





Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

Table listing symbols for boundaries and property: State Line, County Line, Township Line, City Line, Reservation Line, Property Line, Existing Iron Pin, Property Corner, Property Monument, Parcel/Sequence Number, Existing Fence Line, Proposed Woven Wire Fence, Proposed Chain Link Fence, Proposed Barbed Wire Fence, Existing Wetland Boundary, Proposed Wetland Boundary, Existing High Quality Wetland Boundary, Existing Endangered Animal Boundary, Existing Endangered Plant Boundary.

BUILDINGS AND OTHER CULTURE:

Table listing symbols for buildings and other culture: Gas Pump Vent or U/G Tank Cap, Sign, Well, Small Mine, Foundation, Area Outline, Cemetery, Building, School, Church, Dam.

HYDROLOGY:

Table listing symbols for hydrology: Stream or Body of Water, Hydro, Pool or Reservoir, River Basin Buffer, Flow Arrow, Disappearing Stream, Spring, Swamp Marsh, Proposed Lateral, Tail, Head Ditch, False Sump.

RAILROADS:

Table listing symbols for railroads: Standard Gauge, RR Signal Milepost, Switch, RR Abandoned, RR Dismantled.

RIGHT OF WAY:

Table listing symbols for right of way: Baseline Control Point, Existing Right of Way Marker, Existing Right of Way Line, Proposed Right of Way Line, Proposed Right of Way Line with Iron Pin and Cap Marker, Proposed Right of Way Line with Concrete or Granite Marker, Existing Control of Access, Proposed Control of Access, Existing Easement Line, Proposed Temporary Construction Easement, Proposed Temporary Drainage Easement, Proposed Permanent Drainage Easement, Proposed Permanent Utility Easement.

ROADS AND RELATED FEATURES:

Table listing symbols for roads and related features: Existing Edge of Pavement, Existing Curb, Proposed Slope Stakes Cut, Proposed Slope Stakes Fill, Proposed Wheel Chair Ramp, Curb Cut for Future Wheel Chair Ramp, Existing Metal Guardrail, Proposed Guardrail, Existing Cable Guiderail, Proposed Cable Guiderail, Equaility Symbol, Pavement Removal.

VEGETATION:

Table listing symbols for vegetation: Single Tree, Single Shrub, Hedge, Woods Line, Orchard, Vineyard.

EXISTING STRUCTURES:

Table listing symbols for existing structures: MAJOR: Bridge, Tunnel or Box Culvert, Bridge Wing Wall, Head Wall and End Wall; MINOR: Head and End Wall, Pipe Culvert, Footbridge, Drainage Box: Catch Basin, DI or JB, Paved Ditch Gutter, Storm Sewer Manhole, Storm Sewer.

UTILITIES:

Table listing symbols for 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, Designated U/G Power Line (S.U.E.\*); 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, Designated U/G Telephone Cable (S.U.E.\*), Recorded U/G Telephone Conduit, Designated U/G Telephone Conduit (S.U.E.\*), Recorded U/G Fiber Optics Cable, Designated U/G Fiber Optics Cable (S.U.E.\*).

WATER:

Table listing symbols for water: Water Manhole, Water Meter, Water Valve, Water Hydrant, Recorded U/G Water Line, Designated U/G Water Line (S.U.E.\*), Above Ground Water Line.

TV:

Table listing symbols for TV: TV Satellite Dish, TV Pedestal, TV Tower, U/G TV Cable Hand Hole, Recorded U/G TV Cable, Designated U/G TV Cable (S.U.E.\*), Recorded U/G Fiber Optic Cable, Designated U/G Fiber Optic Cable (S.U.E.\*).

GAS:

Table listing symbols for gas: Gas Valve, Gas Meter, Recorded U/G Gas Line, Designated U/G Gas Line (S.U.E.\*), Above Ground Gas Line.

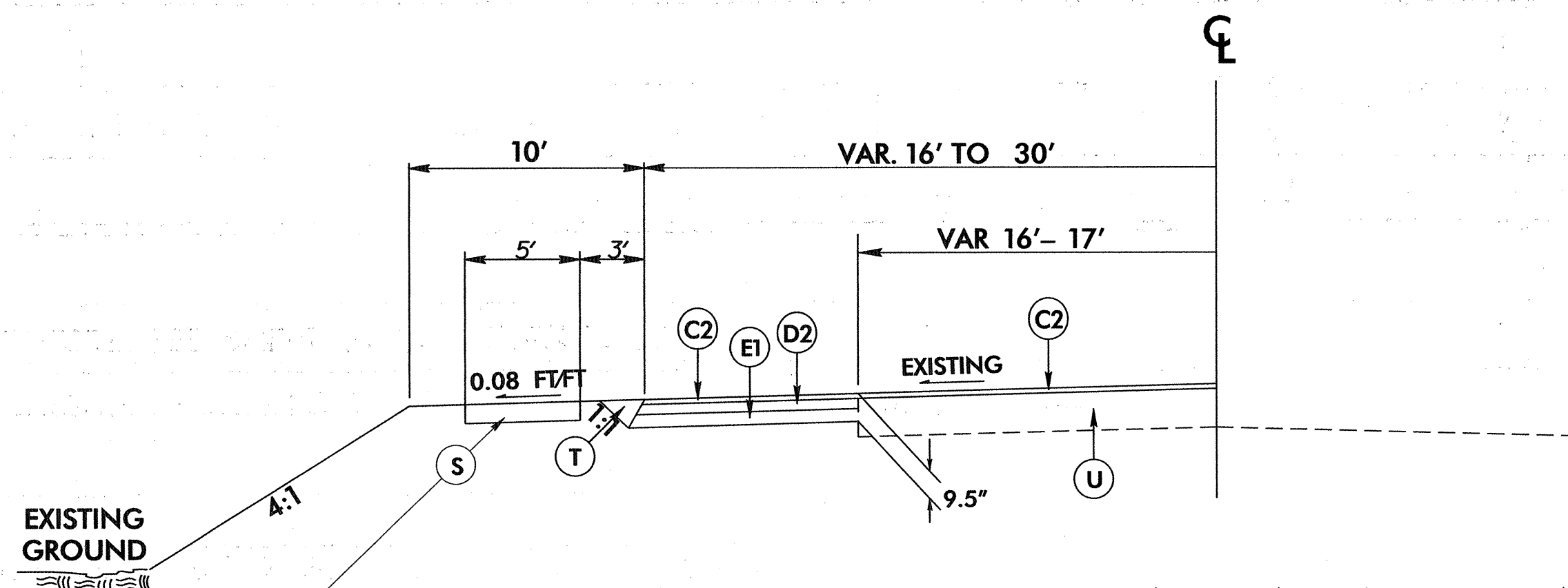
SANITARY SEWER:

Table listing symbols for sanitary sewer: Sanitary Sewer Manhole, Sanitary Sewer Cleanout, U/G Sanitary Sewer Line, Above Ground Sanitary Sewer, Recorded SS Forced Main Line, Designated SS Forced Main Line (S.U.E.\*).

MISCELLANEOUS:

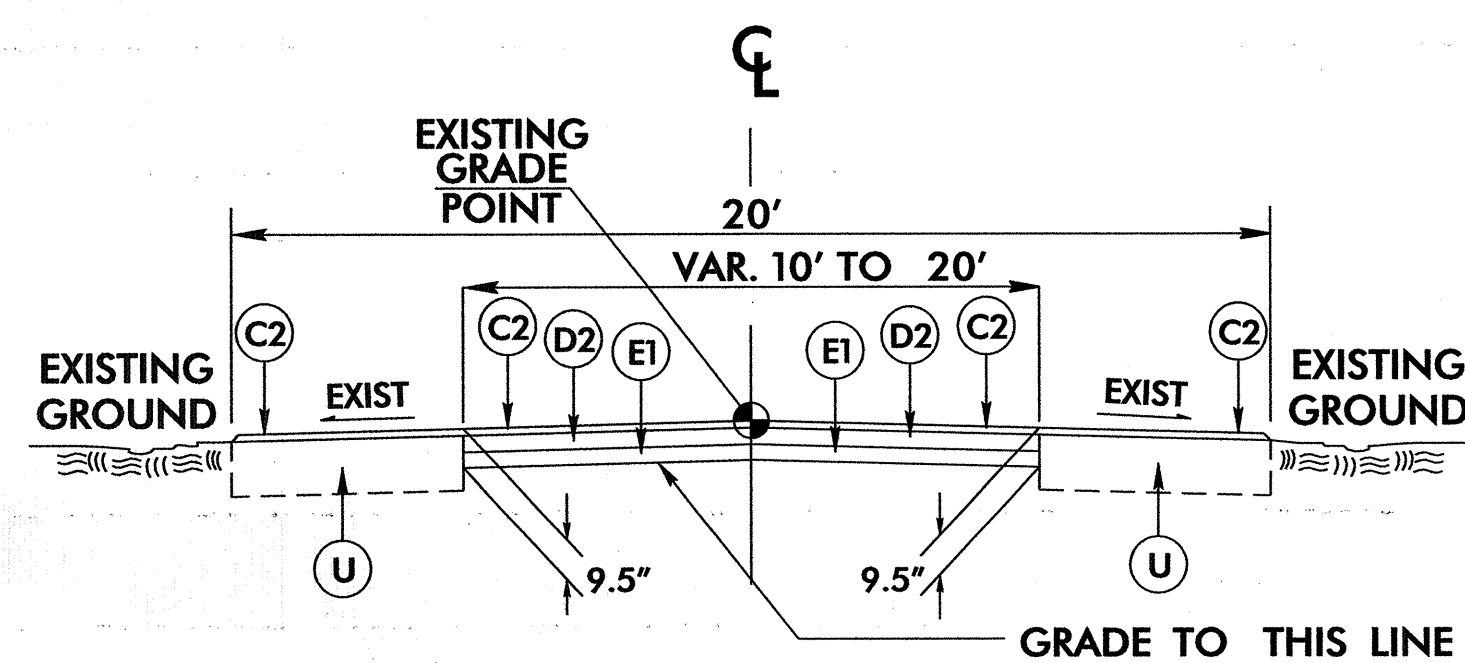
Table listing symbols for miscellaneous: Utility Pole, Utility Pole with Base, Utility Located Object, Utility Traffic Signal Box, Utility Unknown U/G Line, U/G Tank; Water, Gas, Oil, A/G Tank; Water, Gas, Oil, U/G Test Hole (S.U.E.\*), Abandoned According to Utility Records, End of Information.



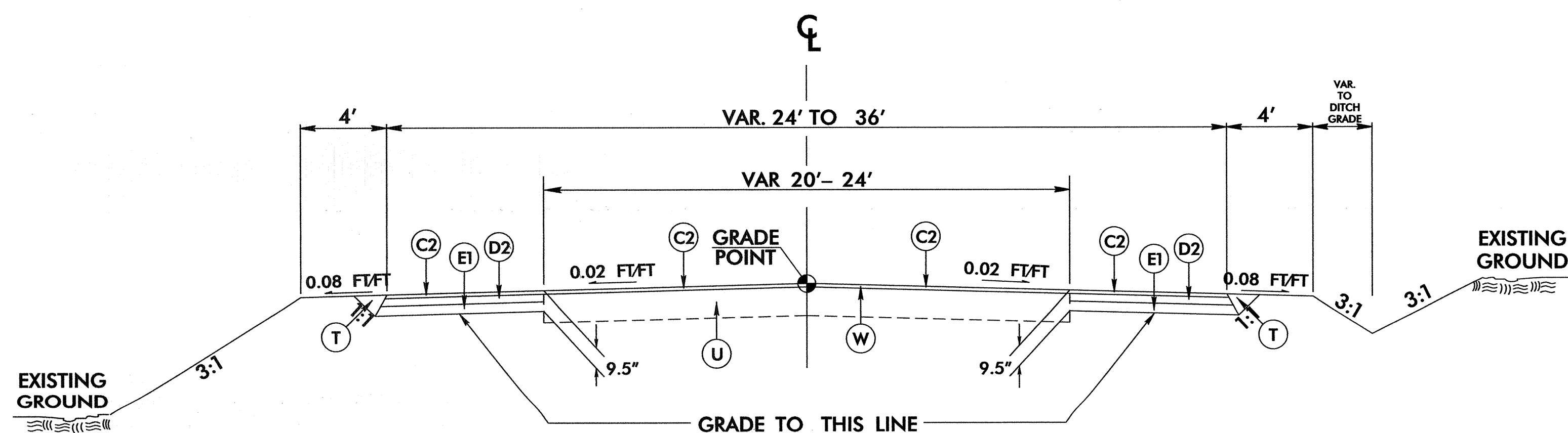


**USE TYPICAL SECTION NO. 3 AS FOLLOWS:  
-Y- STA 16+30 TO -Y- STA 17+40**

NOTE: SIDEWALK FROM -Y- STA 16+30 TO -Y- STA 16+83.  
TIE TO EXISTING SIDEWALK AT 16+83

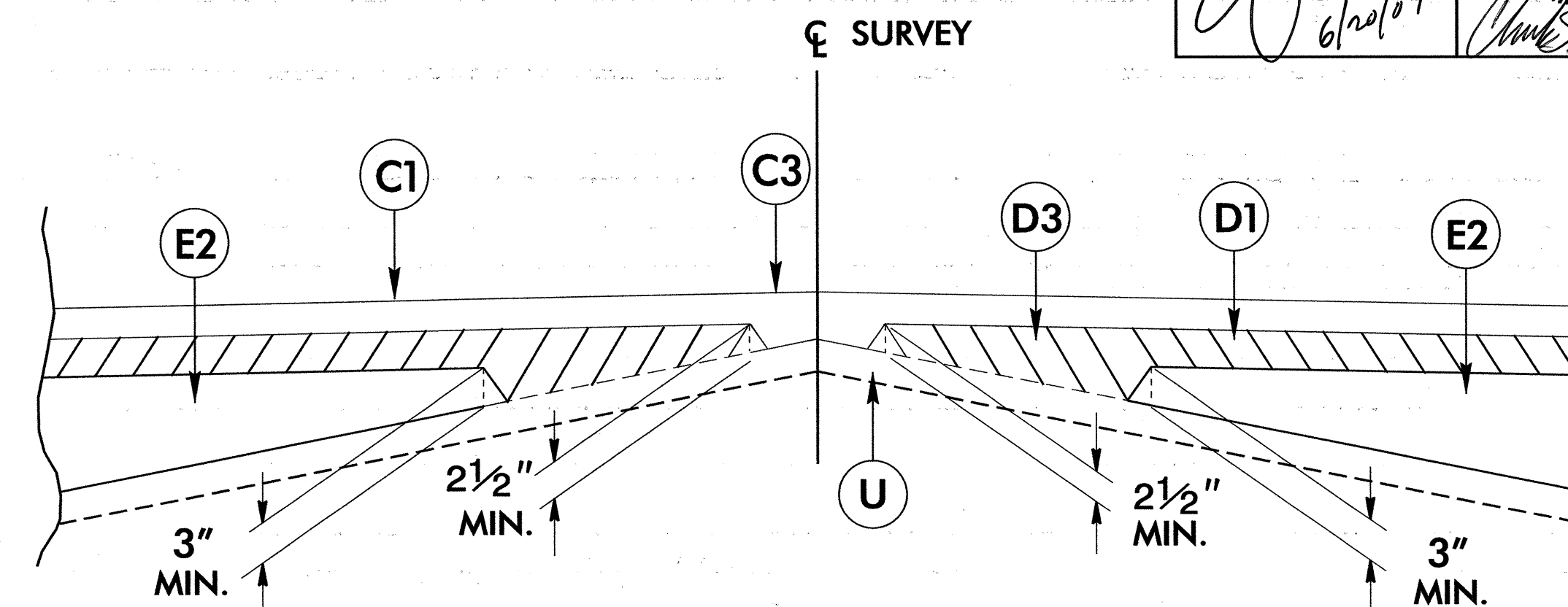


**USE TYPICAL SECTION NO. 4 AS FOLLOWS:  
-Y2- STA 10+18 TO -Y2- STA 20+08**

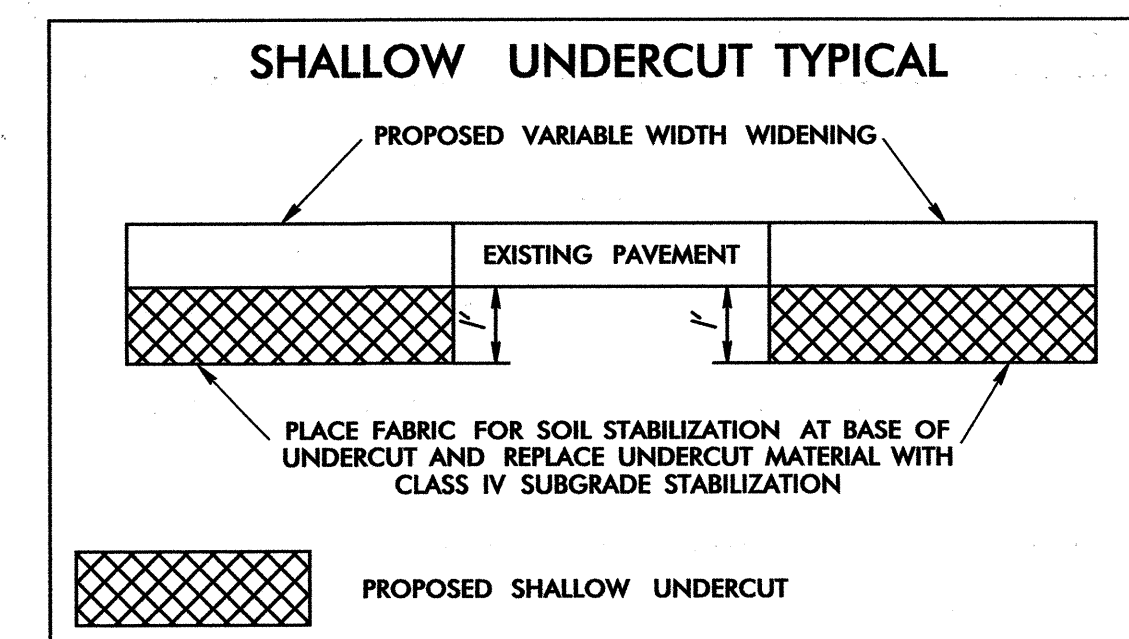


**USE TYPICAL SECTION NO. 5 AS FOLLOWS:  
-Y3- STA 10+00 TO -Y3- STA 12+50**

NOTE : RESURFACE LINE -Y3- WITH 1.5" S9.5B (C2)  
FROM -Y3- STA. 9+00 TO -Y3- STA. 10+00



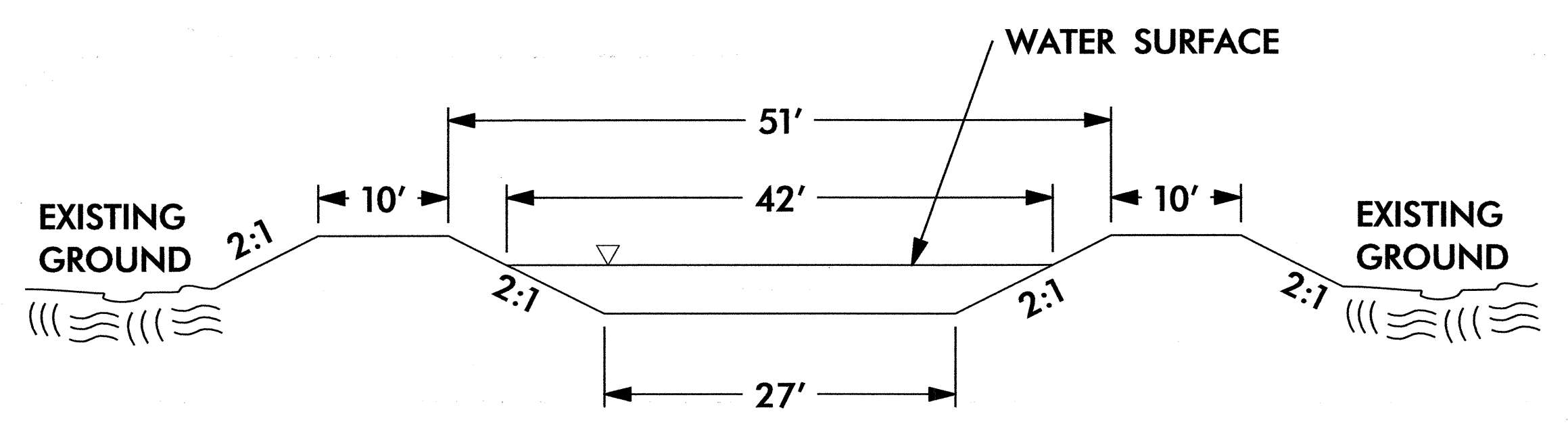
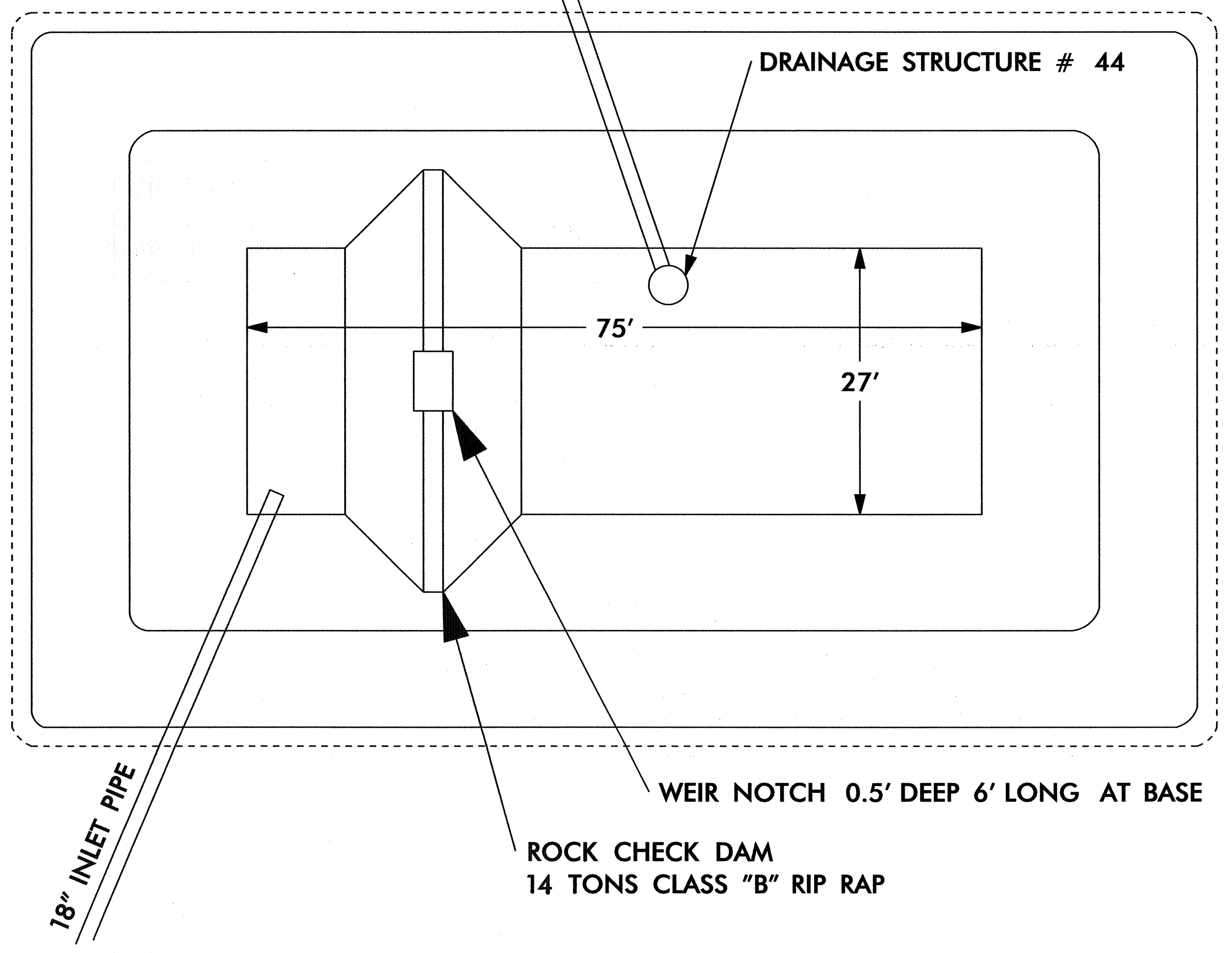
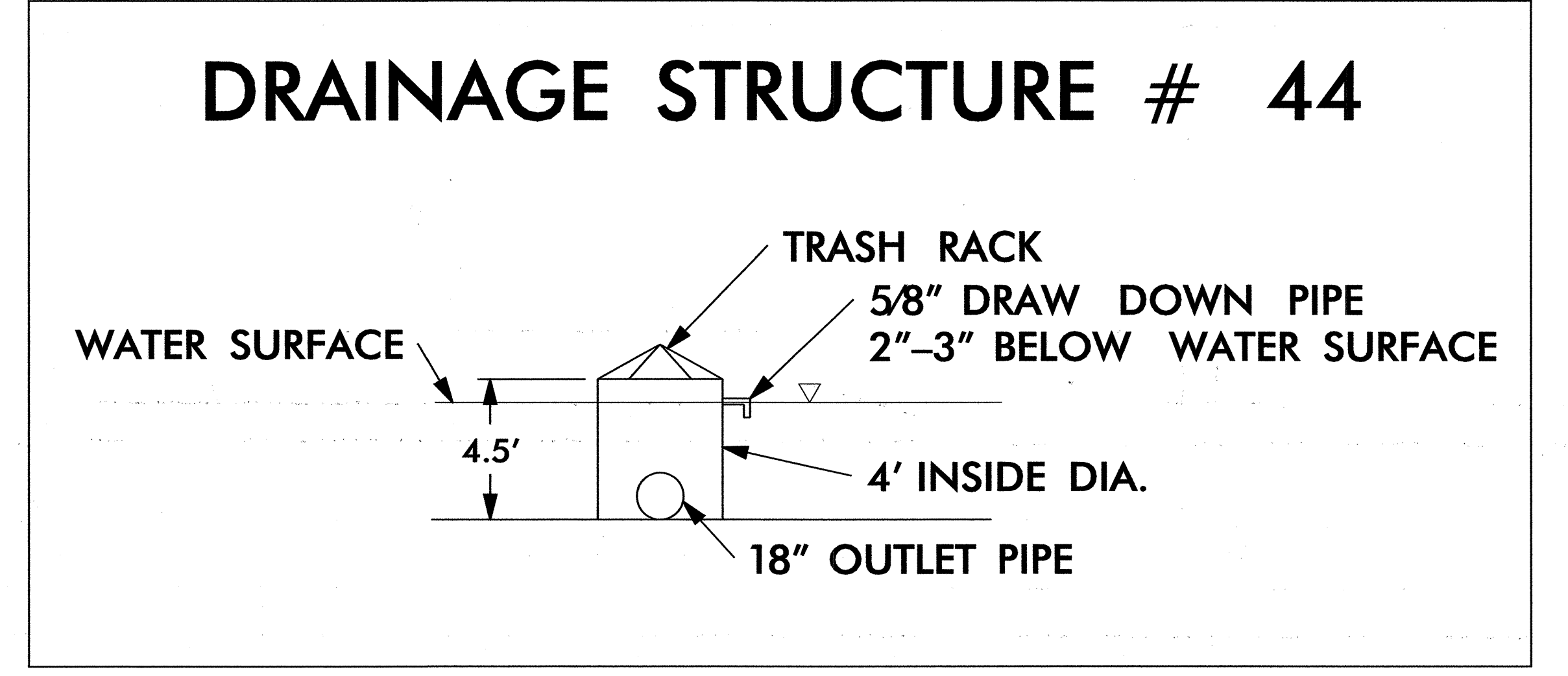
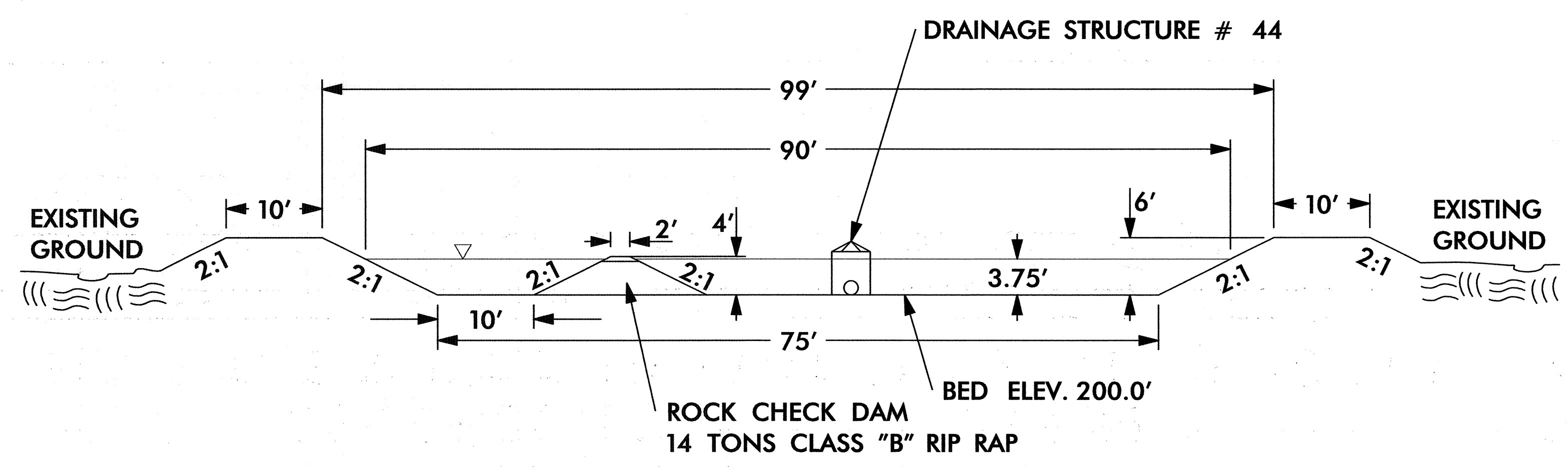
**Detail Showing Method of Wedging**



PAVEMENT SCHEDULE	
C1	3" S9.5B
C2	1 1/2" S9.5B
C3	VAR DEPTH S9.5B
D1	2 1/2" 119.0B
D2	4" 119.0B
D3	VAR DEPTH I19.0B
E1	4" B25.0B
E2	VAR DEPTH B25.0B
R1	2'-6" CONC C&G
S1	4" CONC SIDEWALK
T	EARTH MATERIAL.
U	EXIST PAVEMENT.
V	MILLING
W	WEDGING

# WET DETENTION POND

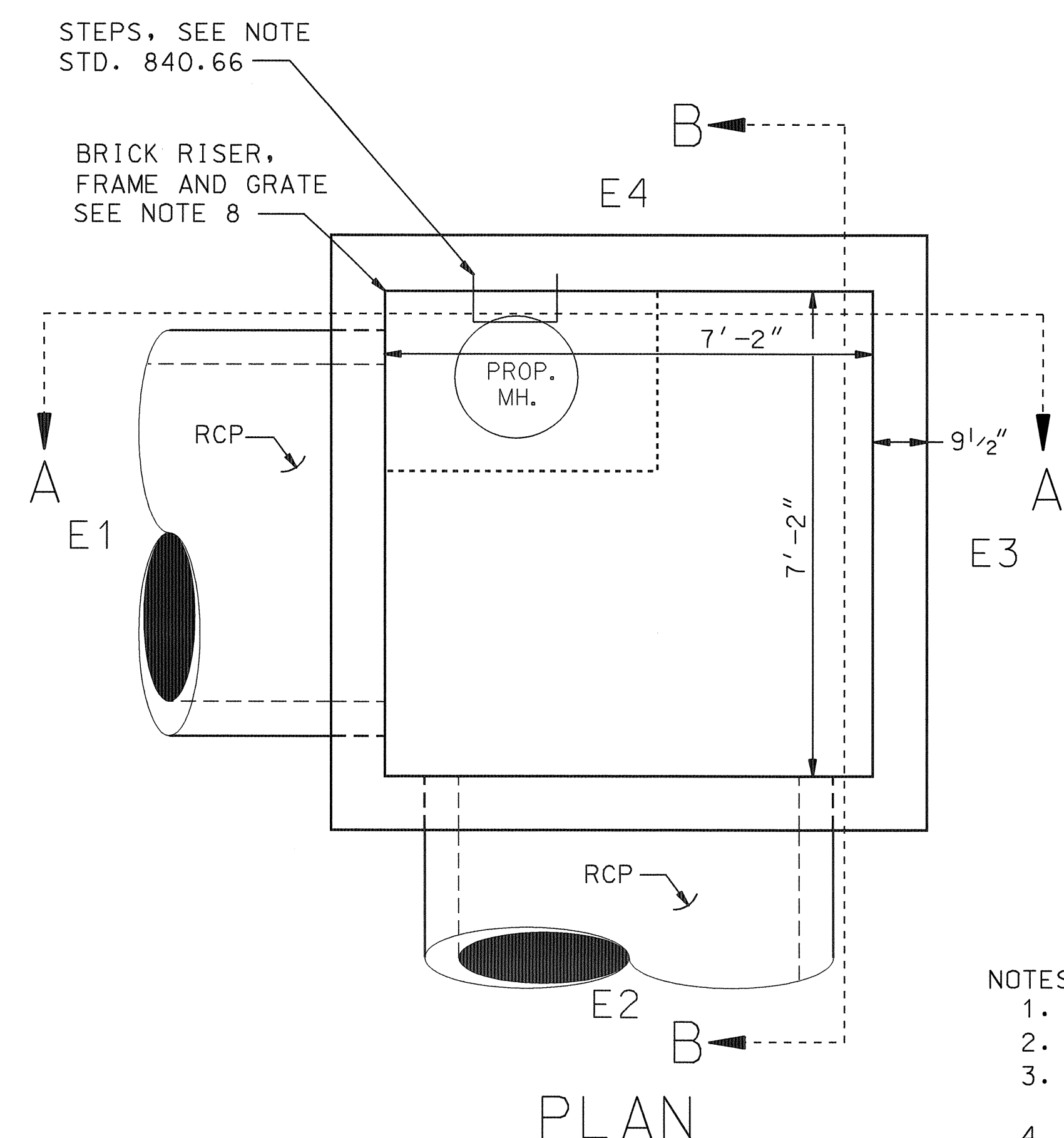
PROJECT REFERENCE NO. R-4071	SHEET NO. 2-B
R/W SHEET NO. 2-B	
ROADWAY DESIGN ENGINEER SEAL 18557 6/20/07	HYDRAULICS ENGINEER SEAL 16800 6-29-07



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denridge AT D:\P-214745-DDC

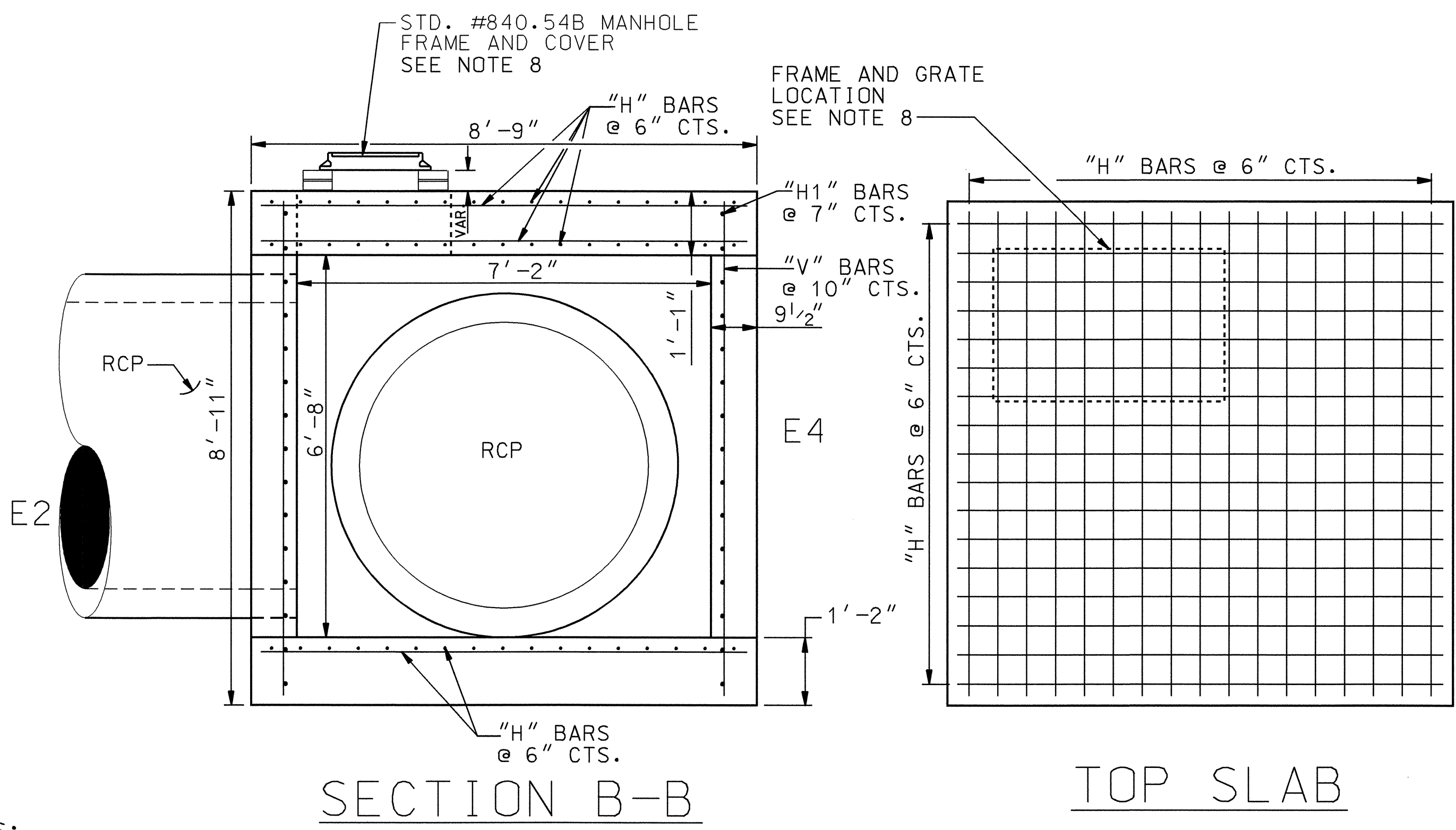
REVISIONS

HP-4500



**PLAN**

STD. #840.54B MANHOLE FRAME AND COVER SEE NOTE 8



**SECTION B-B**

**TOP SLAB**

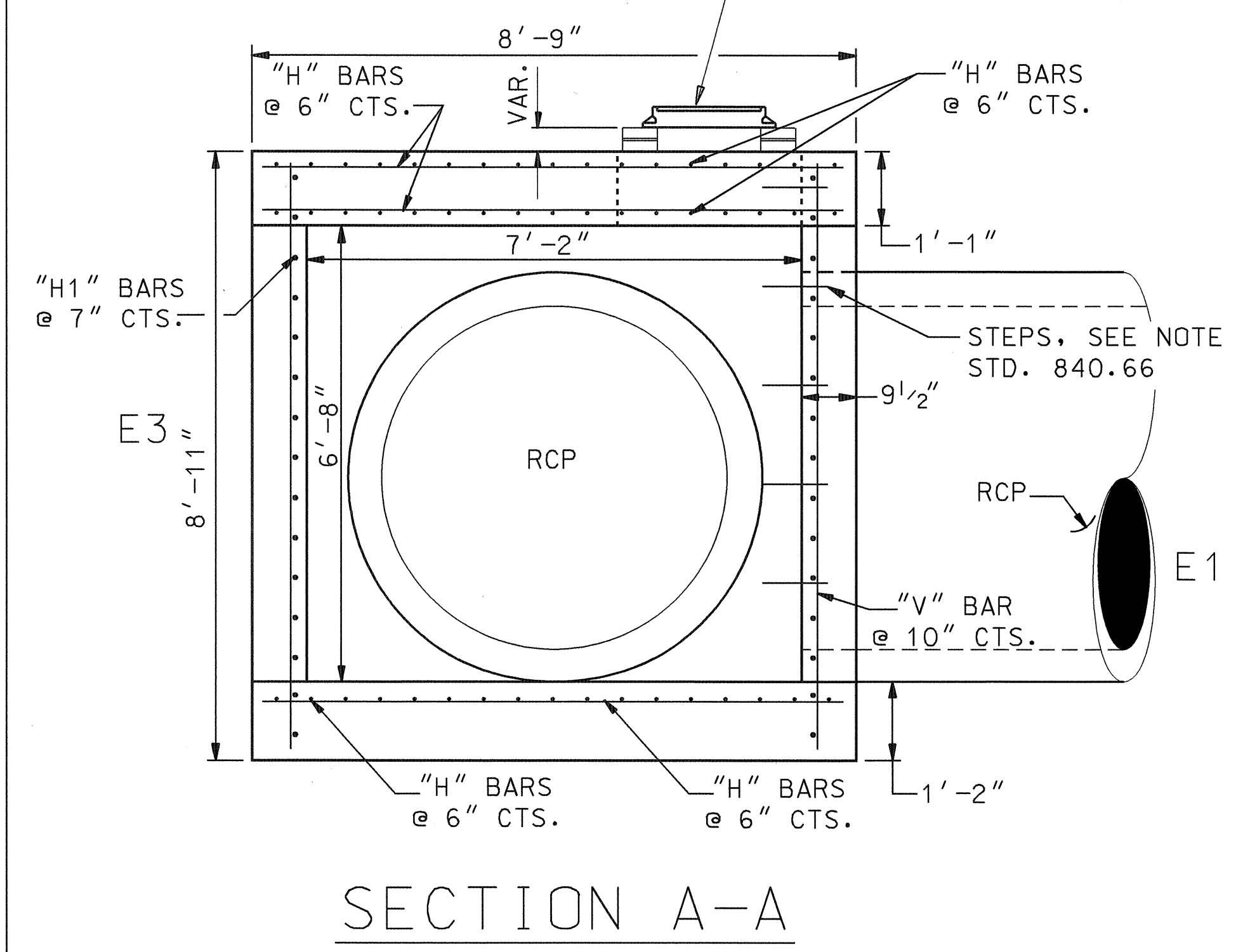
**NOTES:**

1. QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.
2. CLASS "B" CONCRETE TO BE USED THROUGHOUT.
3. CONCRETE BOX SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 825 OF THE STANDARD SPECIFICATIONS AND MAY BE ADJUSTED TO FIT PIPE CONDITION.
4. FORMS ARE TO BE USED FOR CONSTRUCTION OF THE BOTTOM SLAB.
5. ADJUST LENGTH OF STEEL BARS AS NEEDED TO COMPENSATE FOR PIPES AND FRAME AND GRATE OPENINGS.
6. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60.
7. CUT OR BEND STEEL BARS AS NEEDED TO PROVIDE 2" CLEARANCE AROUND PIPES OR AS DIRECTED BY THE ENGINEER.
8. FRAME AND GRATE SHALL BE LOCATED AS FIELD CONDITIONS DICTATE AND DIRECTED BY THE ENGINEER.
9. PROVIDE ALL STRUCTURES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66

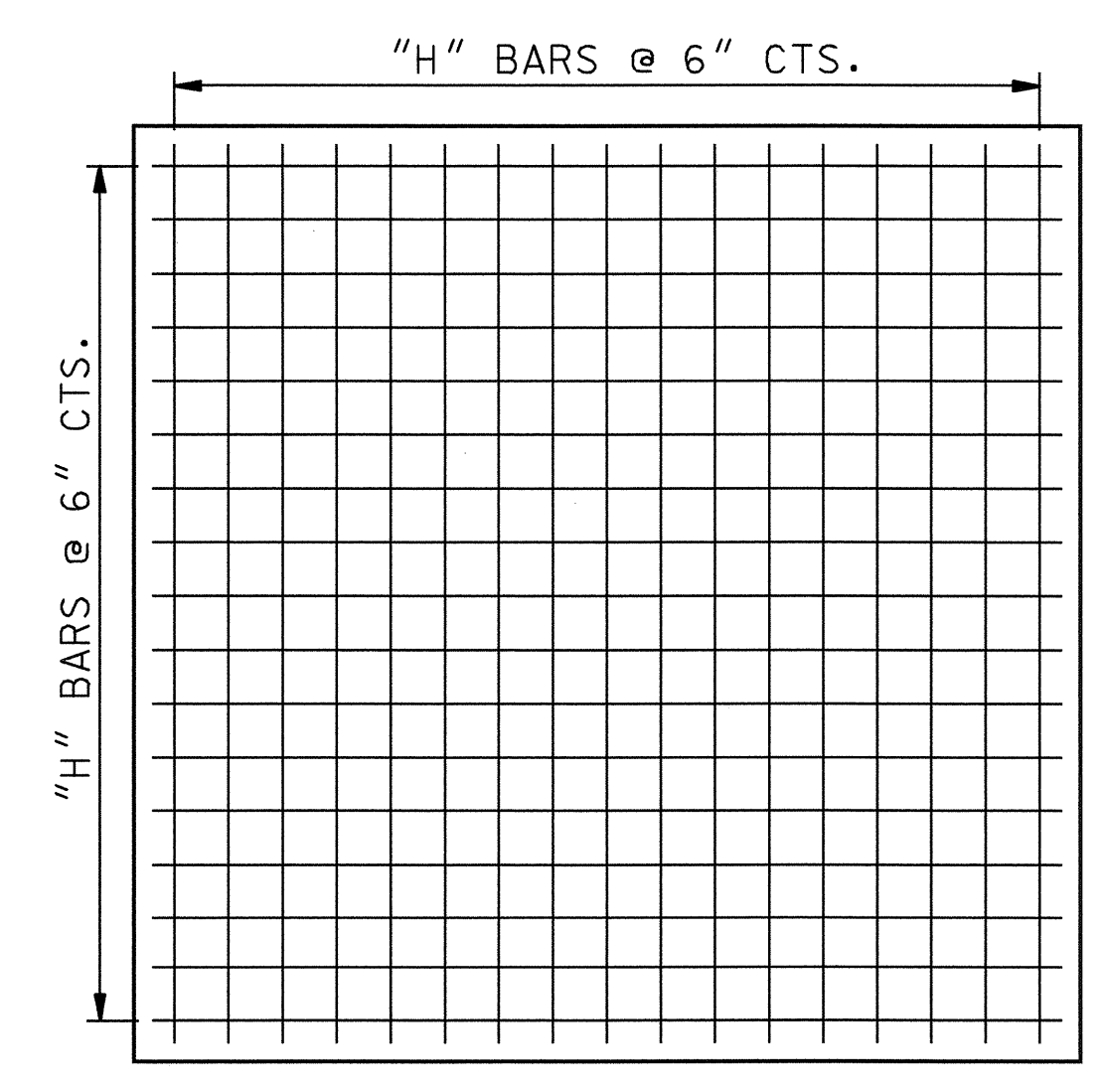
BILL OF MATERIALS				
BAR	NO.	SIZE	LENGTH	WEIGHT
H	102	#5	8'-5"	895.43
V	88	#4	8'-7"	504.56
H1	60	#6	8'-5"	758.51
Z	8	#4	3'-0"	16.03
TOTAL REINF. STEEL (LBS.)				2,174.53
TOTAL CONC. (CU. YDS.)				12.60
DEDUCTIONS FOR ONE PIPE				
15" RCP (CU. YDS.)				.064
18" RCP (CU. YDS.)				.089
24" RCP (CU. YDS.)				.152
30" RCP (CU. YDS.)				.230
36" RCP (CU. YDS.)				.349
42" RCP (CU. YDS.)				.464
48" RCP (CU. YDS.)				.596
54" RCP (CU. YDS.)				.744

NO DEDUCTIONS HAVE BEEN MADE TO ACCOMMODATE PIPES OR DROP INLET OPENING.

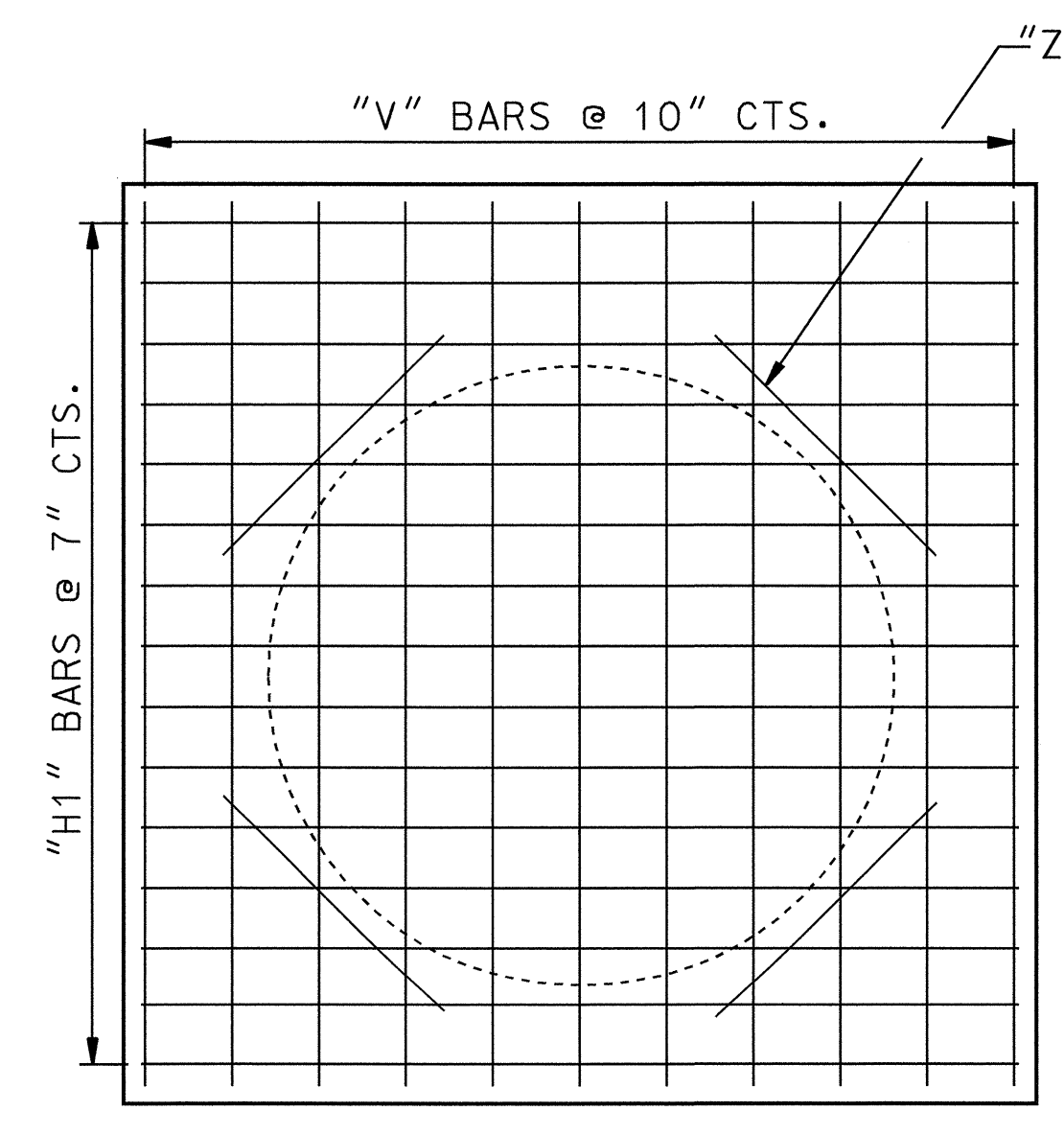
\* 0.30 CU.YDS. PER FOOT OF RISER HEIGHT



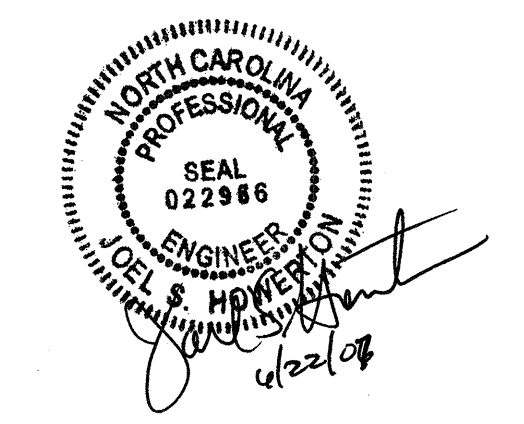
**SECTION A-A**



**BOTTOM SLAB**



**E1, E2, E3 & E4**

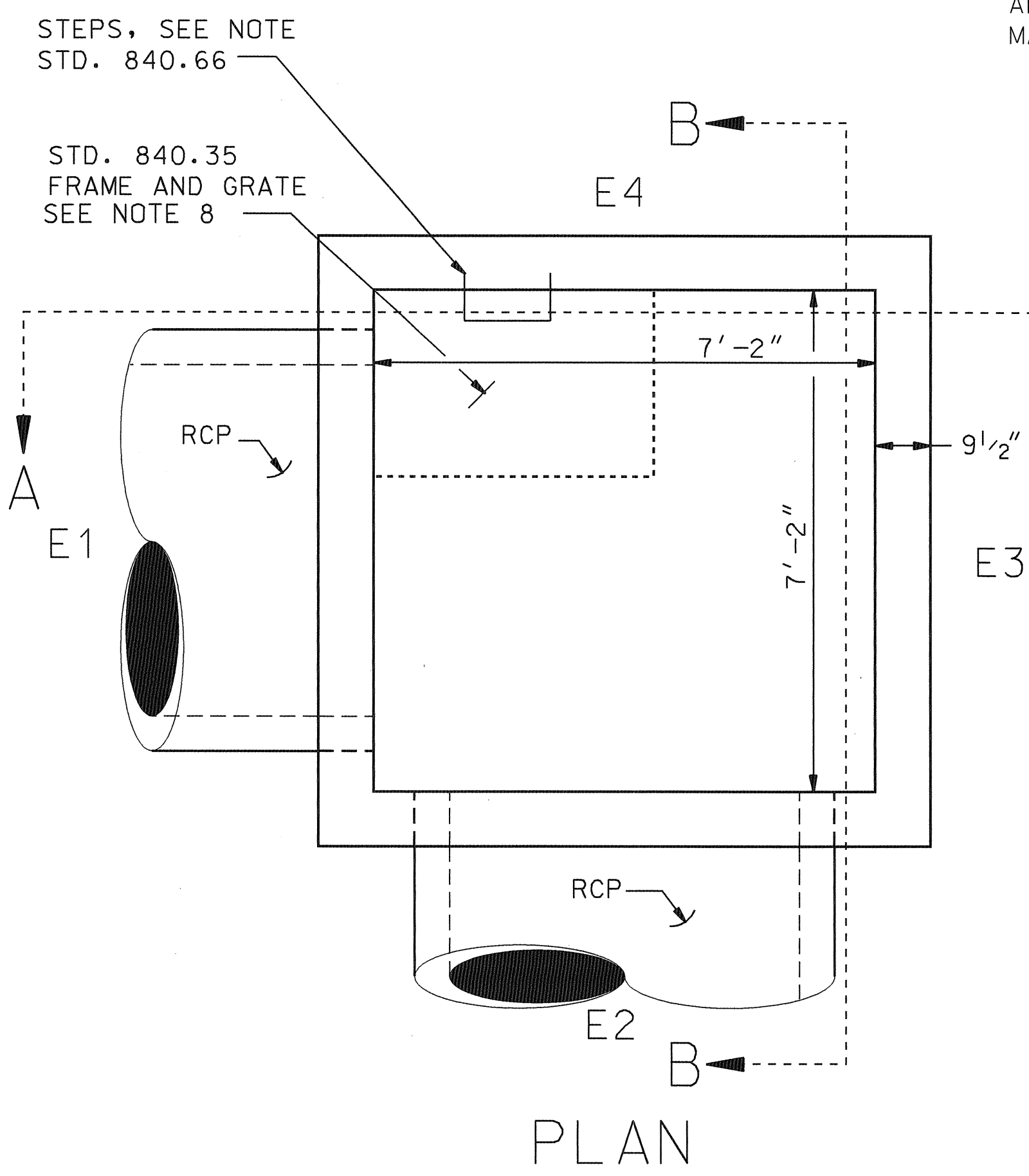


**PROJECT SERVICES UNIT  
STANDARDS AND SPECIAL DESIGN**  
Office 919-250-4128 FAX 919-250-4119

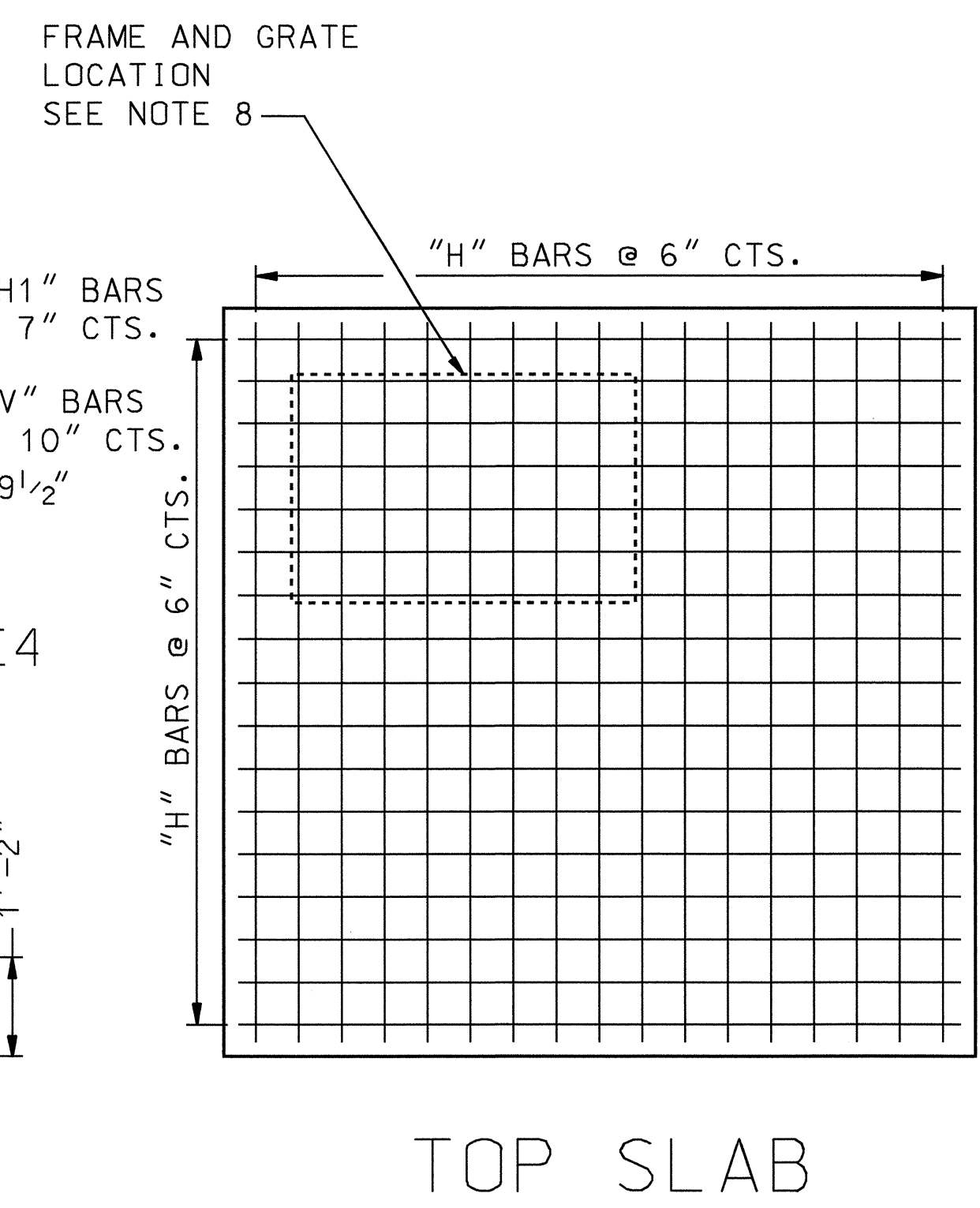
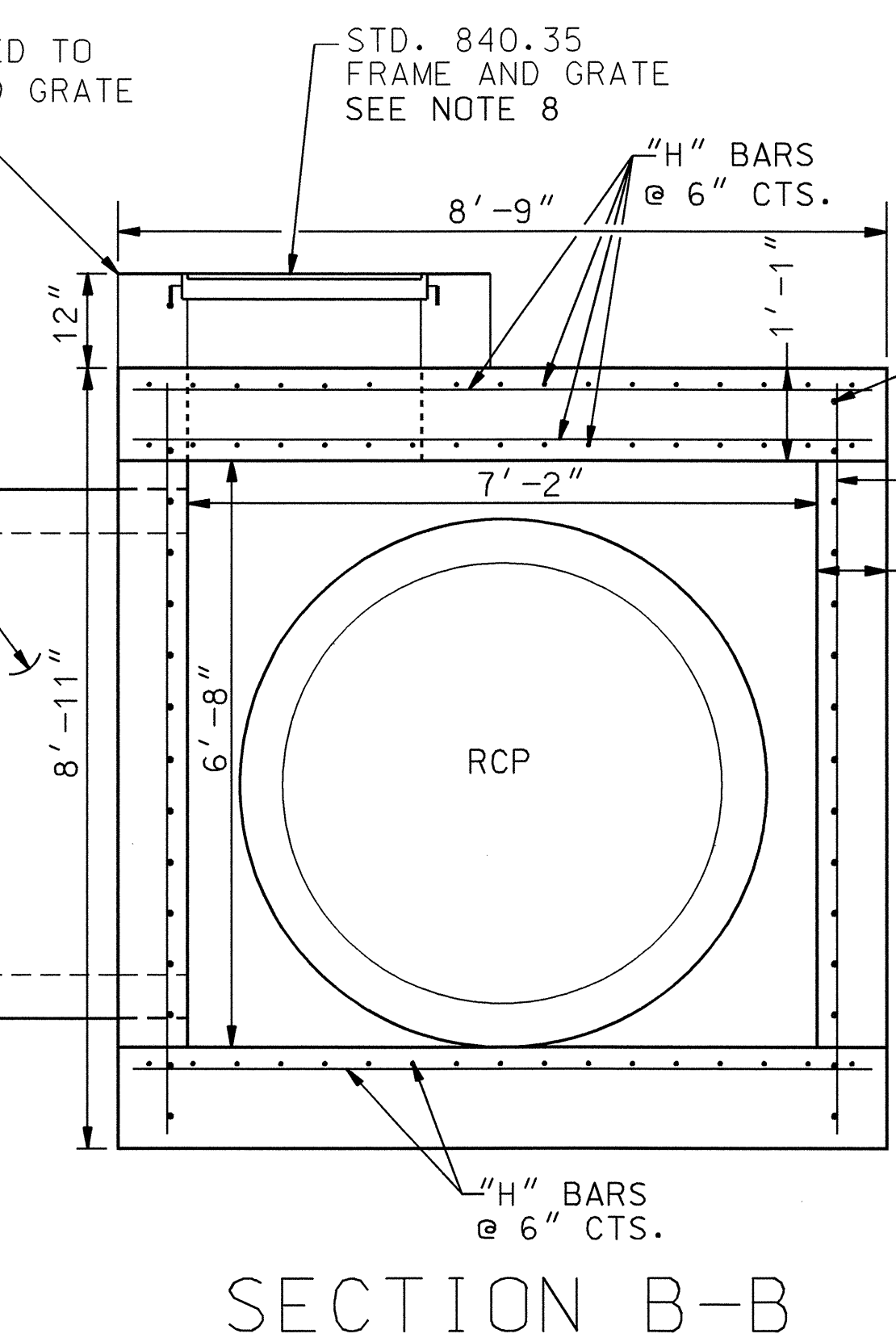
**DETAIL OF TRAFFIC BEARING  
JUNCTION BOX WITH MANHOLE  
FRAME AND COVER  
STR. #65**

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MODIFIED BY: nbritt DATE: 05-04-07  
CHECKED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
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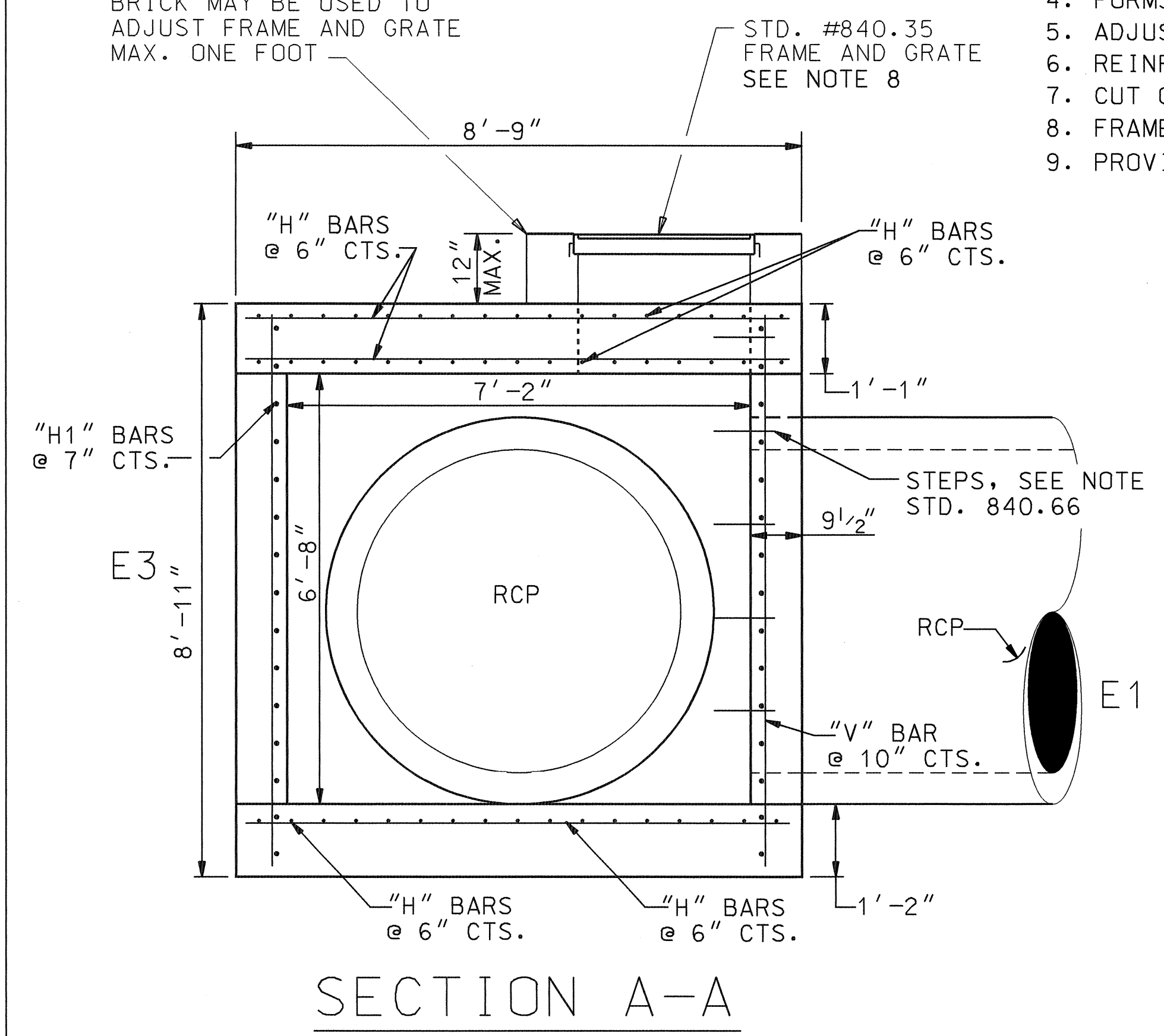
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nbritt AR PCE26331



BRICK MAY BE USED TO ADJUST FRAME AND GRATE MAX. ONE FOOT



BRICK MAY BE USED TO ADJUST FRAME AND GRATE MAX. ONE FOOT

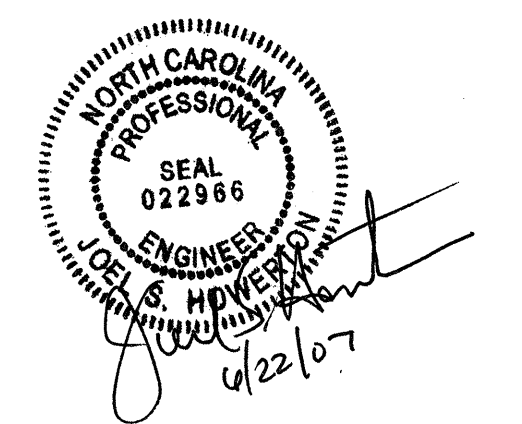
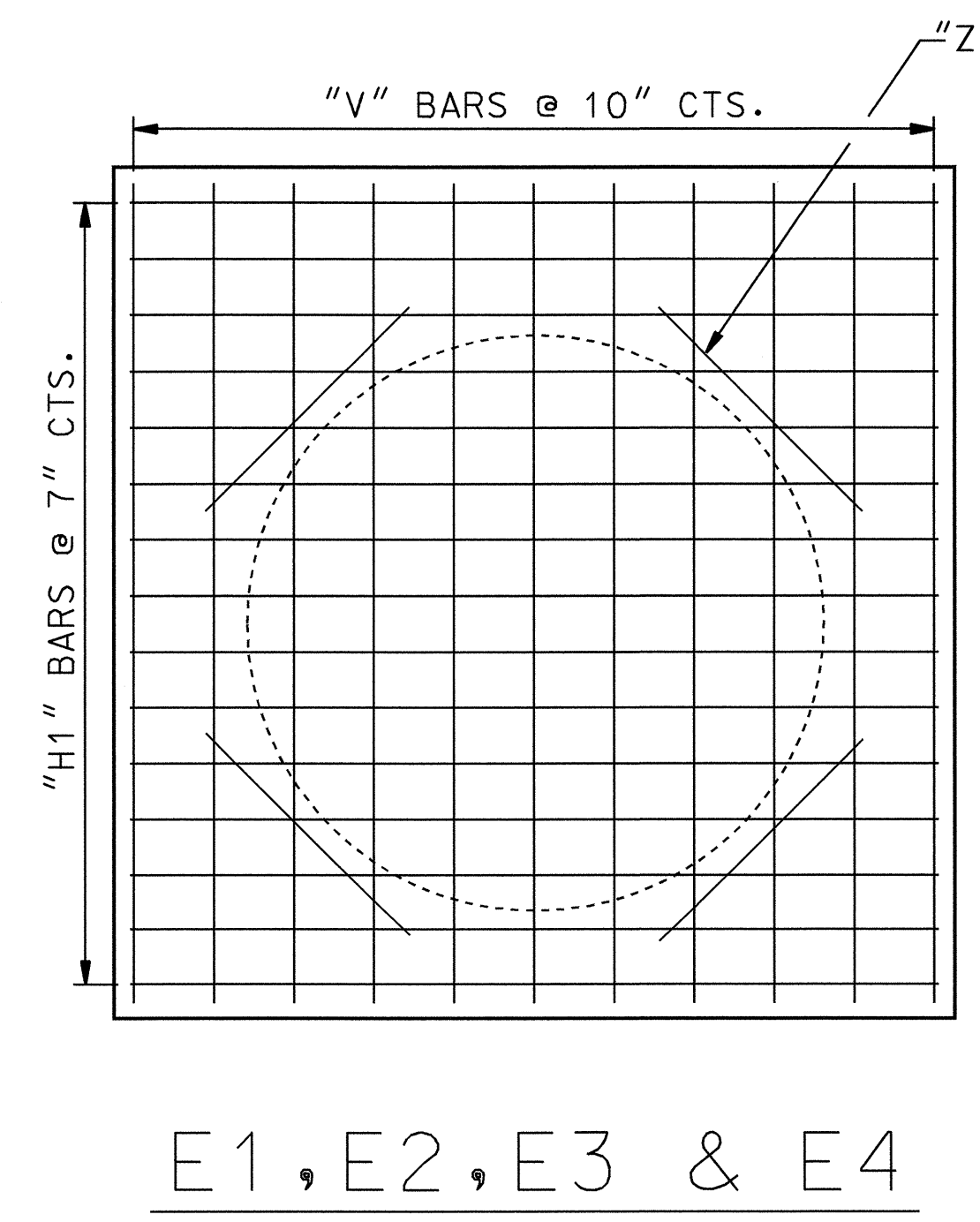
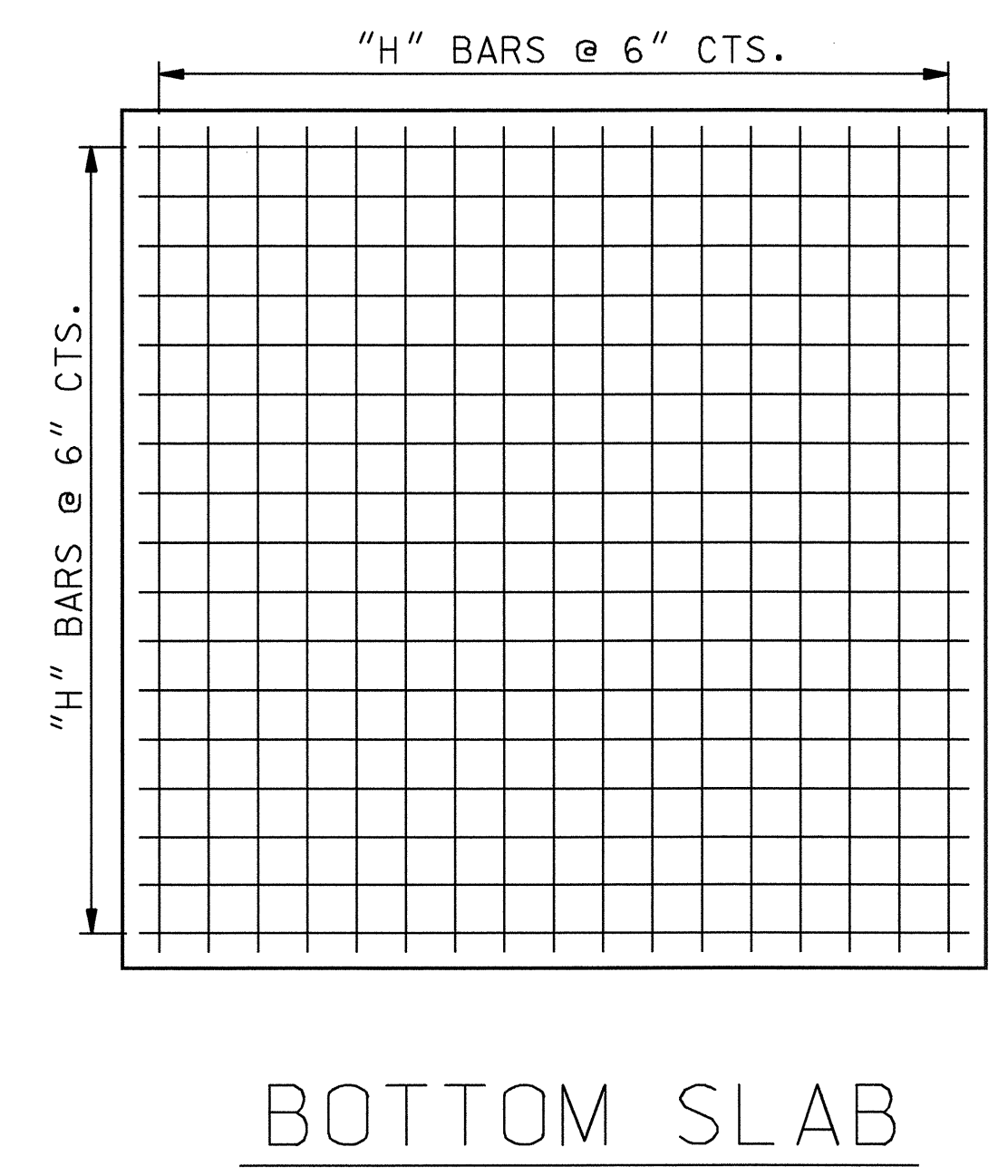


- NOTES:
1. QUANTITIES TO BE PAID FOR AT THE UNIT PRICE BID PER EACH.
  2. CLASS "B" CONCRETE TO BE USED THROUGHOUT.
  3. CONCRETE BOX SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 825 OF THE STANDARD SPECIFICATIONS AND MAY BE ADJUSTED TO FIT PIPE CONDITION.
  4. FORMS ARE TO BE USED FOR CONSTRUCTION OF THE BOTTOM SLAB.
  5. ADJUST LENGTH OF STEEL BARS AS NEEDED TO COMPENSATE FOR PIPES AND FRAME AND GRATE OPENINGS.
  6. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60.
  7. CUT OR BEND STEEL BARS AS NEEDED TO PROVIDE 2" CLEARANCE AROUND PIPES OR AS DIRECTED BY THE ENGINEER.
  8. FRAME AND GRATE SHALL BE LOCATED AS FIELD CONDITIONS DICTATE AND DIRECTED BY THE ENGINEER.
  9. PROVIDE ALL STRUCTURES OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66

BILL OF MATERIALS				
BAR	NO.	SIZE	LENGTH	WEIGHT
H	102	#5	8'-5"	895.43
V	88	#4	8'-7"	504.56
H1	60	#6	8'-5"	758.51
Z	8	#4	3'-0"	16.03
TOTAL REINF. STEEL (LBS.)				2,174.53
TOTAL CONC. (CU. YDS.)				12.60
DEDUCTIONS FOR ONE PIPE				
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24" RCP (CU. YDS.)				.152
30" RCP (CU. YDS.)				.230
36" RCP (CU. YDS.)				.349
42" RCP (CU. YDS.)				.464
48" RCP (CU. YDS.)				.596
54" RCP (CU. YDS.)				.650

NO DEDUCTIONS HAVE BEEN MADE TO ACCOMMODATE PIPES OR DROP INLET OPENING.

\* 0.30 CU.YDS. PER FOOT OF RISER HEIGHT



**PROJECT SERVICES UNIT  
STANDARDS AND SPECIAL DESIGN**  
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**DETAIL OF TRAFFIC BEARING  
DROP INLET WITH FRAME AND GRATE  
STR.#67 & #68**

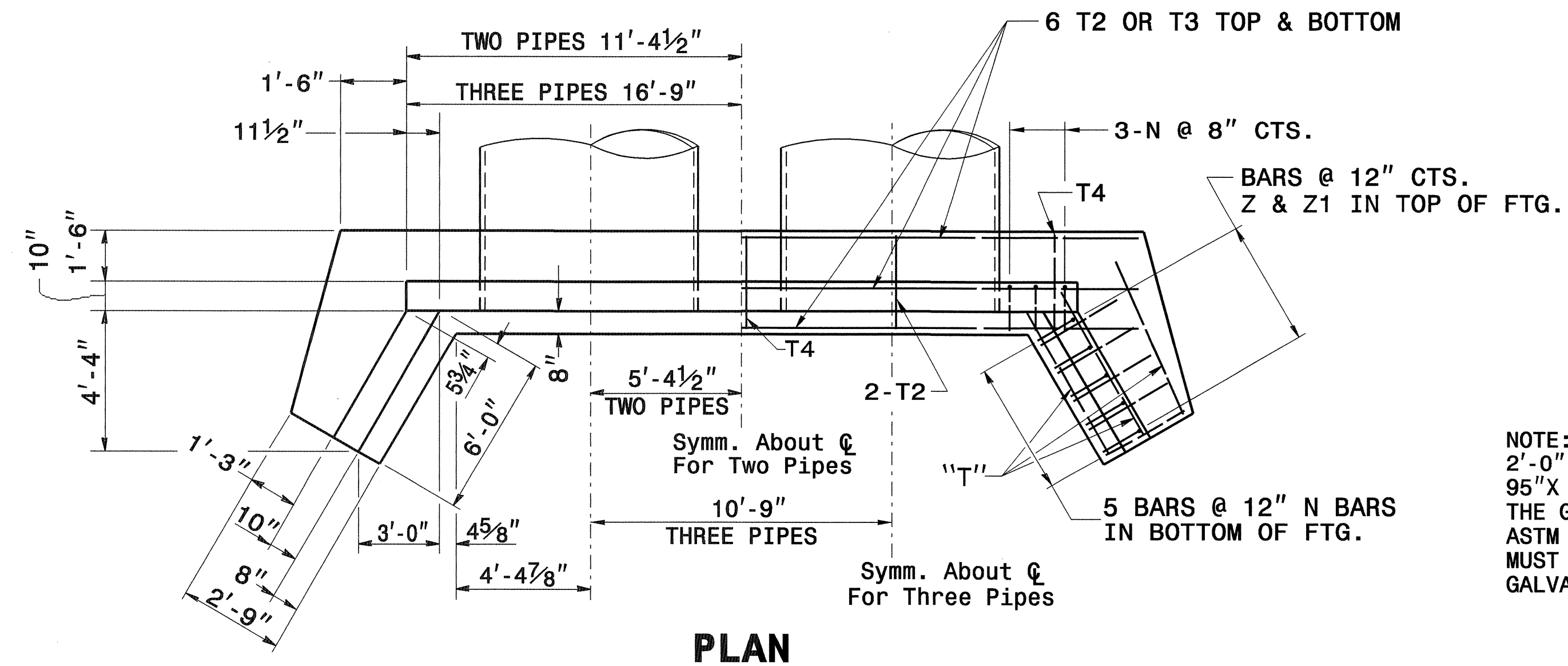
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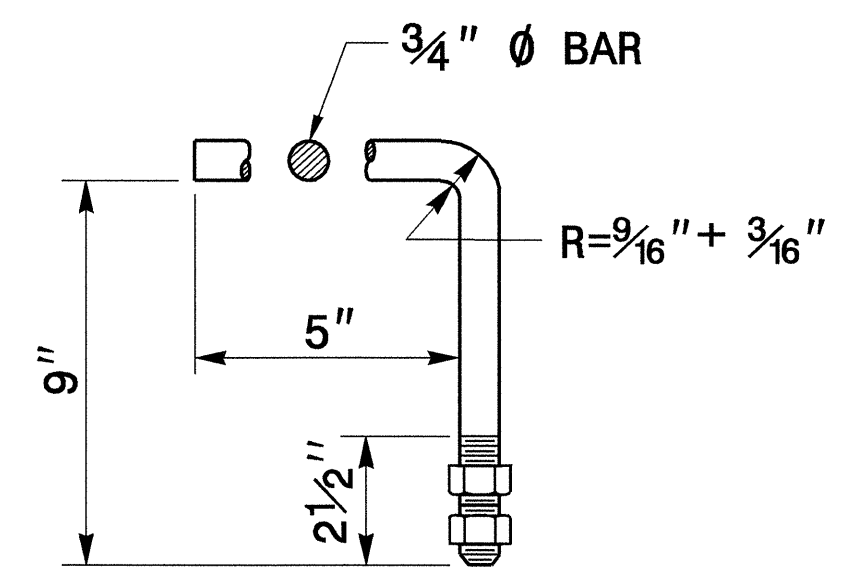


NOTES:

- ALL CONCRETE TO BE CLASS "A".
- ALL REINFORCING STEEL SHALL BE ASTM A615-GRADE 60.
- ALL REINFORCING STEEL SHALL BE DEFORMED BARS. WHERE SPLICING OF REINFORCEMENT IS NECESSARY, BARS ARE TO BE LAPPED 45 DIAMETERS. ALL DIMENSIONS RELATIVE TO REINFORCEMENT ARE TO CENTERS OF BARS.
- THE FOOTING, CURTAIN WALL AND 4" OF WALL ARE TO BE POURED IN ONE OPERATION ALLOWING NO TIME FOR INITIAL SET TO TAKE PLACE BETWEEN THEM. THE REMAINING WALL SHALL THEN BE POURED IN ONE OPERATION.
- ALL EXPOSED CORNERS ARE TO BE CHAMFERED 1".
- 3" DIAMETER DRAINS SHALL BE PLACED IN WALL AS SHOWN AND BE 6" ABOVE NORMAL FLOW LINE.
- ALL MATERIAL AND WORKMANSHIP AS PER N.C. DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- THE EXTRA BARS ARE PROVIDED FOR HOLDING REINFORCING STEEL IN CORRECT POSITION IN WING.

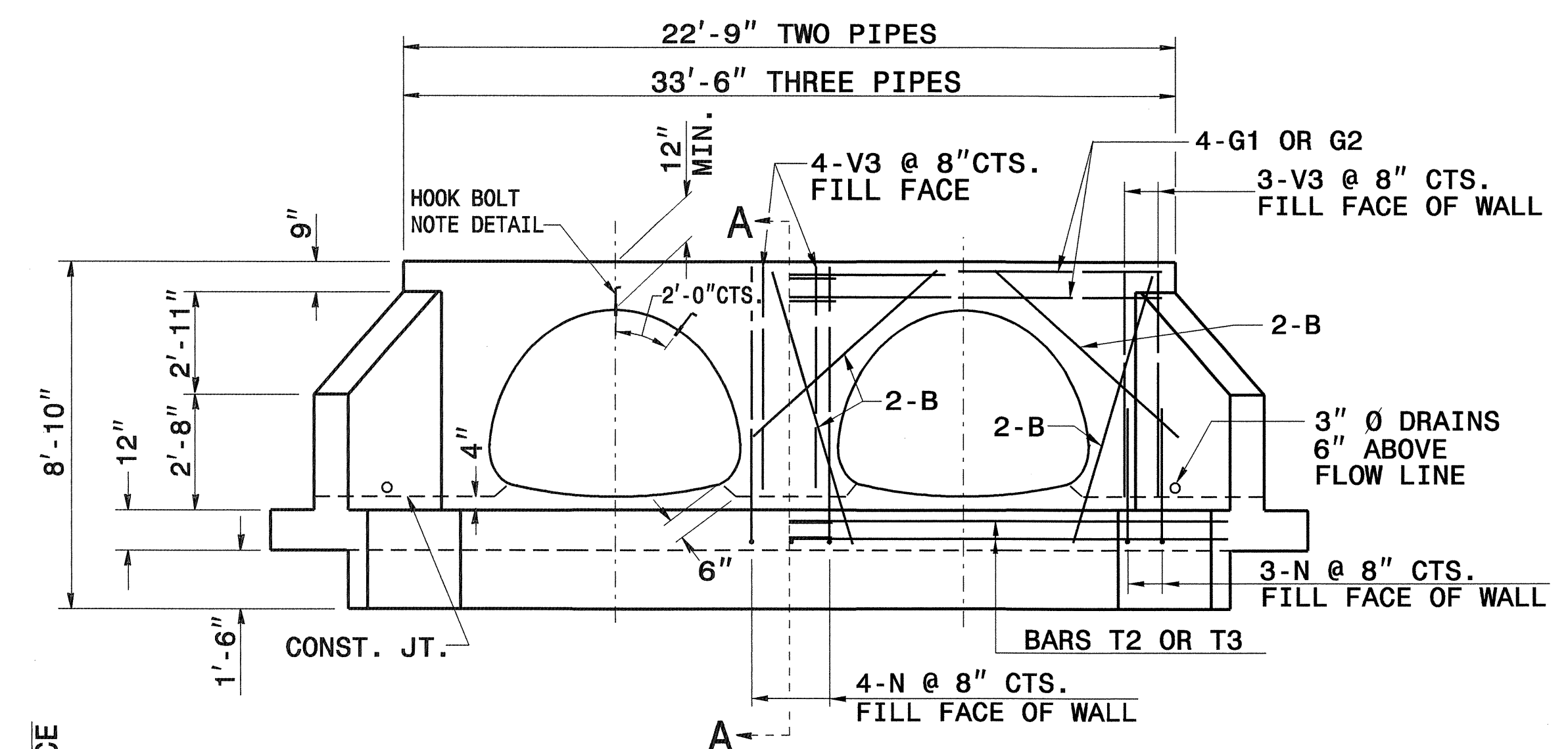


**PLAN**

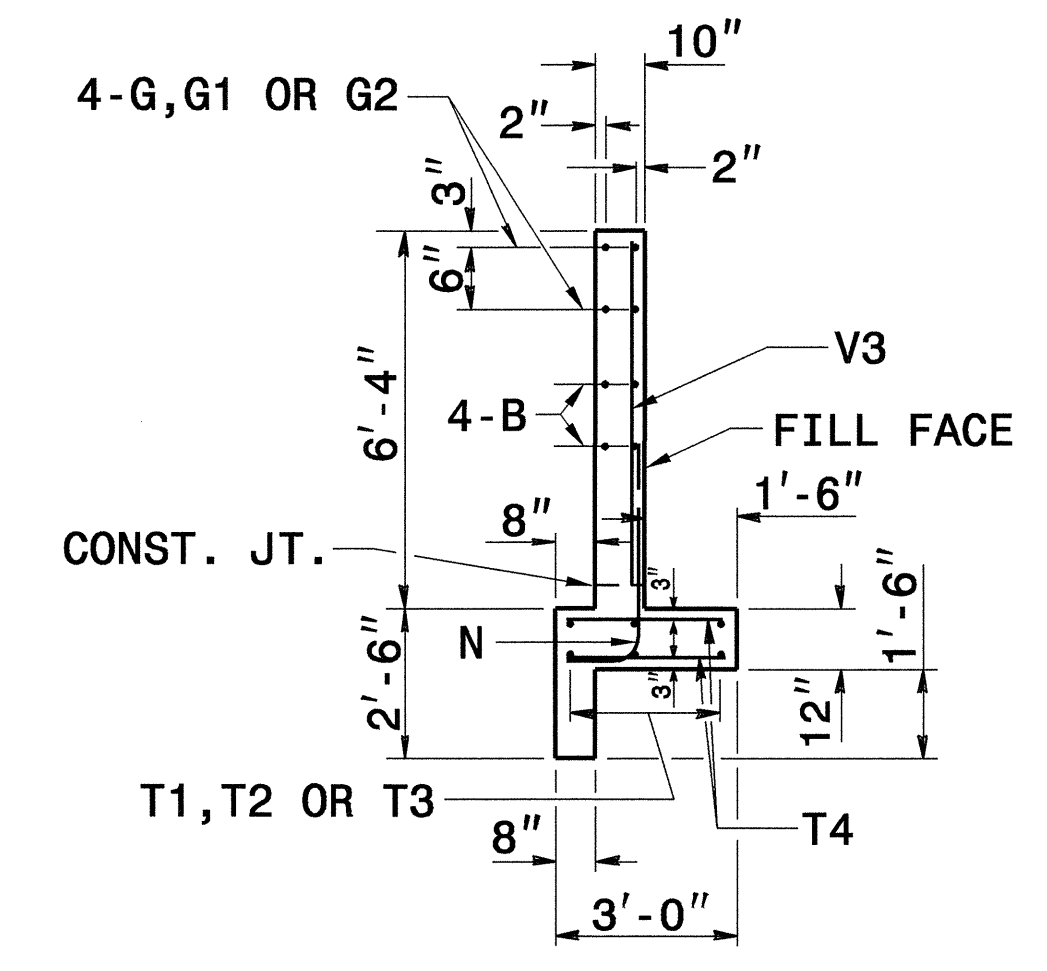


**HOOK BOLT**

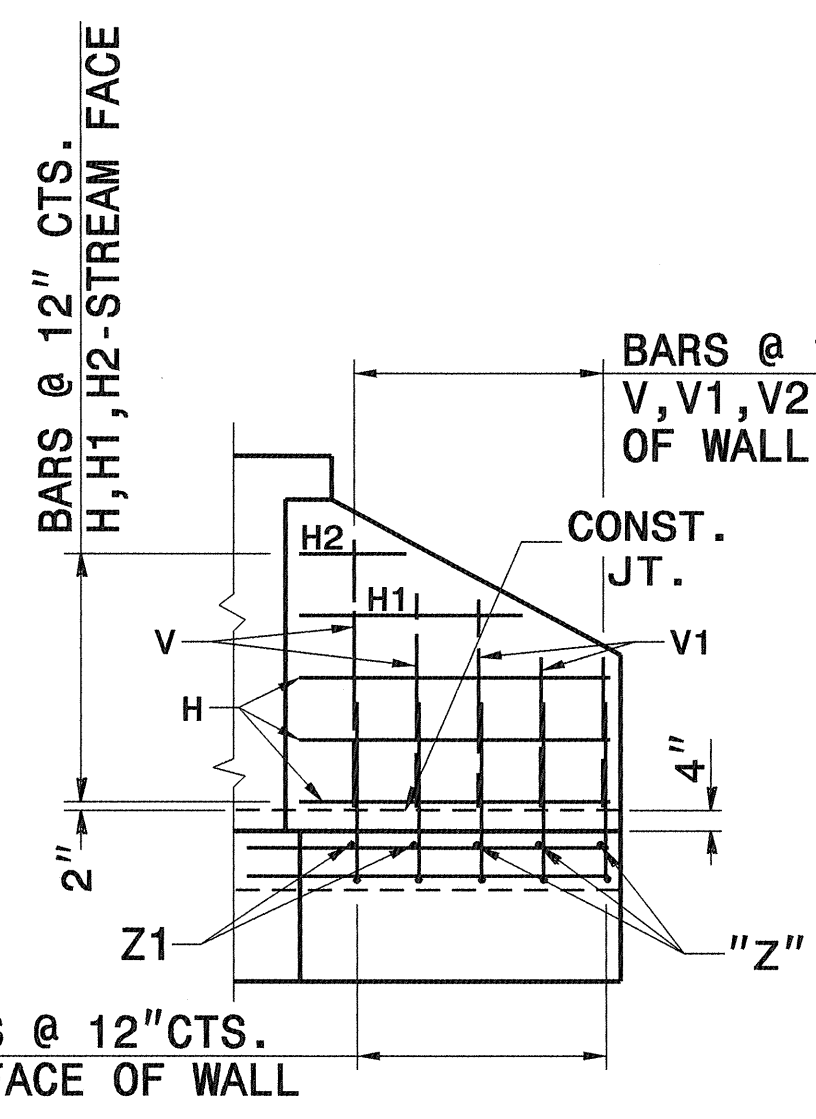
NOTE: CONSTRUCT HOOK BOLTS (ANCHORS) AT 2'-0" CTS. ALONG THE CIRCUMFERENCE OF THE 95" X 67" CMP. EMBED THE HOOK BOLTS 6" IN DEPTH. THE GALVANIZED 3/4" DIA. HOOK BOLTS MUST MEET ASTM A-307 OR ASTM A-836. BOTH BOLTS AND NUTS MUST BE IN ACCORDANCE WITH ASTM A-153 FOR GALVANIZING.



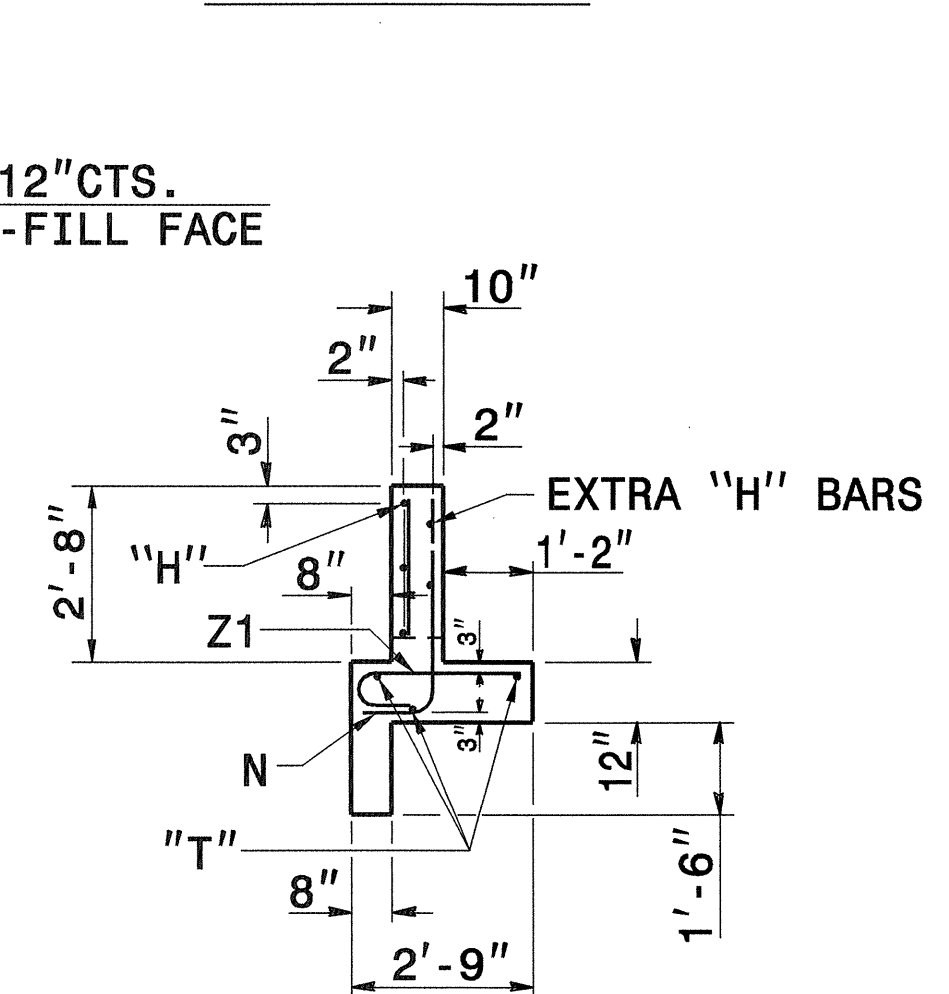
**ELEVATION**



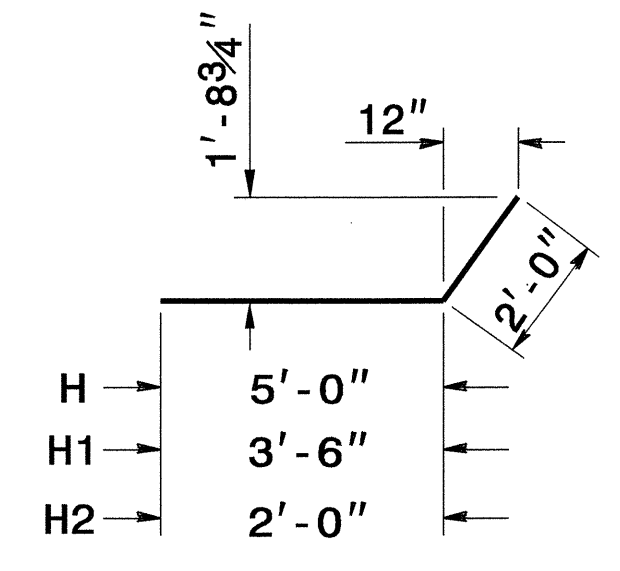
**SECTION - AA**



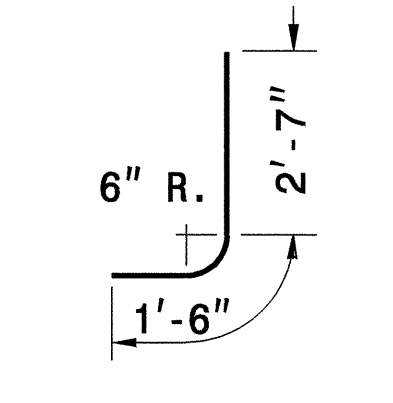
**WING ELEVATION**



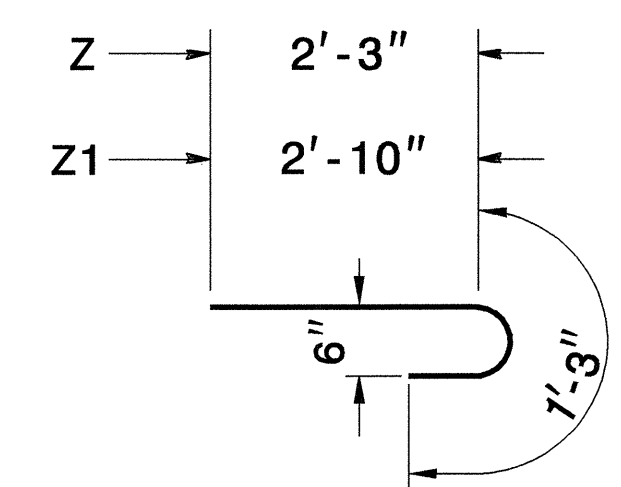
**END OF WING**



**"H" BARS**



**"N" BARS**

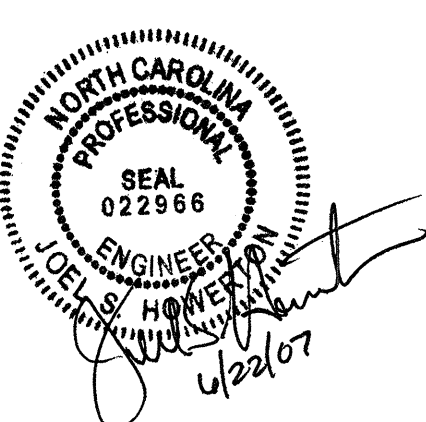


**"Z" BARS**

"H", "N", & "Z" BAR DIMENSIONS ARE OUT TO OUT.

**DESIGN DATA**

Specifications  
 Steel in tension A.A.S.H.T.O. (1977)  
 20,000 LBS. PER SQ. IN.  
 Concrete in compression 1,200 LBS. PER SQ. IN.  
 Shear Class "A" Concrete SEE A.A.S.H.T.O.  
 Equiv. fluid pressure of earth 30 LBS. PER CU. FT.



BILL OF MATERIAL FOR ENDWALL								
REIN. STEEL		1 PIPES	2 PIPES	3 PIPES				
BAR	SIZE	LENGTH	NO.	WEIGHT	NO.	WEIGHT	NO.	WEIGHT
B	#4	6'-6"	8	35	16	69	24	104
G	#5	11'-9"	4	49	-	-	-	-
G1	#5	12'-6"	-	-	8	104	-	-
G2	#5	17'-9"	-	-	-	-	8	148
H	#4	7'-0"	10	47	10	47	10	47
H1	#4	5'-6"	2	7	2	7	2	7
H2	#4	4'-0"	4	11	4	11	4	11
N	#4	4'-1"	16	44	20	55	24	65
T	#4	5'-0"	6	20	6	20	6	20
T1	#4	15'-0"	6	60	-	-	-	-
T2	#4	14'-0"	-	-	12	112	-	-
T3	#4	18'-3"	-	-	-	-	12	146
T4	#4	2'-9"	4	7	7	13	10	18
V	#4	4'-3"	6	17	6	17	6	17
V1	#4	3'-0"	6	12	6	12	6	12
V2	-	-	-	-	-	-	-	-
V3	#4	5'-10"	6	23	10	39	14	55
Z	#4	3'-6"	6	14	6	14	6	14
Z1	#4	4'-1"	4	11	4	11	4	11
REIN. STEEL LBS.				357		531		675
CON./R.C. CU. YDS.				6.2		8.6		11.0

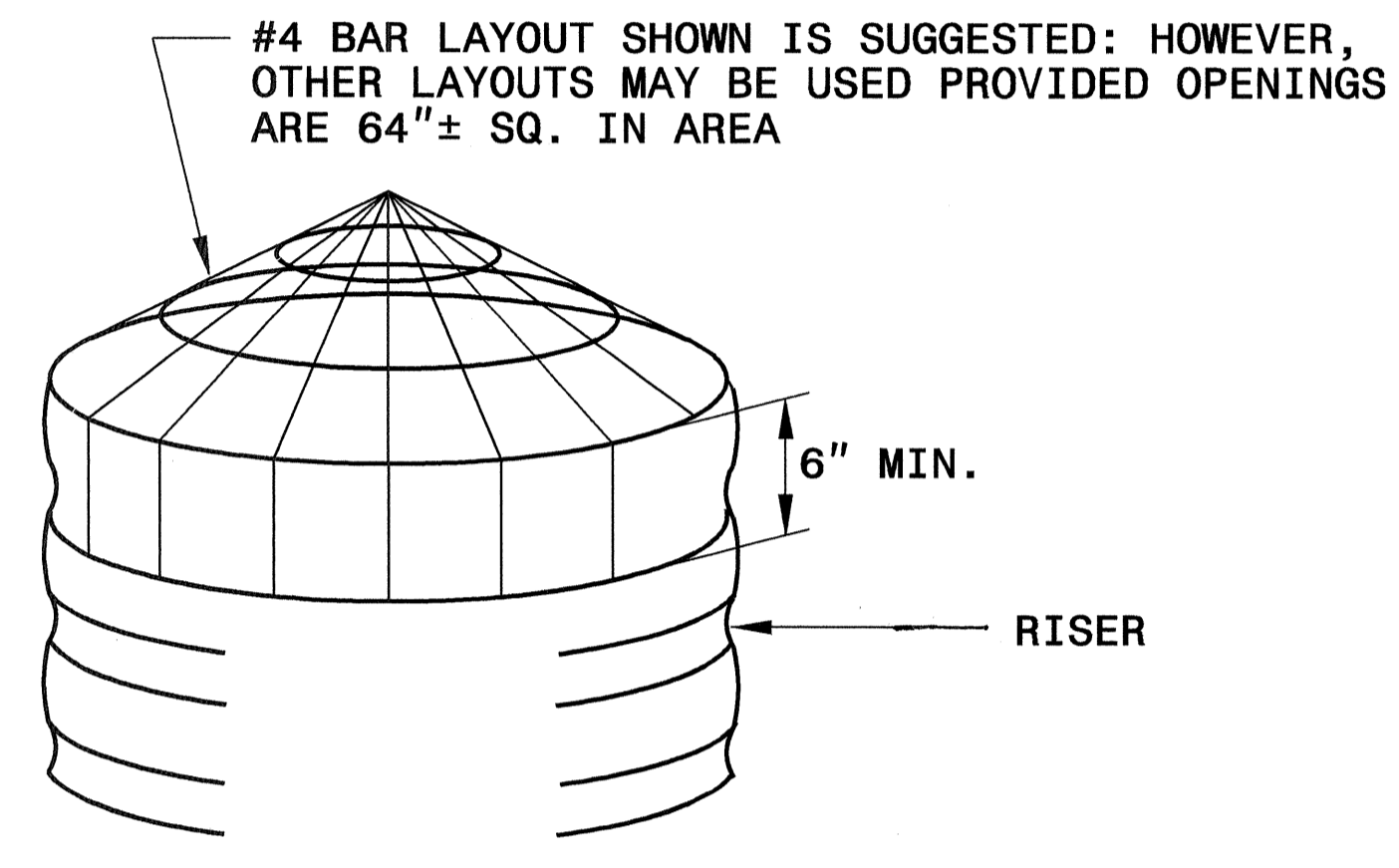
PROJECT SERVICES UNIT  
 STANDARDS AND SPECIAL DESIGN  
 Office 919-250-4128 FAX 919-250-4119

**DETAIL OF REINFORCED CONCRETE ENDWALL FOR 95" X 67" (Pipe Arch)-90°**

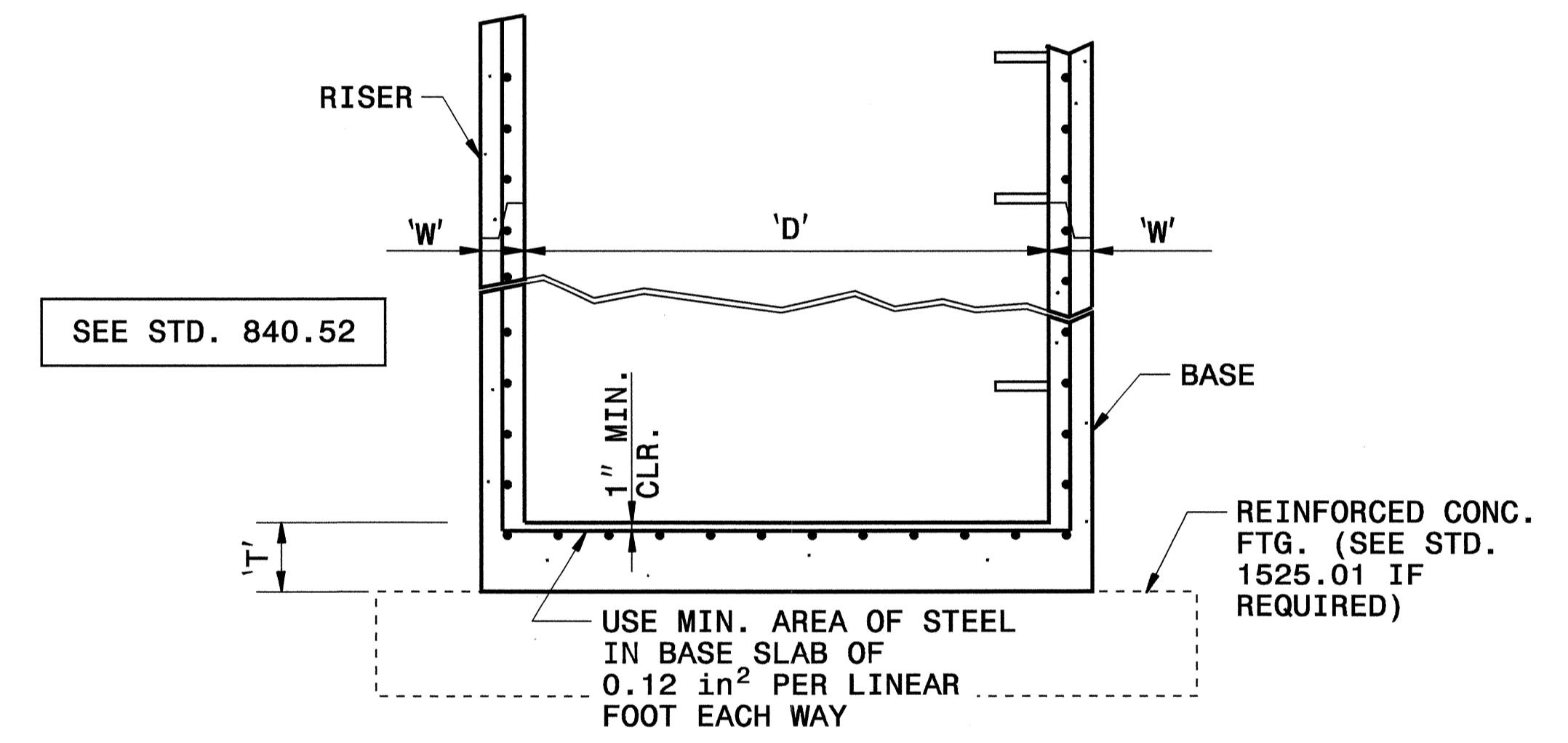
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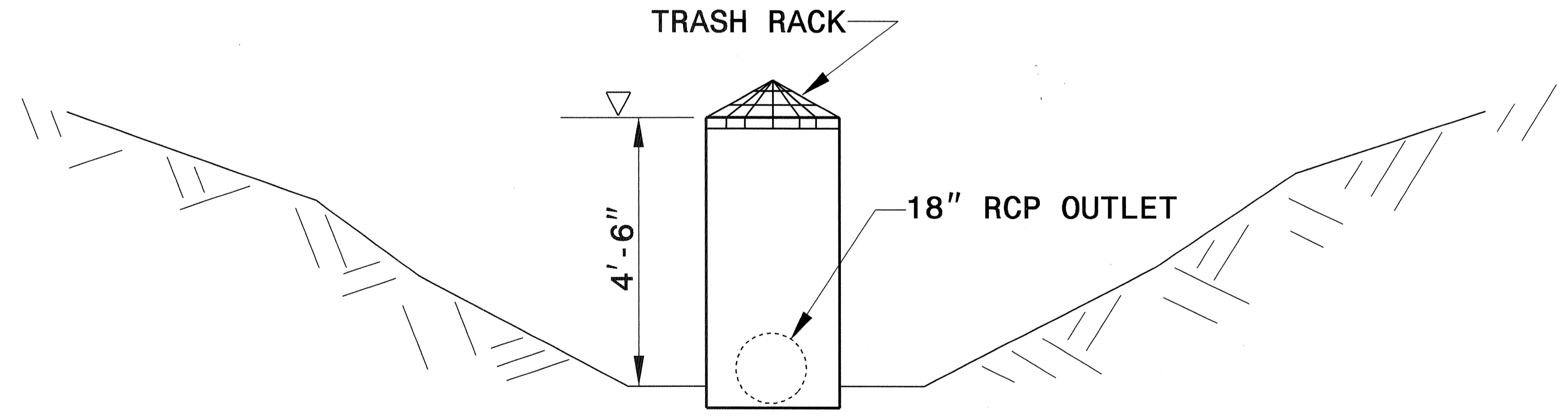
D	W	T	As
INTERNAL DIAMETER (FT.)	MIN. WALL THICKNESS (IN.)	MIN. TOP/BOTTOM SLAB THICKNESS (IN.)	MIN. CIRCUMFERENTIAL AREA OF STEEL PER VERTICAL FT. (SQ. IN.)
4	4	6	0.12



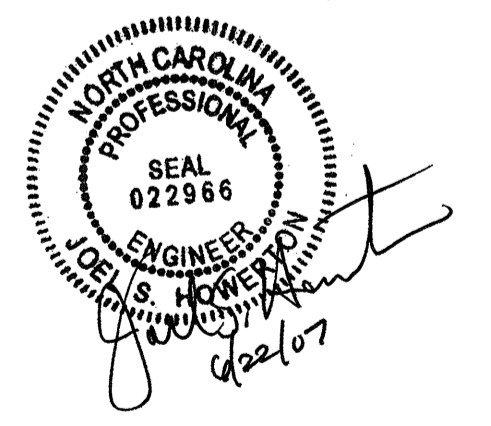
**TRASH RACK DETAIL**



**TYPICAL RISER SECTION**



**PROFILE VIEW**



**PROJECT SERVICES UNIT  
STANDARDS AND SPECIAL DESIGN**  
Office 919-250-4128 FAX 919-250-4119

**4' DIAMETER RISER  
FOR WET DETENTION POND,  
DRAINAGE STRUCTURE #44**

ORIGINAL BY: *rbritt* DATE: 05/16/07  
 MODIFIED BY: *rbritt* DATE: 05/16/07  
 CHECKED BY: *Howerton* DATE: 6/8/07  
 FILE SPEC.: *details/nbritt/english/rural/r4071 det pond riser*

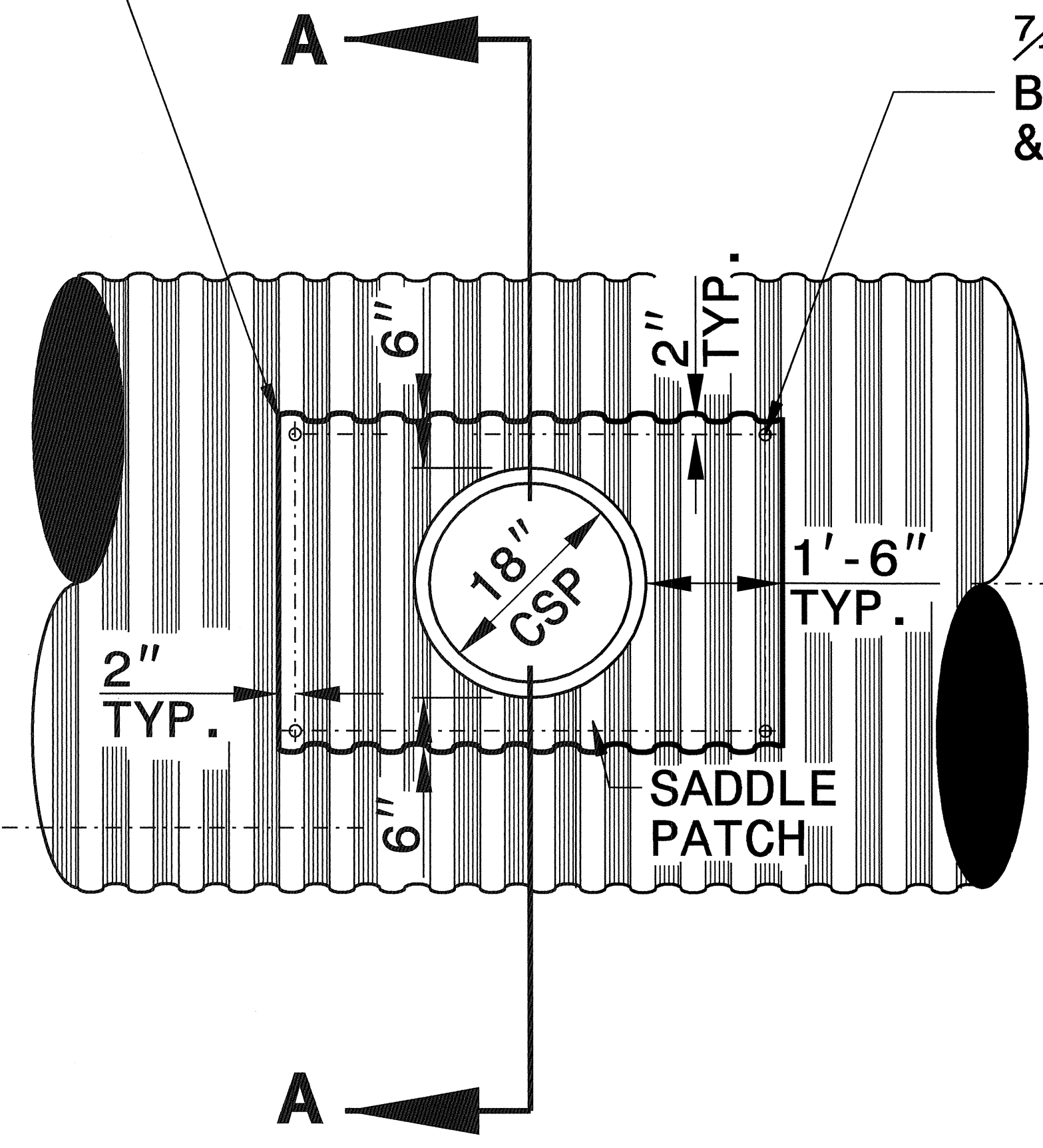
07-JUN-2007 14:11 s:\contracts\contract\905\special\_details\nbritt\english\rural\r4071 det pond riser.dgn jhowerton 41 PS212260

STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**18" SADDLE  
BRANCH CONNECTOR**

SHEET 1 OF 1  
**SADDLE**

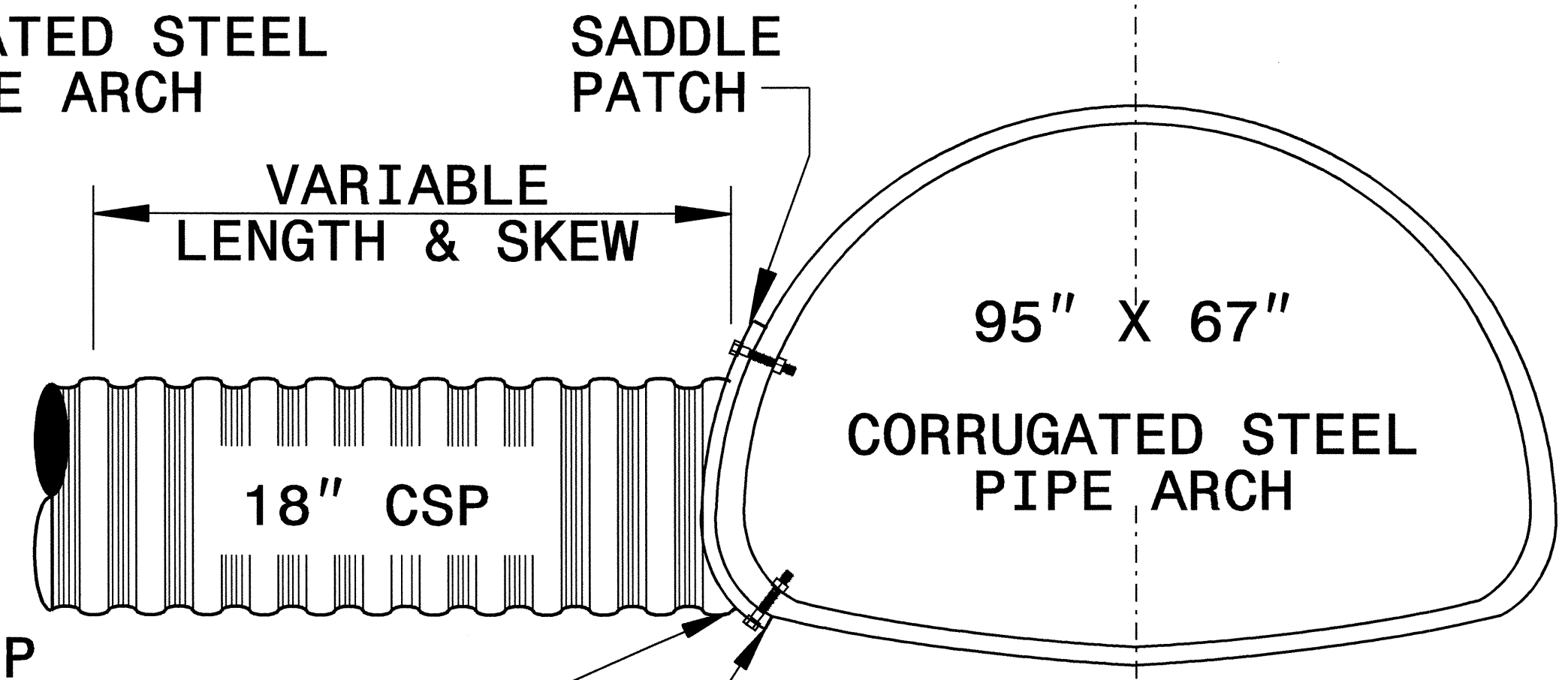
NOTE: (WELDING)  
CONTINUOUS WELD FOR SADDLE PATCH  
SHALL COMPLY WITH CURRENT AWS  
STRUCTURAL WELDING CODE.



**TOP VIEW**

$\frac{7}{16}$ " HOLES  $\frac{3}{8}$ " GALV.  
BOLTS-WITH NUT  
& 2 GALV. WASHERS

95" X 67"  
CORRUGATED STEEL  
PIPE ARCH



**SECTION 'A-A'**

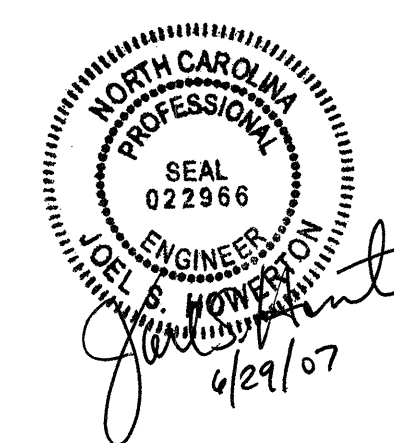
OTHER CONNECTION METHODS MAY BE  
USED AS APPROVED BY THE ENGINEER.

STATE OF  
NORTH CAROLINA  
DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

ENGLISH DETAIL DRAWING FOR  
**18" SADDLE  
BRANCH CONNECTOR**

SHEET 1 OF 1  
**SADDLE**

29-JUN-2007 10:03  
s:\contracts\contract\special\_details\spell1\stand\terry\saddle2.dgn  
Jhower-ton AT PS212260



**PROJECT SERVICES UNIT  
STANDARDS AND SPECIAL DESIGN**  
Office 919-250-4128 FAX 919-250-4119

**SEE PLATE FOR TITLE**

ORIGINAL BY: T.S.SPELL DATE: DEC.1,2005  
 MODIFIED BY: rnbritt DATE: 06.18.2007  
 CHECKED BY: [Signature] DATE: 6/29/07  
 FILE SPEC.: details/stand/tspell1/terry/saddle2.dgn



STATE OF NORTH CAROLINA  
SUMMARY OF QUANTITIES

ItemNumber	Sec #	Quantity	Unit	Description
7901000000-N	1753	1	EA	CABINET BASE EXTENDER
***** BEGIN SCHEDULE AA ***** ***** (3 ALTERNATES) *****				
0360000000-E AA1	310	36	LF	12" RC PIPE CULVERTS, CLASS III
0366000000-E AA1	310	1,456	LF	15" RC PIPE CULVERTS, CLASS III
0372000000-E AA1	310	816	LF	18" RC PIPE CULVERTS, CLASS III
0378000000-E AA1	310	72	LF	24" RC PIPE CULVERTS, CLASS III
0384000000-E AA1	310	216	LF	30" RC PIPE CULVERTS, CLASS III
*** OR ***				
0366000000-E AA2	310	1,000	LF	15" RC PIPE CULVERTS, CLASS III
0372000000-E AA2	310	588	LF	18" RC PIPE CULVERTS, CLASS III
0378000000-E AA2	310	36	LF	24" RC PIPE CULVERTS, CLASS III
0384000000-E AA2	310	180	LF	30" RC PIPE CULVERTS, CLASS III
0536000000-E AA2	SP	36	LF	*** HDPE PIPE CULVERTS (12")
0536000000-E AA2	SP	456	LF	*** HDPE PIPE CULVERTS (15")
0536000000-E AA2	SP	228	LF	*** HDPE PIPE CULVERTS (18")
0536000000-E AA2	SP	36	LF	*** HDPE PIPE CULVERTS (24")
0536000000-E AA2	SP	36	LF	*** HDPE PIPE CULVERTS (30")
*** OR ***				
0366000000-E AA3	310	1,000	LF	15" RC PIPE CULVERTS, CLASS III
0372000000-E AA3	310	588	LF	18" RC PIPE CULVERTS, CLASS III
0378000000-E AA3	310	36	LF	24" RC PIPE CULVERTS, CLASS III
0384000000-E AA3	310	180	LF	30" RC PIPE CULVERTS, CLASS III

ItemNumber	Sec #	Quantity	Unit	Description
0540000000-E AA3	SP	36	LF	*** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, ***** THICK (12", 0.064")
0540000000-E AA3	SP	456	LF	*** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, ***** THICK (15", 0.064")
0540000000-E AA3	SP	228	LF	*** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, ***** THICK (18", 0.064")
0540000000-E AA3	SP	36	LF	*** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, ***** THICK (24", 0.064")
0540000000-E AA3	SP	36	LF	*** ALUMINIZED CORRUGATED STEEL PIPE CULVERTS, ***** THICK (30", 0.079")

\*\*\*\*\* END SCHEDULE AA \*\*\*\*\*













# STATE OF NORTH CAROLINA DIVISION OF HIGHWAYS

PROJ. REFERENCE NO.	SHEET NO.
R-4071	3-F

## SUMMARY OF EARTHWORK

Volumes in Cubic Yards

STATION TO STATION	Uncl. Excav.	Undercut	Embank +%	Borrow	Waste
-Y- 14+00.00 TO 17+40.00	40		275	255	20
-L- 10+00.00 TO 19+48.00	1465		1907	1175	733
-Y3- 10+00.00 TO 12+80.00	139		158	89	70
-L- 19+48.00 TO 26+50.00	105		1199	1147	53
<b>TOTAL</b>	<b>1749</b>		<b>3539</b>	<b>2666</b>	<b>876</b>
<b>PROJECT TOTAL</b>	<b>1749</b>		<b>3539</b>	<b>2666</b>	<b>876</b>
ESTIMATE TO REPLACE TOPSOIL ON BORROW PIT				133	
<b>GRAND TOTAL</b>	<b>1749</b>			<b>2799</b>	
<b>SAY</b>	<b>1800</b>			<b>2800</b>	
ESTIMATE UNDERCUT		1300			

-L-, -Y-, & -Y3- CUT PAVEMENT STRUCTURE VOLUME 208 CY

## REMOVAL OF EXISTING ASPHALT PAVEMENT

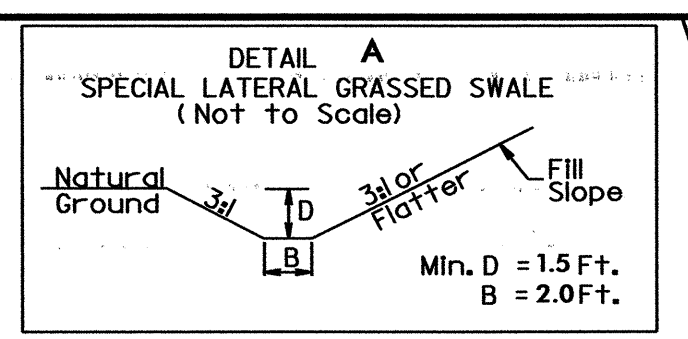
STATION TO STATION	SY
-L- 15+40.00 TO 19+27.00	104
-L- 19+55.00 TO 20+06.00	8
-Y2- 10+18.00 TO 20+08.00	1255
<b>TOTAL</b>	<b>1367</b>
<b>SAY</b>	<b>1400</b>

Quantities are approximate only. The Resident Engineer will recross-section the work accurately when the project is staked out. These cross-section notes will be used in computing the final quantities for which the contractor will be paid.



★ EXISTING SIGNAL TO BE UPGRADED  
 FOR -L- PROFILE, SEE SHEET NO. 13  
 FOR -Y- PROFILE, SEE SHEET NO. 15

TRADE OIL COMPANY  
 DB 2343 PG 303  
 PB 61PG 282



WILLIAM JOSEPH EDWARDS

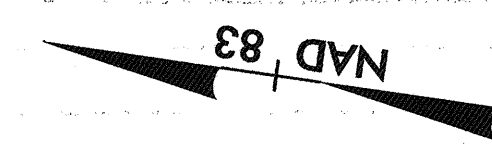
PROJECT REFERENCE NO. R-4071	SHEET NO. 04
R/W SHEET NO. 04	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

-Y- POT 14+00.00  
 BEGIN CONST

-L- POT 10+00.00 =  
 -Y- POT 14+93.55  
 BEGIN PROJECT R-4071

①  
 -L- POT 10+09.28 =  
 54.94' LT  
 BL=101.5+00.00 POT =  
 BY=102.11+44.54 PINC  
 ELEVATION = 206.22'

FROM STA. 10+25 -L- LT. TO STA. 12+50 -L- LT.  
 FROM STA. 16+72 -L- LT. TO STA. 19+00 -L- LT.



FOUR OAKS BANK & TRUST  
 DB 918 PG 87

BRENDA S. BAREFOOT  
 DB 2787 PG 853

CARRIN L. WALKER  
 DB 1904 PG 87

-Y- POT 17+40.00  
 END CONST

-Y- POT 17+56.52 =  
 -Y1- POT 10+00.00

9600	ADT	2007
17800		2030
3100		6800
5800		13000
3700	SR 1178	
7200	KEEN RD.	
10200		
19200		

**DATUM DESCRIPTION**  
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "12704-1"  
 WITH NAD 83 STATE PLANE GRID COORDINATES OF  
 NORTHING: 612598.5189(F) EASTING: 2169588.922(F)  
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9987440  
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM  
 12704-1 TO -L- POT 10+00.00  
 N 19° 58' 48" E 5,448.75'  
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
 VERTICAL DATUM USED IS NGVD 29

LINE -Y1-  
 PI Sta 10+92.72  
 $\Delta = 6' 40' 48.0''$  (RT)  
 $D = 7' 09' 43.1''$   
 $L = 93.27'$   
 $T = 46.69'$   
 $R = 800.00'$

MCLAMB, ANTHONY W.  
 & DONNA RENEE  
 DB 1519 PG 854

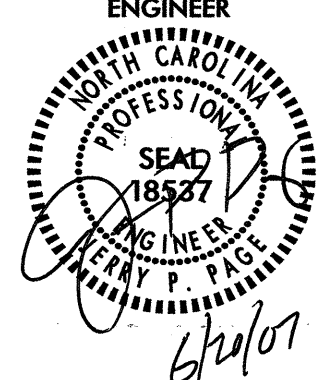
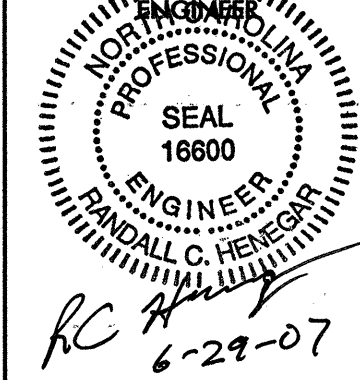
MATCHLINE -L- 12 + 50.00 SEE SHEET 5

19-JUN-2007 13:36:40 T:\4071\4071\_dloc\_psh\_04\_20.dgn  
 d:\p\ray\ray\p\4071\4071.dwg  
 cadmidge AL D:\p\21\41\41-DDC





HP 4500

PROJECT REFERENCE NO. R-4071	SHEET NO. 07
RW SHEET NO. 07	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 
FOR -L- PROFILE, SEE SHEET NO. 14	

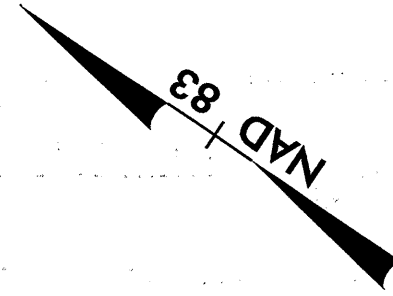
DEBORAH A. RAYNOR  
DB 1913 PG 446

JOSEPHINE L. RAYNOR  
DB 2377 PG 674

JOSEPHINE L. RAYNOR  
DB 2377 PG 674

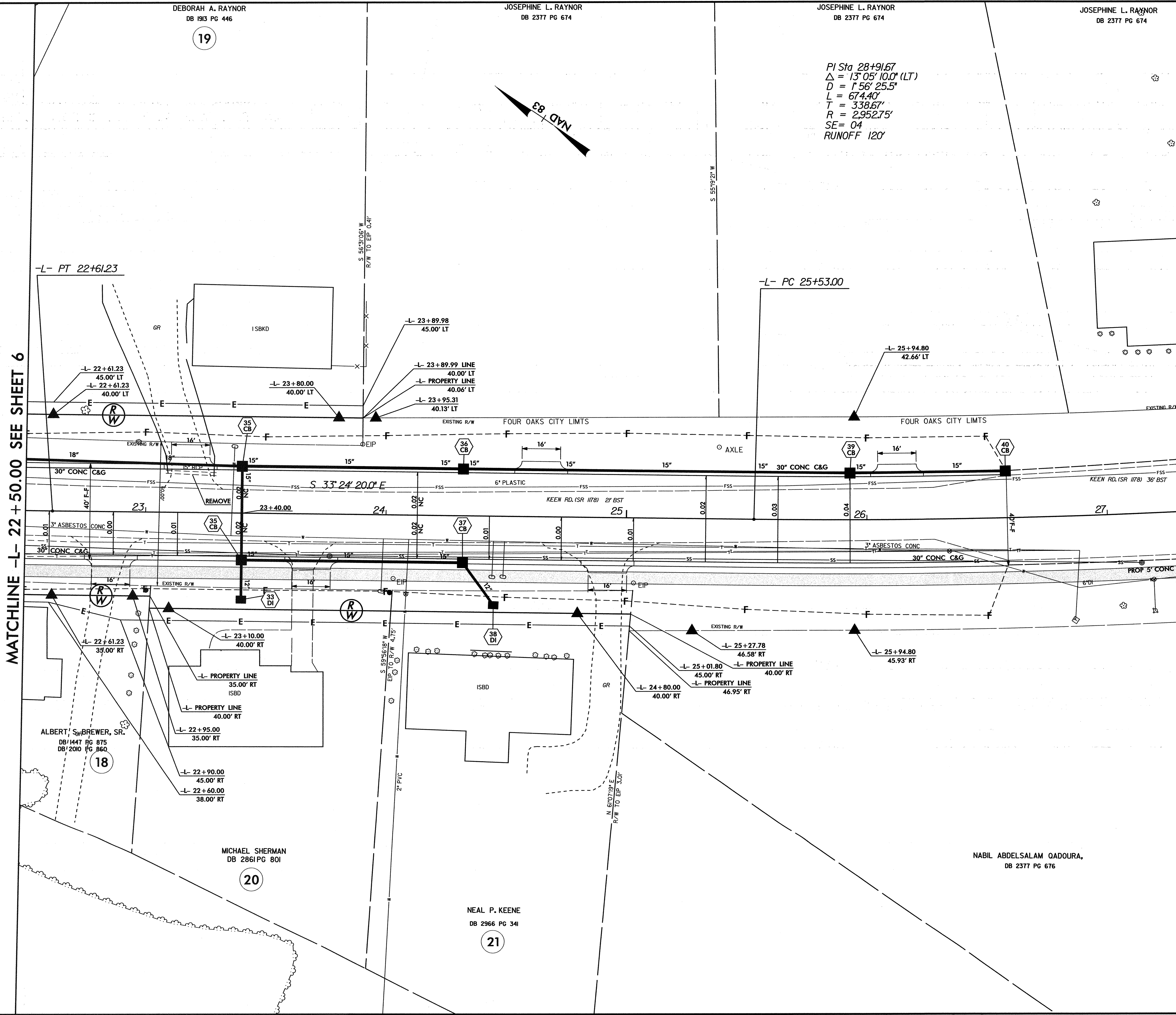
JOSEPHINE L. RAYNOR  
DB 2377 PG 674

PI Sta 28+91.67  
 $\Delta = 13^{\circ} 05' 10.0''$  (LT)  
 $D = 156' 25.5''$   
 $L = 674.40'$   
 $T = 338.67'$   
 $R = 2,952.75'$   
 $SE = 04$   
 RUNOFF 120'



MATCHLINE -L- 22 + 50.00 SEE SHEET 6

MATCHLINE -L- 27 + 50.00 SEE SHEET 8



REVISIONS

19-JUN-2007 13:31  
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 denridge Al D4B-21W/11-BDC

ALBERT S. BREWER, SR.  
DB 1447 PG 875  
DB 2010 PG 860

MICHAEL SHERMAN  
DB 2861 PG 801

NEAL P. KEENE  
DB 2966 PG 341

NABIL ABDELSALAM QADOURA,  
DB 2377 PG 676

19

18

20

21



PROJECT REFERENCE NO. R-4071	SHEET NO. 08
RAW SHEET NO. 08	
ROADWAY DESIGN ENGINEER SEAL 18527 6/20/07	HYDRAULICS ENGINEER SEAL 16600 RANDALL C. HENCH 6-29-07

CHARLES EDWARD UPCHURCH  
DB 858 PG 8

EDNA S. KEENE  
DB 1089 PG. 165

JOSEPHINE L. RAYNOR  
DB 2377 PG 674

-L- POC 28+25.00  
END PROJECT R-4071

PI Sta 28+91.67  
 $\Delta = 13^{\circ} 05' 10.0"$  (LT)  
D = 156' 25.5"  
L = 674.40'  
T = 338.67'  
R = 2952.75'  
SE = 04  
RUNOFF 120'

-L- PT 32+27.39

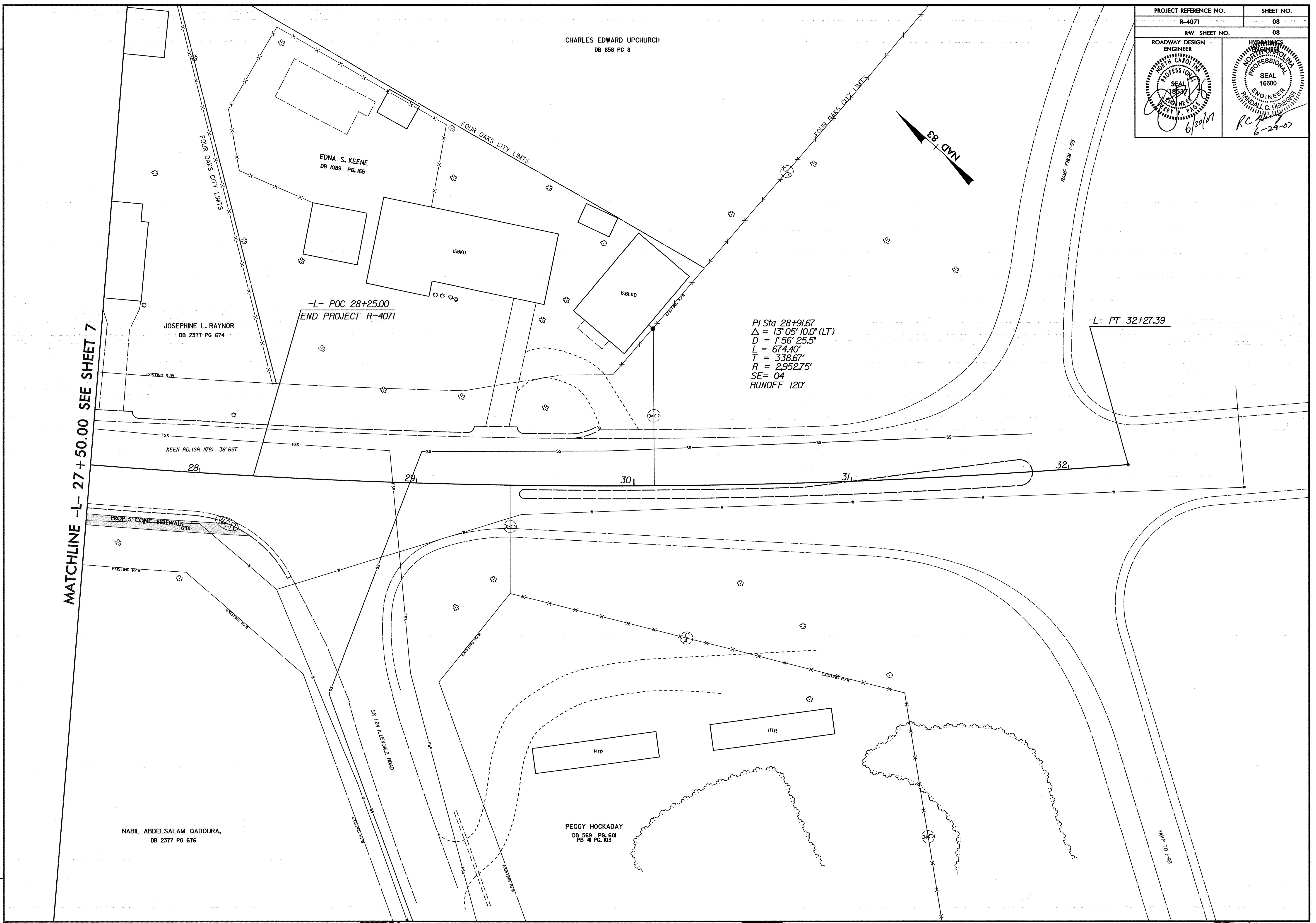
MATCHLINE -L- 27+50.00 SEE SHEET 7

REVISIONS

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delbridge AT DAD-21/41-DDC

NABIL ABDELSALAM QADOURA,  
DB 2377 PG 676

PEGGY HOCKADAY  
DB 569 PG. 601  
Pg 41 PG. 103





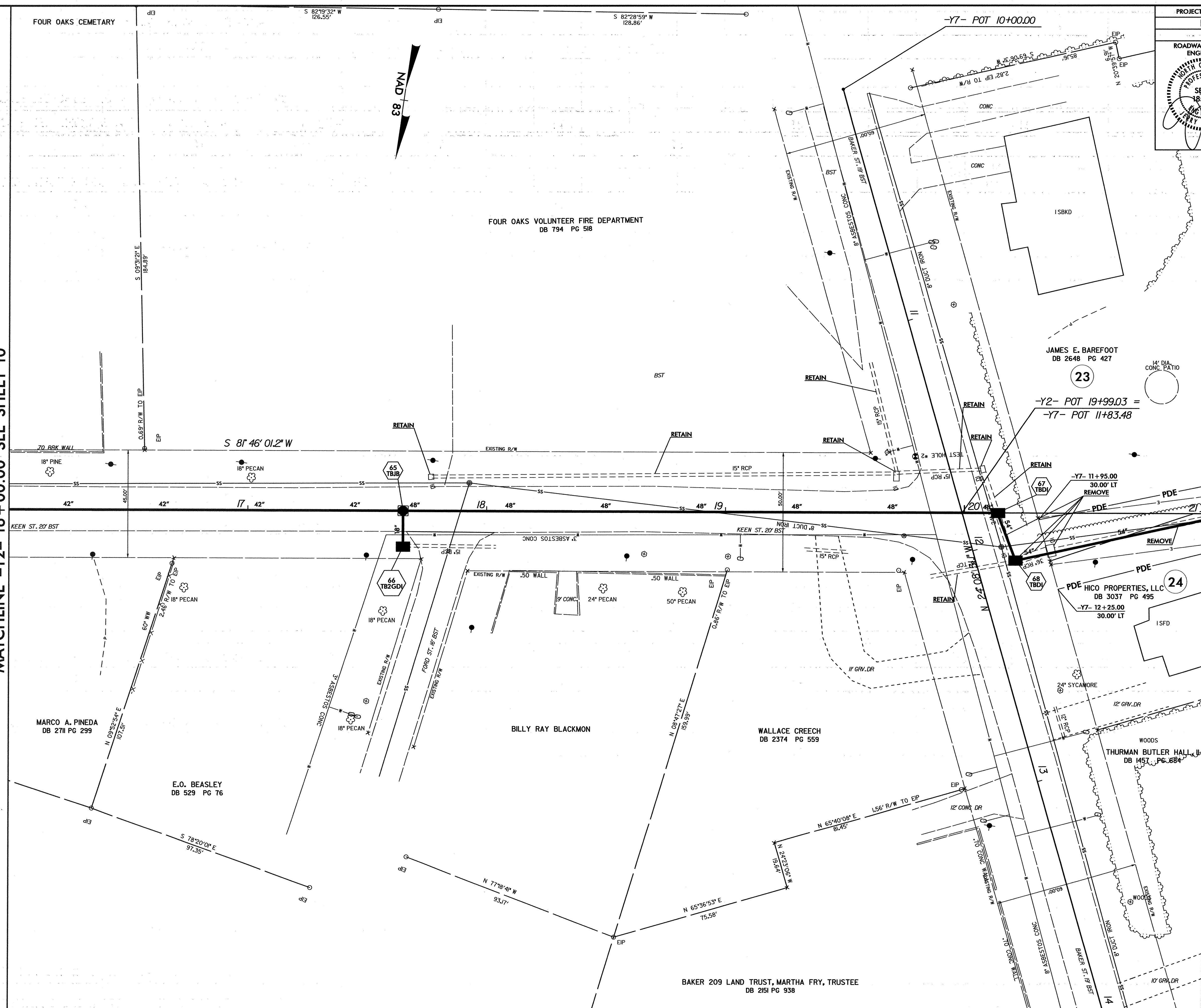


PROJECT REFERENCE NO. <b>R-4071</b>	SHEET NO. <b>11</b>
R/W SHEET NO. <b>11</b>	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
DATE: 6/20/07	

FOR -Y2- PROFILE, SEE SHEET NO. 17

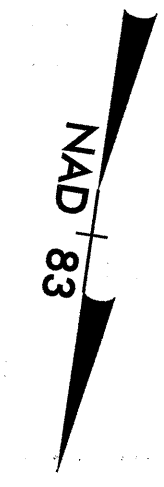
MATCHLINE -Y2- 16 + 00.00 SEE SHEET 10

MATCHLINE -Y2- 21 + 00.00 SEE SHEET 12



REVISIONS

19-JUN-2007 11:32  
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23

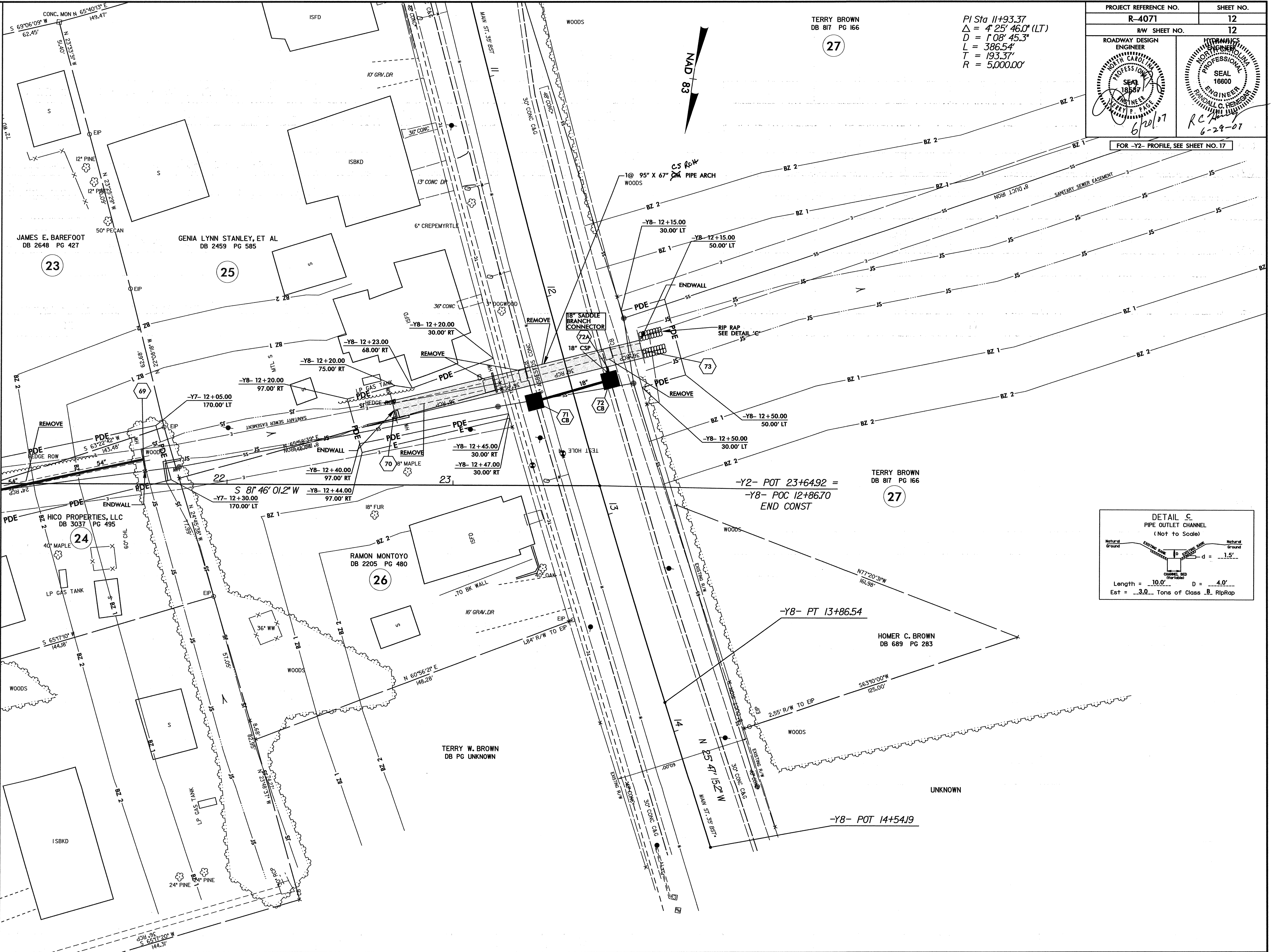


24

WOODS

REVISIONS

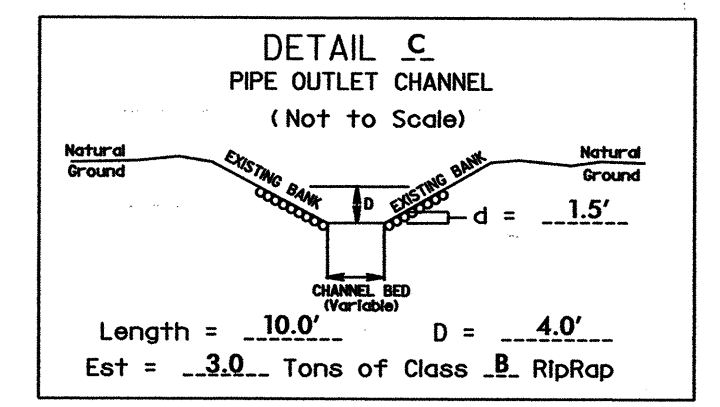
MATCHLINE -Y2- 21+00.00 SEE SHEET 11



TERRY BROWN  
DB 817 PG 166  
27

PI Sta 11+93.37  
Δ = 4' 25" 46.0' (LT)  
D = 1' 08" 45.3"  
L = 386.54'  
T = 193.37'  
R = 5,000.00'

PROJECT REFERENCE NO.	SHEET NO.
R-4071	12
R/W SHEET NO.	12
ROADWAY DESIGN ENGINEER	PROFESSIONAL ENGINEER
FOR -Y2- PROFILE, SEE SHEET NO. 17	



-Y2- POT 23+64.92 =  
-Y8- POC 12+86.70  
END CONST

TERRY BROWN  
DB 817 PG 166  
27

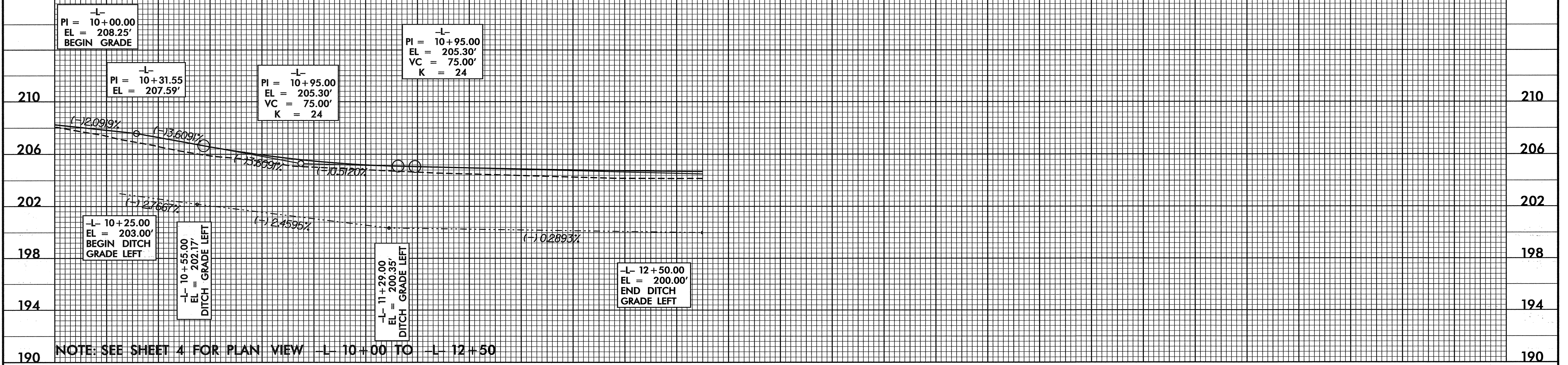
-Y8- PT 13+86.54

HOMER C. BROWN  
DB 689 PG 283

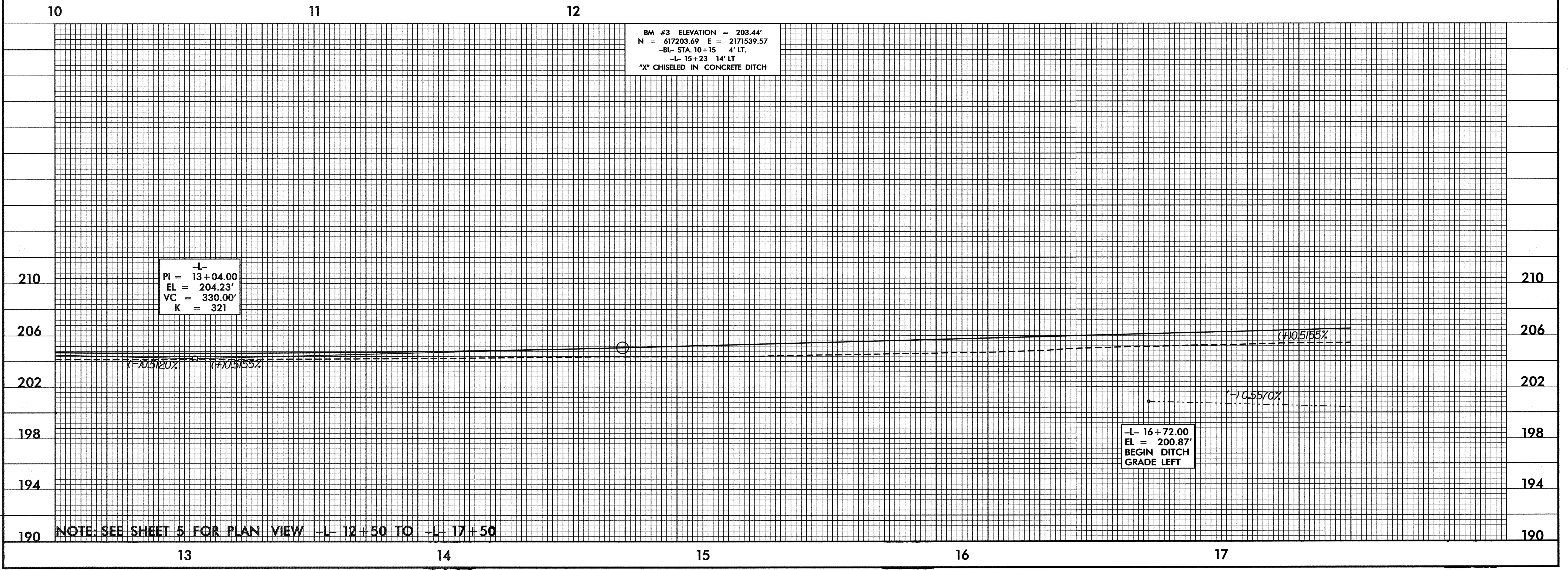
-Y8- POT 14+54.19

UNKNOWN

PROJECT REFERENCE NO. R-4071	SHEET NO. 13
RW SHEET NO. 13	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
6/20/07	RC/H 6-29-07



BM #3 ELEVATION = 203.44'  
 N = 617203.69 E = 2171539.57  
 -BL- STA. 10+15 4' LT.  
 -L- 15+23 14' LT  
 "X" CHISELED IN CONCRETE DITCH

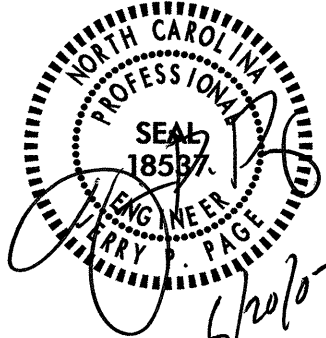
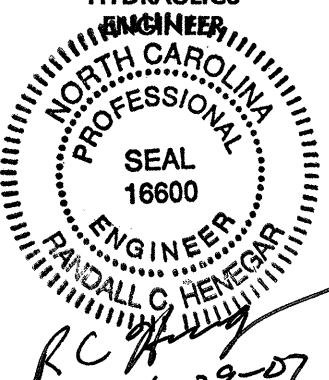


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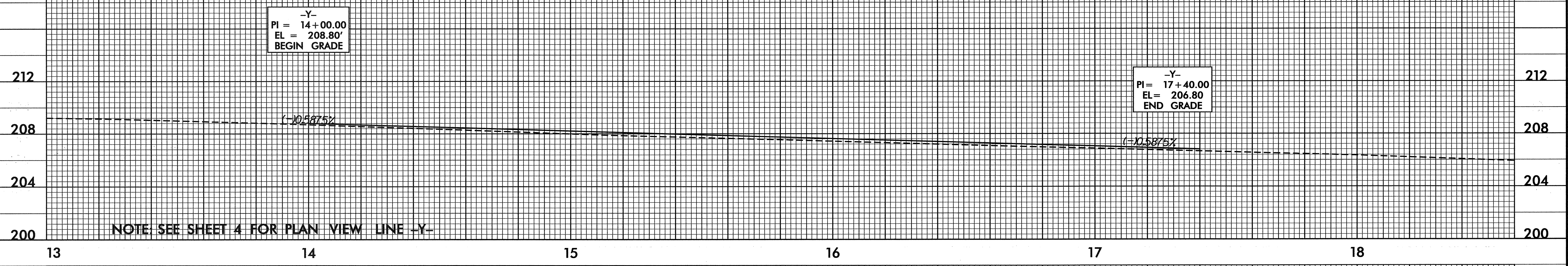
REVISIONS



5/28/99

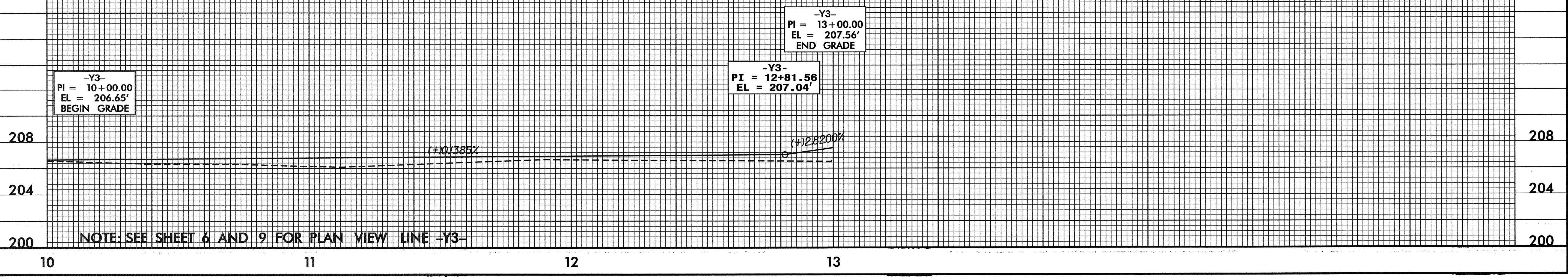
PROJECT REFERENCE NO. R-4071	SHEET NO. 15
RW SHEET NO. 15	
ROADWAY DESIGN ENGINEER 	HYDRAULICS ENGINEER 

# LINE -Y-



NOTE: SEE SHEET 4 FOR PLAN VIEW LINE -Y-

# LINE -Y3-



NOTE: SEE SHEET 6 AND 9 FOR PLAN VIEW LINE -Y3-

19-JUN-2007 11:05  
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delridge AI DAD-21474-BDC

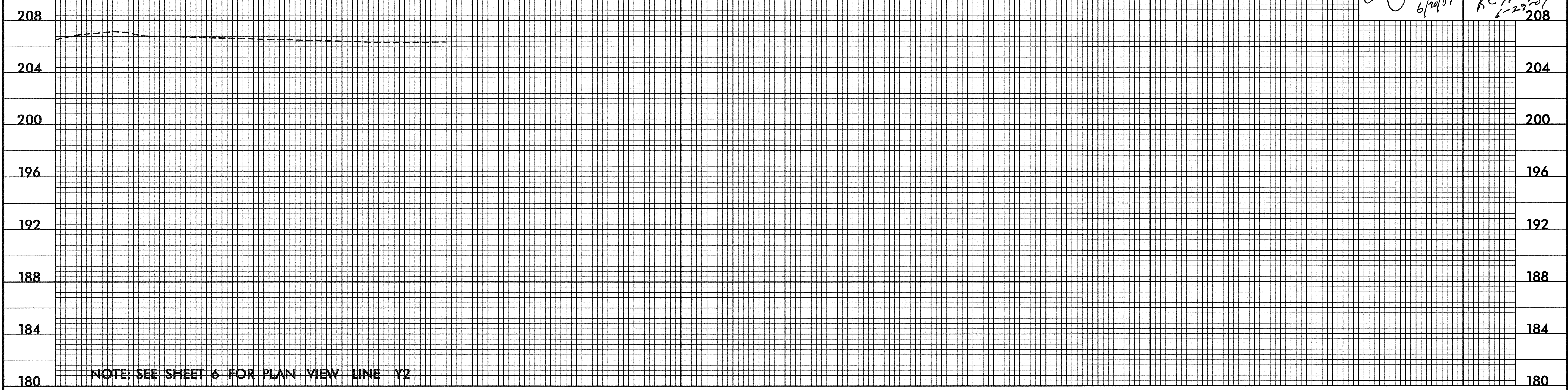
REVISIONS



5/28/99

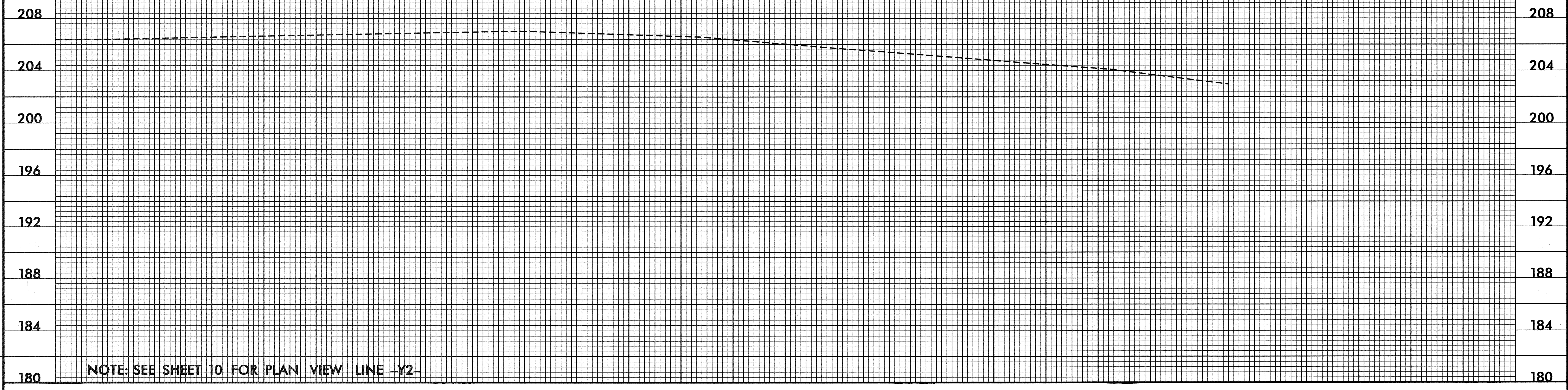
PROJECT REFERENCE NO.	SHEET NO.
R-4071	16
R/W SHEET NO.	16
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

LINE -Y2-



10 11

LINE -Y2-



12 13 14 15 16

19-JUN-2007 11:02  
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cdm\jg

REVISIONS

