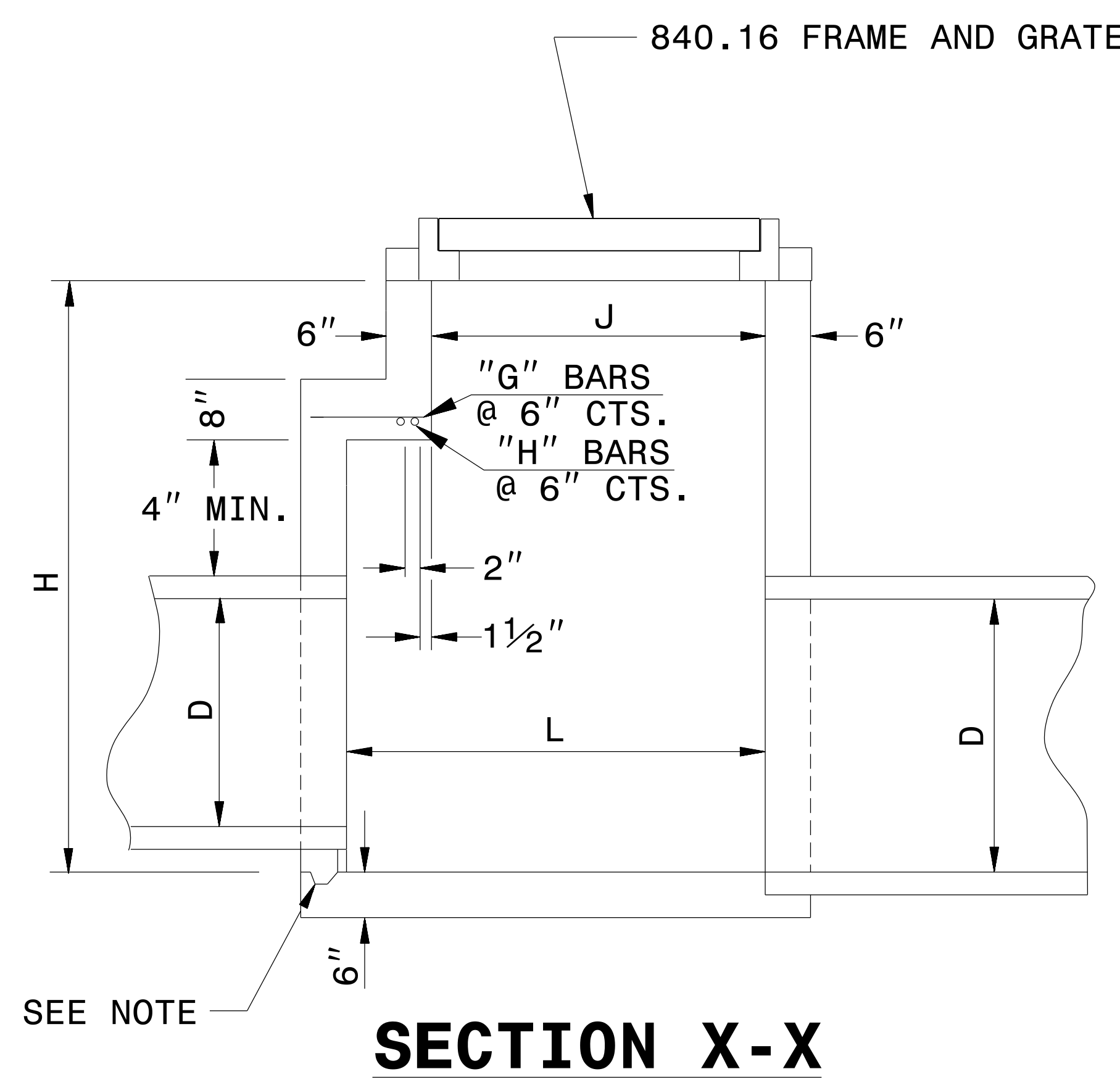
INSTALL 2" WEEPHOLES AS DIRECTED BY THE ENGINEER.

INSTALL STONE DRAINS, OF A MINIMUM OF 1 CUBIC FOOT OF NO. 78M STONE IN A POROUS FABRIC BAG OR WRAP, AT EACH WEEP HOLE OR AS DIRECTED BY THE ENGINEER.

CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

DIMENSIONS MAY BE FIELD ADJUSTED AS DIRECTED BY THE ENGINEER.



MIN. DIMENSIONS AND QUANTITIES FOR CONCRETE DROP INLET (BASED ON MIN. HEIGHT, H)

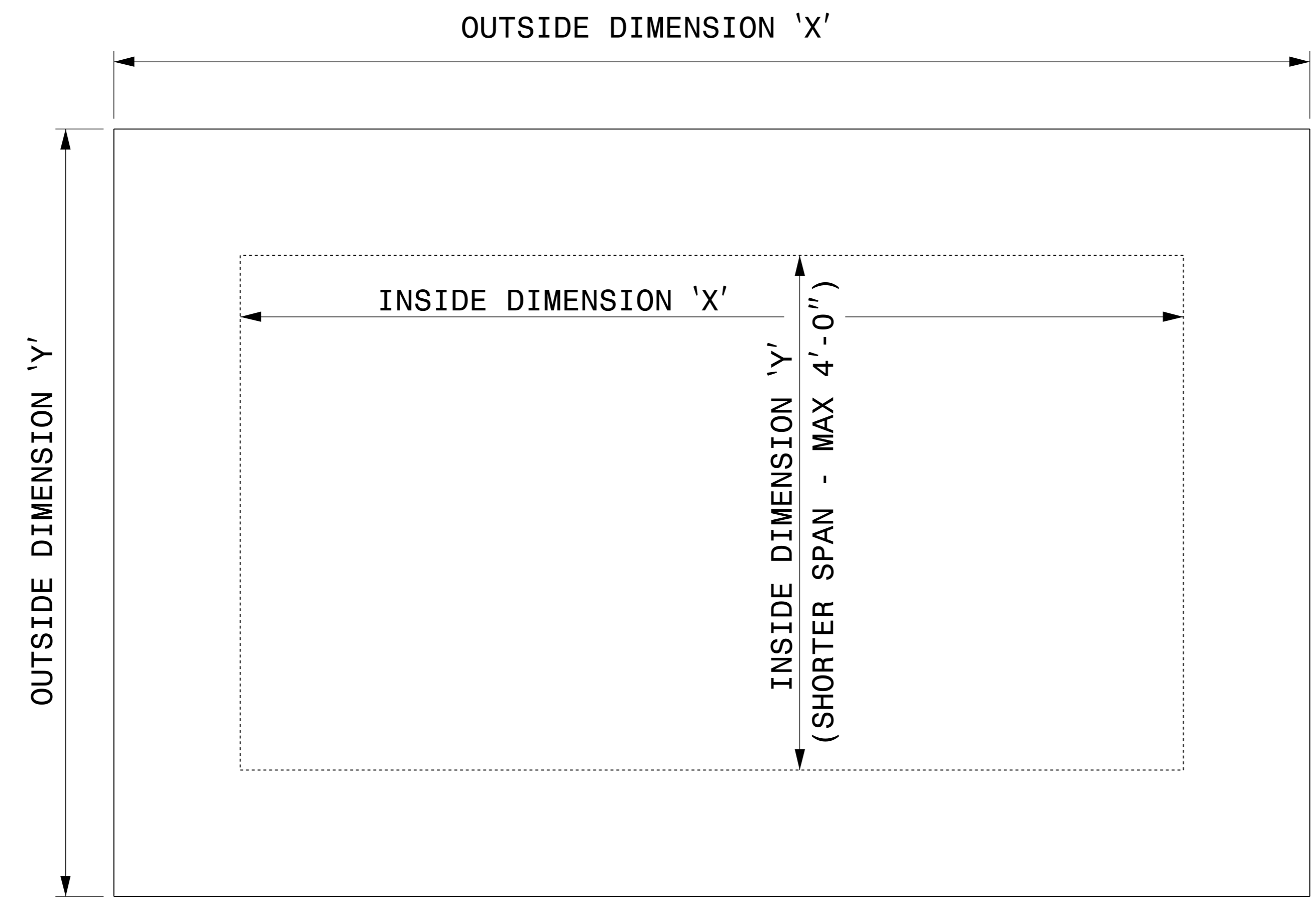
DIMENSIONS OF BOX AND PIPE						REINFORCING STEEL - NO. 4 BARS								CU YDS CONC. IN BOX				DEDUCTIONS FOR ONE PIPE		
PIPE D	SPAN J	WIDTH K	SPAN L	WIDTH M	HEIGHT H	BARS E		BARS F		BARS G		BARS H		TOTAL LBS.	BOTTOM SLAB	H TOTAL	H PER FT HT	TOTAL	C.S.	R.C.
12"	3'-0"	2'-0"	3'-8"	2'-0"	3'-9"	—	—	—	—	—	—	—	—	—	0.362	0.926	0.247	1.288	0.015	0.024
15"	3'-0"	2'-0"	3'-8"	2'-0"	4'-0"	—	—	—	—	—	—	—	—	—	0.362	0.988	0.247	1.350	0.023	0.036
18"	↗	↗	↗	2'-0"	4'-3"	—	—	—	—	—	—	—	—	—	0.362	1.050	0.247	1.412	0.033	0.049
24"	↗	↗	↗	2'-10"	4'-9"	8	1'-5"	6	4'-9"	—	—	—	—	27	0.444	1.362	0.278	1.806	0.059	0.085
30"	↗	↗	↗	3'-8"	3'-5"	8	2'-0"	7	4'-9"	—	—	—	—	33	0.502	1.644	0.288	2.146	0.092	0.127
36"	↗	↗	↗	4'-0"	4'-0"	8	2'-5"	8	4'-11"	4	0'-9"	2	4'-11"	47	0.560	1.931	0.321	2.491	0.132	0.178
42"	↗	↗	↗	4'-10"	4'-10"	10	3'-1"	9	5'-7"	↗	1'-5"	3	5'-7"	67	0.704	2.500	0.370	3.204	0.180	0.243
48"	↗	↗	↗	5'-4"	5'-4"	11	3'-7"	10	6'-1"	↗	1'-11"	4	6'-1"	87	0.823	3.013	0.407	3.836	0.235	0.317
54"	↗	↗	↗	6'-0"	6'-0"	12	4'-1"	11	6'-7"	↗	2'-5"	5	6'-7"	107	0.951	3.589	0.444	4.540	0.297	0.401
60"	↗	↗	↗	6'-6"	6'-6"	13	4'-9"	12	7'-3"	↗	3'-1"	6	7'-3"	135	1.311	4.539	0.494	5.850	0.367	0.495
66"	↗	↗	↗	7'-2"	7'-2"	14	5'-4"	14	7'-10"	↗	3'-7"	7	7'-10"	168	1.136	5.061	0.537	6.197	0.444	0.599
72"	3'-0"	2'-0"	7'-8"	7'-8"	8'-9"	15	5'-11"	15	8'-5"	4	4'-3"	8	8'-5"	199	1.500	5.860	0.580	7.360	0.528	0.713
78"	3'-0"	2'-0"	8'-2"	8'-2"	9'-3"	16	6'-6"	16	8'-11"	4	4'-9"	9	8'-11"	199	1.723	6.610	0.627	9.333	0.615	0.892



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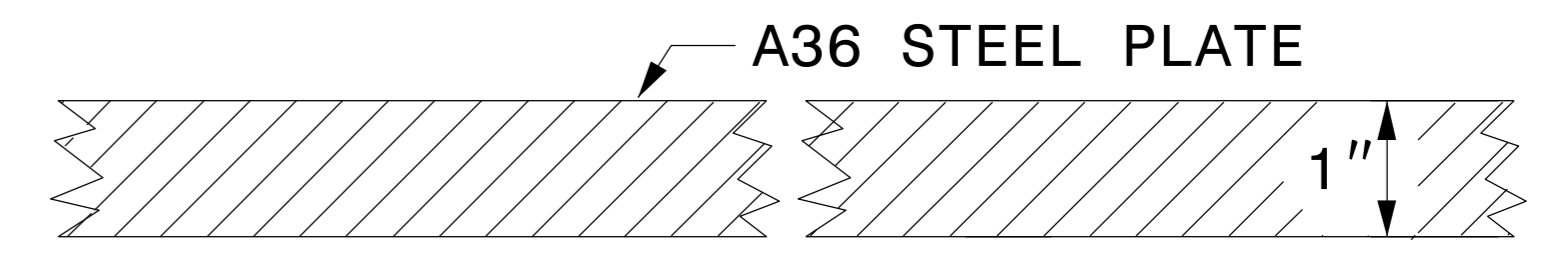
SPECIAL DI

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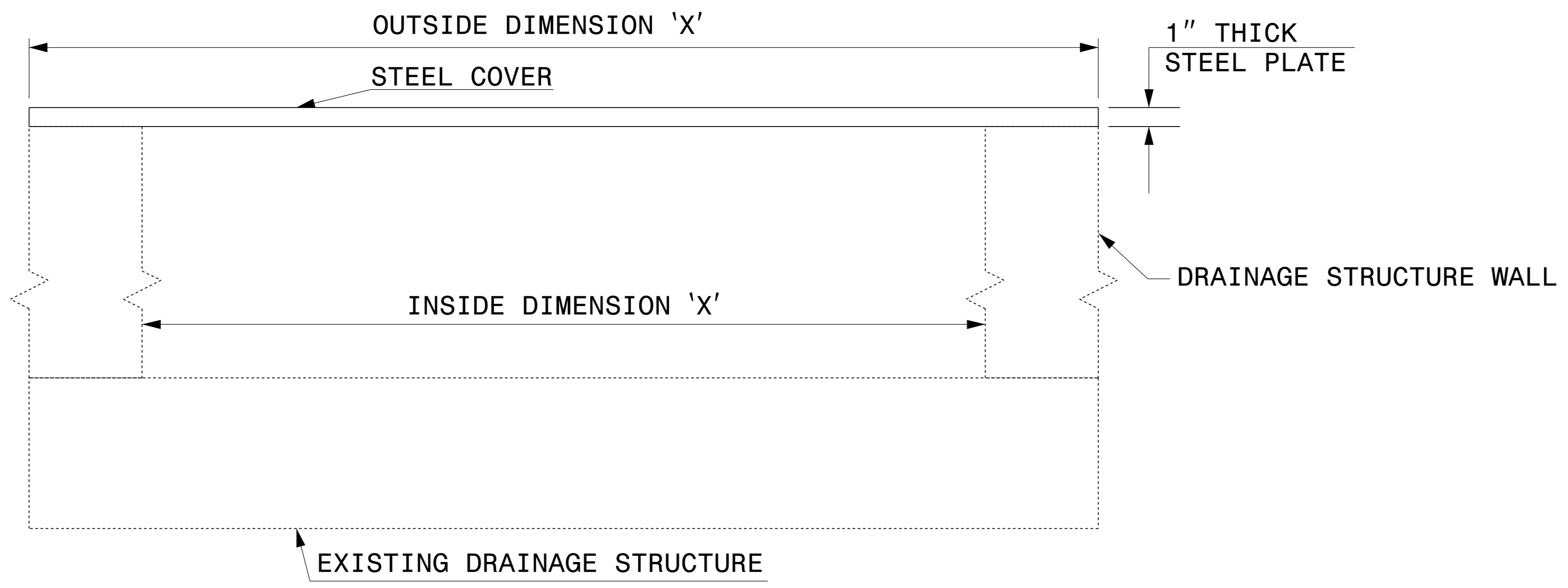
GENERAL NOTES:

- USE GRADE A36 STEEL
- STEEL COVERS ARE FOR TEMPORARY USE DURING PHASE CONSTRUCTION.
- FILL SHALL BE PLACED DIRECTLY OVER THE STEEL PLATES.
- SEE ROADWAY PLANS AND PROVISIONS FOR LOCATIONS
- QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.

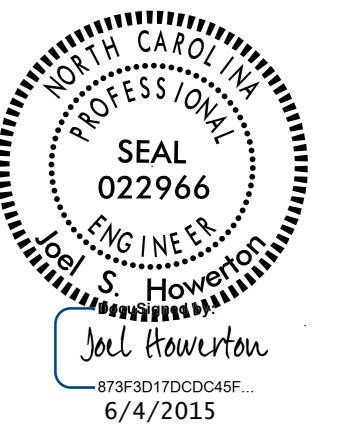


SECTION VIEW OF STEEL TOP PLATE

PLAN VIEWS



ELEVATION VIEWS

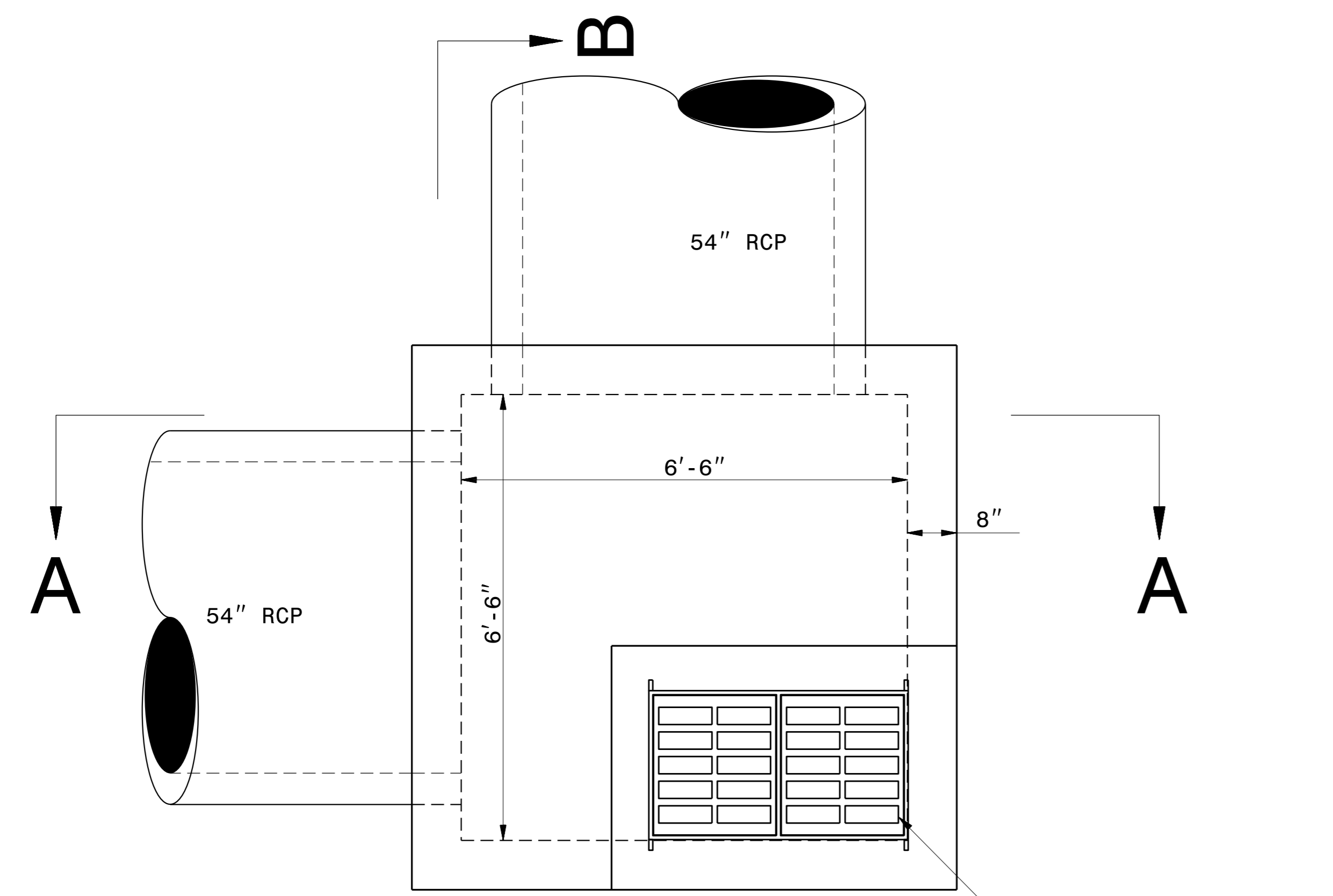


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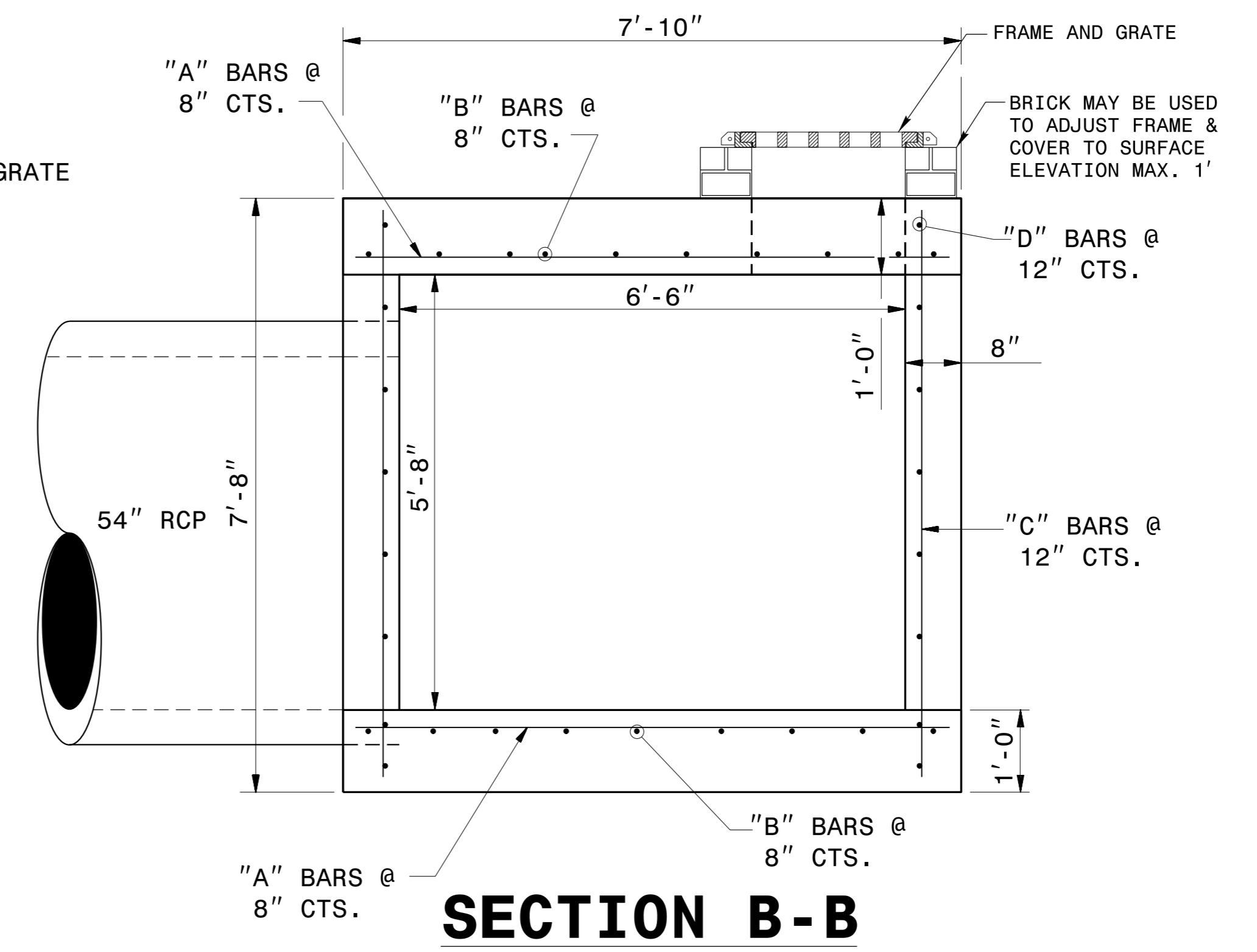
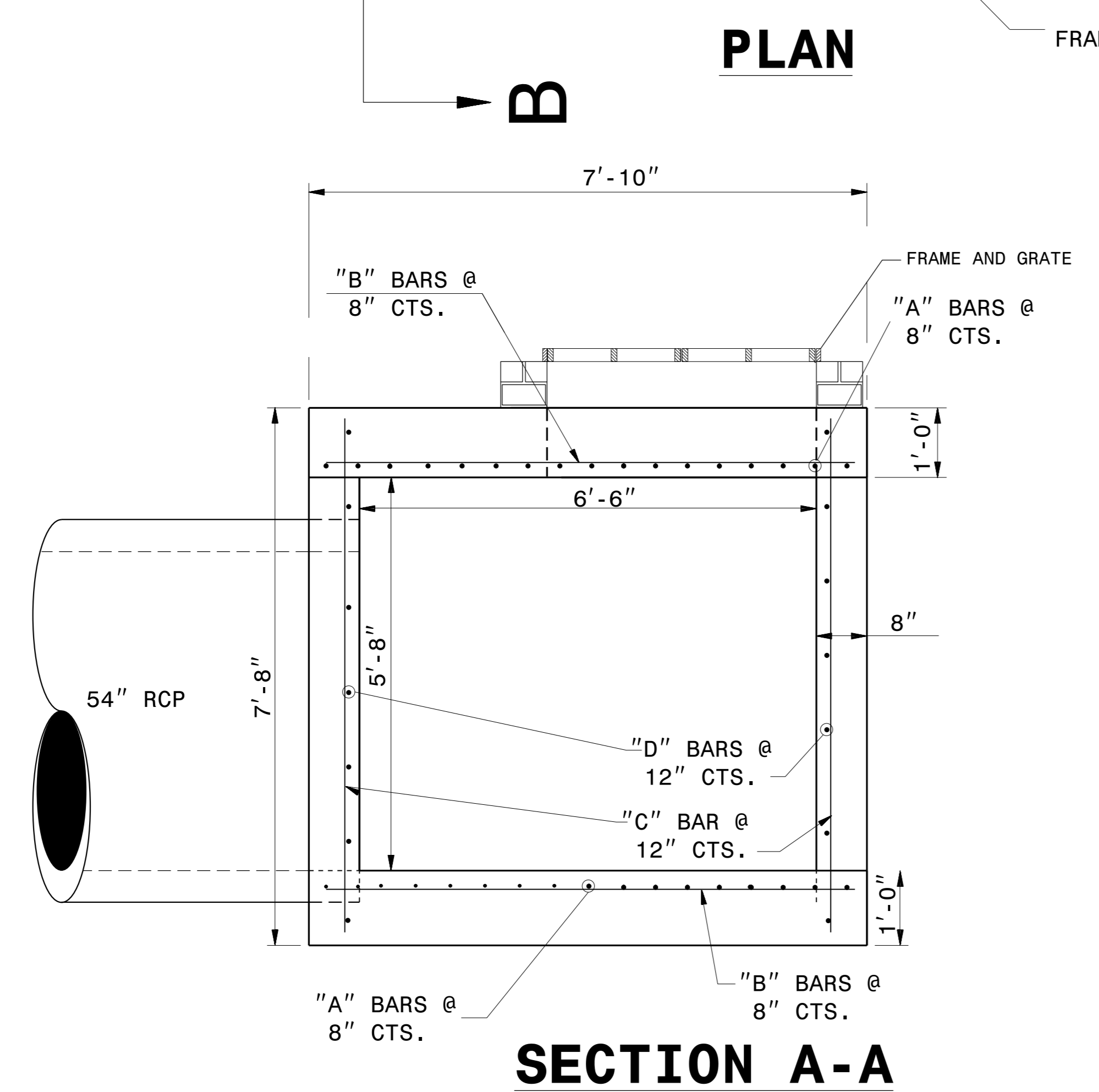
DETAIL OF TEMPORARY 1" STEEL COVER OVER DRAINAGE STRUCTURE

ORIGINAL BY: E.E. WARD DATE: 2-2-98
 MODIFIED BY: DATE:
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 FILE SPEC.: eric:/usr/details/metric/stand/st1cvr2.dgn

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- NOTES:**
1. PAY FOR QUANTITIES AT THE UNIT PRICE BID PER EACH.
 2. USE CLASS "AA" CONCRETE THROUGHOUT.
 3. CONSTRUCT CONCRETE BOX IN ACCORDADANCE WITH SECTION 825 OF THE STANDARD SPECIFICATIONS.
 4. CONSTRUCT BOTTOM SLAB WITH FORMS.
 5. ADJUST LENGTH OF STEEL BARS AS NEEDED TO COMPENSATE FOR PIPES.
 6. CONFORM REINFORCING STEEL TO ASTM A 615, GRADE 400.
 7. CUT OR BEND STEEL BARS AS NEEDED TO PROVIDE 2" CLEARANCE AROUND PIPES OR AS DIRECTED BY THE ENGINEER.



BRICK RISER

BILL OF MATERIALS				
BAR	QTY	SIZE	LENGTH	WEIGHT
A	24	#5	7'-6"	188
B	24	#5	7'-6"	188
C	36	#5	7'-4"	276
D	36	#5	7'-6"	282
TOTAL REINF. STEEL (LBS.)				934
TOTAL CONC. - CU.YDS.				8.6

NO DEDUCTIONS HAVE BEEN MADE TO ACCOMMODATE PIPES.

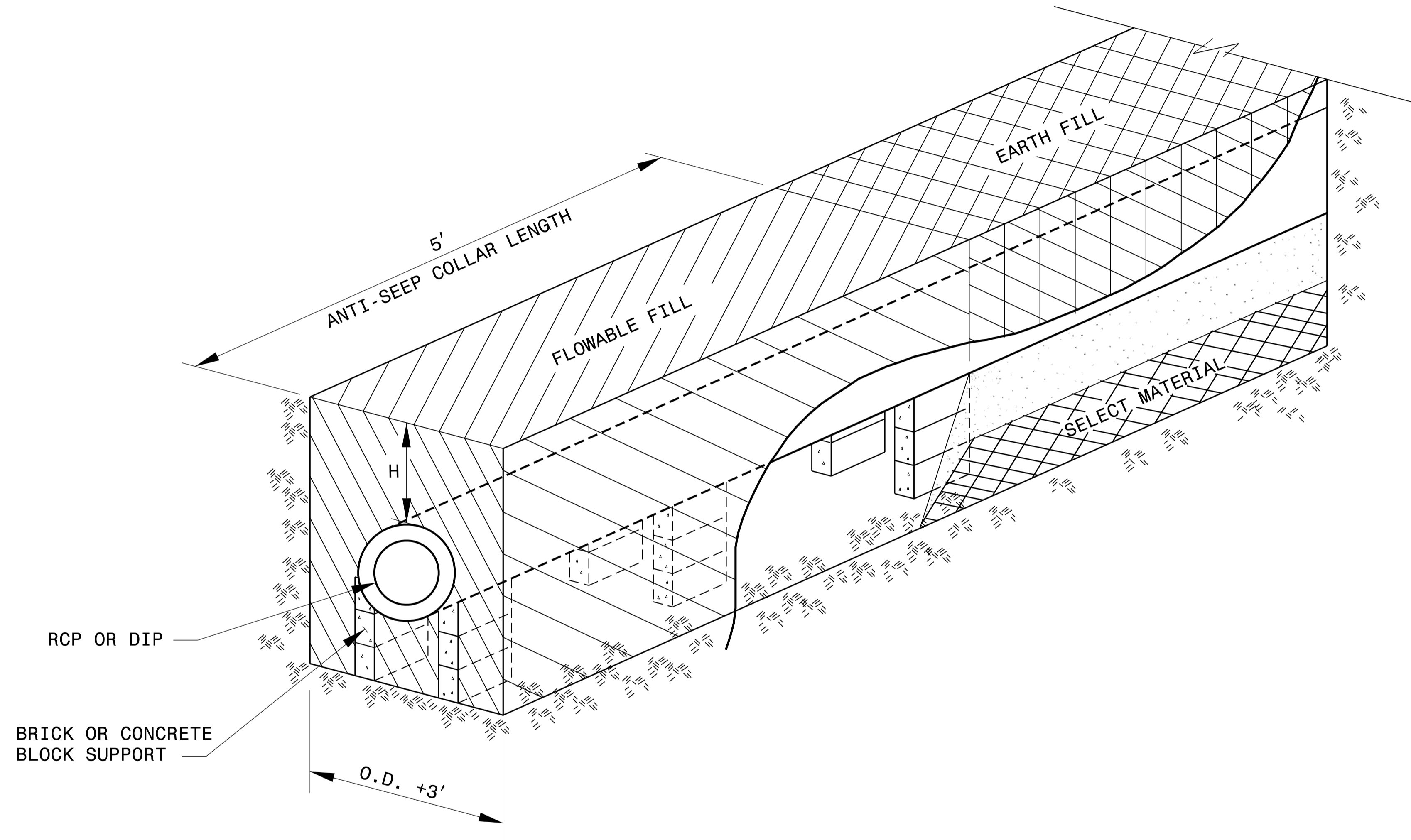


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TRAFFIC BEARING 2-GI

ORIGINAL BY: rnbritt DATE: 10-11-04
 MODIFIED BY: T.Spell DATE: 5-9-05
 CHECKED BY: _____ DATE: _____
 FILE SPEC.: detail/nbritt/english/rural/u3315_tbjb & tbdj.dgn

10/11/04
 5/9/05
 6/4/2015



ANTI-SEEP COLLAR

NOTES:

ANTI-SEEP COLLAR LENGTH ALONG PIPE IS 5 FEET, CONSTRUCTED OF 35 PSI FLOWABLE FILL.

H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

SEE ROADWAY STANDARD DRAWING NO.300.01, 1 OF 3, NCDOT, JANUARY 2012 FOR UNSUITABLE MATERIAL FOUNDATION.



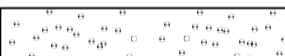
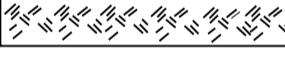
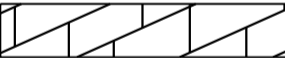

DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.

I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.

RCP = REINFORCED CONCRETE PIPE.

DIP = DUCTILE IRON PIPE.

-  FLOWABLE FILL MATERIAL.
-  SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH ENGINEERING FABRIC AS DIRECTED BY THE ENGINEER.
-  LOOSELY PLACED SELECT MATERIAL, CLASS III OR CLASS II, TYPE I FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.
-  UNDISTURBED EARTH MATERIAL.
-  BRICK OR CONCRETE BLOCK SUPPORT
-  EARTH MATERIAL



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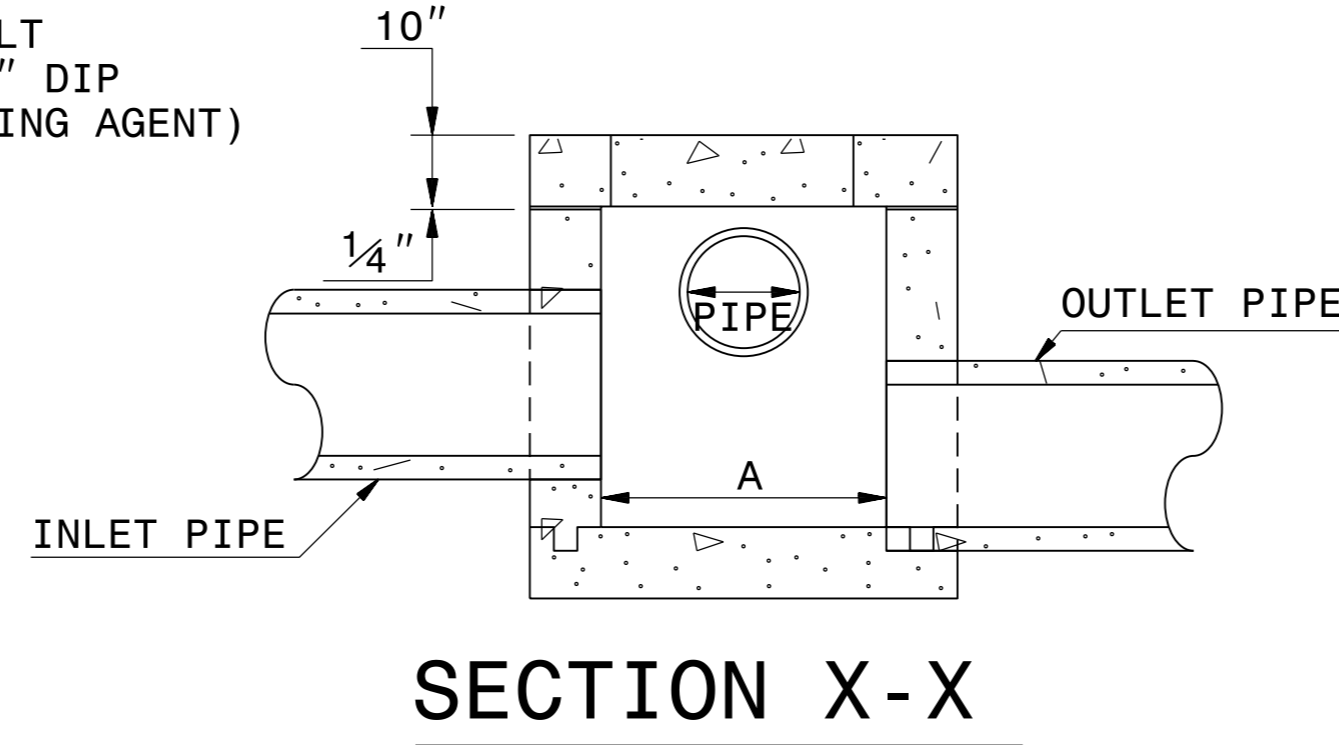
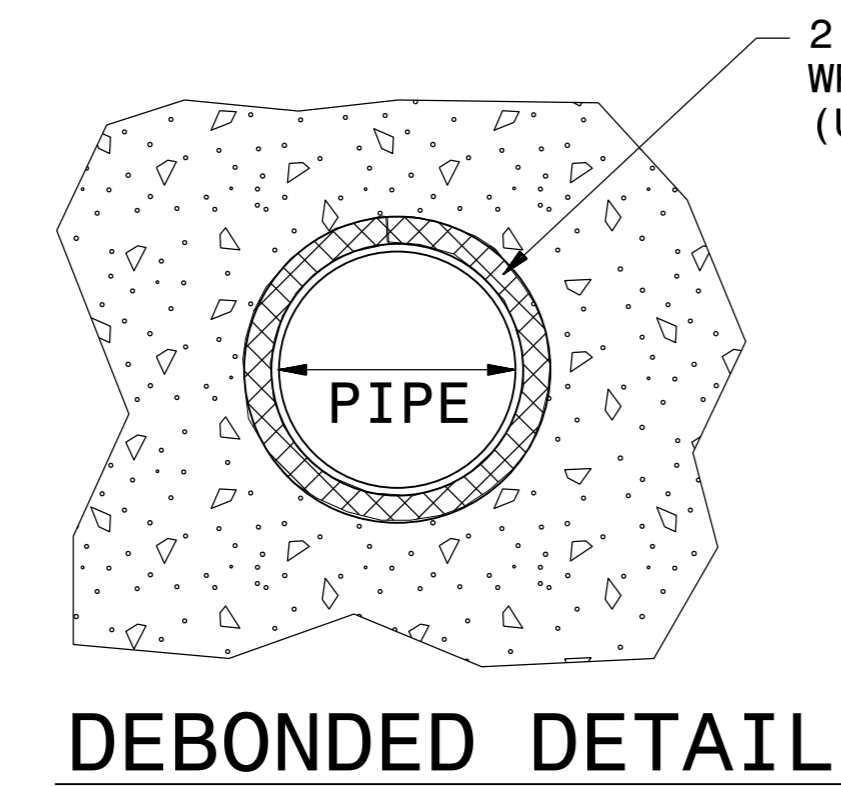
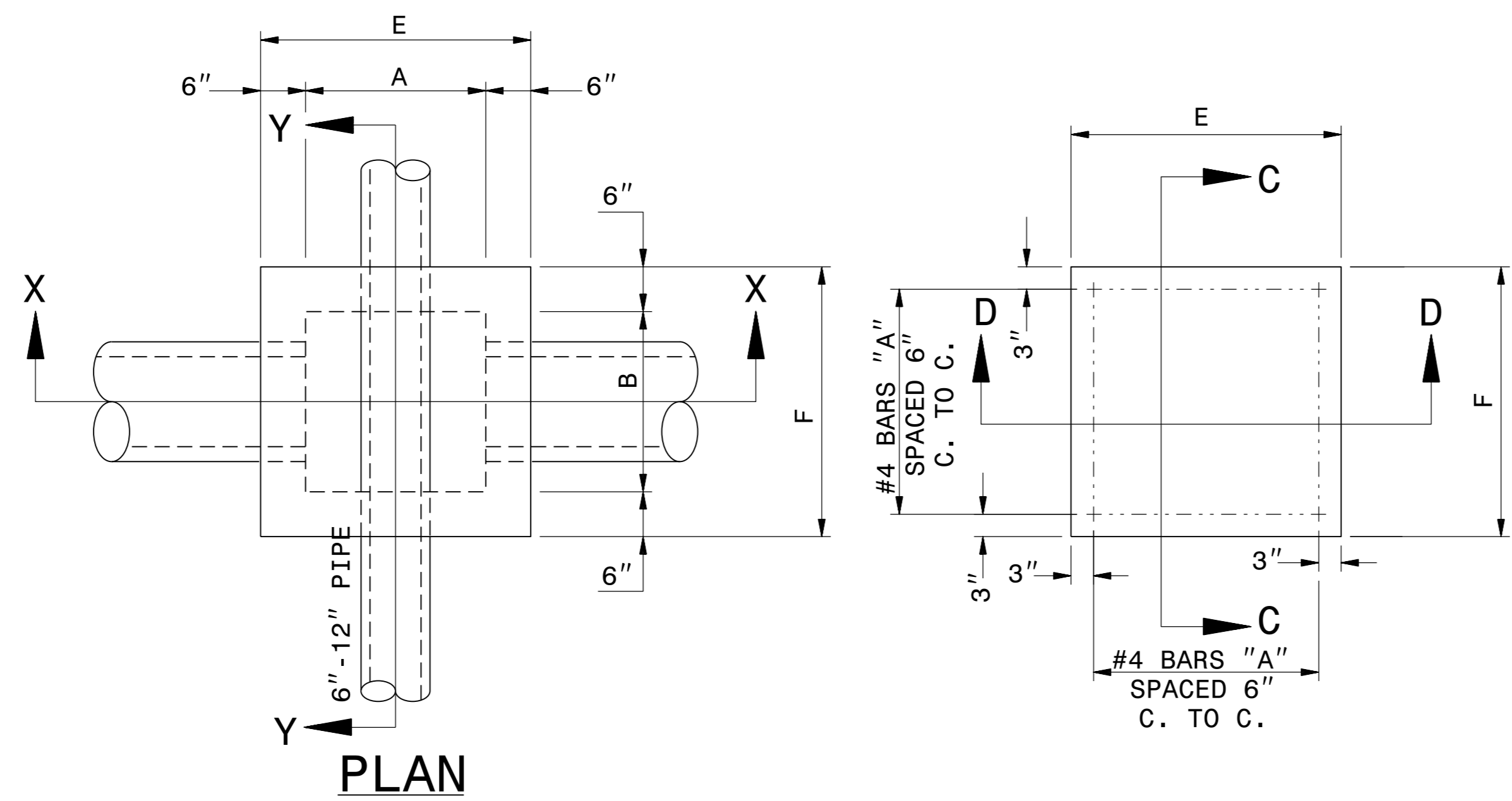
ANTI-SEEP COLLAR

ORIGINAL BY: _____ DATE: _____
 MODIFIED BY: rnbritt DATE: 05-15-15
 CHECKED BY: _____ DATE: _____
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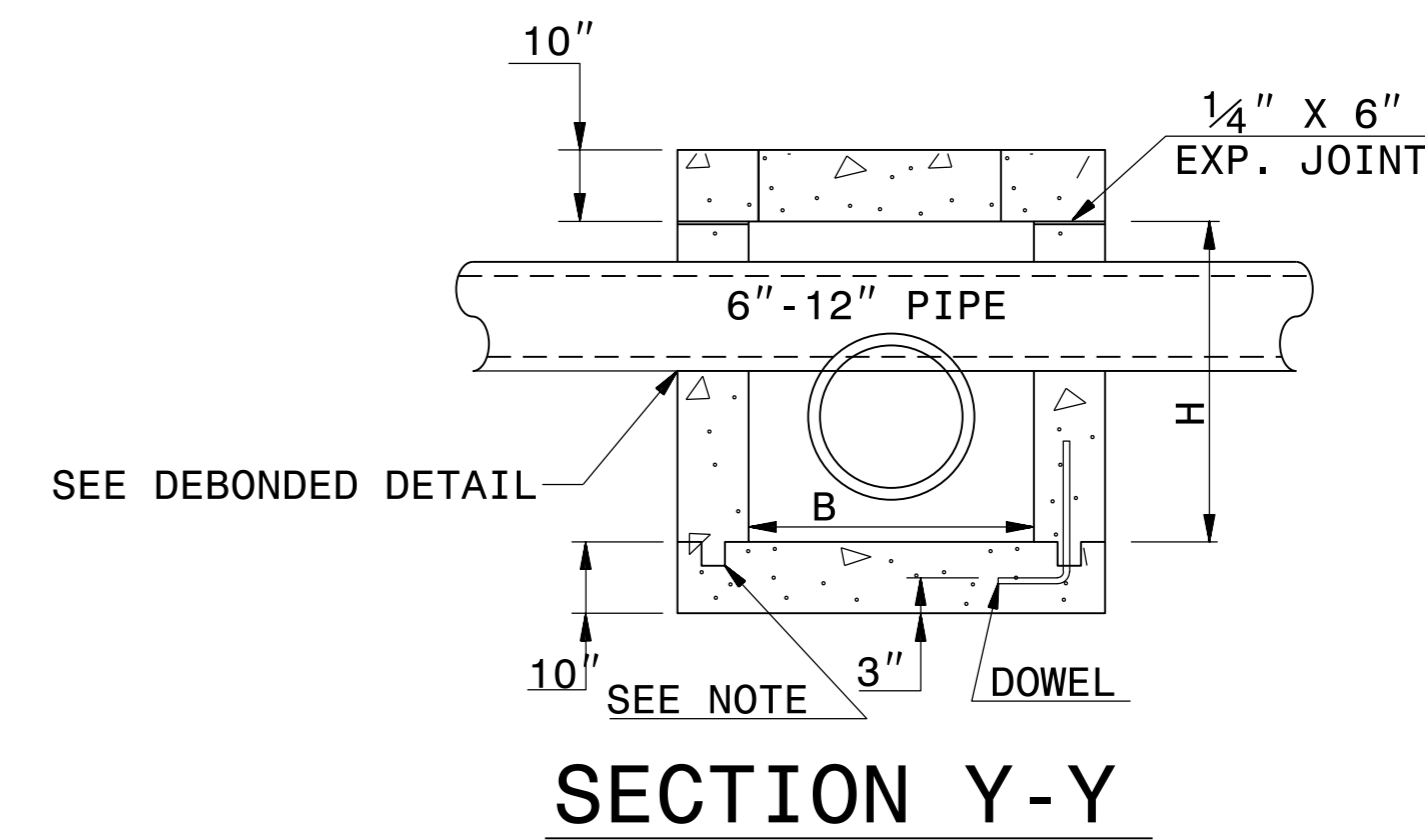
STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**CONCRETE JUNCTION BOX WITH
6" - 12" UTILITY PIPE PASSING THRU
12" THRU 66" PIPE**

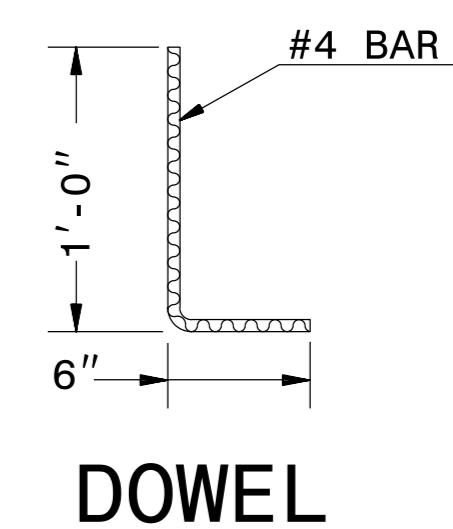
SHEET 1 OF 1
840D31



GENERAL NOTES:
USE CLASS "B" CONCRETE THROUGHOUT.
OPTIONAL CONSTRUCTION - MONOLITHIC POUR, 2" KEYWAY, OR #4 BAR DOWELS AT 12" CENTERS AS DIRECTED BY THE ENGINEER.
USE FORMS TO CONSTRUCT THE BOTTOM SLAB.
IF REINFORCED CONCRETE PIPE IS SET IN BASE SLAB OF BOX, ADD TO BASE AS SHOWN ON STANDARD NO. 840.00.
REFER TO R.S.D.N. 840.31 FOR PLACEMENT OF MANHOLE COVER IN JUNCTION BOX.



DIMENSIONS AND QUANTITIES FOR CONCRETE JUNCTION BOXES														
DIMENSIONS OF BOX AND PIPE				REINFORCEMENT BARS "A"		COVER DIMENSIONS		CUBIC YARDS IN BOX			TOTAL QUANTITIES BOX AND COVER		DEDUCTIONS FOR ONE PIPE CU.YDS.	
PIPE	SPAN	WIDTH	HEIGHT	NO.	LENGTH	E	F	COVER	FLOOR	WALL/ FT. OF HT.	LBS. REINF.	CU. YDS. MIN. "H"	C.S.	R.C.
12"	2'-0"	2'-0"	2'-3"	12	2'-9"	3'-0"	3'-0"	0.222	0.222	0.185	22	0.750	0.015	0.024
15"	2'-3"	2'-3"	2'-6"	12	3'-0"	3'-3"	3'-3"	0.261	0.261	0.204	24	0.902	0.023	0.036
18"	2'-6"	2'-6"	2'-9"	14	3'-3"	3'-6"	3'-6"	0.302	0.302	0.222	30	1.065	0.033	0.049
24"	3'-0"	3'-0"	3'-3"	16	3'-9"	4'-0"	4'-0"	0.395	0.395	0.259	40	1.434	0.059	0.091
30"	3'-6"	3'-6"	3'-9"	18	4'-3"	4'-6"	4'-6"	0.500	0.500	0.296	51	1.860	0.092	0.138
36"	4'-0"	4'-0"	4'-3"	20	4'-9"	5'-0"	5'-0"	0.617	0.617	0.333	64	2.341	0.132	0.196
42"	4'-6"	4'-6"	4'-9"	22	5'-3"	5'-6"	5'-6"	0.747	0.747	0.370	77	2.878	0.180	0.284
48"	5'-0"	5'-0"	5'-3"	24	5'-9"	6'-0"	6'-0"	0.889	0.889	0.407	92	3.471	0.235	0.364
54"	5'-6"	5'-6"	5'-9"	26	6'-3"	6'-6"	6'-6"	1.043	1.043	0.444	109	4.283	0.297	0.440
60"	6'-0"	6'-0"	6'-3"	28	6'-9"	7'-0"	7'-0"	1.210	1.210	0.481	127	5.090	0.367	0.546
66"	6'-6"	6'-6"	6'-9"	30	7'-3"	7'-6"	7'-6"	1.389	1.389	0.518	146	5.917	0.444	0.655



STATE OF NORTH CAROLINA
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RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR
**CONCRETE JUNCTION BOX WITH
6" - 12" UTILITY PIPE PASSING THRU
12" THRU 66" PIPE**

SHEET 1 OF 1
840D31

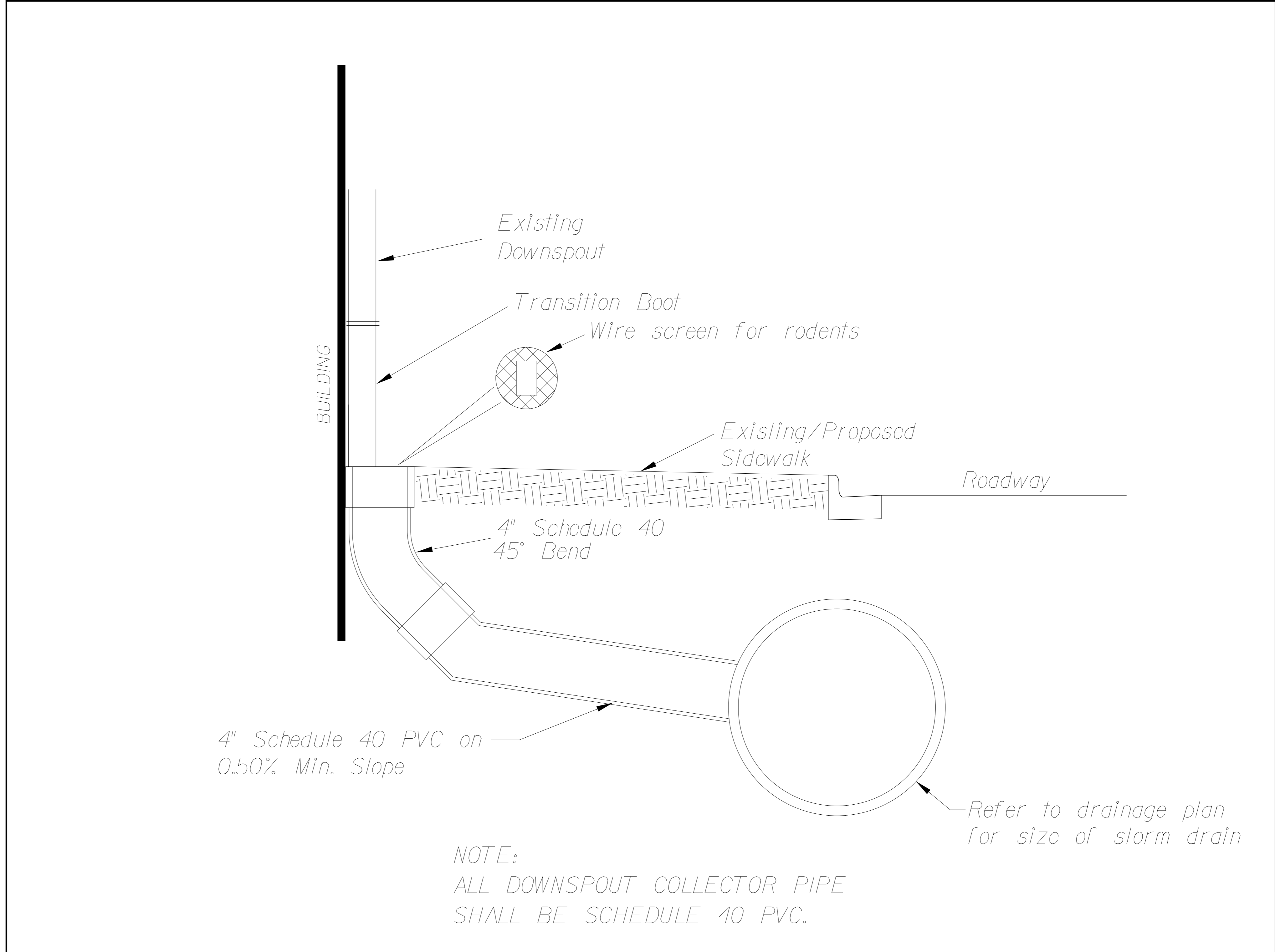
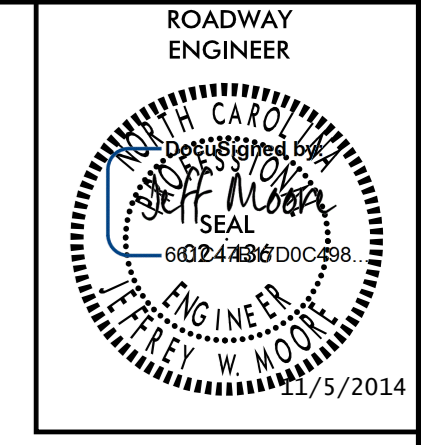


CONTRACT STANDARDS AND DEVELOPMENT UNIT
Office 919-707-6950 FAX 919-250-4119

SEE PLATE FOR TITLE

ORIGINAL BY: E.E. WARD DATE: 3-12-98
MODIFIED BY: DATE: _____
CHECKED BY: DATE: _____
FILE SPEC.:usr/details/stand/conflict_box.dgn

5/14/99
C:\TIME\SS\CONFLICT\CONFLICT_BOX.DGN
\$\$\$\$\$USER\$\$\$\$\$



ROOF DRAIN SYSTEM (STORMDRAIN TIE)

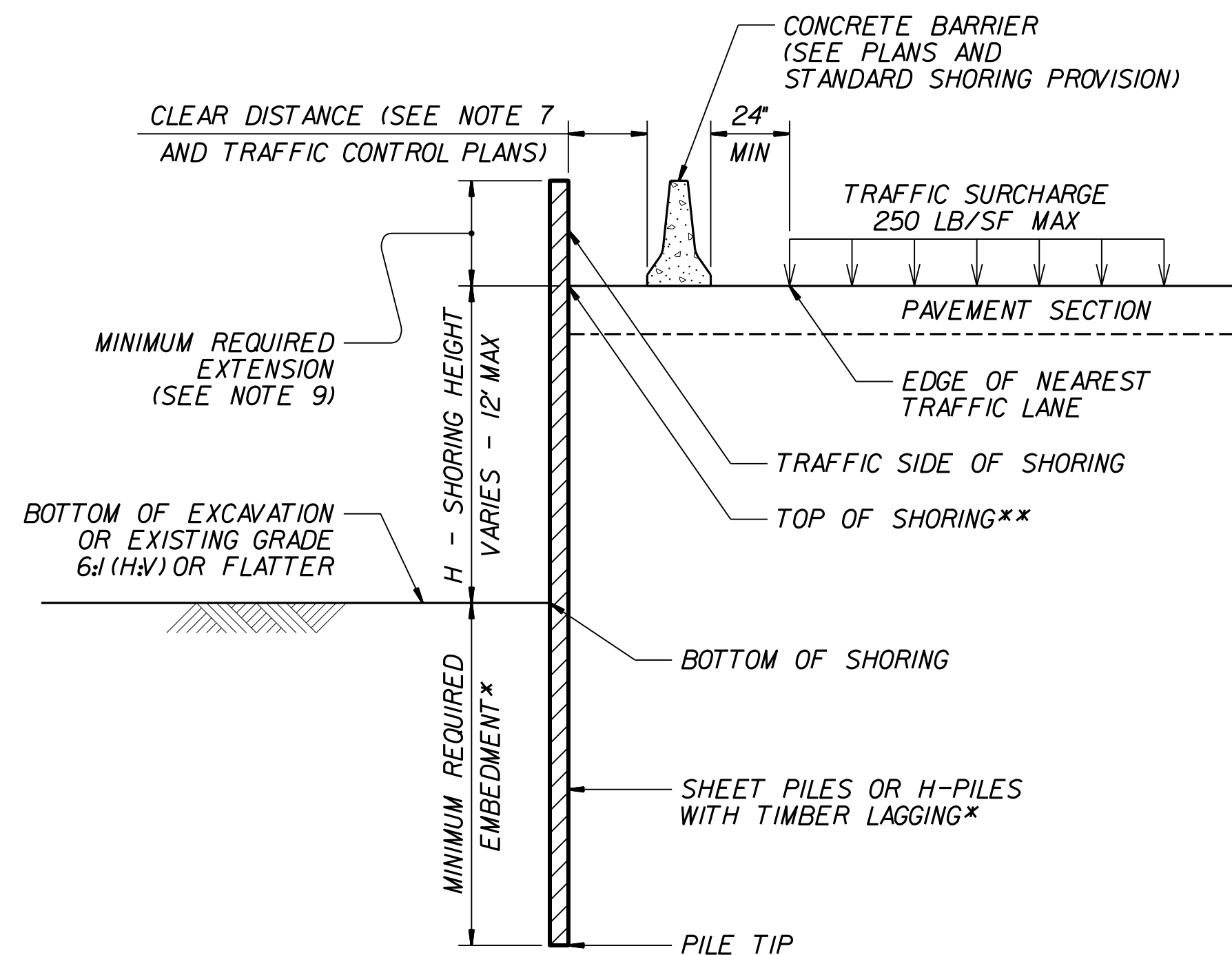
GROUNDWATER CONDITION (SEE NOTE 6)	H SHORING HEIGHT (FT)	SLOPE OR SURCHARGE CASE WITH NO TRAFFIC IMPACT					SURCHARGE CASE WITH TRAFFIC IMPACT				
		SHEET PILES		H-PILES WITH TIMBER LAGGING			SHEET PILES		H-PILES WITH TIMBER LAGGING		
		MINIMUM REQUIRED EMBEDMENT (FT)	MINIMUM REQUIRED SECTION MODULUS (IN ³ /FT)	MINIMUM REQUIRED EMBEDMENT* (FT) (SEE NOTE 10)			MINIMUM REQUIRED EMBEDMENT (FT)	MINIMUM REQUIRED SECTION MODULUS (IN ³ /FT)	MINIMUM REQUIRED EMBEDMENT* (FT) (SEE NOTE 10)		
			HP 10x42	HP 12x53	HP 14x73			HP 10x42	HP 12x53	HP 14x73	
GROUNDWATER ELEVATION BETWEEN BOTTOM OF SHORING AND PILE TIP	< 6	11.5	4.5	11.5	11.5	11.5	16.0	12.0	13.0	13.0	13.0
	7	13.0	7.0	13.0	13.0	13.0	17.0	14.5	14.5	14.5	14.5
	8	15.0	10.0	--	15.0	15.0	18.0	17.0	--	15.5	15.5
	9	17.0	14.0	--	17.0	17.0	19.0	20.0	--	17.0	17.0
	10	18.5	19.5	--	--	18.5	20.0	23.5	--	--	18.5
	11	20.5	26.0	--	--	--	21.0	28.0	--	--	20.0
12	22.5	33.0	--	--	--	22.0	33.0	--	--	21.5	
GROUNDWATER ELEVATION BELOW PILE TIP	< 6	7.5	3.0	8.0	8.0	8.0	11.0	10.0	9.5	9.5	9.5
	7	8.5	4.5	9.5	9.5	9.5	12.0	12.0	10.5	10.5	10.5
	8	10.0	6.5	10.5	10.5	10.5	12.5	14.0	11.5	11.5	11.5
	9	11.0	9.5	--	12.0	12.0	13.5	16.5	--	12.5	12.5
	10	12.5	13.0	--	--	13.5	14.0	19.5	--	13.5	13.5
	11	13.5	17.0	--	--	14.5	15.0	22.5	--	--	14.5
12	15.0	21.5	--	--	16.0	16.0	25.5	--	--	15.5	

NOTES:

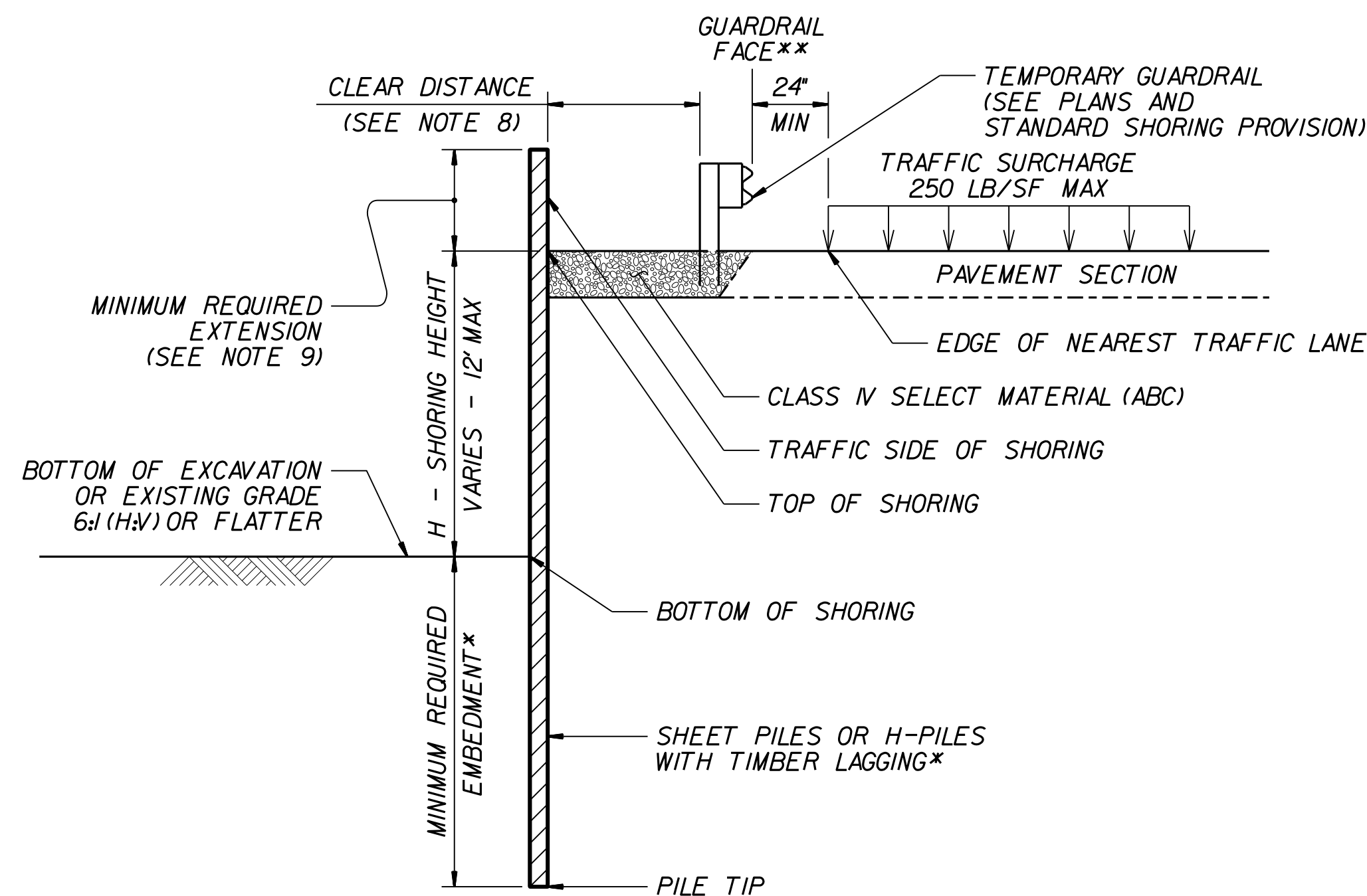
- AT THE CONTRACTOR'S OPTION, USE STANDARD TEMPORARY SHORING AS NOTED IN THE PLANS.
- FOR STANDARD TEMPORARY SHORING, SEE STANDARD SHORING PROVISION.
- STANDARD TEMPORARY SHORING IS BASED ON THE FOLLOWING IN-SITU ASSUMED SOIL PARAMETERS:
 UNIT WEIGHT, $\gamma = 120$ LB/CF
 FRICTION ANGLE, $\phi = 30$ DEGREES
 COHESION, $c = 0$ LB/SF
- DO NOT USE STANDARD TEMPORARY SHORING IF ASSUMED SOIL PARAMETERS ARE NOT APPLICABLE.
- DO NOT USE STANDARD TEMPORARY SHORING WHEN VERY LOOSE OR SOFT SOIL OR MUCK IS WITHIN THE EMBEDMENT DEPTH.
- USE GROUNDWATER ELEVATION NOTED IN THE PLANS. IF NO GROUNDWATER ELEVATION IS SHOWN IN THE PLANS, USE "GROUNDWATER ELEVATION BETWEEN BOTTOM OF SHORING AND PILE TIP" FOR GROUNDWATER CONDITION. DO NOT USE STANDARD TEMPORARY SHORING IF GROUNDWATER IS ABOVE BOTTOM OF SHORING.
- AT THE CONTRACTOR'S OPTION OR IF AVAILABLE CLEAR DISTANCE IS LESS THAN THE MINIMUM REQUIRED FOR CONCRETE BARRIER, SET BARRIER NEXT TO AND UP AGAINST TRAFFIC SIDE OF PILES AND USE "SURCHARGE CASE WITH TRAFFIC IMPACT".
- AT THE CONTRACTOR'S OPTION OR IF AVAILABLE CLEAR DISTANCE IS LESS THAN 4' FOR TEMPORARY GUARDRAIL, ATTACH GUARDRAIL TO TRAFFIC SIDE OF PILES AS SHOWN IN THE PLANS AND USE "SURCHARGE CASE WITH TRAFFIC IMPACT".
- MINIMUM REQUIRED EXTENSION IS 6' FOR "SLOPE OR SURCHARGE CASE WITH NO TRAFFIC IMPACT" AND 32' FOR "SURCHARGE CASE WITH TRAFFIC IMPACT".
- MINIMUM REQUIRED EMBEDMENT FOR H-PILES WITH TIMBER LAGGING IS BASED ON DRIVEN H-PILES AT MAXIMUM 6' SPACING. AT THE CONTRACTOR'S OPTION, EMBEDMENT DEPTHS MAY BE REDUCED BY 25% FOR DRILLED-IN H-PILES.
- SUBMIT A "STANDARD TEMPORARY SHORING SELECTION FORM" AT LEAST 7 DAYS BEFORE STARTING TEMPORARY SHORING CONSTRUCTION. UP TO 3 SHORING LOCATIONS MAY BE INCLUDED ON EACH FORM. STANDARD SHORING SELECTION FORMS ARE AVAILABLE FROM:
connect.ncdot.gov/resources/Geological/Pages/Geotech_Forms_Details.aspx
- CONTACT THE ENGINEER IF PILES DO NOT ATTAIN THE MINIMUM REQUIRED EMBEDMENT.

MINIMUM REQUIRED EMBEDMENT AND SECTION MODULUS

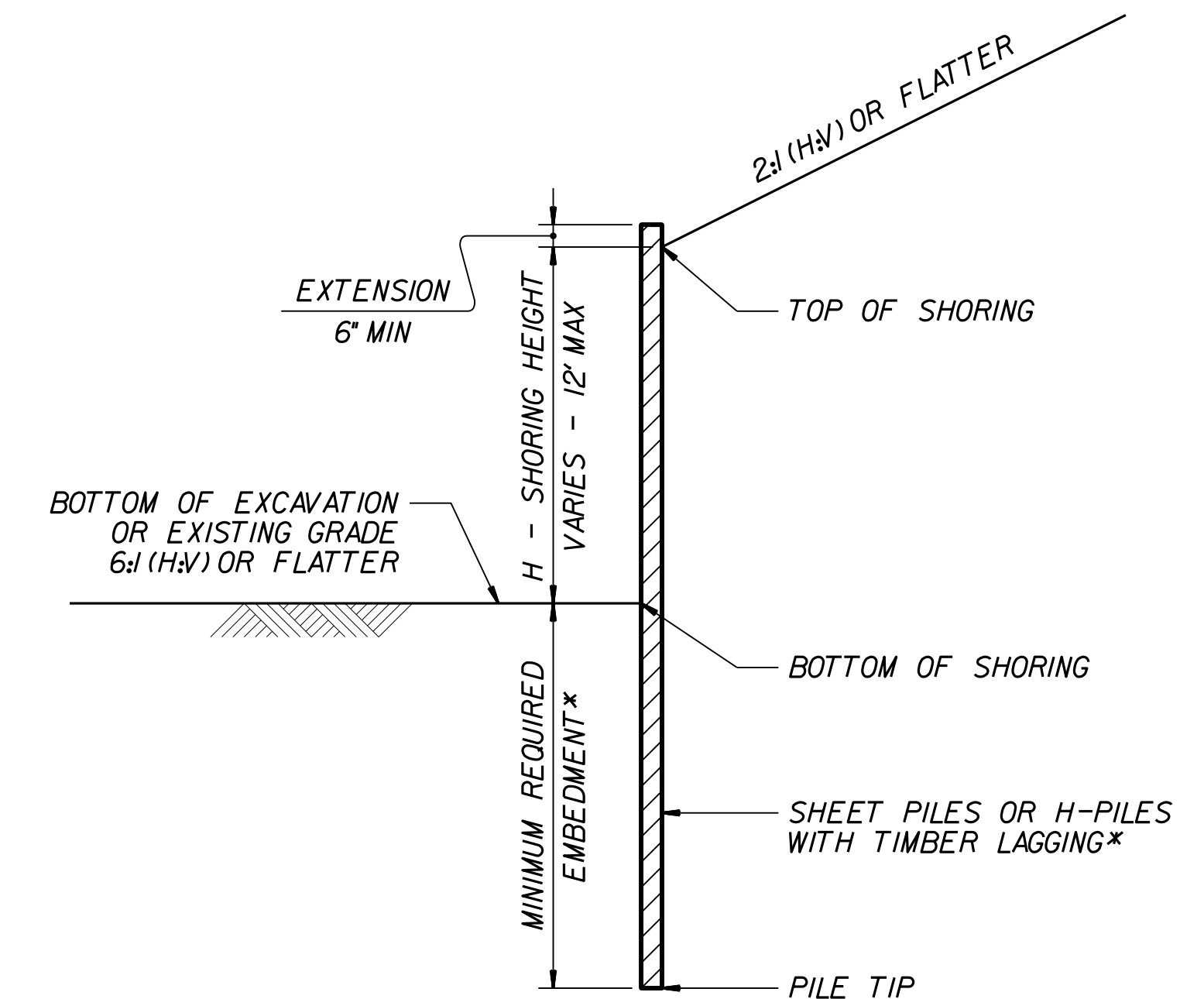
*DO NOT USE H-PILES WITH TIMBER LAGGING FOR GROUNDWATER CONDITION, SHORING HEIGHT AND H-PILE SIZE SHOWN IF MINIMUM REQUIRED EMBEDMENT IS "--".



CONCRETE BARRIER
 **TOP OF SHORING =
 EDGE OF PAVEMENT

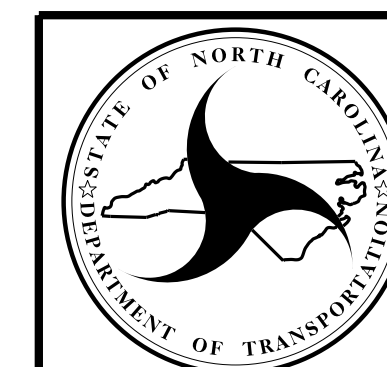


TEMPORARY GUARDRAIL
 **GUARDRAIL FACE =
 EDGE OF PAVEMENT



STANDARD TEMPORARY SHORING
 (SLOPE CASE)
 *SEE TABLE ABOVE.

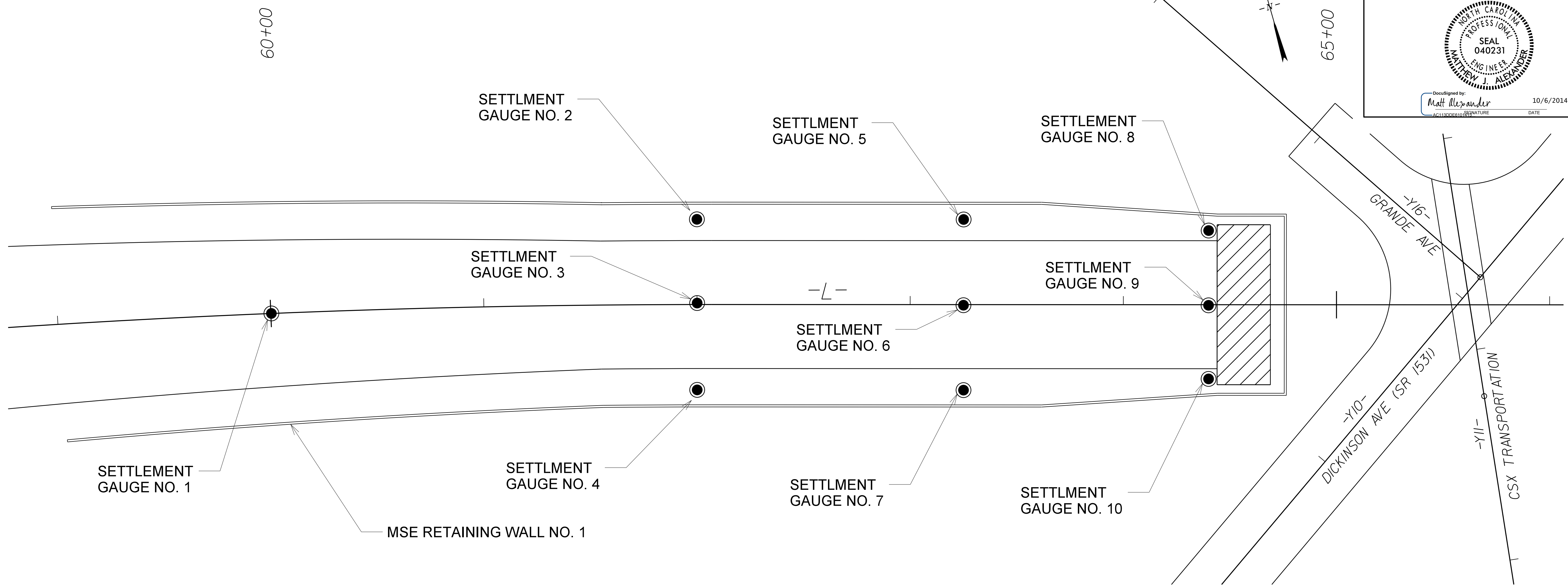
STANDARD TEMPORARY SHORING
 (SURCHARGE CASE)
 *SEE TABLE ABOVE.



GEOTECHNICAL ENGINEERING UNIT
 STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

STANDARD DRAWING NO. 1801.01

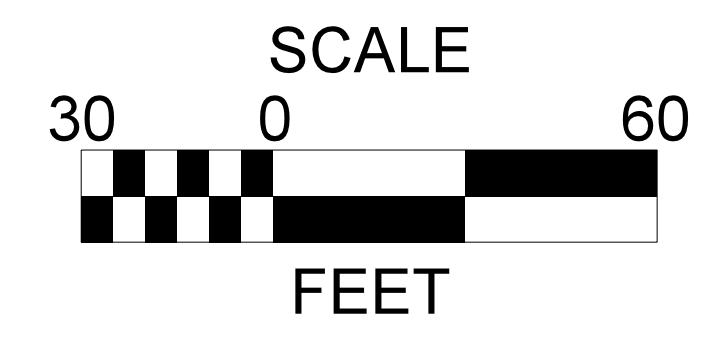
STANDARD TEMPORARY SHORING



SETTLEMENT GAUGE LOCATIONS		
GAUGE NO.	STATION -L-	OFFSET FROM -L-
1	60+00	CL
2	62+00	40 LT
3	62+00	CL
4	62+00	40 RT
5	63+25	40 LT
6	63+25	CL
7	63+25	40 RT
8	64+40	34.5 LT
9	64+40	CL
10	64+40	34.5 RT

SETTLEMENT GAUGE QUANTITIES	
EMBANKMENT SETTLEMENT GAUGES (MSE RETAINING WALL NO. 1)	10

NOTE:
REFER TO SHEET W-10 FOR SETTLEMENT GAUGE DETAILS AND CONSTRUCTION SEQUENCE



Kimley»Horn
 333 Fayetteville Street, Suite 600
 Raleigh, NC 27601-1772
 Phone (919) 835-1494 NC LICENSE # F-0102
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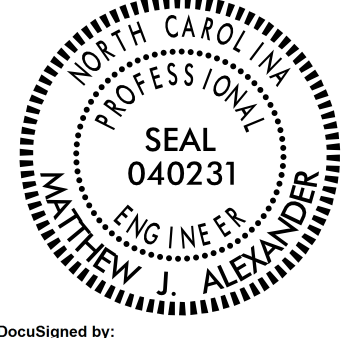
Terracon
 2401 BRENTWOOD ROAD RALEIGH, NC 27604
 PH. (919) 873-2211 FAX. (919) 873-9555

REVISIONS					
NO.	BY	DATE	NO.	BY	DATE
1			3		
2			4		

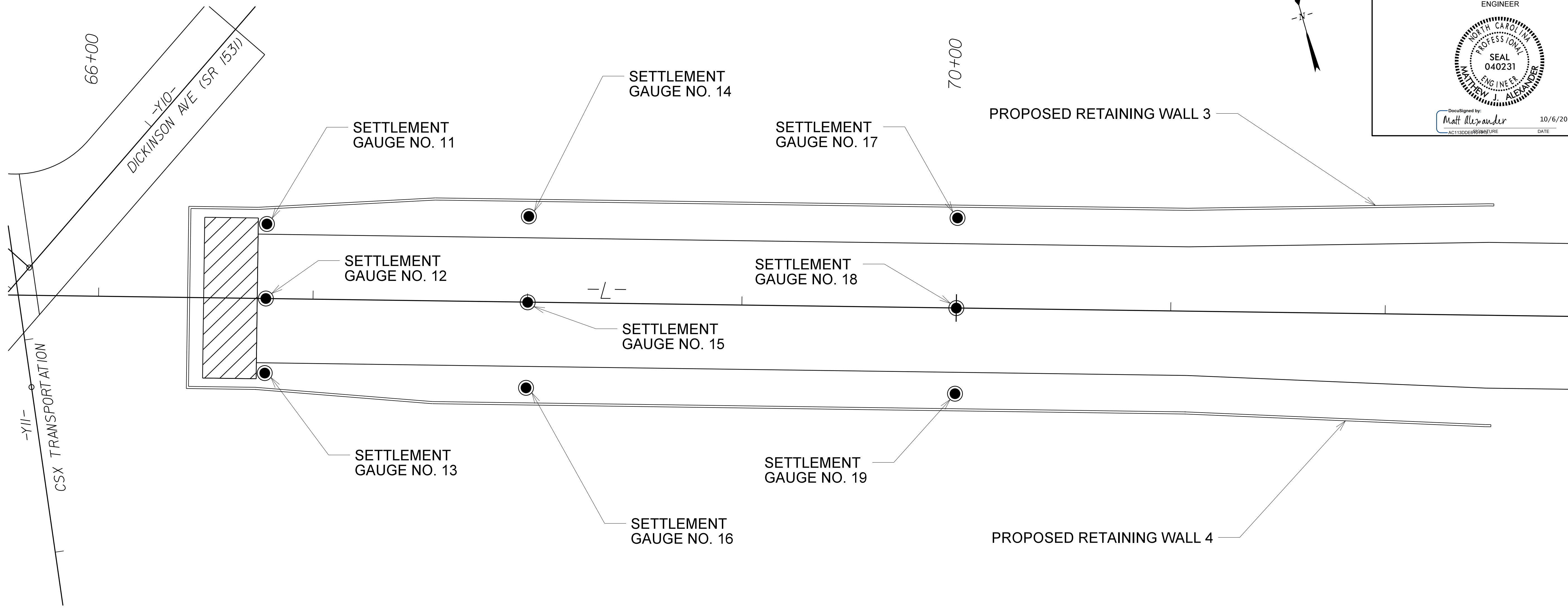
EMBANKMENT MONITORING
 DETAIL
 MSE RETAINING WALL NO. 1

STATE	STATE PROJECT REFERENCE NO.	SHEET
N.C.	35781.1.2 (U-3315)	2G-3

GEOTECHNICAL ENGINEER



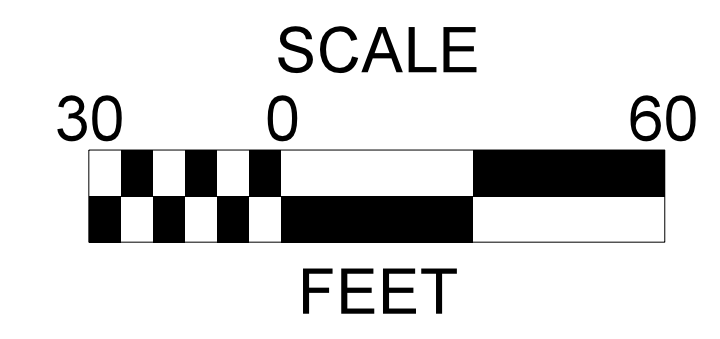
DocuSigned by:
Matthew J. Alexander 10/6/2014



SETTLEMENT GAUGE LOCATIONS		
GAUGE NO.	STATION -L-	OFFSET FROM -L-
11	66+78	34.5 LT
12	66+78	CL
13	66+78	34.5 RT
14	68+00	40 LT
15	68+00	CL
16	68+00	40 RT
17	70+00	42 LT
18	70+00	CL
19	70+00	42 RT

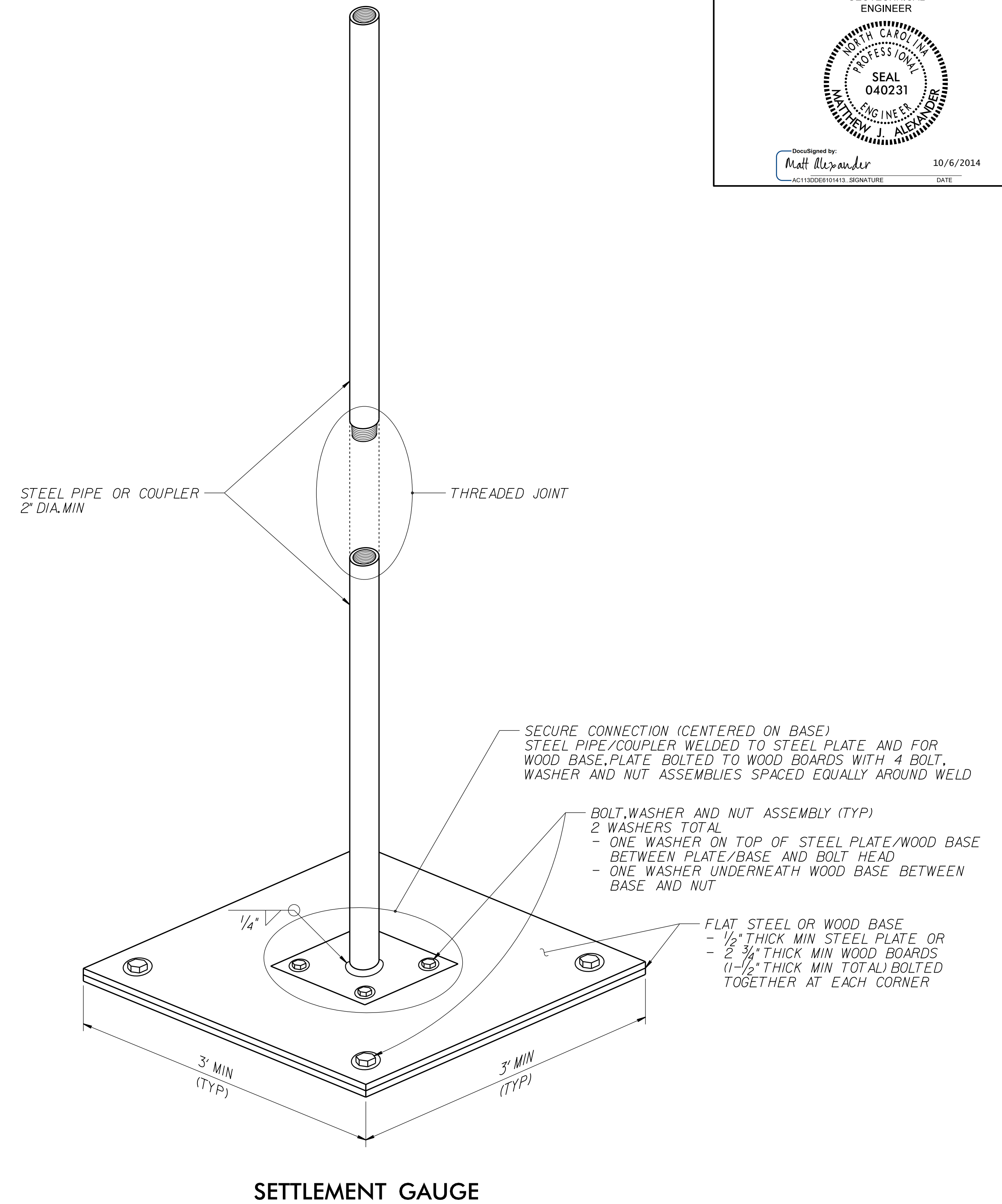
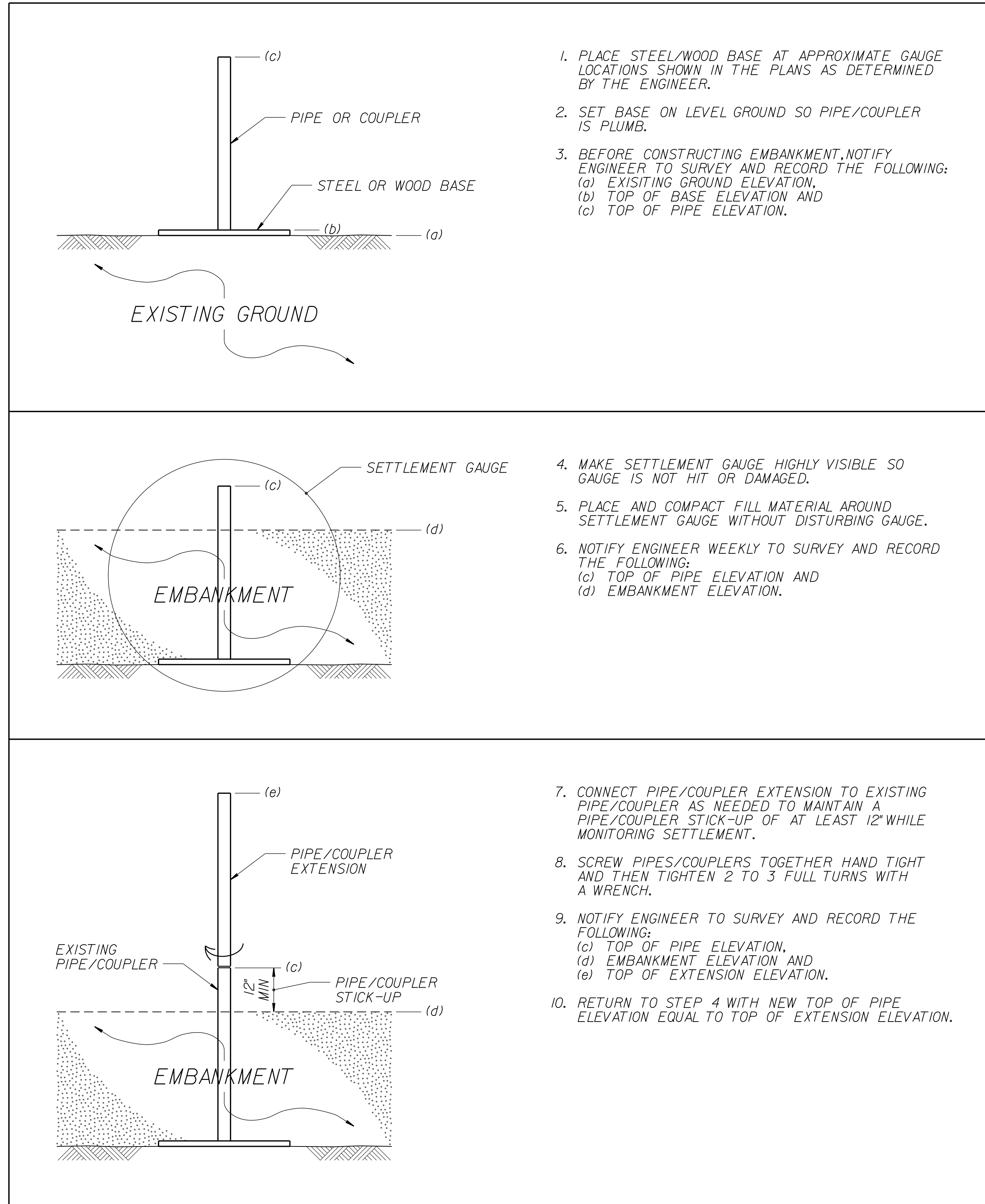
SETTLEMENT GAUGE QUANTITIES	
EMBANKMENT SETTLEMENT GAUGES (MSE RETAINING WALL NO. 2)	9

NOTE:
REFER TO SHEET 2G-4 FOR SETTLEMENT GAUGE DETAILS AND CONSTRUCTION SEQUENCE



<p>Kimley»Horn</p> <p>333 Fayetteville Street, Suite 600 Raleigh, NC 27601-1772 Phone (919) 835-1494 NC LICENSE # F-0102</p> <p><small>This document, together with the concepts and designs presented herein, as an instrument of services, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance of this document without written authorization and approval by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.</small></p> <p>Copyright Kimley-Horn and Associates, Inc., 2014</p>	<p>Terracon</p> <p>2401 BRENTWOOD ROAD PH. (919) 873-2211</p> <p>RALEIGH, NC 27604 FAX. (919) 873-9555</p>	<p>EMBANKMENT MONITORING DETAIL MSE RETAINING WALL NO. 2</p>																
		<p style="text-align: center;">REVISIONS</p> <table border="1"> <thead> <tr> <th>NO.</th> <th>BY</th> <th>DATE</th> <th>NO.</th> <th>BY</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td></td> <td></td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td></td> <td></td> <td>4</td> <td></td> <td></td> </tr> </tbody> </table>	NO.	BY	DATE	NO.	BY	DATE	1			3			2			4
NO.	BY	DATE	NO.	BY	DATE													
1			3															
2			4															

EMBANKMENT MONITORING SEQUENCE



NOTES:

1. SEE ROADWAY SUMMARY SHEETS FOR APPROXIMATE SETTLEMENT GAUGE LOCATIONS.
2. FOR STANDARD EMBANKMENT MONITORING, SEE EMBANKMENT SETTLEMENT GAUGES PROVISION.
3. INSTALL SETTLEMENT GAUGES AFTER CLEARING AND GRUBBING GAUGE LOCATIONS AND BEFORE CONSTRUCTING EMBANKMENTS WITH EMBANKMENT MONITORING.

Kimley»Horn

333 Fayetteville Street, Suite 600
 Raleigh, NC 27601-1772
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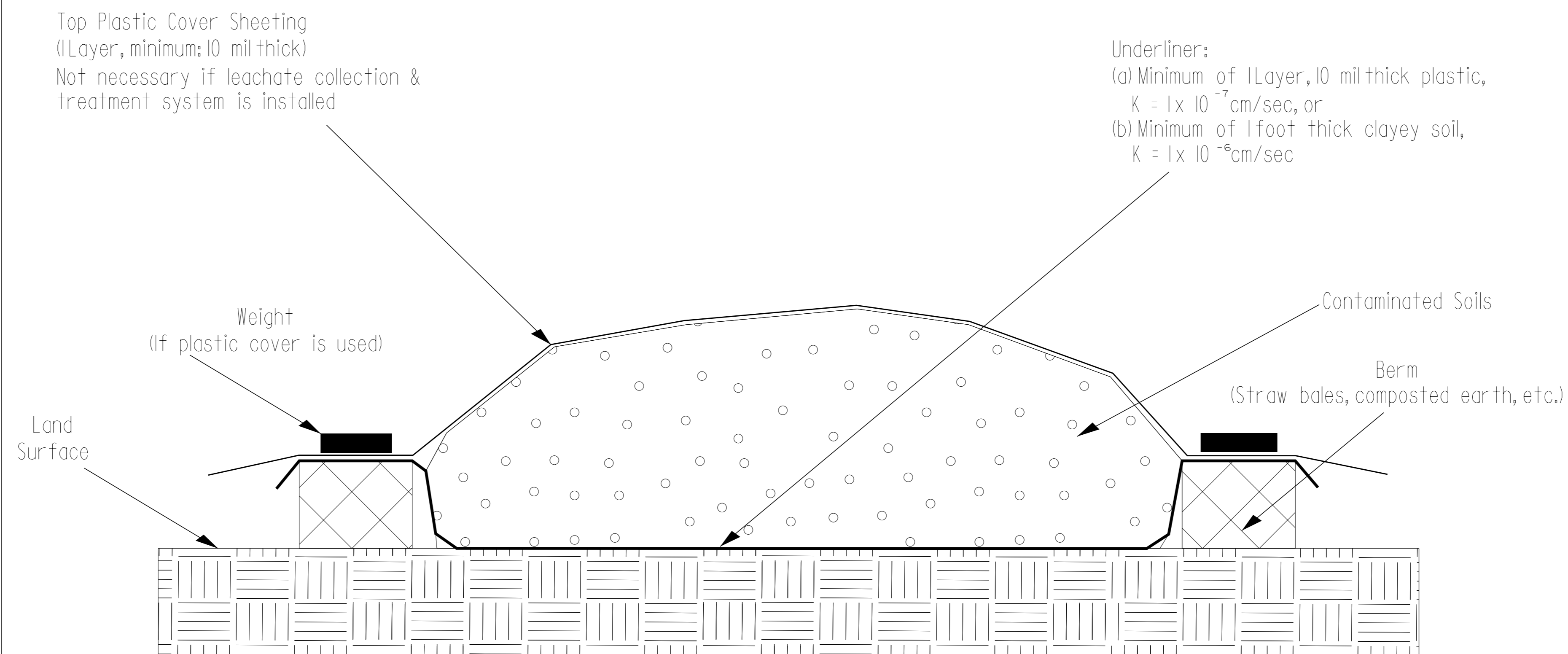
10TH STREET BRIDGE OVER
 DICKINSON AVE (SR 1531)
 AND CSX RAILROAD

REVISIONS

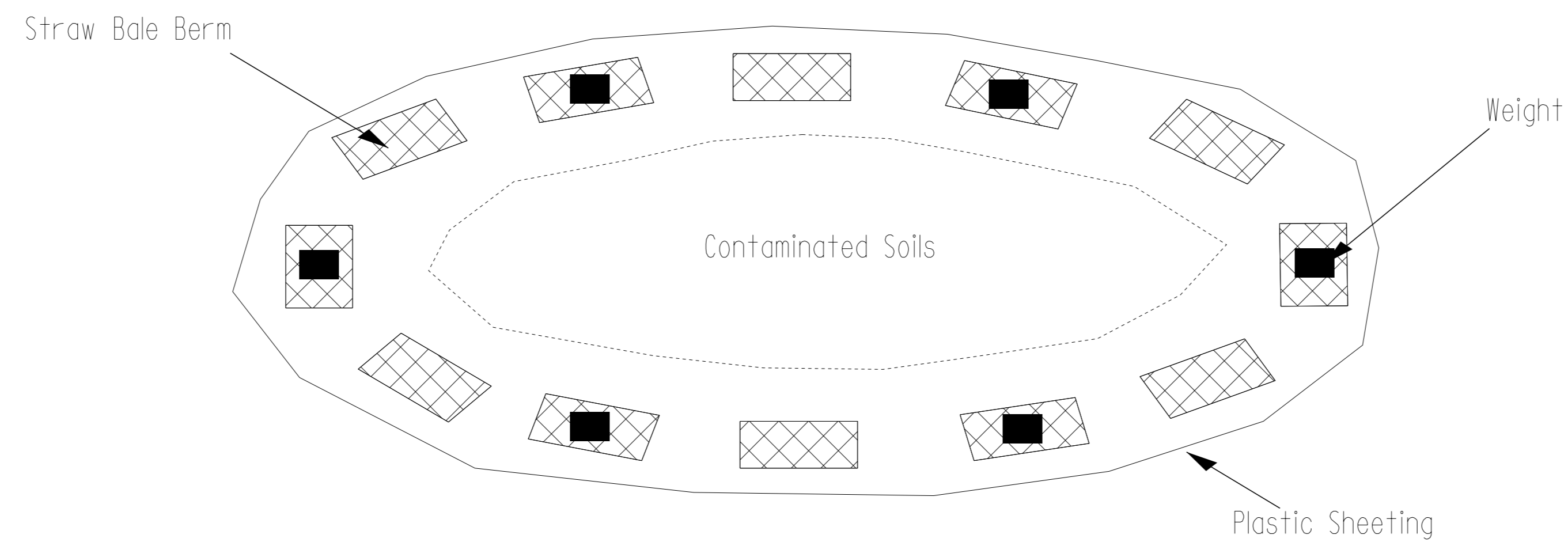
NO.	BY	DATE	NO.	BY	DATE
1	MJA	9/29/14	3		
2			4		

Detail for Temporary Containment of Petroleum Contaminated Soil

Cross-Section View



Map View



DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA
SUMMARY OF EARTHWORK
 IN CUBIC YARDS

LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT EXCAVATION	EMBANKMENT +%	BORROW	TOTAL WASTE	LOCATION	UNCLASSIFIED EXCAVATION	UNDERCUT EXCAVATION	EMBANKMENT +%	BORROW	TOTAL WASTE
SECTION 1 (PHASE 1)						SECTION 4 (PHASE 2)					
-L- (RT) 11+32.00 TO 20+34.32	1272		40	0	1232	-L- (LT) 11+32.00 TO 20+34.32	264		210	0	54
-L- (RT) 21+39.61 TO 48+50.00	5425		1844	0	3581	-L- (LT) 21+39.61 TO 48+50.00	2664		3691	1560	533
-Y1- 18+50.00 TO 26+26.00	1179		81	0	1098	-Y1- 10+95.00 TO 18+50.00	1229		40	0	1189
-Y2- 15+45.55 TO 19+95.00	191		180	27	38	-Y2- 11+55.00 TO 14+53.87	185		76	0	109
-Y3- 10+44.00 TO 10+94.85	19		6	0	13	-Y7- (RT) 11+15.00 TO 18+30.83	176		53	0	123
-Y3- 11+30.85 TO 15+11.00	154		183	60	31	-Y7- (RT) 19+35.74 TO 26+40.00	193		106	0	87
-Y4- 10+43.00 TO 11+55.00	141		3	0	138	-Y14- 19+29.03 TO 23+23.00	501		104	0	397
-Y5- 10+43.00 TO 11+67.00	114		14	0	100	-Y18- 10+36.00 TO 12+36.50	59		81	34	12
-Y6- 10+55.00 TO 11+70.00	178		15	0	163	SUBTOTAL (SECTION 4)	5271		4361	1594	2504
-Y17- 10+26.33 TO 11+79.07	117		45	0	72	SECTION 5 (PHASE 3)					
-Y19- 12+07.00 TO 13+00.00	35		14	0	21	-L- (MED) 26+00.00 TO 31+50.00	73		349	291	15
SUBTOTAL (SECTION 1)	8825		2425	87	6487	-L- (MED) 33+50.00 TO 47+50.00	86		1458	1389	17
SECTION 2 (PHASE 1)						SUBTOTAL (SECTION 5)	159		1807	1680	32
-L- 48+50.00 TO 64+69.00	2111		36808	35119	422	TOTALS					
-L- 66+49.00 TO 73+55.62	76		47790	47729	15		21210		95857	86915	12268
-Y7- (LT) 11+15.00 TO 18+30.83	468		105	0	363	LOSS DUE TO CLEARING AND GRUBBING					
-Y7- (LT) 19+35.74 TO 26+40.00	684		50	0	634					100	
-Y8- 10+43.00 TO 11+75.00	139		6	0	133	EARTH WASTE TO REPLACE BORROW					
-Y9- 10+43.00 TO 12+50.00	132		35	0	97					-8025	-8025
-Y10- 12+55.00 TO 16+97.26	391		365	52	78	BORROW FOR PIPE BACKFILL					
-Y10- 17+10.49 TO 21+50.00	553		96	0	457				18026	18026	
-Y16- 10+24.07 TO 11+05.00	28		6	0	22	PROJECT TOTALS					
-Y20- 10+24.22 TO 21+96.00	352		149	0	203		21110		113883	97016	4243
SUBTOTAL (SECTION 2)	4934		85410	82900	2424	EST 5% FOR REPLACING TOPSOIL ON BORROW PITS					
SECTION 3 (PHASE 1)										4851	
-L- 73+65.66 TO 83+00.00	1304		1644	601	261	GRAND TOTALS					
-L- 83+00.00 TO 86+52.00	172		94	0	78		21110			101867	
-Y12- 10+34.00 TO 11+04.00	8		13	7	2	SAY					
-Y13- 10+00.00 TO 13+24.80	29		69	46	6		21200			102000	
-Y13- 14+04.86 TO 14+87.00	57		14	0	43	PAVEMENT STRUCTURE VOLUME: -L- = 9,500 CY					
-Y14- 15+18.00 TO 18+61.03	451		20	0	431						
SUBTOTAL (SECTION 3)	2021		1854	654	821						

THE FOLLOWING QUANTITIES ARE PER THE
 "GEOTECHNICAL REPORT - RECOMMENDATIONS"
 LETTER (DATED JANUARY 12, 2012)

ESTIMATED SHALLOW UNDERCUT = 5,750 CY
 ESTIMATED CLASS IV SUBGRADE STABILIZATION = 10,000 TONS
 ESTIMATED UNDERCUT EXCAVATION = 5,000 CY
 ESTIMATED SELECT GRANULAR MATERIAL = 5,000 CY

NOTE: NCDOT GEOENVIRONMENTAL SECTION HAS DETERMINED THAT THERE MAY BE APPROXIMATELY 5500 CY OF STOCKPILING NON-HAZARDOUS CONTAMINATED SOIL AND 2,500 CY OF LOADING HAZARDOUS CONTAMINATED SOIL WITHIN THE PROJECT LIMITS (SEE PLANS FOR LOCATIONS). PLEASE SEE THE PROJECT SPECIAL PROVISION AND DETAIL IN THE PLANS TO DETERMINE HOW TO HANDLE THIS MATERIAL.

NOTE: EARTHWORK QUANTITIES ARE CALCULATED BY THE ROADWAY DESIGN UNIT. THESE EARTHWORK QUANTITIES ARE BASED IN PART ON SUBSURFACE DATA PROVIDED BY THE GEOTECHNICAL ENGINEERING UNIT.

NOTE: APPROXIMATE QUANTITIES ONLY. UNCLASSIFIED EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, REMOVAL OF EXISTING PAVEMENT, AND BREAKING OF EXISTING PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "GRADING."

DD64629

COMPUTED BY: DLS DATE: 5/10/15
CHECKED BY: EK DATE: 5/10/15

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROJECT NO. U-3315 SHEET NO. 3D-7

Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".

LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)

Table with columns for Line & Station, Offset, Structure Number, Top Elevation, Invert Elevation, Dip Pipe Sealed Pipe System, R.C. Pipe Class III, R.C. Pipe Class IV, R.C. Pipe Class V, Drainage Structure, Frame, Grates, and Hoop, Concrete Transitional Section, and Remarks. Includes a SHEET TOTALS row at the bottom.

ABBREVIATIONS table listing materials and components like C.A.A. CORRUGATED ALUMINIUM ALLOY, C.B. CATCH BASIN, C.S. CORRUGATED STEEL, etc.

DIVISION OF HIGHWAYS STATE OF NORTH CAROLINA

GEOTECHNICAL SUMMARIES

SUMMARY OF AGGREGATE SUBGRADE STABILIZATION						
LINE	STATION	STATION	SHALLOW UNDERCUT (CY)	CLASS IV SUBGRADE STABILIZATION (TONS)	GEOTEXTILE FOR SOIL STABILIZATION (SY)	CLASS IV AGGREGATE STABILIZATION (TONS)
-Y10-	12 + 55	21 + 50	5600			
-L-	11 + 32	86 + 52				13000
CONTINGENCY			150	10000	8000	
TOTAL CY/TONSSY			5750	10000	8000	13000

SUMMARY OF GEOTEXTILE FOR PAVEMENT STABILIZATION			
LINE	STATION	STATION	SY
-Y10-	12 + 55	21 + 50	3720
CONTINGENCY			3000
TOTAL SY:			6720

SUMMARY OF SUBSURFACE DRAINAGE					
LINE	STATION	STATION	LOCATION L/R/T/CL	DRAIN TYPE* UD/BD/SD	LF
CONTINGENCY				UD	2,550
TOTAL LF:					2,550

*UD = UNDERDRAIN
 *BD = BLIND DRAIN
 *SD = SUBSURFACE DRAIN

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME	DEED BOOK
1	4	TAYLOR CAPITAL, LLC	DB F 37, PG 215 DB L 46, PG 315
2	4	PLAINS COASTAL PROPERTIES, LLC	DB 884, PG 762 MB 26, PG 140
3	4	COOKE HMAW PROPERTIES, LLC	DB 1191, PG 89 MB 26, PG 140
4, 4A	4, 5, 12	COLLICE AND ANN MOORE, LLC	DB 2538, PG 866 DB 2562, PG 134 MB 72, PG 145
5	4	WELLS FARGO BANK, NA	DB Z 46, PG 466 MB 26, PG 140
6	4, 5	RDI LLC	DB 2804, PG 463 MB 35, PG 93
7	4	SHOESTRING RENTALS, LLC / ATTN: BRENDA L. GIBSON	DB 2458, PG 537 MB 26, PG 140
8	5	TRENT LAND COMPANY / C/O YANSY LTD	DB W 44, PG 618 MB 26, PG 140
9	5	CRAIG F. GOESS, SR. / CRAIG M. GOESS, JR.	DB 1494, PG 24
10	5	NORTHCAN INVESTMENTS, INC. / C/O DUNKIN DONUTS INC	DB I 54, PG 639 MB 24, PG 49
11	5	HORRY LAND COMPANY, INC.	DB 1309, PG 4 MB 55, PG 71
12	5	VINCENT PEELE PROPERTIES, LLC	DB 1890, PG 3 MB 33, PG 144
13	5	BLOUNT, W.G., ETAL	DB 225, PG 251 DB Q 49, PG 653 DB Q 49, PG 281
14	5	REDCO PROPERTIES LLC	DB 1981, PG 303 MB 55, PG 71
15	5, 6	SYCAMORE CHAPEL MISSIONARY BAPTIST CHURCH	DB 2438, PG 872
16	5	TW RIVERS, LOUISBERG COLLEGE INC., ETAL	DB O 25, PG 137 DB J 25, PG 367 DB G 50, PG 276 PG Q 49, PG 653 DB Q 49, PG 281 DB 225, PG 251 MB 4, PG 150
17	5	WILLIAM ERNEST STATON, SR & WF JANET COX	DB 698, PG 211 MB 4, PG 150 MB 68, PG 106
18	5	PHILLIP RAY COX	DB 698, PG 483 MB 4, PG 150 MB 68, PG 106
19	6	LIAM P COX & JANETTE B COX	DB 2193, PG 803 DB 2216, PG 261 MB 4, PG 150 MB 68, PG 106
20	6	CLAUDIUS E BAINES	DB U 32, PG 278 MB 5, PG 55
21	6	KENNETH M LLOYD, SR. & WF. CHRISTINE LLOYD	DB 2686, PG 109 MB 2, PG 180
22	6	ANGELA DEANNA GRIMES	DB 846, PG 343 MB 22, PG 56
23	6	KENNETH M LLOYD, SR. & WF. CHRISTINE LLOYD	DB 2686, PG 109 MB 2, PG 180
24	6	HERBERT WILLIAMS JR & WF IDA	DB S 41, PG 747 MB 22, PG 56
25	6	ALFRED EARL BAKER & BESSIE BAKER	DB Q 53, PG 747 MB 2, PG 180
26	6	KATIE TAYLOR	DB T 41, PG 127 MB 22, PG 56
27	6	KENNETH M LLOYD, SR. & WF. CHRISTINE LLOYD	DB 2686, PG 109 MB 2, PG 180
28	6	ROSA BARRETT BARNES, C/O ROSA BARRETT KING	DB T 41, PG 51 MB 22, PG 56
29	6	BREWINGTON	DB I 40, PG 556 DB 109, PG 478 DB 109, PG 482 DB 109, PG 486 MB 20, 135

PARCEL No.	SHEET No.	PROPERTY OWNER NAME	DEED BOOK
30	6	SUTTON, JERRY D.	DB X 49, PG 152 MB 2, PG 180 MB 20, PG 185
31	6	FRANKLIN D BRYAN & WF HELEN ALICE F.R. BRYAN	DB 169, PG 193 MB 20, PG 135
32	6	SAAD RENTALS, LLC	DB 773, PG 408 MB 20, PG 135
33	6	RENA LOUISE DIXON C/O / RENA LOUISE PAYTON	DB T 46, PG 440 MB 2, PG 180 MB 20, PG 185
34	6	JERRY D. SUTTON	DB R 49, PG 134 MB 20, PG 135
35	6	KAREN N. MARTIN	DB 2235, PG 768
36	6	JESSIE L. BROOKS, PEARLIE BROOKS HEIRS	DB T 40, PG 67 ESTATE FILE 02E PG 314 MB 2, PG 180 MB 20, PG 185
37	6	MARTHA W RODGERS SMITH	DB 1091, PG 726 MB 21, PG 22
38	6	MARGARET MARIE ADAMS DYER	DB U 40, PG 402 ESTATE FILE 2010E PG 115 MB 2, PG 180 MB 20, PG 185
39	6	AARON LOUIS SHAMBLEY & WF DIANN SHAMBLEY	DB Z 40, PG 674 MB 21, PG 22
40	6,7	WILLIAM L SANDERS & WF DEBORAH E SANDERS	DB 873, PG 525 MB 21, PG 22
41	7	BOYD, BOBBY E	DB 285, PG 327 MB 2, PG 180 MB 20, PG 185
42	7	DORIS DICKENS HANSLEY HEIRS	DB D 41, PG 732 MB 21, PG 22
43	7	CARL FODUS CHERRY, & MAMIE CHERRY	DB T 40, PG 65 MB 2, PG 180 MB 20, PG 185
44	7	GREENVILLE, CITY OF	DB 1364, PG 509 MB 2, PG 180
45	7	TURNAGE, LULA J	DB 2439, PG 623 MB 2, PG 180 MB 20, PG 185
46	7	BIGGS, NANCY H.	DB F 47, PG 58 PG S 49, PG 64 DB 2381, PG 62 DB 2655, PG 069 MB 2, PG 180 MB 20, PG 185
47	7	CRUDIE O BRADLEY, & WF MARY W BRADLEY	DB 1879, PG 106 MB 2, PG 180 MB 24, PG 15
48	7	OSCAR L HOLLOMAN, & WF CAROL P HOLLOMAN	DB 1635, PG 560 MB 24, PG 15
49	7	OSCAR L HOLLOMAN, & WF CAROL P HOLLOMAN	DB 1635, PG 560 MB 24, PG 15
50	7	ROBERT GREGORY RIDDLE	DB 276, PG 404
51	7	WILLIE LEE MOORE & WF ALICE P MOORE	DB 186, PG 747
52	7, 8	BOBBY R BOWEN & BLANCHE H WILSON	DB N 51, PG 258 DB M 51, PG 757 DB 1027, PG 652 DB 273, PG 406
53	7	BOBBY R BOWEN, SR MARSHALL L BOWEN	DB 1952, PG 711 DB 920, PG 481 DB 1027, PG 652
54	7	BOBBY R BOWEN & BLANCHE H WILSON	
55	8	JONATHAN SUTTON & TODD SUTTON	DB 1952, PG 701 MB 53, PG 71
56	7,8, 13	INDY II, LLC	PG 585, PG 720 MB 39, PG 67
57	8	BOBBY R BOWEN & BLANCH H WILSON	
58	8	HOLLOMAN, OSCAR L	DB 2518, PG 146

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME	DEED BOOK
59	8	HOUSE OF PRAYER-OF HEART TO GIVE	DB Y 50, PG 215
60	8	FLONIE C DAVIS	DB 1797, PG 870
61	8	HUDSON, JAMES R	DB 2491, PG 279 MB 4, PG 99
62	8	HUDSON, JAMES R	DB 2491, PG 279 MB 24, PG 15
63	8	HUGHES, JIMMY A	DB 668, PG 397 MB 2, PG 25
64	8	FRANKLIN BAKING CO	DB F 37, PG 545 MB 2, PG 25
65	8	MELVIN C MCLAWHORN & WF SANDRA J MCLAWHORN	DB 1042, PG 570
66	8	JAMES ARTHUR ANDERSON, JR & WF SERBELER E ANDERSON	DB 1306, PG 313
67	8	SUMMRELL, JULIUS	DB 1748, PG 299
68	8	BENNIE ROBERT ROUNTREE	DB 165, PG 467
69	8	JAMES ROY HUDSON, JR & WF JEAN P MAEBELLE	DB K 49, PG 69 MB 2, PG 25
70	8	MICHAEL V JOYNER	DB S 54, PG 159 MB 2, PG 25
71	8	HATTIE FRANCES VILLANUEVA	DB O 40, PG 579 ESTATE FILE 2008E PG 691
72	8	ESSIE F PETERSON TRUSTEE ESSIE PETERSON REV. LIV. TRUST	DB 1916, PG 380
73	8	ROBERT L JAMES, JR ETALS	DB 672, PG 623 DB 672, PG 709
74	8,9	WACHOVIA BANK, NA	DB 2543, PG 799
75	9	BEST, ARTHUR D	DB 472, PG 709
76	9	DAX R NELSON & WF GLORIA CRANDELL	DB 2559, PG 265
77	9	SAAD, GEORGE JR	DB 502, PG 14
78	8, 9	GRAND VENTURES, LLC	DB 102, PG 296
79	9	PUGH'S TIRE & SERVICE CENTER, INC	DB 254, PG 679
80	9	JAMES E HANNAN & WF ELAINE S HANNAN	DB Q 53, PG 504 DB C 54, PG 366
81	9	HERBERT S COREY & WF JO ANNE W COREY	DB Q 53, PG 742
83	9	CSX TRANSPORTATION	
84	9	DEREK A SANDERSON & WF DIANNE S SANDERSON	DB 1314, PG 292 MB 4, PG 104
85	9	PHILIP MOORE, JR HEIRS	DB R 29, PG 253
86	9	MOORE, WILLIAM PHILIP JR	DB R 29, PG 253 DB X 45, PG 319
87	9	BOBBY BOWDEN	DB 2833, PG 154 DB 424, PG 819 MB 3, PG 37

PARCEL No.	SHEET No.	PROPERTY OWNER NAME	DEED BOOK
88	9	CHARLES A LAWRENCE & MARY B ATKESON	DB 424, PG 816 MB 3 PG 37
89	9	BREAKTHROUGH REVIVAL CENTER	DB 1844, PG 648 MB 3 PG 37
90	9	ADRIAN WOOTEN, & WF HOLLY WOOTEN	DB 1408, PG 692 MB 3 PG 37
91	9	VICTORY DELIVERANCE CENTER	DB 715, PG 449 MB 3 PG 37
92	9, 10	HOPE OF GLORY MINISTRIES, LLC	DB 2547, PG 302 DB 2547, PG 299
93	10	POLLARD AND SON PLUMB & AC INC	DB 91E, PG 44 DB T38, PG 622
94	10	NORFOLK SOUTHERN RAILWAY (LEASED TO CLNA)	
95	10	STATE OF NORTH CAROLINA C/O STATE PROPERTY OFFICE	DB 1550, PG 447
96	10	PYRAMID REHEARSAL STUDIO, INC	DB 2762, PG 636
98	10	WILLIAMS FAMILY HEIRS, LLC	DB J 50, PG 375 DB Z 42, PG 595 MB 7, PG 81
98A	10	WILLIAMS FAMILY HEIRS, LLC	
99	10	WALTER L WILLIAMS & WF MARIE WILLIAMS	DB 431, PG 315 MB 7, PG 81 MB 29, PG 136
100	10	STATE OF NORTH CAROLINA C/O STATE PROPERTY OFFICE	DB 1438, PG 71 MB 21 PG 20
102	10	WARD HOLDINGS, LLC	DB 2760, PG 560 MB 11, PG 25 MB 37, PG 35
103	10	FAULKNER, EARL	DB 607, PG 158 MB 37, PG 35
104	11	BRADLEY SYDNOR PROPERTIES, LLC	DB 832, PG 848
105	11	VINCENT PEELE PROPERTIES LLC	DB 1143, PG 616 MB 11, PG 25
106	11	STATE OF NORTH CAROLINA C/O STATE PROPERTY OFFICE	DB 1894, PG 399
107	11	BRODY PROPERTIES, LLC	DB 1275, PG 416 DB 1528, PG 77 DB 1036, PG 382 MB 66, PG 110
110	11	STATE OF NORTH CAROLINA C/O STATE PROPERTY OFFICE	DB N 42, PG 25
111	5	CLARENCE PHILLIPS HEIRS	DB W, PG 210 MB 5, PG 98
112	5	CLARENCE PHILLIPS, & WF LILLIAN S PHILLIPS HEIRS	DB X 46 PG 612 MB 4, PG 150
113	6	RAY JOHNSON	DB 1644, PG 238 MB 4, PG 150
114	6	GARRIE W MOORE, SR & WF LAVEONNE S MOORE	DB 1332, PG 444 MB 4, PG 150
115	6	GARRIE W MOORE, SR & WF LAVEONNE S MOORE	DB X 54, PG 249 MB 4, PG 150
116	8	HOLLMAN, OSCAR L & WF CAROL P HOLLMAN	DB 309, PG 290 MB 2, PG 180

**STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS**

PARCEL INDEX SHEET

PARCEL No.	SHEET No.	PROPERTY OWNER NAME	DEED BOOK
117	8	JOSEPH EUGENE HATCH	DB 687, PG 390 DB 726, PG 673
118	9	NOLAND PROPERTIES, INC	DB 382, PG 103
119	9	TAYEBI REAL ESTATE, LLC	DB 2763, PG 838
120	9	STATE OF NORTH CAROLINA C/O STATE PROPERTY OFFICE	DB 1550, PG 766
121	9	STATE OF NORTH CAROLINA C/O STATE PROPERTY OFFICE	DB 1550, PG 446
122	12	MACOG PROPERTY OWNERS ASSOC. ET AL	
123	12	GAYLORD, THAD C	DB 1820, PG 644 MB 33, PG 29
124	12	JOHN W MORRIS & WF LISA B MORRIS	DB 604, PG 542 MB 45, PG 187
125	12	NEW SOUTH PROPERTIES	DB 903, PG 614 MB 26, PG 140
126	5, 12	SHN PROPERTIES, LLC C/O BRAZOS TAX GROUP, INC	DB 1122, PG 836 MB 26, PG 140
127	5	BANK OF WINTERVILLE	DB Z 43, PG 109
128	5, 12	COOK OUT MEMORIAL DRIVE INC	DB 2248, PG 117
129	12	MARIE S WILLIAMS	DB 269, PG 243
130	12	MOHAN PATEL AND RANJANA PATEL	DB 911 PG 545 DB 855 PG 150 DB 808 PG 306 MB 47, PG 80
131	12	COLLICE AND ANN MOORE, LLC	DB 2714 PG 27 MB 11, PG 15
132	14	RC RENTALS, LLC	DN 1138, PG 472 MB 3, PG 305 MB 5 PG 55
133	14	FREDDIE FARMER SR & WF CHRISTINE D FARMER	DB D 46, PG 745 MB 3, PG 305 MB 5 PG 55
134	14	CITY OF GREENVILLE	DB 2044, PG 791 MB 3, PG 305 MB 5 PG 55
135	14	EMMA NEWTON WHITEHURST ETAL	DB Y 24, PG 379 DB 2252, PG 747 MB 3, PG 305 MB 4, PG 5 MB 5 PG 55
136	14	STREETS TO HOMES	DB 2816, PG 761 MB 3, PG 305 MB 5 PG 55
137	6, 14	KATHERINE FIELDS LIFE EST	ESTATE FILE 03E, PG 322 MB 3, PG 305 MB 5 PG 55
138	6, 14	GROSS, ALLEGRA GRIMES	DB O 47, PG 440 MB 3, PG 305 MB 4 PG 5
139	6	CRUDIE O BRADLEY	DB 2309, PG 176 DB 1879, PG 106 MB 3, PG 305 MB 5 PG 55
140	6	RICHARD BRIAN STEWART	DB 1237, PG 416 MB 3, PG 305 MB 5 PG 55
141	6	BOBBY LEE COX	DB 259, PG 595 DB 2097, PG 811 MB 4, PG 150
142	6	SAAD RENTALS, LLC	DB 773, PG 408 MB 2, PG 180
143	6	ELIZABETH BURTON ROGERS & CHARLES M CHERRY	DB L 42, PG 464 MB 4, PG 50
144	6	SAAD RENTALS, LLC	DB 773, PG 408
145	6	REEVES, ALLIE MAMIE	DB V 44, PG 541 MB 4, PG 150

PARCEL No.	SHEET No.	PROPERTY OWNER NAME	DEED BOOK
146	6	GREENVILLE HOUSING AND DEVELOPMENT CORPORATION	DB 2187, PG 143 MB 2, PG 180
147	6	JAMES R HUDSON	DB 1241, PG 154 MB 2, PG 180
148	6	LLOYD K NEWMAN JR, ETALS	DB 454, PG 356 MB 2, PG 180
149	6	GREENVILLE HOUSING AND DEVELOPMENT CORPORATION	DB 2332, PG 825 MB 2, PG 180
150	6	JAMES R. HUDSON	DB 1241, PG 154 MB 2, PG 180
151	6	FAITH FAMILY AND FRIENDS HOME, LLC	DB 2459, PG 511 MB 2, PG 180
152	6	MOUNT CALVARY FWB CHURCH	DB 566, PG 498 MB 2, PG 180
153	6	BERNADINE TEEL	DB V 42, PG 463 MB 2, PG 180
154	6	ALTON W HOLLOMAN	DB T 46, PG 521 MB 2, PG 180
155	6	MOORE, SHEILA	DB 1893, PG 47 MB 2, PG 180
156	6	LASHELL MOORING SADLER, ADRIENNE MOORING & TERRY MOORING CONGLETON	DB 656, PG 823 MB 2, PG 180 MB 20, PG 185
157	6	JOSEPH E BARNES, & BETTY J BARNES	DB F 41, PG 418 MB 2, PG 180 MB 20, PG 185
158	6	FRANK V MORGAN & WF MARY D MORGAN	DB L 40, PG 562 MB 5, PG 42
159	6, 7	THOMAS ERSKINE MARTIN, SR	DB 2936, PG 312 MB 6, PG 42
160	7	MINNIE EBON C/O MYRTLE LOIS MCCALL	DB T 40, PG 69 MB 2, PG 180 MB 20, PG 185
161	7	MINNIE GERTRUDE CHERRY GATLIN	ESTATE FILE 00E, PG 120 DB V 42, PG 656 MB 2, PG 180 MB 20, PG 185
162	7, 13	PITT COUNTY	DB 2819, PG 233 MB 74 PG 10
163	13	CITY OF GREENVILLE	DB 2312, PG 231 MB 2, PG 180
164 164A 164B 164C	13	CRUDIE O BRADLEY	DB 1879, PG 106 DB 2309, PG 176 MB 24, PG 15
165	13	JACK W THORNTON, & WF MARY KATHRYN THORNTON	DB 2684, PG 58 MB 24, PG 15
166	7, 13	CITY OF GREENVILLE	DB 2788, PG 09 MB 2, PG 180
167	7	ROBCHERYL LLC	DB 2548, PG 540 MB 2, PG 180
168	7	ANDERSON, BILLY R & WF LUCY G ANDERSON	DB 1141, PG 571 MB 2, PG 180
169	7	J.T. WILLIAMS & VIRGINIA S. WILLIAMS	DB 913, PG 830 DB N 44, PG 209 DB N 44, PG 213 DB B 48, PG 226 DB M 37, PG 317 MB 24, PG 86
170	7	ANTHONY TODD SUTTON & JONATHAN KEVIN SUTTON	DB 1491, PG 322 MB 2, PG 180
171	7, 8, 13	JONATHAN SUTTON & TODD SUTTON	DB 1952, PG 701 MB 53 PG 71
172	7	WILLIAM GORHAM & WF MALINDA GORHAM	DB 1669, PG 524 MB 2 PG 180
173	7, 13	OSCAR L HOLLOMAN & WF CAROL P HOLLOWMAN	DB 1635, PG 560 MB 24 PG 15
174	13	WHITE, MARIE BOWEN	DB Q 30, PG 453 MB 8 PG 122

-L-
 PI Sta 20+02.56
 $\Delta = 32' 48" 45.7" (RT)$
 $D = 4' 46" 28.7"$
 $L = 687.23'$
 $T = 353.32'$
 $DS > 55 MPH$
 $SE = 0.02$
 $RO = 156'$

- NOTES:
 1) TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT
 TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 2) SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 3) TIE TO EXISTING CONCRETE SIDEWALK STRUCTURE
 4) REMOVE EXISTING STORM DRAINAGE STRUCTURE
 5) PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)

Kimley Horn
 P.O. BOX 33068 • RALEIGH, N.C. 27636-3068

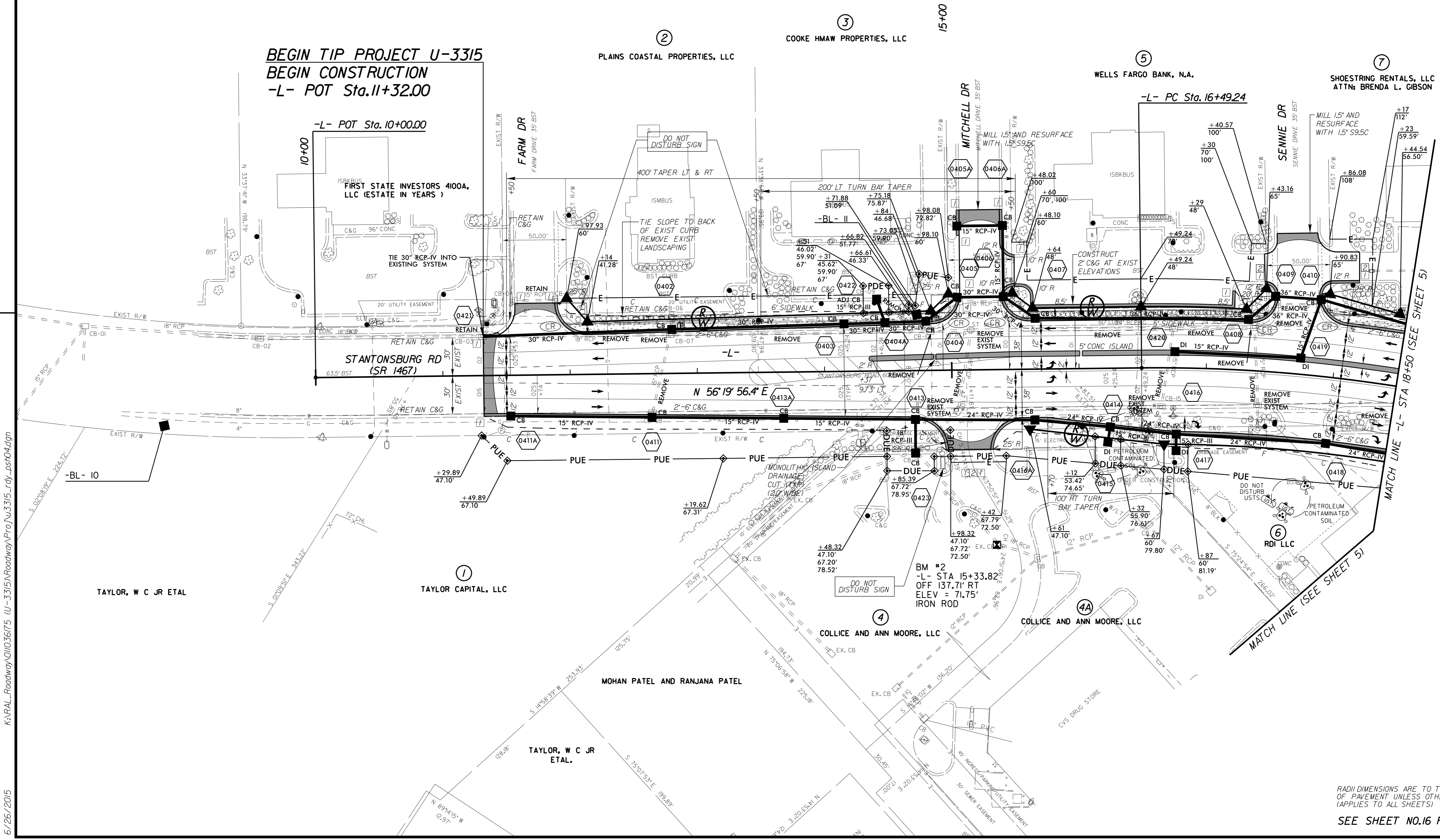
ROADWAY ENGINEER
 HYDRAULICS ENGINEER

PROJECT REFERENCE NO. U-3315
 SHEET NO. 4

7/2/2015

REVISIONS

BEGIN TIP PROJECT U-3315
BEGIN CONSTRUCTION
-L- POT Sta. 11+32.00



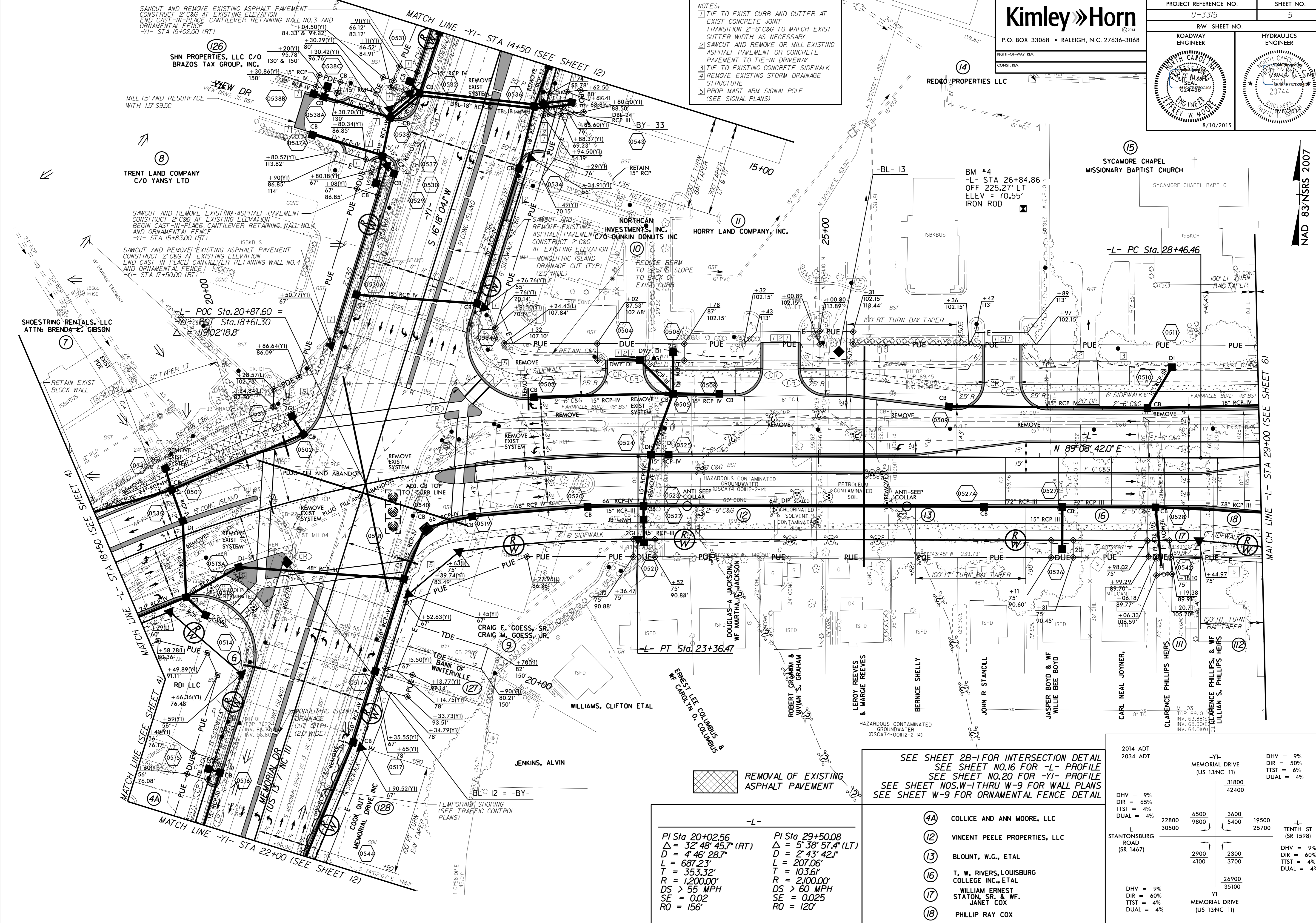
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6/26/2015

RADI DIMENSIONS ARE TO THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED (APPLIES TO ALL SHEETS)
 SEE SHEET NO.16 FOR -L- PROFILE

PROJECT REFERENCE NO. U-3315	SHEET NO. 5
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY ENGINEER	DAVID L. STANTON 20744
8/10/2015	

- NOTES:
- TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - TIE TO EXISTING CONCRETE SIDEWALK STRUCTURE
 - REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)



REVISIONS

NAD 83/NSRS 2007

REMOVAL OF EXISTING ASPHALT PAVEMENT

<p>-L-</p> <p>PI Sta 20+02.56 $\Delta = 32' 48" 45.7" (RT)$ $D = 4' 46" 28.7"$ $L = 687.23'$ $T = 353.32'$ $R = 1,200.00'$ $DS > 55 MPH$ $SE = 0.02$ $RO = 156'$</p>	<p>PI Sta 29+50.08 $\Delta = 5' 38" 57.4" (LT)$ $D = 2' 43" 42.1"$ $L = 207.06'$ $T = 103.61'$ $R = 2,100.00'$ $DS > 60 MPH$ $SE = 0.025$ $RO = 120'$</p>
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SEE SHEET 2B-1 FOR INTERSECTION DETAIL
 SEE SHEET NO.16 FOR -L- PROFILE
 SEE SHEET NO.20 FOR -YI- PROFILE
 SEE SHEET NOS.W-1 THRU W-9 FOR WALL PLANS
 SEE SHEET W-9 FOR ORNAMENTAL FENCE DETAIL

- 4A COLLICE AND ANN MOORE, LLC
- 12 VINCENT PEELE PROPERTIES, LLC
- 13 BLOUNT, W.G., ETAL
- 16 T. W. RIVERS, LOUISBURG COLLEGE INC., ETAL
- 17 WILLIAM ERNEST STANTON, SR. & WF. JANET COX
- 18 PHILLIP RAY COX

2014 ADT	2034 ADT	-YI- MEMORIAL DRIVE (US 13NC 11)	DHW = 9%	DIR = 50%	TTST = 6%	DUAL = 4%
		31800				
		42400				
DHW = 9%	DIR = 65%	TTST = 4%	DUAL = 4%			
		22800	6500	3600	19500	
		30500	9800	5400	25700	
-L- STANTONSBURG ROAD (SR 1467)		2900	2300	3700		
		4100				
DHW = 9%	DIR = 60%	TTST = 4%	DUAL = 4%			
			26900	35100		
			-YI- MEMORIAL DRIVE (US 13NC 11)			

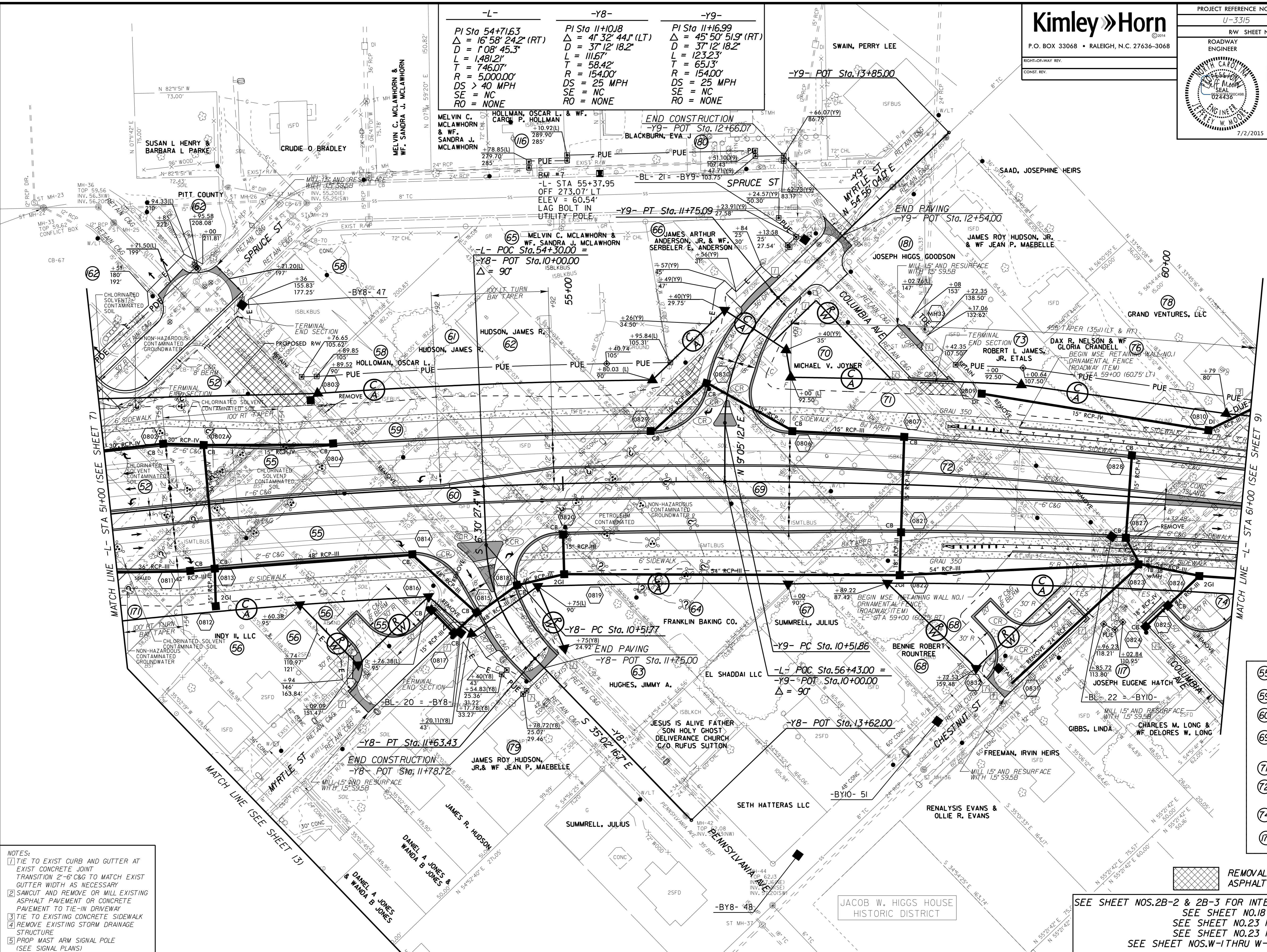
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PROJECT REFERENCE NO. U-3315	SHEET NO. 8
Roadway Engineer TERRY W. WOOD	Hydraulics Engineer DAVID SMITH
7/2/2015	7/2/2015

-L-	-Y8-	-Y9-
PI Sta 54+71.63	PI Sta 11+10.18	PI Sta 11+69.99
$\Delta = 16^\circ 58' 24.2" (RT)$	$\Delta = 47^\circ 32' 44.1" (LT)$	$\Delta = 45^\circ 50' 51.9" (RT)$
$D = 1'08' 45.3"$	$D = 37' 12' 18.2"$	$D = 37' 12' 18.2"$
$L = 1,481.2'$	$L = 111.67'$	$L = 123.23'$
$T = 746.07'$	$T = 58.42'$	$T = 65.13'$
$R = 5,000.00'$	$R = 154.00'$	$R = 154.00'$
$DS > 40 MPH$	$DS = 25 MPH$	$DS = 25 MPH$
$SE = NC$	$SE = NC$	$SE = NC$
$RO = NONE$	$RO = NONE$	$RO = NONE$

REVISIONS

NAD 83 NSRS 2007



- NOTES:
- TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - TIE TO EXISTING CONCRETE SIDEWALK
 - REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)

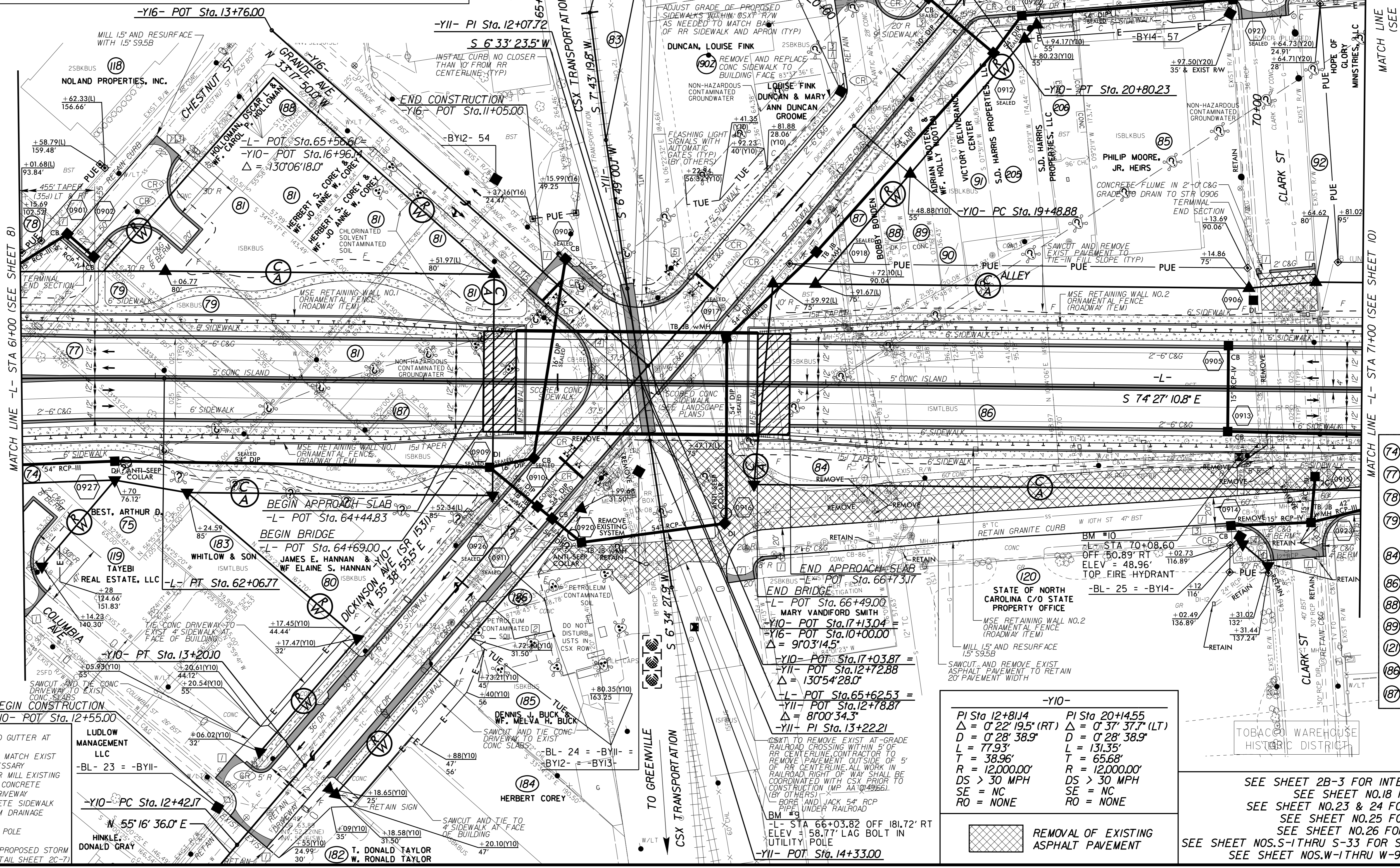
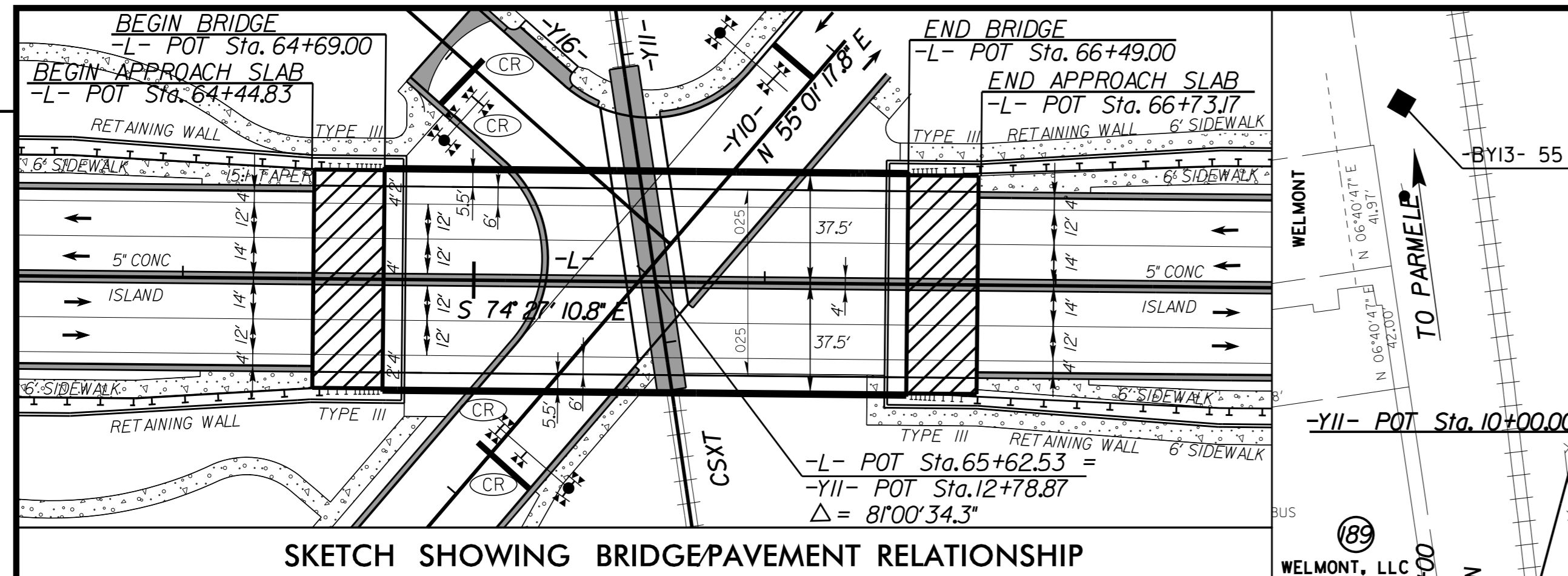
- (55) JONATHAN SUTTON & TODD SUTTON
- (59) HOUSE OF PRAYER-OF HEART TO GIVE
- (60) FLONE C DAVIS
- (69) JAMES ROY HUDSON, JR. & W.F. JEAN P. MAEBELLE
- (71) HATTIE FRANCES VILLANUEVA
- (72) ESSIE PETERSON TRUSTEE ESSIE PETERSON REV. LIV. TRUST
- (74) WACHOVIA BANK, N.A.
- (171) JONATHAN SUTTON & TODD SUTTON

REMOVAL OF EXISTING ASPHALT PAVEMENT

SEE SHEET NOS. 2B-2 & 2B-3 FOR INTERSECTION DETAILS
 SEE SHEET NO. 18 FOR -L- PROFILE
 SEE SHEET NO. 23 FOR -Y8- PROFILE
 SEE SHEET NO. 23 FOR -Y9- PROFILE
 SEE SHEET NOS. W-1 THRU W-9 FOR WALL PLANS

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Kimley Horn
 P.O. BOX 33068 • RALEIGH, N.C. 27636-3068
 ROADWAY ENGINEER
 HYDRAULICS ENGINEER
 PROJECT REFERENCE NO. U-3315
 SHEET NO. 9
 RW SHEET NO.
 8/10/2015



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8/10/2015

- NOTES:**
- TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - TIE TO EXISTING CONCRETE SIDEWALK
 - REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)
 - TIE ROOF DRAINS INTO PROPOSED STORM DRAIN SYSTEM (SEE DETAIL SHEET 2C-7)

LUDLOW MANAGEMENT LLC
 -BL- 23 = -BY11-

HINKLE, DONALD GRAY

-Y10- PI Sta 12+81.4 $\Delta = 0' 22' 19.5" (RT)$ $D = 0' 28' 38.9"$ $L = 77.93'$ $T = 38.96'$ $R = 12,000.00'$ $DS > 30 MPH$ $SE = NC$ $RO = NONE$	-Y10- PI Sta 20+14.55 $\Delta = 0' 37' 37.7" (LT)$ $D = 0' 28' 38.9"$ $L = 131.35'$ $T = 65.68'$ $R = 12,000.00'$ $DS > 30 MPH$ $SE = NC$ $RO = NONE$
---	---



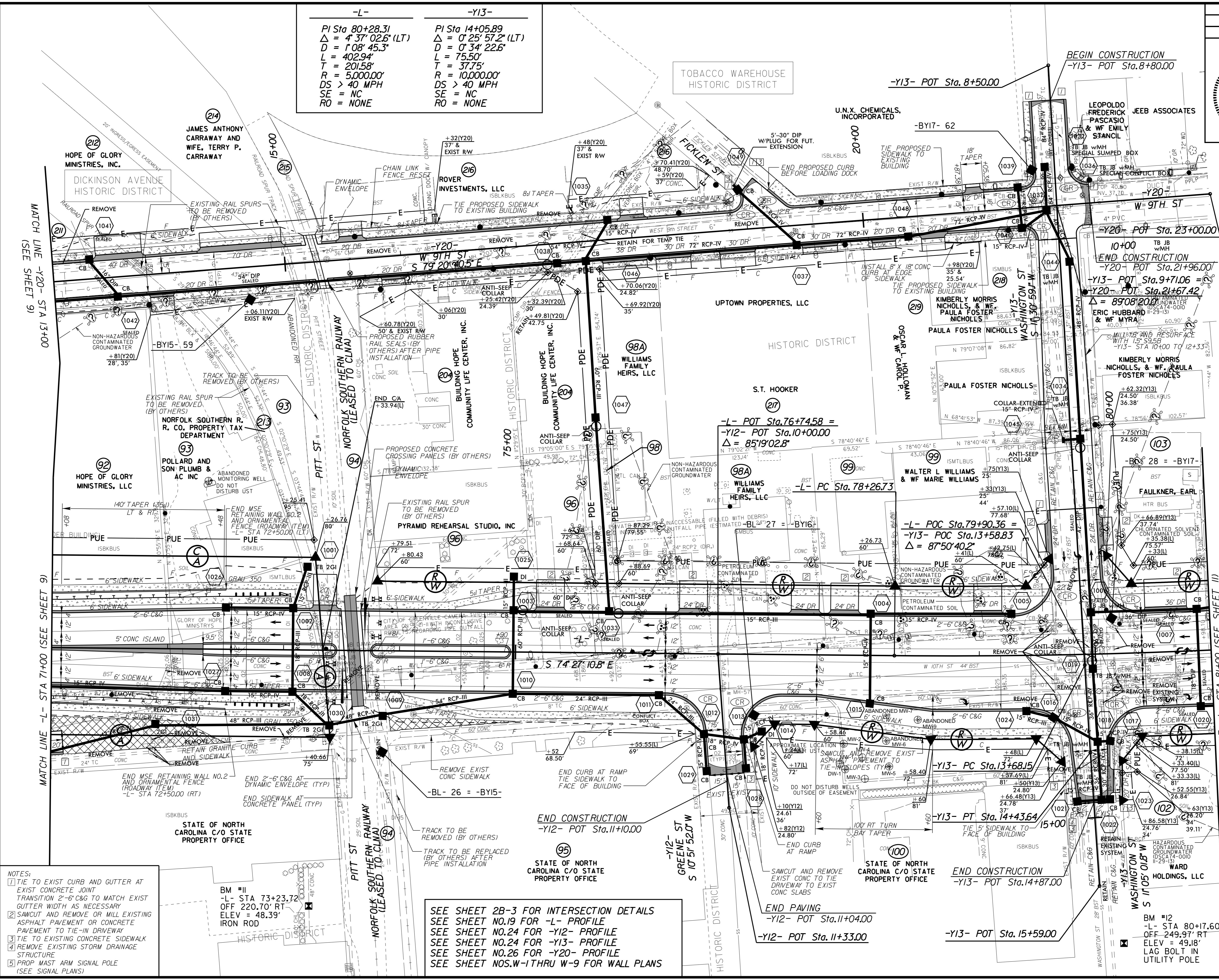
SEE SHEET 2B-3 FOR INTERSECTION DETAIL
 SEE SHEET NO.18 FOR -L- PROFILE
 SEE SHEET NO.23 & 24 FOR -Y10- PROFILE
 SEE SHEET NO.25 FOR -Y16- PROFILE
 SEE SHEET NO.26 FOR -Y20- PROFILE
 SEE SHEET NOS.S-1 THRU S-33 FOR STRUCTURE PLANS
 SEE SHEET NOS.W-1 THRU W-9 FOR WALL PLANS

- (74) WACHOVIA BANK, N.A.
- (77) SAAD, GEORGE JR.
- (78) GRAND VENTURES, LLC
- (79) PUGH'S TIRE & SERVICE CENTER, INC.
- (84) DEREK A. SANDERSON & WF. DIANNE S. SANDERSON
- (86) MOORE, WILLIAM PHILIP JR
- (88) CHARLES A LAWRENCE & MARY B ATKESON
- (89) BREAKTHROUGH REVIVAL CENTER
- (12) STATE OF NORTH CAROLINA C/O PROPERTY OFFICE
- (186) CITY OF GREENVILLE
- (187) WILTON LEE GAT

PROJECT REFERENCE NO. U-3315	SHEET NO. 10
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY ENGINEER	DAVID L. SMITH Professional Engineer No. 20744 7/15/2015

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RIGHT-OF-WAY REV.
CONST. REV.

-L-	-Y13-
PI Sta 80+28.31	PI Sta 14+05.89
$\Delta = 4^{\circ} 37' 02.6''$ (LT)	$\Delta = 0^{\circ} 25' 57.2''$ (LT)
D = 1'08" 45.3"	D = 0' 34" 22.6"
L = 402.94'	L = 75.50'
T = 201.58'	T = 37.75'
R = 5,000.00'	R = 10,000.00'
DS > 40 MPH	DS > 40 MPH
SE = NC	SE = NC
RO = NONE	RO = NONE



- NOTES:
- TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - TIE TO EXISTING CONCRETE SIDEWALK
 - REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)

SEE SHEET 2B-3 FOR INTERSECTION DETAILS
SEE SHEET NO.19 FOR -L- PROFILE
SEE SHEET NO.24 FOR -Y12- PROFILE
SEE SHEET NO.24 FOR -Y13- PROFILE
SEE SHEET NO.26 FOR -Y20- PROFILE
SEE SHEET NOS.W-I THRU W-9 FOR WALL PLANS

REMOVAL OF EXISTING ASPHALT PAVEMENT

REVISIONS

MATCH LINE -Y20- STA 13+00 (SEE SHEET 9)

MATCH LINE -L- STA 71+00 (SEE SHEET 9)

MATCH LINE -L- STA 81+00 (SEE SHEET 11)

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7/9/2015

- NOTES:
- TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT
 - TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)

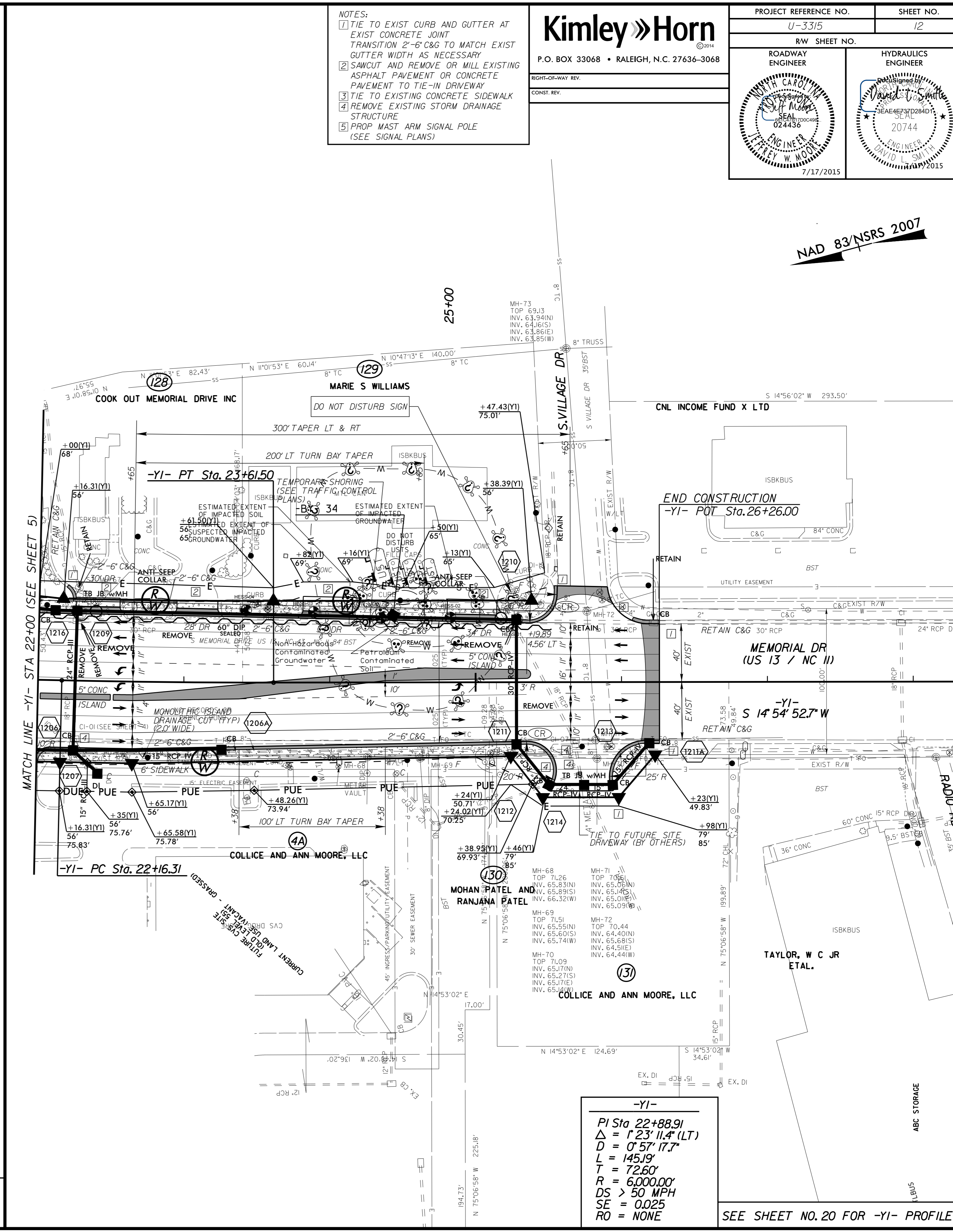
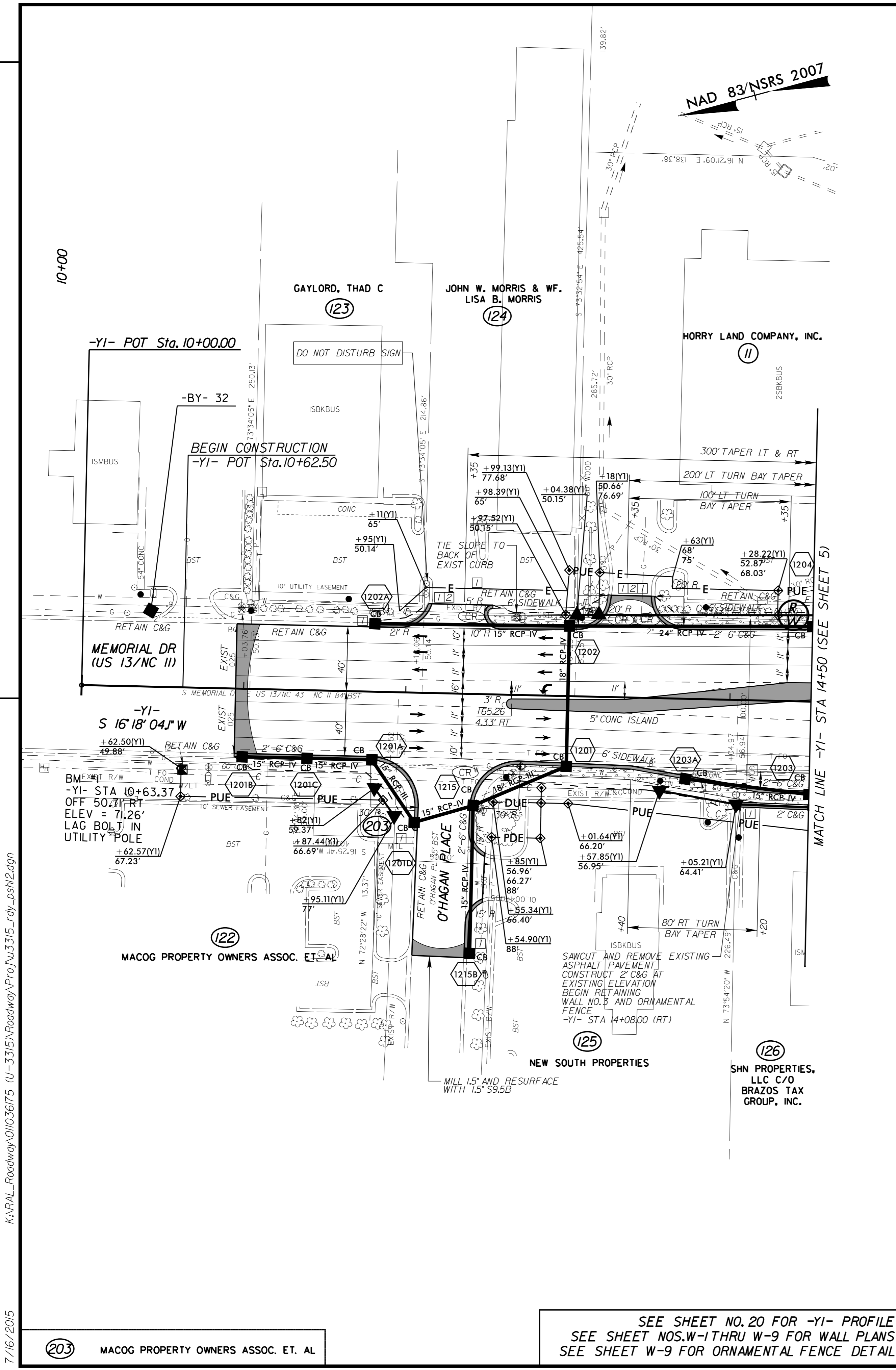
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ROADWAY ENGINEER
 HYDRAULICS ENGINEER

PROJECT REFERENCE NO. U-3315 SHEET NO. 12

7/17/2015

REVISIONS



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7/16/2015

203 MACOG PROPERTY OWNERS ASSOC. ET. AL

SEE SHEET NO. 20 FOR -YI- PROFILE
 SEE SHEET NOS. W-1 THRU W-9 FOR WALL PLANS
 SEE SHEET W-9 FOR ORNAMENTAL FENCE DETAIL

-YI-
 PI Sta 22+88.91
 $\Delta = 1' 23'' 11.4''$ (LT)
 D = 0' 57'' 17.7"
 L = 145.19'
 T = 72.60'
 R = 6,000.00'
 DS > 50 MPH
 SE = 0.025
 RO = NONE

SEE SHEET NO. 20 FOR -YI- PROFILE

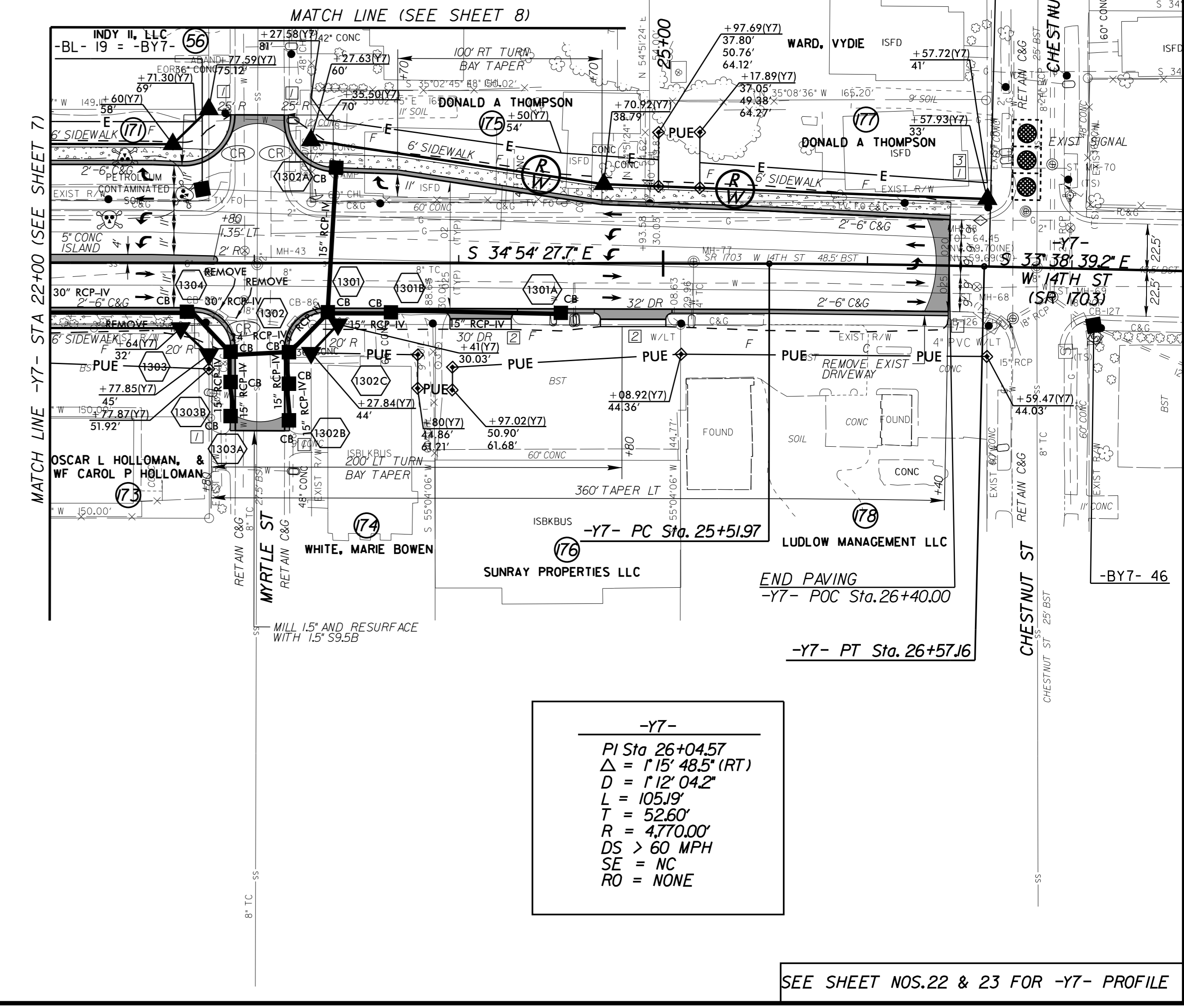
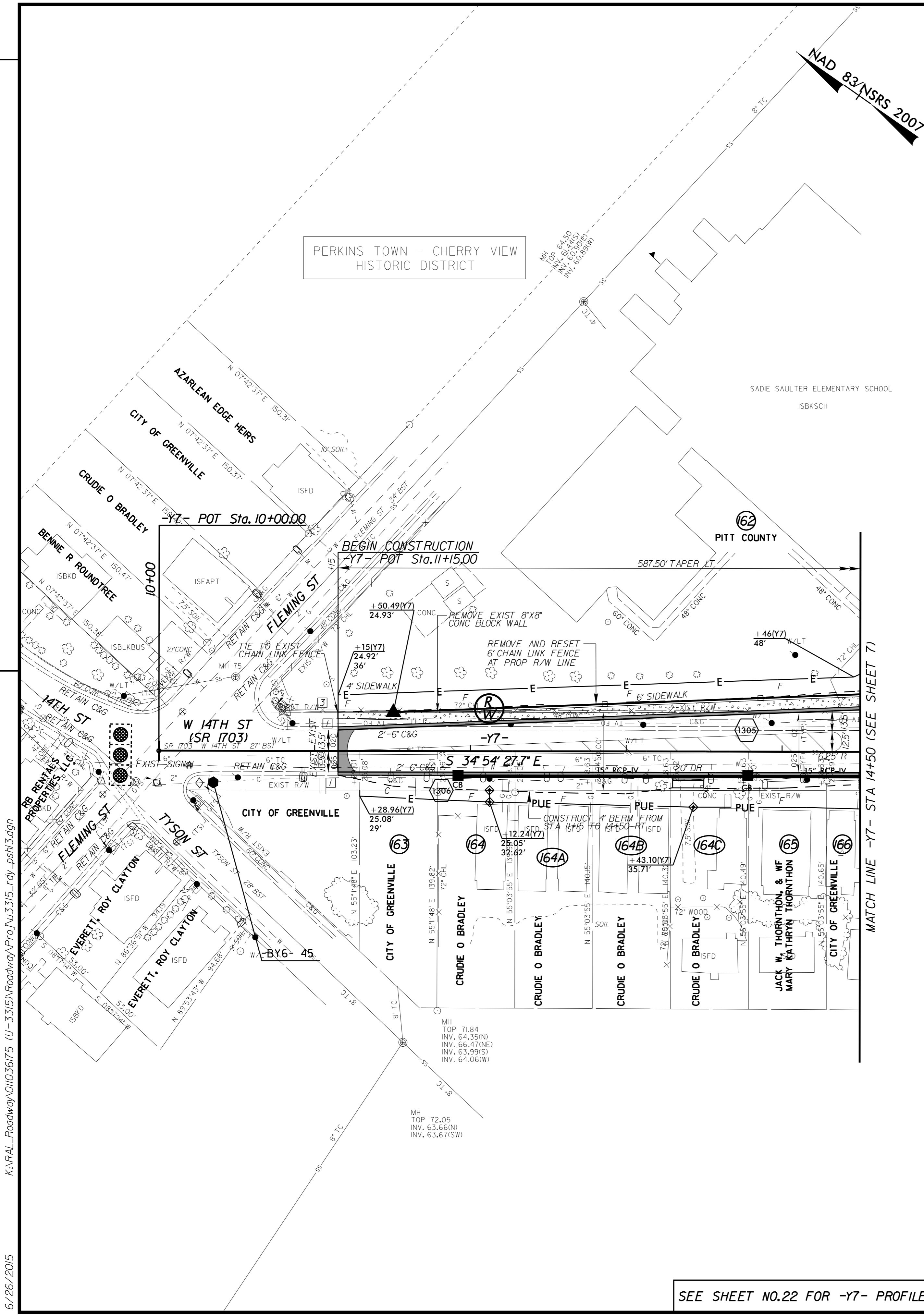
REVISIONS

(17) JONATHAN SUTTON & TODD SUTTON

- NOTES:
- 1] TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT
 - 2] SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - 3] TIE TO EXISTING CONCRETE SIDEWALK STRUCTURE
 - 4] REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - 5] PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)

Kimley Horn
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 ROADWAY ENGINEER
 HYDRAULICS ENGINEER

PROJECT REFERENCE NO. U-3315	SHEET NO. 13
ROADWAY ENGINEER DAVID W. MOORE	HYDRAULICS ENGINEER DAVID W. MOORE
7/2/2015	7/2/2015



-Y7-
 PI Sta 26+04.57
 $\Delta = 1'15" 48.5" (RT)$
 $D = 1'12" 04.2"$
 $L = 105.19'$
 $T = 52.60'$
 $R = 4,770.00'$
 $DS > 60 MPH$
 $SE = NC$
 $RO = NONE$

SEE SHEET NO.22 FOR -Y7- PROFILE

SEE SHEET NOS.22 & 23 FOR -Y7- PROFILE

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- NOTES:
- TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT
 - TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - TIE TO EXISTING CONCRETE SIDEWALK STRUCTURE
 - REMOVE EXISTING STORM DRAINAGE
 - PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)
 - BRICK PAVEMENT SIDEWALK

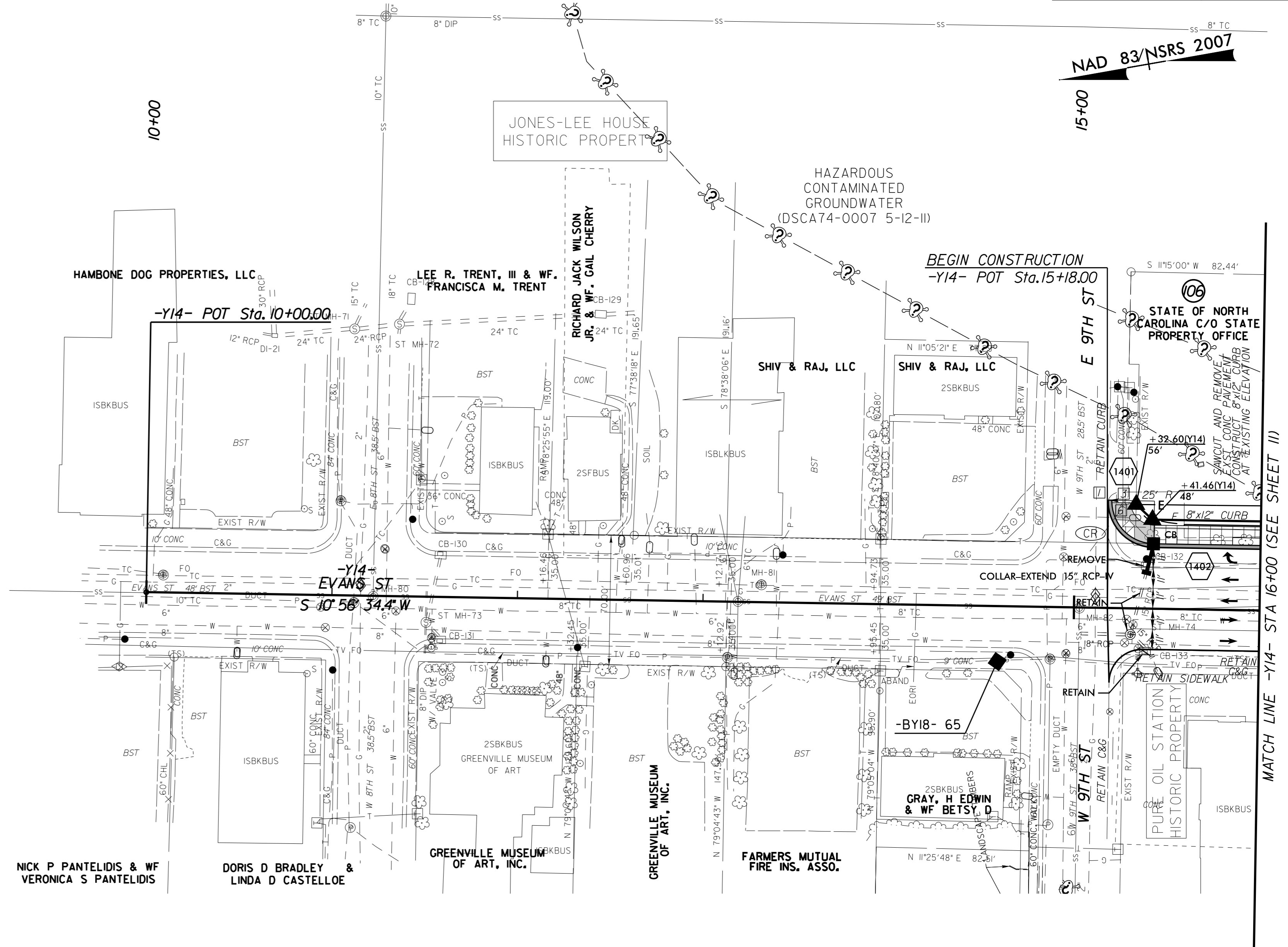
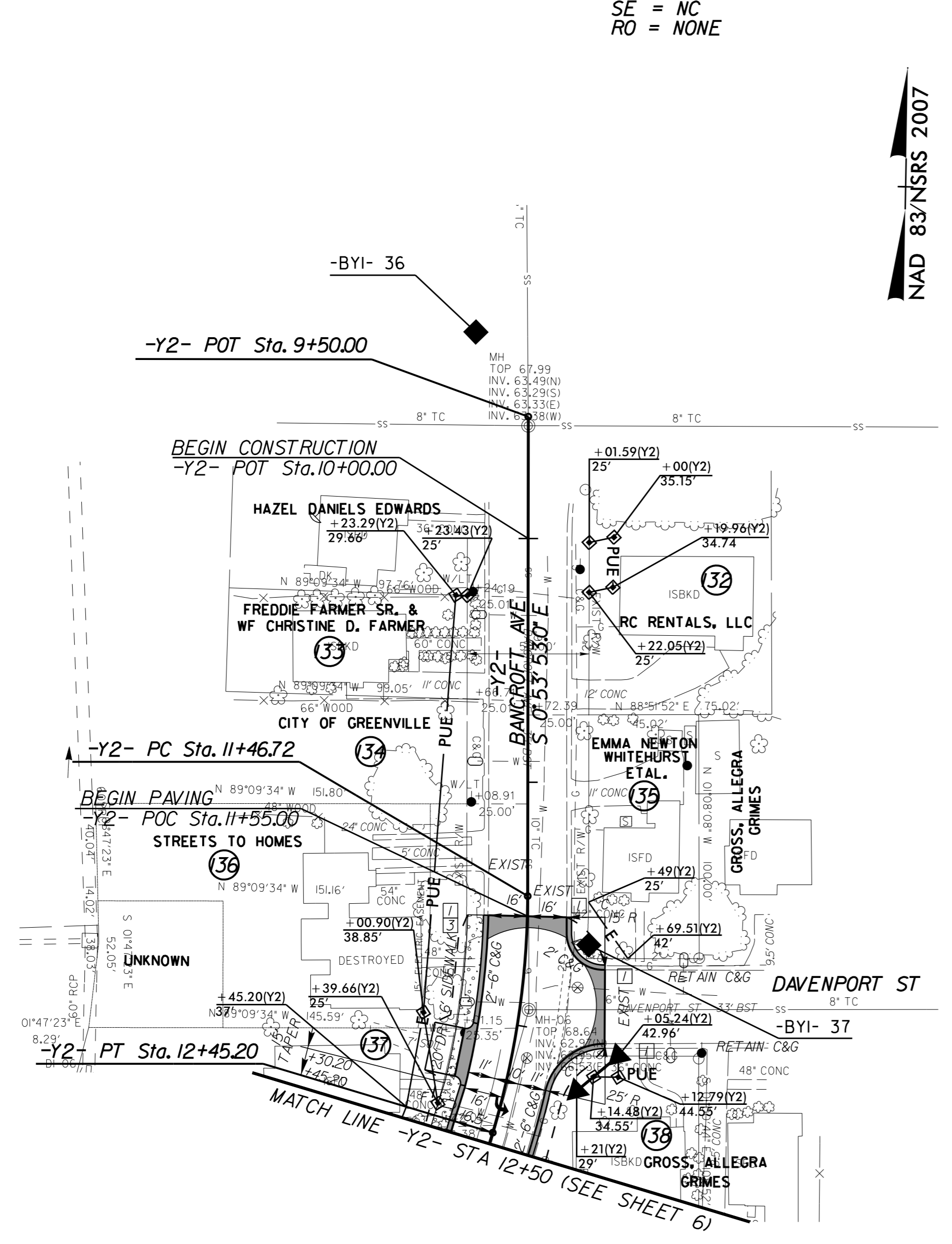
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PROJECT REFERENCE NO. U-3315	SHEET NO. 14
RW SHEET NO.	
ROADWAY ENGINEER 	HYDRAULICS ENGINEER

REVISIONS

-Y2-
 PI Sta 11+96.31
 $\Delta = 16' 35" 42.2" (RT)$
 $D = 16' 51" 06.1"$
 $L = 98.48'$
 $T = 49.59'$
 $R = 340.00'$
 $DS = 40 MPH$
 $SE = NC$
 $RO = NONE$

NAD 83/NSRS 2007



NAD 83/NSRS 2007

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6/26/2015

KATHERINE FIELDS LIFE EST

SEE SHEET NO. 21 FOR -Y2- PROFILE

SEE SHEET NO. 24 FOR -Y14- PROFILE

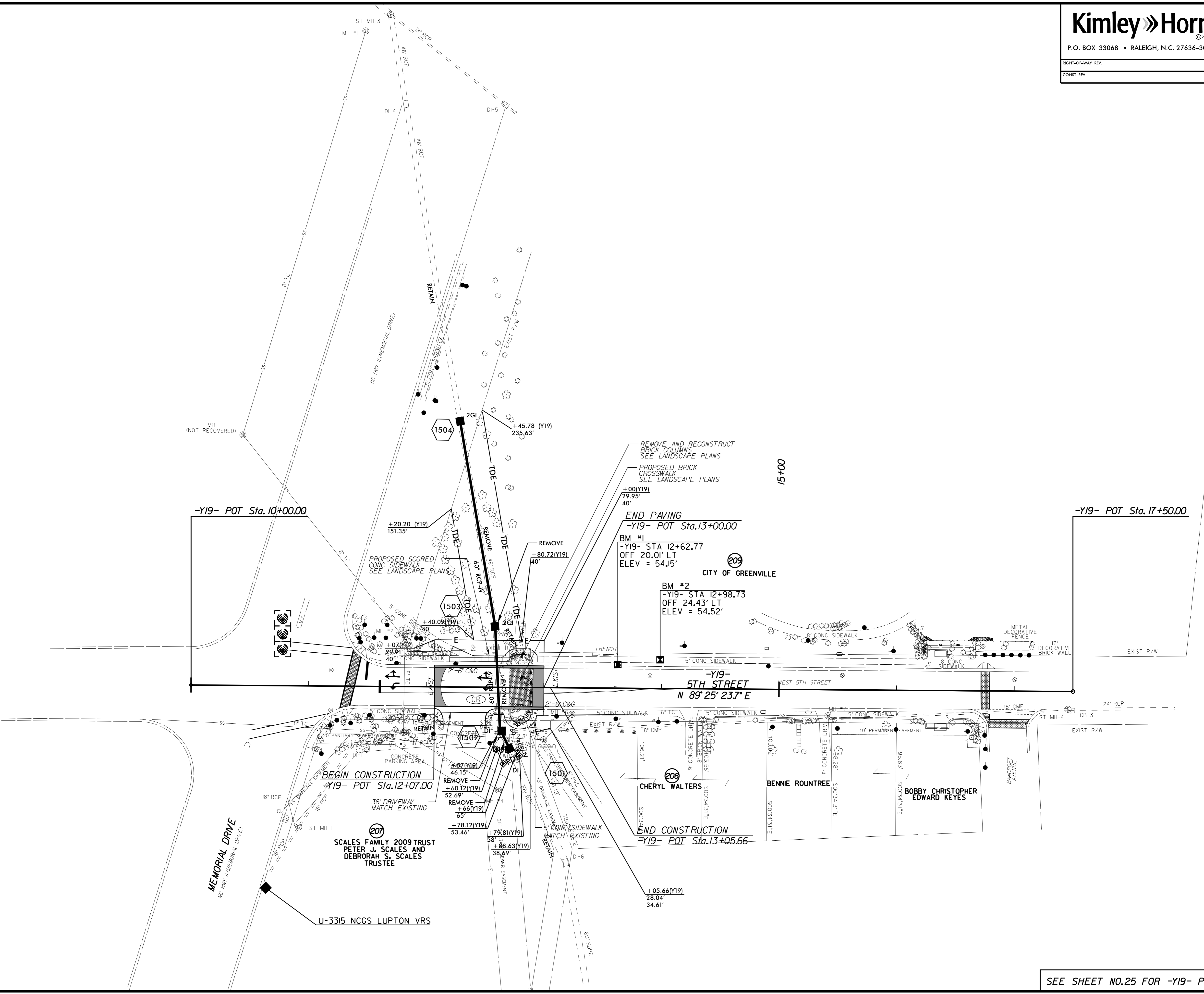
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PROJECT REFERENCE NO. U-3315	SHEET NO. 15
RW SHEET NO.	
ROADWAY ENGINEER	HYDRAULICS ENGINEER
7/2/2015	7/2/2015

RIGHT-OF-WAY REV.
CONST. REV.

REVISIONS

NAD 83/NSRS 2007

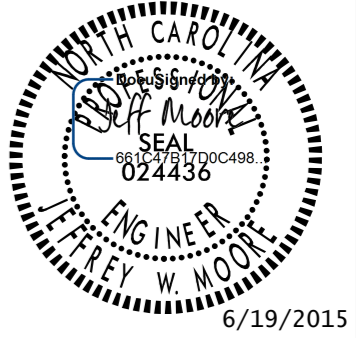
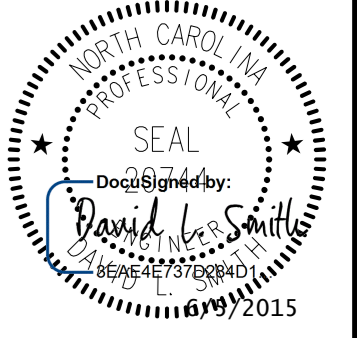


- NOTES:
- 1] TIE TO EXIST CURB AND GUTTER AT EXIST CONCRETE JOINT TRANSITION 2'-6" C&G TO MATCH EXIST GUTTER WIDTH AS NECESSARY
 - 2] SAWCUT AND REMOVE OR MILL EXISTING ASPHALT PAVEMENT OR CONCRETE PAVEMENT TO TIE-IN DRIVEWAY
 - 3] TIE TO EXISTING CONCRETE SIDEWALK
 - 4] REMOVE EXISTING STORM DRAINAGE STRUCTURE
 - 5] PROP MAST ARM SIGNAL POLE (SEE SIGNAL PLANS)

SEE SHEET NO.25 FOR -Y19- PROFILE

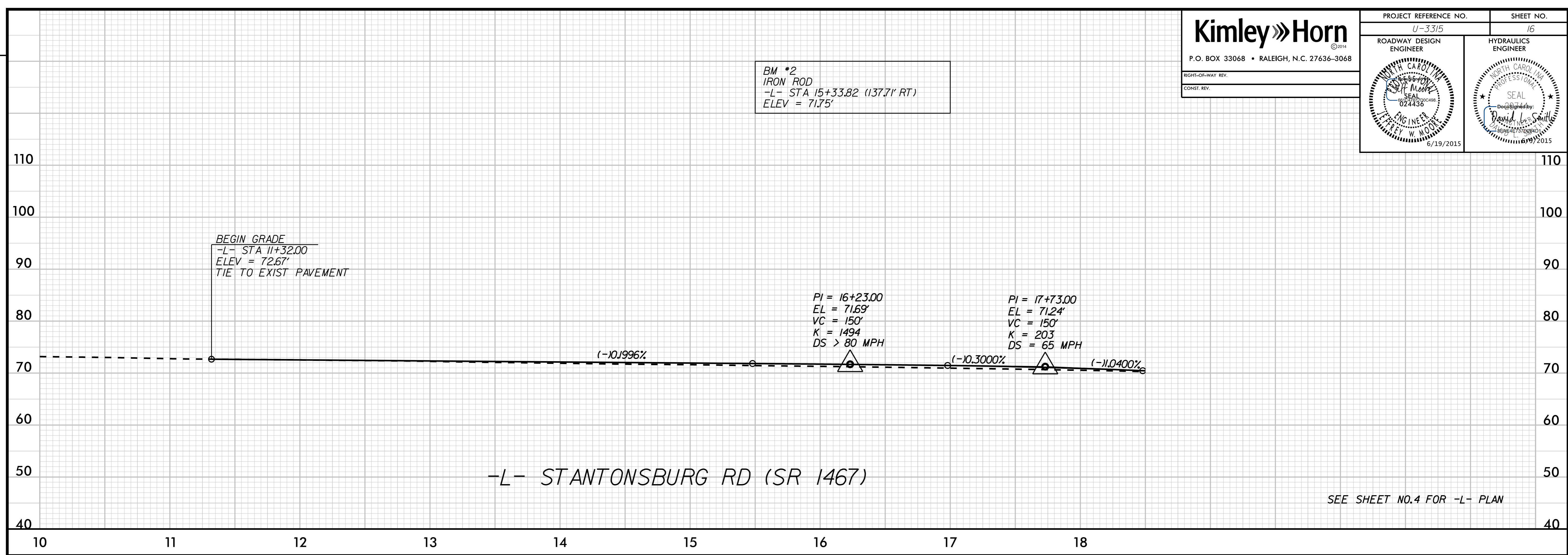
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 RIGHT-OF-WAY REV.
 CONST. REV.

PROJECT REFERENCE NO. U-3315	SHEET NO. 16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
 SEAL 024436 KIMLEY W. MOON 6/19/2015	 SEAL David Lewis Smith 6/19/2015

BM *2
 IRON ROD
 -L- STA 15+33.82 (137.71' RT)
 ELEV = 71.75'

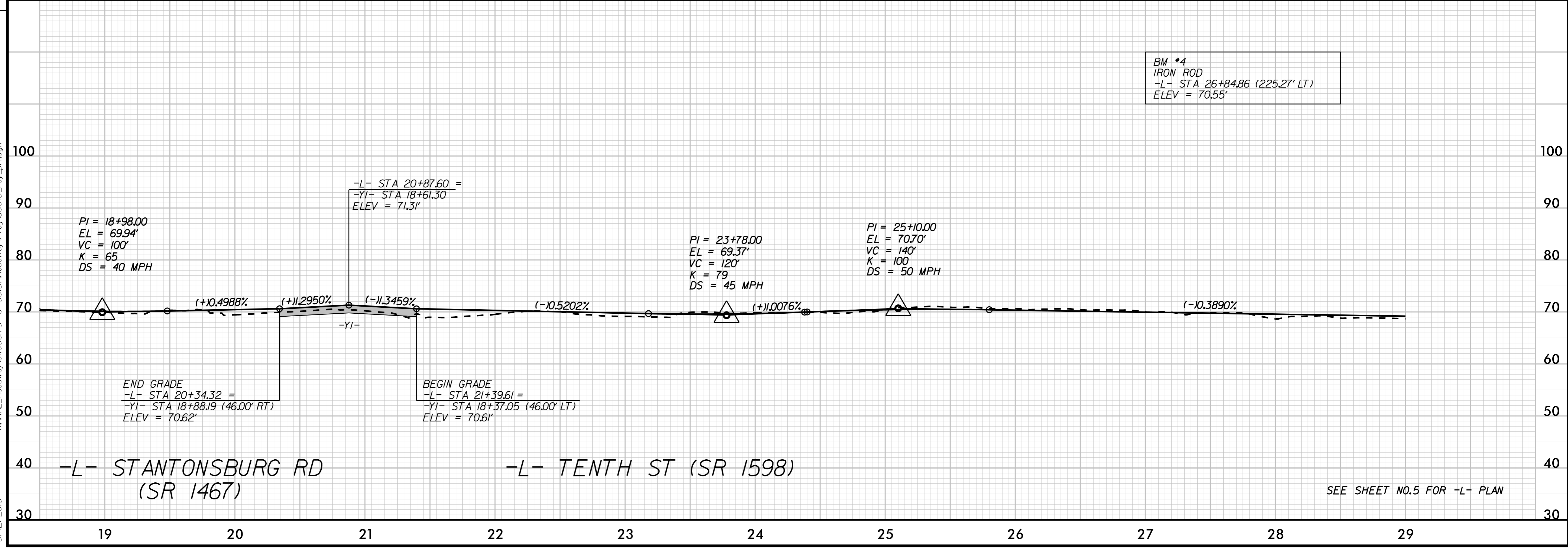
REVISIONS



-L- STANTONSBURG RD (SR 1467)

SEE SHEET NO.4 FOR -L- PLAN

BM *4
 IRON ROD
 -L- STA 26+84.86 (225.27' LT)
 ELEV = 70.55'



-L- STANTONSBURG RD (SR 1467)

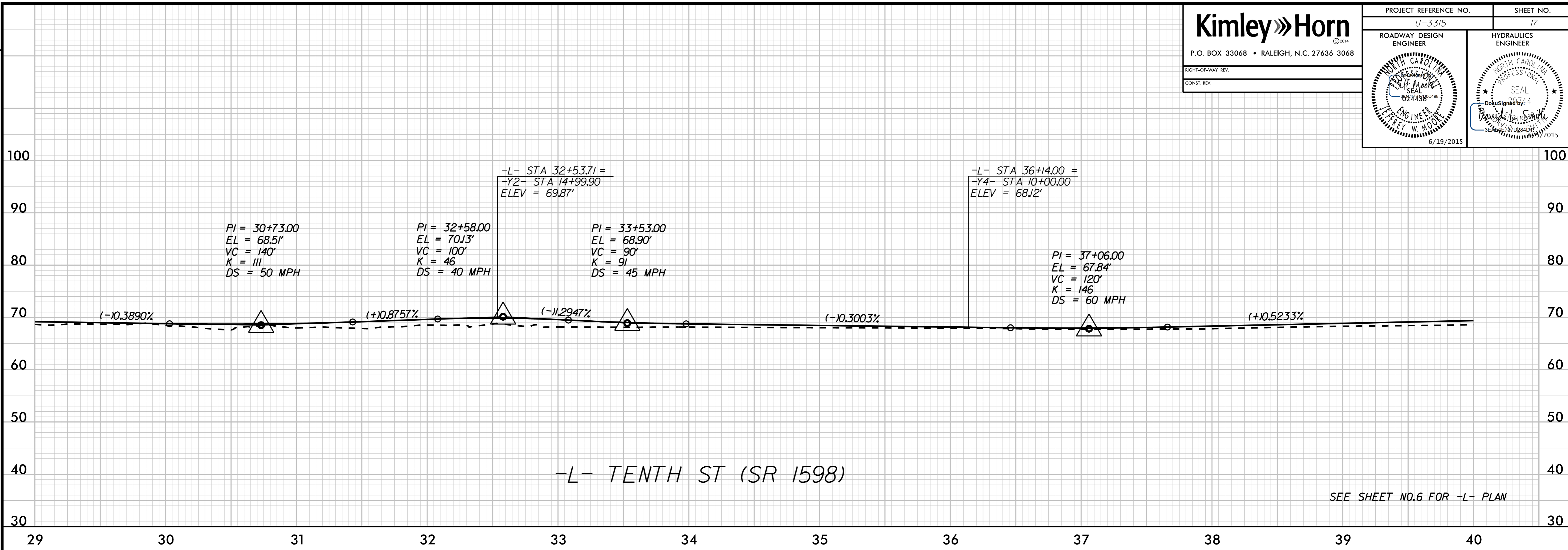
-L- TENTH ST (SR 1598)

SEE SHEET NO.5 FOR -L- PLAN

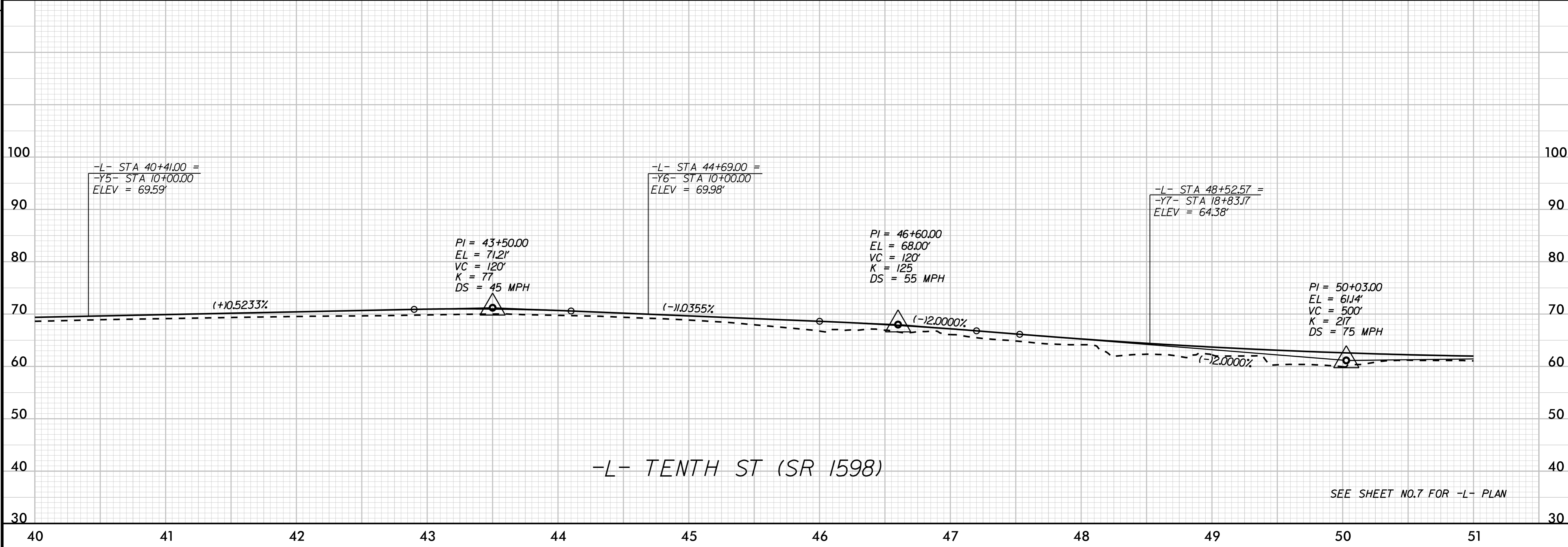
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PROJECT REFERENCE NO. U-3315	SHEET NO. 17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
6/19/2015	6/19/2015

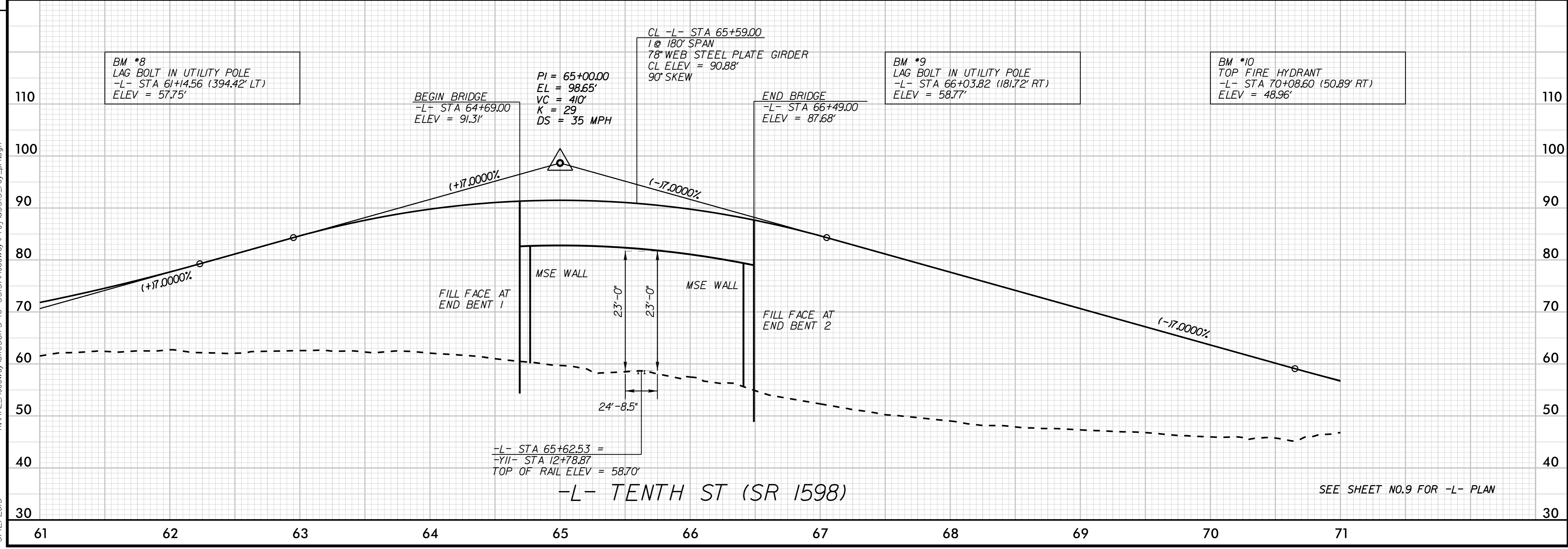
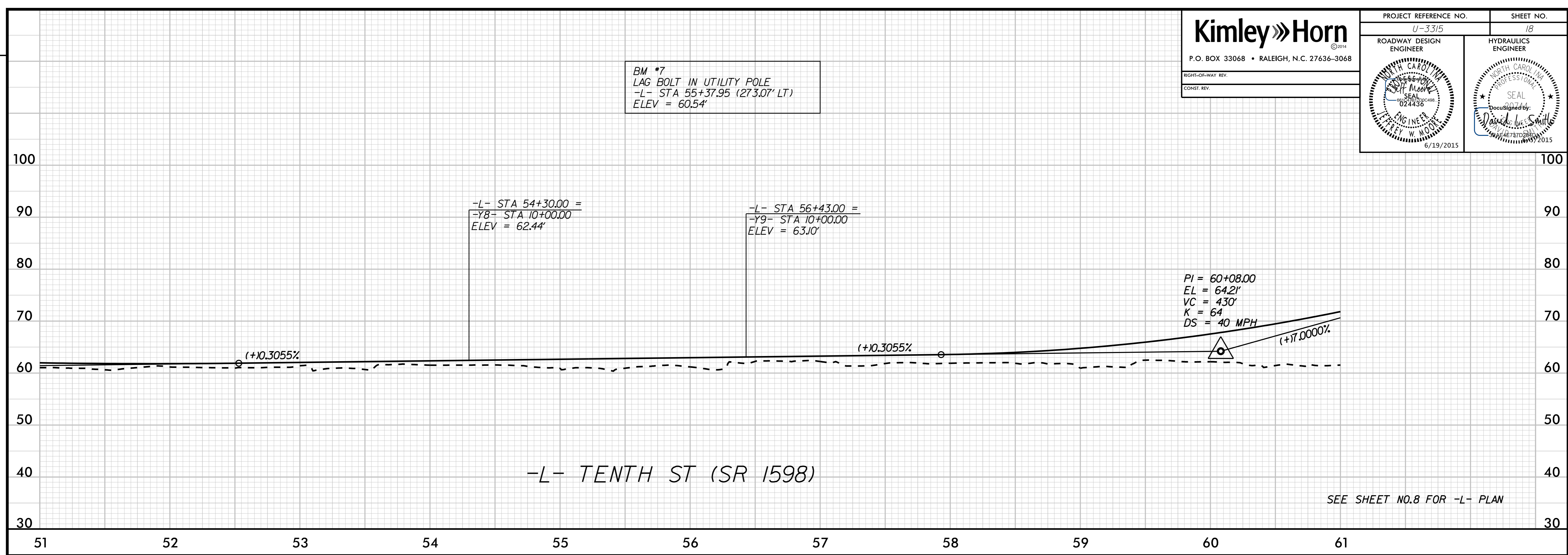
REVISIONS



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5/12/2015



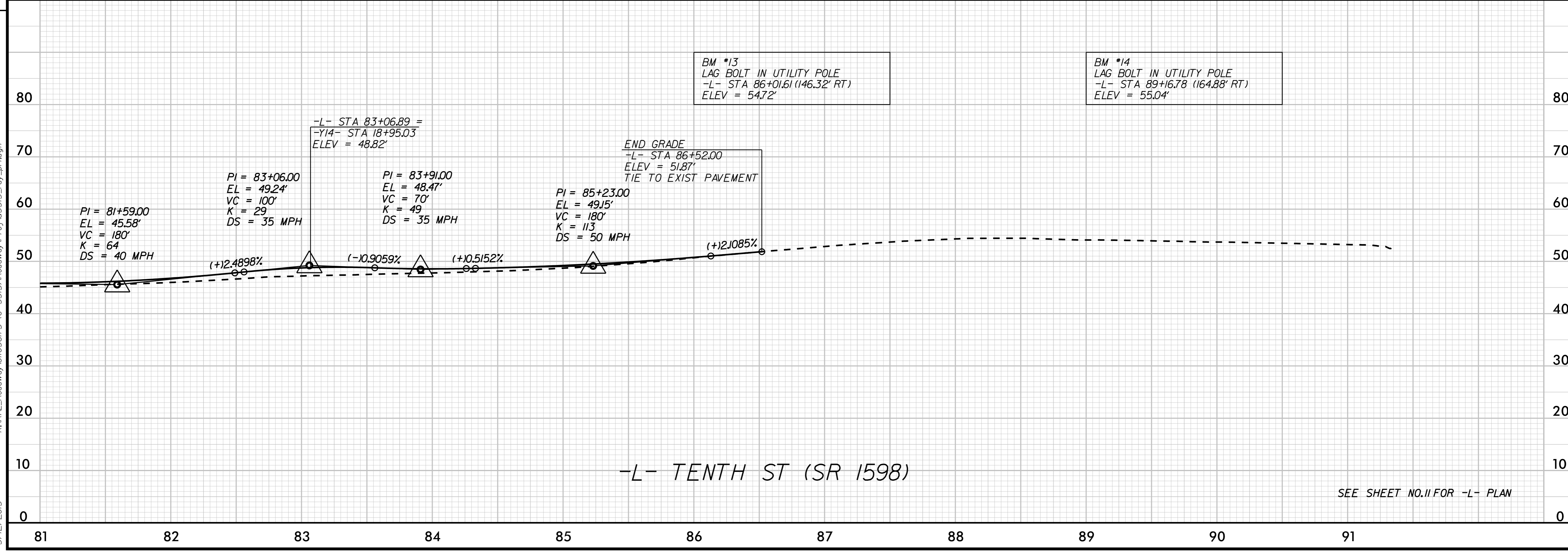
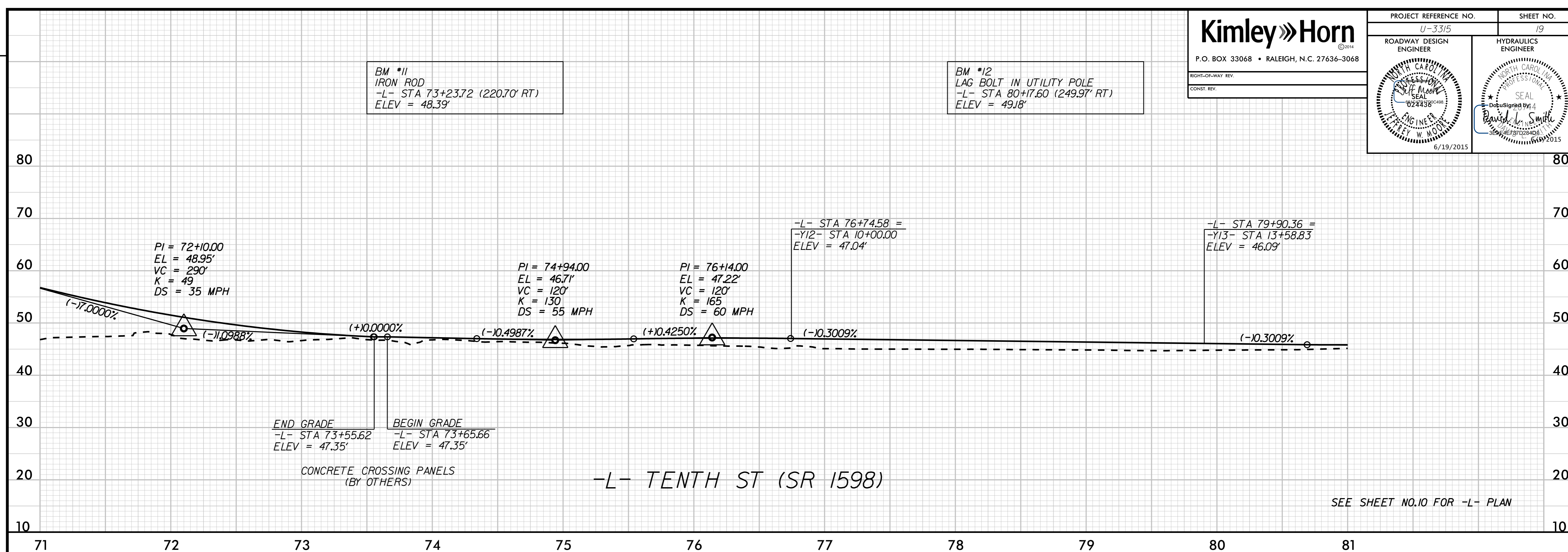
REVISIONS



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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
6/19/2015	6/19/2015

REVISIONS



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5/12/2015

REVISIONS

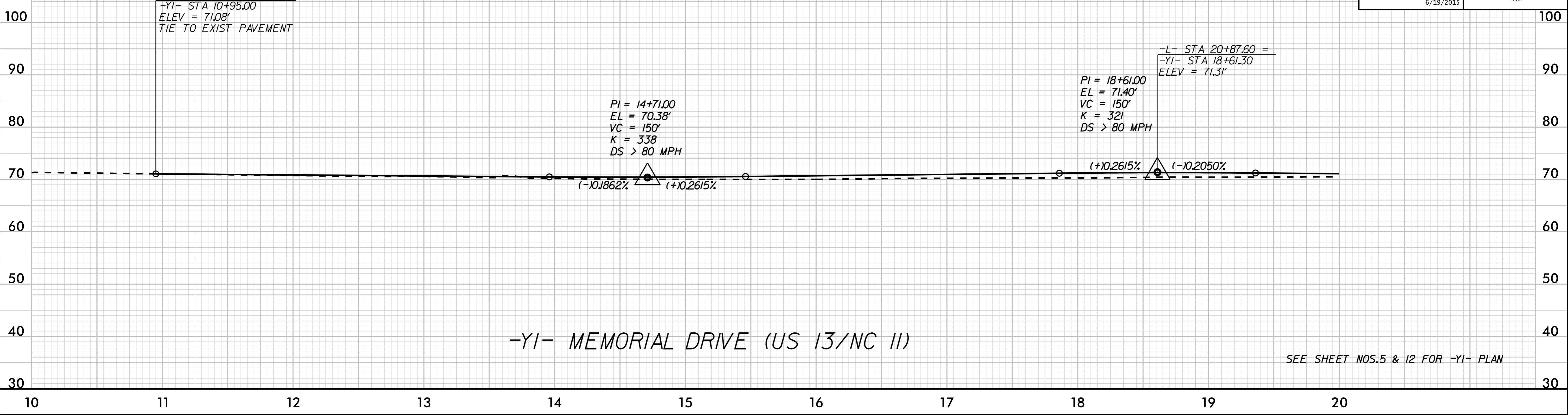
BM *1
LAG BOLT IN UTILITY POLE
-YI- STA 10+63.37 (50.71' RT)
ELEV = 71.26'

BEGIN GRADE
-YI- STA 10+95.00
ELEV = 71.08'
TIE TO EXIST PAVEMENT

PI = 14+71.00
EL = 70.38'
VC = 150'
K = 338
DS > 80 MPH

PI = 18+61.00
EL = 71.40'
VC = 150'
K = 321
DS > 80 MPH

-L- STA 20+87.60 =
-YI- STA 18+61.30
ELEV = 71.31'

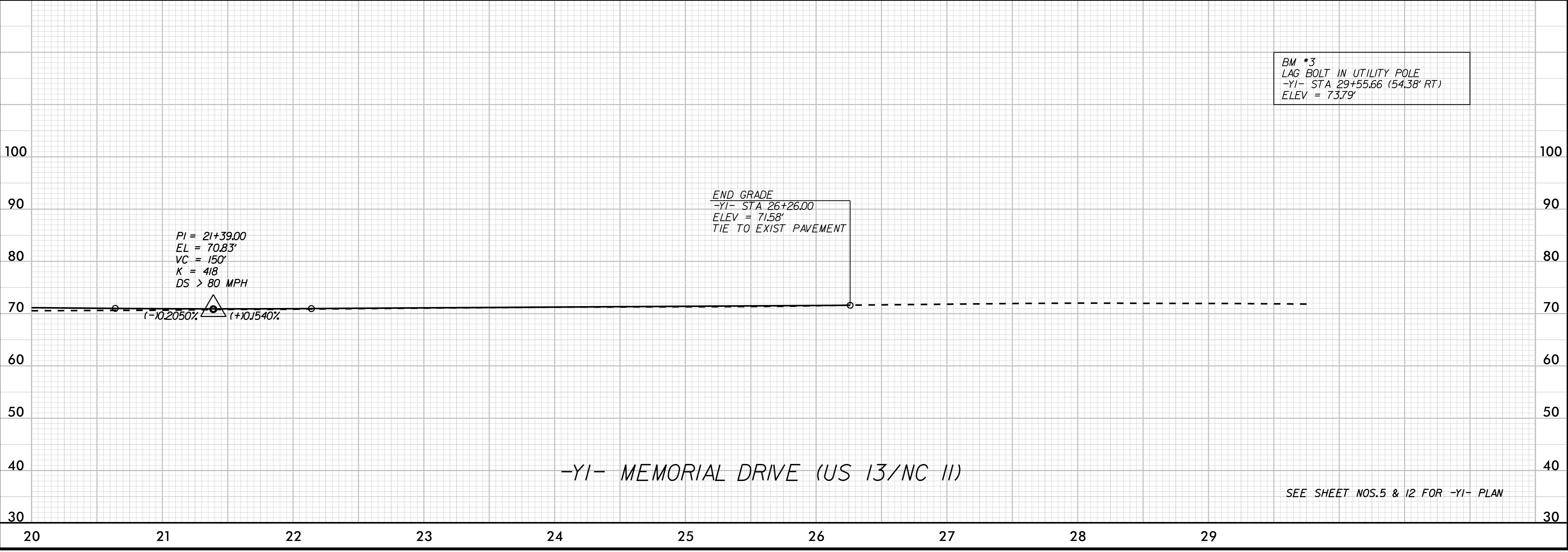


SEE SHEET NOS.5 & 12 FOR -YI- PLAN

BM *3
LAG BOLT IN UTILITY POLE
-YI- STA 29+55.66 (54.38' RT)
ELEV = 73.79'

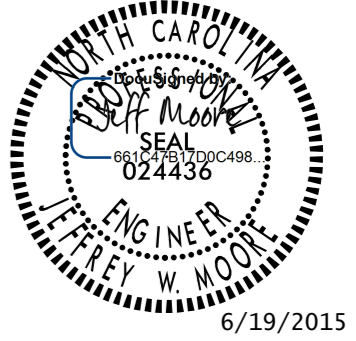
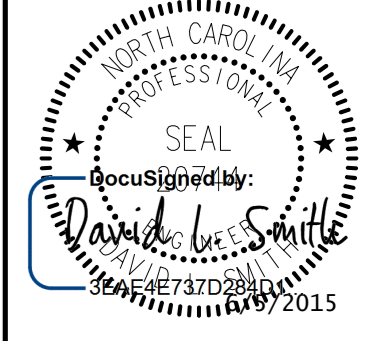
END GRADE
-YI- STA 26+26.00
ELEV = 71.58'
TIE TO EXIST PAVEMENT

PI = 21+39.00
EL = 70.83'
VC = 150'
K = 418
DS > 80 MPH

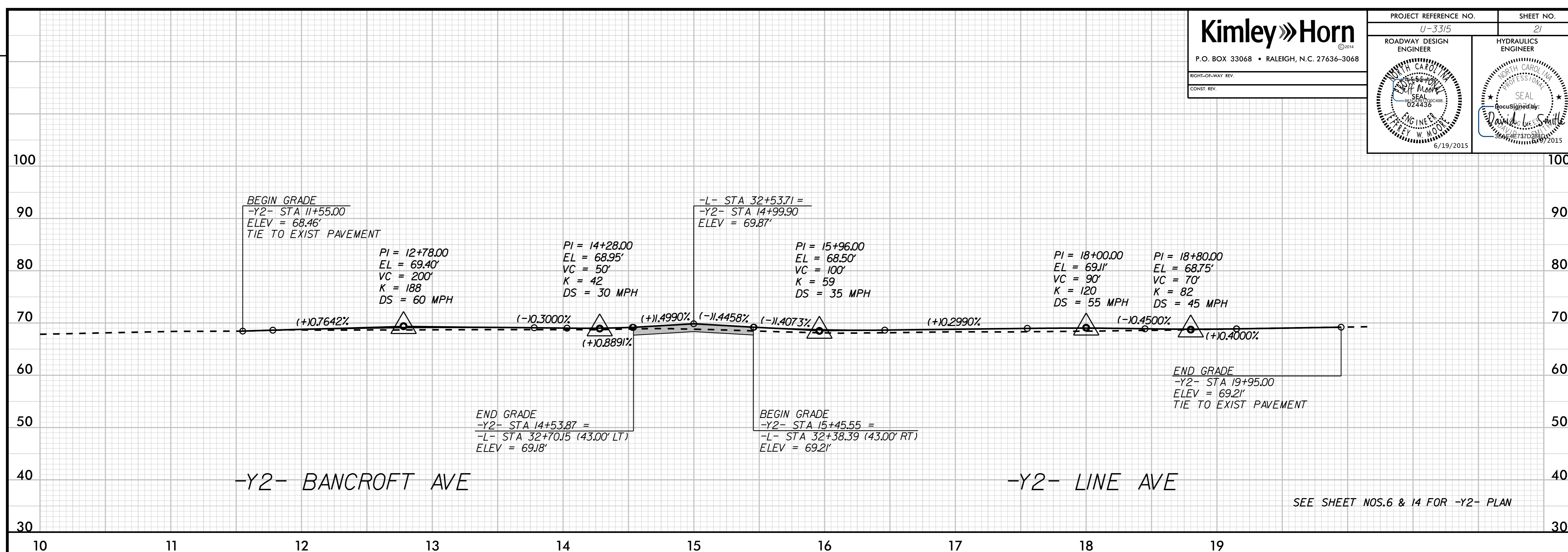


SEE SHEET NOS.5 & 12 FOR -YI- PLAN

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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 21
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
6/19/2015	6/19/2015

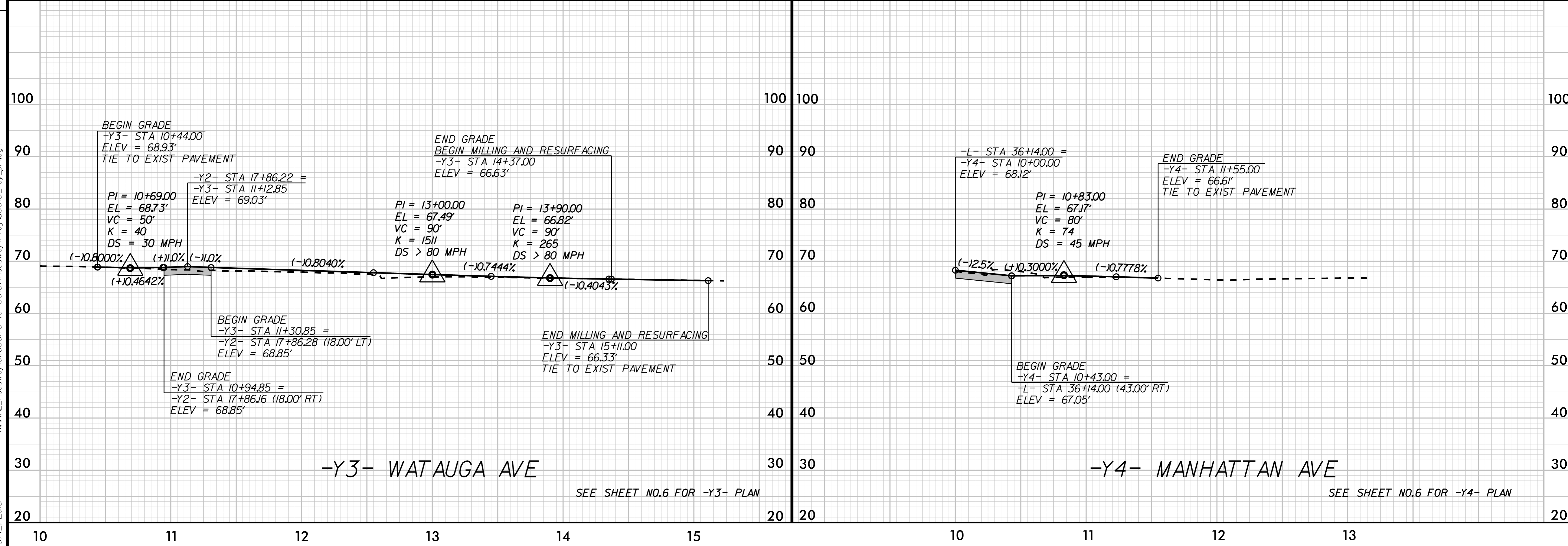
REVISIONS



-Y2- BANCROFT AVE

-Y2- LINE AVE

SEE SHEET NOS.6 & 14 FOR -Y2- PLAN



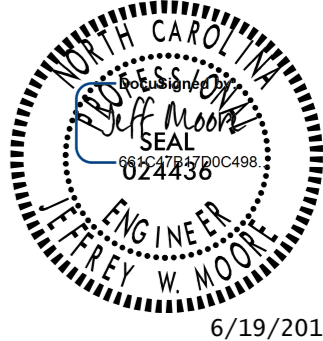
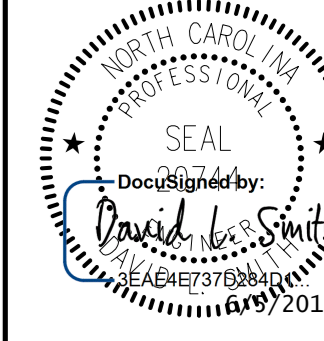
-Y3- WATAUGA AVE

-Y4- MANHATTAN AVE

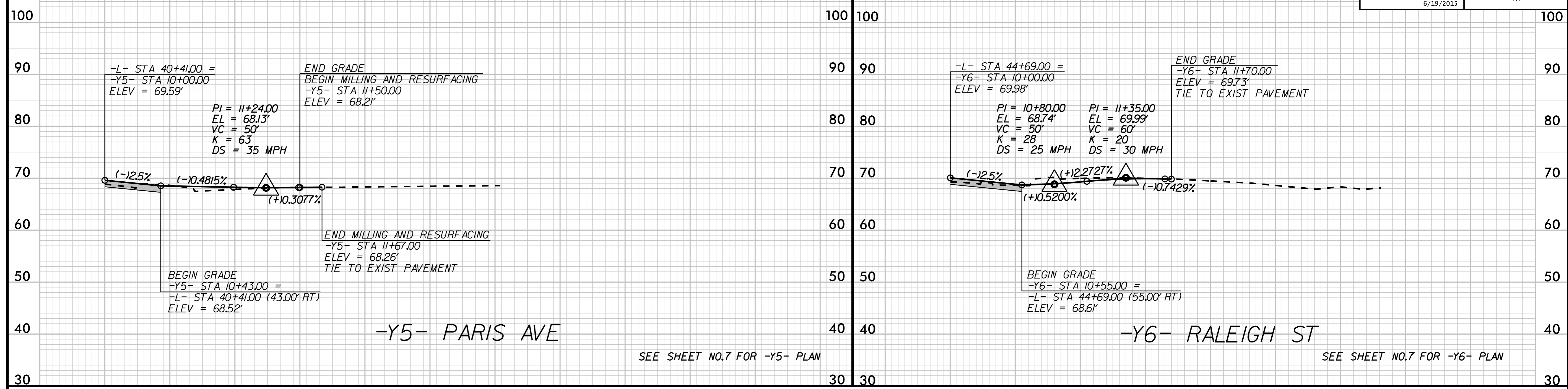
SEE SHEET NO.6 FOR -Y3- PLAN

SEE SHEET NO.6 FOR -Y4- PLAN

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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 22
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
	
6/19/2015	6/19/2015

REVISIONS



BM *5
LAG BOLT IN UTILITY POLE
-Y5- STA 12+18J3 (18.72' RT)
ELEV = 69.98'

-L- STA 40+41.00 =
-Y5- STA 10+00.00
ELEV = 69.59'

END GRADE
-Y5- STA 11+50.00
ELEV = 68.21'

PI = 11+24.00
EL = 68.13'
VC = 50'
K = 63
DS = 35 MPH

BEGIN GRADE
-Y5- STA 10+43.00 =
-L- STA 40+41.00 (43.00' RT)
ELEV = 68.52'

END MILLING AND RESURFACING
-Y5- STA 11+67.00
ELEV = 68.26'
TIE TO EXIST PAVEMENT

BM *6
LAG BOLT IN UTILITY POLE
-Y7- STA 15+71J3 (26J1' LT)
ELEV = 65.85'

BEGIN GRADE
-Y7- STA 11+15.00
ELEV = 69.13'
TIE TO EXIST PAVEMENT

PI = 14+60.00
EL = 64.63'
VC = 200'
K = 203
DS = 70 MPH

PI = 18+00.00
EL = 63.46'
VC = 60'
K = 42
DS = 30 MPH

-Y7- STA 18+83.17 =
-L- STA 48+52.57
ELEV = 64.38'

PI = 20+16.00
EL = 62.16'
VC = 140'
K = 64
DS = 40 MPH

END GRADE
-Y7- STA 18+30.83 =
-L- STA 48+22.85 (43.00' LT)
ELEV = 63.79'

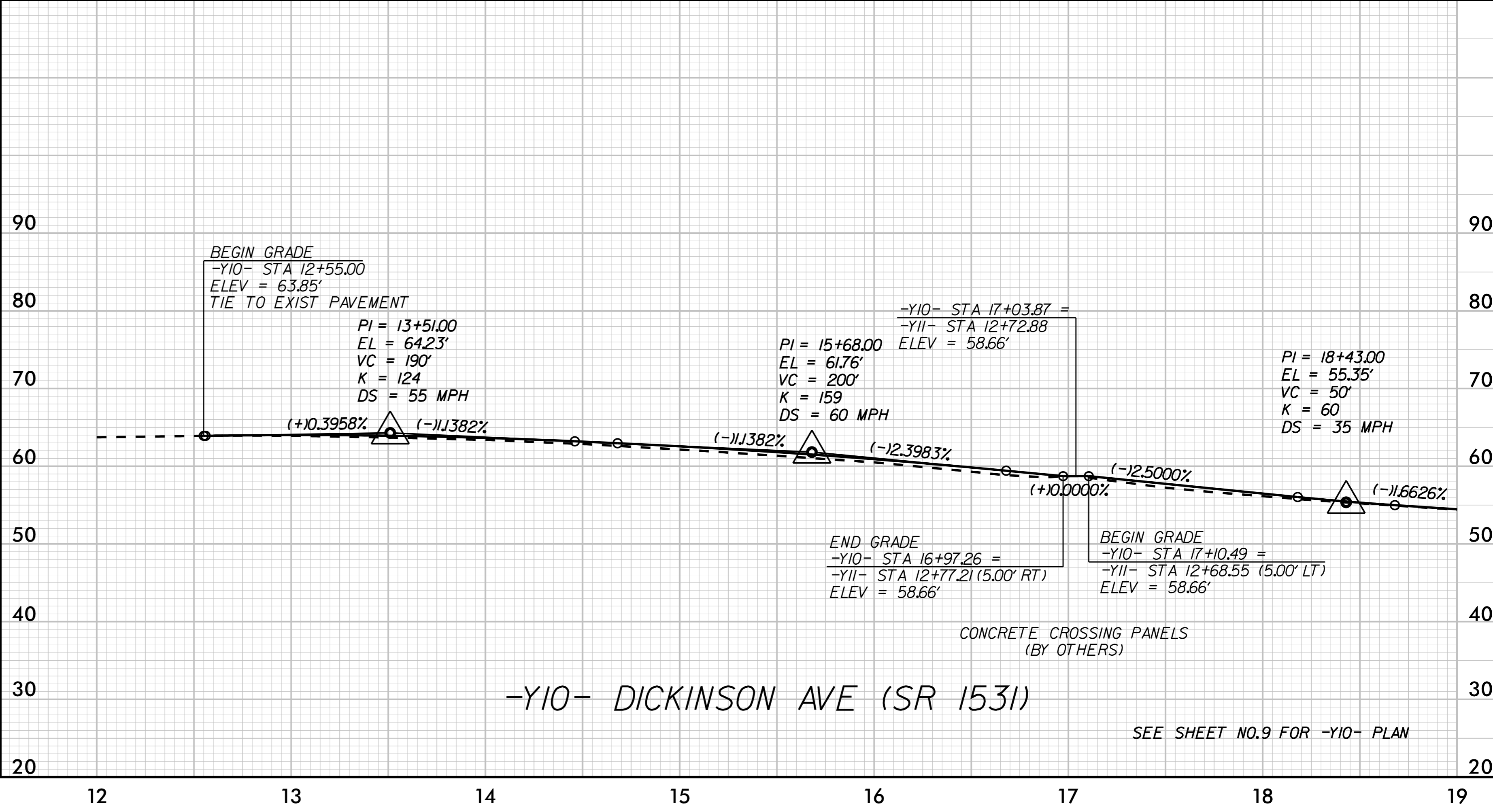
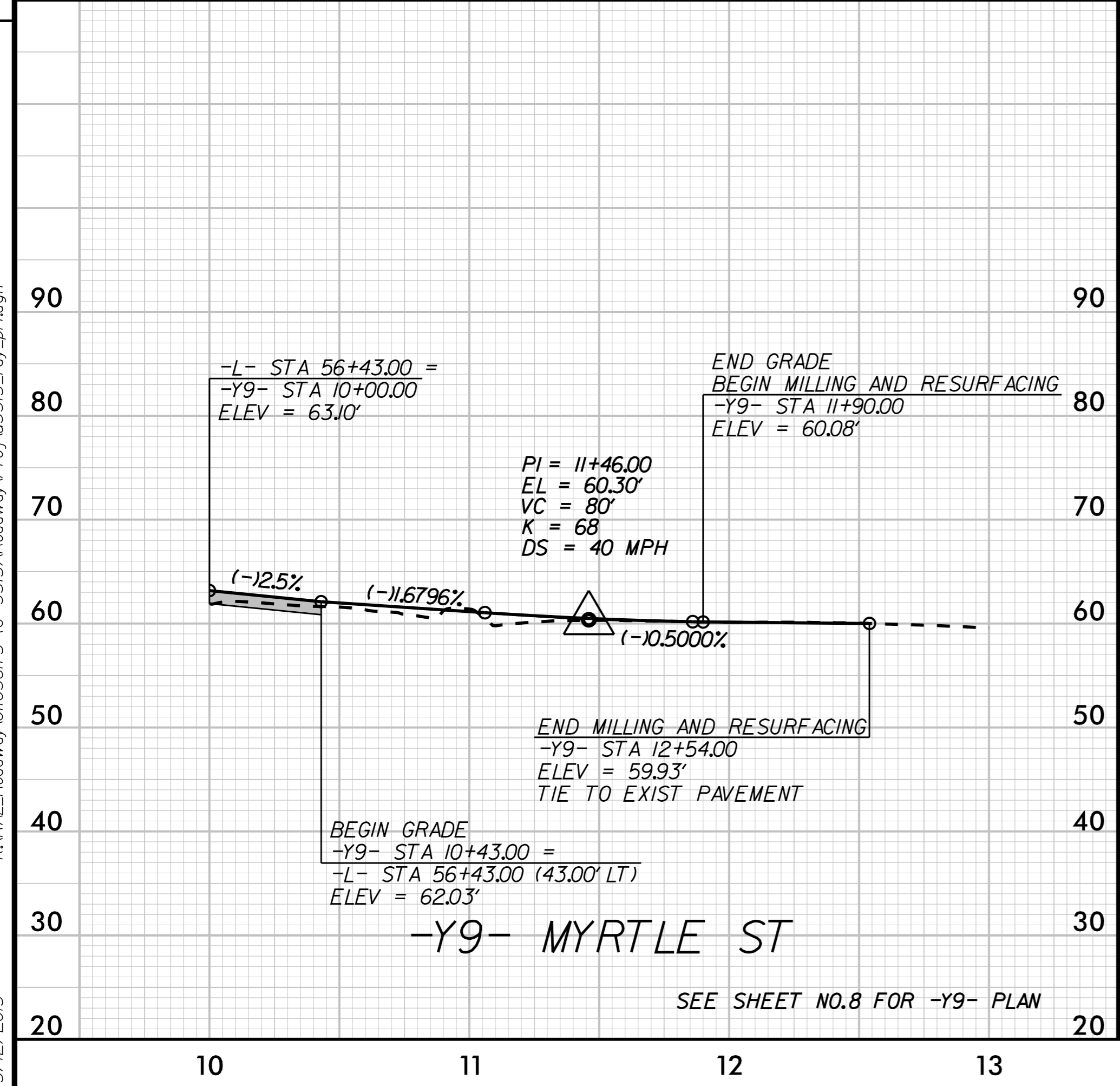
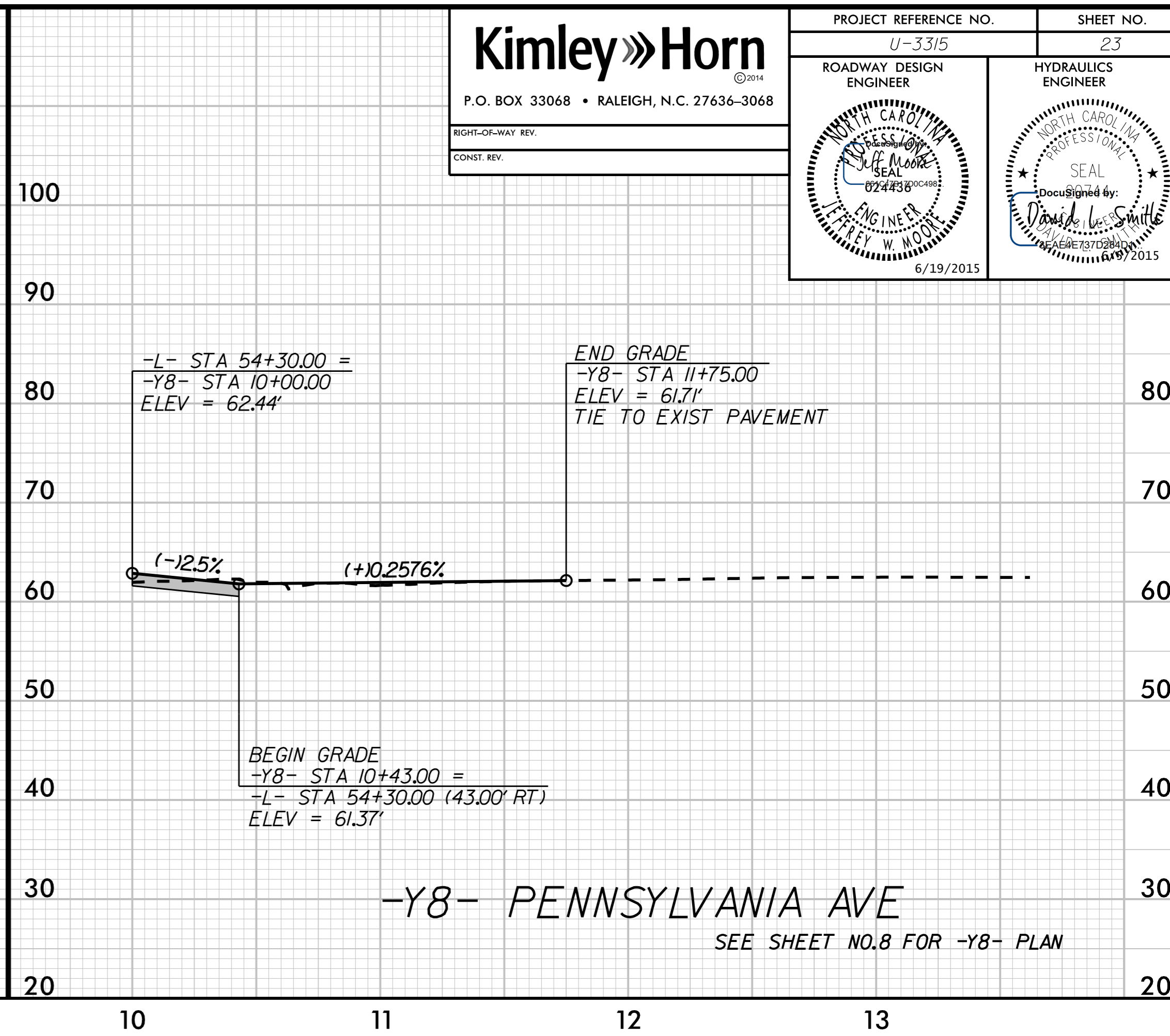
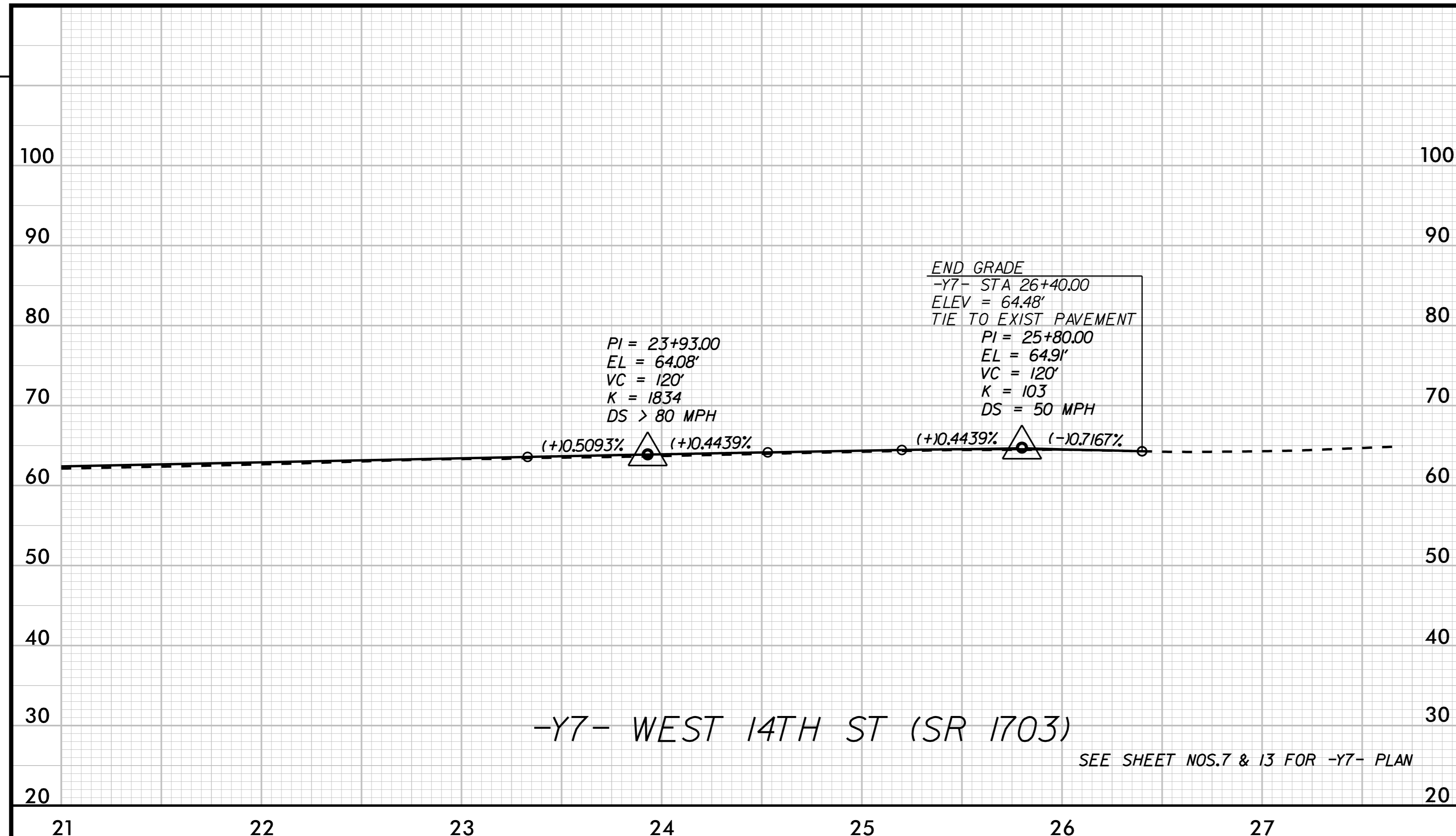
BEGIN GRADE
-Y7- STA 19+35.74 =
-L- STA 48+82.93 (43.00' RT)
ELEV = 63.50'

-Y7- WEST 14TH ST (SR 1703)
SEE SHEET NOS.7 & 13 FOR -Y7- PLAN

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PROJECT REFERENCE NO. U-3315	SHEET NO. 23
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

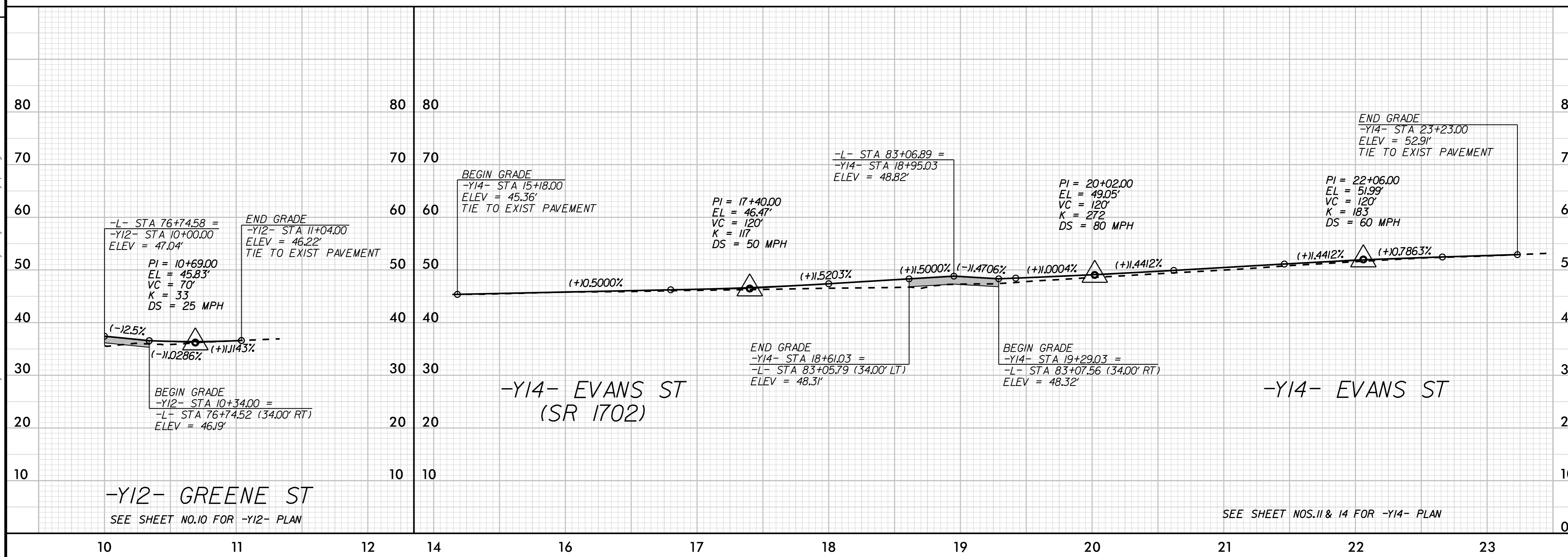
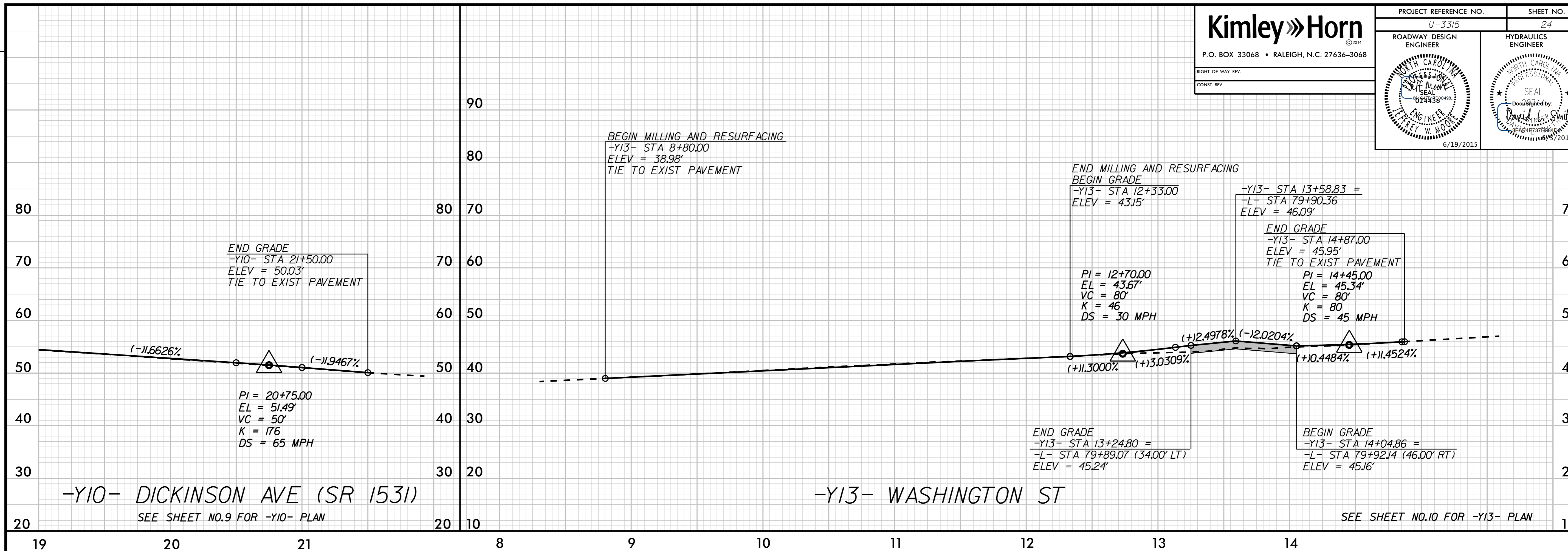
REVISIONS



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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 24
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
6/19/2015	

REVISIONS

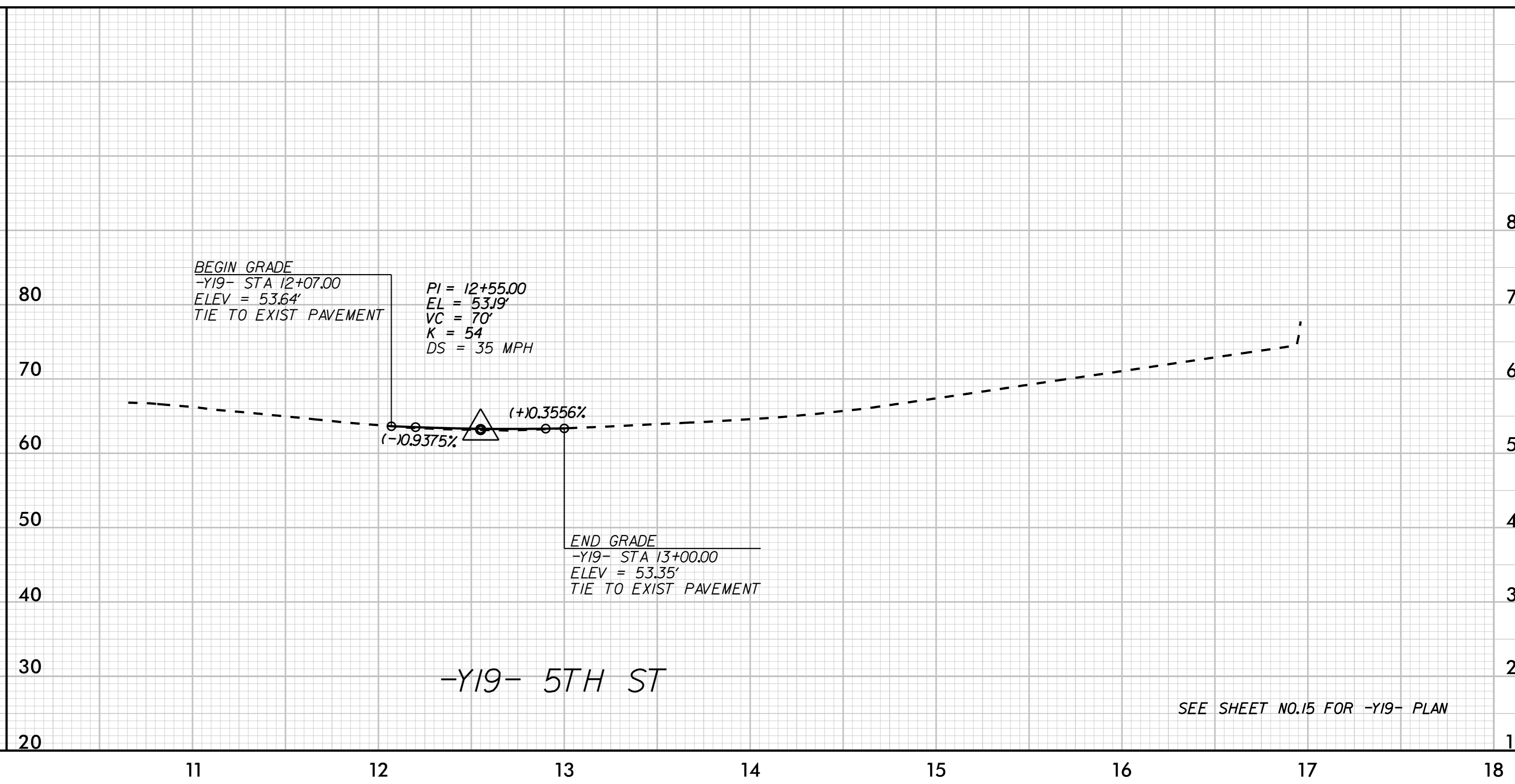
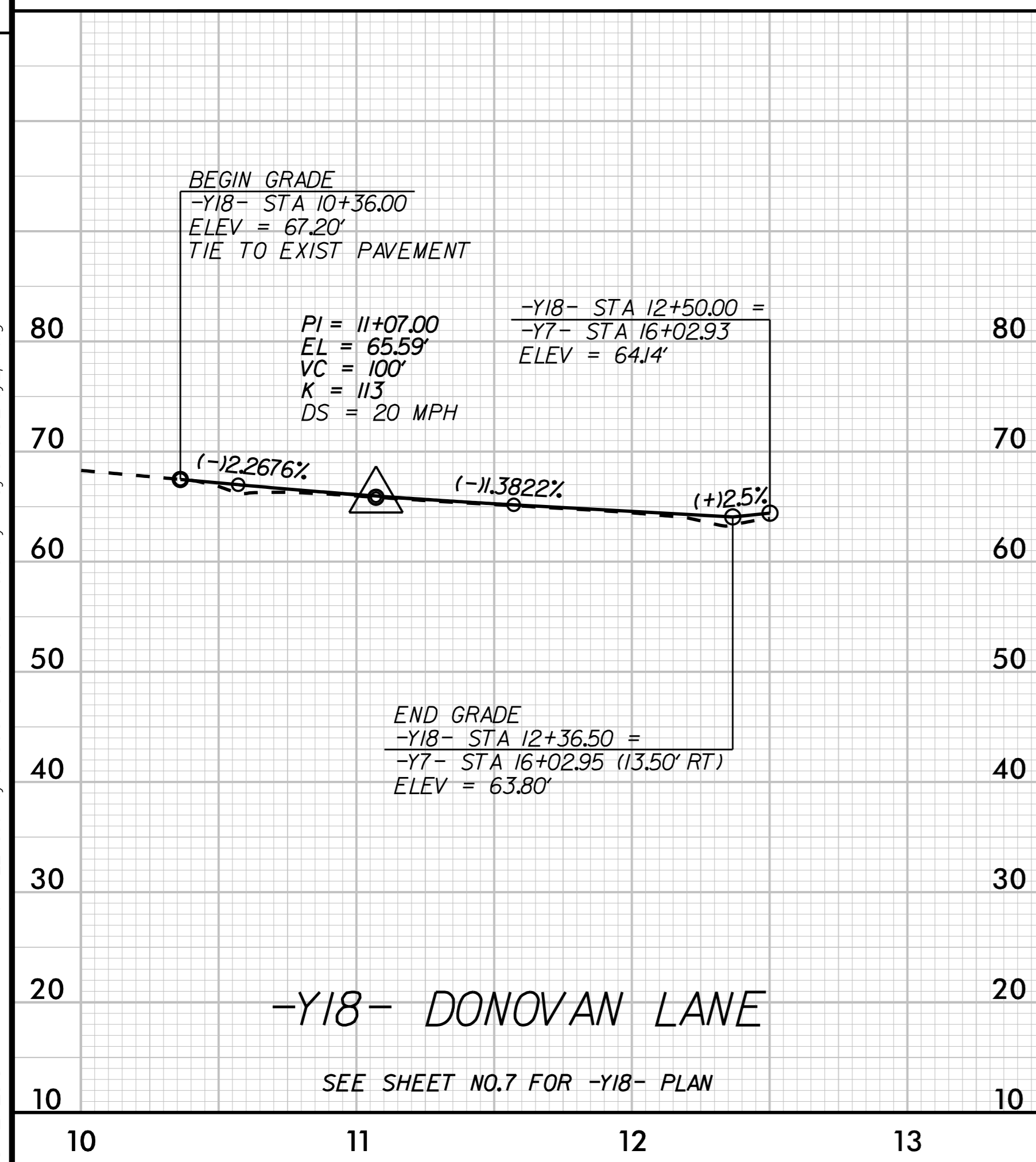
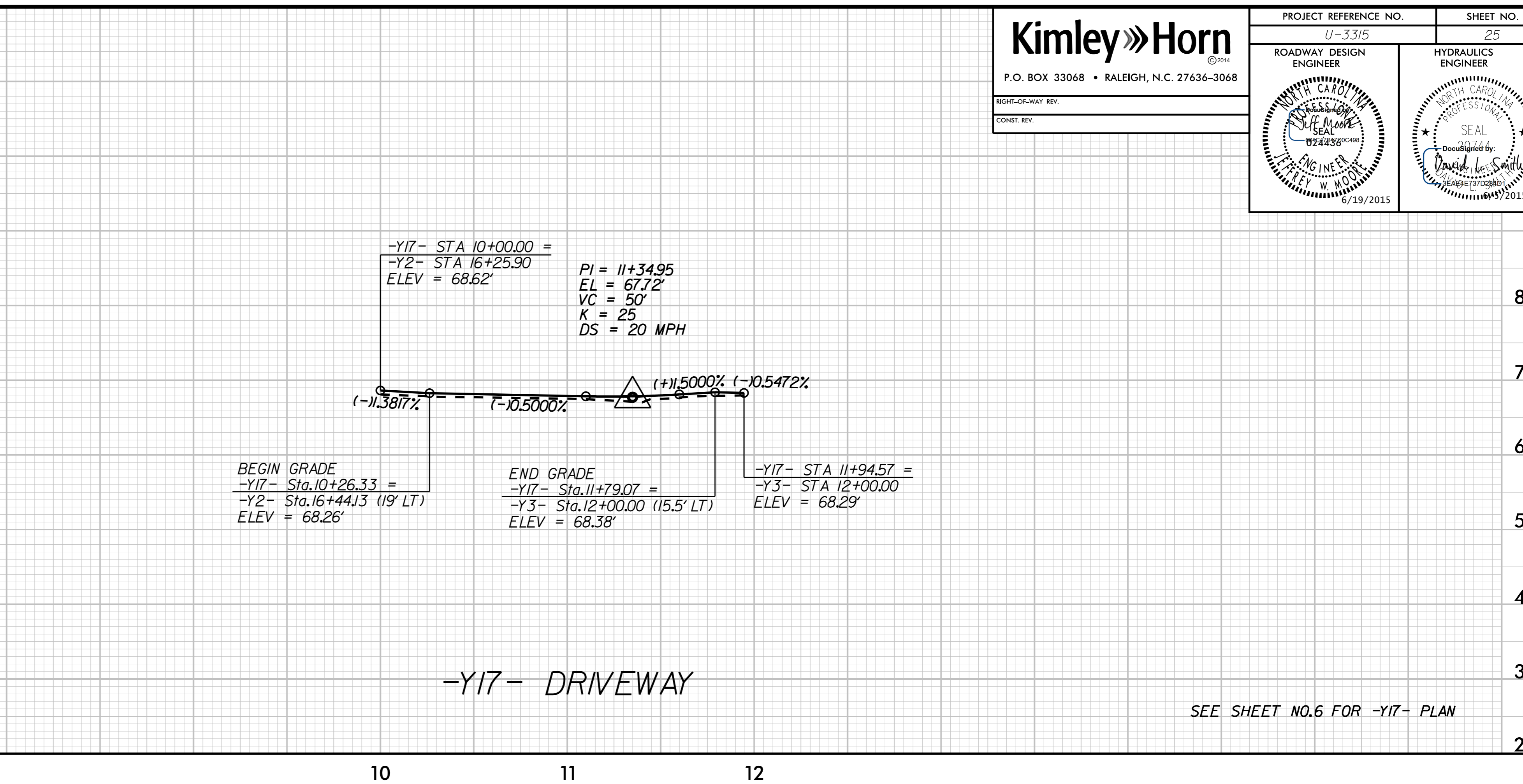
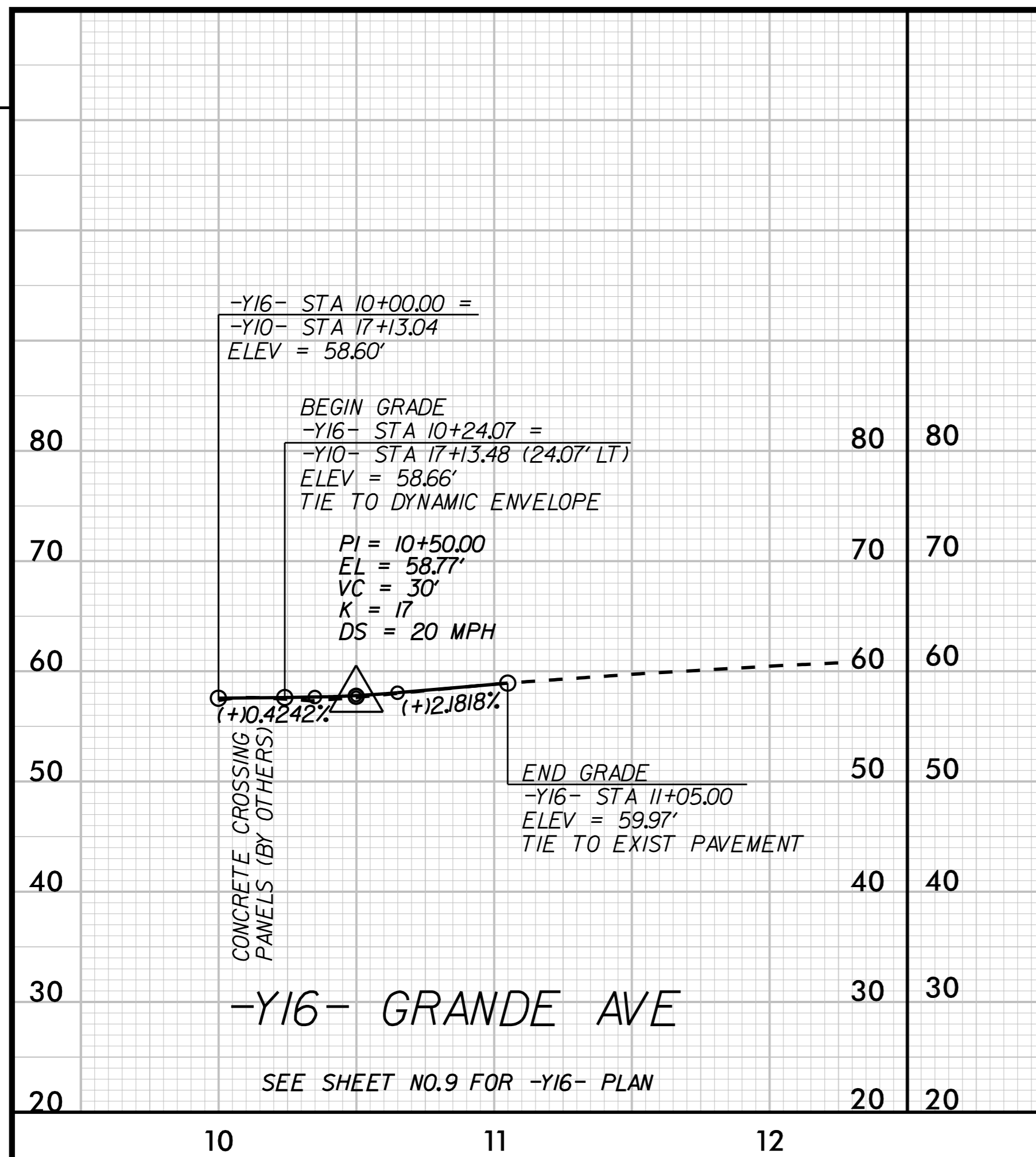


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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 25
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS



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5/12/2015

PROJECT REFERENCE NO. U-3315	SHEET NO. 26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

REVISIONS



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5/12/2015

