

STATE OF OHIO
DEPARTMENT OF TRANSPORTATION
LOR-90-15.65 PART 2
INTERCHANGE IMPROVEMENTS
AT S.R.254
SHEFFIELD TOWNSHIP
LORAIN COUNTY

PROJECT DESCRIPTION

PART 2 (15.65)

IMPROVEMENTS AT I-90 AND S.R.254 INTER-CHANGE, INCLUDING PAVEMENT WIDENING ON RAMPS AND S.R.254 AND BRIDGE WIDENING.

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE REVISED CODE OF OHIO.

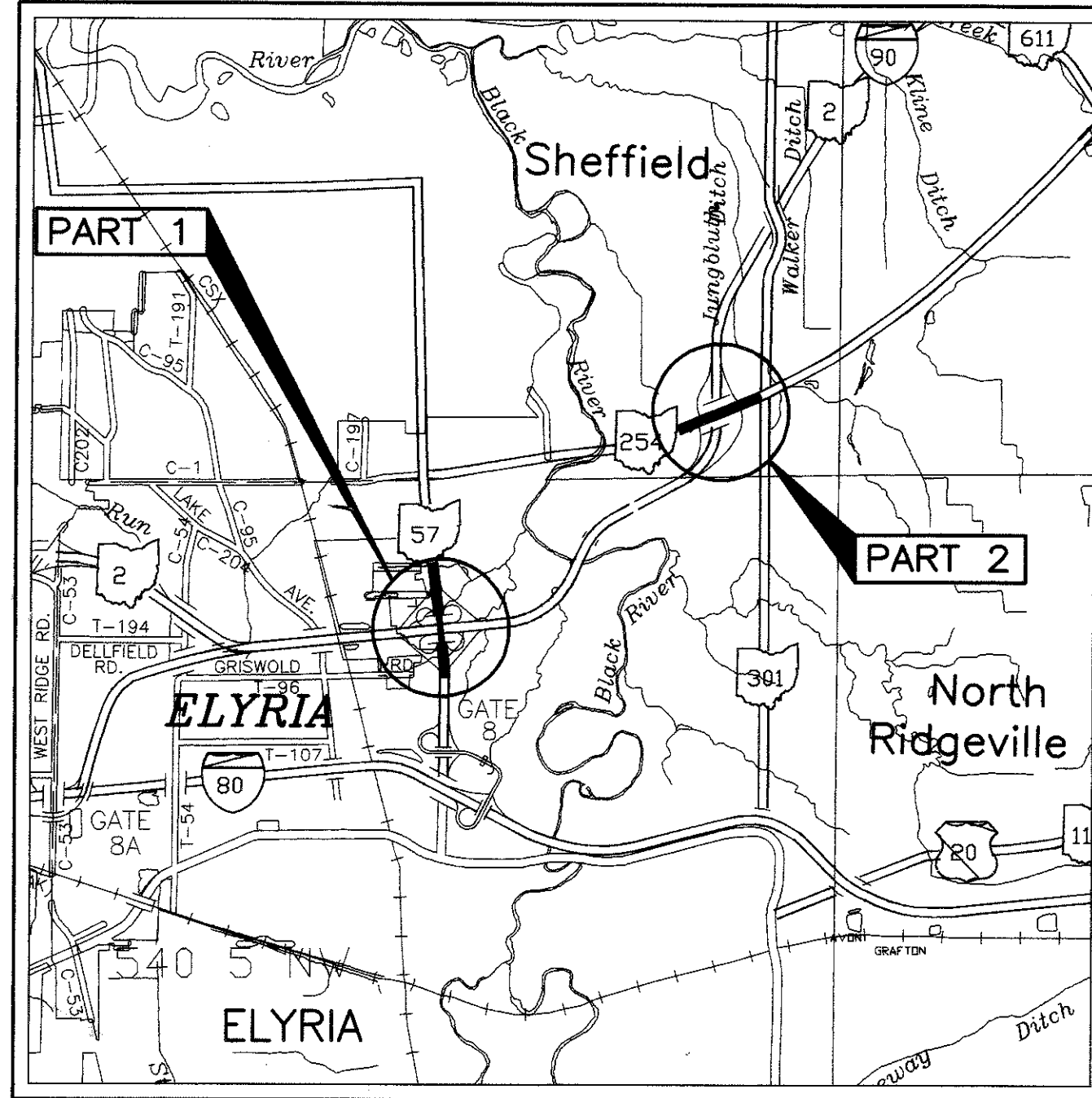
1997 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING CHANGES AND SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

MAINTENANCE OF TRAFFIC ENDORSEMENT

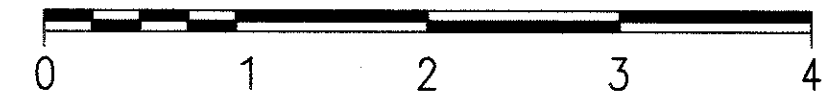
I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL NOT REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT PROVISIONS FOR THE MAINTENANCE AND SAFETY OF TRAFFIC WILL BE AS SET FORTH ON THE PLANS AND ESTIMATES

FOR PART 1 SEE
LOR-90-13.20



LOCATION MAP

SCALE IN MILES



PORTION TO BE IMPROVED _____
STATE & FEDERAL ROUTES _____
OTHER ROADS _____

DESIGN EXCEPTIONS

NONE REQUIRED

DESIGN DESIGNATION

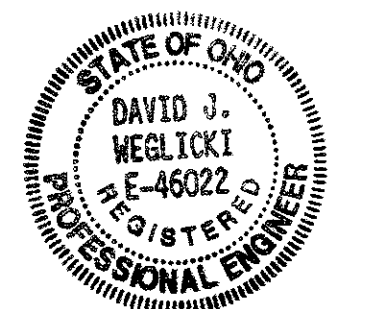
SEE SCHEMATIC PLAN

UNDERGROUND UTILITIES
TWO WORKING DAYS
BEFORE YOU DIG
CALL 1-800-362-2764 (TOLL FREE)
OHIO UTILITIES PROTECTION SERVICE
NON-MEMBERS
MUST BE CALLED DIRECTLY

PLAN PREPARED BY:

REW R.E. WARNER & ASSOCIATES, INC.
CONSULTING ENGINEERS
THREE KING JAMES PARK - SUITE 300
24600 CENTER RIDGE ROAD
WESTLAKE, OHIO 44145
TELEPHONE (440) 835-9400

ENGINEERS SEAL:



SIGNED: *David J. Weiglckl*
DATE: 9-2-01

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SEE PART 1										
STANDARD CONSTRUCTION DRAWINGS										SUPPLEMENTAL SPECIFICATIONS

Approved: *Thomas M. Cleary*
Date: 10-9-01 District Deputy Director

APPROVED: *Jordan Proctor*
DATE: 10-31-01 DIRECTOR, DEPARTMENT OF TRANSPORTATION

FEDERAL PROJECT NO.
NON - FEDERAL

PID NO.
11385

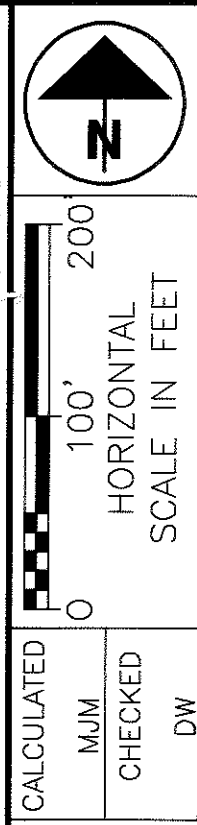
CONSTRUCTION PROJECT NO.

RAILROAD INVOLVEMENT
NONE

LOR - 190 - 15.65

MATCH LINE

STA. 105+02.76, S.R. 254=
STA. 25+09.52, ABBE RD. (R. 301)



CURVE DATA RAMP "J" (EXISTING)
P.I. STA. 819+58.51
 $\Delta=8^{\circ}17'46''$
D=1'30'00"
R=3819.72'
L=553.07'
T=277.02'
E=10.03'

CURVE DATA RAMP "J" (EXISTING)
P.I. STA. 815+29.26
 $\Delta=24^{\circ}44'57''$
D=8'00'00"
R=716.20'
L=309.36'
T=157.13'
E=17.04'

P.I. STA. 813+05.60
 $\Theta_s=8^{\circ}00'00''$
L.S.=200.00'
L.T.=133.47'
S.T.=66.79'

CURVE DATA RAMP "J" (EXISTING)
P.I. STA. 809+44.69
 $\Delta=42^{\circ}54'22''$
D=16'00'00"
R=358.10'
L=268.16'
T=140.72'
E=26.66'

BEGIN WORK
STA. 75+60

CURVE DATA RAMP "K" (EXISTING)
P.I. STA. 818+59.74
 $\Delta=30^{\circ}28'01''$
D=8'00'00"
R=716.197'
L=380.84'
T=195.04'
E=26.08'

CURVE DATA RAMP "K" (EXISTING)
P.I. STA. 813+09.52
 $\Delta=17^{\circ}47'58''$
D=16'00'00"
R=358.10'
L=111.25'
T=56.07'
E=4.36'

P.I. STA. 815+98.17
 $\Theta_s=8^{\circ}00'00''$
L.S.=200.00'
L.T.=133.47'
S.T.=66.79'

CURVE DATA S.R. 254 (EXISTING)
P.I. STA. 104+98.86,
Q R/W & CONSTRUCTION
 $\Delta=6^{\circ}15'00''$
Dc=1'00'00"
R=5729.58'
T=312.81'
L=625.00'
E=8.53'

CURVE DATA RAMP "L" (EXISTING)
P.I. STA. 811+89.38
 $\Delta=45^{\circ}28'09''$
D=16'00'00"
R=358.10'
L=284.18'
T=150.05'
E=31.17'

P.I. STA. 808+06.12
 $\Theta_s=8^{\circ}00'00''$
L.S.=200.00'
L.T.=133.47'
S.T.=66.79'

CURVE DATA RAMP "L" (EXISTING)
P.I. STA. 807+03.71
 $\Delta=5^{\circ}42'15''$
D=8'00'00"
R=716.20'
L=71.30'
T=35.68'
E=0.89'

P.I. STA. 805+68.49
 $\Theta_s=12^{\circ}00'00''$
L.S.=300.00'
L.T.=200.46'
S.T.=100.42'

CURVE DATA RAMP "J" (EXISTING)
P.I. STA. 819+58.51
 $\Delta=8^{\circ}17'46''$
D=1'30'00"
R=3819.72'
L=553.07'
T=277.02'
E=10.03'

CURVE DATA RAMP "H" (EXISTING)
P.I. STA. 802+91.50
 $\Theta_s=8^{\circ}00'00''$
L.S.=200.00'
L.T.=133.47'
S.T.=66.79'

CURVE DATA RAMP "H" (EXISTING)
P.I. STA. 799+88.19
 $\Delta=39^{\circ}29'03''$
D=8'00'00"
R=716.197'
L=493.55'
T=257.03'
E=44.73'

CURVE DATA RAMP "H" (EXISTING)
P.I. STA. 795+81.37
 $\Delta=7^{\circ}30'00''$
D=2'30'00"
R=2291.83'
L=300.00'
T=150.21'
E=4.92'

CURVE DATA I.R. 90 (EXISTING)
P.I. STA. 796+98.20
 $\Delta=62^{\circ}20'45''$
D=2'30'00"
R=2291.83'
Lc=2093.83'
Ts=1588.21'
Es=390.16'
 $\Theta_s=5^{\circ}00'00''$
L.S.=400.00'
L.T.=266.77'
S.T.=133.43'

DESIGN DESIGNATION

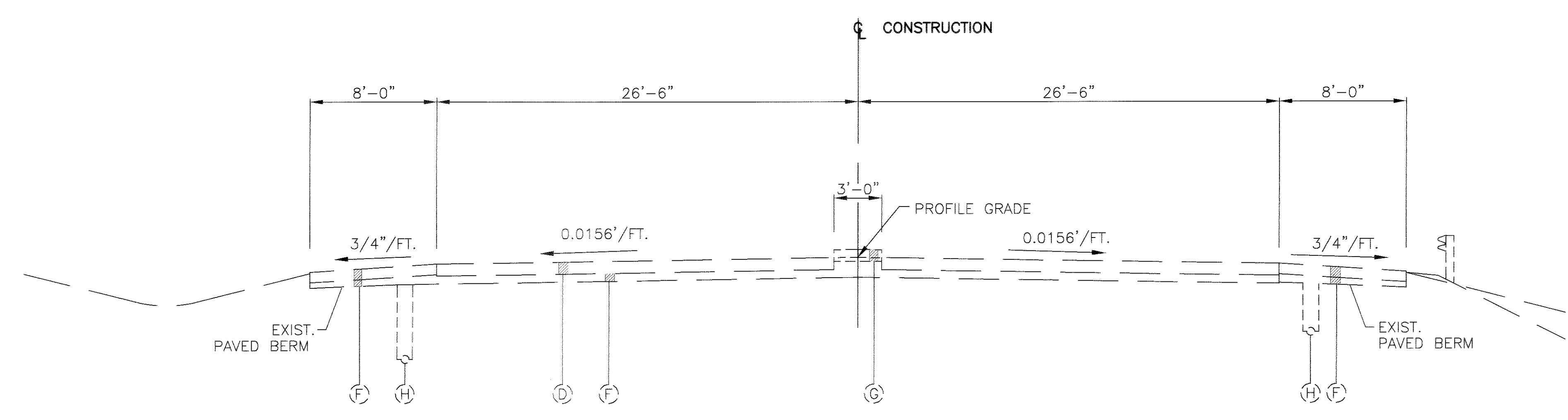
	I-90 (WEST OF INTERCHANGE)		I-90 (EAST OF INTERCHANGE)		S.R. 254 (WEST OF INTERCHANGE)		S.R. 254 (EAST OF INTERCHANGE)	
	W.B.	E.B.	W.B.	E.B.	W.B.	E.B.	W.B.	E.B.
CURRENT ADT (2002)	26,610	26,430	25,790	25,560	7,280	8,140	12,380	13,290
DESIGN YEAR ADT (2022)	38,130	37,910	37,030	36,790	9,730	10,840	16,170	17,300
DESIGN HOURLY VOLUME (2022)	4,576	4,549	4,444	4,415	1,070	1,192	1,779	1,903
TRUCKS-24 HOUR B&C (2022)	6,482	6,445	6,295	6,254	292	325	485	519
DESIGN SPEED	70 MPH				35 MPH			
LEGAL SPEED	65 MPH				35 MPH			
DESIGN FUNCTIONAL CLASSIFICATION	FREEWAY				MINOR ARTERIAL			

	RAMP "H"	RAMP "J"	RAMP "K"	RAMP "L"
CURRENT ADT (2002)	5,910	5,090	5,110	5,980
DESIGN YEAR ADT (2022)	7,910	6,810	6,850	7,970
DESIGN HOURLY VOLUME (2022)	870	749	754	877
TRUCKS (24 HOUR B & C)	237	204	206	239

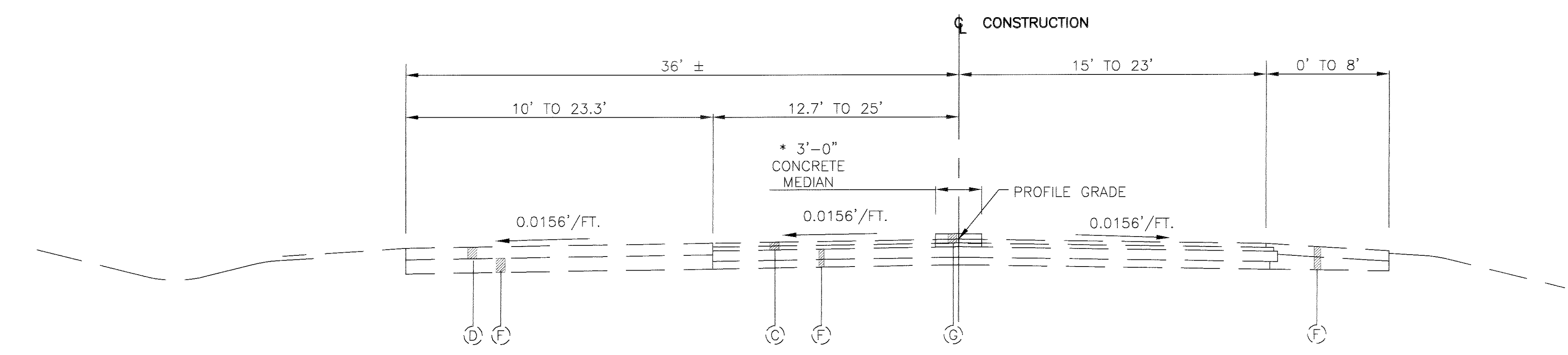
SCHEMATIC PLAN

LOR - I90 - 15.65

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EXISTING CONCRETE PAVEMENT SECTION - S.R. 254
SECTION APPLIES:
STA. 80+88.37 TO STA. 85+31.57
STA. 88+85.41 TO STA. 93+37.12



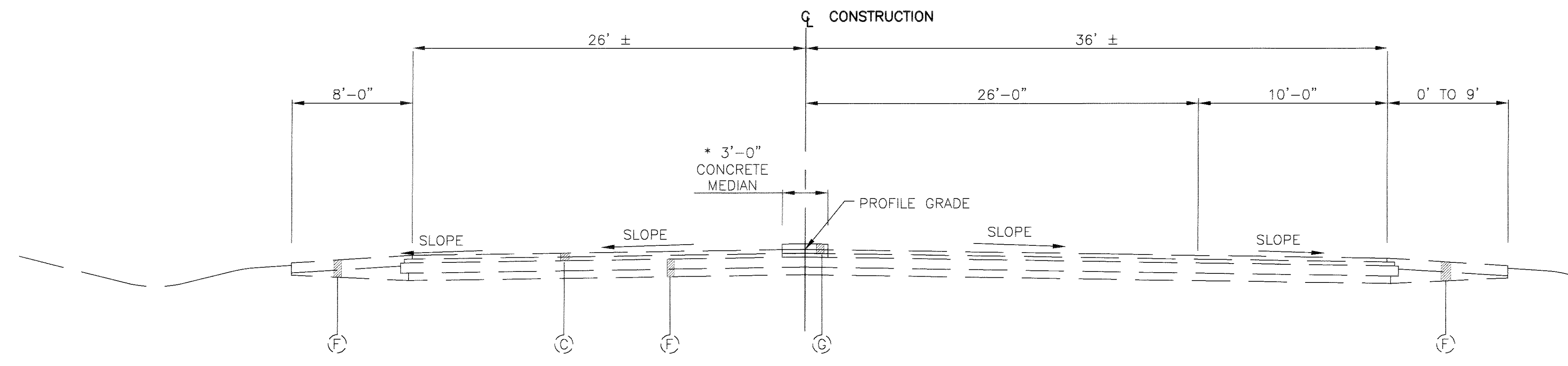
* CONCRETE MEDIAN APPLIES
STA. 78+97.63 TO STA. 80+88.21

EXISTING ASPHALT PAVEMENT WITH CONCRETE WIDENING SECTION - S.R. 254
SECTION APPLIES:
STA. 75+00 TO STA. 80+88.21

LEGEND

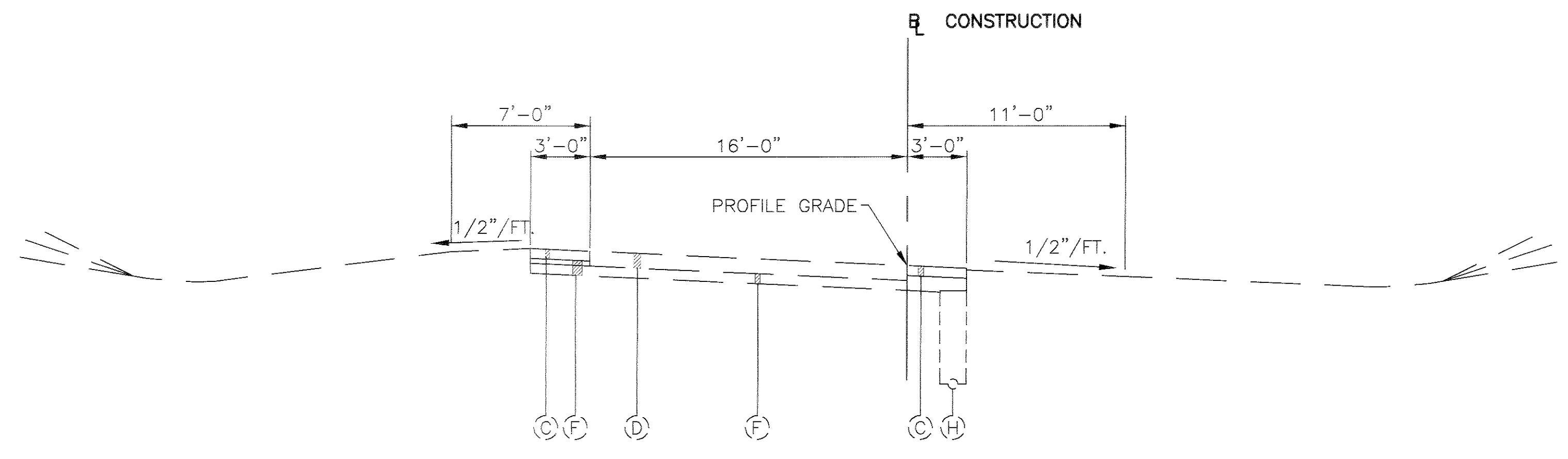
- (B) 4 1/4" ASPHALT CONCRETE
- (C) 6" ASPHALT CONCRETE
- (D) 9" REINFORCED CONCRETE
- (F) SUBBASE
- (G) CONCRETE MEDIAN
- (H) 6" UNDERDRAIN

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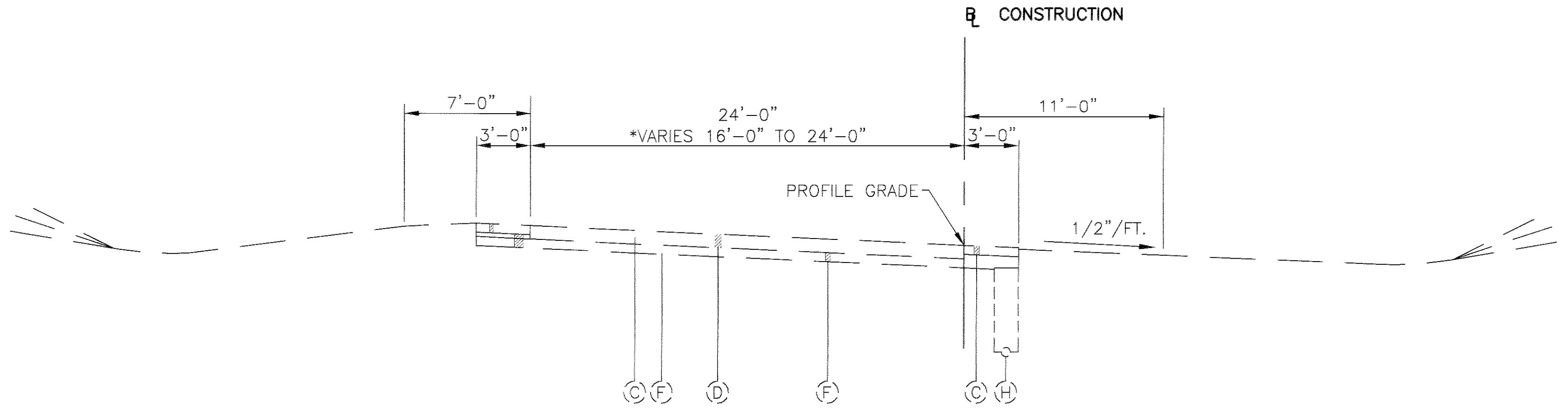
EXISTING ASPHALT PAVEMENT SECTION - S.R. 254
SECTION APPLIES:
STA. 93+37.12 TO STA. 105+02.76

* CONCRETE MEDIAN APPLIES
STA. 78+97.63 TO STA. 80+88.21



EXISTING TYPICAL SECTION - RAMPS
SECTION APPLIES:
STA. 798+31.83 TO STA. 807+97.33 RAMP "H"
STA. 810+53.97 TO STA. 817+77.71 RAMP "J"
STA. 811+23.72 TO STA. 819+45.29 RAMP "K"
STA. 803+68.78 TO STA. 814+07.29 RAMP "L"

- LEGEND**
- (C) 6" ASPHALT CONCRETE
 - (D) 9" REINFORCED CONCRETE
 - (F) SUBBASE
 - (G) CONCRETE MEDIAN
 - (H) 6" UNDERDRAIN



EXISTING TYPICAL SECTION - RAMPS
SECTION APPLIES:
STA. 807+20.19 TO STA. 809+03.97 RAMP "J"
* STA. 809+03.97 TO STA. 810+53.97 RAMP "J"

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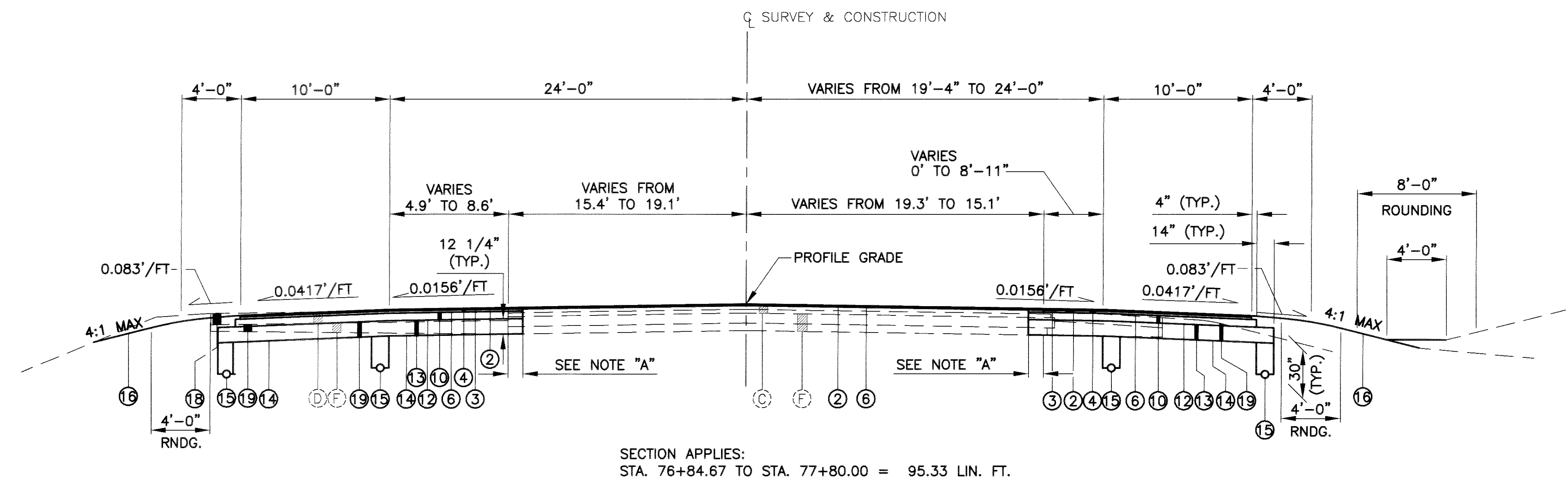
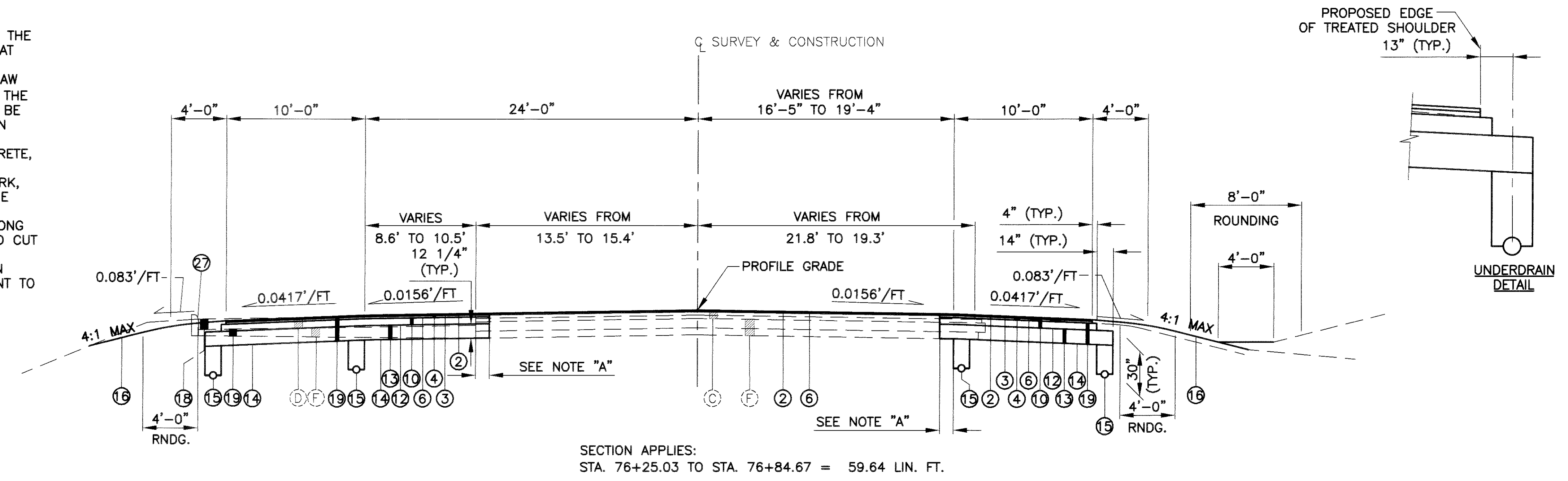
NOTE "A"

THE PAVEMENT CUT LINE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INTENT IS REMOVE UNSOUND EXISTING PAVEMENT, SO THAT NEW PAVEMENT SHALL JOIN SOUND EXISTING PAVEMENT.

ASPHALT PAVEMENT - THE EXISTING PAVEMENT EDGE SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION SHALL BE MADE.

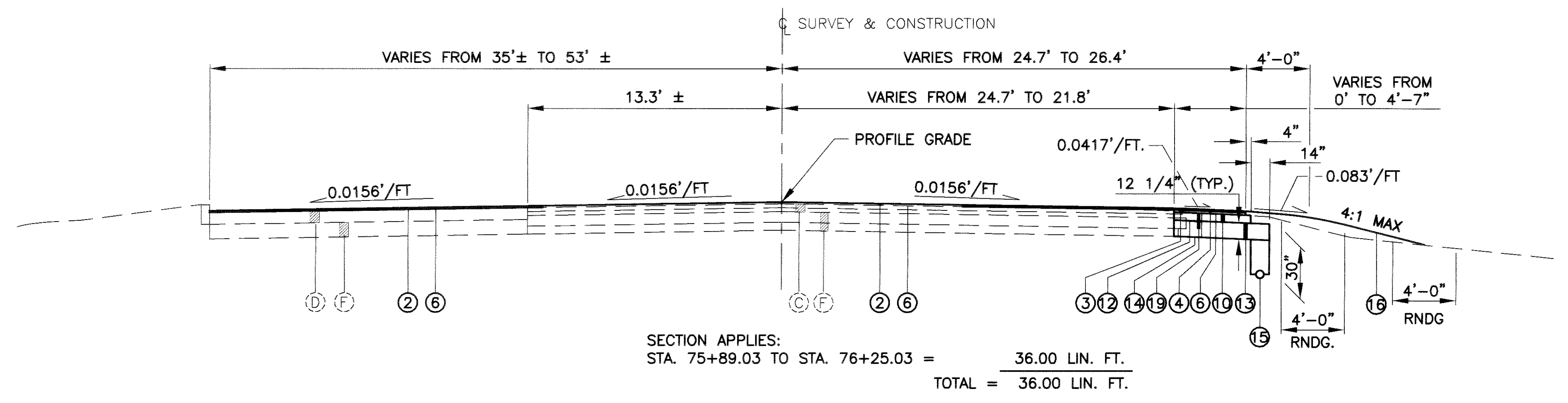
CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE, DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT SAW SHALL BE USED FOR SAW CUTTING PURPOSES.

FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO BE REPLACED.

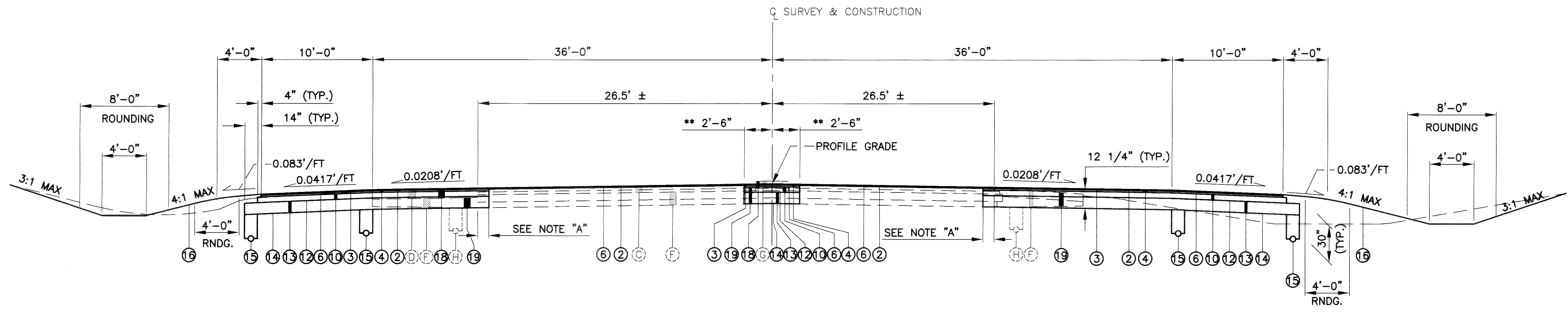


LEGEND

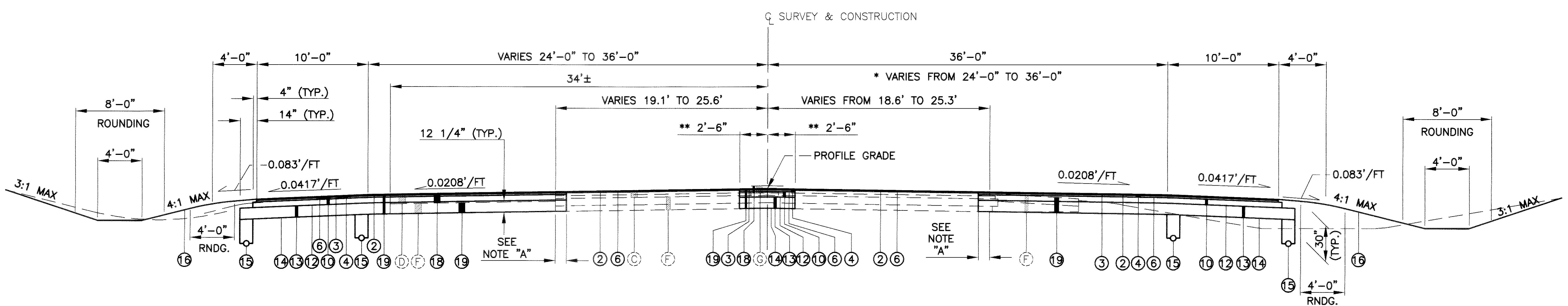
- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
- ④ ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, 1 3/4" UNLESS NOTED OTHERWISE
- ⑥ ITEM 407 - TACK COAT (SEE GENERAL NOTES)
- ⑩ ITEM 301 - 6" BITUMINOUS AGGREGATE BASE, PG 64-22
- ⑫ ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.)
- ⑬ ITEM 304 - AGGREGATE BASE
- ⑭ ITEM 203 - SUBGRADE COMPACTION
- ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
- ⑯ ITEM 870 - SEEDING AND MULCHING
- ⑰ ITEM 202 - PAVEMENT REMOVED
- ⑲ ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
- ⑳ ITEM 202 - CURB REMOVED
- ⓑ 4 1/4" ASPHALT CONCRETE
- ⓒ 6" ASPHALT CONCRETE
- ⓓ 9" REINFORCED CONCRETE
- ⓕ SUBBASE
- ⓖ 6" UNDERDRAIN



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SECTION APPLIES:
STA. 80+25.00 TO STA. 80+88.37 = 63.37 LIN. FT.



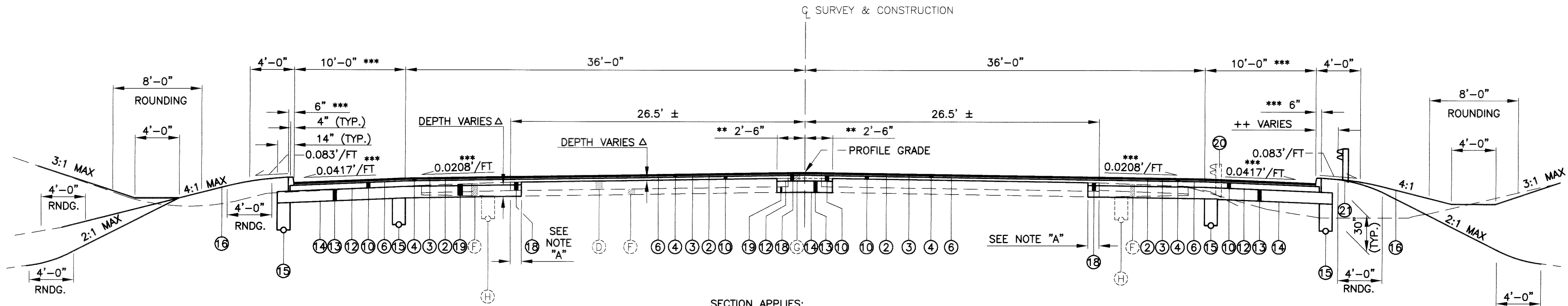
SECTION APPLIES:
* STA. 77+80.00 TO STA. 78+30.00 = 50.00 LIN. FT.
STA. 78+30.00 TO STA. 80+25.00 = 195.00 LIN. FT.
TOTAL = 245.00 LIN. FT.

** REMOVE CONCRETE MEDIAN FROM
STA. 78+97.63 TO STA. 81+79.41 = 281.78 LIN. FT.
STA. 82+65.50 TO STA. 85+56.36 = 290.86 LIN. FT.
STA. 88+59.88 TO STA. 91+60.05 = 300.17 LIN. FT.
STA. 92+37.88 TO STA. 96+68.21 = 430.33 LIN. FT.
1303.14 LIN. FT.

NOTE "A"
THE PAVEMENT CUT LINE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INTENT IS REMOVE UNSOUND EXISTING PAVEMENT, SO THAT NEW PAVEMENT SHALL JOIN SOUND EXISTING PAVEMENT.
ASPHALT PAVEMENT - THE EXISTING PAVEMENT EDGE SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION SHALL BE MADE.
CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE, DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT SAW SHALL BE USED FOR SAW CUTTING PURPOSES.
FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO BE REPLACED.

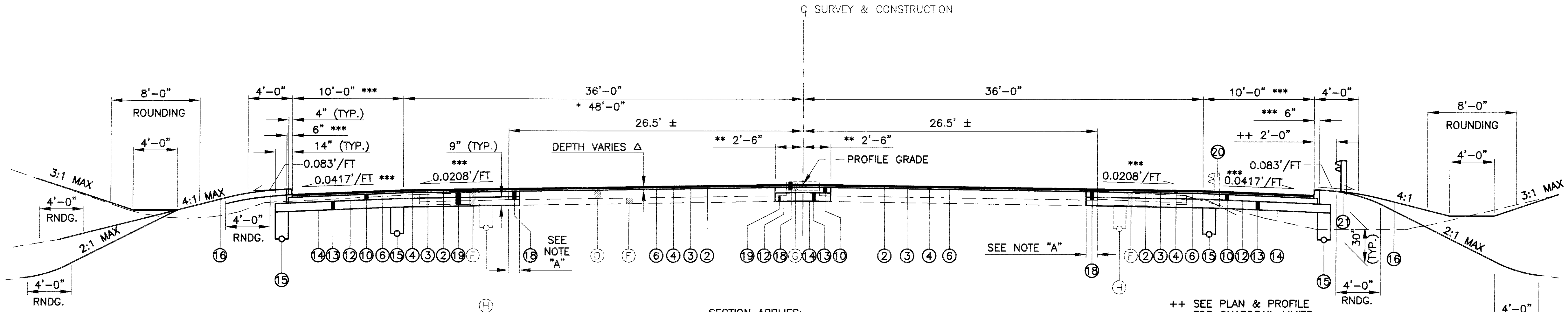
- LEGEND**
- (2) ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
 - (3) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
 - (4) ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, 1 3/4" UNLESS NOTED OTHERWISE
 - (6) ITEM 407 - TACK COAT (SEE GENERAL NOTES)
 - (10) ITEM 301 - 6" BITUMINOUS AGGREGATE BASE
 - (12) ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.)
 - (13) ITEM 304 - AGGREGATE BASE
 - (14) ITEM 203 - SUBGRADE COMPACTION
 - (15) ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
 - (16) ITEM 870 - SEEDING AND MULCHING
 - (18) ITEM 202 - PAVEMENT REMOVED
 - (19) ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
- (C) 6" ASPHALT CONCRETE
 - (D) 9" REINFORCED CONCRETE
 - (F) SUBBASE
 - (G) CONCRETE MEDIAN
 - (H) 6" UNDERDRAIN

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SECTION APPLIES:
 STA. 83+83.00 TO STA. 84+76.36 = 93.36 LIN. FT.
 STA. 84+76.36 TO STA. 85+27.36 = 51.00 LIN. FT.
 STA. 88+88.88 TO STA. 89+28.00 = 39.12 LIN. FT.
 TOTAL = 183.48 LIN. FT.

++ OFFSET VARIES FROM 0'-0" TO 2'-0",
 SEE PLAN & PROFILE FOR LIMITS



SECTION APPLIES:
 STA. 80+88.37 TO STA. 83+83.00 = 294.63 LIN. FT.
 STA. 89+28.00 TO STA. 92+08.82 = 280.82 LIN. FT.
 * STA. 92+08.82 TO STA. 93+37.12 = 128.30 LIN. FT.
 TOTAL = 703.75 LIN. FT.

++ SEE PLAN & PROFILE
 FOR GUARDRAIL LIMITS

△ EXISTING PROFILE IS TO BE ADJUSTED FROM
 STA. 83+00 TO STA. 85+21.36 WEST OF THE BRIDGE
 AND FROM STA. 88+94.88 TO STA. 90+00
 EAST OF THE BRIDGE. SEE PAVEMENT BUILD-UP
 DETAIL ON SHT. 113 FOR DETAILS.

** REMOVE CONCRETE MEDIAN FROM
 STA. 78+97.63 TO STA. 81+79.41 = 281.78 LIN. FT.
 STA. 82+65.50 TO STA. 85+56.36 = 290.86 LIN. FT.
 STA. 88+59.88 TO STA. 91+60.05 = 300.17 LIN. FT.
 STA. 92+37.88 TO STA. 96+68.21 = 430.33 LIN. FT.
 1303.14 LIN. FT.

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 CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE
 CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE
 CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION
 SHALL BE MADE.

CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE,
 DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO
 O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK,
 INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE
 SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE
 CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG
 SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT
 SAW SHALL BE USED FOR SAW CUTTING PURPOSES.

FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN
 THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO
 BE REPLACED.

LEGEND

- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
 - ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
 - ④ ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22,
1 3/4" UNLESS NOTED OTHERWISE
 - ⑥ ITEM 407 - TACK COAT (SEE GENERAL NOTES)
 - ⑩ ITEM 301 - BITUMINOUS AGGREGATE BASE, 6" UNLESS NOTED OTHERWISE
 - ⑫ ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.)
 - ⑬ ITEM 304 - AGGREGATE BASE
 - ⑭ ITEM 203 - SUBGRADE COMPACTION
 - ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
 - ⑯ ITEM 870 - SEEDING AND MULCHING
 - ⑰ ITEM 202 - PAVEMENT REMOVED
 - ⑱ ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
 - ⑳ ITEM 202 - GUARDRAIL REMOVED
 - ㉑ ITEM 606 - GUARDRAIL
 - ㉒ ITEM 830 - TYPE 6 CURB
- (C) 6" ASPHALT CONCRETE
 - (D) 9" REINFORCED CONCRETE
 - (F) SUBBASE
 - (G) CONCRETE MEDIAN
 - (H) 6" UNDERDRAIN

*** CONSTRUCT ITEM 609 - TYPE 6 CURB FROM STA. 88+88.88 TO
 STA. 89+38.88. WITH IN THESE LIMITS, SHOULDER WIDTH AND
 PAVEMENT CROSS SLOPE VARIES AS FOLLOWS:

	SHOULDER WIDTH	SHOULDER SLOPE	WIDENING SLOPE
STA. 84+76.36	10' - 0"	0.0417'/FT.	0.0208'/FT.
STA. 85+27.36	8' - 0"	0.0156'/FT.	0.0156'/FT.
STA. 88+88.88	8' - 0"	0.0156'/FT.	0.0156'/FT.
STA. 89+38.88	10' - 0"	0.0417'/FT.	0.0208'/FT.

LEGEND

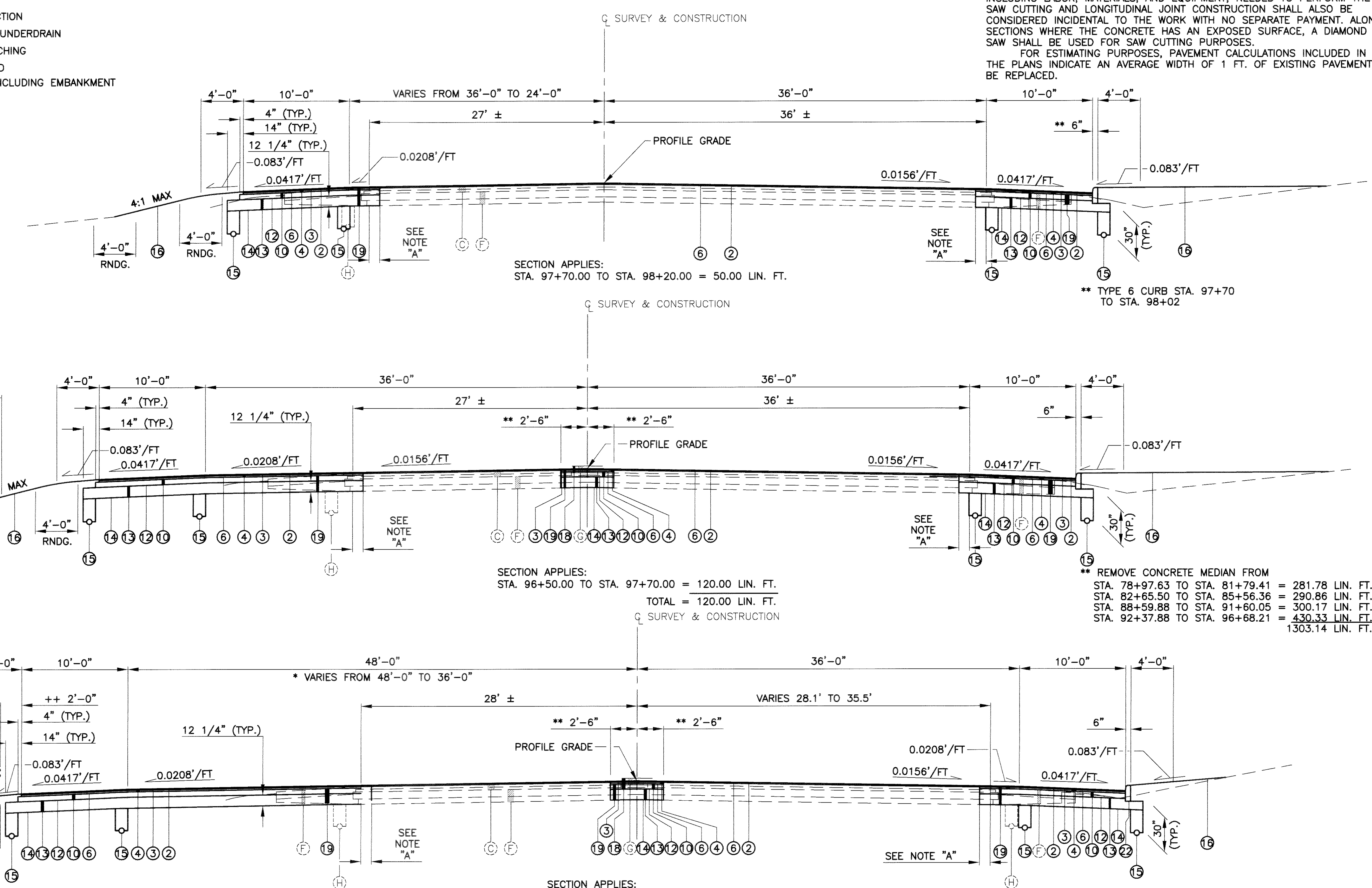
- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
 - ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
 - ④ ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22,
1 3/4" UNLESS NOTES OTHERWISE
 - ⑥ ITEM 407 - TACK COAT (SEE GENERAL NOTES)
 - ⑩ ITEM 301 - 6" BITUMINOUS AGGREGATE BASE
 - ⑫ ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.)
 - ⑬ ITEM 304 - AGGREGATE BASE
 - ⑭ ITEM 203 - SUBGRADE COMPACTION
 - ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
 - ⑯ ITEM 870 - SEEDING AND MULCHING
 - ⑰ ITEM 202 - PAVEMENT REMOVED
 - ⑱ ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
 - ⑳ ITEM 830 - TYPE 6 CURB
- Ⓒ 6" ASPHALT CONCRETE
 - Ⓕ SUBBASE
 - Ⓖ CONCRETE MEDIAN
 - Ⓗ 6" UNDERDRAIN

NOTE "A"
 THE PAVEMENT CUT LINE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INTENT IS REMOVE UNSOUND EXISTING PAVEMENT, SO THAT NEW PAVEMENT SHALL JOIN SOUND EXISTING PAVEMENT.
 ASPHALT PAVEMENT - THE EXISTING PAVEMENT EDGE SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION SHALL BE MADE.
 CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE, DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT SAW SHALL BE USED FOR SAW CUTTING PURPOSES.
 FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO BE REPLACED.

CALCULATED
 MAM
 CHECKED
 DW

TYPICAL SECTIONS

LOR - I90 - 15.65



SECTION APPLIES:
 STA. 97+70.00 TO STA. 98+20.00 = 50.00 LIN. FT.

SECTION APPLIES:
 STA. 96+50.00 TO STA. 97+70.00 = 120.00 LIN. FT.
 TOTAL = 120.00 LIN. FT.

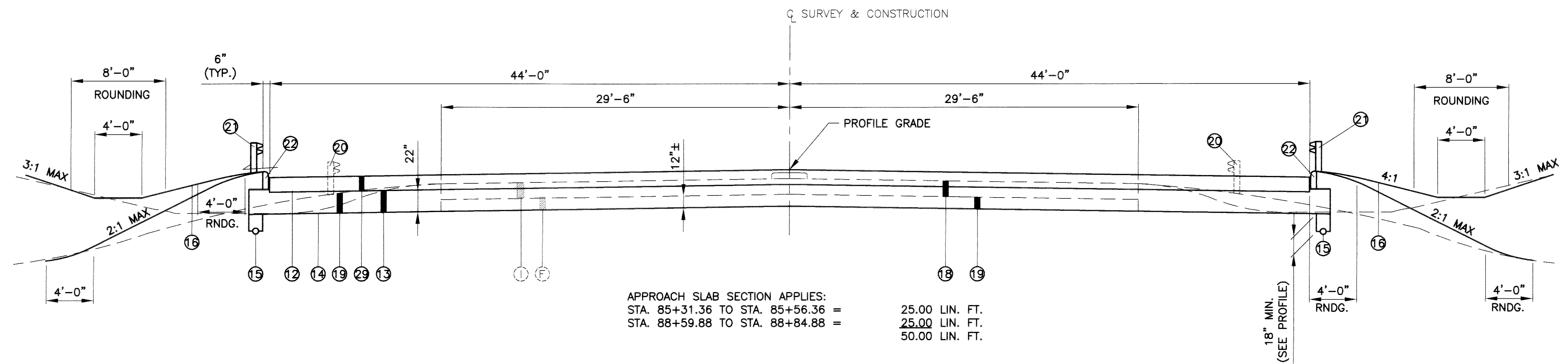
SECTION APPLIES:
 STA. 93+37.12 TO STA. 94+05.00 = 67.94 LIN. FT.
 * STA. 94+05.00 TO STA. 96+50.00 = 245.00 LIN. FT.
 TOTAL = 312.94 LIN. FT.

** TYPE 6 CURB STA. 97+70 TO STA. 98+02

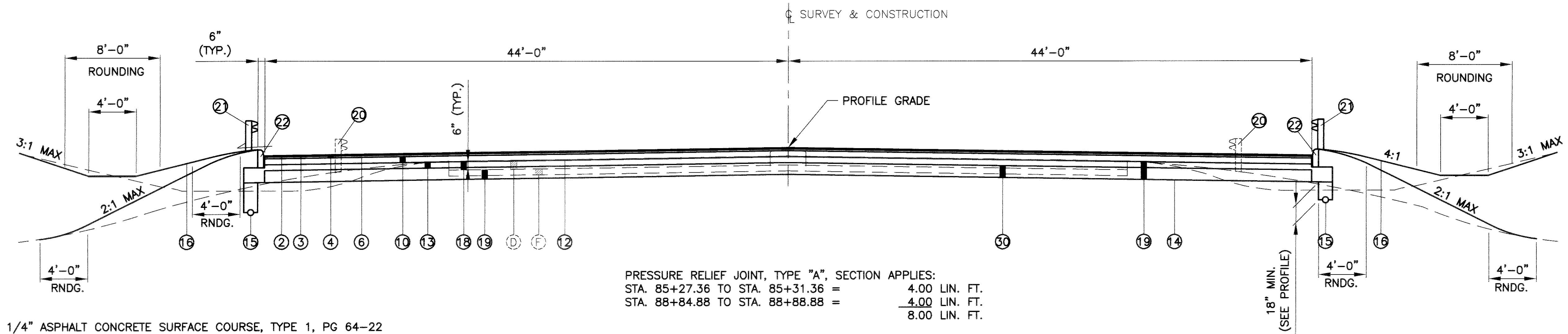
** REMOVE CONCRETE MEDIAN FROM
 STA. 78+97.63 TO STA. 81+79.41 = 281.78 LIN. FT.
 STA. 82+65.50 TO STA. 85+56.36 = 290.86 LIN. FT.
 STA. 88+59.88 TO STA. 91+60.05 = 300.17 LIN. FT.
 STA. 92+37.88 TO STA. 96+68.21 = 430.33 LIN. FT.
 1303.14 LIN. FT.

++ SEE PLAN & PROFILE FOR GUARDRAIL LIMITS

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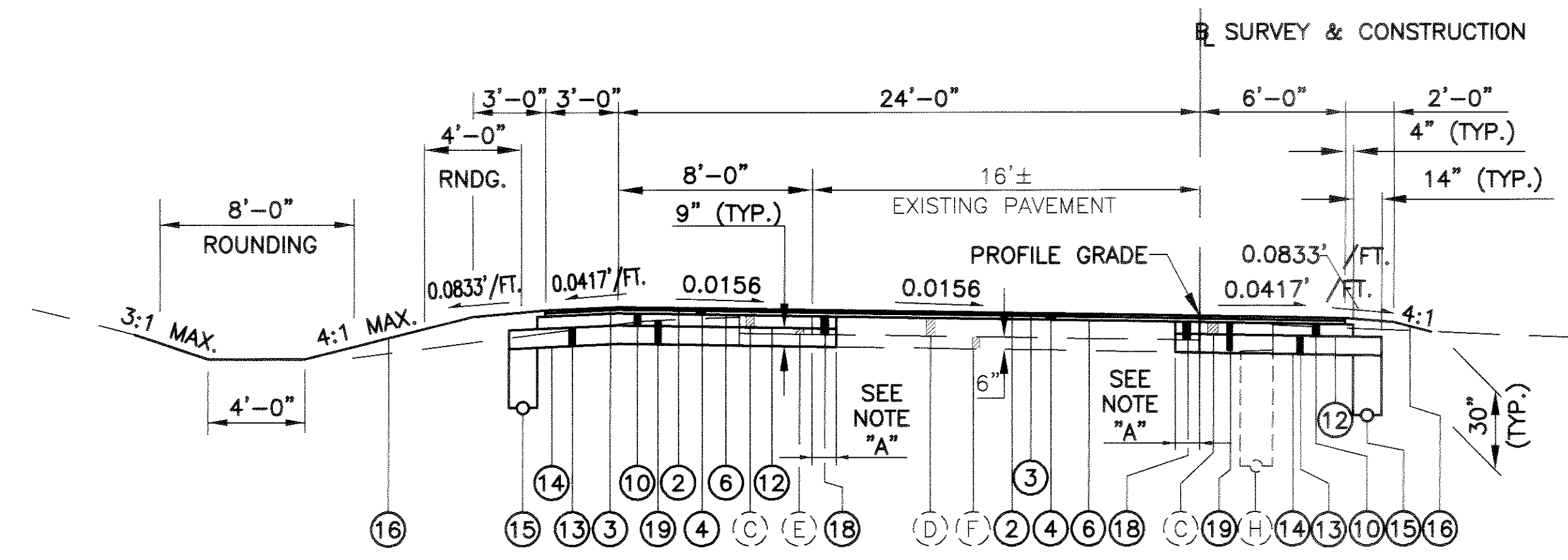
APPROACH SLAB SECTION APPLIES:
 STA. 85+31.36 TO STA. 85+56.36 = 25.00 LIN. FT.
 STA. 88+59.88 TO STA. 88+84.88 = 25.00 LIN. FT.
 50.00 LIN. FT.



PRESSURE RELIEF JOINT, TYPE "A", SECTION APPLIES:
 STA. 85+27.36 TO STA. 85+31.36 = 4.00 LIN. FT.
 STA. 88+84.88 TO STA. 88+88.88 = 4.00 LIN. FT.
 8.00 LIN. FT.

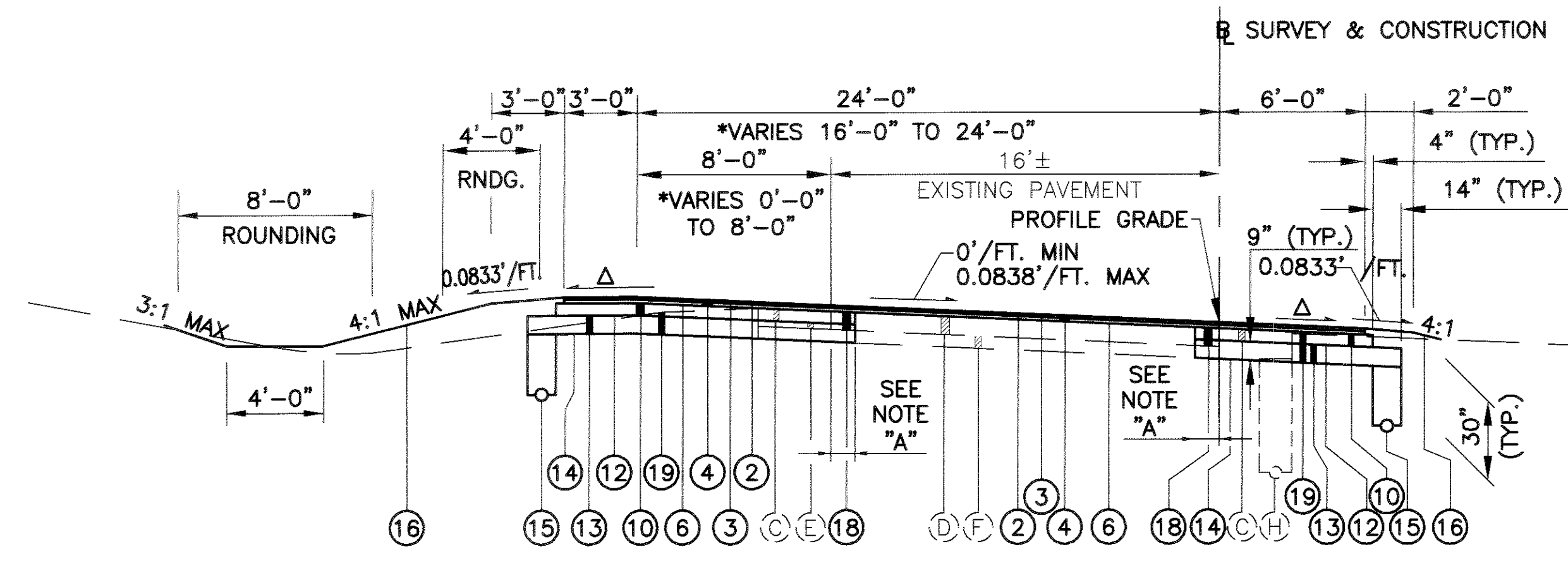
LEGEND

- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
- ④ ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, 1 3/4" UNLESS NOTED OTHERWISE
- ⑥ ITEM 407 - TACK COAT (SEE GENERAL NOTES)
- ⑩ ITEM 301 - 6" BITUMINOUS AGGREGATE BASE, PG 64-22
- ⑫ ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL./SQ. YD.)
- ⑬ ITEM 304 - AGGREGATE BASE
- ⑭ ITEM 203 - SUBGRADE COMPACTION
- ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
- ⑯ ITEM 870 - SEEDING AND MULCHING
- ⑰ ITEM 202 - PAVEMENT REMOVED
- ⑲ ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
- ⑳ ITEM 202 - GUARDRAIL REMOVED
- ㉑ ITEM 606 - GUARDRAIL
- ㉒ ITEM 830 - TYPE 6 CURB
- ㉓ ITEM 611 - REINFORCED CONCRETE APPROACH SLAB (T=15")
- ⑳ SLEEPER SLAB
- ① 9" REINFORCED CONCRETE
- ② SUBBASE
- ③ 15" REINFORCED CONCRETE APPROACH SLAB



NORMAL SECTION

SECTION APPLIES:
STA. 804+24.71 TO STA. 807+51.33 RAMP "H" = 226.62 LIN. FT.



SUPER ELEVATED SECTION - DIRECTION OF TRAVEL

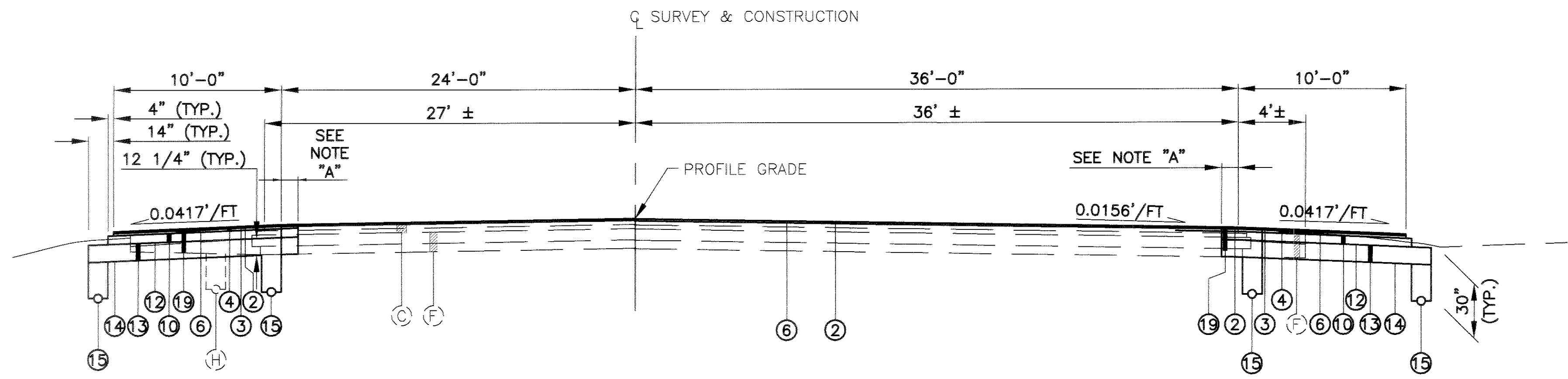
SECTION APPLIES:
*STA. 798+32.00 TO STA. 802+32.00 RAMP "H" = 400.00 LIN. FT.
STA. 802+32.00 TO STA. 804+24.71 RAMP "H" = 192.71 LIN. FT.

STA. 811+13.00 TO STA. 814+50.00 RAMP "J" = 337.00 LIN. FT.
*STA. 814+50.00 TO STA. 815+00.00 RAMP "J" = 50.00 LIN. FT.

STA. 813+98.00 TO STA. 814+25.00 RAMP "K" = 27.00 LIN. FT.
*STA. 814+25.00 TO STA. 818+25.00 RAMP "K" = 400.00 LIN. FT.
TOTAL LENGTH = 1406.71 LIN. FT.

LEGEND

- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
- ④ ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, 1 3/4" UNLESS NOTED OTHERWISE
- ⑥ ITEM 407 - TACK COAT (SEE GENERAL NOTES)
- ⑩ ITEM 301 - 6" BITUMINOUS AGGREGATE BASE
- ⑫ ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL/SQ. YD.)
- ⑬ ITEM 304 - AGGREGATE BASE
- ⑭ ITEM 203 - SUBGRADE COMPACTION
- ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
- ⑯ ITEM 870 - SEEDING AND MULCHING
- ⑰ ITEM 202 - PAVEMENT REMOVED
- ⑲ ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
- (A) 3" ASPHALT CONCRETE
- (B) 4 1/4" ASPHALT CONCRETE
- (C) 6" ASPHALT CONCRETE
- (D) 9" REINFORCED CONCRETE
- (E) 10" REINFORCED CONCRETE
- (F) SUBBASE
- (G) CONCRETE MEDIAN
- (H) 6" UNDERDRAIN

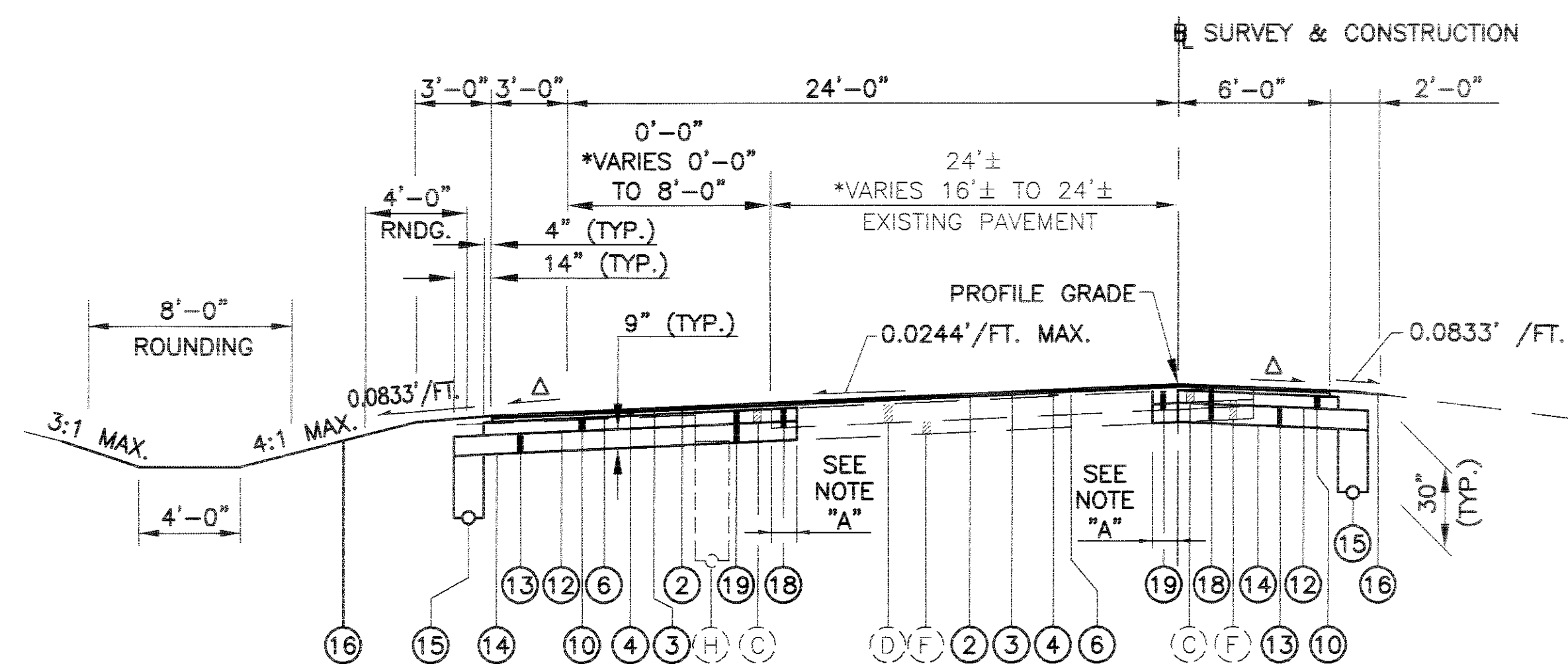


SECTION APPLIES:
STA. 98+20.00 TO STA. 104+56.90 = 636.90 LIN. FT.

Δ SEE PAVEMENT ELEVATION TABLE ON SHEET 40-43 FOR VARIOUS SHOULDER SLOPES.

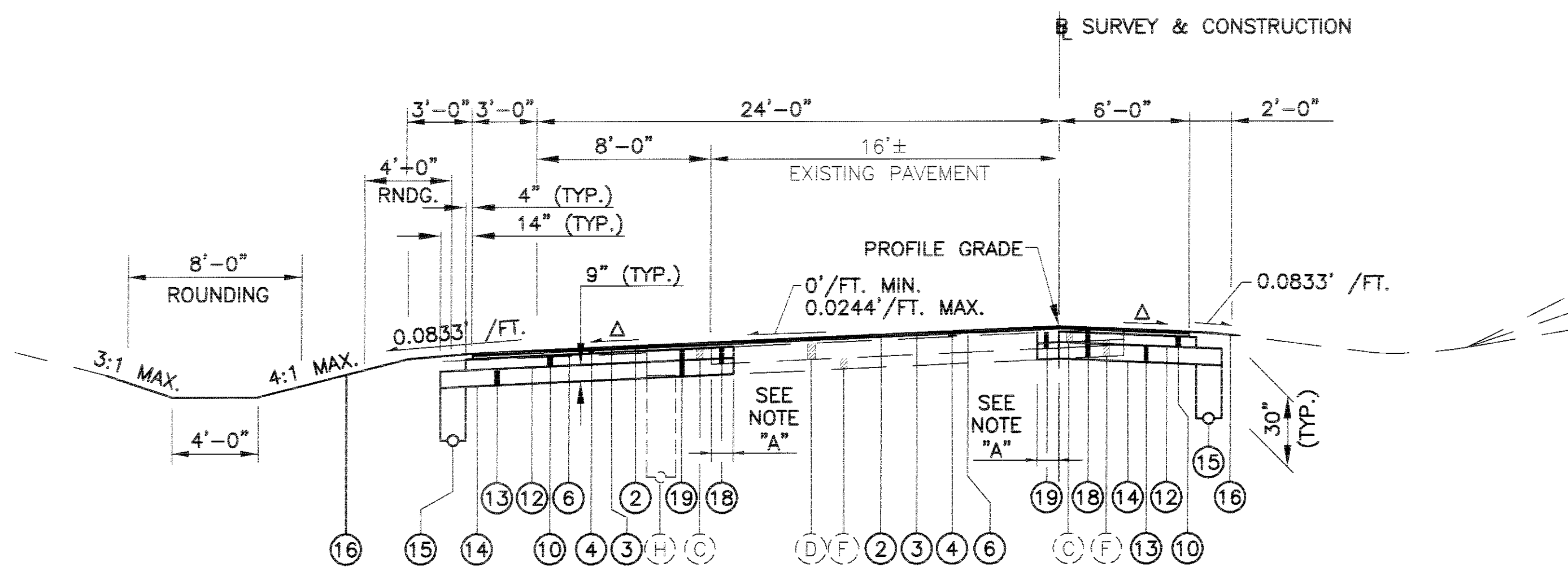
NOTE "A"

THE PAVEMENT CUT LINE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INTENT IS REMOVE UNSOUND EXISTING PAVEMENT, SO THAT NEW PAVEMENT SHALL JOIN SOUND EXISTING PAVEMENT.
ASPHALT PAVEMENT - THE EXISTING PAVEMENT EDGE SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION SHALL BE MADE.
CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE, DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT SAW SHALL BE USED FOR SAW CUTTING PURPOSES.
FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO BE REPLACED.



REVERSE SUPER ELEVATED SECTION - DIRECTION OF TRAVEL

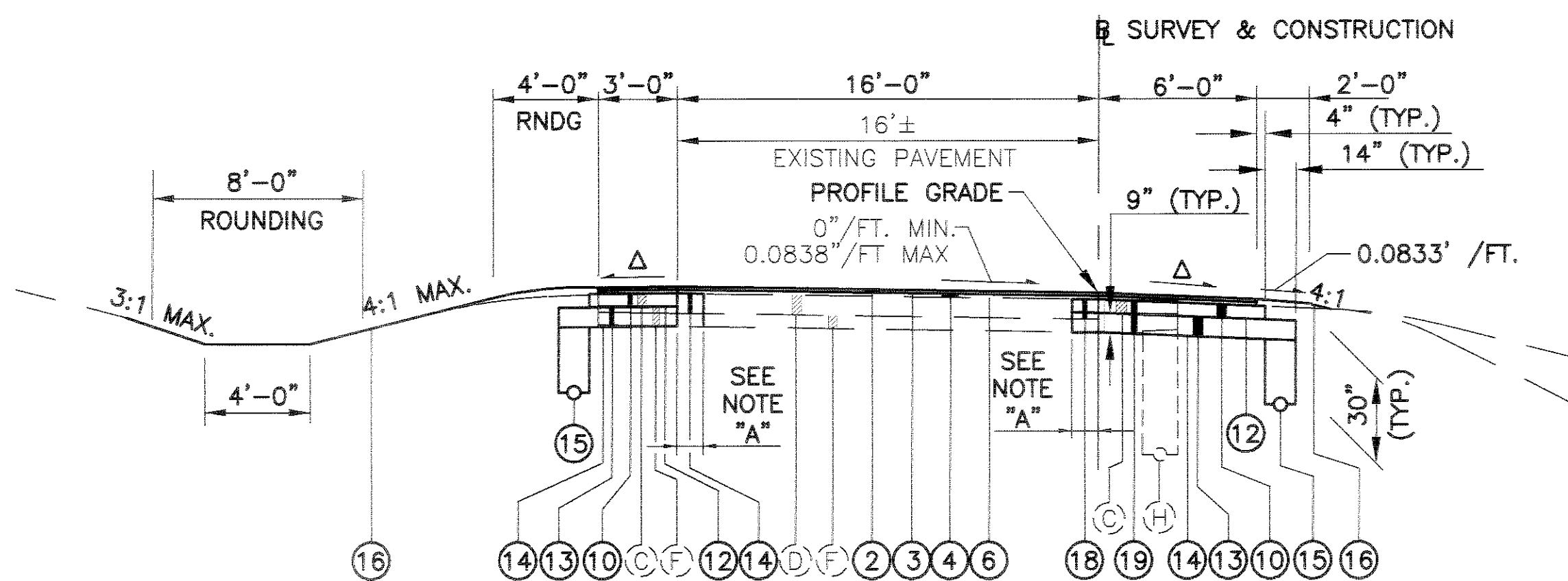
SECTION APPLIES:
 STA. 807+69.24 TO STA. 809+03.97 RAMP "J" = 134.83 LIN. FT.
 * STA. 809+03.97 TO STA. 810+53.97 RAMP "J" = 150.00 LIN. FT.
 TOTAL LENGTH = 284.83 LIN. FT.



REVERSE SUPER ELEVATED SECTION - DIRECTION OF TRAVEL

SECTION APPLIES:
 STA. 810+53.97 TO STA. 811+13.00 RAMP "J" = 59.03 LIN. FT.
 STA. 811+81.70 TO STA. 813+98.00 RAMP "K" = 216.30 LIN. FT.
 TOTAL LENGTH = 275.33 LIN. FT.

- LEGEND**
- (2) ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
 - (3) ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
 - (4) ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, 1 3/4" UNLESS NOTED OTHERWISE
 - (6) ITEM 407 - TACK COAT (SEE GENERAL NOTES)
 - (10) ITEM 301 - 6" BITUMINOUS AGGREGATE BASE
 - (12) ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL/SQ. YD.)
 - (13) ITEM 304 - AGGREGATE BASE
 - (14) ITEM 203 - SUBGRADE COMPACTION
 - (15) ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
 - (16) ITEM 870 - SEEDING AND MULCHING
 - (18) ITEM 202 - PAVEMENT REMOVED
 - (19) ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
 - (A) 3" ASPHALT CONCRETE
 - (B) 4 1/4" ASPHALT CONCRETE
 - (C) 6" ASPHALT CONCRETE
 - (D) 9" REINFORCED CONCRETE
 - (E) 10" REINFORCED CONCRETE
 - (F) SUBBASE
 - (G) CONCRETE MEDIAN
 - (H) 6" UNDERDRAIN

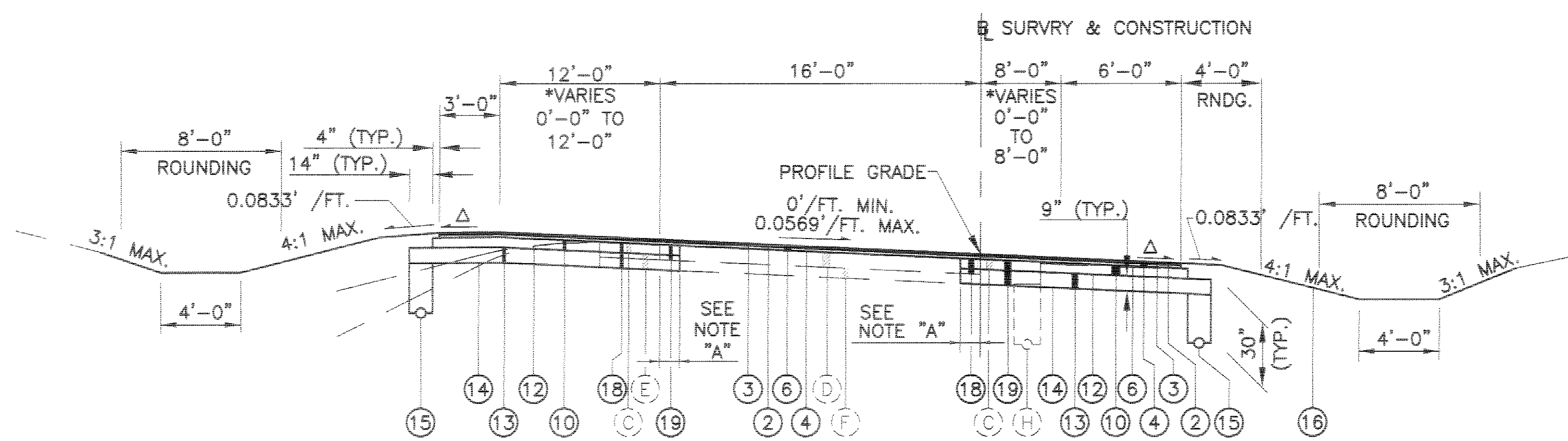


RAMP SECTION - DIRECTION OF TRAVEL

SECTION APPLIES:
 STA. 803+68.78 TO STA. 808+00.00 RAMP "L" = 431.22 LIN. FT.
 STA. 818+25.00 TO STA. 819+57.31 RAMP "K" = 132.31 LIN. FT.
 STA. 815+00.00 TO STA. 817+77.71 RAMP "J" = 252.71 LIN. FT.
 TOTAL = 816.24 LIN. FT.

△ SEE PAVEMENT ELEVATION TABLE ON SHEET 40-43 FOR VARIING SHOULDER SLOPES.

NOTE "A"
 THE PAVEMENT CUT LINE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INTENT IS REMOVE UNSOUND EXISTING PAVEMENT, SO THAT NEW PAVEMENT SHALL JOIN SOUND EXISTING PAVEMENT.
 ASPHALT PAVEMENT - THE EXISTING PAVEMENT EDGE SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION SHALL BE MADE.
 CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE, DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT SAW SHALL BE USED FOR SAW CUTTING PURPOSES.
 FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO BE REPLACED.



△ SEE PAVEMENT ELEVATION TABLE ON SHEET 40-43 FOR VARIOUS SHOULDER SLOPES.

NOTE "A"

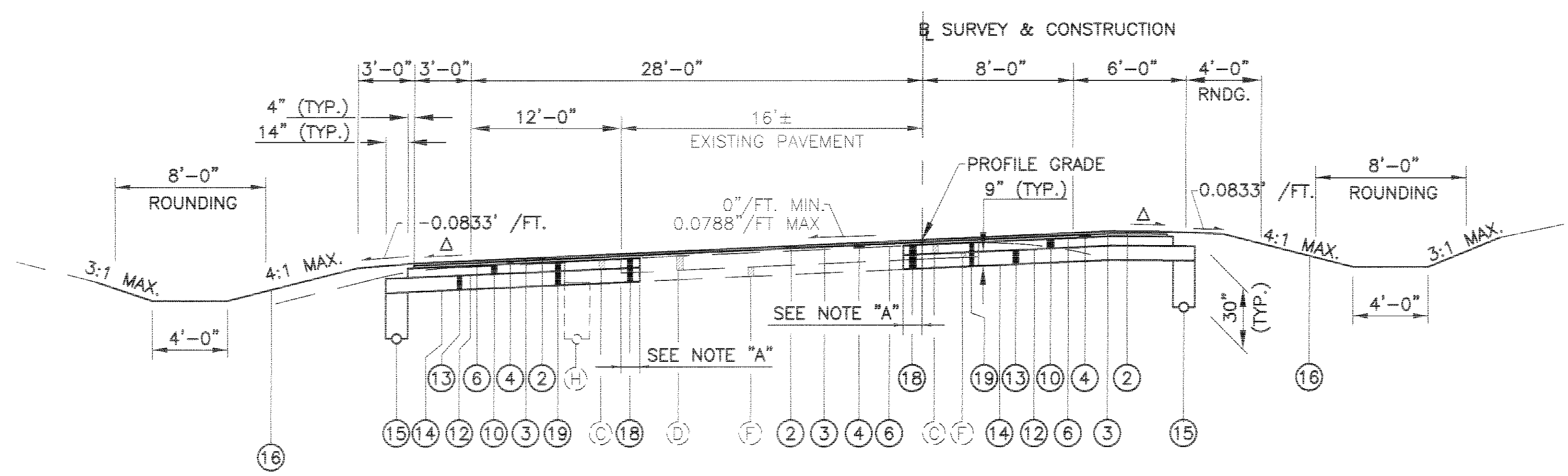
THE PAVEMENT CUT LINE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER. THE INTENT IS REMOVE UNSOUND EXISTING PAVEMENT, SO THAT NEW PAVEMENT SHALL JOIN SOUND EXISTING PAVEMENT.
 ASPHALT PAVEMENT - THE EXISTING PAVEMENT EDGE SHALL BE SAW CUT TO LOCATE A SOUND PAVEMENT EDGE PER SECTION 203.04 (f) OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS. THIS SAW CUTTING SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND NO SEPARATE COMPENSATION SHALL BE MADE.
 CONCRETE PAVEMENT - WHERE THE EXISTING PAVEMENT IS CONCRETE, DRILLED TIED LONGITUDINAL JOINTS SHALL BE PLACED ACCORDING TO O.D.O.T. STANDARD CONSTRUCTION DRAWING BP-2.1. ALL ADDITIONAL WORK, INCLUDING LABOR, MATERIALS, AND EQUIPMENT, NEEDED TO PERFORM THE SAW CUTTING AND LONGITUDINAL JOINT CONSTRUCTION SHALL ALSO BE CONSIDERED INCIDENTAL TO THE WORK WITH NO SEPARATE PAYMENT. ALONG SECTIONS WHERE THE CONCRETE HAS AN EXPOSED SURFACE, A DIAMOND CUT SAW SHALL BE USED FOR SAW CUTTING PURPOSES.
 FOR ESTIMATING PURPOSES, PAVEMENT CALCULATIONS INCLUDED IN THE PLANS INDICATE AN AVERAGE WIDTH OF 1 FT. OF EXISTING PAVEMENT TO BE REPLACED.

SUPER ELEVATED SECTION - DIRECTION OF TRAVEL

SECTION APPLIES:
 *STA. 808+00.00 TO STA. 808+50.00 RAMP "L" = 50.00 LIN. FT.
 STA. 808+50.00 TO STA. 809+89.25 RAMP "L" = 139.25 LIN. FT.
 TOTAL LENGTH = 189.25 LIN. FT.

LEGEND

- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE (SEE GENERAL NOTES)
- ④ ITEM 448 - ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22, 1 3/4" UNLESS NOTED OTHERWISE
- ⑥ ITEM 407 - TACK COAT (SEE GENERAL NOTES)
- ⑩ ITEM 301 - 6" BITUMINOUS AGGREGATE BASE
- ⑫ ITEM 408 - PRIME COAT (APPLIED AT THE RATE OF 0.4 GAL/SQ. YD.)
- ⑬ ITEM 304 - AGGREGATE BASE
- ⑭ ITEM 203 - SUBGRADE COMPACTION
- ⑮ ITEM 605 - 6" SHALLOW PIPE UNDERDRAIN
- ⑯ ITEM 870 - SEEDING AND MULCHING
- ⑰ ITEM 202 - PAVEMENT REMOVED
- ⑱ ITEM 203 - EXCAVATION NOT INCLUDING EMBANKMENT
- (A) 3" ASPHALT CONCRETE
- (B) 4 1/4" ASPHALT CONCRETE
- (C) 6" ASPHALT CONCRETE
- (D) 9" REINFORCED CONCRETE
- (E) 10" REINFORCED CONCRETE
- (F) SUBBASE
- (G) CONCRETE MEDIAN
- (H) 6" UNDERDRAIN



REVERSE SUPER ELEVATED SECTION - DIRECTION OF TRAVEL

SECTION APPLIES:
 STA. 809+89.25 TO STA. 813+58.34 RAMP "L" = 369.09 LIN. FT.
 TOTAL LENGTH = 369.09 LIN. FT.

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ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS, AS PER PLAN

CONTRACT WORK FOR THIS ITEM SHALL BE IN COMPLIANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS OF ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS. ALL EQUIPMENT, LABOR AND MATERIALS REQUIRED TO PERFORM THE NECESSARY SAW CUTTING ASSOCIATED WITH THE PAVEMENT REPAIR SHALL BE CONSIDERED INCIDENTAL WITH NO ADDITIONAL PAYMENT TO BE MADE.

THE FOLLOWING QUANTITY HAS BEEN INCLUDED FOR USE AS DIRECTED BY THE ENGINEER IN THE FIELD:

255, FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS, AS PER PLAN 270 SQ. YD.

ROADWAY

ITEM 203 - PROOF ROLLING

AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER.

ITEM 203 - PROOF ROLLING 14 HOURS

FENCE LENGTHS

THE LENGTHS OF FENCE SHOWN IN THE PLANS ARE HORIZONTAL DIMENSIONS. MEASUREMENTS OF THE FINAL QUANTITIES SHALL BE MADE IN ACCORDANCE WITH ITEM 607.

EXISTING CONCRETE GORE ISLANDS AND PACER CURB

ALL EXISTING CONCRETE GORE ISLANDS AND PACER CURBING IS TO BE REMOVED AS PART OF A REHABILITATION PROJECT. HOWEVER, IN THE EVENT THIS WORK HAS NOT BEEN PERFORMED, THE CONTRACTOR SHALL REMOVE THE EXISTING EXIT RAMP GORE ISLANDS AND PACER CURB USING THE FOLLOWING QUANTITIES AND DESCRIPTIONS:

ITEM 202 - CURB REMOVED AS PER PLAN - SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS SET FORTH IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS MANUAL UNDER ITEM 202 - CURB REMOVED. ADDITIONALLY, THIS ITEM SHALL INCLUDE PATCHING ANY GAP LEFT DUE TO THE REMOVAL. IT IS ANTICIPATED THAT MANY OF THESE AREAS WILL HAVE TEMPORARY PAVEMENT PLACED FOR MAINTENANCE OF TRAFFIC PURPOSES. HOWEVER, IN THE EVENT TEMPORARY PAVEMENT WILL NOT BE PLACED IN THE AREA OF CURB REMOVAL, THE CONTRACTOR SHALL FILL THE AREA EXPOSED DUE TO THE REMOVAL WITH A FILL SUITABLE TO THE FIELD ENGINEER, INCLUDING EMBANKMENT, TOPSOIL AND SEEDING NECESSARY TO RESTORE THE AREA TO ADJACENT CONDITIONS. PAYMENT FOR ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO PERFORM THE ASSOCIATED WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 202 - CURB REMOVED, AS PER PLAN.

ITEM 202 - PAVEMENT REMOVED, AS PER PLAN SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STANDARDS AND SPECIFICATIONS SET FORTH IN THE CONSTRUCTION AND MATERIALS SPECIFICATIONS MANUAL UNDER ITEM 202 - PAVEMENT REMOVED. ADDITIONALLY, THIS ITEM SHALL INCLUDE ANY MATERIALS, LABOR, AND EQUIPMENT NECESSARY TO GRADE THE AREA OF REMOVAL AND RESTORE TO CONDITIONS OF ADJACENT LANDSCAPED/GRASS COVERED AREA. PAYMENT FOR ALL MATERIALS, EQUIPMENT, AND LABOR NECESSARY TO PERFORM THE ASSOCIATED WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 202 - PAVEMENT REMOVED, AS PER PLAN.

THE FOLLOWING CONTINGENCY QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY:

ITEM 202 - CURB REMOVED, AS PER PLAN 1240 LIN. FT.
 ITEM 202 - PAVEMENT REMOVED, AS PER PLAN 75 SQ. YD.

ITEM 203 - EMBANKMENT

CONSTRUCTION OF ALL PROPOSED SLOPES AT ALONG WIDENED SECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION THE CONSTRUCTION AND MATERIALS SPECIFICATIONS, SECTION 203.09.

CLEARING AND GRUBBING

ALTHOUGH THERE ARE NO TREES OR STUMPS SPECIFICALLY MARKED FOR REMOVAL WITHIN THE LIMITS OF THE PROJECT, A LUMP SUM QUANTITY HAS BEEN INCLUDED IN THE GENERAL SUMMARY FOR ITEM 201, CLEARING AND GRUBBING. ALL PROVISIONS AS SET FORTH IN THE SPECIFICATIONS UNDER THIS ITEM SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 201, CLEARING AND GRUBBING.

ITEM 606 - ANCHOR ASSEMBLY, TYPE E-98

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING EITHER OF THE FOLLOWING GUARDRAIL END TERMINALS.

1) THE ET-2000 (1997) MANUFACTURED BY SYRO, INC., 1170 N. STATE STREET, GIRARD, OHIO 44420 (TELEPHONE: 330-545-4373).

THE LENGTH OF THE ET-2000 (1997) SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF TWO 25'-0" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SSS265M	ET-2000 (1997) PLAN, ELEVATION & SECTIONS	6/20/97	3/6/98

2) THE SKT-350 MANUFACTURED BY ROAD SYSTEMS, INC., 7631 NEW CASTLE DRIVE, FRANKFORT, IL 60423 (TELEPHONE: 815-464-5917).

THE LENGTH OF THE SKT-350 SYSTEM IS CONSIDERED TO BE 50'-0", INCLUSIVE OF FOUR 12'-6" LONG RAIL ELEMENTS. INSTALLATION SHALL BE AT THE LOCATIONS SPECIFIED IN THE PLANS, IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS AS DETAILED ON THE FOLLOWING PRE-APPROVED SHOP DRAWINGS:

DWG. #	DRAWING NAME	DWG./REV. DATE	ODOT APPROVAL DATE
SKT-4M SS444M	SEQUENTIAL KINKING TERMINAL (SKT-350) ASSEMBLY WITH 4 FOUNDATION TUBES	12/11/97	3/6/98

THE FACE OF THE TYPE E-98 IMPACT HEAD SHALL BE COVERED WITH A SHEET OF TYPE G REFLECTIVE SHEETING, PER CMS 730.19, APPROXIMATELY 18" X 18"

PAYMENT FOR THE ABOVE WORK SHALL BE MADE AT THE UNIT PRICE BID FOR ITEM 606, ANCHOR ASSEMBLY, TYPE E-98, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL ANCHOR ASSEMBLY SYSTEM, INCLUDING ALL RELATED TRANSITIONS, REFLECTIVE SHEETING, HARDWARE, GRADING, EMBANKMENT AND EXCAVATION NOT SEPARATELY SPECIFIED, AS REQUIRED BY THE MANUFACTURER.

CALCULATED
 MJM
 CHECKED
 BW

GENERAL NOTES

LOR - I90 - 15.65

Part Two - I-90 / S.R. 254 Interchange

SEQUENCE OF OPERATIONS

1. All ramp work should be performed prior to the completion of phase IV of S.R. 254. In the event that the ramp has not been completed at this time, only one left turn lane from S.R. 254 onto ramps "K" and "H" may be opened to traffic.

S.R. 254

PHASE I

Traffic Control

1. Close the outside S.R. 254 westbound lane per maintenance of traffic standard construction drawing MT-95.31. Closure is to be between 10:00 p.m. and 6:00 a.m., with normal traffic patterns restored by 6:00 a.m..

Work Proposed

1. Construct 9' of temporary pavement using Item 615 - Temporary Pavement from station 84+00 to station 96+00. Construct a 2' temporary shoulder using 8" of Item 304 - Aggregate Base along the temporary pavement.

PHASE II

Traffic Control

1. Close the inside S.R. 254 (each direction) per maintenance of traffic standard construction drawing MT-95.32. Closure is to be between 10:00 p.m. and 6:00 a.m., with normal traffic patterns restored by 6:00 a.m..

Work Proposed

1. Remove existing concrete median, including 1 foot of pavement on either side. Construct proposed pavement in trench. All trenches shall be filled before 6:00 a.m.

PHASE III

Traffic Control

1. Maintain at least one 11 foot lane in each direction on the left side of S.R. 254 using temporary pavement markings, drums, and portable concrete barrier. Three lanes can be placed near the ramp intersections to accommodate a turn lane. Traffic to be returned to normal operation east of the eastbound ramps.

Work Proposed

1. Construct proposed pavement widening and shoulders along the south side of S.R. 254, west of station 96+10, except 448 surface course.

2. Perform structure widening on the south side of the bridge over I-90.

3. Construct the south side of the approach slab and sleeper slab on both the east and west sides of the bridge.

4. Construct pavement build-up with 301 from station 83+83 to station 85+21.36 and from station 88+94.88 to station 89+28.

5. With barrier tapers moved, construct 448 intermediate course from station 80+88.37 to sta. 85+21.36 and from station 88+94.88 to station 93+37.12, including the variable depth portions. This shall be done using flaggers to maintain traffic.

PHASE IV

1. Maintain at least one 11 foot lane in each direction and one 12 foot turn lane on the right side of S.R. 254 (east of the westbound ramps) using temporary pavement markings, drums, and portable concrete barriers. Traffic to be returned to normal operation east of the eastbound ramps.

Work Proposed

1. Construct proposed pavement widening and shoulders along the left side of S.R. 254, west of ramp "K", except 448 surface course.

2. Perform structure widening and closure pour on the bridge over I-90.

3. Construct the north side of the approach slab and sleeper slab on both the east and west sides of the bridge.

4. Construct all 301 and 448 intermediate courses between the stations noted in phase III.

PHASE V

Traffic Control

1. Close outside lane of S.R. 254 westbound per maintenance of traffic standard construction drawing MT-95.31.

Work Proposed

1. Construct proposed pavement widening and shoulders along left side of S.R. 254, east of ramp "K", except 448 surface course.

PHASE VI

Traffic Control

1. Close outside lane of S.R. 254 eastbound per maintenance of traffic standard construction drawing MT-95.31.

Work Proposed

1. Construct proposed pavement widening and shoulders along right side of S.R. 254, except surface course, east of station 96+10.

PHASE VII

1. Resurfacing and surface course per typical sections to be performed using flaggers.

RAMPS

All ramp work will be constructed in the same three phase manner.

PHASE I

Traffic Control

1. Maintain one 11.5 foot minimum lane on the right side of the existing ramp pavement, using drums. Drums to be moved to the shoulder at night, permitting unrestricted use of the 16' existing pavement.

Work Proposed

1. Construct 6'-0" temporary pavement on left side of existing pavement using Item 615 - Temporary Pavement.

2. Construct 2 foot temporary shoulder using 8" of Item 304 - Aggregate Base.

3. This will be a daytime only operation with no night closure permitted. All excavated shoulder material must be replaced with Item 615 - Temporary Pavement at the end of the days operation, permitting unrestricted use of the 16' pavement.

PHASE II

Traffic Control

1. Maintain one 11.5 foot minimum lane on the left side of the existing and temporary pavement using temporary pavement markings and drums.

Work Proposed

1. Construct new shoulder on right side of existing pavement.

2. Perform joint repair on right side of existing pavement.

3. Construct additional temporary pavement necessary to return traffic to normal operation at gore.

PHASE III

Traffic Control

1. Maintain one 11.5 foot minimum lane on the right side of existing and new shoulder using temporary pavement markings and drums

Work Performed

1. Construct pavement widening and new shoulder on left side of existing pavement.

2. Perform joint repair on left side of existing pavement.

PHASE IV

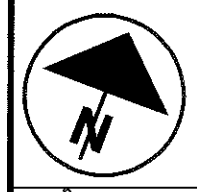
1. Resurface ramps to be performed per typical sections using flaggers.

CALCULATED
MJM
CHECKED
DW

MAINTENANCE OF TRAFFIC
SEQUENCE OF OPERATIONS

LOR - I90 - 15.65

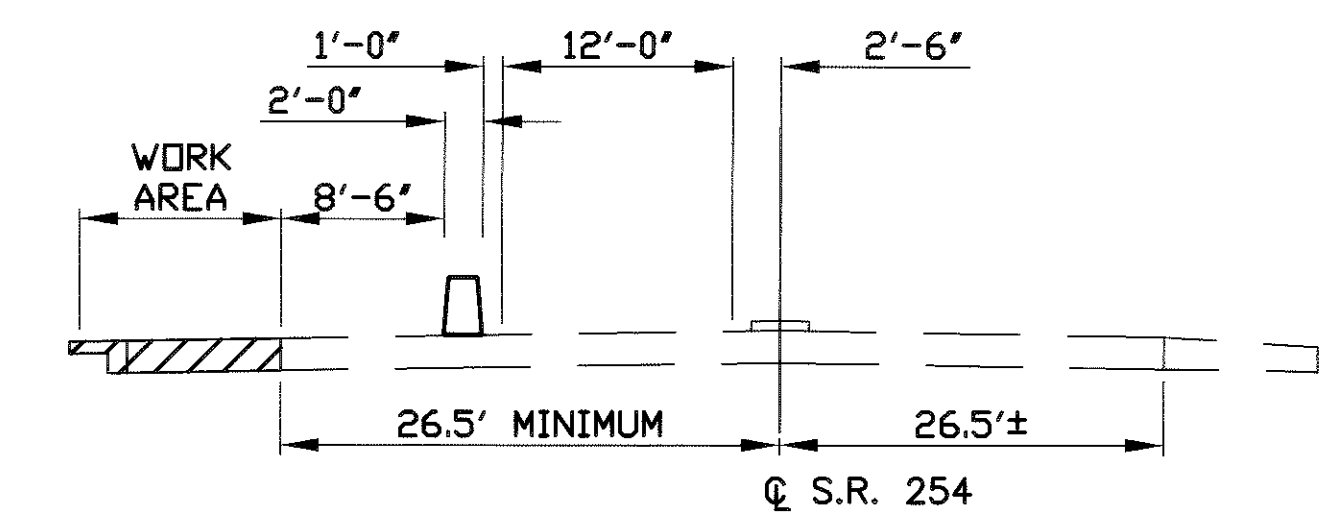
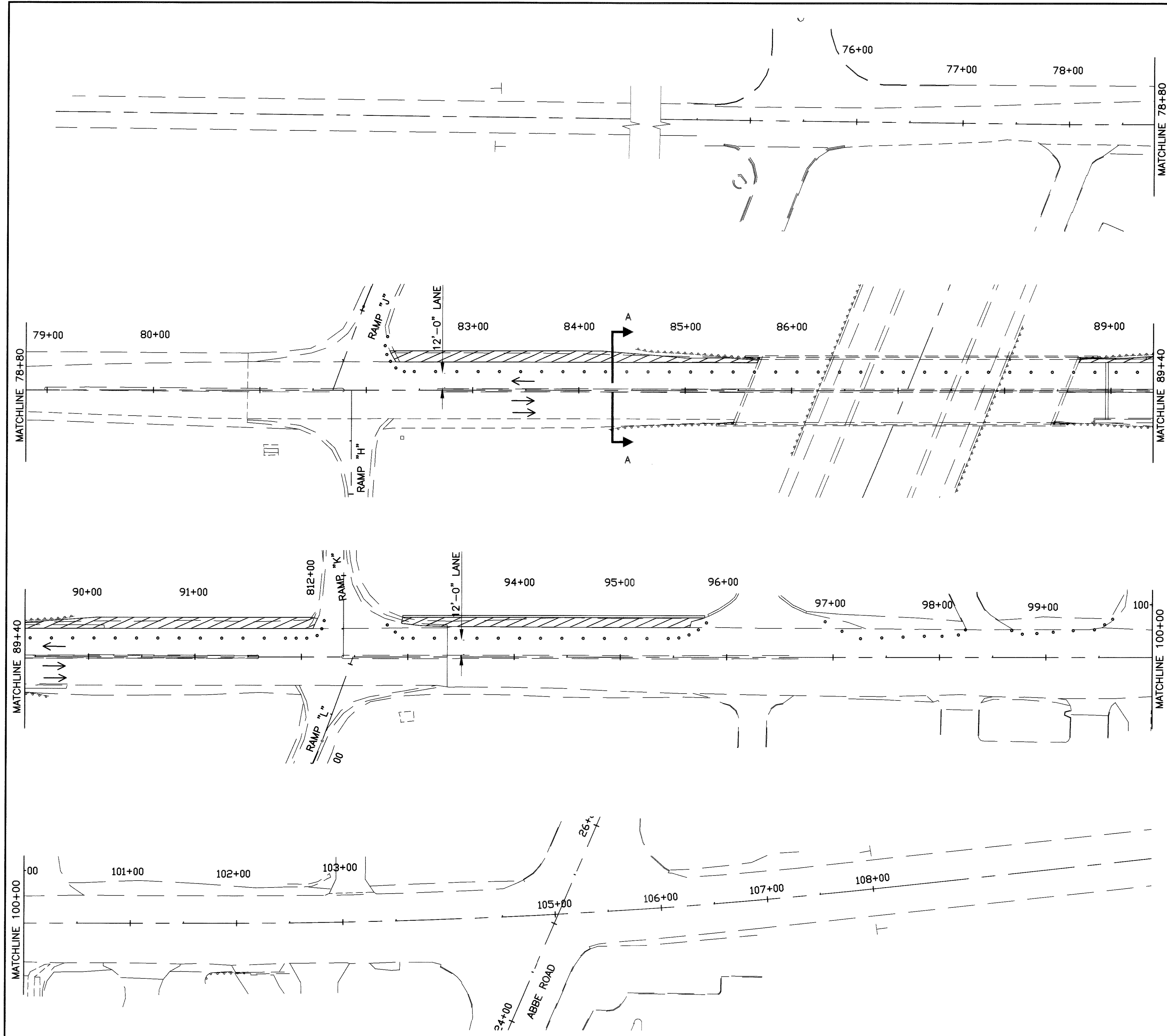
16
161



100'
50'
0
HORIZONTAL SCALE IN FEET
CALCULATED
M30
DW

MAINTENANCE OF TRAFFIC - S.R.-254 PHASE I

LOR - 190 - 15.65



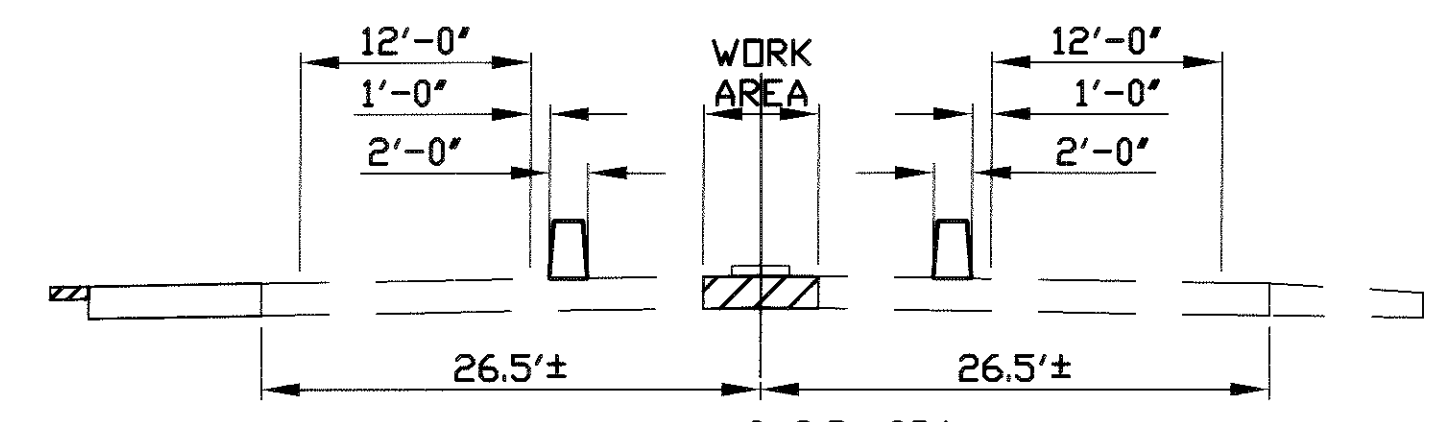
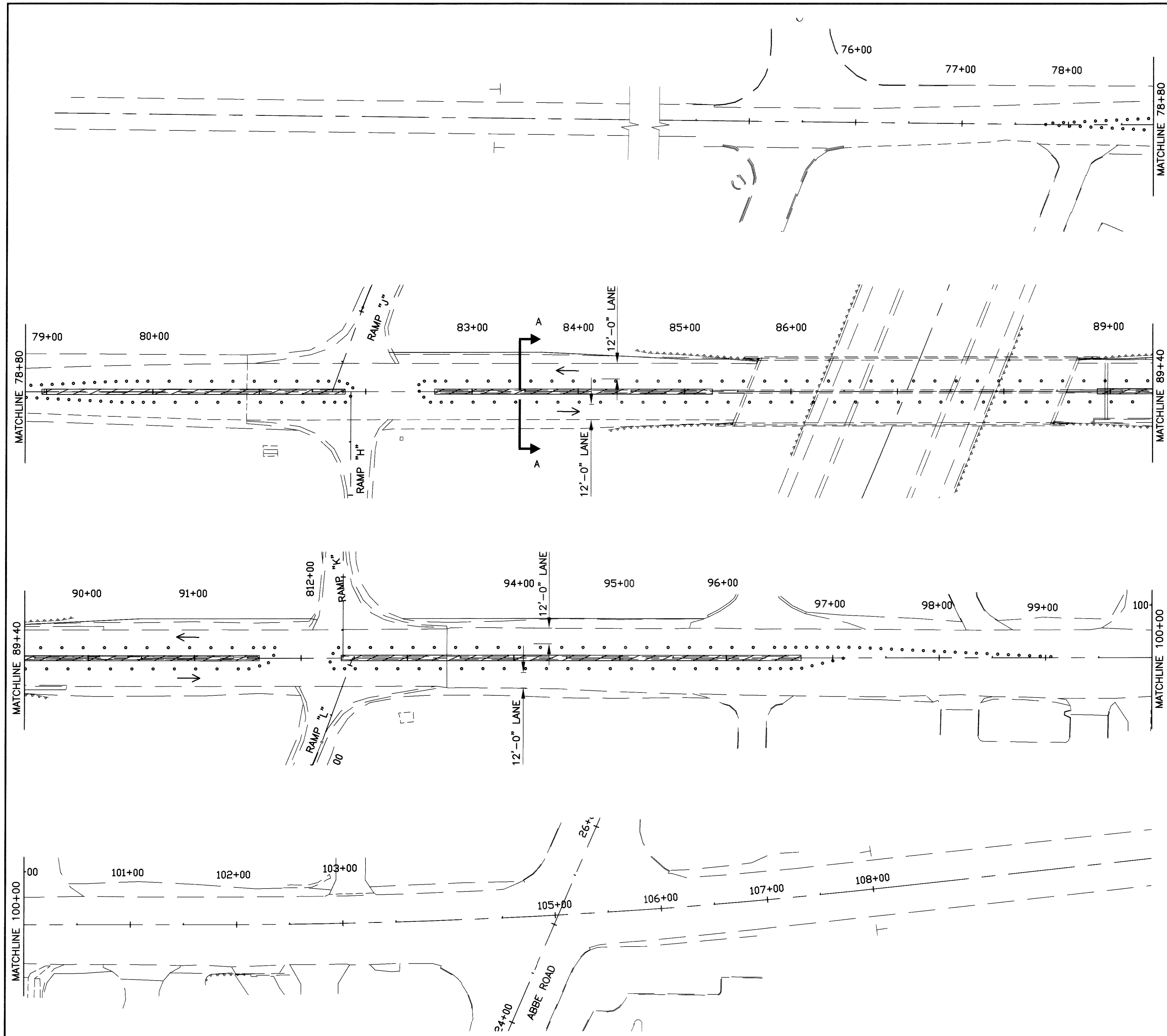
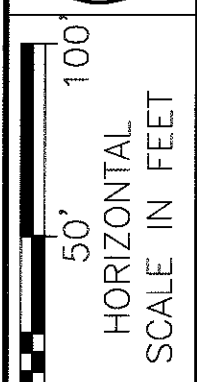
SECTION A-A

NOTES
 1) ALL CONSTRUCTION WORK IN PHASE 1 IS TO BE PERFORMED AT NIGHT ONLY. MAINTENANCE OF TRAFFIC IS TO BE PER STANDARD CONSTRUCTION DRAWING MT-95.31. ALL LANES SHALL BE OPENED TO TRAFFIC BEFORE 6:00 A.M., AND ALL TRENCHES SHALL BE FILLED AT THAT TIME.

LEGEND
 PHASE I CONSTRUCTION

- TEMPORARY PAVEMENT MARKING KEY
- (P) TEMPORARY SOLID LANE LINE, WHITE
 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE

9:45AM
 03-15-2001
 [C:\S3197\DWG\S\SR254\30197M1.DWG] JMM

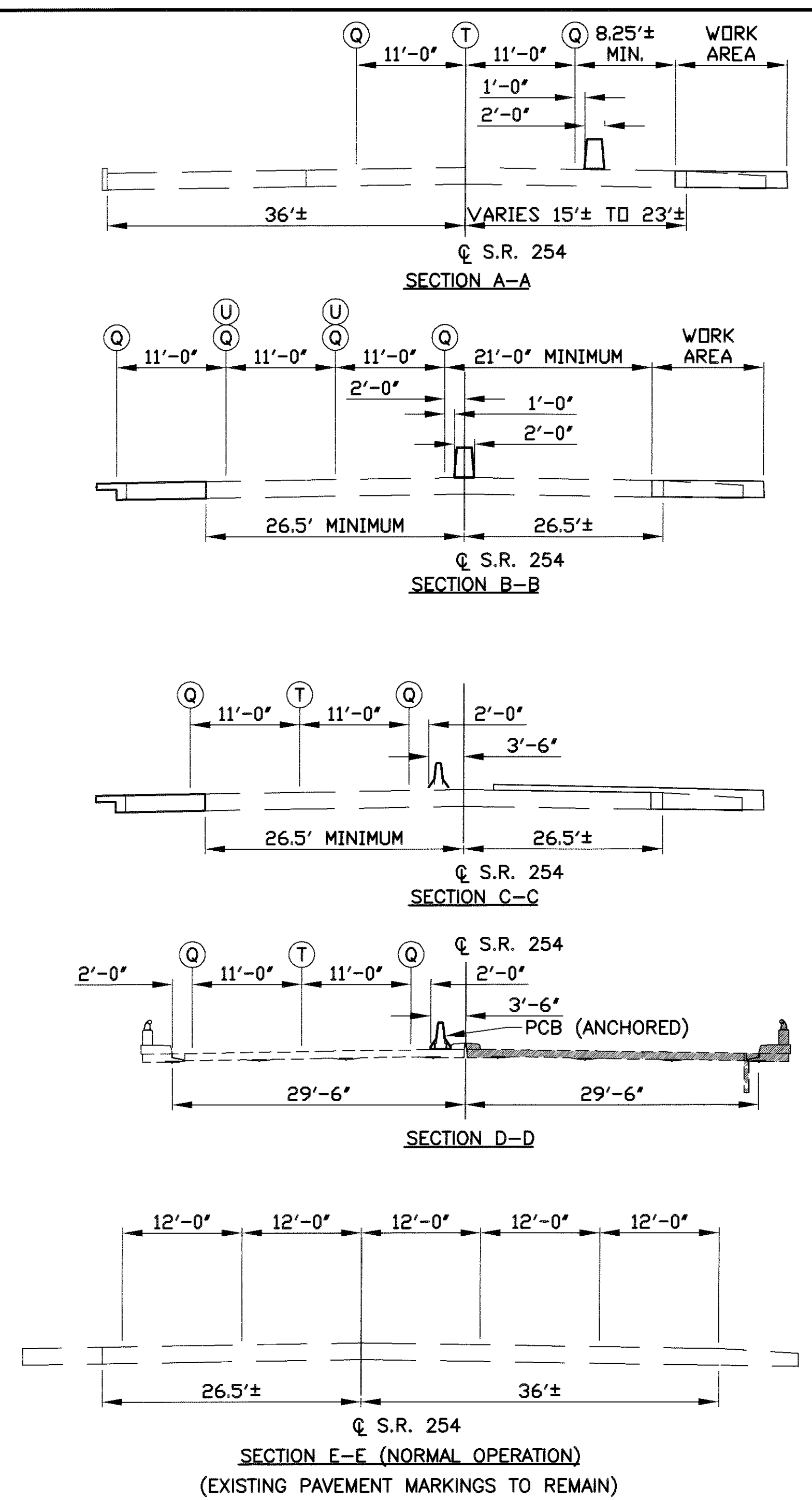
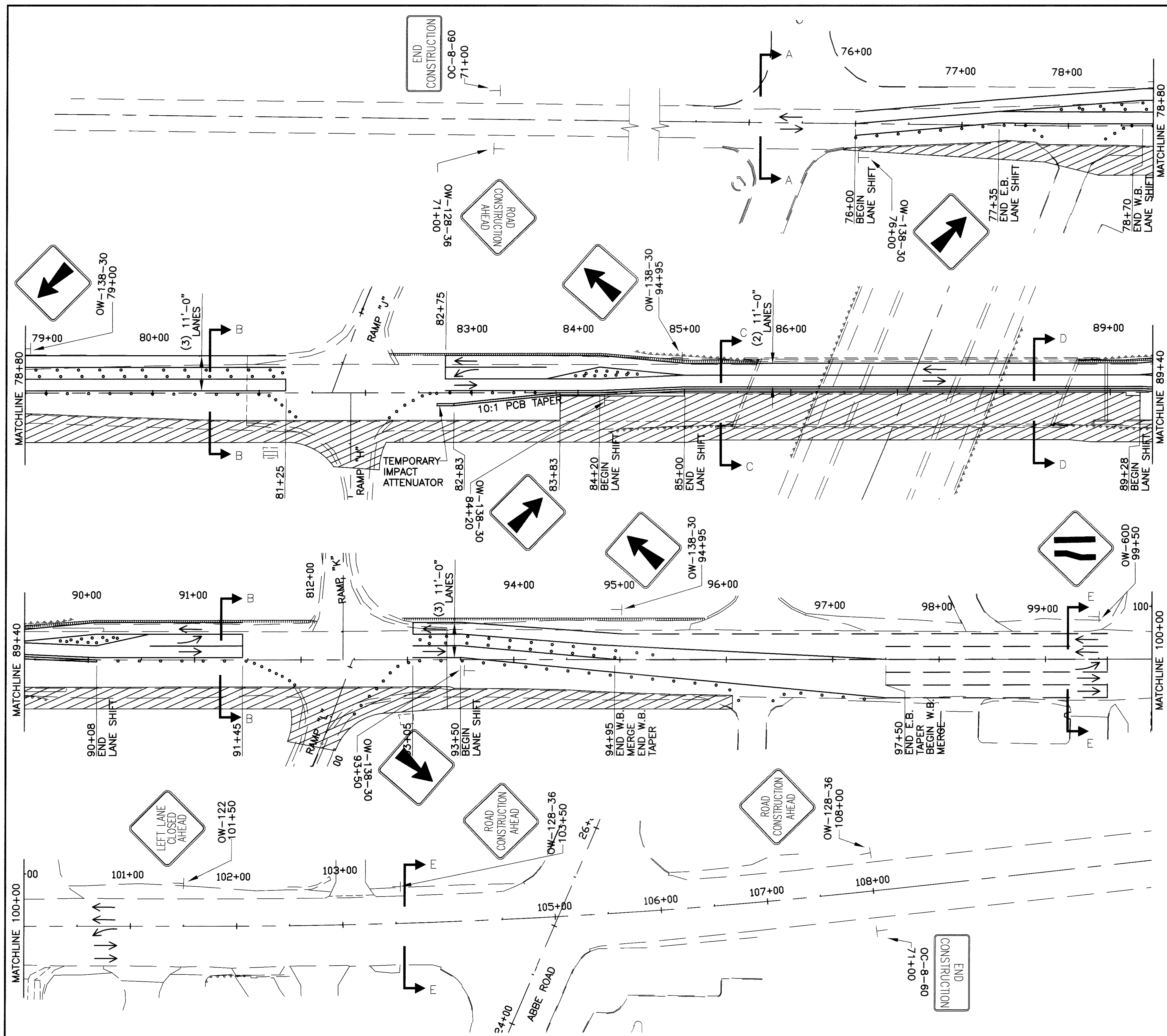


SECTION B-B

NOTES
 1) ALL CONSTRUCTION WORK IN PHASE II IS TO BE PERFORMED AT NIGHT ONLY. ADDITIONAL NOTES PER STANDARD CONSTRUCTION DRAWING MT-95.32. ALL LANES SHALL BE OPENED TO TRAFFIC BEFORE 6:00 A.M., AND ALL TRENCHES SHALL BE FILLED AT THAT TIME.

LEGEND
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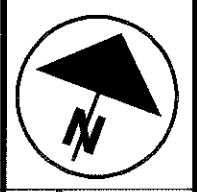
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- TEMPORARY PAVEMENT MARKING KEY**
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 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE
 - (U) TEMPORARY CHANNELIZING LINE

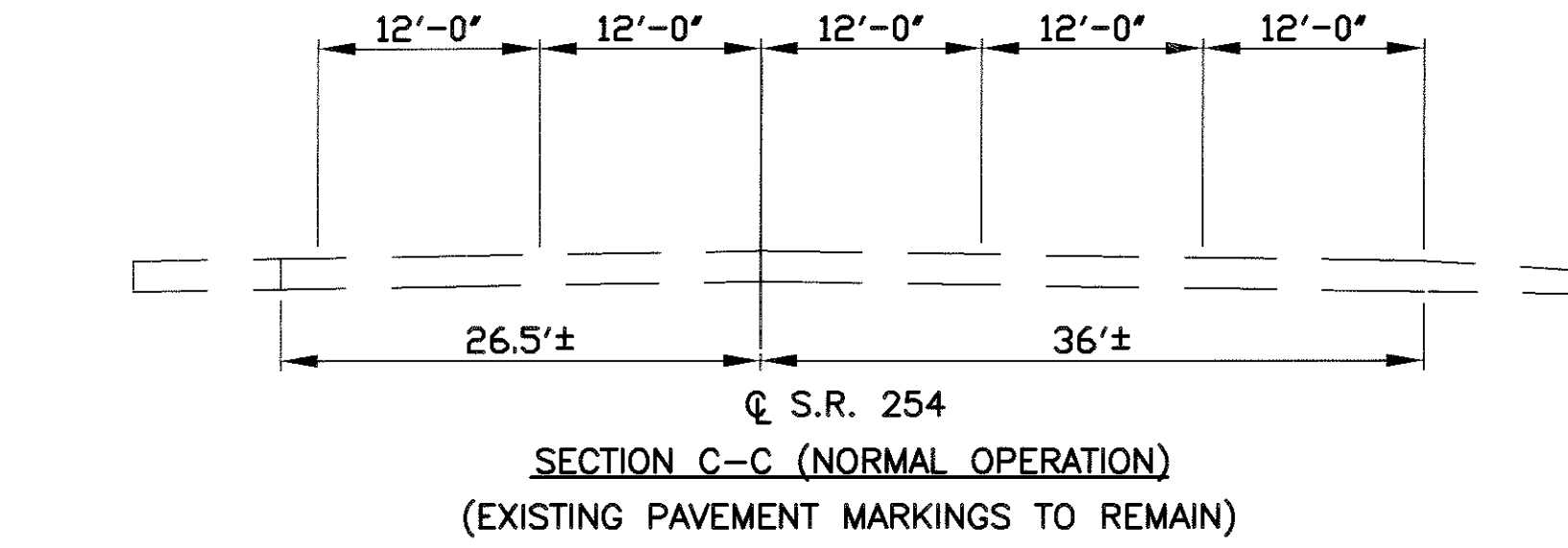
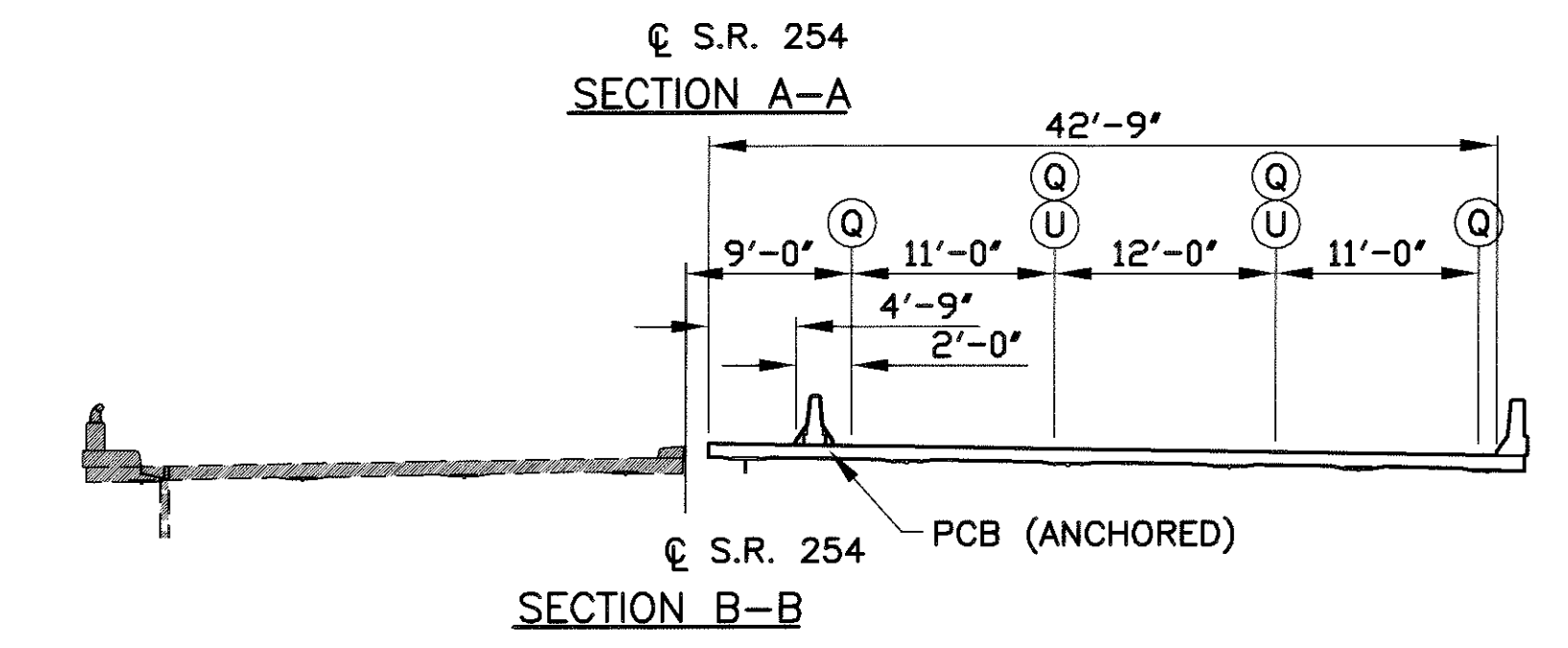
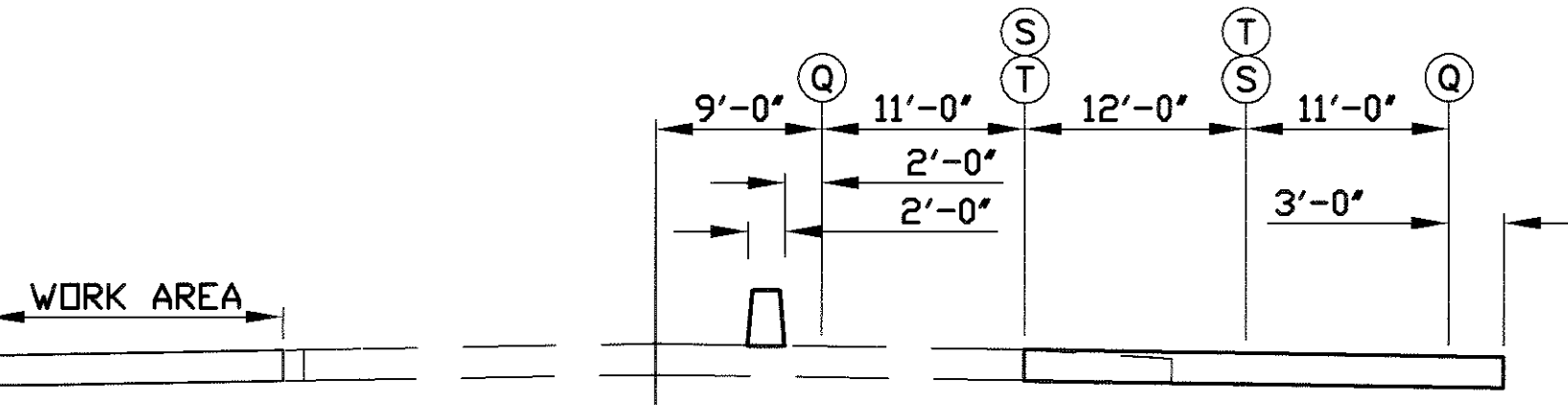
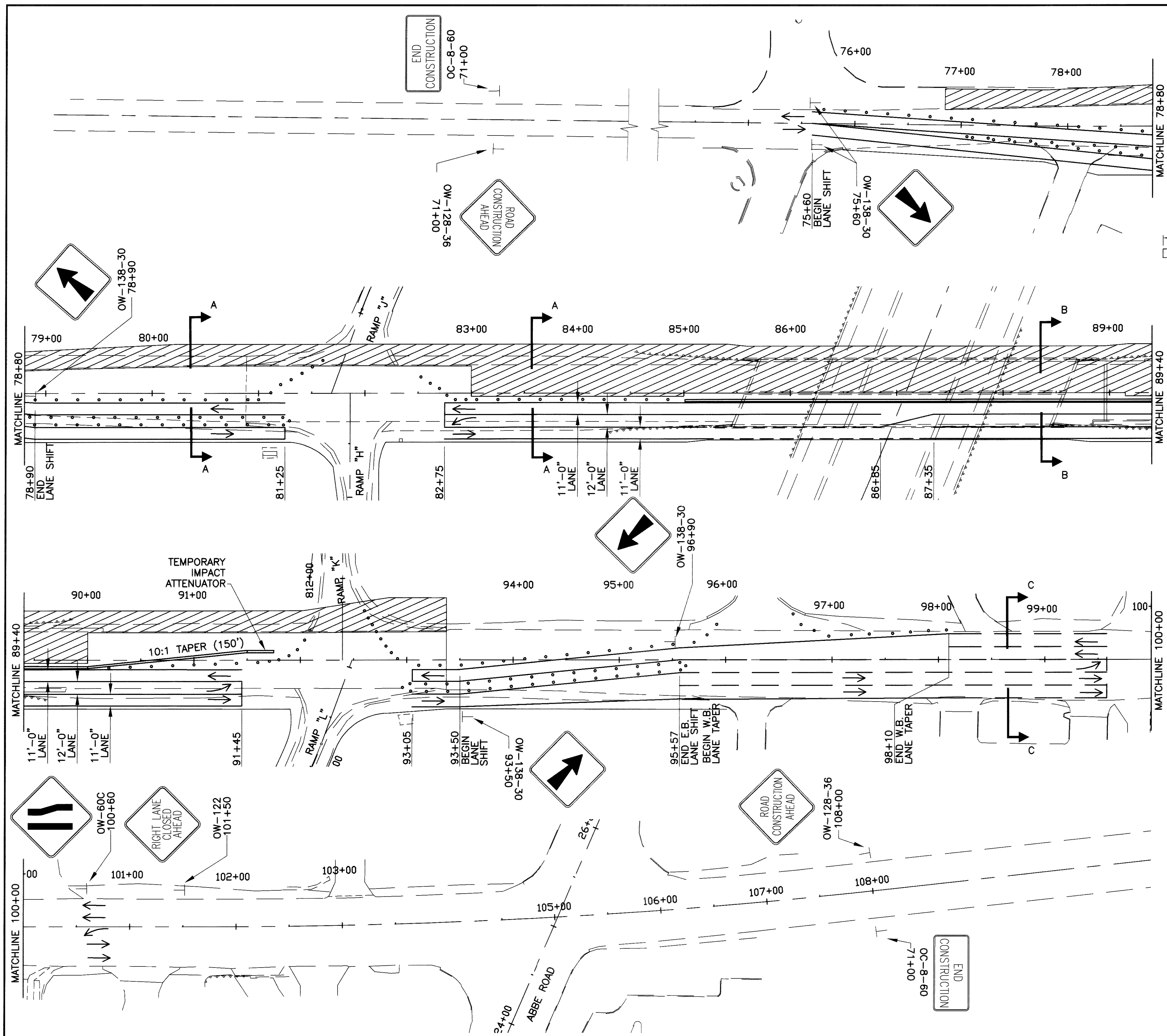
LEGEND

- PHASE CONSTRUCTION
- TEMPORARY SHOULDER



MAINTENANCE OF TRAFFIC - S.R. 254 PHASE IV

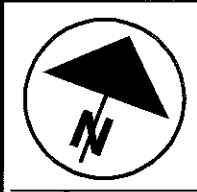
LOR - 190 - 15.65



LEGEND
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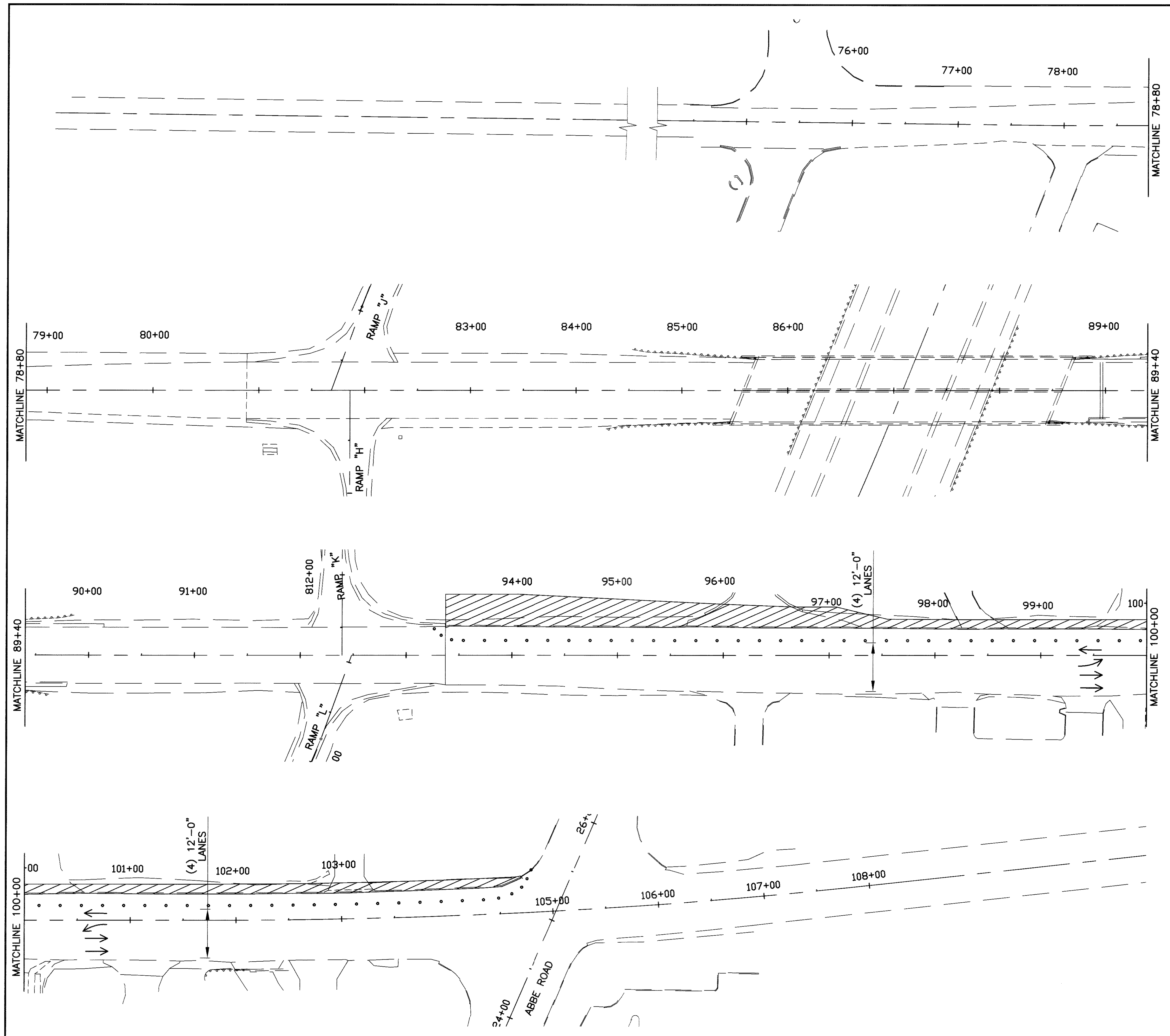
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 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE
 - (U) TEMPORARY CHANNELIZING LINE

9:46AM 03-15-2001 [C:\93187\DWG\S\S254\93187M1.DWG] M3M



MAINTENANCE OF TRAFFIC DETAILS
PER STANDARD CONSTRUCTION
CONSTRUCTION DRAWING MT-95.31

NOTE: CONTRACTOR TO MAINTAIN
TRAFFIC ACCESS TO DRIVES AT ALL
TIMES.



LEGEND
 PHASE V CONSTRUCTION

MAINTENANCE OF TRAFFIC - S.R.-254 PHASE V

LOR - 190 - 15.65

9:48AM 03-15-2001 [G:\93197\DWG\S\SR254\93197M1.DWG] MJM

MAINTENANCE OF TRAFFIC DETAILS
PER STANDARD CONSTRUCTION
CONSTRUCTION DRAWING MT-95.31

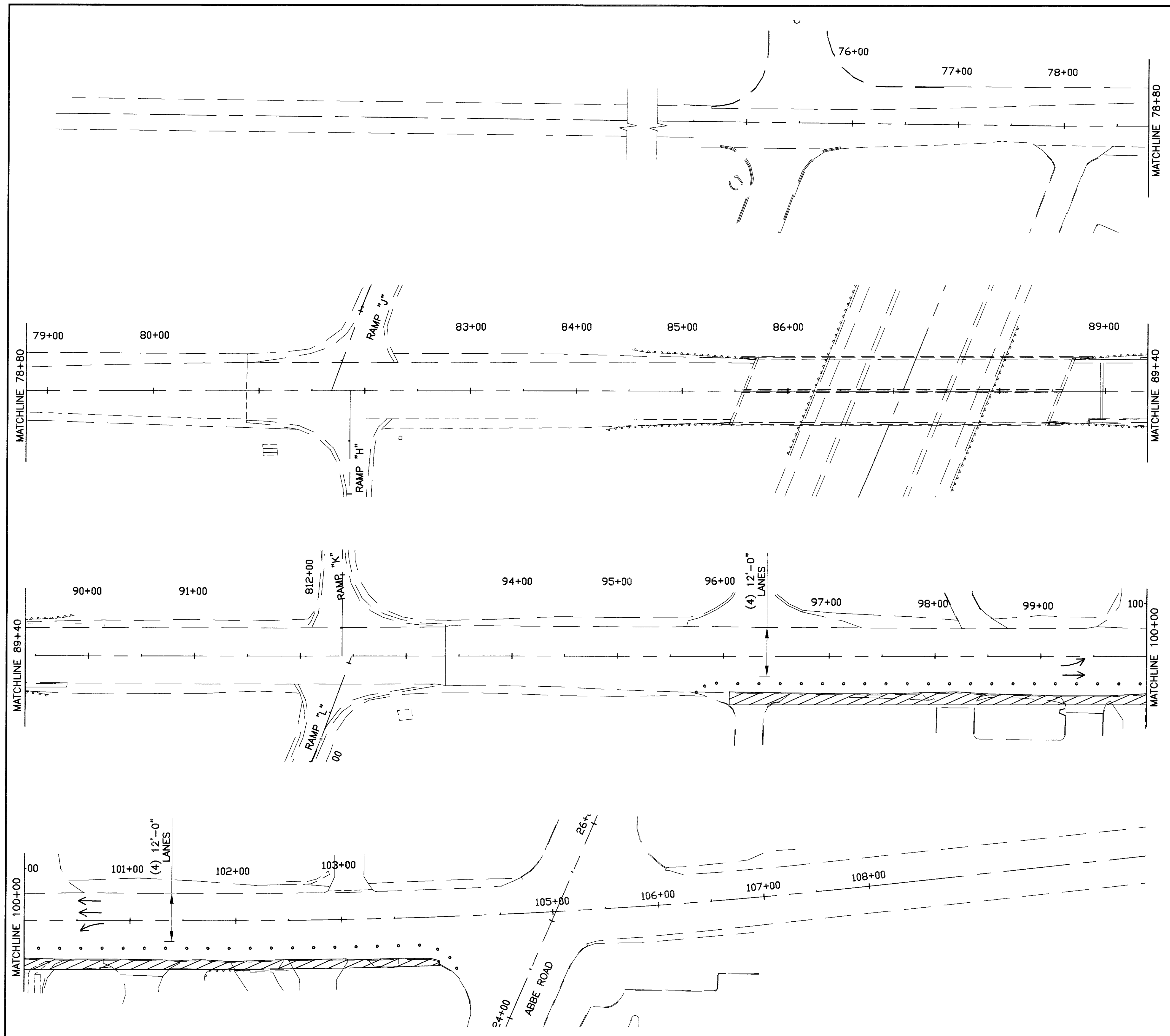
NOTE: CONTRACTOR TO MAINTAIN
TRAFFIC ACCESS TO DRIVES AT ALL
TIMES.



CALCULATED
MJM
CHECKED
bw

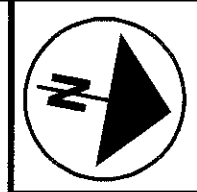
MAINTENANCE OF TRAFFIC - S.R.-254 PHASE VI

LOR - I90 - 15.65



LEGEND
[Hatched Box] PHASE VI CONSTRUCTION

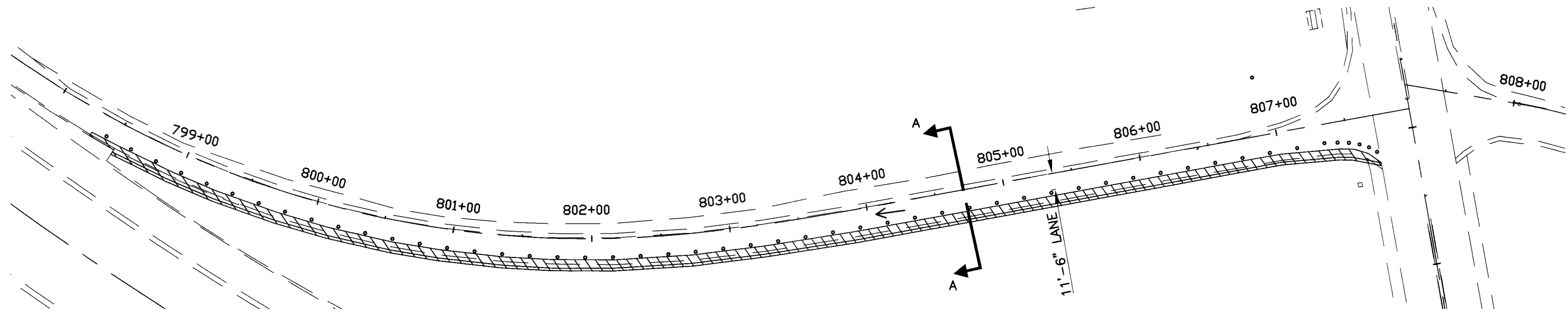
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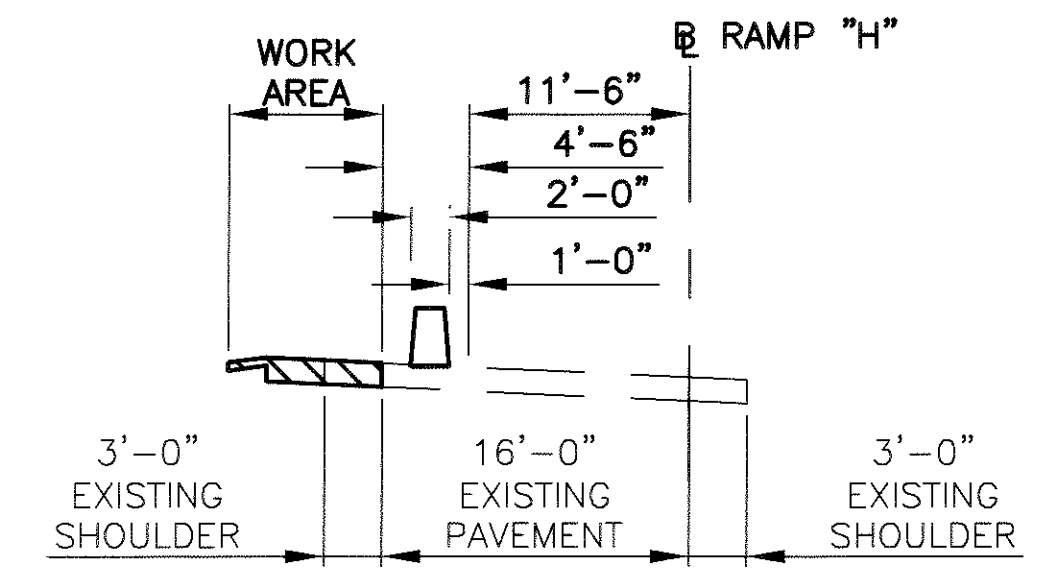
100'
50'
0'
HORIZONTAL SCALE IN FEET

CALCULATED
MIM
CHECKED
BW

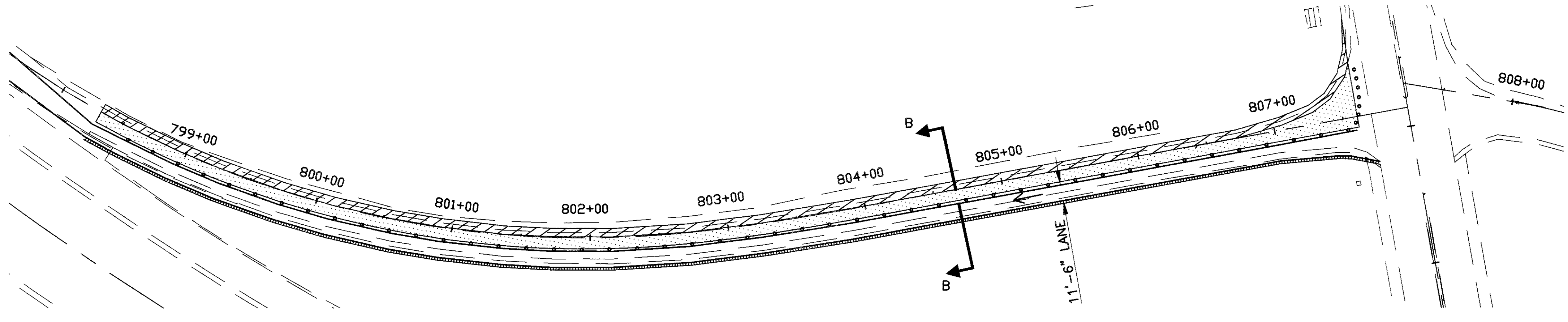
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- (P) TEMPORARY SOLID LANE LINE, WHITE
 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE



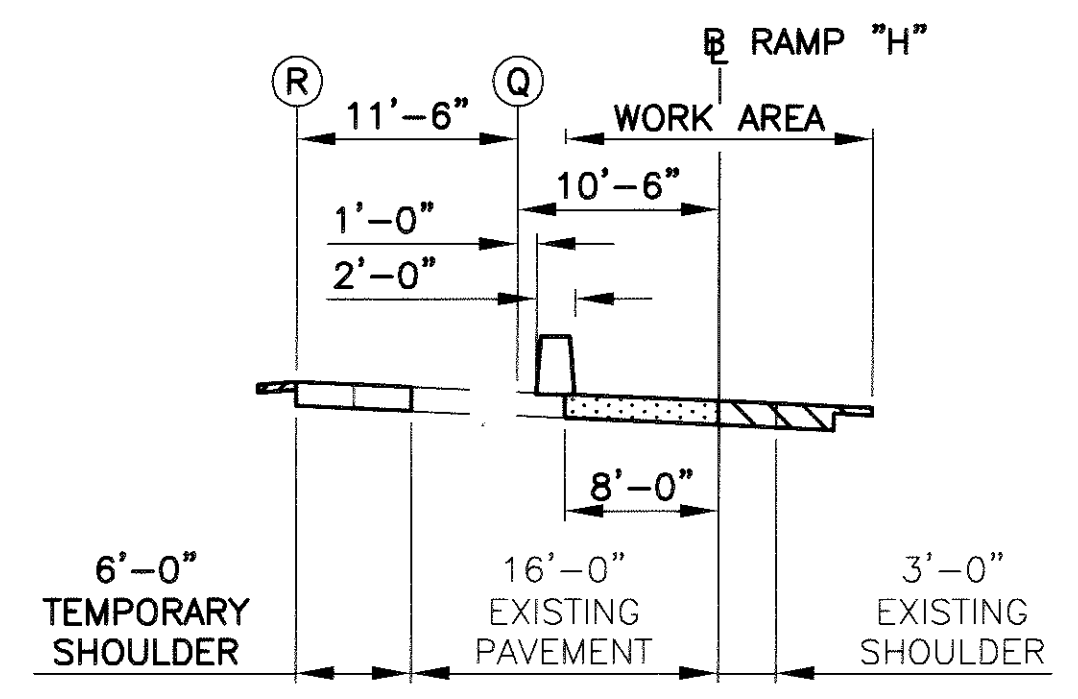
PHASE I



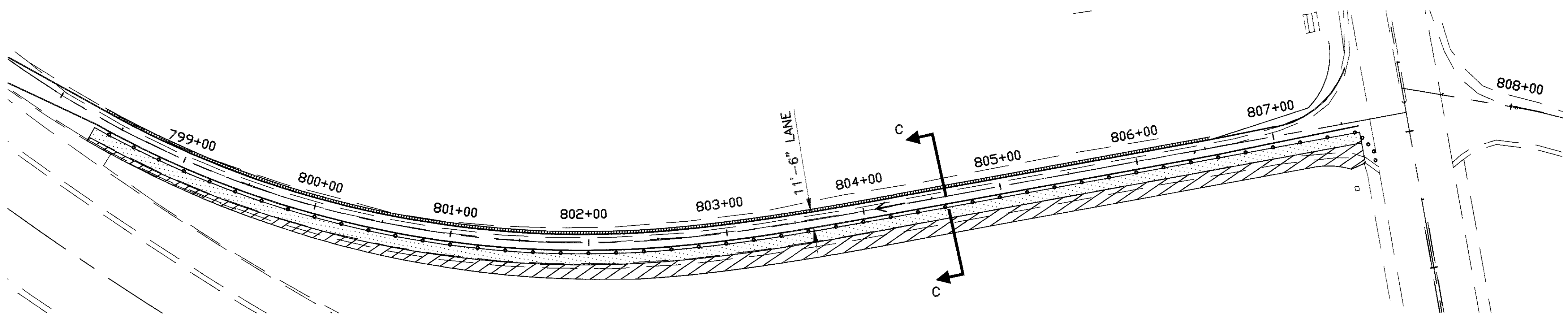
SECTION A-A



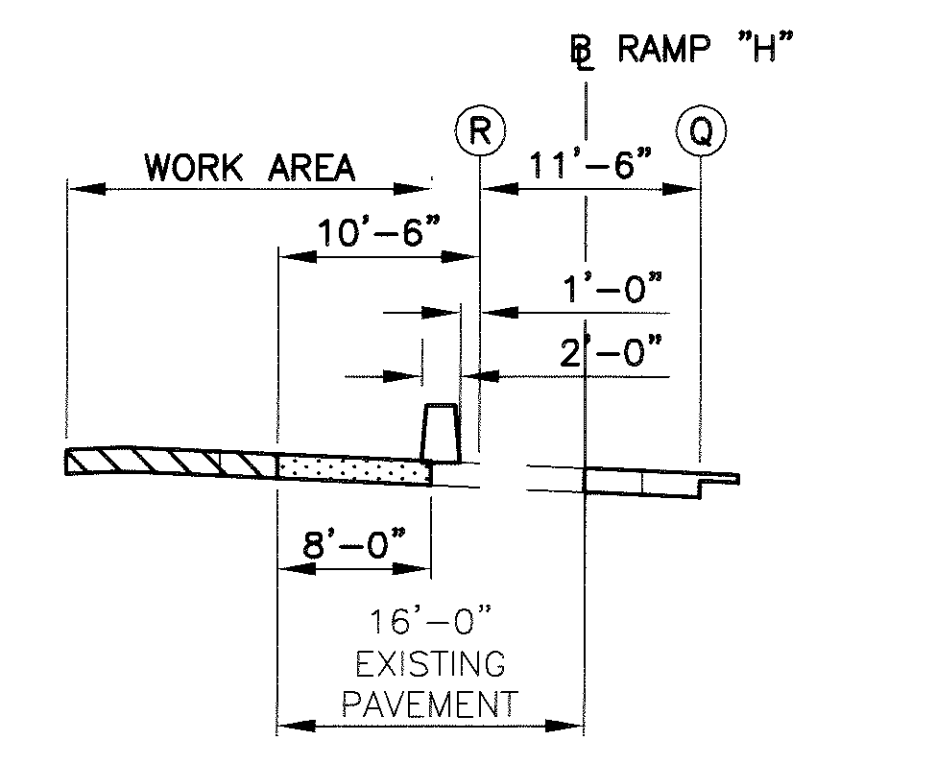
PHASE II



SECTION B-B



PHASE III



SECTION C-C

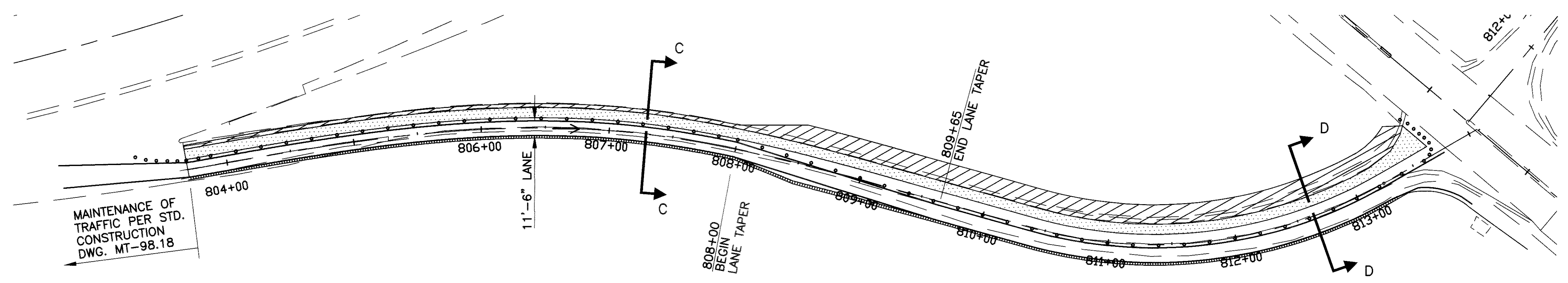
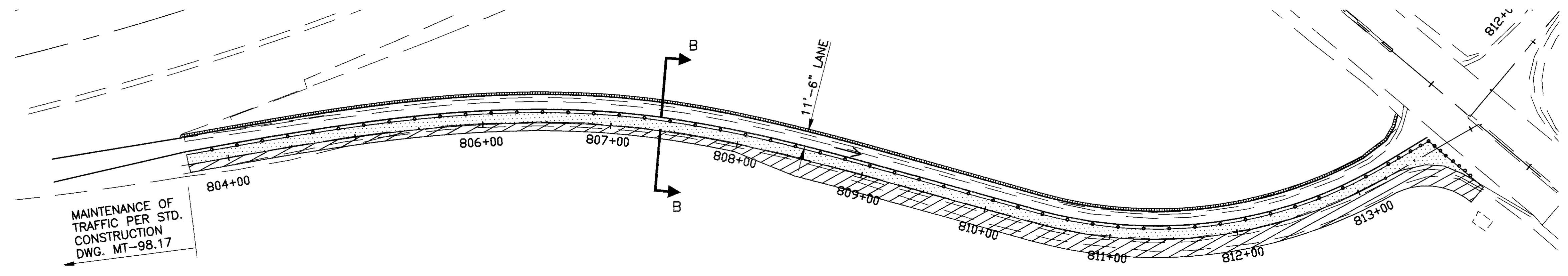
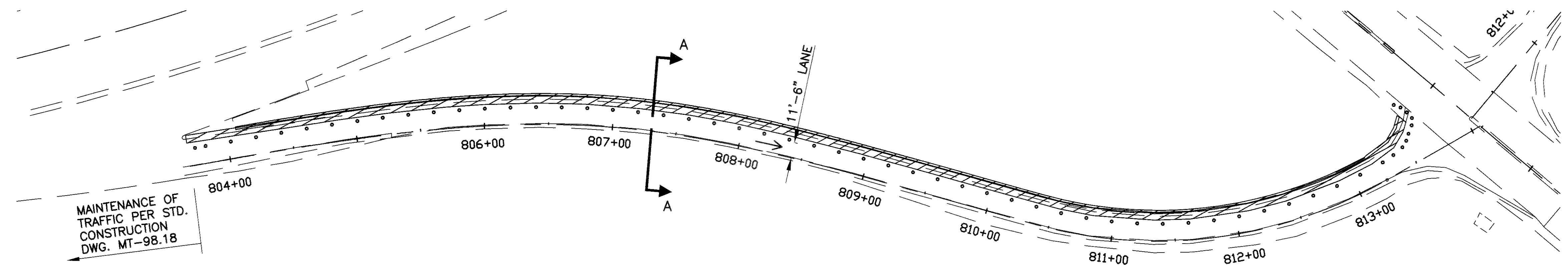
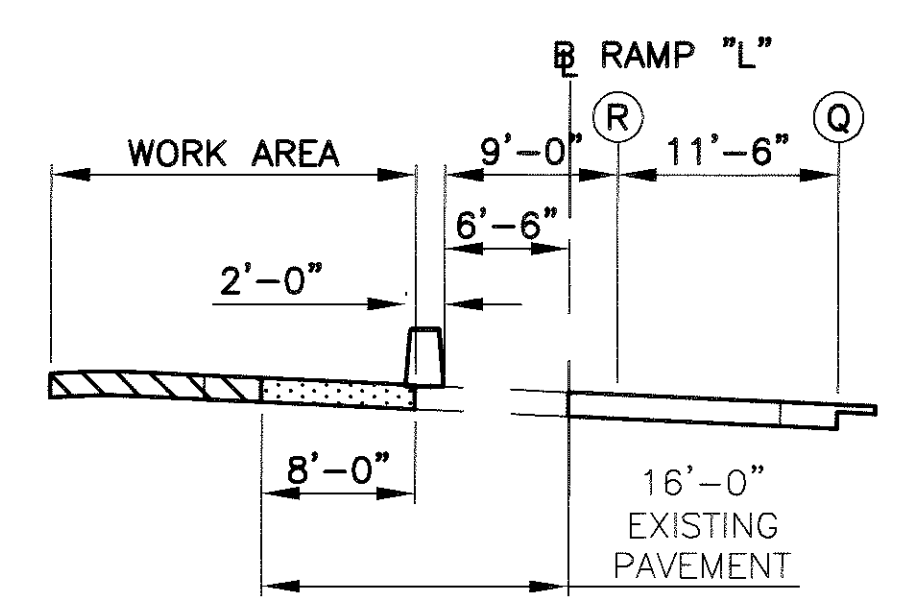
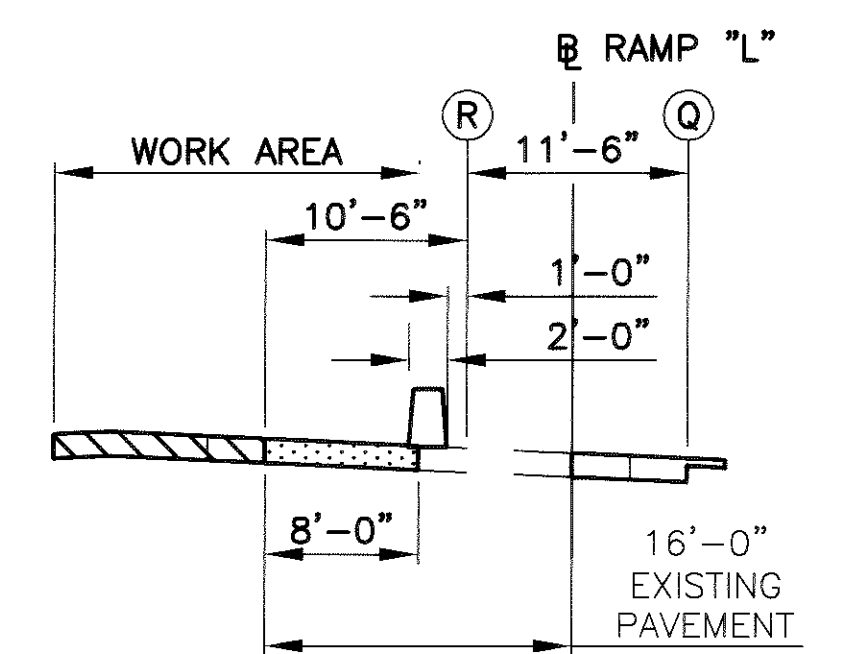
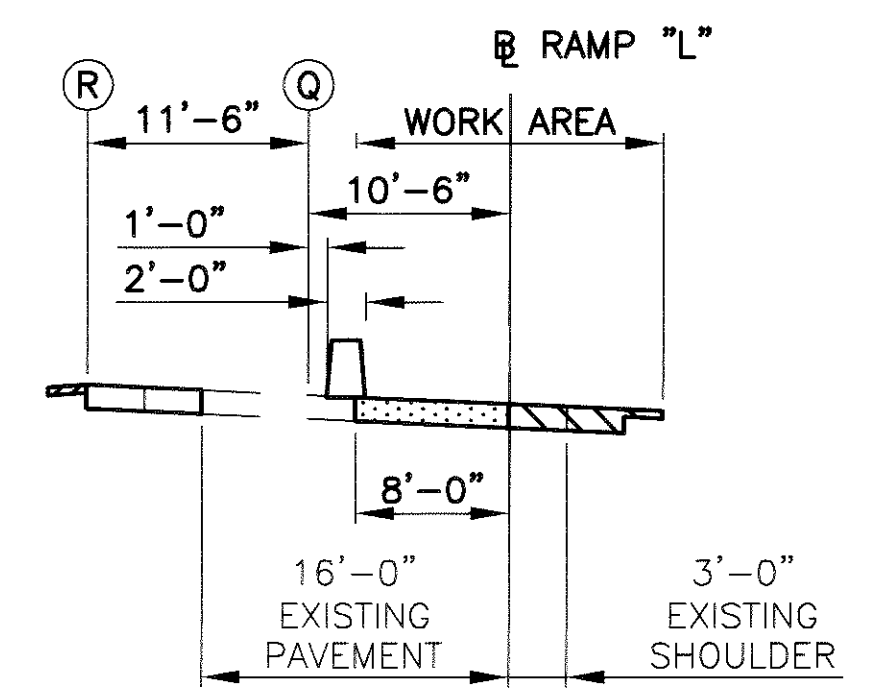
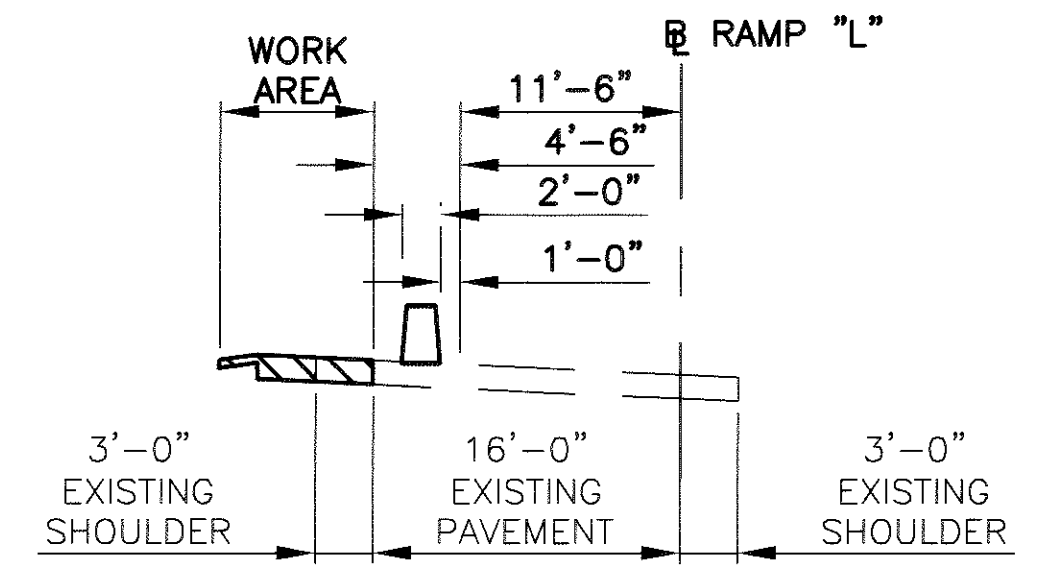
- LEGEND**
- PHASE CONSTRUCTION
 - TEMPORARY SHOULDER
 - PHASE JOINT REPAIR

MAINTENANCE OF TRAFFIC - RAMP "H"

LOR - 190 - 15.65

[C:\03197\DWG\SR254\93197M2.DWG] MIM 03-15-2001 9:55AM

- TEMPORARY PAVEMENT MARKING KEY**
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 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE

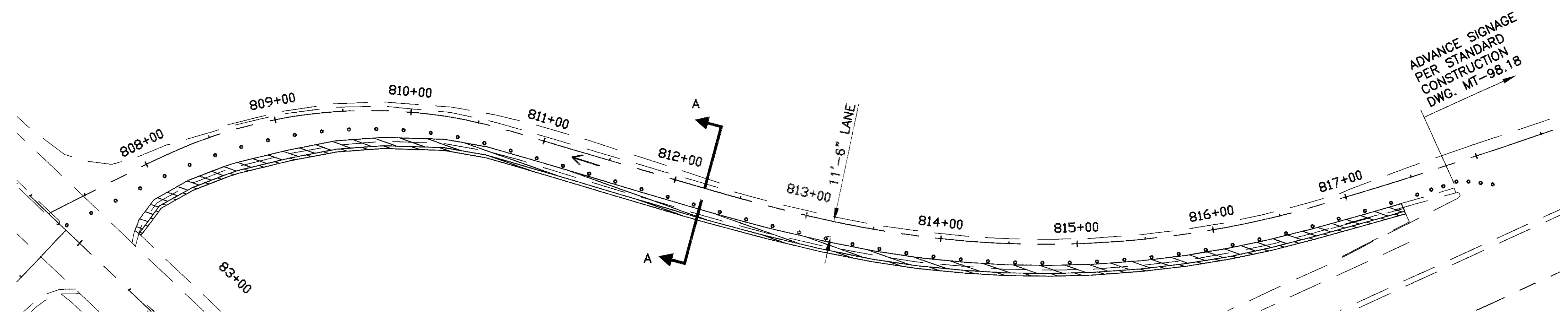


MAINTENANCE OF TRAFFIC PER STD. CONSTRUCTION DWG. MT-98.18

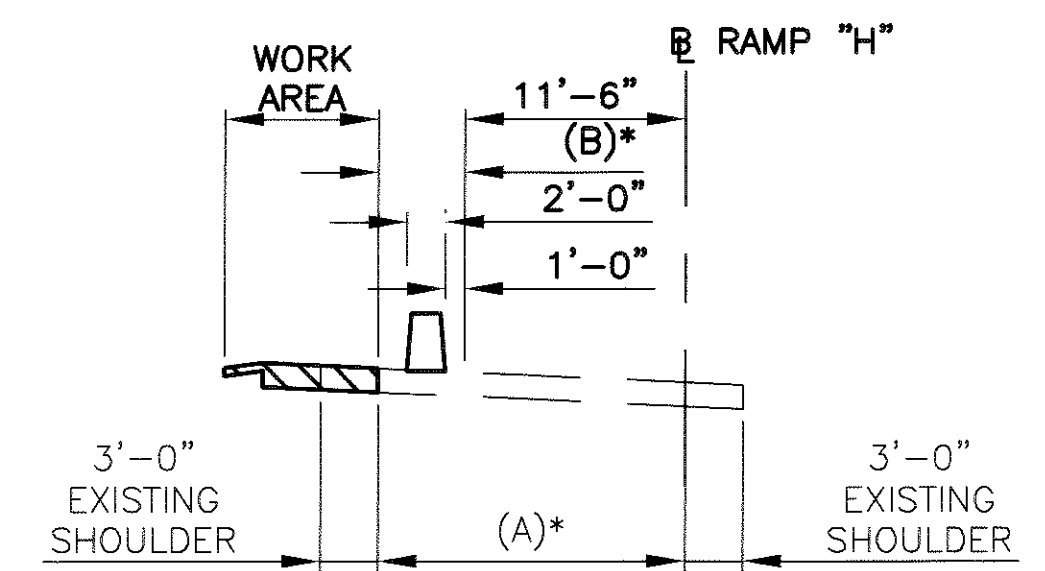
MAINTENANCE OF TRAFFIC PER STD. CONSTRUCTION DWG. MT-98.17

MAINTENANCE OF TRAFFIC PER STD. CONSTRUCTION DWG. MT-98.18

- LEGEND**
- PHASE CONSTRUCTION
 - TEMPORARY SHOULDER
 - PHASE JOINT REPAIR

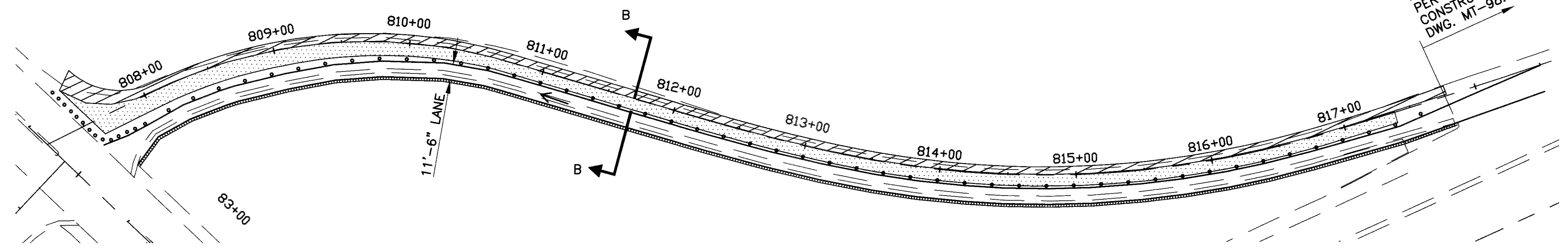


PHASE I

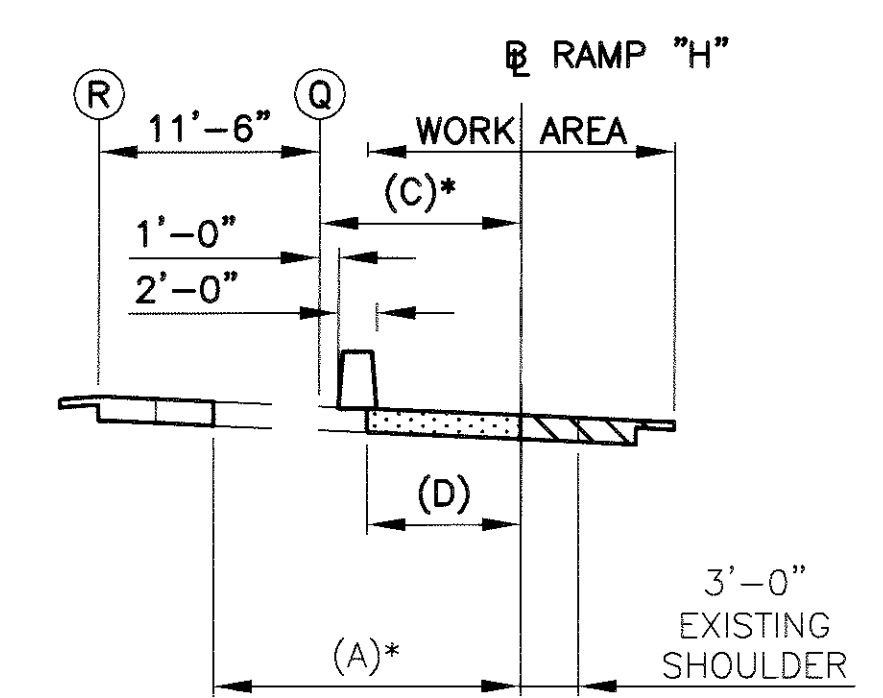


- (A) 16'-0" (STA. 810+53.97 TO STA. 817+77.71)
VARIES - 16'-0" (STA. 810+53.97) TO 24'-0" (STA. 809+03.97)
24'-0" (STA. 809+03.97 TO STA. 807+58.50)
- (B) 4'-6" (STA. 810+53.97 TO STA. 817+77.71)
VARIES - 4'-6" (STA. 810+53.97) TO 12'-6" (STA. 809+03.97)
12'-6" (STA. 809+03.97 TO STA. 807+58.50)

SECTION A-A

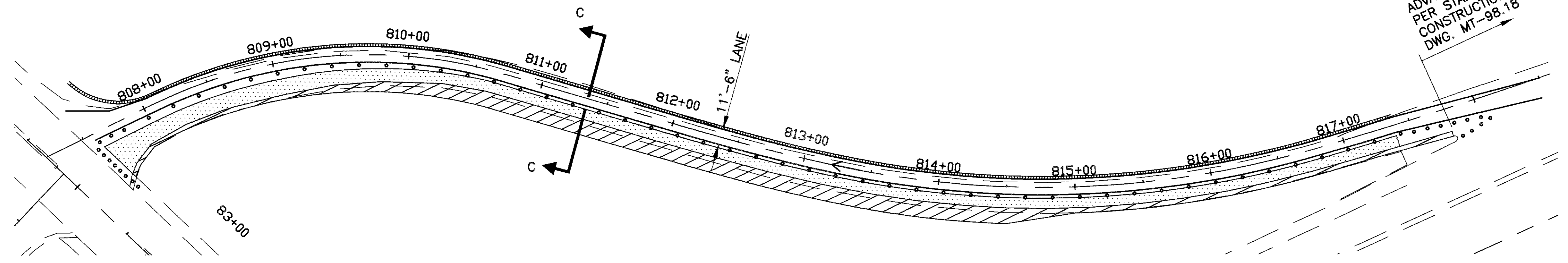


PHASE II

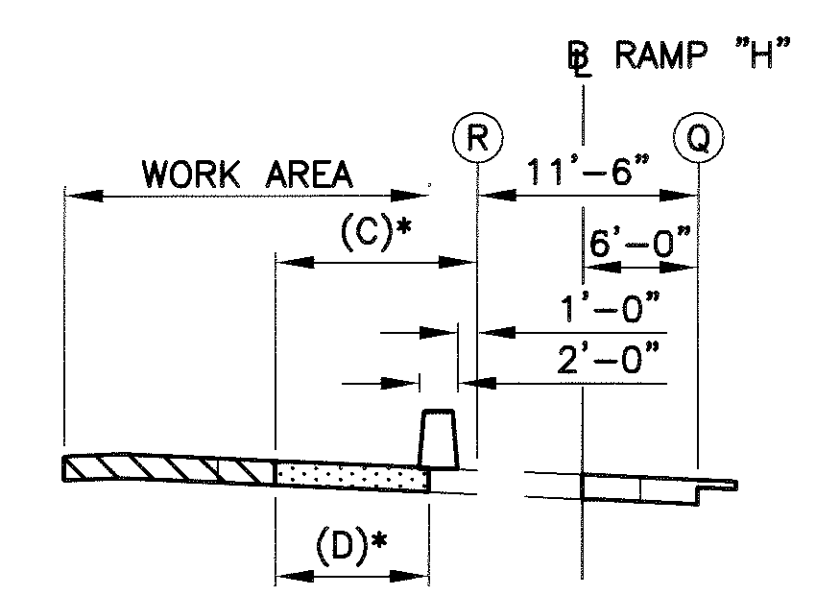


- (C) 10'-6" (STA. 810+53.97 TO STA. 817+77.71)
VARIES - 10'-6" (STA. 810+53.97) TO 18'-6" (STA. 809+03.97)
18'-6" (STA. 809+03.97 TO STA. 807+58.50)
- (D) 8'-0" (STA. 810+53.97 TO STA. 817+77.71)
VARIES - 8'-0" (STA. 810+53.97) TO 12'-0" (STA. 809+03.97)
12'-0" (STA. 809+03.97 TO STA. 807+58.50)

SECTION B-B



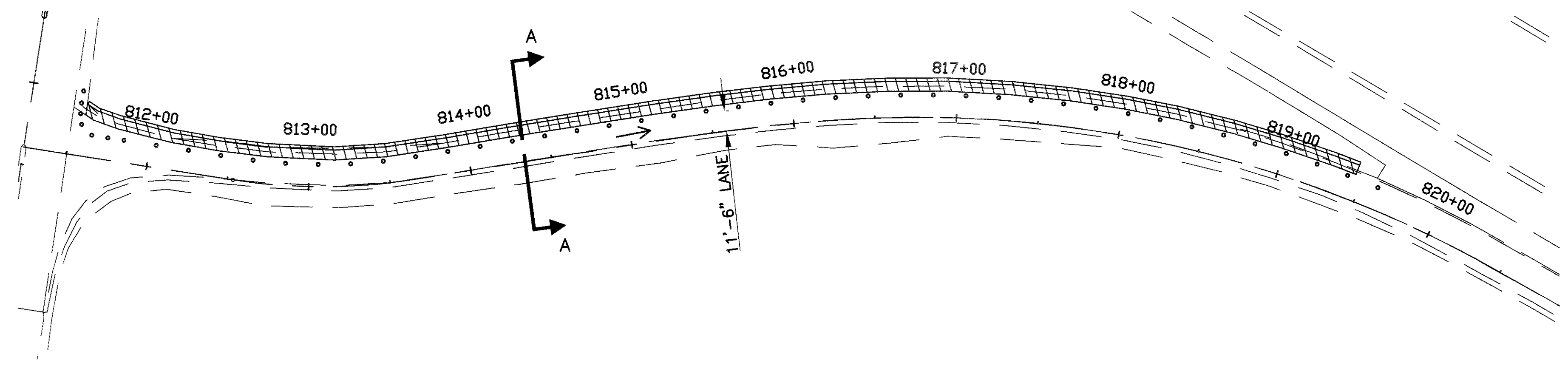
PHASE III



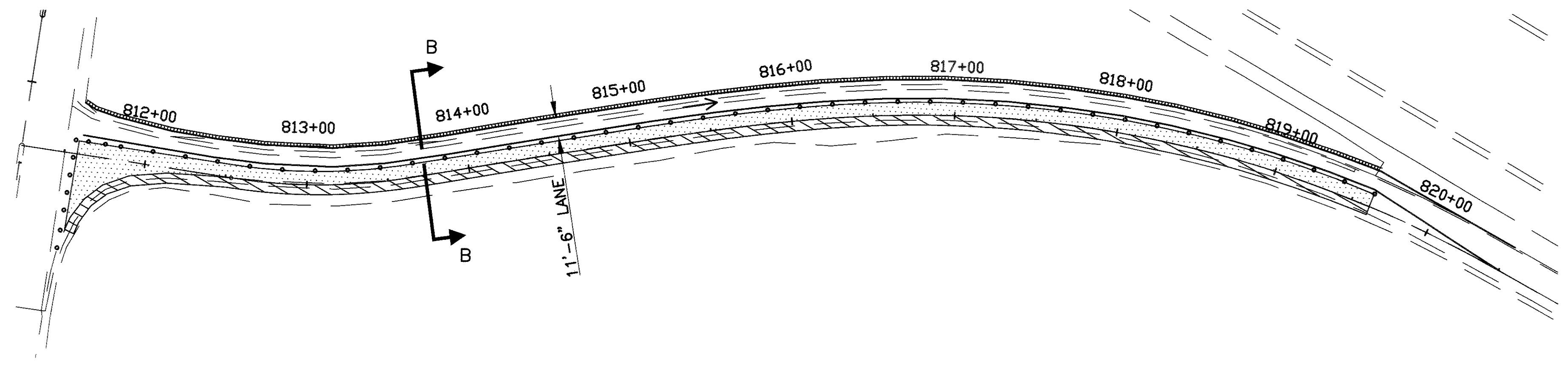
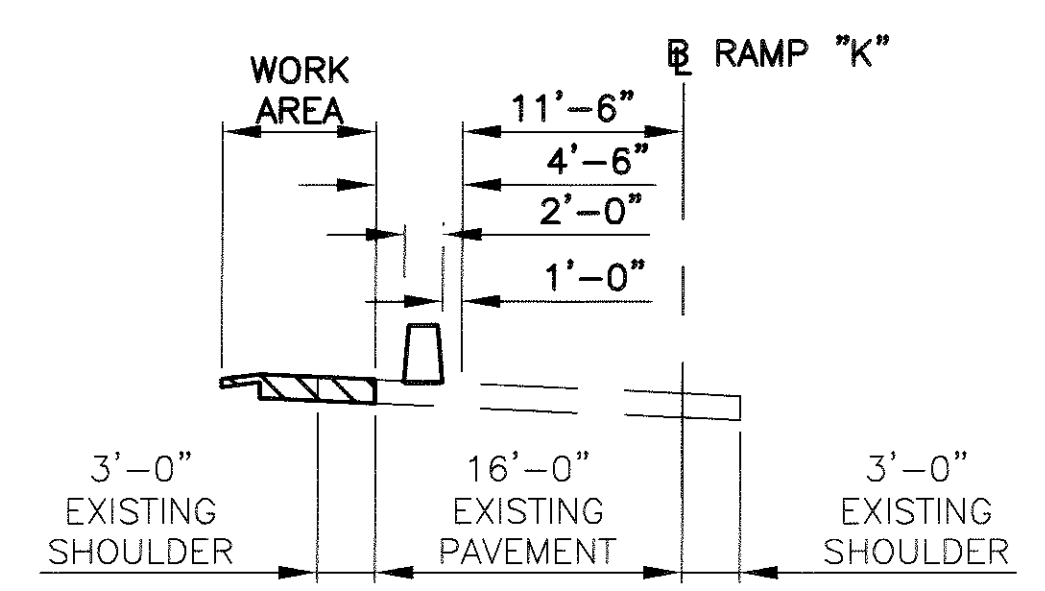
SECTION C-C

- LEGEND**
- PHASE CONSTRUCTION
 - TEMPORARY SHOULDER
 - PHASE JOINT REPAIR

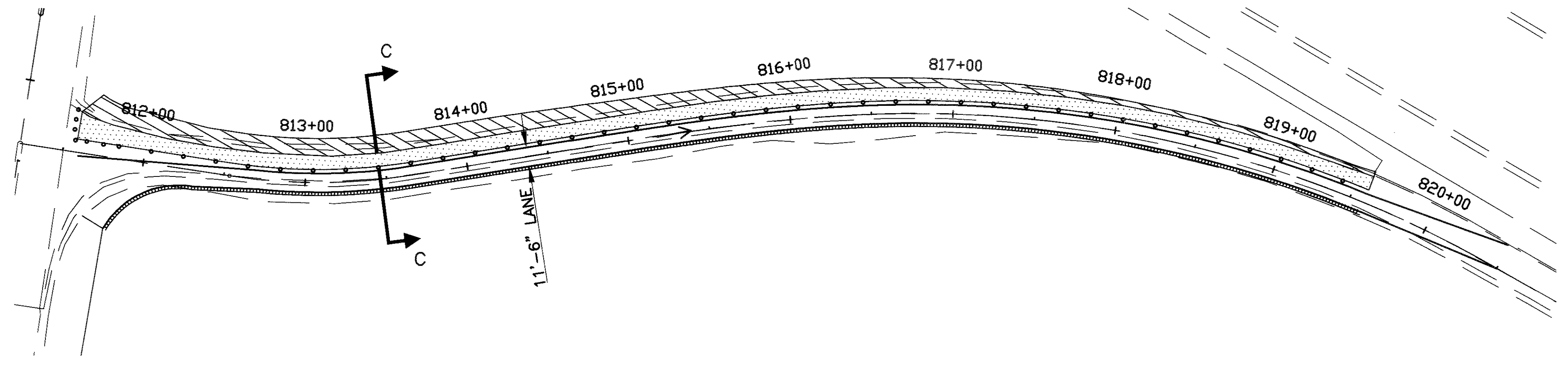
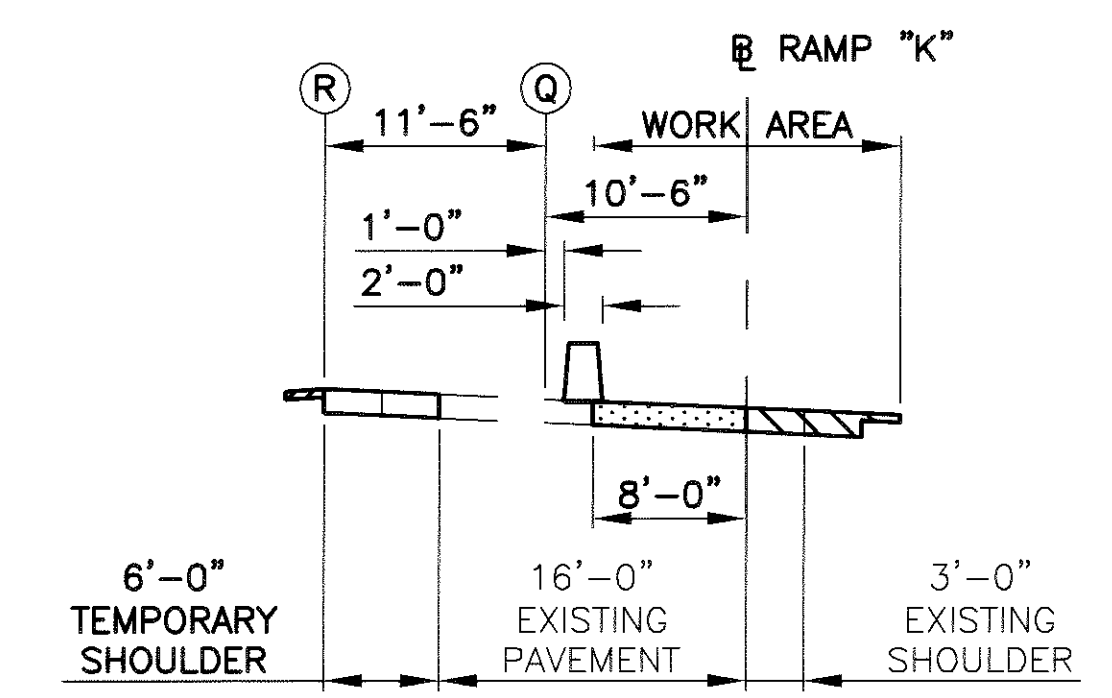
- TEMPORARY PAVEMENT MARKING KEY**
- (P) TEMPORARY SOLID LANE LINE, WHITE
 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE



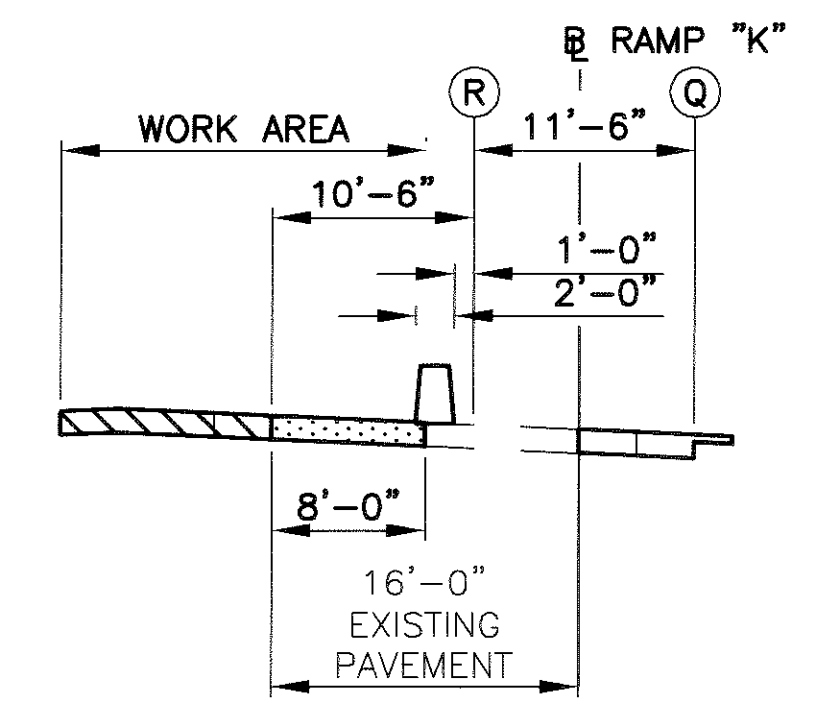
PHASE I






PHASE II



PHASE III



- LEGEND**
-  PHASE CONSTRUCTION
 -  TEMPORARY SHOULDER
 -  PHASE JOINT REPAIR

- TEMPORARY PAVEMENT MARKING KEY**
- (P) TEMPORARY SOLID LANE LINE, WHITE
 - (Q) TEMPORARY EDGE LINE, WHITE
 - (R) TEMPORARY EDGE LINE, YELLOW
 - (S) TEMPORARY LANE LINE, WHITE
 - (T) TEMPORARY CENTER LINE, SOLID DOUBLE

SHEET NUMBER														ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	A.P.P. REF.	
13	14	15	17	32	33	34	35	36	38	44	115	116	132							132A
	270		421				3053								255 301	10101 46000	270 3474	SQ. YD. CU. YD.	PAVEMENT FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS FS, AS PER PLAN BITUMINOUS AGGREGATE BASE, PG 64-22	14
							5006	70							304	20000	5076	CU. YD.	AGGREGATE BASE	
							1111 27557	15							407 407	14000 10000	1126 27557	GALLON GALLON	TACK COAT FOR INTERMEDIATE COURSE TACK COAT	
							6942								408	10000	6942	GALLON	BITUMINOUS PRIME COAT	
							1283	11							446	47020	1294	CU. YD.	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	
							1445	17							448	46050	1462	CU. YD.	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22	
							180								SPECIAL	45130000	180	LIN. FT.	PRESSURE RELIEF JOINT, TYPE A, AS PER PLAN	13
								48							452	12000	48	SQ. YD.	8" PLAIN CONCRETE PAVEMENT	
							246								611	25000	246	SQ. YD.	REINFORCED CONCRETE APPROACH SLAB (T = 15")	
							783	24 112							830 830	18000 26000	24 895	LIN. FT. LIN. FT.	COMBINATION CURB AND GUTTER, TYPE 3 CURB, TYPE 6	
																			WATER WORK (Y-060)	
											465				638	02500	465	LIN. FT.	12" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 52, MECHANICAL JOINTS AND FITTINGS	
											200				638	07310	200	LIN. FT.	24" STEEL PIPE ENCASMENT, BORED OR JACKED	
											1				638	09200	1	EACH	12" CUTTING-IN SLEEVE, VALVE AND VALVE BOX	
												1			638	10400	1	EACH	FIRE HYDRANT ADJUSTED TO GRADE	
												6			638	10800	6	EACH	VALVE BOX ADJUSTED TO GRADE	
																			LIGHTING	
													2	2	625	14200	4	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP	
													75	50	625	25402	125	LIN. FT.	CONDUIT, 2", 713.07	
													2	2	625	26250	4	EACH	LUMINAIRE, CONVENTIONAL	
													1	1	625	28000	2	EACH	GLARE SHIELD	
													315	573	625	29001	888	LIN. FT.	TRENCH, AS PER PLAN	130
													75	50	625	29600	125	LIN. FT.	TRENCH IN PAVED AREA, TYPE B	
													3	6	625	30700	9	EACH	PULL BOX, 713.08, 18"	
													3	3	625	32000	6	EACH	GROUND ROD	
													2	2	625	35010	4	EACH	REMOVE AND REERECT EXISTING LIGHT POLE	
													430	708	625	98100	1138	LIN. FT.	LIGHTING, MISC.: 1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 480 VOLT CABLES	

CALCULATED JHP
 CHECKED DW
GENERAL SUMMARY
 LOR-190-15.65
 29
 161

SHEET NUMBER											ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	A.P.P. REF.
125	126	127	128	129	131A	131C	131E	131G								
											TRAFFIC CONTROL					
26.0											630	02100	26.0	LIN. FT.	GROUND MOUNTED SUPPORT, NO. 2 POST	
135.5	196.0	291.5	273.5	288.5							630	03100	1185.0	LIN. FT.	GROUND MOUNTED SUPPORT, NO. 3 POST	
				30.0							630	06400	30.0	LIN. FT.	GROUND MOUNTED SUPPORT, S4 x 7.7 BEAM	
				29.0							630	06500	29.0	LIN. FT.	GROUND MOUNTED SUPPORT, W6 x 9 BEAM	
			17.0	16.0							630	08004	33.0	LIN. FT.	ONE WAY SUPPORT, NO. 3 POST	
				8							630	09000	8	EACH	BREAKAWAY BEAM CONNECTION	
1	1										630	25700	2	EACH	COMBINATION OVERHEAD SIGN SUPPORT, TYPE TC - 12.30, DESIGN 7	
49.25	53.75	50.00	82.00	92.00							630	80102	327.00	SQ. FT.	SIGN, FLAT SHEET, TYPE G	
45.0		180.0									630	80204	225.0	SQ. FT.	SIGN, EXTRUSHEET, TYPE G	
				2							630	82000	2	EACH	SIGN BACKING ASSEMBLY	
				4							630	84500	4	EACH	GROUND MOUNTED BEAM SUPPORT FOUNDATION	
1	1										630	84510	2	EACH	RIGID OVERHEAD SIGN SUPPORT FOUNDATION	
3	2	6	1	1							630	84900	13	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
3	13	12	6	12							630	85100	46	EACH	REMOVAL OF GROUND MOUNTED SIGN AND REERECTION	
2	2			2							630	85600	6	EACH	REMOVAL OF GROUND MOUNTED MAJOR SIGN AND REERECTION	
4	7	12	4	6							630	86002	33	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
				2							630	86102	2	EACH	REMOVAL OF GROUND MOUNTED BEAM SUPPORT AND DISPOSAL	
1	3										630	87400	4	EACH	REMOVAL OF OVERHEAD MOUNTED SIGN AND DISPOSAL	
0.30	0.35	0.36	0.74	0.80							644	00100	2.55	MILE	EDGE LINE	
0.14	0.32	0.32	0.11	0.19							644	00200	1.08	MILE	LANE LINE	
0.27	0.20	0.25									644	00300	0.72	MILE	CENTER LINE	
965	1305	1798	300	420							644	00400	4788	LIN. FT.	CHANNELIZING LINE	
77	84	355	38	54							644	00500	608	LIN. FT.	STOP LINE	
558	378										644	00700	936	LIN. FT.	TRANSVERSE LINE	
239	239										644	00900	478	SQ. FT.	ISLAND MARKING	
11	7	21	4	6							644	01300	49	EACH	LANE ARROW	
4	7	4	2	3							644	01400	20	EACH	WORD ON PAVEMENT, 72"	
316	631										644	01500	947	LIN. FT.	DOTTED LINE, 4"	
											SIGNALIZATION					
					612	605	20	100			625	25402	1337	LIN. FT.	CONDUIT, 2", 713.07	
					200	189	50	17			625	25502	456	LIN. FT.	CONDUIT, 3", 713.07	
					670	655	70	117			625	29001	1512	LIN. FT.	TRENCH, AS PER PLAN	130
					142	139					625	29600	281	LIN. FT.	TRENCH IN PAVED AREA, TYPE B	
					3	3		1			625	30700	7	EACH	PULL BOX, 713.08, 18"	
					3	3	2	2			625	30706	10	EACH	PULL BOX, 713.08, 24"	
					9	9	4	5			625	32000	27	EACH	GROUND ROD	
					8	9	3	5			632	00300	25	EACH	VEHICULAR SIGNAL HEAD, 3 SECTION, 12" LENS, 1-WAY	
							4	4			632	00501	8	EACH	VEHICULAR SIGNAL HEAD, 5 SECTION, 12" LENS, 1-WAY, AS PER PLAN	130
							1				632	01101	1	EACH	VEHICULAR SIGNAL HEAD, 3 SECTION, 12" LENS, 2-WAY, AS PER PLAN	130
					14	17	5	8			632	26500	44	EACH	DETECTOR LOOP	
					14	17	5	8			632	27004	44	EACH	LOOP DETECTOR UNIT	
					648	745	398	655			632	40500	2446	LIN. FT.	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG.	
							550	622			632	40700	1172	LIN. FT.	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG.	
					2	2	3	4			632	64000	11	EACH	STRAIN POLE FOUNDATION	
					3908	5402	545	1398			632	65300	11253	LIN. FT.	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG.	
						106		110			632	67300	216	LIN. FT.	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG.	
					116		92				632	68300	208	LIN. FT.	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG.	
					1	1	1	1			632	70000	4	EACH	POWER SERVICE	
					1	1	2	3			632	82600	7	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6	
					1	1	1	1			632	82600	4	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6 WITH SERVICE WIRE ENTRANCE	
						1	1	1			633	38001	3	EACH	CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN	130
					1						633	39001	1	EACH	CONTROLLER, MASTER, TRAFFIC RESPONSIVE, AS PER PLAN	130A
					1	1	1	1			633	70000	4	CU. YD.	CONCRETE FOR CABINET FOUNDATION	
					9	9	9	9			633	70500	36	SQ. FT.	CONTROLLER WORKPAD	
											STRUCTURES					
SEE STRUCTURE PLANS FOR ESTIMATED QUANTITIES, SHEET 135																

CALCULATED JHP
 CHECKED MJM
 GENERAL SUMMARY
 LOR-190-15.65
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SHEET NUMBER												ITEM	ITEM EXT.	GRAND TOTAL	UNIT	DESCRIPTION	A.P.P. REF.		
13	14	15	17	32	33	34	35	36	38	44									
																		MAINTENANCE OF TRAFFIC	
		100										410	12000	100	CU. YD.	TRAFFIC COMPACTED SURFACE, TYPE A OR B			
		220										614	11100	220	HOUR	LAW ENFORCEMENT OFFICER WITH PATROL CAR			
			1									614	12336	1	EACH	TEMPORARY IMPACT ATTENUATOR (UNDIRECTIONAL)			
		100										SPECIAL	61412500	100	SQ. FT.	REPLACEMENT SIGN			
		150										SPECIAL	61412600	150	EACH	REPLACEMENT DRUM			
		61										614	13300	61	EACH	BARRIER REFLECTOR, TYPE B			
		61										614	13350	61	EACH	OBJECT MARKER			
			0.46									614	21000	0.46	MILE	TEMPORARY CENTERLINE, CLASS I			
			5.24									614	22000	5.24	MILE	TEMPORARY EDGE LINE, CLASS I			
			1002									614	23000	1002	LIN. FT.	TEMPORARY CHANNELIZING LINE, CLASS I			
			134									614	26000	134	LIN. FT.	TEMPORARY STOP LINE, CLASS I			
			12									614	30000	12	EACH	TEMPORARY LANE ARROW, CLASS I			
			3413									615	20000	3413	SQ. YD.	TEMPORARY PAVEMENT, CLASS A			
		150										616	10000	150	M. GAL.	WATER			
		12										616	20000	12	TON	CALCIUM CHLORIDE			
			685									622	40020	685	LIN. FT.	PORTABLE CONCRETE BARRIER, 32"			
			690									622	40040	690	LIN. FT.	PORTABLE CONCRETE BARRIER, 32", BRIDGE MOUNTED			
												614	11000	LUMP		MAINTAINING TRAFFIC (PART 1 AND PART 2)			
												623	10000	LUMP		CONSTRUCTION LAYOUT STAKES (PART 1 AND PART 2)			
												624	10000	LUMP		MOBILIZATION (PART 1 AND PART 2)			
												806	16010	12	MONTH	FIELD OFFICE, TYPE B (PART 1 AND PART 2)			

CALCULATED JHP	CHECKED MJM
GENERAL SUMMARY	
LOR-190-15.65	
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3:44PM 05-29-2001 [O:\93197\DWG\S\S254\93197\DWG] M.M

SHEET	#	STATION		OFFSET	SIDE	202	202	202	604	606	606	606	606	606	607		
		FROM	TO			GUARDRAIL REMOVED	CURB REMOVED	FENCE REMOVED	MONUMENT BOX ADJUSTED TO GRADE	GUARDRAIL TYPE 5	ANCHOR ASSEMBLY, TYPE E-98 (OFFSET DESIGN)	BRIDGE TERMINAL ASSEMBLY, TYPE 1	BRIDGE TERMINAL ASSEMBLY, TYPE 2	ANCHOR ASSEMBLY, TYPE T	FENCE, TYPE CL		
						LIN. FT.	LIN. FT.	LIN. FT.	EACH	LIN. FT.	EACH	EACH	EACH	EACH	LIN. FT.		
45	2-R	76+25.03	76+86.00	35'	LT		61										
45	1-MO	77+91.83			☺				1								
47	1-GR	84+21.62	85+40.37		RT					69	1	1					
47	2-R	84+28.00	85+47.00		RT	119											
47	3-R	84+53.00	85+71.00		LT	118											
47	2-GR	84+58.72	85+75.47		LT					105			1				
47	2-MO	84+99.83			☺				1					1			
47-48	4-R	88+44.00	89.63.00		RT	120											
47-48	5-R	88+69.00	89+86.00		RT	119											
47-48	3-GR	88+40.65	89+57.40		RT					105			1				
47-48	4-GR	88+75.98	89+94.73		LT					69	1	1	1				
48	3-MO	91+99.82			☺				1								
48-49,58	5-GM	92+48.00	96+00.00		LT					350				3			
48-49	6-R	93+33.00	96+00.00		LT			275									
48-49	1-F	93+33.00	96+00.00		LT										270		
50	4-MO	101+86.05			☺				1								
50	7-R	101+70.00	102+15.55		RT	55											
50	6-GR	101+46.80	102+15.55		RT					19	1	1					
51	8-R	104+71.63	104+94.41		LT												
51	9-R	103+92.28	104+20.00		RT		32'										
							73'										
SHEET TOTALS						531	166	275	4	717	3	3	2	5	270		
TOTALS CARRIED TO GENERAL SUMMARY SHEET 28-31																	

CALCULATED
M.M
CHECKED
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ROADWAY SUB-SUMMARY

LOF-190-15.65

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08-06-2001 10:49AM

SHEET	REFERENCE NO.	STATION		SIDE	202		ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	202		12" CONDUIT, TYPE B, 706.02	12" CONDUIT, TYPE C, 706.02	12" CONDUIT, TYPE C, 707.01	15" CONDUIT, TYPE C, 706.02	18" CONDUIT, TYPE C, 706.02	30" CONDUIT, TYPE C, 706.02	604		SEEDING AND JUTE MATTING	660								
		FROM	TO		CATCH BASIN REMOVED	STRUCTURE REMOVED		601	602							603	603		603	603	603	604	604	604	604	667	660
45	1-D	78+48	79+00	LT														42									
	2-D	78+48	79+00	RT														42									
46	3-D	79+00	81+32	LT														193									
	4-D	81+10	-	LT				0.56							11												
	5-D	79+00	81+05	RT														171									
	6-D	81+06	81+10.6	RT	1										8	1		1									
47	7-D	88+44	89+00	LT			1.5	0.21		6	54																
48	8-D	89+00	89+44.7	LT																							
	9-D	89+44.7	-	LT							45																
	10-D	89+09.4	89+44.7	RT-LT					98		15																
	11-D	93+07	94+00	LT																78							
	12-D	92+99	-	RT	1										15		1										
		13-D	92+99	93+41	RT										42												
49	14-D	93+41	94+00	RT						5			59			1		1									
	15-D	94+00	95+62	LT																135							
	16-D	94+01	-	RT		1		0.11		5		1				1											
17-D	94+01	95+86	RT						185									1									
53	18-D	801+00(H)	804+00(H)	RT																250							
54	19-D	804+00(H)	82+70	RT																301							
55	20-D	810+24(J)	812+00(J)	RT																147							
56	21-D	812+00(J)	815+00(J)	RT																250							
62	22-D	805+60(L)	810+00(L)	RT																367							
	23-D	806+27(L)	810+00(L)	LT																311							
63	24-D	810+00(L)	812+83(L)	RT																236							
	25-D	810+00(L)	91+00	LT(L),RT																296							
TOTALS					2	1	1.5	0.88	98	261	54	60	42	34	2	2	3	5	2569	250							
TOTALS CARRIED TO GENERAL SUMMARY SHEET 28-31																											

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JJP
CHECKED
MJM

DRAINAGE SUB-SUMMARY

LOR - 190 - 15.65

SHEET	REFERENCE NO.	STATION		SIDE	605	605	603	603	604				SHEET	REFERENCE NO.	STATION		SIDE	605	605	603	603	604				
		6" SHALLOW PIPE UNDERDRAIN WITH FABRIC WRAP	6" UNCLASSIFIED PIPE UNDERDRAIN WITH FABRIC WRAP		6" CONDUIT, TYPE B, 707.45	6" CONDUIT, TYPE F	PRECAST REINFORCED CONCRETE OUTLET	6" SHALLOW PIPE UNDERDRAIN WITH FABRIC WRAP	6" UNCLASSIFIED PIPE UNDERDRAIN WITH FABRIC WRAP						6" CONDUIT, TYPE B, 707.45	6" CONDUIT, TYPE F		PRECAST REINFORCED CONCRETE OUTLET								
		FROM	TO		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH						FROM	TO		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH				
45	1-U	76+25	79+00	LT	550								52	25-U	798+32(H)	799+00(H)	LT	68								
	2-U	75+89	79+00	RT	622									26-U	798+32(H)	799+00(H)	RT	68								
46	3-U	79+00	81+08	LT	416		13	35	1				53	27-U	799+00(H)	799+48(H)	LT	48		5	10					
	4-U	79+00	81+08	RT	416		10	11						28-U	799+00(H)	799+48(H)	RT	48		5						
	5-U	82+32	84+00	LT	336									29-U	799+53(H)	804+00(H)	LT	447		5	10					
	6-U	82+19	84+00	RT	362									30-U	799+53(H)	804+00(H)	RT	447		5						
	53-U	81+20		LT				15	1																	
47	7-U	84+00	86+00	LT	280		13	67	1				54	31-U	804+00(H)	807+51(H)	LT	395								
	8-U	84+00	85+50	RT	226		13	67	1					32-U	804+00(H)	807+51(H)	RT	354								
	9-U	85+44	85+74	LT		30							55	33-U	807+45(J)	812+00(J)	LT	490								
	10-U	85+09	85+39	RT		30								34-U	807+85(J)	812+00(J)	RT	418					15	1		
	11-U	88+78	89+00	LT		22								56-U	811+00(J)		RT									
	12-U	88+20	89+00	RT		70	12	50	1																	
48	13-U	89+45	92+06	LT		518	10						56	35-U	812+00(J)	814+90(J)	LT	290								
	14-U	89+25	92+99	RT		748	12	10						36-U	812+00(J)	815+06(J)	RT	306					36	1		
	15-U	93+04	94+00	LT	192		10	10	1				37-U	815+14(J)	817+00(J)	LT	186					45	1			
	16-U	93+00	94+00	RT	200		12	9					38-U	815+14(J)	817+00(J)	RT	186									
	55-U	89+00	89+44	LT		88	13						57	39-U	817+00(J)	817+78(J)	LT	78		5						
	17-U	95+50	99+00	LT	700		12	15	1					40-U	817+00(J)	817+78(J)	RT	78		5						
49	18-U	94+00	99+00	RT	1000		12	5					58	41-U	811+70(K)	816+00(K)	LT	430								
	54-U	94+00	95+40	LT	280									42-U	811+82(K)	816+00(K)	RT	446								
50	19-U	99+00	103+00	LT	800								59	43-U	816+00(K)	817+95(K)	LT	195								
	20-U	103+00	104+00	LT		200								44-U	816+00(K)	817+95(K)	RT	195								
	21-U	101+50	102+50	RT		200	12	10						45-U	818+03(K)	819+57(K)	LT		107	6	23	1				
	22-U	103+00	104+00	RT		200								46-U	818+03(K)	819+57(K)	RT		107		33	1				
	57-U	99+00	100+70	RT	340																	60	1			
51	23-U	104+00	104+50	LT		100							61	47-U	803+69(L)	804+98(L)	LT	129		5						
	24-U	104+00	104+25	RT		15	10							48-U	803+69(L)	804+98(L)	RT	129					20			
62	49-U	805+03(L)	810+00(L)	LT									63	51-U	810+00(L)	813+42(L)	LT	342								
	50-U	805+03(L)	810+00(L)	RT										52-U	810+00(L)	813+79(L)	RT	403					5	20		
SR 254 TOTALS					6720	2221	164	304	7			RAMP TOTALS					7170	214	46	322	6					
GRAND TOTALS CARRIED TO GENERAL SUMMARY SHEET 28-31												SR 245 TOTALS					6720	2221	164	304	7					
												GRAND TOTALS					13890	2435	210	626	13					

UNDERDRAINS SUB-SUMMARY

LOR - 190 - 15.65

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CALCULATED
LUP
CHECKED
MJM

[C:\93197\DWG\S254\9319714.DWG] NUP
1:34PM
08-22-2001

REF. NO.	STATION	SIDE	LENGTH "L"	WIDTH "W"	R1 (LEFT SIDE AREA OF RADI OF DRIVE LOOKING FROM CL.)	R2 (RIGHT SIDE AREA OF RADI OF DRIVE LOOKING FROM CL.)	AREA	202	203	304		407	452	446	448	830	830	
								PAVEMENT REMOVED	SUBGRADE COMPACTION	AGGREGATE BASE	TACK COAT FOR INTER. COURSE (@ 0.04 GAL./SQ. YD.)	8" PLAIN CONCRETE PAVEMENT	1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22	1 3/4" ASPHALT CONCRETE INTER. COURSE, TYPE 2, PG 64-22	COMBINATION CURB AND GUTTER, TYPE 3	CURB TYPE 6		
								AREA SQ. YD.	AREA SQ. YD.	DEPTH IN.	VOL. CU. YD.	AREA SQ. YD.	VOL. CU. YD.	VOL. CU. YD.	LENGTH LIN. FT.	LENGTH LIN. FT.		
FT.	FT.	S.F.	S.F.	S.F.	S.F.	S.F.	SQ. YD.	SQ. YD.	IN.	CU. YD.	GAL.	SQ. YD.	CU. YD.	CU. YD.	LIN. FT.	LIN. FT.		
1-DR	78+21.50	RT	11.42	25.77	5.4	5.4	305.1		34	8	8	2		1			40	
2-DR	96+25.96	RT	16.00	25.74	193.2	193.2	798.2		89	8	20	4		3			48	
3-DR	96+30.00	LT	VARIES	VARIES			284.0		32	8	7	2		1				
4-DR	98+22.29	RT	4.00	35	3.5	3.5	147.0	5	17	8	4	1		1	24		6	
5-DR	99+43.45	RT	3.77	35.92	7.1	7.1	149.6		17	8	4	1		1				
6-DR	100+00.64	RT	4.00	50.22	8.0	8.0	216.9		24	8	6	1		1				
7-DR	100+04.89	LT	11.00	64.78	61.0	61.0	834.6		93	8	21	4		3				
8-DR	98+51.80	LT	VARIES	VARIES			188.7	56	21				21				18	
9-DR	103+07.73	LT	7.00	27.76			243.3	24	27				27					
SHEET TOTALS								85	354		70	15	48	11	17	24	112	
TOTALS CARRIED TO GENERAL SUMMARY SHEET 28-31																		

CALCULATED
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DRIVEWAY SUB-SUMMARY

LOR-190-15.65

EARTHWORK SUB-SUMMARY			203	203
			EXCAVATION NOT INCLUDING EMBANKMENT	EMBANKMENT
STREET	SHEET	STATION TO STATION	CU. YDS.	CU. YDS.
S.R. 254	64	STA. 75+00 TO STA. 76+00	2	2
S.R. 254	65	STA. 76+00 TO STA. 78+00	275	11
S.R. 254	66	STA. 78+00 TO STA. 80+00	404	115
S.R. 254	67	STA. 80+00 TO STA. 81+00	292	239
S.R. 254	68	STA. 81+00 TO STA. 82+50	224	115
S.R. 254	69	STA. 82+50 TO STA. 84+00	426	149
S.R. 254	70	STA. 84+00 TO STA. 85+31.36	338	155
S.R. 254	71	STA. 85+31.36 TO STA. 88+84.89	281	158
S.R. 254	72	STA. 88+84.89 TO STA. 90+50	542	132
S.R. 254	73	STA. 90+50 TO STA. 92+50	455	73
S.R. 254	74	STA. 92+50 TO STA. 93+50	195	265
S.R. 254	75	STA. 93+50 TO STA. 94+50	247	308
S.R. 254	76	STA. 94+50 TO STA. 95+50	180	325
S.R. 254	77	STA. 95+50 TO STA. 97+00	311	80
S.R. 254	78	STA. 97+00 TO STA. 99+00	257	57
S.R. 254	79	STA. 99+00 TO STA. 101+00	321	10
S.R. 254	80	STA. 101+00 TO STA. 103+00	203	8
S.R. 254	81	STA. 103+00 TO STA. 105+00	274	6
RAMP "H"	82	STA. 798+00 TO STA. 799+00	41	4
RAMP "H"	83	STA. 799+00 TO STA. 800+50	94	30
RAMP "H"	84	STA. 800+50 TO STA. 802+00	106	45
RAMP "H"	85	STA. 802+00 TO STA. 804+00	164	83
RAMP "H"	86	STA. 804+00 TO STA. 806+00	155	98
RAMP "H"	87	STA. 806+00 TO STA. 807+97.33	169	82
RAMP "J"	88	STA. 807+50 TO STA. 808+50	59	8
RAMP "J"	89	STA. 808+50 TO STA. 810+00	81	20
RAMP "J"	90	STA. 810+00 TO STA. 811+50	136	193
RAMP "J"	91	STA. 811+50 TO STA. 813+00	179	322
RAMP "J"	92	STA. 813+00 TO STA. 815+00	185	429
RAMP "J"	93	STA. 815+00 TO STA. 817+00	99	25
RAMP "J"	94	STA. 817+00 TO STA. 818+00	46	4
RAMP "K"	95	STA. 811+50 TO STA. 812+50	108	12
RAMP "K"	96	STA. 812+50 TO STA. 814+00	115	33
RAMP "K"	97	STA. 814+00 TO STA. 815+50	105	34
RAMP "K"	98	STA. 815+50 TO STA. 817+00	90	53
RAMP "K"	99	STA. 817+00 TO STA. 818+50	78	25
RAMP "K"	100	STA. 818+50 TO STA. 820+00	57	7
RAMP "L"	101	STA. 803+50 TO STA. 805+00	65	6
RAMP "L"	102	STA. 805+00 TO STA. 806+50	104	10
RAMP "L"	103	STA. 806+50 TO STA. 808+00	70	5
RAMP "L"	104	STA. 808+00 TO STA. 809+50	387	54
RAMP "L"	105	STA. 809+50 TO STA. 811+50	288	83
RAMP "L"	106	STA. 811+50 TO STA. 813+53.34	312	79
TOTAL			8520	3952

SEEDING & MULCHING SUB-SUMMARY				870
				SEEDING & MULCHING
STREET	SHEET	STATION TO STATION	SQ. YDS.	
S.R. 254	64	STA. 75+00 TO STA. 76+00	29	
S.R. 254	65	STA. 76+00 TO STA. 78+00	481	
S.R. 254	66	STA. 78+00 TO STA. 80+00	753	
S.R. 254	67	STA. 80+00 TO STA. 81+00	562	
S.R. 254	68	STA. 81+00 TO STA. 82+50	368	
S.R. 254	69	STA. 82+50 TO STA. 84+00	764	
S.R. 254	70	STA. 84+00 TO STA. 85+31.36	769	
S.R. 254	71	STA. 85+31.36 TO STA. 88+84.89	282	
S.R. 254	72	STA. 88+84.89 TO STA. 90+50	790	
S.R. 254	73	STA. 90+50 TO STA. 92+50	501	
S.R. 254	74	STA. 92+50 TO STA. 93+50	500	
S.R. 254	75	STA. 93+50 TO STA. 94+50	542	
S.R. 254	76	STA. 94+50 TO STA. 95+50	486	
S.R. 254	77	STA. 95+50 TO STA. 97+00	323	
S.R. 254	78	STA. 97+00 TO STA. 99+00	436	
S.R. 254	79	STA. 99+00 TO STA. 101+00	240	
S.R. 254	80	STA. 101+00 TO STA. 103+00	178	
S.R. 254	81	STA. 103+00 TO STA. 105+00	190	
RAMP "H"	82	STA. 798+00 TO STA. 799+00	111	
RAMP "H"	83	STA. 799+00 TO STA. 800+50	324	
RAMP "H"	84	STA. 800+50 TO STA. 802+00	337	
RAMP "H"	85	STA. 802+00 TO STA. 804+00	501	
RAMP "H"	86	STA. 804+00 TO STA. 806+00	487	
RAMP "H"	87	STA. 806+00 TO STA. 807+97.33	404	
RAMP "J"	88	STA. 807+50 TO STA. 808+50	113	
RAMP "J"	89	STA. 808+50 TO STA. 810+00	278	
RAMP "J"	90	STA. 810+00 TO STA. 811+50	659	
RAMP "J"	91	STA. 811+50 TO STA. 813+00	770	
RAMP "J"	92	STA. 813+00 TO STA. 815+00	908	
RAMP "J"	93	STA. 815+00 TO STA. 817+00	449	
RAMP "J"	94	STA. 817+00 TO STA. 818+00	176	
RAMP "K"	95	STA. 811+50 TO STA. 812+50	134	
RAMP "K"	96	STA. 812+50 TO STA. 814+00	292	
RAMP "K"	97	STA. 814+00 TO STA. 815+50	326	
RAMP "K"	98	STA. 815+50 TO STA. 817+00	395	
RAMP "K"	99	STA. 817+00 TO STA. 818+50	315	
RAMP "K"	100	STA. 818+50 TO STA. 820+00	221	
RAMP "L"	101	STA. 803+50 TO STA. 805+00	219	
RAMP "L"	102	STA. 805+00 TO STA. 806+50	425	
RAMP "L"	103	STA. 806+50 TO STA. 808+00	270	
RAMP "L"	104	STA. 808+00 TO STA. 809+50	737	
RAMP "L"	105	STA. 809+50 TO STA. 811+50	712	
RAMP "L"	106	STA. 811+50 TO STA. 813+53.34	605	
TOTAL				18,362

THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL NOTES:

ITEM 870 - TOPSOIL
= (111 CU. YD. / 1,000 SQ. YD.) * (18,362 SQ. YD.) = 2,038 CU. YD.

ITEM 870 - SOIL ANALYSIS TEST
= (1 TEST / 10,000 CU. YD.) * (2,059 CU. YD.) (MINIMUM = 2) = 2 EACH

ITEM 870 - COMMERCIAL FERTILIZER
= (1 TON / 7,410 SQ. YD.) * (18,549 SQ. YD.) = 3 TON

ITEM 870 - AGRICULTURAL LIME
= (1 TON / 2,420 SQ. YD.) * (18,549 SQ. YD.) = 8 TON

ITEM 870 - WATER
= (0.0027 M. GAL. / SQ. YD.) * (18,549 SQ. YD.) = 50 M. GAL.

10:05AM 06-05-2001 [0:\33197\DWG\S\SR254\93197P2.DWG] M.M

STATION	SHOULDER GRADE BREAK	LEFT EDGE OF SHOULDER ELEVATION	OFFSET TO RIGHT EDGE OF SHOULDER	LEFT SHOULDER SLOPE	LEFT EDGE OF PAVEMENT ELEVATION	OFFSET TO LEFT EDGE OF PROPOSED PAVEMENT	WIDENING	* EXISTING RIGHT EDGE OF PAVEMENT ELEVATION	OFFSET TO EXISTING LEFT EDGE OF PAVEMENT	EXISTING PAVEMENT SLOPE	* EXISTING PROFILE GRADE ELEVATION	RIGHT SHOULDER SLOPE	OFFSET TO RIGHT EDGE OF SHOULDER	ELEVATION AT RIGHT EDGE OF SHOULDER	SHOULDER GRADE BREAK
813+00.00	0.0348	672.05	-27.00	-0.0417	672.18	-24.00	8.00	671.98	-16.00	-0.0069	672.09	-0.0417	6.00	672.09	0.0486
813+25.00	0.0311	671.34	-27.00	-0.0417	671.47	-24.00	8.00	671.30	-16.00	-0.0106	671.47	-0.0417	6.00	671.47	0.0523
813+50.00	0.0298	670.64	-27.00	-0.0417	670.77	-24.00	8.00	670.61	-16.00	-0.0119	670.80	-0.0417	6.00	670.80	0.0536
813+75.00	0.0367	670.02	-27.00	-0.0417	670.15	-24.00	8.00	669.94	-16.00	-0.0050	670.02	-0.0417	6.00	670.02	0.0467
814+00.00	0.0417	669.33	-27.00	-0.0417	669.46	-24.00	8.00	669.21	-16.00	0.0000	669.21	-0.0417	6.00	669.21	0.0417
814+25.00	0.0467	668.60	-27.00	-0.0417	668.73	-24.00	8.00	668.44	-16.00	0.0050	668.36	-0.0417	6.00	668.36	0.0367
814+50.00	0.0536	667.88	-26.50	-0.0417	668.01	-23.50	7.50	667.67	-16.00	0.0119	667.48	-0.0417	6.00	667.48	0.0298
814+75.00	0.0611	667.15	-26.00	-0.0417	667.28	-23.00	7.00	666.89	-16.00	0.0194	666.58	-0.0417	6.00	666.58	0.0223
815+00.00	0.0673	666.35	-25.50	-0.0417	666.48	-22.50	6.50	666.06	-16.00	0.0256	665.65	-0.0417	6.00	665.65	0.0161
815+25.00	0.0700	665.56	-25.00	-0.0375	665.68	-22.00	6.00	665.23	-16.00	0.0325	664.71	-0.0417	6.00	664.71	0.0092
815+50.00	0.0700	664.80	-24.50	-0.0294	664.88	-21.50	5.50	664.41	-16.00	0.0406	663.76	-0.0417	6.00	663.76	0.0011
815+75.00	0.0700	664.02	-24.00	-0.0219	664.08	-21.00	5.00	663.59	-16.00	0.0481	662.82	-0.0481	6.00	662.78	0.0000
816+00.00	0.0700	663.26	-23.50	-0.0119	663.29	-20.50	4.50	662.78	-16.00	0.0581	661.85	-0.0581	6.00	661.75	0.0000
816+25.00	0.0700	662.47	-23.00	-0.0025	662.48	-20.00	4.00	661.96	-16.00	0.0675	660.88	-0.0675	6.00	660.73	0.0000
816+50.00	0.0700	661.63	-22.50	0.0038	661.62	-19.50	3.50	661.11	-16.00	0.0738	659.93	-0.0738	6.00	659.74	0.0000
816+75.00	0.0700	660.71	-22.00	0.0069	660.69	-19.00	3.00	660.21	-16.00	0.0769	658.98	-0.0769	6.00	658.77	0.0000
817+00.00	0.0700	659.76	-21.50	0.0094	659.73	-18.50	2.50	659.28	-16.00	0.0794	658.01	-0.0794	6.00	657.78	0.0000
817+25.00	0.0700	658.82	-21.00	0.0106	658.79	-18.00	2.00	658.38	-16.00	0.0806	657.09	-0.0806	6.00	656.86	0.0000
817+50.00	0.0700	657.92	-20.50	0.0075	657.90	-17.50	1.50	657.53	-16.00	0.0775	656.29	-0.0775	6.00	656.08	0.0000
817+75.00	0.0700	657.05	-20.00	0.0050	657.04	-17.00	1.00	656.71	-16.00	0.0750	655.51	-0.0750	6.00	655.31	0.0000
818+00.00	0.0700	656.26	-19.50	0.0100	656.23	-16.50	0.50	655.94	-16.00	0.0800	654.66	-0.0800	6.00	654.43	0.0000
818+25.00	0.0700	655.59	-19.00	0.0087	655.56	-16.00	0.00	655.31	-16.00	0.0787	654.05	-0.0787	6.00	653.83	0.0000
818+50.00	0.0700	655.01	-19.00	0.0100	654.98	-16.00	0.00	654.73	-16.00	0.0800	653.45	-0.0800	6.00	653.22	0.0000
818+75.00	0.0700	654.46	-19.00	0.0125	654.42	-16.00	0.00	654.17	-16.00	0.0825	652.85	-0.0825	6.00	652.61	0.0000
819+00.00	0.0700	653.94	-19.00	0.0125	653.90	-16.00	0.00	653.65	-16.00	0.0825	652.33	-0.0825	6.00	652.09	0.0000
819+25.00	0.0700	653.56	-19.00	0.0138	653.52	-16.00	0.00	653.27	-16.00	0.0838	651.93	-0.0838	6.00	651.68	0.0000
819+50.00	0.0700	653.11	-19.00	0.0087	653.08	-16.00	0.00	652.83	-16.00	0.0787	651.57	-0.0787	6.00	651.35	0.0000
819+57.31	0.0700	653.00	-19.00	0.0081	652.98	-16.00	0.00	652.73	-16.00	0.0781	651.48	-0.0781	6.00	651.26	0.0000

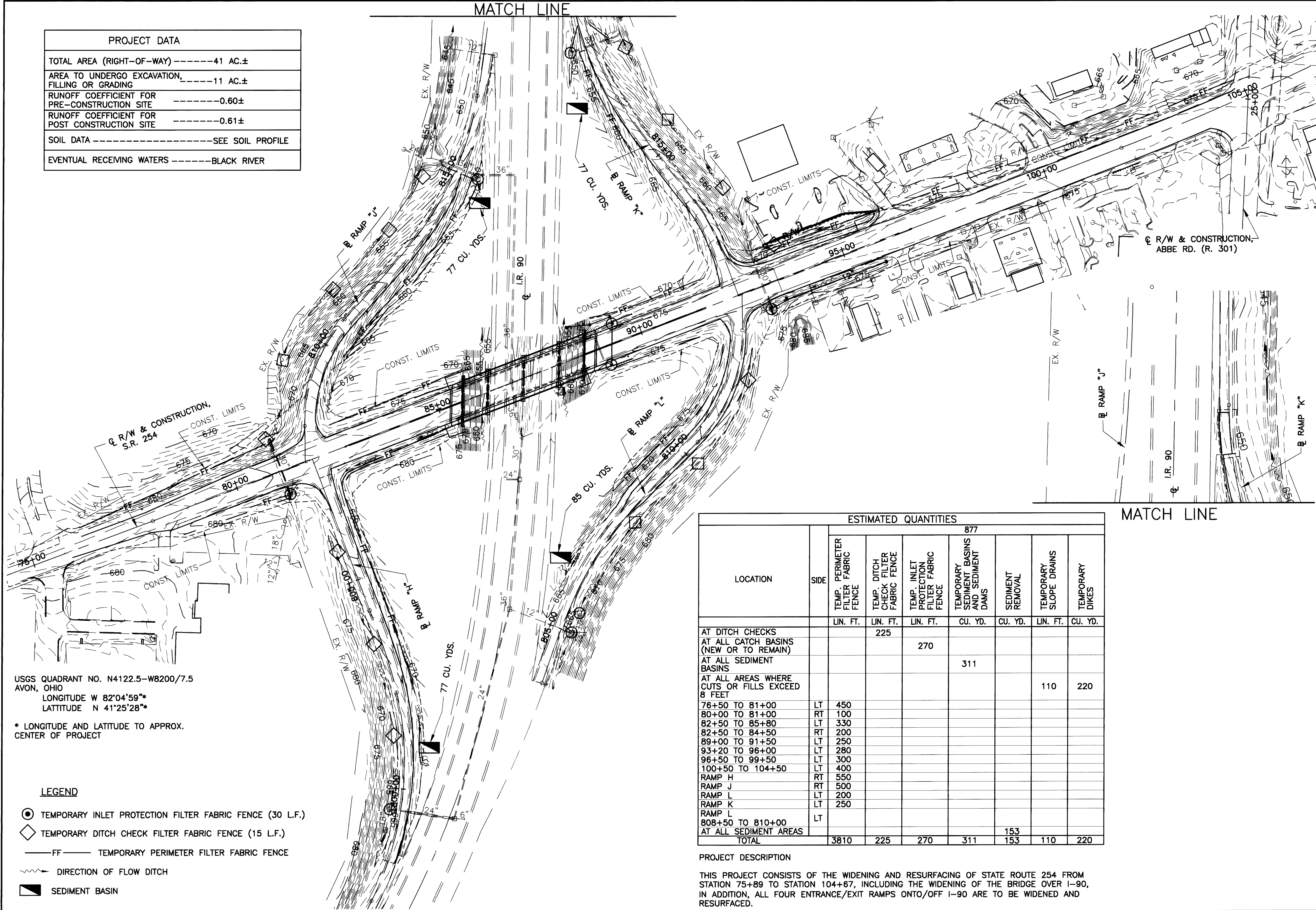
NOTE: EXISTING PAVEMENT ELEVATIONS DO NOT INCLUDE PROPOSED ASHALT OVERLAY OF 1 3/4" 448 INTERMEDIATE COURSE AND 1 1/4" 446 SURFACE COURSE

CALCULATED
M.M
CHECKED
DW

RAMP "K" ELEVATION TABLE

LOR-190-15.65

PROJECT DATA	
TOTAL AREA (RIGHT-OF-WAY) -----	41 AC.±
AREA TO UNDERGO EXCAVATION, FILLING OR GRADING -----	11 AC.±
RUNOFF COEFFICIENT FOR PRE-CONSTRUCTION SITE -----	0.60±
RUNOFF COEFFICIENT FOR POST CONSTRUCTION SITE -----	0.61±
SOIL DATA -----	SEE SOIL PROFILE
EVENTUAL RECEIVING WATERS -----	BLACK RIVER



USGS QUADRANT NO. N4122.5-W8200/7.5
 AVON, OHIO
 LONGITUDE W 82°04'59"*
 LATITUDE N 41°25'28"*

* LONGITUDE AND LATITUDE TO APPROX. CENTER OF PROJECT

- LEGEND**
- ⊙ TEMPORARY INLET PROTECTION FILTER FABRIC FENCE (30 L.F.)
 - ◇ TEMPORARY DITCH CHECK FILTER FABRIC FENCE (15 L.F.)
 - FF— TEMPORARY PERIMETER FILTER FABRIC FENCE
 - DIRECTION OF FLOW DITCH
 - ▣ SEDIMENT BASIN

LOCATION	SIDE	ESTIMATED QUANTITIES						
		TEMP. PERIMETER FILTER FABRIC FENCE	TEMP. DITCH CHECK FILTER FABRIC FENCE	TEMP. INLET PROTECTION FILTER FABRIC FENCE	TEMPORARY SEDIMENT BASINS AND SEDIMENT DAMS	SEDIMENT REMOVAL	TEMPORARY SLOPE DRAINS	TEMPORARY DIKES
		LN. FT.	LN. FT.	LN. FT.	CU. YD.	CU. YD.	LN. FT.	CU. YD.
AT DITCH CHECKS			225					
AT ALL CATCH BASINS (NEW OR TO REMAIN)				270				
AT ALL SEDIMENT BASINS					311			
AT ALL AREAS WHERE CUTS OR FILLS EXCEED 8 FEET							110	220
76+50 TO 81+00	LT	450						
80+00 TO 81+00	RT	100						
82+50 TO 85+80	LT	330						
82+50 TO 84+50	RT	200						
89+00 TO 91+50	LT	250						
93+20 TO 96+00	LT	280						
96+50 TO 99+50	LT	300						
100+50 TO 104+50	LT	400						
RAMP H	RT	550						
RAMP J	RT	500						
RAMP L	LT	200						
RAMP K	LT	250						
RAMP L	LT							
808+50 TO 810+00	LT					153		
AT ALL SEDIMENT AREAS								
TOTAL		3810	225	270	311	153	110	220

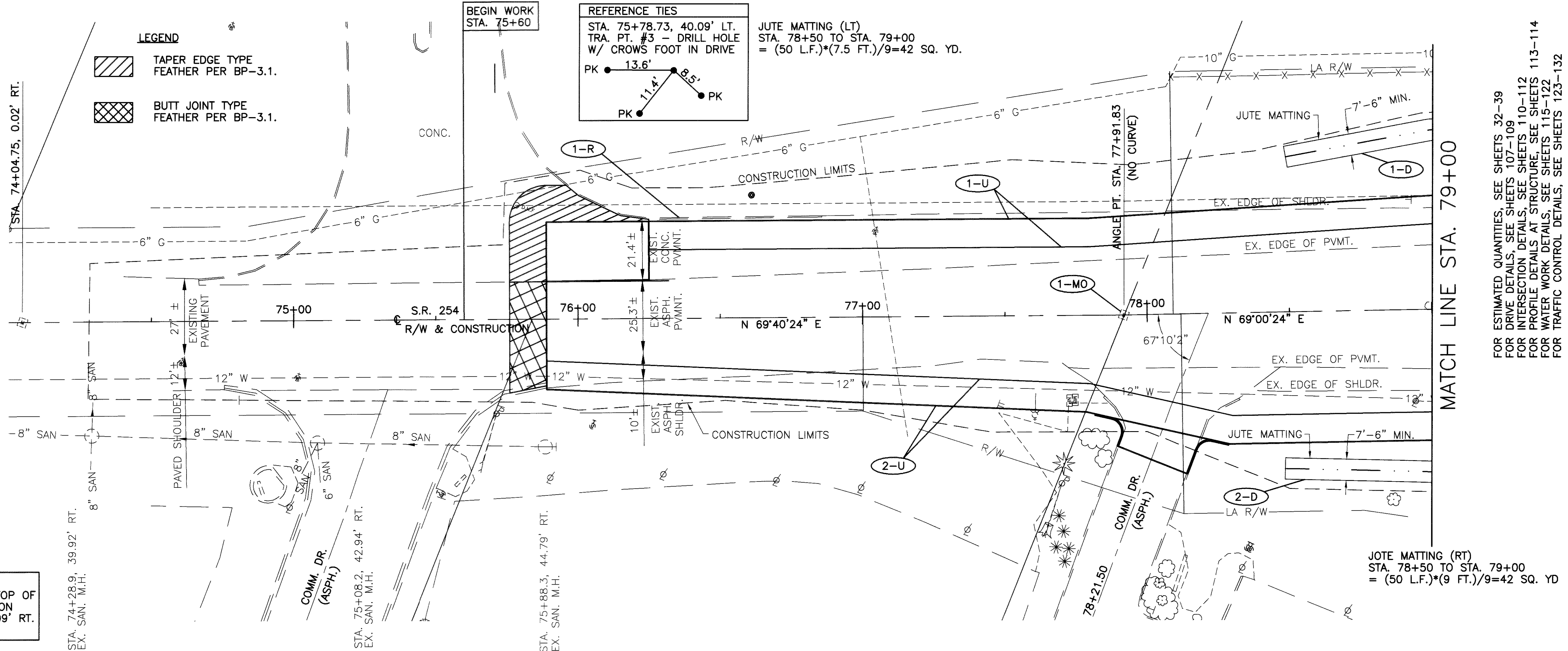
PROJECT DESCRIPTION
 THIS PROJECT CONSISTS OF THE WIDENING AND RESURFACING OF STATE ROUTE 254 FROM STATION 75+89 TO STATION 104+67, INCLUDING THE WIDENING OF THE BRIDGE OVER I-90, IN ADDITION, ALL FOUR ENTRANCE/EXIT RAMPS ONTO/OFF I-90 ARE TO BE WIDENED AND RESURFACED.



STORM WATER POLLUTION PREVENTION PLAN (S.R.254)

LOR - 190 - 13.20

[0:\93197\DWG\S\SR254\931975.DWG] NUN 08-28-2001 11:53AM

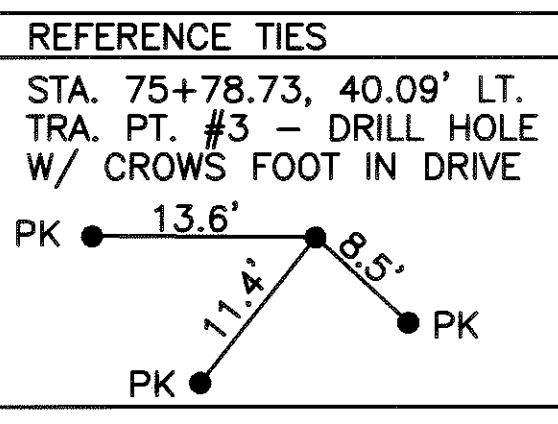


BENCHMARK:
CHISLED SQUARE IN TOP OF
LIGHT POLE FOUNDATION
STA. 74+56.98, 180.09' RT.
ELEV. = 678.16

LEGEND

TAPER EDGE TYPE
FEATHER PER BP-3.1.

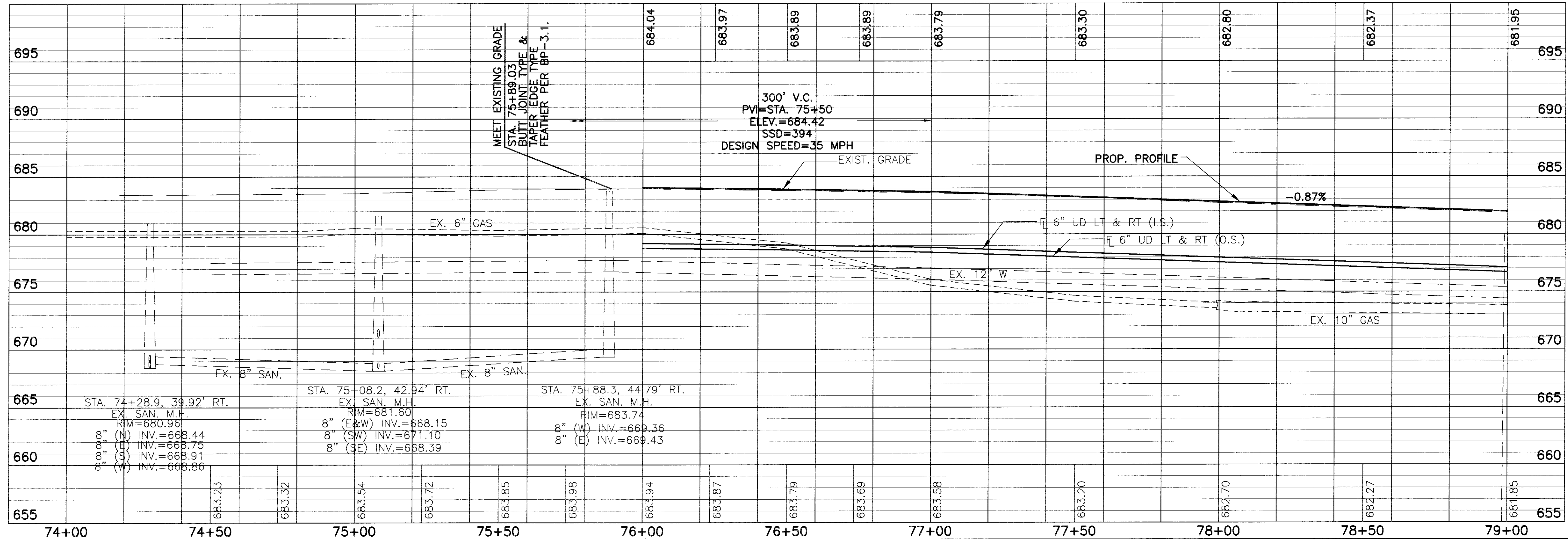
BUTT JOINT TYPE
FEATHER PER BP-3.1.



JUTE MATTING (LT)
STA. 78+50 TO STA. 79+00
= (50 L.F.)*(7.5 FT.)/9=42 SQ. YD.

JUTE MATTING (RT)
STA. 78+50 TO STA. 79+00
= (50 L.F.)*(9 FT.)/9=42 SQ. YD.

FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
FOR DRIVE DETAILS, SEE SHEETS 107-109
FOR INTERSECTION DETAILS, SEE SHEETS 110-112
FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
FOR WATER WORK DETAILS, SEE SHEETS 115-122
FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE
STA. 74+00 TO STA. 79+00

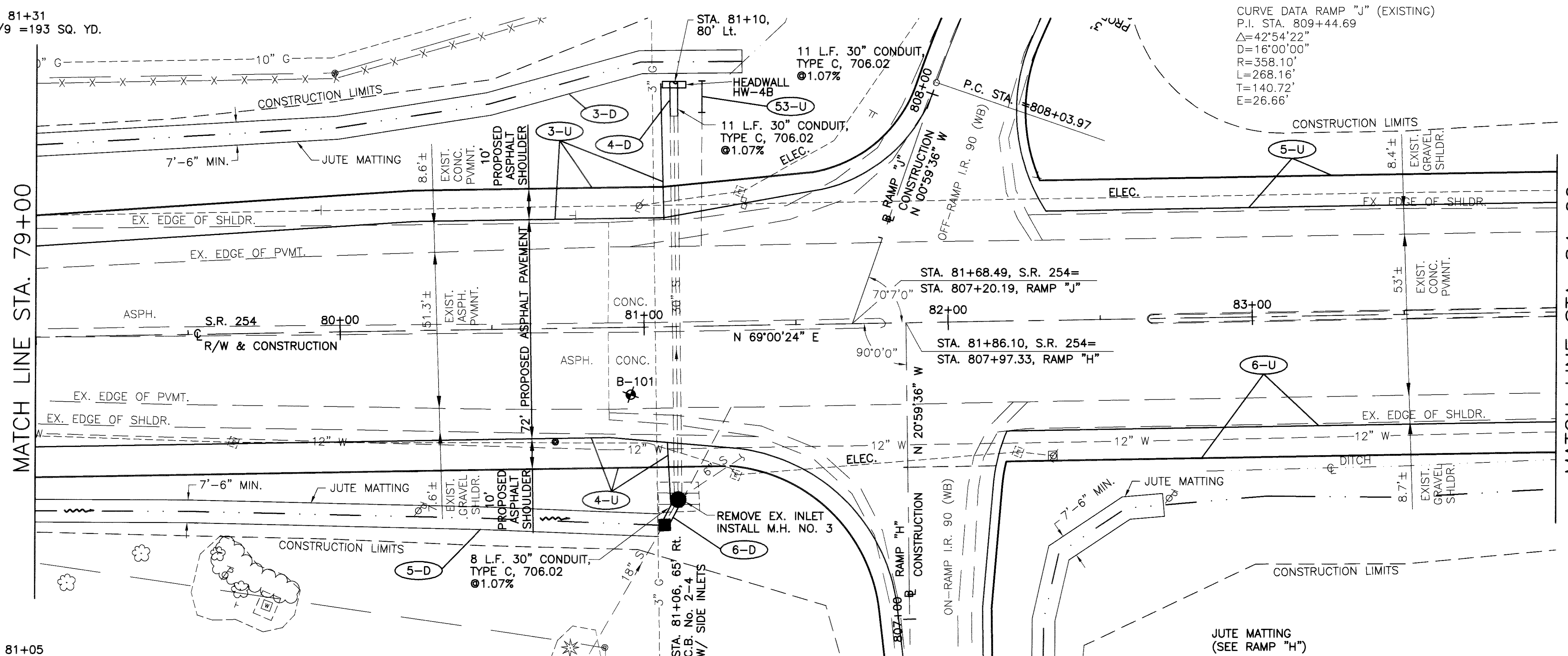
LOR - 190 - 15.65

45
161

[0:19177.DWG \SR254\PCP01001.DWG] N.W. 08-07-2001 3:26PM

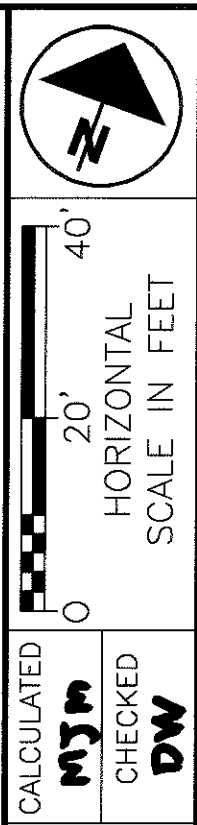
JUTE MATTING (LT)
 STA. 79+00 TO STA. 81+31
 (231 L.F.)*(7.5 FT.)/9 = 193 SQ. YD.

JUTE MATTING (RT)
 STA. 79+00 TO STA. 81+05
 (205 L.F.)*(7.5 FT.)/9 = 171 SQ. YD.

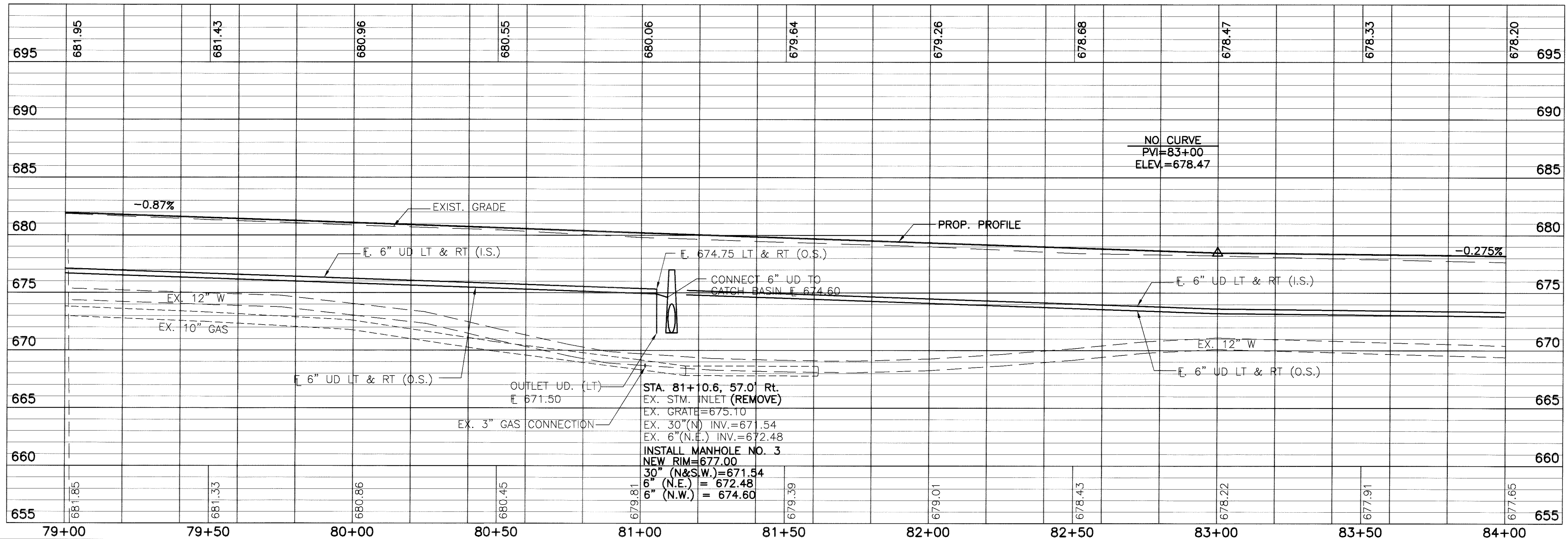


CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 809+44.69
 $\Delta=42^{\circ}54'22''$
 $D=16^{\circ}00'00''$
 $R=358.10'$
 $L=268.16'$
 $T=140.72'$
 $E=26.66'$

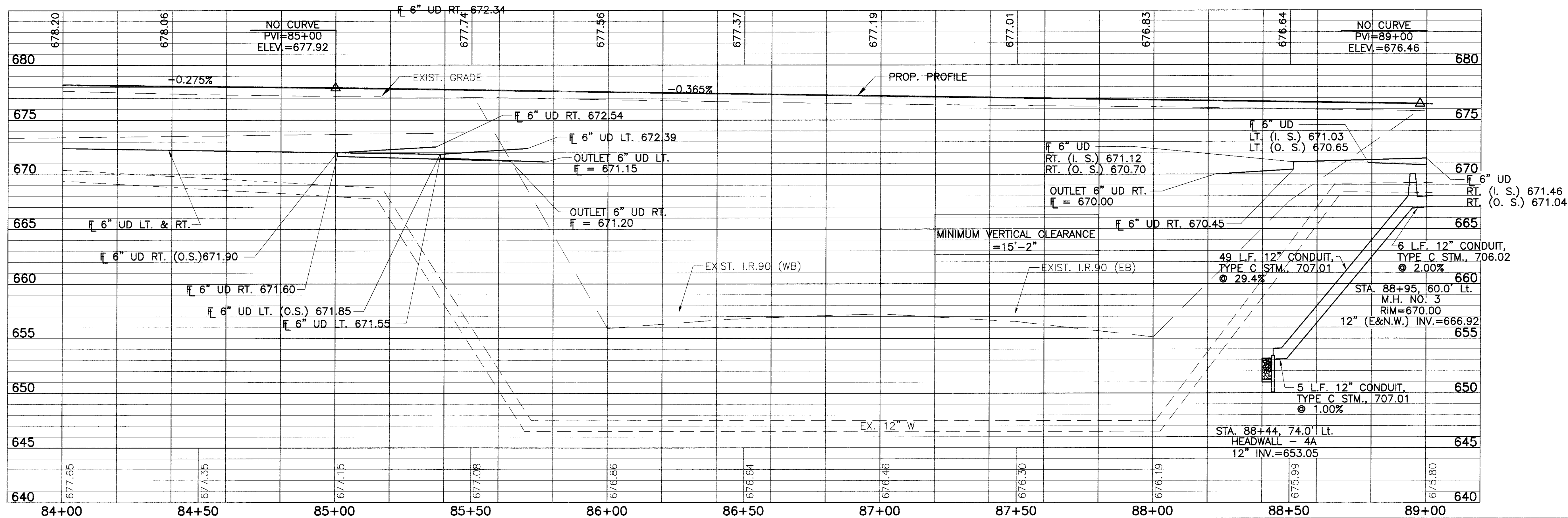
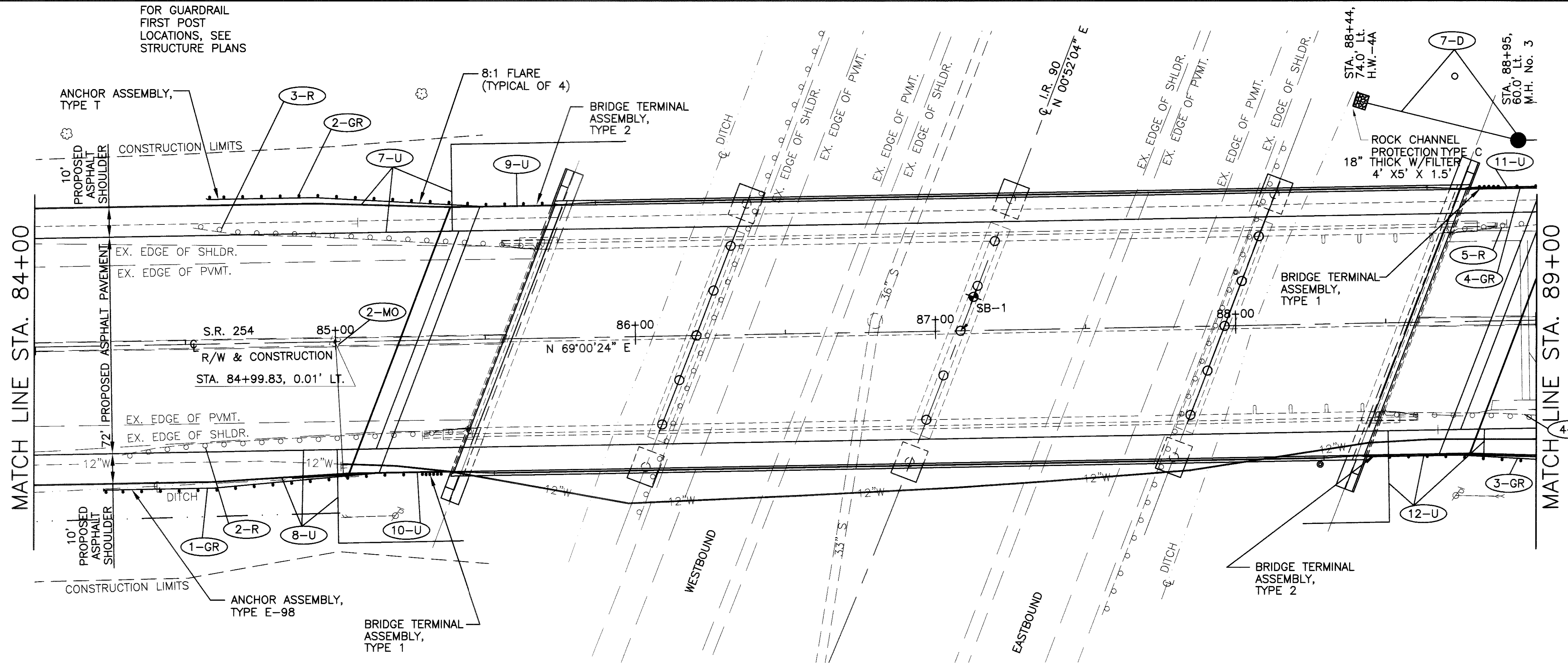
FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE
 STA. 79+00 TO STA. 84+00



LOR - 190 - 15.65



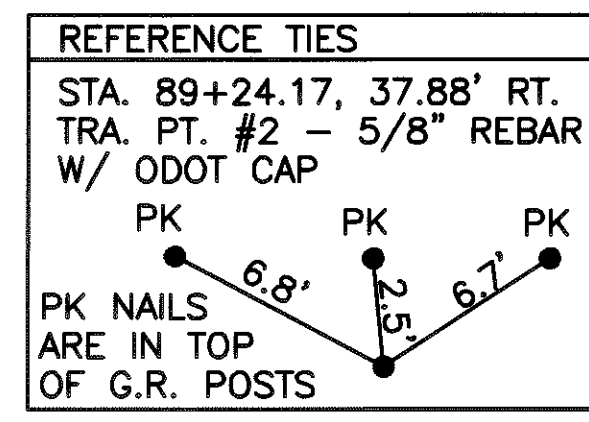
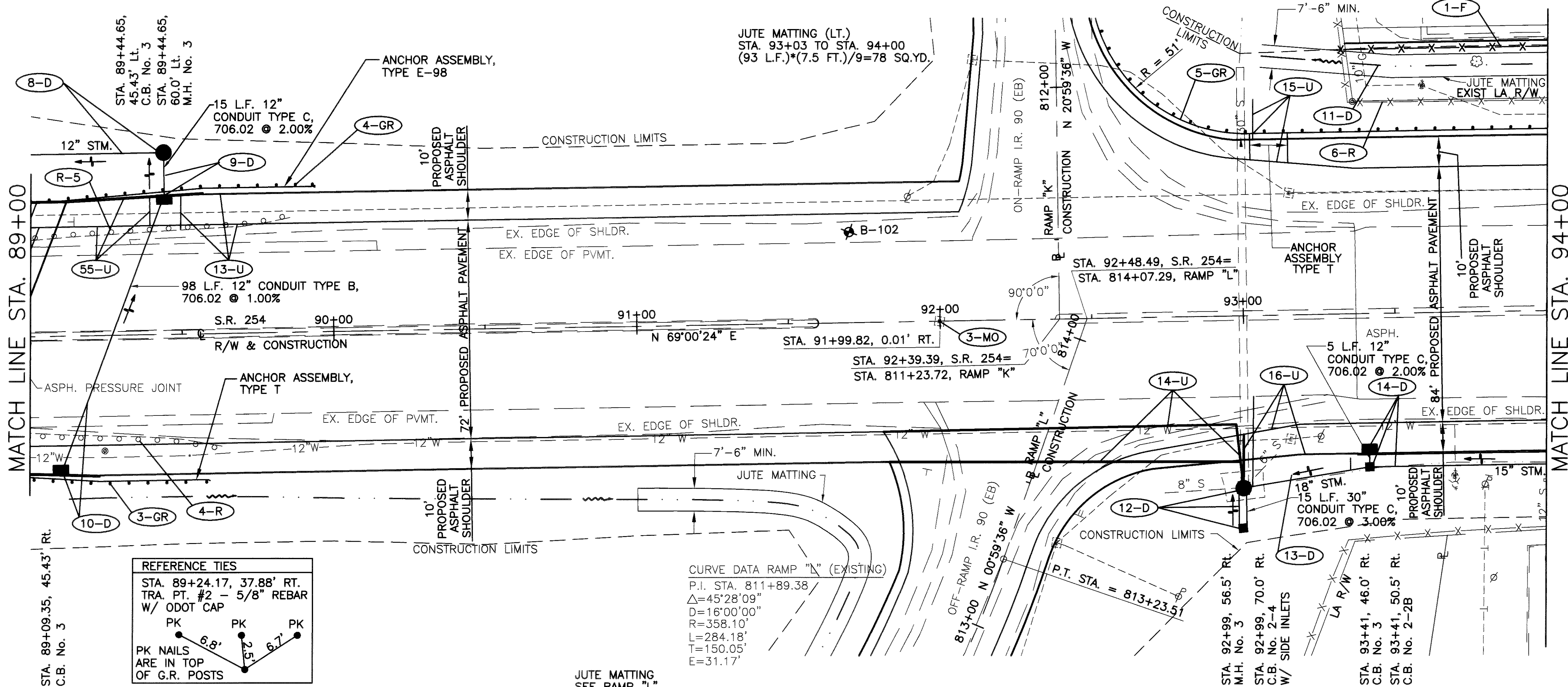
FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



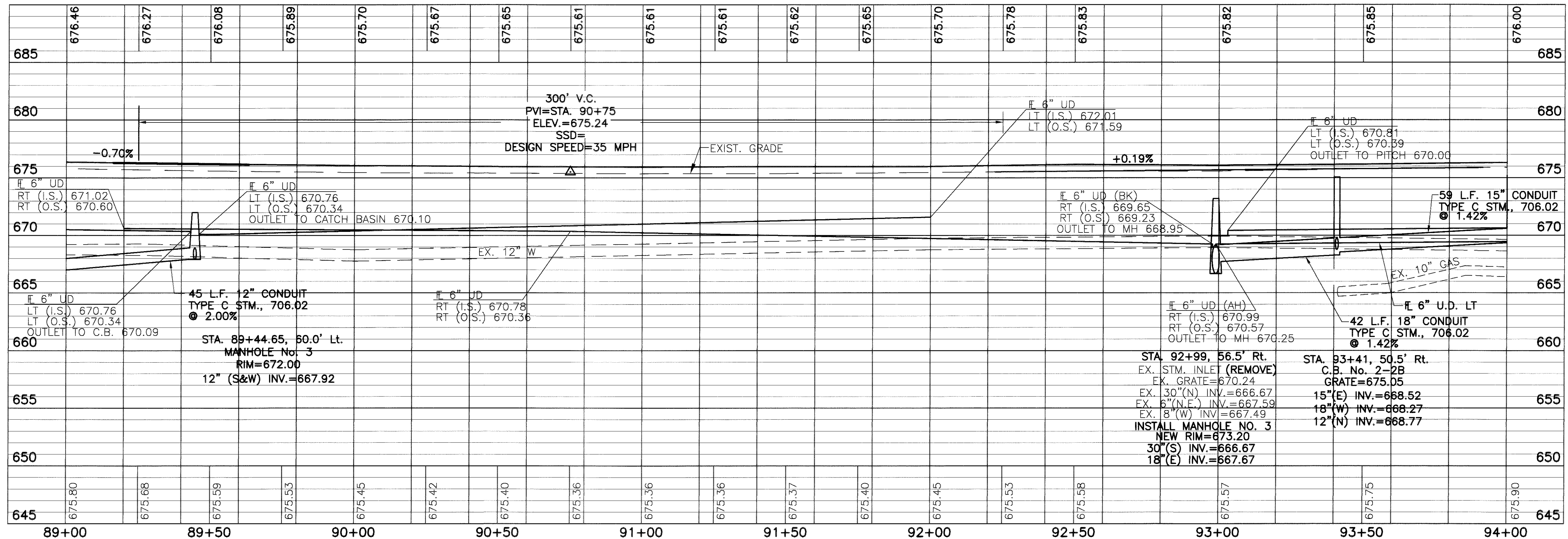
PLAN AND PROFILE
STA. 84+00 TO STA. 89+00

LOR - 190 - 15.65

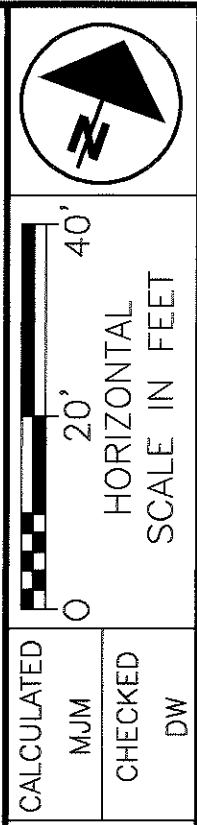
[0:\93197\UMCS\51254\PROJ\3001.DWG] NAW
 08-21-2001 3:29PM



CURVE DATA RAMP "L" (EXISTING)
 P.I. STA. 811+89.38
 $\Delta=45^{\circ}28'09''$
 $D=16^{\circ}00'00''$
 $R=358.10'$
 $L=284.18'$
 $T=150.05'$
 $E=31.17'$



FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132

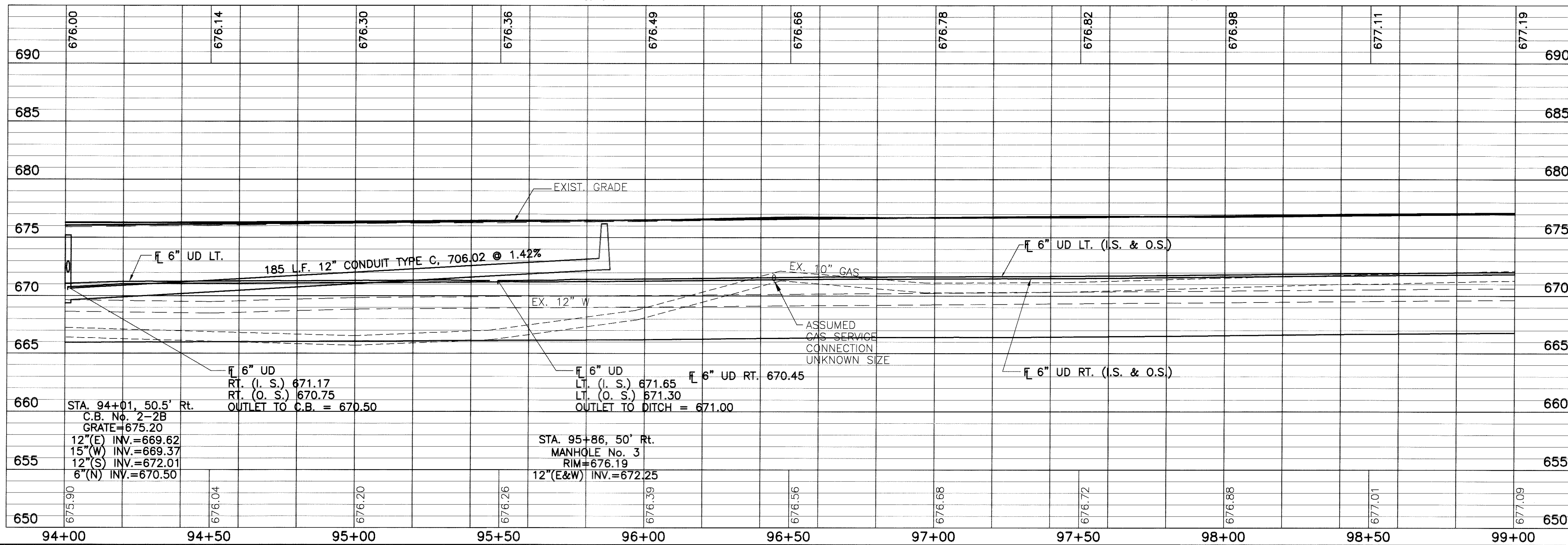
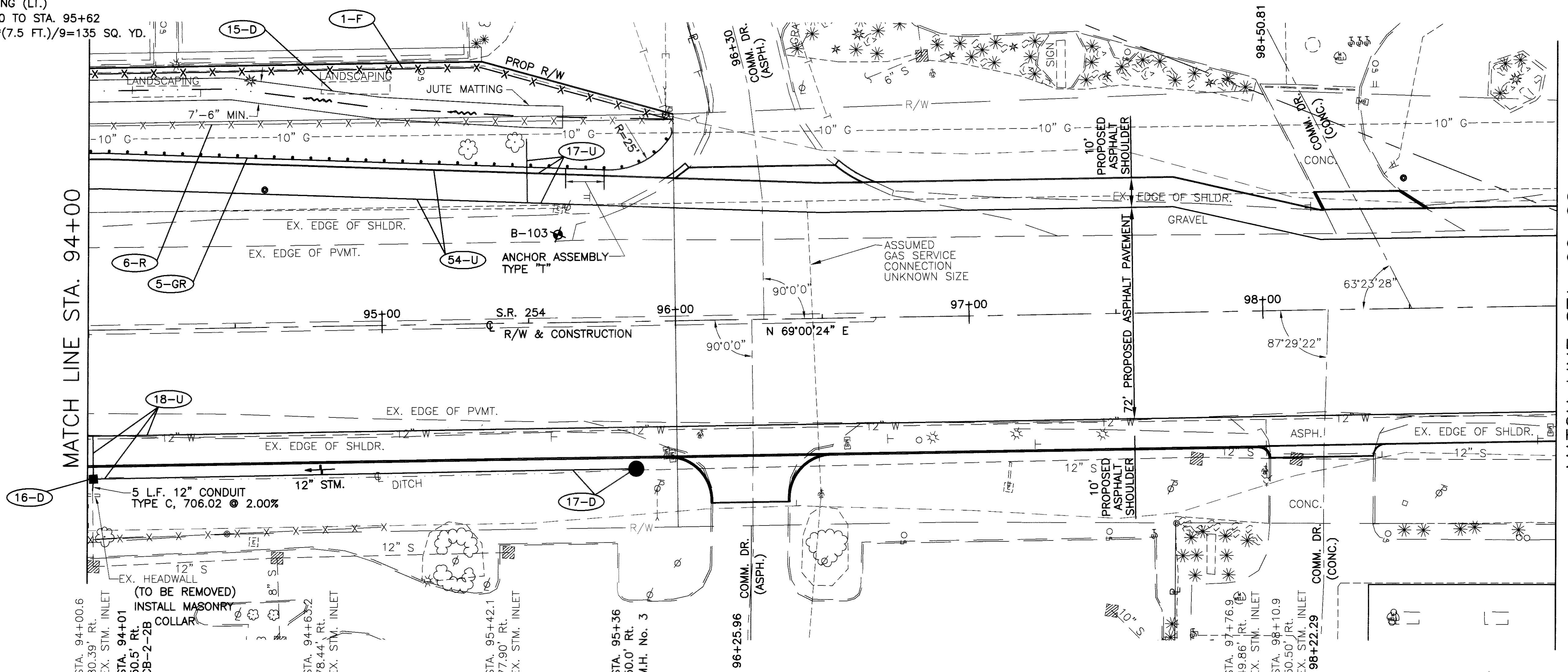


PLAN AND PROFILE
STA. 89+00 TO STA. 94+00

LOR - 190 - 15.65

I:\03\190\1565\190-15.65\190-15.65.dwg J:NMW
 08-07-2001 4:28PM

JUTE MATTING (LT.)
 STA. 94+00 TO STA. 95+62
 (162 L.F.)*(7.5 FT.)/9=135 SQ. YD.



FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE
 STA. 94+00 TO STA. 99+00

LOR - 190 - 15.65



CALCULATED
 .M3M
 CHECKED
 .DW

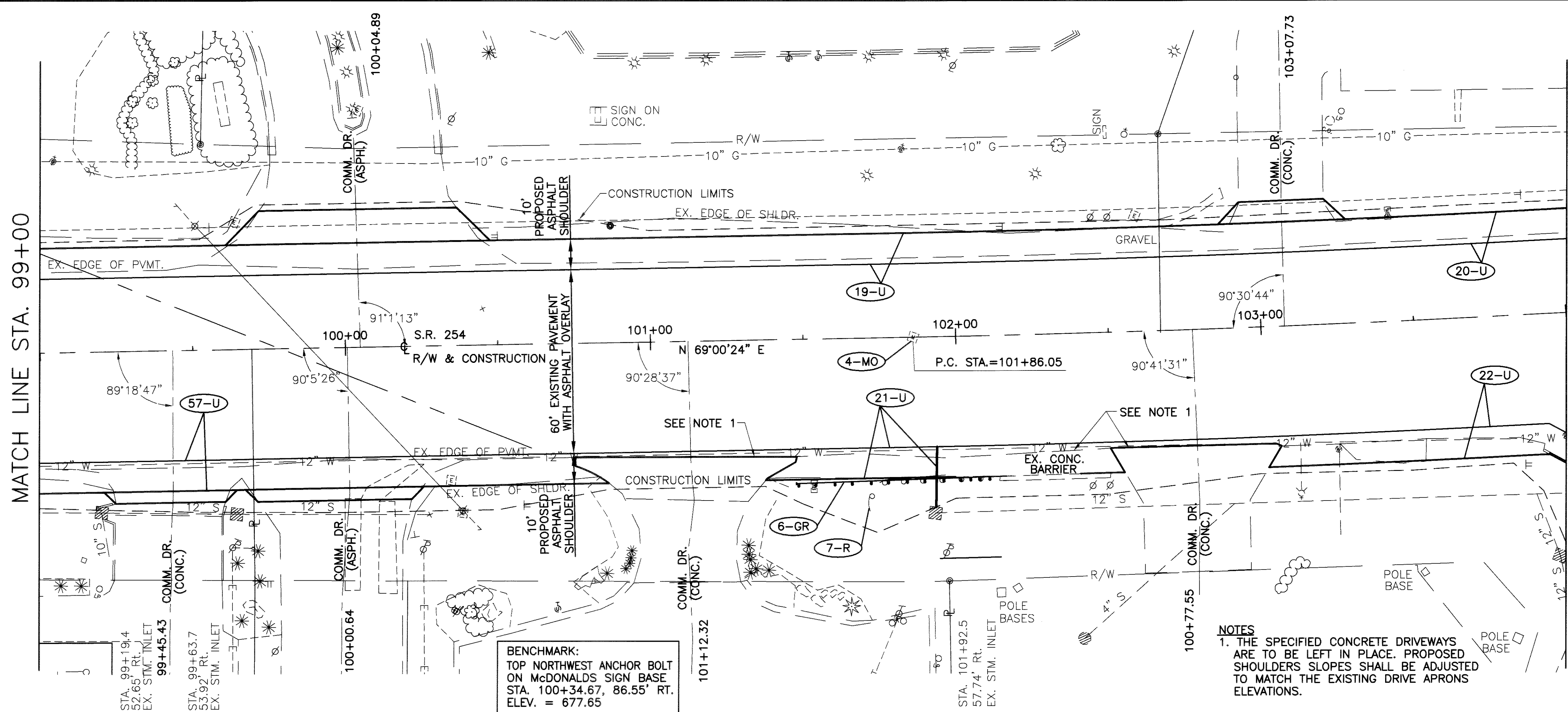
HORIZONTAL
 SCALE IN FEET

PLAN AND PROFILE
 STA. 99+00 TO STA. 104+00

LOR - 190 - 15.65

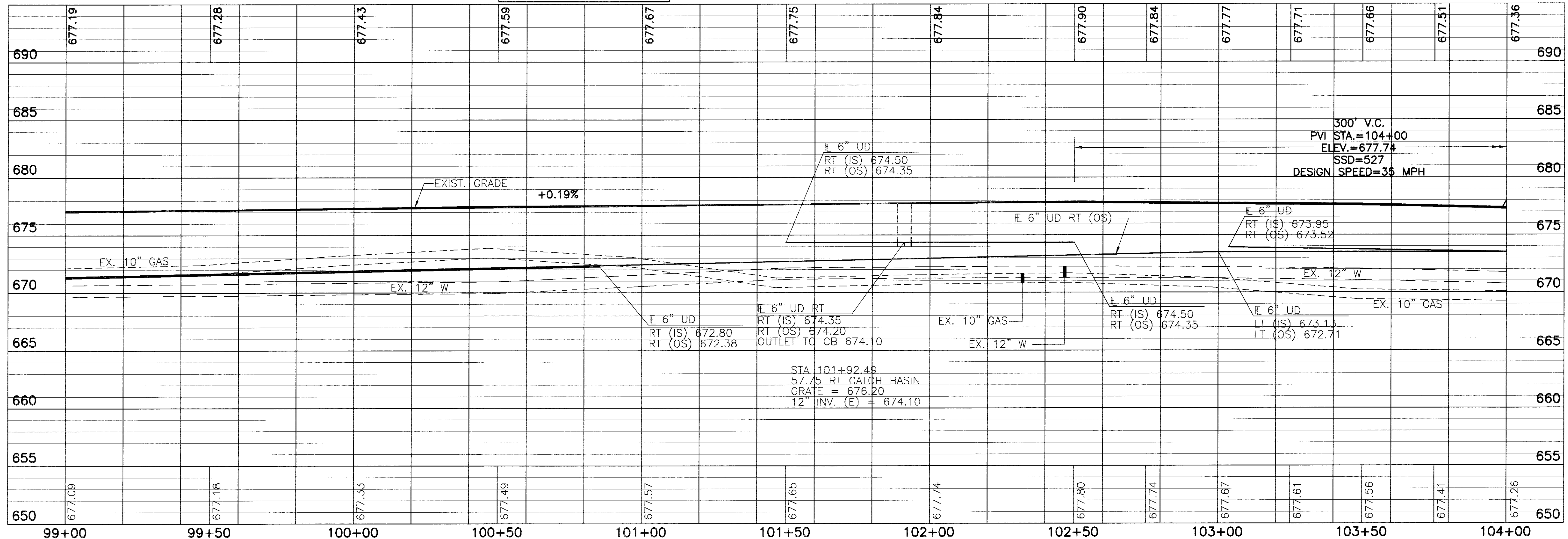
50
 161

EXISTING CURVE DATA
 P.I. STA. 104+98.86,
 C R/W & CONSTRUCTION
 $\Delta = 6^{\circ}15'00''$
 $D_c = 1^{\circ}00'00''$
 $R = 5729.58'$
 $T = 312.81'$
 $L = 625.00'$
 $E = 8.53'$

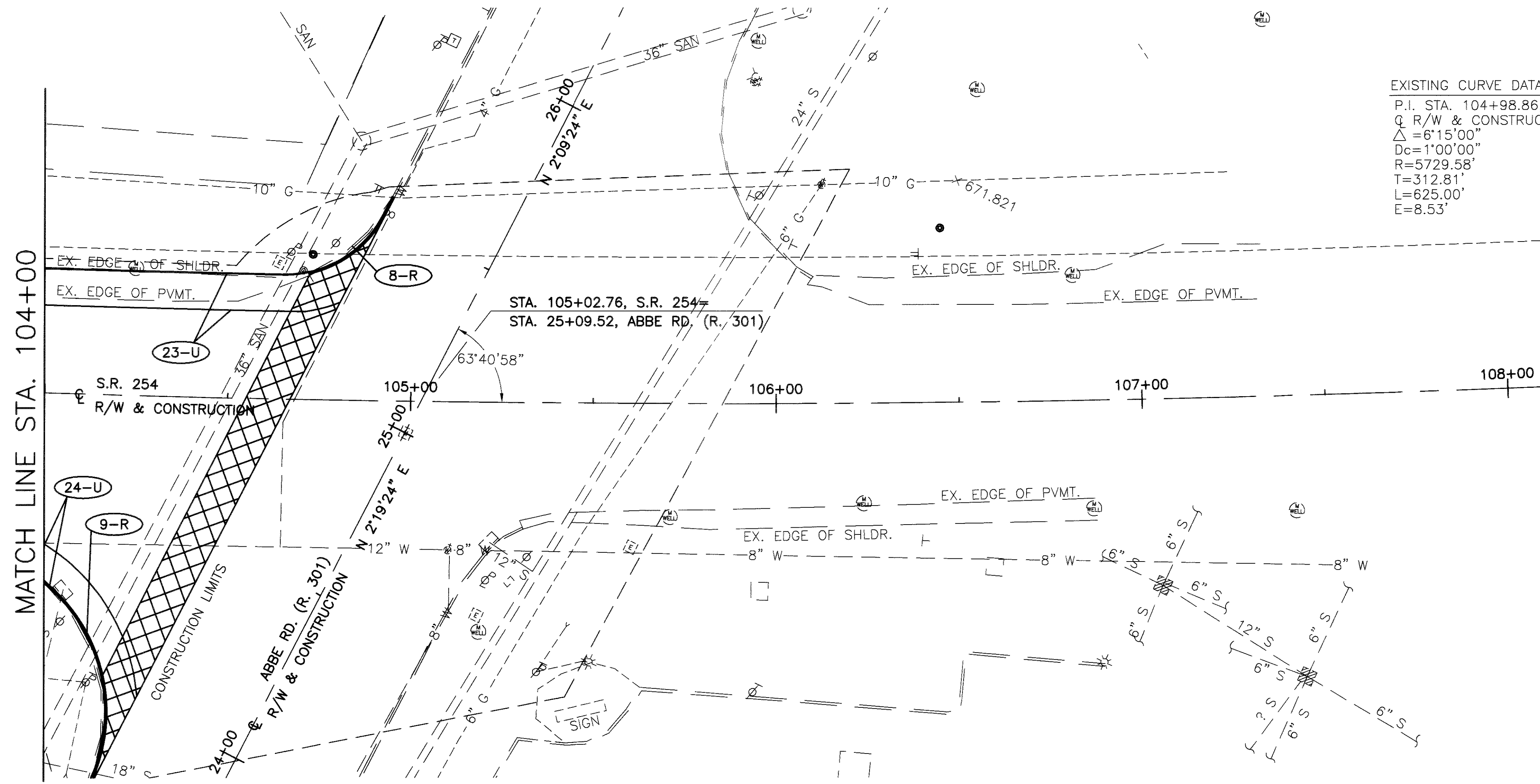


BENCHMARK:
 TOP NORTHWEST ANCHOR BOLT
 ON McDONALDS SIGN BASE
 STA. 100+34.67, 86.55' RT.
 ELEV. = 677.65

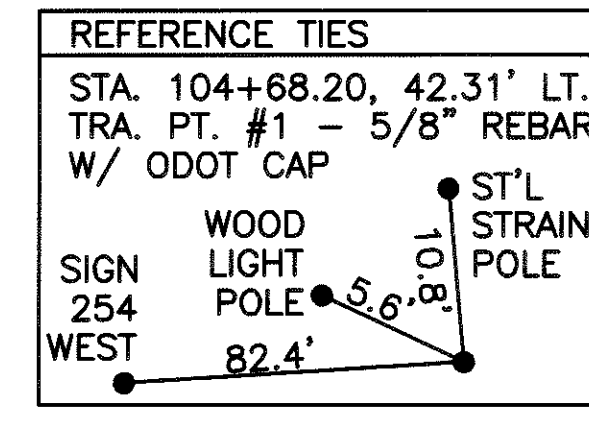
NOTES
 1. THE SPECIFIED CONCRETE DRIVEWAYS
 ARE TO BE LEFT IN PLACE. PROPOSED
 SHOULDERS SLOPES SHALL BE ADJUSTED
 TO MATCH THE EXISTING DRIVE APRONS
 ELEVATIONS.



[c:\p197\lms\sr25a\p090001.dwg] nww
 08-07-2001 4:35PM

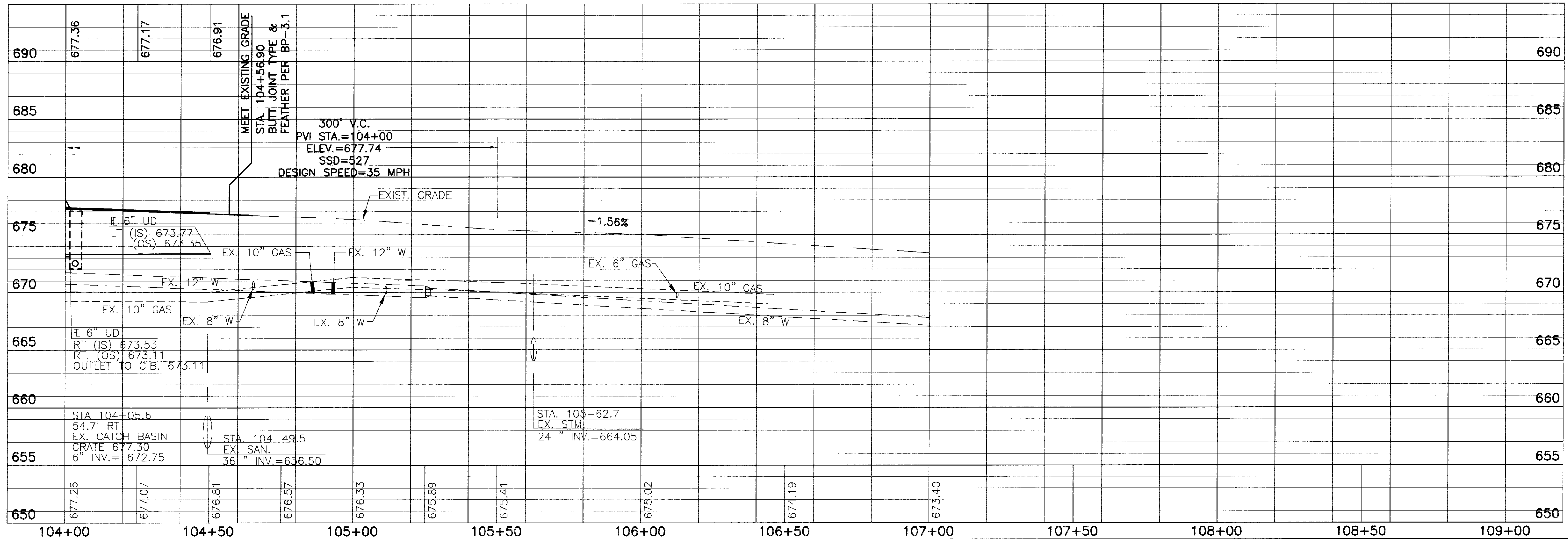


EXISTING CURVE DATA
 P.I. STA. 104+98.86,
 Q R/W & CONSTRUCTION
 $\Delta = 6^{\circ}15'00''$
 $Dc = 1^{\circ}00'00''$
 $R = 5729.58'$
 $T = 312.81'$
 $L = 625.00'$
 $E = 8.53'$



LEGEND
 BUTT JOINT TYPE
 FEATHER PER BP-3.1.

FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



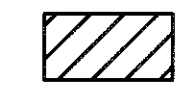
[C:\33197\DWG\S25A\RCPO7001.DWG] NJW
 06-08-2001 8:45AM

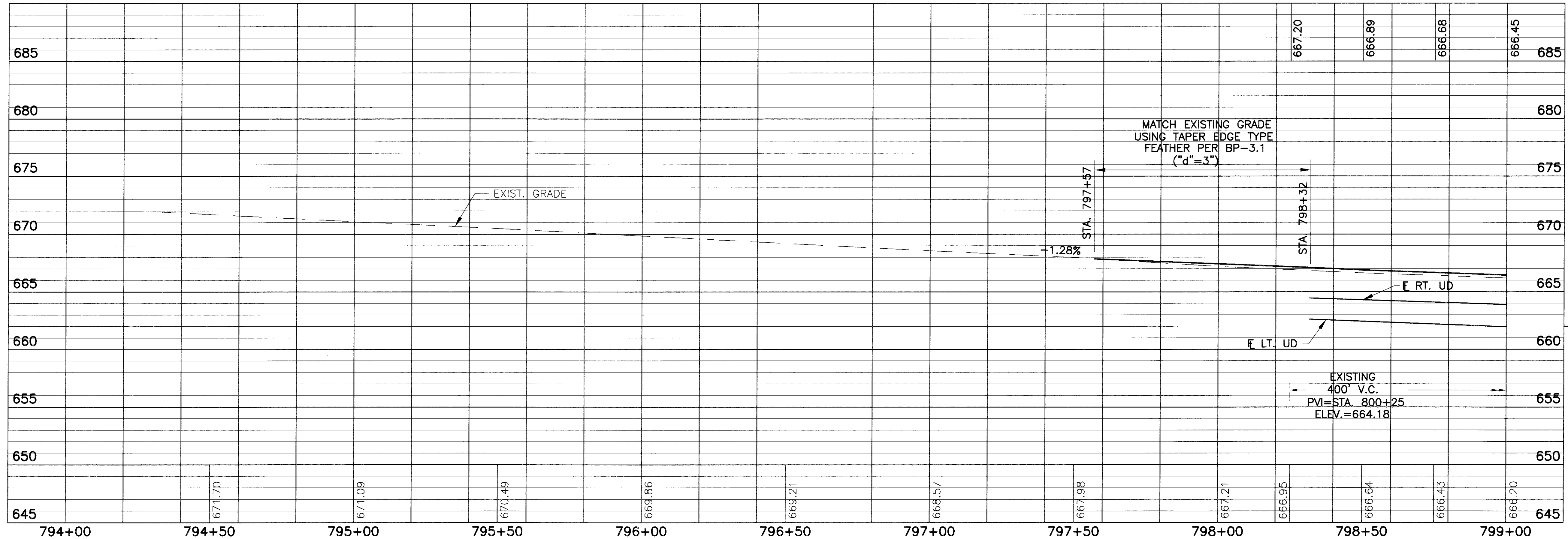
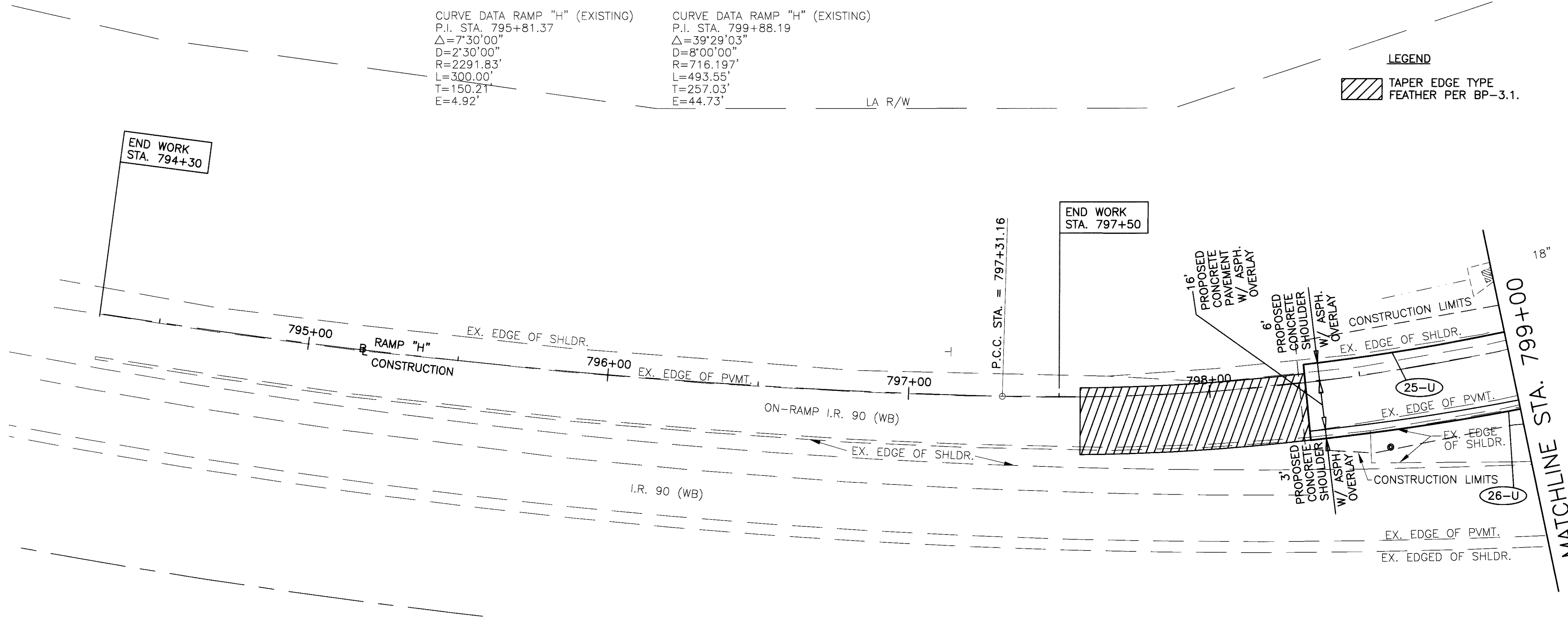
CURVE DATA RAMP "H" (EXISTING)
P.I. STA. 795+81.37
 $\Delta=7^{\circ}30'00''$
 $D=2'30'00''$
 $R=2291.83'$
 $L=300.00'$
 $T=150.21'$
 $E=4.92'$

CURVE DATA RAMP "H" (EXISTING)
P.I. STA. 799+88.19
 $\Delta=39^{\circ}29'03''$
 $D=8'00'00''$
 $R=716.197'$
 $L=493.55'$
 $T=257.03'$
 $E=44.73'$

LA R/W

LEGEND

 TAPER EDGE TYPE
FEATHER PER BP-3.1.



FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
FOR DRIVE DETAILS, SEE SHEETS 107-109
FOR INTERSECTION DETAILS, SEE SHEETS 110-112
FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
FOR WATER WORK DETAILS, SEE SHEETS 115-122
FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132

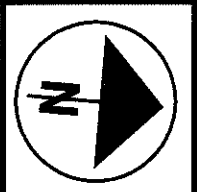


CALCULATED
MUM
CHECKED
DW



PLAN AND PROFILE - RAMP "H"
STA. 794+00 TO STA. 799+00

LOR - 190 - 15.65



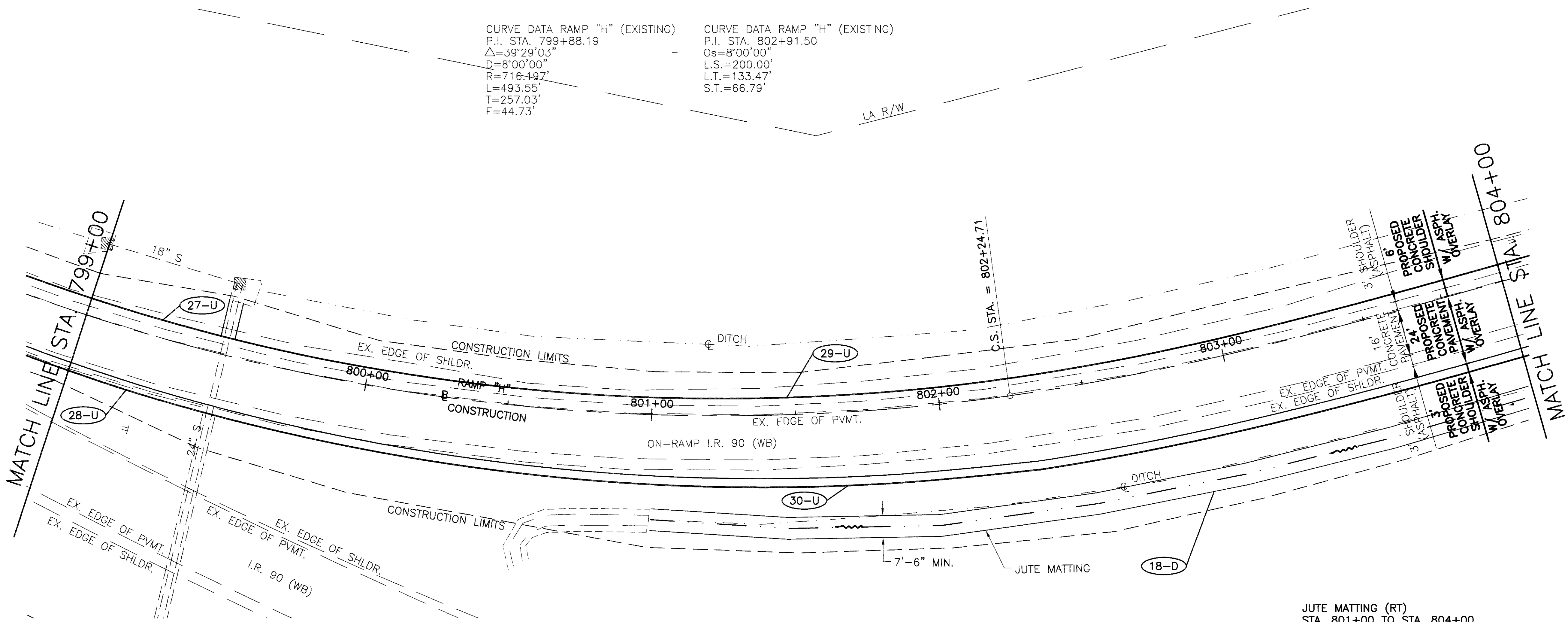
CALCULATED
M.M.
CHECKED
D.W.

0 20' 40'
HORIZONTAL
SCALE IN FEET

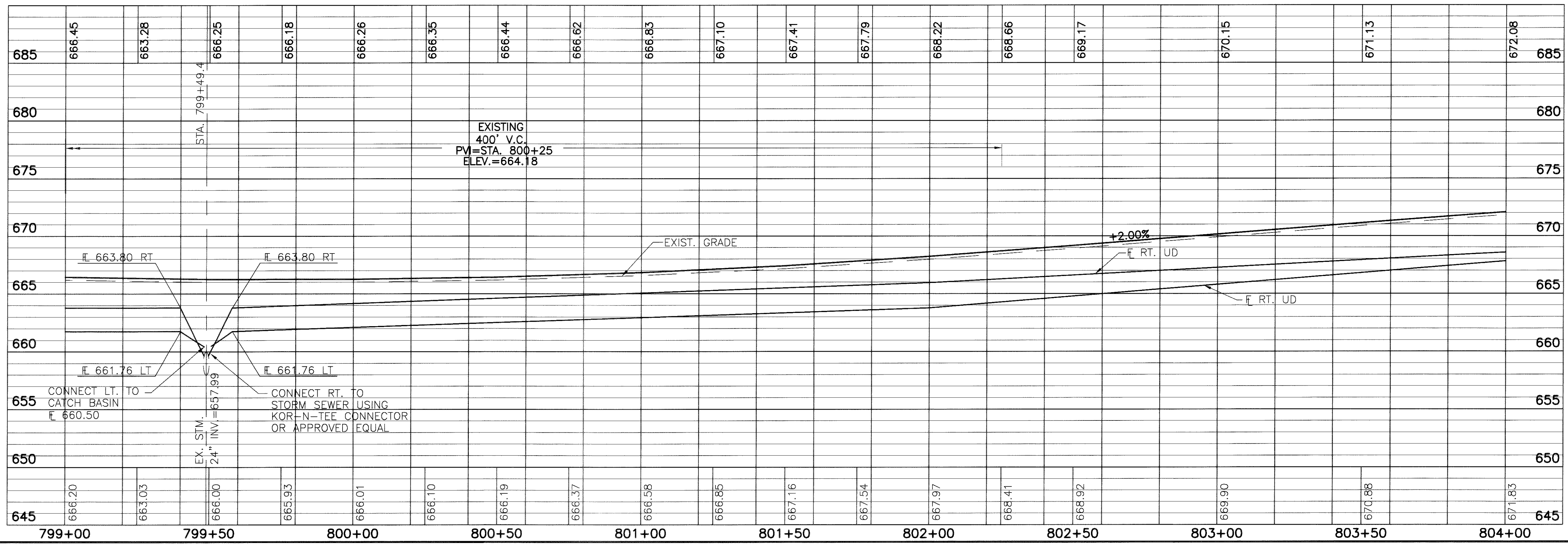
PLAN AND PROFILE - RAMP "H"
STA. 799+00 TO STA. 804+00

LOR - 190 - 15.65

FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
FOR DRIVE DETAILS, SEE SHEETS 107-109
FOR INTERSECTION DETAILS, SEE SHEETS 110-112
FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
FOR WATER WORK DETAILS, SEE SHEETS 115-122
FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



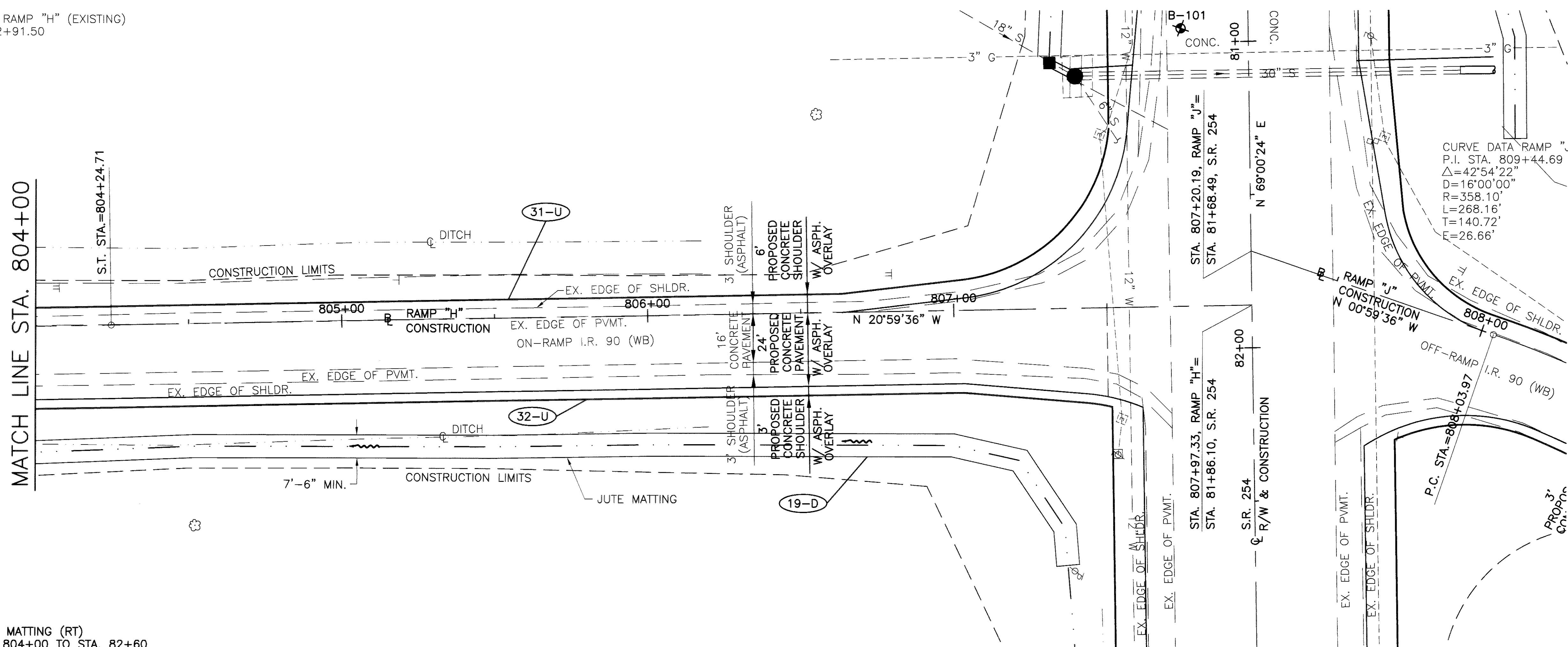
JUTE MATTING (RT)
STA. 801+00 TO STA. 804+00
= (300 L.F.)*(7.5 FT) 9/=
250 SQ. YD.



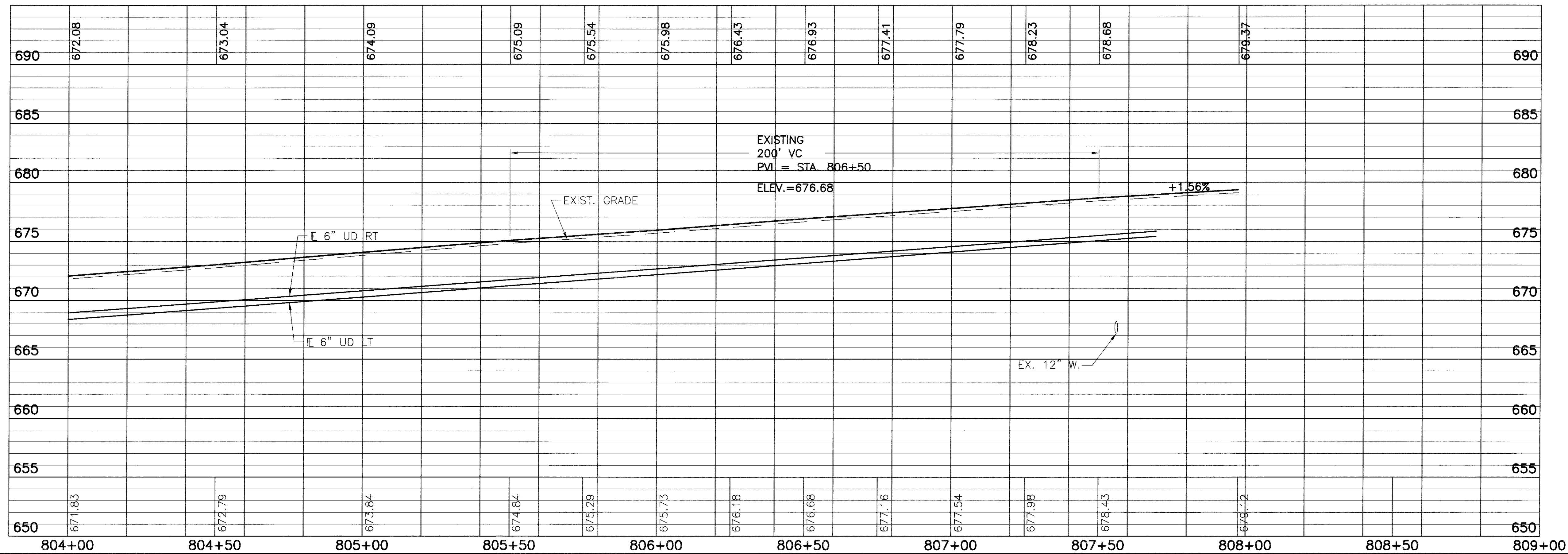
CURVE DATA RAMP "H" (EXISTING)
 P.I. STA. 802+91.50
 $\theta_s=8^{\circ}00'00''$
 L.S.=200.00'
 L.T.=133.47'
 S.T.=66.79'

CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 809+44.69
 $\Delta=42^{\circ}54'22''$
 $D=16^{\circ}00'00''$
 $R=358.10'$
 $L=268.16'$
 $T=140.72'$
 $E=26.66'$

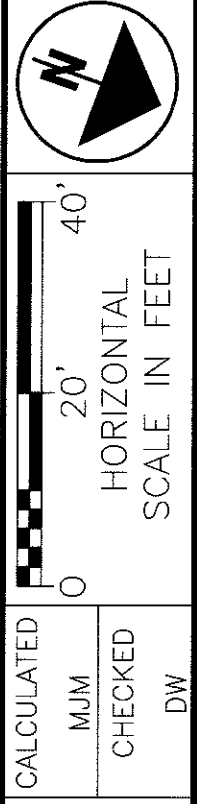
MATCH LINE STA. 804+00



JUTE MATTING (RT)
 STA. 804+00 TO STA. 82+60
 $= (361 \text{ L.F.}) \cdot (7.5 \text{ FT}) \cdot 9/16 =$
 301 SQ. YD.



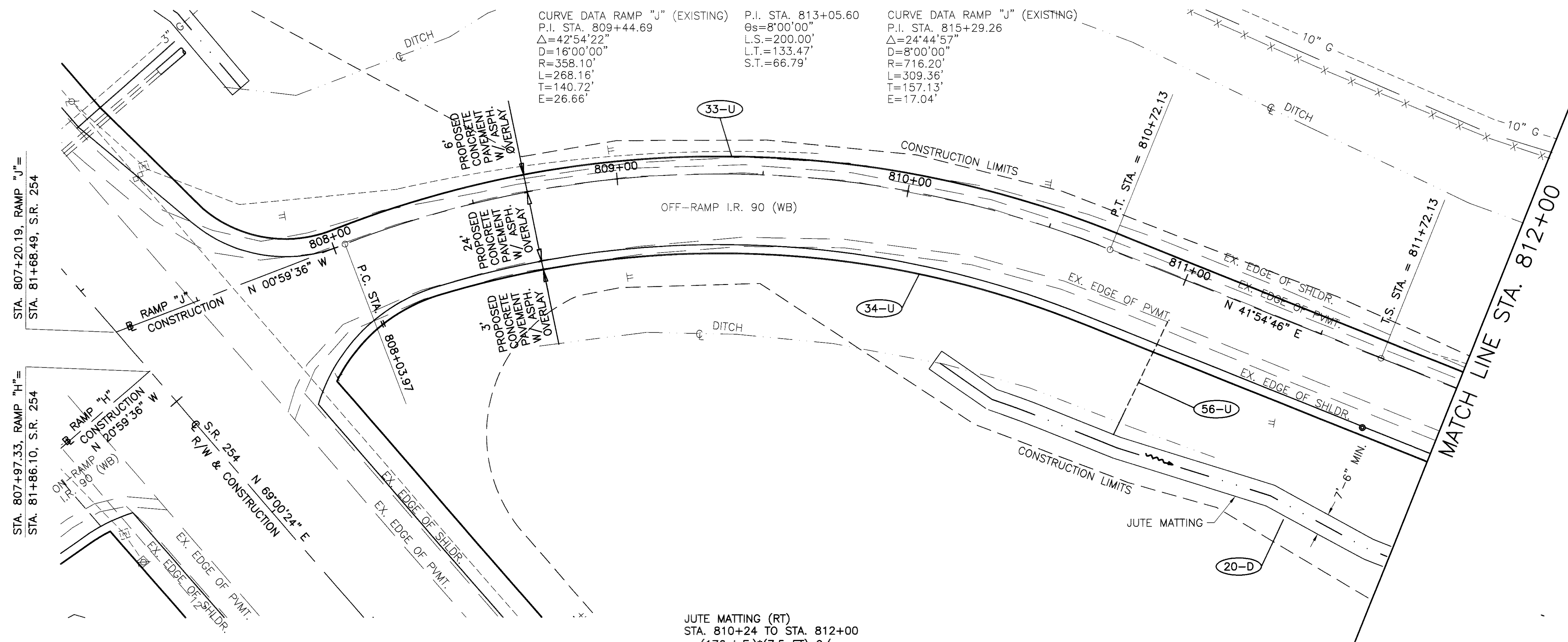
FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



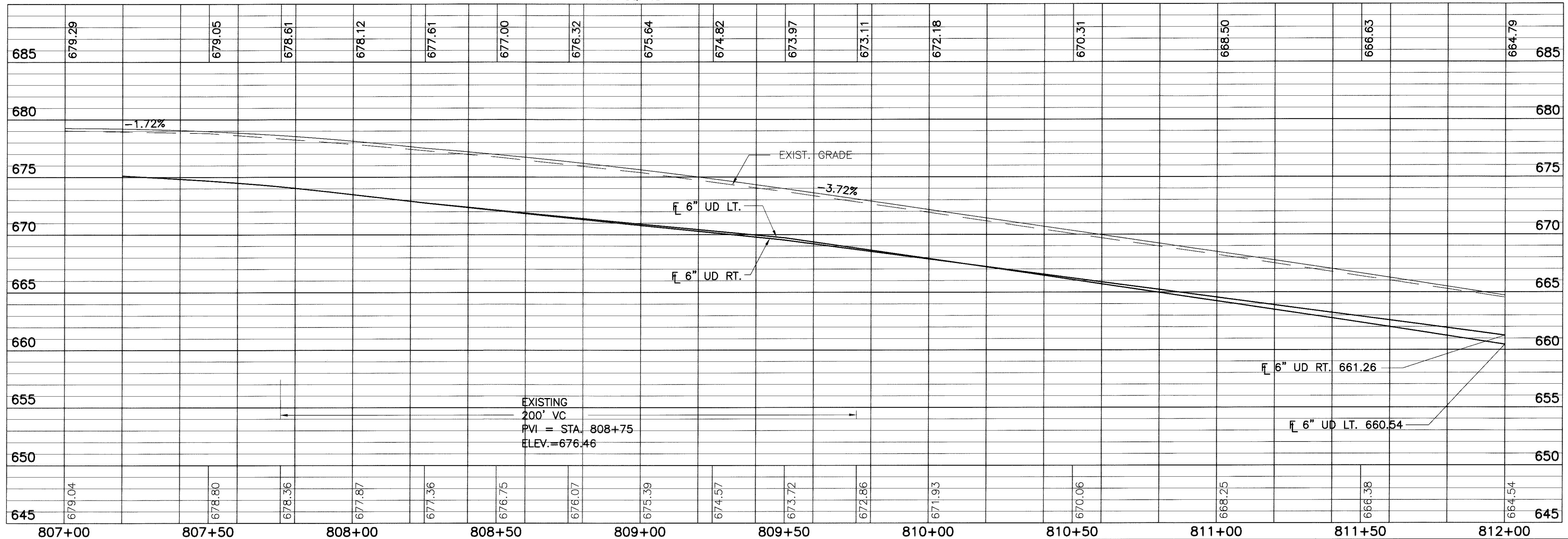
PLAN AND PROFILE - RAMP "H"
 STA. 804+00 TO STA. 807+97.33

LOR - 190 - 15.65

54
161



JUTE MATTING (RT)
 STA. 810+24 TO STA. 812+00
 = (176 L.F.)*(7.5 FT) 9/=
 147 SQ. YD.

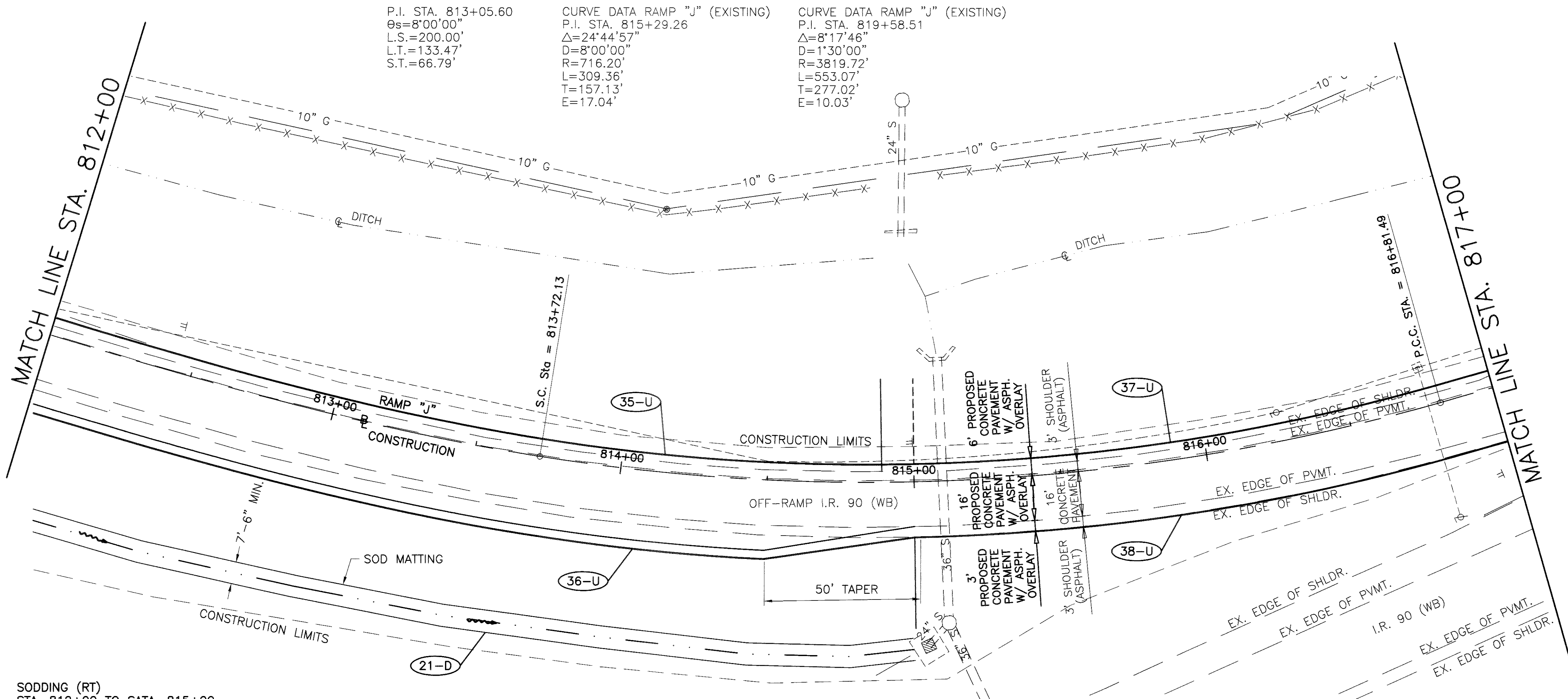


FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132

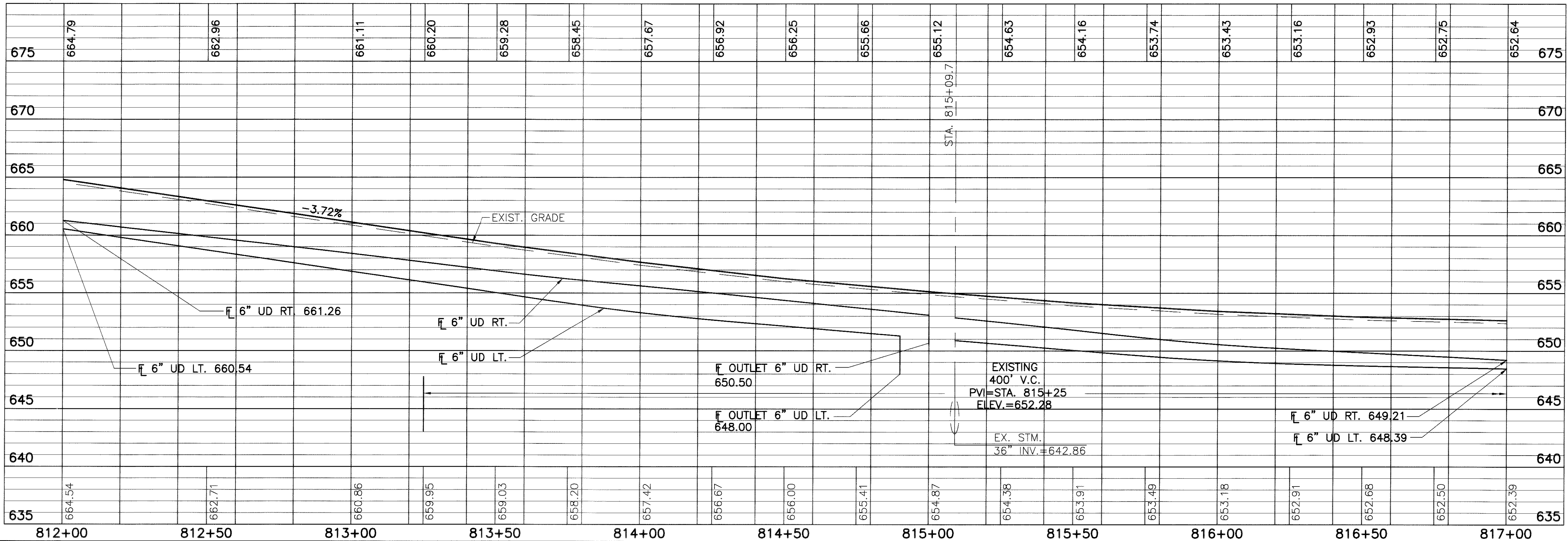


PLAN AND PROFILE - RAMP "J"
 STA. 807+20.19 TO STA. 812+00

LOR - 190 - 15.65



SODDING (RT)
 STA. 812+00 TO STA. 815+00
 = (300 L.F.)*(7.5 FT) 9/=
 250 SQ. YD.



FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132

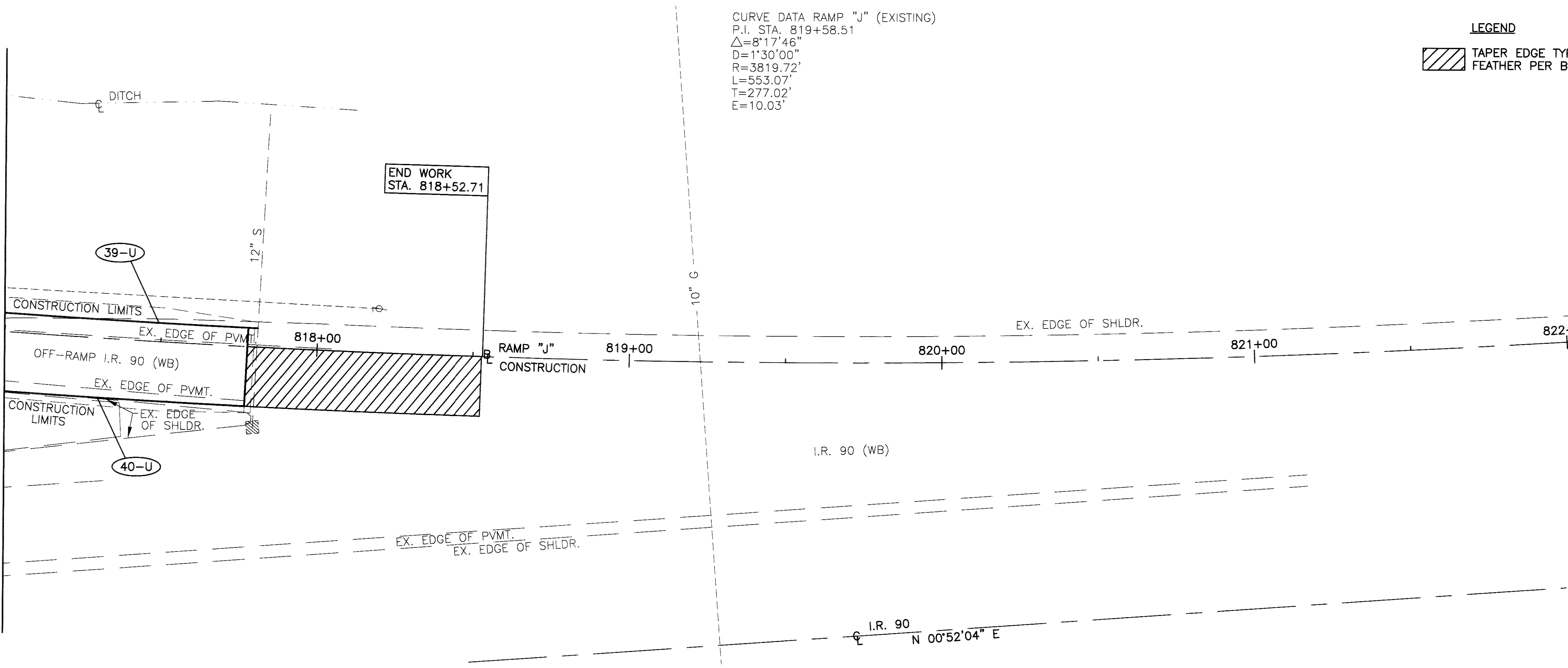


PLAN AND PROFILE - RAMP "J"
 STA. 812+00 TO STA. 817+00

LOR - I90 - 15.65

[0:\3197\LMCS\SR254\PCP02003.DWG] N:\W
 08-20-2001 2:18PM

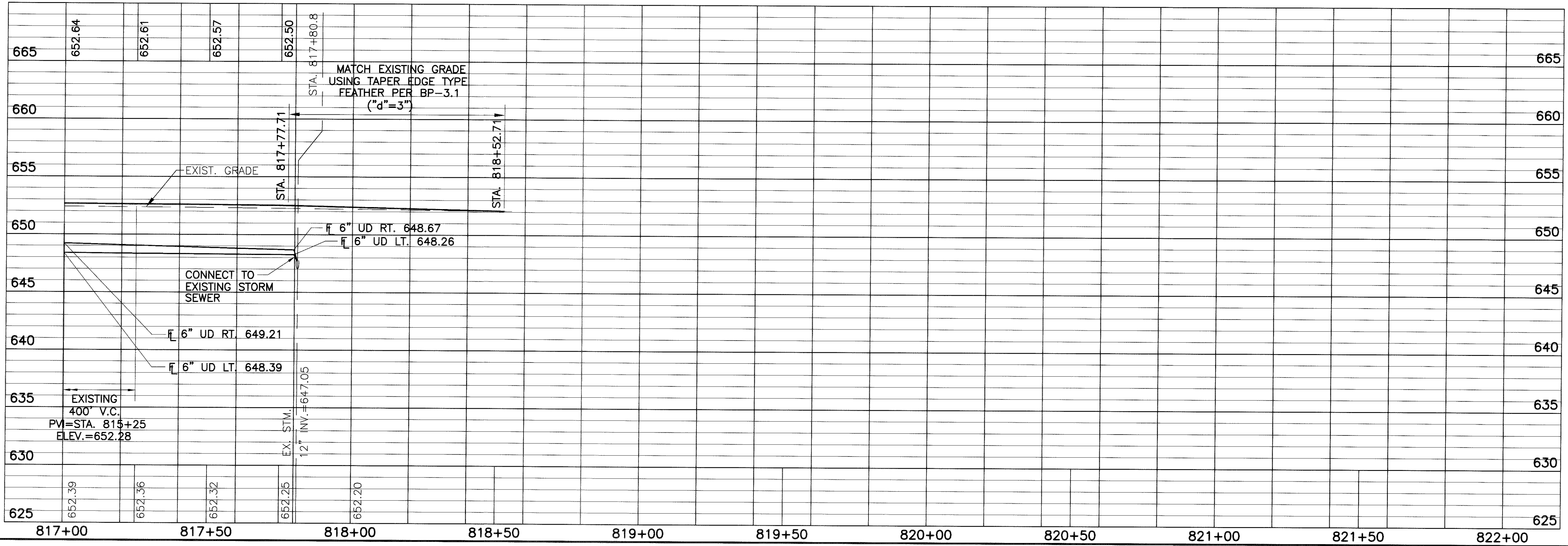
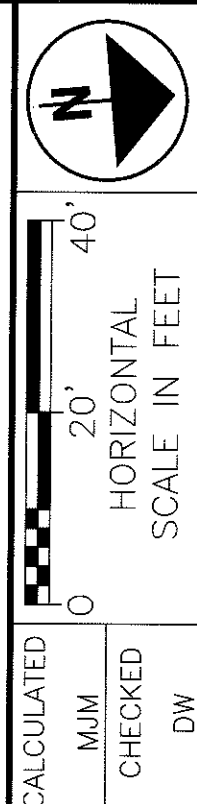
MATCH LINE STA. 817+00



CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 819+58.51
 $\Delta=8^{\circ}17'46''$
 $D=1^{\circ}30'00''$
 $R=3819.72'$
 $L=553.07'$
 $T=277.02'$
 $E=10.03'$

LEGEND
 TAPER EDGE TYPE FEATHER PER BP-3.1.

FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132

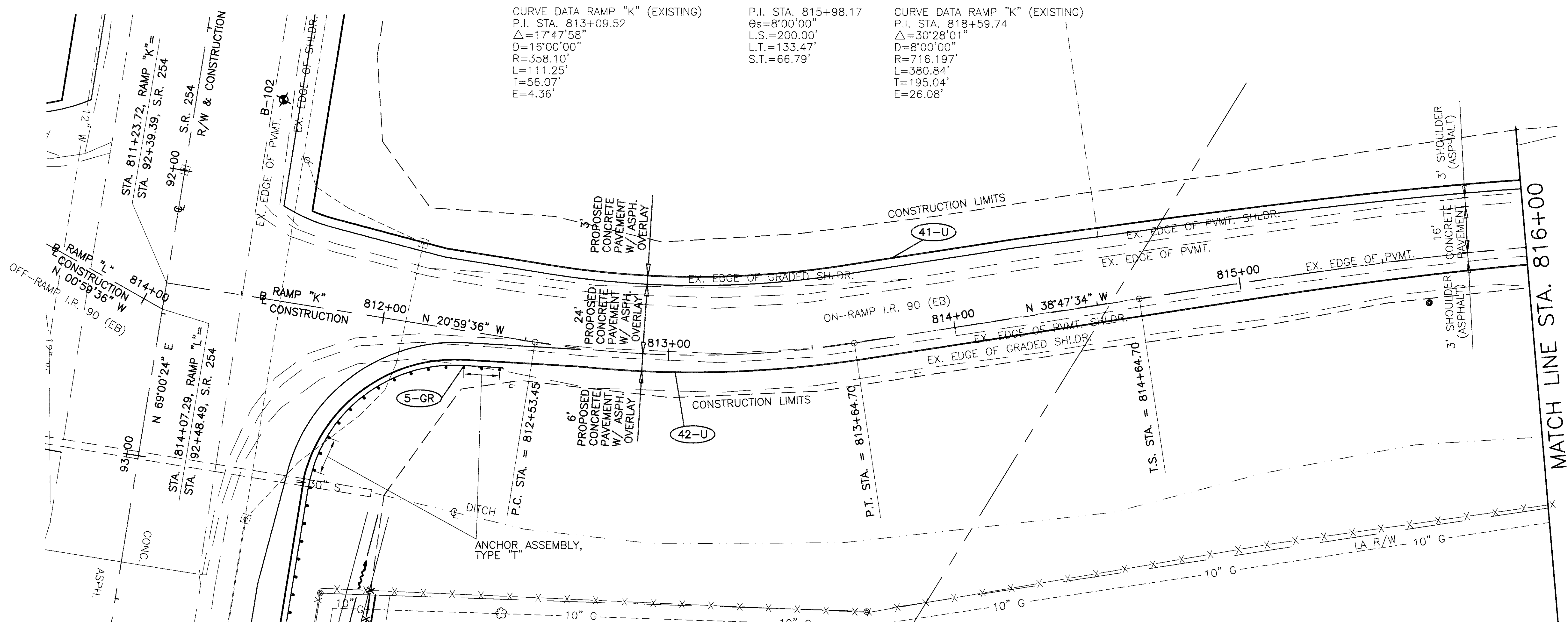


PLAN AND PROFILE - RAMP "J"
 STA. 817+00 TO STA. 822+00

LOR - 190 - 15.65

57
161

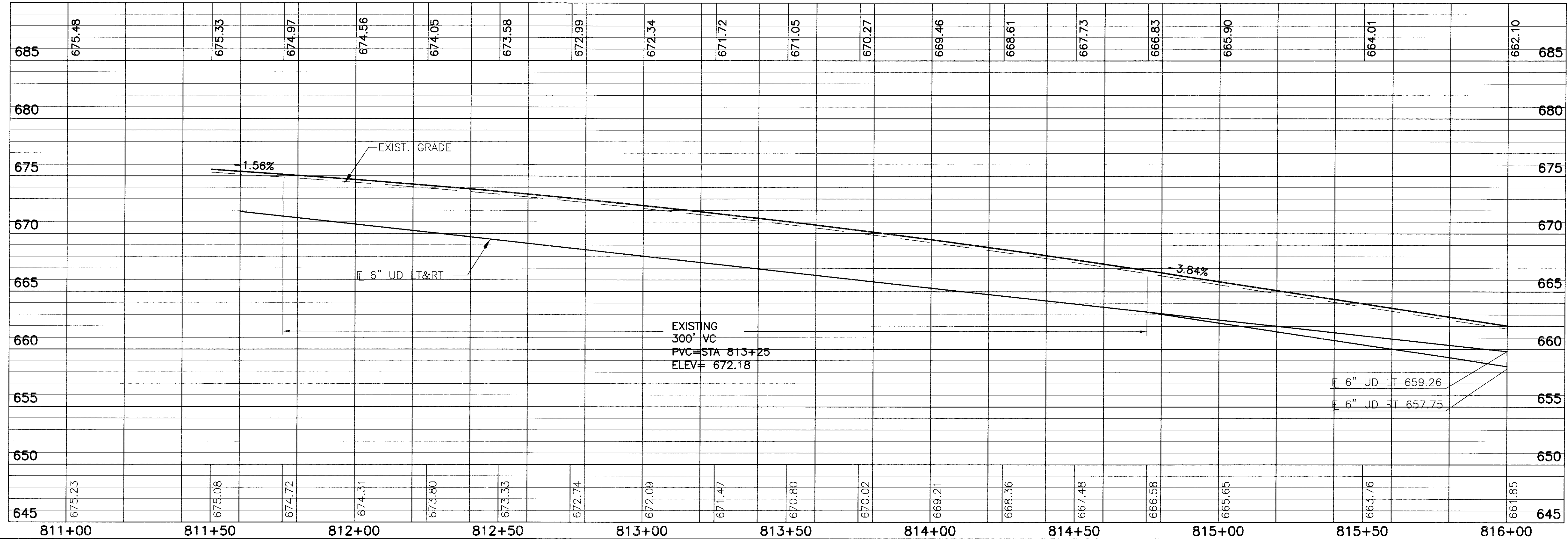
[C:\A31\971\DWG\15625A\15625A\15625A.DWG] NEW
 08-20-2001 3:55PM



CURVE DATA RAMP "K" (EXISTING)
 P.I. STA. 813+09.52
 $\Delta=17^{\circ}47'58''$
 $D=16^{\circ}00'00''$
 $R=358.10'$
 $L=111.25'$
 $T=56.07'$
 $E=4.36'$

P.I. STA. 815+98.17
 $\theta_s=8^{\circ}00'00''$
 $L.S.=200.00'$
 $L.T.=133.47'$
 $S.T.=66.79'$

CURVE DATA RAMP "K" (EXISTING)
 P.I. STA. 818+59.74
 $\Delta=30^{\circ}28'01''$
 $D=8^{\circ}00'00''$
 $R=716.197'$
 $L=380.84'$
 $T=195.04'$
 $E=26.08'$



FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE - RAMP "K"
 STA. 811+23.72 TO STA. 816+00

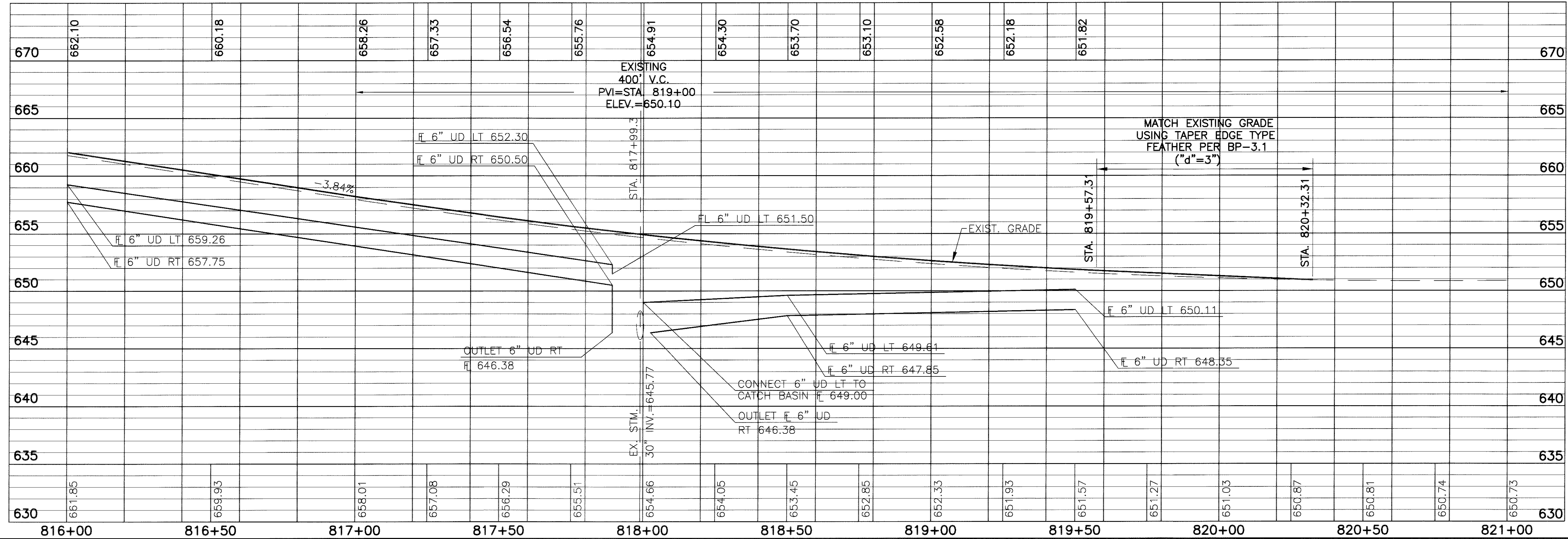
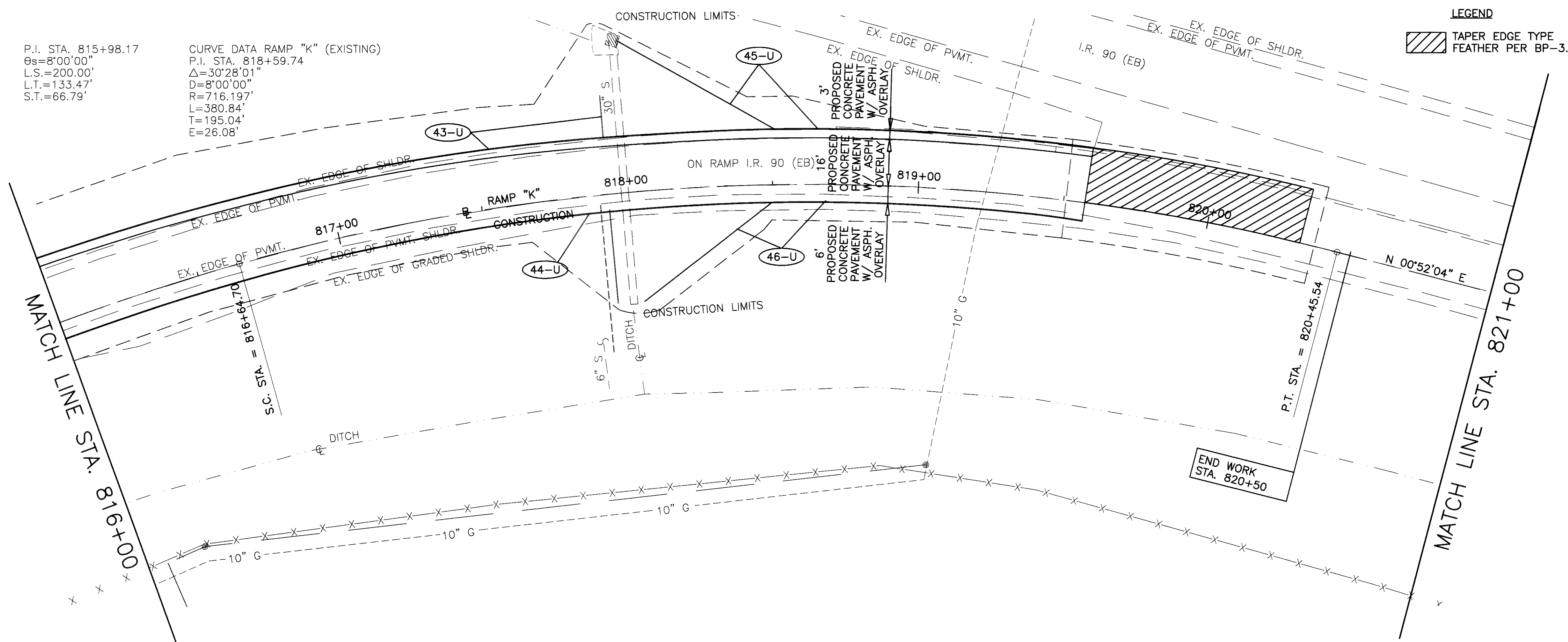
LOR - 190 - 15.65

P.I. STA. 815+98.17
 $\theta_s=8^{\circ}00'00''$
 L.S.=200.00'
 L.T.=133.47'
 S.T.=66.79'

CURVE DATA RAMP "K" (EXISTING)
 P.I. STA. 818+59.74
 $\Delta=30^{\circ}28'01''$
 $D=8^{\circ}00'00''$
 $R=716.197'$
 $L=380.84'$
 $T=195.04'$
 $E=26.08'$

LEGEND

 TAPER EDGE TYPE
 FEATHER PER BP-3.1.



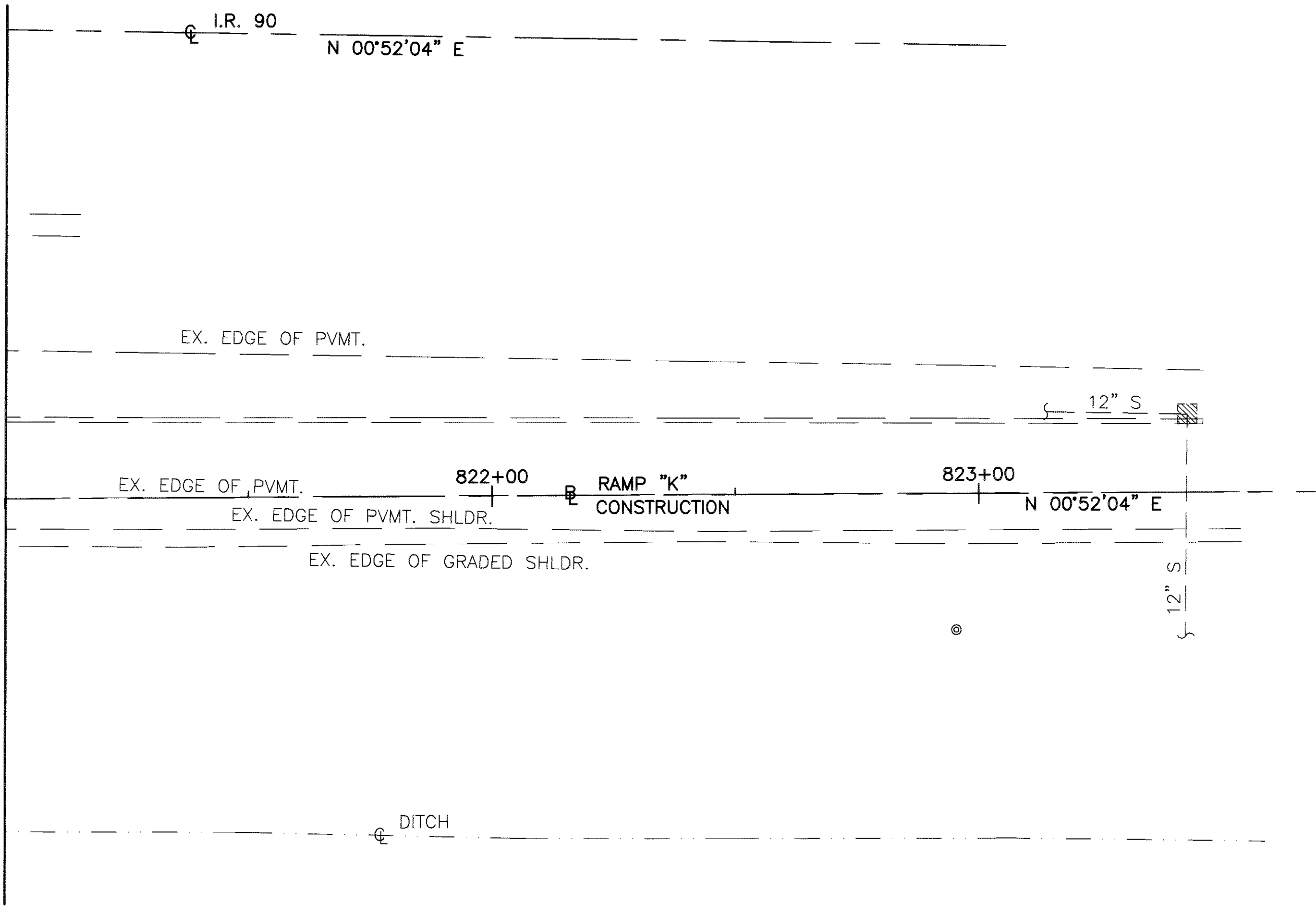
FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



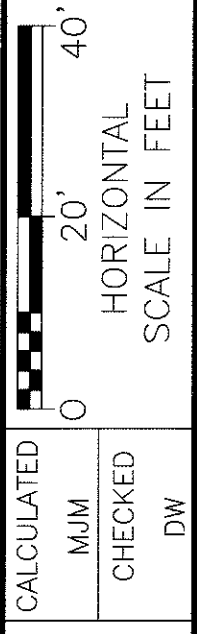
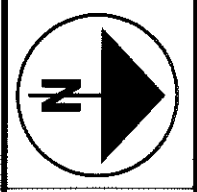
PLAN AND PROFILE - RAMP "K"
 STA. 816+00 TO STA. 821+00

LOR - 190 - 15.65

MATCH LINE STA. 821+00

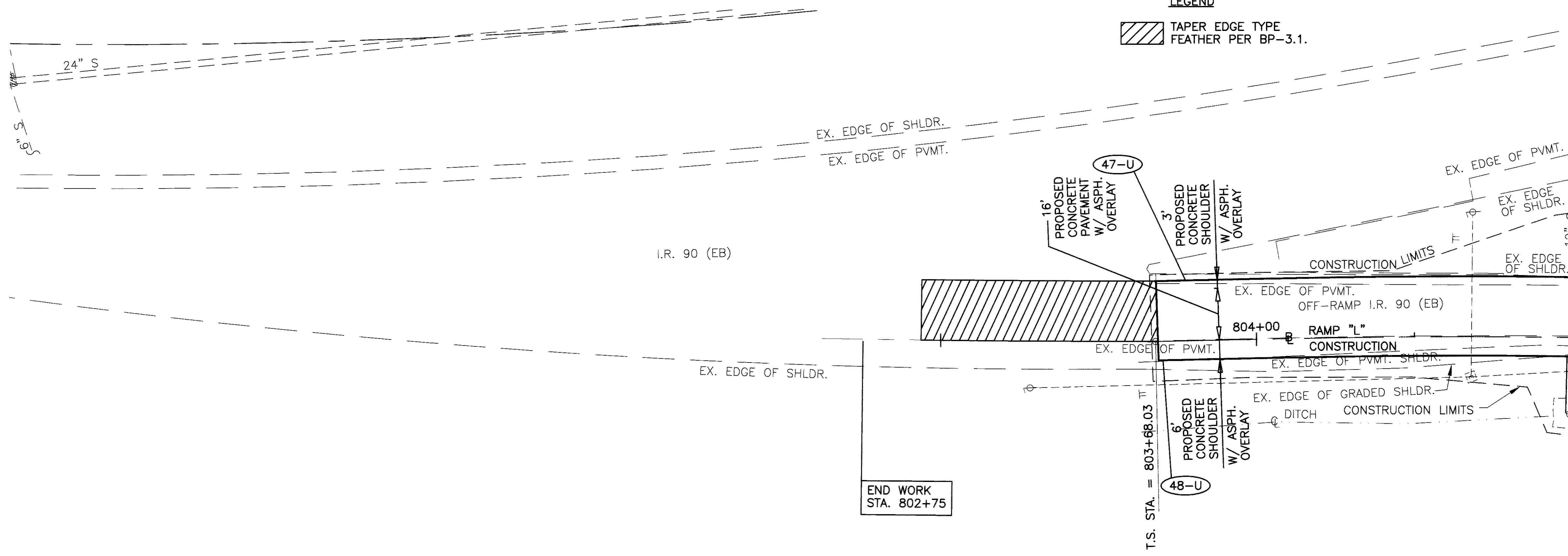


FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132

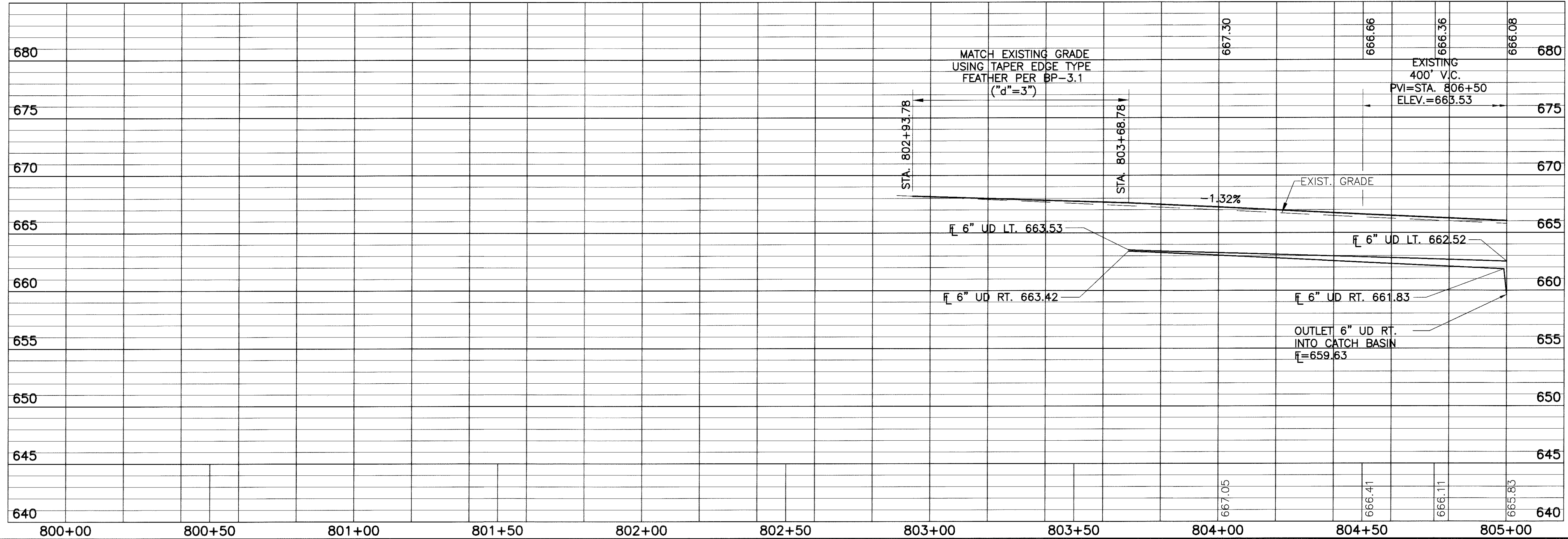


PLAN AND PROFILE - RAMP "K"
STA. 821+00 TO STA. 823+00

LOR - 190 - 15.65



P.I. STA. 805+68.49
 Gs=12'00'00"
 L.S.=300.00'
 L.T.=200.46'
 S.T.=100.42'

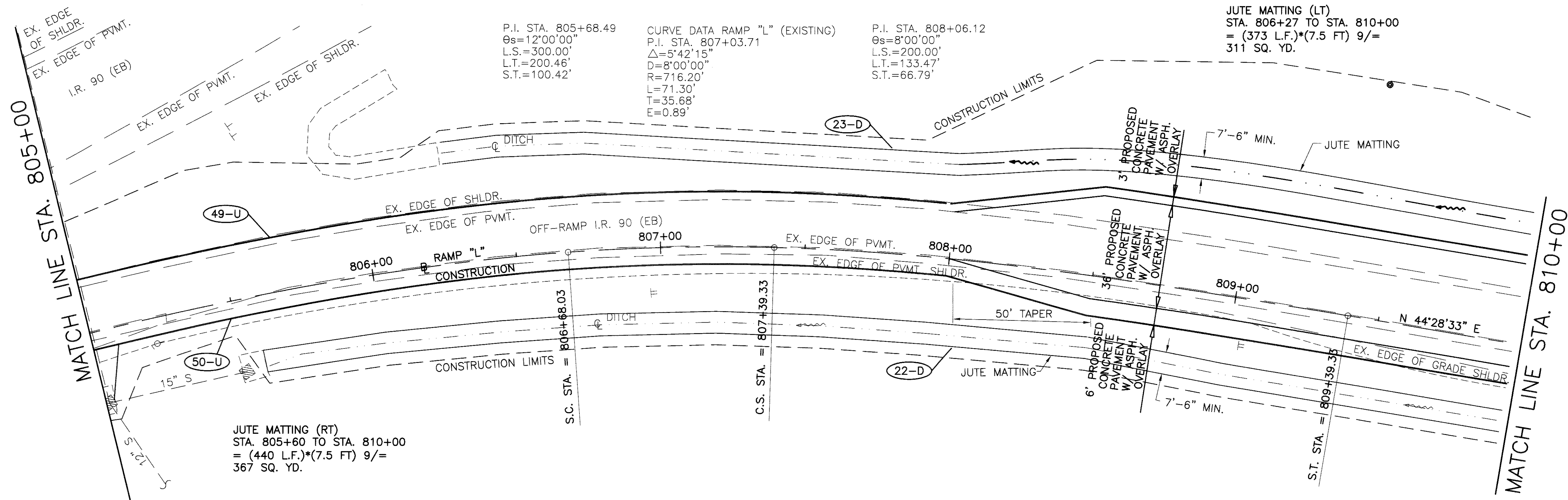


FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE - RAMP "L"
STA. 803+68.03 TO STA. 805+00

LOR - 190 - 15.65



P.I. STA. 805+68.49
 $\theta_s=12^{\circ}00'00''$
 L.S.=300.00'
 L.T.=200.46'
 S.T.=100.42'

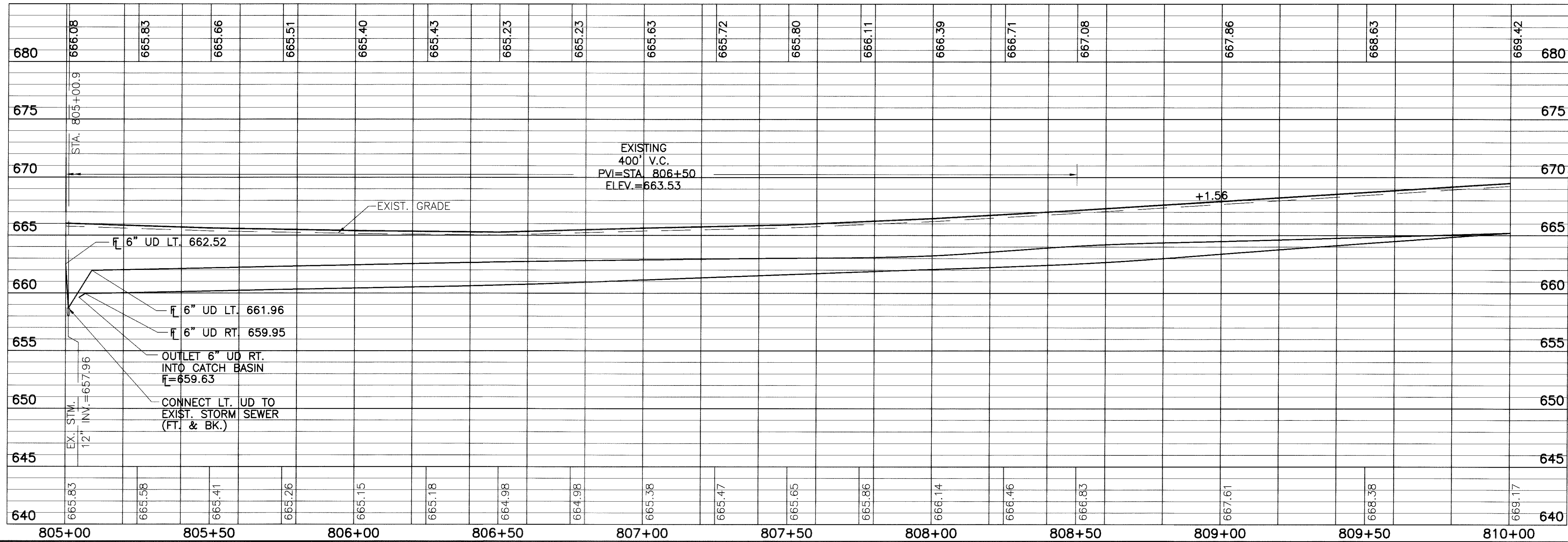
CURVE DATA RAMP "L" (EXISTING)
 P.I. STA. 807+03.71
 $\Delta=5^{\circ}42'15''$
 $D=8^{\circ}00'00''$
 $R=716.20'$
 $L=71.30'$
 $T=35.68'$
 $E=0.89'$

P.I. STA. 808+06.12
 $\theta_s=8^{\circ}00'00''$
 L.S.=200.00'
 L.T.=133.47'
 S.T.=66.79'

JUTE MATTING (LT)
 STA. 806+27 TO STA. 810+00
 = (373 L.F.)*(7.5 FT) 9/=
 311 SQ. YD.

JUTE MATTING (RT)
 STA. 805+60 TO STA. 810+00
 = (440 L.F.)*(7.5 FT) 9/=
 367 SQ. YD.

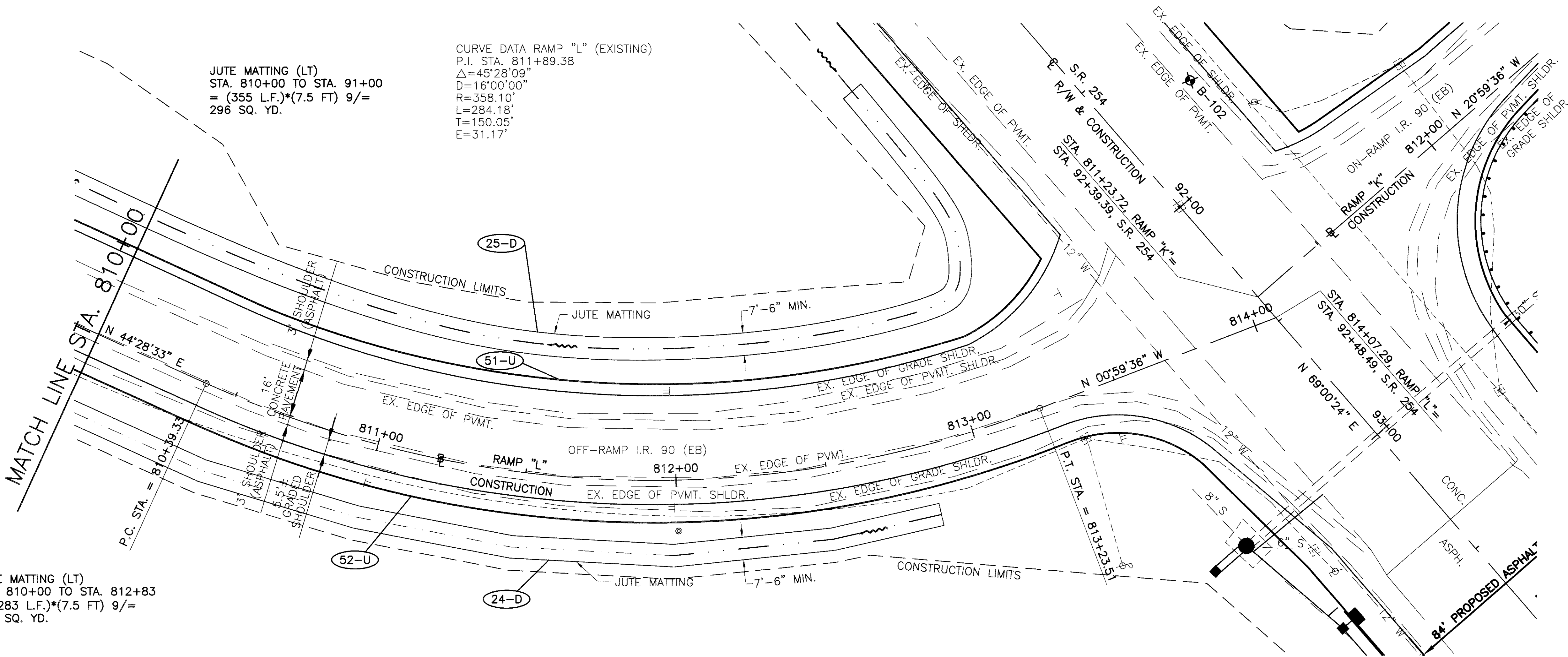
FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE - RAMP "L"
STA. 805+00 TO STA. 810+00

LOR - I90 - 15.65

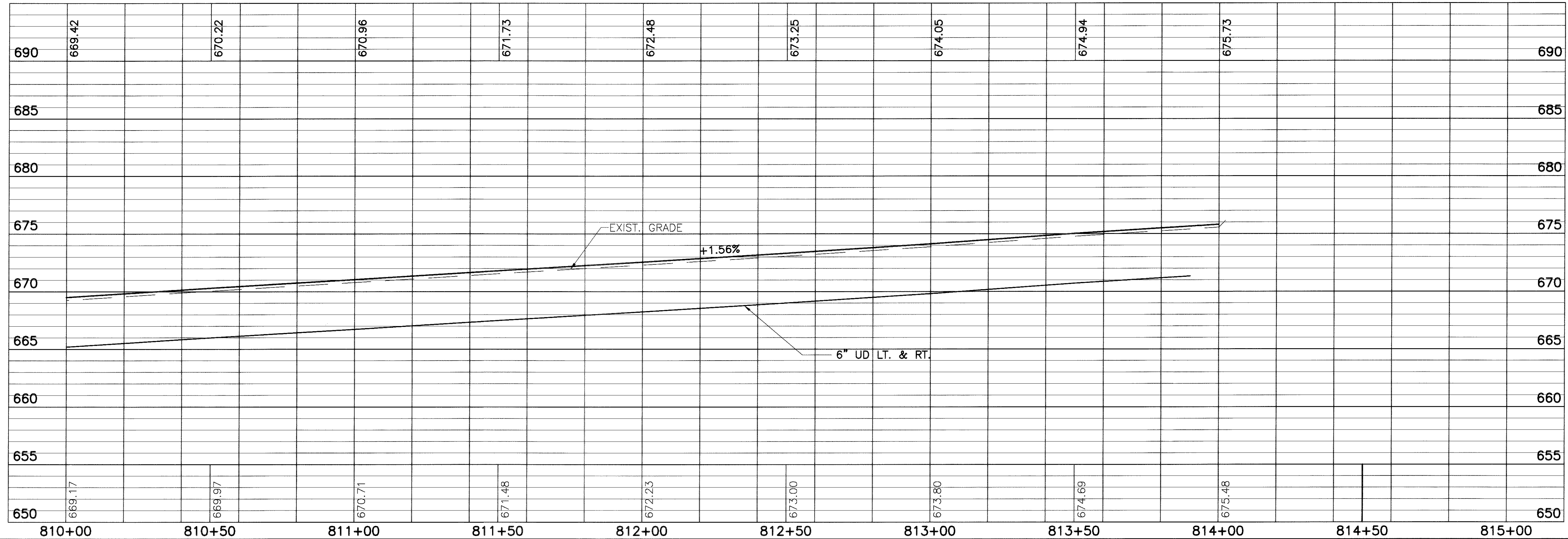
I:\03\197\DWG\SR25A\RePO1006.DWG I:NUW
 08-21-2001 9:33AM



JUTE MATTING (LT)
 STA. 810+00 TO STA. 91+00
 = (355 L.F.)*(7.5 FT) 9/=
 296 SQ. YD.

CURVE DATA RAMP "L" (EXISTING)
 P.I. STA. 811+89.38
 $\Delta=45^{\circ}28'09''$
 $D=16^{\circ}00'00''$
 $R=358.10'$
 $L=284.18'$
 $T=150.05'$
 $E=31.17'$

JUTE MATTING (LT)
 STA. 810+00 TO STA. 812+83
 = (283 L.F.)*(7.5 FT) 9/=
 236 SQ. YD.

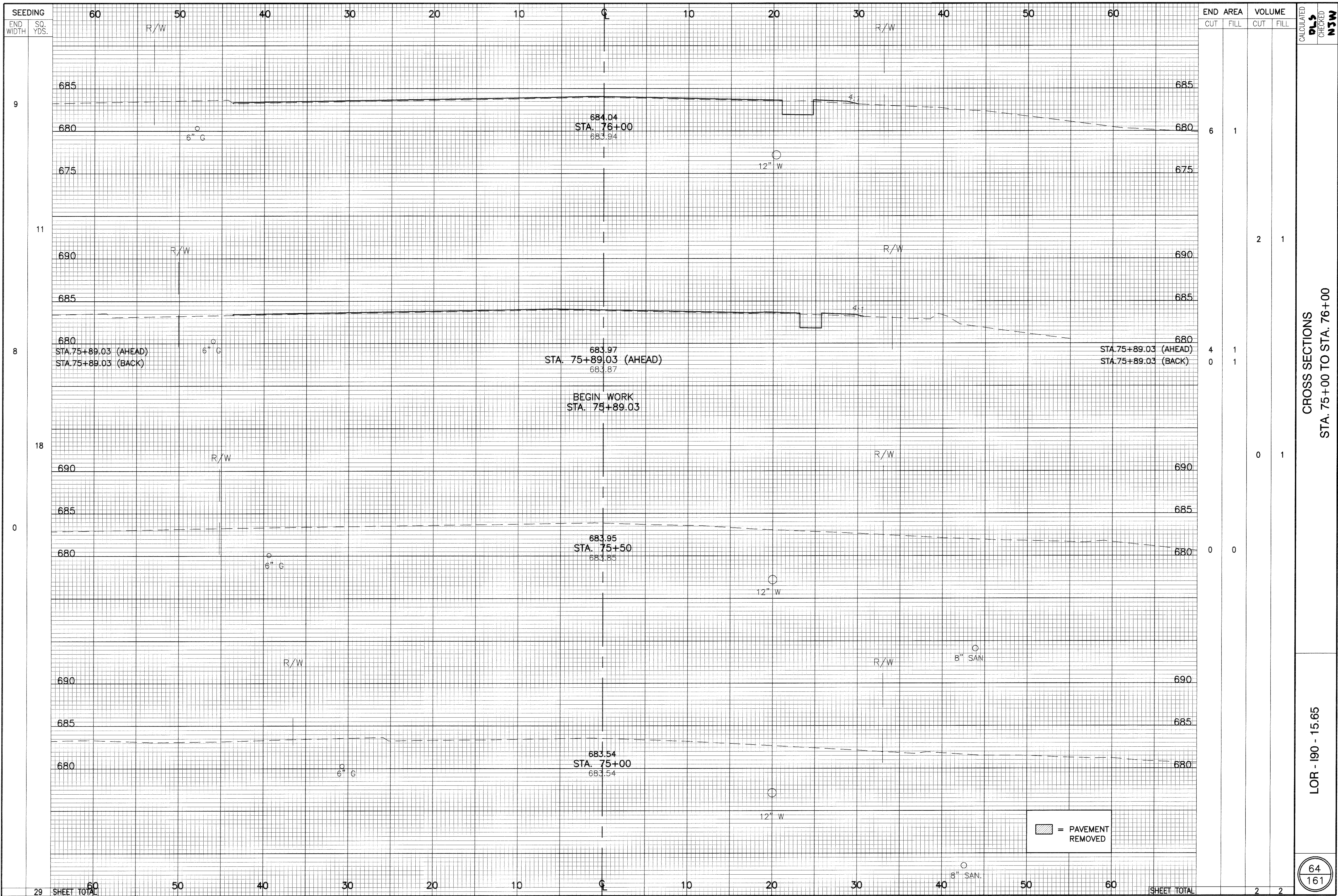


FOR ESTIMATED QUANTITIES, SEE SHEETS 32-39
 FOR DRIVE DETAILS, SEE SHEETS 107-109
 FOR INTERSECTION DETAILS, SEE SHEETS 110-112
 FOR PROFILE DETAILS AT STRUCTURE, SEE SHEETS 113-114
 FOR WATER WORK DETAILS, SEE SHEETS 115-122
 FOR TRAFFIC CONTROL DETAILS, SEE SHEETS 123-132



PLAN AND PROFILE - RAMP "L"
 STA. 810+00 TO STA. 814+07.29

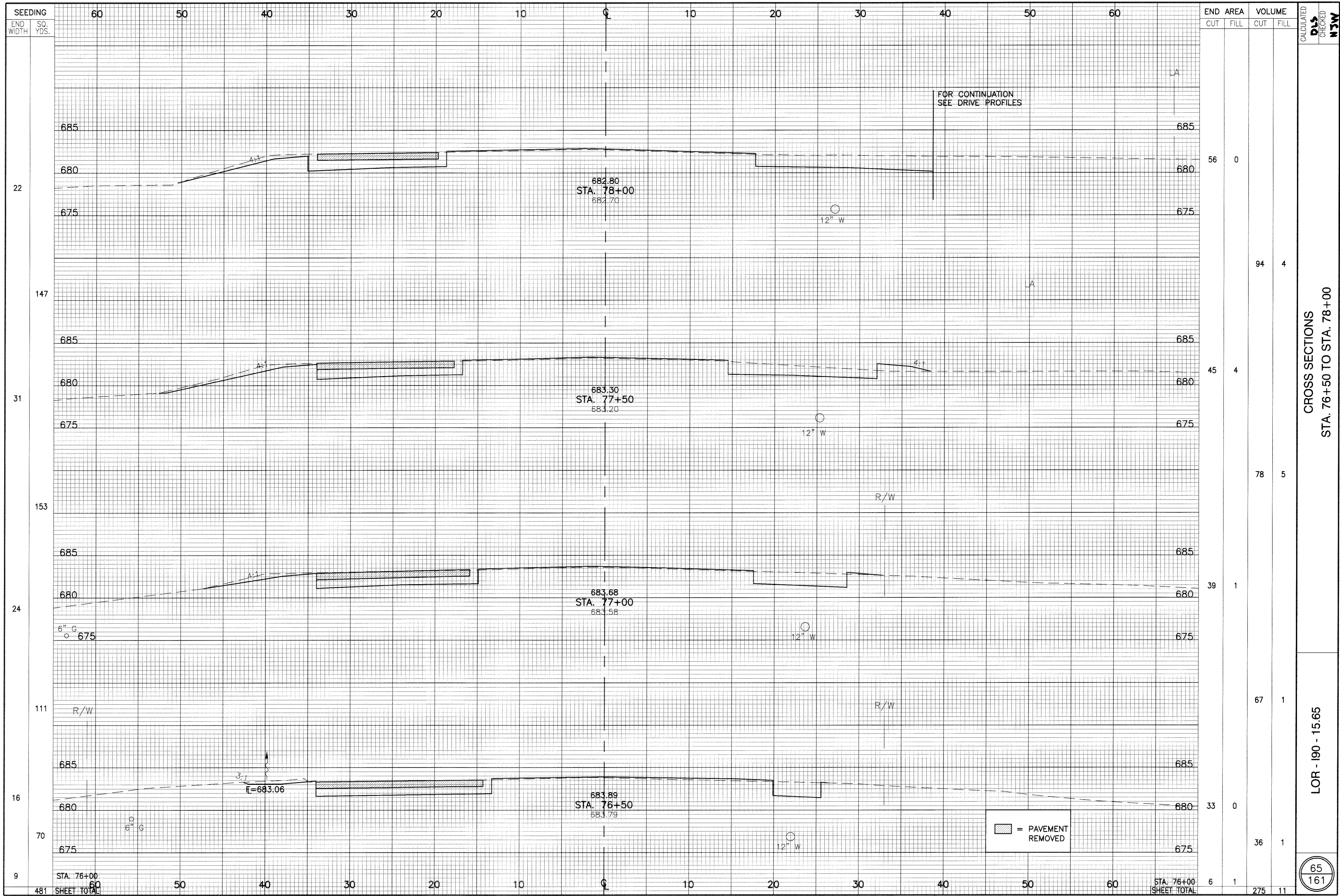
LOR - 190 - 15.65



CROSS SECTIONS
STA. 75+00 TO STA. 76+00

LOR - 190 - 15.65

[0:\93197\DWG\5\90264\90001001.DWG] NWP
6/5/01 07-12-2001

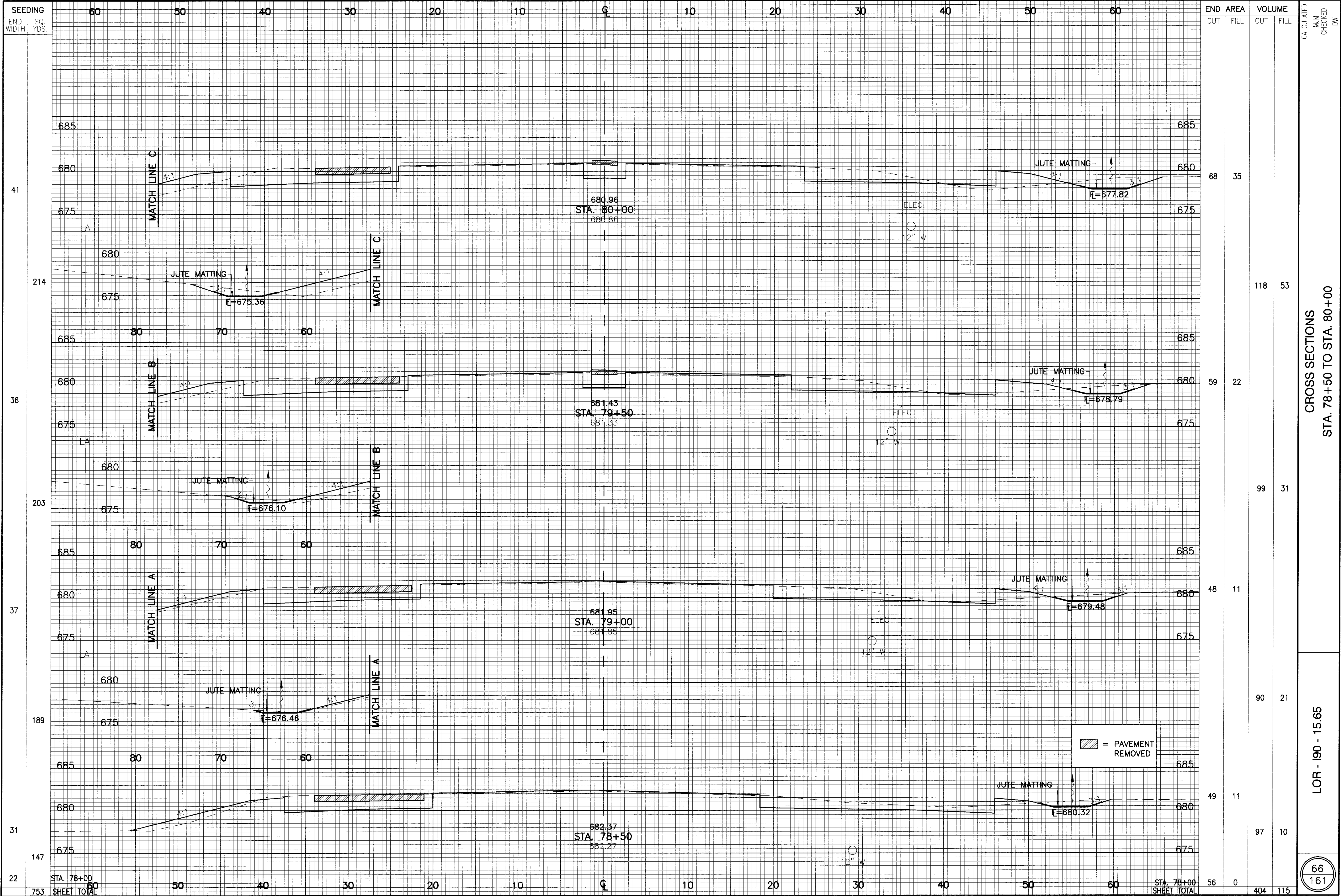


CROSS SECTIONS
STA. 76+50 TO STA. 78+00

LOR - 190 - 15.65

65
161

I:\03197\DWG\SP25A\RC000001.DWG] GBR
 2/5/PM 05-25-2001

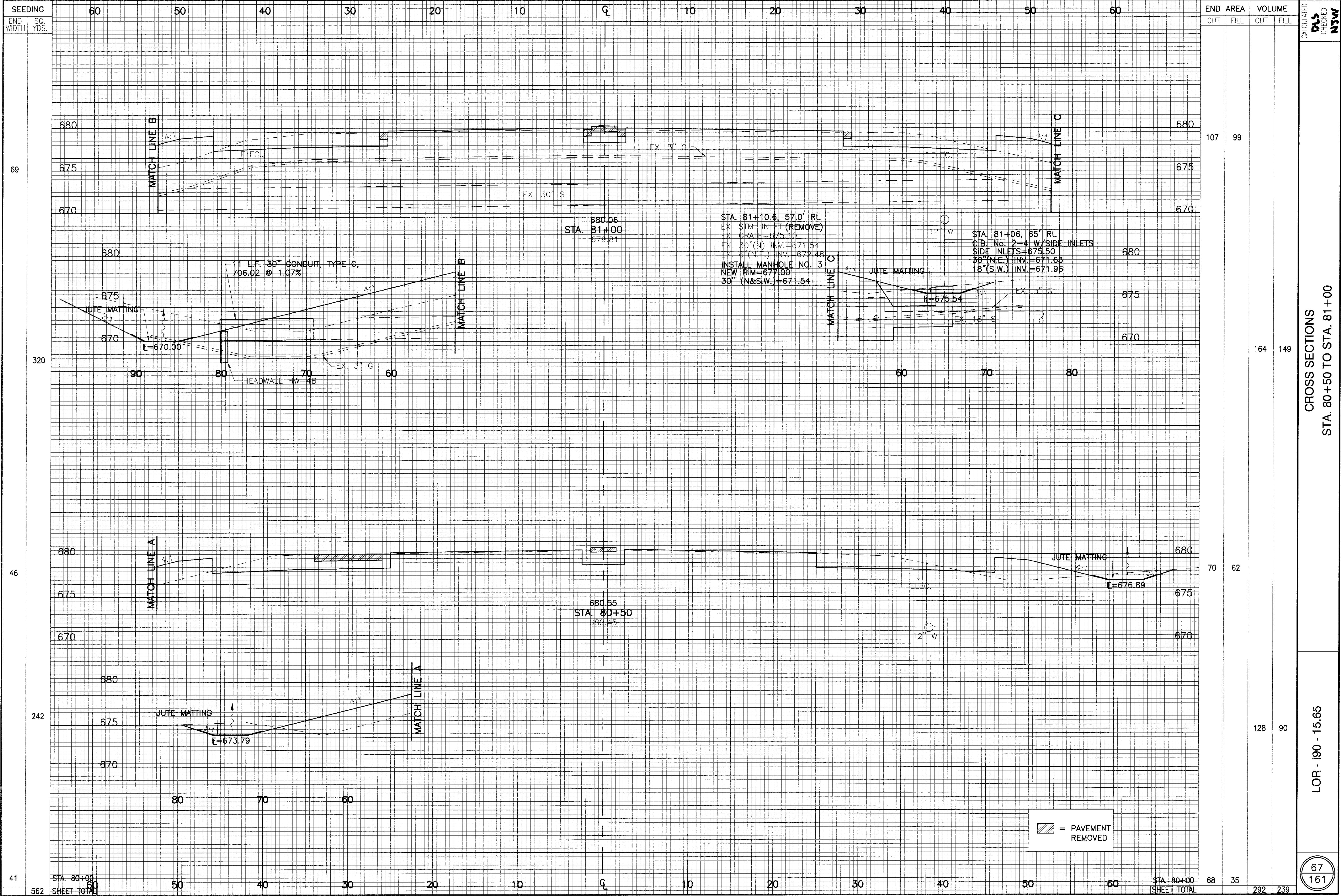


END AREA	VOLUME		CALCULATED	CHECKED	DW
	CUT	FILL			
68	35				
118	53				
59	22				
99	31				
48	11				
90	21				
49	11				
97	10				
56	0	404	115		

CROSS SECTIONS
STA. 78+50 TO STA. 80+00

LOR - 190 - 15.65

[0:\93\97\DWG\SR25A\F0000001.DWG] JOR
05-25-2001 3:01 PM



END	AREA		VOLUME	
	CUT	FILL	CUT	FILL
680	107	99		
675				
670				
680			164	149
675				
670				
680	70	62		
675				
670				
680			128	90
675				
670				
680	68	35	292	239

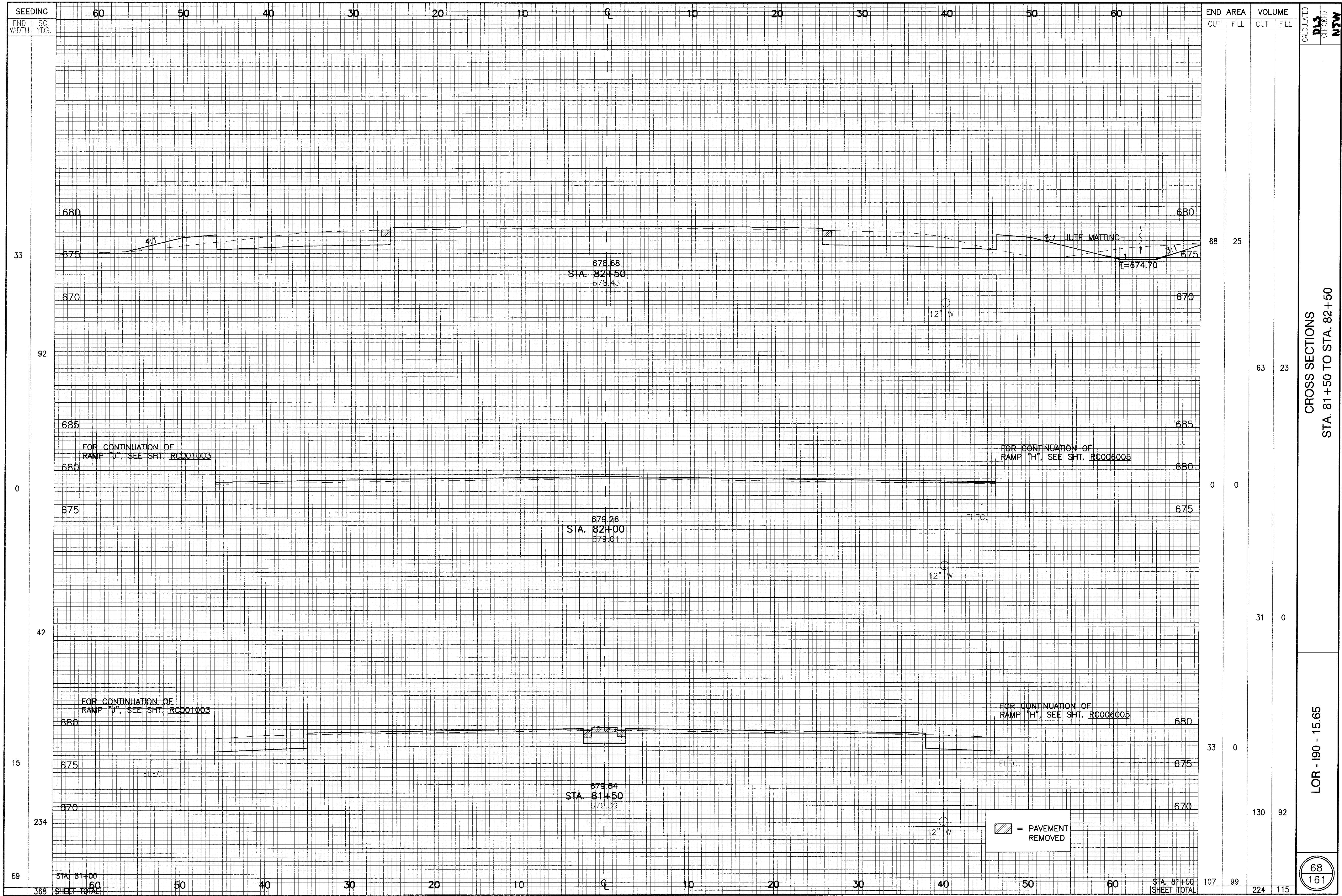
CALCULATED
 DLS
 CHECKED
 NSW

CROSS SECTIONS
 STA. 80+50 TO STA. 81+00

LOR - 190 - 15.65

67
 161

C:\G:\197\DWG\SR25A\RC004001.DWG J JGR
 05-25-2001 3:03PM



END	AREA		VOLUME	
	CUT	FILL	CUT	FILL
68		25		
92		63	23	
0	0	0		
42		31	0	
15	33	0		
234		130	92	
69	107	99	224	115

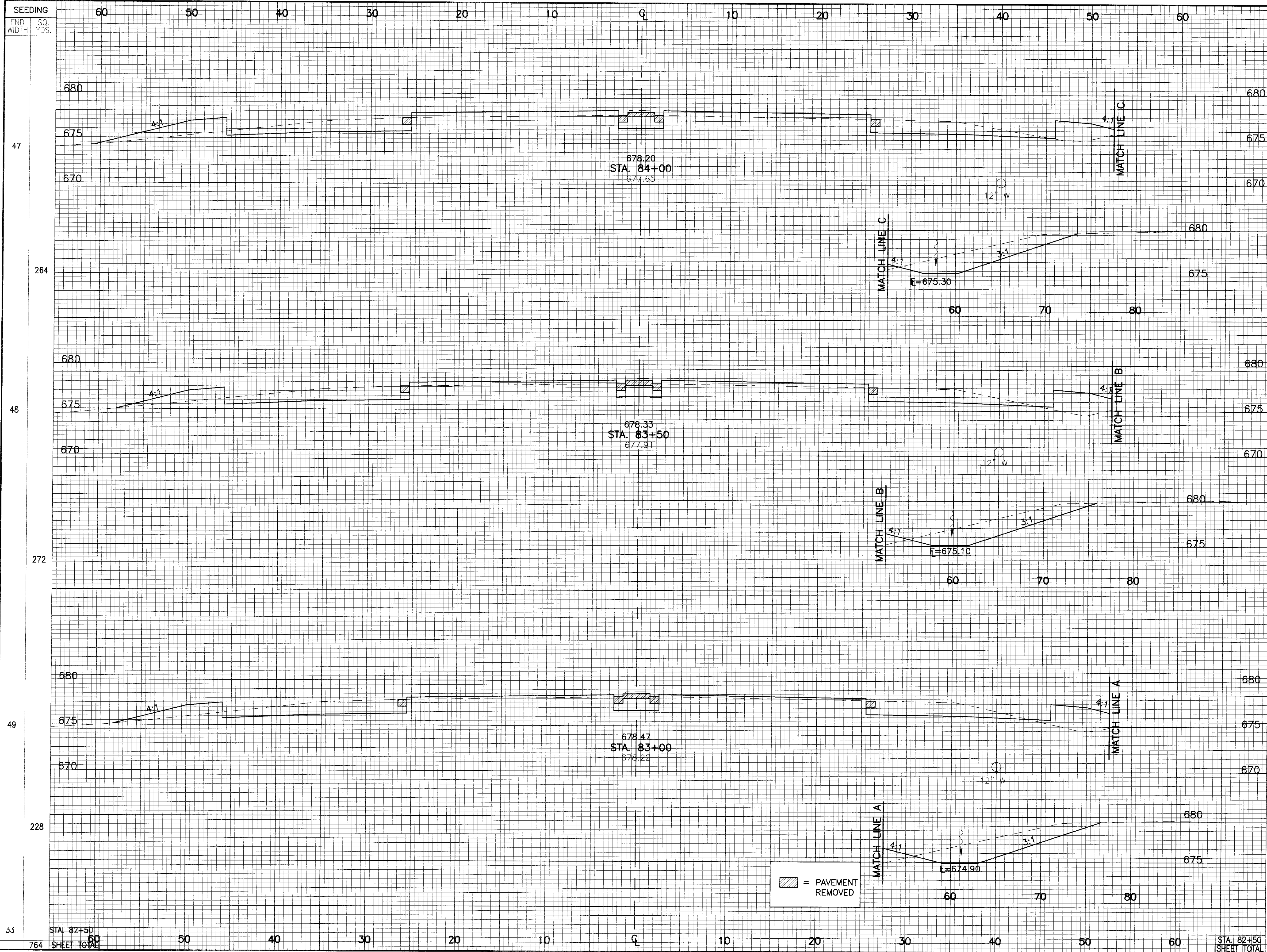
CALCULATED
 PLS
 CHECKED
 NJW

CROSS SECTIONS
 STA. 81+50 TO STA. 82+50

LOR - 190 - 15.65

68
 161

[0:\93197\DWG\51\254\RC000001.DWG] JGR
 05-25-2001 3:05PM



END WIDTH	SQ. YDS.	END AREA		VOLUME	
		CUT	FILL	CUT	FILL
60					
50					
40					
30					
20					
10					
CL					
10					
20					
30					
40					
50					
60					
74	26			141	48
78	26			147	51
81	29			138	50
68	25			426	149

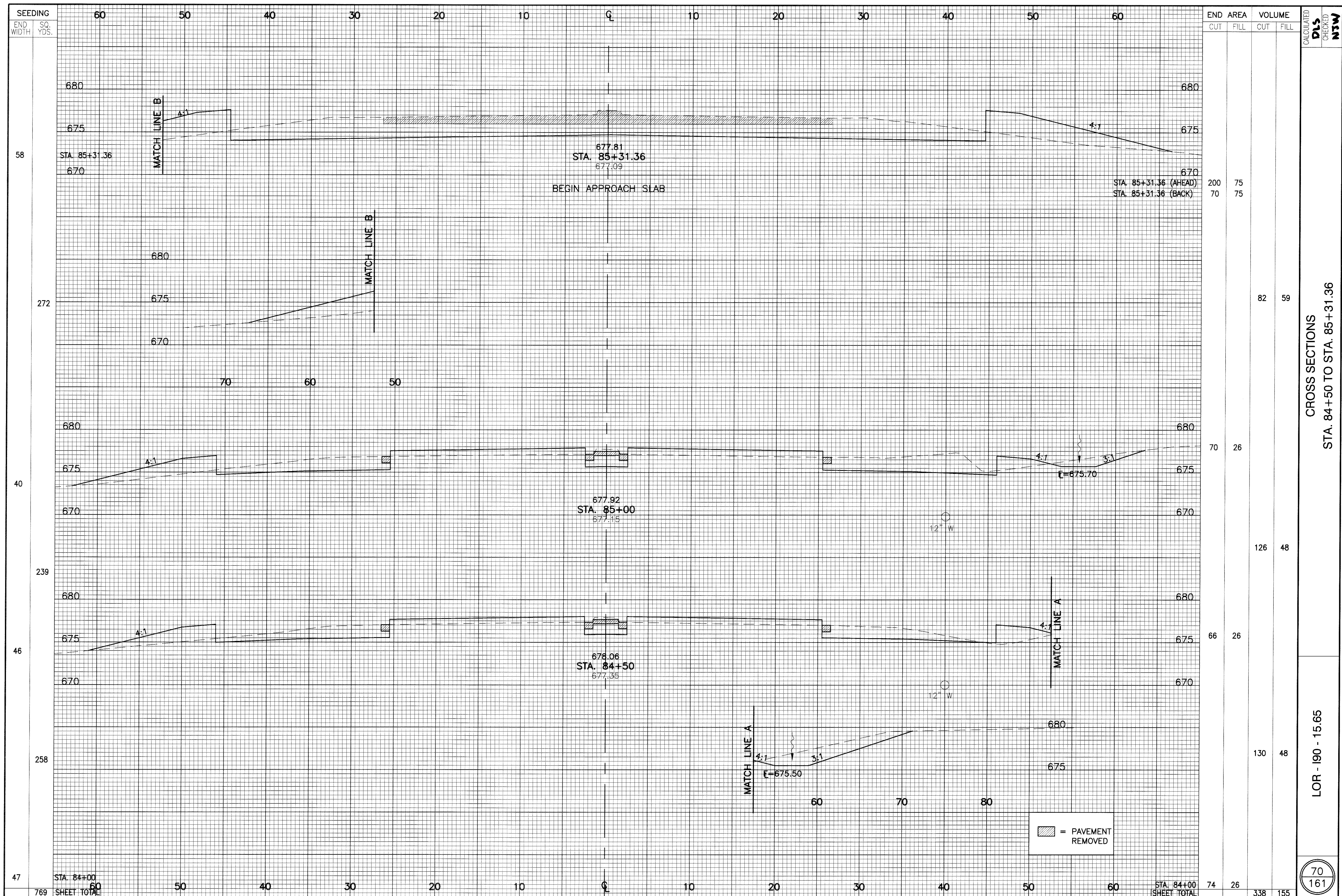
CALCULATED
 CHECKED
 PLS
 NTW

CROSS SECTIONS
 STA. 83+00 TO STA. 84+00

LOR - 190 - 15.65

69
 161

L:\0319\NUMOS\156254\156254.dwg [NW
 08-03-2001 2:17PM

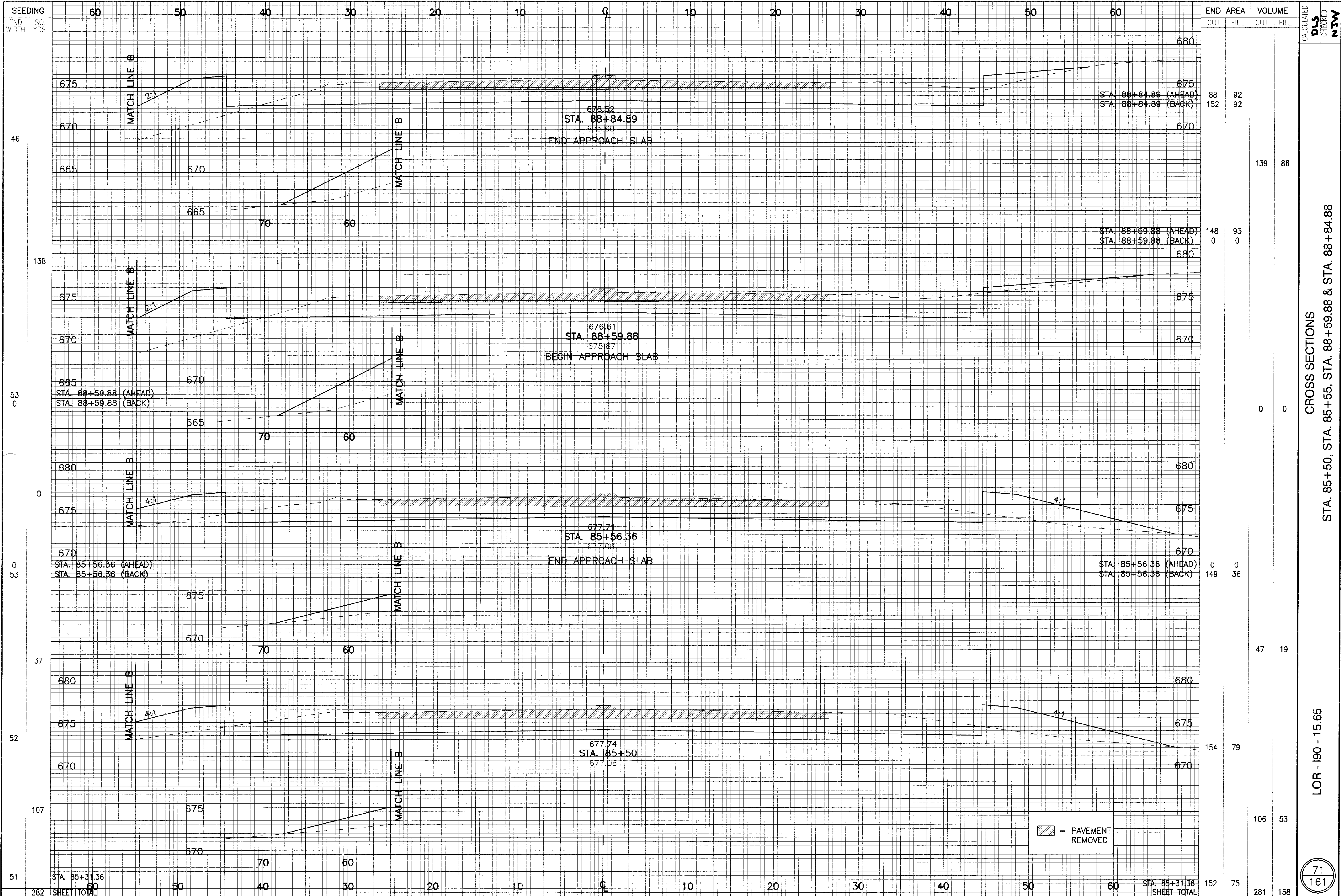


END	AREA		VOLUME	
	CUT	FILL	CUT	FILL
58	200	75		
272	70	75	82	59
40	70	26		
239			126	48
46	66	26		
258			130	48
47	74	26		
769	769	769	338	155

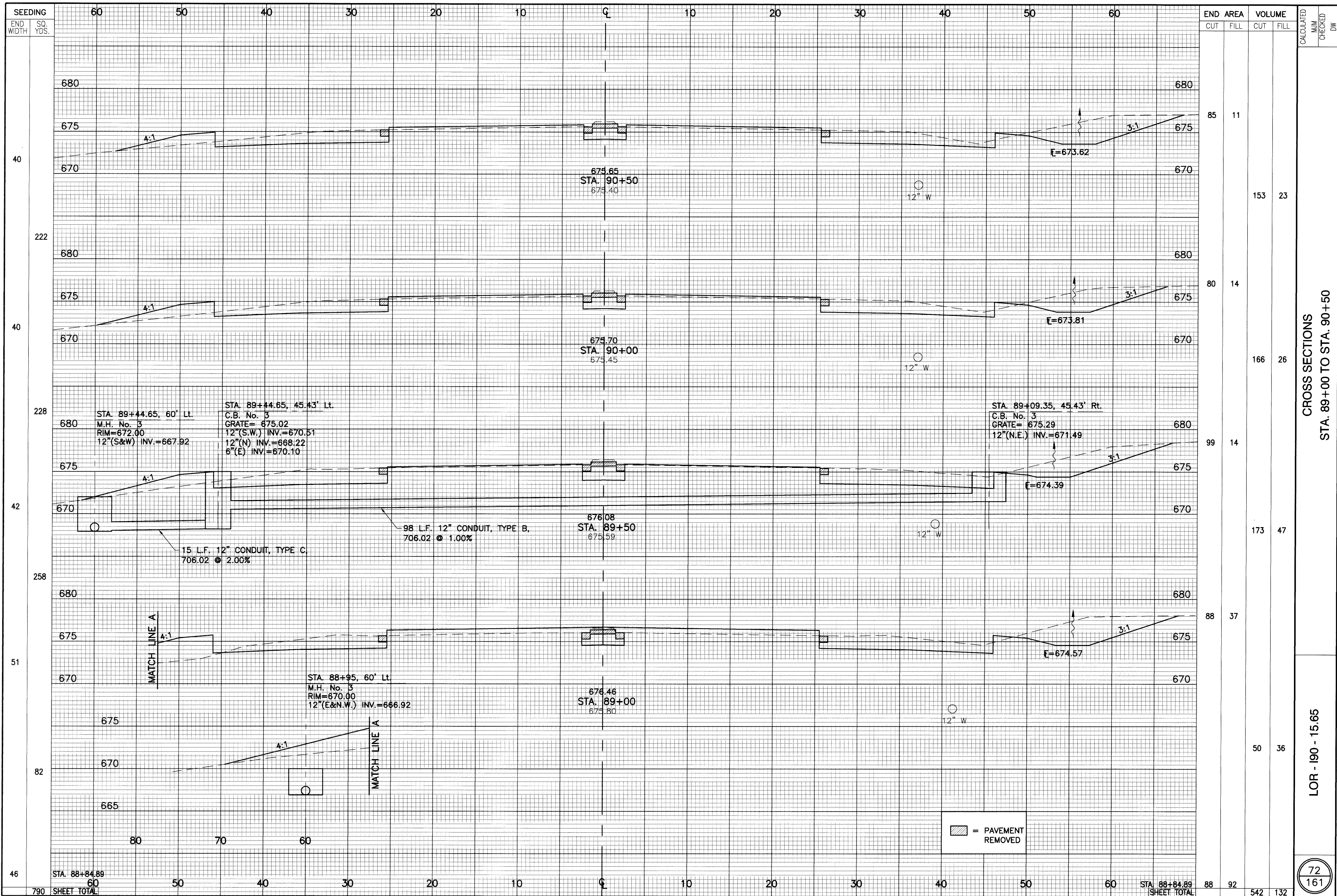
CROSS SECTIONS
STA. 84+50 TO STA. 85+31.36

LOR - 190 - 15.65

70
161



[0:\191\1\DWG5\SR254\F0020001.DWG] NSW
 08-03-2001 2:28PM



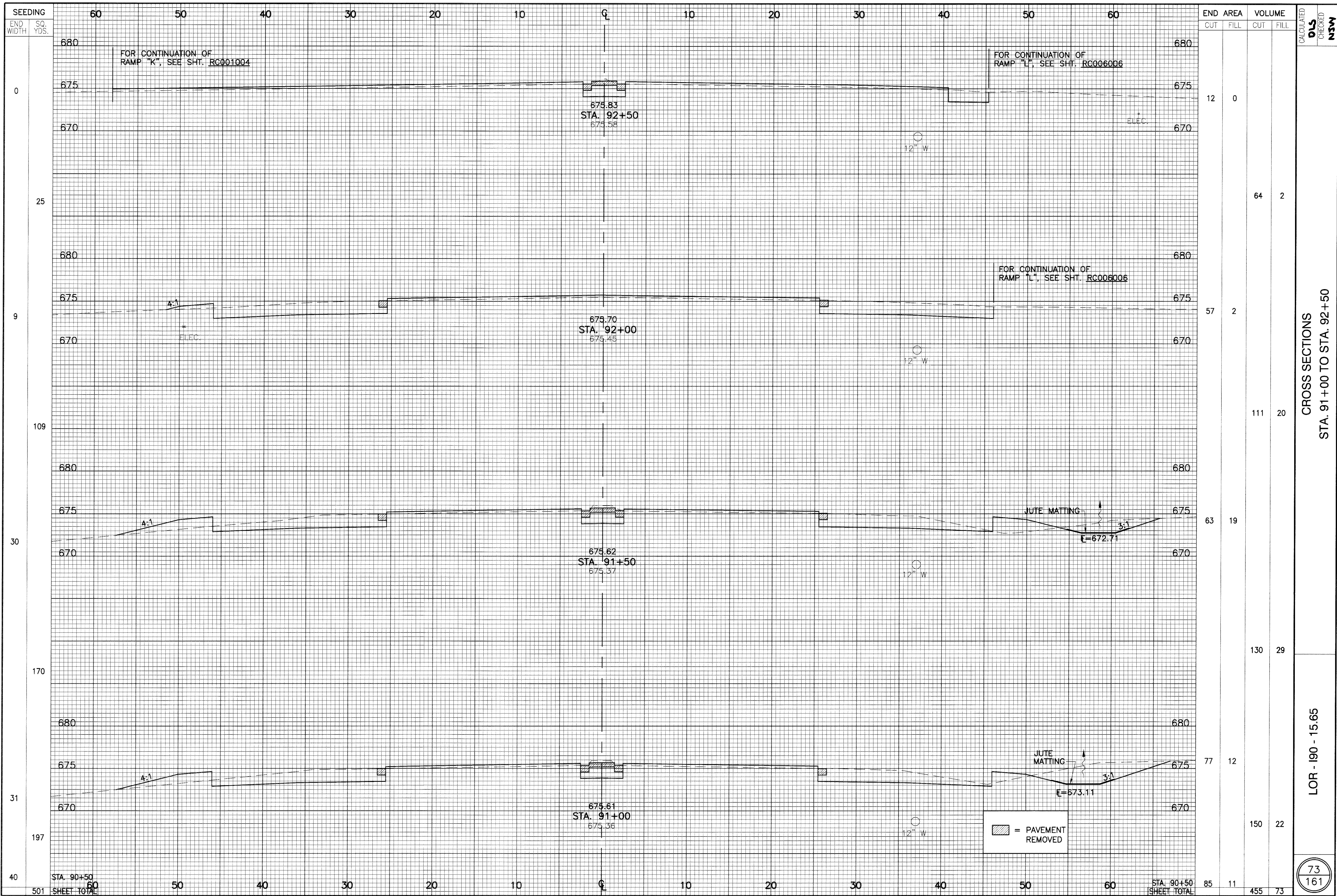
END CUT	AREA FILL	VOLUME		CALCULATED	MIN	CHECKED	DW
		CUT	FILL				
85	11						
153	23						
80	14						
166	26						
99	14						
173	47						
88	37						
50	36						
88	92	542	132				

CROSS SECTIONS
STA. 89+00 TO STA. 90+50

LOR - 190 - 15.65

72
161

I:\031971\DWG\SR25A\RC01.001.DWG] NUN
 08-03-2001 2:31PM

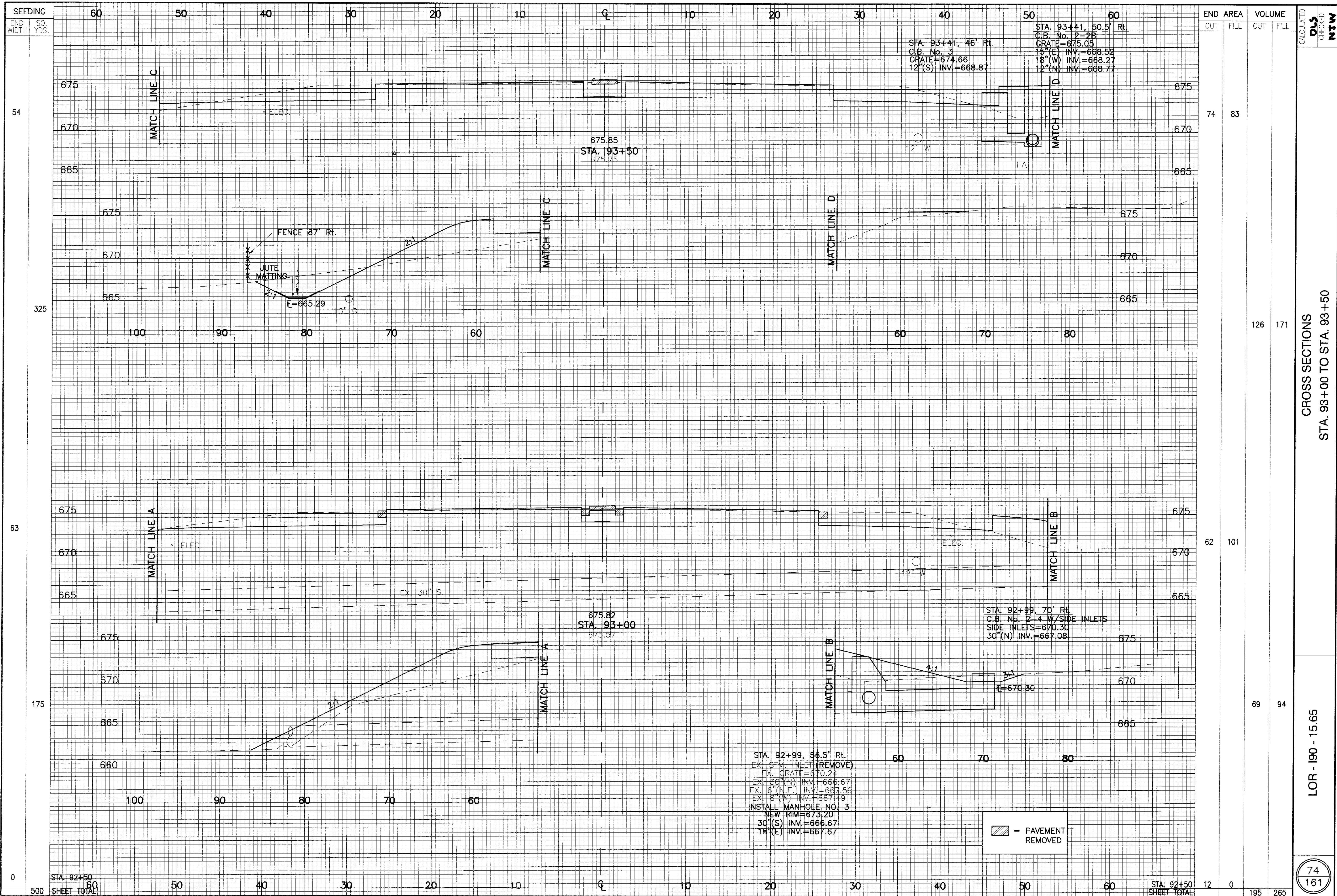


CROSS SECTIONS
STA. 91+00 TO STA. 92+50

LOR - 190 - 15.65

73
161

C:\03197\UNCS\56264\RC01\2001.DWG | NW
 08-03-2001 2:54PM

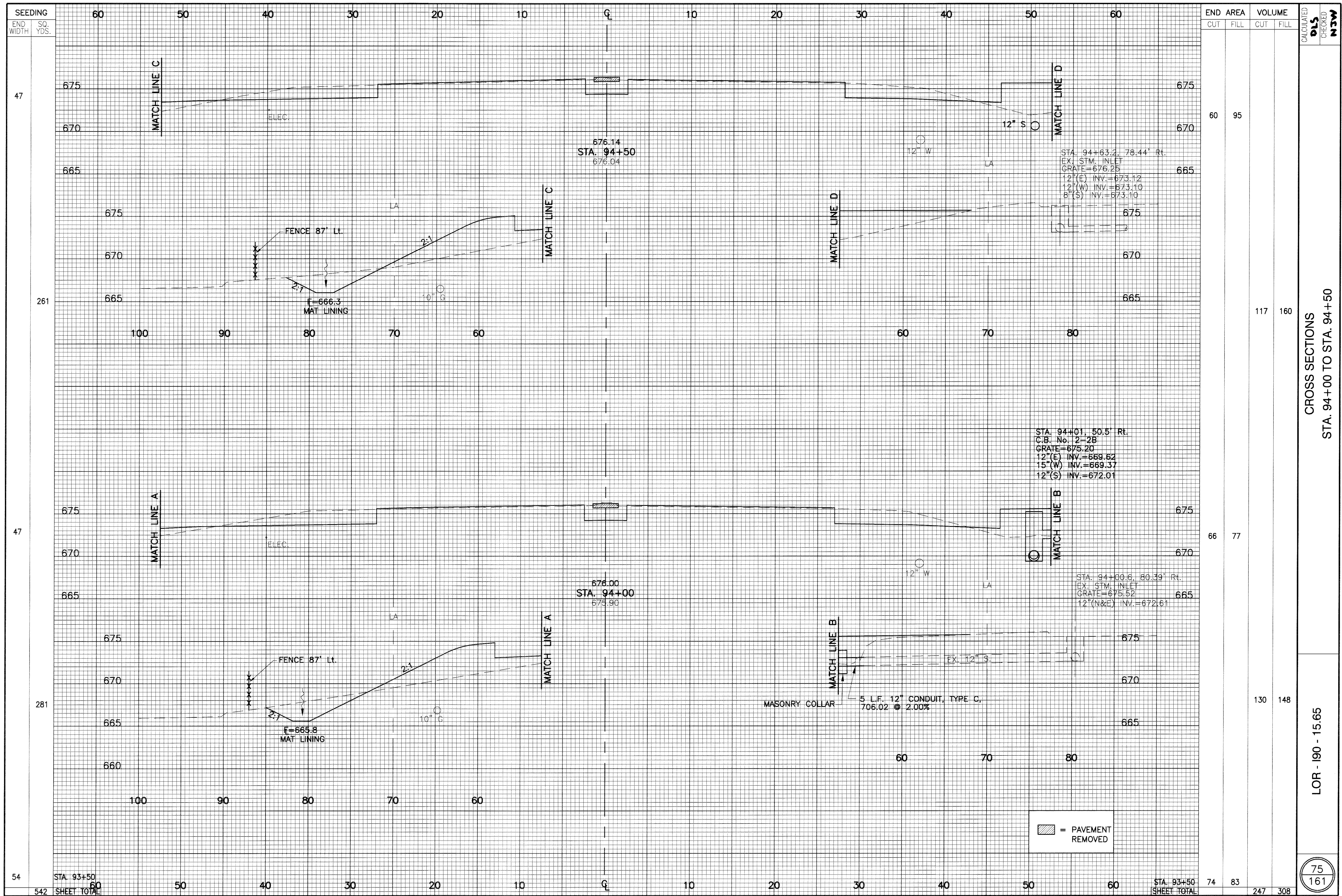


END AREA	VOLUME		CALCULATED	CHECKED	NTW
	CUT	FILL			
74	83				
126	171				
62	101				
69	94				
12	0	195	265		

CROSS SECTIONS
STA. 93+00 TO STA. 93+50

LOR - 190 - 15.65

I:\01\93197\DWG\S\SR25A\RC01\3001.DWG] NJW
08-03-2001 2:37PM

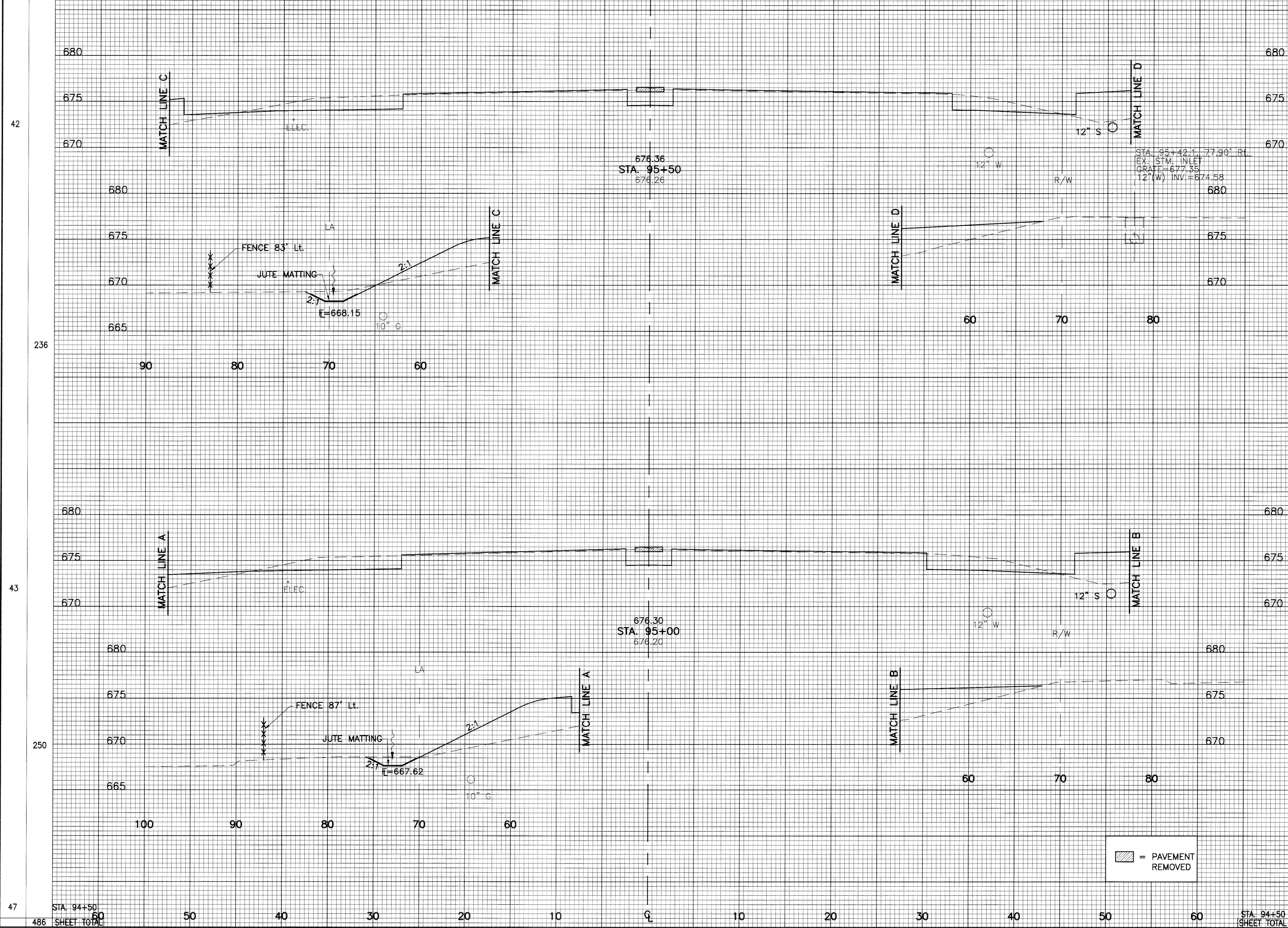


[C:\93197\DWG\3R25A\RC1300\A.DWG] JGR
05-25-2001 3:36PM

SEEDING
END WIDTH SQ. YDS.

END AREA VOLUME
CUT FILL CUT FILL

CALCULATED
DLS
CHECKED
NSW

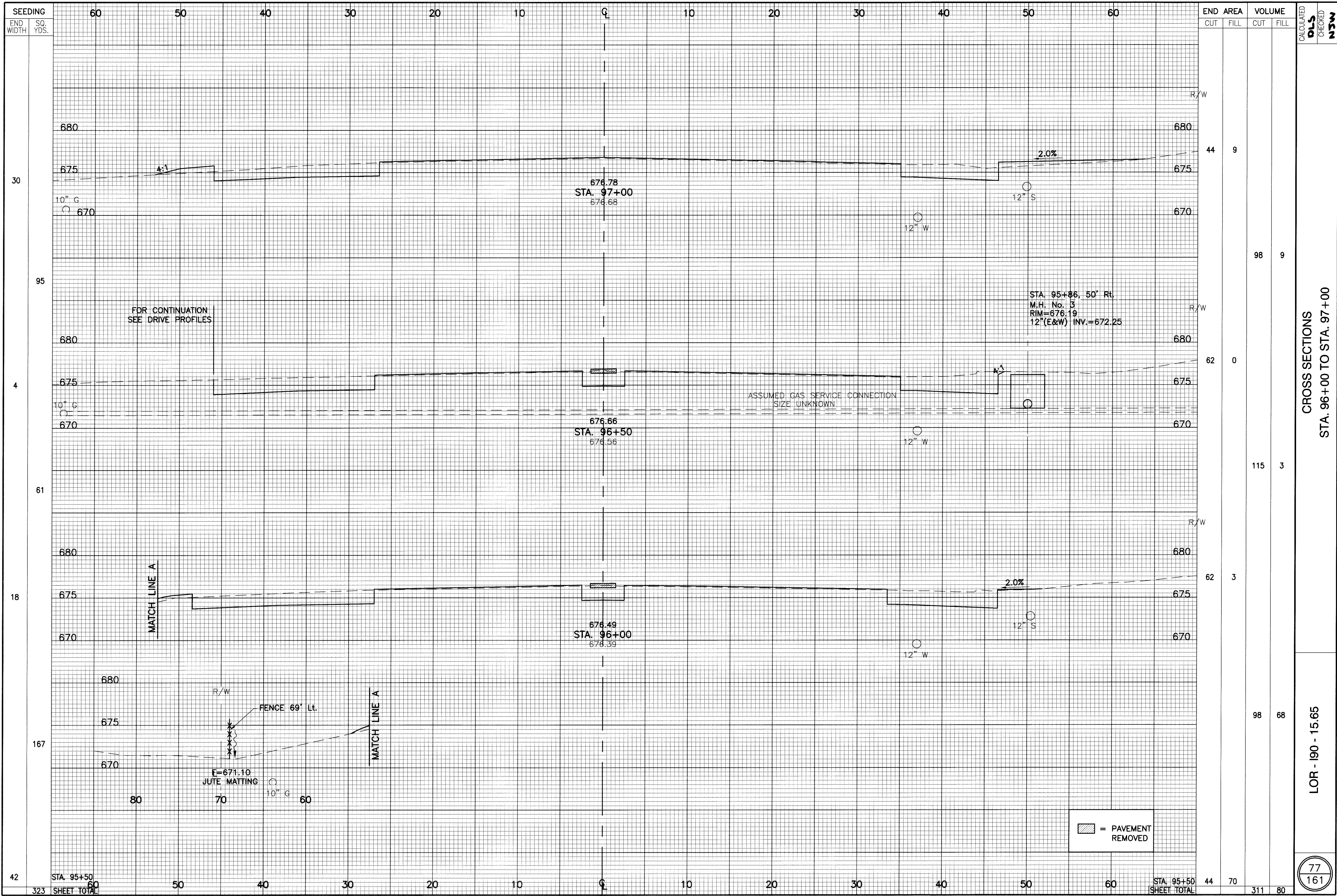


STATION	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
42	44	70		
236	83	151		
43	45	93		
250	97	174		
47	60	95	180	325

CROSS SECTIONS
STA. 95+00 TO STA. 95+50

LOR - 190 - 15.65

76
161

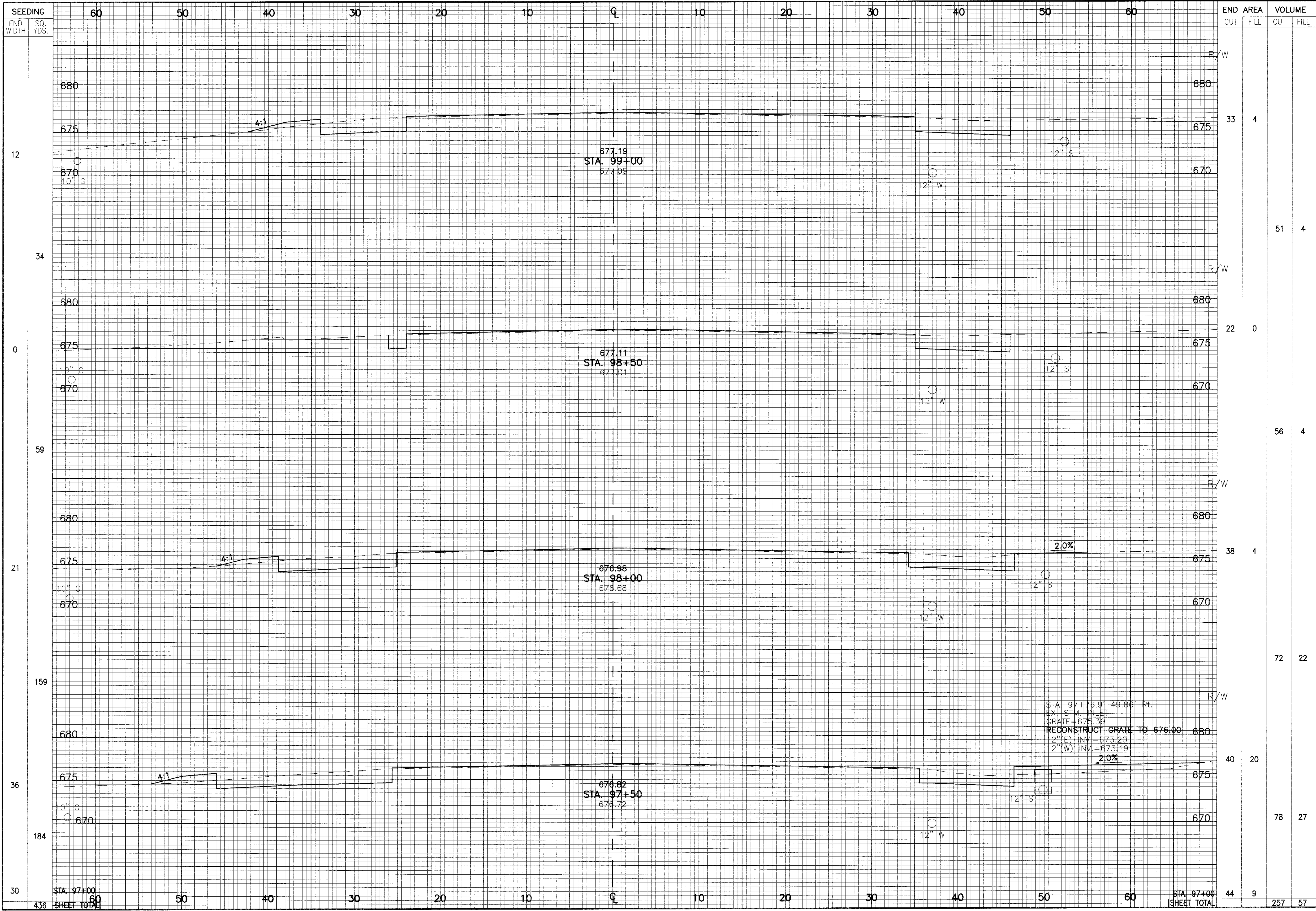


CROSS SECTIONS
 STA. 96+00 TO STA. 97+00

LOR - 190 - 15.65

77
161

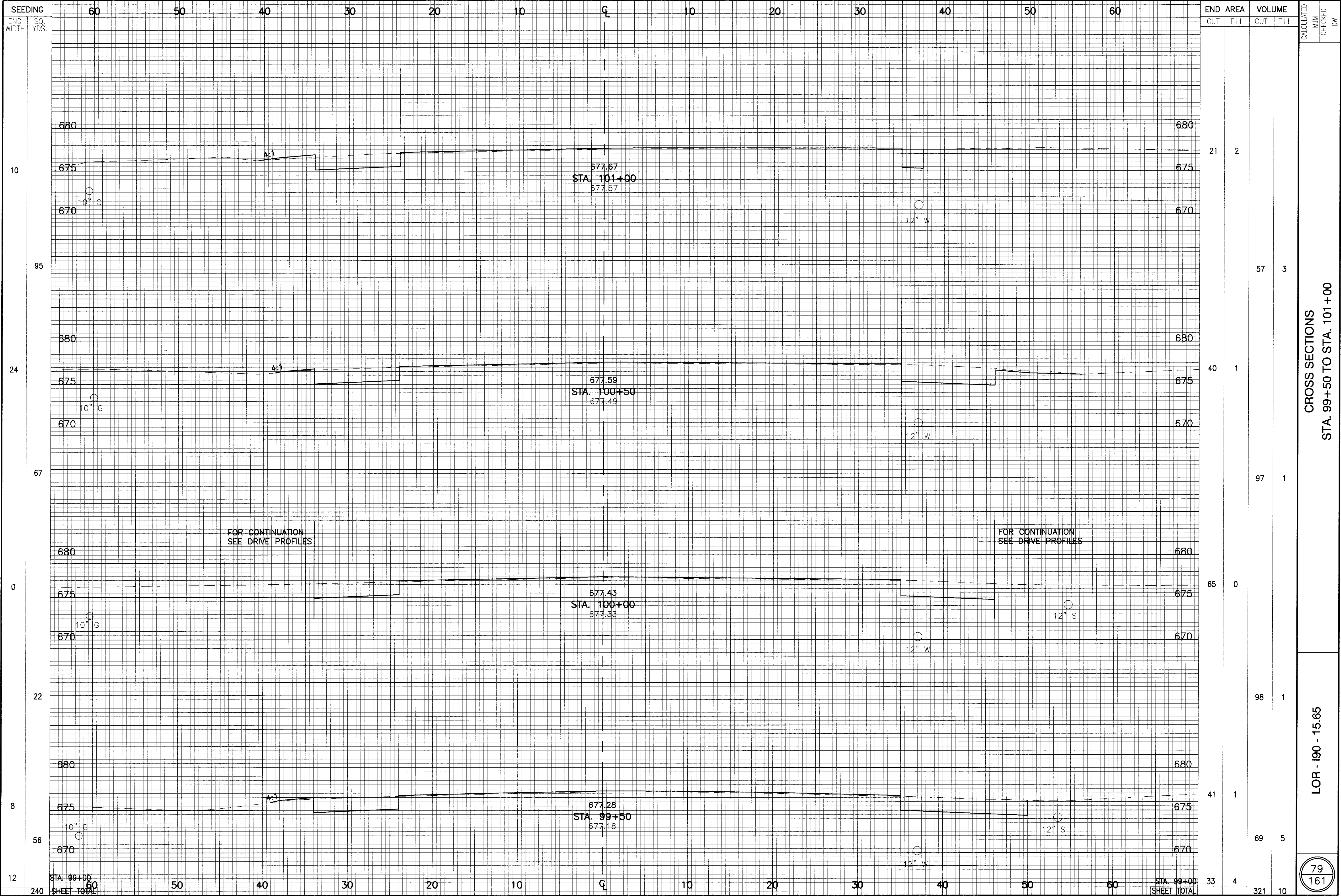
[C:\93197\DWG\SR25A\RC015001.DWG] NAW
 08-29-2001 11:08AM



END CUT	AREA FILL	VOLUME	
		CUT	FILL
33	4		
22	0	51	4
38	4	56	4
40	20	72	22
44	9	78	27
44	9	257	57

CALCULATED
 CHECKED
 N3W
 CROSS SECTIONS
 STA. 97+50 TO STA. 99+00
 LOR - I90 - 15.65
 78
 161

C:\91977\DWG\S225A.RC016001.DWG] N3W
 08-03-2001 2:45PM



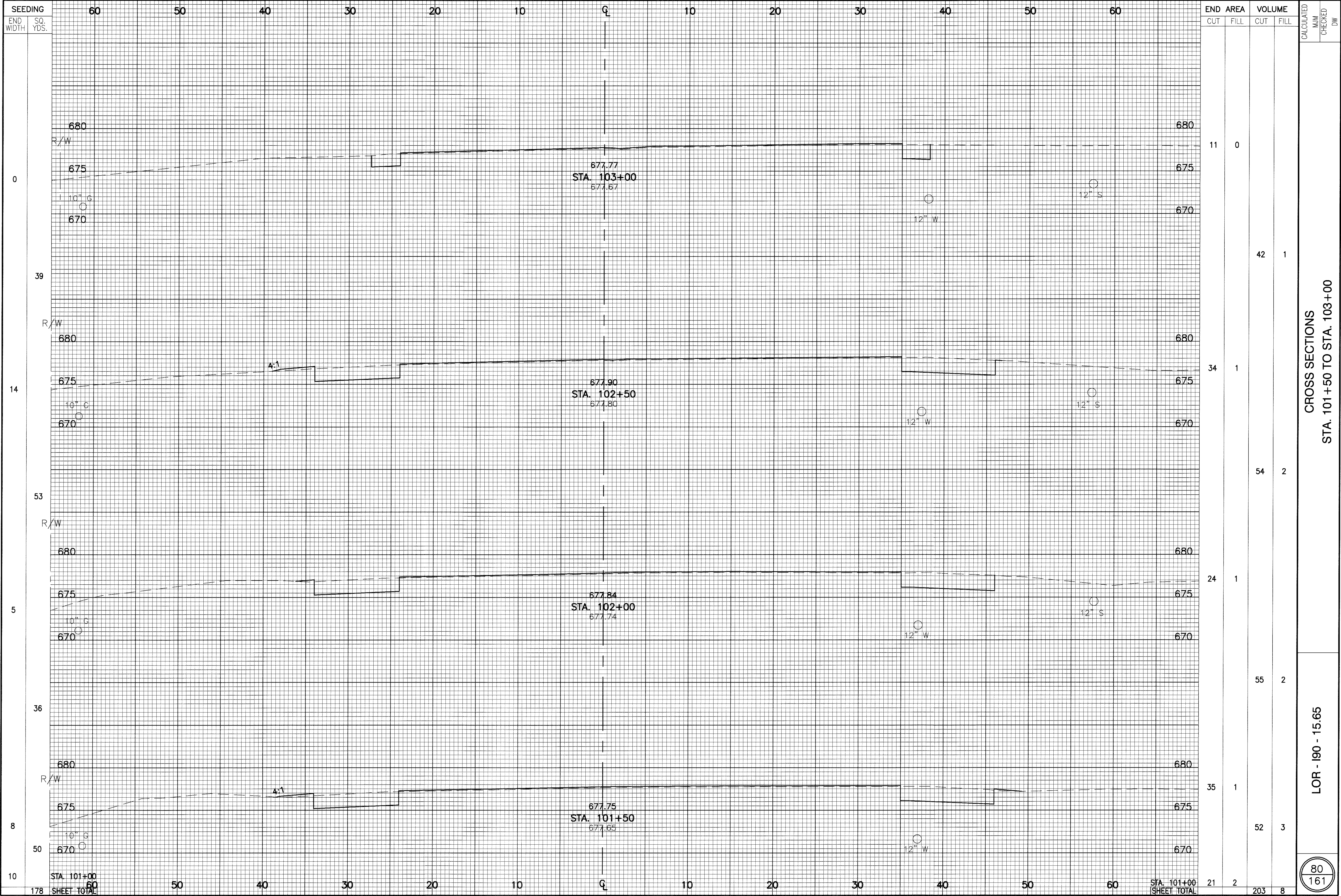
END WIDTH	END AREA		VOLUME	
	CUT	FILL	CUT	FILL
10	21	2		
95			57	3
24	40	1		
67			97	1
0	65	0		
22			98	1
8	41	1		
56			69	5
12	33	4		
240			321	10

CROSS SECTIONS
STA. 99+50 TO STA. 101+00

LOR - 190 - 15.65

79
161

[C:\A\93197\DWG\5\SR254\RC017001.DWG] NJW
08-02-2001 3:00PM



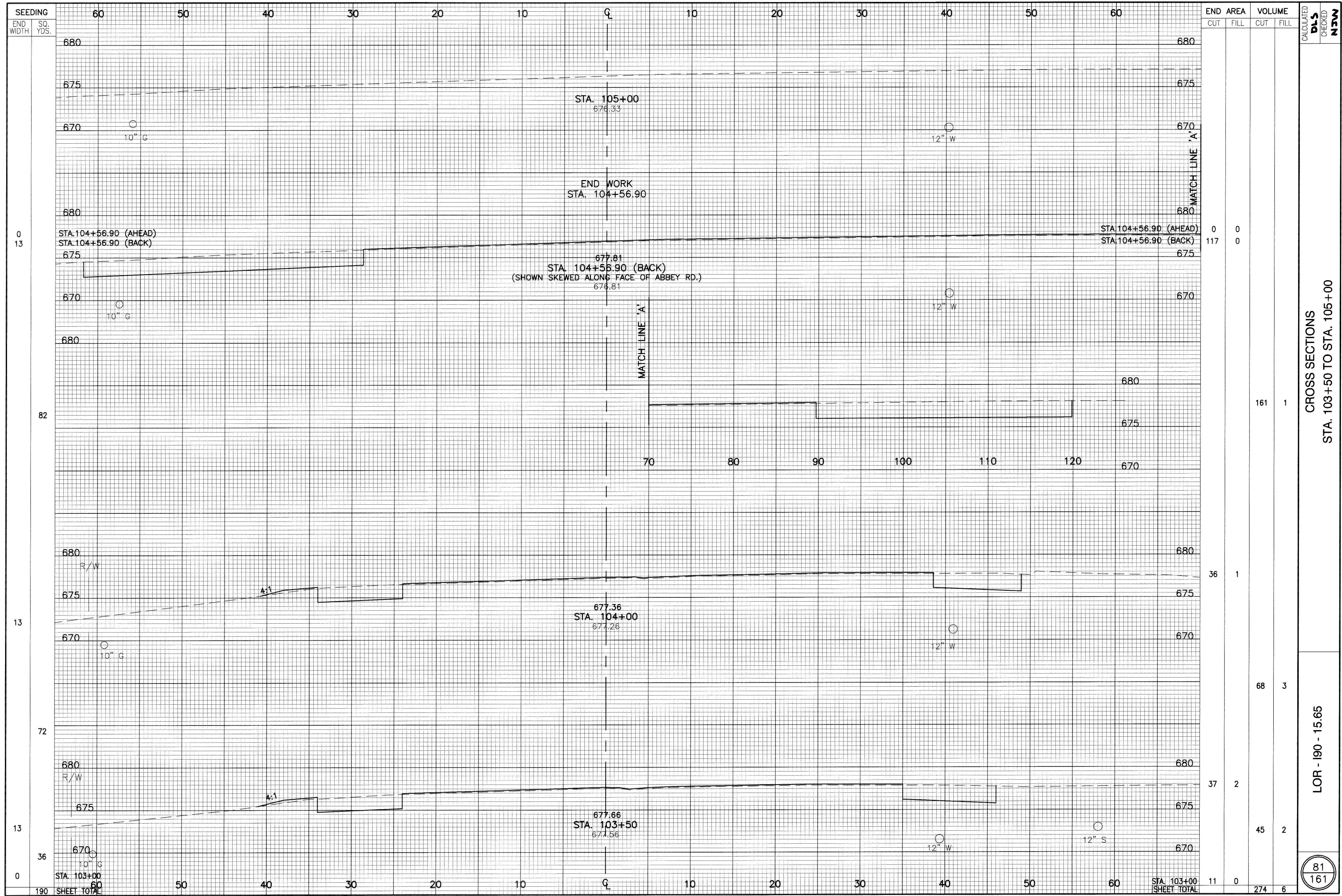
END	AREA		VOLUME		CALCULATED	CHECKED
	CUT	FILL	CUT	FILL		
0	11	0				
39			42	1		
14	34	1				
53			54	2		
5	24	1				
36			55	2		
8	35	1				
50			52	3		
10	21	2	203	8		

CROSS SECTIONS
STA. 101+50 TO STA. 103+00

LOR - 190 - 15.65

80
161

[0:\31917\DWG\5\5234\RC018001.DWG] NUN
08-03-2001 3:03PM



END STA.	AREA		VOLUME	
	CUT	FILL	CUT	FILL
680				
675				
670				
680				
0	0	0	0	0
13	117	0		
675				
670				
680				
82			161	1
670				
680				
13	36	1		
675				
670				
72			68	3
680				
13	37	2		
675				
670				
36			45	2
670				
0	11	0	274	6
190				

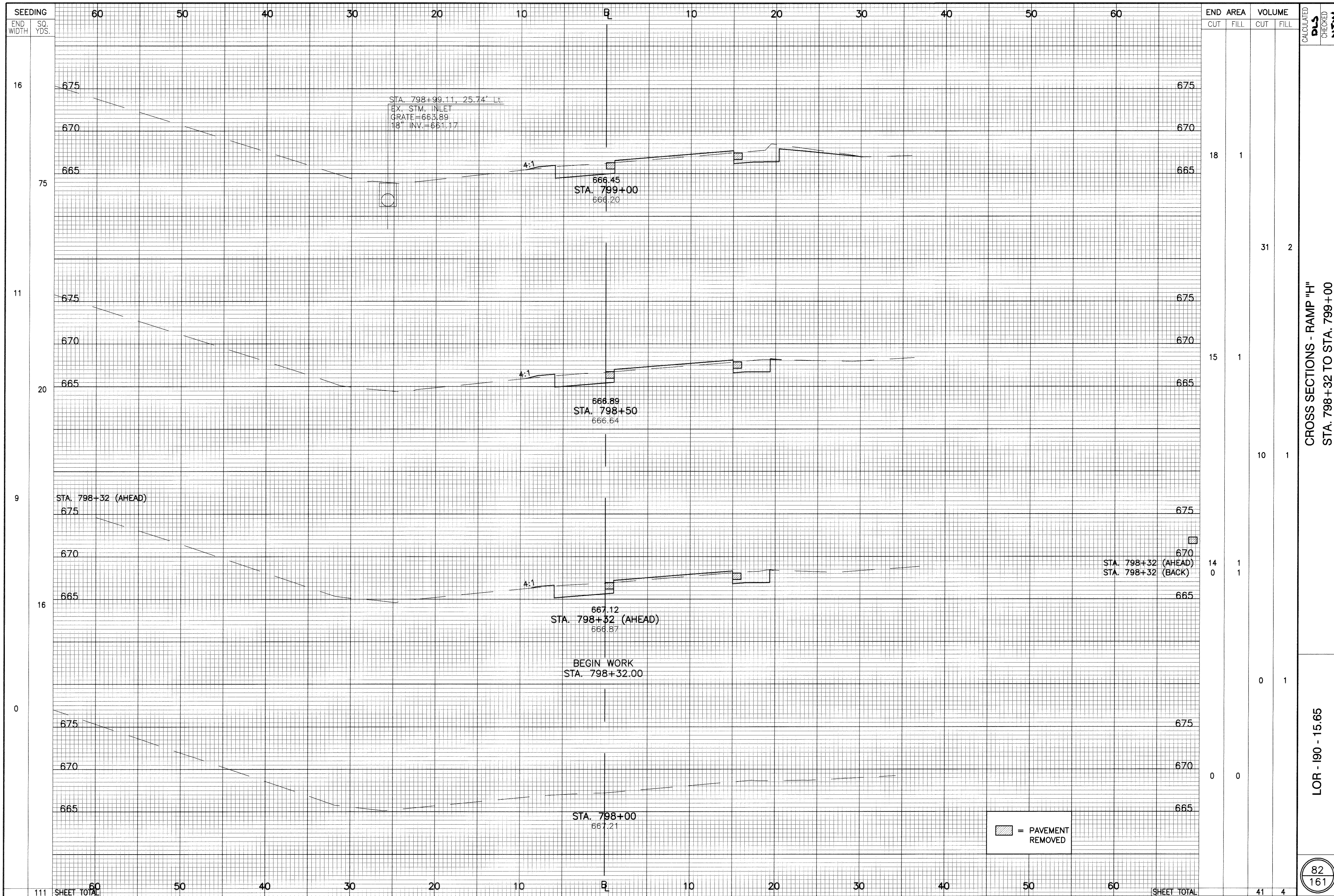
CALCULATED
 DLS
 CHECKED
 NEW

CROSS SECTIONS
 STA. 103+50 TO STA. 105+00

LOR - 190 - 15.65

81
 161

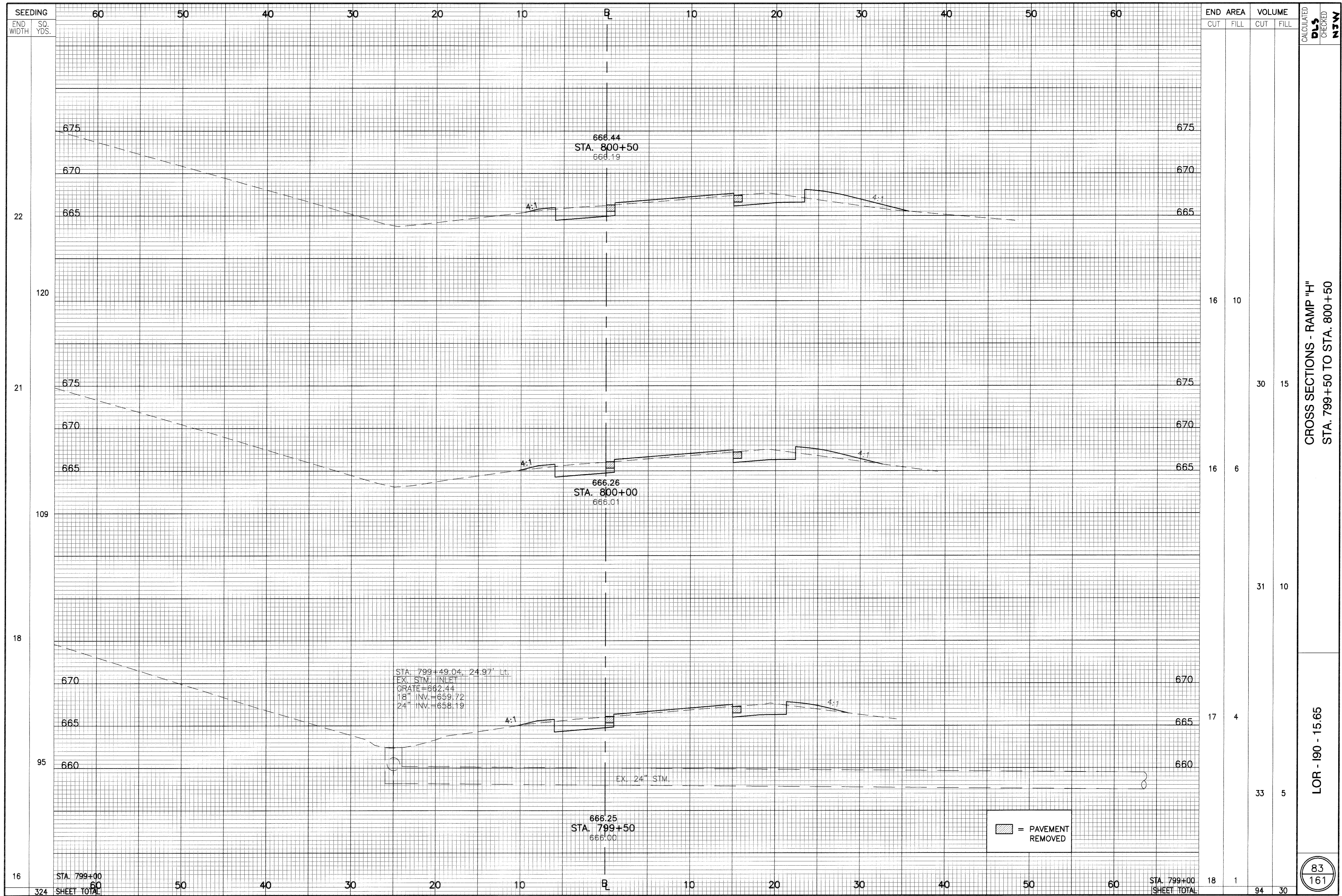
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 8-03-2001 3:08PM



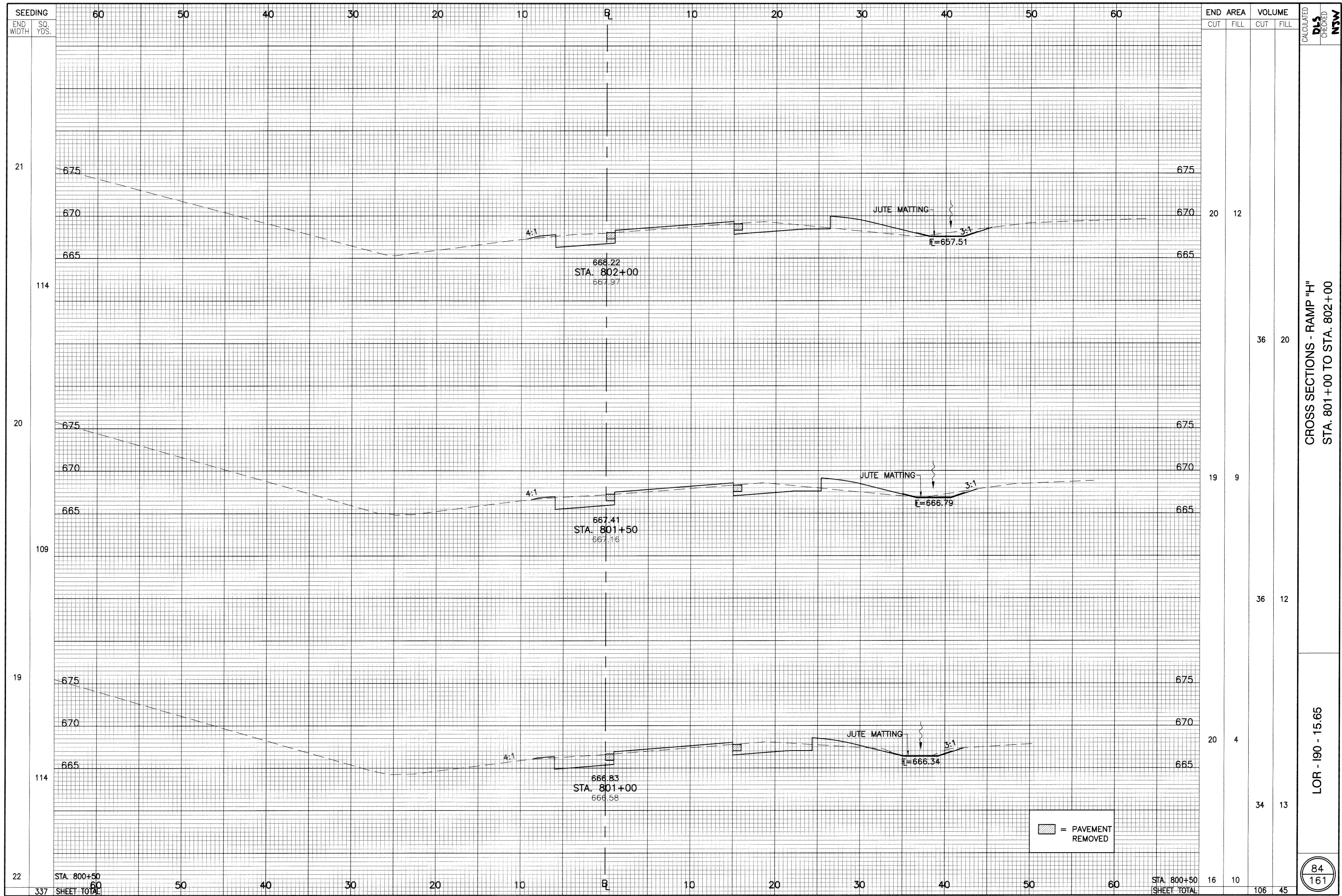
CROSS SECTIONS - RAMP "H"
 STA. 798+32 TO STA. 799+00

LOR - 190 - 15.65

C:\3197\DWG\SR254\RC001005.DWG 1 JGR
 25-25-2001 4:44PM



CALCULATED
 DLS
 CHECKED
 NJW
 CROSS SECTIONS - RAMP "H"
 STA. 799+50 TO STA. 800+50
 LOR - I90 - 15.65
 83
 161



END	AREA		VOLUME	
	CUT	FILL	CUT	FILL
21				
20	12			
19	9			
18				
17				
16	10		106	45
TOTAL	31		106	45

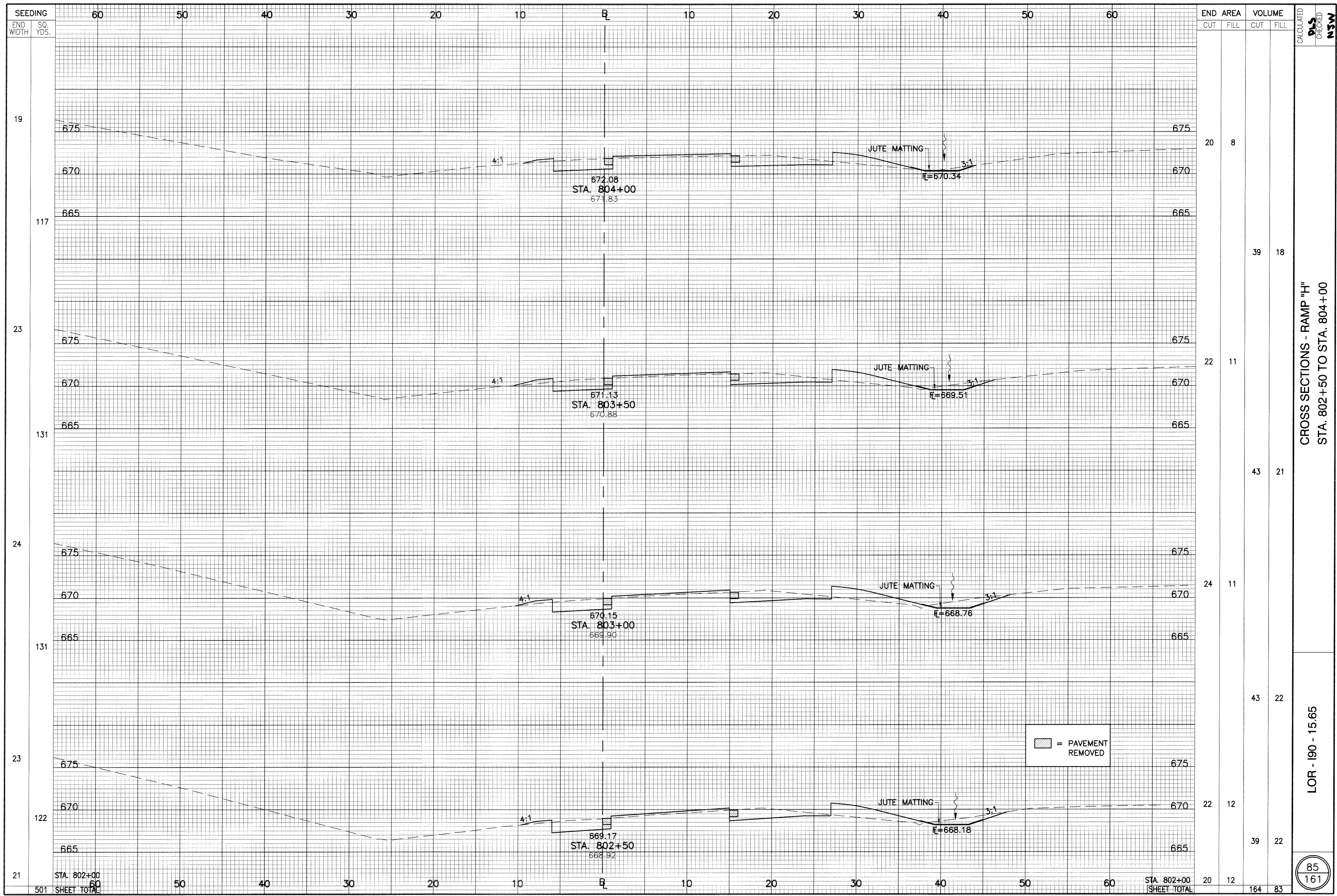
CALCULATED
 DLS
 CHECKED
 NSW

CROSS SECTIONS - RAMP "H"
 STA. 801+00 TO STA. 802+00

LOR - I90 - 15.65

84
 161

0:\p197a\DWG\SR25A\F003005.DWG 1 JER
 05-25-2001 4:46PM

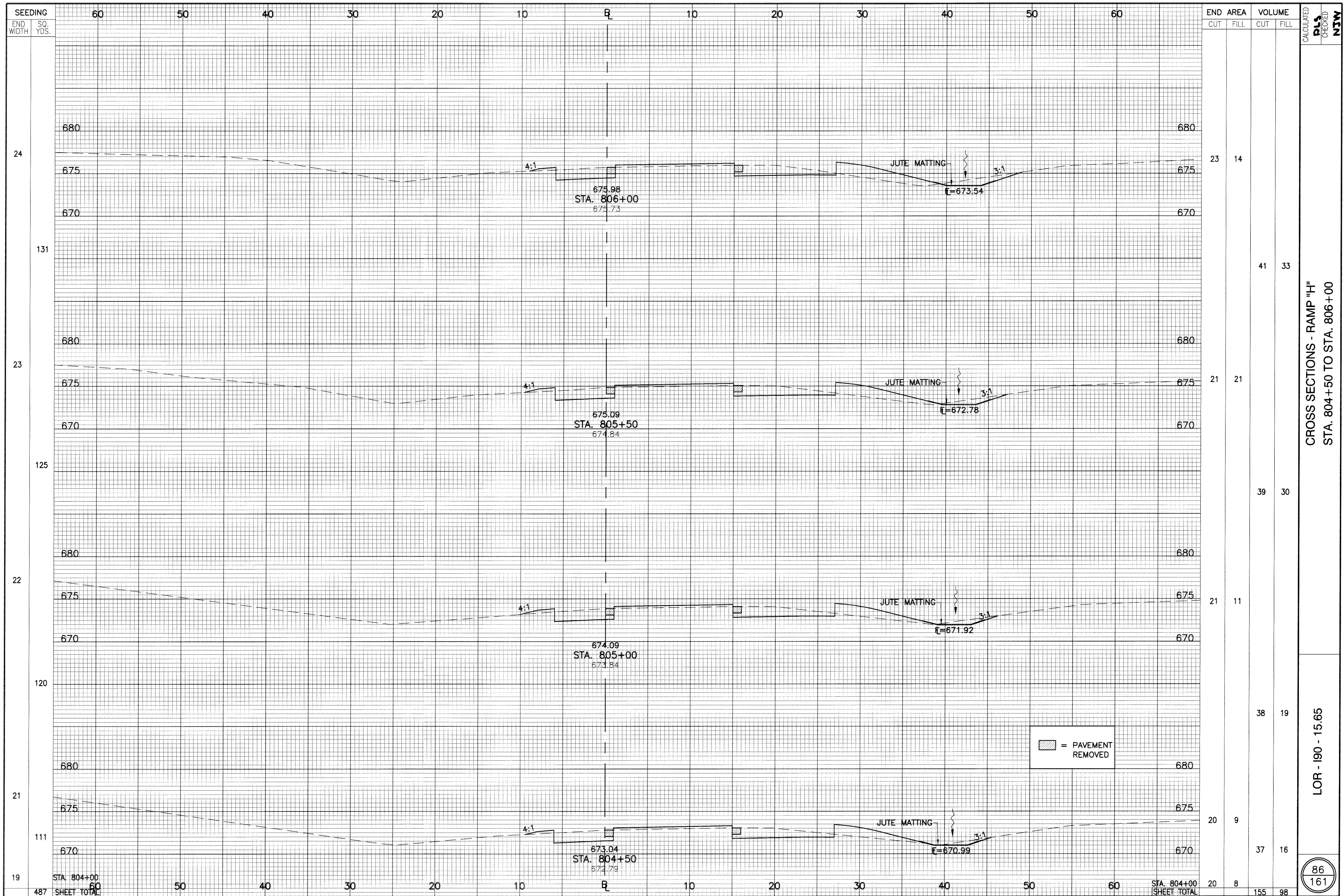


SEEDING END WIDTH	SQ. YDS.	END AREA		VOLUME		CALCULATED PLS CHECKED NSW
		CUT	FILL	CUT	FILL	
19				20	8	
117				39	18	
23				22	11	
131				43	21	
24				24	11	
131				43	22	
23				22	12	
122				39	22	
21	STA. 802+00 SHEET TOTAL	60	60	20	12	164 83

CROSS SECTIONS - RAMP "H"
STA. 802+50 TO STA. 804+00

LOR - 190 - 15.65

85
161

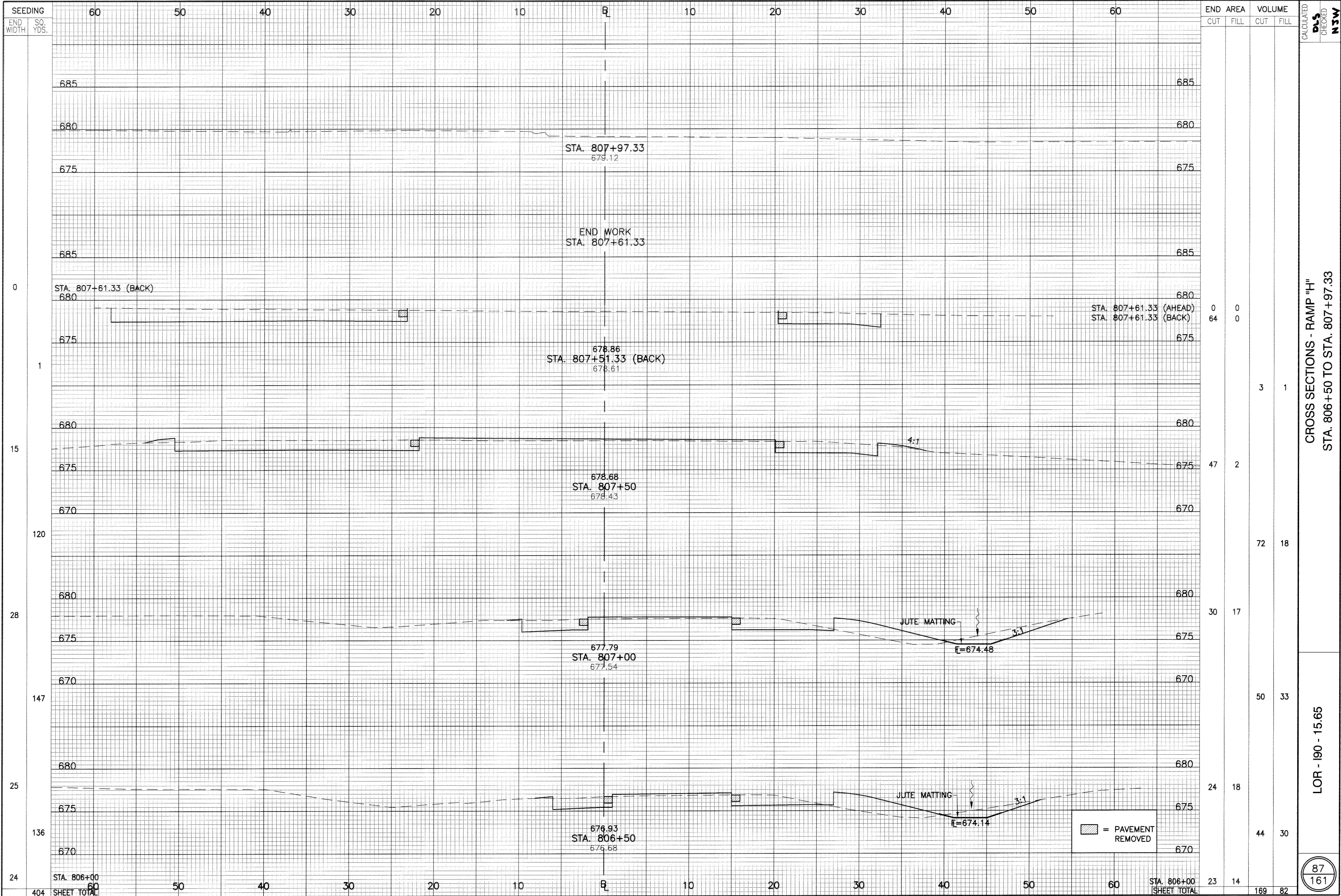


SEEDING END WIDTH	SQ. YDS.	END AREA		VOLUME		CALCULATED PLS CHECKED NJW
		CUT	FILL	CUT	FILL	
24				23	14	
131				41	33	
23				21	21	
125				39	30	
22				21	11	
120				38	19	
21				20	9	
111				37	16	
19				20	8	
487	SHEET TOTAL			155	98	

CROSS SECTIONS - RAMP "H"
STA. 804+50 TO STA. 806+00

LOR - 190 - 15.65

C:\03\03\107\DWG\SP25A\PC0505.DWG 1 JGR
05-25-2001 4:46PM

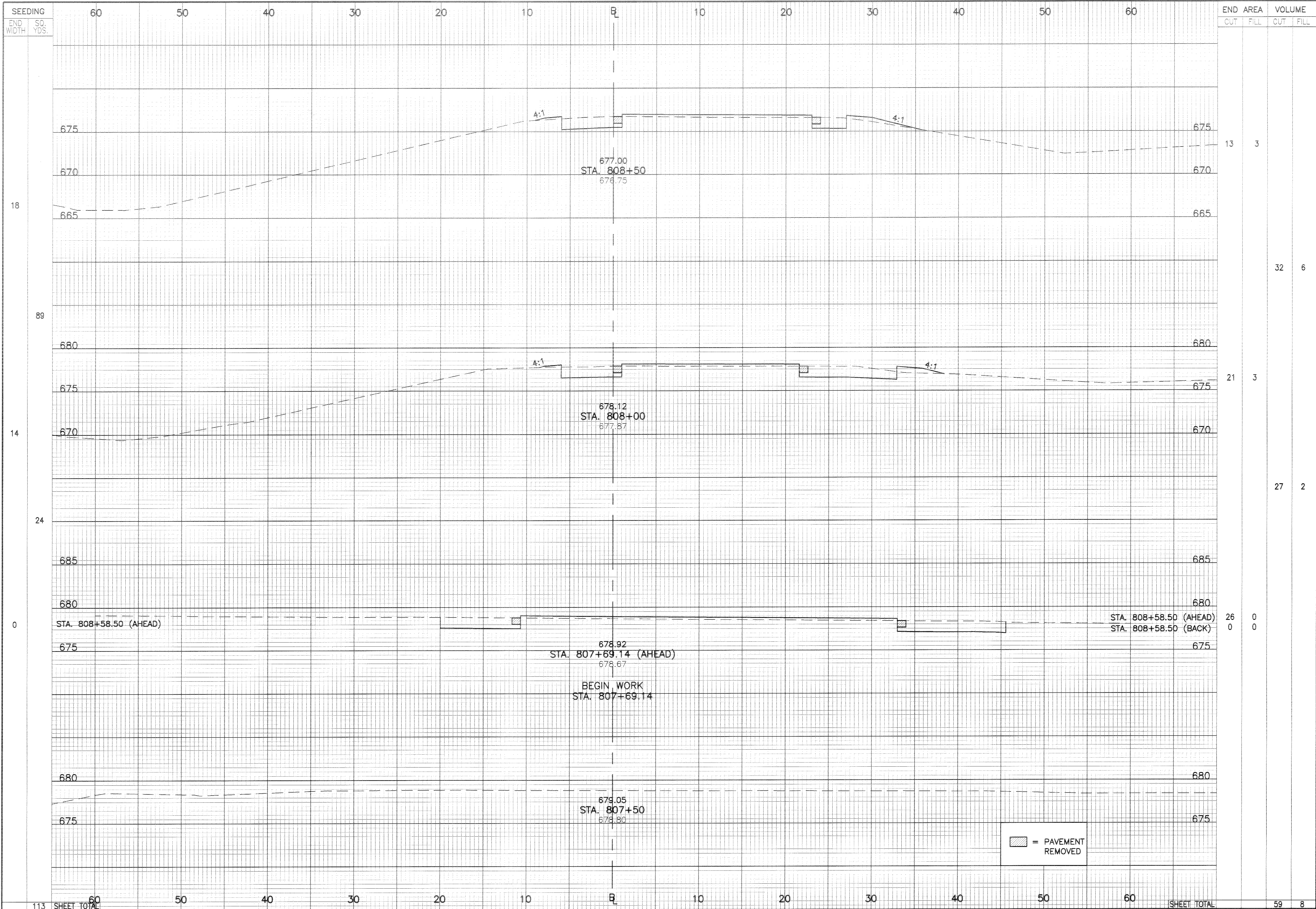


CROSS SECTIONS - RAMP "H"
 STA. 806+50 TO STA. 807+97.33

LOR - 190 - 15.65

87
161

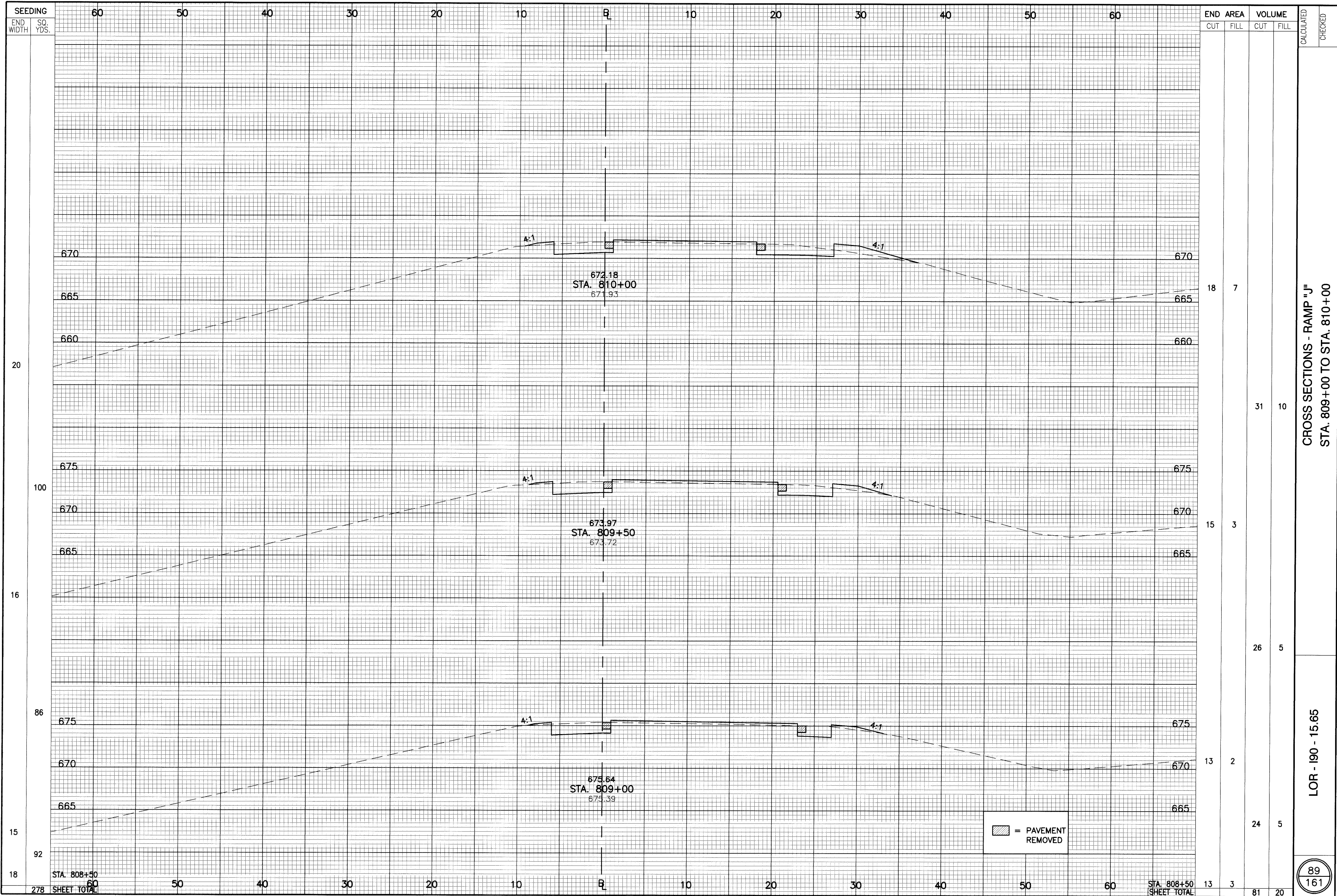
C:\Users\j197\OneDrive\Documents\Projects\SR224\F0000005.DWG 1 JOR
 15-25-2001 4:47PM



END	AREA		VOLUME	
	CUT	FILL	CUT	FILL
13		3		
32		6		
21	3			
27	2			
26	0	0		
59		8		

CALCULATED PLS CHECKED NSW
 CROSS SECTIONS - RAMP "J"
 STA. 807+58.50 TO STA. 808+50
 LOR - 190 - 15.65
 88
 161

C:\Users\191\Documents\SP25A\PC001003.DWG 1 AUT
 05-28-2001 8:17AM



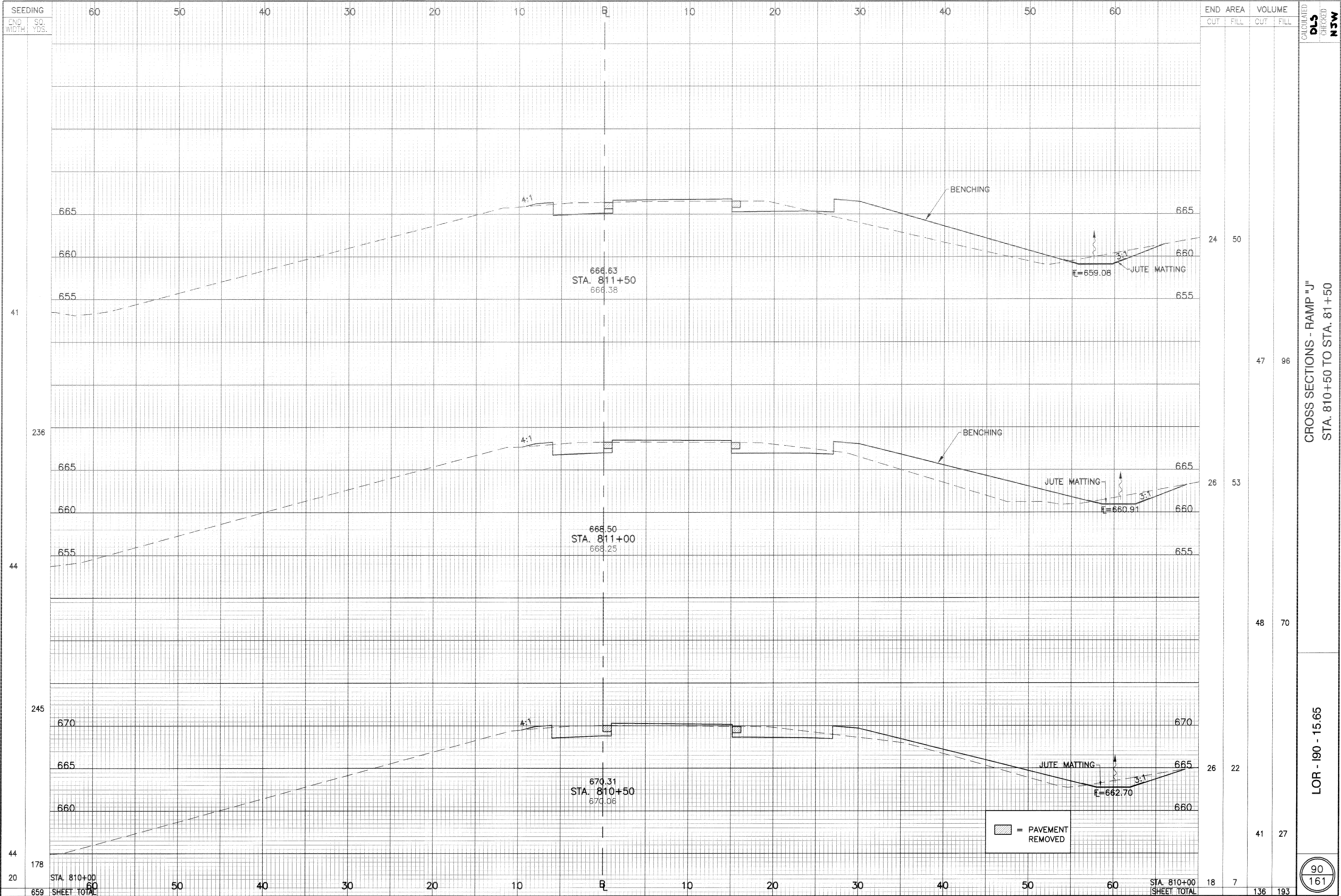
CROSS SECTIONS - RAMP "J"
 STA. 809+00 TO STA. 810+00

LOR - 190 - 15.65

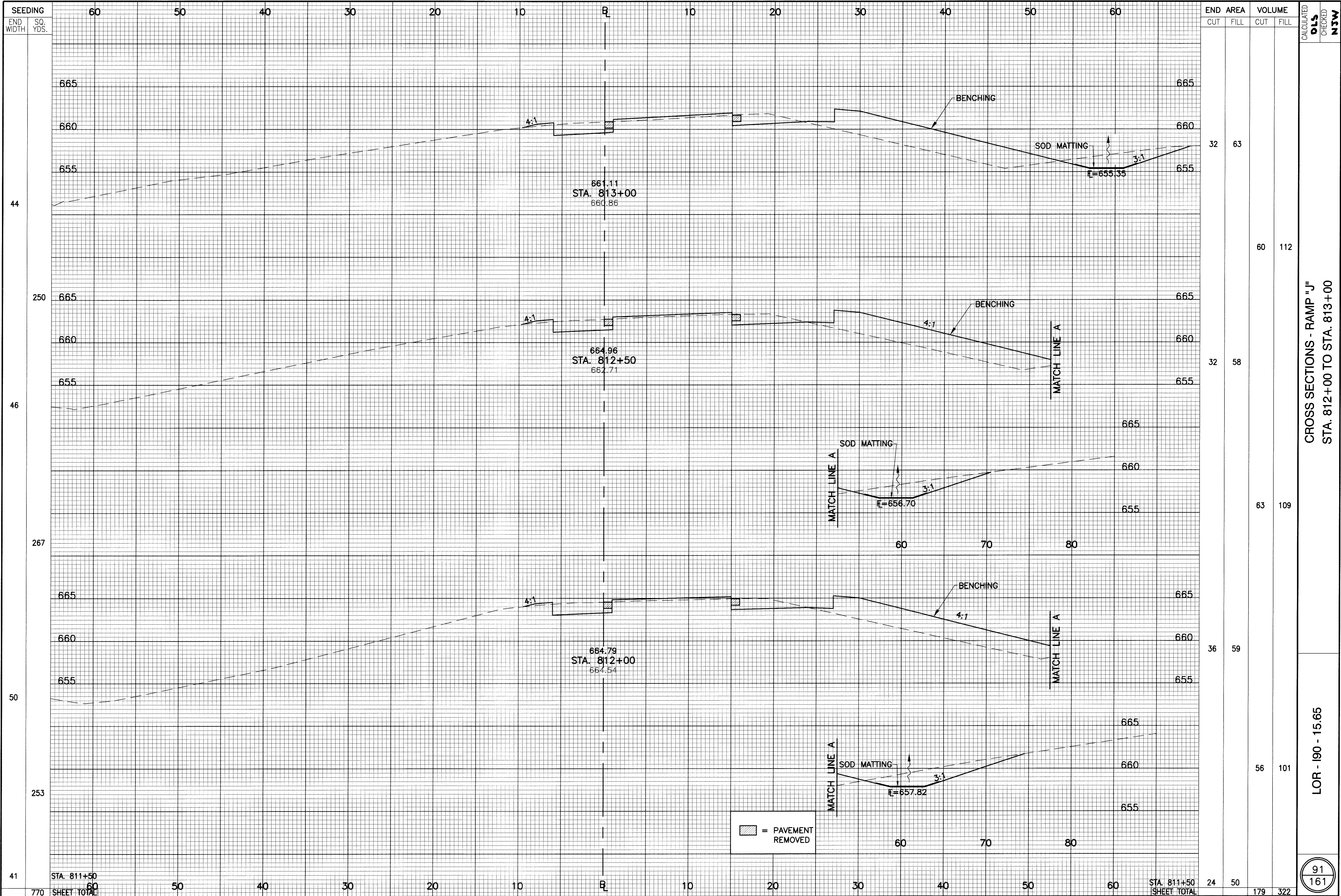
89
161

SEEDING END WIDTH	SQ. YDS.	END AREA		VOLUME		CALCULATED	CHECKED
		CUT	FILL	CUT	FILL		
20							
100							
16							
86							
15							
92							
18							
278	SHEET TOTAL	13	3	81	20		

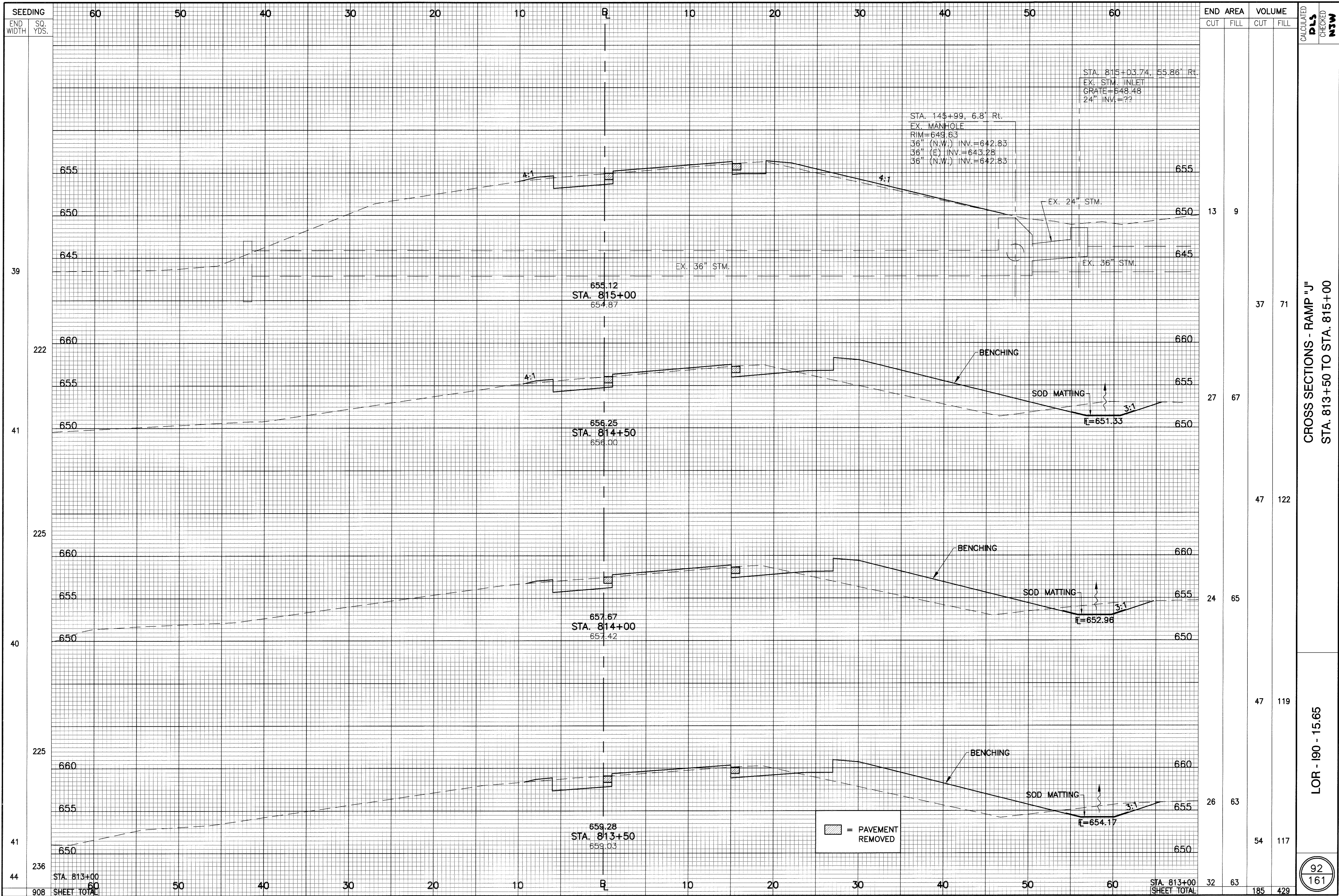
STA. 808+50
SHEET TOTAL



[0:\919\DWG\SR25A\F003003.DWG] NSW
08-03-2001 3:43PM



C:\projects\197\DWG\197\19725A\PC00403.DWG J N.W
 08-03-2001 3:47PM

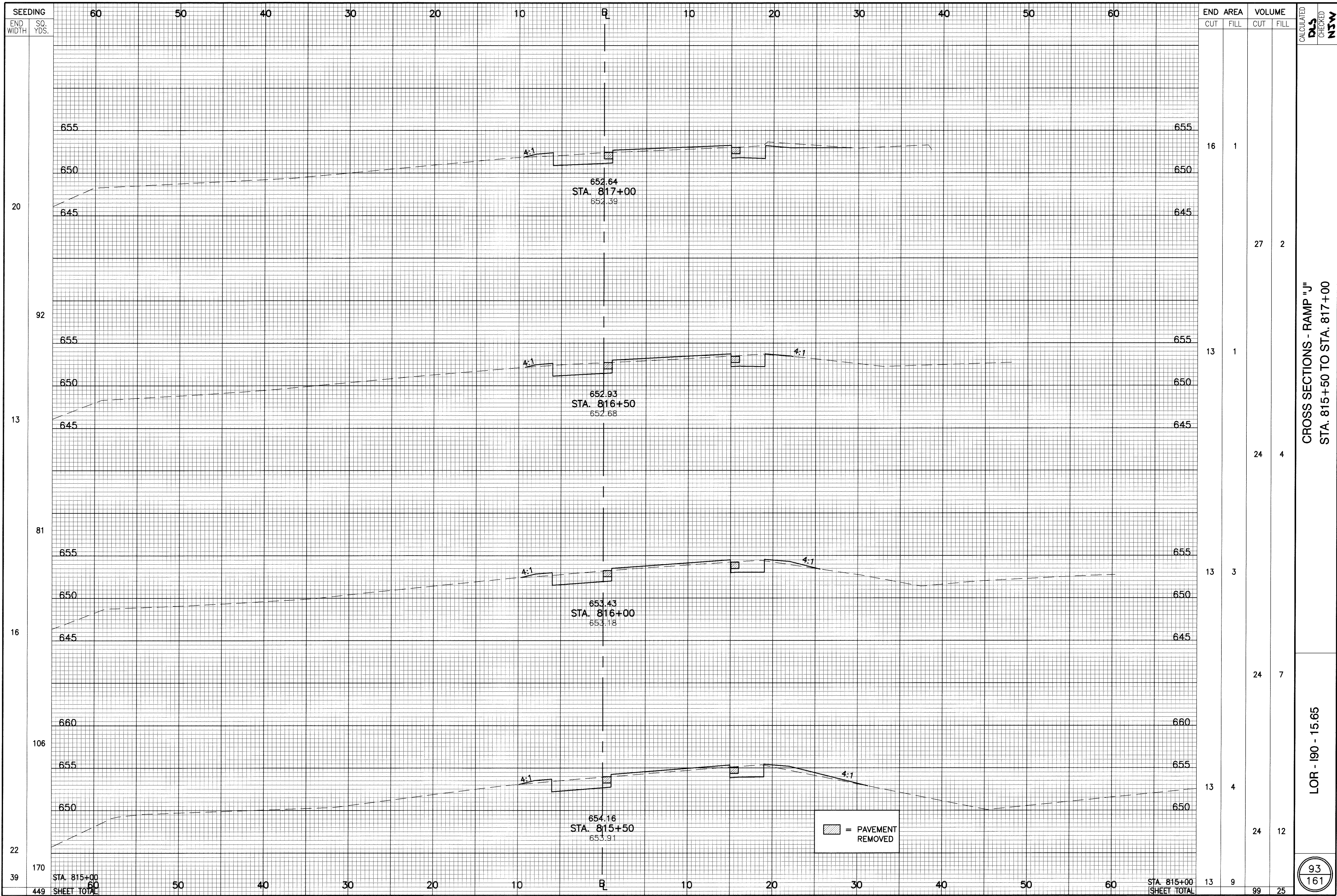


END CUT	AREA FILL	VOLUME		CALCULATED PLS	CHECKED NSW
		CUT	FILL		
13	9				
37	71				
27	67				
47	122				
24	65				
47	119				
26	63				
54	117				
32	63	185	429		

CROSS SECTIONS - RAMP "J"
STA. 813+50 TO STA. 815+00

LOR - 190 - 15.65

C:\A3197\DWG\S\S254\PC05003.DWG 1 N.W
08-03-2001 3:48PM



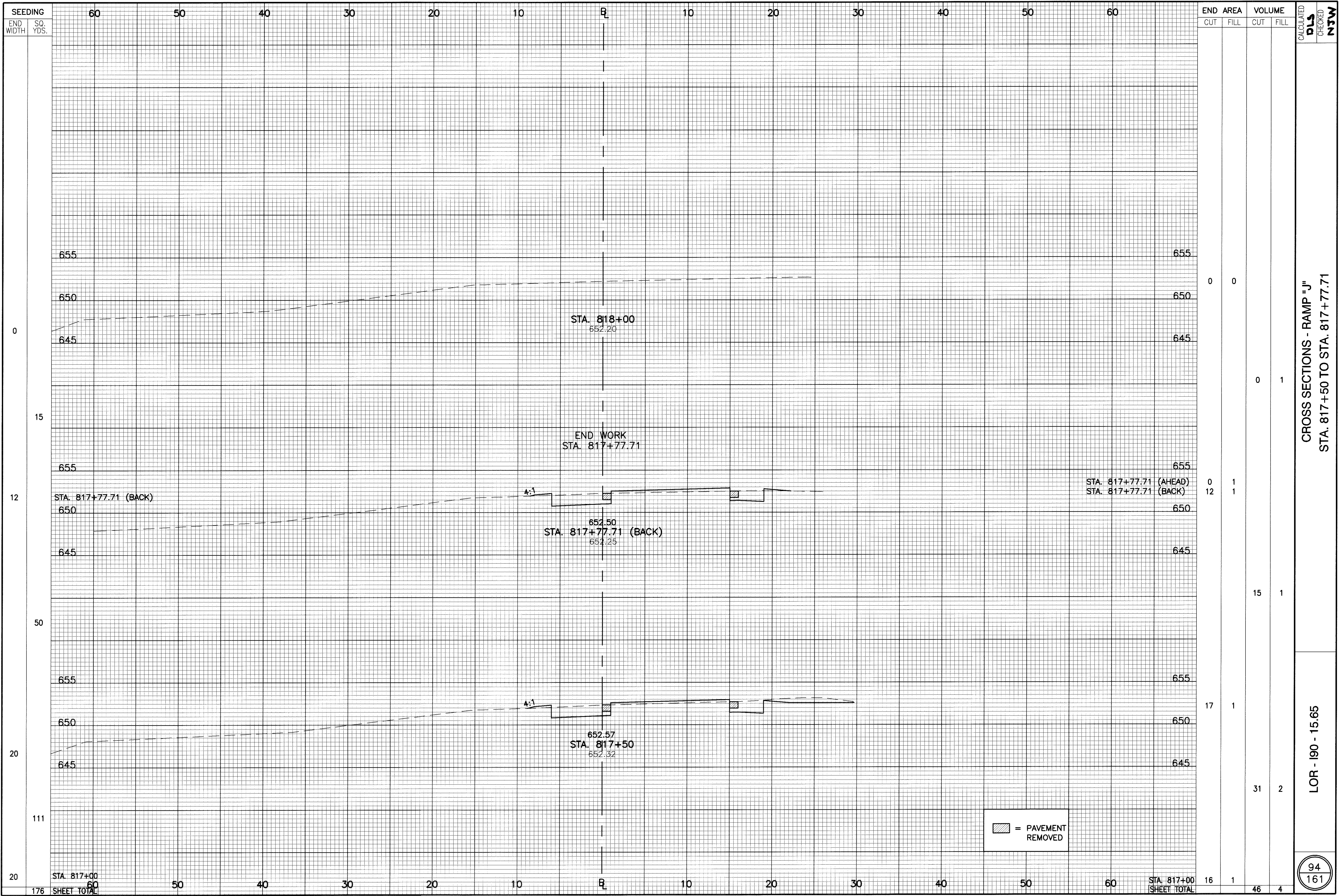
END WIDTH	SQ. YDS.	END AREA		VOLUME		CALCULATED	CHECKED
		CUT	FILL	CUT	FILL		
20				16	1		
92				27	2		
13				13	1		
81				24	4		
16				13	3		
106				24	7		
22				24	12		
39				13	9		
449	SHEET TOTAL			99	25		

CROSS SECTIONS - RAMP "J"
 STA. 815+50 TO STA. 817+00

LOR - 190 - 15.65

93
161

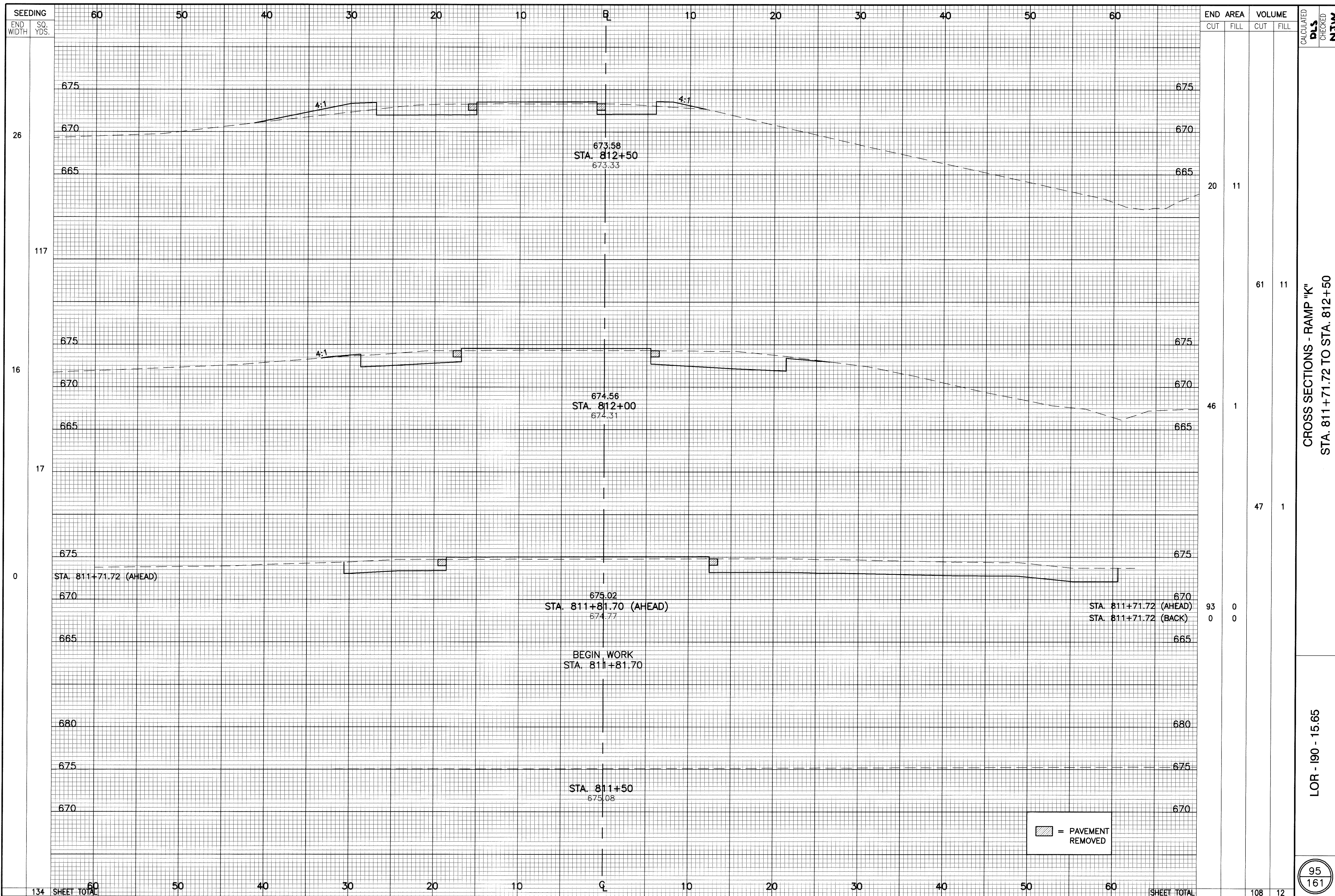
I:\05197\DWG\SR254\RC00603.DWG] JHP
 05-22-2001 10:00AM



CROSS SECTIONS - RAMP "J"
 STA. 817+50 TO STA. 817+77.71

LOR - 190 - 15.65

[C:\9197\DWG\SS95A\PC007003.DWG] HP
 05-22-2001 10:24M



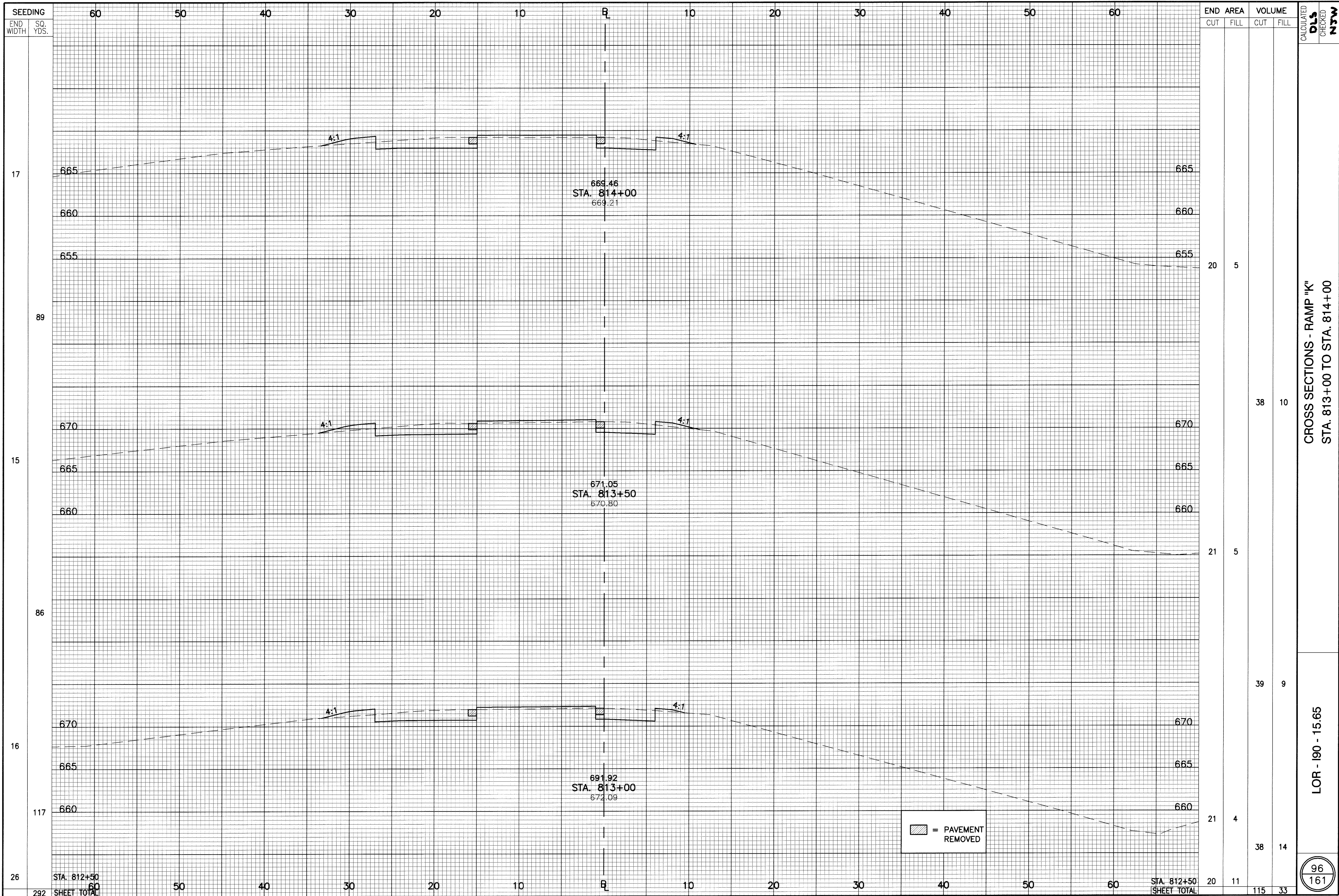
CALCULATED
DLS
CHECKED
NTW

CROSS SECTIONS - RAMP "K"
STA. 811 +71.72 TO STA. 812 +50

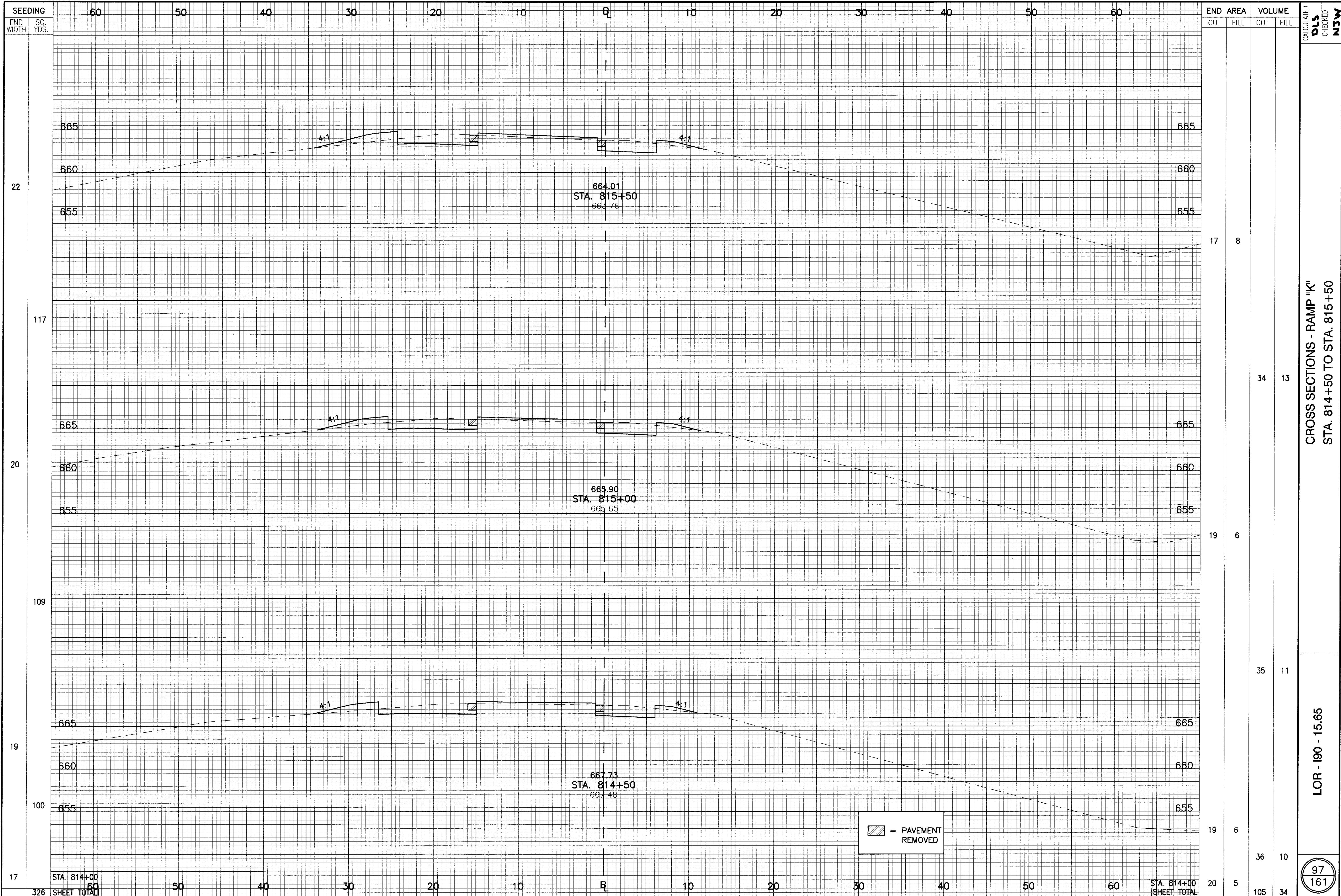
LOR - 190 - 15.65

95
161

[0:\91\97\DWG\SR25\PC001004.DWG] NTW
08-03-2001 3:50PM



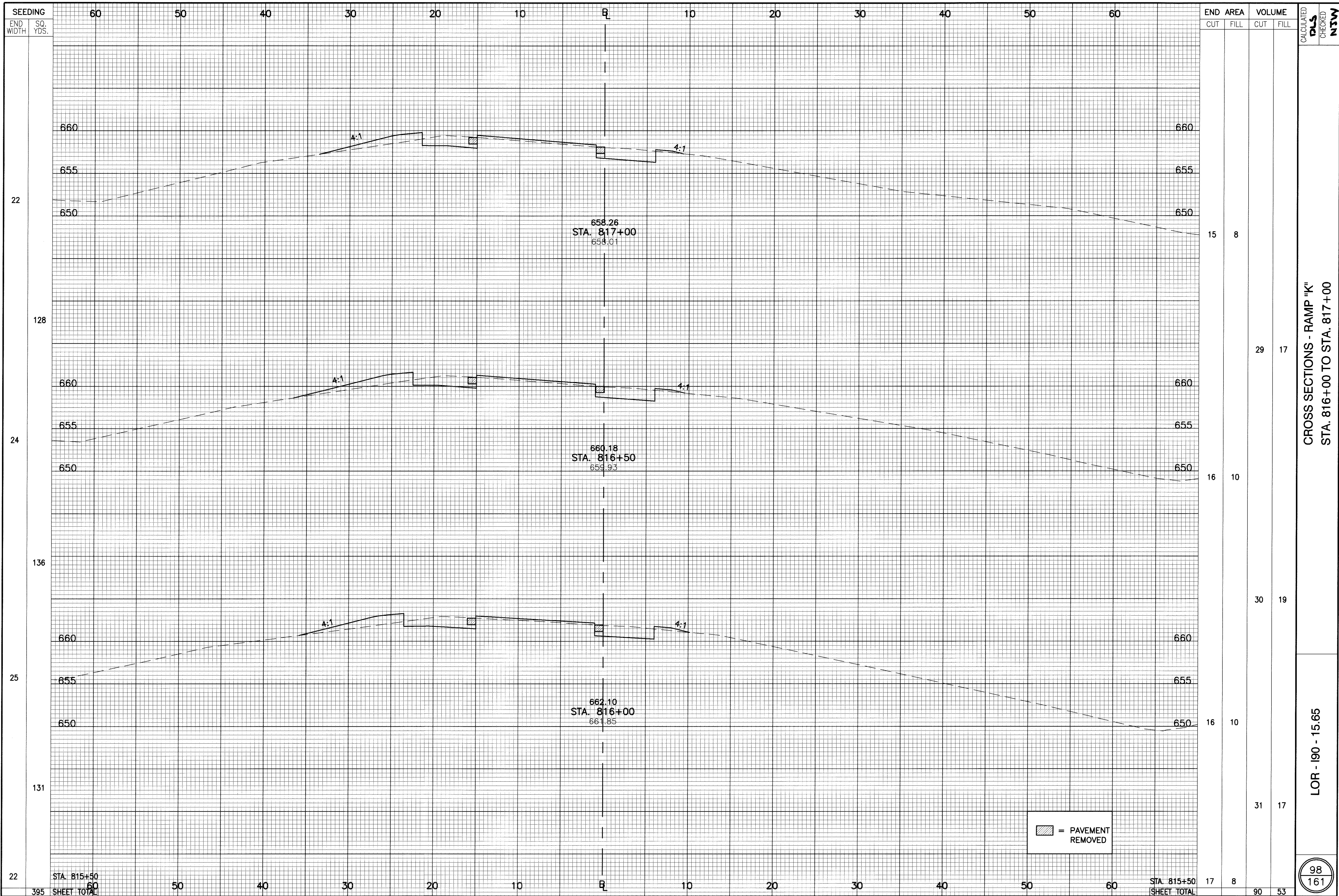
C:\B\197_DWS\SR254\PC002004.DWG 1 JHP
 05-22-2001 10:09AM



CROSS SECTIONS - RAMP "K"
STA. 814+50 TO STA. 815+50

LOR - 190 - 15.65

97
161



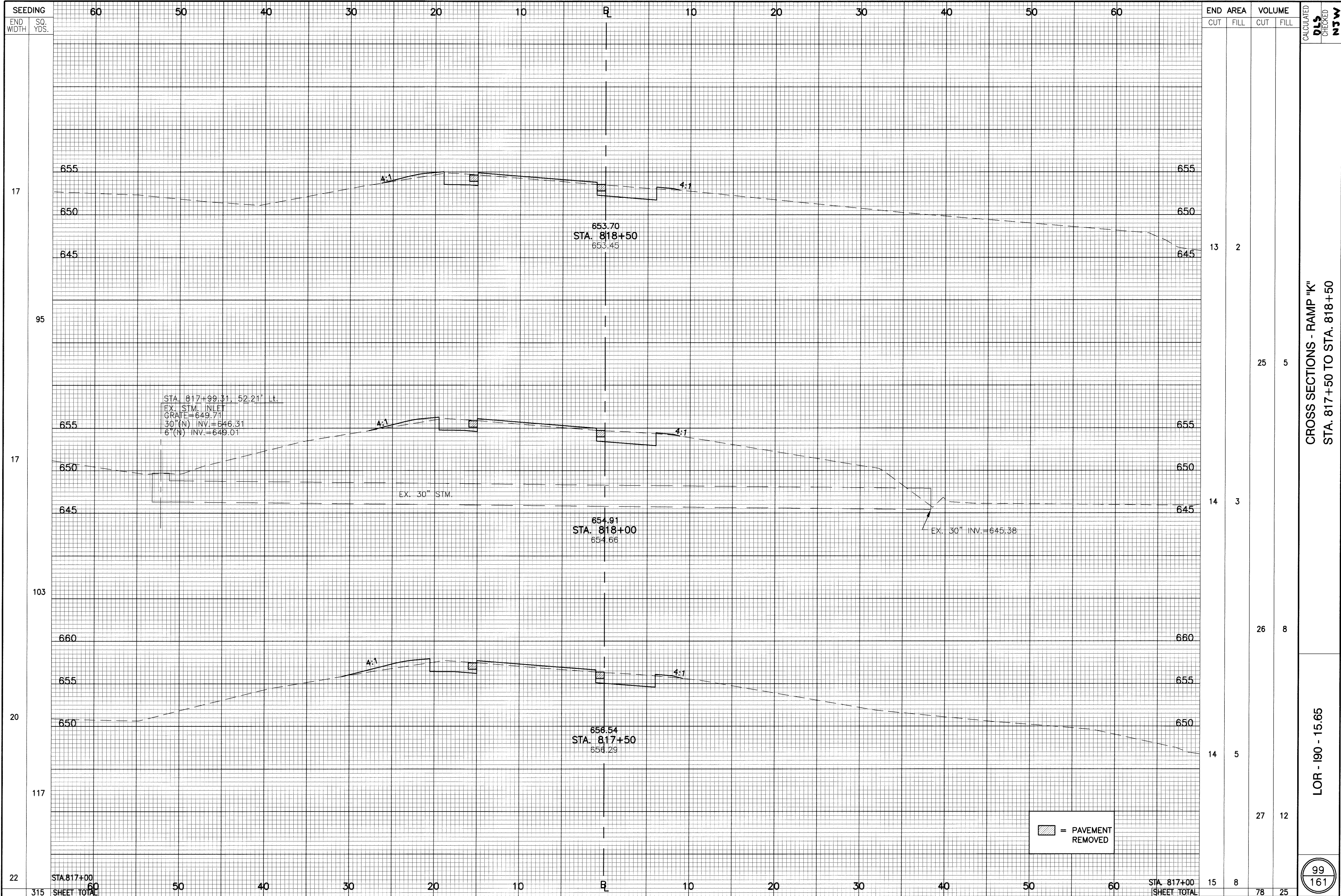
END WIDTH	SEEDING SQ. YDS.		END AREA		VOLUME	
	CUT	FILL	CUT	FILL	CUT	FILL
22			15	8		
128			29	17		
24			16	10		
136			30	19		
25			16	10		
131			31	17		
22			17	8		
395			90	53		

CROSS SECTIONS - RAMP "K"
STA. 816+00 TO STA. 817+00

LOR - 190 - 15.65

98
161

[0:\93197\DWG\SR25\FR004004.DWG] JHP
05-22-2001 10:14AM

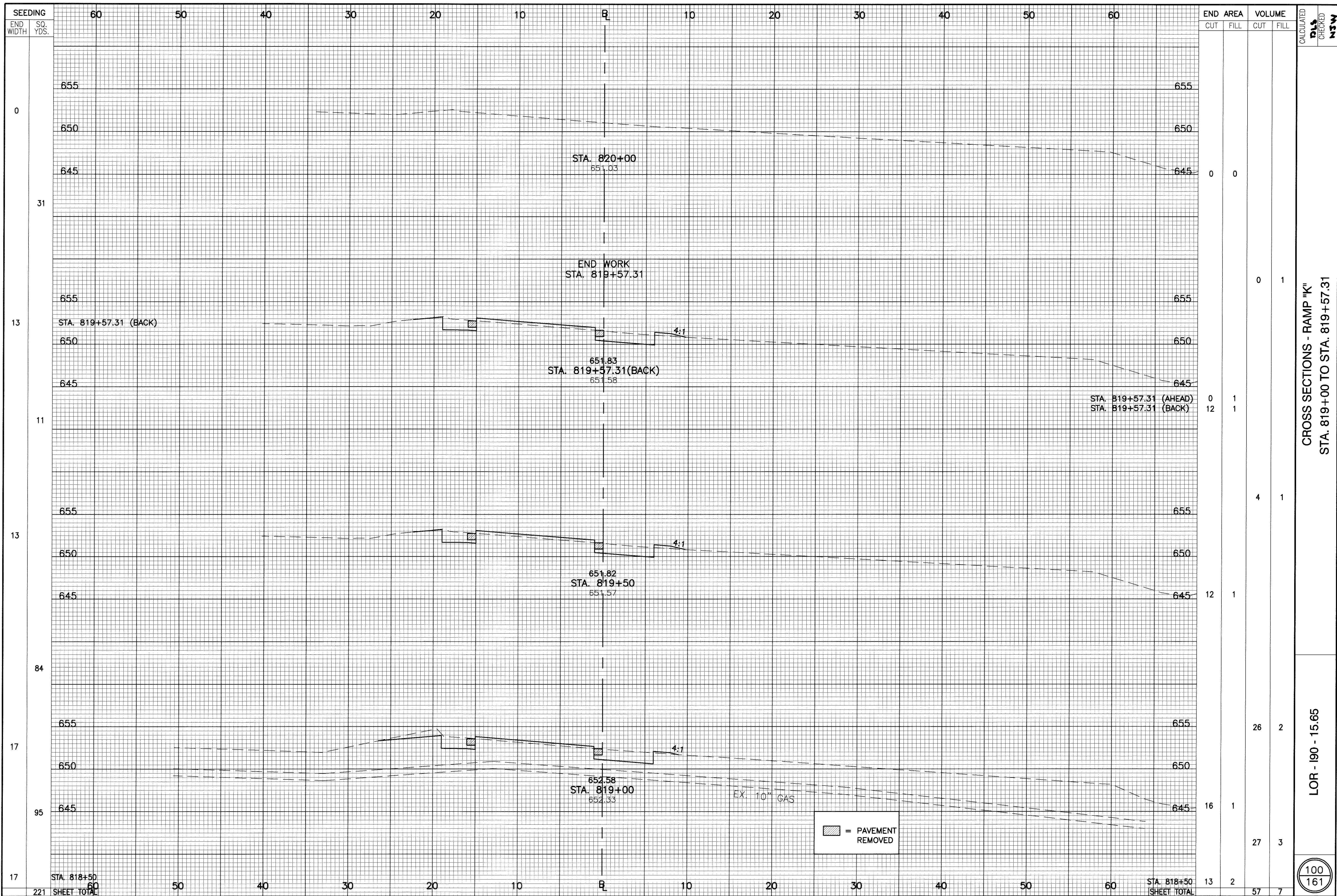


CROSS SECTIONS - RAMP "K"
 STA. 817+50 TO STA. 818+50

LOR - 190 - 15.65

99
161

C:\Users\jhp\OneDrive\Documents\SR25-A\PC05004.DWG | JHP
 05-22-2003 10:16AM

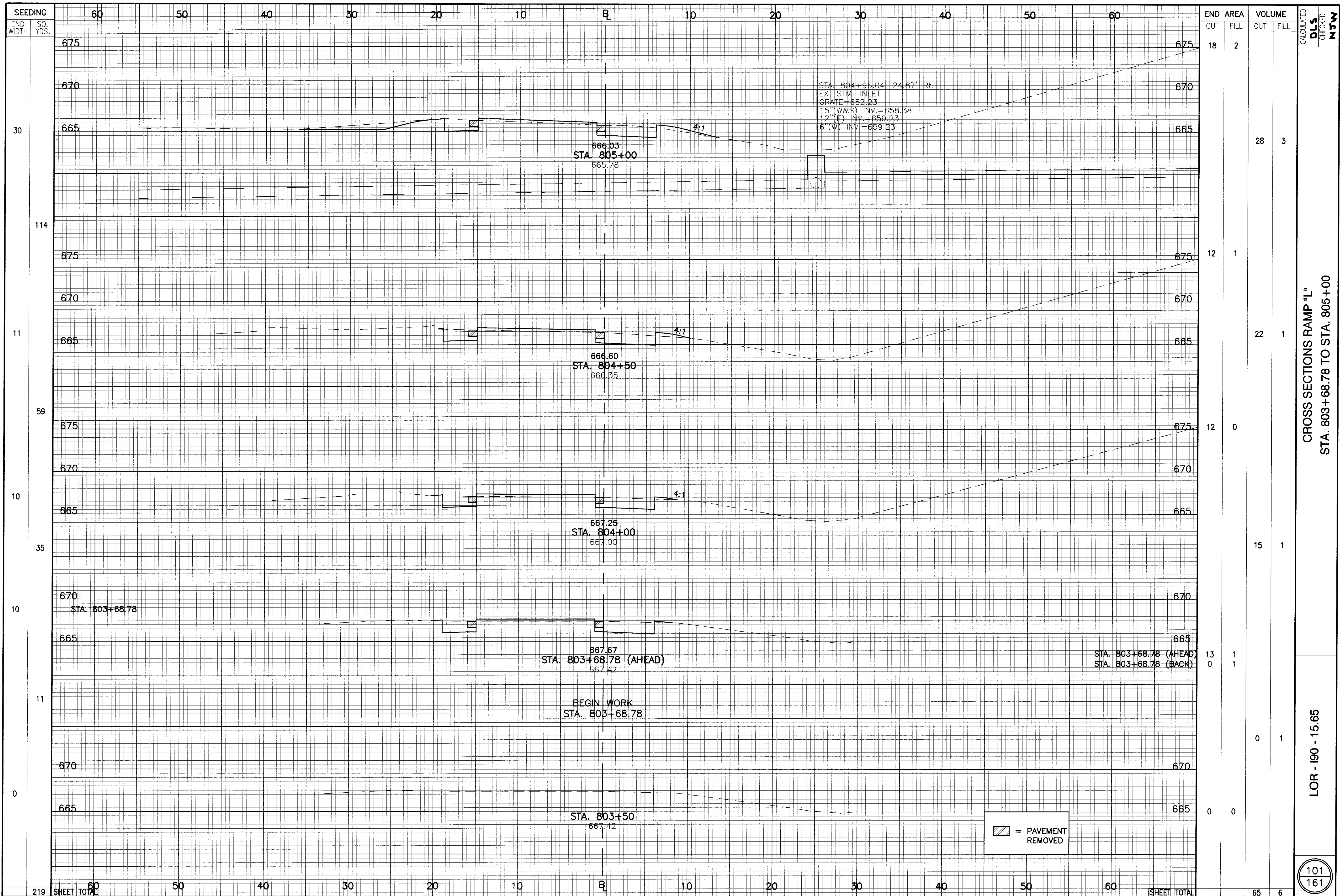


CROSS SECTIONS - RAMP "K"
 STA. 819+00 TO STA. 819+57.31

LOR - 190 - 15.65

100
161

C:\05-22-2007\05-22-2007\DWG\SR25A\PC096004.DWG | JHP
 05-22-2007 10:19AM

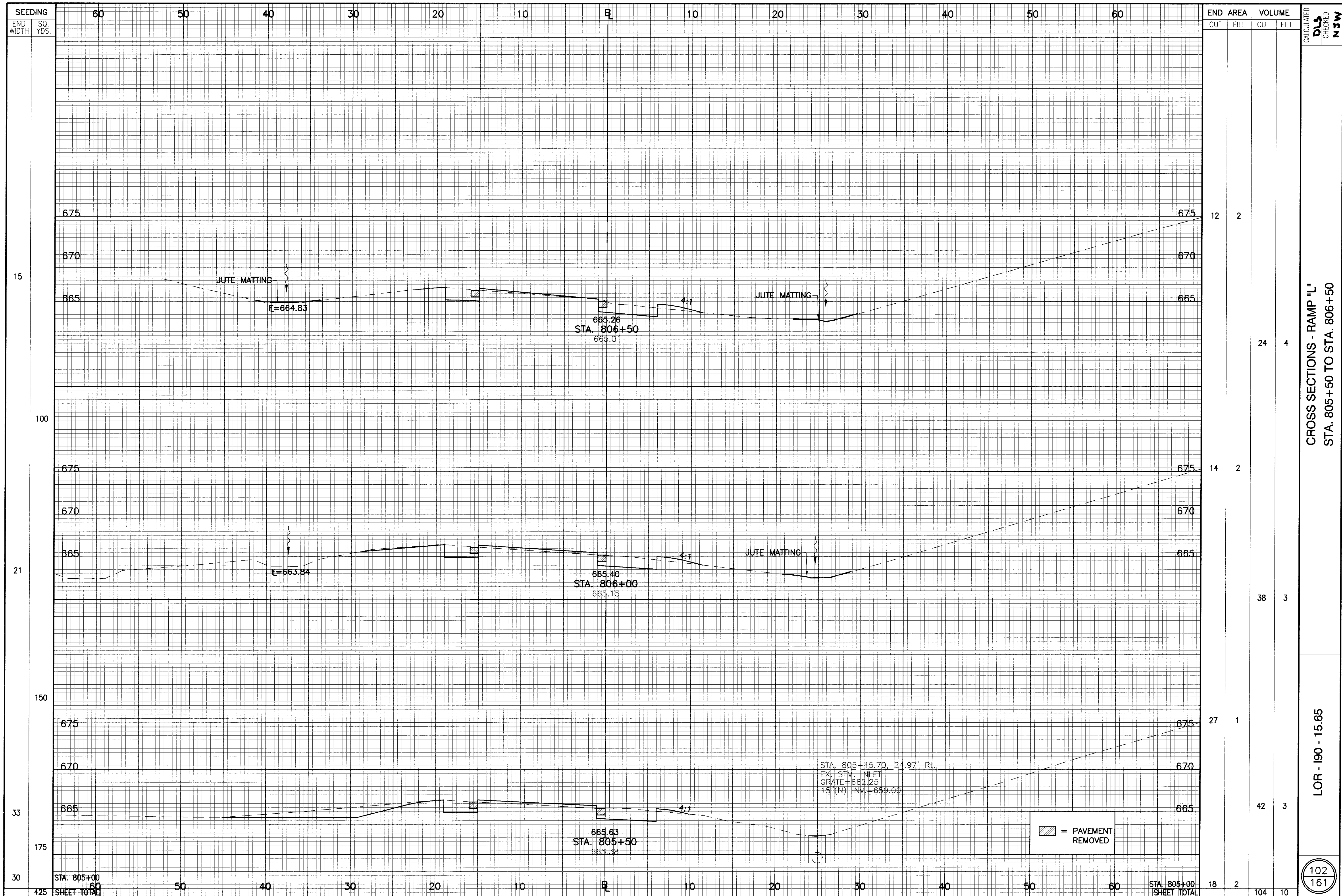


CROSS SECTIONS RAMP "L"
 STA. 803+68.78 TO STA. 805+00

LOR - 190 - 15.65

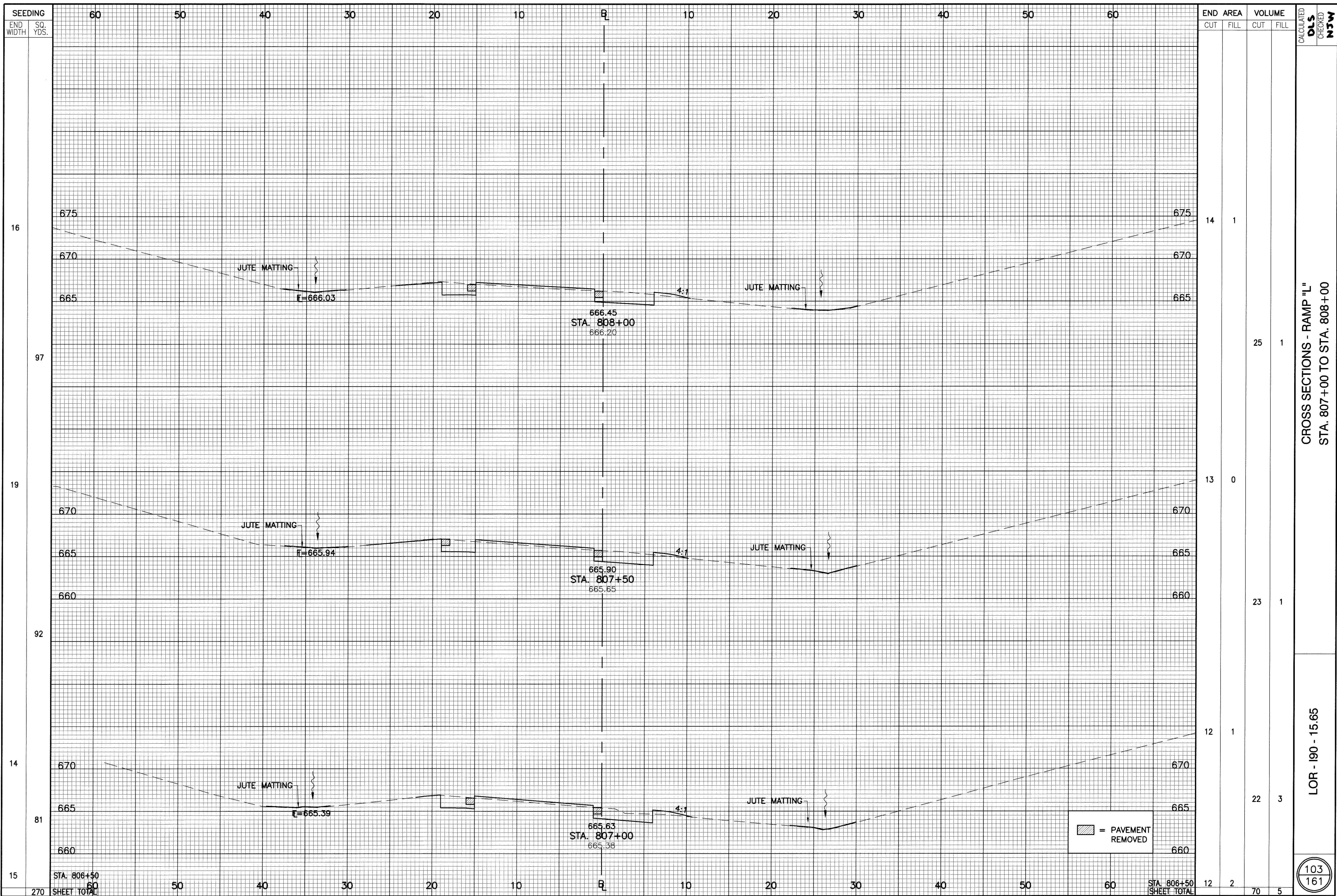
101
161

C:\93197\DWG\S\SR254\PC001006.DWG JHP
 05-22-2001 10:25AM



END WIDTH	SQ. YDS.	END AREA		VOLUME		CALCULATED DLS CHECKED NSW
		CUT	FILL	CUT	FILL	
15		12	2	24	4	CROSS SECTIONS - RAMP "L" STA. 805+50 TO STA. 806+50
100		14	2	38	3	
21		27	1	42	3	
33		18	2	104	10	LOR - 190 - 15.65
30						102 161

C:\Users\jhp\Documents\Projects\805+00\805+00.dwg 11:38AM
 05-22-2001



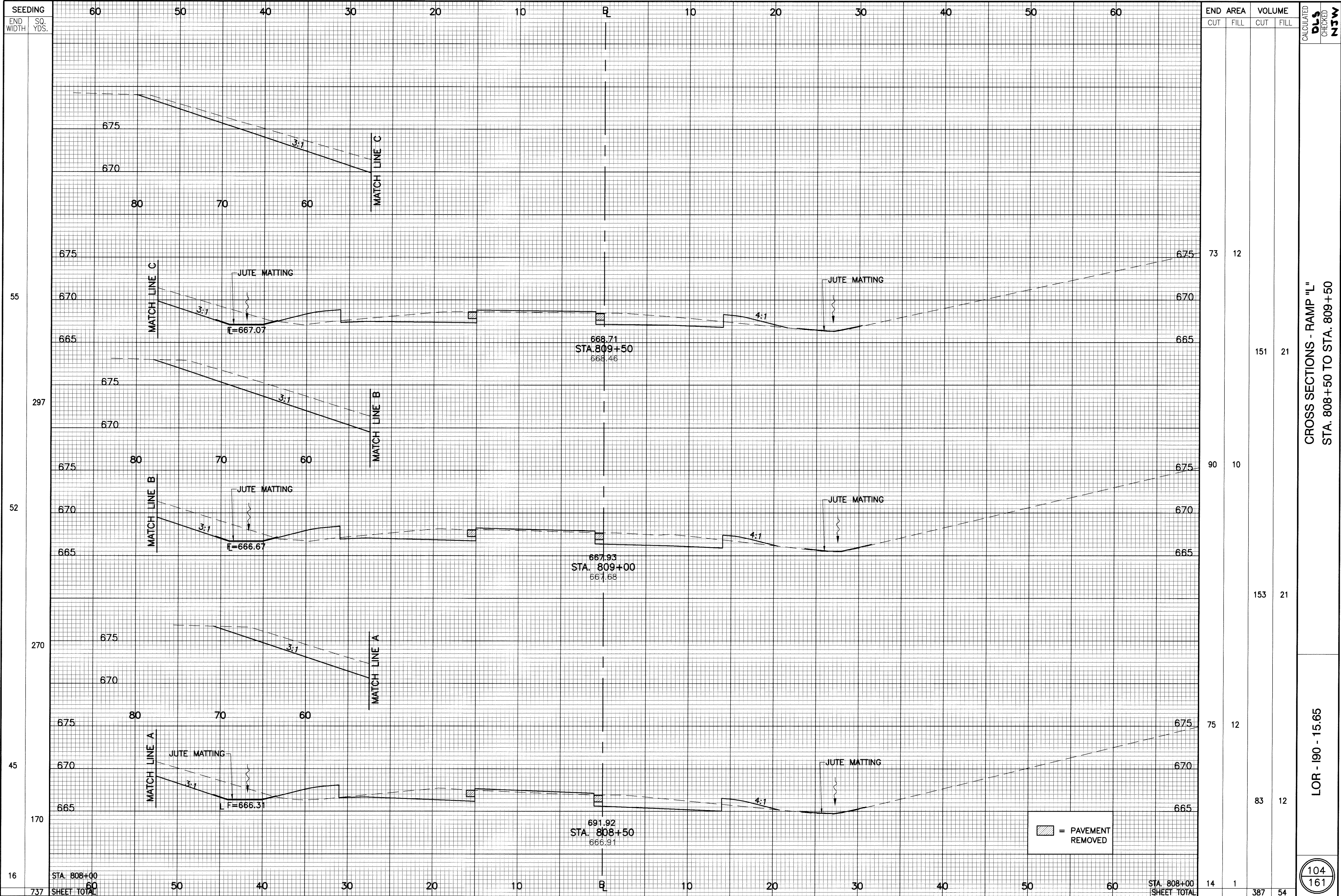
END CUT	AREA FILL	VOLUME	
		CUT	FILL
14	1		
25	1		
13	0		
23	1		
12	1		
22	3		
12	2	70	5

CALCULATED
DLS
CHECKED
NSW

CROSS SECTIONS - RAMP "L"
STA. 807+00 TO STA. 808+00

LOR - 190 - 15.65

103
161



END	AREA		VOLUME		CALCULATED	CHECKED
	CUT	FILL	CUT	FILL		
73	12					
55	151	21				
297	90	10				
52	153	21				
270	75	12				
45	83	12				
170						
16	14	1	387	54		

CROSS SECTIONS - RAMP "L"
 STA. 808+50 TO STA. 809+50

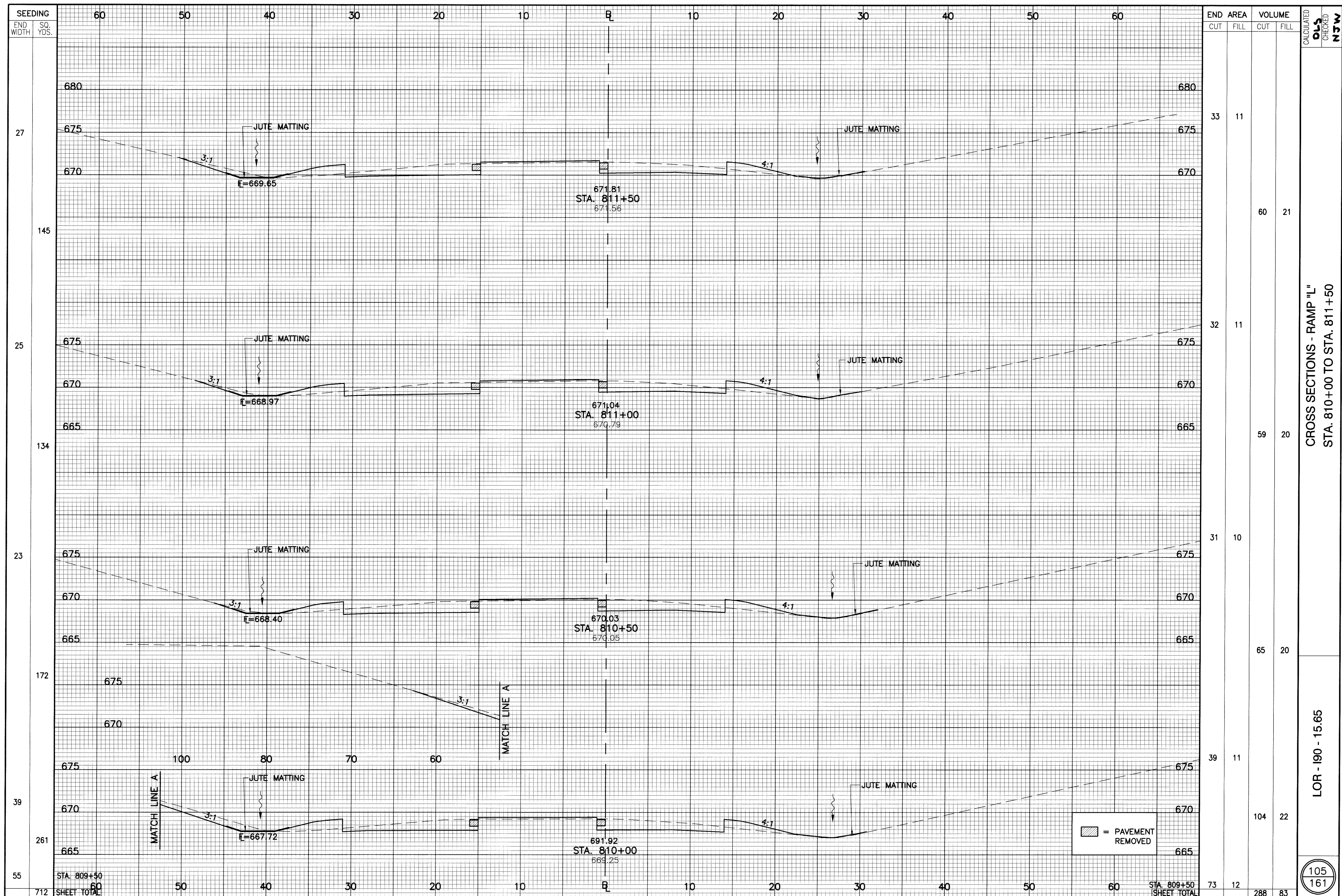
LOR - 190 - 15.65

104
161

SEEDING
 END WIDTH SQ. YDS.
 60 50 40 30 20 10 R 10 20 30 40 50 60
 737 STA. 808+00 SHEET TOTAL

STA. 808+00 SHEET TOTAL

C:\G:\197\DWG\SR25A\PC0406.DWG JHP
 08-22-2001 1:07 PM



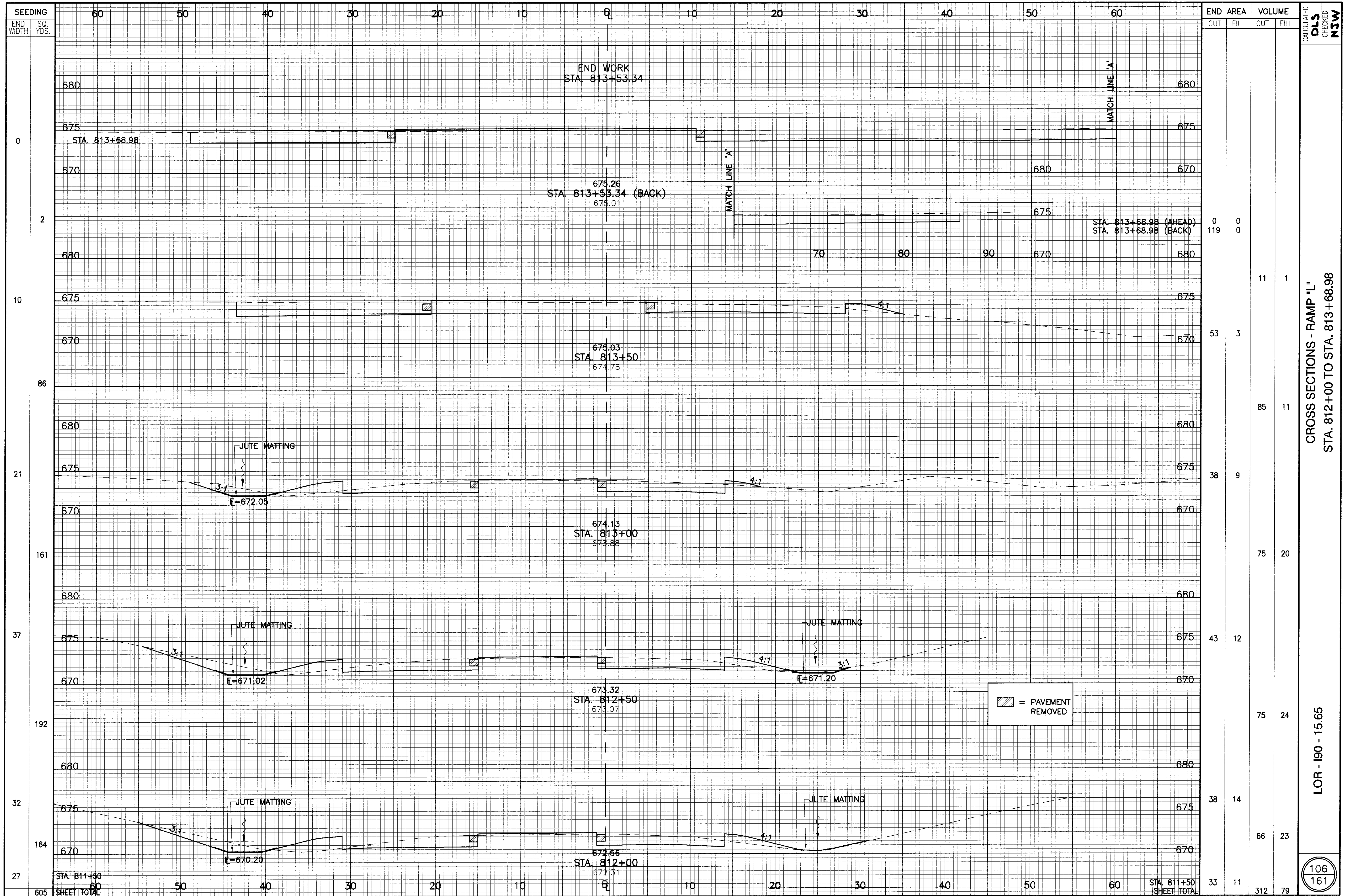
END WIDTH	SQ. YDS.	END AREA		VOLUME		CALCULATED	CHECKED	NTW
		CUT	FILL	CUT	FILL			
27		33	11					
145				60	21			
25		32	11					
134				59	20			
23		31	10					
172				65	20			
39		39	11					
261				104	22			
55		73	12					
712	SHEET TOTAL			288	83			

CROSS SECTIONS - RAMP "L"
 STA. 810+00 TO STA. 811+50

LOR - 190 - 15.65

105
161

C:\031917\DWG\GR25A\PC05006.DWG 1 JHP
 06-22-2001 12:35PM



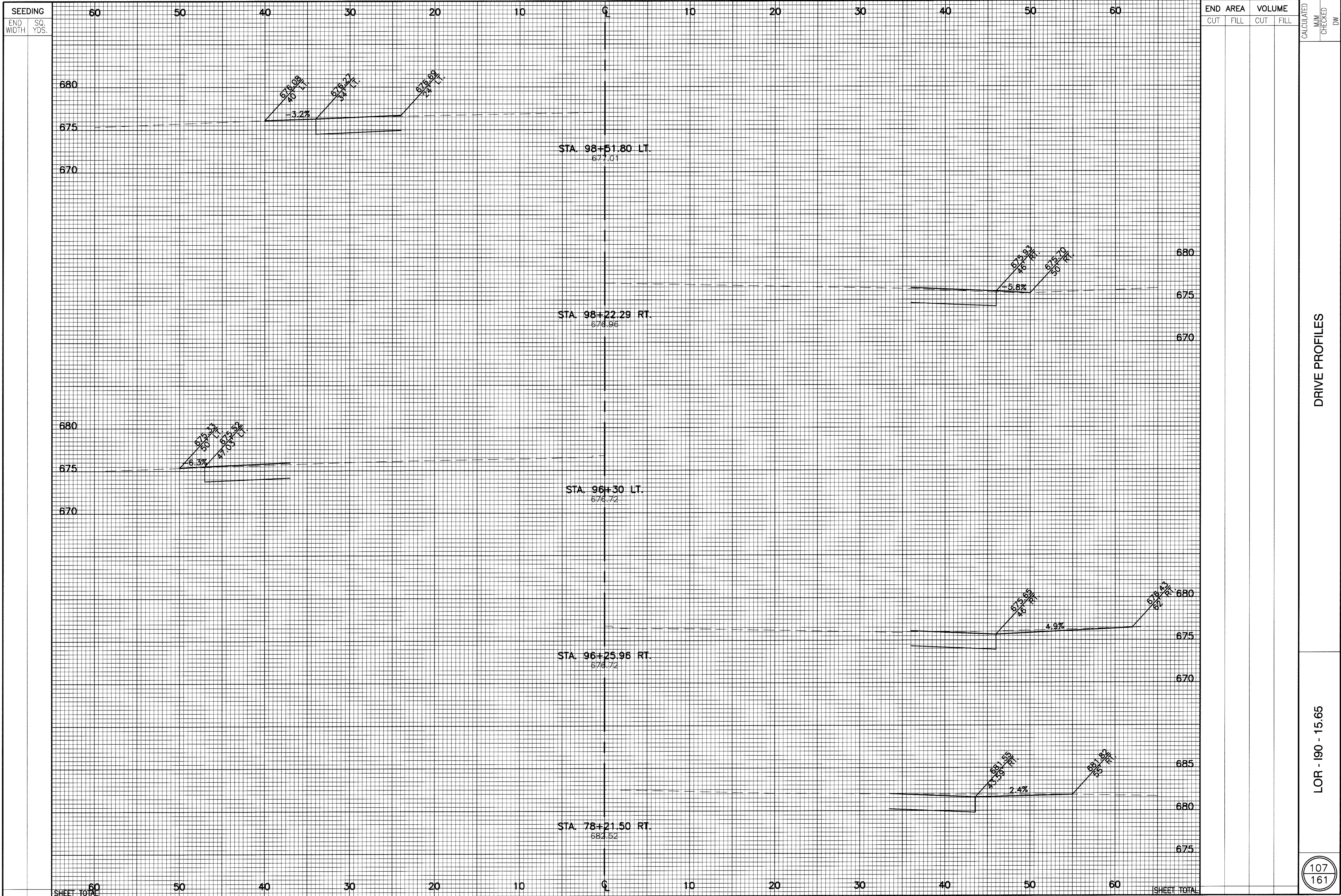
CALCULATED
DLS
CHECKED
NSW

CROSS SECTIONS - RAMP "L"
STA. 812+00 TO STA. 813+68.98

LOR - 190 - 15.65

106
161

[0:34:19.71 DWS\GR25\PROJECTS\142PM
 05-22-2001]

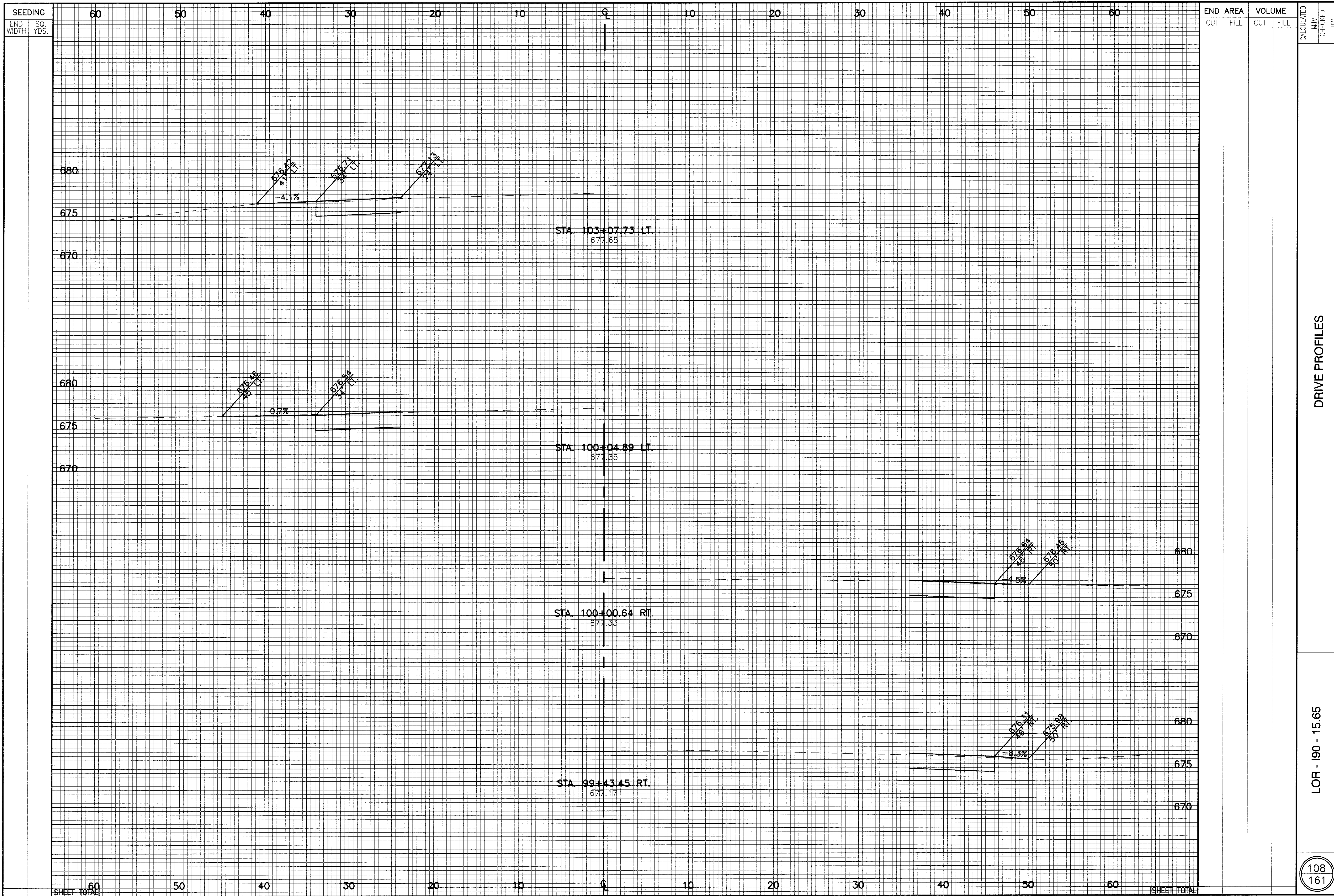


CALCULATED	END AREA		VOLUME		M.M. CHECKED	DW
	CUT	FILL	CUT	FILL		

DRIVE PROFILES

LOR - I90 - 15.65

9:23AM 08-21-2001 [O:\3197\DWG\SR25A\9197DRV.DWG] DLS



END AREA		VOLUME	
CUT	FILL	CUT	FILL

CALCULATED M/M	CHECKED D/W
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DRIVE PROFILES

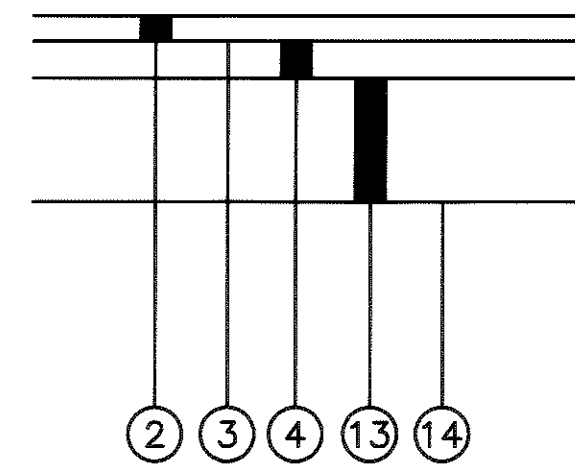
LOR - 190 - 15.65

108
161

SHEET TOTAL 60 50 40 30 20 10 0 10 20 30 40 50 60 SHEET TOTAL

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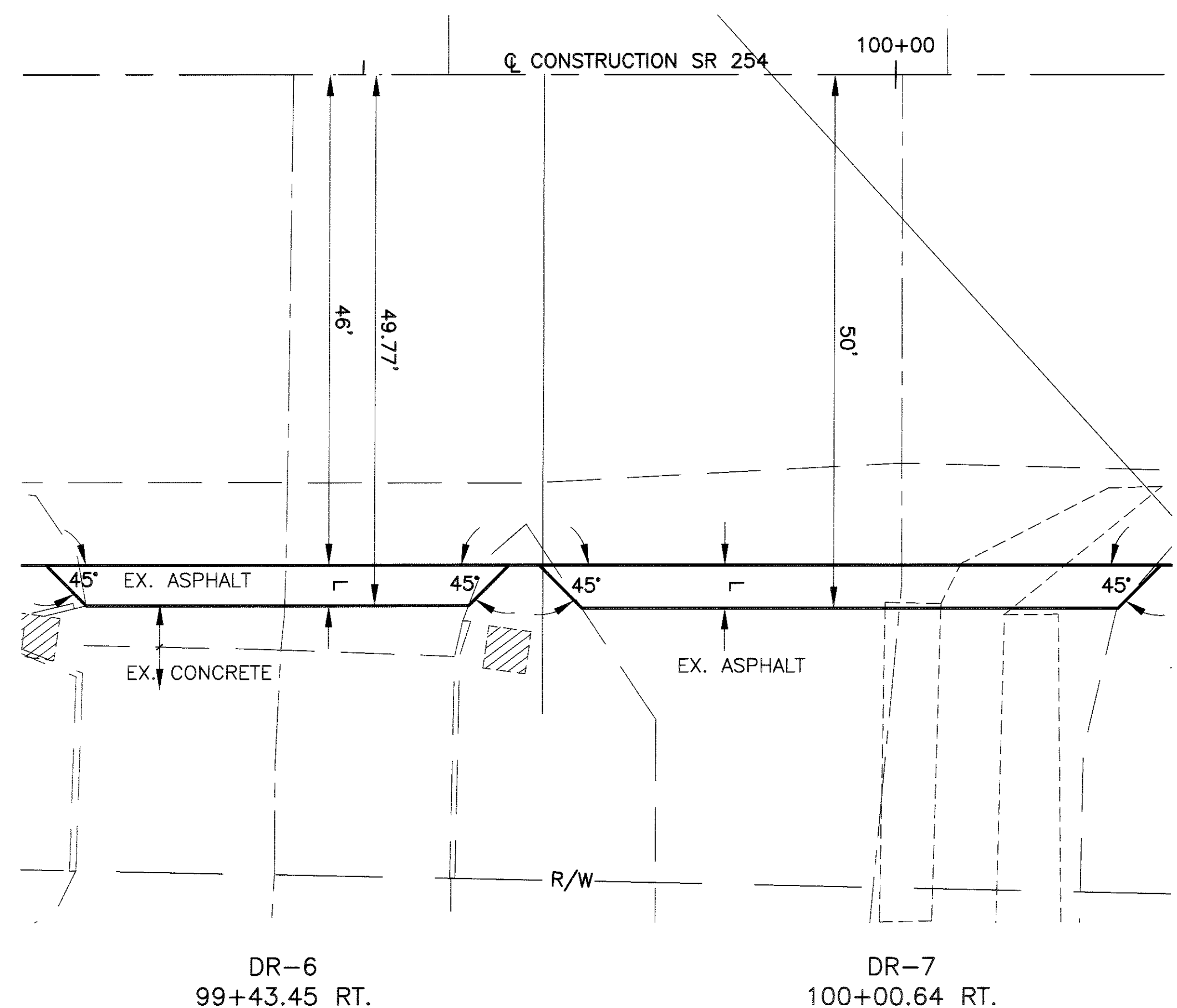
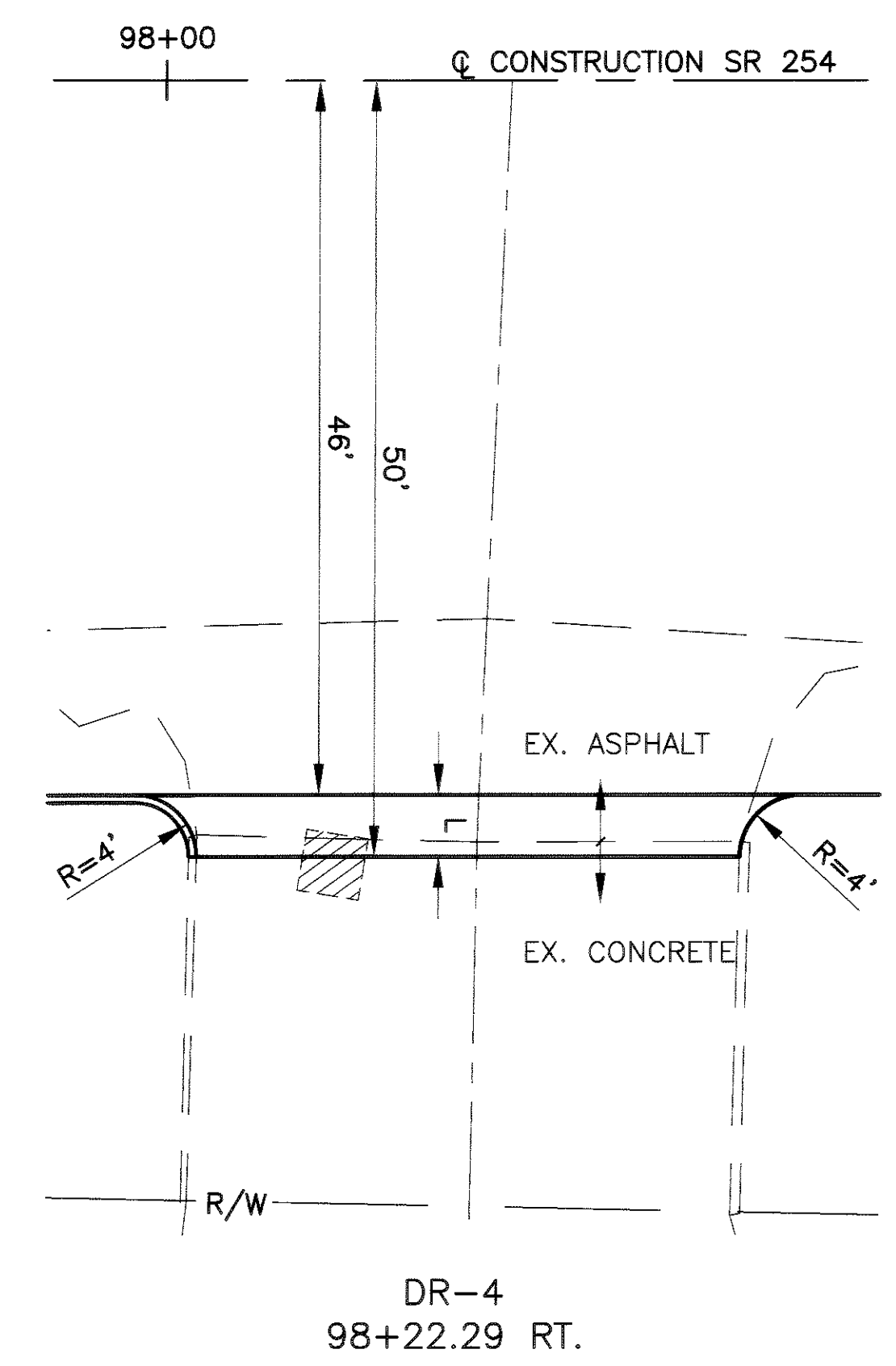
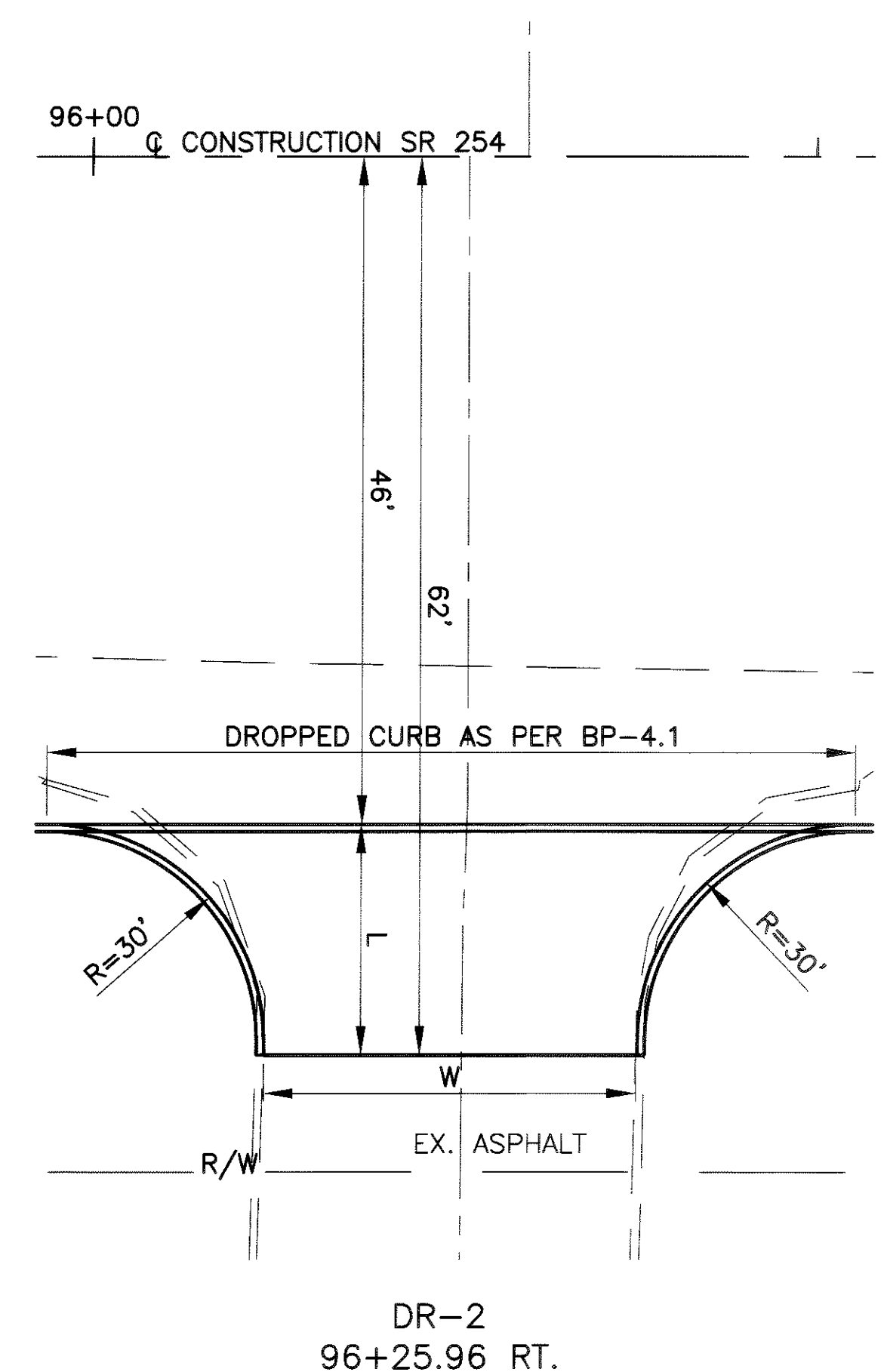
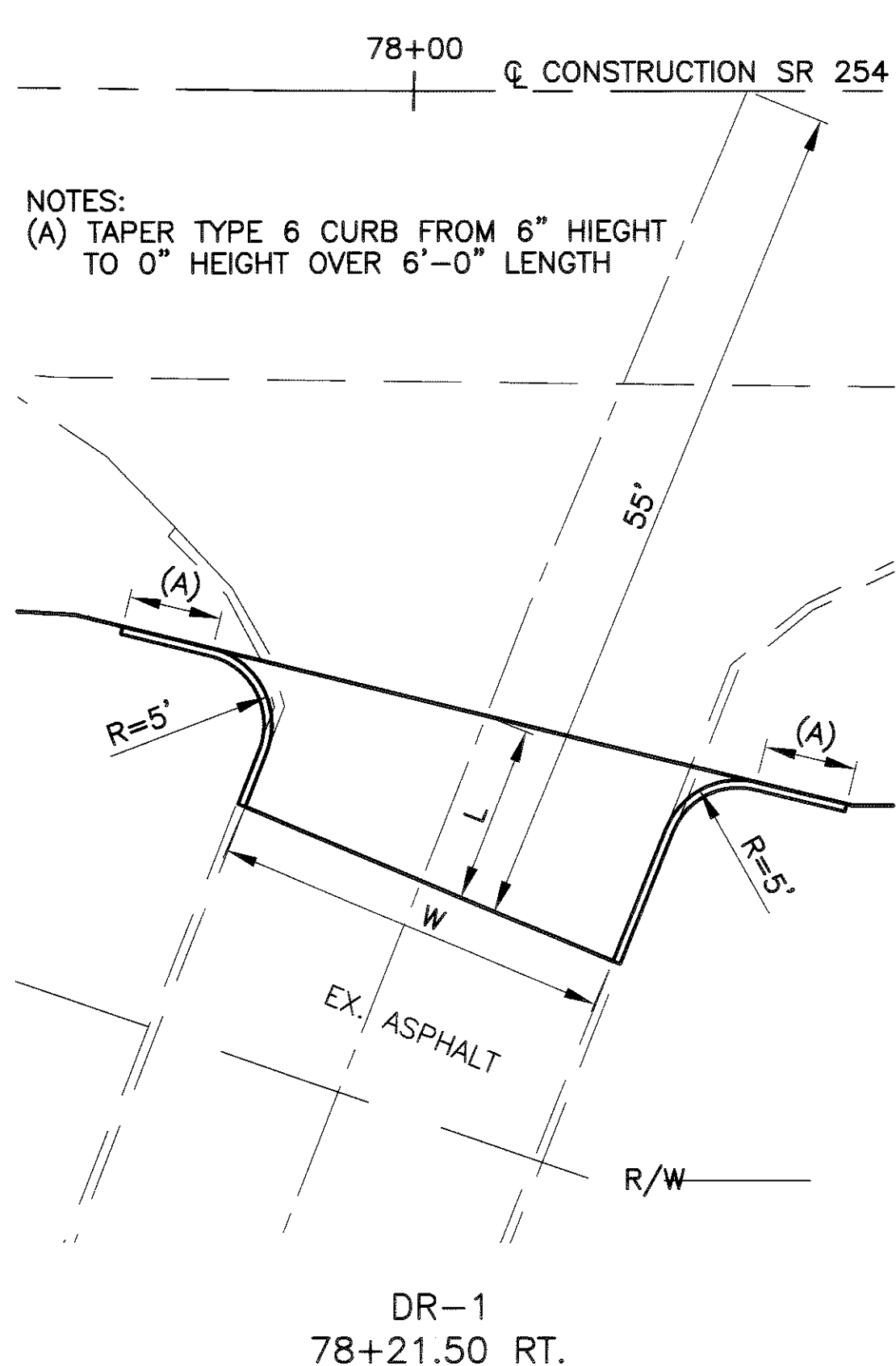
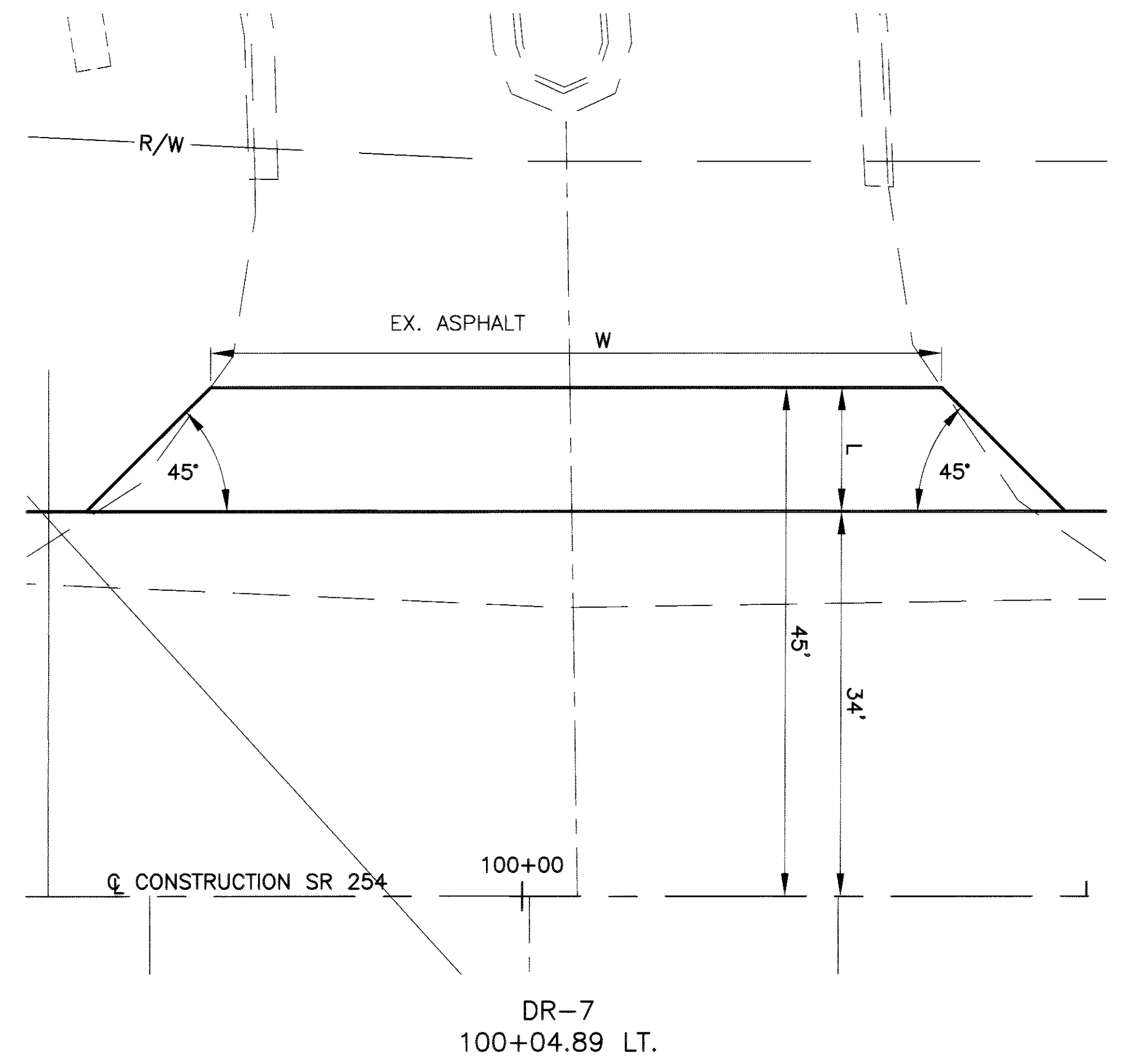
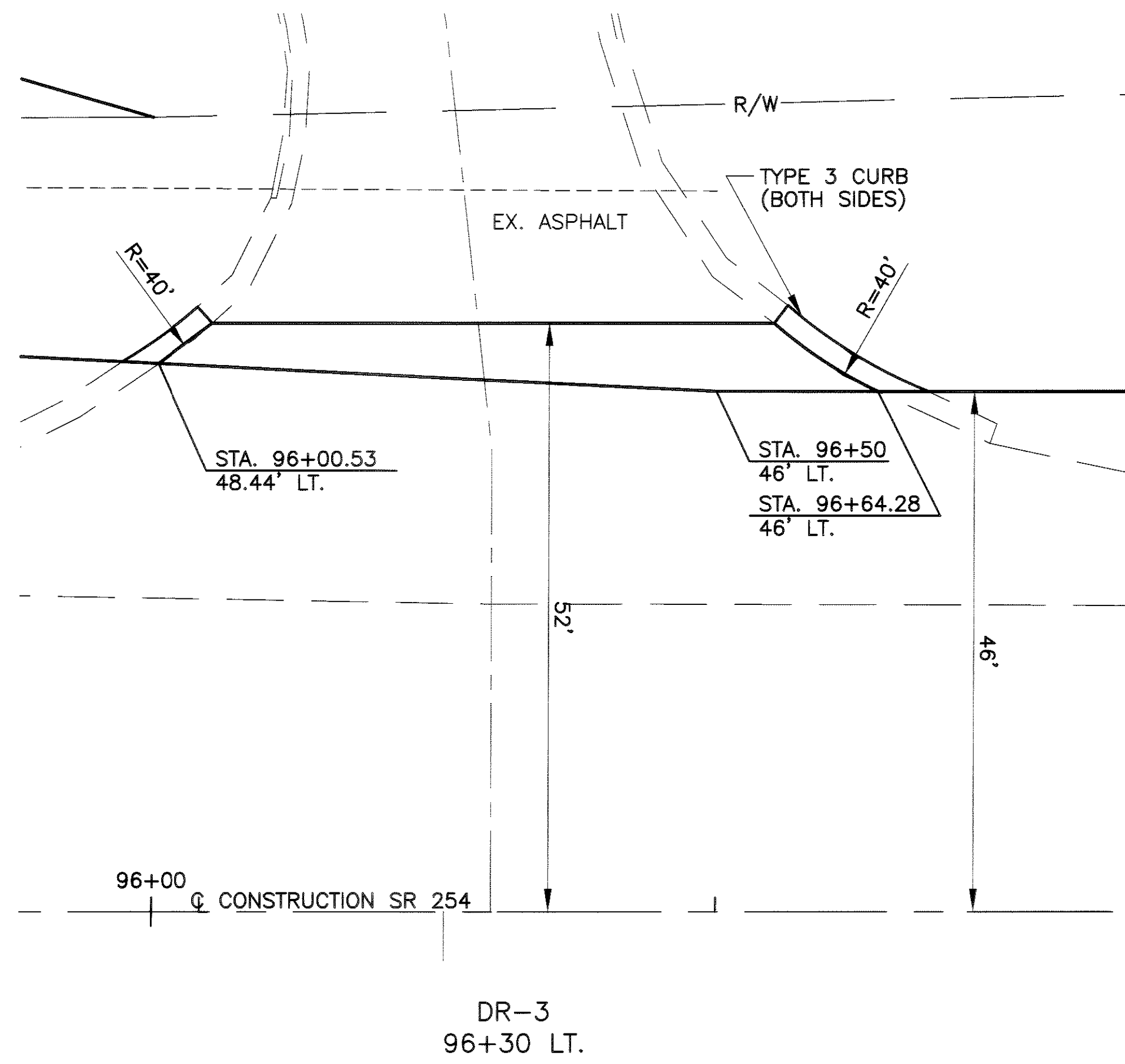
ASPHALT DRIVEWAY COMPOSITION



LEGEND

- ② ITEM 446 - 1 1/4" ASPHALT CONCRETE SURFACE COURSE, TYPE 1, PG 64-22
- ③ ITEM 407 - TACK COAT FOR INTERMEDIATE COURSE
- ④ ITEM 448 - 1 3/4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, PG 64-22
- ⑬ ITEM 304 - 8" AGGREGATE BASE
- ⑭ ITEM 203 - SUBGRADE COMPACTION

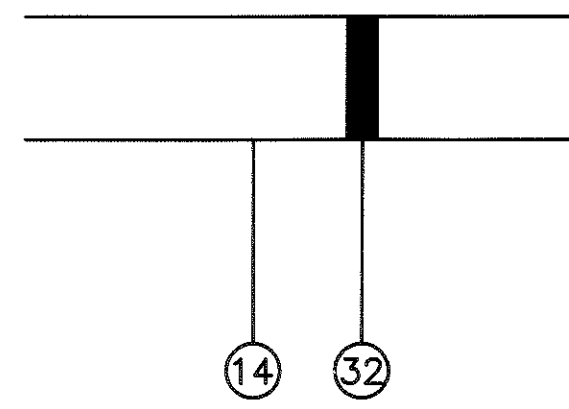
SEE SHEET 36 FOR QUANTITIES.



DRIVEWAY DETAILS - S.R.254

LOR - 190 - 15.65

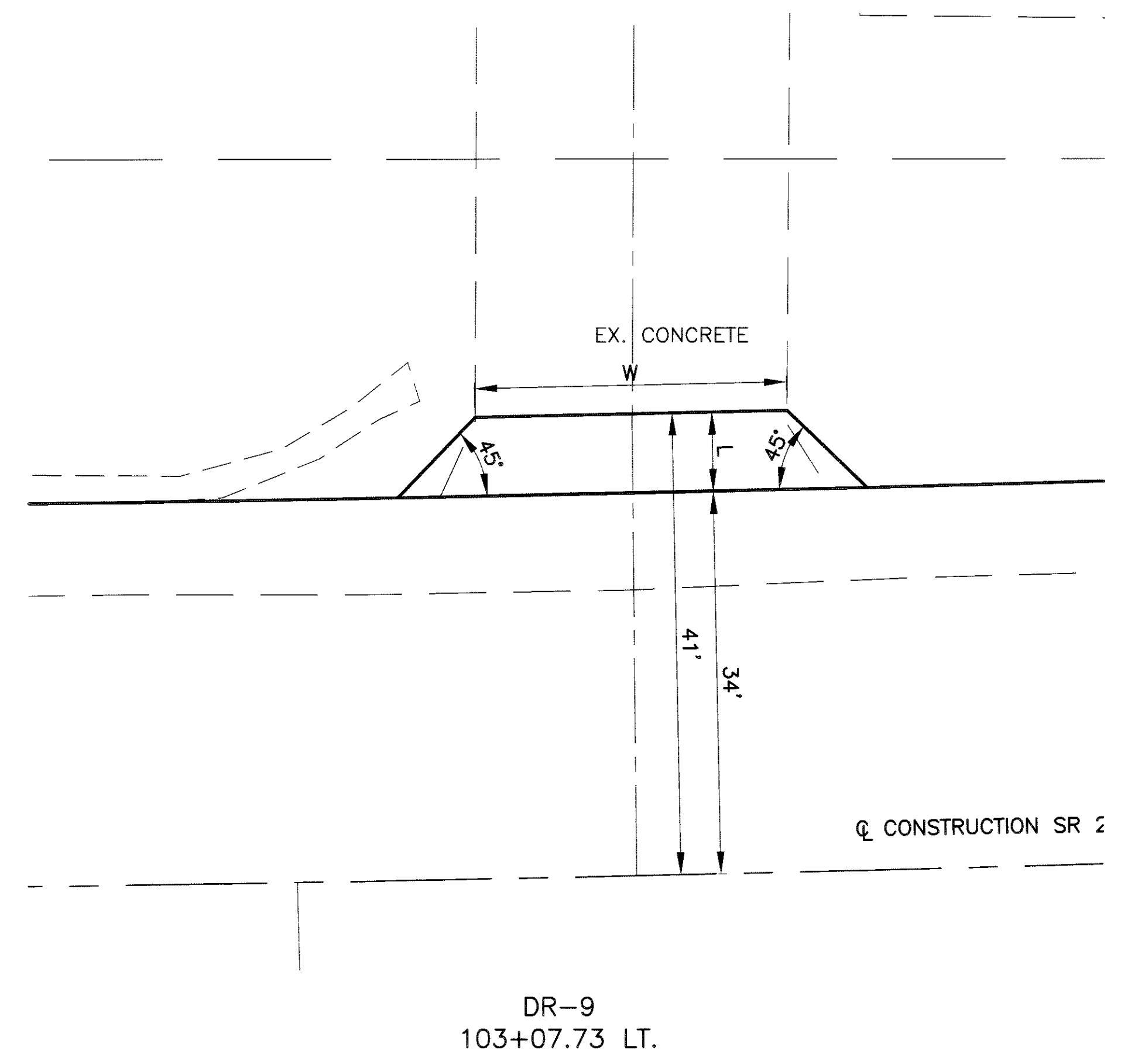
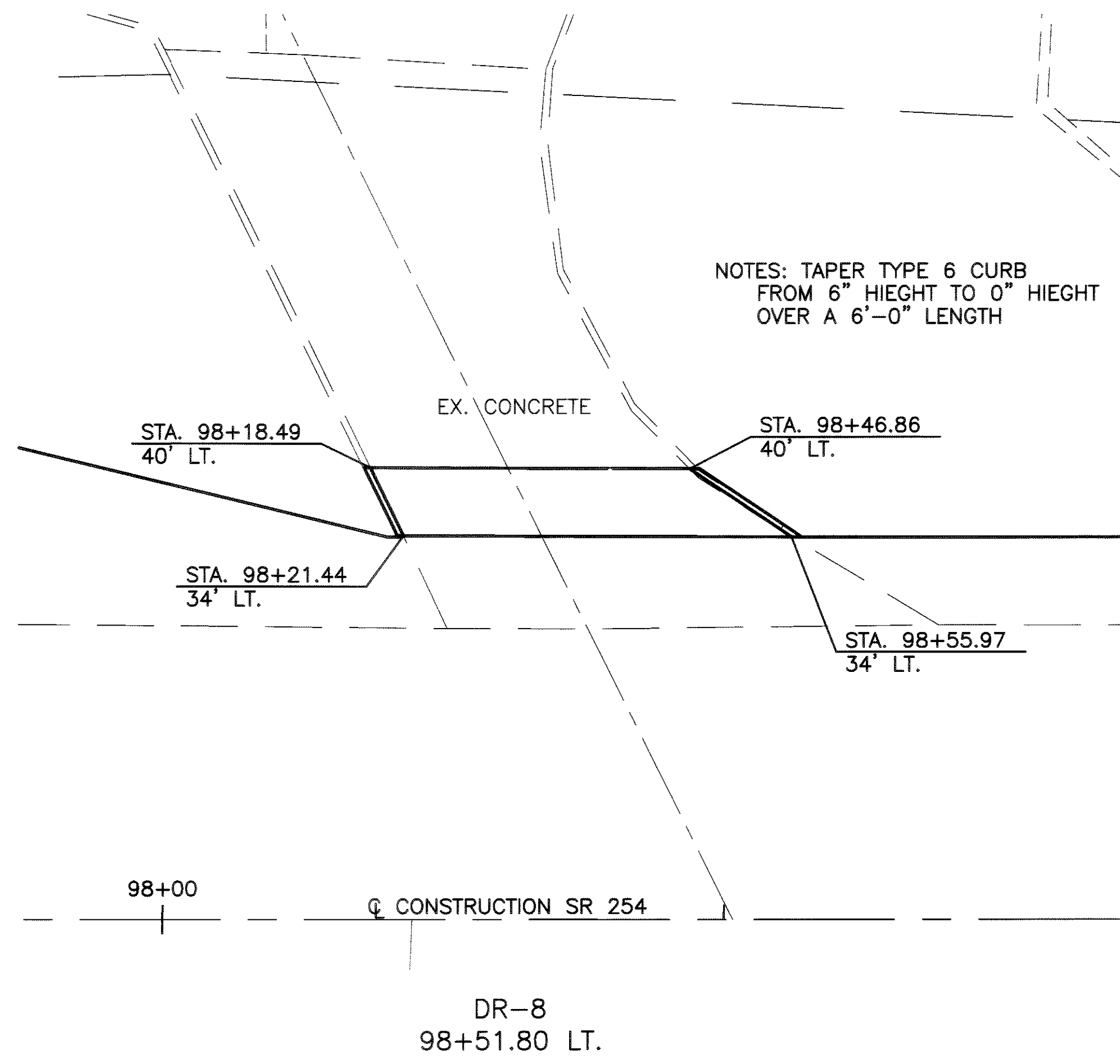
CONCRETE DRIVEWAY COMPOSITION



LEGEND

- ⑭ ITEM 203 - SUBGRADE COMPACTION
- ⑳ ITEM 452 - 8" PLAIN CONCRETE PAVEMENT

SEE SHEET 36 FOR QUANTITIES.



CALCULATED
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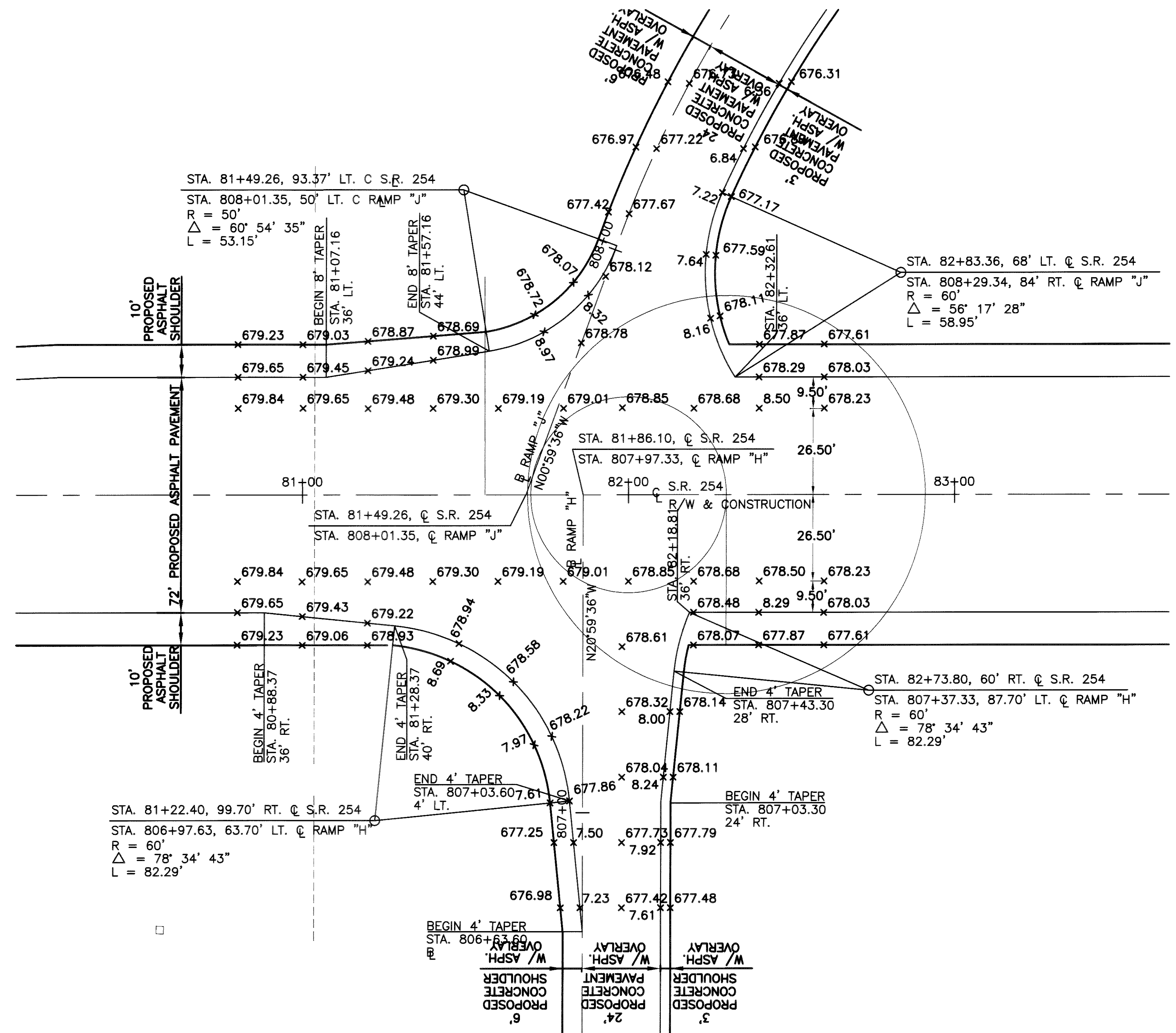
0 5' 10' 20'
HORIZONTAL
SCALE IN FEET

DRIVEWAY DETAILS - S.R.254

LOR - I90 - 15.65

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08-03-2001 3:55PM

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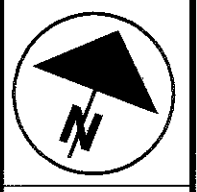


CALCULATED
MJM
CHECKED
DW

0 20' 40'
HORIZONTAL
SCALE IN FEET

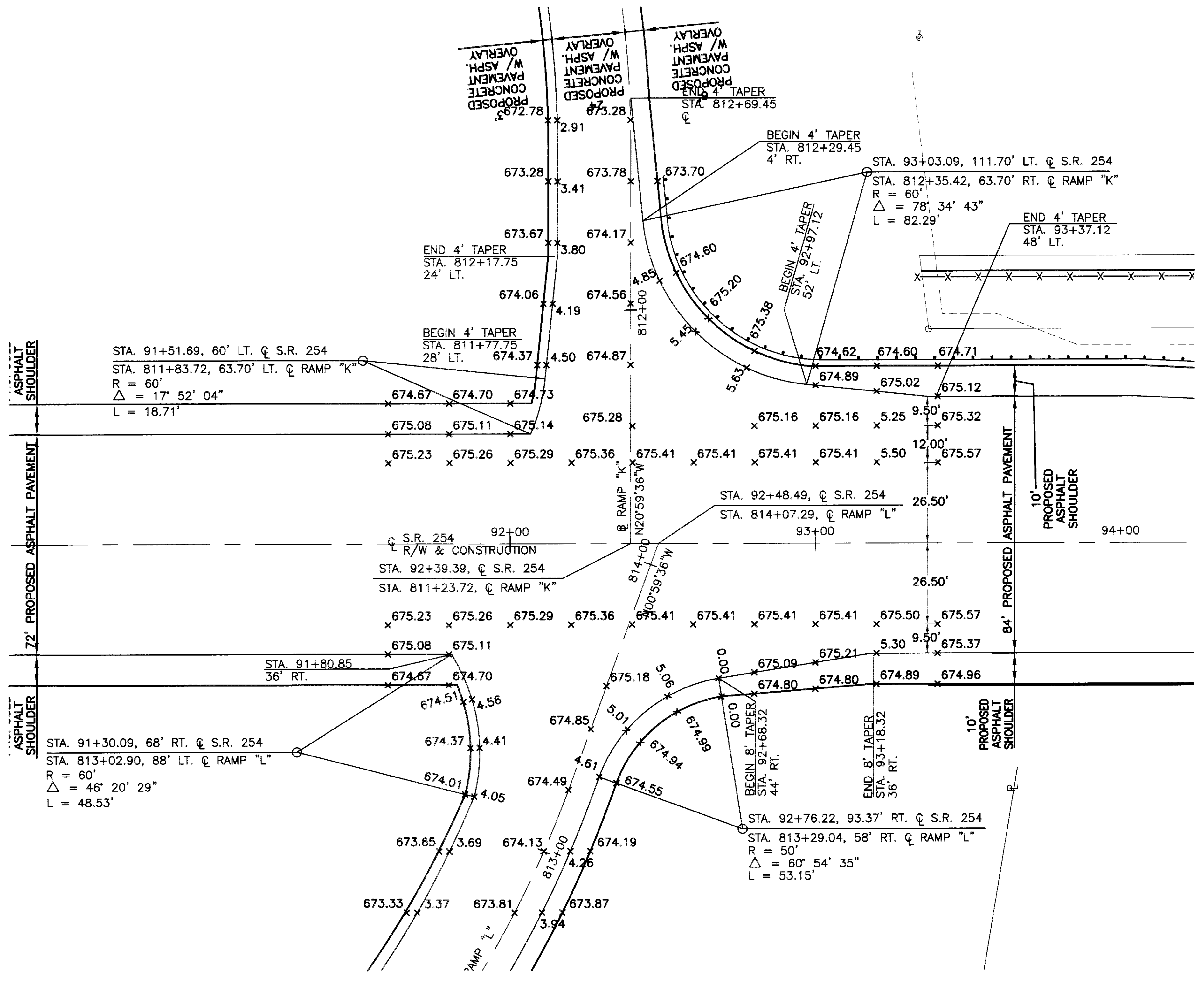
INTERSECTION DETAIL

LOR - 190 - 15.65



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SCALE IN FEET

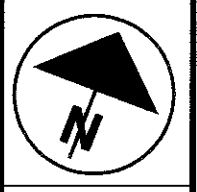
CALCULATED
M.M.
CHECKED
D.W.



INTERSECTION DETAIL

LOR - 190 - 15.65

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 11-16-2008 2:08PM



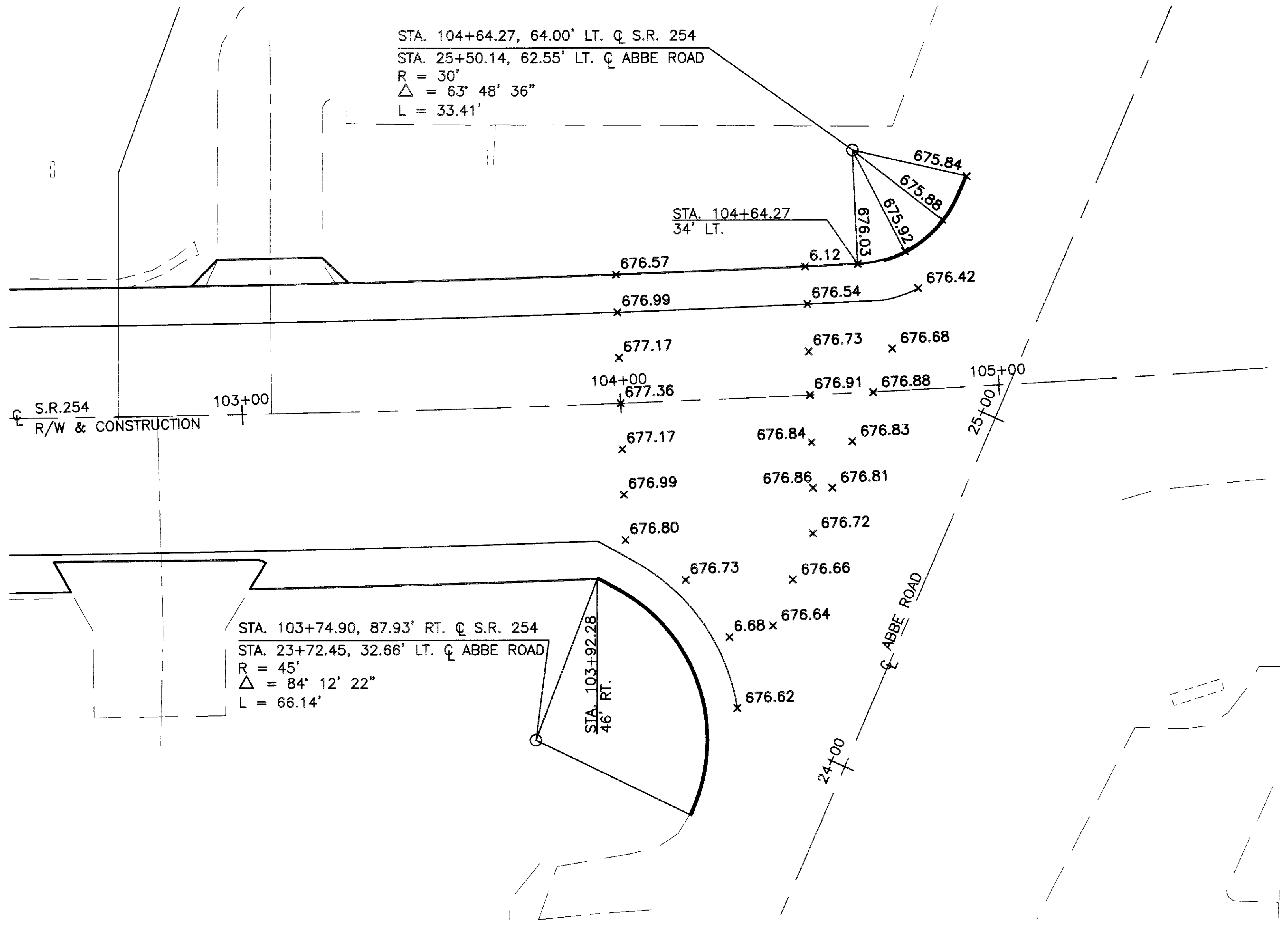
0 20' 40'
HORIZONTAL
SCALE IN FEET

CALCULATED
MJM
CHECKED
DW

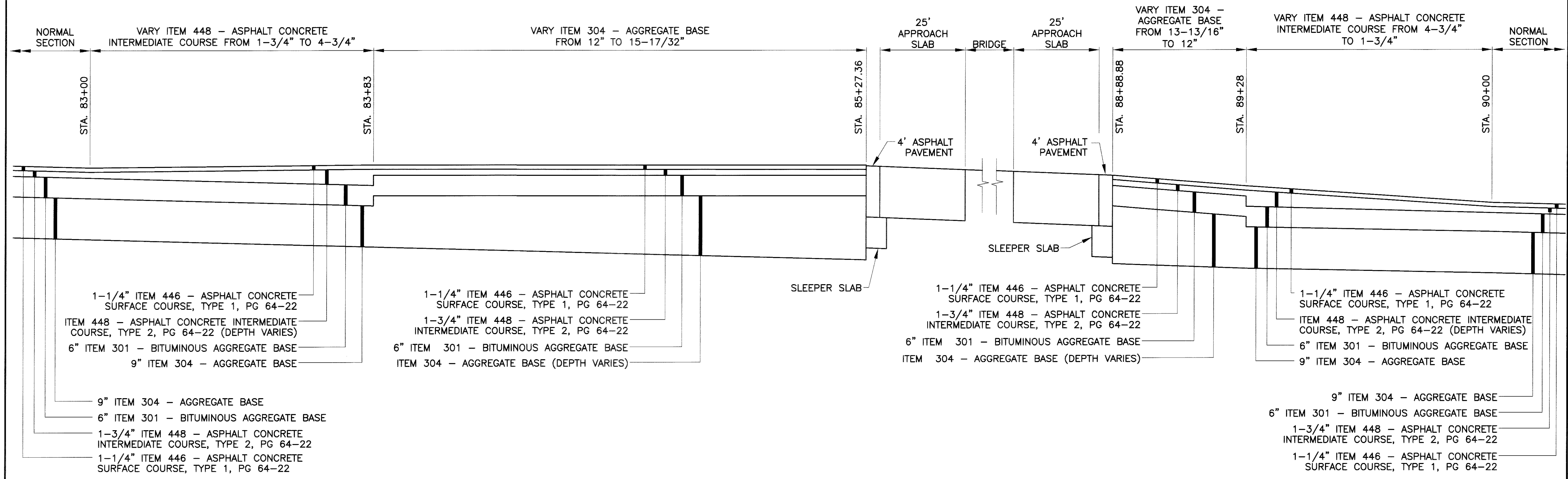
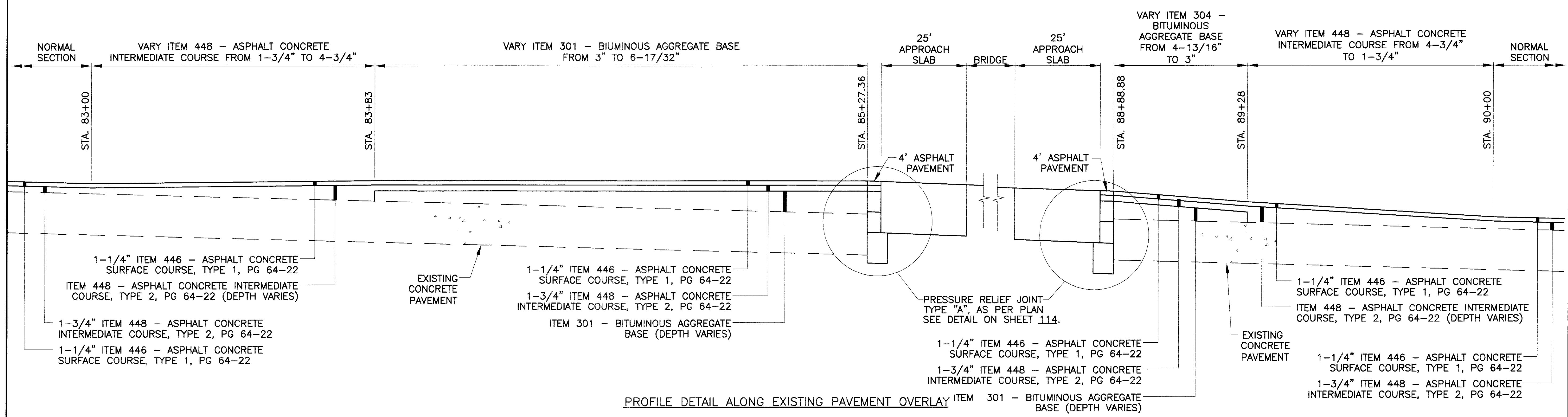
INTERSECTION DETAIL

LOR - 190 - 15.65

112
161



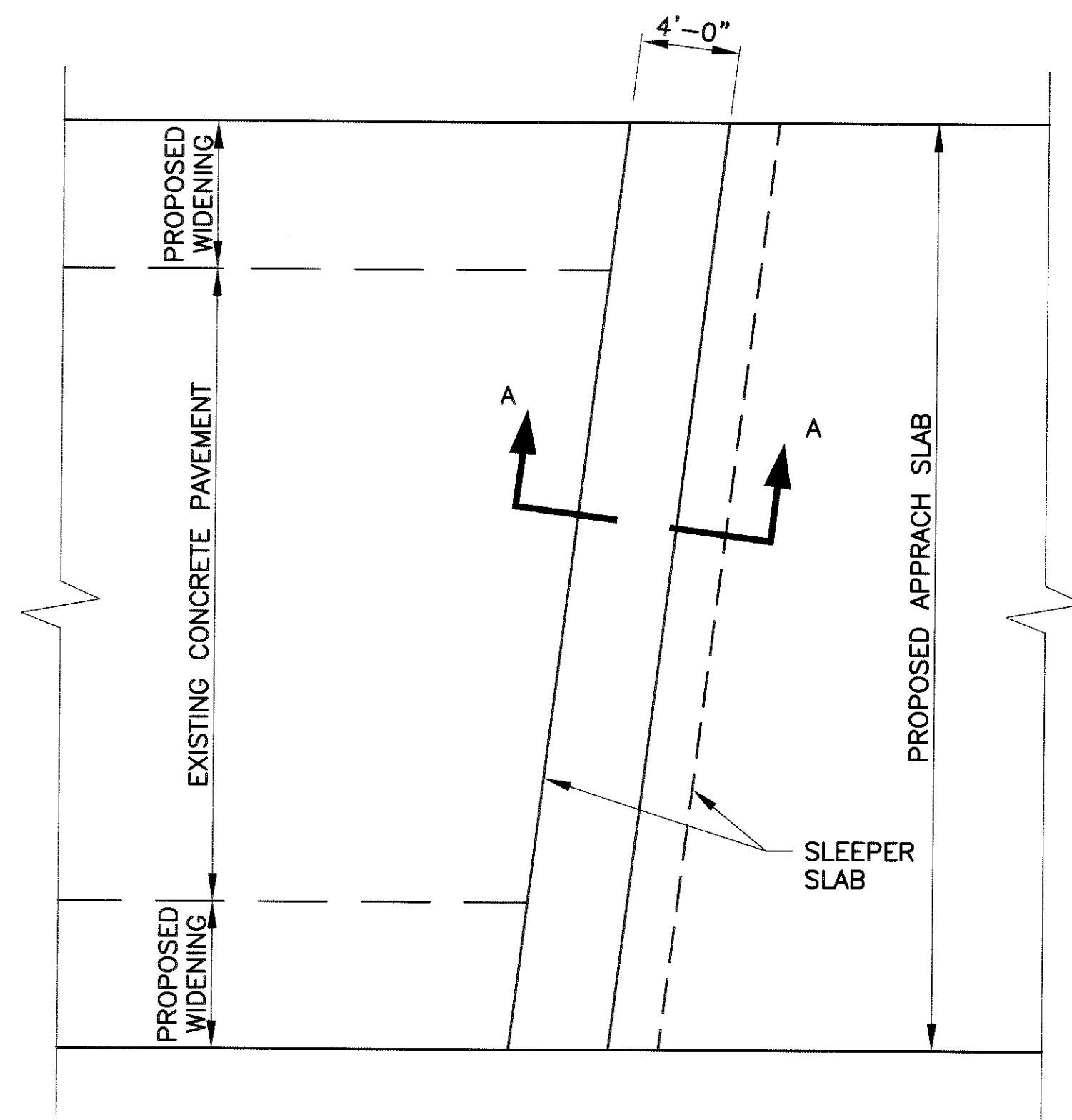
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 11-20-2006 2:08PM



MISCELLANEOUS DETAILS

LOR - I90 - 15.65

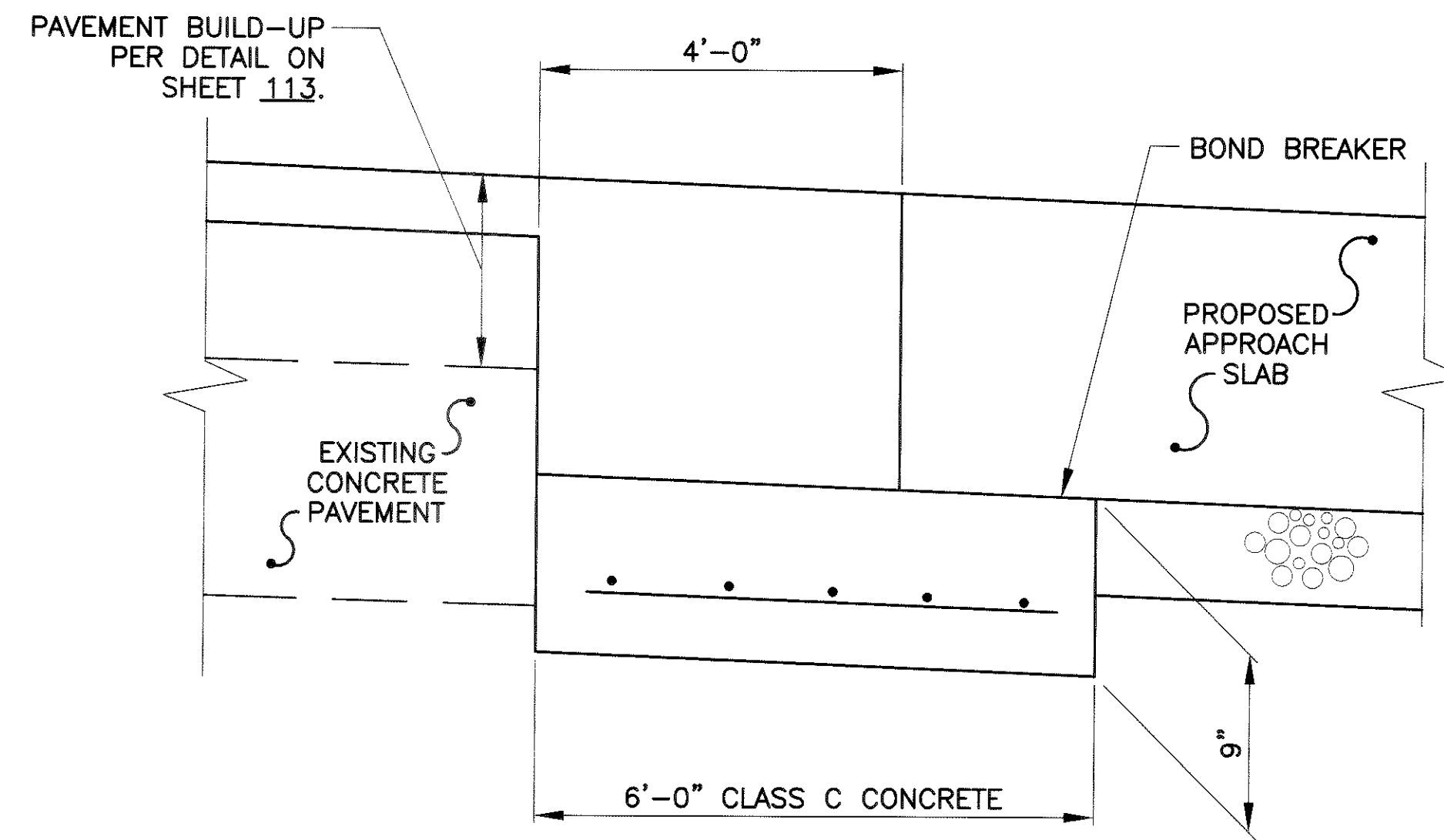
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 08-03-2001 4:09PM



PLAN VIEW

NOTES:

1. THE INTENT OF THIS DETAIL TO DIFFER FROM A STANDARD TYPE A PRESSURE RELIEF JOINT IS THAT THIS SHALL BUTT AGAINST ADJACENT CONCRETE PAVEMENT WHICH WILL NOT BE REMOVED, RATHER THAN BENEATH NEW CONCRETE ROADWAY.
2. REINFORCEMENT DETAILS, SURFACE FINISHINGS AND COATINGS, AND ALL OTHER APPLICABLE DETAILS FROM STANDARD CONSTRUCTION DRAWING BR-2.3 ARE TO REMAIN UNCHANGED.
3. SEE PROFILE ADJUSTMENT DETAIL ON SHEET 113 FOR ADDITIONAL PAVEMENT BUILD-UP INFORMATION.



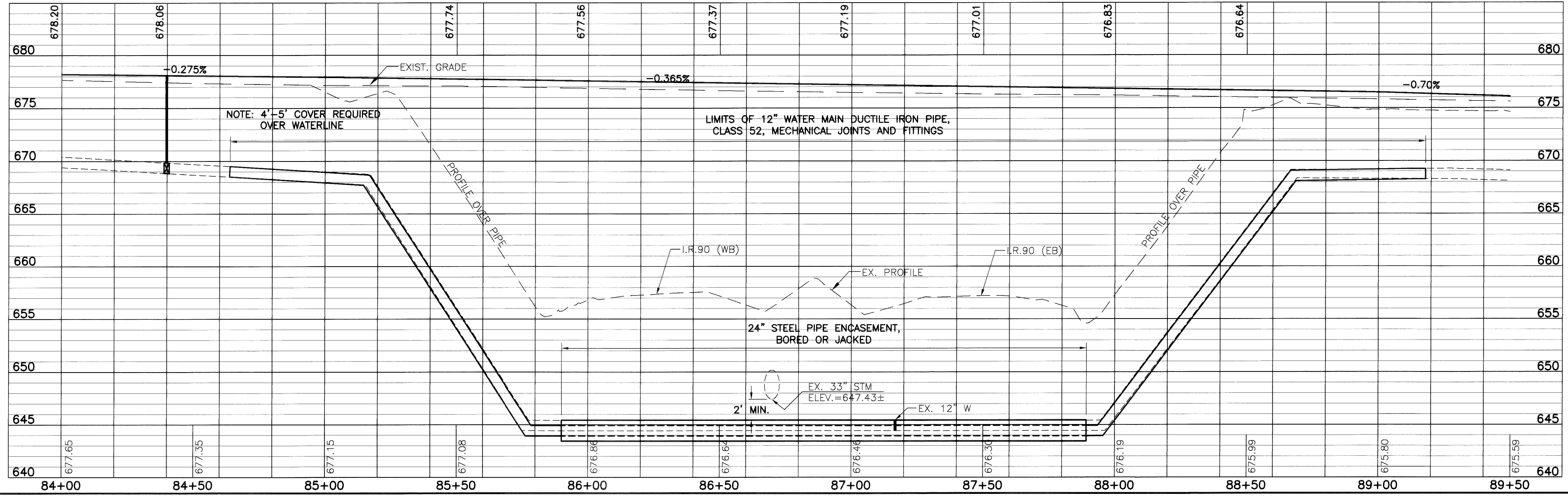
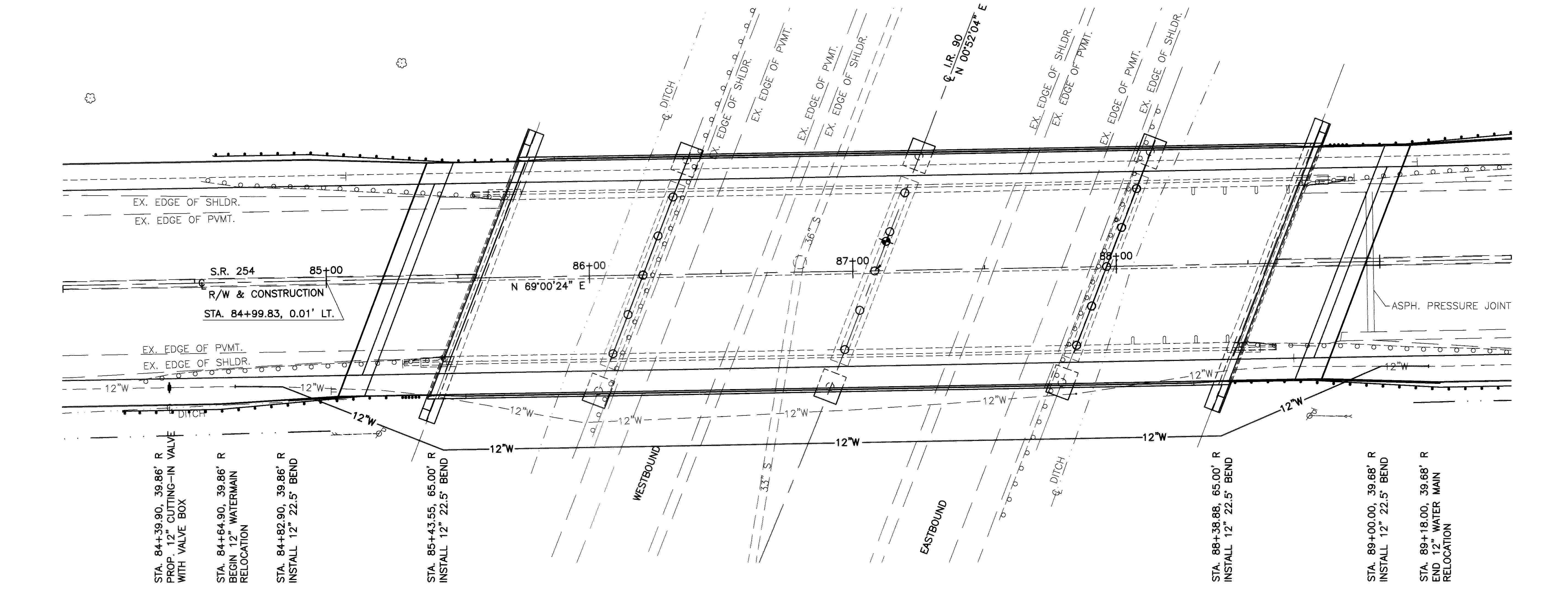
SECTION A - A

PRESSURE RELIEF JOINT, TYPE "A", AS PER PLAN

CALCULATED
MJM
CHECKED
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MISCELLANEOUS DETAILS

LOR - I90 - 15.65



WATER WORK -- GENERAL

SCOPE OF WORK

THE WORK CONTEMPLATED UNDER THIS CONTRACT COMPRISES RELOCATION OF A 12" WATER MAIN RUNNING UNDER I-90, DUE TO THE WIDENING OF THE S.R. 254 BRIDGE, FROM CURRENT 4 LANE TO 6 LANE HIGHWAY. THE LINE WILL NEED TO BE BORED OR JACKED UNDER I-90 TO SHIFT THE LINE TO THE SOUTH. THE RELOCATED LINE WILL BE RECONNECTED TO THE EXISTING LINE ON EITHER SIDE OF I-90.

THE CONTRACTOR SHALL NOTIFY SHEFFIELD VILLAGE WATER THREE (3) WEEKS PRIOR TO STARTING ANY WATER WORKS CONSTRUCTION. CALL 440-949-6209.

AFTER AWARD OF CONTRACT, THE CONTRACTOR THROUGH THE PROJECT ENGINEER SHALL SUBMIT TO THE SHEEFIELD VILLAGE WATER, A CONSTRUCTION SCHEDULE RELATING TO WATERWORK.

PROPER FACILITIES SHALL BE PROVIDED FOR PROTECTING THE WORK FROM DAMAGE BY FLOOD RAIN OR FROST, AND WORK DONE IN FREEZING WEATHER SHALL BE DONE IN SUCH MANNER AS THE ENGINEER MAY APPROVE. VALVES SHALL BE PROTECTED FROM FREEZING UNTIL BACKFILLED IN THE COMPLETED WORK.

TESTING MAINS

ALL PIPES, VALVES, FITTINGS, ETC., SHALL BE LAID IN SUCH A MANNER AS TO LEAVE ALL JOINTS WATERTIGHT. AFTER THE PIPE IS LAID, SUCH LENGTHS OF THE WATER MAIN AS THE DIRECTOR OR HIS DESIGNATE MAY DETERMINE, SHALL BE TESTED UNDER HYDROSTATIC PRESSURE INDICATED IN GENERAL NOTES.

THE HYDROSTATIC TEST PRESSURE SHALL BE FOR A DURATION OF A MINIMUM OF TWO (2) HOURS WITH ALL VALVES CLOSED DURING WHICH TIME THE INTERNAL PRESSURE SHALL REMAIN WITHIN 5 PSI OF THE SPECIFIED TEST PRESSURE. SHOULD THE TEST PRESSURE DROP MORE THAN 5 PSI, THE CONTRACTOR SHALL RECHARGE THE WATER MAIN TO THE SPECIFIED TEST PRESSURE AND LOCATE AND REPAIR THE LEAK TO THE SATISFACTION OF THE VILLAGE. ANY DAMAGED OR DEFECTIVE PIPE, PIPE JOINTS, FITTINGS, VALVES, HYDRANTS OR APPURTENANCES SHALL BE REPAIRED OR REPLACED WITH SOUND MATERIAL AND THE HYDROSTATIC PRESSURE TEST REPEATED.

WATER MAIN DISINFECTION

(A.) WATER MAIN DISINFECTION SHALL CONSIST OF: FLUSHING WATER MAINS AFTER THE HYDROSTATIC TEST AND PRIOR TO THE CHLORINATION PROCEDURE; THE CHLORINATION PROCEDURE, THE FINAL FLUSHING AND SAMPLING.

1. TAPS, TAPPING SADDLES, SERVICE PIPES, COMBINATION BLOWOFFS, AND EXISTING WATER MAINS WITH READILY ACCESSIBLE CONTROL VALVES, AND ALL PIPES, APPLIANCES, LABOR AND OTHER APPURTENANCES SHALL BE FURNISHED OR PROVIDED BY THE CONTRACTOR. THEY SHALL BE USED FOR INTRODUCING DISINFECTING AGENT AND WATER FOR FLUSHING INTO THE NEW OR EXTENDED WATER MAINS. TAPS OR SERVICE PIPES SHALL BE A MINIMUM ONE INCH (1") SIZE OF COPPER TO IRON PIPE THREADED CONFIGURATION. ADDITIONAL TAPS SHALL BE PROVIDED IF NECESSARY. ALL ONE INCH (1") TAPS ON DUCTILE IRON WATER MAINS WITH THICKNESS LESS THAN CLASS 56 WILL REQUIRE BRONZE DOUBLE STRAP TAPPING SADDLES, OR APPROVED EQUAL, FURNISHED BY THE CONTRACTOR.

2. SUCH LENGTHS OF THE WATER MAIN AS THE VILLAGE MAY DETERMINE, SHALL BE CHLORINATED; HOWEVER, IN NO CASE SHALL THE LENGTH EXCEED THAT WHICH CAN BE CHLORINATED SATISFACTORILY IN ONE (1) WORK DAY. SUCH MAXIMUM LENGTH IS GENERALLY UP TO THREE (3) MILES TOTAL, INCLUDING BRANCHES AND CONNECTING WATER MAIN(S), FOR SIXTEEN INCH (16") AND SMALLER; AND THREE (3) VALVE SECTIONS, OR TWO (2) MILES, FOR TWENTY INCH (20") OR LARGER WATER MAINS.

3. THE CONTRACTOR SHALL PREPARE AND PRESENT TO THE VILLAGE FOR APPROVAL A PLAN FOR ALL DISINFECTION FROM THE HYDROSTATIC TESTING TO THE FINAL FLUSHING FOR THE NEW OR EXTENDED WATER MAIN, INCLUDING ANY BRANCHES. THE DISINFECTION PLAN SHALL SHOW COMPLETE LAYOUT, INCLUDING SIZES AND LOCATION OF: (A) FLUSHING WATER SOURCE; (B) WATER SOURCE FOR CHLORINATION UTILIZING CALCIUM HYPOCHLORITE SOLUTION FURNISHED IN MIXING DRUM; (C) BLENDING WATER SOURCE TO ASSURE PROPER AND UNIFORM CONCENTRATION OF CHLORINATION SOLUTION THROUGHOUT THE WATER MAIN TO BE DISINFECTED; (D) OUTLETS TO BE UTILIZED OR PROVIDED FOR THE DRAWING AND FINAL FLUSHING OF CHLORINE SOLUTION THROUGH AND FROM THE WATER MAIN BEING DISINFECTED; AND (E) TYPE, NUMBER, SEQUENCE AND SIZES OF OUTLETS INCLUDING FIRE HYDRANTS AND VALVES TO BE OPERATED.

(B.) FLUSHING

1. BEFORE DISINFECTION ALL DIRT AND FOREIGN MATTER SHALL BE REMOVED FROM THE NEW WATER MAIN OR EXTENSIONS TO EXISTING MAINS BY A THOROUGH FLUSHING THROUGH THE HYDRANTS OR BY OTHER APPROVED MEANS. EACH VALVE SECTION OF THE NEWLY LAID PIPE SHALL BE FLUSHED INDEPENDENTLY. THIS SHALL BE DONE AFTER THE PRESSURE TEST. FLUSHING SHALL BE IN ACCORDANCE WITH ANSI/AWWA C 651 STANDARD FOR DISINFECTING WATER MAINS. WHERE THE FLUSHING VELOCITY SPECIFIED THEREIN CANNOT BE ATTAINED, FLUSHING RATES AS DETERMINED BY THE DIRECTOR TO BE SUFFICIENT SHALL BE PERMITTED. IF IN THE OPINION OF THE DIRECTOR THE FLUSHING PRIOR TO THE CHLORINATION PROCEDURE DOES NOT REMOVE DIRT OR OTHER ACCUMULATIONS IN THE PIPE, THE PIPE SHALL BE CLEANED BY MECHANICAL MEANS BY THE CONTRACTOR AND THE FLUSHING SHALL BE REPEATED.

2. THE FLUSHING OF THE CHLORINATION SOLUTION SHALL BE DONE BY THE VILLAGE UNTIL THE CHLORINE SOLUTION IS TOTALLY FLUSHED OUT OF THE SYSTEM BEING DISINFECTED. ALL FLUSHING SHALL BE UNDER THE CONTROL OF THE VILLAGE OF PUBLIC UTILITIES, OR HIS DESIGNATE. THE CONTRACTOR SHALL OBTAIN WATER FOR FLUSHING IN THE SAME MANNER AS FOR TESTING.

CONTINGENCY ITEMS FOR ADJUSTMENTS TO GRADE PERTAINING TO THE EXISTING WATER LINE:

AS A RESULT OF THE PROPOSED CONSTRUCTION, EXISTING VALVE BOXES AND/OR FIRE HYDRANTS MAY NEED TO BE ADJUSTED TO MEET FINAL GRADE, WITHIN THE RIGHT-OF-WAY.

THE ADJUSTMENT OF THE EXISTING VALVE BOXES AND/OR FIRE HYDRANTS SHALL BE AS DETERMINED/DIRECTED BY THE ENGINEER

TO PROVIDE FOR CONTINGENCY, THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED IN THE GENERAL SUMMARY FOR USE AS DIRECTED BY THE ENGINEER:

ITEM 638 - FIRE HYDRANT ADJUSTED TO GRADE	1 EACH
ITEM 638 - VALVE BOX ADJUSTED TO GRADE	6 EACH

ANY ADDITIONAL MATERIAL THAT MAY BE REQUIRED FOR THE ABOVE ADJUSTMENTS, SHALL NOT BE ORDERED BY THE CONTRACTOR UNTIL AUTHORIZED BY THE ENGINEER.

CALCULATED	M/JM	CHECKED	DW
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GENERAL WATER LINE NOTES

LOR - I90 - 15.65

116
161

SHEET NO.	REFERENCE NO.	STATION	OFFSET	CODE	SIZE (INCHES)	SIGN, FLAT SHEET, TYPE G	GROUND MOUNTED SUPPORT, NO. 3 POST	ONE WAY SUPPORT, NO. 3 POST	REMOVAL OF GROUND MOUNTED SIGN & REERECTION	REMOVAL OF GROUND MOUNTED POST SUPPORT & DISPOSAL
						SQ. FT.				
129	S-136	STA. 813+40.06	28.00' R	R-1-48	48" x 48"		16.0		1	1
	S-137	STA. 813+40.06	28.00' R	R-41-36	36" x 36"				1	
	S-138	STA. 814+67.25	44.00' L	R-43R-48	48" x 18"			16.0	1	1
	S-139	STA. 814+67.25	44.00' L	R-43L-48	48" x 18"				1	
	S-140	STA. 814+67.25	44.00' L	R-41B-36	36" x 36"				1	
	S-141	STA. 801+00.00	33.00' R	W-60L-36	36" x 36"	9.0	17.0			
	S-142	STA. 804+00.00	35.00' R	W-53L-36	36" x 36"	9.0	15.0			
	S-143	STA. 806+79.83	18.00' L	R-15A	36" x 36"		15.0		1	1
	S-144	STA. 801+00.00	15.00' L	W-60L-36	36" x 36"	9.0	17.0			
	S-145	STA. 804+00.00	15.00' L	W-53L-36	36" x 36"	9.0	15.0			
TOTALS						36.0	95.0	16.0	6	3

CALCULATED
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SIGNING SUB-SUMMARY

LOR - I90 - 15.65

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161

[0:\p\197\DWG\SR25A\93197.DWG] NUN
09-04-2001 9:50AM

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	EDGE LINE, YELLOW	EDGE LINE, WHITE	LANE LINE	CENTER LINE, DOUBLE SOLID	CHANNELIZING LINE	ISLAND MARKING	TRANSVERSE LINE	DOTTED LINE, 4 IN.
						LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	SQ. FT.	LIN. FT.	LIN. FT.
125	CL-1	S.R. 254	75+21	81+25	LT. & RT.				1208				
	CL-2	S.R. 254	82+75	85+00	RT.				225				
126	CL-3	S.R. 254	85+00	91+45	LT. & RT.				645				
	CL-4	S.R. 254	93+05	95+00	LT. & RT.				390				
127	CL-5	S.R. 254	95+00	96+36	LT. & C				272				
	CL-6	S.R. 254	96+36	99+58	C				322				
	CL-7	S.R. 254	100+45	104+32	RT. & C				387				
	CL-8	S.R. 254	105+57	106+57	C				100				
	CL-9	ABBE RD.	25+58	26+58	RT.				100				
	CL-10	ABBE RD.	23+55	24+55	LT.				100				
	CL-11	S.R. 254	100+03		LT.				38				
	CL-12	S.R. 254	99+97		RT.				30				
125	LL-2	S.R. 254	78+45	81+25	LT.			280					
	LL-3	S.R. 254	82+75	85+00	RT.			225					
	LL-4	S.R. 254	82+75	85+00	LT.			225					
126	LL-5	S.R. 254	85+00	91+45	LT. & RT.			1290					
	LL-6	S.R. 254	93+05	95+00	LT. & RT.			390					
127	LL-7	S.R. 254	95+00	99+58	LT. & RT.			916					
	LL-8	S.R. 254	100+45	104+32	RT.			387					
	LL-9	S.R. 254	100+45	104+50	LT.			405					
128	LL-10	S.R. 254 - RAMP "J"	810+82	814+30	RT.			348					
	LL-11	S.R. 254 - RAMP "K"	812+00	814+25	LT.			225					
129	LL-12	S.R. 254 - RAMP "L"	808+70	811+40	LT.			540					
	LL-13	S.R. 254 - RAMP "H"	802+32	807+25	LT.			493					
125	DL-3	S.R. 254	82+00		LT. & RT.								316
126	DL-4	S.R. 254	91+45		LT. & RT.								377
	DL-5	S.R. 254	91+05		LT.								60
	DL-6	S.R. 254	93+05		RT.								194
125	EL-12	S.R. 254	75+89	81+25	RT.		536						
	EL-13	S.R. 254	76+25	81+25	LT.		500						
	EL-14	S.R. 254	82+22	85+00	RT.		278						
	EL-15	S.R. 254	82+22	85+00	LT.		278						
126	EL-16	S.R. 254	85+00	92+00	LT.		700						
	EL-17	S.R. 254	85+00	91+90	RT.		690						
	EL-18	S.R. 254	93+05	95+00	LT.		195						
	EL-19	S.R. 254	92+66	95+00	RT.		234						
127	EL-20	S.R. 254	95+00	104+27	RT.		927						
	EL-21	S.R. 254	95+00	104+79	RT.		979						
128	EL-22	S.R. 254 - RAMP "J"	807+72	818+53	RT.	1081							
	EL-23	S.R. 254 - RAMP "J"	807+72	818+53	LT.		1081						
	EL-24	S.R. 254 - RAMP "K"	881+60	820+50	LT.	890							
	EL-25	S.R. 254 - RAMP "K"	881+60	820+50	RT.		890						
129	EL-26	S.R. 254 - RAMP "L"	802+75	813+54	LT.	1079							
	EL-27	S.R. 254 - RAMP "L"	802+75	813+54	RT.		1079						
	EL-28	S.R. 254 - RAMP "H"	797+50	807+61	RT.	1011							
	EL-29	S.R. 254 - RAMP "H"	797+50	807+61	LT.		1011						
125	IM-3	S.R. 254	75+21	81+38	LT. & RT.					239		558	
126	IM-4	S.R. 254	92+92	95+00	LT. & RT.					239		378	
125	CH-5	S.R. 254	76+25	78+45	LT.				220				
	CH-6	S.R. 254	78+30	81+25	RT.				295				
	CH-7	S.R. 254	82+75	85+00	LT. & C				450				
126	CH-8	S.R. 254	85+00	88+02	LT. & C				604				
	CH-9	S.R. 254	88+92	91+45	RT. & C				506				
	CH-10	S.R. 254	93+05	95+00	LT.				195				
127	CH-11	S.R. 254	95+20	99+58	RT.				438				
	CH-12	S.R. 254	95+00	97+50	RT.				250				
	CH-13	S.R. 254	100+45	104+26	RT.				381				
	CH-14	S.R. 254	103+30	104+21	RT.				91				
	CH-15	S.R. 254	105+57	106+57	LT.				200				
	CH-16	ABBE RD.	25+58	26+58	LT.				200				
	CH-17	ABBE RD.	23+55	24+55	RT.				200				
	CH-18	S.R. 254	99+87		LT.				38				
128	CH-19	S.R. 254 - RAMP "J"	807+82	810+82	LT.				300				
129	CH-20	S.R. 254 - RAMP "L"	811+40	813+50	LT.				420				
TOTALS						4061	9378	5724	3817	4788	478	936	947
						0.77 MI.	1.78 MI.	1.08 MI.	0.72 MI.				

PAVEMENT MARKING SUB-SUMMARY

LOR - I90 - 15.65

CALCULATED
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CHECKED
LAB

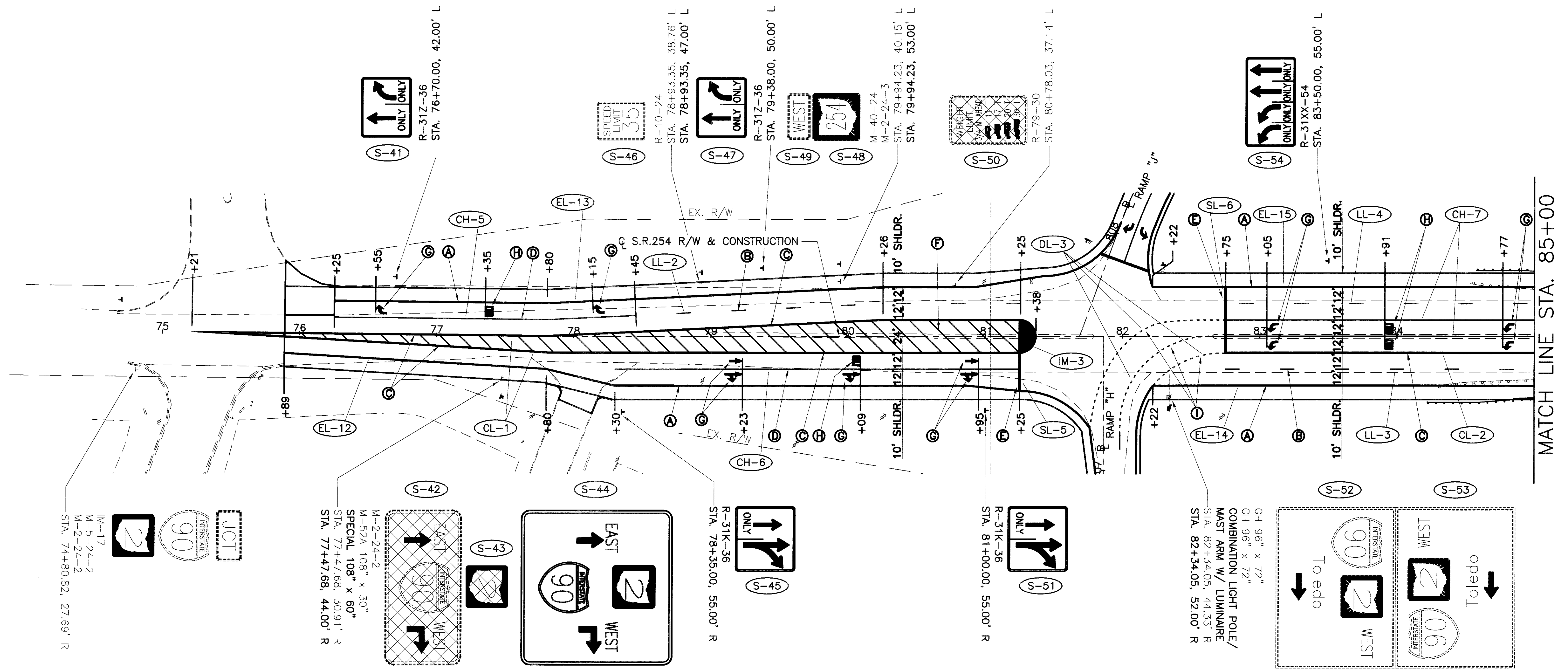
124B
161

SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	ITEM 644												STOP LINE LIN. FT.	LANE ARROW EACH	WORD ON PAVEMENT, 72" EACH
125	SL-5	S.R. 254	81+25		RT.															
	SL-6	S.R. 254	82+75		LT. & RT.												29			
126	SL-7	S.R. 254	91+45		LT. & RT.												48			
	SL-8	S.R. 254	93+05		LT.												48			
127	SL-9	S.R. 254	99+58		RT.												36			
	SL-10	S.R. 254	100+45		LT. & RT.												36			
	SL-11	S.R. 254	104+32		RT.												36			
	SL-12	S.R. 254	105+57		LT. & RT.												52			
	SL-13	ABBE RD.	25+58		LT. & RT.												82			
	SL-14	ABBE RD.	24+55		LT. & RT.												44			
	SL-15	S.R. 254	99+62	100+03	LT.												43			
	SL-16	S.R. 254	99+97	100+18	RT.												41			
128	SL-17	S.R. 254 - RAMP "J"	807+82		LT. & RT.												21			
129	SL-18	S.R. 254 - RAMP "L"	813+50		LT. & RT.												38			
																	54			
125		S.R. 254	76+55		LT.													1		
		S.R. 254	77+35		LT.														1	
		S.R. 254	78+15		LT.													1		
		S.R. 254	79+23		RT.													2		
		S.R. 254	80+09		RT.													1		
		S.R. 254	80+95		RT.													2		
		S.R. 254	83+05		LT. & RT.													2		
		S.R. 254	83+91		LT. & RT.													2		
126		S.R. 254	84+77		LT. & RT.													2		
		S.R. 254	85+63		LT. & RT.													2		
		S.R. 254	86+49		LT. & RT.													2		
		S.R. 254	87+35		LT. & RT.													2		
		S.R. 254	89+43		LT. & RT.													2		
		S.R. 254	90+29		LT. & RT.													2		
		S.R. 254	91+15		LT. & RT.													2		
		S.R. 254	93+35		LT.													1		
127		S.R. 254	94+21		LT.													1		
		S.R. 254	95+07		LT.													1		
		S.R. 254	95+93		LT.													1		
		S.R. 254	96+70		RT.													1		
		S.R. 254	96+79		LT.													1		
		S.R. 254	97+56		RT.													1		
		S.R. 254	98+42		RT.													1		
		S.R. 254	99+28		RT.													1		
		S.R. 254	100+65		RT.													1		
		S.R. 254	101+25		RT.													1		
		S.R. 254	102+70		RT.													1		
		S.R. 254	103+30		RT.													1		
		S.R. 254	104+00		RT.													3		
		S.R. 254	106+05		LT. & RT.													3		
		ABBE RD.	24+47		LT. & RT.													3		
		ABBE RD.	25+66		LT. & RT.													3		
		S.R. 254	99+82		LT.													1		
		S.R. 254	99+96		LT.													1		
128		S.R. 254 - RAMP "J"	808+02		RT.													2		
		S.R. 254 - RAMP "J"	808+88		RT.													2		
		S.R. 254 - RAMP "J"	809+74		RT.													2	2	
129		S.R. 254 - RAMP "L"	812+00		LT. & RT.													3	3	
		S.R. 254 - RAMP "L"	812+60		LT. & RT.													3		
		S.R. 254 - RAMP "L"	813+20		LT. & RT.													3		
TOTALS																	608	49	20	

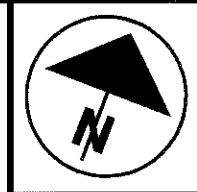
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PAVEMENT MARKING SUB-SUMMARY			
LOR - I90 - 15.65			
124C			
161			

- LEGEND**
- (A) ITEM 644 - EDGE LINE, W/RAISED PAVEMENT MARKERS (TYP.)
 - (B) ITEM 644 - LANE LINE, W/RAISED PAVEMENT MARKERS (TYP.)
 - (C) ITEM 644 - CENTER LINE, W/RAISED PAVEMENT MARKERS (TYP.)
 - (D) ITEM 644 - CHANNELIZING LINE
 - (E) ITEM 644 - STOP LINE
 - (F) ITEM 644 - TRANSVERSE LINE
 - (G) ITEM 644 - LANE ARROW
 - (H) ITEM 644 - WORD ON PAVEMENT, 72 IN.
 - (I) ITEM 644 - DOTTED LINE, 4 IN.

- LEGEND**
- PROPOSED
 - EXISTING TO BE REMOVED
 - EXISTING TO REMAIN



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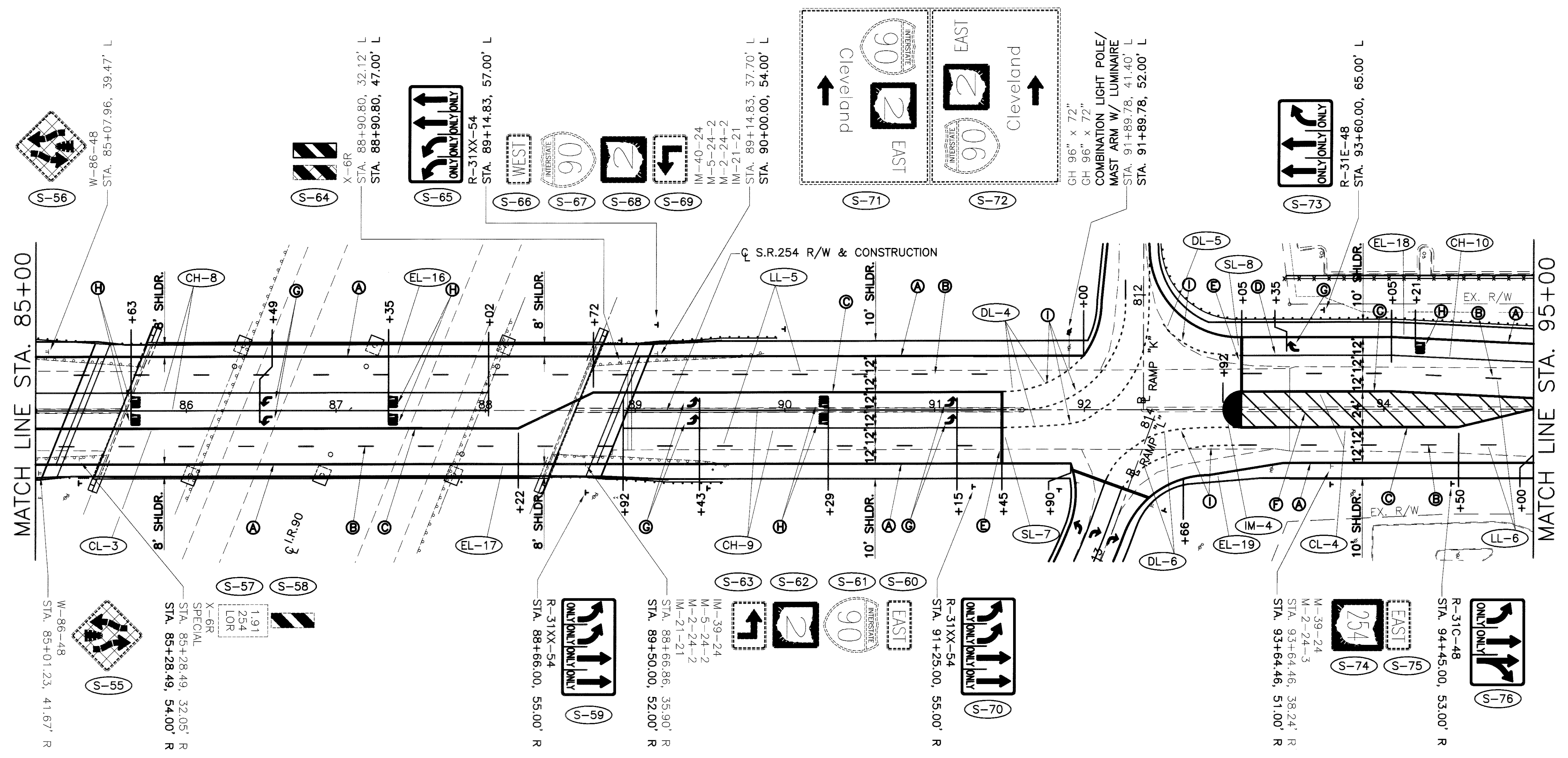
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PAVEMENT MARKING AND SIGNING PLAN

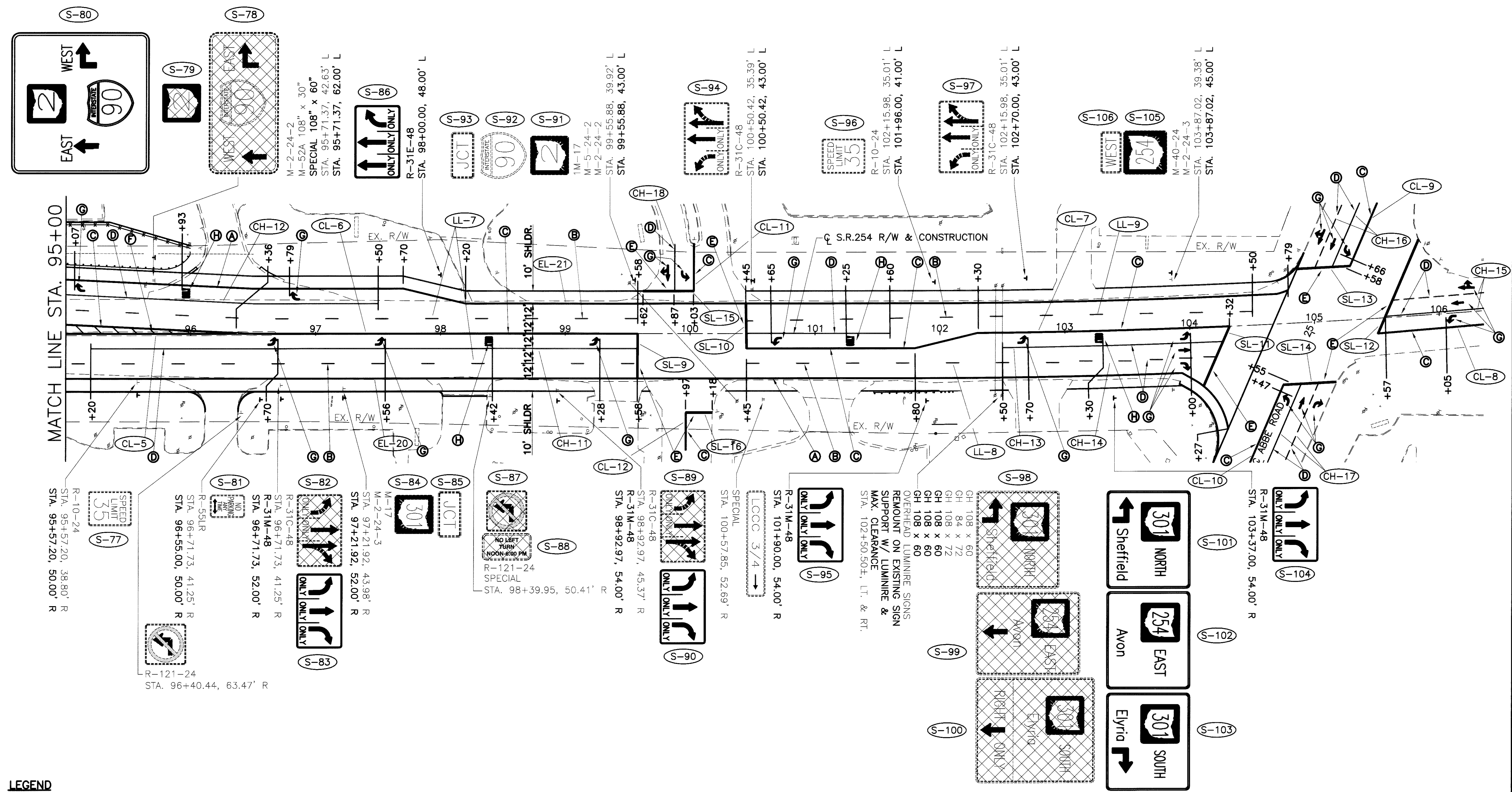
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- LEGEND**
- (A) ITEM 644 - EDGE LINE, W/RAISED PAVEMENT MARKERS (TYP.)
 - (B) ITEM 644 - LANE LINE, W/RAISED PAVEMENT MARKERS (TYP.)
 - (C) ITEM 644 - CENTER LINE, W/RAISED PAVEMENT MARKERS (TYP.)
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 - (G) ITEM 644 - LANE ARROW
 - (H) ITEM 644 - WORD ON PAVEMENT, 72 IN.
 - (I) ITEM 644 - DOTTED LINE, 4 IN.

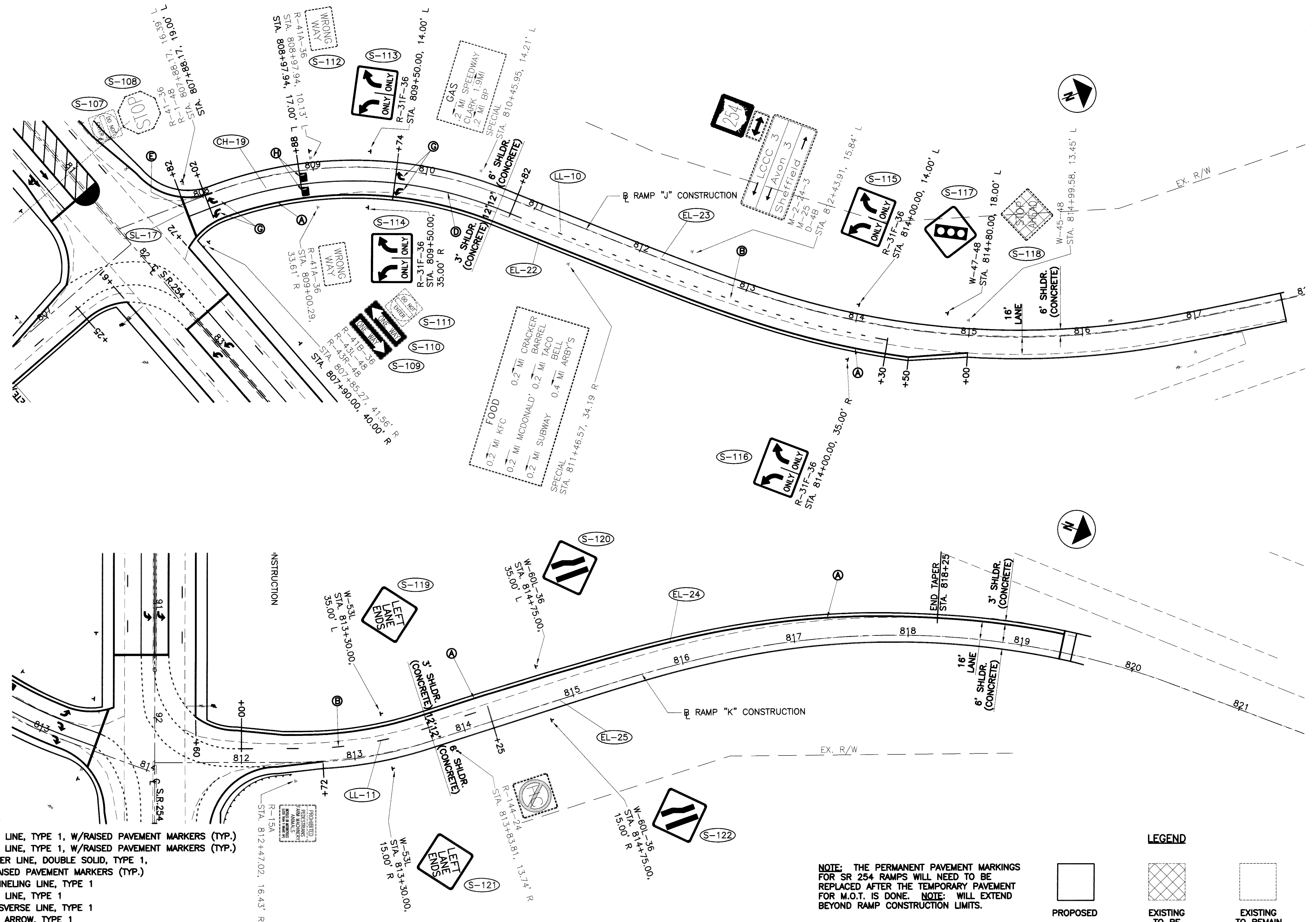
- LEGEND**
- PROPOSED
 - EXISTING TO BE REMOVED
 - EXISTING TO REMAIN



- LEGEND**
- Ⓐ EDGE LINE, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
 - Ⓑ LANE LINE, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
 - Ⓒ CENTER LINE, DOUBLE SOLID, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
 - Ⓓ CHANNELING LINE, TYPE 1
 - Ⓔ STOP LINE, TYPE 1
 - Ⓕ TRANSVERSE LINE, TYPE 1
 - Ⓖ LANE ARROW, TYPE 1
 - Ⓗ WORD ON PAVEMENT, 72 IN., TYPE 1
 - Ⓘ DOTTED LINE, 4 IN., TYPE 1

- LEGEND**
- PROPOSED
 - ▨ EXISTING TO BE REMOVED
 - EXISTING TO REMAIN

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- LEGEND**
- (A) EDGE LINE, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
 - (B) LANE LINE, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
 - (C) CENTER LINE, DOUBLE SOLID, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
 - (D) CHANNELING LINE, TYPE 1
 - (E) STOP LINE, TYPE 1
 - (F) TRANSVERSE LINE, TYPE 1
 - (G) LANE ARROW, TYPE 1
 - (H) WORD ON PAVEMENT, 72 IN., TYPE 1
 - (I) DOTTED LINE, 4 IN., TYPE 1

NOTE: THE PERMANENT PAVEMENT MARKINGS FOR SR 254 RAMPS WILL NEED TO BE REPLACED AFTER THE TEMPORARY PAVEMENT FOR M.O.T. IS DONE. **NOTE:** WILL EXTEND BEYOND RAMP CONSTRUCTION LIMITS.

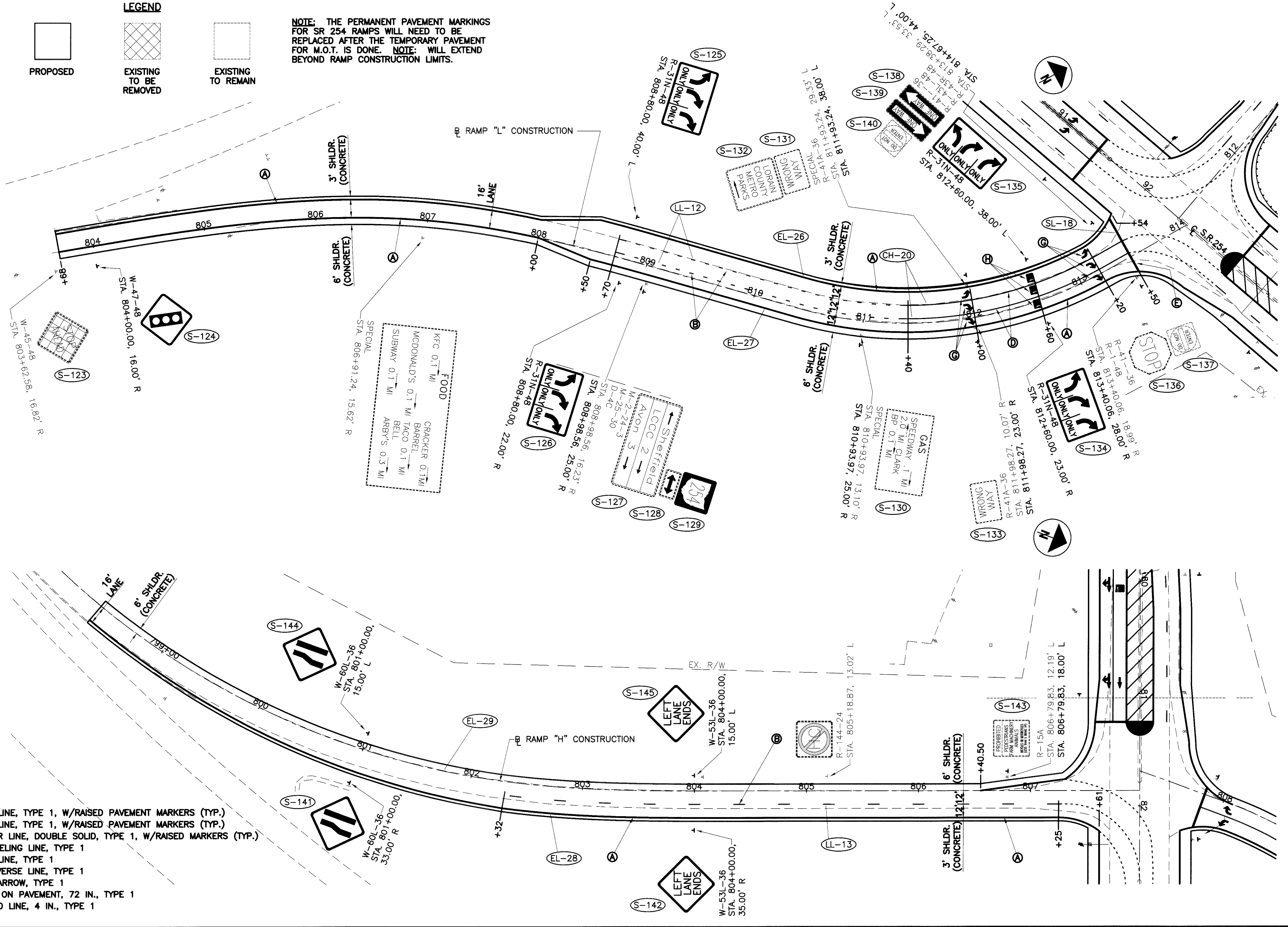
- LEGEND**
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LEGEND

PROPOSED	EXISTING TO BE REMOVED	EXISTING TO REMAIN

NOTE: THE PERMANENT PAVEMENT MARKINGS FOR SR 254 RAMPS WILL NEED TO BE REPLACED AFTER THE TEMPORARY PAVEMENT FOR M.O.T. IS DONE. **NOTE:** WILL EXTEND BEYOND RAMP CONSTRUCTION LIMITS.



LEGEND

- (A) EDGE LINE, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
- (B) LANE LINE, TYPE 1, W/RAISED PAVEMENT MARKERS (TYP.)
- (C) CENTER LINE, DOUBLE SOLID, TYPE 1, W/RAISED MARKERS (TYP.)
- (D) CHANNELING LINE, TYPE 1
- (E) STOP LINE, TYPE 1
- (F) TRANSVERSE LINE, TYPE 1
- (G) LANE ARROW, TYPE 1
- (H) WORD ON PAVEMENT, 72 IN., TYPE 1
- (I) DOTTED LINE, 4 IN., TYPE 1

CALCULATED	DLS	CHECKED	LAB

PAVEMENT MARKING AND SIGNING PLAN

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TRAFFIC CONTROL STANDARD CONSTRUCTION DRAWINGS:

REFERENCES TO SUPPLEMENTAL SPECIFICATIONS 857, 858, 861, 957, 958 AND 961 ON THE STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS RESPECTIVE REFERENCES TO ITEMS 630, 631, 633, 730, 731 AND 733.

MAINTENANCE OF TRAFFIC STANDARD CONSTRUCTION DRAWINGS

REFERENCES TO SECTION 621, OR SUPPLEMENTAL SPECIFICATIONS 806, 847, 906, OR 947 ON THE STANDARD CONSTRUCTION DRAWINGS OR ELSEWHERE IN THESE PLANS SHALL BE CONSIDERED TO READ AS REFERENCES TO THE APPROPRIATE PORTIONS OF SECTIONS 641, 642, 643, 644, 645 AND 740.

REFERENCES TO ITEM 740.05, TYPE C AND ITEM 740.05, TYPE B ON THE STANDARD CONSTRUCTION DRAWINGS OR ELSEWHERE IN THESE PLANS SHALL BE CONSIDERED TO READ AS REFERENCES TO ITEM 740.06, TYPE I AND ITEM 740.06, TYPE II, RESPECTIVELY.

ITEM 632 - VEHICULAR SIGNAL HEAD, 3 & 4 SECTION, 12" LENS, 1 OR 2 WAY AS PER PLAN:

SECTION 732.01 OF THE SPECIFICATIONS IS MODIFIED FOR THIS PROJECT AS FOLLOWS:

- A) PROPOSED SIGNAL HEADS AND VISORS SHALL MEET I.T.E SPECIFICATIONS.
- B) GLASS LENSES SHALL BE USED.
- C) THE ENTRANCE FITTINGS SHALL BE OF THE TRI-STUD DESIGN WITH SERRATED RINGS IN ORDER TO ACHIEVE POSITIVE LOCKING.

ITEM 632 - STRAIN POLES, TYPE TC-81.10, AS PER PLAN

SIGNAL STRAIN POLES SHALL COMPLY WITH 732.11, EXCEPT THAT THE POLES SHALL BE SINGLE SECTION TRUE CONTINUOUS TAPERED TUBES AS SHOWN ON STANDARD CONSTRUCTION DRAWINGS TC-81.10. THE USE OF STRAIGHT SECTIONS WITH A TAPER EFFECT ACCOMPLISHED BY THE USE OF REDUCERS WILL NOT BE PERMITTED.

THE CONTRACTOR SHALL PROVIDE A SECURED DOME COVER OVER THE BASE PLATE BOLTS. THE COST OF THIS WORK SHALL BE INCLUDED IN "ITEM 632 - SIGNAL SUPPORT, TYPE TC-81.10, AS PER PLAN".

PAYMENT FOR "ITEM 632 SIGNAL SUPPORT, TYPE TC-81.10, AS PER PLAN" SHALL BE MADE AT THE CONTRACT UNIT PRICE BID PER EACH.

ITEM 633 - CONTROLLER WORK PAD

REFERENCES TO ITEM 608 4" CONCRETE WALK FOR CONTROLLER WORK PADS ON THE STANDARD CONSTRUCTION DRAWINGS IN THESE PLANS SHALL BE CONSIDERED TO READ AS REFERENCES TO ITEM 633 CONTROLLER WORK PAD.

TEMPORARY MAINTENANCE OF TRAFFIC SIGNAL INSTALLATIONS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL INSTALLATIONS WITHIN THE PROJECT UNDER THE FOLLOWING CONDITIONS:

- A) EXISTING SIGNAL INSTALLATIONS WHICH THE PLANS REQUIRE THE CONTRACTOR TO ADJUST, MODIFY, ADD ONTO, OR REMOVE, OR WHICH THE CONTRACTOR ACTUALLY ADJUSTS, MODIFIES OR OTHERWISE DISTURBS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ENTIRE INSTALLATION (AT AN INTERSECTION) FROM THE TIME HIS OPERATIONS FIRST DISTURB THE INSTALLATION UNTIL THE INSTALLATION HAS BEEN SUBSEQUENTLY REMOVED, MODIFIED, OR RESTORED TO ITS ORIGINAL CONDITION, AND THE WORK HAS BEEN ACCEPTED.
- B) FOR NEW OR REUSED SIGNAL INSTALLATIONS OR DEVICES, INSTALLED BY THE CONTRACTOR, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF THESE FROM THE TIME OF INSTALLATION UNTIL THE WORK IS ACCEPTED.

THE CONTRACTOR SHALL CORRECT AS QUICKLY AS POSSIBLE ALL OUTAGES OR MALFUNCTIONS. HE SHALL PROVIDE THE MUNICIPALITY AND THE ENGINEER SUCH ADDRESSES AND PHONE NUMBERS WHERE HIS MAINTENANCE FORCES CAN BE CONTACTED. THE CONTRACTOR SHALL PROVIDE ONE OR MORE PERSONS TO RECEIVE ALL CALLS AND DISPATCH THE NECESSARY MAINTENANCE FORCES TO CORRECT OUTAGES OR MALFUNCTIONS. SUCH A PERSON OR PERSONS MAY BE USED TO PERFORM OTHER DUTIES AS LONG AS PROMPT ATTENTION IS GIVEN TO THESE CALLS, AND A PERSON IS READILY AVAILABLE CONTINUOUSLY 24 HOURS A DAY, 7 DAYS A WEEK. ALL LAMP OUTAGES, CABLE OUTAGES, ELECTRICAL FAILURES, EQUIPMENT MALFUNCTIONS AND MISALIGNED SIGNAL HEADS SHALL BE CORRECTED TO THE SATISFACTION OF THE ENGINEER. WITH THE SIGNAL BACK IN SERVICE, WITHIN FOUR (4) HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE OUTAGE OR MALFUNCTION.

IN THE EVENT NEW SIGNALS ARE DAMAGED PRIOR TO ACCEPTANCE, ALL DAMAGED EQUIPMENT, EXCEPT POLES AND CONTROL EQUIPMENT, SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, WITH THE SIGNAL BACK IN SERVICE, WITHIN EIGHT (8) HOURS AFTER THE CONTRACTOR HAS BEEN NOTIFIED OF THE DAMAGE.

IF POLES AND/OR CONTROL EQUIPMENT ARE DAMAGED AND MUST BE REPLACED, THE CONTRACTOR SHALL MAKE TEMPORARY REPAIRS AS NECESSARY TO BRING THE SIGNAL BACK INTO FULL OPERATION WITHIN THE ALLOWED EIGHT (8) HOUR PERIOD, AND SHALL MAKE PERMANENT REPAIRS OR REPLACEMENTS AS SOON AS POSSIBLE.

NONE OF THE ABOVE SHALL BE CONSTRUED AS COLLECTIVE OR CONSECUTIVE OUTAGE TIME PERIODS AT ANY ONE LOCATION. THAT IS, WHERE MORE THAN ONE OUTAGE OR MALFUNCTION OCCURS CONCURRENTLY AT ANY ONE LOCATION, THEN THE ALLOTTED TIME LIMIT SHALL BE FOR THE WORST SINGLE OUTAGE OR MALFUNCTION.

WHERE OUTAGES OR MALFUNCTIONS ARE THE DIRECT RESULT OF A VEHICULAR ACCIDENT, THE RESPONSE OF THE CONTRACTOR SHALL BE AS OUTLINED ABOVE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTION OF ANY COMPENSATION FOR THIS WORK FROM THOSE PARTIES RESPONSIBLE FOR THE DAMAGE.

WHERE THE CONTRACTOR HAS FAILED TO OR CANNOT RESPOND TO AN OUTAGE OR SIGNAL EQUIPMENT MALFUNCTION AT THOSE LOCATIONS WITHIN HIS RESPONSIBILITY, THE ENGINEER MAY INVOKE THE PROVISIONS OF SECTION 105.15, AND ANY SUBSEQUENT BILLINGS TO THE STATE OR MUNICIPALITY FOR POLICE SERVICES AND/OR MAINTENANCE SERVICES BY MUNICIPAL FORCES OR OUTSIDE CONTRACTORS HIRED BY THE STATE OF MUNICIPALITY, SHALL BE DEDUCTED FROM MONIES DUE OR TO BECOME DUE TO THE CONTRACTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 105.15.

THE CONTRACTOR SHALL PROVIDE THE MAINTENANCE SERVICE ENTIRELY WITH HIS FORCES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO ANY TRAFFIC SIGNAL COMPONENTS REQUIRED TO BE HANDLED DURING THE RELOCATION OF POLES AND REVISIONS TO THE SIGNAL SYSTEM.

WHEN A TRAFFIC SIGNAL MUST BE TAKEN OUT OF SERVICE BY THE CONTRACTOR, DUE TO CONSTRUCTION PROCEDURES, THIS OUTAGE SHALL NOT EXCEED 3 HOURS AND SHALL NOT INCLUDE THE HOURS OF (6:00 TO 9:00 AM, 12:00 TO 1:00 PM, AND/OR 4:00 TO 7:00 PM).

ANY VEHICULAR TRAFFIC SIGNAL HEAD, EITHER NEW OR EXISTING, WHICH WILL BE OUT OF OPERATION, SHALL BE COVERED IN THE MANNER DESCRIBED IN 632.24.

ALL COSTS RESULTING FROM THE ABOVE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 - MAINTAINING TRAFFIC.

ITEM 632 - REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN

TRAFFIC SIGNAL INSTALLATIONS, INCLUDING SIGNAL HEADS, PEDESTRIAN HEADS, CABLE SPAN WIRE, STRAIN POLES, CABINET, CONTROLLER, ETC. SHALL BE REMOVED IN ACCORDANCE WITH 632.25. THE CONTROLLER AND SPAN WIRE ASSEMBLIES ARE TO BE REMOVED AT EVERY INTERSECTION IN THE PROJECT. POLES AT EACH SPECIFIC INTERSECTION, ARE TO BE REMOVED AS INDICATED ON THE PLAN, OR AS DIRECTED BY THE ENGINEER. ALL POLE MOUNTED SIGNAL HEADS ARE TO BE REMOVED. TRAFFIC SIGNAL HEADS AND CONTROLLERS SHALL BE STORED IN A SECURE LOCATION AND SHALL BE PICKED-UP BY CITY FORCES. ALL OTHER REMOVED EQUIPMENT INCLUDING POLES, SPAN WIRE, SIGNAL WIRE AND STREET NAME SIGNS SHALL BE DISPOSED OF BY THE CONTRACTOR, UNLESS OTHERWISE NOTED ON THE PLANS

THIS ITEM SHALL ALSO INCLUDE REMOVING EXISTING PAVEMENT MARKINGS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

EXISTING TRAFFIC REGULATION SIGNS MOUNTED ON POLES TO BE REMOVED SHALL BE RELOCATED TO PROPOSED SIGNAL POLES OR NEW SIGN POSTS. THE LOCATION OF ALL RELOCATED SIGNS SHALL BE APPROVED BY THE ENGINEER.

PAYMENT FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS, INCLUDING REMOVING, STORING SIGNS AND RE-MOUNTING SIGNS AND REMOVING PAVEMENT MARKINGS SHALL BE AT THE CONTRACT UNIT PRICE BIN FOR "ITEM 632 - REMOVAL OF TRAFFIC SIGNAL INSTALLATION, AS PER PLAN." THE COST OF SIGN SUPPORT ASSEMBLIES AND GROUND MOUNTED SIGN SUPPORTS SHALL BE AS SPECIFIED HEREINBEFORE FOR THOSE ITEMS.

ITEM 633 - CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING ACTUATED, SOLID STATE DIGITAL MICROPROCESSOR TYPE CONTROLLERS WITH SECONDARY COORDINATOR, MENU DRIVEN PROMPTS, INTERNAL TBC, TELEMETRY UNIT, BASE MOUNTED CABINET, AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE CONTROLLER COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS

THE CONTROLLER SHALL BE DELIVERED PRE-WIRED. THE LOCAL CONTROLLERS SHALL BE MADE BY THE SAME MANUFACTURER AS THE SYSTEM MASTER.

THE CONTROLLER AND CABINET SHALL CONFORM TO O.D.O.T. SPECIFICATION 633, 733.021, 733.031, 733.041, SHALL MEET NEMA TS-2 FOR TYPE 2 CONTROLLERS AND SHALL HAVE THE FOLLOWING FEATURES:

- 1. THE LOAD SWITCHES SHALL PROVIDE INPUT AND OUTPUT INDICATIONS.
- 2. THE FOLLOWING SWITCHES SHALL BE ACCESSIBLE VIA THE POLICE PANEL DOOR:
 - A. SIGNAL SHUTDOWN
 - B. FLASH CONTROL
 - C. AUTOMATIC/MANUAL TRANSFER
 - D. MANUAL PUSHBUTTON AND 10' EXTENSION CORD.
- 3. THE FOLLOWING SWITCHES SHALL BE MOUNTED ON THE SWITCH PANEL IN THE CABINET:
 - A. RUN/STOP TIMING
 - B. CONTROLLER TIMER POWER
 - C. DETECTOR TEST
 - D. COORDINATION/FREE
- 4. A SERVICE LAMP WITH DOOR ACTIVATED ON/OFF SWITCH.
- 5. A TELEPHONE MODEM COMPLETELY WIRED TO REPORT CABINET FAILURES, DETECTOR FAILURES AND TRAFFIC COUNTS AT THOSE LOCATIONS SHOWN IN THE PLANS.
- 6. THE CABINET EXTERIOR SHALL BE ALUMINUM WITH CLEAR COATED FINISH AND INTERIOR SHALL BE WHITE.
- 7. THE CABINET SHALL HAVE CORBIN LOCKS AND LIGHTNING PROTECTION.
- 8. THE CONTRACTOR SHALL FURNISH FOR APPROVAL A CABINET PLAN SHOWING COMPONENT PLACEMENT.

PAYMENT FOR 633 CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER IN PLACE, INCLUDING PRE-WIRED CABINET COMPLETELY INSTALLED, WIRED, TESTED AND ACCEPTED. PAYMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, TESTING, CERTIFICATIONS, AND OTHER INCIDENTALS NECESSARY TO FURNISH THE CONTROLLER, COMPLETE IN PLACE, INCLUDING ALL CONNECTIONS MADE AND WIRING COMPLETE, TESTED, AND ACCEPTED.

ITEM 632 - POWER SUPPLY

ELECTRIC POWER SHALL BE OBTAINED FROM THE APPROPRIATE UTILITY COMPANY AT THE LOCATIONS INDICATED ON THE PLANS, AS VERIFIED WITH THE UTILITY COMPANY. POWER SUPPLY SHALL BE 120 VOLT, UNMETERED, AS FURNISHED BY THE UTILITY COMPANY. PAYMENT SHALL BE FOR THE VARIOUS ITEMS, CONDUIT, CONDUIT RISER AND POWER CABLE.

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ITEM 633 - CONTROLLER, MASTER, TRAFFIC RESPONSIVE AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF FURNISHING AND INSTALLING A SOLID-STATE DIGITAL MICROPROCESSOR TYPE TRAFFIC RESPONSIVE MASTER CONTROLLER WITH MENU DRIVEN PROMPTS, INTERNAL TBC, TELEMETRY UNIT, IN THE LOCAL CONTROLLER CABINET, AND ALL OTHER ACCESSORIES THAT ARE NECESSARY TO MAKE THE MASTER COMPLETELY FUNCTIONAL AND OPERATIONAL AS SHOWN IN THE PLANS. THIS ITEM SHALL ALSO INCLUDE THE EXTRA CABINET SPACE NECESSARY TO BE LOCATED IN THE LOCAL CONTROLLER CABINETS WHERE INDICATED IN THE PLANS. THE COST OF THE LARGER CABINETS ABOVE AND BEYOND THE COST OF THE STANDARD CABINET SHALL BE INCLUDED IN THE COST OF THE MASTER CONTROLLER.

THE MASTER CONTROLLER SHALL CONFORM TO O.D.O.T. SPECIFICATION 633 AND SHALL HAVE THE FOLLOWING FEATURES:

- 1. IT SHALL GENERATE PATTERN COMMANDS TO LOCAL INTERSECTION CONTROLLERS WITHIN ITS CONTROL AREA IN RESPONSE TO PREVAILING TRAFFIC CONDITIONS AS INDICATED BY SAMPLING SENSORS STRATEGICALLY PLACED IN THE CONTROL AREA. THE MASTER SHALL ALSO ALLOW PRE-PROGRAMMED TIME OF DAY SELECTION OF PATTERNS.
- 2. IT SHALL MONITOR THE OPERATION OF THE LOCAL INTERSECTION CONTROLLERS AND SHALL INITIATE FAILURE REPORTS IF MALFUNCTIONS ARE DETECTED. THE MASTER SHALL GENERATE SYSTEM OPERATION STATUS REPORTS FOR PRINTING AT THE CENTRAL OFFICE MONITOR.
- 3. IT SHALL BE CAPABLE OF OPERATING IN ANY OF THE FOLLOWING MODES:
 - A. TRAFFIC RESPONSIVE WHEREBY PATTERN SELECTION IS BASED ON DYNAMIC TRAFFIC CONDITIONS AS MEASURED BY SYSTEM SENSORS LOCATED IN THE CONTROL AREA.
 - B. TIME OF DAY/DAY OF WEEK WHEREBY PATTERN SELECTION IS BASED ON A PRE-PROGRAMMED BASIS WITH AUTOMATIC ADJUSTMENTS FOR SEASONAL CHANGES.
 - C. MANUAL OVERRIDE WHEREBY PATTERN SELECTION IS BASED ON OPERATOR COMMAND AT THE CENTRAL OFFICE MONITOR OR TRAFFIC RESPONSIVE MASTER CONTROLLER SITE.
- 4. IT SHALL BE MADE BY THE SAME MANUFACTURER AS THE LOCAL CONTROLLERS.

THE MASTER CONTROLLER SHALL HAVE THE FOLLOWING CAPACITIES:

- 1. TOTAL LOCAL INTERSECTION CONTROLLERS: 30
- 2. SYSTEM SENSOR DETECTOR UNITS: 48
- 3. THERE SHALL BE A MINIMUM OF 30 SELECTABLE PATTERNS INCLUDING AN ADDITIONAL 4 SPECIAL PATTERNS. EACH PATTERN SHALL CONSIST OF A COMBINATION OF CYCLE, OFFSET AND SPLIT NUMBERS FOR EACH INTERSECTION IN THE SYSTEM. THE MASTER SHALL BE CAPABLE OF DIRECTING THE SYSTEM INTO FREE OPERATION. PATTERNS SELECTABLE FROM THE FOLLOWING MINIMUM PARAMETER RANGES:
 - A. CYCLES: SIX (6)
 - B. OFFSETS: FIVE (5)
 - C. SPLITS: SIXTEEN (16)
- 4. SYSTEM SENSORS SHALL BE DISTRIBUTED TO A MINIMUM CAPACITY OF EIGHT (8) PER INTERSECTION, BUT NOT TO EXCEED THE TOTAL SENSOR CAPACITY.

THE MASTER CONTROLLER SHALL HAVE THE FOLLOWING FUNCTIONAL REQUIREMENTS:

- 1. PATTERN SELECTION DURING NORMAL TRAFFIC RESPONSIVE OPERATION SHALL BE BASED ON THE FOLLOWING QUANTITATIVE TRAFFIC FLOW PARAMETERS:
 - A. VOLUME LEVEL OF ARTERIAL TRAFFIC FLOW.
 - B. DIRECTIONALITY OF ARTERIAL TRAFFIC FLOW.
 - C. RATIO OF ARTERIAL TRAFFIC FLOW TO NON-ARTERIAL TRAFFIC.
- 2. PATTERN SELECTION DURING SPECIAL TRAFFIC RESPONSIVE OPERATION SHALL BE BASED ON THE FOLLOWING PARAMETERS:
 - A. NORMAL RESPONSIVE OPERATION OVERRIDE BY DETECTION OF HIGH OCCUPANCY ON SELECTED SYSTEM SENSORS.
 - B. NORMAL RESPONSIVE OPERATION OVERRIDE BY DETECTION OF QUEUE LENGTH OR DURATION ON SELECTED SYSTEM SENSORS.
- 3. PREFERENTIAL TRANSFER OF PATTERNS SHALL BE ACCOMPLISHED BY PROGRAMMABLE THRESHOLD VALUES. PROGRAMMABLE THRESHOLD VALUES SHALL ALSO BE PROVIDED FOR SPECIAL PATTERNS.

- 3. PREFERENTIAL TRANSFER OF PATTERNS SHALL BE ACCOMPLISHED BY PROGRAMMABLE THRESHOLD VALUES. PROGRAMMABLE THRESHOLD VALUES SHALL ALSO BE PROVIDED FOR SPECIAL PATTERNS.
- 4. THE FOLLOWING SYSTEM SENSOR DATA SHALL FORM THE BASIS FOR ALL RESPONSIVE PATTERNS INITIATED BY THE MASTER:
 - A. VOLUME, OCCUPANCY AND QUEUE DATA.
 - B. EACH SYSTEM SENSOR SHALL BE CAPABLE OF SELECTIVE WEIGHING.
 - C. SYSTEM SENSOR DATA SHALL BE AVERAGED ON A MOVING BASIS, UTILIZING A USER PROGRAMMABLE TIME FACTOR.
 - D. EACH SYSTEM SENSOR SHALL BE MONITORED FOR CONSTANT CALL, ABSENCE OF CALL AND ERRATIC OUTPUT. THERE SHALL BE AN OPTION TO ELIMINATE THE MONITORING OF ABSENCE OF CALLS DURING LIGHT TRAFFIC PERIODS ON A TIME OF DAY BASIS. SENSORS WHICH FAIL ANY MONITORING TEST SHALL BE AUTOMATICALLY DELETED FROM VOLUME AND OCCUPANCY CALCULATIONS. UPON RESUMPTION OF SATISFACTORY OPERATION, SENSORS SHALL AUTOMATICALLY RESUME INPUT TO VOLUME AND OCCUPANCY CALCULATIONS. A USER PRESCRIBED MINIMUM NUMBER OF DESIGNATED SENSORS SHALL BE REQUIRED TO MAINTAIN RESPONSIVE OPERATION. THE MINIMUM NUMBER OF OPERATIONAL SENSORS SHALL BE PROGRAMMABLE FOR EACH COMPUTATIONAL CHANNEL. IF FEWER THAN THE PRESCRIBED NUMBER OF SYSTEM SENSORS ARE OPERATIONAL, THEN THE MASTER SHALL REVERT TO THE TIME OF DAY, DAY OF WEEK MODE.
 - E. EACH COMPUTATIONAL CHANNEL SHALL BE ASSIGNED FROM UP TO TWELVE (12) DIFFERENT SYSTEM SENSORS FROM THE TOTAL OF 48.
- 5. IT SHALL BE POSSIBLE TO SELECT ANY SYSTEM PATTERN FROM THE MASTER ON A PRE-PROGRAMMED TIME OF DAY, DAY OF WEEK BASIS. THERE SHALL BE TIME OF DAY OVERRIDE OF RESPONSIVE OPERATION. TIME OF DAY OPERATION SHALL UTILIZE A 99 YEAR CALENDAR-CLOCK WITH AUTOMATIC DAYLIGHT SAVINGS TIME CHANGE.
- 6. MEANS SHALL BE PROVIDED TO ALLOW INTER-MASTER LINKING IN ORDER TO AFFORD COORDINATION BETWEEN CONTIGUOUS SYSTEM CONTROL AREAS. THIS SHALL INCLUDE SYNCHRONIZATION OF MASTER REFERENCE CLOCKS.
- 7. PATTERN CHANGES FOR EACH LOCAL CONTROLLER IN THE SYSTEM SHALL BE IMPLEMENTED SMOOTHLY AND IN THE SHORTEST TIME FRAME POSSIBLE WITHOUT VIOLATING MINIMUM INTERVAL VALUES.
- 8. THE MASTER CONTROLLER SHALL STORE AND FORMAT MONITORED FUNCTION DATA FOR EITHER IMMEDIATE OUTPUT TO THE CENTRAL OFFICE MONITOR OR SHALL STORE DATA FOR FUTURE OUTPUT FOR A MINIMUM STORAGE PERIOD OF FORTY-EIGHT HOURS. AS A MINIMUM THE FOLLOWING REPORTS SHALL BE INCLUDED:
 - A. AN ACTIVITY LOG WHICH INCLUDES TIME, INTERSECTION AND ACTIVITY TYPE OF ALL MONITORED LOCAL INTERSECTION FAILURE CONDITIONS.
 - B. A SYSTEM SENSOR FAILURE LOG WHICH INCLUDES TIME, SENSOR LOCATION AND TYPE OF FAILURE.
 - C. A PATTERN CHANGE LOG WHICH INCLUDES THE OPERATING PATTERN AND THE TIME OF CHANGE WHILE IN THE RESPONSIVE MODE.
 - D. A SYSTEM STATUS REPORT WHICH SHOWS THE CURRENT OPERATING MODE AND PATTERN FOR ALL LOCAL INTERSECTION CONTROLLERS ON LINE.
 - E. A SYSTEM SENSOR DATA REPORT WHICH INCLUDES VOLUME, OCCUPANCY AND AVERAGE SPEED FOR ALL SYSTEM SENSORS.

PAYMENT FOR 633 CONTROLLER, MASTER SOLID STATE DIGITAL MICROPROCESSOR, TRAFFIC RESPONSIVE, AS PER PLAN WILL BE MADE AT THE CONTRACT PRICE FOR EACH CONTROLLER IN PLACE, COMPLETELY INSTALLED IN THE LOCAL CONTROLLER SHOWN IN THE PLANS, WIRED, TESTED, AND ACCEPTED.

ITEM 632 - INTERCONNECT CABLE, AS PER PLAN

INTERCONNECT CABLE SHALL BE 6 PAIR, NO. 19 AWG, SOLID, REA PE-39 (UNDERGROUND) OR PE-38 (SELF-SUPPORTING OVERHEAD). OVERHEAD CABLE SHALL BE INSTALLED ON EXISTING POLES OWNED BY OHIO EDISON AS FOLLOWS:

- 1. INTEGRAL MESSENGER TYPE INTERCONNECT CABLE SHALL MEET THE REQUIREMENT OF 732.19 AND REA (PE-39). UNDER THIS METHOD ANY SECTION OF CABLE SHOWN ON THE PLANS TO BE CONTAINED IN CONTROLLERS, POLES, CONDUITS OR SUPPORTED ON MESSENGER WIRE INSTALLED FOR OTHER PURPOSES SHALL HAVE THE SUPPORTING MESSENGER AND JACKET WEB NEATLY REMOVED BY THE USE OF A TOOL SPECIFICALLY DESIGNED AND SIZED FOR THIS PURPOSE. DEVIATIONS FROM THE CABLE ROUTING SHOWN ON THE PLANS, FOR THE SOLE PURPOSE OF REDUCING THE AMOUNT OF MESSENGER TO BE REMOVED, WILL NOT BE PERMITTED. THE CABLE SHALL BE INSTALLED WITH APPROXIMATELY ONE TWIST FOR EACH 15 FEET OF SPAN LENGTH.

SPLICES SHALL OCCURE ONLY AT THE TERMINAL ENDS OF THE HARDWARE INTERCONNECT PANEL. NO OTHER SPLICE LOCATIONS SHALL BE PERMITTED.

2. PRUNING OF TREES IN ACCORDANCE WITH LA-1 TO PREVENT CONTACT WITH INTERCONNECT CABLE SHALL BE INCIDENTAL TO THE COST OF THE BID ITEM.

3. OVERHEAD INTERCONNECT CABLE SHALL BE INSTALLED AT A MINIMUM OF 18 FEET ABOVE ALL ROADWAY CROSSINGS UNLESS OTHERWISE APPROVED BY THE ENGINEER.

4. WHERE INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL REMOVE EXISTING INTERCONNECT CABLE PRIOR TO INSTALLING NEW CABLE.

PAYMENT FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS, INCLUDING TREE PRUNING, REMOVING AND DISPOSING OF EXISTING INTERCONNECT CABLE SHALL BE INCLUDED IN THE CONTRACT LINEAR FOOT PRICE BID FOR "ITEM 632 - INTERCONNECT CABLE, MESSENGER WIRE TYPE, 6 PR, NO. 19 AWG, SOLID, REA (PE-38), AS PER PLAN" AND "ITEM 632 - INTERCONNECT CABLE, WIRE TYPE, 6 PR, NO. 19 AWG, SOLID, REA (PE-39), AS PER PLAN".

ITEM 632 - PHONE DROP, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF SUPPLYING A PHONE DROP TO THE MASTER CONTROLLERS AT THE FOLLOWING INTERSECTION: SR-254 AT I-90 (SOUTHEAST CORNER OF WESTBOUND ENTRANCE RAMP)

IT SHALL INCLUDE CONDUIT RISER (WHERE REQUIRED), SHIELDED 2 CONDUCTOR CABLE, LIGHTNING ARRESTOR AND CABINET TERMINALS TO COMPLETELY WIRE TO THE TELEPHONE MODEM. CONDUIT AND TRENCH BETWEEN THE CONTROLLER AND THE TELEPHONE SERVICE LOCATION SHALL BE INCLUDED IN THIS ITEM. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ARRANGEMENTS WITH THE LOCAL TELEPHONE COMPANY TO VERIFY THE LOCATION SHOWN ON THE PLANS AND HAVE TELEPHONE SERVICE DROP INSTALLED.

TELEPHONE SERVICE SHALL BE PAID BY THE CONTRACTOR UNTIL THE SYSTEM IS ACCEPTED.

PAYMENT FOR ALL LABOR, MATERIALS, TOOLS, EQUIPMENT AND OTHER INCIDENTALS, INCLUDING TEMPORARY TELEPHONE SERVICE, CONDUIT AND TRENCH, SHALL BE AT THE CONTRACT UNIT PRICE BID FOR "ITEM 632 - PHONE DROP, AS PER PLAN".

SCHEDULING OF DETECTOR LOOP INSTALLATION AND INSTALLATION OF PAVEMENT MARKINGS

THE CONTRACTOR SHALL SCHEDULE HIS WORK, AND THAT OF HIS SUBCONTRACTORS, TO ENSURE THAT DETECTOR LOOP INSTALLATION PAVEMENT CUTTING, (INCLUDING THE INSTALLATION OF LOOP DETECTOR WIRES, AND SEALING OF THE LOOP DETECTOR SLOTS) IS COMPLETED PRIOR TO THE INSTALLATION OF THE VARIOUS PAVEMENT MARKINGS TO BE INSTALLED IN THE SAME LOCATIONS (SUCH AS STOP LINES, CROSSWALK LINES, WORDS ON PAVEMENT AND LANE ARROWS). HE SHALL FURTHER INSURE THAT THE PAVEMENT MARKINGS ARE INSTALLED AS SOON AS PRACTICABLE AFTER THE SURFACE COURSE IS INSTALLED AND THE ROAD IS READY TO OPEN TO TRAFFIC.

TEMPORARY SIGNAL TIMING FOR NEW TRAFFIC SIGNALS

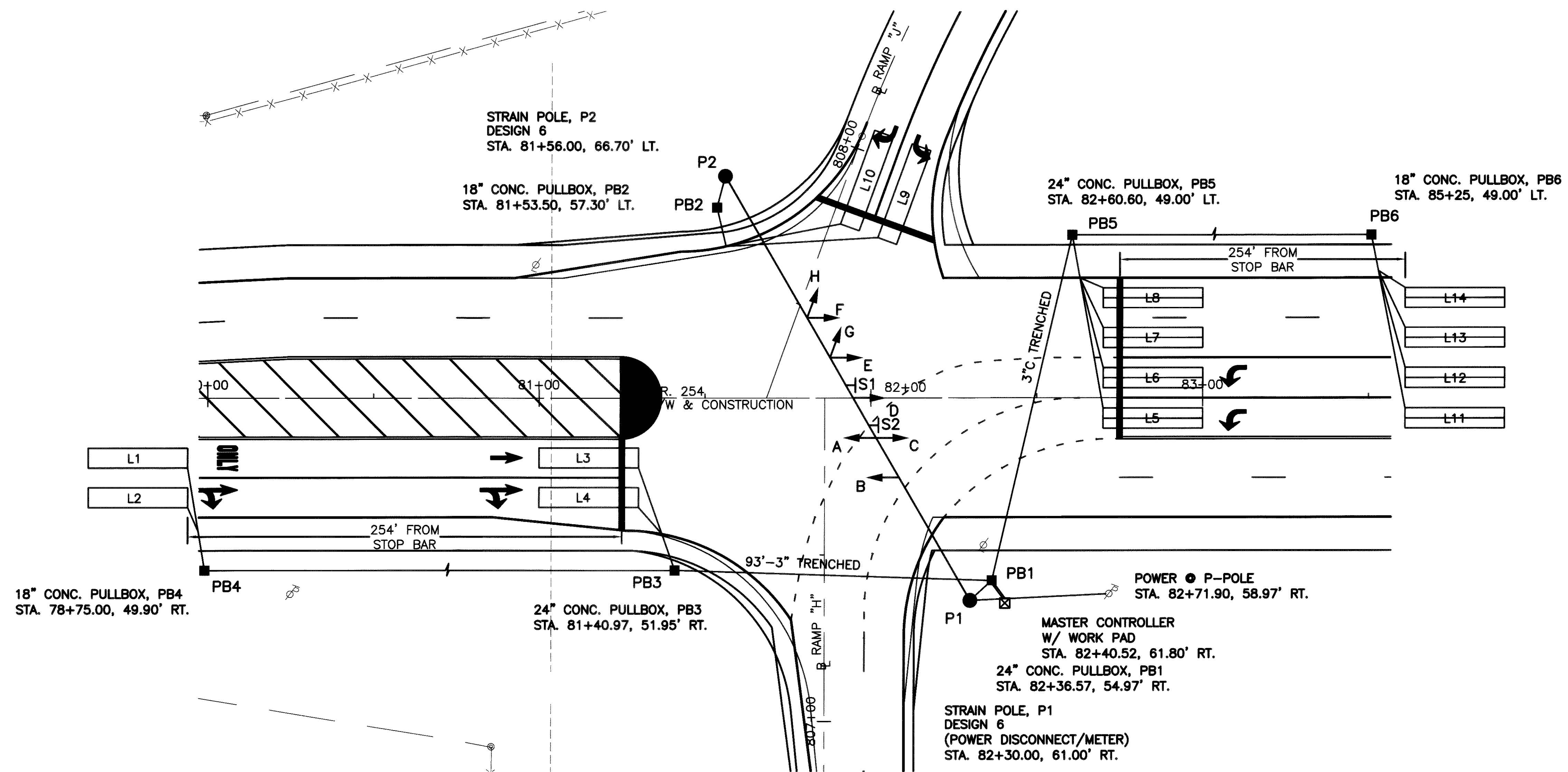
AS EACH NEW TRAFFIC SIGNAL INSTALLATION IS ENERGIZED, THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN INTERNAL "TIME BASED COORDINATION" BETWEEN ALL OF THE NEW CONTROLLERS UNTIL THE INTERCONNECT CABLE IS IN PLACE AND THE CONTROLLER(S) IS BROUGHT "ON LINE" WITH THE SYSTEM MASTER CONTROLLER.

EACH INDIVIDUAL CONTROLLER SHALL OPERATE IN ACCORDANCE WITH THE COORDINATION TIMING CHART (CYCLE LENGTH, PHASE SPLITS, AND OFFSETS) SHOWN ON THE INTERSECTION PLAN SHEET FOR THE SPECIFIC INTERSECTION CONTROLLER. THE CONTROLLER SHALL OPERATE IN A TIME OF DAY MODE.

THE TIME BETWEEN ACTIVATING A NEW SIGNAL AND THE INSTALLATION AND OPERATION OF THE SIGNAL LOOP DETECTORS SHALL BE KEPT TO A MINIMUM.

THE COST OF THIS WORK SHALL BE CONSIDERED TO BE INCIDENTAL TO THE COST OF THE CONTROLLER PAY ITEM. NO ADDITIONAL COMPENSATION SHALL BE MADE TO THE CONTRACTOR TO PERFORM THIS WORK.

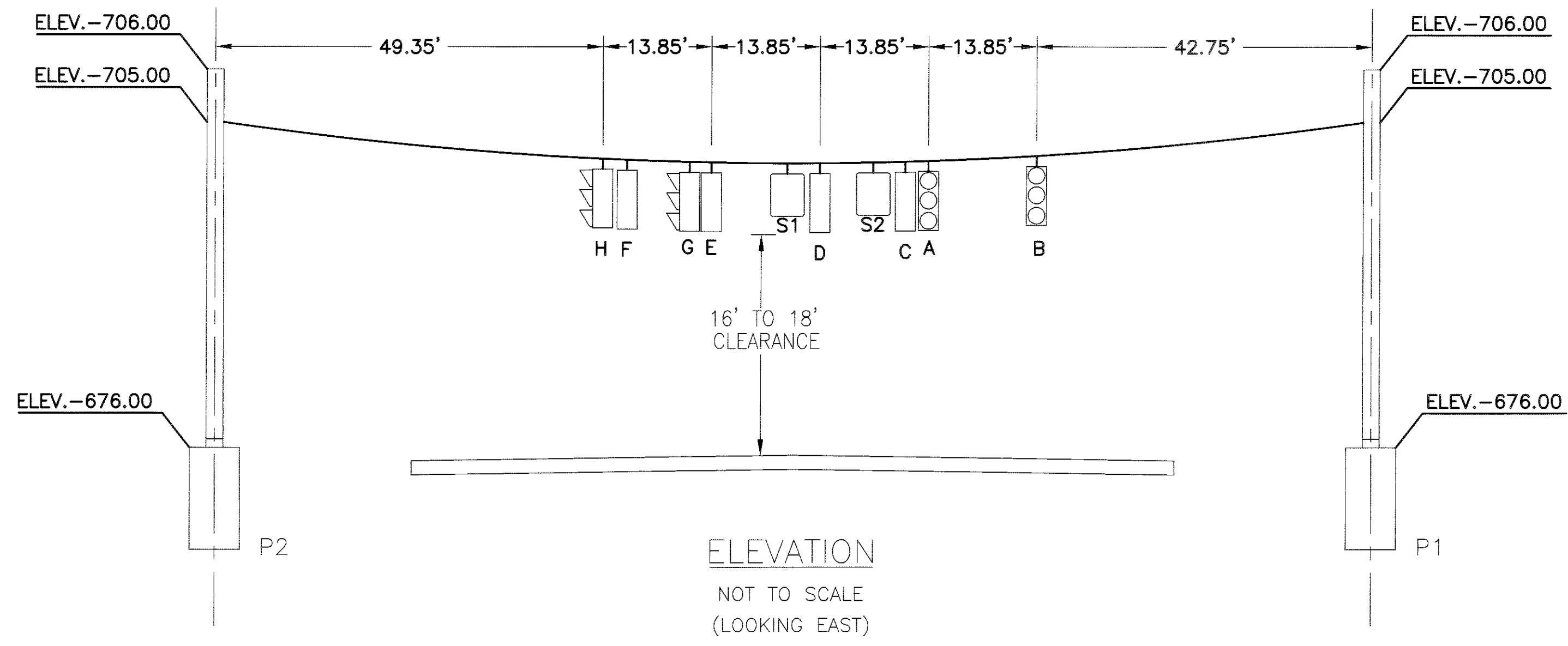
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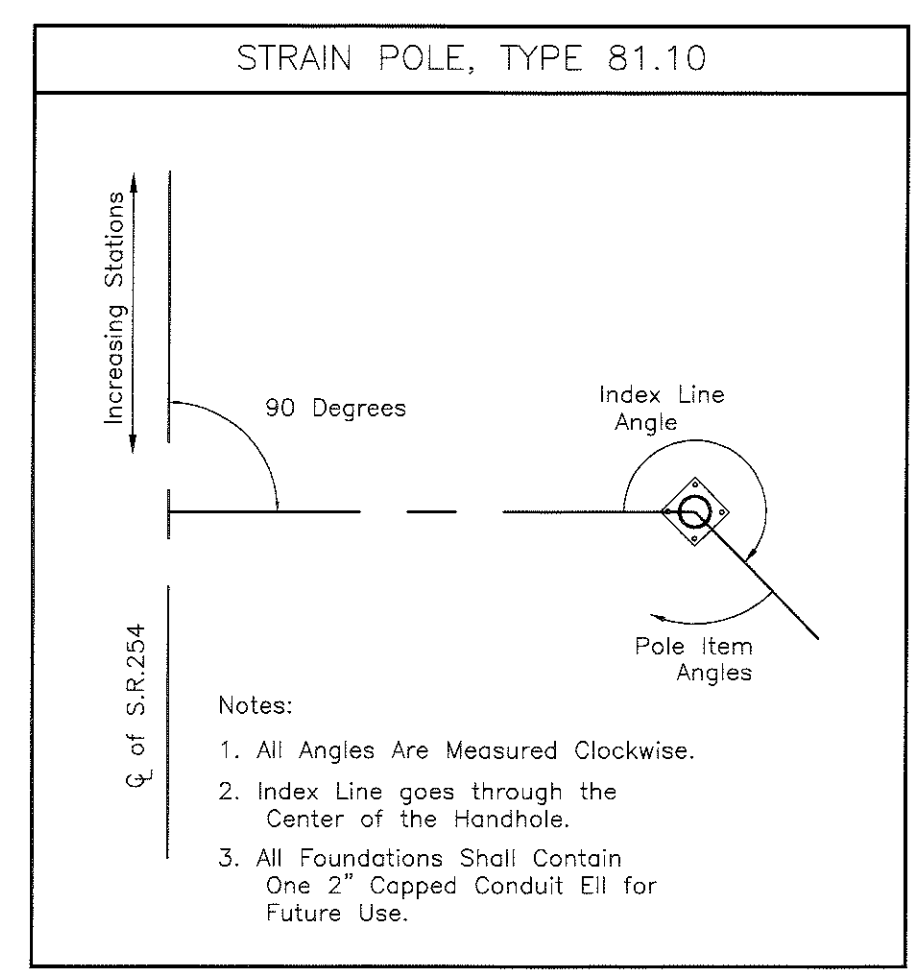
SIGNALIZATION PLAN - S.R.254

LOR - I90 - 15.65

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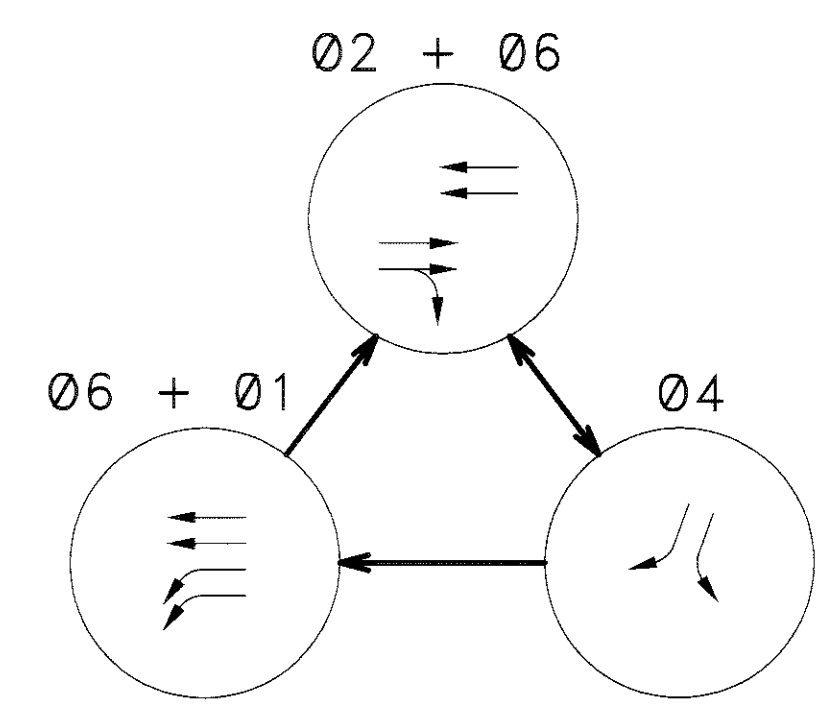


POLE NO.	DESIGN NO.	POLE HEIGHT FT.	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE				
				PEDESTRIAN PUSHBUTTONS	POWER SERVICE	CABLE ENTRANCE 12" FROM TOP	POLE SPLICE BOX	HAND HOLE
P1	6	30	245	-	200	180	270	0
P2	6	30	65	-	-	-	-	0

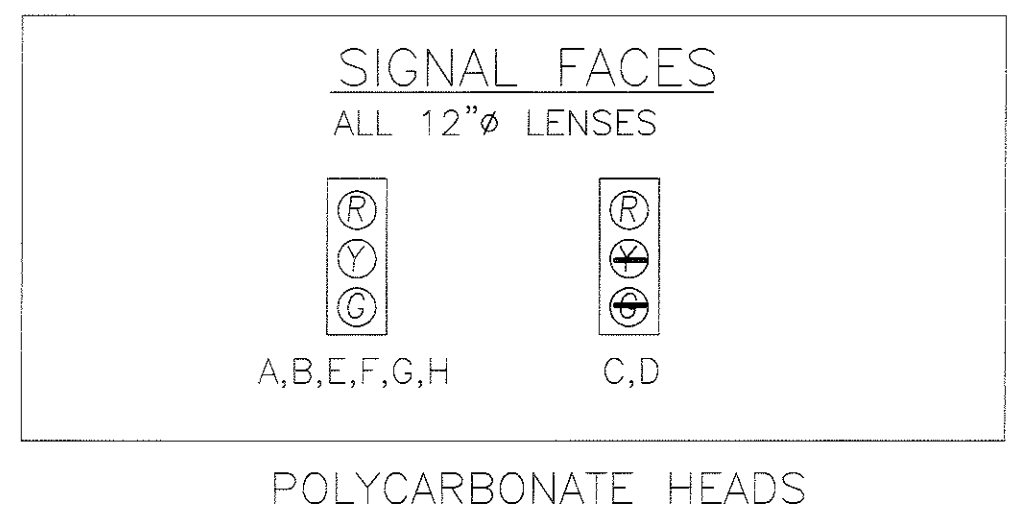


COLOR SEQUENCE CHART

SIGNAL	PHASE 2 + 6	PHASE 4	PHASE 6 + 1	FLASH
A	C	Y	R	R
B	G	Y	R	R
C	R	R	R	R
D	R	R	R	R
E	G	Y	R	R
F	G	Y	R	R
G	R	R	R	R
H	R	R	R	R



SIGNAL TIMING (SECONDS)	PHASES 2,6	PHASE 4	PHASE 6 + 1
INITIAL	15.0	12.0	12.0
PASSAGE	2.3	2.3	2.5
MAXIMUM	48.0	32.0	40.0
CLEARANCE	3.6	5.0	3.6
ALL RED	1.5	1.0	1.5
RECALL	MIN.	NONE	NONE



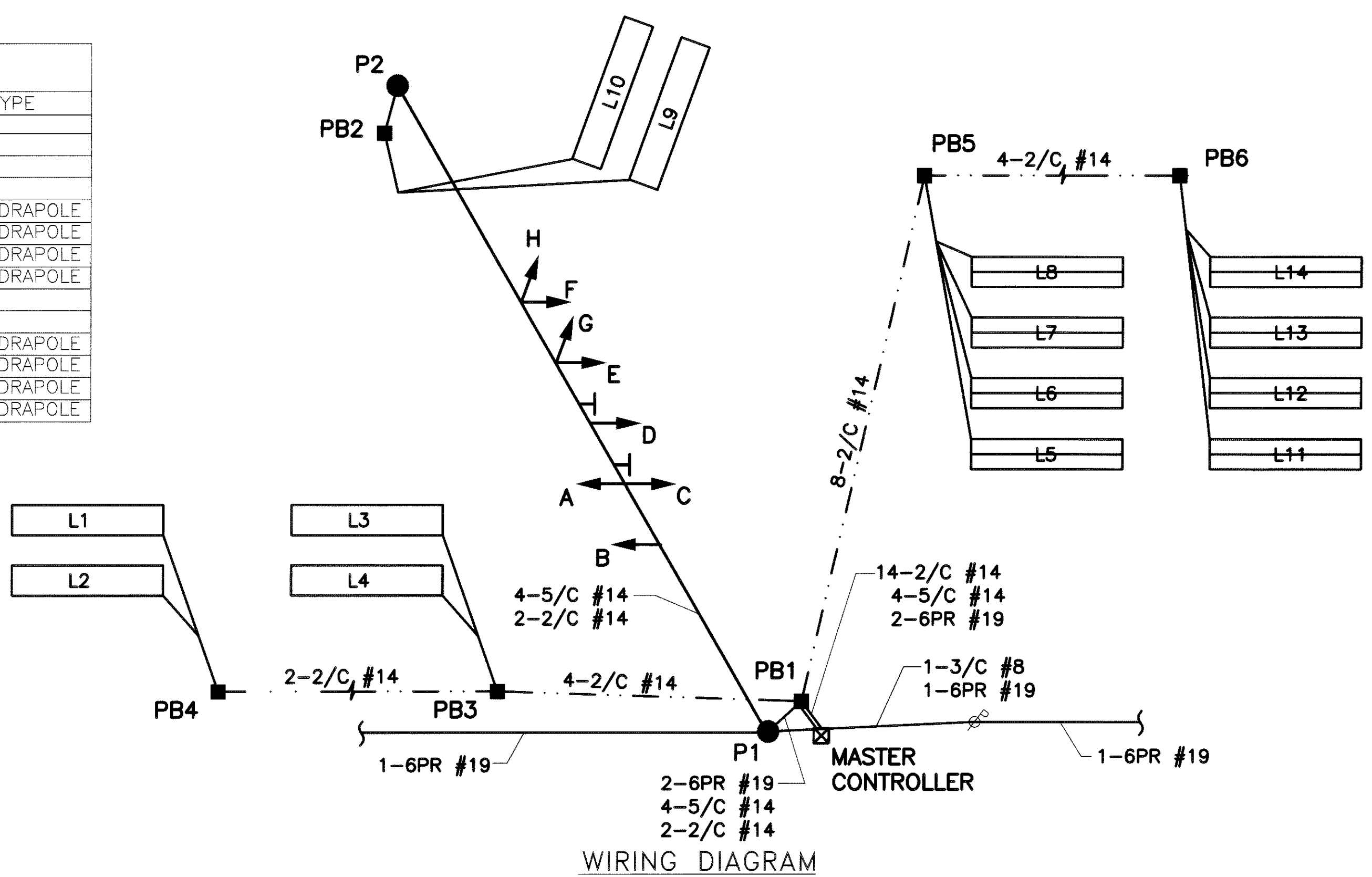
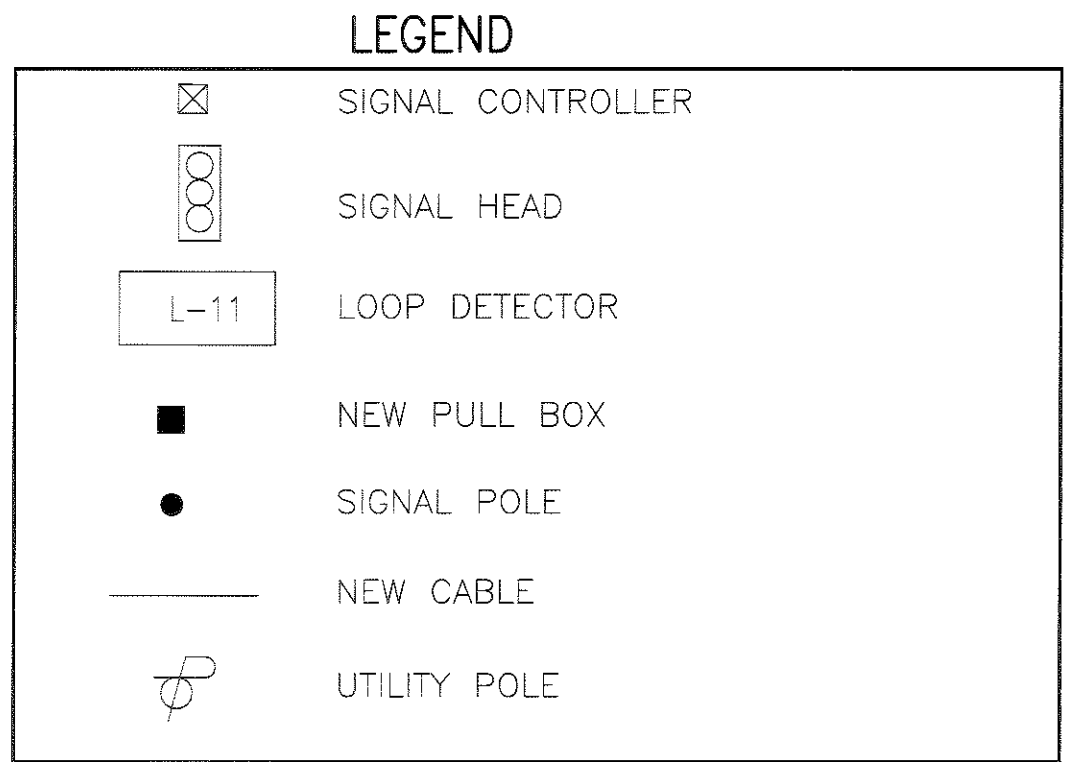
**S1 & S2
R-25EL-24
SIGN LEGEND
SIGNS TO BE LOCATED
3' FROM SIGNAL-C/C**

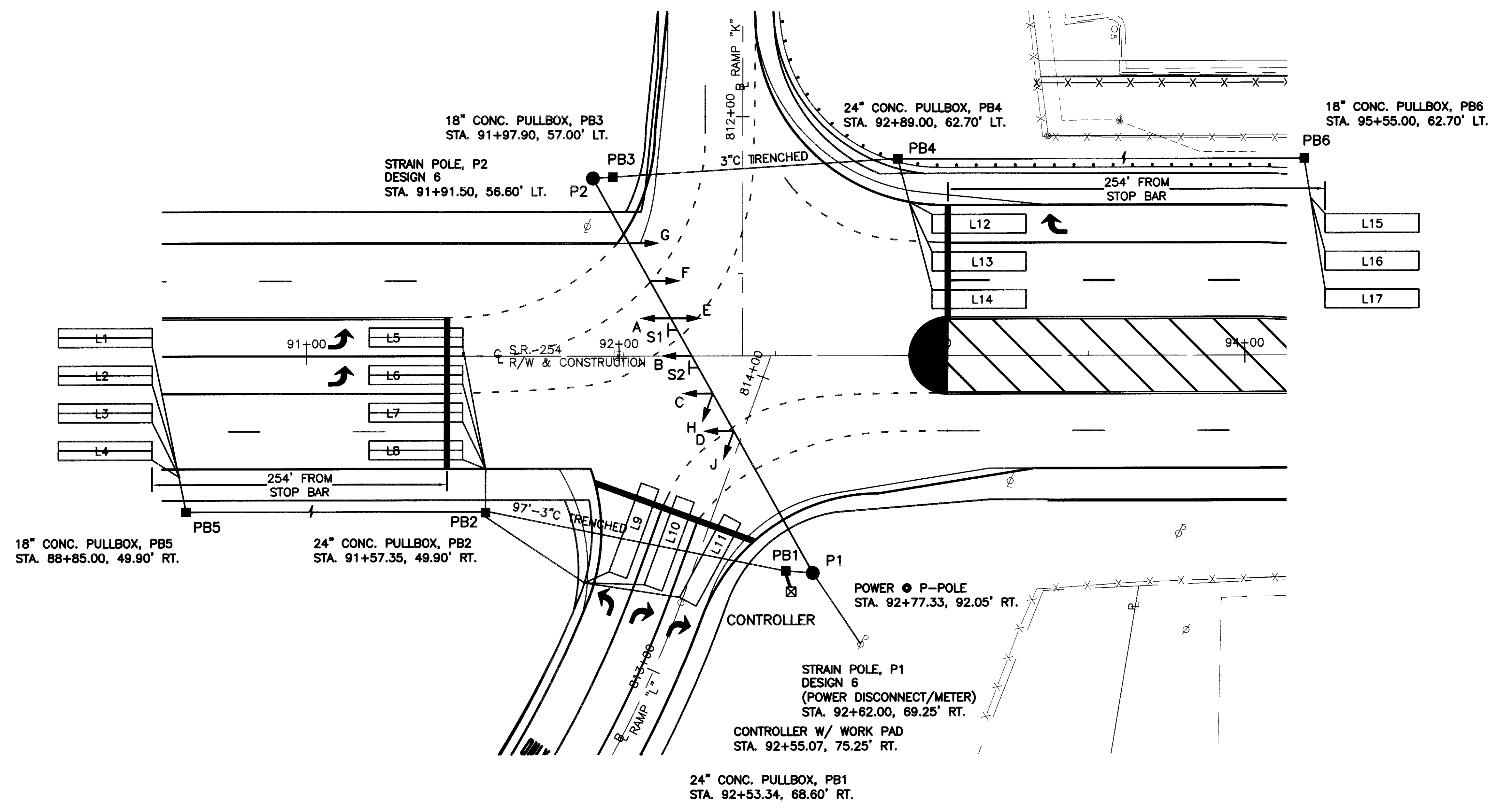
QUANTITIES FOR SIGNAL AT INTERSECTION OF S.R.254 WEST OF I90 BRIDGE

ITEM	QTY	UNIT	DESCRIPTION
625	9	EACH	GROUND ROD
625	3	EACH	PULL BOX, 713.08, 18"
625	3	EACH	PULL BOX, 713.08, 24"
625	670	LIN. FT.	TRENCH, AS PER PLAN
625	142	LIN. FT.	TRENCH IN PAVED AREA, TYPE B
625	612	LIN. FT.	CONDUIT, 2", 713.07
625	200	LIN. FT.	CONDUIT, 3", 713.07
632	8	EACH	VEHICULAR SIGNAL HEAD 3 SECTION, 12" LENS, 1-WAY
632	14	EACH	LOOP DETECTOR UNIT
632	14	EACH	DETECTOR LOOP
632	3908	LIN. FT.	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
632	648	LIN. FT.	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6 WITH SERVICE WIRE ENTRANCE
632	2	EACH	STRAIN POLE FOUNDATION
632	116	LIN. FT.	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	1	EACH	POWER SERVICE
633	1	EACH	CONTROLLER, MASTER, TRAFFIC RESPONSIVE, AS PER PLAN
633	9	SQ. FT.	CONTROLLER WORKPAD
633	1	CU. YD.	CONCRETE FOR CABINET FOUNDATION
TOTALS CARRIED TO GENERAL SUMMARY			

LOOP DETECTORS

LOOP	SIZE (FT)	MODE	NO. TURNS	PHASE	TYPE
L1	6x30	PRESENCE	3	2	
L2	6x30	PRESENCE	3	2	
L3	6x30	PRESENCE	3	2	
L4	6x30	PRESENCE	3	2	
L5	6x30	PRESENCE	3	1	QUADRAPOLE
L6	6x30	PRESENCE	3	1	QUADRAPOLE
L7	6x30	PRESENCE	3	6	QUADRAPOLE
L8	6x30	PRESENCE	3	6	QUADRAPOLE
L9	6x30	PRESENCE	3	4	
L10	6x30	PRESENCE	3	4	
L11	6x30	PRESENCE	3	1	QUADRAPOLE
L12	6x30	PRESENCE	3	1	QUADRAPOLE
L13	6x30	PRESENCE	3	6	QUADRAPOLE
L14	6x30	PRESENCE	3	6	QUADRAPOLE

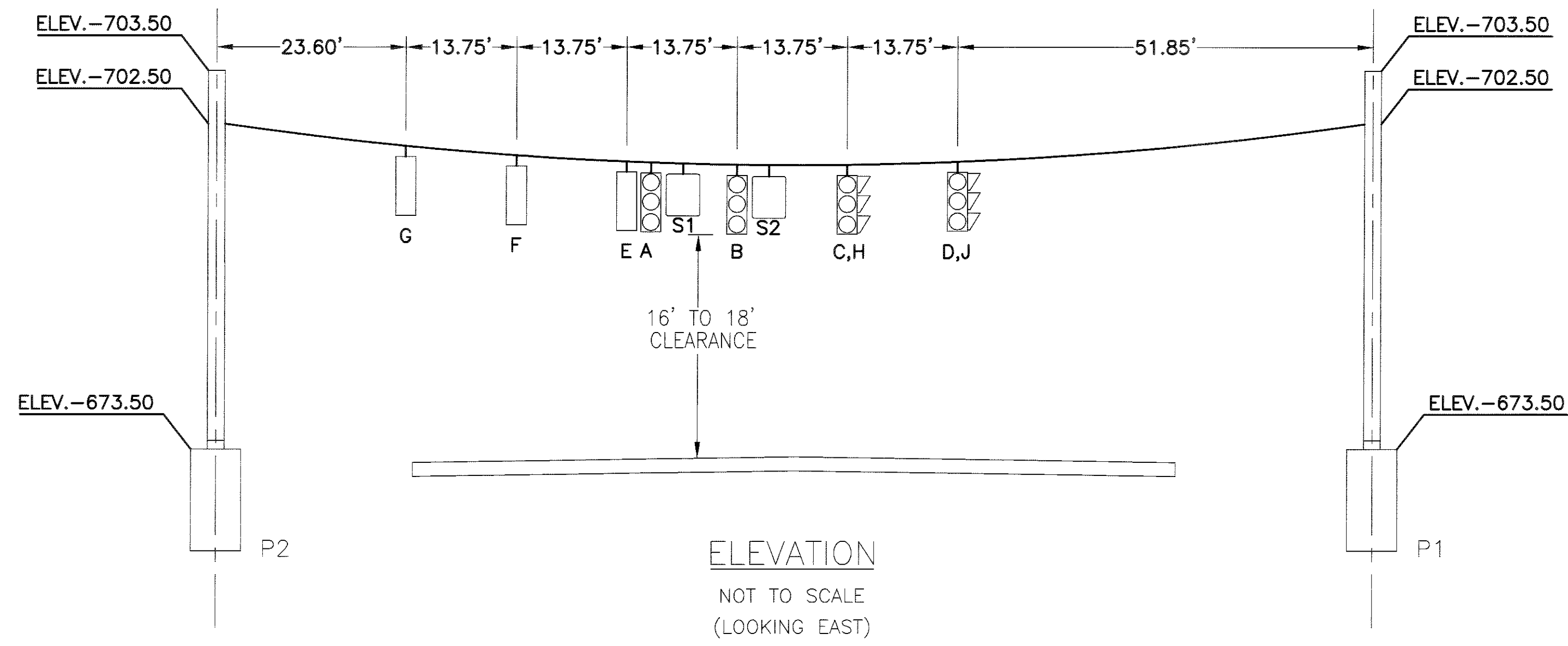




SIGNALIZATION PLAN - S.R.254

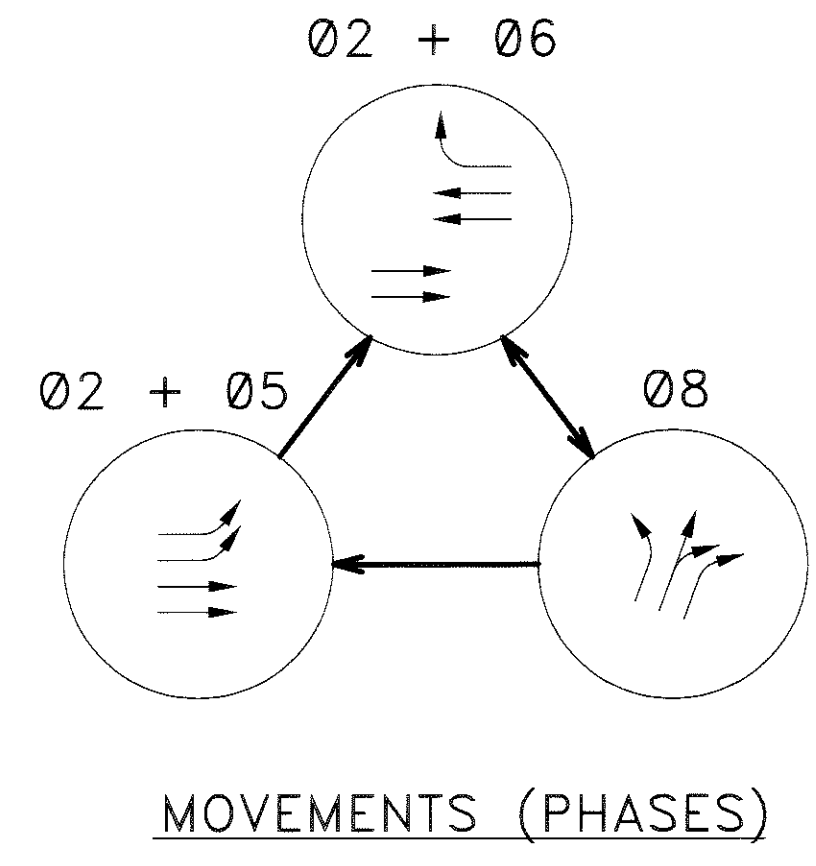
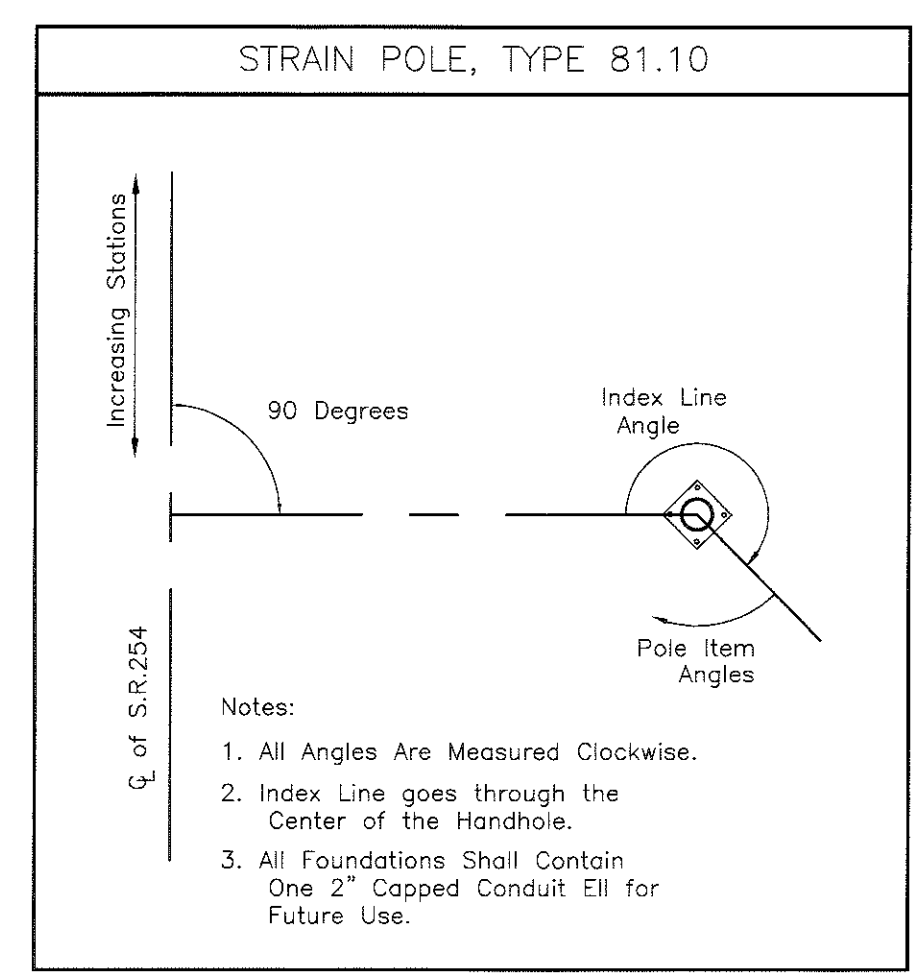
LOR - 190 - 15.65

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ELEVATION
NOT TO SCALE
(LOOKING EAST)

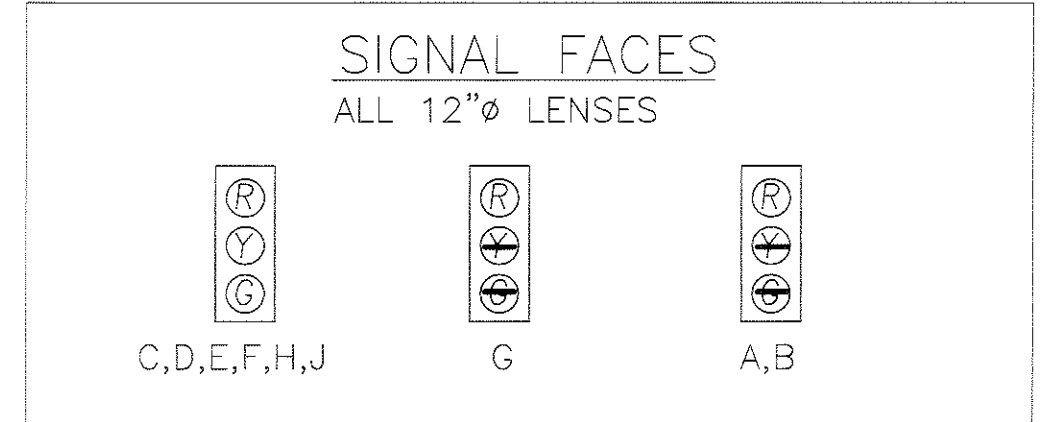
POLE NO.	DESIGN NO.	POLE HEIGHT FT.	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE			
				PEDESTRIAN PUSHBUTTONS	CABLE ENTRANCE 12" FROM TOP	INTERCONNECT POLE SPLICE BOX	HAND HOLE
P1	6	30	245	-	295	0	245
P2	6	30	65	-	-	-	65



COLOR SEQUENCE CHART

SIGNAL	PHASE 2 + 6	PHASE 8	PHASE 2 + 5	FLASH
A	R	R	R	R
B	R	R	R	R
C	G	Y	R	Y
D	G	Y	R	Y
E	G	Y	R	Y
F	G	Y	R	Y
G	Φ	Φ	Φ	Φ
H	R	R	R	R
J	R	R	R	R

SIGNAL TIMING (SECONDS)	PHASE 2+6	PHASE 8	PHASE 5
INITIAL	15	12	12
PASSAGE	2.4	2.4	2.4
MAXIMUM	48.0	32.0	40.0
CLEARANCE	3.6	3.6	3.6
ALL RED	1.5	1.5	1.5
RECALL	MIN.	NONE	NONE



LEFT TURN SIGNAL

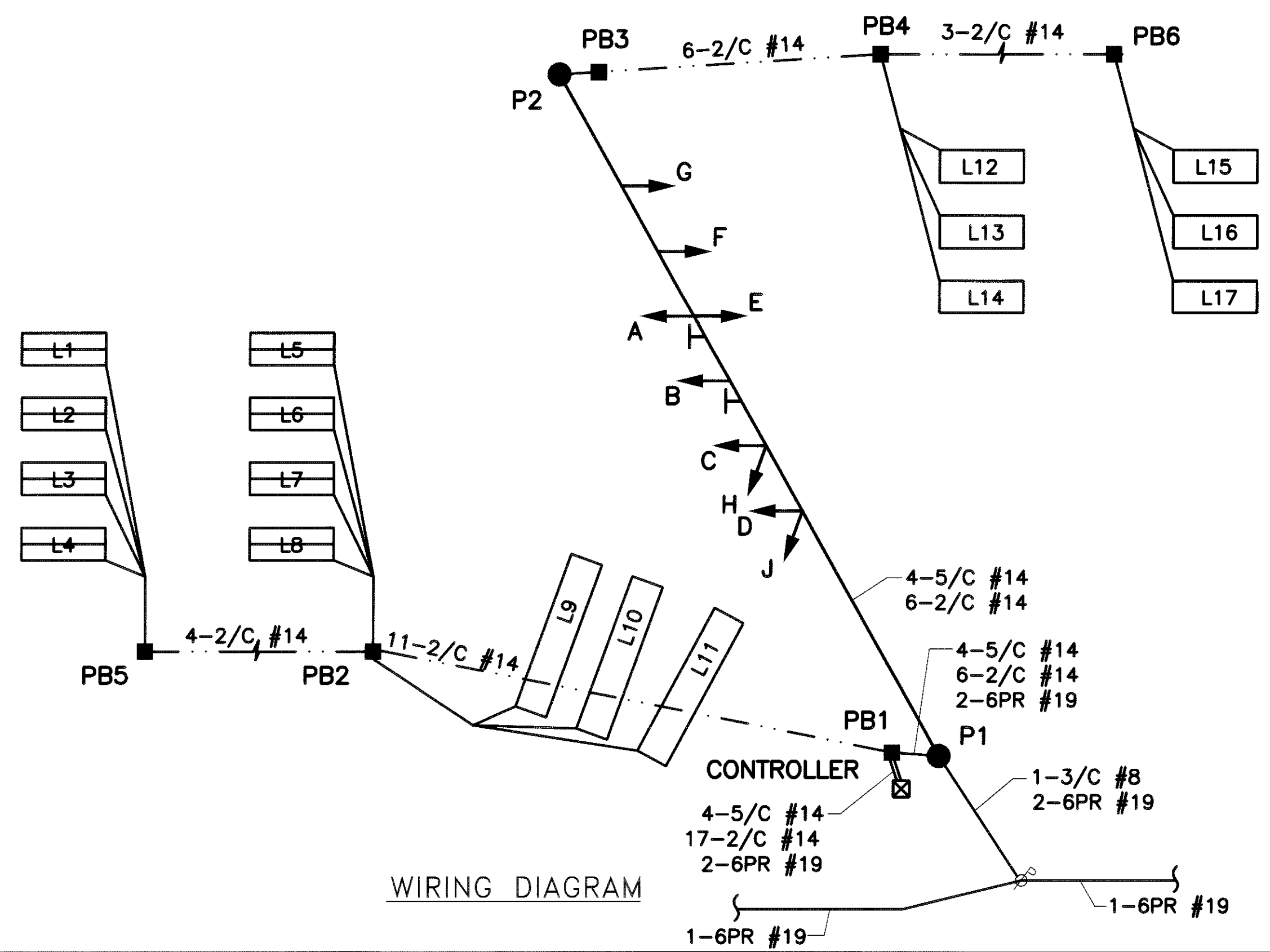
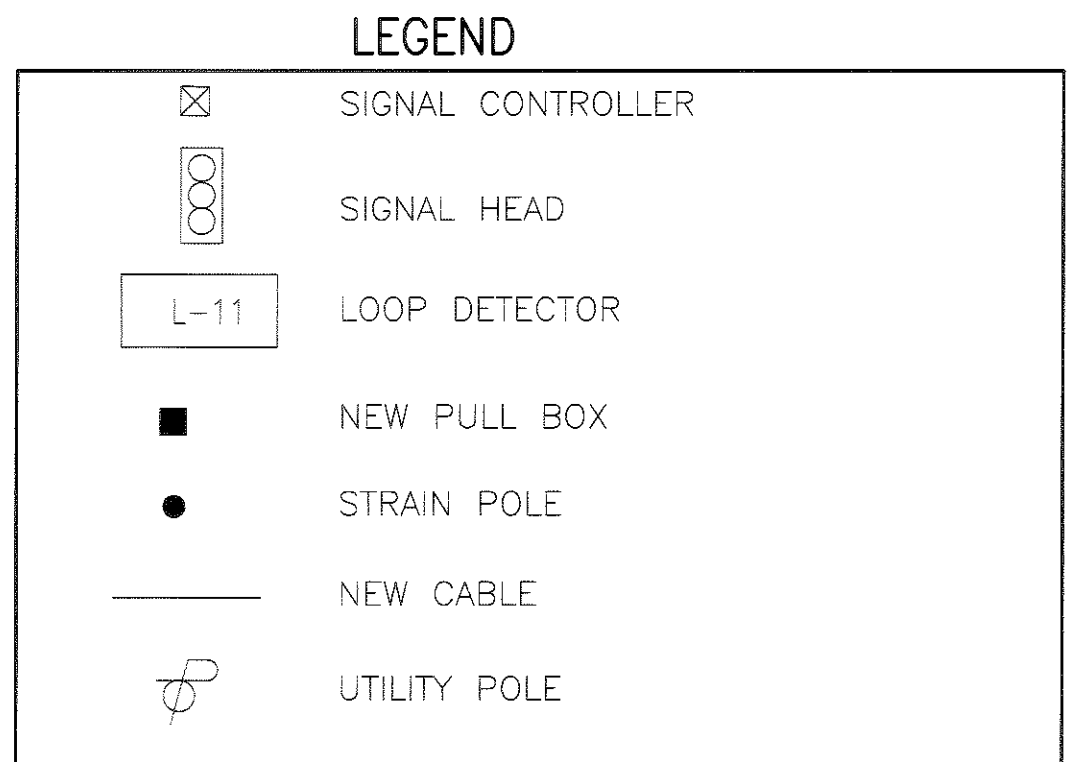
S1 & S2
R-25EL-24

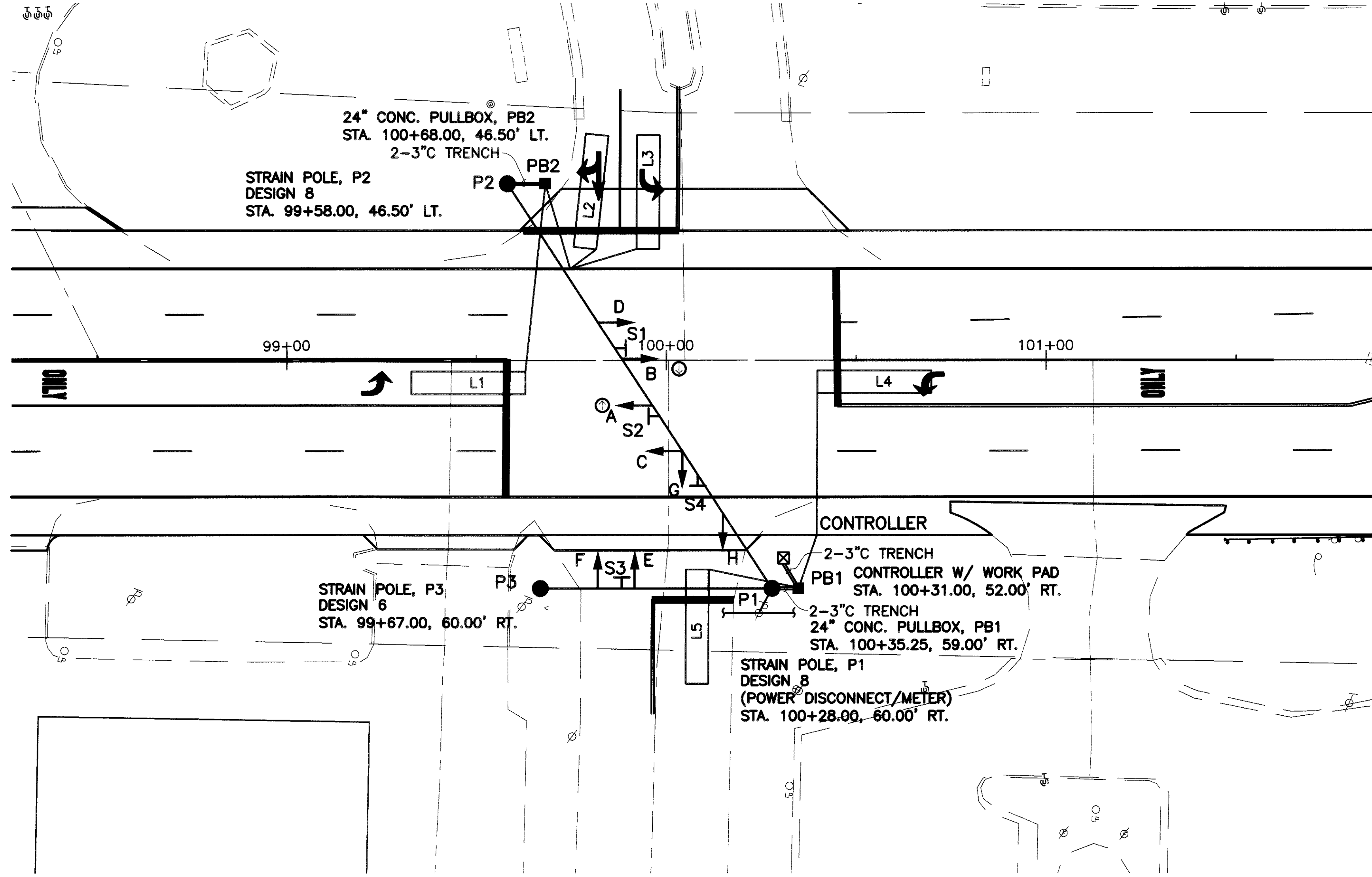
SIGN LEGEND
SIGNS TO BE LOCATED
3' FROM SIGNAL-C/C

QUANTITIES FOR SIGNAL AT INTERSECTION OF S.R.254 EAST OF I90 BRIDGE

ITEM	QTY	UNIT	DESCRIPTION
625	9	EACH	GROUND ROD
625	3	EACH	PULL BOX, 713.08, 18"
625	3	EACH	PULL BOX, 713.08, 24"
625	655	LIN. FT.	TRENCH, AS PER PLAN
625	139	LIN. FT.	TRENCH IN PAVED AREA, TYPE B
625	605	LIN. FT.	CONDUIT, 2", 713.07
625	189	LIN. FT.	CONDUIT, 3", 713.07
632	9	EACH	VEHICULAR SIGNAL HEAD 3 SECTION, 12" LENS, 1-WAY
632	17	EACH	LOOP DETECTOR UNIT
632	17	EACH	DETECTOR LOOP
632	5402	LIN. FT.	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
632	745	LIN. FT.	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6 WITH SERVICE WIRE ENTRANCE
632	2	EACH	STRAIN POLE FOUNDATION
632	106	LIN. FT.	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
632	1	EACH	POWER SERVICE
633	1	EACH	CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	9	SQ. FT.	CONTROLLER WORKPAD
633	1	CU. YD.	CONCRETE FOR CABINET FOUNDATION
TOTALS CARRIED TO GENERAL SUMMARY			

LOOP	SIZE (FT)	MODE	NO. TURNS	PHASE	TYPE
L1	6x30	PRESENCE	3	5	QUADRAPOLE
L2	6x30	PRESENCE	3	5	QUADRAPOLE
L3	6x30	PRESENCE	3	2	QUADRAPOLE
L4	6x30	PRESENCE	3	2	QUADRAPOLE
L5	6x30	PRESENCE	3	5	QUADRAPOLE
L6	6x30	PRESENCE	3	5	QUADRAPOLE
L7	6x30	PRESENCE	3	2	QUADRAPOLE
L8	6x30	PRESENCE	3	2	QUADRAPOLE
L9	6x30	PRESENCE	3	8	QUADRAPOLE
L10	6x30	PRESENCE	3	8	QUADRAPOLE
L11	6x30	PRESENCE	3	8	QUADRAPOLE
L12	6x30	PRESENCE	3	6	QUADRAPOLE
L13	6x30	PRESENCE	3	6	QUADRAPOLE
L14	6x30	PRESENCE	3	6	QUADRAPOLE
L15	6x30	PRESENCE	3	6	QUADRAPOLE
L16	6x30	PRESENCE	3	6	QUADRAPOLE
L17	6x30	PRESENCE	3	6	QUADRAPOLE



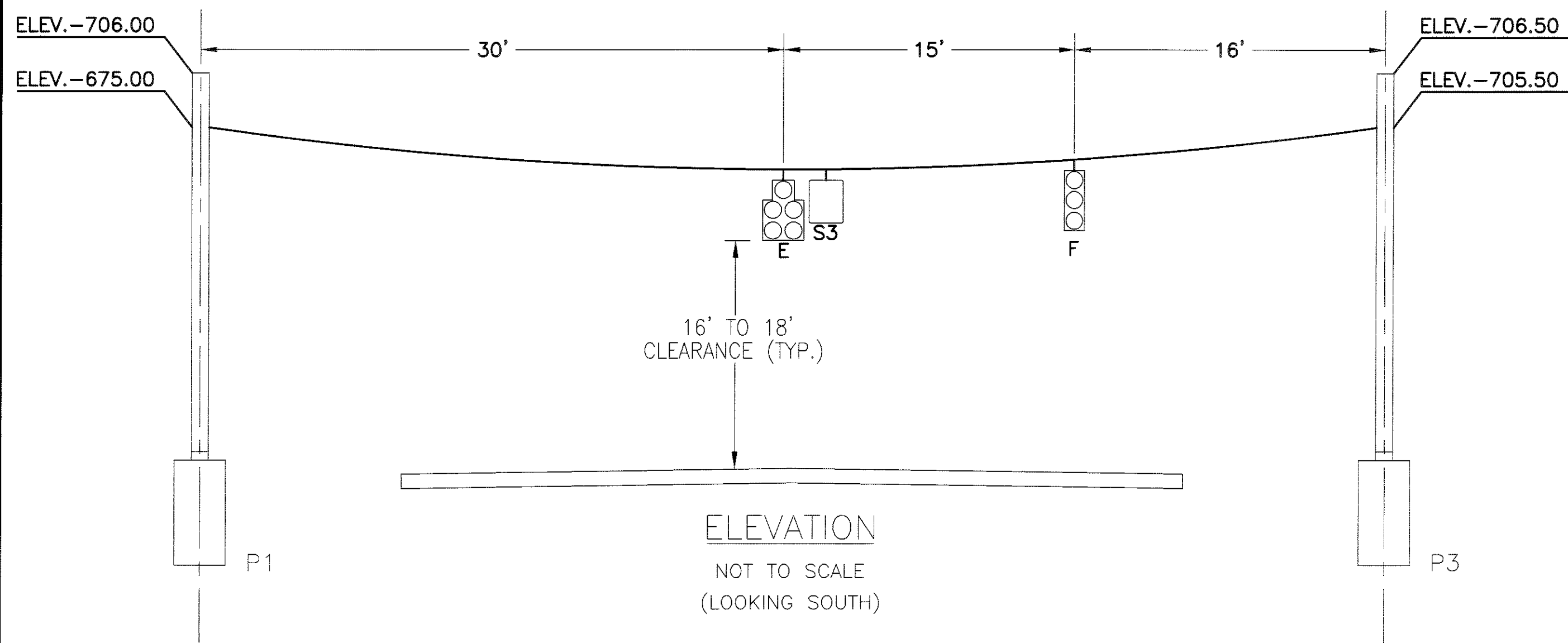
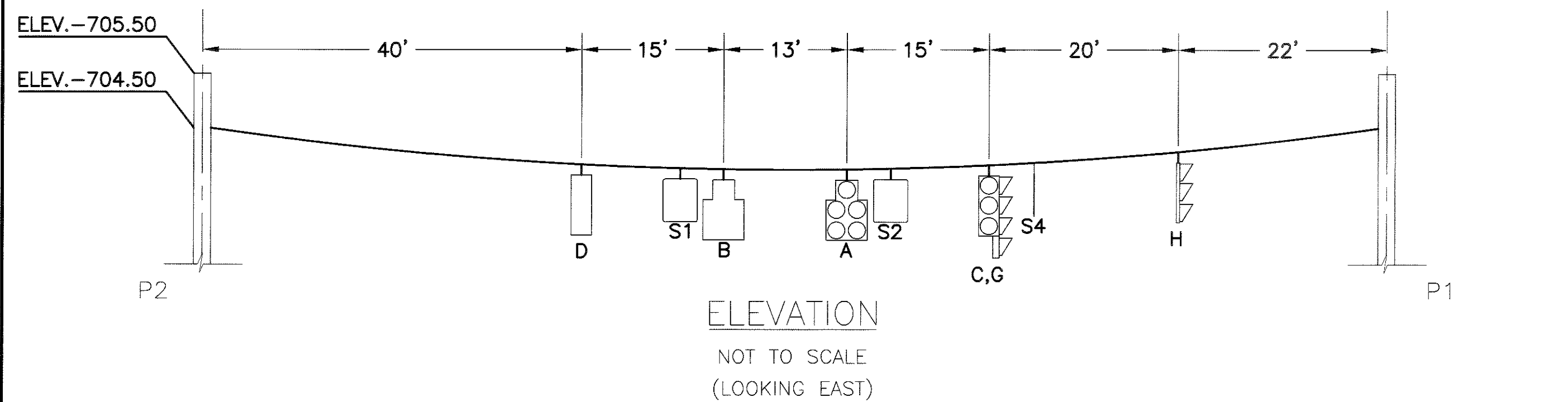


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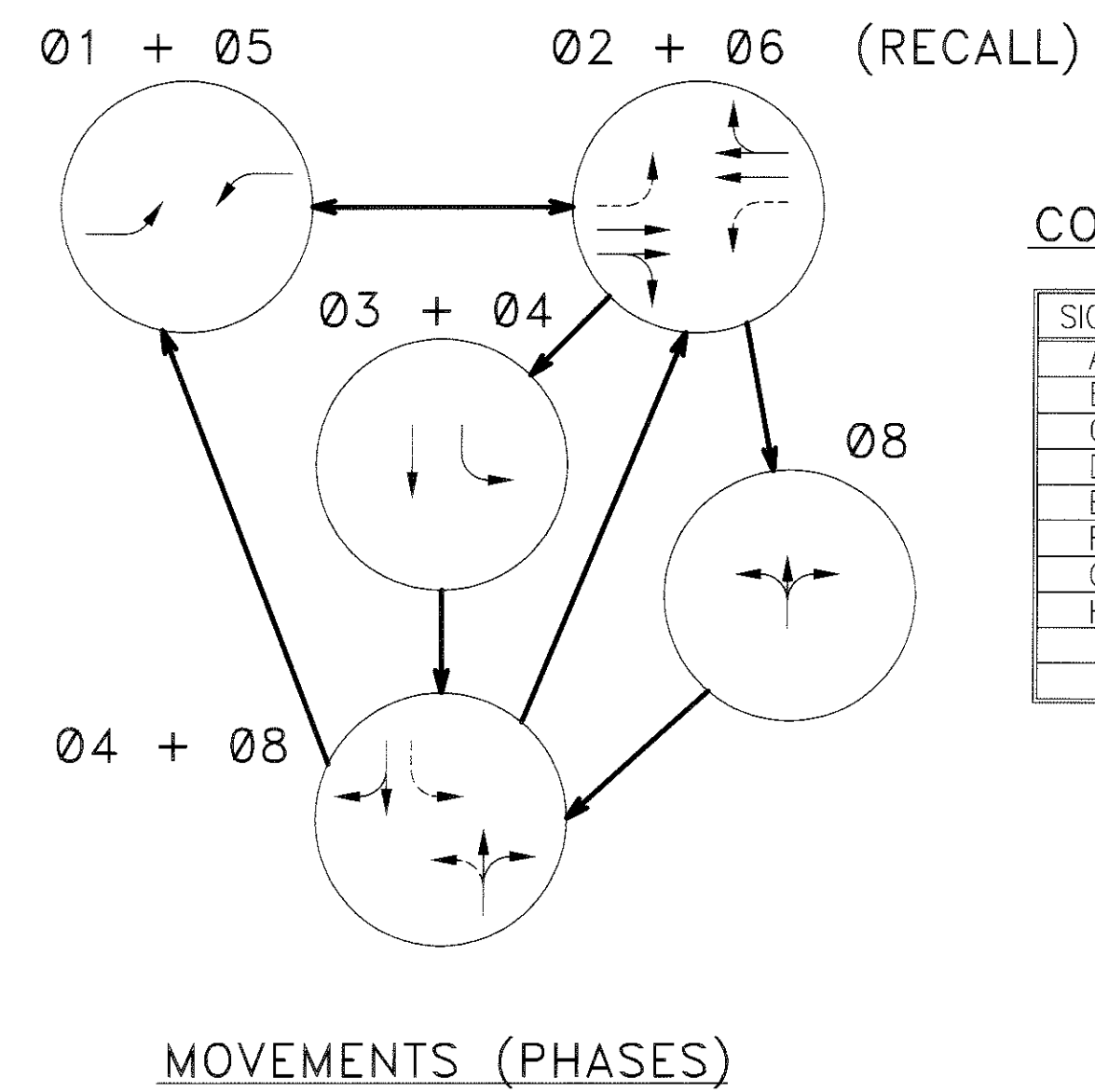
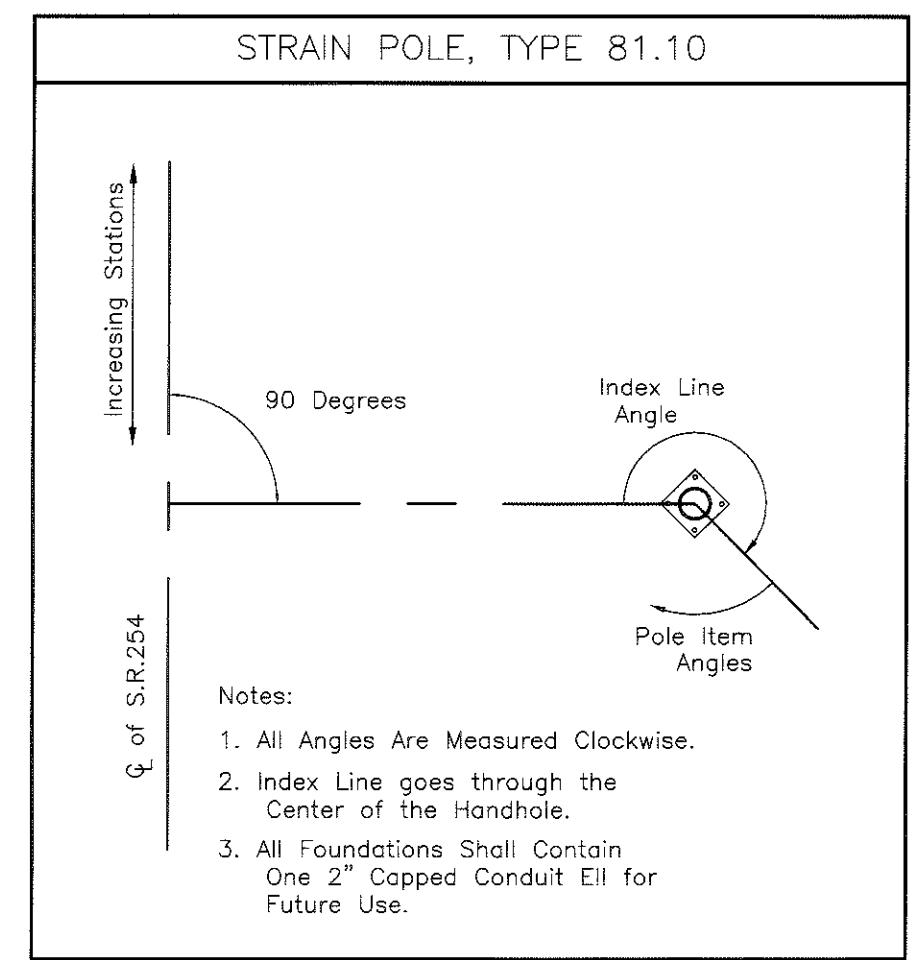
0 20' 40'
HORIZONTAL
SCALE IN FEET

SIGNALIZATION PLAN - S.R.254

LOR - 190 - 15.65



POLE NO.	DESIGN NO.	POLE HEIGHT FT.	FOUNDATION ELEV.	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE				
					PEDESTRIAN PUSHBUTTONS	POWER SERVICE	CABLE ENTRANCE 12" FROM TOP	INTERCONNECT POLE SPLICE BOX	HAND HOLE
P1	8	30	676.00	235	-	35	180	35	0
P2	8	30	675.50	55	-	-	-	-	0
P3	8	30	676.50	0	-	-	-	-	0



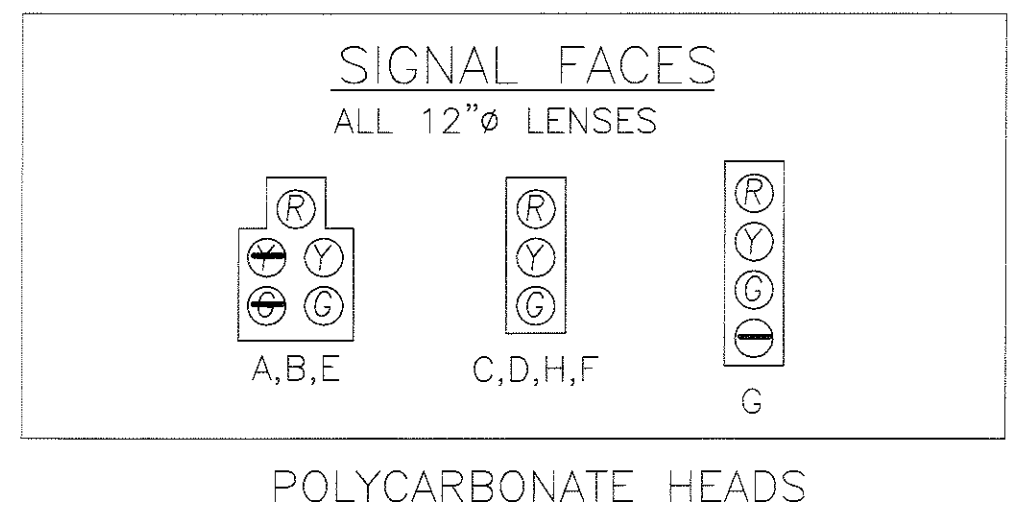
COLOR SEQUENCE CHART

SIGNAL	PHASE 1 + 5	PHASE 2 + 6	PHASE 3 + 4	PHASE 4 + 8	PHASE 8	FLASH
A	R	G	R	R	R	Y
B	R	G	R	R	R	Y
C	R	G	R	R	R	Y
D	R	G	R	R	R	Y
E	R	R	G	G	R	R
F	R	R	R	G	R	R
G	R	R	R	G	R	R
H	R	R	R	G	R	R

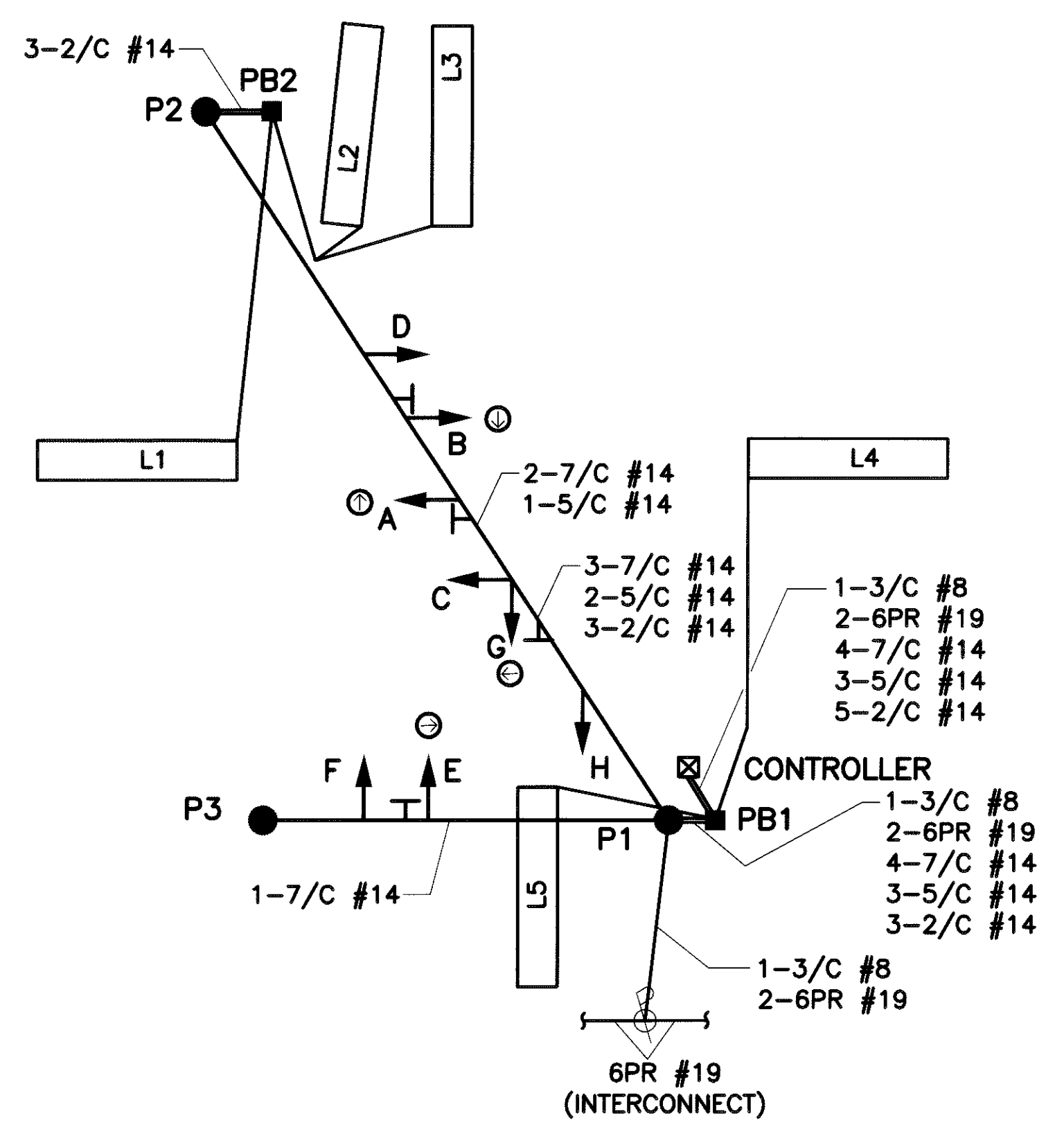
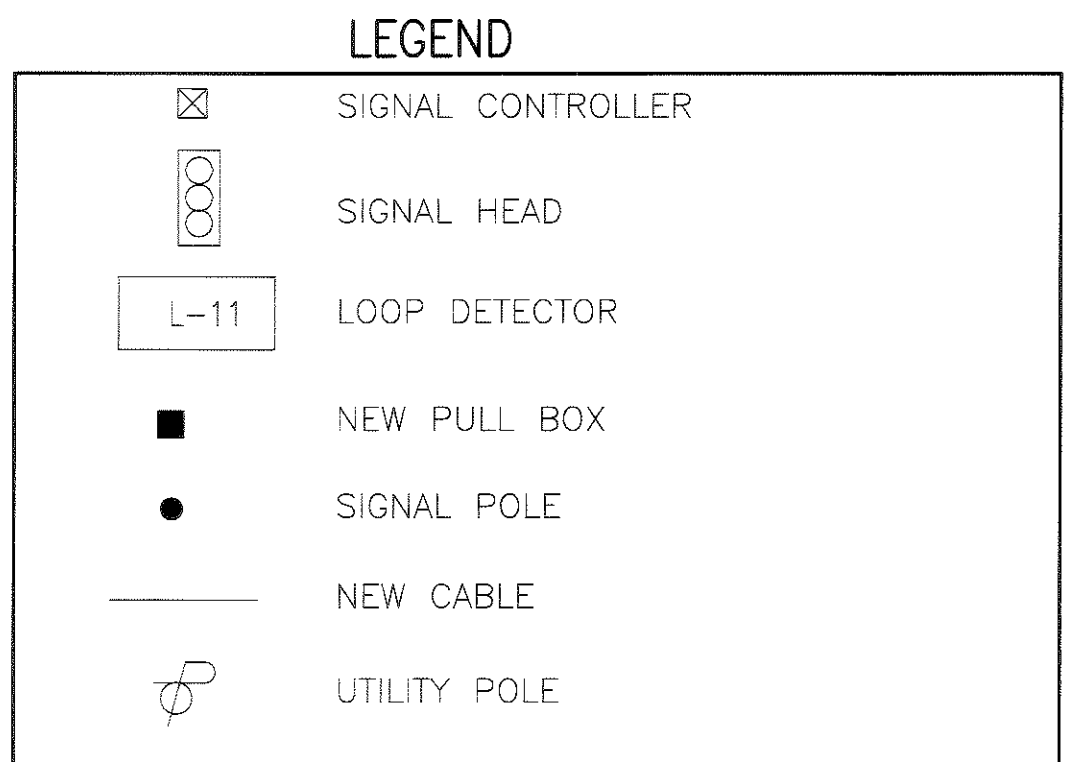
SIGNAL TIMING (SECONDS)	PHASE 1,5	PHASE 2,6	PHASE 3,4	PHASE 4,8	PHASE 8
INITIAL	6.0	40.0	6	6	6
PASSAGE	2.0	2.0	2.0	2.0	2.0
MAXIMUM 1	1.0	1.0	1.0	1.0	1.0
MAXIMUM 2	15.0	45.0	15.0	45.0	15.0
CLEARANCE	3.5	3.5	3.5	3.5	3.5
ALL RED	2.0	2.0	2.0	2.0	2.0
RECALL	NONE	MIN.	NONE	NONE	NONE

QUANTITIES FOR SIGNAL AT INTERSECTION OF S.R.254 & SHEFFIELD CROSSING

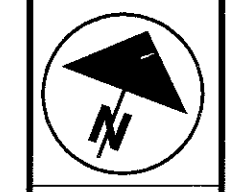
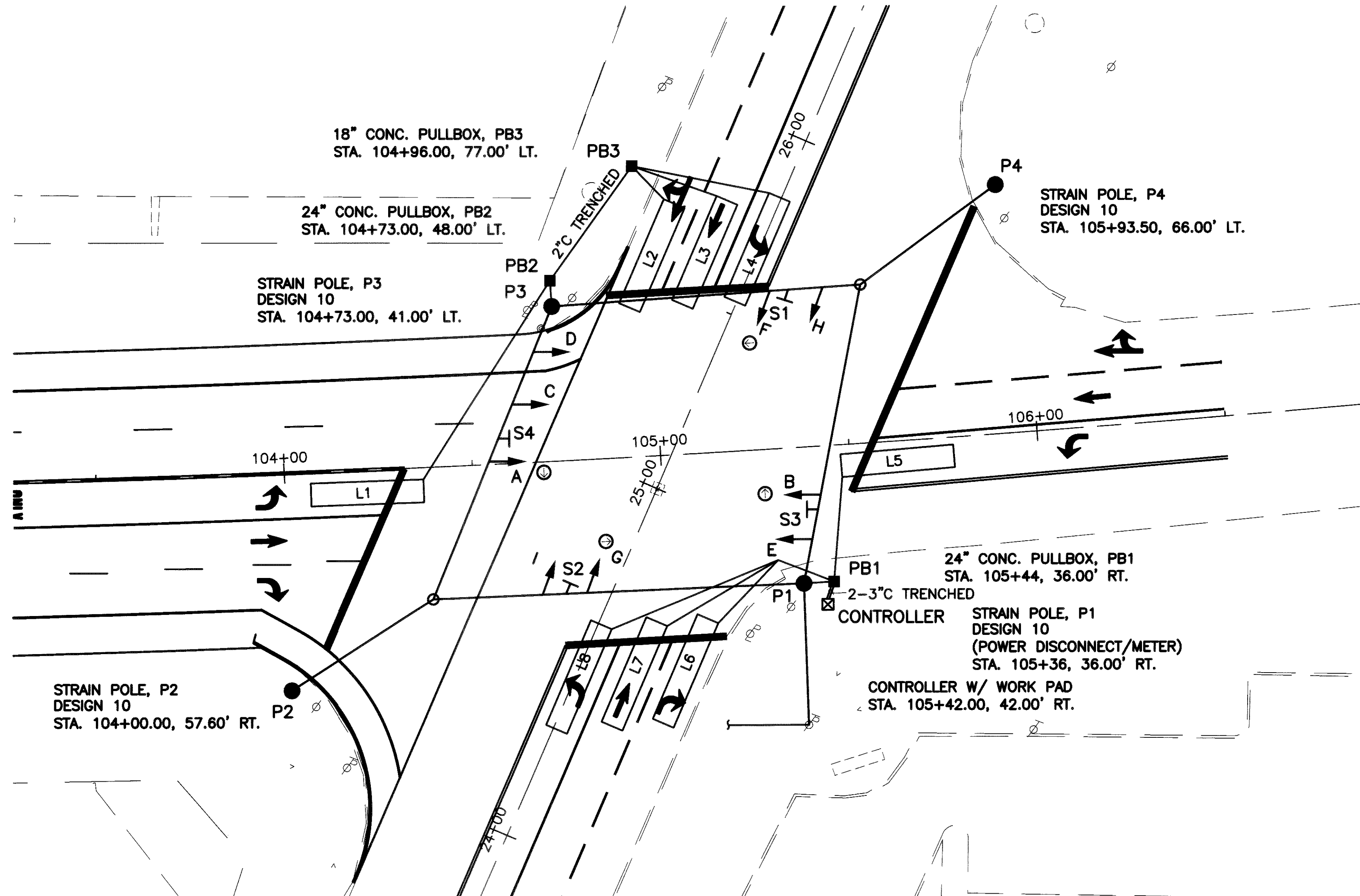
ITEM	QTY	UNIT	DESCRIPTION
625	4	EACH	GROUND ROD
625	2	EACH	PULL BOX, 713.08, 24"
625	70	LIN. FT.	TRENCH, AS PER PLAN
625	20	LIN. FT.	CONDUIT, 2", 713.07
625	50	LIN. FT.	CONDUIT, 3", 713.07
632	3	EACH	VEHICULAR SIGNAL HEAD, 3 SECTION, 12" LENS, 1-WAY
632	1	EACH	VEHICULAR SIGNAL HEAD, 3 SECTION, 12" LENS, 2-WAY, AS PER PLAN
632	4	EACH	VEHICULAR SIGNAL HEAD, 5 SECTION, 12" LENS, 1-WAY, AS PER PLAN
632	5	EACH	LOOP DETECTOR UNIT
632	5	EACH	DETECTOR LOOP
632	545	LIN. FT.	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
632	398	LIN. FT.	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	550	LIN. FT.	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	2	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6 WITH SERVICE WIRE ENTRANCE
632	3	EACH	STRAIN POLE FOUNDATION
632	92	LIN. FT.	POWER CABLE, 3 CONDUCTOR, NO. 6 AWG
632	1	EACH	POWER SERVICE
633	1	EACH	CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	9	SQ. FT.	CONTROLLER WORKPAD
633	1	CU. YD.	CONCRETE FOR CABINET FOUNDATION
TOTALS CARRIED TO GENERAL SUMMARY			



LOOP	SIZE (FT)	MODE	NO. TURNS	PHASE	TYPE
L1	6x30	PRESENCE	3	1	TYPICAL
L2	6x30	PRESENCE	3	4	TYPICAL
L3	6x30	PRESENCE	3	3	TYPICAL
L4	6x30	PRESENCE	3	5	TYPICAL
L5	6x30	PRESENCE	3	7	TYPICAL



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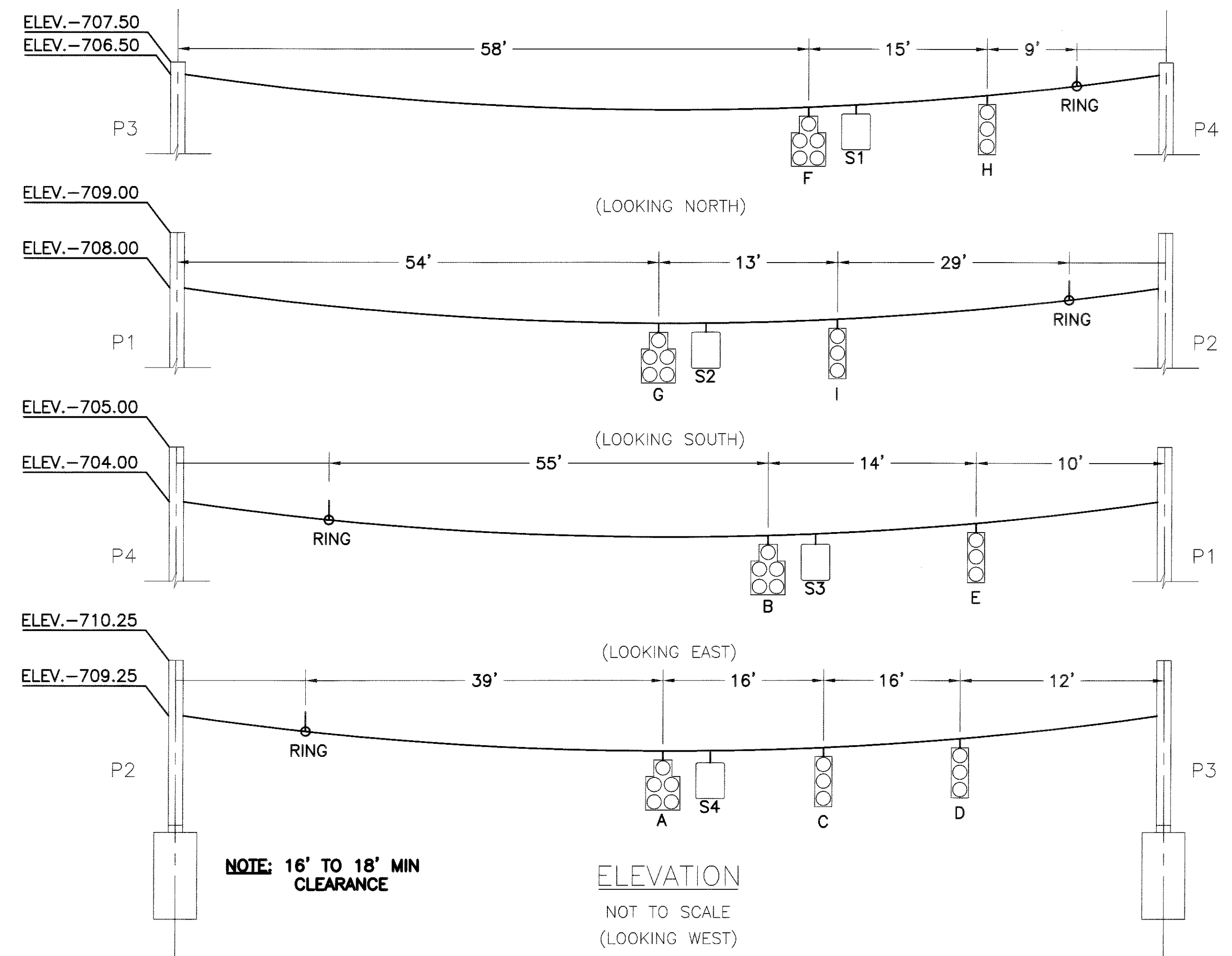


CALCULATED
DLS
CHECKED
LAB

0 20' 40'
HORIZONTAL
SCALE IN FEET

SIGNALIZATION PLAN - S.R.254

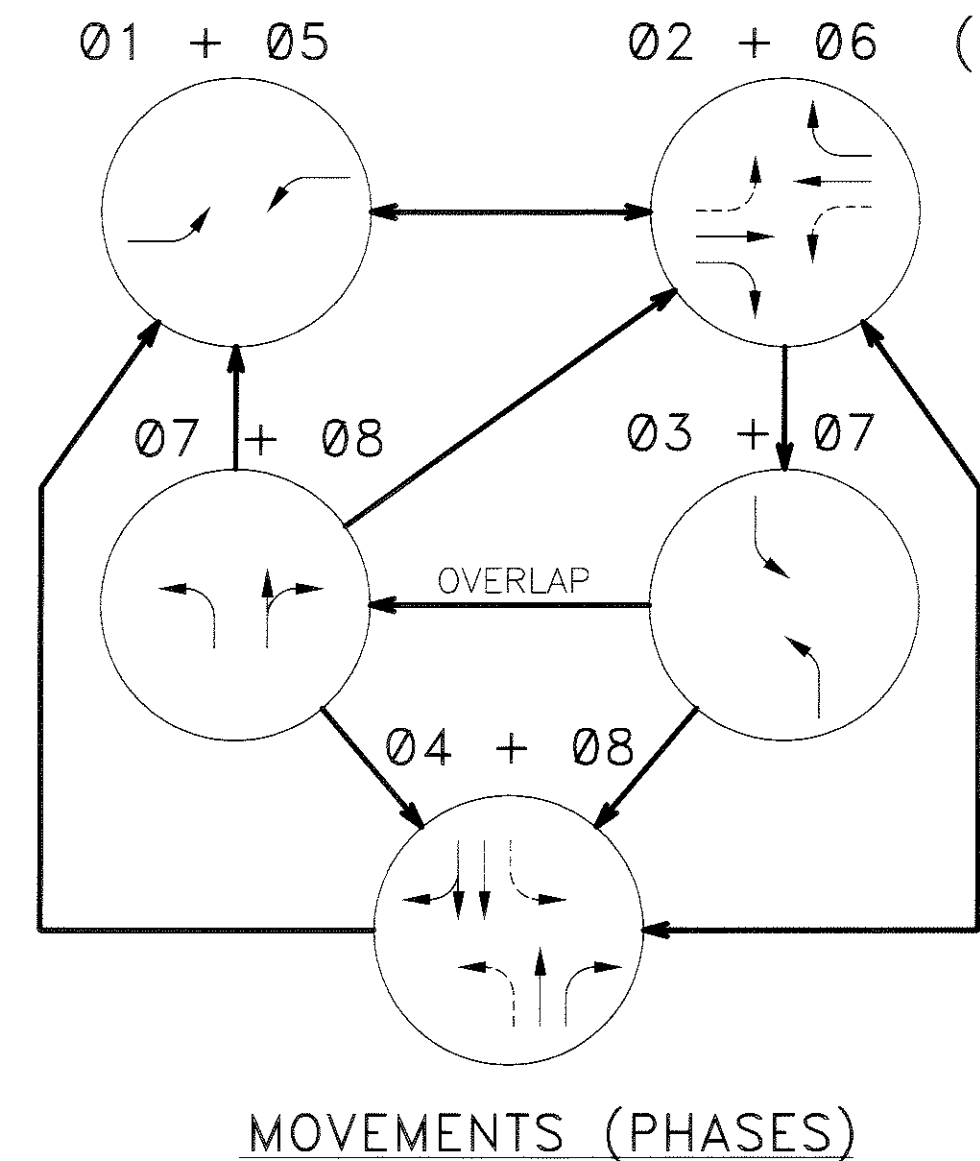
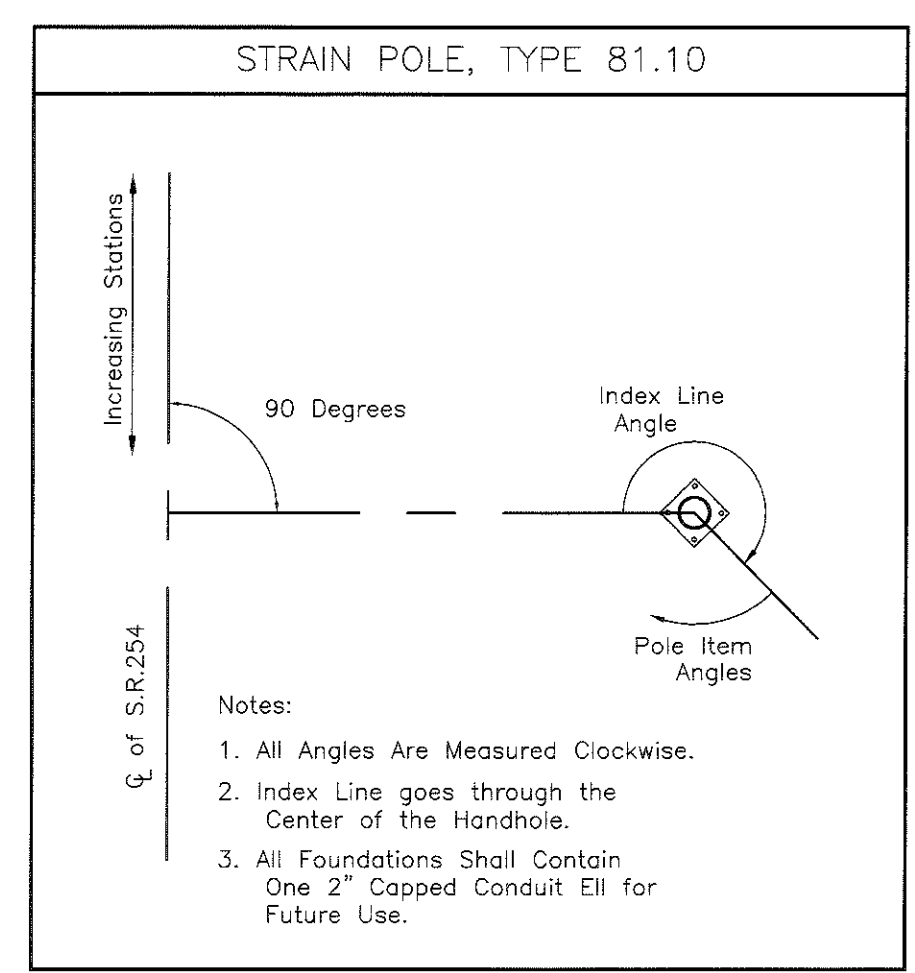
LOR - 190 - 15.65



NOTE: 16' TO 18' MIN CLEARANCE

ELEVATION
NOT TO SCALE
(LOOKING WEST)

POLE NO.	DESIGN NO.	POLE HEIGHT FT.	FOUNDATION ELEV.	INDEX LINE ANGLE (DEG.)	ANGLES (DEG.) FROM INDEX LINE				
					PEDESTRIAN PUSHBUTTONS	CABLE ENTRANCE 12" FROM TOP	INTERCONNECT POLE SPLICE BOX	HAND HOLE	
P1	10	32	677.00	245	-	295	0		245
P2	10	32	678.25	65	-	-	-		65
P3	10	32	675.50	245	-	295	0		245
P4	10	32	673.00	65	-	-	-		65



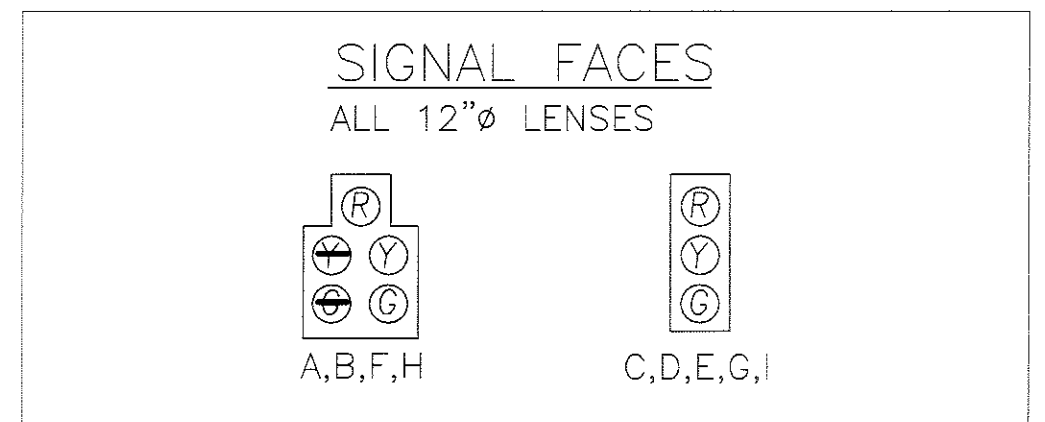
COLOR SEQUENCE CHART

SIGNAL	PHASE 1 + 5	PHASE 2 + 6	PHASE 3 + 7	PHASE 7 + 8	PHASE 4 + 8	FLASH
A	R	R	R	R	R	R
B	R	R	R	R	R	R
C	R	R	R	R	R	R
D	R	R	R	R	R	R
E	R	R	R	R	R	R
F	R	R	R	R	R	R
G	R	R	R	R	R	R
H	R	R	R	R	R	R
I	R	R	R	R	R	R

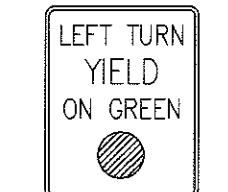
SIGNAL TIMING (SECONDS)	OVERLAP				
	PHASE 1,5	PHASE 2,6	PHASE 3,7	PHASE 7,8	PHASE 4,8
INITIAL	10/5	25.0	5.0	7.0	25/20
PASSAGE	2.0	0.0	2.0	3.0	0.0
MAXIMUM 1	10.0	35.0	10.0	30.0	37.0
MAXIMUM 2	10.0	35.0	10.0	30.0	37.0
CLEARANCE	3.6	3.6	3.6	3.6	3.6
ALL RED	2.0	2.0	2.0	2.0	2.0
RECALL	1	1			

QUANTITIES FOR SIGNAL AT INTERSECTION OF S.R.254 & S.R.301 (ABBE RD.)

ITEM	QTY	UNIT	DESCRIPTION
625	5	EACH	GROUND ROD
625	1	EACH	PULL BOX, 713.08, 18"
625	2	EACH	PULL BOX, 713.08, 24"
625	117	LIN. FT.	TRENCH, AS PER PLAN
625	100	LIN. FT.	CONDUIT, 2", 713.07
625	17	LIN. FT.	CONDUIT, 3", 713.07
632	5	EACH	VEHICULAR SIGNAL HEAD, 3 SECTION, 12" LENS, 1-WAY
632	4	EACH	VEHICULAR SIGNAL HEAD, 5 SECTION, 12" LENS, 1-WAY, AS PER PLAN
632	8	EACH	LOOP DETECTOR UNIT
632	8	EACH	DETECTOR LOOP
632	1398	LIN. FT.	LOOP DETECTOR LEAD-IN CABLE, 2 CONDUCTOR, NO. 14 AWG
632	655	LIN. FT.	SIGNAL CABLE, 5 CONDUCTOR, NO. 14 AWG
632	622	LIN. FT.	SIGNAL CABLE, 7 CONDUCTOR, NO. 14 AWG
632	3	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6
632	1	EACH	STRAIN POLE, TYPE TC-81.10, DESIGN 6 WITH SERVICE WIRE ENTRANCE
632	4	EACH	STRAIN POLE FOUNDATION
632	110	LIN. FT.	POWER CABLE, 3 CONDUCTOR, NO. 8 AWG
632	1	EACH	POWER SERVICE
633	1	EACH	CONTROLLER, ACTUATED, 8 PHASE, SOLID STATE DIGITAL MICROPROCESSOR, AS PER PLAN
633	9	SQ. FT.	CONTROLLER WORKPAD
633	1	CU. YD.	CONCRETE FOR CABINET FOUNDATION
TOTALS CARRIED TO GENERAL SUMMARY			



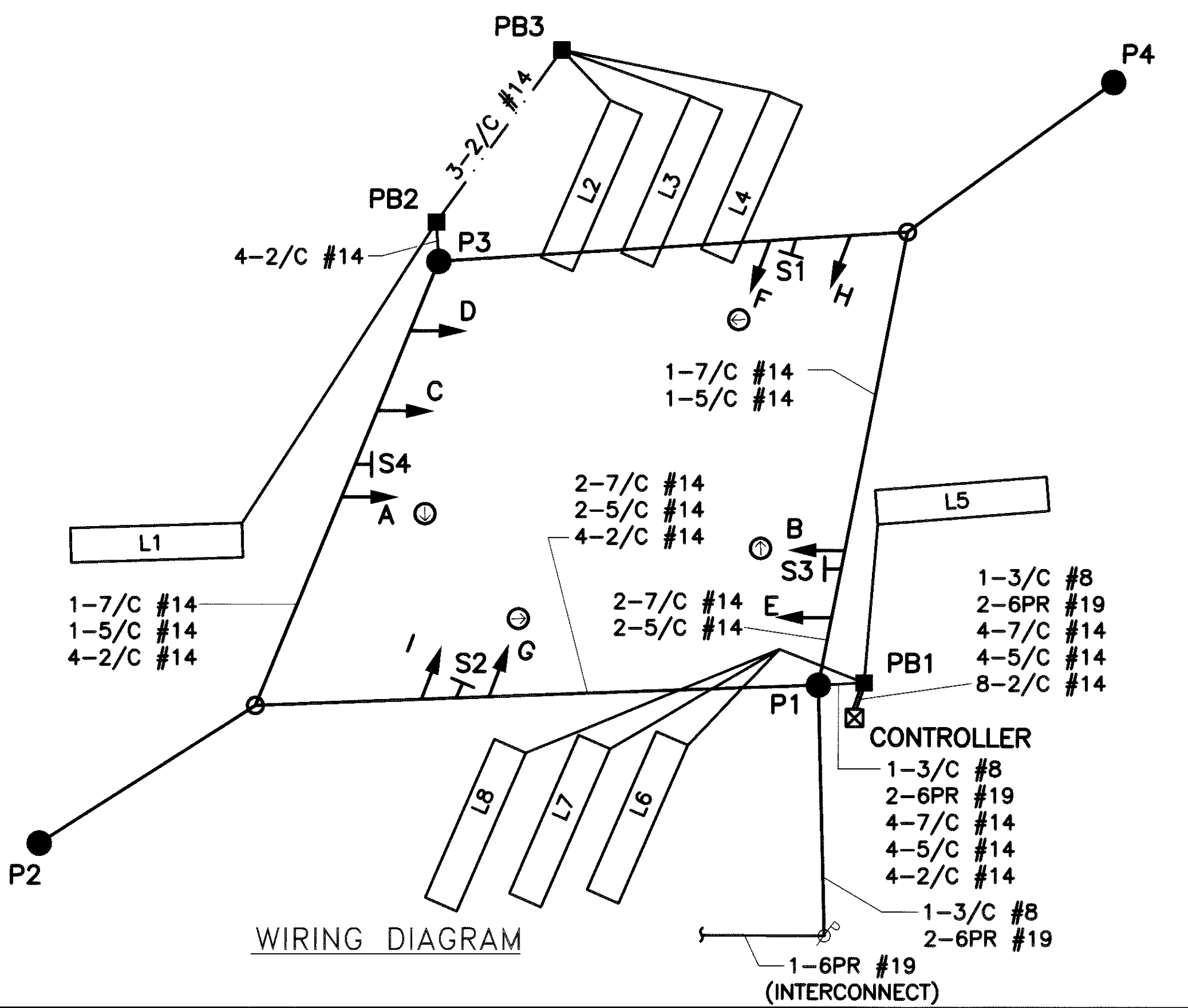
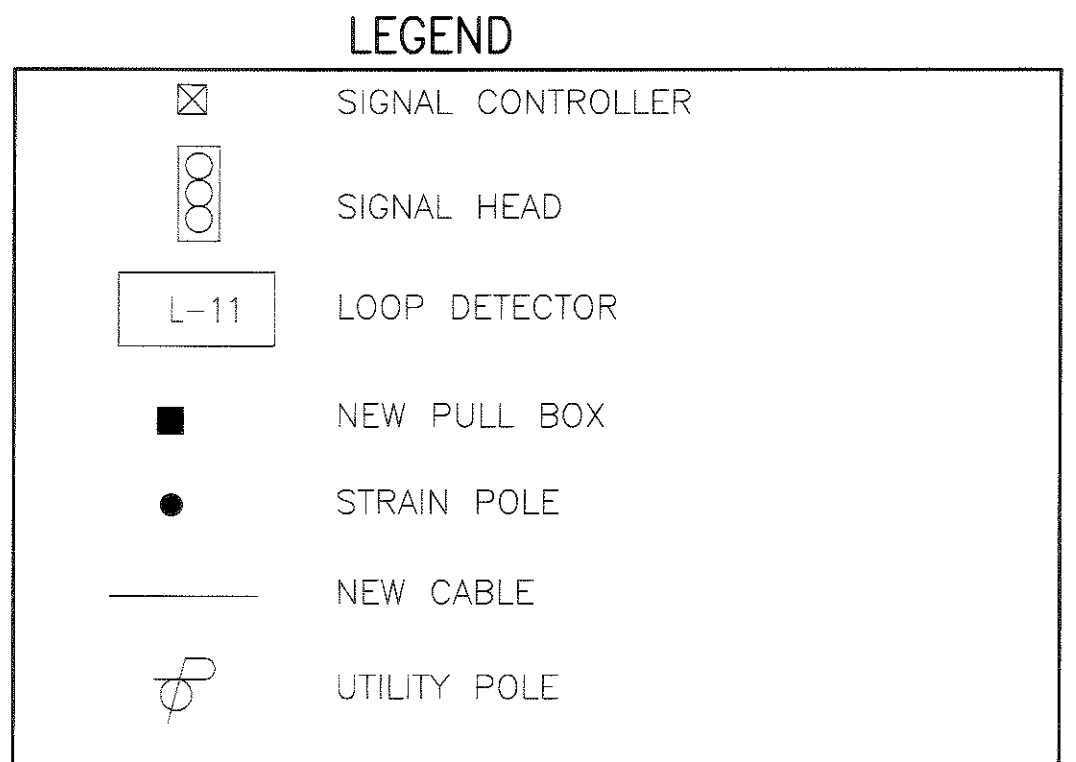
POLYCARBONATE HEADS



S1, S2, S3 & S4
R-25F-24
SIGN LEGEND
SIGNS TO BE LOCATED 3' FROM SIGNAL-C/C

LOOP DETECTORS

LOOP	SIZE (FT)	MODE	NO. TURNS	PHASE	TYPE
L1	6x30	PRESENCE	3	1	TYPICAL
L2	6x30	PRESENCE	3	4	TYPICAL
L3	6x30	PRESENCE	3	4	TYPICAL
L4	6x30	PRESENCE	3	3	TYPICAL
L5	6x30	PRESENCE	3	1	TYPICAL
L6	6x30	PRESENCE	3	8	TYPICAL
L7	6x30	PRESENCE	3	8	TYPICAL
L8	6x30	PRESENCE	3	7	TYPICAL



COORDINATION TIMING SEQUENCE

	6AM - 9AM		9AM - 3PM 6PM - 6AM		3PM - 6AM		WEST BOUND EAST BOUND
	SEC	%	SEC	%	SEC	%	
RAMP "J"	52	29	0	0	48	40	
RAMP "I"	34	19	0	0	66	55	
SHEFFIELD CROSSING	19	16	0	0	81	67	
ABBE RD.	10	8	5	4	90	75	

Average Time of Day

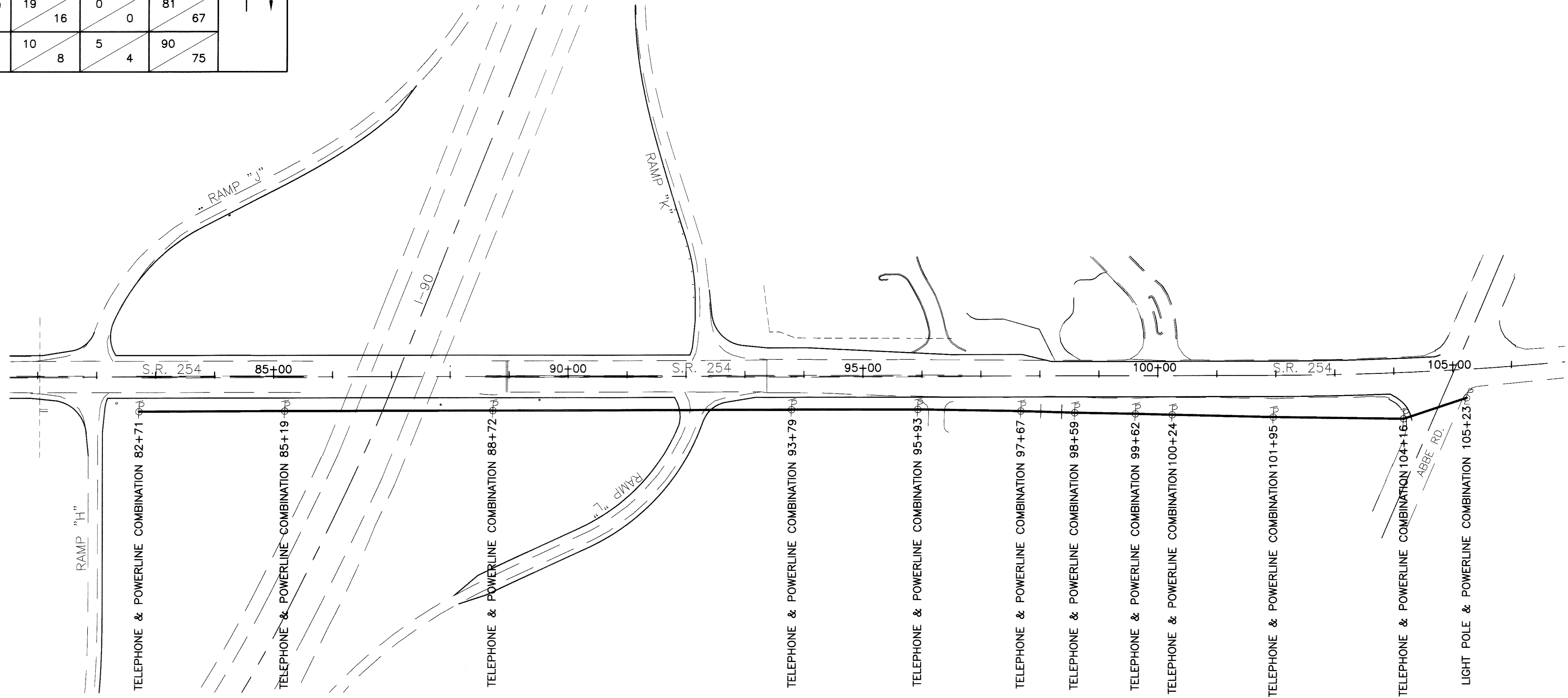
Due to the length of the cycles, the relatively short distance between intersections and the consistent traffic volumes during the day. The 9AM to 3PM & 6PM to 6AM sequence plan was chosen to be simultaneous operation with the beginning reference being Phase 2 & 6. This is expected to favor the thru flow on S.R.254 as well as accommodate some of the existing ramp traffic.

AM Peak Period

Timing plan favors west bound flow on S.R.254, base reference is the beginning of Phase 7 at S.R.254 and Abbe Road.

PM Peak Period

Timing plan favors east bound flow on S.R.254, base reference is the beginning of Phase 4 at S.R.254 and I-90 west bound exist ramp.



CALCULATED
SJK
CHECKED
DR

0 100' 200'
HORIZONTAL
SCALE IN FEET

INTERCONNECT PLAN

LOR - I90 - 15.65

[I:\0\93197\DWG\5\SH254\93197\INTL.DWG] 01.5
09-05-2001 8:29AM


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(TS.DIAGM)
                                PASSER II-90
DECEMBER 93                    MULTIPHASE ARTERIAL PROGRESSION PROGRAM        VERSION 2.0

RUN NO 1 DISTRICT 3 S.R.254                            11/28/00 CYCLE = 100 SECONDS
                                HORIZONTAL SCALE 1 INCH = 30 SECS (1 inch = 10 characters)
                                VERTICAL SCALE 1 INCH = 300 FEET (1 inch = 6 lines)

INT 4 I
ABBE RD IX/// \\XXXXXXXXXXXX /// \\XXXXXXXXXXXX///
59.6S I
    I
    I
    I
    I
    I
    I
INT 3 I
SHEFFIE IXXXXXXXX== XXXXXXXXXXXXXXX XXXXXX== XXXXXXXXXXXXXXXXXXXX
56.3S I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
INT 2 I
RAMP #L IXXXXX /////XXXXXXXXXXXX XXXX /////XXXXXXXXXXXXXXXXXX
49.6S I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
    I
INT 1 I
RAMP #J I////////XXXXXXXXXXXXXXXXX //////////XXXXXXXXXXXXXXXXX /////
0.0S

/A/ \\B\\
 37 MPH 37 MPH
38 SECOND BAND 34 SECOND BAND

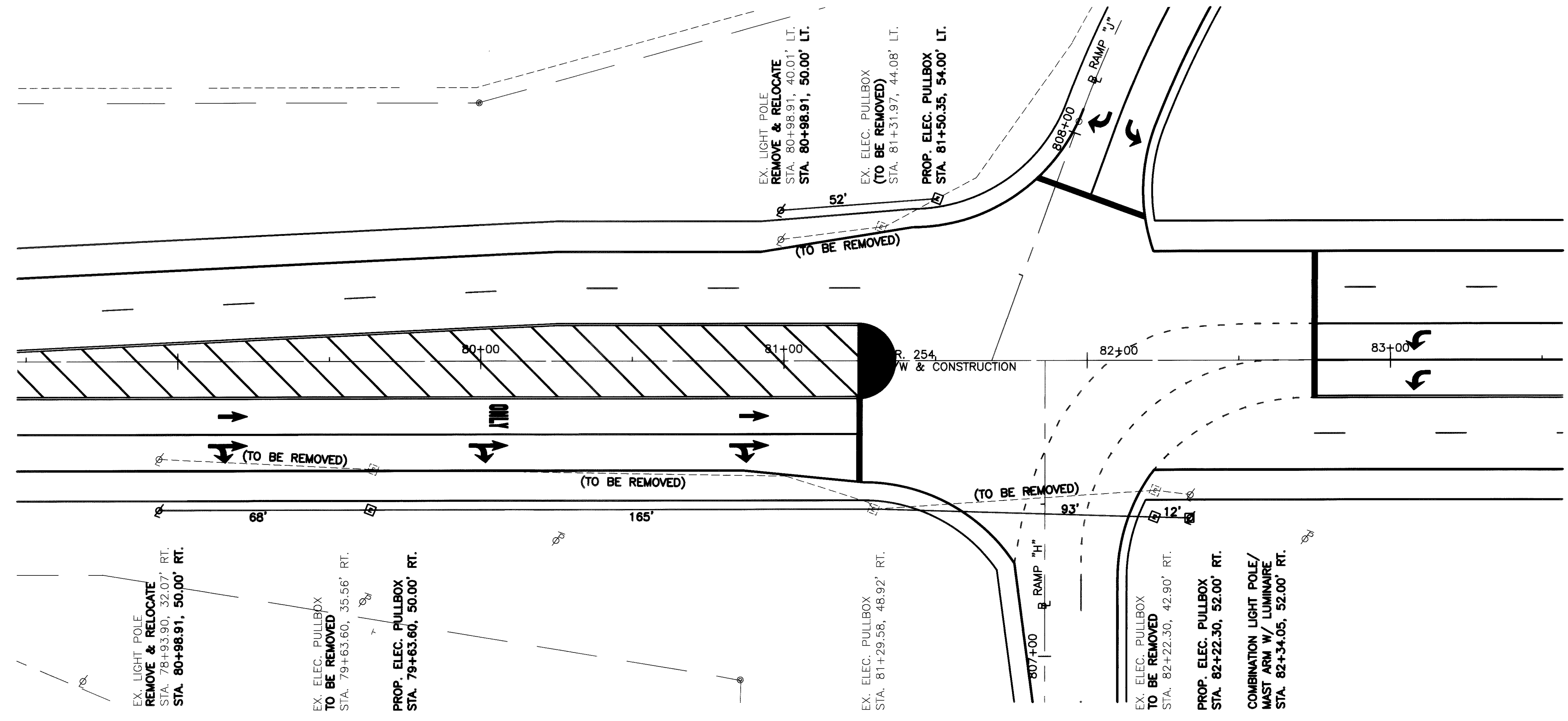
=== DUAL LEFTS (1+5) XXX DUAL THRU (2+6)
/// LT 5 LEADS (2+5) \\ \\ LT 1 LEADS (1+6)

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CALCULATED
DLS
CHECKED
LAB

TIME-SPACE DIAGRAM (S.R.254)

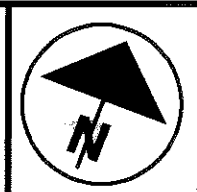
LOR - 190 - 13.20



QUANTITIES FOR LIGHTING PLAN AT S.R. 254 (WEST SIDE OF BRIDGE)

ITEM	QTY	UNIT	DESCRIPTION
625	3	EACH	GROUND ROD
625	3	EACH	PULL BOX, 713.08, 18"
625	315	LIN. FT.	TRENCH, AS PER PLAN
625	75	LIN. FT.	TRENCH IN PAVED AREA, TYPE B
625	430	LIN. FT.	1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 480 VOLT CABLES
625	75	LIN. FT.	CONDUIT, 2", 713.07
625	2	EACH	REMOVE AND REERECT EXISTING LIGHT POLE
625	2	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP
625	2	EACH	LUMINAIRE, CONVENTIONAL
625	1	EACH	GLARE SHIELD
TOTALS CARRIED TO GENERAL SUMMARY			

C:\p197\DWG\SER254\91197p.dwg J DLS
09-11-2001 1:40PM



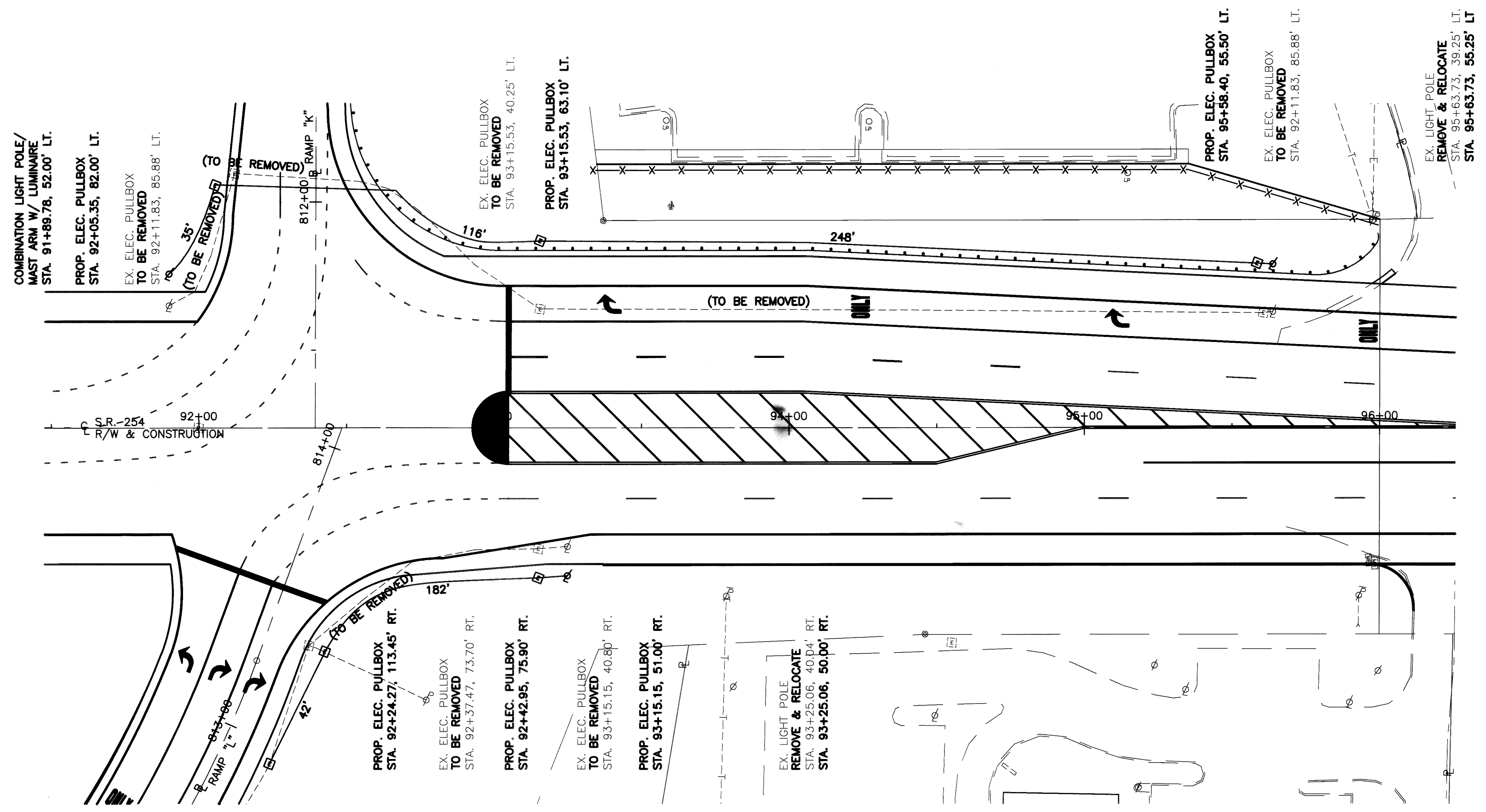
CALCULATED
DLS
CHECKED
LAB

0 20' 40'
HORIZONTAL
SCALE IN FEET

LIGHTING PLAN - S.R.254

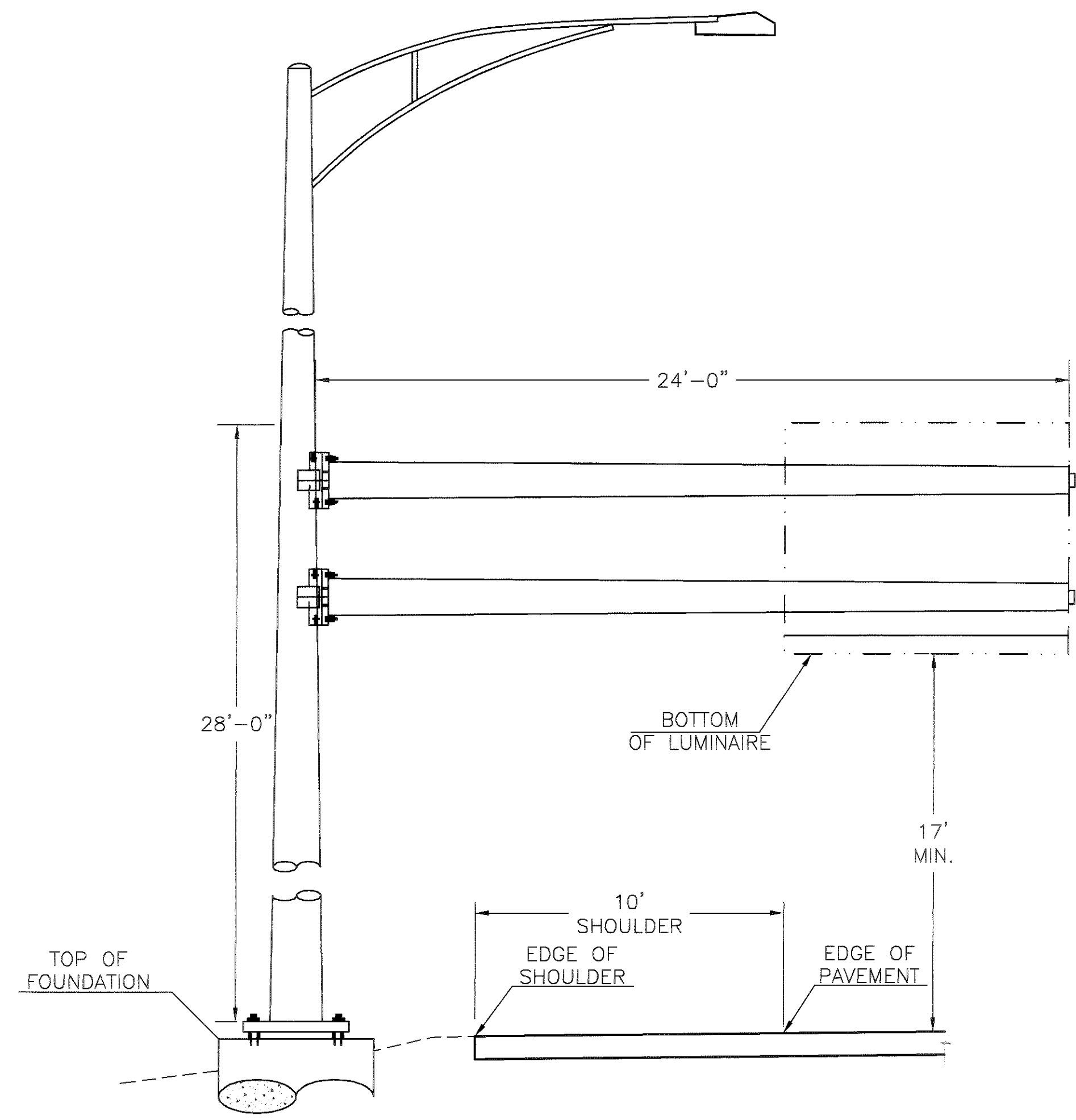
LOR - I90 - 15.65

132A
161



QUANTITIES FOR LIGHTING PLAN AT S.R. 254 (EAST SIDE OF BRIDGE)

ITEM	QTY	UNIT	DESCRIPTION
625	3	EACH	GROUND ROD
625	6	EACH	PULL BOX, 713.08, 18"
625	573	LIN. FT.	TRENCH, AS PER PLAN
625	50	LIN. FT.	TRENCH IN PAVED AREA, TYPE B
625	708	LIN. FT.	1-1/2" DUCT CABLE WITH TWO NO. 4 AWG 480 VOLT CABLES
625	50	LIN. FT.	CONDUIT, 2", 713.07
625	2	EACH	REMOVE AND REERECT EXISTING LIGHT POLE
625	2	EACH	LIGHT POLE FOUNDATION, 24" X 10' DEEP
625	2	EACH	LUMINAIRE, CONVENTIONAL
625	1	EACH	GLARE SHIELD
TOTALS CARRIED TO GENERAL SUMMARY			



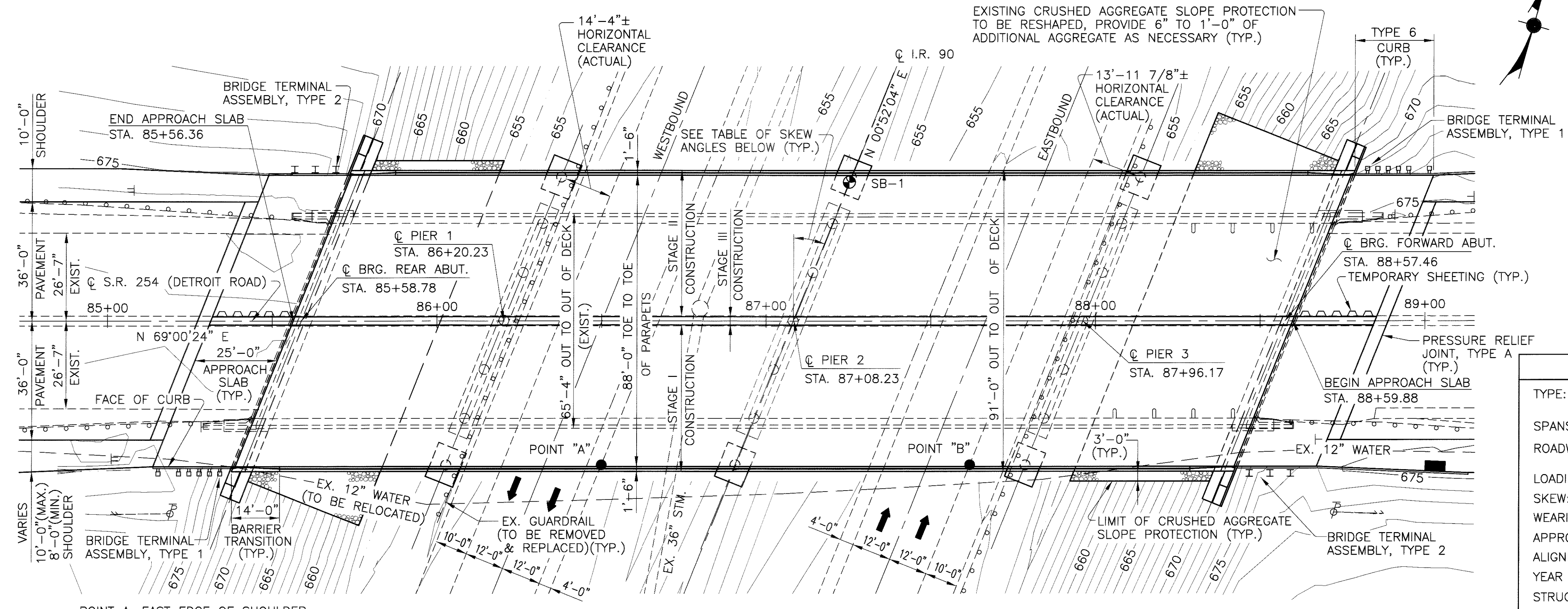
ELEVATION VIEW
NOT TO SCALE

CANTILEVER OVERHEAD SIGN SUPPORT					
LOCATION	TC-12.30, DESIGN 7 OVERHEAD SIGN SUPPORT W/ COMBINATION LIGHTING	ELEV. - TOP OF FOUNDATION	ELEV. - BOTTOM OF SIGN	ELEV. - EDGE OF SHOULDER	ELEV. - EDGE OF PAVEMENT
STA. 82+34.05, 52' RT.	1	676.00	695.19	677.77	678.19
STA. 91+89.78, 52' LT.	1	674.00	692.07	674.65	675.07

CALCULATED
DLS
CHECKED
LAB

MISCELLANEOUS DETAILS

LOR - I90 - 15.65



BENCHMARK No. 1
 CHISLED SQUARE IN TOP OF LIGHT POLE FOUNDATION ON WESTERLY SIDE OF BASS FORD DRIVE, SOUTH SIDE OF S.R. 254 STA. 74+56.98, 180.09' RT. ELEV. = 678.16

BENCHMARK No. 2
 TOP OF NORTHWEST ANCHOR BOLT ON McDONALD'S SIGN BASE; STA. 100+34.67, 86.55' RT. ELEV. = 678.16

TRAFFIC DATA

STATE ROUTE 254 (DETROIT ROAD)
 CURRENT YEAR A.D.T. (2002) = 19,460
 DESIGN YEAR A.D.T. (2022) = 25,550
 CURRENT YEAR A.D.T.T. (2002) = 583
 DESIGN YEAR A.D.T.T. (2022) = 766

EXISTING STRUCTURE

TYPE: 4-SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
 SPANS: 61'-6", 88'-0", 88'-0", 61'-6" c/c BEARINGS
 ROADWAY: 59'-0" FACE TO FACE OF 2'-0" SAFETY CURBS WITH A 3'-0" RAISED MEDIAN
 LOADING: CF400 (57)
 SKEW: 21°51'40" LEFT FORWARD
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 APPROACH SLABS: AS-1-54 (25'-0" LONG)
 ALIGNMENT: TANGENT
 YEAR BUILT: 1966
 STRUCTURE FILE NO. 4706277

PROPOSED STRUCTURE

PROPOSED WORK: REPLACE AND WIDEN NEW DECK SALVAGING EXISTING BEAMS AND ADDING NEW BEAMS ON WIDENED, MODIFIED SUBSTRUCTURE
 TYPE: 4-SPAN CONTINUOUS STEEL BEAMS WITH REINFORCED CONCRETE DECK AND SUBSTRUCTURE
 SPANS: 61'-5 7/16"±, 88'-0"±, 87'-11 5/16"±, 61'-3 7/16"± c/c BEARINGS
 ROADWAY: 88'-0" TOE TO TOE CONCRETE BARRIER PARAPETS
 LOADING: HS-20-44 CASE II AND THE ALTERNATE MILITARY LOADING
 SKEW: 21°51'40" LEFT FORWARD
 WEARING SURFACE: 1" MONOLITHIC CONCRETE
 APPROACH SLABS: AS-1-81 (25'-0" LONG)
 ALIGNMENT: TANGENT
 CROWN: 3/16"/FT.
 LONGITUDE: 82°05'00"
 LATITUDE: 41°25'42"

TABLE OF SKEW ANGLES

LOCATION	SKEW ANGLE (OBSERVED)	SKEW ANGLE (RECORD)
¢ BRG. REAR ABUT.	21°39'45"	21°51'40"
¢ PIER 1	21°49'56"	21°51'40"
¢ PIER 2	21°56'46"	21°51'40"
¢ I.R. 90	NOT ESTABLISHED	21°51'40"
¢ PIER 3	21°52'32"	21°51'40"
¢ BRG. FWD. ABUT.	21°51'38"	21°51'40"

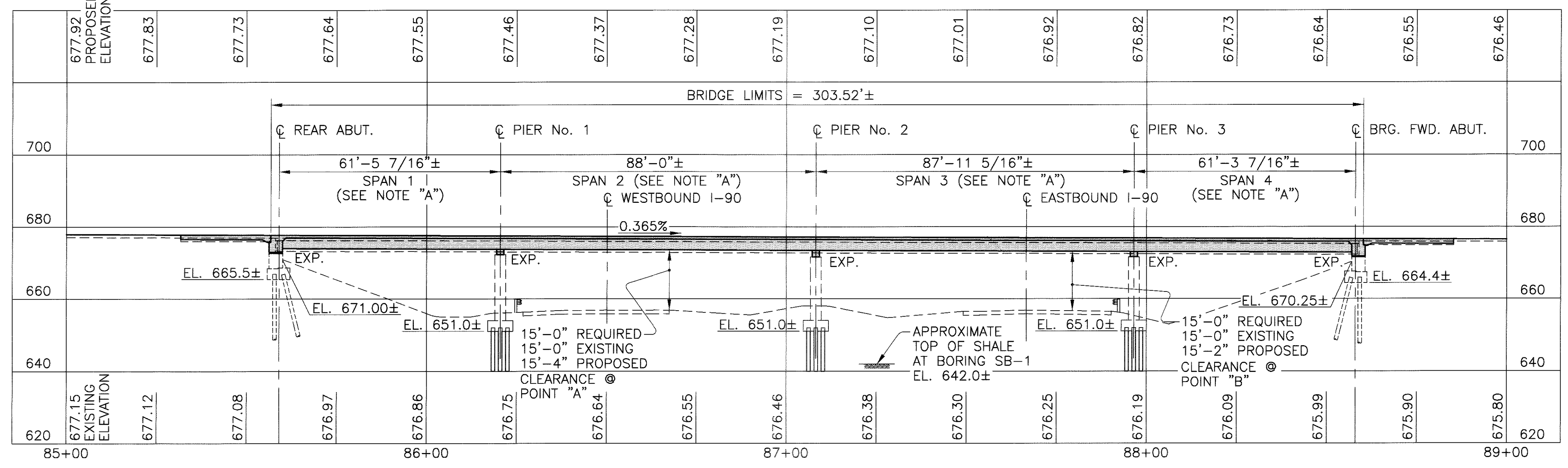
STATION OF FIRST ROADWAY GUARDRAIL POST ADJACENT TO BRIDGE

LOCATION	¢ S.R. 254 STATION
REAR ABUTMENT	85+69.22 (LT.)
	85+34.12 (RT.)
FORWARD ABUTMENT	88+46.90 (RT.)
	88+82.23 (LT.)

BORING LOCATIONS

BORING	¢ S.R. 254 STATION	OFFSET TO ¢
SB-1	87+25.15	42'-0" LT.

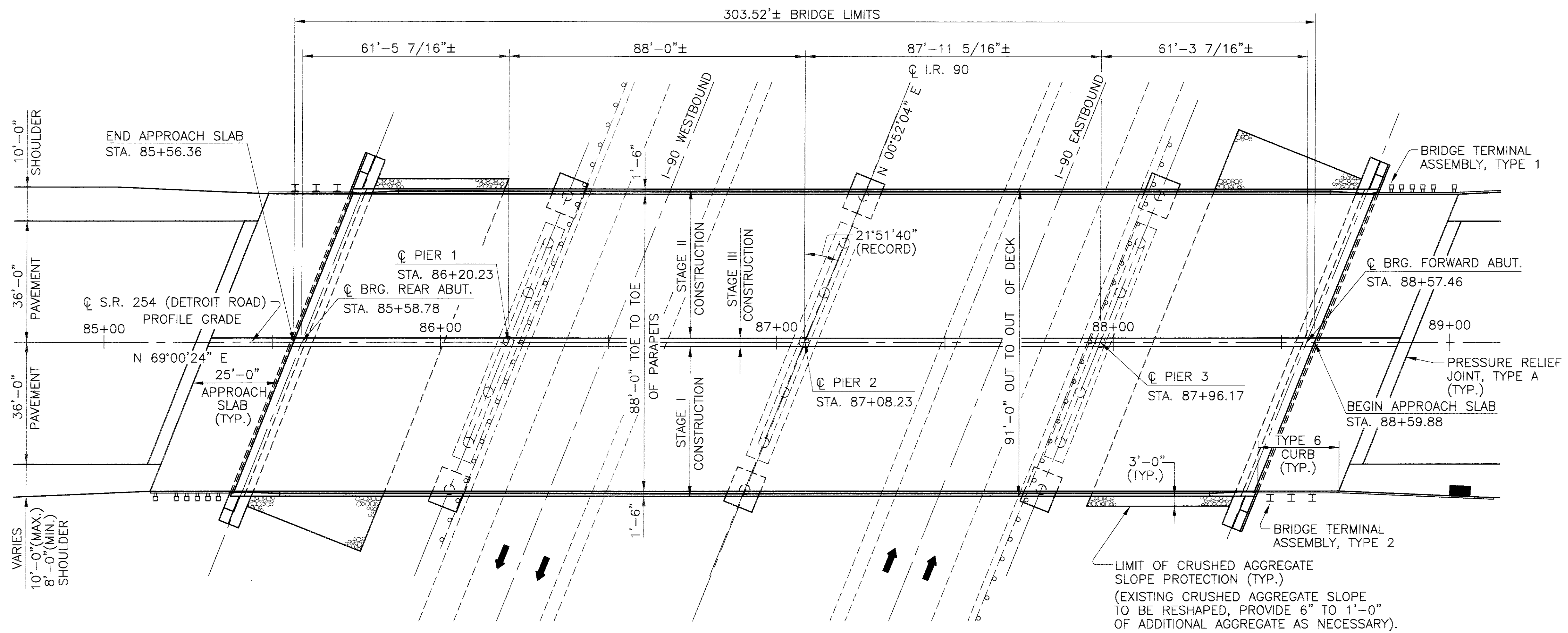
NOTE "A":
 SPAN LENGTHS SHOWN ON THE PROFILE ARE AS OBSERVED FROM FIELD. RECORD SPAN LENGTHS ARE AS SHOWN IN EXISTING STRUCTURE DATA BLOCK.



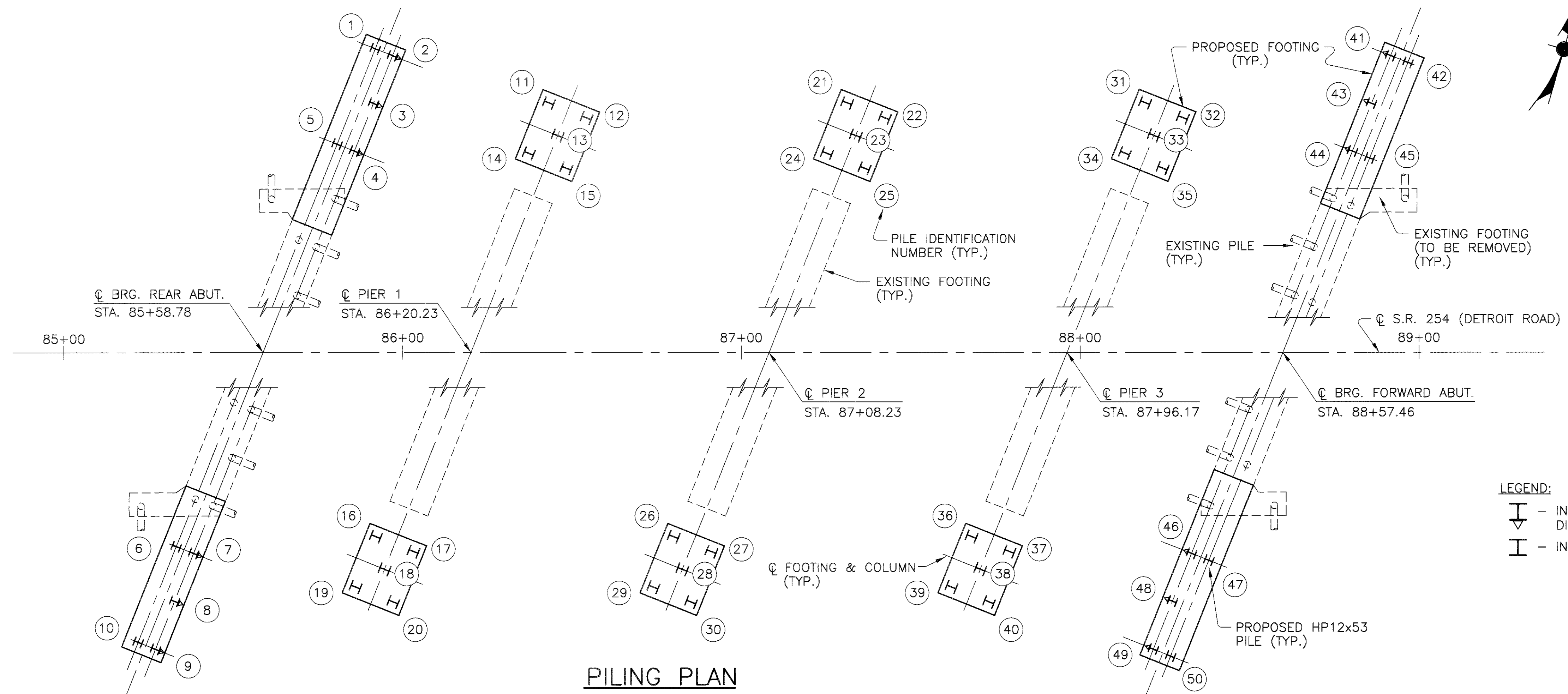
PROFILE ALONG ¢ CONSTRUCTION S.R. 254 (DETROIT ROAD)

- FOUNDATION DATA:**
- PILE DESIGN LOADS (ULTIMATE BEARING VALUE): THE ULTIMATE BEARING VALUE IS 134 TONS PER PILE FOR THE 12" ABUTMENT. THE ULTIMATE BEARING VALUE IS 83 TONS PER PILE FOR THE 12" PIER PILES.
- ABUTMENT PILES:**
- 10 PILES 26 FEET LONG, REAR ABUTMENT, ESTIMATED LENGTH
 - 10 PILES 25 FEET LONG, FORWARD ABUTMENT, ESTIMATED LENGTH
 - 10 PILES OF ORDER LENGTH 26 FEET LONG, REAR ABUTMENT
 - 10 PILES OF ORDER LENGTH 25 FEET LONG, FORWARD ABUTMENT
 - 5 SPLICES
- PIER PILES:**
- 30 PILES 12 FEET LONG ESTIMATED LENGTH
 - 10 PILES OF ORDER LENGTH 36 FEET LONG
 - 5 SPLICES
- NOTES:**
- 1.) THE PROPOSED PROFILE GRADE IS ONLY WITHIN BRIDGE LIMITS. SEE ROADWAY PLANS FOR PAVEMENT ELEVATIONS BEYOND BRIDGE LIMITS.
 - 2.) EARTHWORK LIMITS ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS-SECTIONS.

O:\93197\DWGS\SR254\FINBRDG\SITEPLAN.DWG



GENERAL PLAN



PILING PLAN

O:\93197\DWGS\SR254\FINBRDG_GENPLAN.DWG

DESIGN AGENCY
REW
 R.P. WARNER & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 JOB NUMBER 93197

DESIGNED	INF	CHECKED	RAK
DRAWN	CAG	REVISED	
REVIEWED	DW	STRUCTURE FILE NUMBER	4706277
DATE	2/13/01		

GENERAL PLAN AND PILING PLAN
 BRIDGE No. LOR-90-1565
 S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90

LOR-90-13.20

CALCULATED BY NFF DATE 1/25/01				ESTIMATED QUANTITIES					CHECKED BY RAK DATE 2/12/01					AS PER PLAN
ITEM	ITEM EXTENSION	TOTAL	UNIT	DESCRIPTION	REAR ABUTMENT	FORWARD ABUTMENT	PIERS	SUPER-STRUCTURE	GENERAL	REFERENCE SHEET NO.				
202	11203	LUMP	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN							4,8,13,15,19			
503	11100	LUMP	LUMP	COFFERDAMS, CRIBS AND SHEETING										
503	21101	737	CU. YD.	UNCLASSIFIED EXCAVATION, AS PER PLAN	281	281	175				4			
505	11100	LUMP	LUMP	PILE DRIVING EQUIPMENT MOBILIZATION										
507	00200	870	LIN. FT.	STEEL PILES HP12X53, FURNISHED	260	250	360							
507	00250	770	LIN. FT.	STEEL PILES HP12X53, DRIVEN	240	230	300							
507	50500	15	EACH	STEEL PILES SPLICES	5	5	5							
507	93301	50	EACH	STEEL POINT (OR SHOE), AS PER PLAN	10	10	30				4			
509	20001	200	POUND	REINFORCING STEEL, REPLACEMENT OF EXISTING REINFORCING STEEL, AS PER PLAN					200		4			
512	33000	6	SQ. YD.	TYPE 2 WATERPROOFING	3	3								
516	13900	54	SQ. FT.	2" PREFORMED EXPANSION JOINT FILLER	26	28								
516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (8 1/2"x12"x 2.52")*	12	12					18			
516	44101	24	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (12"x19"x 2.74")*			24				18			
516	44101	12	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES AND LOAD PLATE (NEOPRENE) (13"x19"x 2.84")*			12				18			
516	47001	LUMP	LUMP	JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN							4			
518	21230	LUMP	LUMP	POROUS BACKFILL WITH FILTER FABRIC										
518	40000	236	LIN. FT.	6" PERFORATED CORRUGATED PLASTIC PIPE	118	118								
518	40010	30	LIN. FT.	6" NON - PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	15	15								
SPECIAL	51912600	25	LIN. FT.	CONCRETE REPAIR BY EPOXY INJECTION			25							
601	20000	530	SQ. YD.	CRUSHED AGGREGATE SLOPE PROTECTION	265	265								
815	00050	41,600	SQ. FT.	SURFACE PREPARATION OF EXISTING STEEL, SYSTEM OZEU				41,600						
815	00056	41,600	SQ. FT.	FIELD PAINTING OF EXISTING STEEL, PRIME COAT, SYSTEM OZEU				41,600						
815	00060	41,600	SQ. FT.	FIELD PAINTING OF EXISTING STEEL, INTERMEDIATE COAT, SYSTEM OZEU				41,600						
815	00066	41,600	SQ. FT.	FIELD PAINTING OF EXISTING STEEL, FINISH COAT, SYSTEM OZEU				41,600						
842	43001	137	CU. YD.	CLASS C CONCRETE, PIER, AS PER PLAN			137				5			
842	45701	154	CU. YD.	CLASS C CONCRETE, ABUTMENT, AS PER PLAN	77	77					5			
843	50001	70	SQ. FT.	PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN	55	11	4				5			
863	10240	273,182	POUND	STRUCTURAL STEEL MEMBERS, LEVEL TWO (2) FABRICATION (A572 - 50)				273,182						
863	20000	7344	EACH	WELDED STUD SHEAR CONNECTOR				7344						
864	10100	1488	SQ. YD.	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	84	84	625	695						
894	10001	900	CU. YD.	HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN				900			5			

* AS PER PLAN

GENERAL NOTES - STRUCTURES

ITEM 516. JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN:

THIS ITEM SHALL CONSIST OF FURNISHING ALL NECESSARY LABOR, MATERIALS AND EQUIPMENT TO RAISE OR RE-POSITION ANY EXISTING STRUCTURE TO THE DIMENSIONS AND REQUIREMENTS DEFINED IN THE PROJECT PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, INSTALLATION AND OPERATION OF AN ADEQUATE JACKING SYSTEM, INCLUDING ANY TEMPORARY OR PERMANENT SUPPORTS NECESSARY TO PERFORM THE WORK DESCRIBED IN THE PROJECT PLANS. THREE (3) SETS OF JACKING PLANS, WHICH INCLUDE THE INFORMATION DESCRIBED IN THIS NOTE, SHALL BE SUBMITTED TO THE DIRECTOR FOR APPROVAL AT LEAST THIRTY (30) DAYS BEFORE ACTUAL WORK I TO BEGIN. THE PLANS SHALL BE PREPARED AND STAMPED BY A OHIO PROFESSIONAL ENGINEER.

JACKING SUBMITTALS SHALL INCLUDE AT LEAST THE FOLLOWING:

1. THE SIGNATURE AND NUMBER, OR PROFESSIONAL SEAL, OF THE OHIO REGISTERED PROFESSIONAL ENGINEER WHO PREPARED THE SUBMITTAL.
2. CALCULATIONS AND ANALYSES OF THE STRUCTURE TO DETERMINE AND DEFINE THE ACTUAL LOADING APPLIED AT THE CONTRACTOR'S SELECTED JACKING POINTS.
3. A DRAWING SHOWING THE PHYSICAL AND DIMENSIONAL POSITIONS OF THE JACKS WITH RESPECT TO THE STRUCTURE INCLUDING CLEARANCES AND CENTER OF LIFT.
4. A SCHEMATIC LAYOUT OF JACKS, CHECK VALVES, PUMPS WITH 3 WAY RETRACTOR VALVE, PRESSURE GAGES, FLOW CONTROL VALVES, ETC. IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. ALL JACKS FOR EACH ABUTMENT OR PIER SHALL BE CONNECTED TOGETHER. ALL JACKS AT EACH ABUTMENT OR PIER SHALL BE THE SAME SIZE.
5. ANALYSIS AND CALCULATIONS OF THE STRESSES INDUCED OR CREATED IN THE STRUCTURE AND ANY TEMPORARY OR PERMANENT SUPPORTS. DESIGN CALCULATIONS FOR ANY TEMPORARY OR PERMANENT SUPPORTS.
6. PHYSICAL DIMENSIONS, MATERIALS, AND FABRICATION DETAILS OF ANY TEMPORARY OR PERMANENT SUPPORTS. HORIZONTAL AND VERTICAL MOVEMENT RESTRAINT SHALL BE PROVIDED.
7. A STEP BY STEP PROCEDURE DETAILING ALL STEPS IN THE JACKING OPERATION.
8. METHOD OF ATTACHMENT TO STRUCTURAL MEMBERS. WELDING TO TENSION AREAS WILL NOT BE PERMITTED.

THE ENTIRE SYSTEM INCLUDING JACKS SHALL HAVE 20% MORE CAPACITY THAN REQUIRED BASED ON CALCULATED LOADS.

FOR LIFTS GREATER THAN 1 INCH, JACKS SHALL HAVE LOCKING NUTS TO POSITIVELY LOCK AND SUPPORT THE STRUCTURE DURING THE LIFT.

JACKS SHALL HAVE A SWIVEL LOAD CAP, A DOMED PISTON HEAD OR SOME OTHER DEVICE TO PROTECT AGAINST THE EFFECTS OF SIDE LOAD ON THE JACK.

JACKS ALONE SHALL NOT BE USED TO SUPPORT LOADS EXCEPT DURING THE ACTUAL JACKING OPERATION. TEMPORARY SUPPORTS, BLOCKING OR OTHER METHODS APPROVED BY THE DIRECTOR SHALL BE USED.

SINGLE ACTING RAMS WITH NO OVER-TRAVEL PROTECTION SYSTEM SHALL NOT BE USED.

SPARE EQUIPMENT SHALL BE AVAILABLE ON SITE FOR THE REQUIRED STRUCTURE RAISING TO PROCEED IN THE EVENT OF BREAKDOWN. A LIST OF SPARE EQUIPMENT SHALL BE PROVIDED TO THE ENGINEER.

AT A MINIMUM, A JACKING OPERATION SHALL LIFT ALL BEAMS AT ANY ONE ABUTMENT OR PIER SIMULTANEOUSLY. THE ONLY EXCEPTION IS THE SITUATION WHERE THE WORK INVOLVES REPLACING OR REHABILITATING INDIVIDUAL BEARINGS; NO PERMANENT SHIMMING IS REQUIRED AND THE HEIGHT OF THE LIFT SHALL NOT EXCEED 1/4 INCH.

MAXIMUM DIFFERENTIAL JACKING HEIGHT BETWEEN ANY ADJACENT ABUTMENTS OR PIERS SHALL BE 1 INCH OR LESS. THIS HEIGHT MAY BE MODIFIED IF CALCULATIONS, BY THE CONTRACTOR'S OHIO REGISTERED PROFESSIONAL ENGINEER, SHOW THE SUPERSTRUCTURE COMPONENTS WILL NOT BE TEMPORARILY STRESSED BEYOND ALLOWABLE STRESSES FOR THOSE COMPONENTS AND THAT NO PERMANENT STRESSES WILL BE INCLUDED IN THE COMPONENTS AFTER THEY OBTAIN THEIR FINAL POSITION.

IF DURING THE JACKING OPERATIONS, CRACKING OF THE CONCRETE SUPERSTRUCTURE, SEPARATION OF THE CONCRETE DECK FROM THE STEEL GIRDERS, OR OTHER DAMAGE TO THE STRUCTURE IS VISUALLY OBSERVED, THE JACKING OPERATION SHALL IMMEDIATELY CEASE AND APPROVED SUPPORTS SHALL BE INSTALLED. THE CONTRACTOR SHALL THEN ANALYZE THE DAMAGE AND SUBMIT A METHOD OF CORRECTION TO THE ENGINEER FOR APPROVAL. ANY BEAMS THAT SEPARATE FROM THE DECK SHALL BE EPOXY INJECTED FOR THE DISTANCE OF SEPARATION IN ACCORDANCE WITH ODOT'S PROPOSAL NOTE "CONCRETE REPAIR BY EPOXY INJECTION". COST OF THIS EPOXY INJECTION OR OTHER REQUIRED REPAIRS SHALL BE BORNE BY THE CONTRACTOR.

THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER THAT THE BRIDGE BEARINGS ARE FULLY SEATED AT ALL CONTACT AREAS. IF FULL SEATING IS NOT ATTAINED, SUITABLE MEANS OF REPAIR, SUBJECT TO THE ENGINEER'S APPROVAL, WILL BE REQUIRED AT THE CONTRACTOR'S EXPENSE.

PAYMENT SHALL BE MADE AT THE LUMP SUM PRICE BID FOR ITEM 516, JACKING AND TEMPORARY SUPPORT OF SUPERSTRUCTURE, AS PER PLAN. THIS SHALL INCLUDE ALL NECESSARY TOOLS LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

ITEM 611 REINFORCED CONCRETE APPROACH SLAB, T=15 INCHES, AS PER PLAN:

CONCRETE FOR THIS ITEM SHALL BE CLASS S, SS899 OR SS844, HIGH PERFORMANCE CONCRETE, MIX 4.

ITEM 843. PATCHING CONCRETE STRUCTURES, AS PER PLAN:

ALL SURFACES TO BE PATCHED AND THE EXPOSED REINFORCING STEEL WITHIN SHALL BE THOROUGHLY CLEANED BY ABRASIVE BLASTING PRIOR TO THE CLEANING SPECIFIED BY 519.04. CLEANING SHALL PRECEDE APPLICATION OF THE PATCHING MATERIAL OR ERECTIONS OF THE FORMS BY NOT MORE THAN 24 HOURS.

CONVERSION OF METRIC STANDARD DRAWINGS:

SOME OF THE STANDARD BRIDGE DRAWINGS REFERENCED IN THIS PLAN ARE METRIC. ANY CONVERSION OF DIMENSIONS REQUIRED TO CONSTRUCT THE ITEMS SHOWN ON THE STANDARDS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONVERSIONS SHALL BE MADE USING THE SI (METRIC) TO ENGLISH CONVERSION FACTORS PROVIDED IN SECTION 109.011 OF THE 1997 CONSTRUCTION AND MATERIALS SPECIFICATIONS. THE APPENDIX OF ASTM E380 SHALL BE UTILIZED FOR ANY ADDITIONAL CONVERSION FACTORS REQUIRED. CONVERSIONS SHALL BE APPROPRIATELY PRECISE AND SHALL REFLECT STANDARD INDUSTRY ENGLISH VALUES WHERE SUITABLE.

UTILITY LINES:

ALL EXPENSE INVOLVED IN RELOCATION (INSTALLING) THE AFFECTED UTILITY LINES SHALL BE BORNE BY THE UTILITY(IES). THE CONTRACTOR AND UTILITY(IES) ARE TO COOPERATE BY ARRANGING THEIR WORK IN SUCH A MANNER THAT INCONVENIENCE TO EITHER WILL BE HELD TO A MINIMUM.

ITEM 842 - CLASS C CONCRETE, AS PER PLAN:

THE AGGREGATE SHALL CONSIST OF NO. 8 LIMESTONE. THESE ITEMS SHALL INCLUDE THE COSTS OF THE REINFORCING STEEL.

ITEM 894- HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN:

THE AGGREGATE SHALL CONSIST OF No. 8 LIMESTONE. THE OPTION OF SLIP FORM CONSTRUCTION OF THE BRIDGE PARAPETS IS NOT PERMITTED. THIS ITEM SHALL INCLUDE THE COSTS OF THE REINFORCING STEEL.

DOWEL HOLES WITH NON-SHRINK, NON-METALLIC GROUT:

ALL DOWEL HOLES SHALL BE PERFORMED PER CMS 510 AS THE PREFERRED METHOD. PRIMARY REINFORCING STEEL SHALL BE DEVELOPED BY LAP SPLICING OR BY THE USE OF MECHANICAL CONNECTORS. CUTTING PRIMARY STEEL AND DOWELING NEW BARS SHALL NOT BE PERMITTED. PAYMENT FOR ALL OF THE ABOVE SHALL BE INCLUDED WITH THE APPLICABLE ITEM 842, CONCRETE.

ITEM 518 POROUS BACKFILL WITH FILTER FABRIC, AS PER PLAN:

THE MATERIAL SHALL BE NO. 57 GRAVEL.

DRIP GROOVES:

THE DRIP GROOVES AS DETAILED ON STANDARD CONSTRUCTION DRAWINGS SHALL NOT BE CONSTRUCTED.

SEALING OF CONCRETE (EPOXY-URETHANE):

ALL EXPOSED CONCRETE SURFACES ON THE SUPERSTRUCTURE, ABUTMENTS, WINGWALLS AND PIERS SHALL BE SEALED WITH AN EPOXY-URETHANE SEALER MEETING SPECIFICATION 864 TO THE LIMITS SHOWN ON THE PLANS.

SURVEY DISC ON STRUCTURE:

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST ONE (1) WEEK IN ADVANCE OF POURING THE CONCRETE FOR THE COMPLETION OF THE ABUTMENT. THE ENGINEER WILL PROVIDE THE CONTRACTOR ONE (1) SURVEY DISC (OBTAINED FROM THE DISTRICT SURVEYOR) WHICH THE CONTRACTOR SHALL PLACE IN THE SURFACE OF THE FRESH CONCRETE, THE LOCATION OF THE DISC SHALL BE ON THE ABUTMENT, AND ON A FLAT, HORIZONTAL SURFACE BEYOND THE EDGE OF DECK AND GUARDRAIL OR PARAPET. THE BENCHMARK SHALL BE ACCESSIBLE TO A SURVEYOR'S ROD WITHOUT ANY OBSTRUCTIONS. COST OF THIS WORK IS CONSIDERED INCIDENTAL TO THE CONCRETE BID ITEM.

PAINTING OF 863 STEEL:

NEW STEEL SHALL BE SHOP PRIMED, WHICH SHALL BE INCLUDED IN THE COST OF ITEM 863. THE NEW STEEL SHALL ALSO BE PREPARED AND PAINTED PER SUPPLEMENTAL SPECIFICATION 815 IN THE FIELD AS IF IT WERE EXISTING STEEL. QUANTITIES AND PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE SQUARE FOOT UNIT PRICE BID ITEM 815.

ITEM 815 - FIELD PAINTING OF EXISTING STEEL, SYSTEM OZEU:

ALL EXISTING AND NEW STEEL SHALL BE CLEANED AND PAINTED WITH A PRIME, INTERMEDIATE AND FINISH COAT OF PAINT IN THE FIELD USING SYSTEM OZEU. THE COST OF THIS WORK SHALL BE INCLUDED WITH SEVERAL FIELD PAINTING OF EXISTING STEEL, SYSTEM OZEU ITEMS FOR PAYMENT. THE COLOR OF THE FINISH COAT SHALL BE A GREEN COLOR MEETING FEDERAL STANDARD NUMBER 24277 OR A BLUE COLOR MEETING FEDERAL STANDARD NUMBER 25526. IN ADDITION TO THE SURFACE AREA OF THE STEEL BEAMS TO BE PAINTED, AN ADDITIONAL TWENTY FIVE PERCENT OF THIS AMOUNT HAS BEEN ADDED TO THE SQUARE FOOT TOTALS TO ACCOUNT FOR INCIDENTALS SUCH AS CROSS FRAMES AND BEARINGS.

ITEM 516- ELASTOMERIC BEARING:

FOR ADDITIONAL NOTES, SEE THE PROPOSAL NOTE TITLED" 516,517,518 FABRICATED MEMBERS"

ITEM SPECIAL - CONCRETE REPAIR BY EPOXY INJECTION:

FOR ADDITIONAL NOTES, SEE THE PROPOSAL NOTE TITLED" CONCRETE REPAIR BY EPOXY INJECTION"

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DESIGN AGENCY
R.R. WALKER & ASSOCIATES, INC.
CONSULTING ENGINEERS
JOB NUMBER 93197
THREE HING JAMES PARK - SUITE 300
WESTLAKE, OHIO 44145
TELEPHONE (440) 835-9400

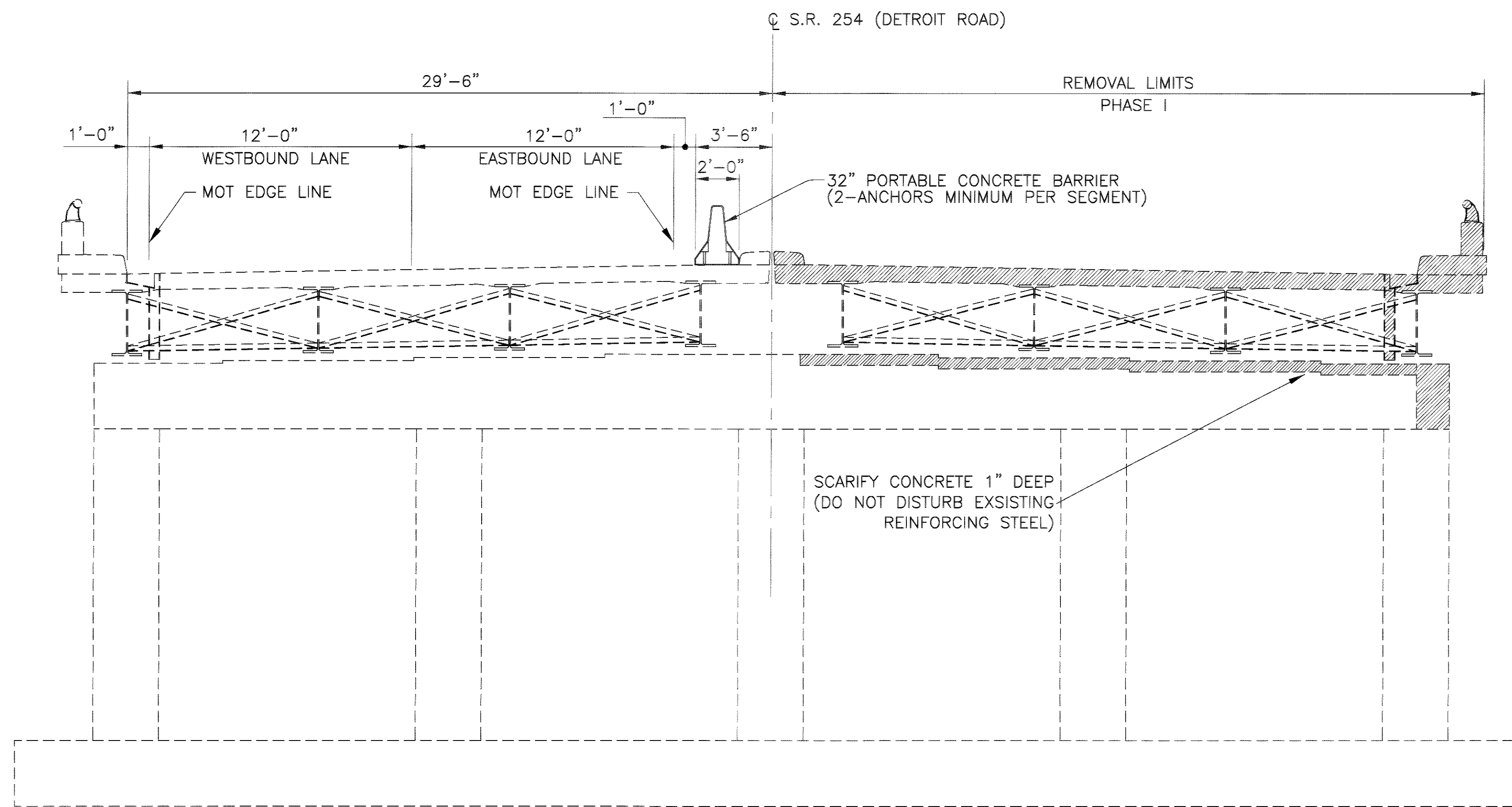
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NFF	2/13/01
CHECKED	REVIEWED
FRK	DW
	STRUCTURE FILE NUMBER
	4706277

GENERAL NOTES
BRIDGE No. LOR-90-1565
S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90

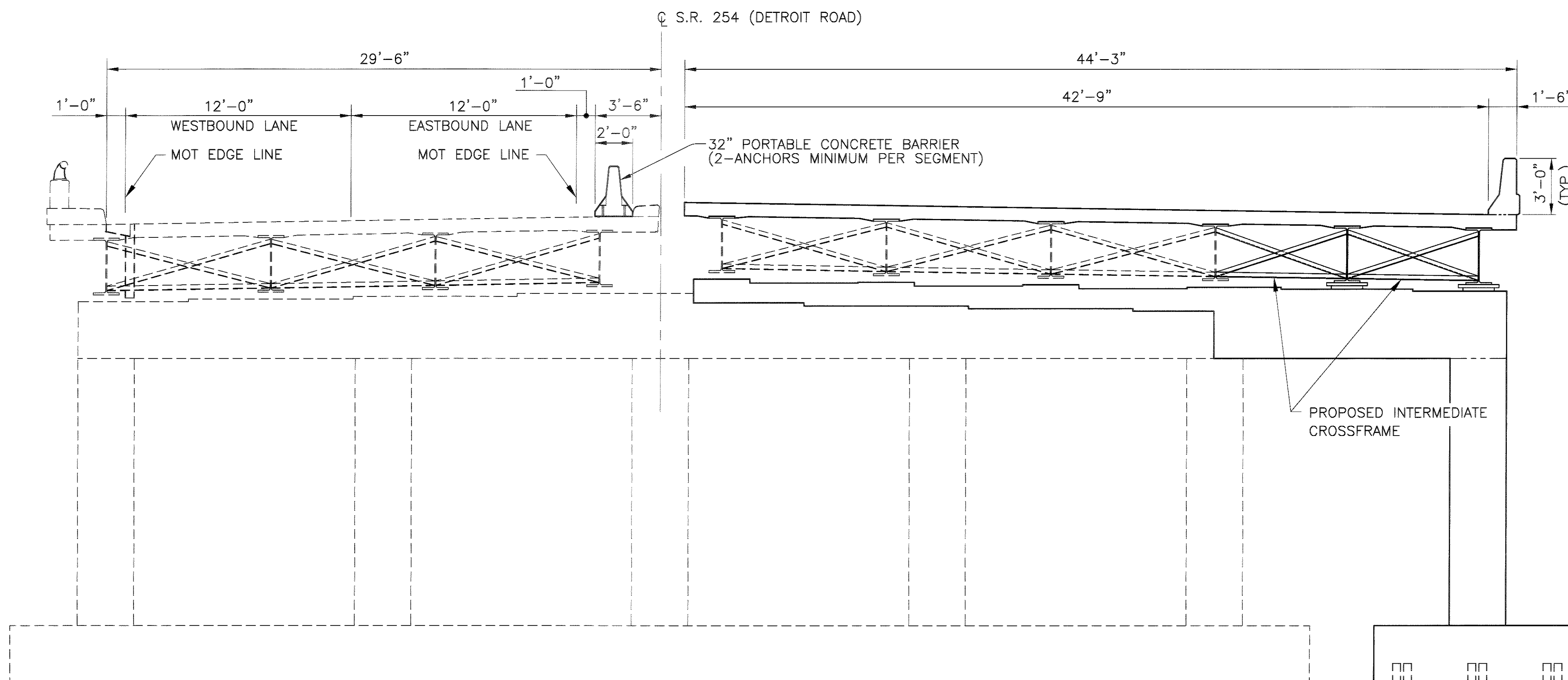
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**MAINTENANCE OF TRAFFIC PHASE I
REMOVAL**



**MAINTENANCE OF TRAFFIC PHASE I
NEW CONSTRUCTION**

SUGGESTED CONSTRUCTION SEQUENCE

PHASE I

- 1.) INSTALL PORTABLE CONCRETE BARRIER AS SHOWN ON PLANS.
- 2.) DIRECT WESTBOUND AND EASTBOUND TRAFFIC TOWARD NORTHERLY PORTION OF THE BRIDGE
- 3.) REMOVE EXISTING DECK TO THE LIMIT SHOWN IN MAINTENANCE OF TRAFFIC PHASE I - REMOVAL.
- 4.) CONSTRUCT NEW PORTION OF ABUTMENT AND PIERS.
- 5.) RE-SET EXISTING BEAMS TO NEW ADJUSTED PROFILE ON NEW BEARINGS.
- 6.) ERECT NEW BEAMS.
- 7.) CONSTRUCT NEW DECK AND PARAPET AS SHOWN ON MAINTENANCE OF TRAFFIC PHASE I - NEW CONSTRUCTION.

PHASE II

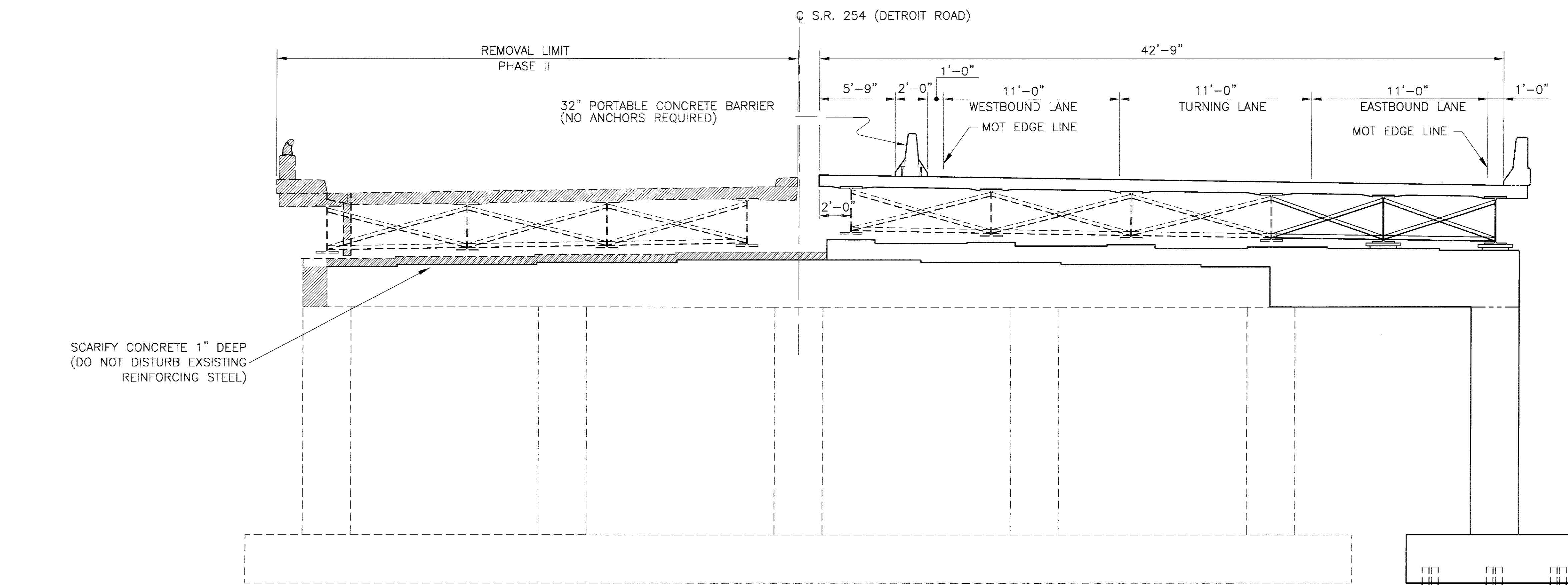
- 1.) INSTALL PORTABLE CONCRETE BARRIER ON THE NEWLY CONSTRUCTED WORK.
- 2.) DIRECT TRAFFIC TO THE SOUTHERLY PORTION OF THE BRIDGE.
- 3.) REMOVE EXISTING PORTABLE CONCRETE BARRIER AND REMAINING DECK TO THE LIMITS SHOWN IN MAINTENANCE OF TRAFFIC PHASE II - REMOVAL.
- 4.) CONSTRUCT NEW PORTION OF ABUTMENT AND PIERS.
- 5.) RE-SET EXISTING BEAMS TO NEW ADJUSTED PROFILE.
- 6.) ERECT NEW BEAMS.
- 7.) CONSTRUCT NEW DECK AND PARAPET AS SHOWN ON MAINTENANCE OF TRAFFIC PHASE II - NEW CONSTRUCTION.
- 8.) MAKE CLOSURE BAY NEW CROSSFRAME CONNECTIONS. PLACE CLOSURE SECTION DECK CONCRETE. REWORK APPROACH ROADWAY AS REQUIRED.
- 9.) RESUME NORMAL TRAFFIC.

NOTE:
 - INDICATES REMOVAL

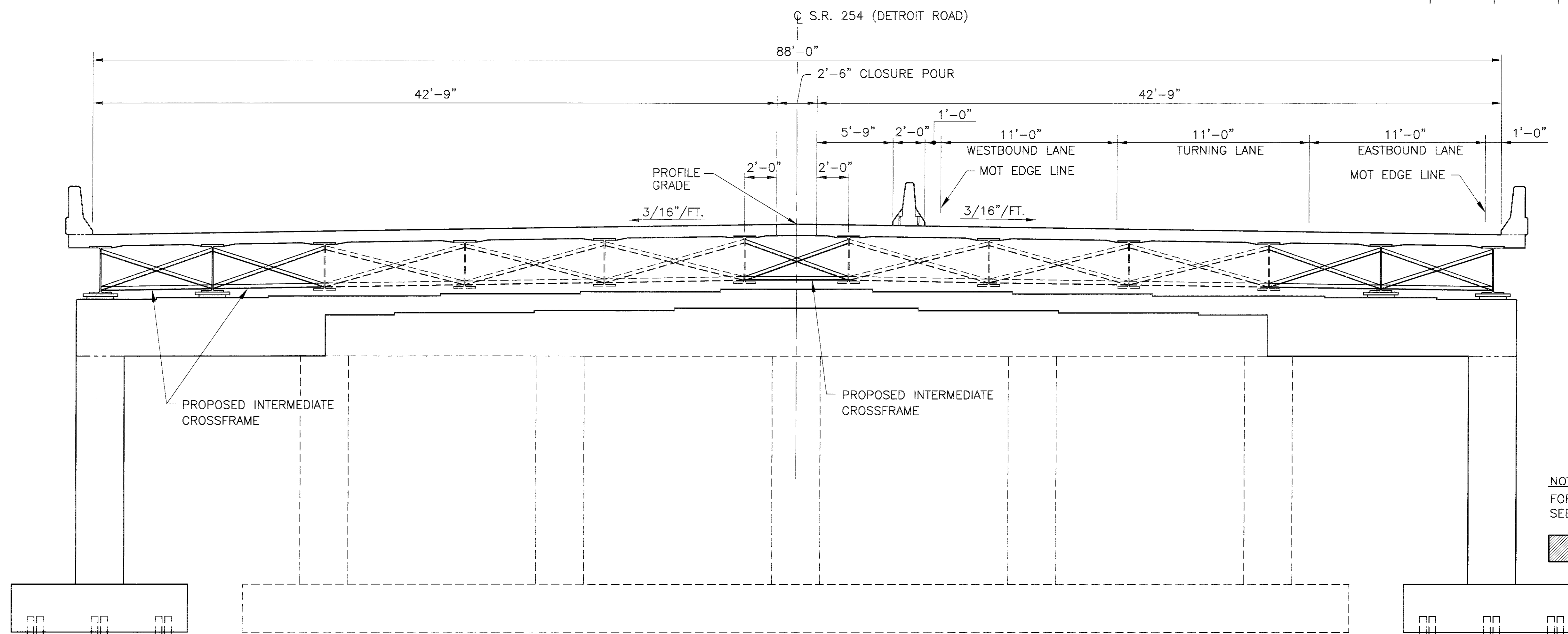
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DESIGN AGENCY R.E. MAHAR & ASSOCIATES, INC. CONSULTING ENGINEERS 2400 CENTER RIDGE ROAD WESTLAKE, OHIO 44145 TELEPHONE (416) 837-9400 JOB NUMBER 93197	DATE 2/13/01 STRUCTURE FILE NUMBER 4708277	REVIEWED DW STRUCTURE FILE NUMBER 4708277	DRAWN CAG REVISIONS	DESIGNED NFF CHECKED RAK	PHASE CONSTRUCTION DETAILS - PHASE I BRIDGE No. LOR-90-1565 S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90
LOR-90-13.20					
6 / 24					

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**MAINTENANCE OF TRAFFIC PHASE II
REMOVAL**



**MAINTENANCE OF TRAFFIC PHASE II
NEW CONSTRUCTION**

NOTE:
FOR SUGGESTED CONSTRUCTION SCHEDULE
SEE SHEET 6/24

- INDICATES REMOVAL

DESIGN AGENCY
THREE RIVERS PARK, SUITE 300
REYNOLDS ROAD
WESTLAKE, OHIO 44140
REYNOLDS & ASSOCIATES, INC.
CONSULTING ENGINEERS
PHONE (440) 832-9400
FAX (440) 832-9401
JOB NUMBER 93197

DATE
2/13/01
REVIEWED
DW
STRUCTURE FILE NUMBER
4706277

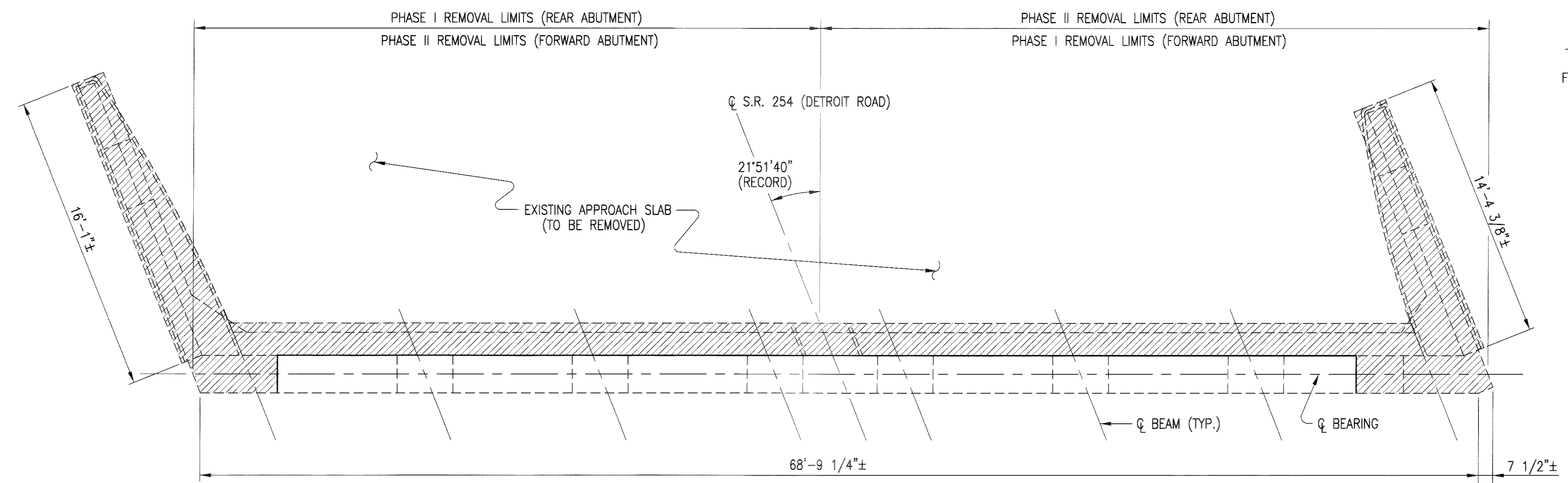
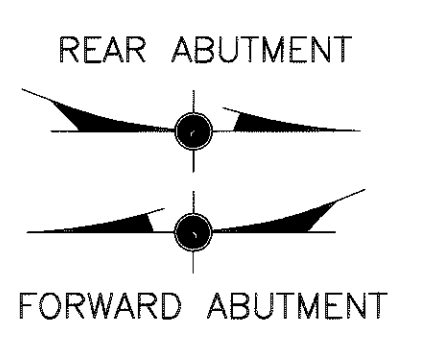
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PHASE CONSTRUCTION DETAILS - PHASE II
BRIDGE No. LOR-90-1565
S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90

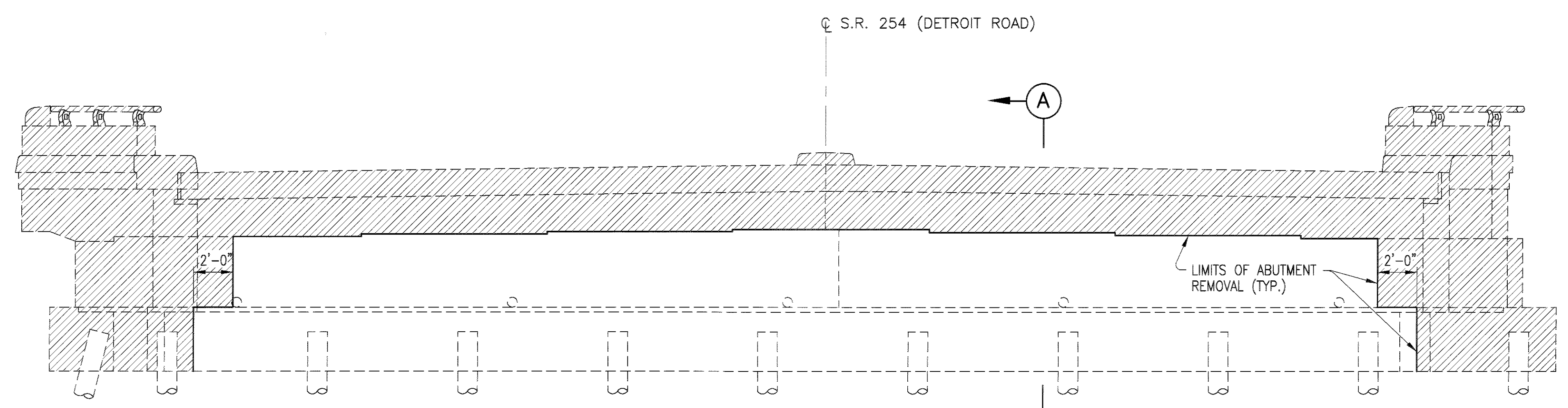
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7/24

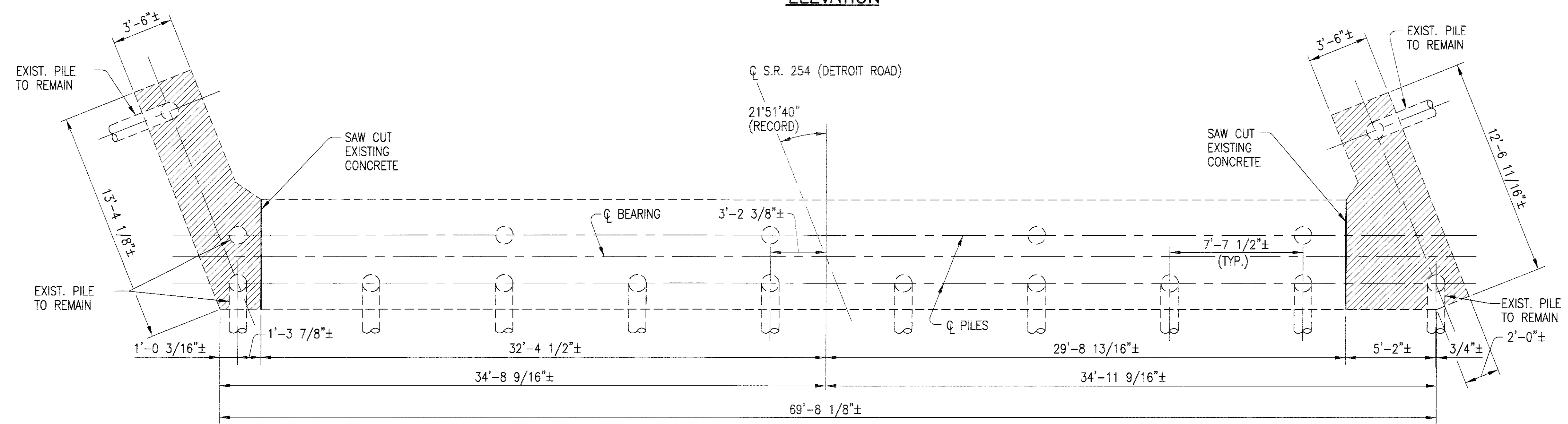
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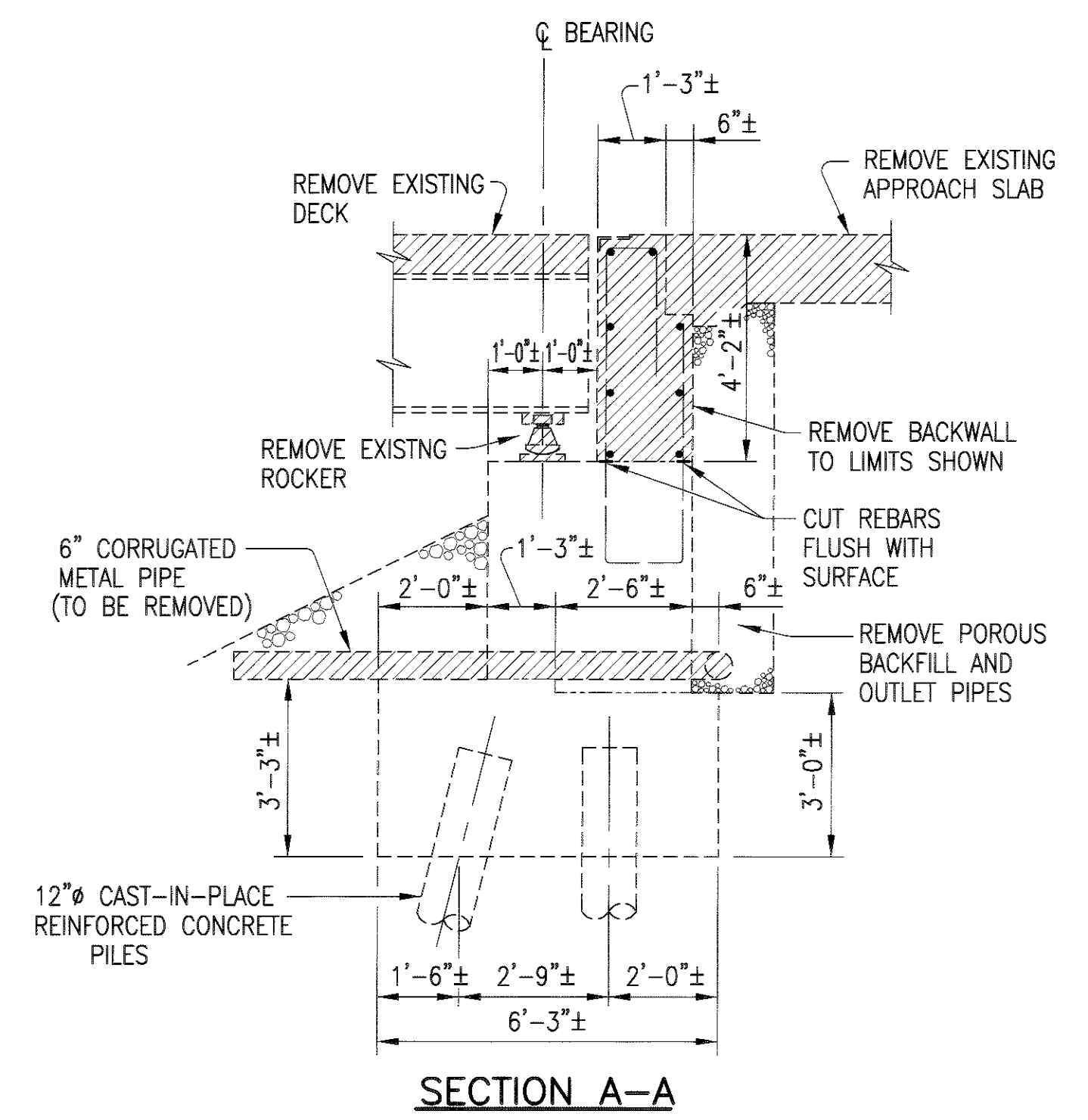
PLAN



ELEVATION



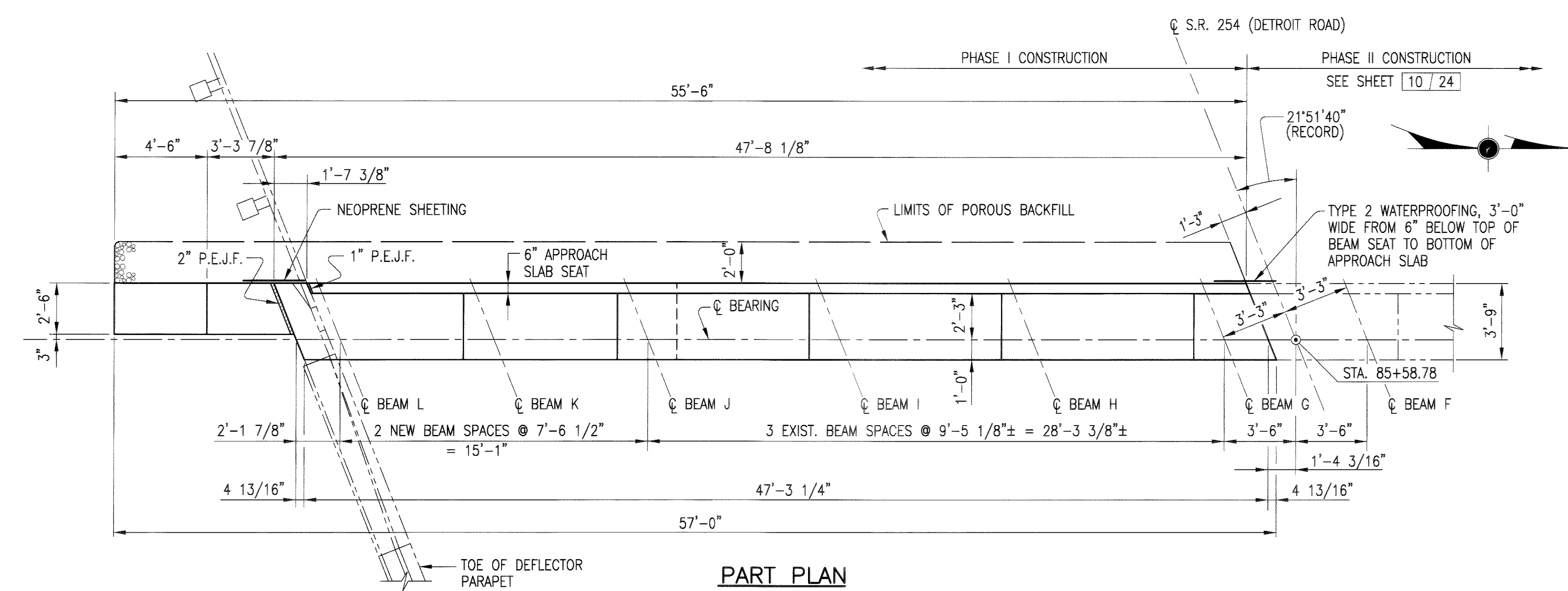
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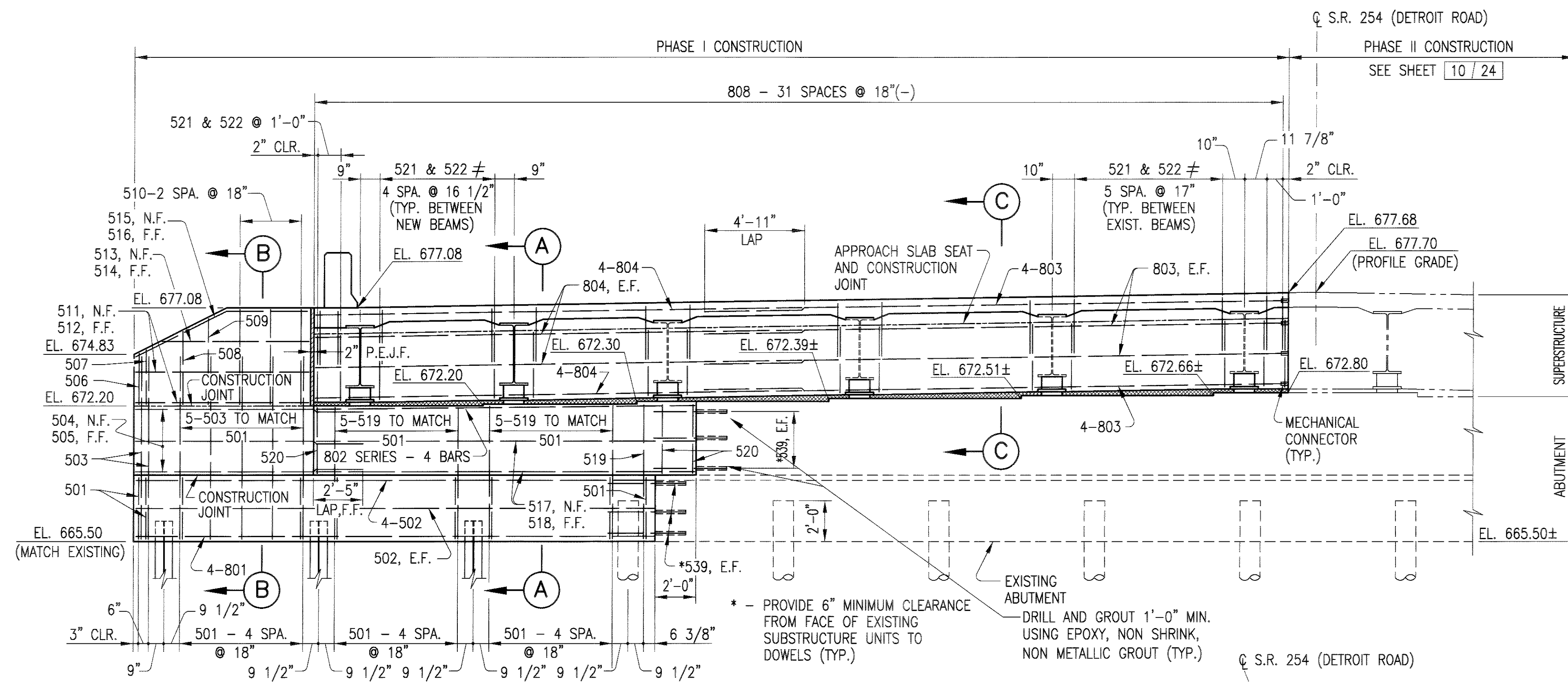
LEGEND:

INDICATES AREA TO BE REMOVED AS PER ITEM 202 PORTIONS OF STRUCTURE REMOVED.

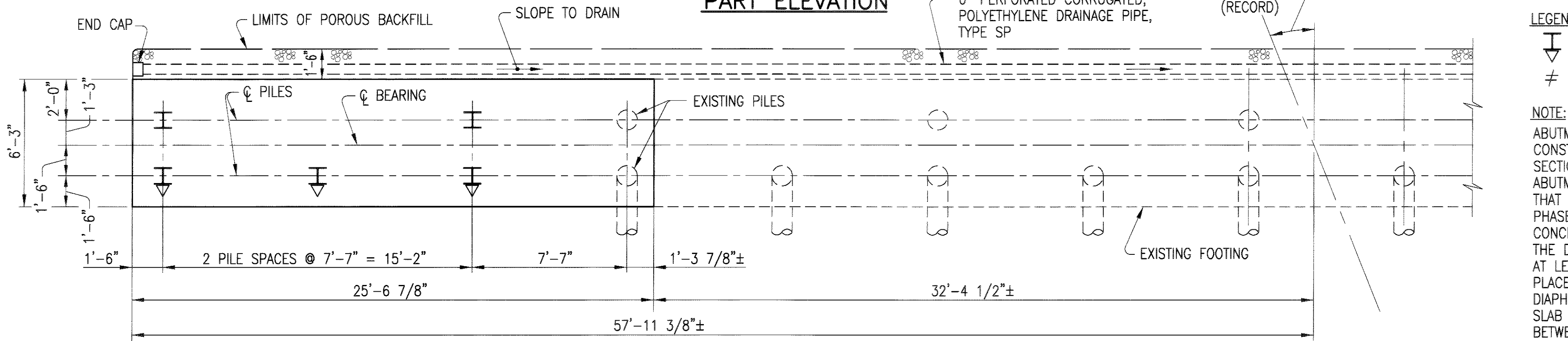
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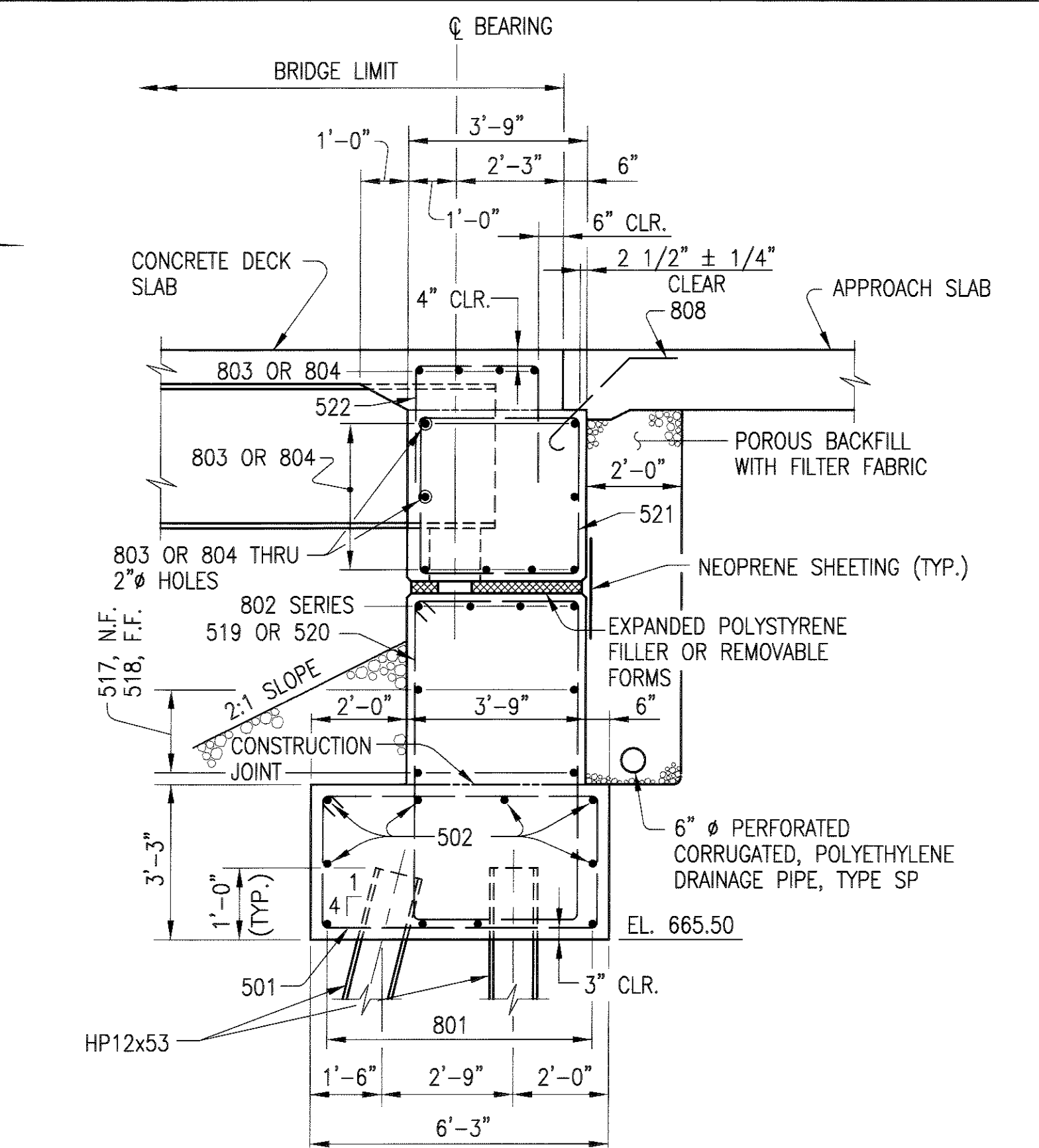
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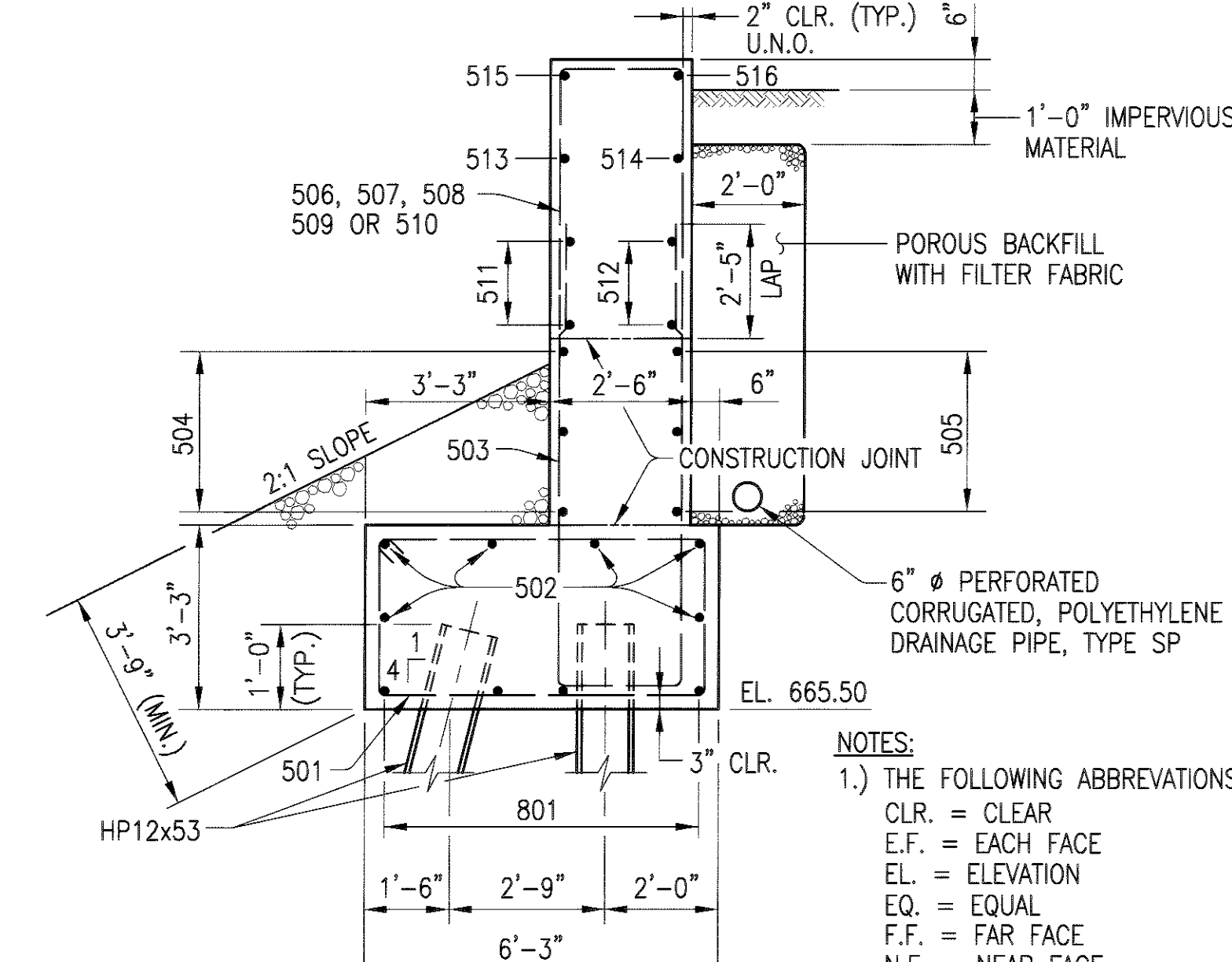
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PART FOOTING PLAN
(REINFORCING NOT SHOWN)



SECTION A-A



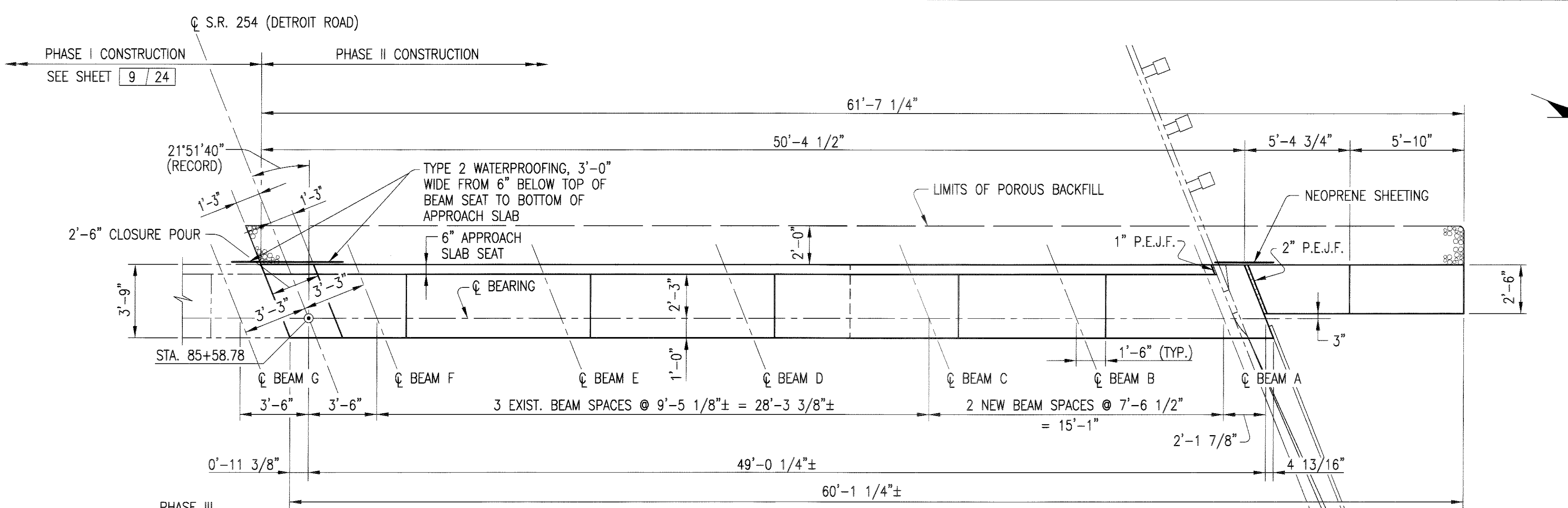
SECTION B-B

LEGEND:
 - INDICATES PILE BATTERED 1:4 IN DIRECTION SHOWN
 - PLACED PARALLEL TO BEAMS

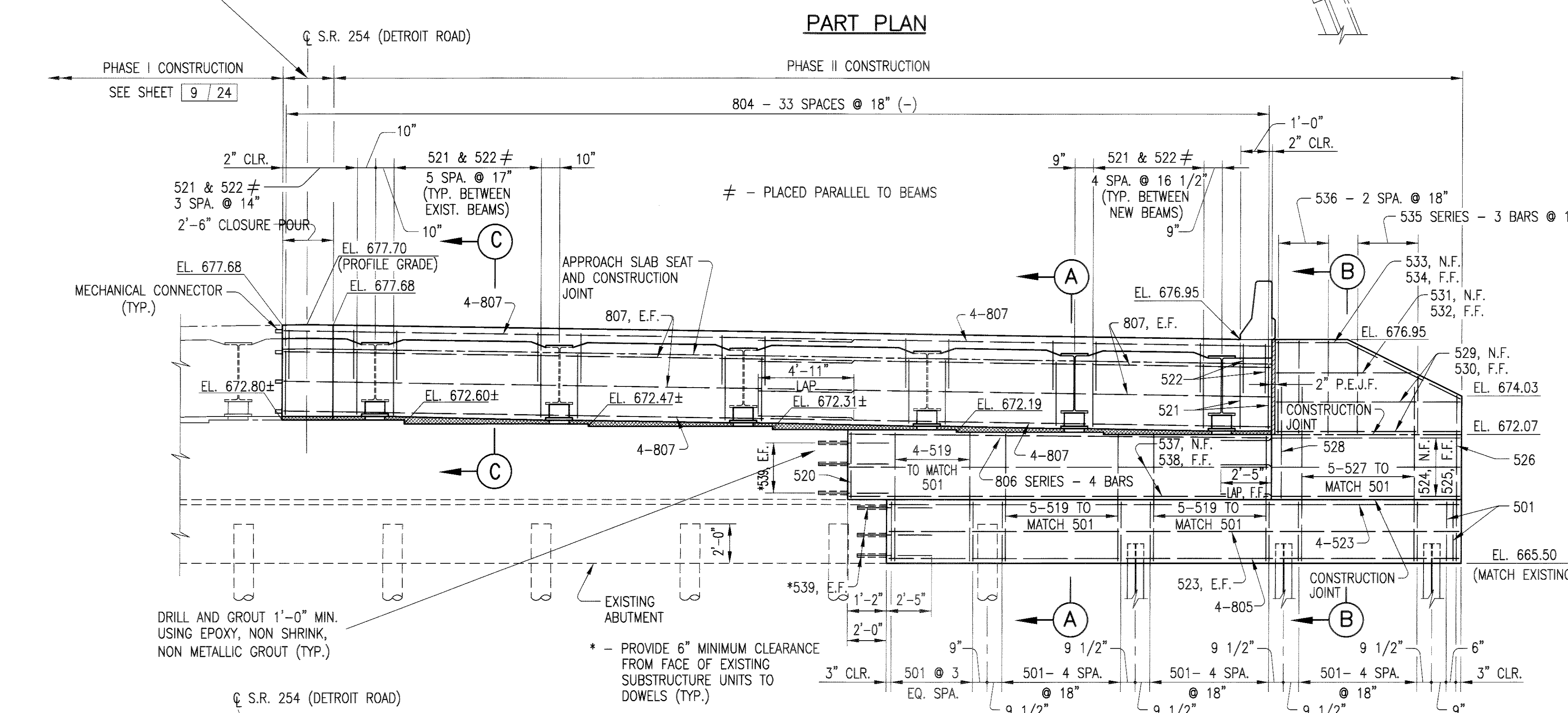
NOTE:
 ABUTMENT DIAPHRAGM CONCRETE, STEEL SUPERSTRUCTURE, PHASED CONSTRUCTION: WHERE THE PLANS DETAIL A SEPARATE CLOSURE POUR SECTION BETWEEN CONSTRUCTION PHASES, THE CONCRETE IN THE ABUTMENT DIAPHRAGM SECTIONS OF THIS SEMI-INTEGRAL ABUTMENT THAT ENCASES ANY STRUCTURAL STEEL MEMBERS OF AN INDIVIDUAL PHASE MAY BE PLACED EITHER SEPARATE OF OR WITH THE DECK CONCRETE OF THAT PHASE. IF THE CONTRACTOR CHOOSES TO PLACE THE DIAPHRAGM CONCRETE SEPARATELY, THE CONCRETE SHALL HAVE AT LEAST 48 HOURS OF SET TIME BEFORE DECK CONCRETE CAN BE PLACED. THE HORIZONTAL CONSTRUCTION JOINT BETWEEN THE DIAPHRAGM AND DECK CONCRETE SHOULD BE AT THE APPROACH SLAB SEAT. IF NO SEPARATE CLOSURE POUR SECTION IS DETAILED BETWEEN PHASES THE ABUTMENT DIAPHRAGM CONCRETE SHALL BE POURED SIMULTANEOUSLY WITH THE DECK POUR TO ALLOW FOR EXPECTED DEADLOAD ROTATION AT THE ABUTMENTS.

- NOTES:**
- 1.) THE FOLLOWING ABBREVIATIONS ARE USED:
 CLR. = CLEAR
 E.F. = EACH FACE
 EL. = ELEVATION
 EQ. = EQUAL
 F.F. = FAR FACE
 N.F. = NEAR FACE
 P.E.J.F. = PREFORMED EXPANSION JOINT FILLER
 SPA. = SPACES
 TYP. = TYPICAL
 U.N.O. = UNLESS NOTED OTHERWISE
 - 2.) ALL REINFORCING BAR MARKS SHALL BE PREFIXED AS FOLLOWS:
 REAR ABUTMENT: RA
 FORWARD ABUTMENT: FA
 - 3.) FOR REINFORCING SCHEDULE SEE SHEET [24 / 24]
 - 4.) POROUS BACKFILL WITH FILTER FABRIC, 2'-0" THICK SHALL EXTEND UP TO THE PLANE OF THE SUBGRADE TO 1'-0" BELOW THE EMBANKMENT SURFACE, AND LATERALLY TO THE ENDS OF THE WINGWALLS.
 - 5.) FOR ADDITIONAL DETAILS NOT SHOWN REFER TO ODOT STD. DWG. SICD-1-96M.
 - 6.) FOR EXISTING ABUTMENT REMOVAL LIMITS AND DETAILS SEE SHEET [8 / 24]
 - 7.) FOR PILE LAYOUT PLAN AND PILE IDENTIFICATION NUMBERS SEE SHEET [2 / 24]
 - 8.) FOR LIMITS OF SEALING OF CONCRETE SURFACES SEE SHEET [13 / 24]
 - 9.) FOR SECTION C-C, SEE SHEET [13 / 24]

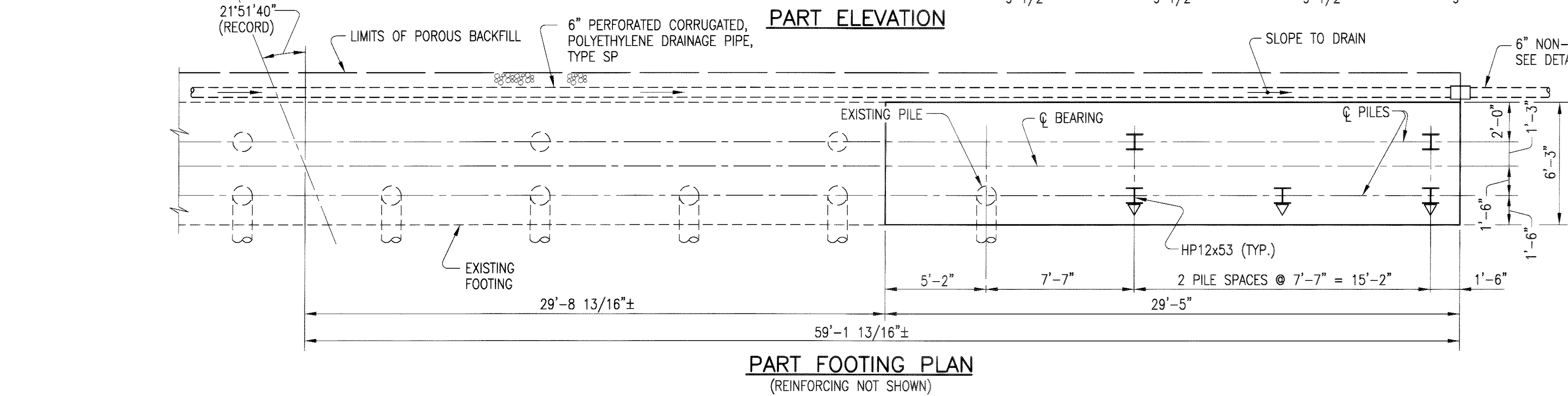
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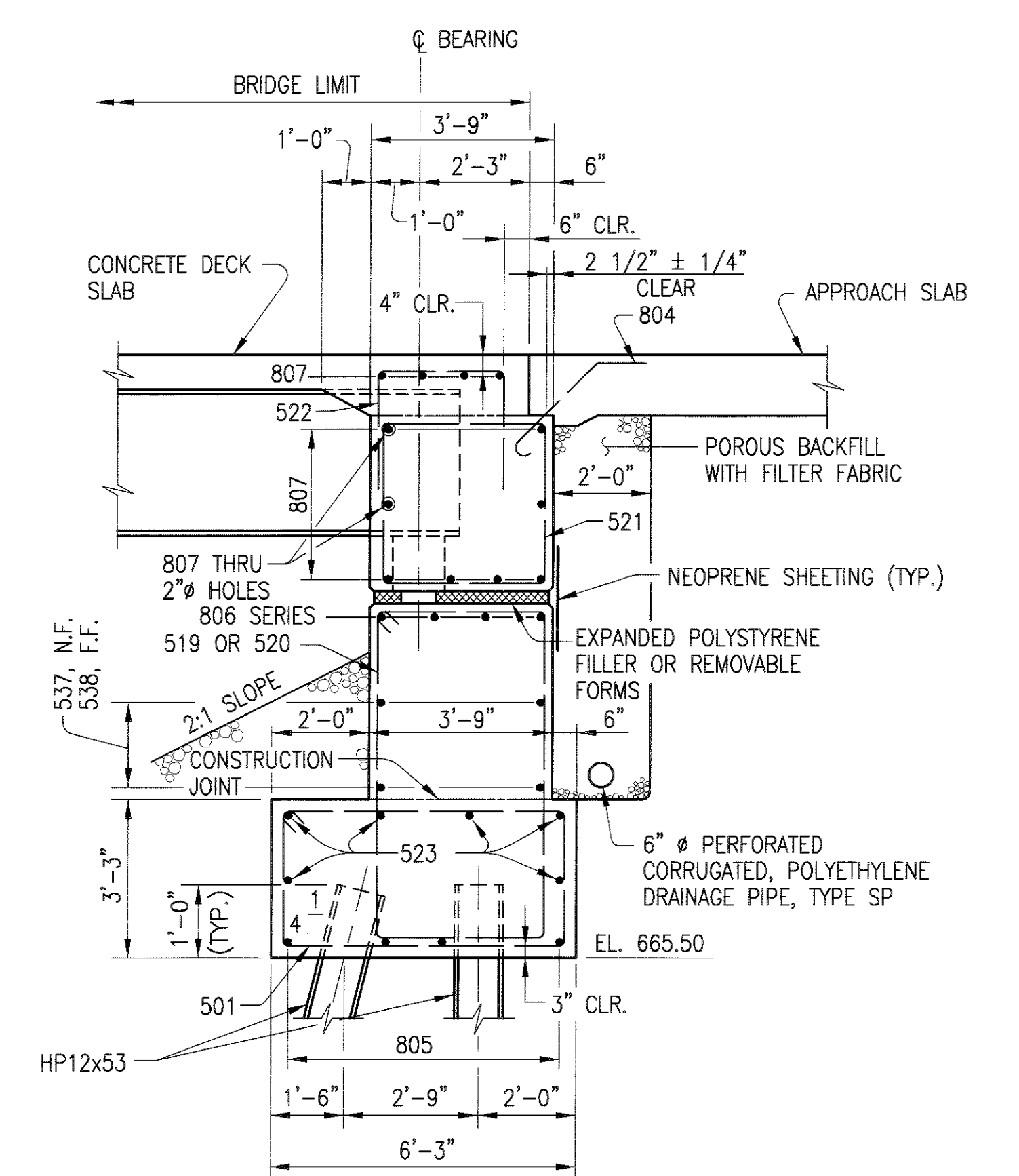
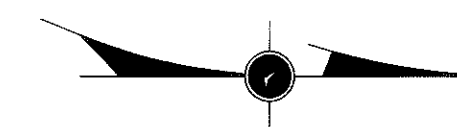
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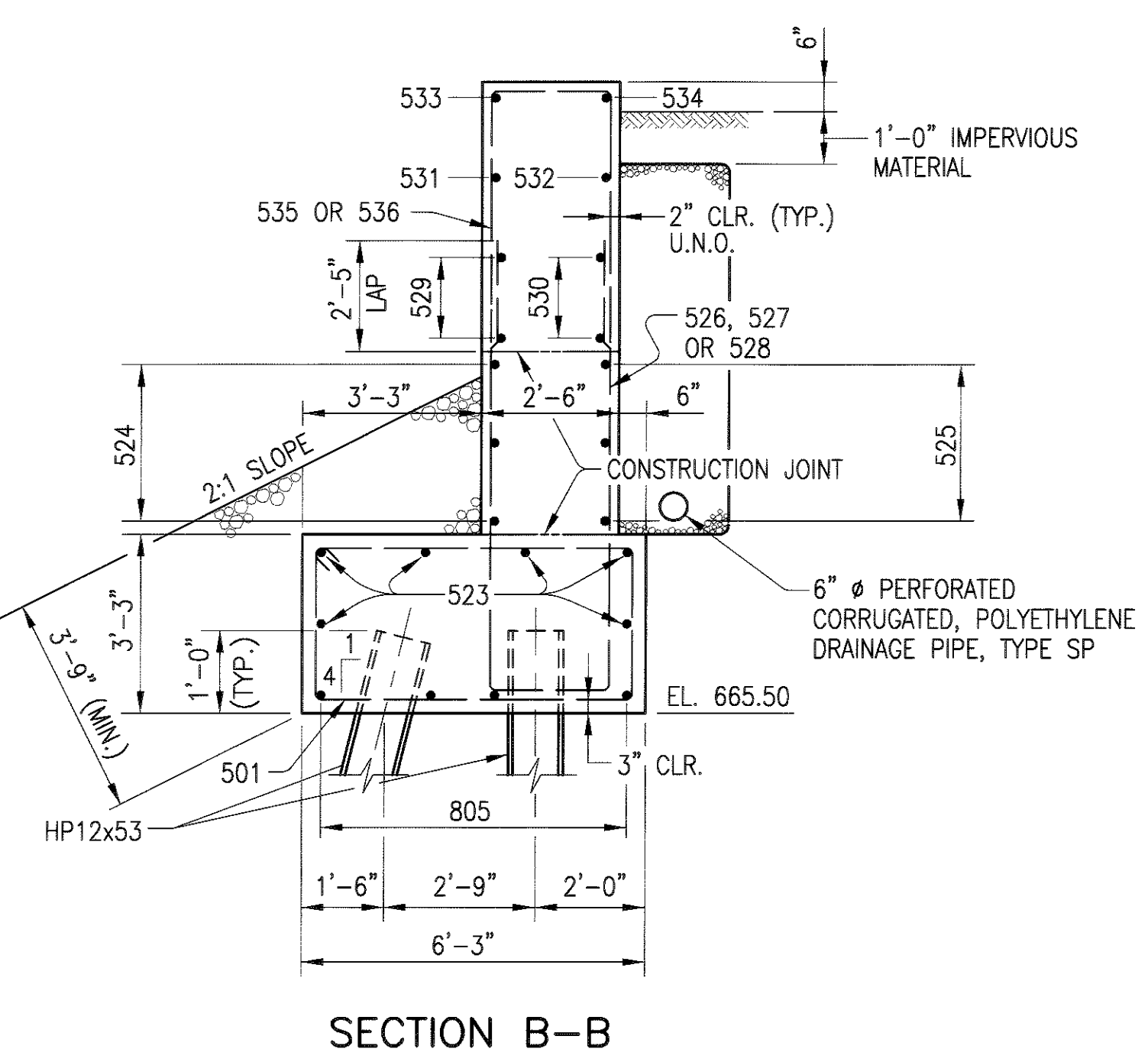
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SECTION A-A

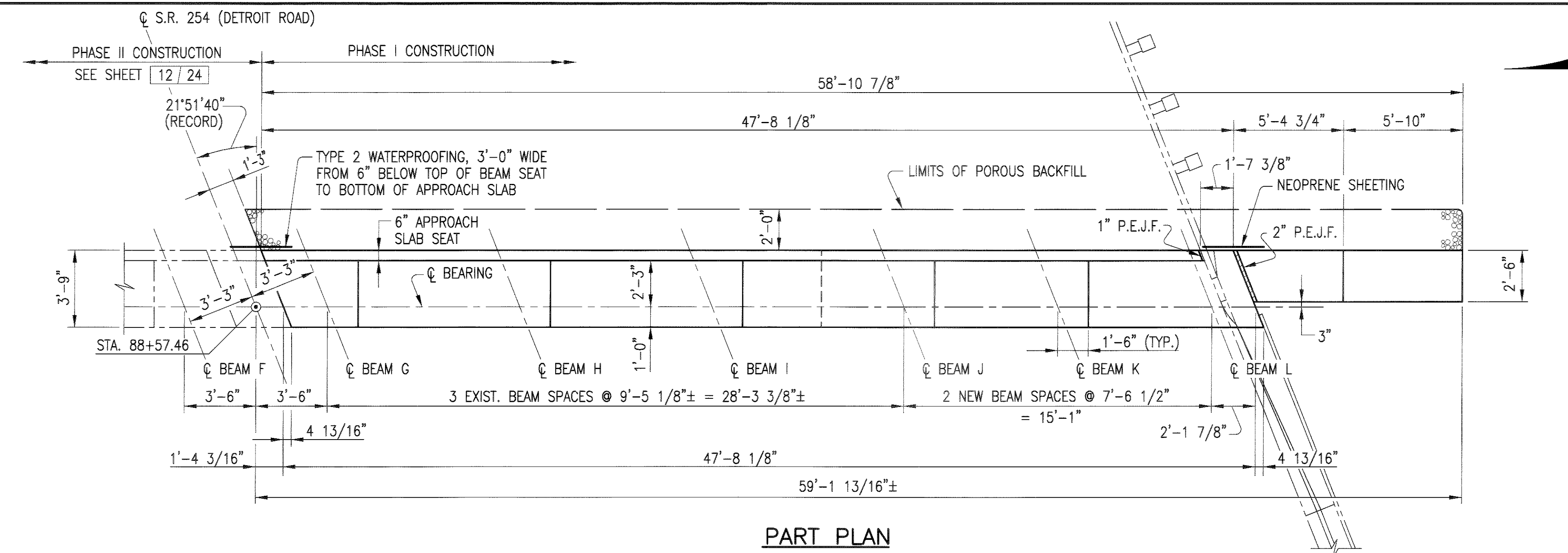


SECTION B-B

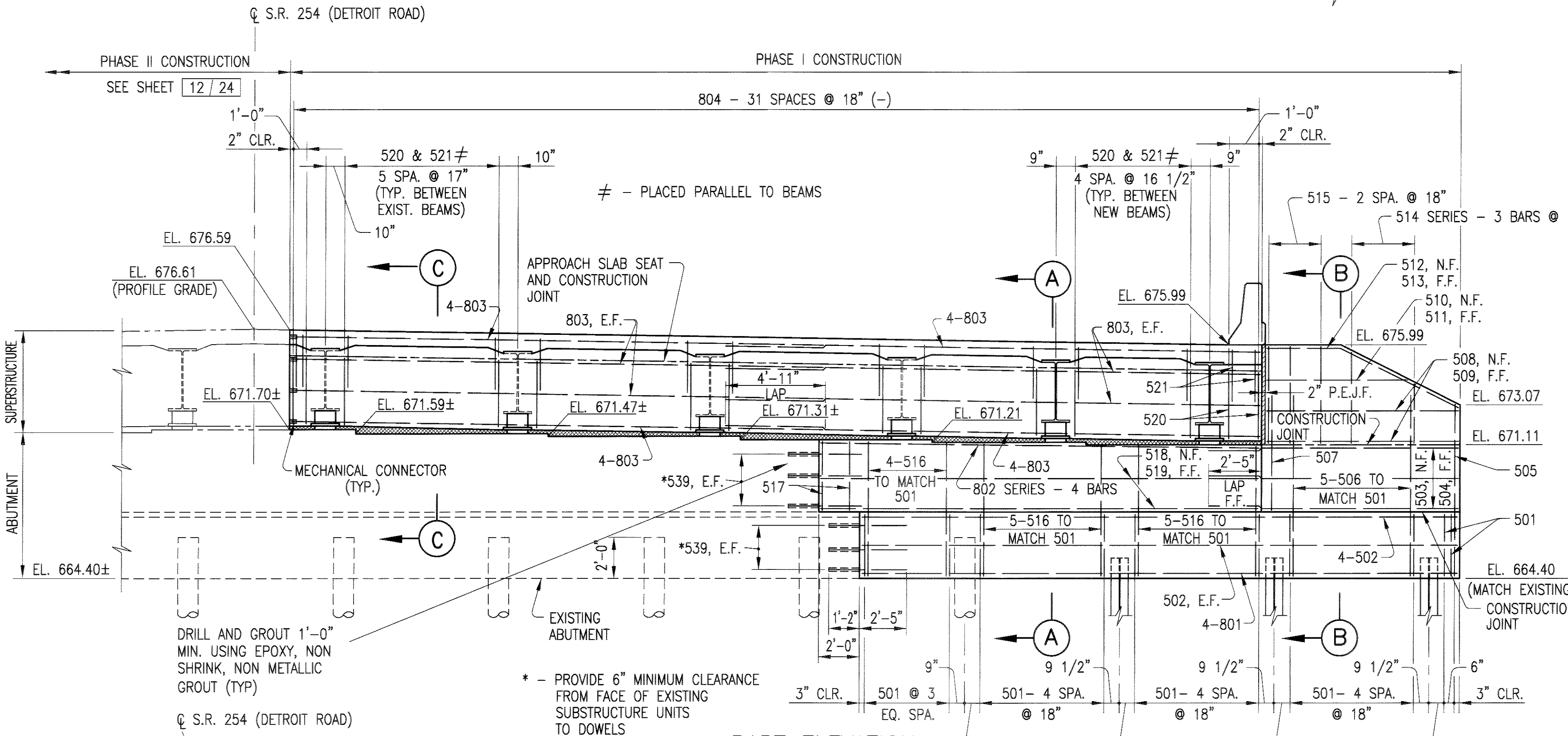
NOTES:
1.) FOR NOTES AND LEGEND SEE SHEET 9 / 24

DESIGN AGENCY R.F. WARNER & ASSOCIATES, INC. CONSULTING ENGINEERS 2460 CENTER ROAD WESTLAKE, OHIO 44145 TELEPHONE (416) 525-9900 JOB NUMBER 93197	DATE	2/13/01		
	REVIEWED	DW	STRUCTURE FILE NUMBER 4700277	
DESIGNED	NF	CHECKED	RAK	
DRAWN	CAG	REVISED		
REAR ABUTMENT DETAILS - PHASE II CONSTRUCTION				
BRIDGE No. LOR-90-1565				
S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90				
LOR-90-13.20				
10 / 24				
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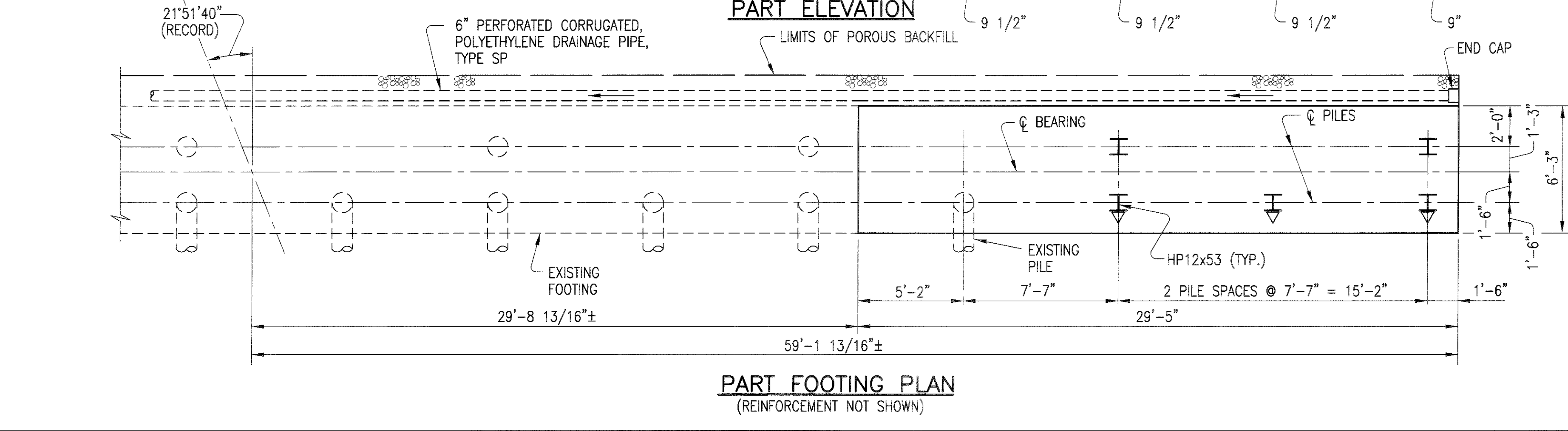
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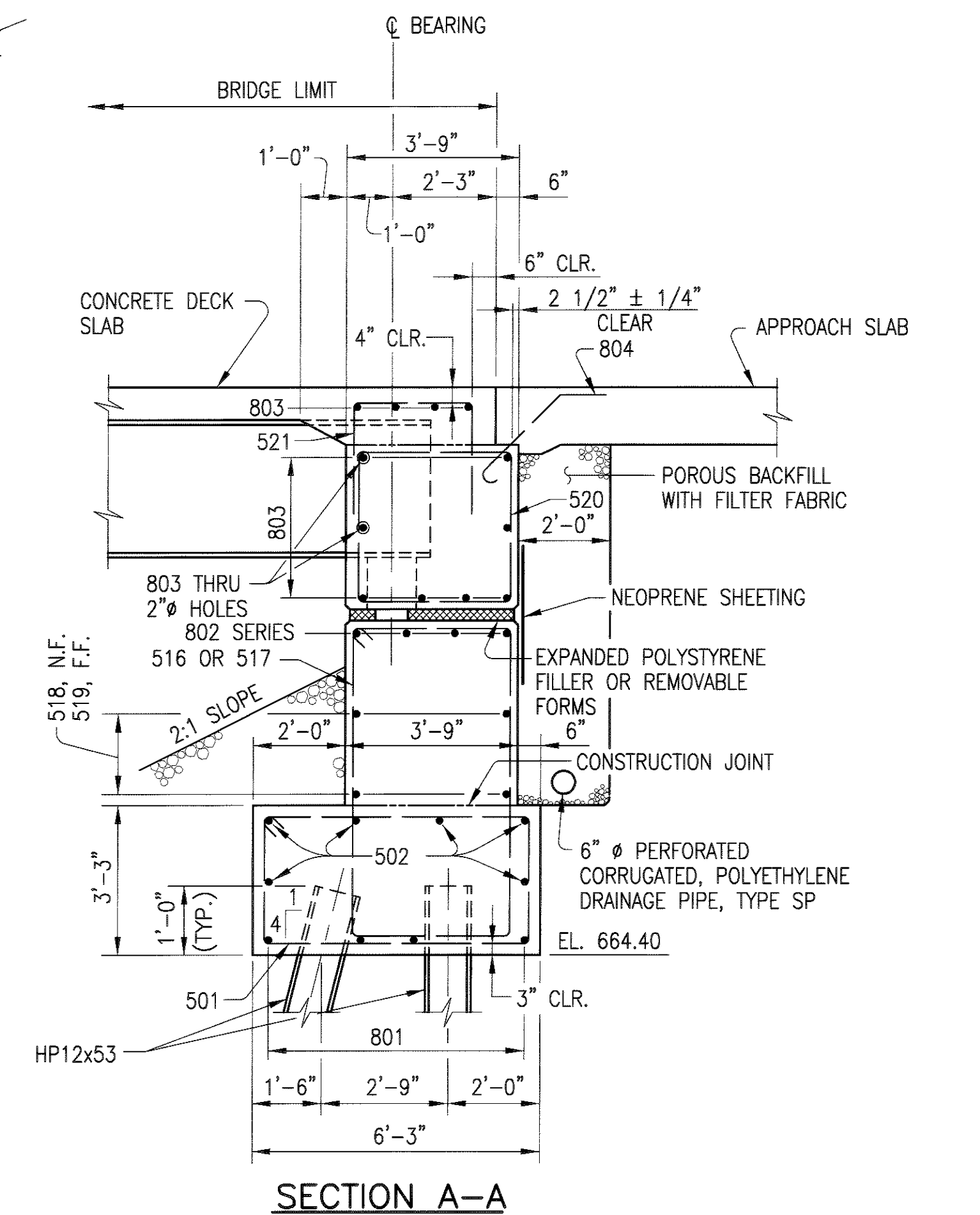
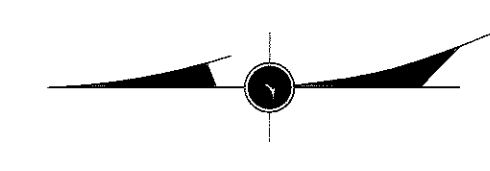
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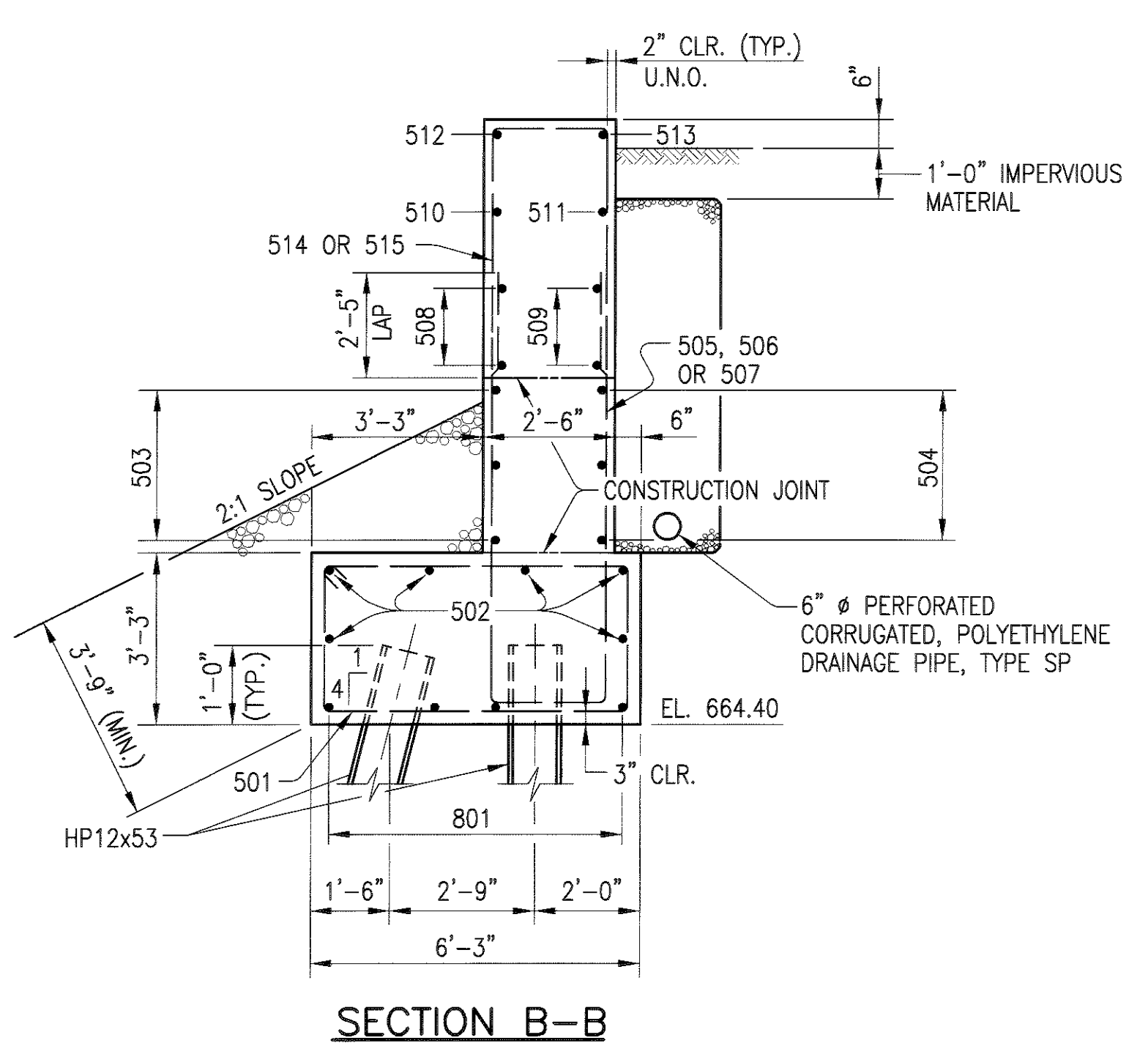
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PART FOOTING PLAN
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SECTION A-A



SECTION B-B

NOTES:
1.) FOR NOTES AND LEGEND SEE SHEET 9 / 24

DESIGN AGENCY
REW R.E. WARNER
 & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 24800 CEDAR RIDGE ROAD
 WESTLAKE, OHIO 44145
 TELEPHONE (419) 335-9400
 FAX (419) 335-9400
 JOB NUMBER 93197

DATE
2/13/01

REVIEWED
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STRUCTURE FILE NUMBER
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CHECKED
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FORWARD ABUTMENT DETAILS - PHASE I CONSTRUCTION

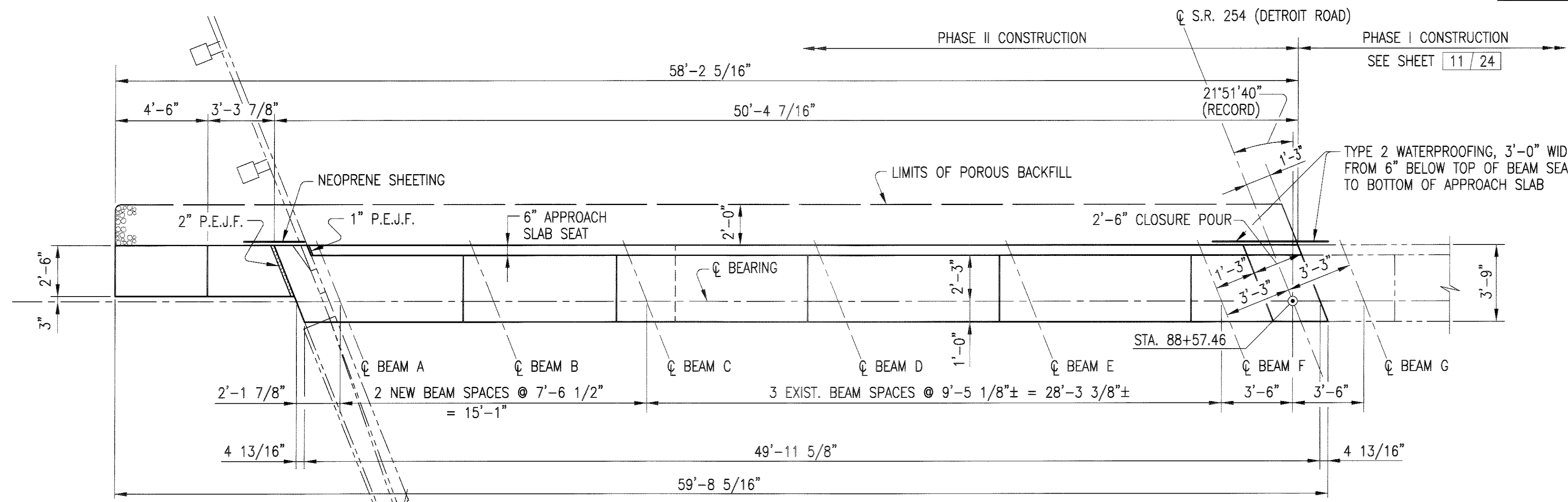
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S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90

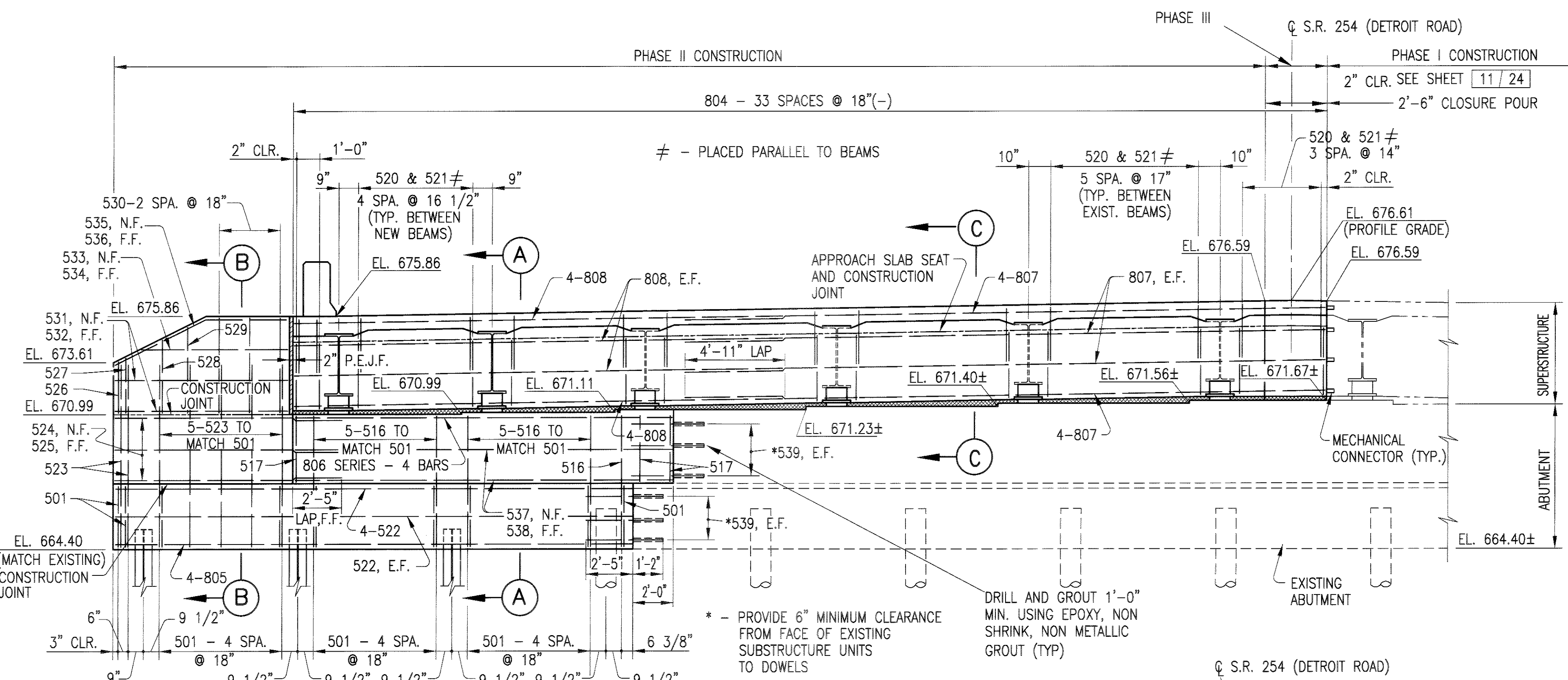
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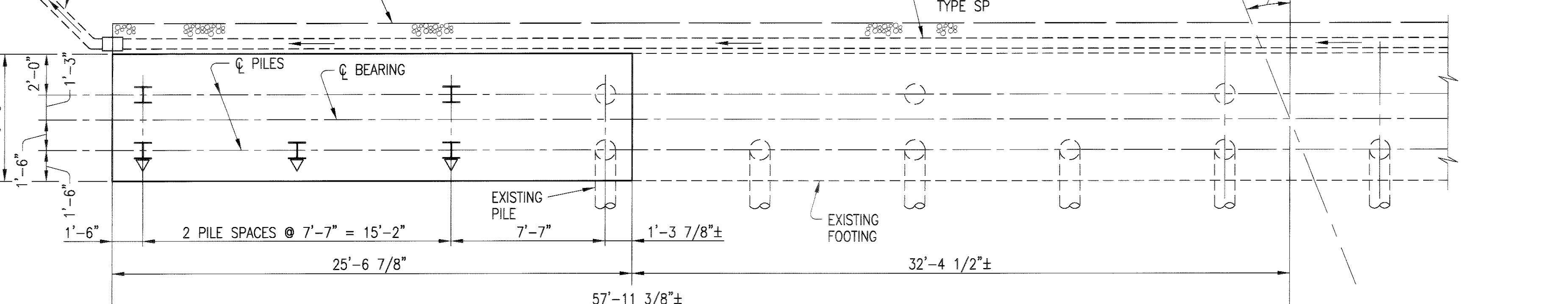
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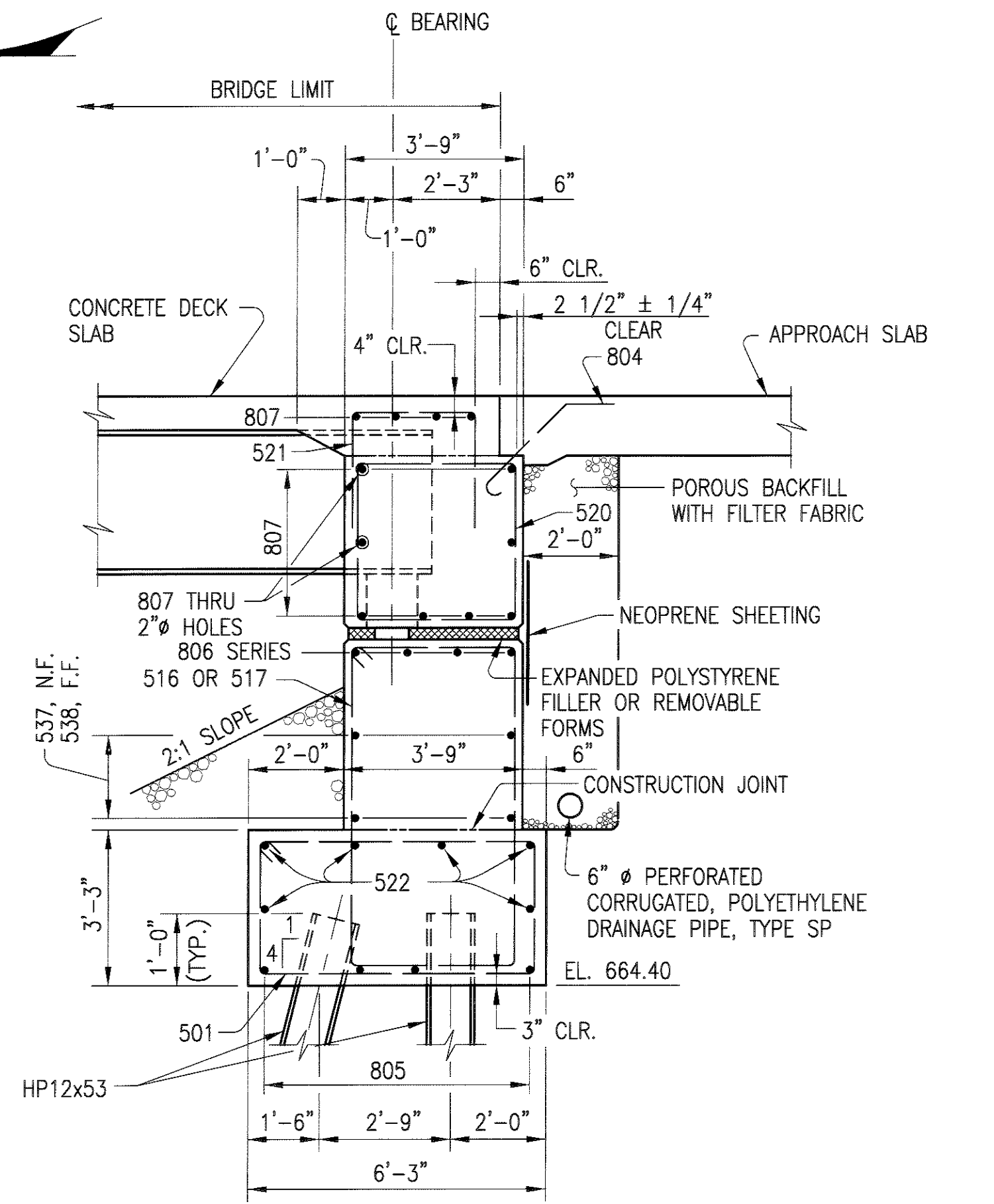
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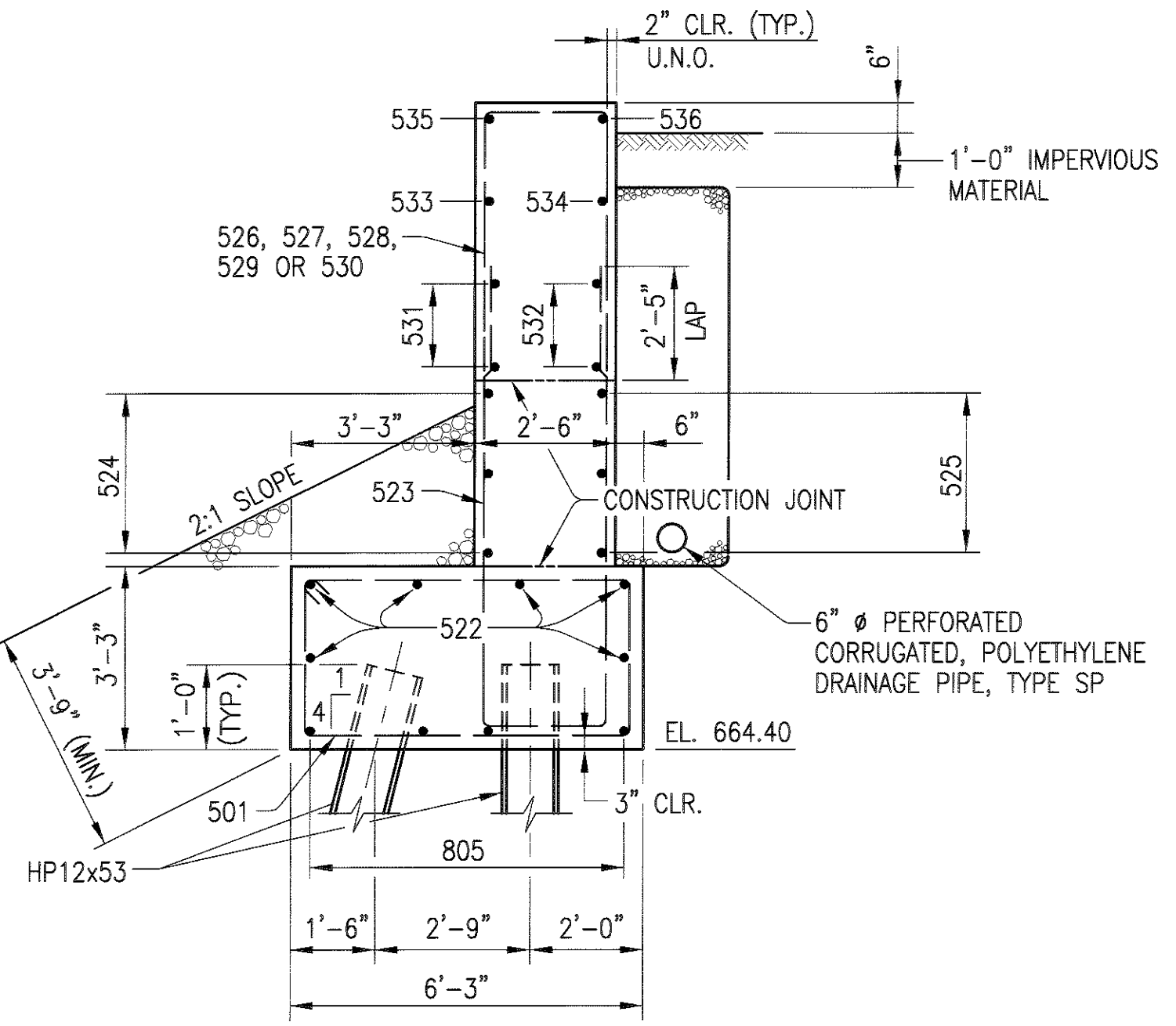
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PART FOOTING PLAN
(REINFORCEMENT NOT SHOWN)



SECTION A-A

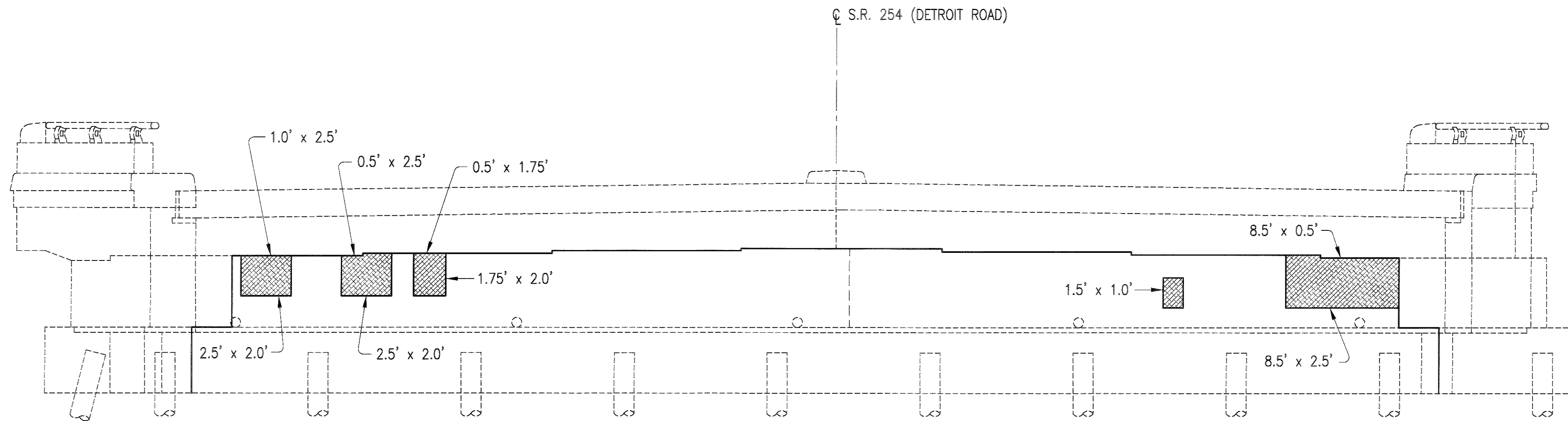


SECTION B-B

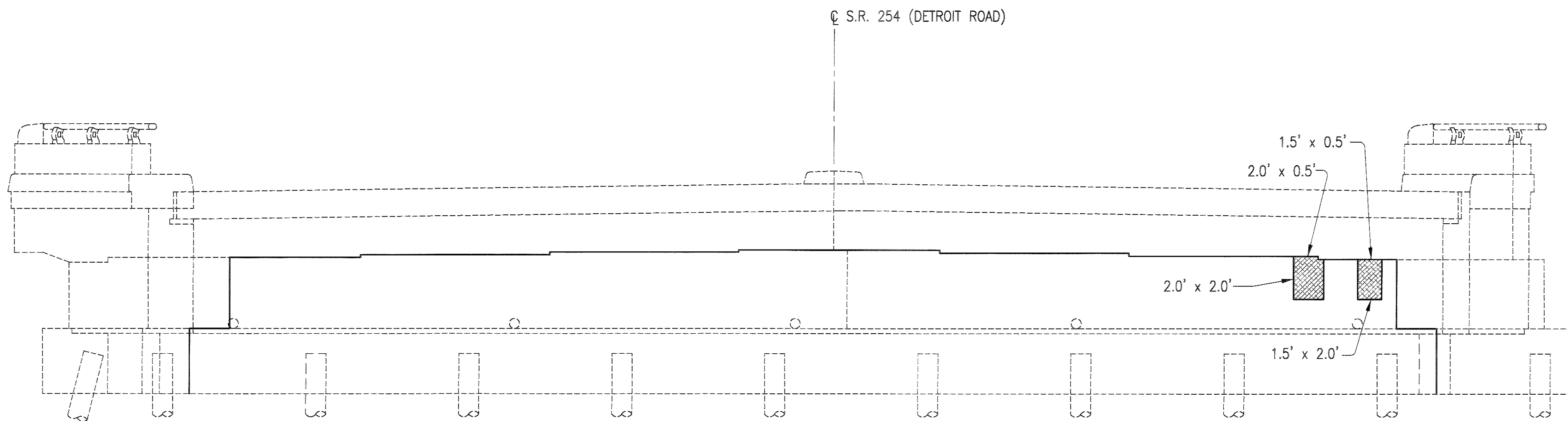
NOTES:
1.) FOR NOTES AND LEGEND SEE SHEET 9 / 24

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DESIGN AGENCY R.E. WALKER & ASSOCIATES, INC. CONSULTING ENGINEERS JOB NUMBER 93197	DATE 2/13/01	REVIEWED DW	STRUCTURE FILE NUMBER 4706277	DRAWN CAG	REVISIONS
FORWARD ABUTMENT DETAILS - PHASE II CONSTRUCTION BRIDGE NO. LOR-90-1565 S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90					
LOR-90-13.20					
12 / 24					
144 161					



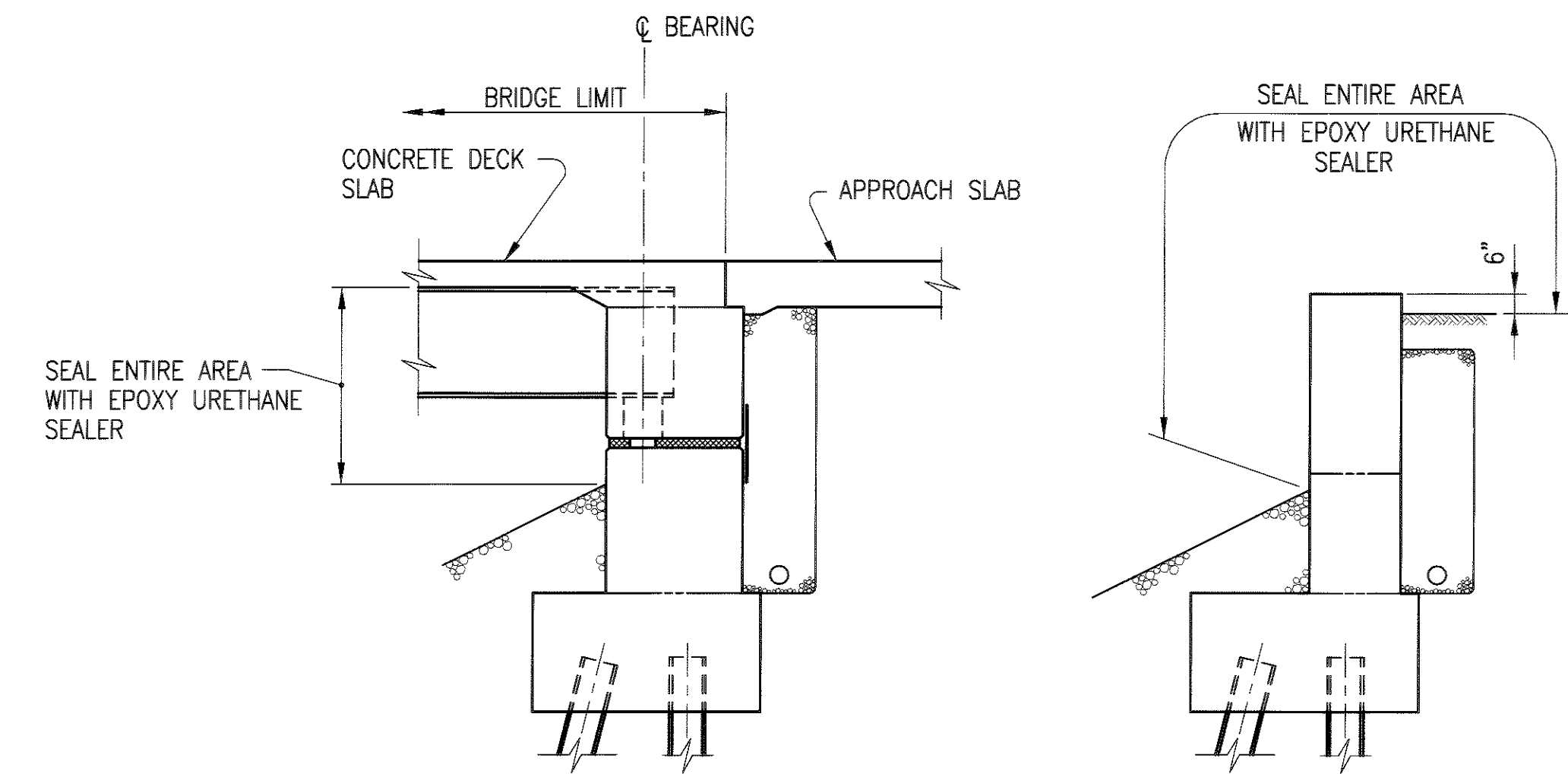
REAR ABUTMENT PATCHING ELEVATION



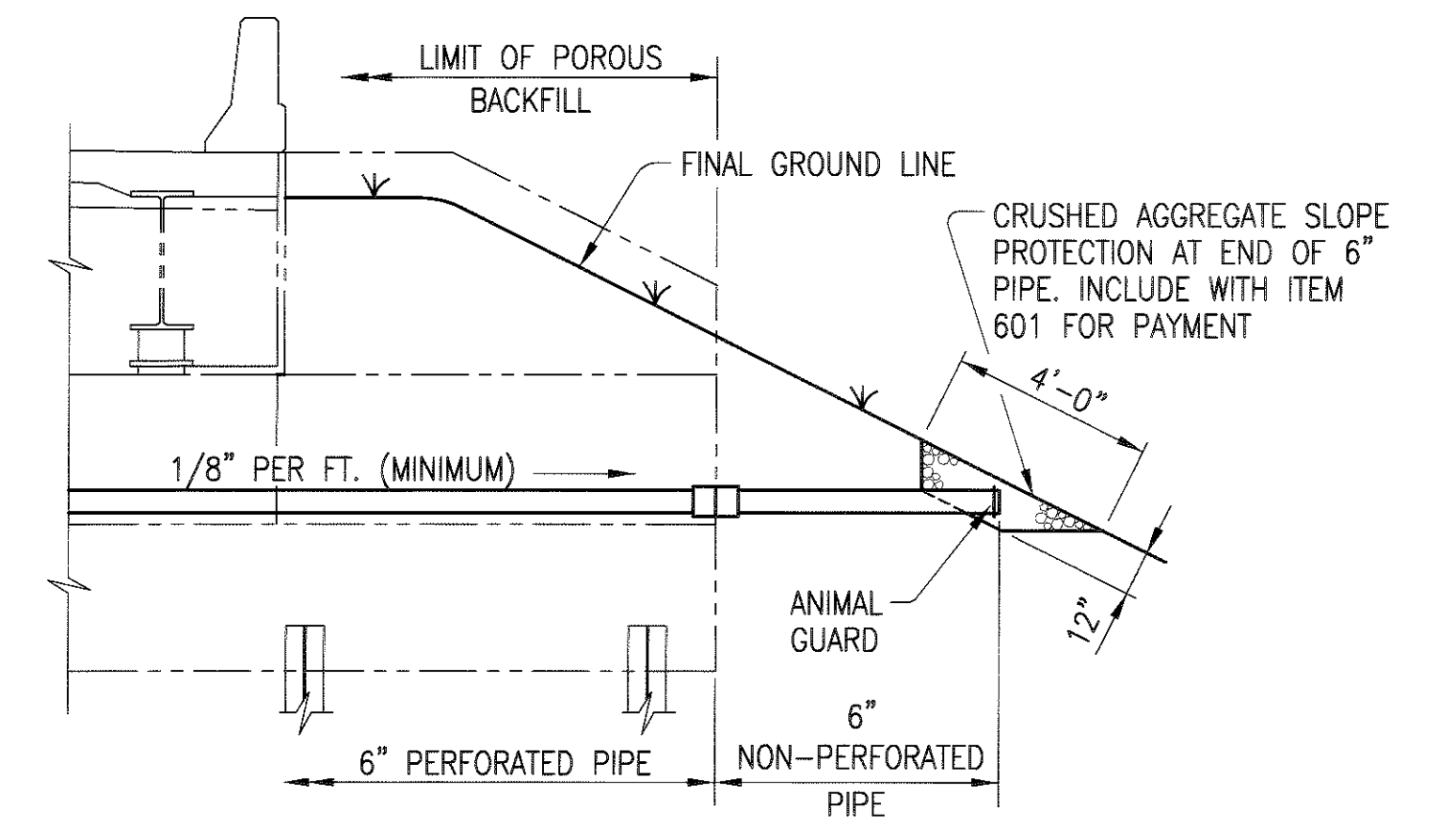
FORWARD ABUTMENT PATCHING ELEVATION

LEGEND:
 - ITEM 843 - PATCHING CONCRETE STRUCTURES WITH TROWELABLE MORTAR, AS PER PLAN

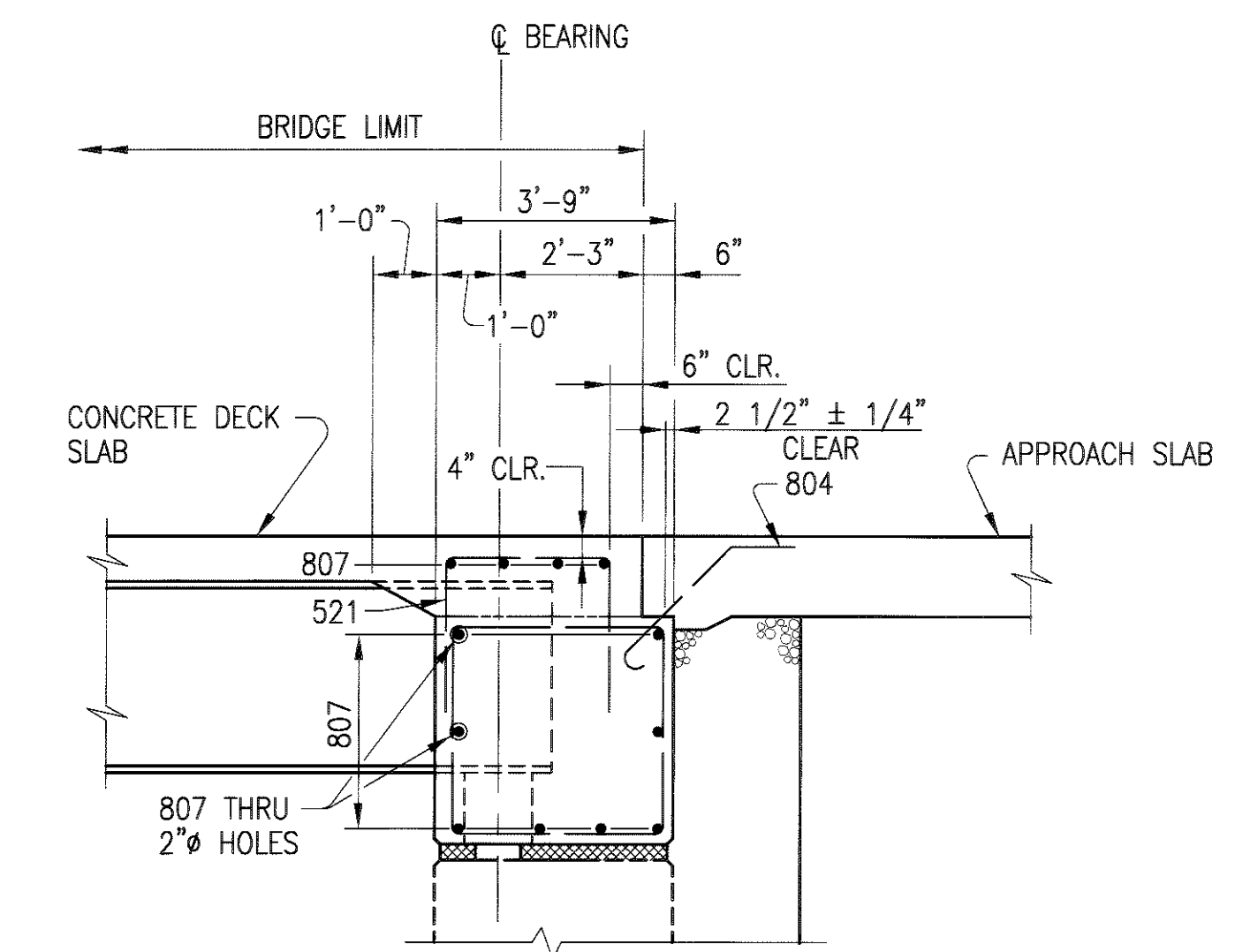
NOTE: PHYSICAL INVENTORY OF MEASURED QUANTITIES
 OF DETERIORATION WAS PERFORMED IN AUGUST 2001



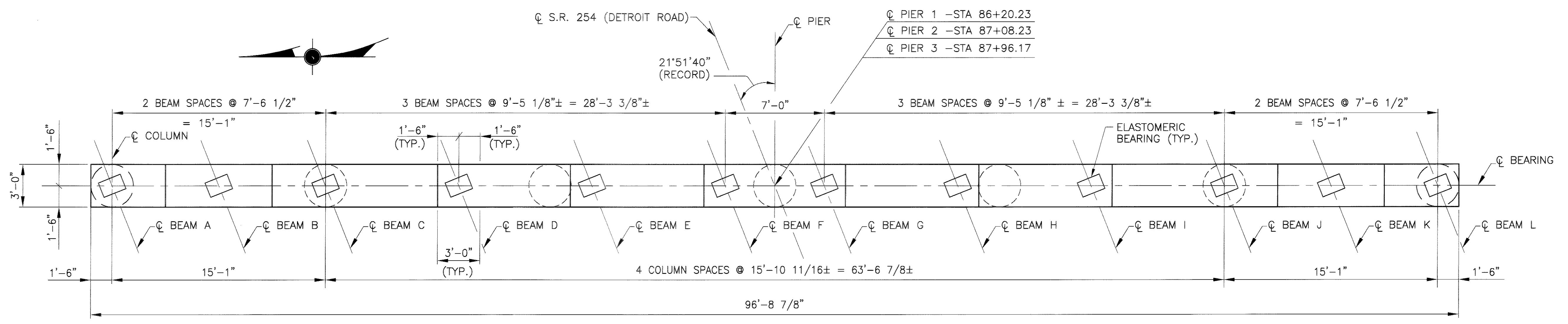
**ABUTMENT WINGWALL
 SEALING OF CONCRETE SURFACES DETAIL**



DETAIL A
 (SEE SHEET 10 / 24)

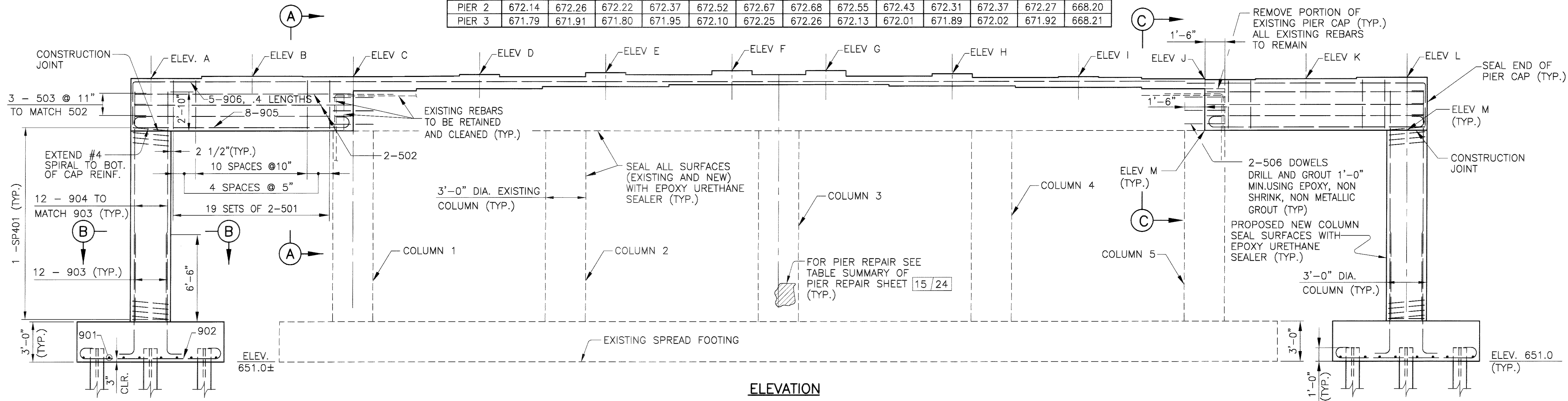


SECTION C-C

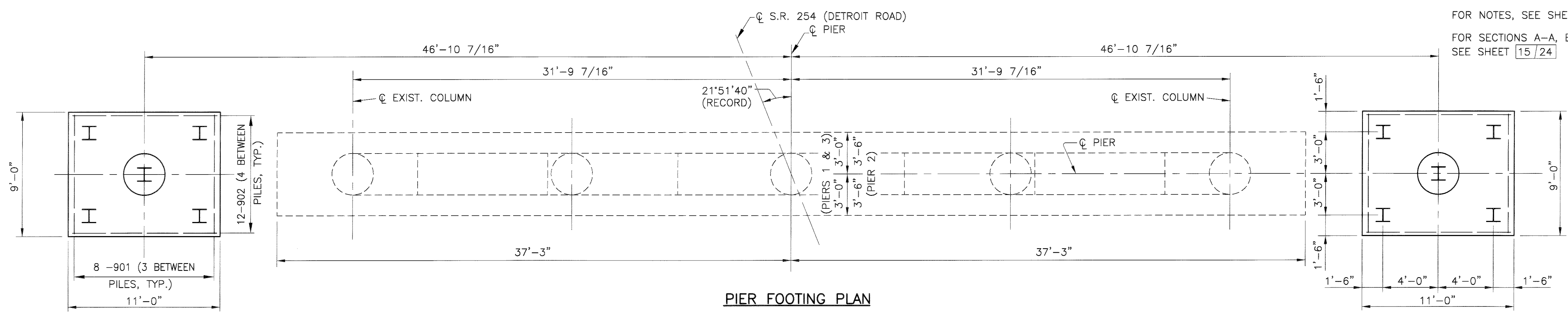


PLAN

LOCATION	ELEV A	ELEV B	ELEV C	ELEV D	ELEV E	ELEV F	ELEV G	ELEV H	ELEV I	ELEV J	ELEV K	ELEV L	ELEV M
PIER 1	672.43	672.55	672.44	672.59	672.74	672.89	672.90	672.77	672.65	672.53	672.66	672.56	668.85
PIER 2	672.14	672.26	672.22	672.37	672.52	672.67	672.68	672.55	672.43	672.31	672.37	672.27	668.20
PIER 3	671.79	671.91	671.80	671.95	672.10	672.25	672.26	672.13	672.01	671.89	672.02	671.92	668.21



ELEVATION

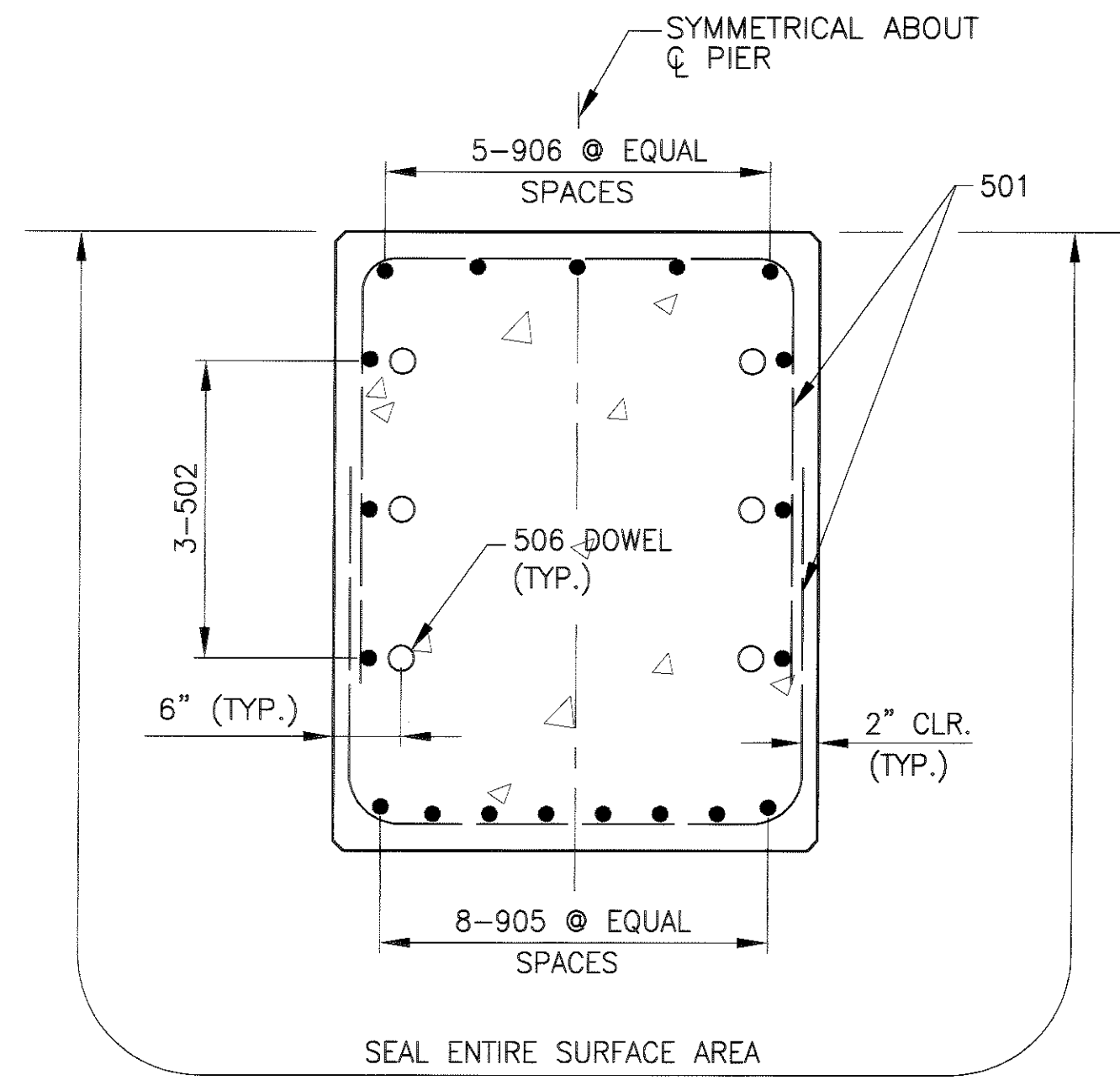


PIER FOOTING PLAN

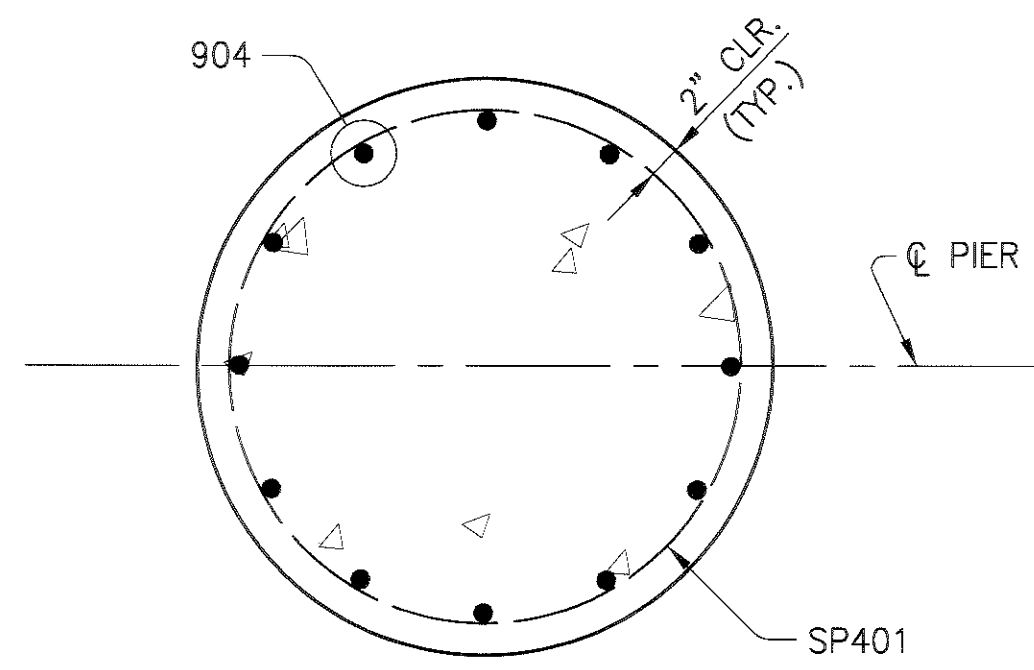
NOTES:
 FOR NOTES, SEE SHEET 15/24
 FOR SECTIONS A-A, B-B AND C-C
 SEE SHEET 15/24

O:\93197\DWG\SR254\FINBRIDG\PIERS.DWG

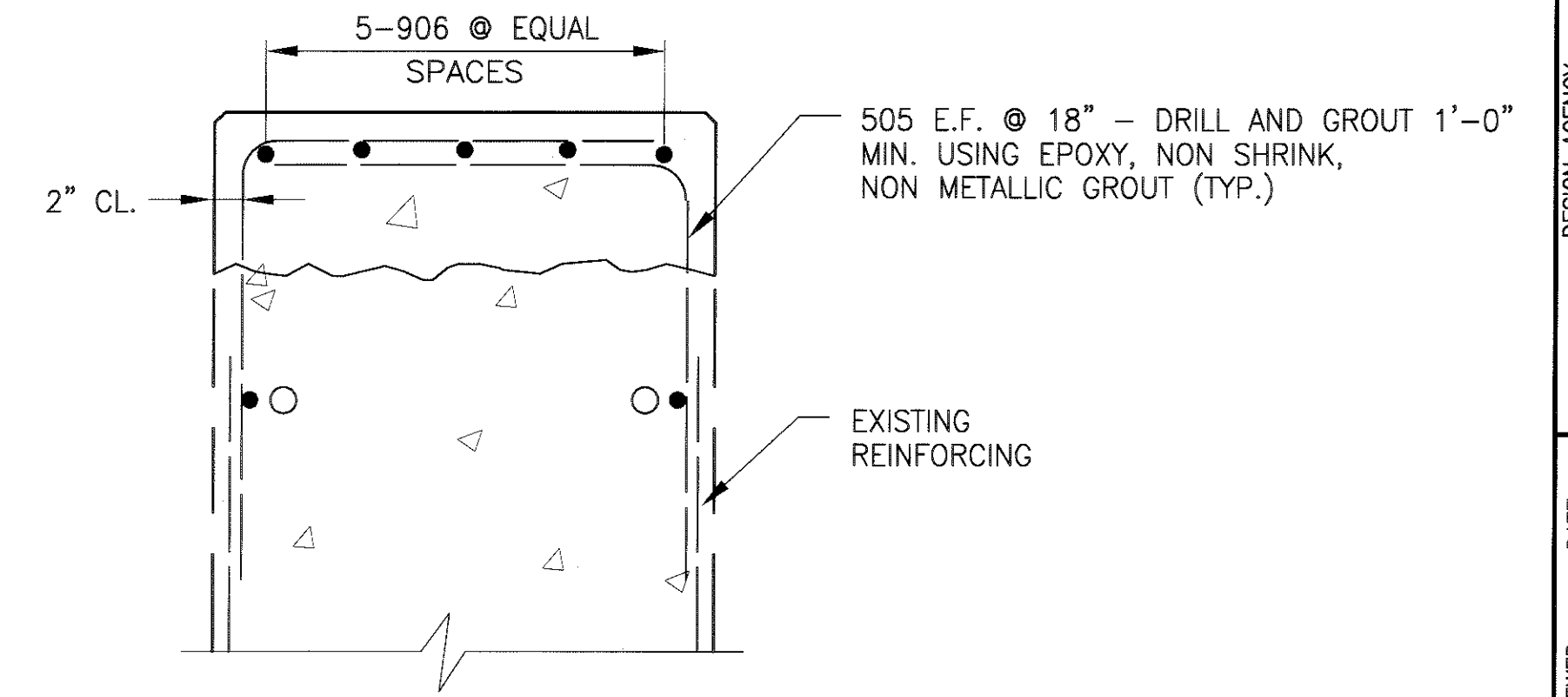
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SECTION A-A



SECTION B-B



SECTION C-C

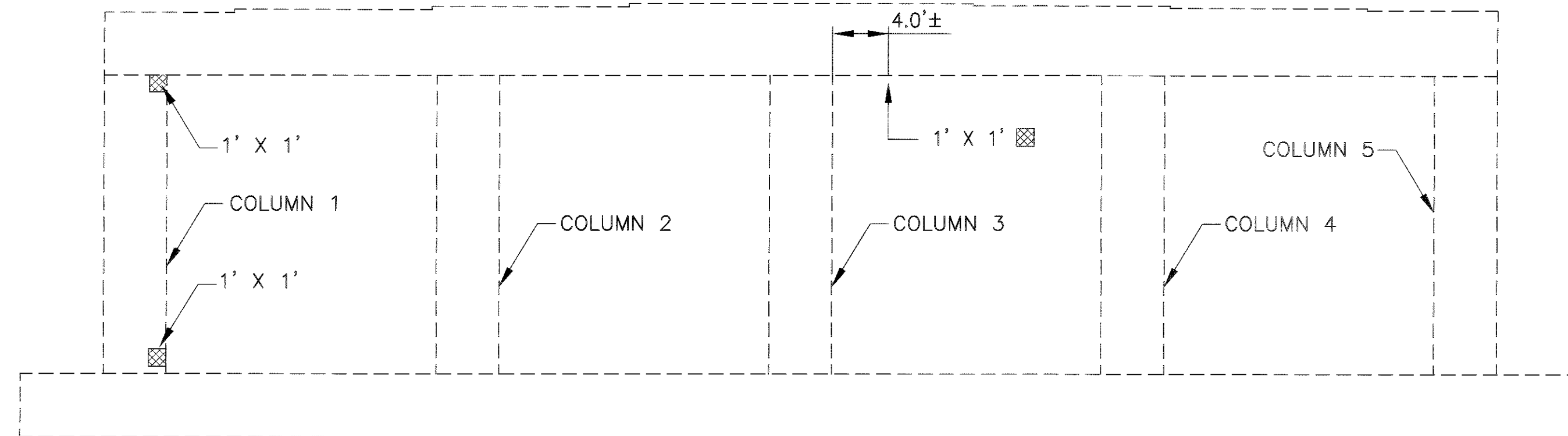
SUMMARY OF PIER REPAIR QUANTITIES (SQURE FEET)

	COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5	PIER CAP
LOCATION	MEASURED	MEASURED	MEASURED	MEASURED	MEASURED	MEASURED
PIER 1	2.0	0.0	0.0	0.0	0.0	1.0
PIER 2	0.0	0.0	0.0	0.0	0.0	0.0
PIER 3	0.0	0.0	0.0	0.0	0.0	0.0

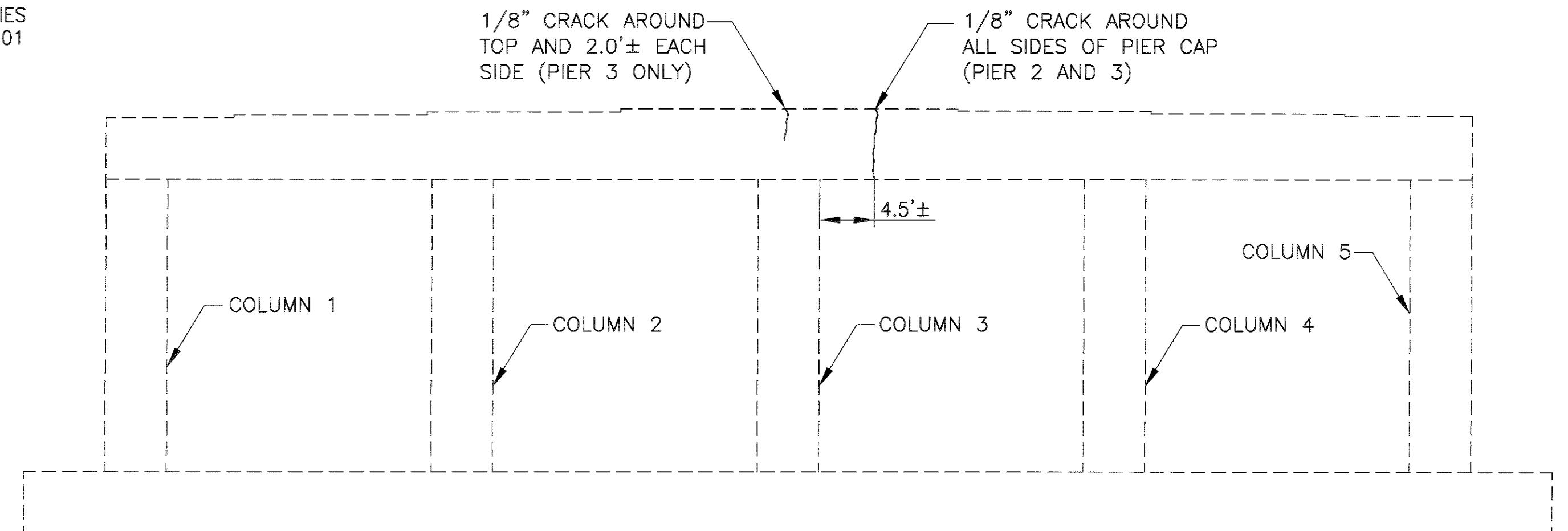
CONCRETE REPAIR BY EPOXY INJECTION

	PIER CAP
LOCATION	1/8" CRACK (L.F.)
PIER 1	0.0
PIER 2	9.0
PIER 3	16.0

NOTE: PHYSICAL INVENTORY OF MEASURED QUANTITIES OF DETERIORATION WAS PERFORMED IN AUGUST 2001



PIER 1 WEST ELEVATION



PIER 2 AND 3 WEST ELEVATION

NOTES:

NEW REINFORCING STEEL MAY REQUIRE FIELD CUTTING OR BENDING TO BE PROPERLY FITTED. PAYMENT SHALL BE INCLUDED IN THE APPLICABLE CONCRETE ITEM.

ALL PILES ARE HP 12 X 53 WITH A DESIGN PILE LOAD OF OF 41.5 TONS PER PILE.

ALL REINFORCING BAR MARKS SHALL BE PREFIXED AS FOLLOWS:

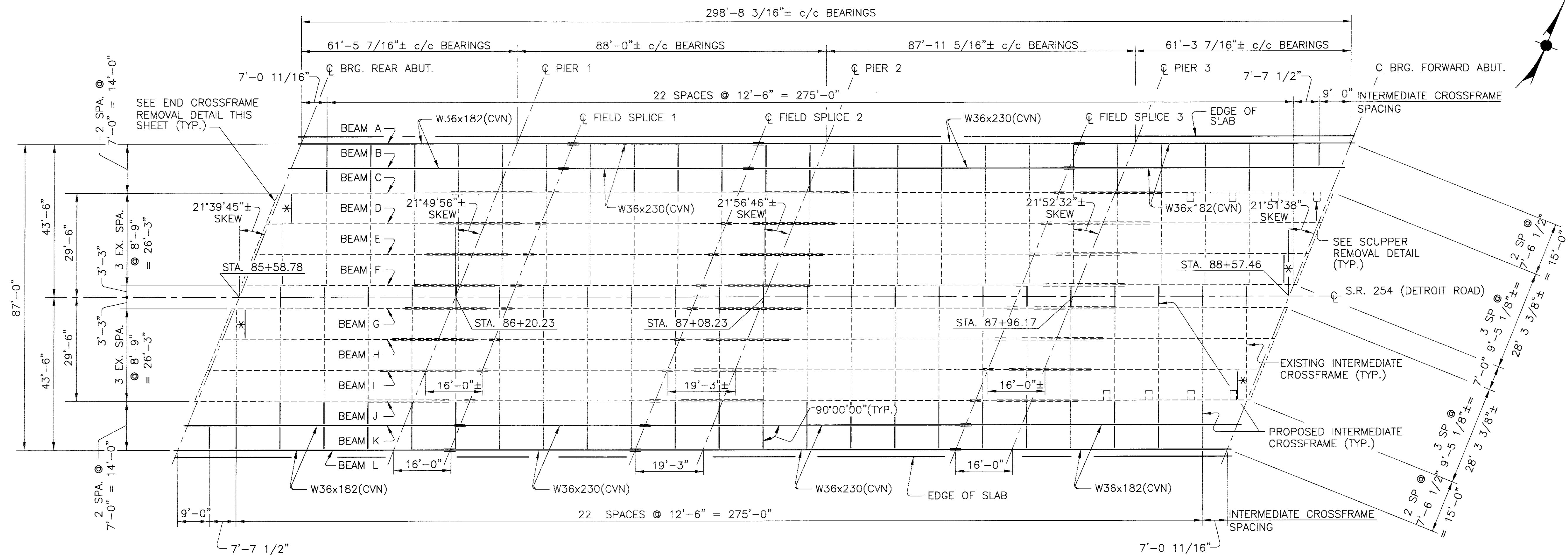
- PIER 1 = PA
- PIER 2 = PB
- PIER 3 = PC

FOR REINFORCEMENT SCHEDULE, SEE SHEET 24/24

FOR PILING PLAN, SEE SHEET 2/24

THE MODIFICATIONS OF THE EXISTING PIER CAPS SHALL BE INCLUDED IN ITEM 842- CLASS C CONCRETE, PIER, AS PER PLAN

ITEM 843 - TROWELABLE MORTAR



EXISTING BEAM SIZES				
BEAMS	REAR ABUT. TO FS 1	FS1 TO FS 2	FS2 TO FS 3	FS3 TO FWD.ABUT
C THRU J	W36X182	W36X230	W36X230	W36X182

* - SEE NOTE A

NOTE A:

THE CROSS FRAMES AT THOSE LOCATION WILL REQUIRE REMOVAL TO ACCOMMODATE THE SEMI-INTEGRAL MODIFICATION DETAILS. NEW CROSS FRAMES SHALL BE PROVIDED AT 2 FEET± FROM THE EXISTING LOCATION. REMOVAL OF THE EXISTING CROSS FRAME WILL BE PAID FOR WITH ITEM 202. NEW CROSS FRAMES WILL BE PAID FOR UNDER ITEM 863.

REMOVAL NOTE:

- CUT THE SUPPORT ANGLE TO THE BEAM WEB. DO NOT UNDERCUT THE WELDS OR GOUGE THE BEAM WEB OR FLANGE DURING THE CUTTING OPERATION. ALL CUTTING SHALL BE DONE BY EITHER THE OXYGEN CUTTING OR THE AIR-CARBON-ARC PROCESS. CUTTING MAY BE DONE MANUALLY PROVIDED A GUIDE IS USED AND A STRAIGHT CUT IS ATTAINED. THE CONTRACTOR SHALL DEMONSTRATE TO THE ENGINEER PRIOR TO START OF WORK THAT HE CAN ACCOMPLISH THE WORK WITHOUT DAMAGE TO THE BEAM REGARDLESS OF THE PROCESS USED. AT NO TIME SHALL THE BEAM TEMPERATURE EXCEED 1100° F.
- DETACH AND DISCARD THE SUPPORT ANGLE.
- THE SURFACES OF THE CUT FILLET WELDS SHALL BE GROUND IMMEDIATELY AFTER DISCARDING THE REMOVED PORTION. THIS GRINDING IS TO REMOVE ANY LARGE SURFACE IRREGULARITIES.
- ANY REMAINING WELD MATERIAL OR SUPPORT ANGLE SHALL BE GROUND SO THAT THE RESULTING WEB SURFACE IS SMOOTH. EXTREME CAUTION SHALL BE TAKEN TO MAINTAIN THE FULL FLANGE THICKNESS AND TO ENSURE THAT NO UNDERCUTTING, GOUGING, SCRATCHING OR OVERGRINDING OF THE WEB OCCURS.

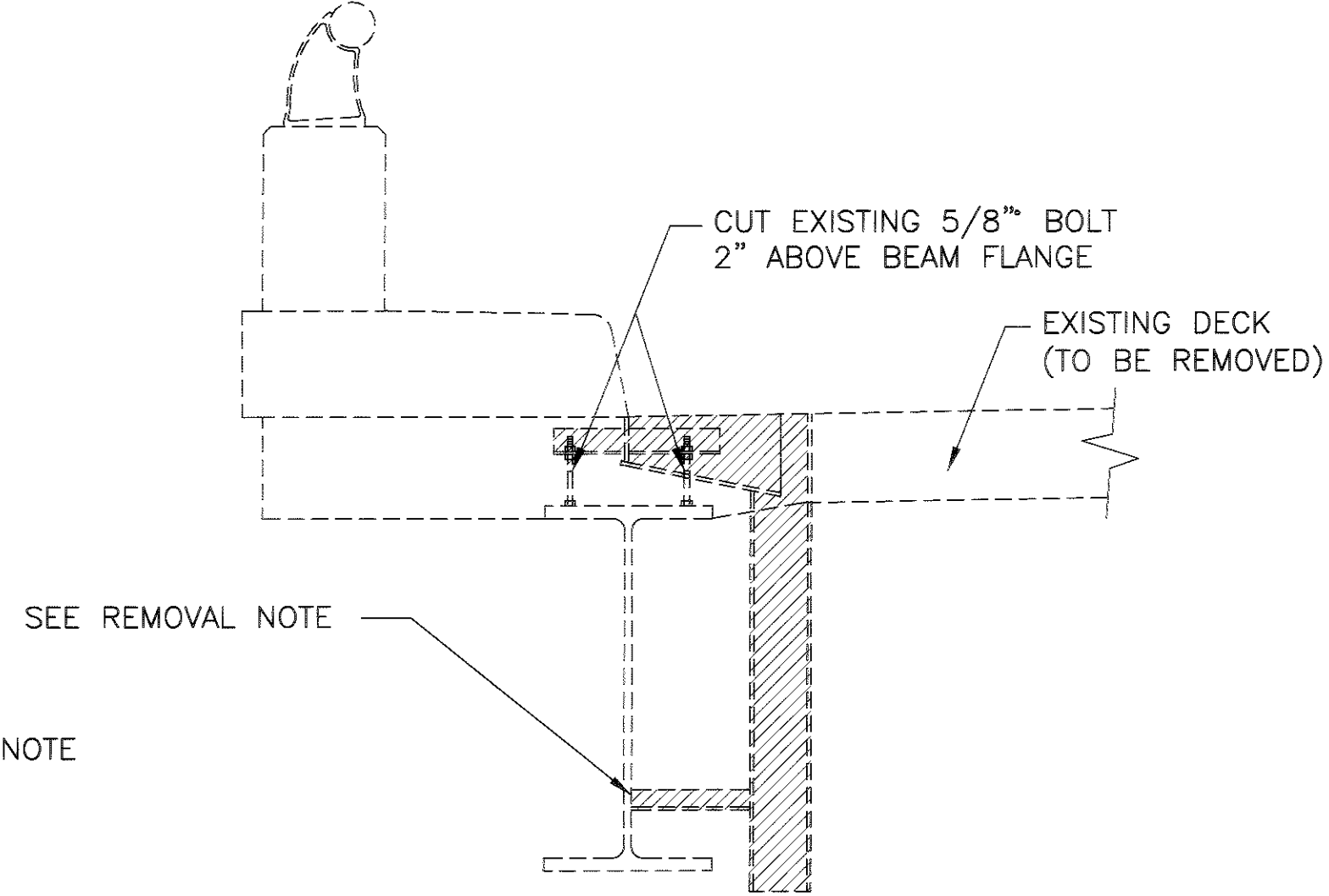
NOTES:

FOR DETAILS OF PROPOSED INTERMEDIATE CROSS FRAMES, REFER TO ODOT STANDARD DRAWING GSD-1-96.

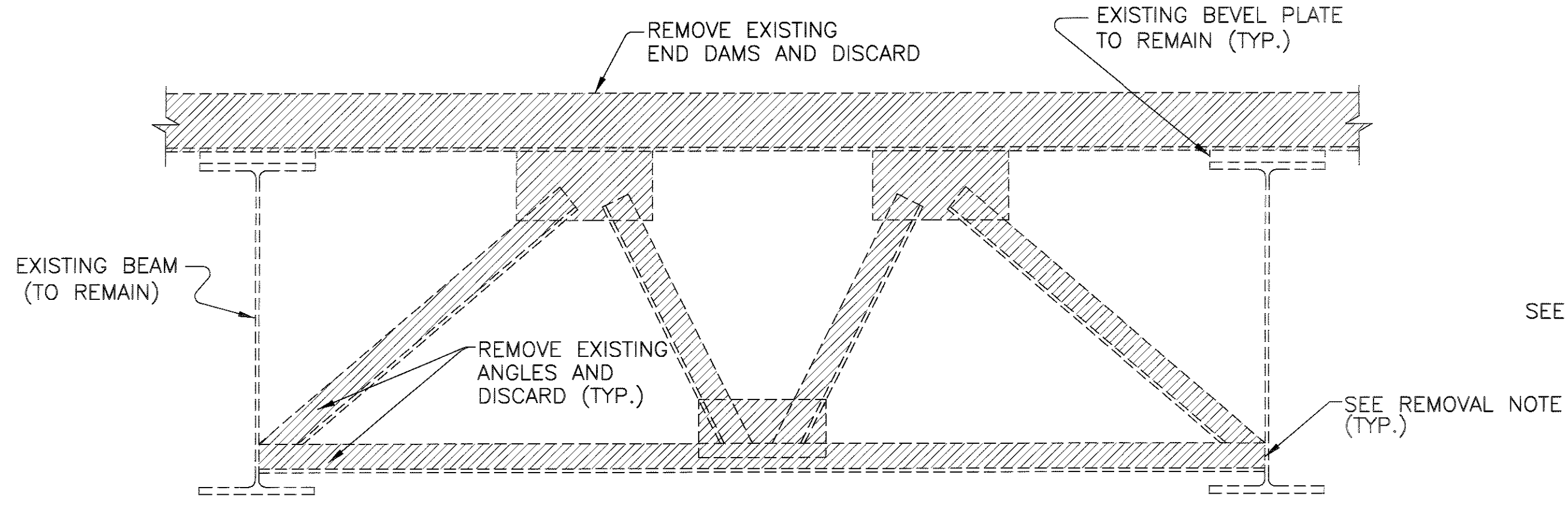
FOR BEAM NOTES, SEE SHEET 17/24

- INDICATES REMOVAL

FRAMING PLAN

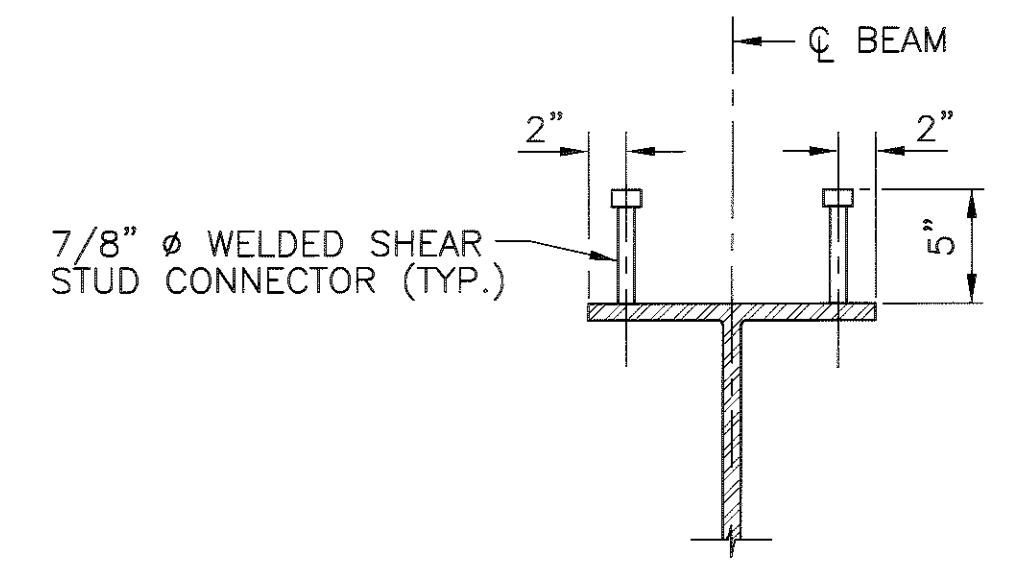
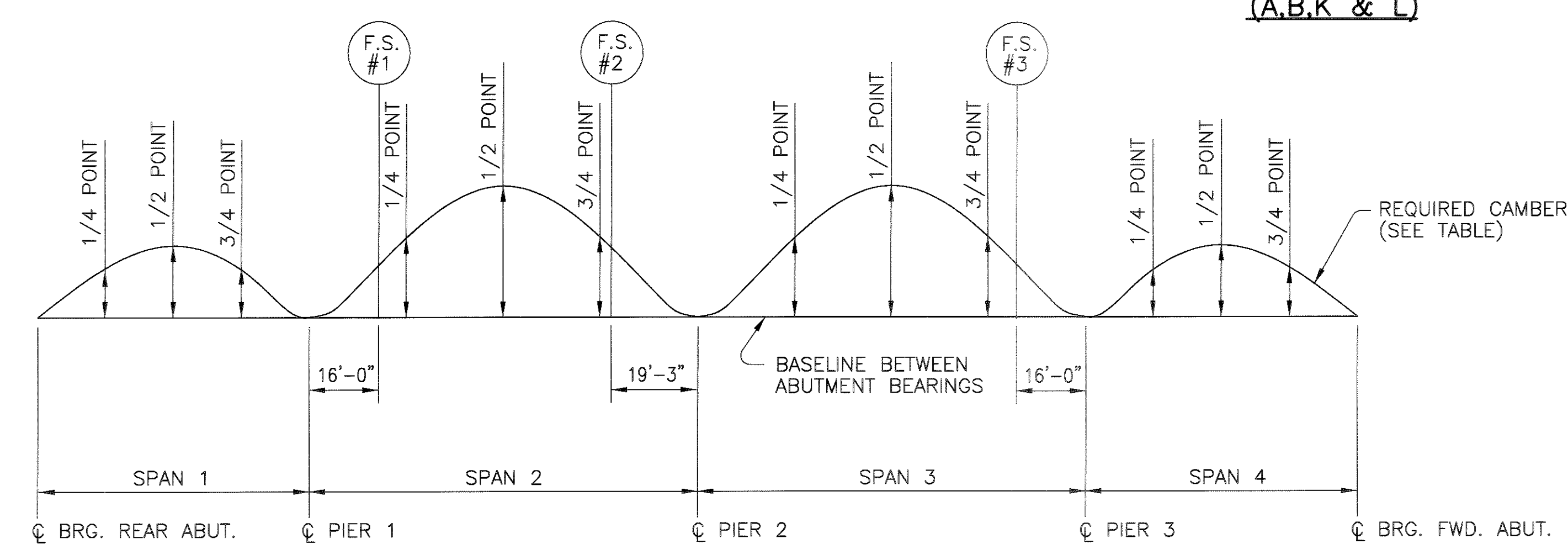
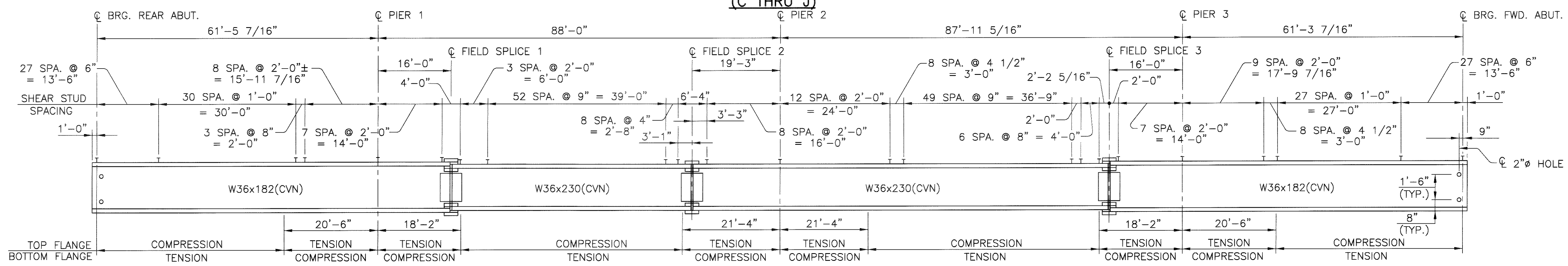
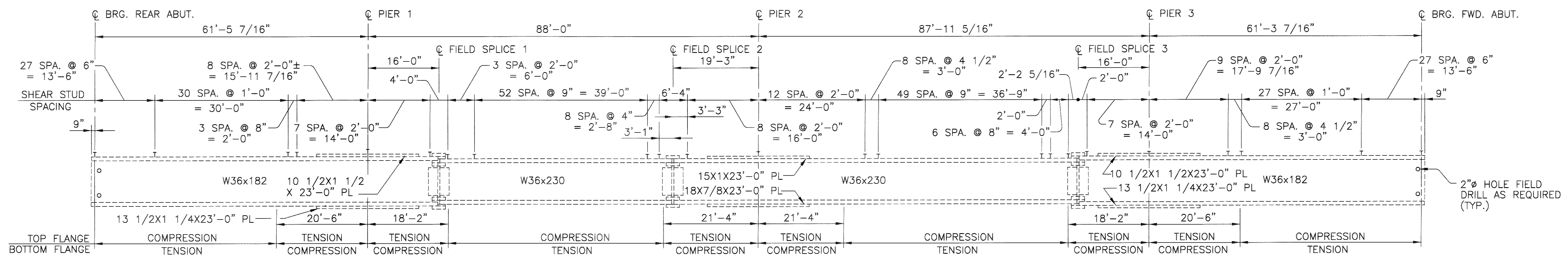


SCUPPER REMOVAL DETAIL



END CROSSFRAME REMOVAL DETAIL

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DEAD LOAD DEFLECTION AND CAMBER
 BEAMS A, B, K AND L

POINT	SPAN 1			SPAN 2			SPAN 3			SPAN 4				
	1/4	1/2	3/4	F.S.1	1/4	1/2	3/4 F.S.2	1/4	1/2	3/4	F.S.3	1/4	1/2	3/4
DEFLECTION DUE TO WEIGHT OF STEEL	1/16	1/16	1/16	1/16	1/8	3/16	3/16	3/16	3/16	1/8	1/16	1/16	1/16	1/16
DEFLECTION DUE TO REMAINING DEAD LOAD	1/4	5/16	1/8	3/8	1/2	11/16	3/8	3/8	11/16	1/2	1/4	1/8	5/16	1/4
REQUIRED SHOP CAMBER	5/16	3/8	3/16	7/16	5/8	7/8	9/16	9/16	7/8	5/8	5/16	3/16	3/8	5/16

NOTES:

FOR FIELD SPLICE DETAILS SEE SHEET 18/24.

WHERE A SHAPE OR A PLATE IS DESIGNATED (CVN) THE MATERIAL SHALL MEET SPECIFIED MINIMUM NOTCH TOUGHNESS REQUIREMENTS AS SPECIFIED IN 711.01.

WELDED ATTACHMENT OF SUPPORTS FOR CONCRETE DECK FINISHING MACHINE MAY BE MADE TO AREAS ON THE BEAM FLANGES DESIGNATED COMPRESSION. ATTACHMENTS SHALL NOT BE MADE TO AREAS DESIGNATED TENSION. FILLET WELDS TO COMPRESSION FLANGES SHALL BE NOT CLOSER THAN 1" FROM EDGE OF FLANGE, BE MORE THAN 2" LONG, AND BE NOT SMALLER THAN 1/4" FOR THICKNESSES UP TO 3/4" AND 5/16" FOR GREATER THAN 3/4" THICK.

USE O.D.O.T. STD. DWG. GSD-1-96 FOR INTERMEDIATE CROSSFRAMES.

FIELD DRILLING OF 2" DIAMETER HOLES AT END OF EXISTING BEAMS SHALL BE INCLUDED WITH WITH ITEM 894, HIGH PERFORMANCE CONCRETE, FOR BRIDGE DECK WITH WARRANTY, AS PER PLAN

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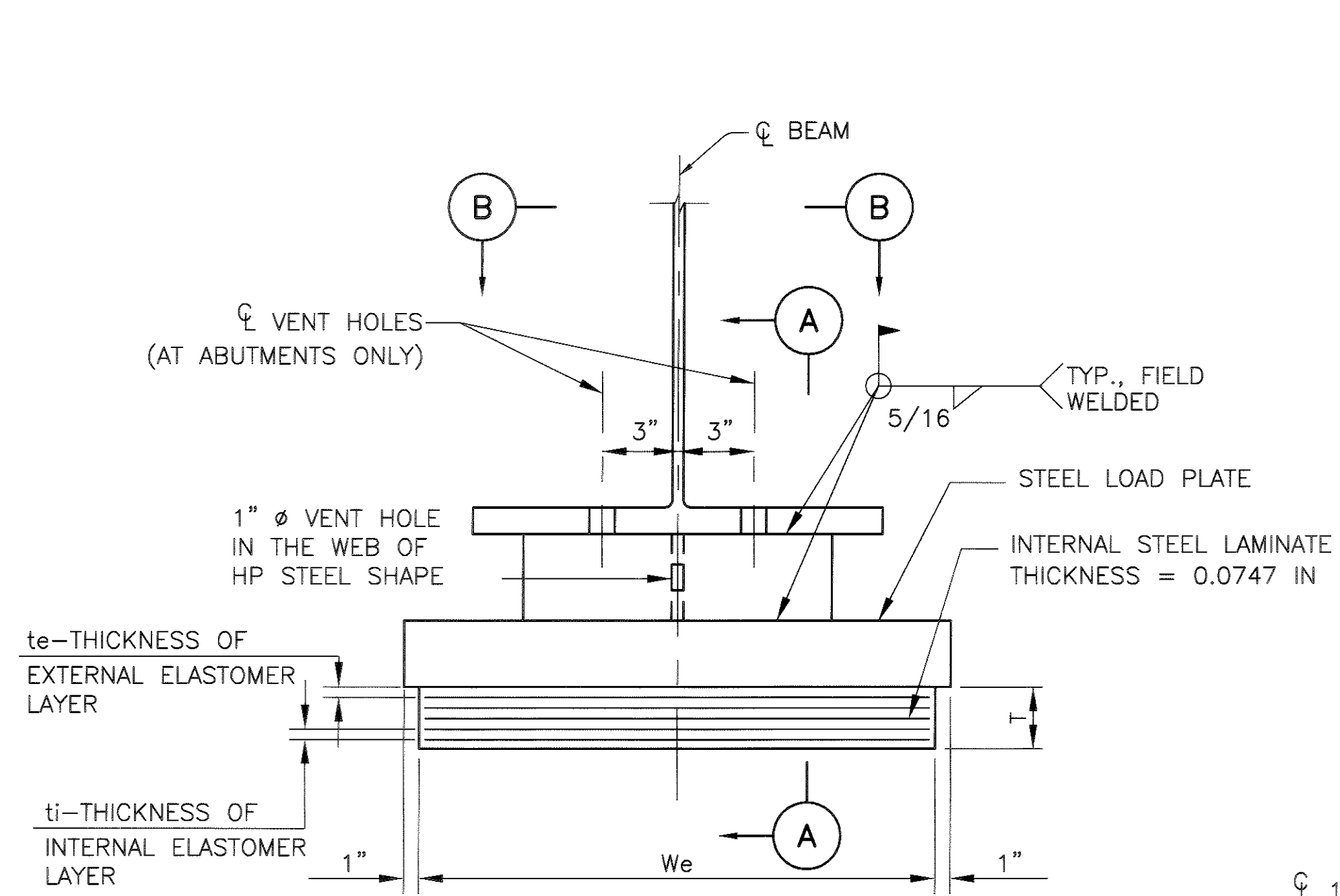
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DESIGN AGENCY
 R.E. WARNER
 & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 2460 CENTER HISE ROAD
 WESTLAKE, OHIO 44145-9900
 TELEPHONE (419) 366-9900
 FAX NUMBER 931-97

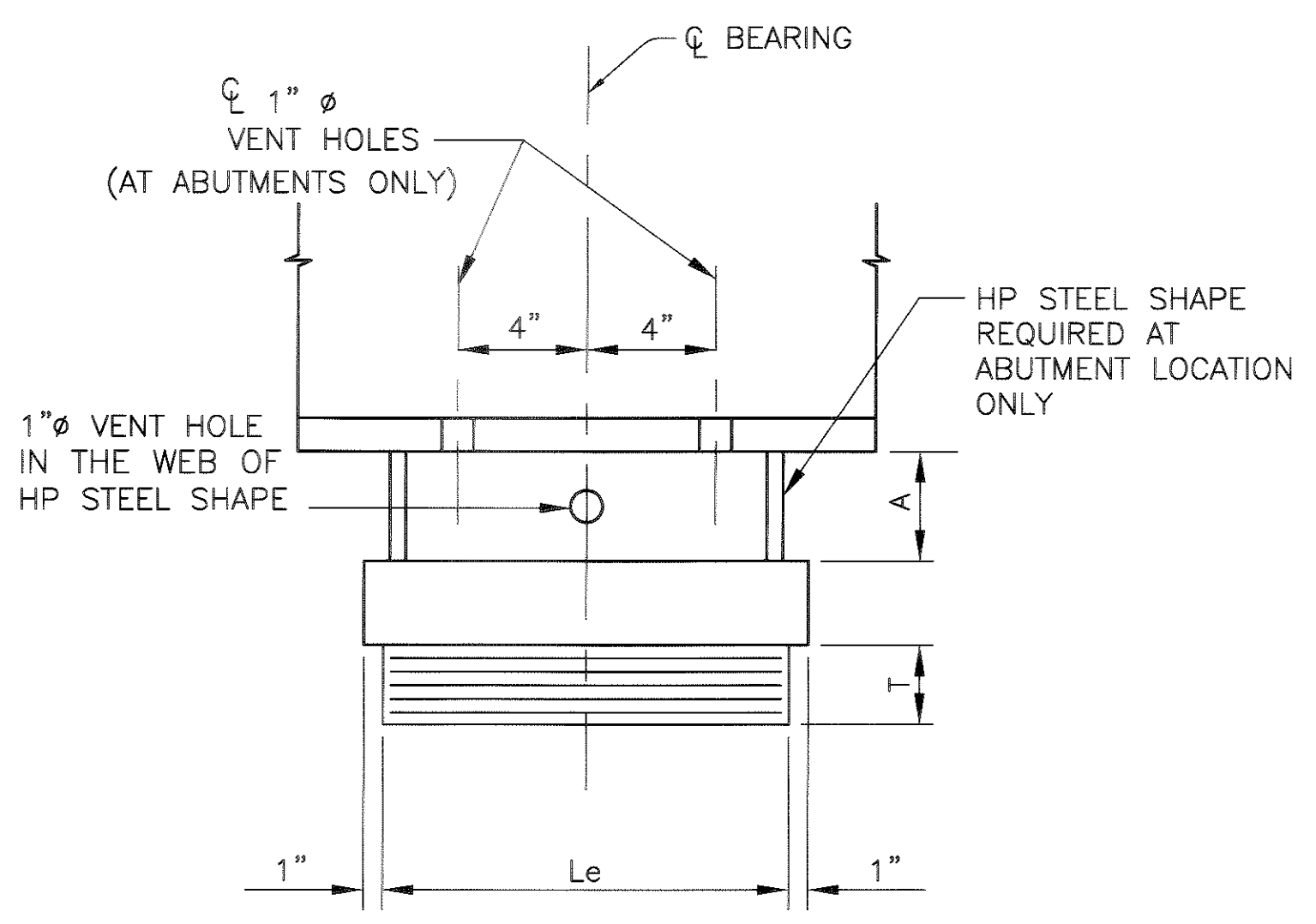
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 2/13/01
 REVIEWED
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 CAG
 REVISION
 CHECKED
 RAK

DESIGNED
 INF
 CHECKED
 RAK

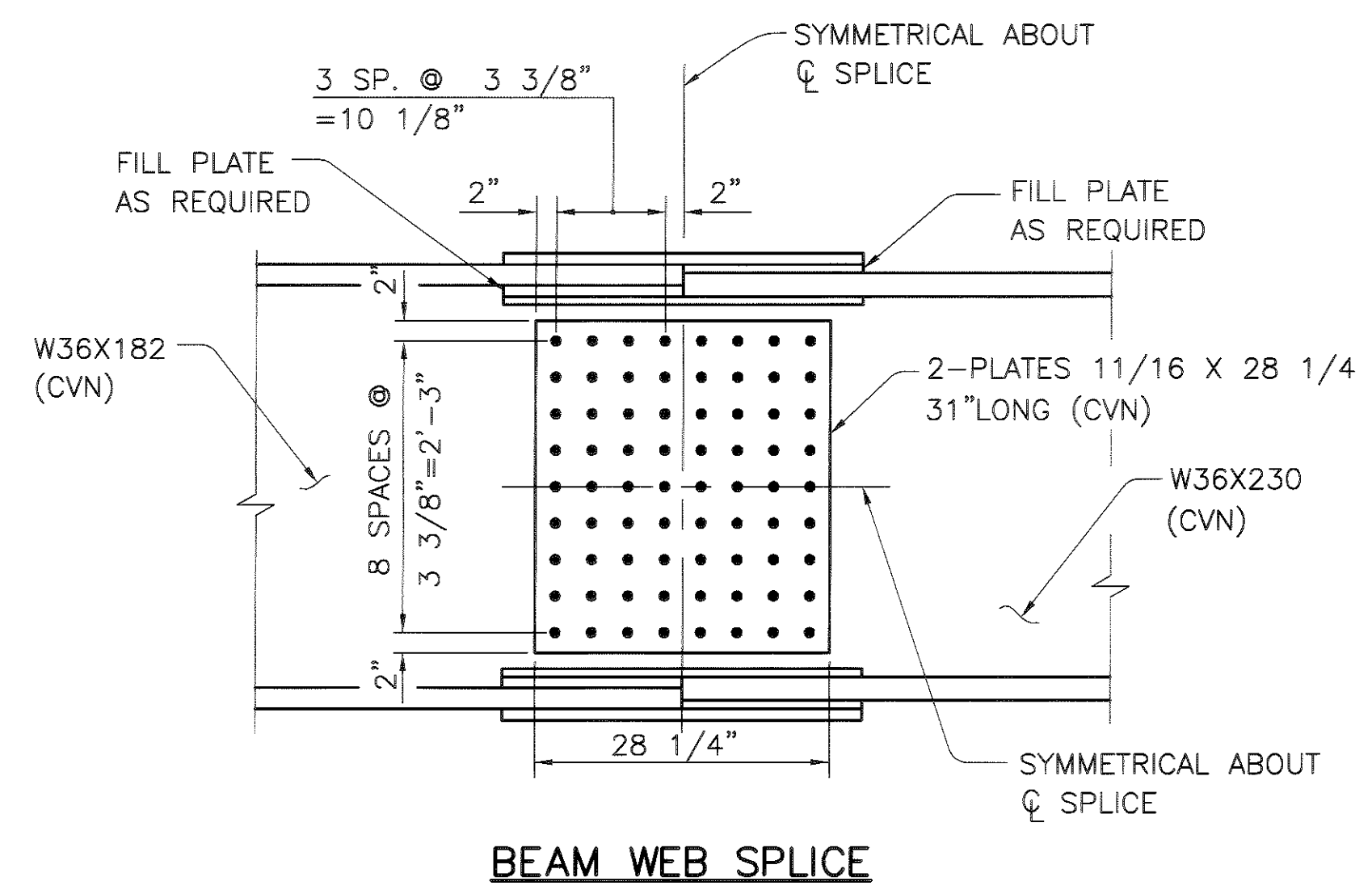
SUPERSTRUCTURE DETAILS
 BRIDGE No. LOR-90-1565
 S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90
 LOR-90-13.20
 18/24
 150
 161



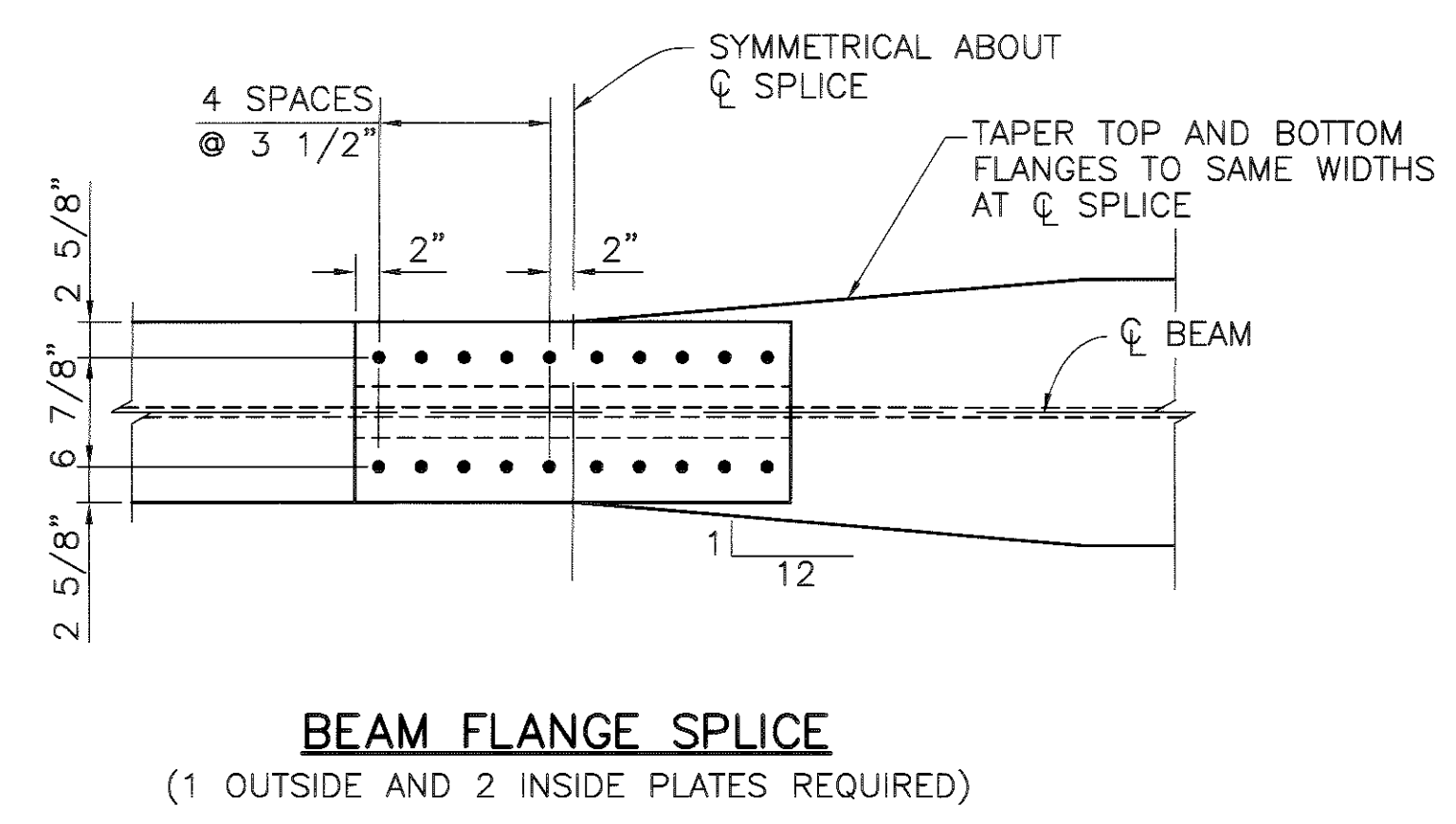
SECTION B-B



SECTION A-A



BEAM WEB SPLICE



BEAM FLANGE SPLICE

(1 OUTSIDE AND 2 INSIDE PLATES REQUIRED)

BEAM FLANGE SPLICES			
BEAM FLANGES	FLANGE SPLICE PLATES (CVN)		FLANGE BOLTS NUMBER
	OUTSIDE (1)	INSIDE (2)	
TOP FLANGE	9/16X12X3'-0"	9/16X4 1/2X3'-0"	20
BOTTOM FLANGE	9/16X12X3'-0"	9/16X4 1/2X3'-0"	20

FIELD SPLICE 1 AND 3 DETAILS
 (FOR FIELD SPLICE 2, REFER TO
 ODOT BS-1-93 (W36X230))

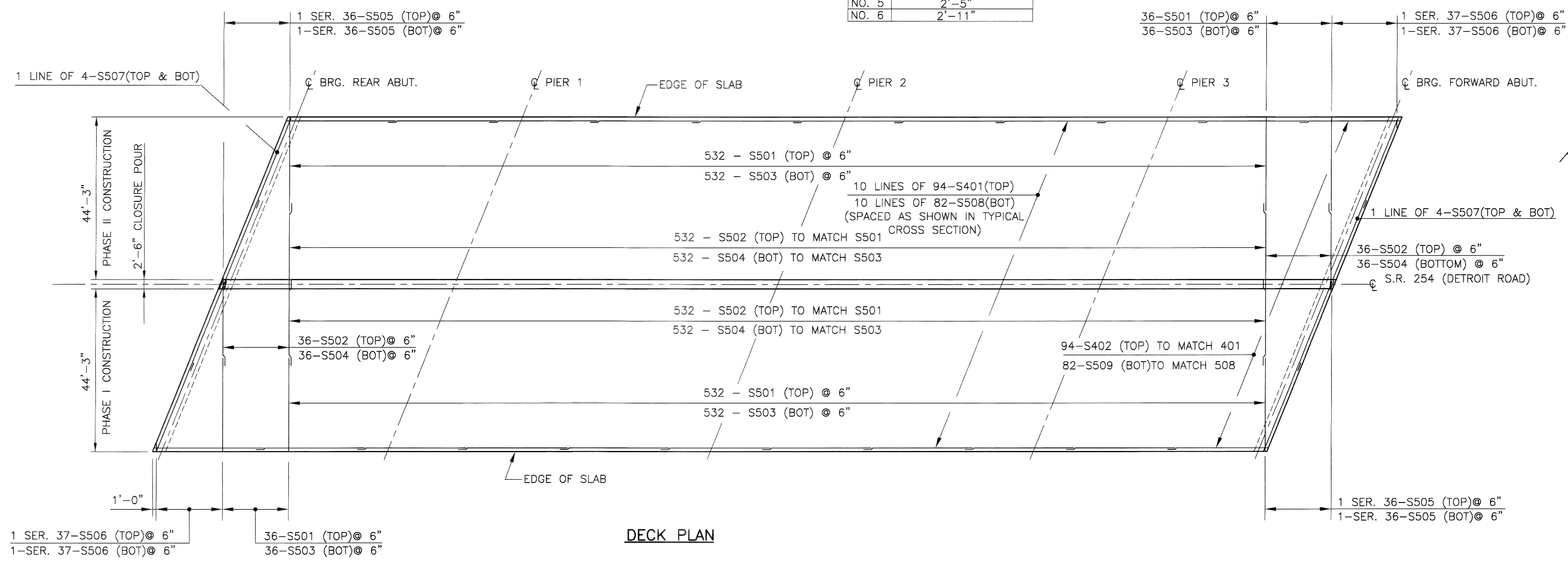
ELASTOMERIC BEARING REQUIREMENTS													
BEARING LOCATION	BEARING TYPE	NO. REQUIRED	(DL) KIPS	(LL) KIPS	TOTAL LOAD (DL+LL) KIPS	Le IN.	We IN.	ti NO.-THICK. IN.	te NO.-THICK. IN.	NO. OF INTERNAL LAMINATES	T IN.	LOAD PLATE IN. x IN. x IN.	DEPTH OF HP STEEL SHAPE "A" (IN.)
REAR ABUTMENT FORWARD ABUTMENT	EXPANSION	24	56	51	107	8 1/2	12	6 - 0.27	2 - 0.19	7-0.0747	2.52	1 1/2 x 10 1/2 x 1'-2"	7 3/4 7 5/8
PIERS 1 AND 3	EXPANSION	24	144	66	210	12	19	5 - 0.35	2 - 0.27	6-0.0747	2.74	2 x 1'-2" x 1'-9"	NONE
PIER 2	EXPANSION	12	160	71	231	13	19	5 - 0.37	2 - 0.27	6-0.0747	2.84	2 x 1'-3" x 1'-9"	NONE

LAMINATED ELASTOMERIC EXPANSION BEARING

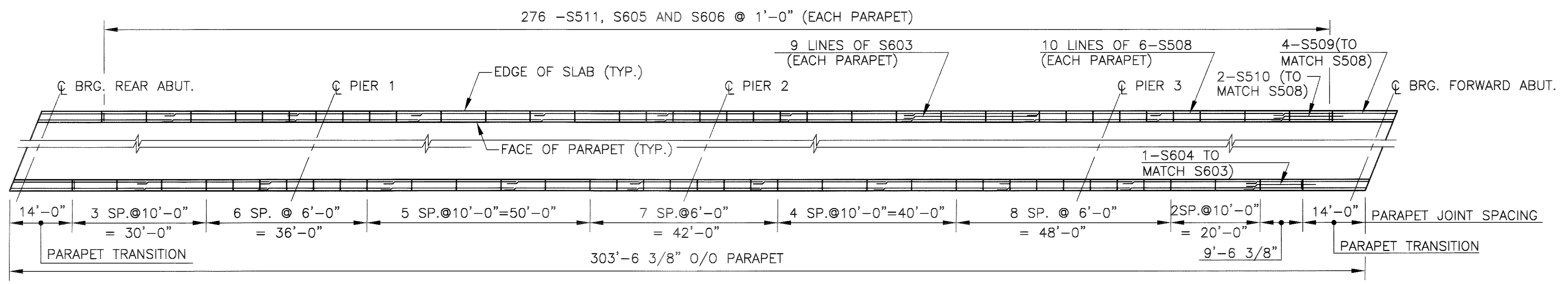
NOTES:

- ELASTOMERIC BEARING NOTES
- ELASTOMERIC BEARINGS SHALL COMPLY WITH ITEM 516 AND AASHTO STANDARD SPECIFICATION FOR HIGHWAY BRIDGES, SECTION 18, BEARING DEVICES, DIVISION II, CONSTRUCTION, ARTICLES 18.4.5.1 AND 18.5.6.2. BEARINGS SHALL BE GRADE 3, 50 DUROMETER ELASTOMER, AND SHALL BE SUBJECTED TO THE LOAD TESTING REQUIREMENTS DEFINED IN ARTICLE 18.7.4.5 OF THE AASHTO DOCUMENT LISTED ABOVE. BEARINGS WERE DESIGNED UNDER SECTION 14.6.1 OF SECTION 14, BEARINGS, DIVISION I, DESIGN. TESTING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE BEARINGS, EACH.
 - WELDING SHALL BE CONTROLLED SO THAT THE PLATE TEMPERATURE AT THE ELASTOMER BONDED SURFACE DOES NOT EXCEED 150° C AS DETERMINED BY USE OF PYROMETRIC STICKS OR OTHER TEMPERATURE MONITORING DEVICES.
 - IF THE STEEL IS ERECTED AT AN AMBIENT TEMPERATURE HIGHER THAN 80° F OR LOWER THAN 40° F AND THE BEARING SHEAR DEFLECTION EXCEEDS ONE-SIXTH OF THE BEARING HEIGHT AT 60° F ± 10° F., THE GIRDERS SHALL BE RAISED TO ALLOW THE BEARINGS TO RETURN TO THEIR UNDEFORMED SHAPE AT 60° F ± 10° F.
 - HP STEEL SHAPE HP 12 X 53 AND LOAD PLATE SHALL BE ASTM A572, YIELD STRENGTH 50,000 PSI AND SHALL BE INCLUDED WITH ITEM 516, ELASTOMERIC BEARING, FOR PAYMENT.
 - FIELD DRILLING OF VENT HOLES IN EXISTING BEAMS AT ABUTMENTS SHALL BE INCLUDED WITH ITEM 516, ELASTOMERIC BEARING, FOR PAYMENT.
 - FOR ADDITIONAL FIELD SPLICE DETAILS REFER TO ODOT STANDARD BRIDGE DRAWING BS-1-93
 - HIGH STRENGTH BOLTS SHALL BE 1 1/8" DIAMETER A325, GALVANIZED.

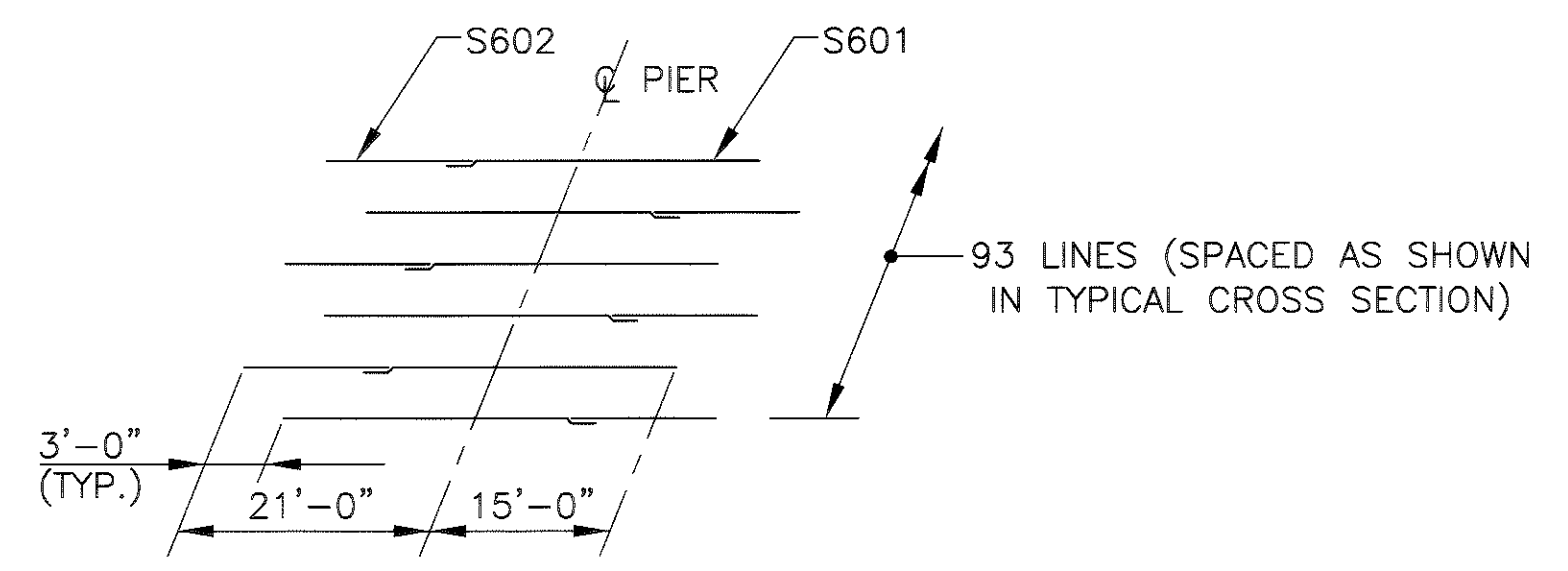
BAR NO.	REQUIRED LAP LENGTH
NO. 4	1'-11"
NO. 5	2'-5"
NO. 6	2'-11"



DECK PLAN



PARAPET PLAN



ADDITIONAL REINFORCEMENT OVER PIERS

- NOTES:
- FOR TYPICAL CROSS SECTION, SEE SHEET 20/24
 - FOR REINFORCEMENT SCHEDULE, SEE SHEET 24/24
 - FOR PARAPET TRANSITION DETAIL, SEE SHEET 21/24
 - FOR SCREED ELEVATION TABLES, SEE SHEETS 22/24 & 23/24
 - FOR ABUTMENT DIAPHRAGMS REINFORCING, SEE SHEETS 9/24 THRU 12/24

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DESIGN AGENCY
R.L. WAINWRIGHT & ASSOCIATES, INC.
CONSULTING ENGINEERS
2400 CENTER ROAD
WESTLAKE, OHIO 44145
TELEPHONE (440) 525-9400
JOB NUMBER 93197

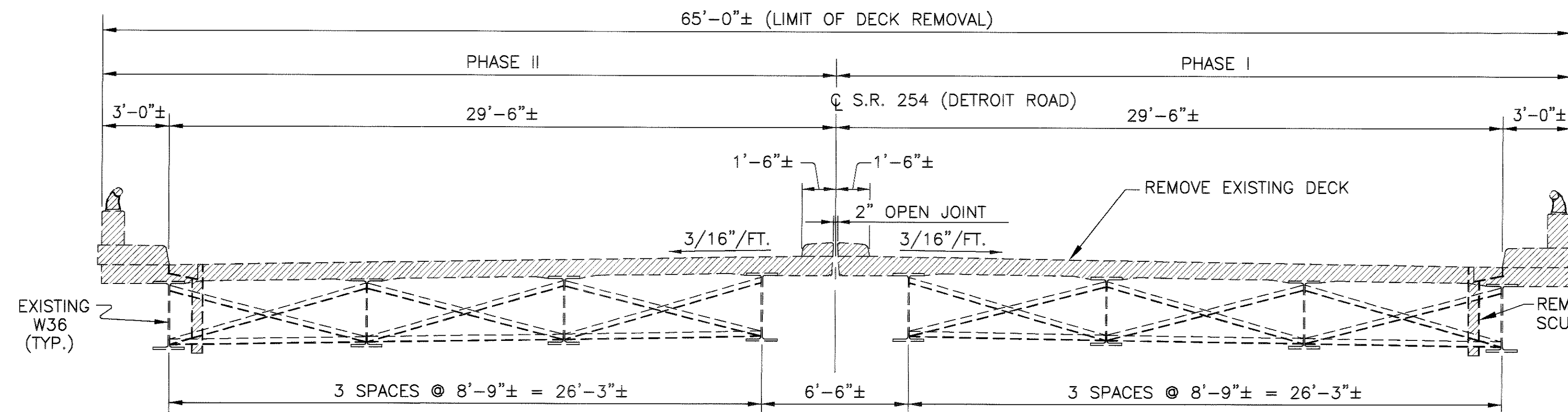
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2/13/01
REVIEWED
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DRAWN
NFF
REVISIONS
CHECKED
RAK

DECK SLAB
BRIDGE NO. LOR-90-1565
S.R. 254 (DETROIT ROAD) OVER INTERSTATE ROUTE 90

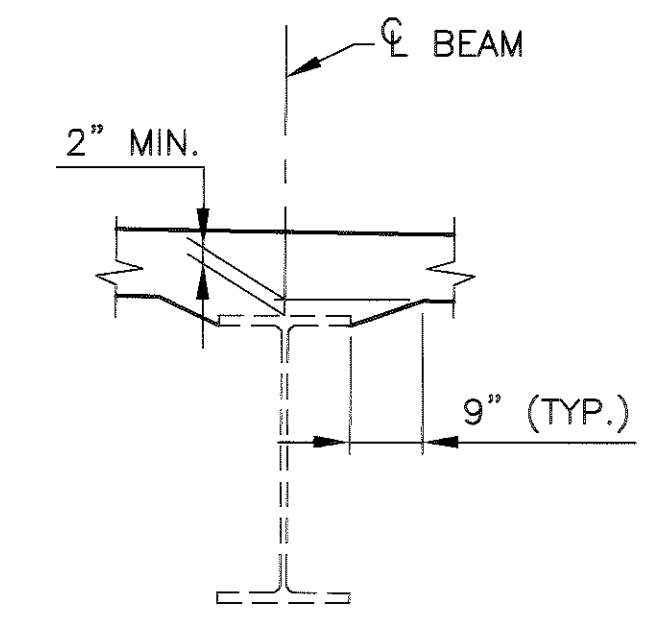
LOR-90-13.20

19/24

151
161

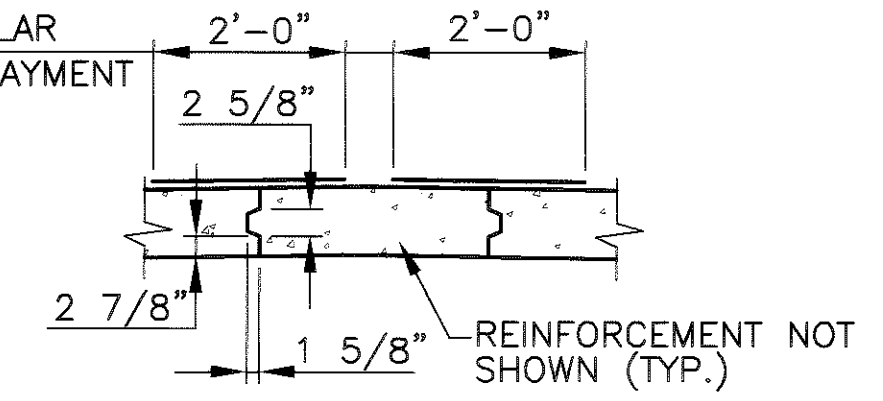


EXISTING TRANSVERSE SECTION (REMOVAL)

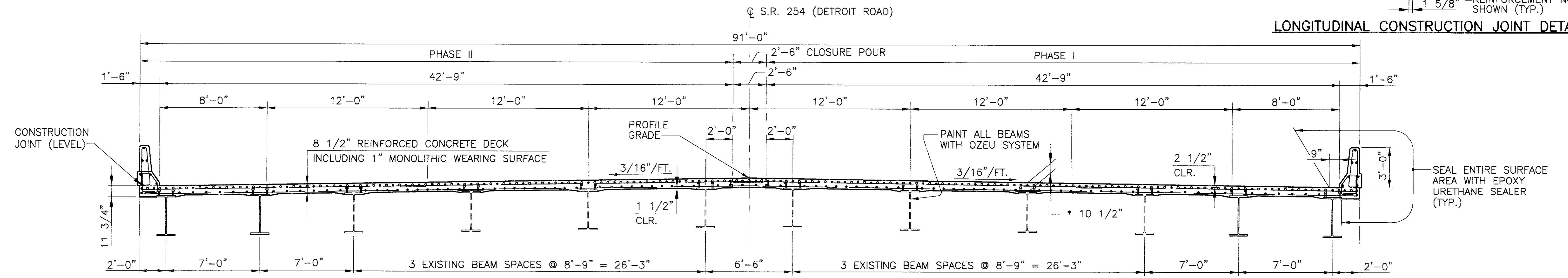


HAUNCH DETAIL

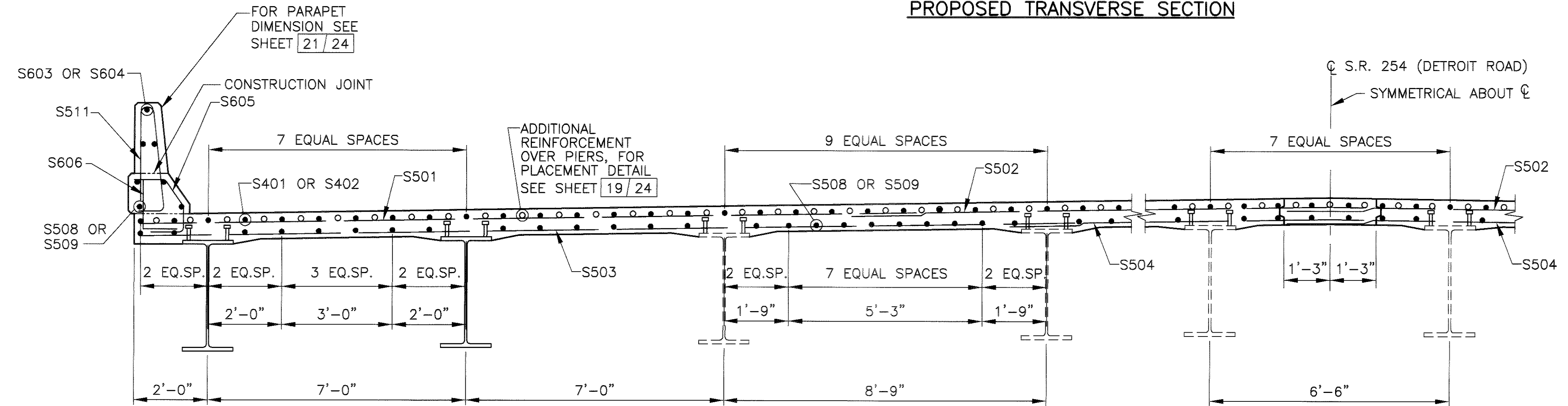
SEAL WITH HIGH MOLECULAR WEIGHT METHACRYLATE. PAYMENT INCLUDED WITH ITEM 842



LONGITUDINAL CONSTRUCTION JOINT DETAIL



PROPOSED TRANSVERSE SECTION

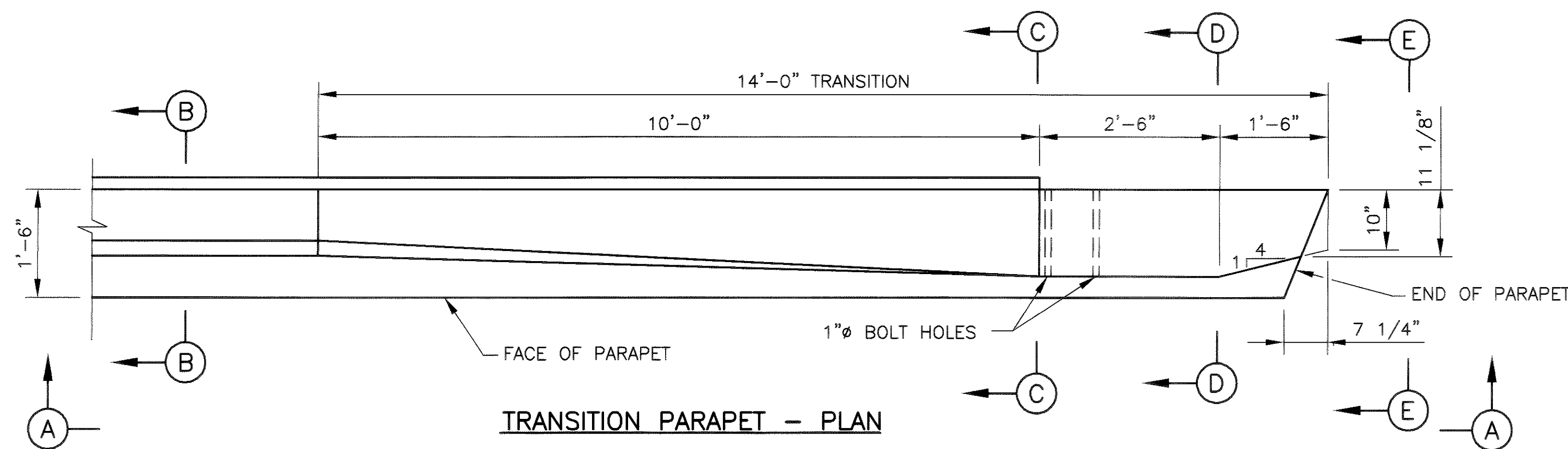


PART ENLARGED TRANSVERSE SECTION

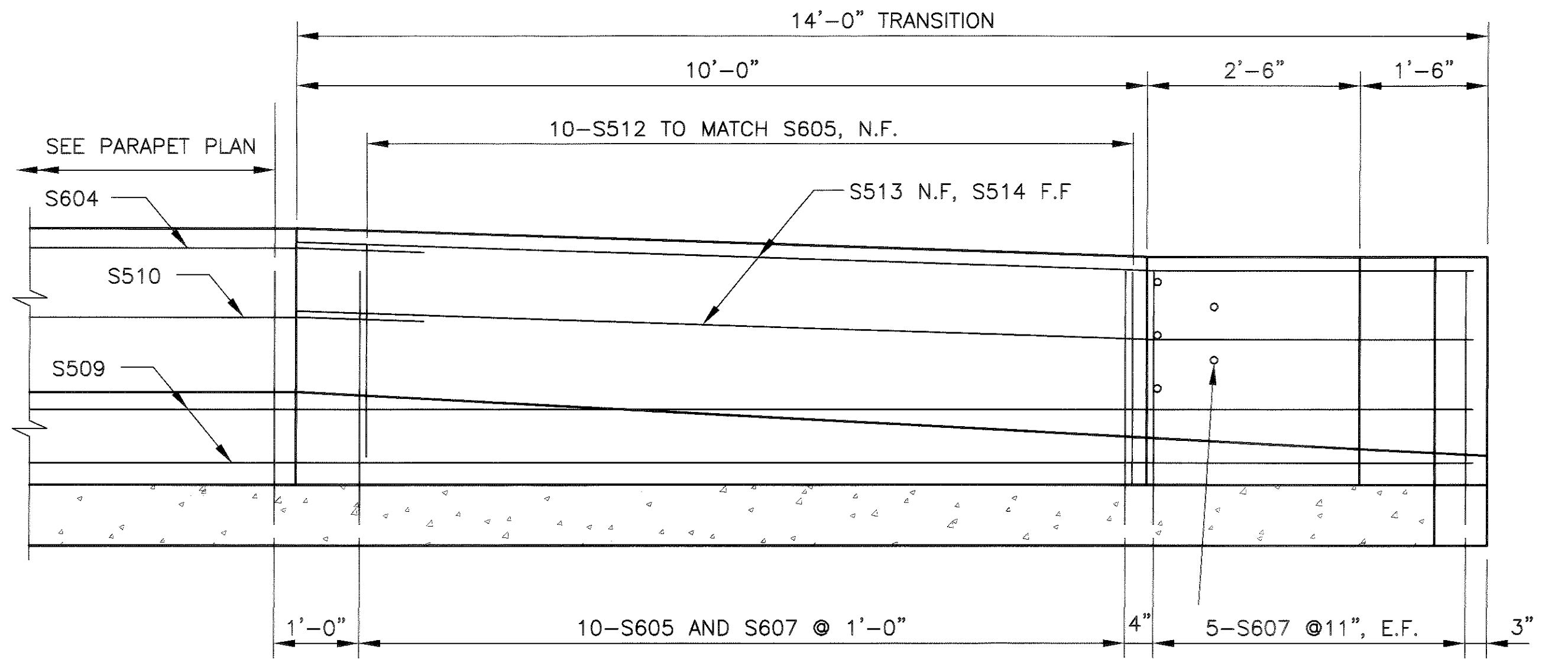
NOTES:
 * - THE DIMENSION SHOWN FROM THE TOP OF THE CONCRETE DECK TO THE TOP OF THE FLANGE, MINUS THE DESIGN HAUNCH THICKNESS OF 2 INCHES, HAS BEEN USED FOR COMPUTING THE DECK CONCRETE QUANTITIES. CONCRETE REQUIRED TO FILL THE HAUNCHES, INCLUDING ADDITIONAL OR LESS MATERIAL REQUIRED DUE TO HAUNCH CONSTRUCTION TOLERANCES, SHALL BE CONSIDERED AS INCIDENTAL AND WILL NOT BE INCLUDED IN THE QUANTITY CALCULATIONS FOR PAYMENT.
 AN OPTIMUM HAUNCH WIDTH OF 9 INCHES SHALL BE USED. HOWEVER, THE HAUNCH WIDTH MAY VARY BETWEEN 6 INCHES AND 12 INCHES.
 INTERMEDIATE CROSS FRAMES SHALL NOT BE PERMANENTLY ATTACHED IN THE CLOSURE POUR LOCATION UNTIL THE CONCRETE POURS ON BOTH SIDES OF THE CLOSURE POUR LOCATION HAVE BEEN COMPLETED AND CURED FOR SEVEN (7) DAYS.

FOR DECK SLAB PLAN, SEE SHEET 19/24
 FOR REINFORCEMENT SCHEDULE, SEE SHEET 24/24
 FOR PARAPET TRANSITION DETAIL, SEE SHEET 21/24
 FOR SCREED ELEVATION TABLES, SEE SHEETS 22/24 & 23/24
 THE FOLLOWING ABBREVIATIONS ARE USED:
 EQ. = EQUAL
 F.F. = FAR FACE
 MIN. = MINIMUM
 N.F. = NEAR FACE
 SP. = SPACES
 TYP. = TYPICAL

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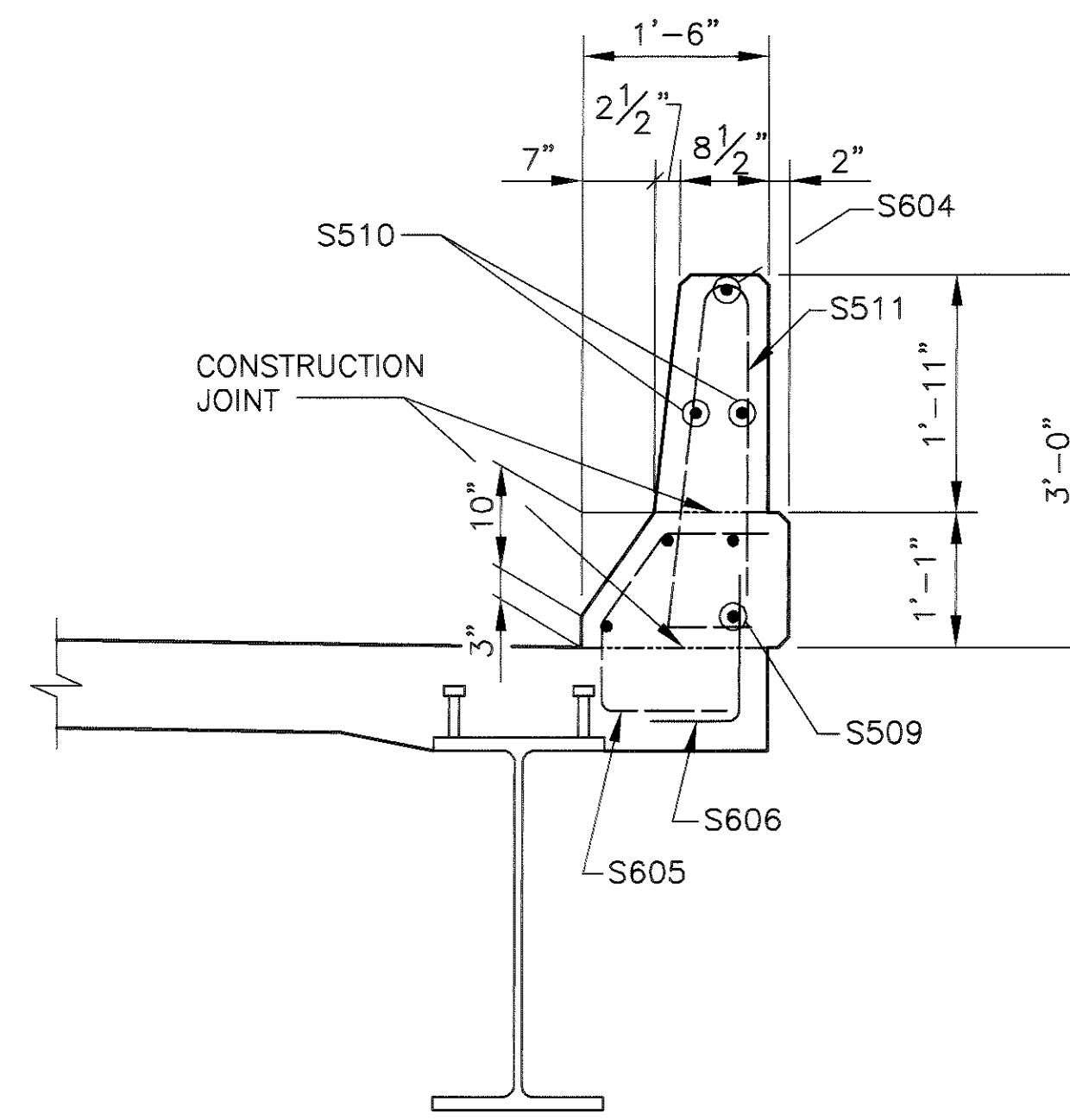


TRANSITION PARAPET - PLAN

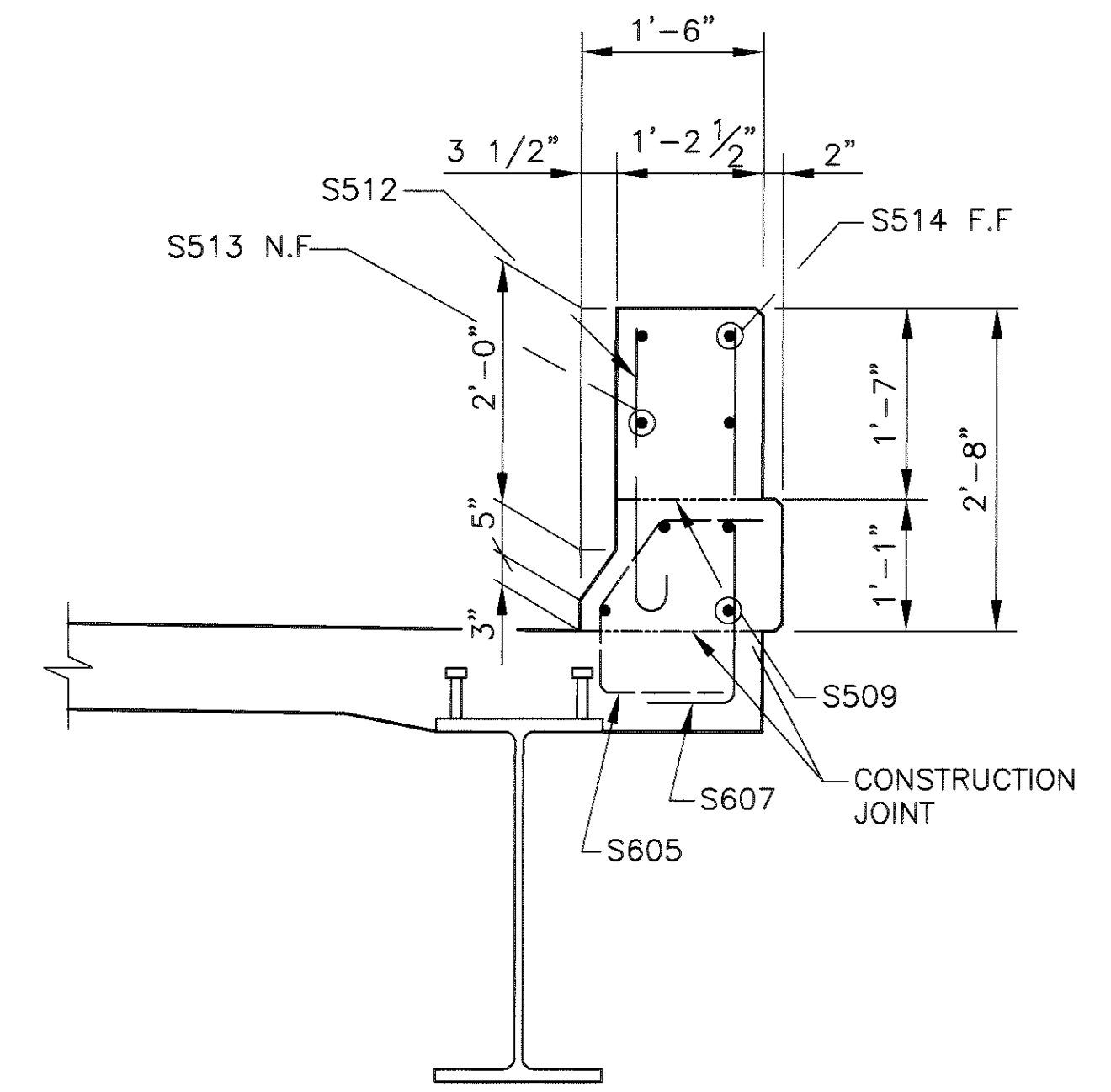


VIEW A-A

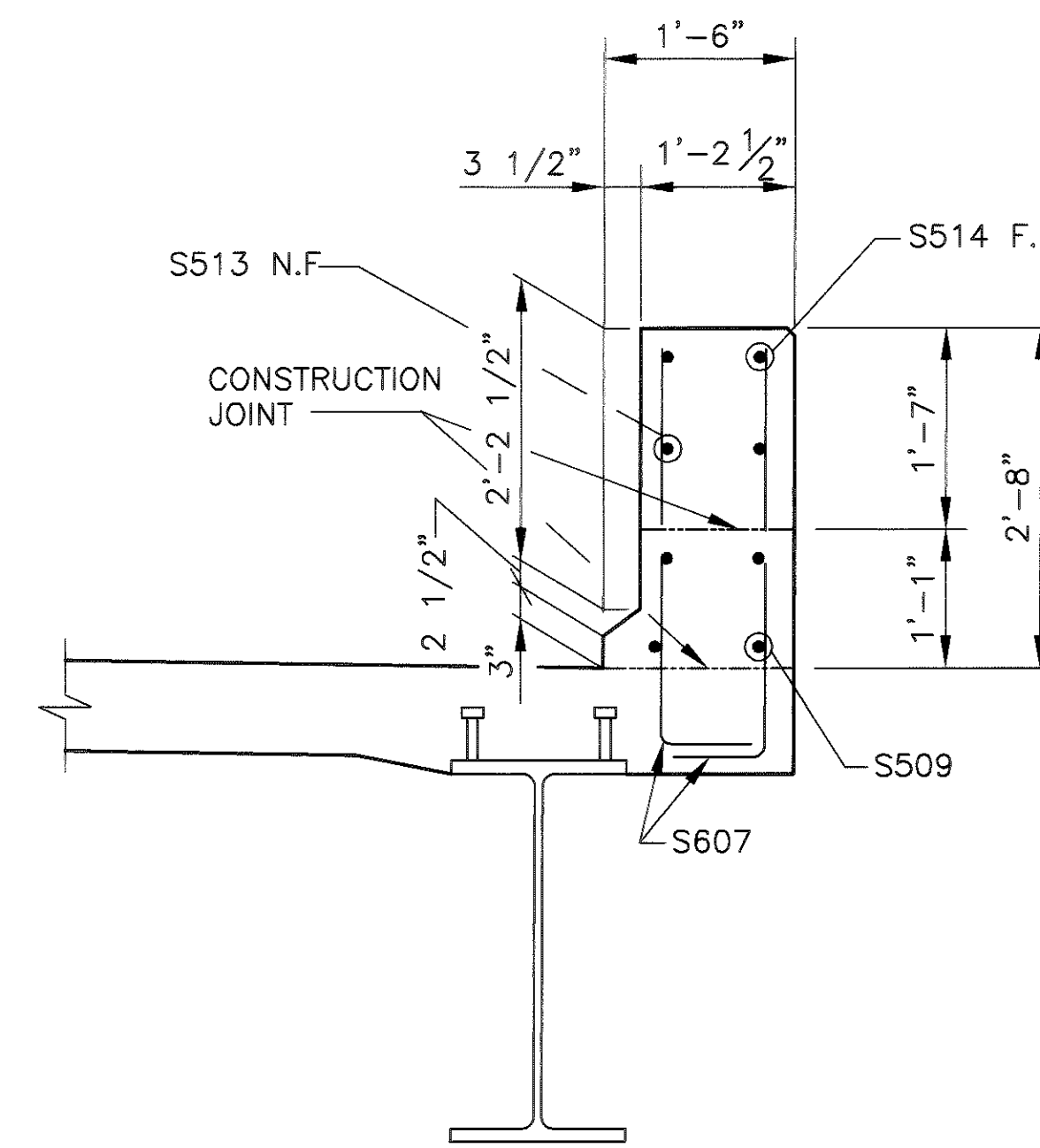
SEE ODOT STD. DWG. GR-3.1M OR GR 3.2M FOR BOLT HOLE LOCATION (TYP.)



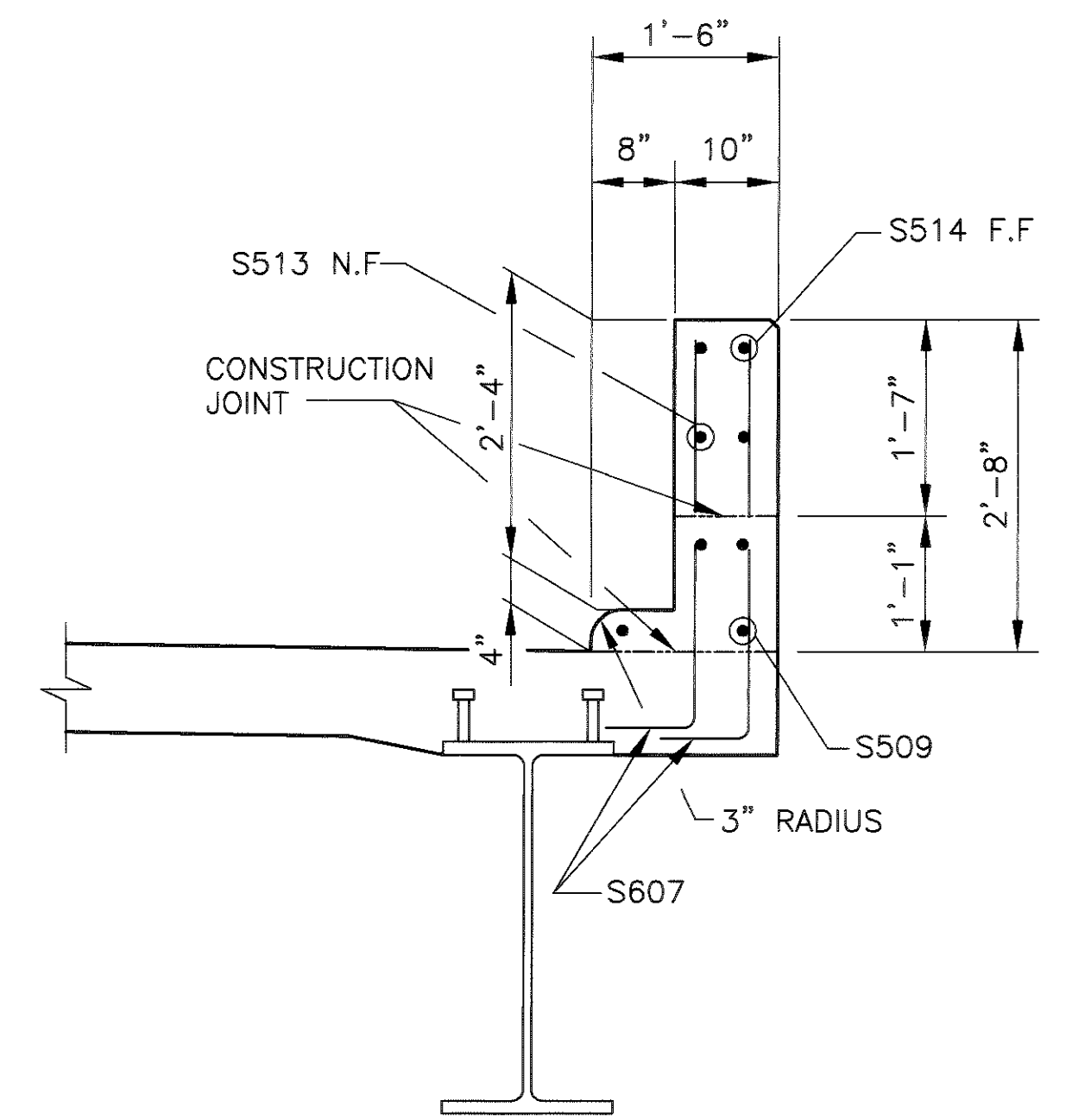
SECTION B-B



SECTION C-C



SECTION D-D



SECTION E-E

FOR PARAPET PLAN, SEE SHEET 19/24

FOR REINFORCEMENT SCHEDULE, SEE SHEET 24/24

FOR ADDITIONAL DETAILS AND NOTES NOT SHOWN REFER TO O.D.O.T. STANDARD DRAWING BR-1.

LOR-90-13.20
 O.L. 11, 12 & 73
 SHEFFIELD TOWNSHIP
 T-7 N, R-17 W
 VILLAGE OF SHEFFIELD
 LORAIN COUNTY
 STATE OF OHIO

MONUMENTS TO BE RESET DURING CONSTRUCTION				
STATION	STATION FROM C SURVEY		ADJUSTABLE C MONUMENT	RIGHT OF WAY MONUMENT
	LEFT	RIGHT		
77+91.83			1	
84+99.83	0.01'		1	
91+99.82		0.01'	1	
101+86.05			1	
TOTAL			4	

CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 819+58.51
 $\Delta=8^{\circ}17'46"$
 $D=1^{\circ}30'00"$
 $R=3819.72'$
 $L=553.07'$
 $T=277.02'$
 $E=10.03'$

CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 815+29.26
 $\Delta=24^{\circ}44'57"$
 $D=8^{\circ}00'00"$
 $R=716.20'$
 $L=309.36'$
 $T=157.13'$
 $E=17.04'$

P.I. STA. 813+05.60
 $\Theta_s=8^{\circ}00'00"$
 $L.S.=200.00'$
 $L.T.=133.47'$
 $S.T.=66.79'$

CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 809+44.69
 $\Delta=42^{\circ}54'22"$
 $D=16^{\circ}00'00"$
 $R=358.10'$
 $L=268.16'$
 $T=140.72'$
 $E=26.66'$

CURVE DATA RAMP "K" (EXISTING)
 P.I. STA. 818+59.74
 $\Delta=30^{\circ}28'01"$
 $D=8^{\circ}00'00"$
 $R=716.197'$
 $L=380.84'$
 $T=195.04'$
 $E=26.08'$

P.I. STA. 815+98.17
 $\Theta_s=8^{\circ}00'00"$
 $L.S.=200.00'$
 $L.T.=133.47'$
 $S.T.=66.79'$

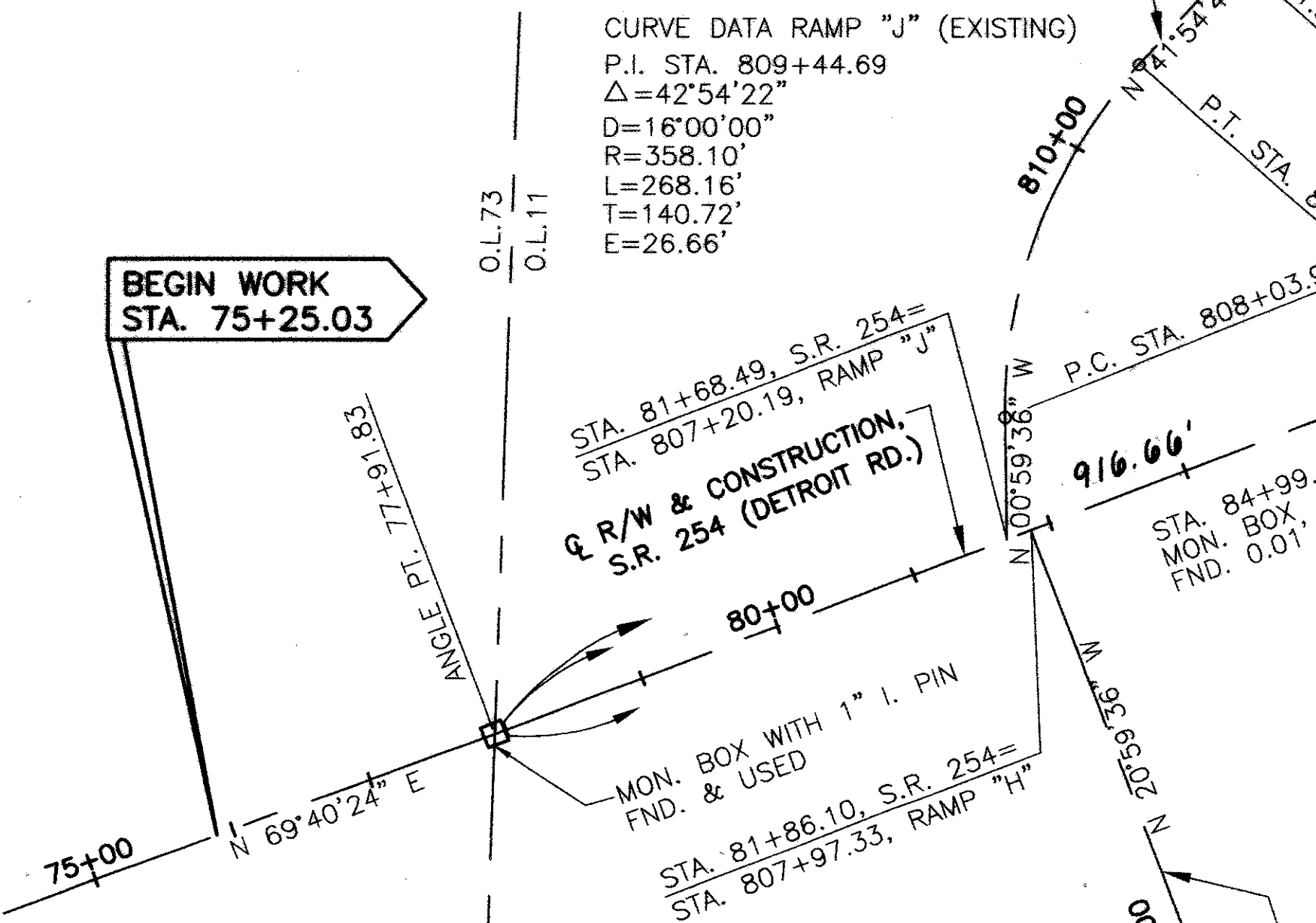
CURVE DATA RAMP "K" (EXISTING)
 P.I. STA. 813+09.52
 $\Delta=17^{\circ}47'58"$
 $D=16^{\circ}00'00"$
 $R=358.10'$
 $L=111.25'$
 $T=56.07'$
 $E=4.36'$

CURVE DATA RAMP "L" (EXISTING)
 P.I. STA. 811+89.38
 $\Delta=45^{\circ}28'09"$
 $D=16^{\circ}00'00"$
 $R=358.10'$
 $L=284.18'$
 $T=150.05'$
 $E=31.17'$

CURVE DATA RAMP "J" (EXISTING)
 P.I. STA. 819+58.51
 $\Delta=8^{\circ}17'46"$
 $D=1^{\circ}30'00"$
 $R=3819.72'$
 $L=553.07'$
 $T=277.02'$
 $E=10.03'$

CURVE DATA S.R. 254 (EXISTING)
 P.I. STA. 104+98.86
 $\Delta=6^{\circ}15'00"$ Lt.
 $D_c=1^{\circ}00'00"$
 $R=5729.58'$
 $T=312.81'$
 $L=625.00'$
 $E=8.53'$

CURVE DATA RAMP "K" (EXISTING)
 P.I. STA. 818+59.74
 $\Delta=30^{\circ}28'01"$
 $D=8^{\circ}00'00"$
 $R=716.197'$
 $L=380.84'$
 $T=195.04'$
 $E=26.08'$



MATCH LINE STA. 818+00 (I.R. 90)

MATCH LINE STA. 818+00 (I.R. 90)

BASIS FOR BEARINGS

THE BEARINGS USED IN THIS PLAN ARE BASED ON LOR-90 CENTERLINE SURVEY PLAT VOL. 24 PG. 51&51A

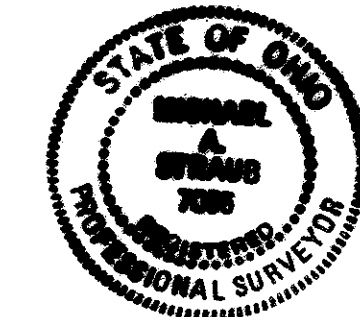
BASIS FOR EXISTING C OF R/W

LORAIN COUNTY TAX MAPS
 O.D.O.T. SURVEY DATA REPORT
 LOR-90 CENTERLINE SURVEY PLAT VOL.24 PG. 51 & 51A
 SHEFFIELD CROSSING
 SUBDIVISION P.V. 63 PG 54 & 55
 DOCUMENT NO. 97504947

I HEREBY CERTIFY THAT THIS PLAN IS A TRUE DELINEATION OF A SURVEY MADE FOR THE OHIO DEPARTMENT OF TRANSPORTATION IN 2000 BY R.E. WARNER & ASSOCIATES, INC.

THE ESTABLISHMENT OF THE PROPERTY LINES AND EXISTING RIGHT OF WAY LINES SHOWN ON THIS PLAN AS OF THIS DATE WAS PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION.

BY *Michael A. Straub* DATE 01/23/2001
 MICHAEL A. STRAUB
 PROFESSIONAL SURVEYOR NO. 7055



RECEIVED _____, 2001
 RECORDED _____, 2001
 BOOK _____ PAGE _____
 COUNTY RECORDER

MONUMENT LEGEND

- ☐ EXISTING MONUMENT BOX
- IRON PIPE FOUND
- I.P.F.● IRON PIN FOUND WITH I.D. CAP
- I.P.F.○ IRON PIN FOUND/NO I.D. CAP
- ADJUSTABLE CENTERLINE MONUMENT BOX
- 3/4" DIA. STEEL ROD, 36" LONG
- W/ 1-1/2" ALUMINIUM CAP STAMPED
- "ODOT R/W, R.E. WARNER & ASSOC. INC."

THE PROPOSED RIGHT OF WAY SHALL BE REFERENCED FROM THE CENTERLINE OF RIGHT OF WAY.

ADJUSTABLE CENTERLINE MONUMENTS, REFERENCE MONUMENTS AND RIGHT OF WAY MONUMENTS ARE SHOWN ON STANDARD CONSTRUCTION DRAWING RM-1.1 (REV. 4-29-99) OF THE OHIO DEPARTMENT OF TRANSPORTATION. THE PLACING OF THE MONUMENTS SHALL BE UNDER THE DIRECTION OF A REGISTERED SURVEYOR AND ARE TO BE SET, AS SHOWN BY THE HIGHWAY CONTRACTOR AT THE TIME OF CONSTRUCTION. ANY ALTERATIONS, WITH PRIOR APPROVAL OF THE OHIO DEPARTMENT OF TRANSPORTATION, SHALL BE NOTED AND O.D.O.T. SHALL BE NOTIFIED OF THE NEW LOCATIONS.

CENTERLINE PLAT

LOR - 190 - 13.20

1 / 1
1 / 3

157
161

P.I.D. NUMBER 11385
STATE JOB NO. 039690
R/W DESIGNER WJS
R/W REVIEWER W/W

LOR-90-13.20

O.L. 11, 12 & 73
SHEFFIELD TOWNSHIP
T-7 N, R-17 W
VILLAGE OF SHEFFIELD
LORAIN COUNTY
STATE OF OHIO

CONVENTIONAL SIGNS

- County Line _____
- Township Line _____
- Section Line _____
- Corporation Line _____ or _____
- Limited access (only) _____ LA
- Right of Way (only) _____ R/W
- Limited Access & Right of Way _____ LA & R/W
- Existing Right of Way _____
- Property Line _____ (in existing fence) _____
- Center Line _____ 352 _____ 353
- Construction Limits _____
- Fence Line (existing) _____ (proposed) _____
- Railroad _____ or _____
- Guardrail (existing) _____ (proposed) _____
- Utility Poles: Telephone ϕ Power ϕ Light ϕ
- Combination Utility Poles: ϕ ϕ ϕ ϕ
- Catch Basin (existing) \square (adjust to grade) \square (new) \square
- Manhole (existing) \circ (adjust to grade) \circ (new) \circ
- Inlet Basin \bullet Existing Hydrant \circ
- Existing Valve δ Valve (adjust to grade) δ
- Water Meter Vault \square Mailbox \square Sign w/Post \square
- Trees \odot Stumps \times (to be removed) \times
- Storm line _____ 12"S
- Sanitary line _____ 12"San
- Waterline _____ 8"W _____ 12"W
- Gasline _____ 10"G
- Electric line _____ E
- Telephone line _____
- Construction line _____ CONSTRUCTION LIMITS
- Temporary Right of Way _____
- Original Lot Line _____ O.L.12 _____ O.L.11

STRUCTURE KEY

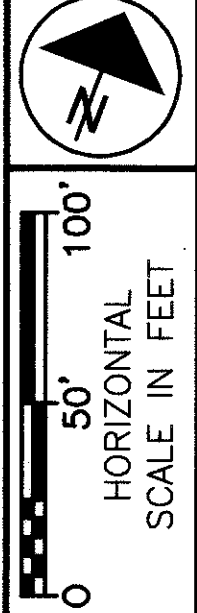
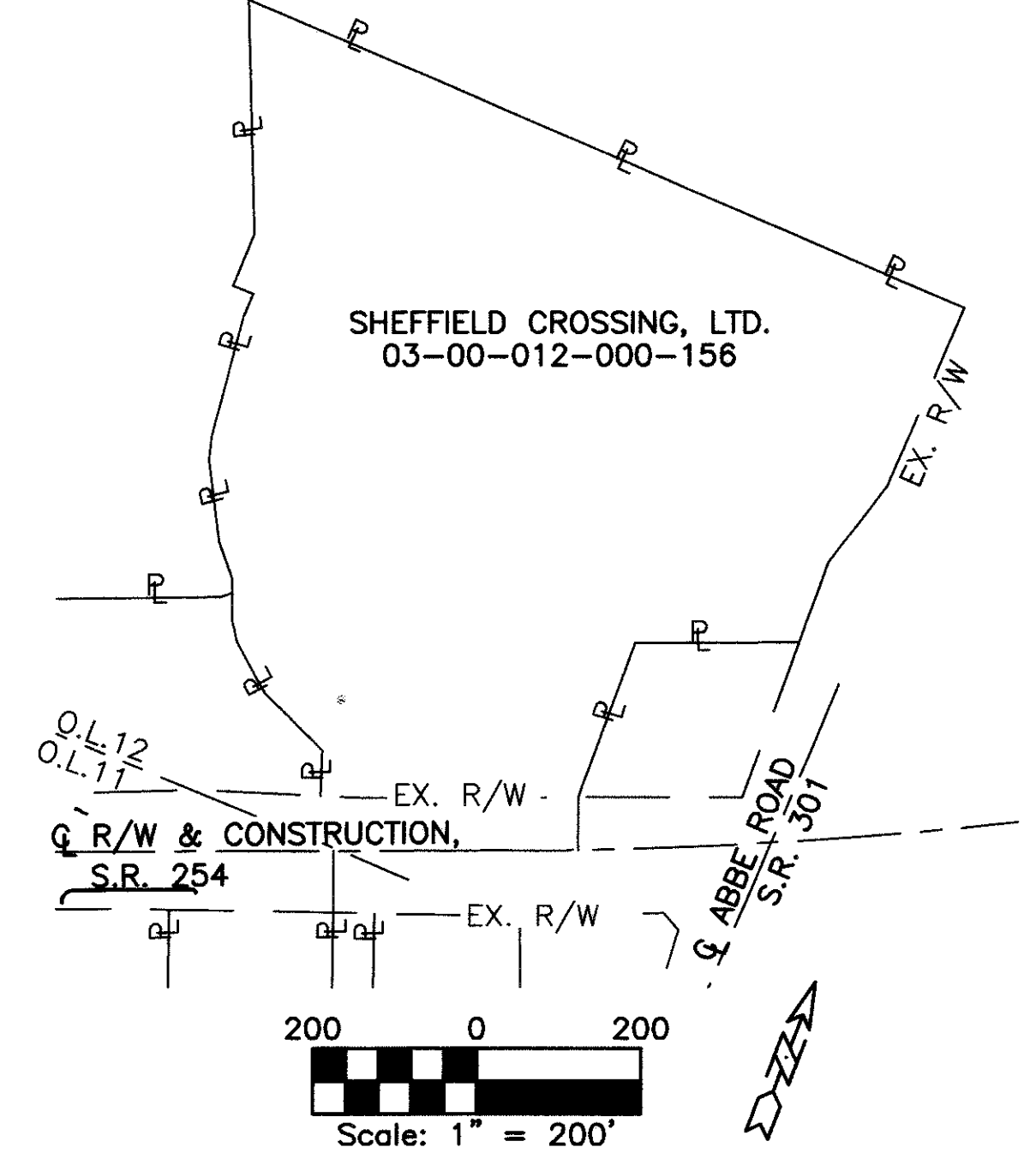
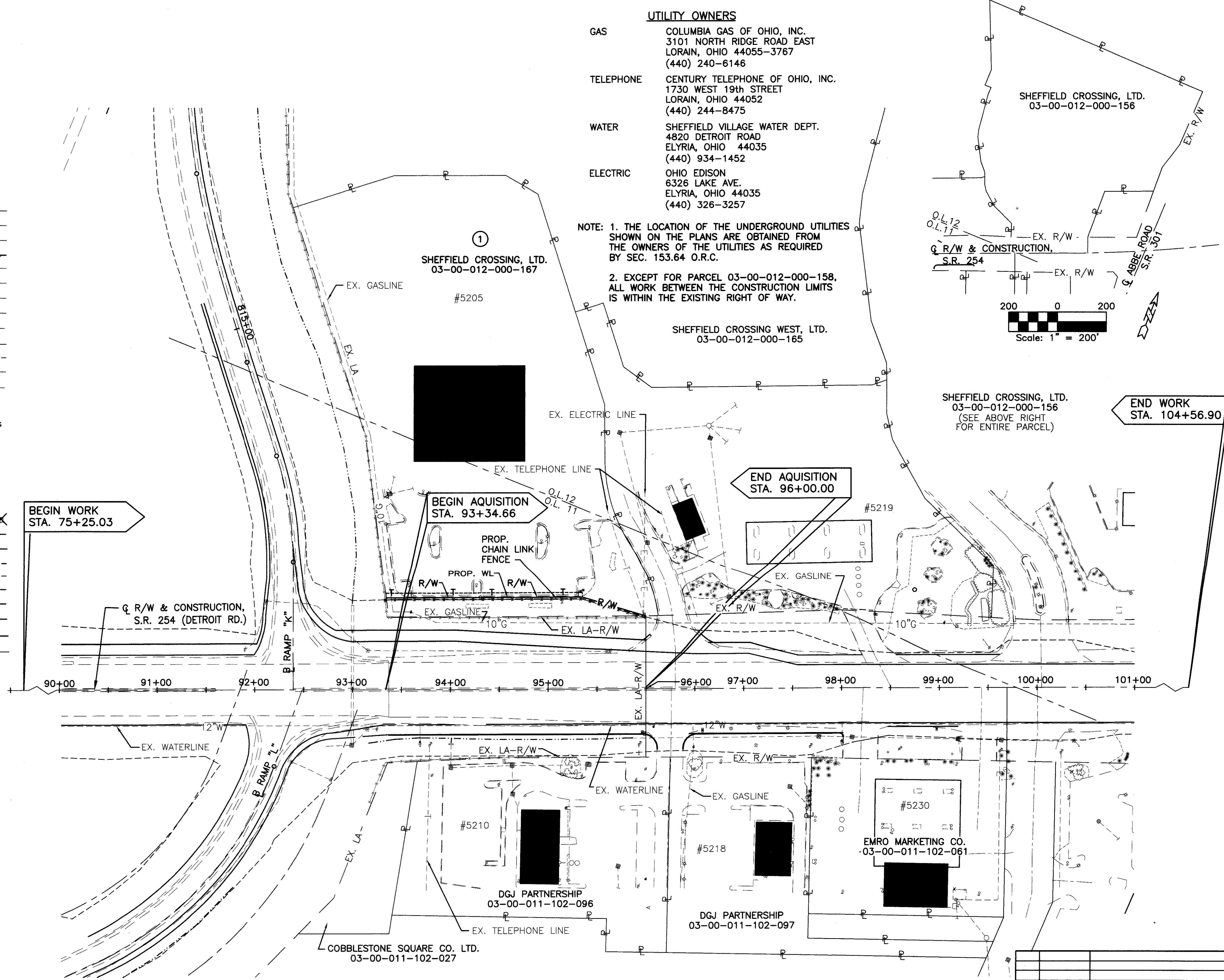
- RESIDENTIAL
- COMMERCIAL

UTILITY OWNERS

- GAS COLUMBIA GAS OF OHIO, INC.
3101 NORTH RIDGE ROAD EAST
LORAIN, OHIO 44055-3767
(440) 240-6146
- TELEPHONE CENTURY TELEPHONE OF OHIO, INC.
1730 WEST 19th STREET
LORAIN, OHIO 44052
(440) 244-8475
- WATER SHEFFIELD VILLAGE WATER DEPT.
4820 DETROIT ROAD
ELYRIA, OHIO 44035
(440) 934-1452
- ELECTRIC OHIO EDISON
6326 LAKE AVE.
ELYRIA, OHIO 44035
(440) 326-3257

NOTE: 1. THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THE PLANS ARE OBTAINED FROM THE OWNERS OF THE UTILITIES AS REQUIRED BY SEC. 153.64 O.R.C.

2. EXCEPT FOR PARCEL 03-00-012-000-158, ALL WORK BETWEEN THE CONSTRUCTION LIMITS IS WITHIN THE EXISTING RIGHT OF WAY.



P.I.D. NUMBER
11385

STATE JOB NO.
039690

R/W DESIGNER
R/W REVIEWER

PROPERTY MAP

LOR - 190 - 13.20

2 / 3

158
161

REV	DATE	DESCRIPTION

10:51 AM
 05-10-2001
 [C:\94197\DWG\S\SR25A\9319\MAP.DWG] DLS

LOR-90-13.20
 O.L. 11, 12 & 73
 SHEFFIELD TOWNSHIP
 T-7 N, R-17 W
 VILLAGE OF SHEFFIELD
 LORAIN COUNTY
 STATE OF OHIO

TOTAL NUMBER OF:

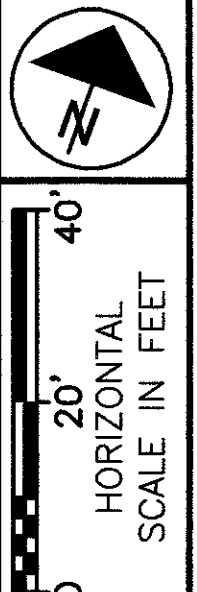
- 1 OWNERSHIP
- 2 PARCEL'S
- 0 TOTAL TAKE'S

- 0 OWNERSHIP WITH STRUCTURES INVOLVED
- 1 OWNERSHIPS WITH "P" ITEMS

NOTE: UNDER NO CIRCUMSTANCES ARE TEMPORARY EASEMENTS TO BE USED FOR STORAGE OF MATERIAL OR EQUIPMENT BY THE CONTRACTOR UNLESS NOTED OTHERWISE.

NOTE: ALL TEMPORARY PARCELS TO BE OF 18 MONTHS DURATION.

PARCEL NO.	OWNER	SHEET NO.	OWNERS RECORD DOCUMENT NO.	AUDITOR'S PARCEL	RECORD AREA Ac.	TOTAL P.R.O.	GROSS TAKE Ac.	P.R.O. IN TAKE Ac.	NET TAKE Ac.	STRUC-TURE	NET RESIDUE		TYPE FUND	REMARKS AND PERSONALTY	AS REQUIRED	
											LEFT	RIGHT			BOOK	PAGE
1WL	SHEFFIELD CROSSING, LTD	3	97504947	03-00-012-000-167	2.6080	-	0.1010	-	0.1010	P	2.5070			(2) LANDSCAPE AREAS LIGHT POLE		
1T		3					0.0230		0.0230					GRADING		



P.L.D. NUMBER
11385

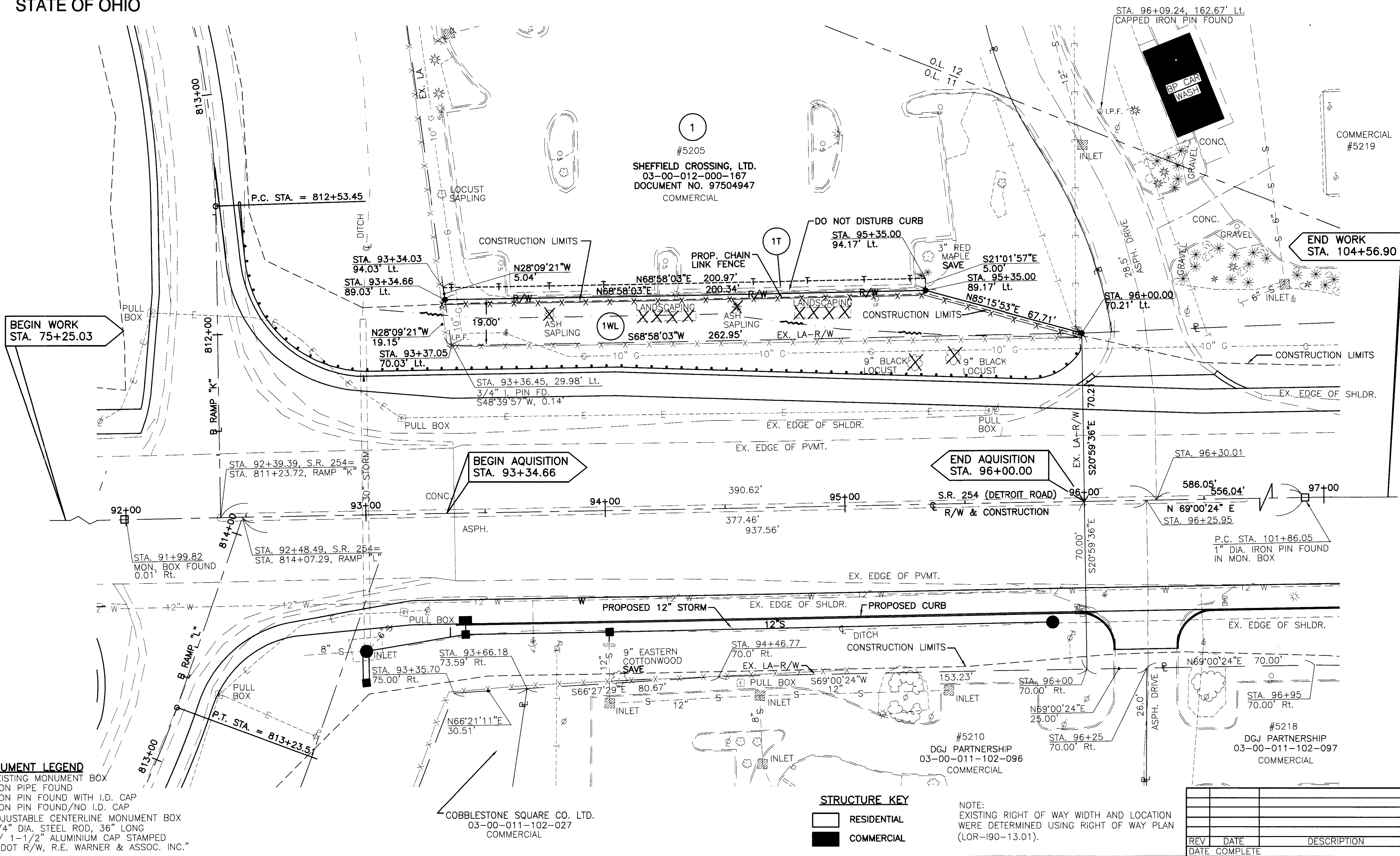
STATE JOB NO.
039690

R/W DESIGNER
R/W REVIEWER

RIGHT OF WAY PLAN AND
SUMMARY OF ADDITIONAL RIGHT OF WAY

LOR - 190 - 13.20

3 / 3
161



- MONUMENT LEGEND**
- EXISTING MONUMENT BOX
 - IRON PIPE FOUND
 - I.P.F.● IRON PIN FOUND WITH I.D. CAP
 - I.P.F.○ IRON PIN FOUND/NO I.D. CAP
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 - W/ 1-1/2" ALUMINIUM CAP STAMPED
 - "ODOT R/W, R.E. WARNER & ASSOC. INC."

- STRUCTURE KEY**
- RESIDENTIAL
 - COMMERCIAL

NOTE: EXISTING RIGHT OF WAY WIDTH AND LOCATION WERE DETERMINED USING RIGHT OF WAY PLAN (LOR-190-13.01).

REV	DATE	DESCRIPTION