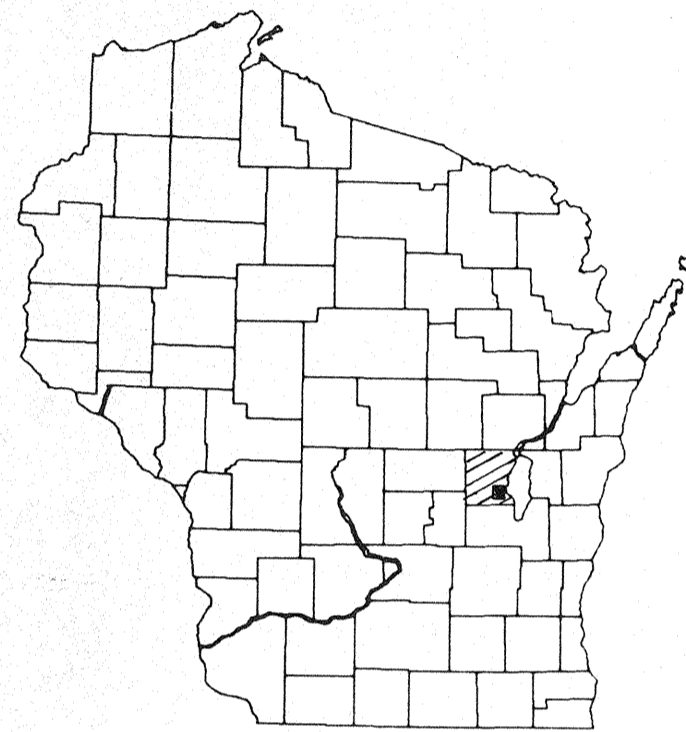


INDEX OF SHEETS

Sheet No. 1	Title
Sheet No.	Typical Sections and Details
Sheet No.	Estimate of Quantities
Sheet No.	Miscellaneous Quantities
Sheet No.	Right of Way Plat
Sheet No.	Plan and Profile
Sheet No.	Standard Detail Drawings
Sheet No.	Sign Plates
Sheet No.	Structure Plans
Sheet No.	Computer Earthwork Data
Sheet No.	Cross Sections

TOTAL SHEETS =



DESIGN DESIGNATION

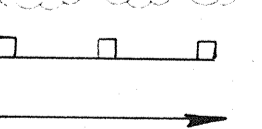
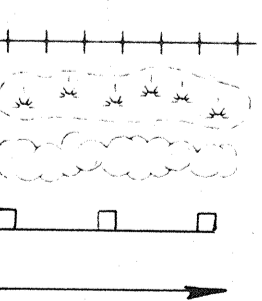
A.D.T. (1989)	= 8900
A.D.T. (2009)	= 16,000
D.H.V. (2009)	= 1,600
D.	= 60-40
T. (% ADT)	= 5
V.	= 35 M.P.H.

CONVENTIONAL SIGNS

COUNTY LINE	--- ---	COMBUSTIBLE FLUIDS (UNDER PRESSURE)	
CORPORATE LIMITS	--- ---	UNDERGROUND UTILITIES	G
PROPERTY LINE	--- ---	GAS	E
LOT LINE	--- ---	ELECTRIC	T
LIMITED HIGHWAY EASEMENT	--- ---	TELEPHONE	⊗
EXISTING RIGHT OF WAY	--- ---	SERVICE PEDESTAL	P
NEW RIGHT OF WAY	--- ---	CABLE MARKER	⊔
REFERENCE LINE	--- ---	POWER POLE	⊔
SLOPE INTERCEPT	--- ---	TELEPHONE POLE	⊔
ORIGINAL GROUND	--- ---	RAILROADS	⊔
MARSH OR ROCK PROFILE	--- ---	MARSH	
CULVERT IN PLACE	--- ---	WOODED AREA	
CULVERT REQUIRED	--- ---	SILT FENCE	
CULVERT REQUIRED (Profile)	--- ---	DRAINAGE ARROWS	



G	---
E	---
T	---
⊗	---
P	---
⊔	---
⊔	---
⊔	---
	---
	---
	---
	---



## GENERAL NOTES

- BEARINGS SHOWN ON THE PLANS ARE ASSUMED.
- CURVE DATA IS BASED ON THE ARC DEFINITION.
- FILL AS SHOWN ON THE PLANS PERTAINS TO EMBANKMENT CONSTRUCTED FROM BORROW EXCAVATION AND UNCLASSIFIED EXCAVATION. THE ALLOWANCE USED FOR EXPANDING THE FILLS TO COMPUTE THE VOLUME OF MATERIAL REQUIRED IS 30%.
- NO TREES AND OR SHRUBS ARE TO BE REMOVED WITHOUT THE APPROVAL OF THE ENGINEER.
- ALL RADII ARE MEASURED TO THE FACE OF CURB UNLESS OTHERWISE SHOWN OR NOTED.
- EXPANSION JOINTS ARE TO BE CONSTRUCTED AT ALL RADIUS POINTS IN THE CONCRETE CURB AND GUTTER.
- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- ALL PRIVATE EXISTING UTILITIES ARE TO BE ADJUSTED BY THE UTILITIES CONCERNED, MUNICIPAL OWNED STORM SEWER, SANITARY SEWER, AND WATER MANHOLES AND/OR BOXES WILL BE ADJUSTED BY THE CITY OF OSHKOSH.
- THE EXACT LOCATION OF DRIVEWAYS SHALL BE DETERMINED BY THE ENGINEER.
- WHEN THE QUANTITY OF CRUSHED AGGREGATE BASE COURSE OR SINGLE AGGREGATE BITUMINOUS MIX IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLAN IS APPROXIMATE. THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF MATERIAL AS DIRECTED BY THE ENGINEER.
- EXCAVATION BELOW SUBGRADE (E.B.S.), IF NEEDED, SHALL BE MEASURED AND PAID FOR AS UNCLASSIFIED EXCAVATION. THE LOCATION OF THE E.B.S. WILL BE DETERMINED BY THE ENGINEER.
- THE EXISTING DRIVEWAYS WILL BE RESTORED IN KIND AS DIRECTED BY THE ENGINEER IN THE FIELD, AND AT THE LOCATION DETERMINED BY THE ENGINEER.
- DISTURBED AREAS WITHIN THE RIGHT-OF-WAY, EXCEPT THE AREAS WITHIN THE SUBGRADE SHOULDER POINTS, ARE TO BE FERTILIZED, SEEDED AND MULCHED AS DIRECTED BY THE ENGINEER.
- TRAFFIC SIGNAL CONDUIT SHALL EXTEND 6' BEHIND BACK OF CURB.
- THE REMOVAL AND LANDSCAPING OF KOELLER ST. SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS UNDER THE ITEMS OF UNCLASSIFIED EXCAVATION, SALVAGED TOPSOIL, FERTILIZER, SEEDING & MULCHING. KOELLER ST. SHALL BE REMOVED TO MATCH EXISTING GROUND. THE UNCLASSIFIED EXCAVATION QUANTITY WAS OBTAINED FROM AS BUILT CONSTRUCTION PLANS.
- BORROW EXCAVATION FOR THIS PROJECT MAY BE AVAILABLE AS WASTE MATERIAL FROM AN ADJACENT PROJECT ON C.T.H. "K" TO THE WEST.
- RECONSTRUCTION OF THE RAILROAD CROSSING ON KOELLER STREET WILL BE COMPLETED BY OTHERS.

## STANDARD ABBREVIATIONS

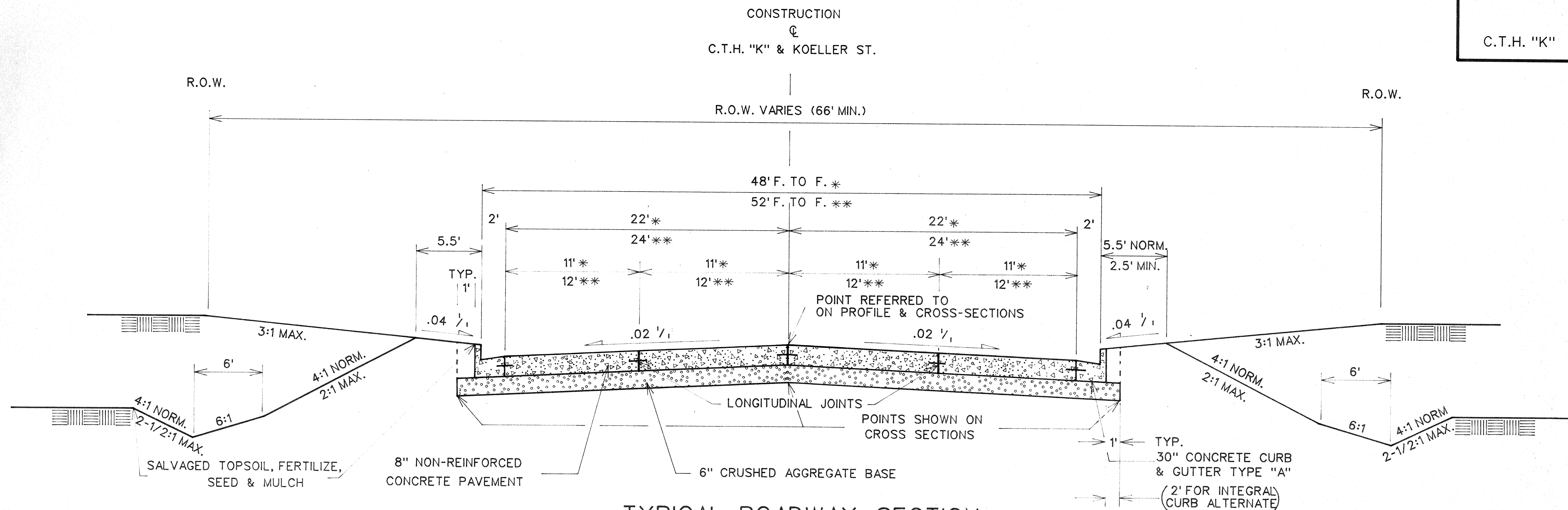
ADT=	AVERAGE DAILY TRAFFIC	NOR=	NORMAL
AGGR=	AGGREGATE	PAVT=	PAVEMENT
AH=	AHEAD	PC=	POINT OF CURVATURE
BIT=	BITUMINOUS	PE=	PRIVATE ENTRANCE
BK=	BACK	PI=	POINT OF INTERSECTION
BLDG=	BUILDING	PL=	PROPERTY LINE
BM=	BENCH MARK	POT=	POINT ON TANGENT
CB=	CATCH BASIN	PP=	POWER POLE
CE=	COMMERCIAL ENTRANCE	PT=	POINT OF TANGENCY
C&G=	CURB & GUTTER	R=	RADIUS
CL=	CENTER LINE	RC=	REVERSE CROWN
CMCP=	CORRUGATED METAL CULVERT PIPE	RCCP=	REINFORCED CONCRETE CULVERT PIPE
CONC=	CONCRETE	RCPSS=	REINFORCED CONCRETE PIPE, STORM SEWER
CONST=	CONSTRUCTION	RCPASS=	REINFORCED CONCRETE PIPE, ARCH, STORM SEWER
COR=	CORNER	RCPHSS=	REINFORCED CONCRETE PIPE, HORIZONTAL ELLIPTICAL, STORM SEWER
CTH=	COUNTY TRUNK HIGHWAY	RDWY=	ROADWAY
CY=	CUBIC YARD	REQD=	REQUIRED
D=	DEGREE OF CURVE	RO=	RUNOFF
DHV=	DESIGN HOUR VOLUME	RT=	RIGHT
DIA=	DIAMETER	ROW=	RIGHT-OF-WAY
DWY=	DRIVEWAY	SAN=	SANITARY SEWER
EBS=	EXCAVATION BELOW SUBGRADE	SDW=	SIDEWALK
EL=	ELEVATION	SE=	SUPERELEVATION
ELEC=	ELECTRIC	SEC=	SECTION
ENTR=	ENTRANCE	SHLD=	SHOULDER
EXIST=	EXISTING	SS=	STORM SEWER
FE=	FIELD ENTRANCE	SSD=	STOPPING SIGHT DISTANCE
F-F=	FACE TO FACE	STA=	STATION
FH=	FIRE HYDRANT	STH=	STATE TRUNK HIGHWAY
FL=	FLOW LINE	SY=	SQUARE YARD
FT=	FEET (FOOT)	T=	TANGENT OR TRUCKS
G=	GAS	TEL=	TELEPHONE
GV=	GAS VALVE	T=	TRANSIT LINE
H=	HOUSE	TYP=	TYPICAL
HOR=	HORIZONTAL	UG=	UNDERGROUND
IN=	INCHES	UNCL=	UNCLASSIFIED
INL=	INLET	USGS=	UNITED STATES GEOLOGICAL SURVEY
IP=	IRON PIPE	VAR=	VARIABLE
L=	LENGTH OF CURVE	VC=	VERTICAL CURVE
LF=	LINEAR FEET	VERT=	VERTICAL
LT=	LEFT	W=	WATER
MAX=	MAXIMUM	WV=	WATER VALVE
MIN=	MINIMUM		
MH=	MANHOLE		
NC=	NORMAL CROWN		

## STANDARD DETAIL DRAWINGS

8A5-6a & c	INLET & MANHOLE COVERS
8B6-3	MANHOLES, TYPE 1
8C1-4	INLETS, TYPE 1,2, & 3
8D1-11	CONCRETE CURB, CONCRETE CURB & GUTTER AND PAVEMENT TIES
8D5-8	CURB RAMPS
8E7-1	EROSION MAT
8E9-2	SILT FENCE
8F1-10a	APRON ENDWALLS FOR CULVERT PIPE
9B2-4	CONDUIT
12A2-3	SLOPE PAVING - STRUCTURES (CRUSHED AGGREGATE)
12A3-4	NAME PLATE - STRUCTURES
13B1-3	PAVEMENT DETAILS FOR RAILROAD APPROACH
13B2-3	CONCRETE PAVEMENT APPROACH SLAB
13C1-7	CONC. PAVEMENT LONGITUDINAL JOINTS AND PAVEMENT TIES
13C4-9	TRANSVERSE JOINTS IN NON-REINFORCED CONC. PAVEMENT (20' NORMAL TRANSVERSE JOINTS)
14B2-8a & b	CLASS "A" STEEL PLATE BEAM GUARD (TWO SHEETS)
15C1-7	CONSTRUCTION BARRICADES AND STANDARD SIGNS
15C7-1	PAVEMENT MARKING SYMBOLS
15C9-1	PAVEMENT MARKING DETAILS FOR RAILROAD-HIGHWAY GRADE CROSSING
15C3-1	TRAFFIC CONTROL FOR TEMPORARY ROAD CLOSURES IN RURAL AREAS (HIGHWAY UNDER CONSTRUCTION CLOSED TO TRAFFIC)

## UTILITIES

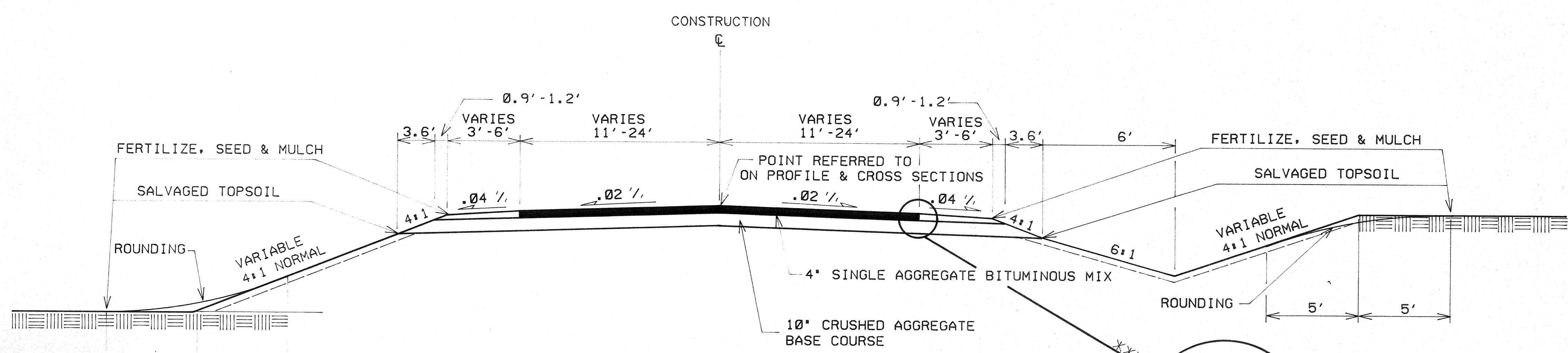
POWER (414) 231-7100	MR. TIM DOUGLAS WISCONSIN PUBLIC SERVICE CORP. 3300 N. MAIN OSHKOSH, WISC. 54901
GAS (414) 231-7100	MR. JIM THOMA WISCONSIN PUBLIC SERVICE CORP. 3300 N. MAIN OSHKOSH, WISC. 54901
TELEPHONE (414) 929-1008	MR. AL MATSCHI WISCONSIN BELL 70 E. DIVISION STREET FOND DU LAC, WISC. 54935
CABLE TV. (414) 233-2700	MR. GEORGE SCHMIDT WARNER AMEX. CABLE TV OF OSHKOSH 304 HIGH AVE OSHKOSH, WISC. 54901
SEWER & WATER (414) 236-5065	MR. GERALD KONRAD CITY OF OSHKOSH P.O. BOX 1130 OSHKOSH, WISC. 54901
RAILROAD (414) 485-4732	MR. BERNARD MEIGHAN WISCONSIN AND SOUTHERN RAILROAD P.O. BOX A HORICON, WISC. 53032



### TYPICAL ROADWAY SECTION

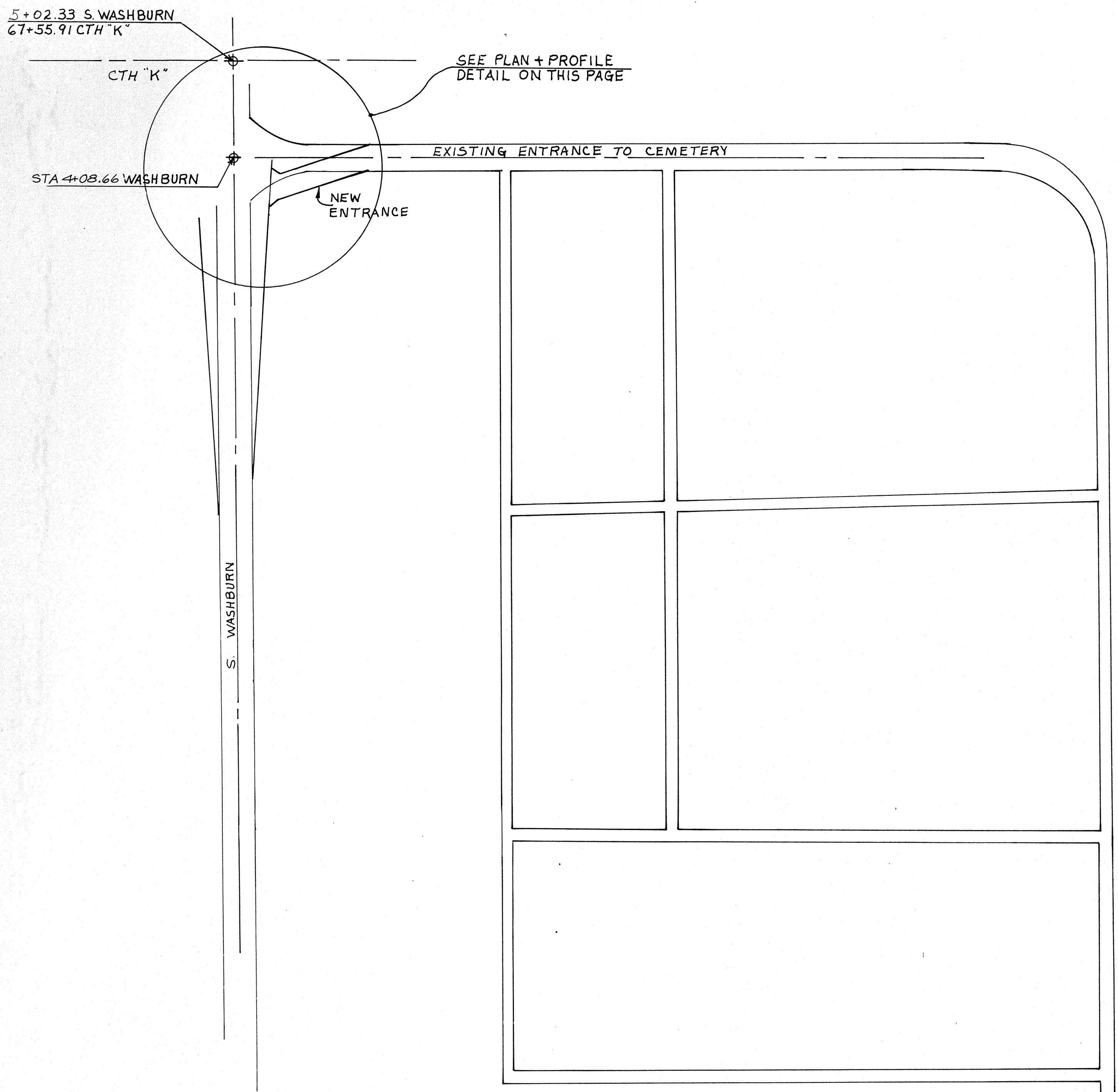
STA. 64+00 TO STA. 93+00 CTH "K"  
 STA. 0+24 TO STA. 15+71.10 KOELLER ST.  
 STA. 15+84 TO STA. 17+50.10 KOELLER ST.

\* C.T.H. "K"  
 \*\* KOELLER ST.

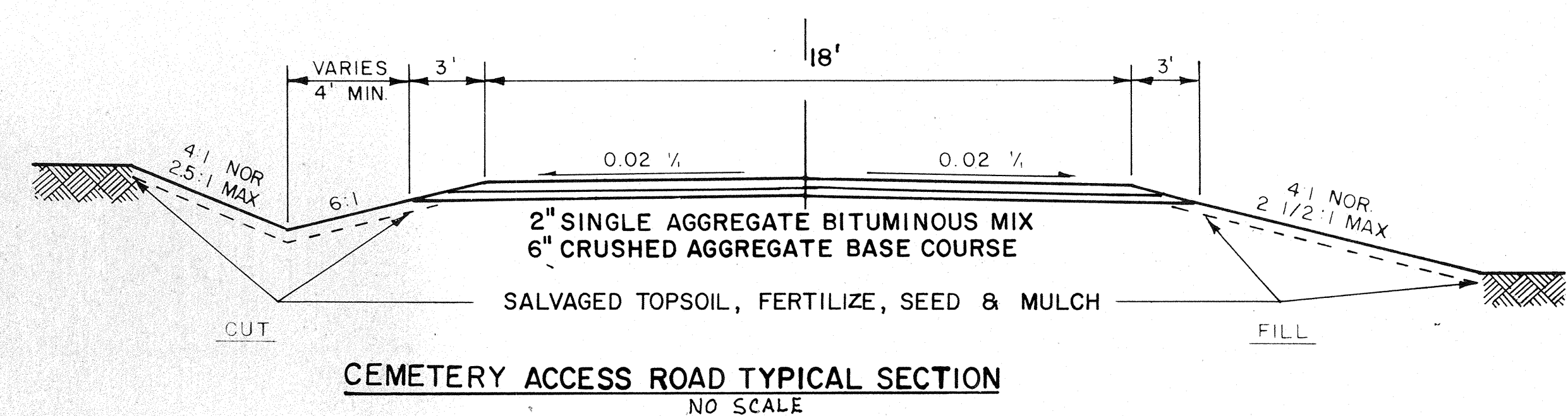


### TYPICAL ROADWAY CROSS SECTION

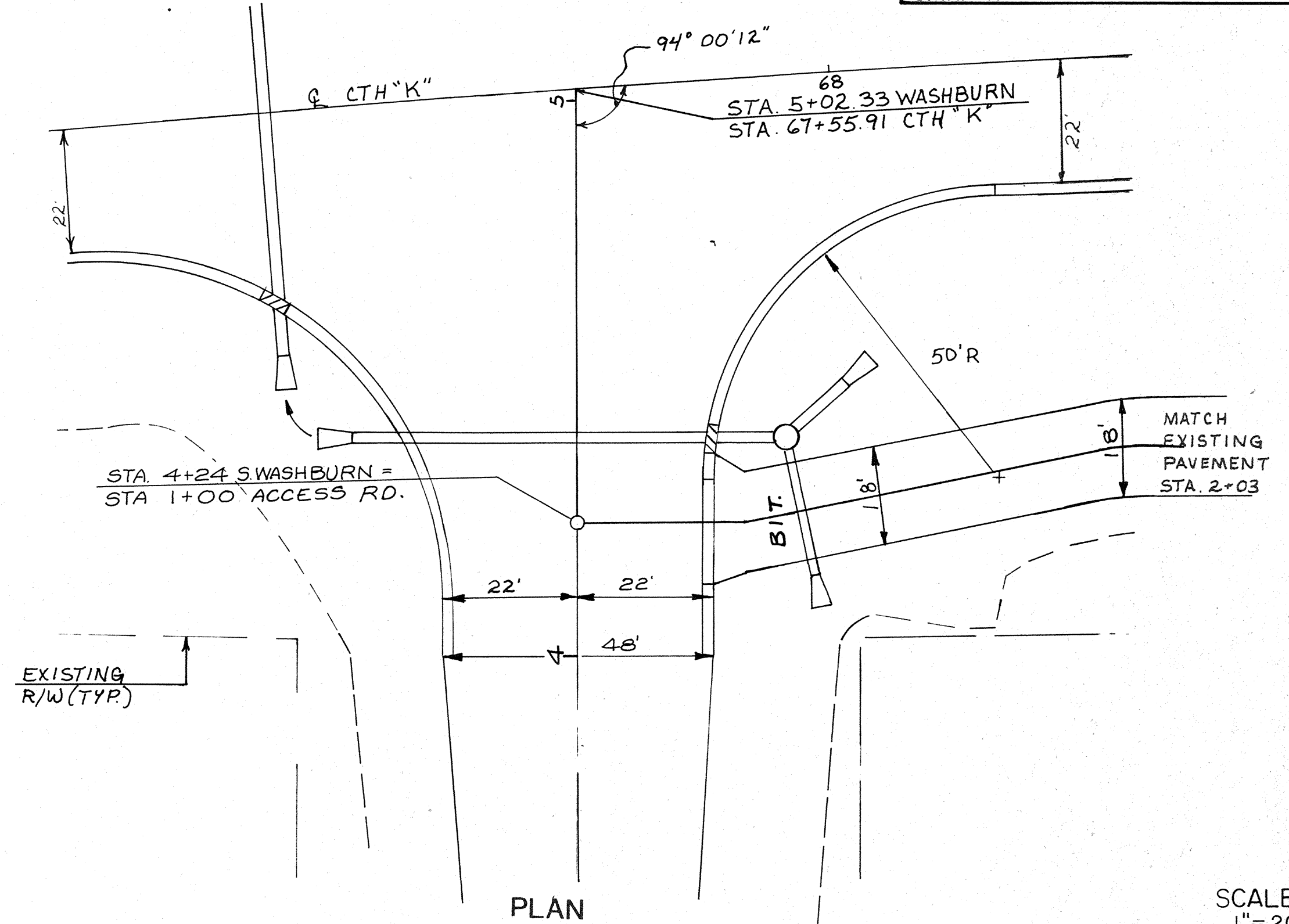
WASHBURN ST. (STA. 6+08 - STA. 8+03, STA. 12+00 - STA. 14+00)  
 \*\*\* KOELLER ST. (STA. 17+50.10 - STA. 20+00)



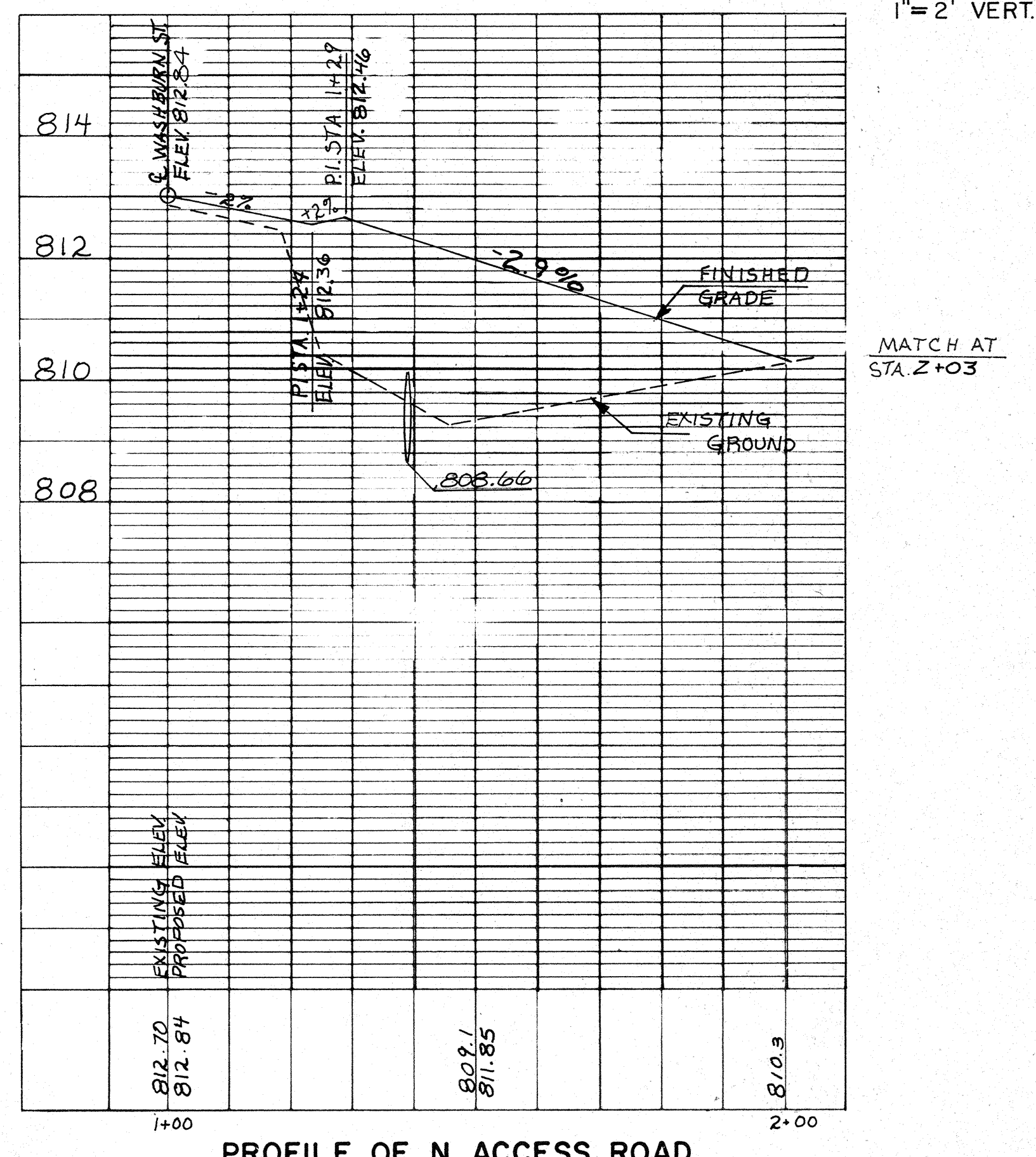
LAYOUT OF ELLENWOOD CEMETERY  
SCALE 1" = 50'



CEMETERY ACCESS ROAD TYPICAL SECTION  
NO SCALE



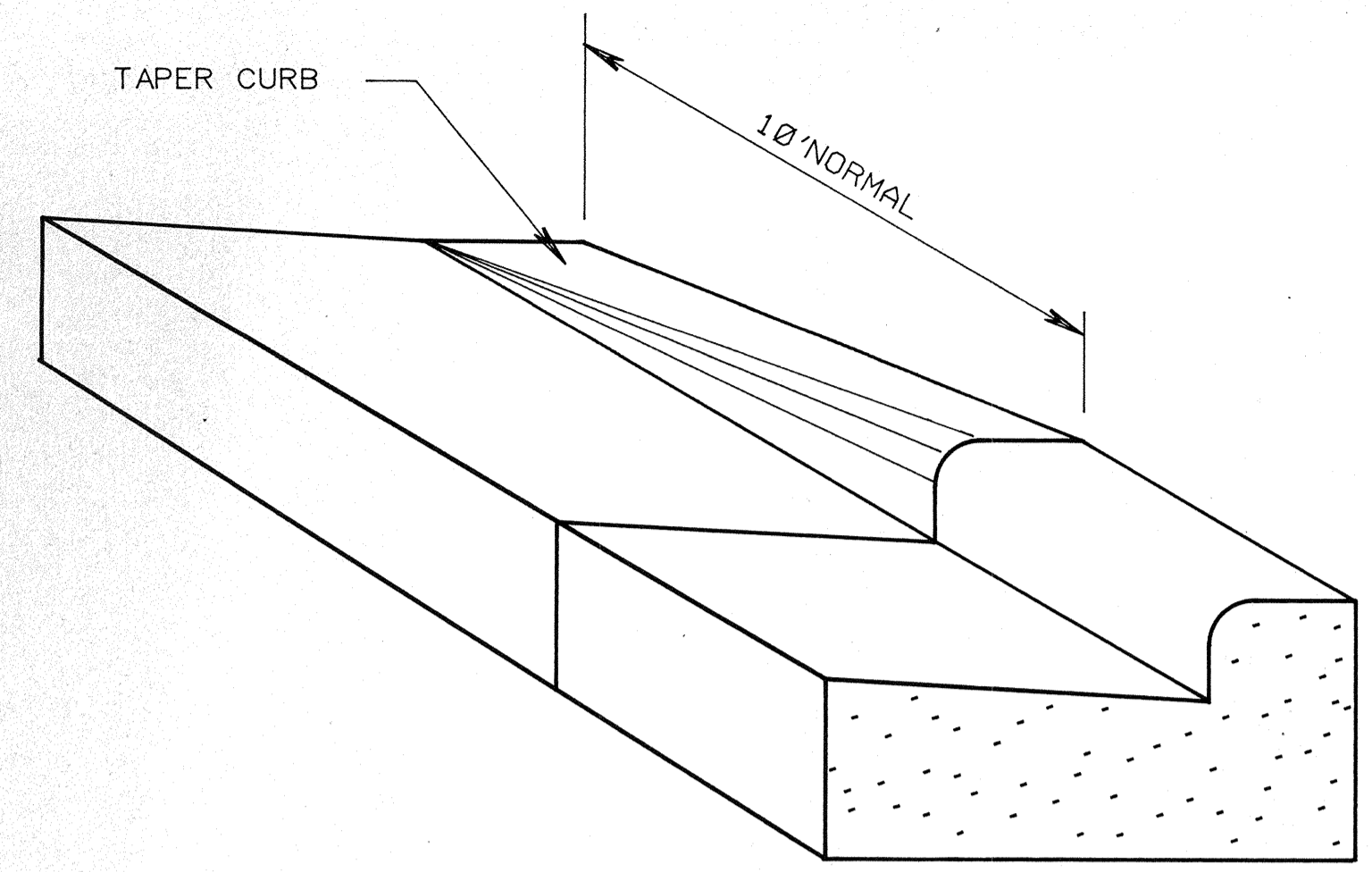
PLAN



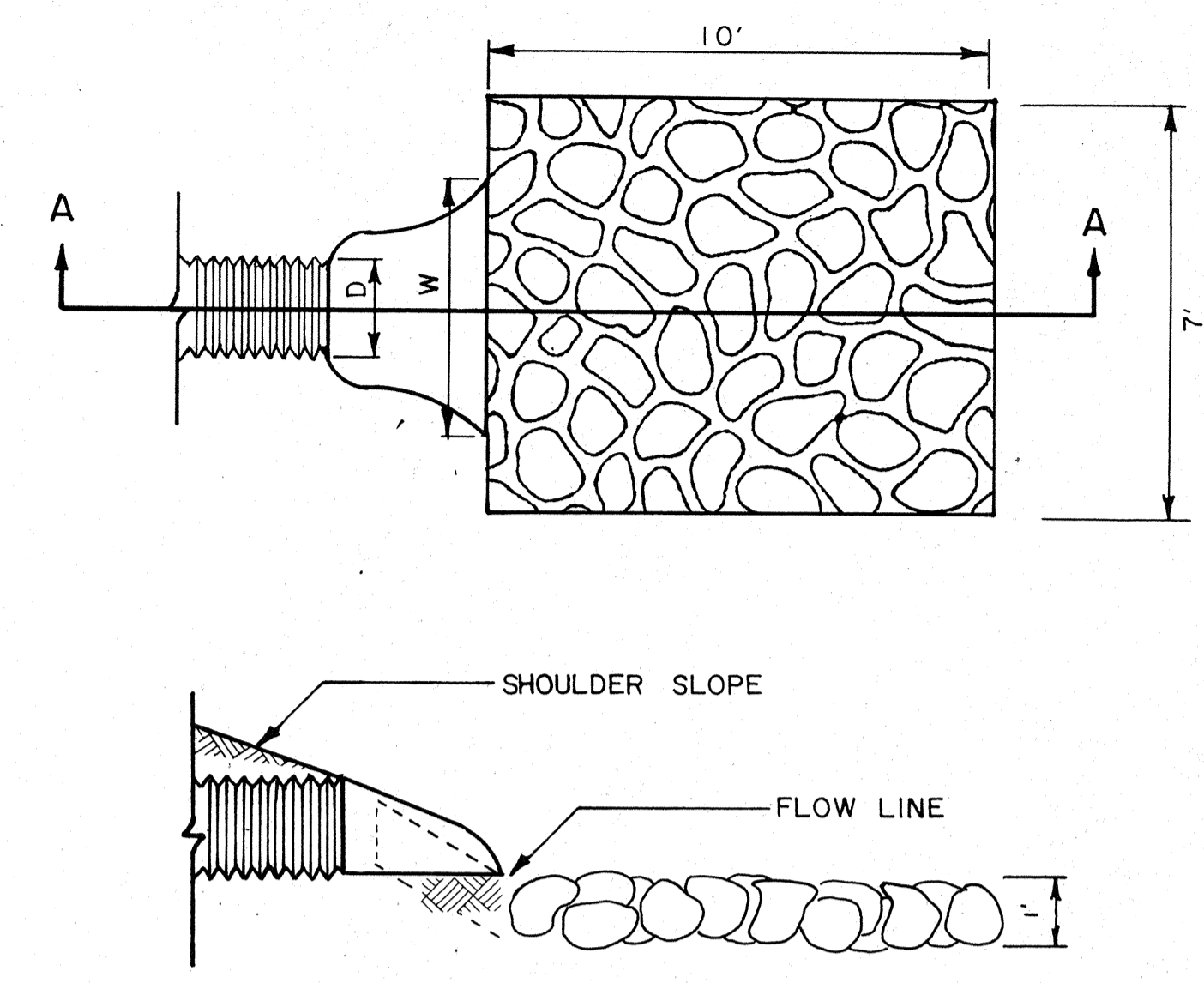
PROFILE OF N. ACCESS ROAD

SCALE  
1" = 20' HOR.  
1" = 2' VERT.

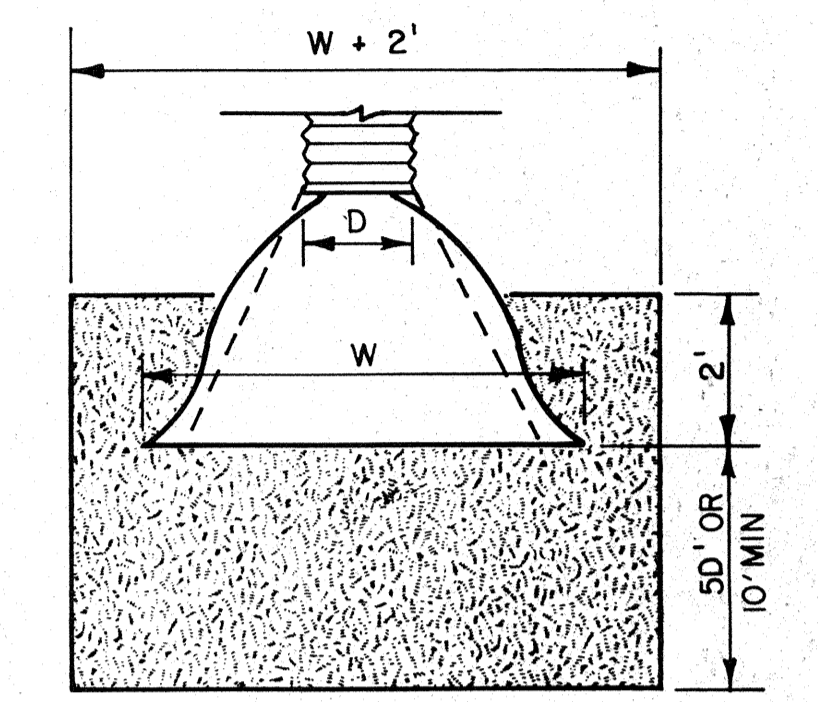




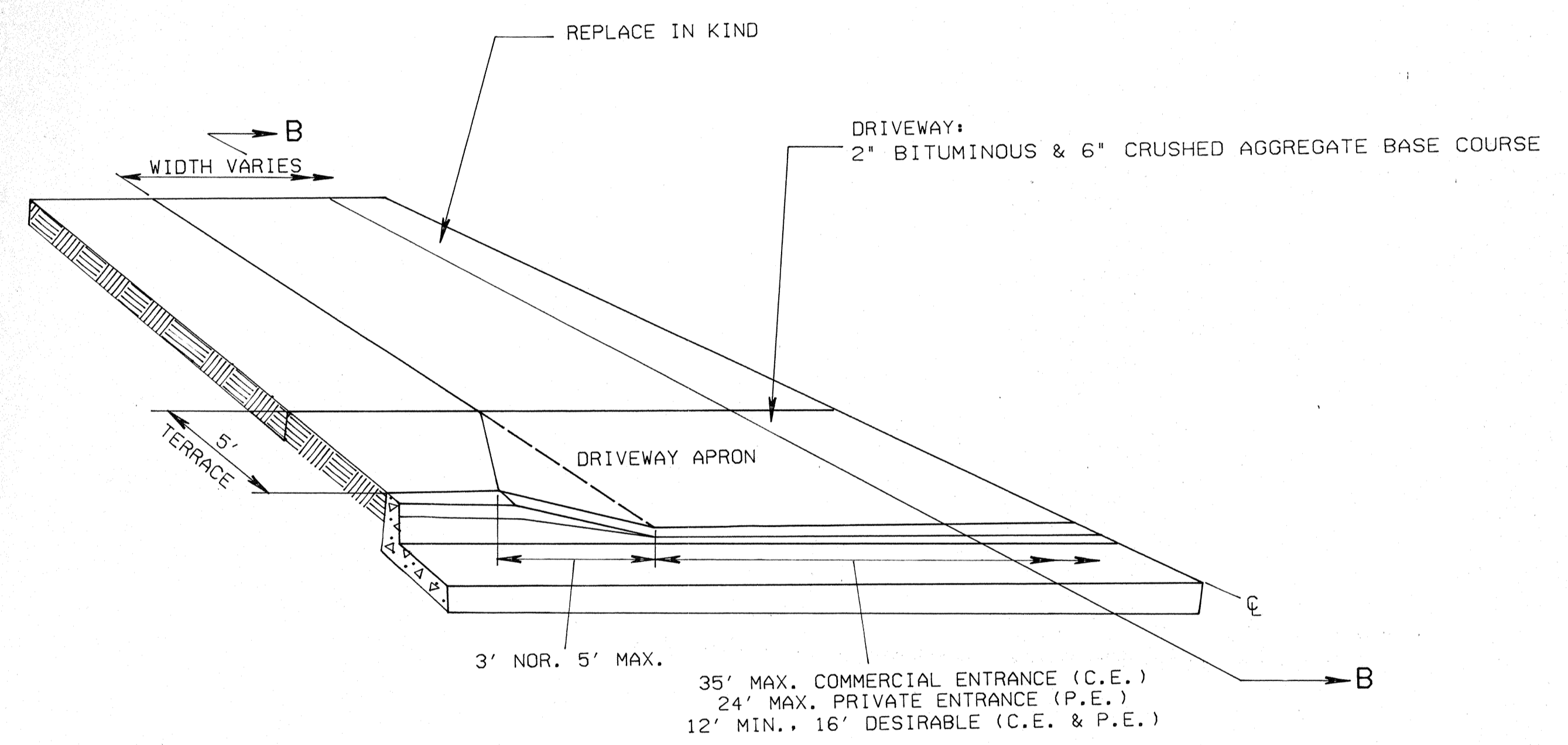
**DETAIL OF CURB & GUTTER TERMINI**



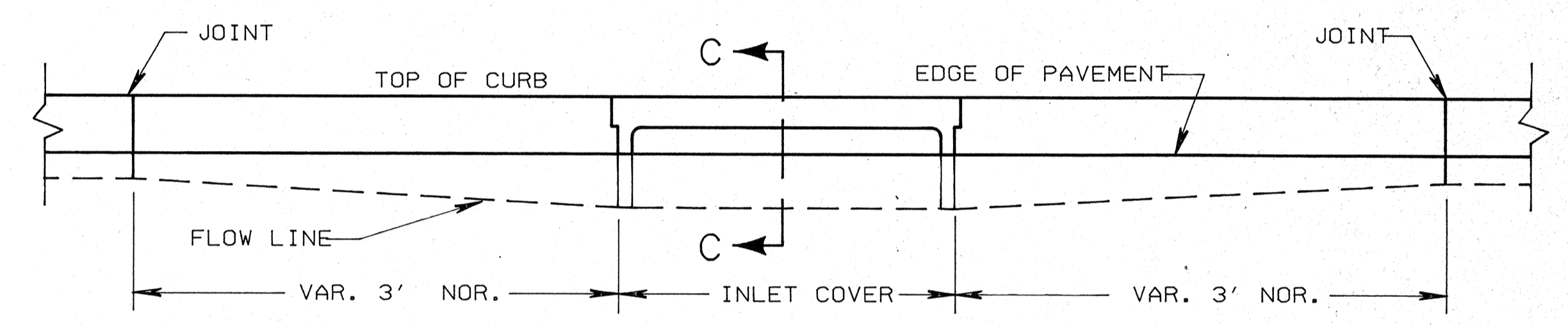
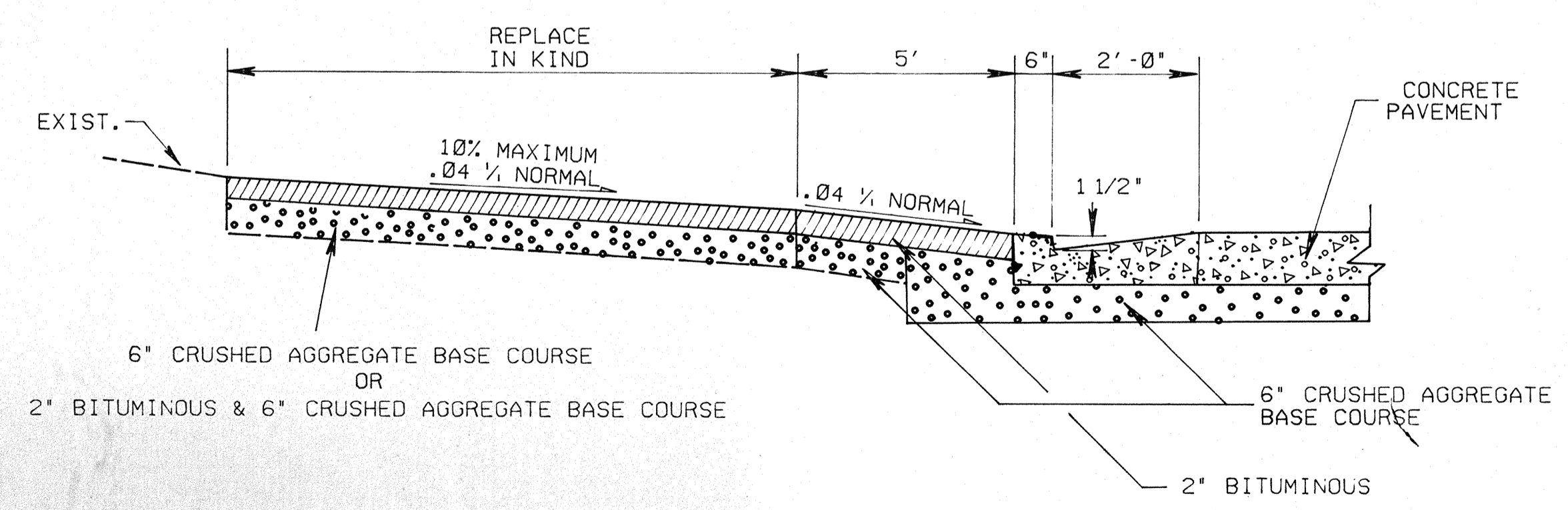
**SECTION A-A**  
**RIPRAP AT PIPE DISCHARGE**



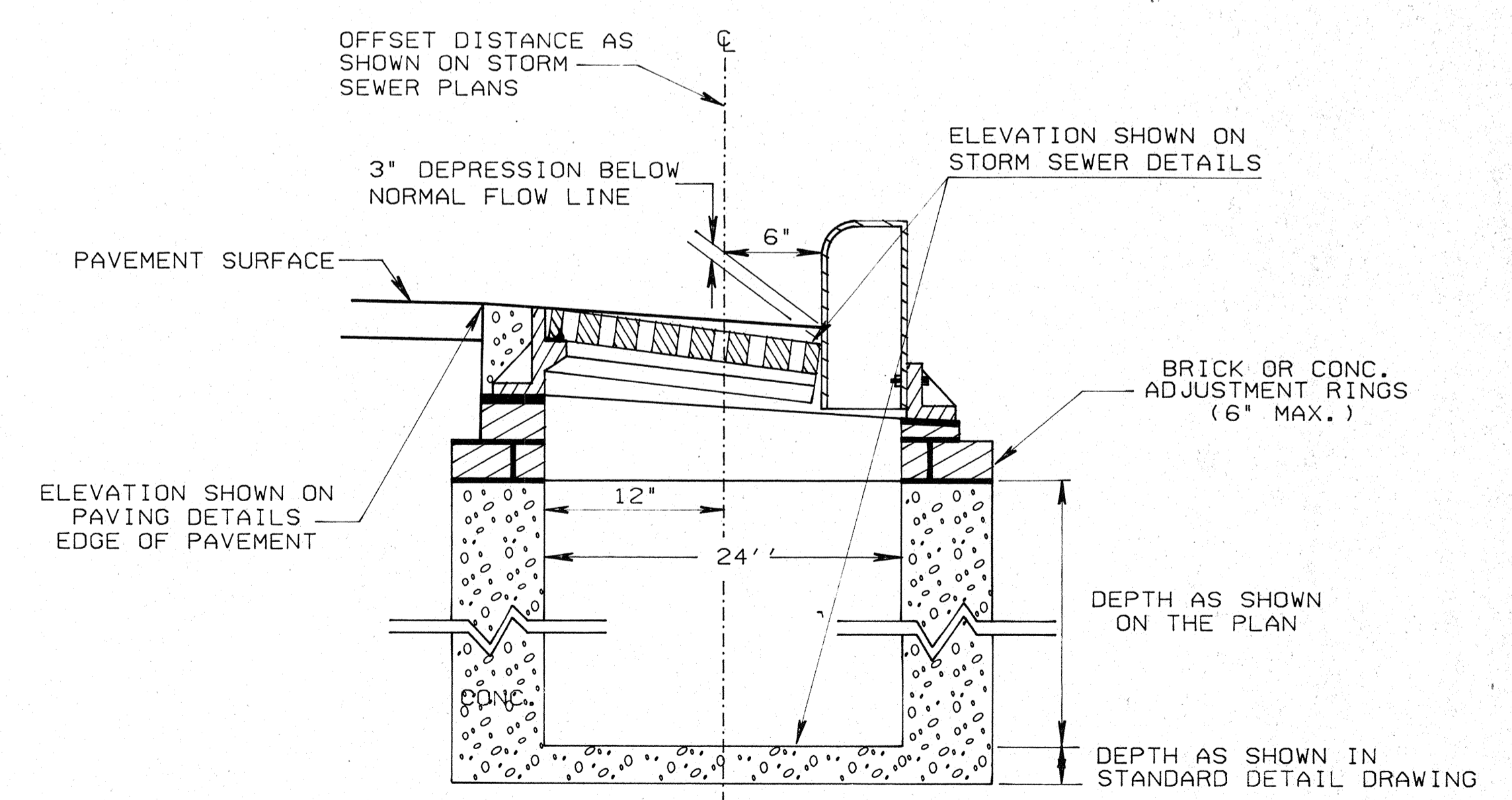
**SOD AT PIPE DISCHARGE**



**SECTION B-B**  
**URBAN DRIVEWAY DETAILS**



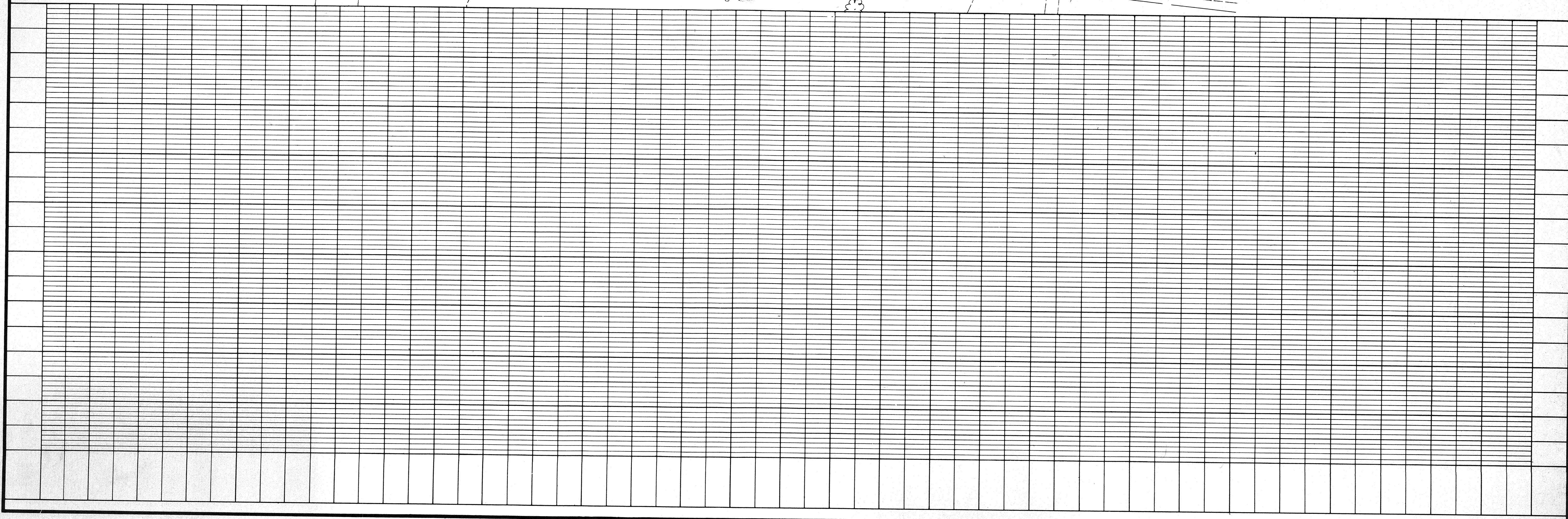
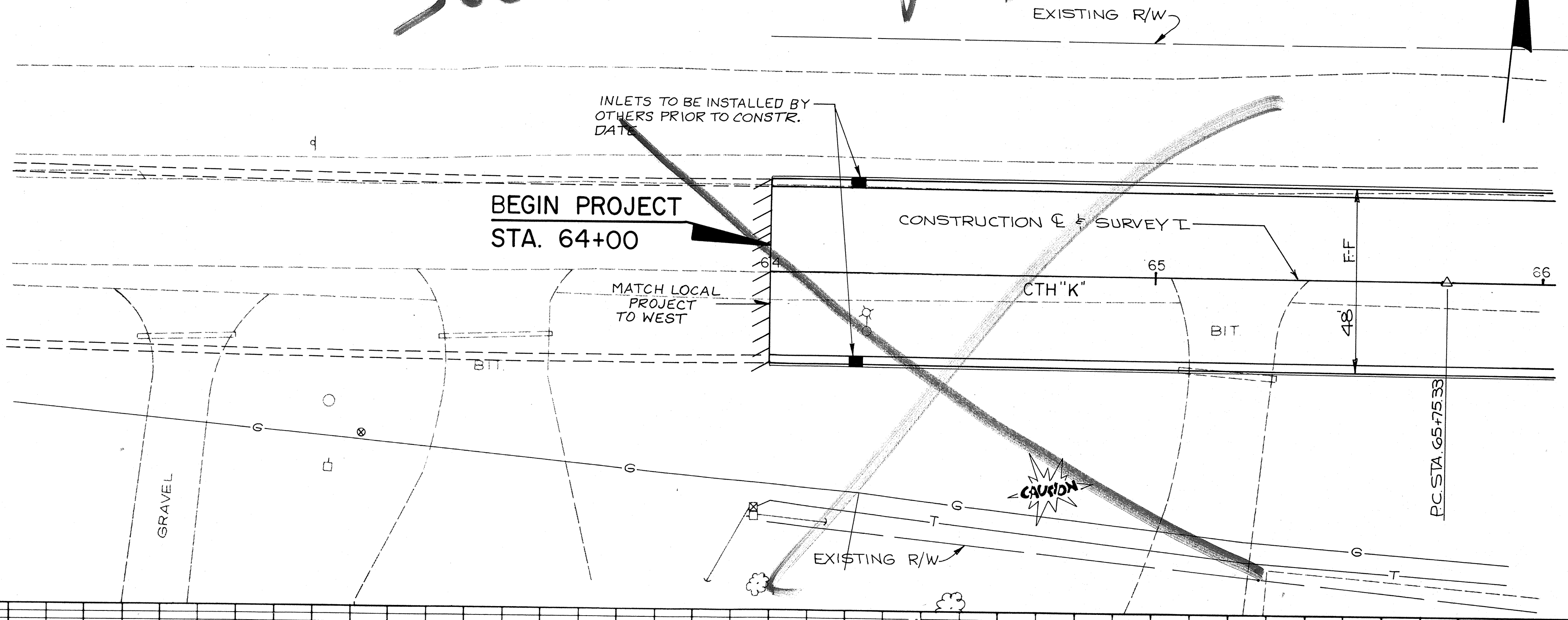
**ELEVATION**



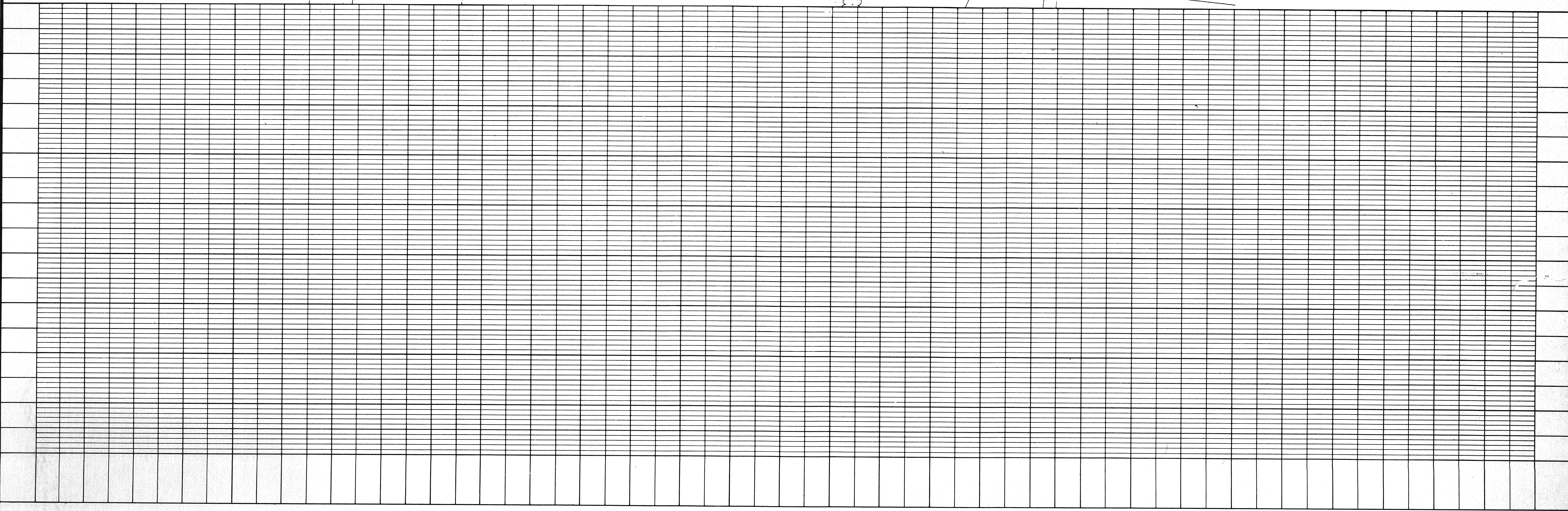
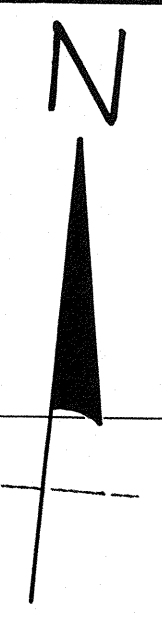
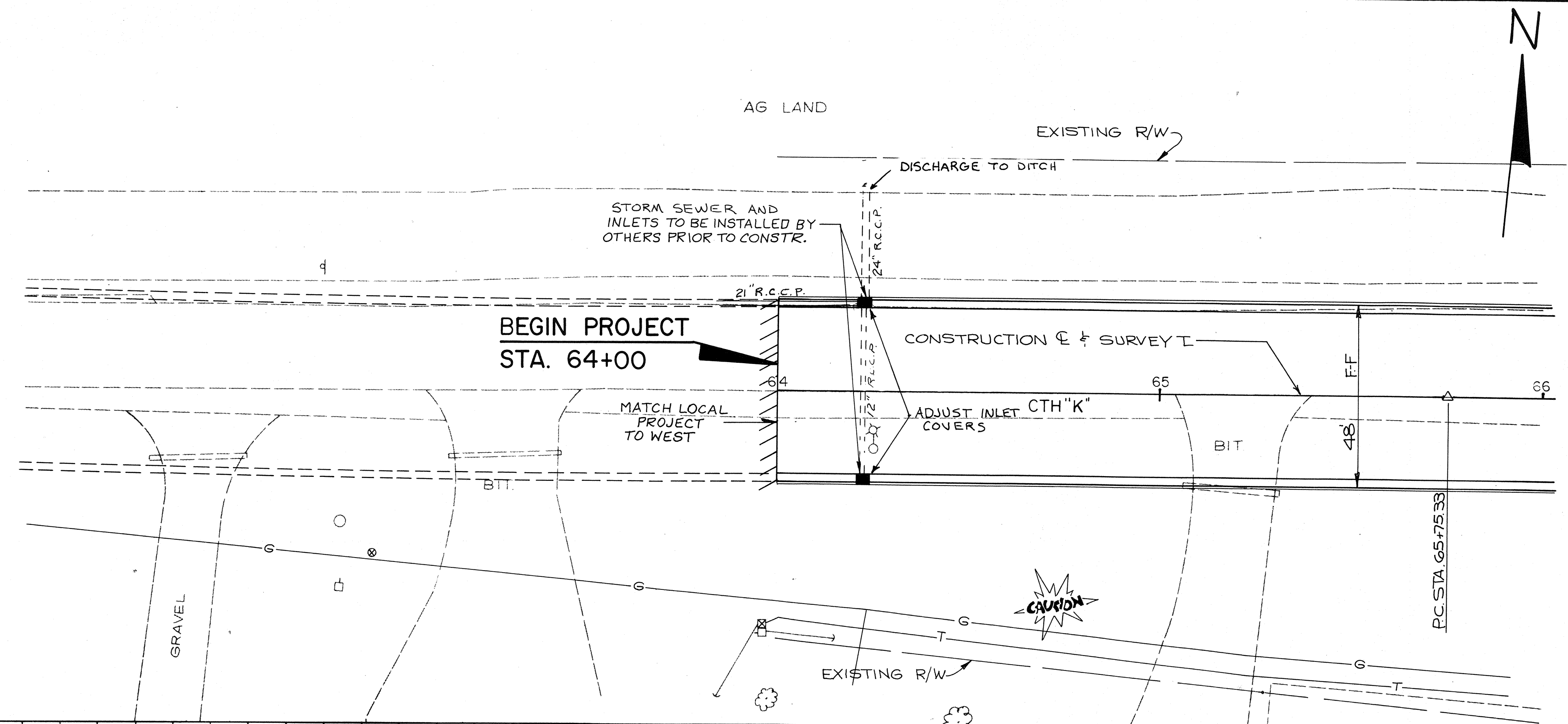
**SECTION C-C**  
**DETAIL OF CURB AND GUTTER AT INLETS**

See NEXT PAGE  
AG LAND

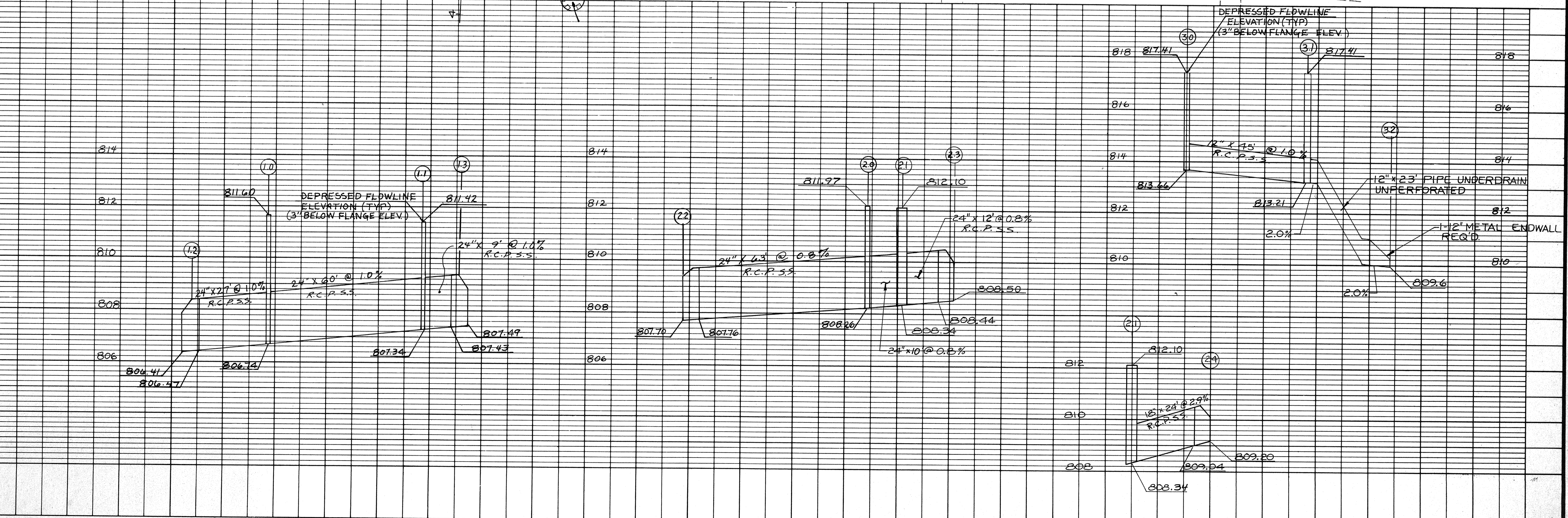
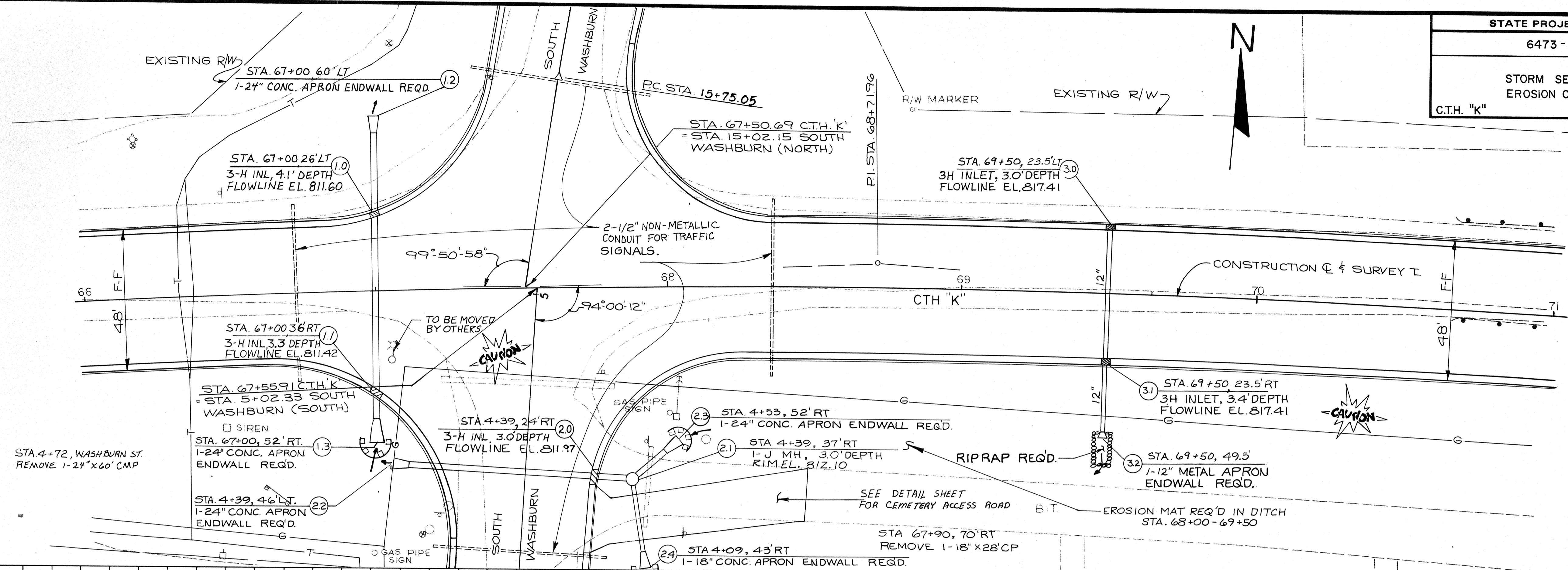
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
STORM SEWER & UTILITIES EROSION CONTROL	
C.T.H. "K" WINNEBAGO COUNTY	



STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
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6473-01-71	
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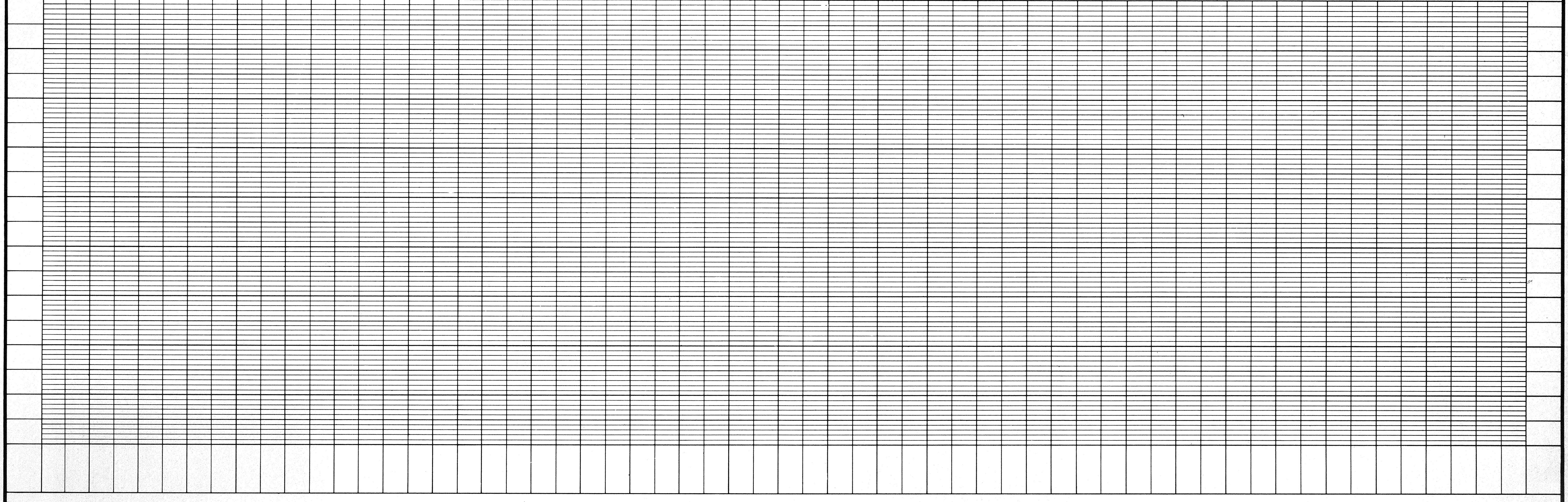
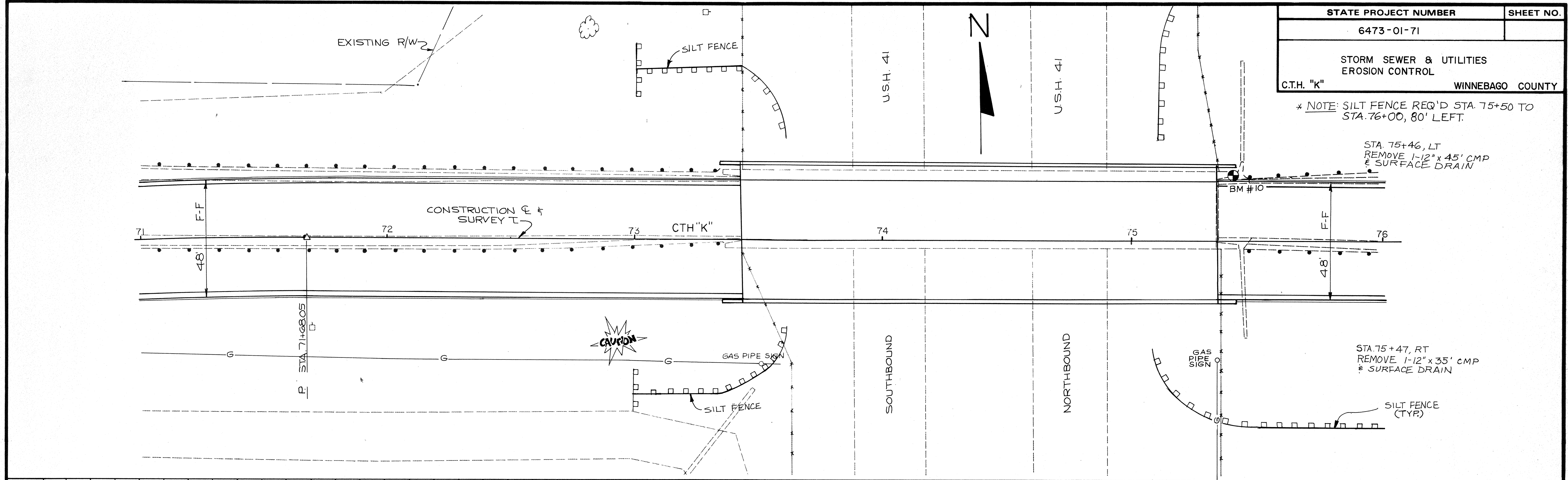


\* NOTE: SILT FENCE REQ'D STA. 75+50 TO STA. 76+00, 80' LEFT.

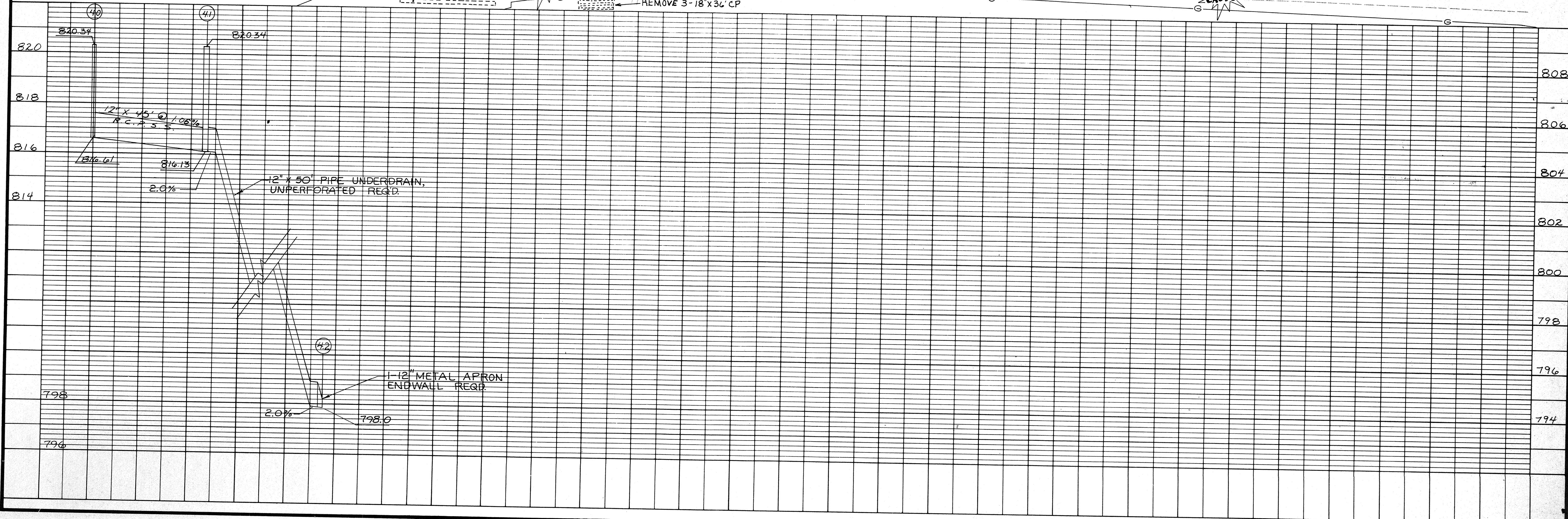
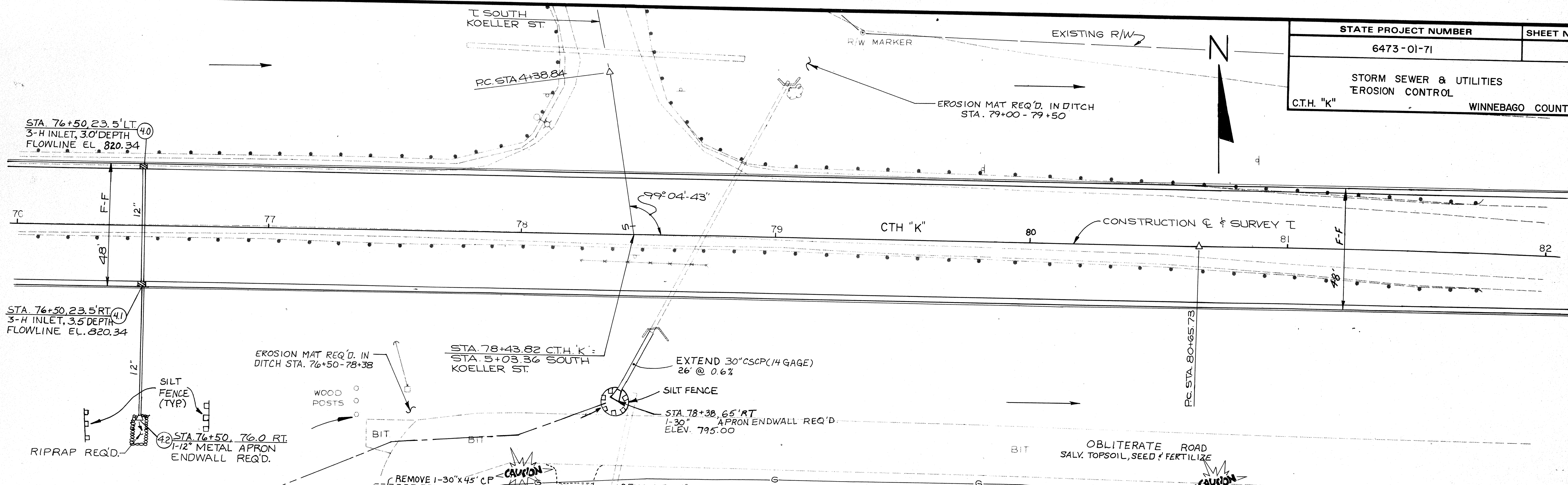
STA. 75+46, LT  
REMOVE 1-12" x 45' CMP  
& SURFACE DRAIN

STA. 75+47, RT  
REMOVE 1-12" x 35' CMP  
& SURFACE DRAIN

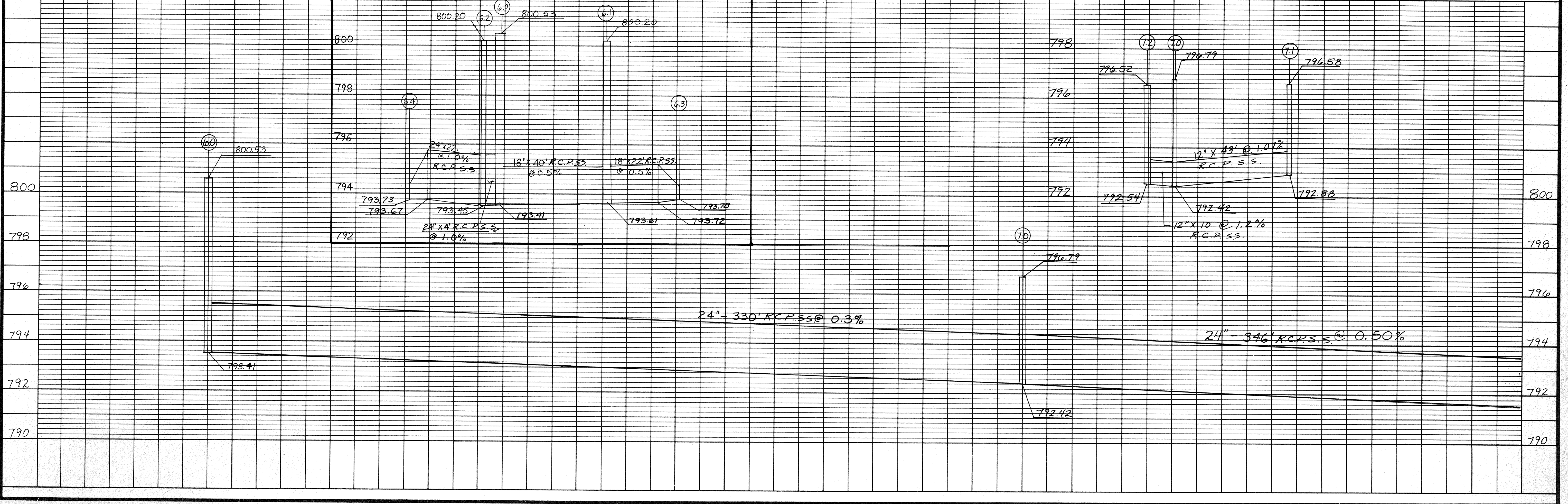
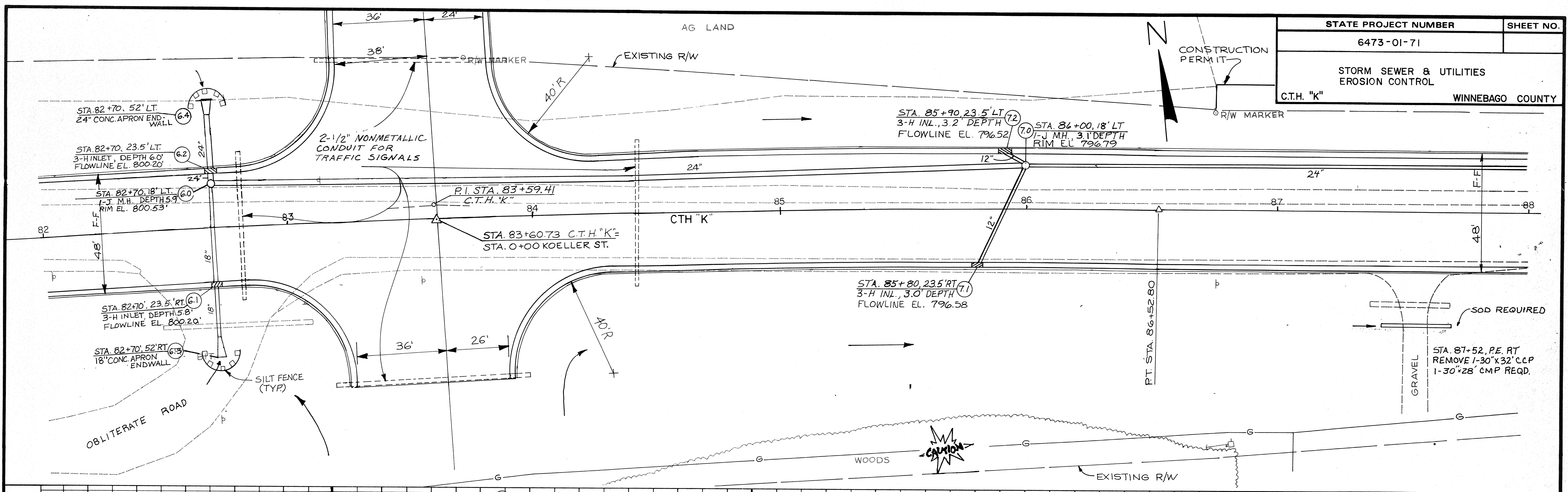
SILT FENCE (TYP)

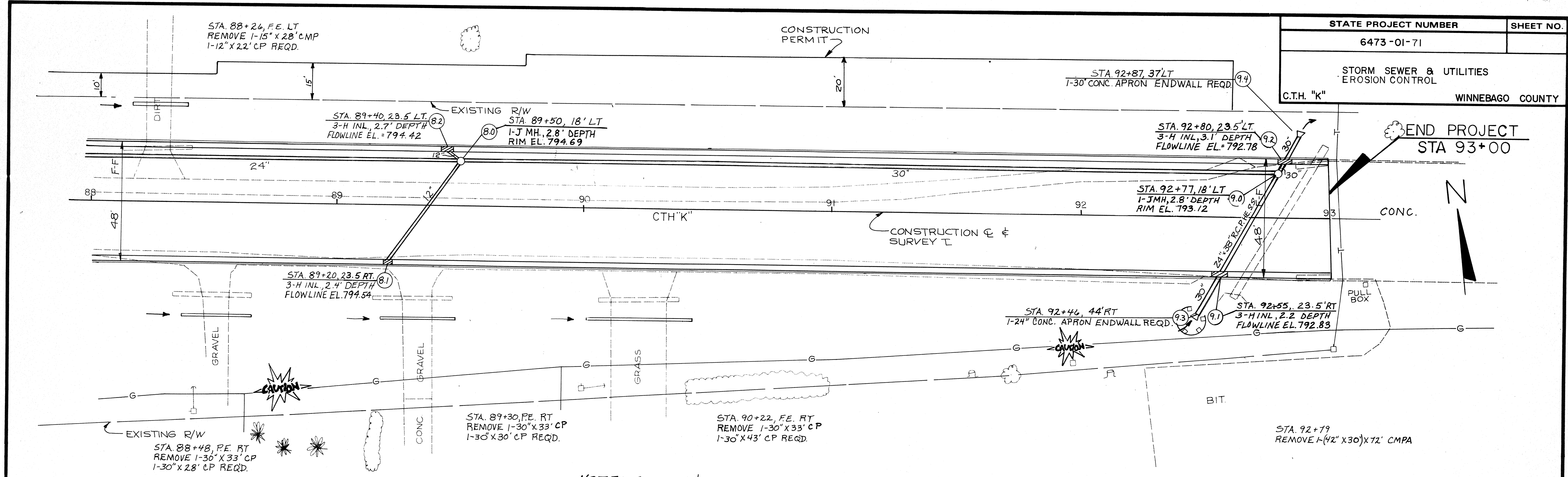


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6473-01-71	
STORM SEWER & UTILITIES EROSION CONTROL	
C.T.H. "K"	WINNEBAGO COUNTY

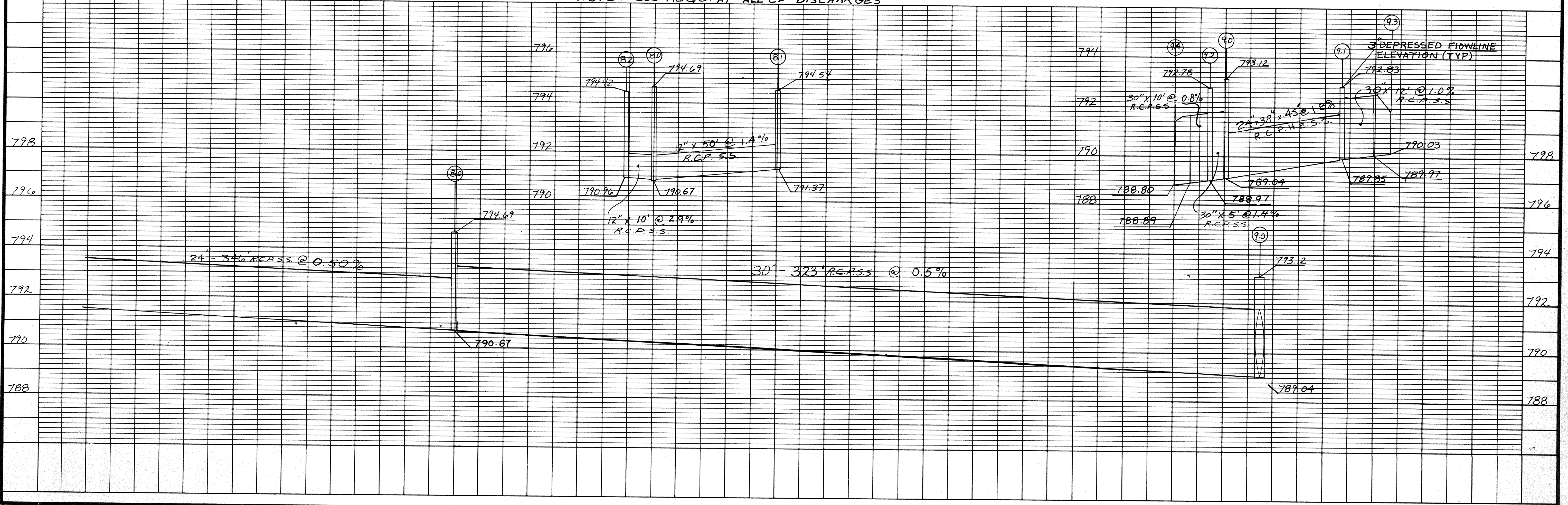


STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
STORM SEWER & UTILITIES EROSION CONTROL	
C.T.H. "K"	WINNEBAGO COUNTY

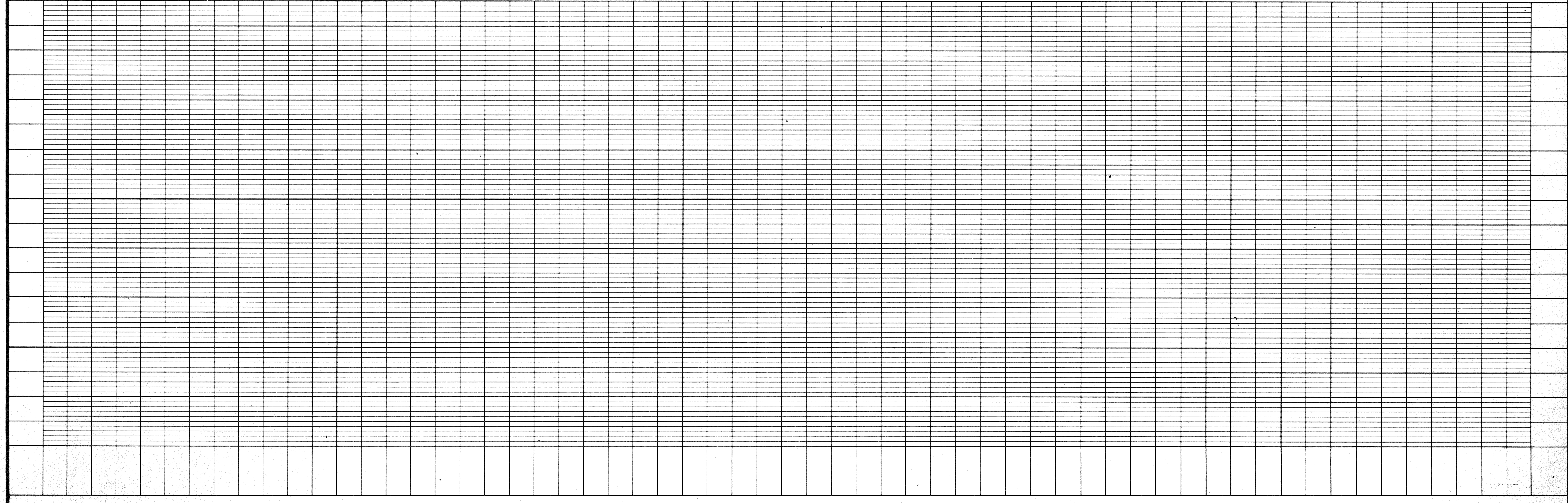
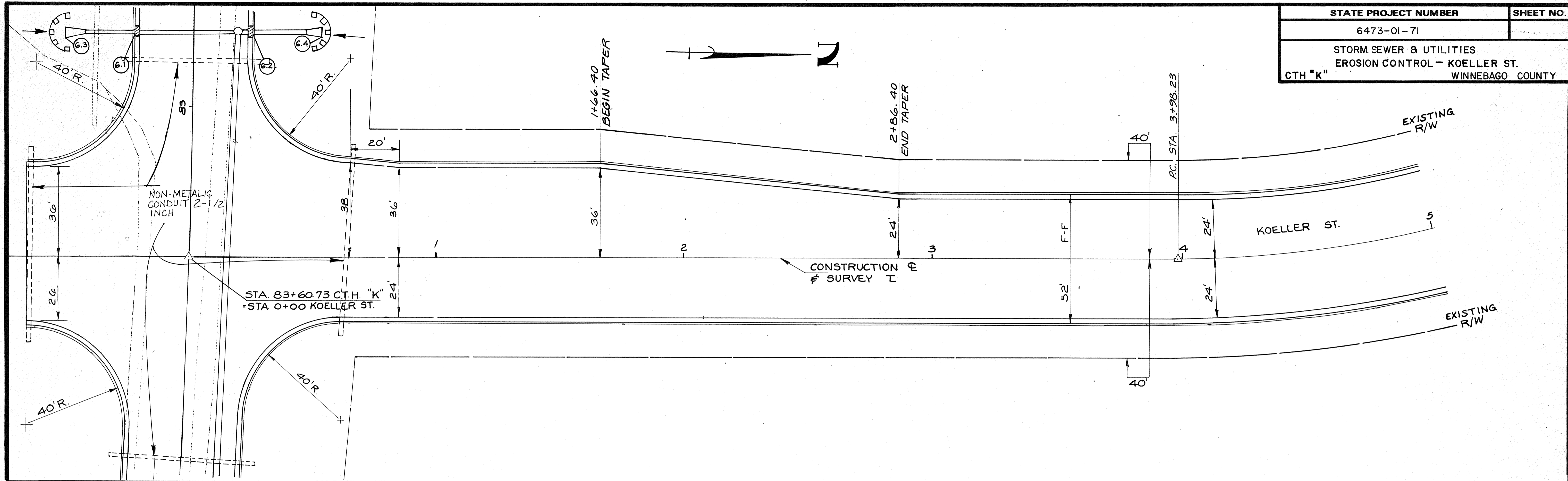




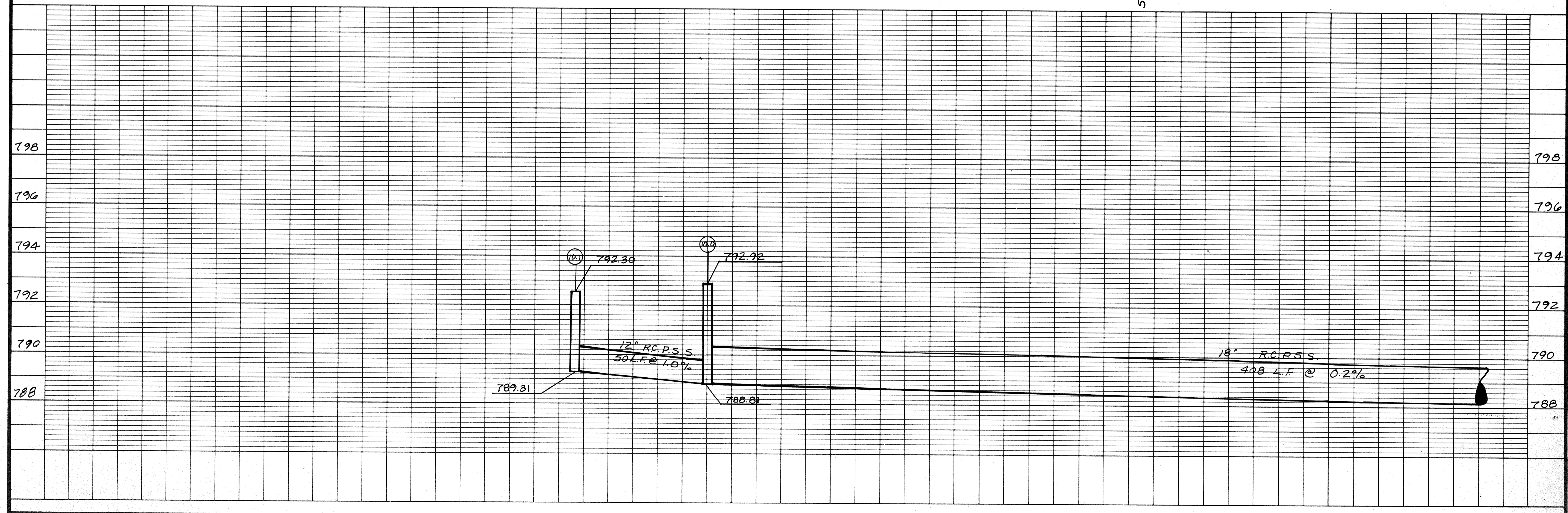
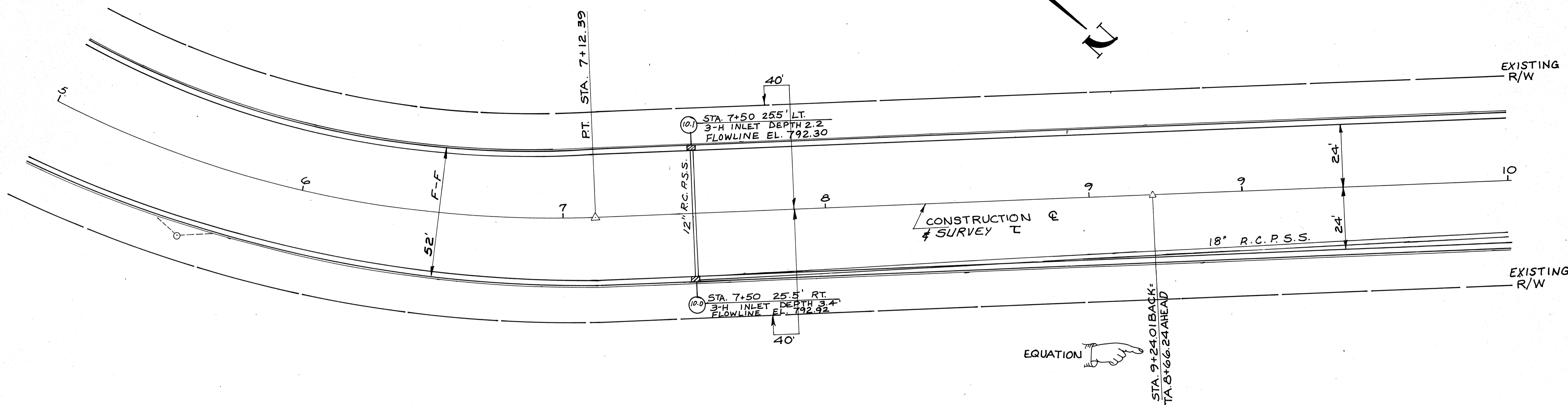
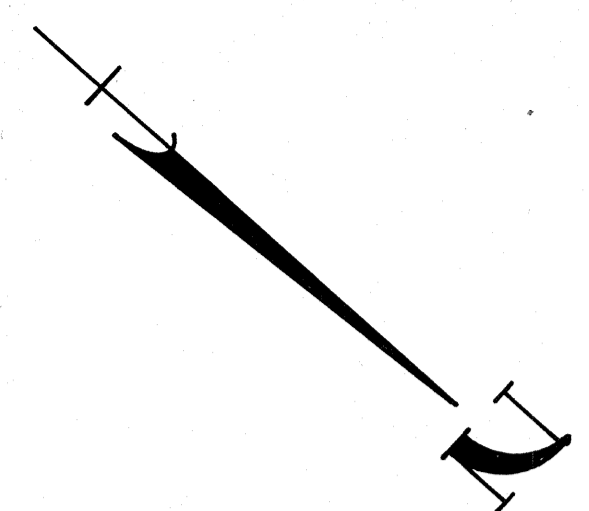
NOTE: SOD REQ'D. AT ALL CP DISCHARGES



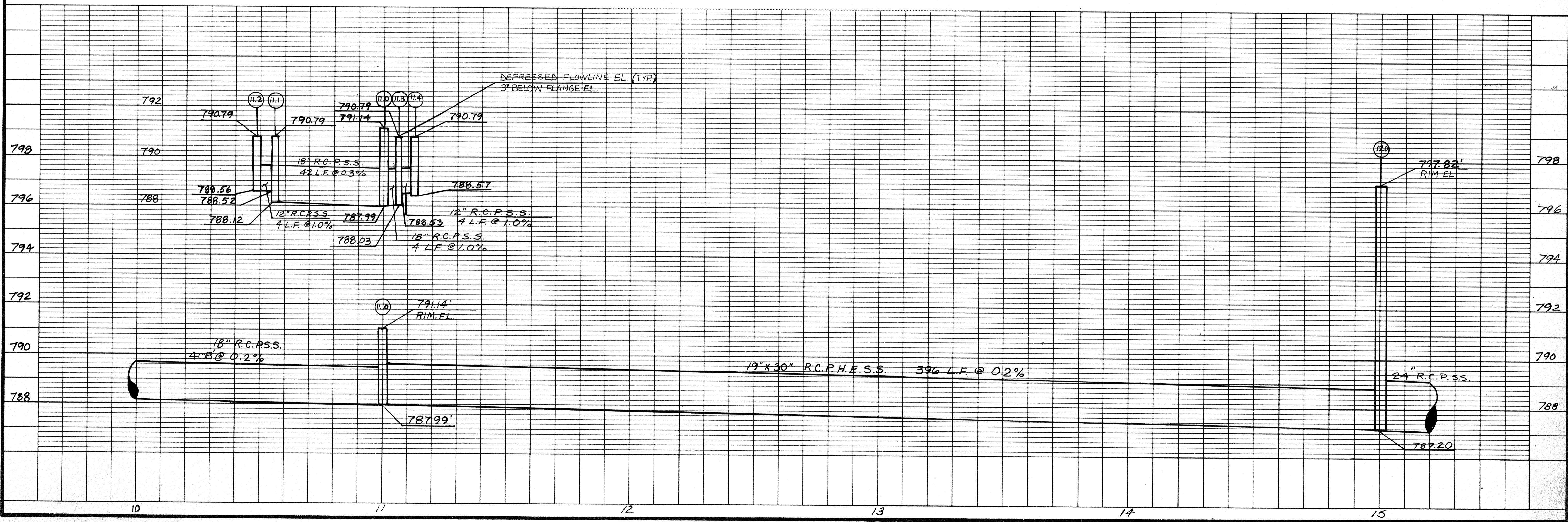
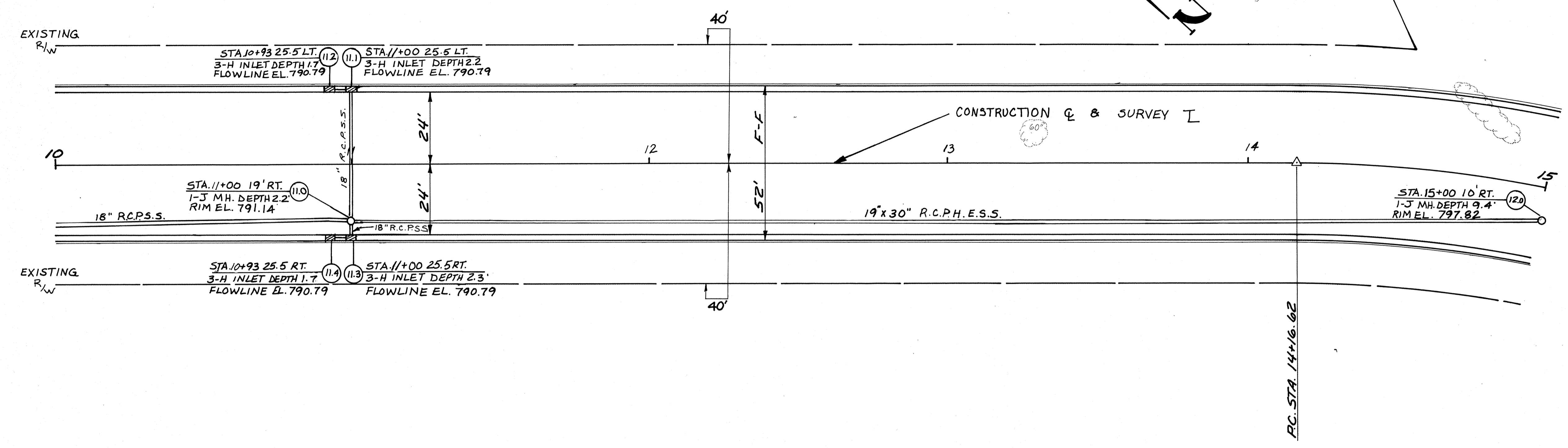
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
STORM SEWER & UTILITIES EROSION CONTROL - KOELLER ST. CTH "K" WINNEBAGO COUNTY	



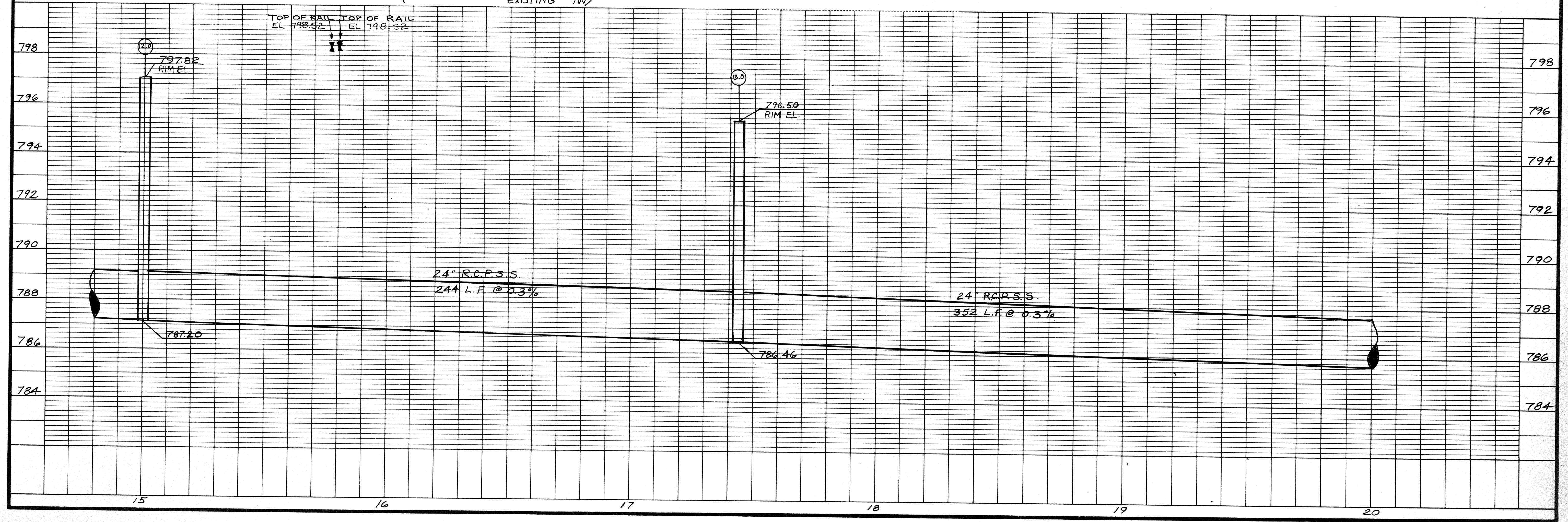
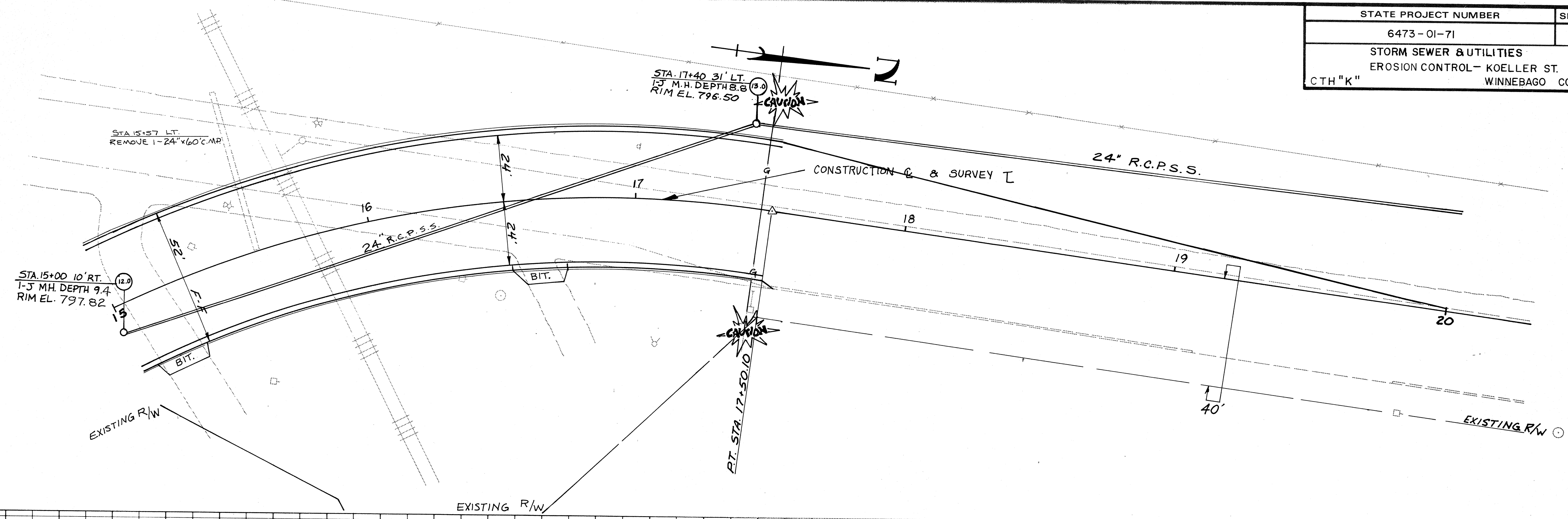
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
STORM SEWER & UTILITIES	
EROSION CONTROL-KOELLER ST.	
C.T.H. "K"	WINNEBAGO COUNTY



STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
STORM SEWER & UTILITIES EROSION CONTROL - KOELLER ST. CTH "K" WINNEBAGO COUNTY	

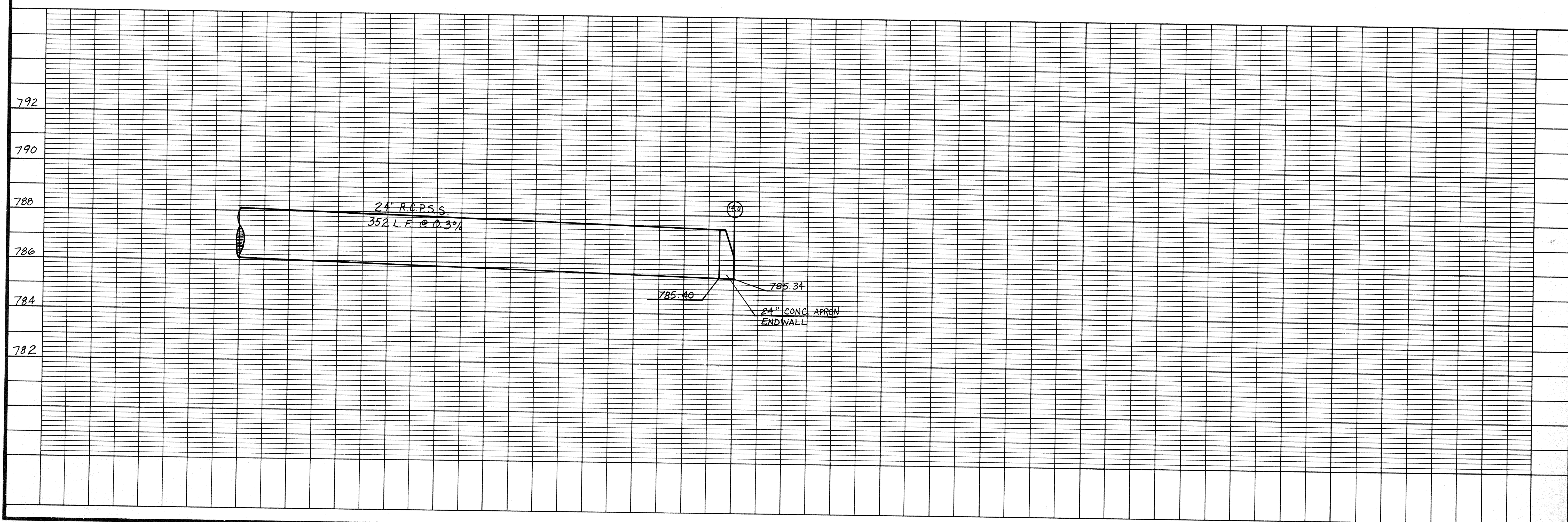
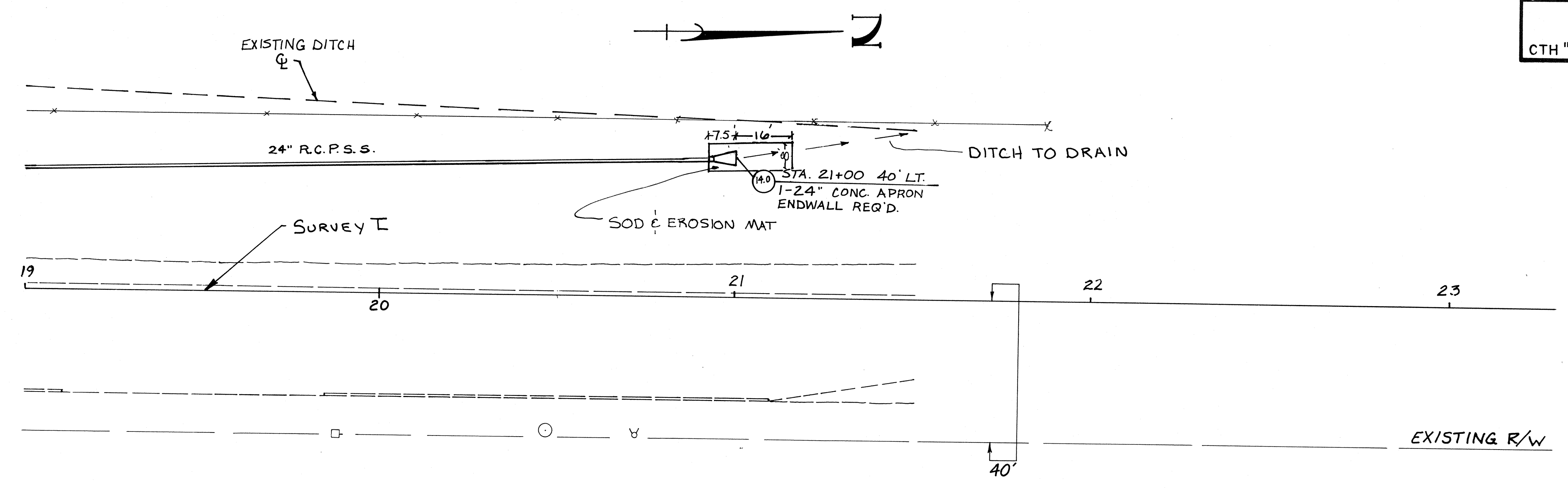


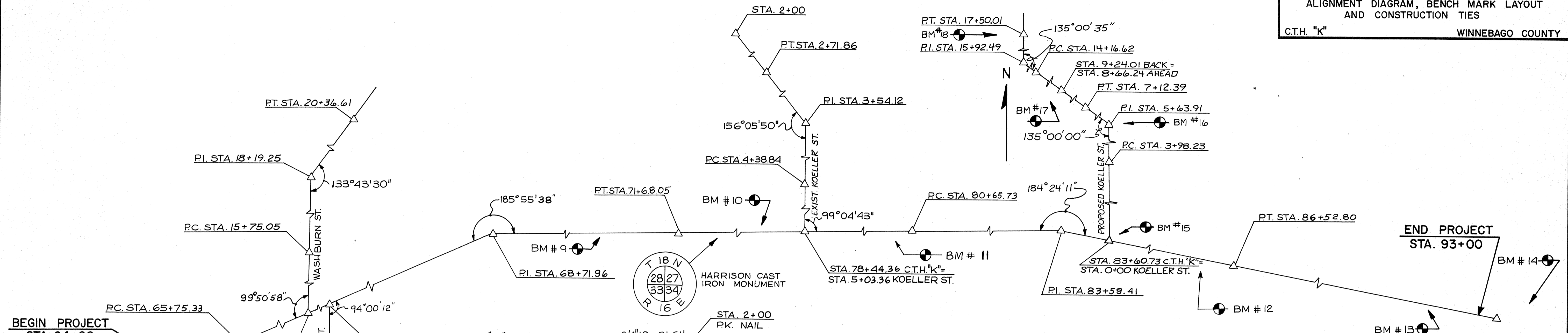
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STORM SEWER & UTILITIES	
EROSION CONTROL - KOELLER ST.	
CTH "K" WINNEBAGO COUNTY	



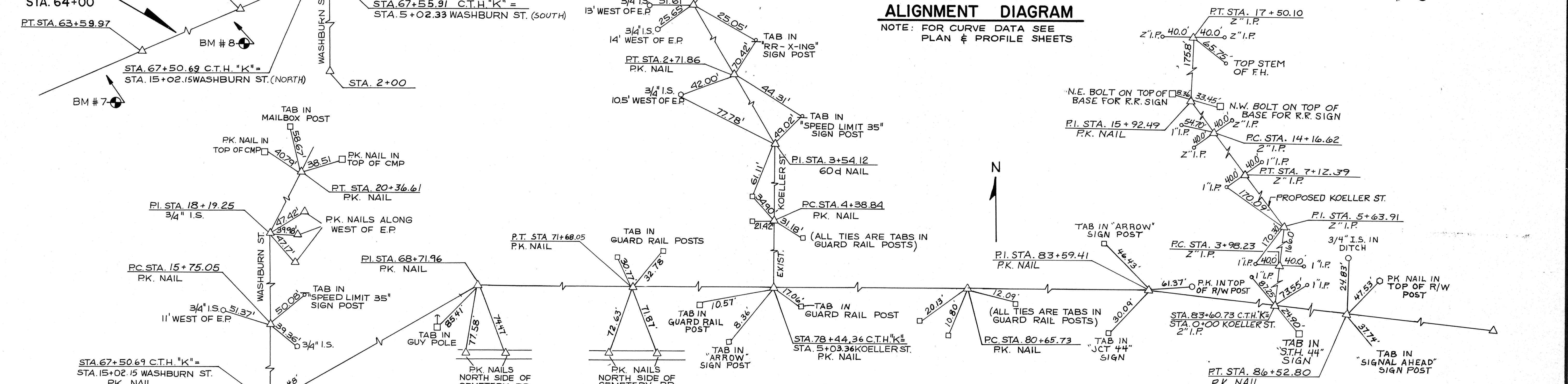


STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
STORM SEWER & UTILITIES	
EROSION CONTROL - KOELLER ST.	
CTH "K" WINNEBAGO COUNTY	





**ALIGNMENT DIAGRAM**  
NOTE: FOR CURVE DATA SEE PLAN & PROFILE SHEETS



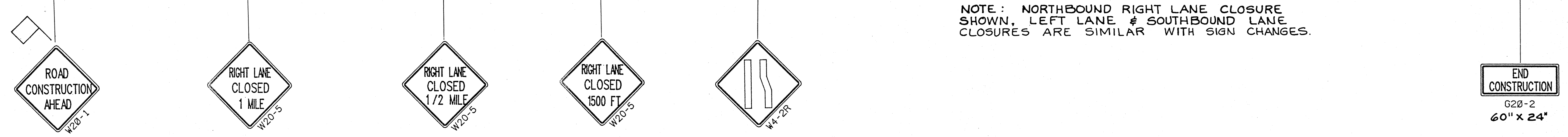
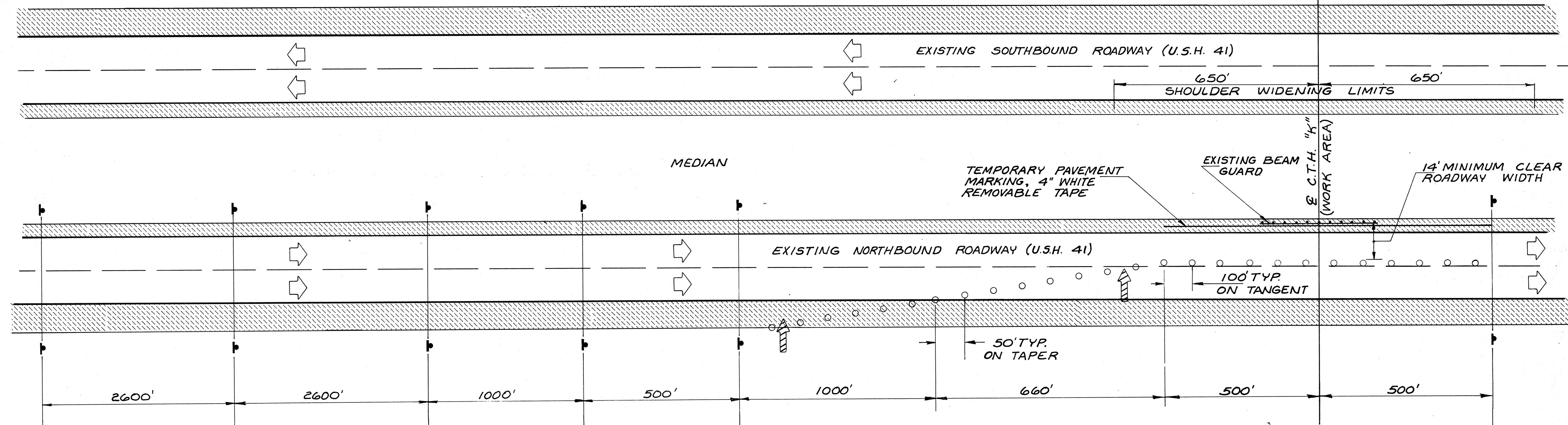
**CONSTRUCTION TIES**

**EXISTING PROPERTY CORNERS**

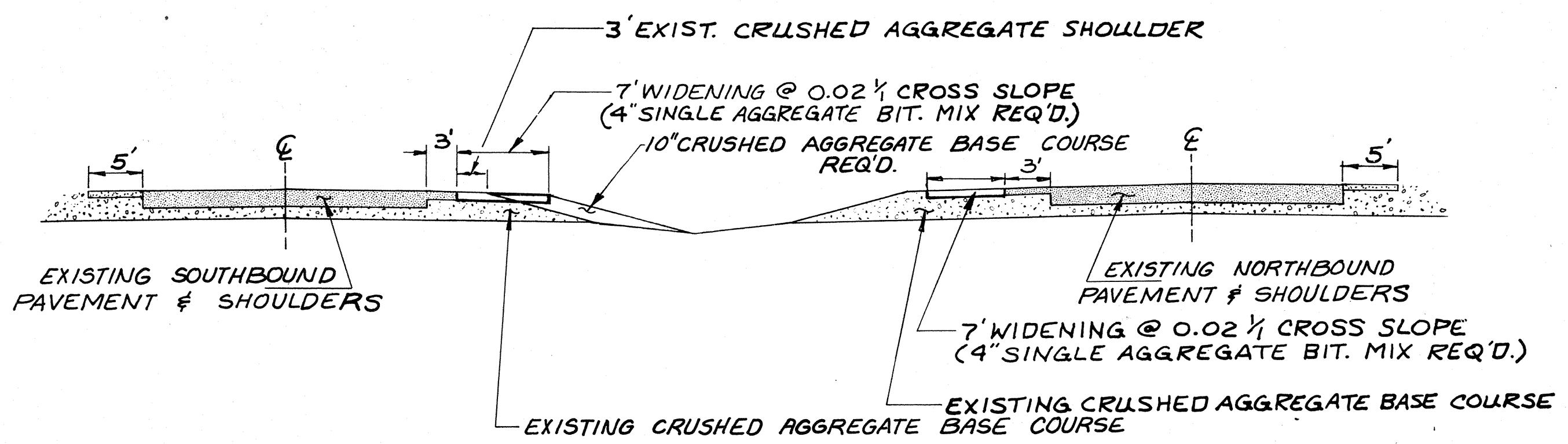
STATION	LOCATION	DESCRIPTION
65+27.5	78.5' RT.	1 1/2" I.P.
72+14	62.4' LT.	3/4" I.S.
77+15	116.0' RT.	3/4" I.S.
79+03.5	81.7' RT.	1 1/4" RD. IRON
79+33	82.4' LT.	1" I.P.
86+75	41.4' LT.	1" I.P.
86+79	95.3' RT.	1" I.P.
87+62	93.6' RT.	1/2" I.S.
91+63	61.9' LT.	1" I.P.
6+01 WASHBURN ST.	48.6' LT.	4" I.P.
7+07 WASHBURN ST.	51.0' LT.	1" I.P.
7+31 WASHBURN ST.	51.0' LT.	1" I.P.
13+35.5 WASHBURN ST.	60.6' LT.	3/4" I.S.

**BENCH MARKS**

BM	STATION	DESCRIPTION	EL.
7	60+49	CHISELED 'D', N. END OF CONC. SIGN BASE "PELLES-JOHNSON SIGN CO.", 53.7' AT	810.36
8	64+38	CHISELED 'D', E. END OF CONC. WALL @ "JAY MFG CO." LOADING DOCK, 140.9' AT	811.52
9	69+80.5	R.R. SPIKE IN 36" SILVER MAPLE, 110.6' AT	813.38
10	75+42.5	BLUE KEELED 'D', N.E. COR. OF BRIDGE CURBING, 26.5' LT.	820.53
11	79+70	R.R. SPIKE IN 24" CHINESE ELM, 137.8' AT	800.70
12	84+98	R.R. SPIKE IN 10" ELM, 137.8' AT	796.99
13	89+44	BLUE KEELED COR. OF CONC. WALK, 5' N. OF PORCH HOUSE # 1621, 233' AT	795.96
14	94+60	KEELED N.W. FLANGE BOLT ON HYDRANT, 30' LT.	793.64
— B.M.'S ALONG PROPOSED KOELLER ST. —			
15	0+66.44	1" I.P., 40' RT.	795.51
16	5+63.91	2" I.P., 30' RT.	795.16
17	8+66.24 AHEAD	2" I.P., 40' LT.	795.06
18	17+50.10	2" I.P., 40' LT.	795.64



NOTE: NORTHBOUND RIGHT LANE CLOSURE SHOWN, LEFT LANE & SOUTHBOUND LANE CLOSURES ARE SIMILAR WITH SIGN CHANGES.



**MEDIAN SHOULDER WIDENING & PAVING  
TYPICAL SECTION**

45  
M.P.H.  
W13-1  
24" x 24"

**SYMBOLS**

- SIGN WITH 18" x 18" (MIN.) ORANGE FLAGS ATTACHED
- SIGN ON PERMANENT SUPPORT
- NONMETALLIC DRUM WITH TYPE "C" STEADY BURN LAMP
- 4' x 8' FLASHING ARROW BOARD

**GENERAL NOTES**

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

WHEN CONSTRUCTION IS COMPLETED, THE 7' BITUMINOUS PAVEMENT SHOULDER WIDENING SHALL BE REMOVED AND THE SHOULDER WILL BE RESHAPED TO ITS ORIGINAL CONDITION.

ALL SIGNS ARE 48" x 48" UNLESS OTHERWISE NOTED

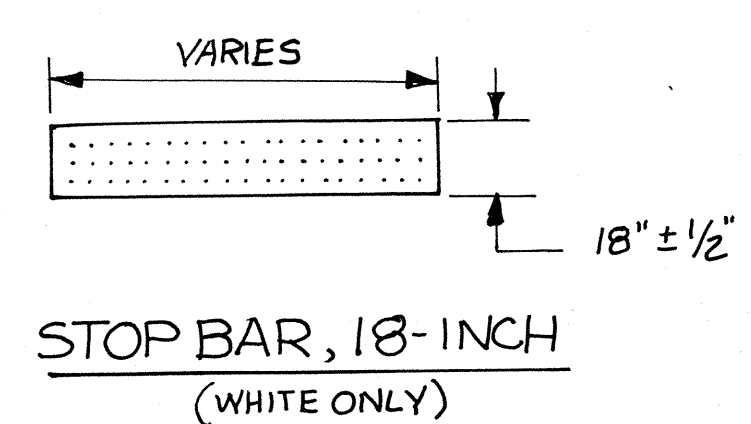
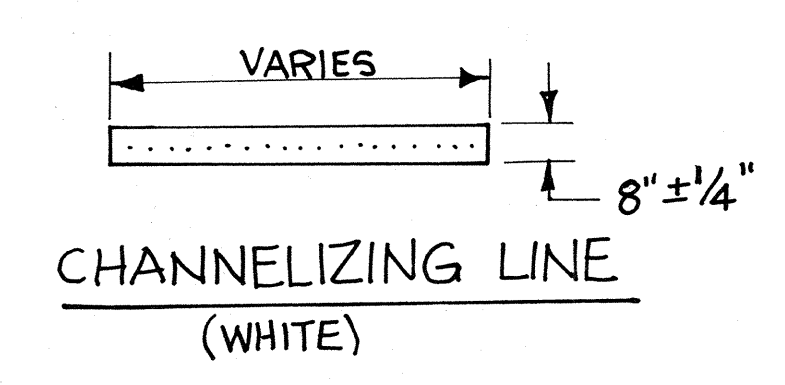
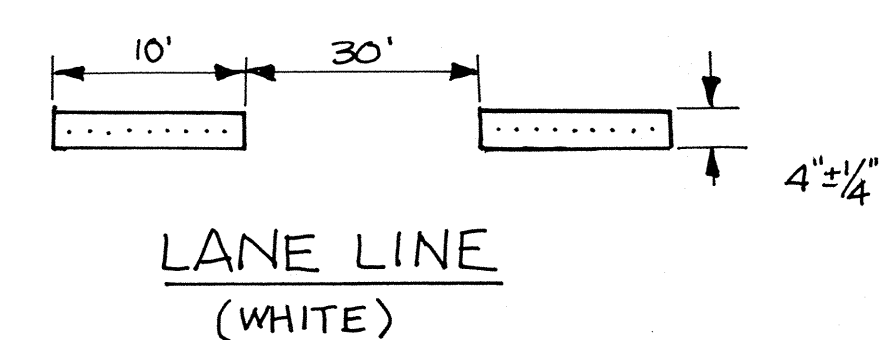
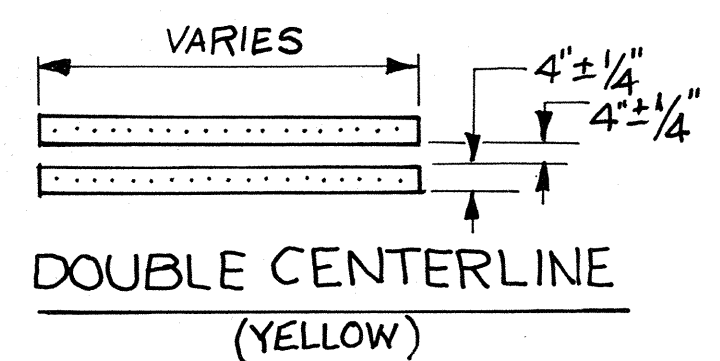
WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER.

ALL "W" SIGNS SHOWN ON THE DIAGRAM SHALL HAVE BLACK LETTERING ON AN ORANGE BACKGROUND.

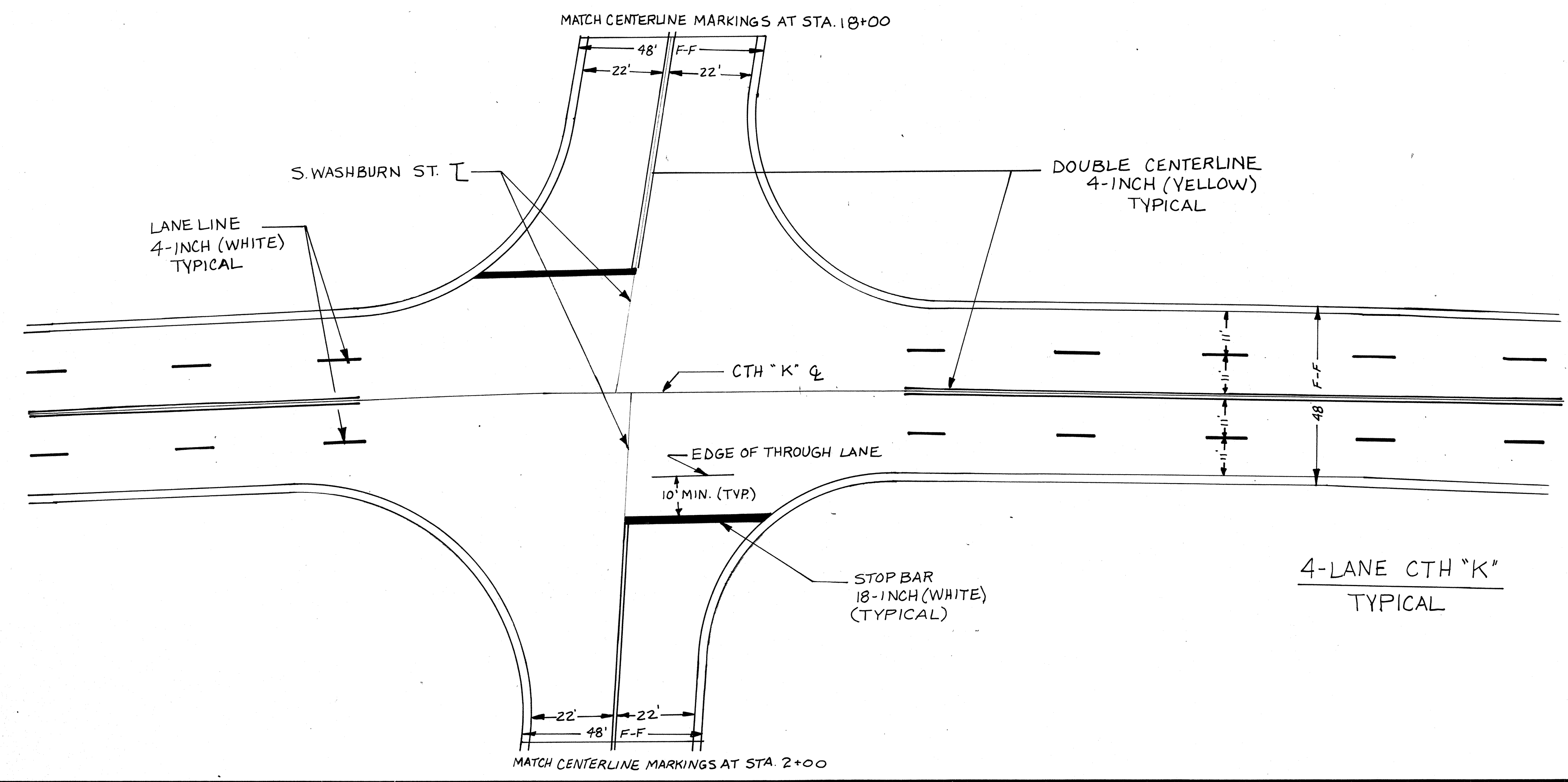
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PAVEMENT MARKING	
CTH "K"	WINNEBAGO COUNTY

**GENERAL NOTES**

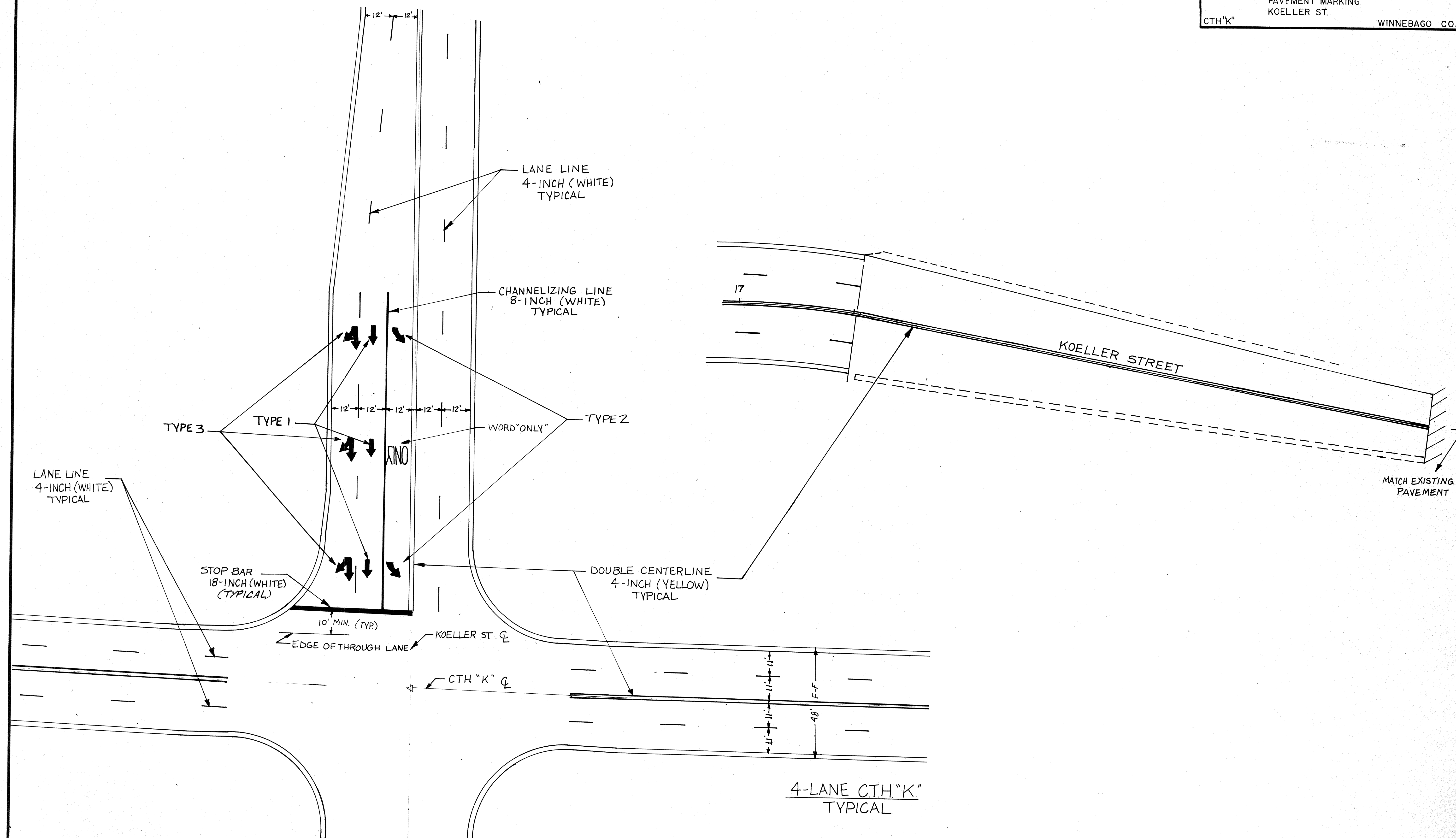
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE STANDARD SPECIFICATIONS, SPECIAL PROVISIONS, AND STANDARD DETAILS. THE CONTRACTOR SHALL APPLY PAVEMENT MARKINGS IN ACCORDANCE WITH THE WISCONSIN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES. 18-INCH STOP BARS SHALL EXTEND FROM THE EDGE OF PAVEMENT TO THE CENTERLINE OF THE ROADWAY. STOPBARS TO BE PARALLEL TO THE THROUGH EDGE OF PAVEMENT. DO NOT INSTALL PAVEMENT MARKINGS THROUGH INTERSECTIONS. DIMENSIONS FOR THE CENTERLINES AND LANE LINES ARE TO THE CENTER OF PAVEMENT MARKING. ALL PAVEMENT MARKING IS TO BE EPOXY.



**PERMANENT PAVEMENT MARKINGS**



STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PAVEMENT MARKING KOELLER ST.	
CTH "K"	WINNEBAGO CO.



**DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES**

*See Next Page*

**EROSION CONTROL**

LOCATION	SALVAGED SOIL SQ. YD.	MULCH SQ. YD.	(TYPE B) FERTILIZER CWT.	SEED LBS.	TYPE *
C.T.H. 'K'					
64+00 - 67+00	700	700	0.5	10	1
68+50 - 73+45	2850	2850	1.8	77	3
75+35 - 83+00	6700	6700	4.2	181	3
84+00 - 93+00	5450	5450	4	74	1
WASHBURN ST.					
2+00 - 4+40	600	600	0.4	8	1
15+70 - 18+00	1100	1100	0.7	15	1
KOELLER ST.					
PROPOSED	3800	3800	2.4	52	1
EXISTING	5600	5600	3.5	76	1

**INLET COVERS, TYPE H**

LOCATION	DIRECTION OF FLOW	EACH
C.T.H. 'K'		
67+00 26'LT.	LT.	1
67+00 36'RT.	RT.	1
69+50 23.5'LT.	LT.	1
69+50 23.5'RT.	RT.	1
76+50 23.5'LT.	LT.	1
76+50 23.5'RT.	RT.	1
82+70 23.5'LT.	LT.	1
82+70 23.5'RT.	RT.	1
85+80 23.5'RT.	LT.	1
85+90 23.5'LT.	RT.	1
89+20 23.5'RT.	LT.	1
89+40 23.5'LT.	RT.	1
92+55 23.5'RT.	LT.	1
92+80 23.5'LT.	RT.	1
WASHBURN ST.		
4+39 24'RT.	RT.	1
KOELLER ST.		
7+50 25.5'LT.	RT.	1
7+50 25.5'RT.	LT.	1
10+93 25.5'LT.	RT.	1
10+93 25.5'RT.	LT.	1
11+00 25.5'LT.	LT.	1
11+00 25.5'RT.	RT.	1

**PIPE UNDERDRAIN, UNPERFORATED 12-INCH**

LOCATION	STRUCTURES FROM NO. TO NO.	L.F.	METAL APRON ENDWALL EACH
C.T.H. 'K'			
69+50	3.1 - 3.2	23	1
76+50	4.1 - 4.2	50	1

**SOD AT PIPE DISCHARGE**

LOCATION	SQ. YD.
C.T.H. 'K'	
67+00 60'LT.	7
92+87 37'LT.	10
P.E.'S & F.E.'S	30
WASHBURN ST.	
4+39 46'LT.	7
KOELLER ST.	
21+00 40'LT.	21

**CULVERT PIPE SCHEDULE**

LOCATION	DIA. INCHES	LENGTH L.F.	TYPE	CLASS	THICKNESS ALUMINUM	THICKNESS STEEL	APRON ENDWALL EACH
78+38 65'RT.	30	26	CSCP	-	-	.079	1
87+52 46'RT.	30	28	CP	III	.060	.064	-
88+26 39'LT.	12	22	CP	III	.060	.064	-
88+48 46'RT.	30	28	CP	III	.060	.064	-
89+30 46'RT.	30	30	CP	III	.060	.064	-
90+22 45'RT.	30	43	CP	III	.060	.064	-

**INLETS, TYPE 3**

LOCATION	EACH
C.T.H. 'K'	
67+00 26'LT.	1
67+00 36'RT.	1
69+50 23.5'LT. & RT.	2
76+50 23.5'LT. & RT.	2
82+70 23.5'LT. & RT.	2
85+80 23.5'RT.	1
85+90 23.5'LT.	1
89+20 23.5'RT.	1
89+40 23.5'LT.	1
92+55 23.5'RT.	1
92+80 23.5'LT.	1
WASHBURN ST.	
4+39 24'RT.	1
KOELLER ST.	
7+50 25.5'LT. & RT.	2
10+93 25.5'LT. & RT.	2
11+00 25.5'LT. & RT.	2

**REINFORCED CONCRETE PIPE, CLASS III**

LOCATION	STRUCTURES FROM NO. TO NO.	DIA. INCH.	LENGTH L.F.	APRON ENDWALL EACH
C.T.H. 'K'				
67+00	1.2 - 1.0	24	27	1
67+00	1.0 - 1.1	24	60	-
67+00	1.1 - 1.3	24	7	1
69+50	3.0 - 3.1	12	45	-
76+50	4.0 - 4.1	12	45	-
82+70	6.4 - 6.2	24	22	1
82+70	6.2 - 6.0	24	4	-
82+70	6.0 - 6.1	18	40	-
82+70	6.1 - 6.3	18	22	1
82+70	6.0 - 7.0	24	330	-
86+00	7.0 - 7.2	12	10	-
86+00	7.0 - 7.1	12	43	-
86+00	7.0 - 8.0	24	346	-
89+50	8.0 - 8.2	12	10	-
89+50	8.0 - 8.1	12	50	-
89+50	8.0 - 9.0	30	323	-
92+55	9.1 - 9.3	30	12	1
92+77	9.0 - 9.1	24 X 38 HE	45	-
92+77	9.0 - 9.2	30	5	-
92+80	9.2 - 9.4	30	10	1
WASHBURN ST.				
4+39	2.0 - 2.1	24	10	-
4+39	2.1 - 2.3	24	12	1
4+39	2.1 - 2.4	18	24	1
4+39	2.0 - 2.2	24	63	1
KOELLER ST.				
7+50	10.0 - 10.1	12	50	-
7+50	10.0 - 11.0	18	408	-
11+00	11.0 - 11.1	18	42	-
11+00	11.1 - 11.2	12	4	-
11+00	11.0 - 11.3	18	4	-
11+00	11.3 - 11.4	12	4	-
11+00	11.0 - 12.0	19 X 30 HE	396	-
15+00	12.0 - 13.0	24	244	-
17+40	13.0 - 14.0	24	352	1

**REMOVE OLD CULVERTS**

LOCATION	EACH
C.T.H. 'K'	
67+90 70'RT.	1
75+46 30'LT.	1
75+47 4'RT.	1
77+65 101'RT.	1
78+25 99'RT.	1
78+25 101'RT.	1
78+25 103'RT.	1
87+52 P.E. RT.	1
88+26 F.E. LT.	1
88+48 P.E. RT.	1
89+30 P.E. RT.	1
90+22 F.E. RT.	1
92+79	1
WASHBURN ST.	
4+72	1
KOELLER ST.	
15+57 LT.	1

**EROSION MAT**

LOCATION	SQ. YD.
KOELLER ST.	
21+00 40' LT.	20
C.T.H. 'K'	
68+00 - 69+50 55'RT.	170
76+50 - 78+38 80' RT.	440
79+00 - 79+50 70' LT.	60

**MANHOLE COVERS, TYPE J**

LOCATION	EACH
C.T.H. 'K'	
82+70 18'LT.	1
86+00 18'LT.	1
89+50 18'LT.	1
92+77 18'LT.	1
WASHBURN ST.	
4+39 37'RT.	1
KOELLER ST.	
15+00 10'RT.	1
17+40 31'LT.	1

**MANHOLES, TYPE 1**

LOCATION	EACH
C.T.H. 'K'	
82+70 18'LT.	1
86+00 18'LT.	1
89+50 18'LT.	1
92+77 18'LT.	1
WASHBURN ST.	
4+39 37'RT.	1
KOELLER ST.	
15+00 10'RT.	1
17+40 31'LT.	1

### DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

#### EROSION CONTROL

LOCATION	SALVAGED TOPSOIL SQ. YD.	MULCH SQ. YD.	(TYPE B) FERTILIZER CWT.	SEED LBS.	TYPE *
C.T.H. "K"					
64+00 - 67+00	700	700	0.5	10	1
68+50 - 73+45	2850	2850	1.8	77	3
75+35 - 83+00	6700	6700	4.2	181	3
84+00 - 93+00	5450	5450	3.4	74	1
WASHBURN ST.					
2+00 - 4+40	600	600	0.4	8	1
15+70 - 18+00	1100	1100	0.7	15	1
KOELLER ST.					
PROPOSED	3800	3800	2.4	52	1
EXISTING	5600	5600	3.5	76	1
U.S.H. 41					
SHOULDER WIDENING	2900	2900	1.8	40	1
<b>TOTAL</b>	<b>29700</b>	<b>29700</b>	<b>18.7</b>	<b>533</b>	

#### INLET COVERS, TYPE H

LOCATION	GRATE TYPE	EACH
C.T.H. "K"		
67+00 26'LT.	LT.	1
67+00 36'RT.	RT.	1
69+50 23.5'LT.	LT.	1
69+50 23.5'RT.	RT.	1
76+50 23.5'LT.	LT.	1
76+50 23.5'RT.	RT.	1
82+70 23.5'LT.	LT.	1
82+70 23.5'RT.	RT.	1
85+80 23.5'RT.	RT.	1
85+90 23.5'LT.	LT.	1
89+20 23.5'RT.	RT.	1
89+40 23.5'LT.	LT.	1
92+55 23.5'RT.	RT.	1
92+80 23.5'LT.	LT.	1
WASHBURN ST.		
4+39 24'RT.	RT.	1
KOELLER ST.		
7+50 25.5'LT.	LT.	1
7+50 25.5'RT.	RT.	1
10+93 25.5'LT.	LT.	1
10+93 25.5'RT.	RT.	1
11+00 25.5'LT.	LT.	1
11+00 25.5'RT.	RT.	1
<b>TOTAL LT.</b>		<b>10</b>
<b>TOTAL RT.</b>		<b>11</b>

#### SOD AT PIPE DISCHARGE

LOCATION	SQ. YD.
C.T.H. "K"	
67+00 60'LT.	7
92+87 37'LT.	10
P.E.'S & F.E.'S	30
WASHBURN ST.	
4+39 46'LT.	7
KOELLER ST.	
21+00 40'LT.	21
<b>TOTAL</b>	<b>75</b>

#### REINFORCED CONCRETE PIPE, CLASS V

##### STORM SEWER

LOCATION	STRUCTURES FROM NO. TO NO.	DIA. INCH.	LENGTH L.F.	APRON ENDWALL EACH
KOELLER ST.				
15+00	12.0 - 13.0	24	244	-

#### CULVERT PIPE SCHEDULE

LOCATION	DIA. INCHES	LENGTH L.F.	TYPE	CLASS	THICKNESS ALUMINUM	THICKNESS STEEL	APRON ENDWALL EACH
C.T.H. "K"							
78+38 65'RT.	30	26	CSCP	-	-	.079	1
87+52 46'RT.	30	28	CP	III	.075	.079	-
88+26 39'LT.	12	22	CP	III	.060	.064	-
88+48 46'RT.	30	28	CP	III	.075	.079	-
89+30 46'RT.	30	30	CP	III	.075	.079	-
90+22 45'RT.	30	43	CP	III	.075	.079	-
<b>TOTAL</b>	<b>30</b>	<b>26</b>	<b>CSCP</b>				<b>1</b>
<b>TOTAL</b>	<b>30</b>	<b>129</b>	<b>CP</b>				<b>-</b>
<b>TOTAL</b>	<b>12</b>	<b>22</b>	<b>CP</b>				<b>-</b>

#### INLETS, TYPE 3

LOCATION	EACH
C.T.H. "K"	
67+00 26'LT.	1
67+00 36'RT.	1
69+50 23.5'LT. & RT.	2
76+50 23.5'LT. & RT.	2
82+70 23.5'LT. & RT.	2
85+80 23.5'RT.	1
85+90 23.5'LT.	1
89+20 23.5'RT.	1
89+40 23.5'LT.	1
92+55 23.5'RT.	1
92+80 23.5'LT.	1
WASHBURN ST.	
4+39 24'RT.	1
KOELLER ST.	
7+50 25.5'LT. & RT.	2
10+93 25.5'LT. & RT.	2
11+00 25.5'LT. & RT.	2
<b>TOTAL</b>	<b>21</b>

#### REINFORCED CONCRETE PIPE, CLASS III

##### STORM SEWER

LOCATION	STRUCTURES FROM NO. TO NO.	DIA. INCH.	LENGTH L.F.	APRON ENDWALL EACH
C.T.K. "K"				
67+00	1.2 - 1.0	24	27	1
67+00	1.0 - 1.1	24	60	-
67+00	1.1 - 1.3	24	7	1
69+50	3.0 - 3.1	12	45	-
76+50	4.0 - 4.1	12	45	-
82+70	6.4 - 6.2	24	22	1
82+70	6.2 - 6.0	24	4	-
82+70	6.0 - 6.1	18	40	-
82+70	6.1 - 6.3	18	22	1
82+70	6.0 - 7.0	24	330	-
86+00	7.0 - 7.2	12	10	-
86+00	7.0 - 7.1	12	43	-
86+00	7.0 - 8.0	24	346	-
89+50	8.0 - 8.2	12	10	-
89+50	8.0 - 8.1	12	50	-
89+50	8.0 - 9.0	30	323	-
92+55	9.1 - 9.3	30	12	1
92+77	9.0 - 9.1	24 X 38 HE	45	-
92+77	9.0 - 9.2	30	5	-
92+80	9.2 - 9.4	30	10	1
WASHBURN ST.				
4+39	2.0 - 2.1	24	10	-
4+39	2.1 - 2.3	24	12	1
4+39	2.1 - 2.4	18	24	1
4+39	2.0 - 2.2	24	63	1
KOELLER ST.				
7+50	10.0 - 10.1	12	50	-
7+50	10.0 - 11.0	18	408	-
11+00	11.0 - 11.1	18	42	-
11+00	11.1 - 11.2	12	4	-
11+00	11.0 - 11.3	18	4	-
11+00	11.3 - 11.4	12	4	-
11+00	11.0 - 12.0	19 X 30 HE	396	-
17+40	13.0 - 14.0	24	352	1
<b>TOTAL</b>			<b>261</b>	<b>-</b>
<b>TOTAL</b>			<b>540</b>	<b>2</b>
<b>TOTAL</b>			<b>1233</b>	<b>6</b>
<b>TOTAL</b>			<b>350</b>	<b>2</b>
<b>TOTAL</b>			<b>396</b>	<b>396</b>
<b>TOTAL</b>			<b>45</b>	<b>45</b>

#### EROSION MAT

LOCATION	SQ. YD.
KOELLER ST.	
21+00 40' LT.	20
C.T.H. "K"	
68+00 - 69+50 55' RT.	170
76+50 - 78+38 80' RT.	440
79+00 - 79+50 70' LT.	60
<b>TOTAL</b>	<b>690</b>

#### REMOVE OLD CULVERTS

LOCATION	EACH
C.T.H. "K"	
67+90 70'RT.	1
75+46 30'LT.	1
75+47 4'RT.	1
77+65 101'RT.	1
78+25 99'RT.	1
78+25 101'RT.	1
78+25 103'RT.	1
87+52 P.E. RT.	1
88+26 F.E. LT.	1
88+48 P.E. RT.	1
89+30 P.E. RT.	1
90+22 F.E. RT.	1
92+79 @	1
WASHBURN ST.	
4+72 @	1
KOELLER ST.	
15+57 LT.	1
<b>TOTAL</b>	<b>15</b>

#### MANHOLE COVERS, TYPE J

LOCATION	EACH
C.T.H. "K"	
82+70 18'LT.	1
86+00 18'LT.	1
89+50 18'LT.	1
92+77 18'LT.	1
WASHBURN ST.	
4+39 37'RT.	1
KOELLER ST.	
15+00 10'RT.	1
17+40 31'LT.	1
<b>TOTAL</b>	<b>7</b>

#### ADJUSTING INLET COVERS

LOCATION	EACH
C.T.H. "K"	
64+23 LT. & RT.	2

#### PIPE UNDERDRAIN, UNPERFORATED

##### 12-INCH

LOCATION	STRUCTURES FROM NO. TO NO.	L.F.	METAL APRON ENDWALL EACH
C.T.H. "K"			
69+50	3.1 - 3.2	23	1
76+50	4.1 - 4.2	50	1
<b>TOTAL</b>		<b>73</b>	<b>2</b>

#### MEDIUM RANDOM RIPRAP

LOCATION	C.Y.
C.T.H. "K"	
69+50 49.5'RT.	3
76+50 76'RT.	3
<b>TOTAL</b>	<b>6</b>

DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

*See Next Page*

SILT FENCE (SILTY SOILS), DELIVERED, INSTALLED, AND MAINTAINED

LOCATION	L.F.
C.T.H. 'K'	
67+00 52' RT.	15
73+00 LT. & RT.	200
75+50 LT.	180
75+50 RT.	100
76+25 RT.	10
76+75 RT.	10
78+38 65' RT.	15
82+70 52' LT.	15
82+70 52' RT.	15
92+46 44' RT.	15
WASHBURN ST.	
4+09 43' RT.	10
4+53 52' RT.	10

CONCRETE PAVEMENT, 8-INCH

LOCATION	S.Y.
C.T.H. 'K'	
64+00 - 73+44	4615
75+34 - 93+00	8634
WASHBURN ST. INTERSECTION	1048
KOELLER ST. INTERSECTION	742
KOELLER ST.	
0+65 - 15+71.1	6852
15+84 - 17+50.1	886

NONMETALLIC CONDUIT, 2 1/2-INCH DIA.

LOCATION	L.F.
WASHBURN ST. INTERSECTION	244
KOELLER ST. INTERSECTION	272

PAVEMENT TIES

LOCATION	EACH
C.T.H. 'K'	
64+00	13
93+00	13

REMOVE SURFACE DRAIN

LOCATION	EACH
C.T.H. 'K'	
75+46 LT.	1
75+47 RT.	1

CLEARING & GRUBBING

LOCATION	CLEARING (IN DIA.)	GRUBBING (IN DIA.)
C.T.H. 'K'		
79+05 57' LT.	5	5
KOELLER ST.		
13+30 10' LT.	60	60

CRUSHED AGGREGATE BASE COURSE

LOCATION	TONS
C.T.H. 'K'	
64+00 - 73+44	2500
75+34 - 93+00	4200
P.E.'S & F.E.'S	60
WASHBURN ST.	
2+00 - 4+00	700
16+00 - 18+00	700
CEMETERY ACCESS ROAD	60
KOELLER ST.	
0+65 - 15+71.1	4900
U.S.H. 41 (SHOULDER WIDENING)	350

REMOVING BITUMINOUS SURFACE

LOCATION	S.Y.
U.S.H. 41 (SHOULDER WIDENING)	2020

OBLITERATE OLD ROAD

LOCATION	L.F.
C.T.H. 'K'	
77+40 85' RT. - 82+75 27' RT.	

REMOVING FENCE

LOCATION	L.F.
C.T.H. 'K'	
78+25 - 78+75	50
75+37 LT. & RT.	120
73+44 LT. & RT.	80

REMOVING CURB & GUTTER

LOCATION	L.F.
C.T.H. 'K'	
92+86 LT. & RT.	28

CONCRETE CURB & GUTTER

30" - TYPE 'A'

LOCATION	LF.
C.T.H. 'K'	
64+00 - 66+63 RT.	263
64+00 - 66+82 LT.	282
68+38 - 73+44 LT.	506
68+28 - 73+44 RT.	516
75+34 - 82+79 LT.	745
75+34 - 82+85 RT.	751
84+23 - 93+00 LT.	877
84+29 - 93+00 RT.	871
WASHBURN ST. INTERSECTION	
RADIUS	420
KOELLER ST. INTERSECTION	
RADIUS	258
KOELLER ST.	
0+65 - 15+65 LT.	1500
0+65 - 15+73 RT.	1508
15+84 - 17+50 LT.	166
15+94 - 17+50 RT.	156

SAWING EXISTING PAVEMENT

LOCATION	LF.
C.T.H. 'K'	
65+20 P.E. RT.	22
WASHBURN ST.	
2+00	22
18+00	22
CEMETERY ACCESS ROAD	18
KOELLER ST.	
20+00	28

SINGLE AGGREGATE BITUMINOUS MIX

LOCATION	TONS
C.T.H. 'K'	
P.E.'S & F.E.'S	16
CEMETERY ACCESS ROAD	18
WASHBURN ST.	
2+00 - 4+00 & 16+00 - 18+00	350
KOELLER ST.	
17+50 - 20+00	245
P.E.' & F.E.'S	3
U.S.H. 41 SHOULDER WIDENING	445

BITUMINOUS MATERIAL FOR TACK COAT

LOCATION	GAL.
C.T.H. 'K'	
P.E.'S & F.E.'S	5
CEMETERY ACCESS ROAD	5
WASHBURN ST.	
2+00 - 4+00 & 16+00 - 18+00	48
KOELLER ST.	
17+50 - 20+00	33
P.E.' & F.E.'S	1
U.S.H. 41 SHOULDER WIDENING	61



### DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

#### SILT FENCE (SILTY SOILS), DELIVERED, INSTALLED, AND MAINTAINED

LOCATION	L.F.
C.T.H. 'K'	
67+00 52' RT.	15
73+00 LT. & RT.	200
75+50 LT.	180
75+50 RT.	100
76+25 RT.	10
76+75 RT.	10
78+38 65' RT.	15
82+70 52' LT.	15
82+70 52' RT.	15
92+46 44' RT.	15
WASHBURN ST.	
4+09 43' RT.	10
4+53 52' RT.	10
TOTAL	595

#### CONCRETE PAVEMENT, 8-INCH

LOCATION	S.Y.
C.T.H. 'K'	
64+00 - 73+24	4515
75+54 - 93+00	8534
WASHBURN ST. INTERSECTION	1048
KOELLER ST. INTERSECTION	742
KOELLER ST.	
0+65 - 15+72	6857
15+83 - 17+50.1	891
TOTAL	22587

#### NONMETALLIC CONDUIT, 2 1/2-INCH DIA.

LOCATION	L.F.
WASHBURN ST. INTERSECTION	244
KOELLER ST. INTERSECTION	272
TOTAL	516

#### CONCRETE PAVEMENT APPROACH SLAB

LOCATION	S.Y.
C.T.H. 'K'	200

#### PAVEMENT TIES

LOCATION	EACH
C.T.H. 'K'	
93+00	13

#### REMOVE SURFACE DRAIN

LOCATION	EACH
C.T.H. 'K'	
75+46 LT.	1
75+47 RT.	1
TOTAL	2

#### CLEARING & GRUBBING

LOCATION	CLEARING (IN DIA.)	GRUBBING (IN DIA.)
C.T.H. 'K'		
79+05 57' LT.	5	5
KOELLER ST.		
13+30 10' LT.	60	60
TOTAL	65	65

#### CRUSHED AGGREGATE BASE COURSE

LOCATION	TONS
C.T.H. 'K'	
64+00 - 73+44	2500
75+34 - 93+00	4200
P.E.'S & F.E.'S	60
WASHBURN ST.	
2+00 - 4+00	700
16+00 - 18+00	700
CEMETERY ACCESS ROAD	60
KOELLER ST.	
0+65 - 20+00	4900
U.S.H. 41 (SHOULDER WIDENING)	350
TOTAL	13470

#### REMOVING BITUMINOUS SURFACE

LOCATION	S.Y.
U.S.H. 41 (SHOULDER WIDENING)	2020

#### OBLITERATE OLD ROAD

LOCATION	STA.
C.T.H. 'K'	
77+40 85' RT. - 82+75 27' RT.	5.4

#### REMOVING FENCE

LOCATION	L.F.
C.T.H. 'K'	
78+25 - 78+75	50
75+37 LT. & RT.	120
73+44 LT. & RT.	80
TOTAL	250

#### REMOVING CURB & GUTTER

LOCATION	L.F.
C.T.H. 'K'	
92+86 LT. & RT.	28

#### WOVEN WIRE FENCE

LOCATION	L.F.
C.T.H. 'K'	
75+37 LT. & RT.	100
73+44 LT. & RT.	50
TOTAL	150

#### CONCRETE CURB & GUTTER 30'-TYPE 'A'

LOCATION	LF.
C.T.H. 'K'	
64+00 - 66+63 RT.	263
64+00 - 66+82 LT.	282
68+38 - 73+44 LT.	506
68+28 - 73+44 RT.	516
75+34 - 82+79 LT.	745
75+34 - 82+85 RT.	751
84+23 - 93+00 LT.	877
84+29 - 93+00 RT.	871
WASHBURN ST. INTERSECTION	
RADIUS	420
KOELLER ST. INTERSECTION	
RADIUS	258
KOELLER ST.	
0+65 - 15+65 LT.	1500
0+65 - 15+73 RT.	1508
15+84 - 17+50 LT.	166
15+94 - 17+50 RT.	156
TOTAL	8819

#### SAWING EXISTING PAVEMENT

LOCATION	LF.
C.T.H. 'K'	
65+20 P.E. RT.	22
WASHBURN ST.	
2+00	22
18+00	22
CEMETERY ACCESS ROAD	18
KOELLER ST.	
20+00	28
TOTAL	112

#### SINGLE AGGREGATE BITUMINOUS MIX

LOCATION	TONS
C.T.H. 'K'	
P.E.'S & F.E.'S	16
CEMETERY ACCESS ROAD	18
WASHBURN ST.	
2+00 - 4+00 & 16+00 - 18+00	350
KOELLER ST.	
RAILROAD CROSSING	13
17+50 - 20+00	245
P.E.' & F.E.'S	3
U.S.H. 41 SHOULDER WIDENING	445
TOTAL	1090

#### BITUMINOUS MATERIAL FOR TACK COAT

LOCATION	GAL.
C.T.H. 'K'	
CEMETERY ACCESS ROAD	5
WASHBURN ST.	
2+00 - 4+00 & 16+00 - 18+00	48
KOELLER ST.	
RAILROAD CROSSING	2
17+50 - 20+00	33
U.S.H. 41 SHOULDER WIDENING	61
TOTAL	149

## DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

See Next Page

### MISCELLANEOUS PAVING GAPS

LOCATION	S. Y.
C.T.H. "K" 67+70	100

### TRAFFIC CONTROL

	DAYS
ARROW BOARDS	40
NONMETALLIC DRUMS	880

### REMOVE GUARDRAIL

LOCATION	L.F.
C.T.H. "K"	
70+65 - 73+35LT. & RT.	540
75+45 - 81+75RT.	630
75+45 - 78+00LT.	255
79+00 - 81+75LT.	275
KOELLER (EXISTING)LT.	82
KOELLER (EXISTING)RT.	95

### YARDAGE SUMMARY

LOCATION	UNCLASSIFIED EXCAVATION C.Y.	FILL C.Y.
C.T.H. "K"		
64+00 - 73+43	1900	6150
75+38 - 93+00	4000	14600
WASHBURN ST.	600	550
* KOELLER ST. (EXISTING)	11100	
KOELLER ST. (PROPOSED)	8000	600
TOTAL	25600	21300

BORROW EXCAVATION (21900 X 1.3) = 28670 C.Y.  
 \* THIS QUANTITY WAS TAKEN FROM THE AS-BUILT GRADING PLAN

### STEEL PLATE BEAM GUARD, CLASS "A"

LOCATION	L.F.	STANDARD ANCHORAGE (EACH)
75+42 - 76+19 LT.	77	1
75+42 - 76+19 RT.	77	1
72+58 - 73+35 LT.	77	1
72+58 - 73+35 RT.	77	1

### PAVEMENT MARKING, (DOUBLE CENTERLINE) (4-INCH. YELLOW) EPOXY

LOCATION	L.F.
C.T.H. "K"	
64+00 - 66+80	560
68+40 - 82+80	2880
84+20 - 93+00	1760
WASHBURN ST.	
2+00 - 4+67	534
15+36 - 18+00	528
KOELLER ST.	
0+35 - 20+00	3930

### PAVEMENT MARKINGS, LANE LINE (4-INCH. WHITE) EPOXY

LOCATION	L.F.
C.T.H. "K"	
64+00 - 66+80LT. & RT.	140
68+40 - 82+80LT. & RT.	720
84+20 - 93+00LT. & RT.	440
KOELLER ST.	
0+40 - 17+20 LT. & RT.	840

### PAVEMENT MARKINGS, RAILROAD CROSSINGS, EPOXY

LOCATION	EACH
KOELLER ST.	2

### PAVEMENT MARKINGS, CHANNELIZING, EPOXY, 8-INCH

LOCATION	L.F.
KOELLER ST.	
0+33 - 1+70	137

### PAVEMENT MARKING, STOP LINE, EPOXY, 18-INCH

LOCATION	L.F.
WASHBURN ST.	
4+67	39
15+35	43
KOELLER ST.	
0+37	52

### PAVEMENT MARKING, ARROWS, EPOXY

LOCATION	EACH		
	TYPE 1	TYPE 2	TYPE 3
KOELLER ST.			
0+55	1	1	1
1+05	1	-	1
1+55	1	1	1

### PAVEMENT MARKING, WORDS, EPOXY

LOCATION	EACH
KOELLER ST.	
1+05	1

### TEMPORARY PAVEMENT MARKING, (4-INCH. WHITE) REMOVABLE TAPE

LOCATION	L.F.
U.S.H. 41	4000

### PREPARATION OF FOUNDATION FOR BITUMINOUS SHOULDERS

LOCATION	STATIONS
U.S.H. 41	26

### SHAPING SHOULDERS

LOCATION	STATIONS
U.S.H. 41	26

### DETAIL SUMMARY OF MISCELLANEOUS QUANTITIES

#### CONCRETE PAVEMENT GAPS

LOCATION	EACH
C.T.H. 'K' 67+70	1

#### TRAFFIC CONTROL

	DAYS
ARROW BOARDS	40
NONMETALLIC DRUMS	880

#### REMOVE GUARDRAIL

LOCATION	L.F.
C.T.H. 'K'	
70+65 - 73+35LT. & RT.	540
75+45 - 81+75RT.	630
75+45 - 78+00LT.	255
79+00 - 81+75LT.	275
KOELLER ST. (EXISTING)LT.	82
KOELLER ST. (EXISTING)RT.	95
<b>TOTAL</b>	<b>1877</b>

#### REMOVE AND RESET STEEL PLATE BEAM MEDIAN GUARD

LOCATION	L.F.
U.S.H. 41	140

#### STEEL PLATE BEAM MEDIAN GUARD

LOCATION	L.F.	STANDARD ANCHORAGE (EACH)
U.S.H. 41	30	1

#### STEEL PLATE BEAM GUARD, CLASS 'A'

LOCATION	L.F.	STANDARD ANCHORAGE (EACH)
C.T.H. 'K'		
75+42 - 76+19 LT.	77	1
75+42 - 76+19 RT.	77	1
72+58 - 73+35 LT.	77	1
72+58 - 73+35 RT.	77	1
<b>TOTAL</b>	<b>308</b>	<b>4</b>

#### PAVEMENT MARKING, (DOUBLE CENTERLINE) (4-INCH. YELLOW) EPOXY

LOCATION	L.F.
C.T.H. 'K'	
64+00 - 66+80	560
68+40 - 82+80	2880
84+20 - 93+00	1760
WASHBURN ST.	
2+00 - 4+67	534
15+36 - 18+00	528
KOELLER ST.	
0+35 - 20+00	3930
<b>TOTAL</b>	<b>10192</b>

#### PAVEMENT MARKINGS, LANE LINE (4-INCH. WHITE) EPOXY

LOCATION	L.F.
C.T.H. 'K'	
64+00 - 66+80LT. & RT.	140
68+40 - 82+80LT. & RT.	720
84+20 - 93+00LT. & RT.	440
KOELLER ST.	
0+40 - 17+20 LT. & RT.	840
<b>TOTAL</b>	<b>2140</b>

#### PAVEMENT MARKINGS, RAILROAD CROSSINGS, EPOXY

LOCATION	EACH
KOELLER ST.	2

#### PAVEMENT MARKINGS, CHANNELIZING, EPOXY, 8-INCH

LOCATION	L.F.
KOELLER ST.	
0+33 - 1+70	137

#### YARDAGE SUMMARY

LOCATION	UNCLASSIFIED EXCAVATION C.Y.	FILL C.Y.
C.T.H. 'K'		
64+00 - 73+43	1900	6150
75+38 - 93+00	4000	14600
WASHBURN ST.	600	550
* KOELLER ST. (EXISTING)	11100	500
KOELLER ST. (PROPOSED)	8000	600
<b>TOTAL</b>	<b>25600</b>	<b>28700</b>

BORROW EXCAVATION (21900 X 1.3) - 25600 = 28700 C.Y.  
 \* THIS QUANTITY WAS TAKEN FROM THE AS-BUILT GRADING PLAN.

#### PAVEMENT MARKING, STOP LINE, EPOXY, 18-INCH

LOCATION	L.F.
WASHBURN ST.	
4+67	39
15+35	43
KOELLER ST.	
0+37	52
<b>TOTAL</b>	<b>134</b>

#### PAVEMENT MARKING, ARROWS, EPOXY

LOCATION	EACH		
	TYPE 1	TYPE 2	TYPE 3
KOELLER ST.			
0+55	1	1	1
1+05	1	-	1
1+55	1	1	1
<b>TOTAL</b>	<b>3</b>	<b>2</b>	<b>3</b>

#### PAVEMENT MARKING, WORDS, EPOXY

LOCATION	EACH
KOELLER ST.	
1+05	1

#### TEMPORARY PAVEMENT MARKING, (4-INCH. WHITE) REMOVABLE TAPE

LOCATION	L.F.
U.S.H. 41	4000

#### PREPARATION OF FOUNDATION FOR BITUMINOUS SHOULDERS

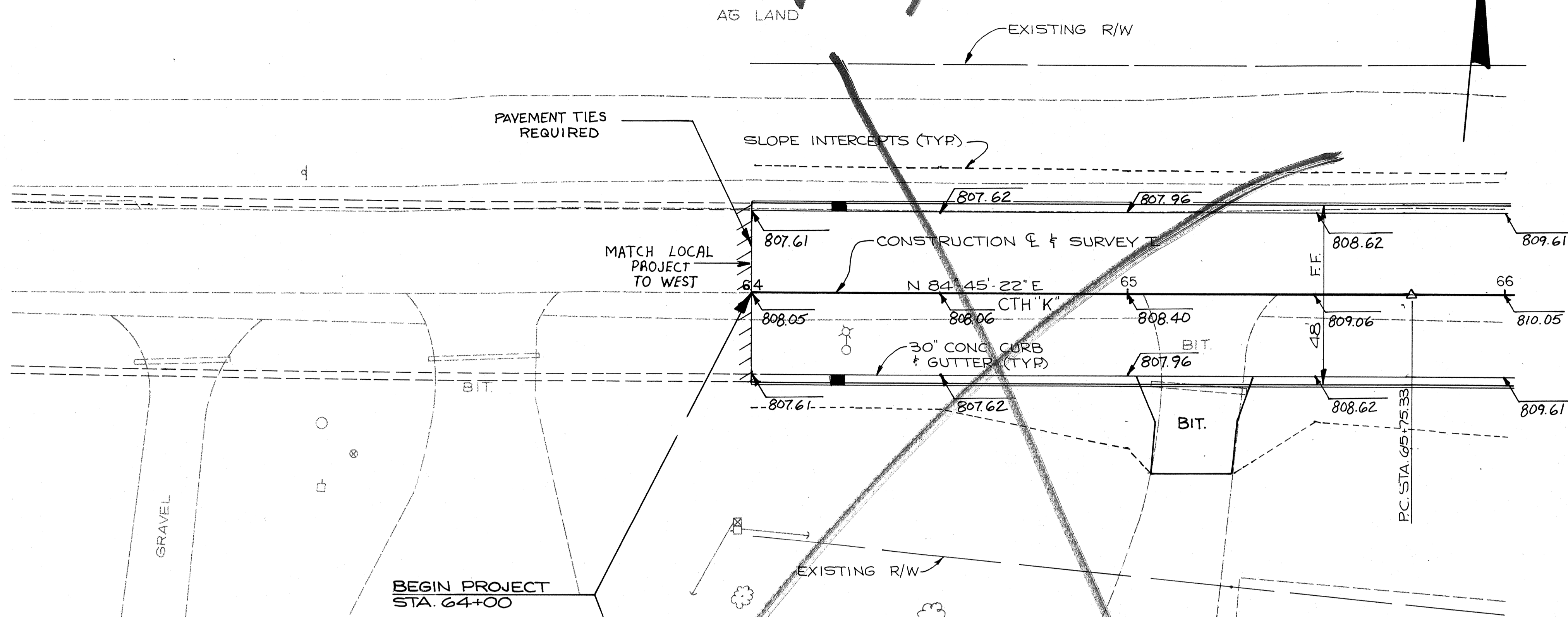
LOCATION	STATIONS
U.S.H. 41	26

#### SHAPING SHOULDERS

LOCATION	STATIONS
U.S.H. 41	26

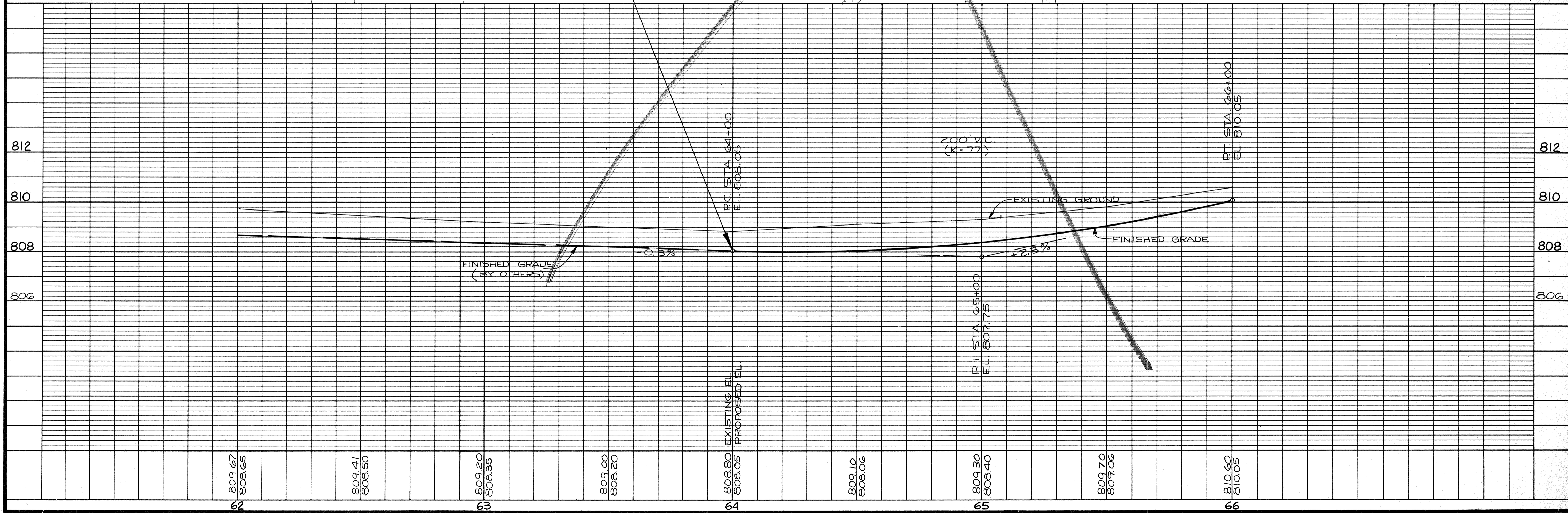
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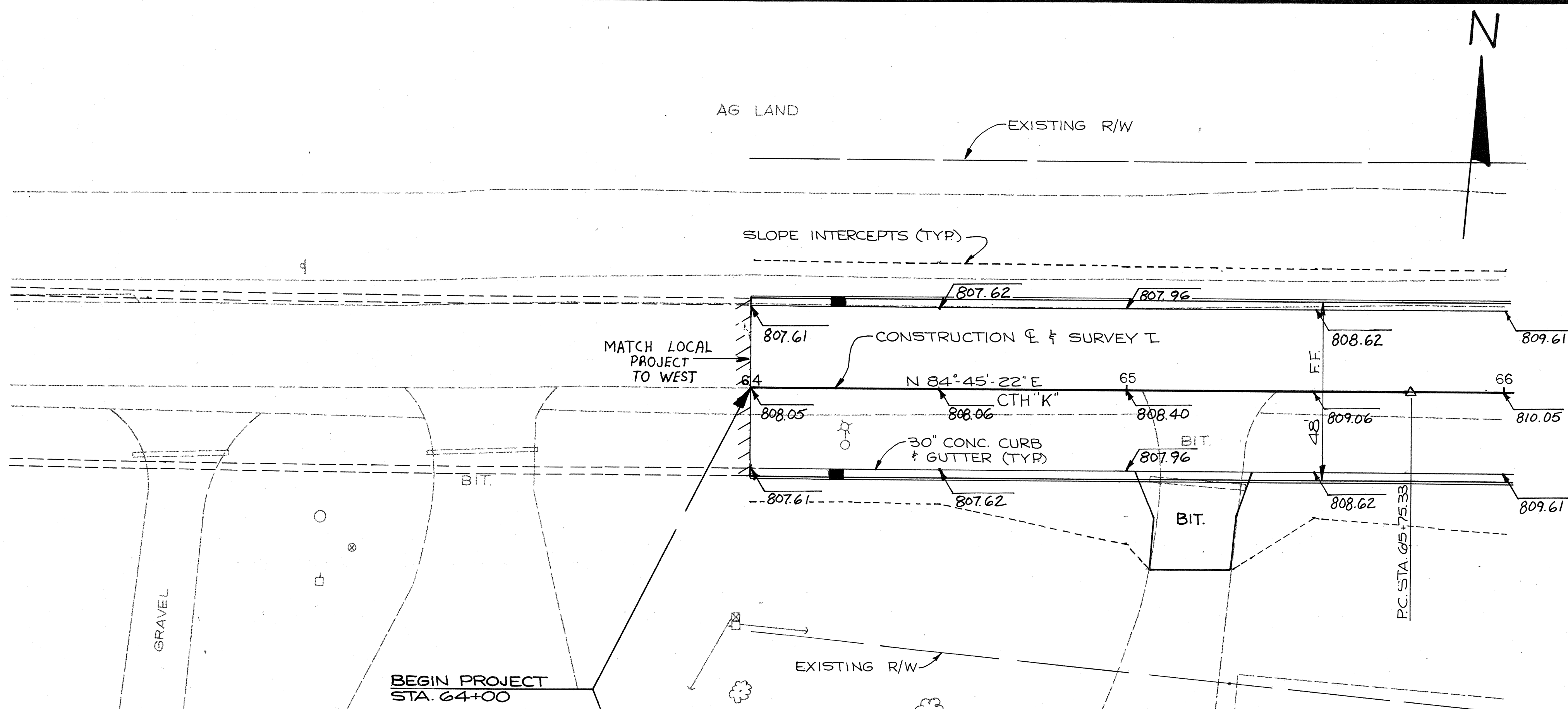
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
C.T.H. "K" WINNEBAGO COUNTY	



**CURVE DATA**

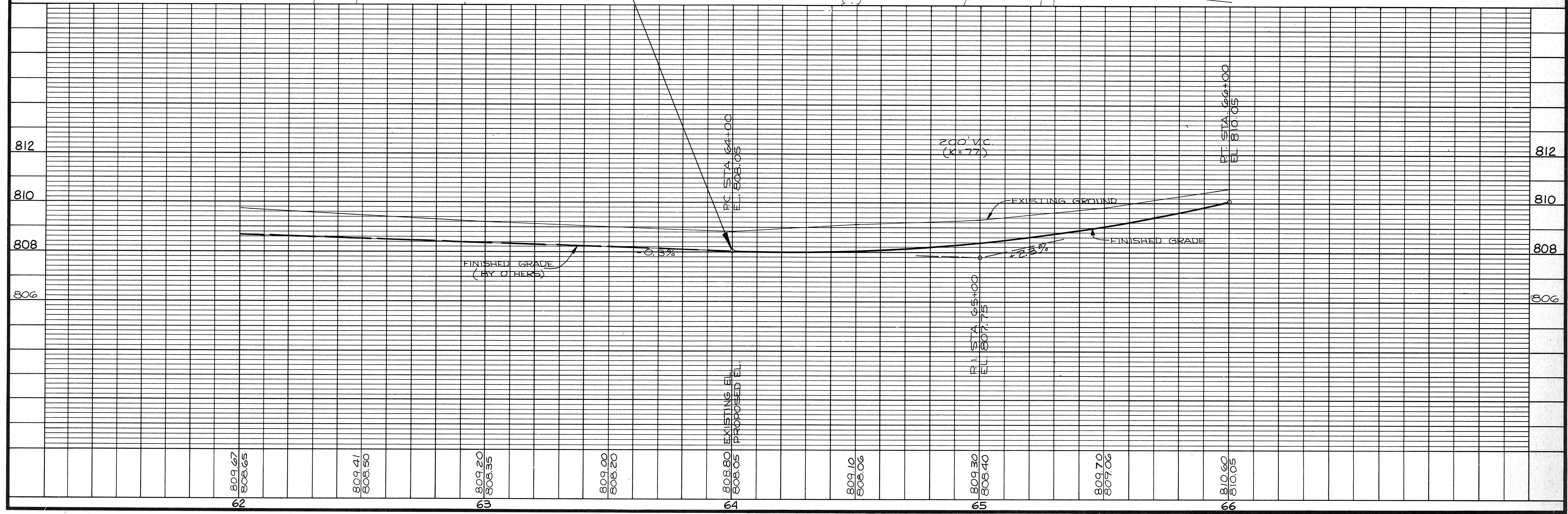
P.I. = STA. 68+71.96
$\Delta = 5^\circ 55' 38''$
D = 1° 00'
R = 5729.58'
T = 296.63'
L = 592.72'
S.E. = N.C.





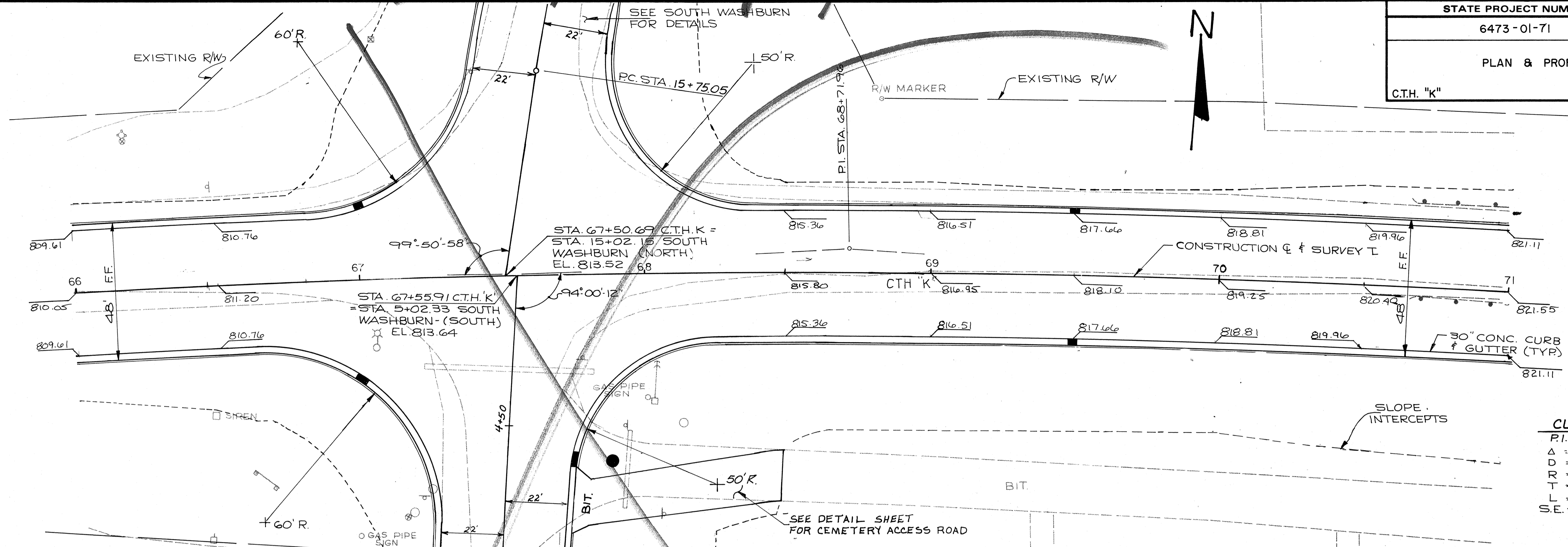
**CURVE DATA**

P.I. STA.	68+71.96
$\Delta$	5°55'38"
D	1°00'
R	5729.58'
T	296.63'
L	592.72'
S.E.	N.C.



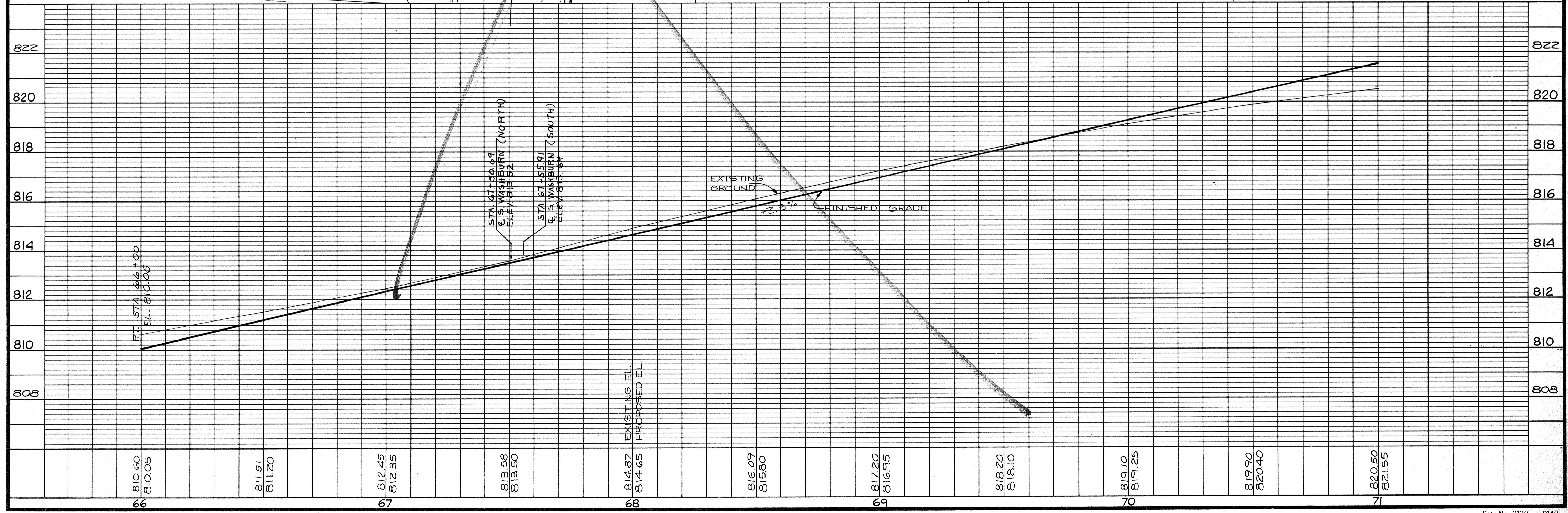
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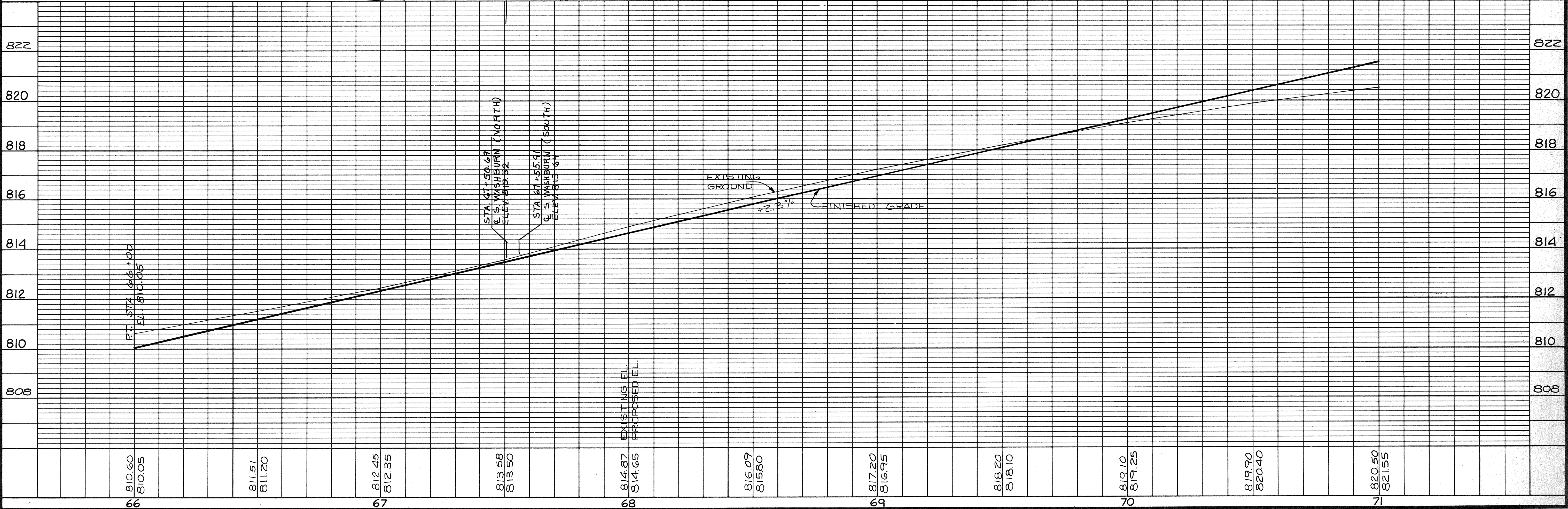
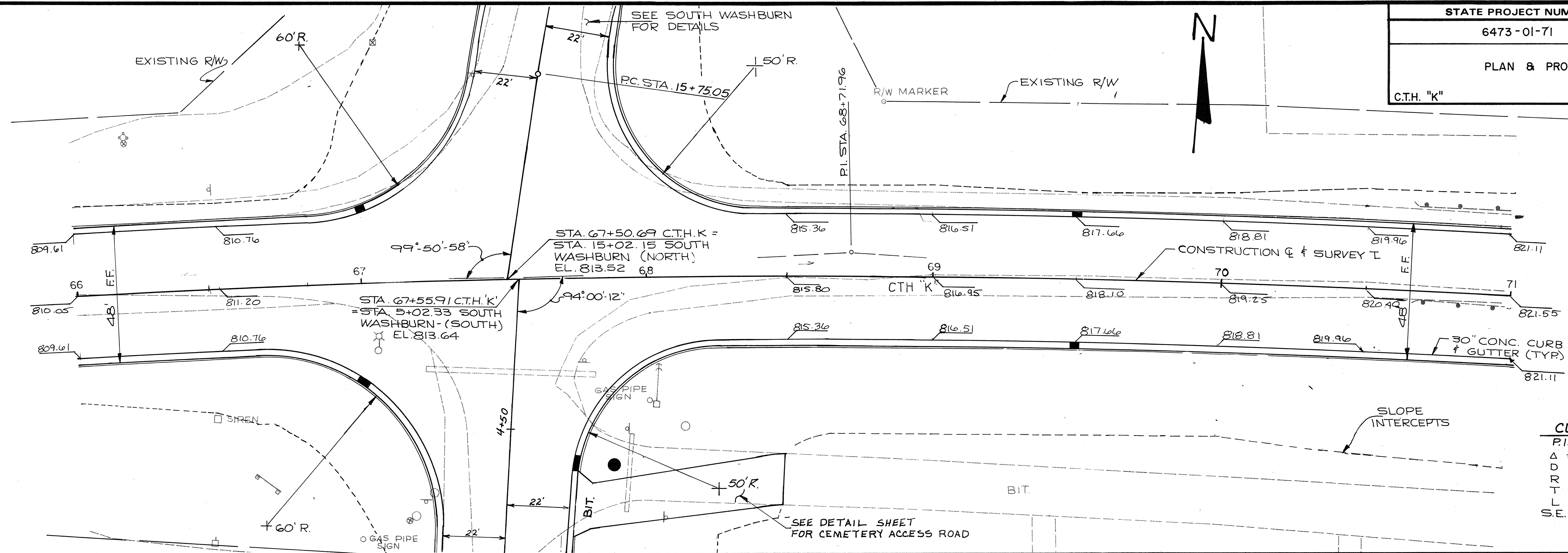
STATE PROJECT NUMBER	SHEET NO.
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PLAN & PROFILE	
C.T.H. "K"	WINNEBAGO COUNTY



**CURVE DATA**

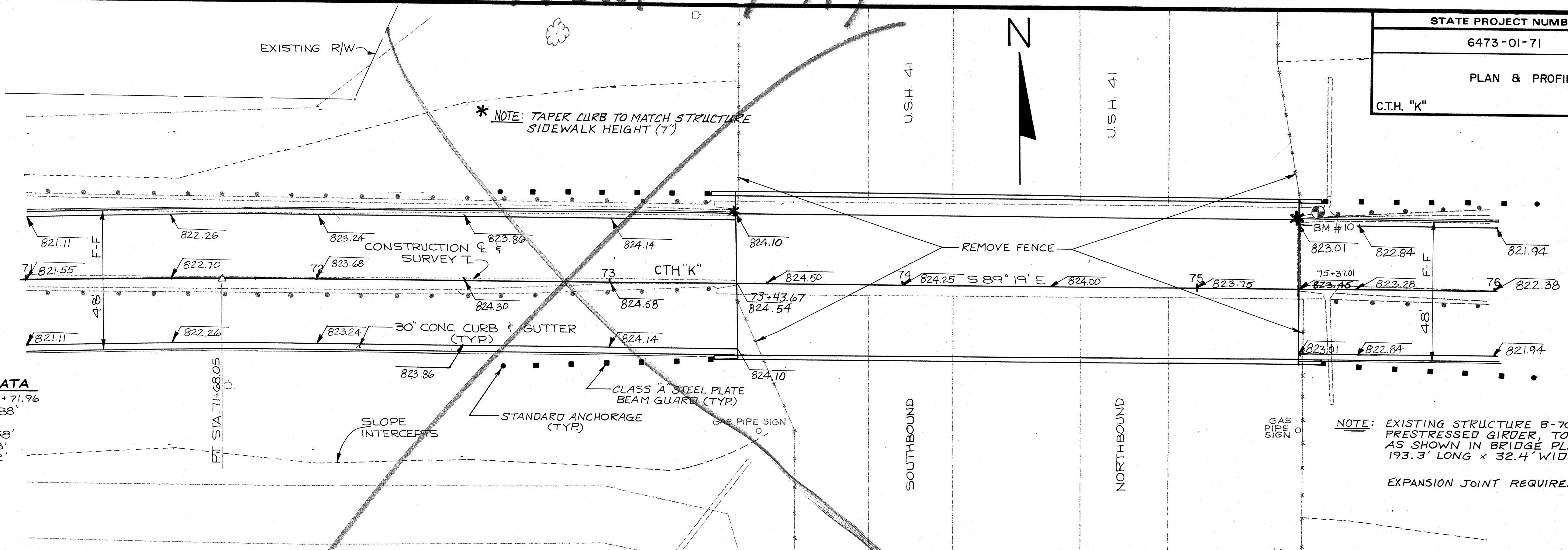
P.I. = STA. 68+71.96
$\Delta = 5^{\circ}55'38''$
$D = 1^{\circ}00'$
$R = 5729.58'$
$T = 296.63'$
$L = 592.72'$
S.E. = N.C.





See Next Page

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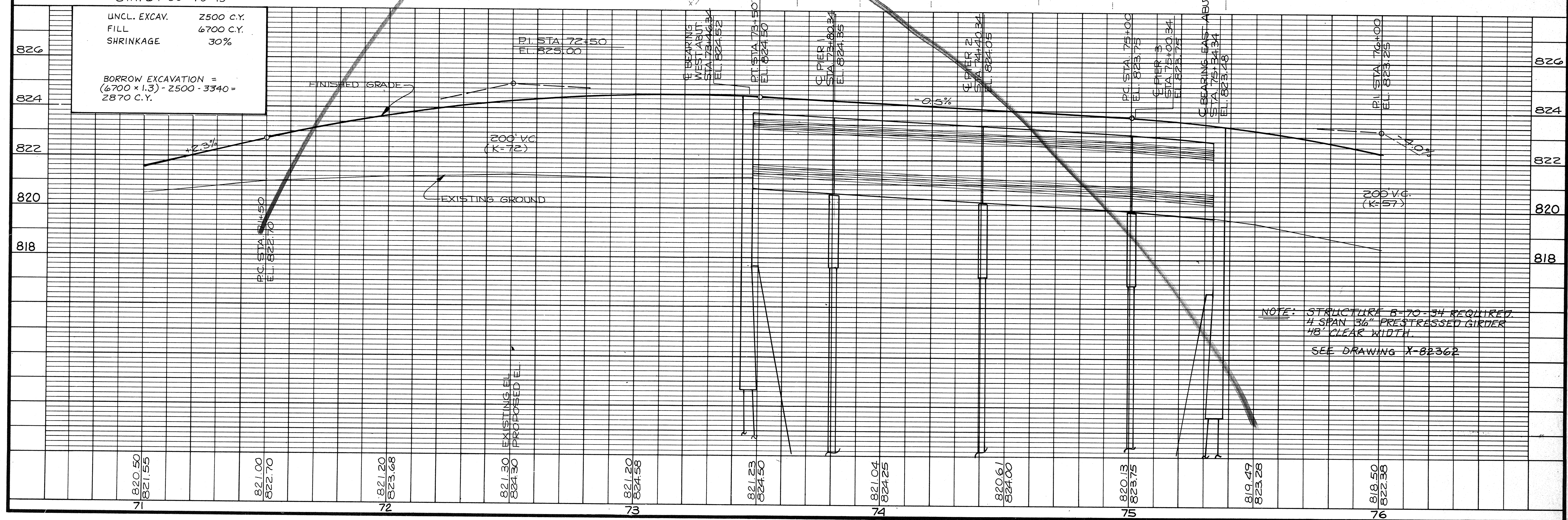
**CURVE DATA**  
 P.I. = STA. 68+71.96  
 $\Delta = 5^{\circ} 55' 38''$   
 $D = 1^{\circ} 00'$   
 $R = 5729.58'$   
 $T = 296.63'$   
 $L = 592.72'$   
 S.E. = N.C.

NOTE: EXISTING STRUCTURE B-70-34, 4 SPAN, 36" PRESTRESSED GIRDER, TO BE REMOVED AS SHOWN IN BRIDGE PLANS 193.3' LONG x 32.4' WIDE.  
 EXPANSION JOINT REQUIRED AT STRUCTURE.

STA. 64+00 - 73+43

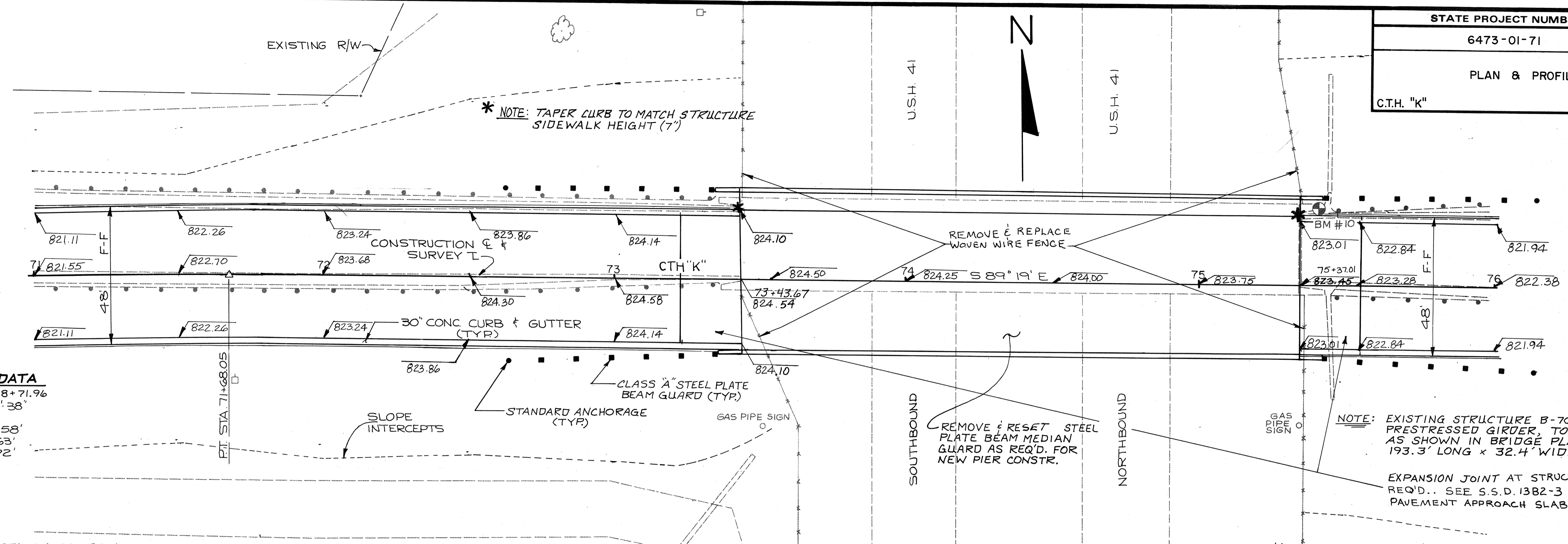
UNCL. EXCAV.	2500 C.Y.
FILL	6700 C.Y.
SHRINKAGE	30%

BORROW EXCAVATION =  
 $(6700 \times 1.3) - 2500 = 3340 = 2870$  C.Y.



NOTE: STRUCTURE B-70-34 REQUIRED 4 SPAN 36" PRESTRESSED GIRDER 48' CLEAR WIDTH.  
 SEE DRAWING X-82362





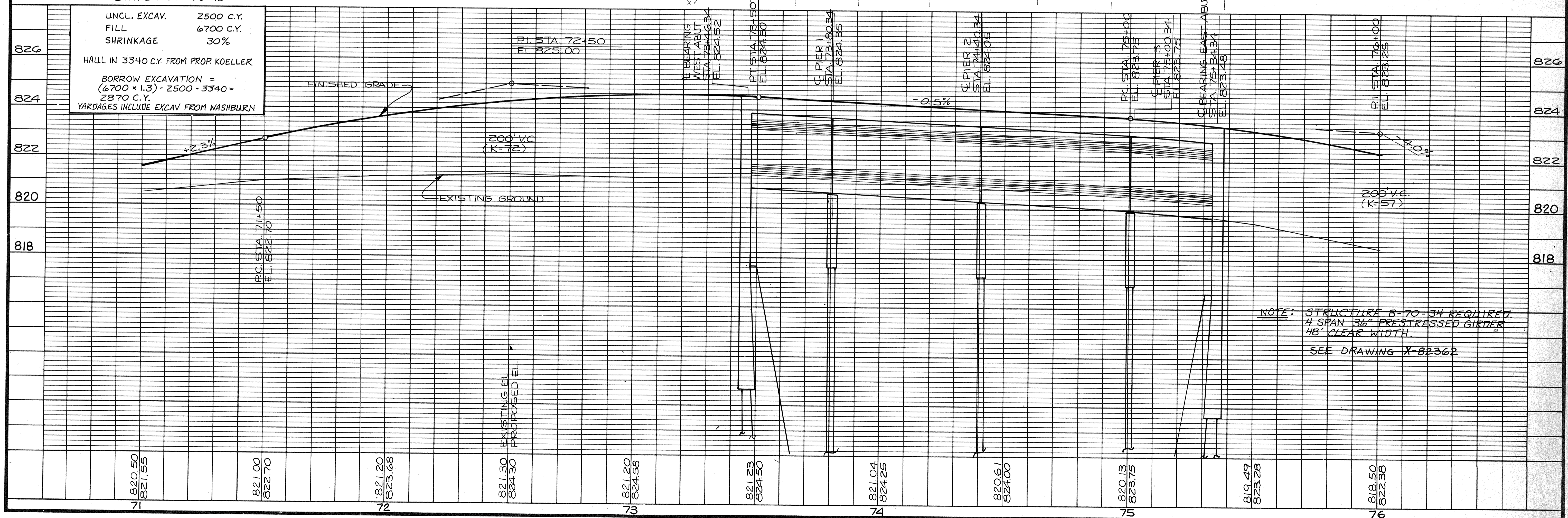
**CURVE DATA**  
 P.I. = STA. 68+71.96  
 $\Delta = 5^\circ 55' 38''$   
 $D = 1^\circ 00'$   
 $R = 5729.58'$   
 $T = 296.63'$   
 $L = 592.72'$   
 S.E. = N.C.

STA. 64+00 - 73+43

UNCL. EXCAV.	2500 C.Y.
FILL	6700 C.Y.
SHRINKAGE	30%

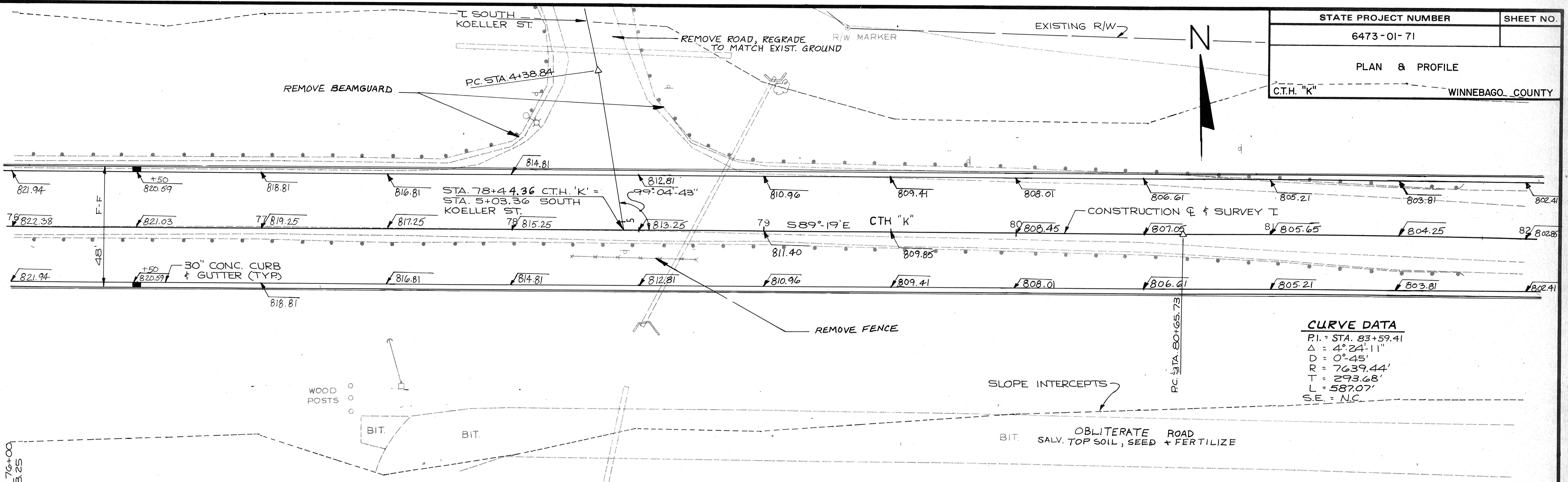
HALL IN 3340 C.Y. FROM PROP KOELLER

BORROW EXCAVATION =  $(6700 \times 1.3) - 2500 = 3340$  C.Y.  
 YARDAGES INCLUDE EXCAV. FROM WASHBURN



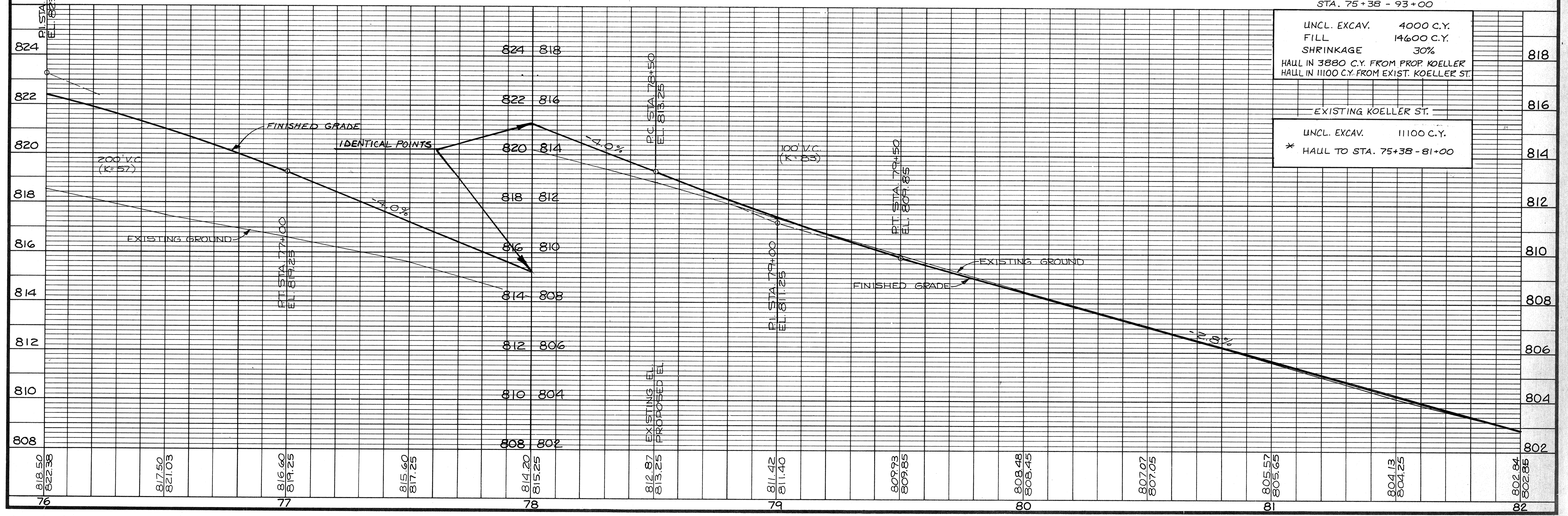
NOTE: STRUCTURE B-70-34 REQUIRED  
 4 SPAN 36" PRESTRESSED GIRDER  
 48' CLEAR WIDTH.  
 SEE DRAWING X-82362





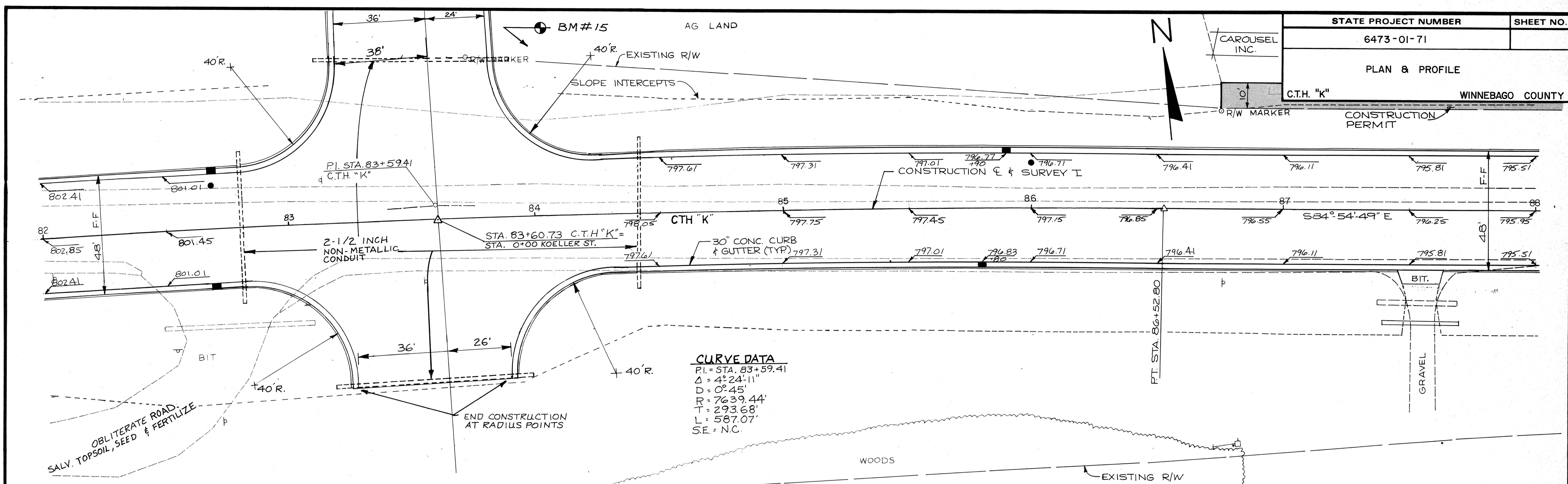
**CURVE DATA**

PI. = STA. 83+59.41
$\Delta = 4^{\circ}24'11''$
$D = 0^{\circ}45'$
$R = 7639.44'$
$T = 293.68'$
$L = 587.07'$
S.E. = N.C.

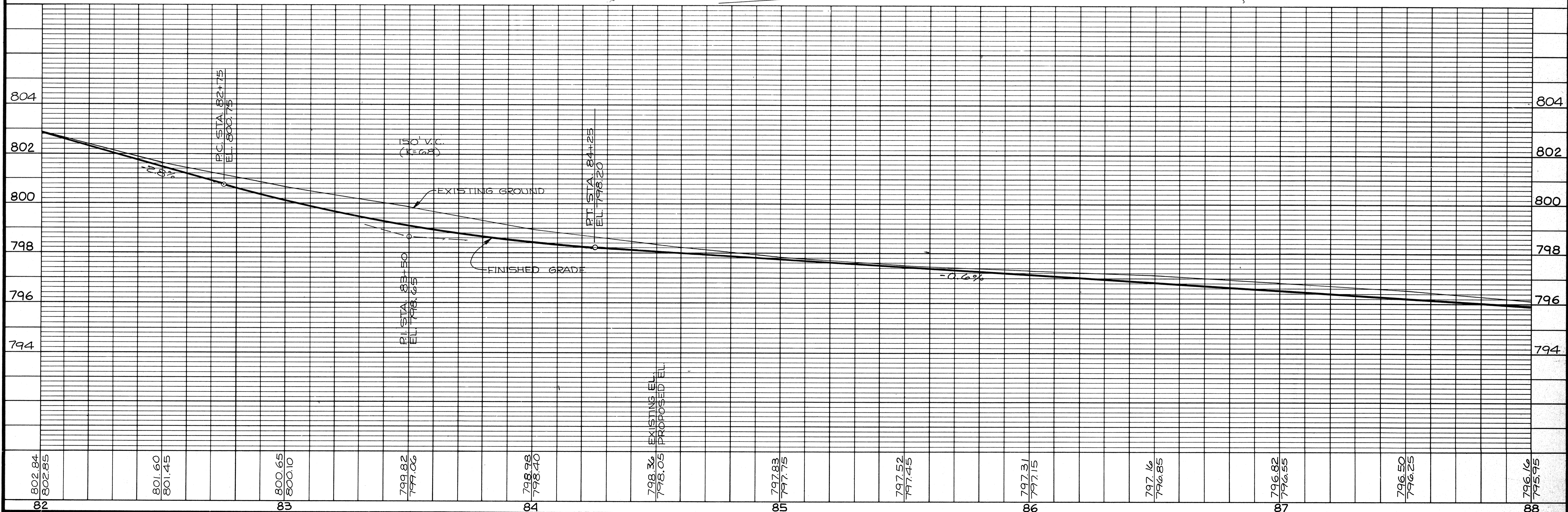


UNCL. EXCAV.	4000 C.Y.
FILL	14600 C.Y.
SHRINKAGE	30%
HAUL IN 3880 C.Y. FROM PROP. KOELLER ST.	
HAUL IN 1100 C.Y. FROM EXIST. KOELLER ST.	
EXISTING KOELLER ST.	
UNCL. EXCAV.	11100 C.Y.
* HAUL TO STA. 75+38 - 81+00	

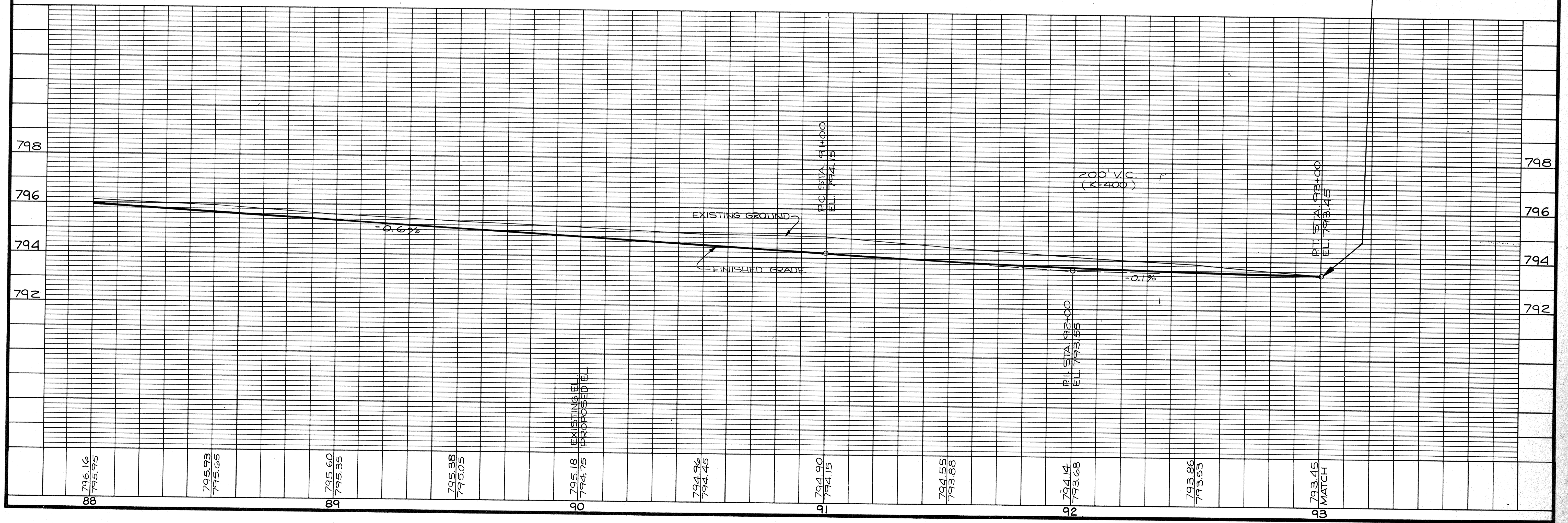
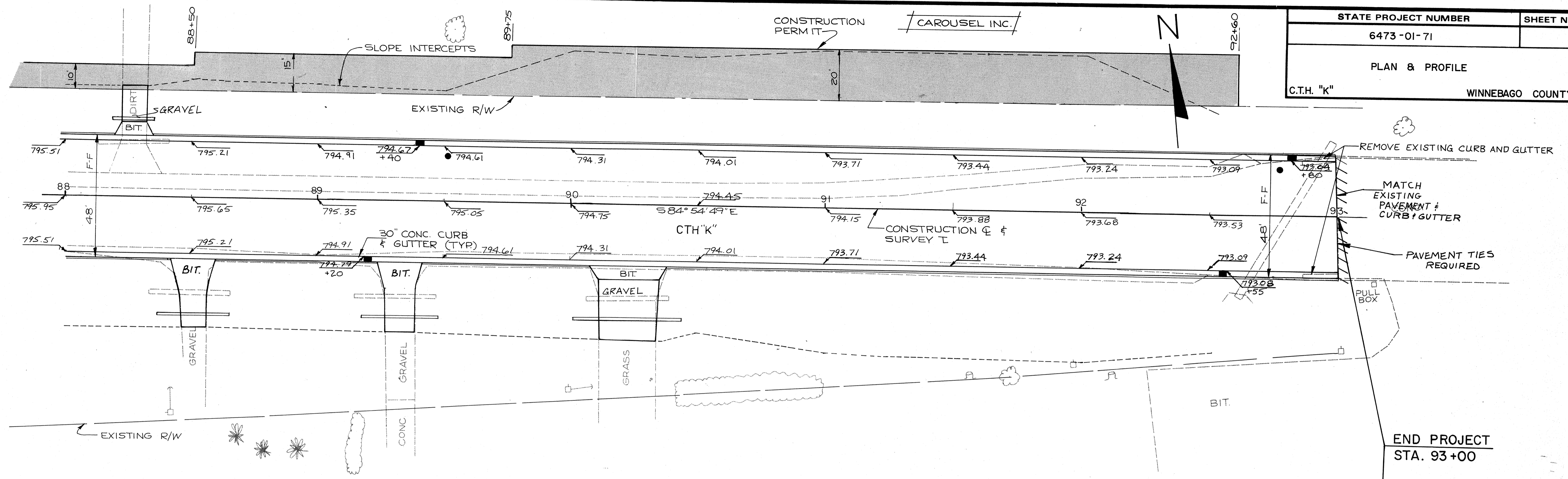
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
C.T.H. "K" WINNEBAGO COUNTY	
CONSTRUCTION PERMIT	



**CURVE DATA**  
 P.I. = STA. 83+59.41  
 $\Delta = 4^{\circ}24'11''$   
 $D = 0^{\circ}45'$   
 $R = 7639.44'$   
 $T = 293.68'$   
 $L = 587.07'$   
 S.E. = N.C.

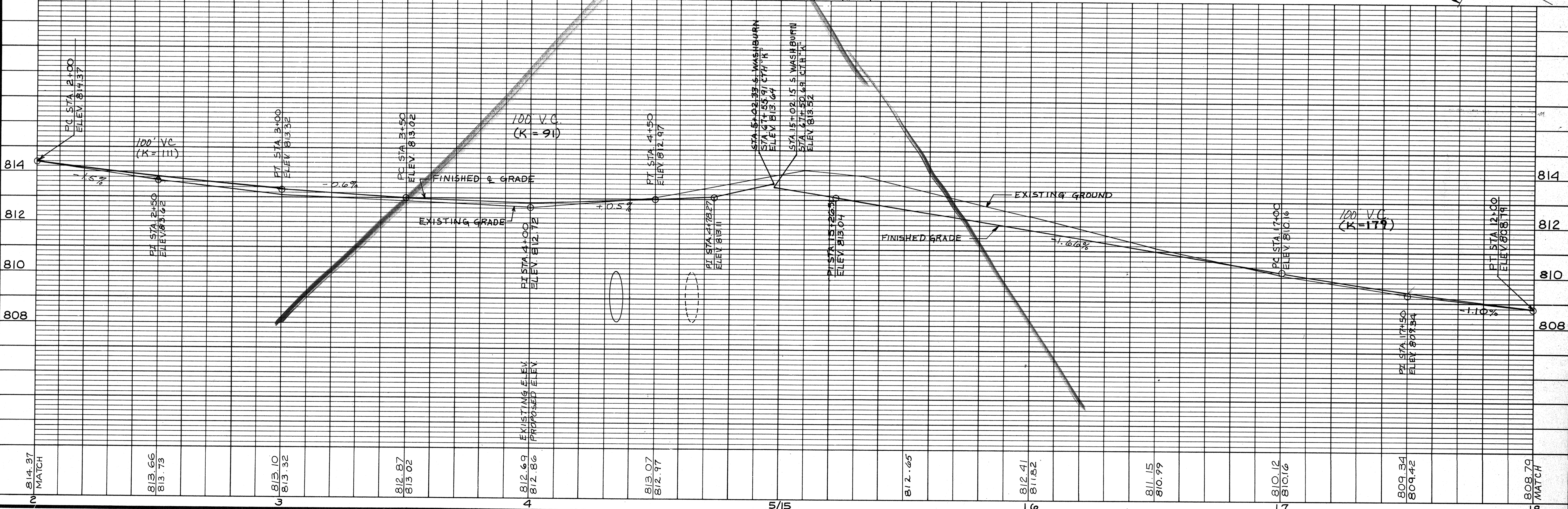
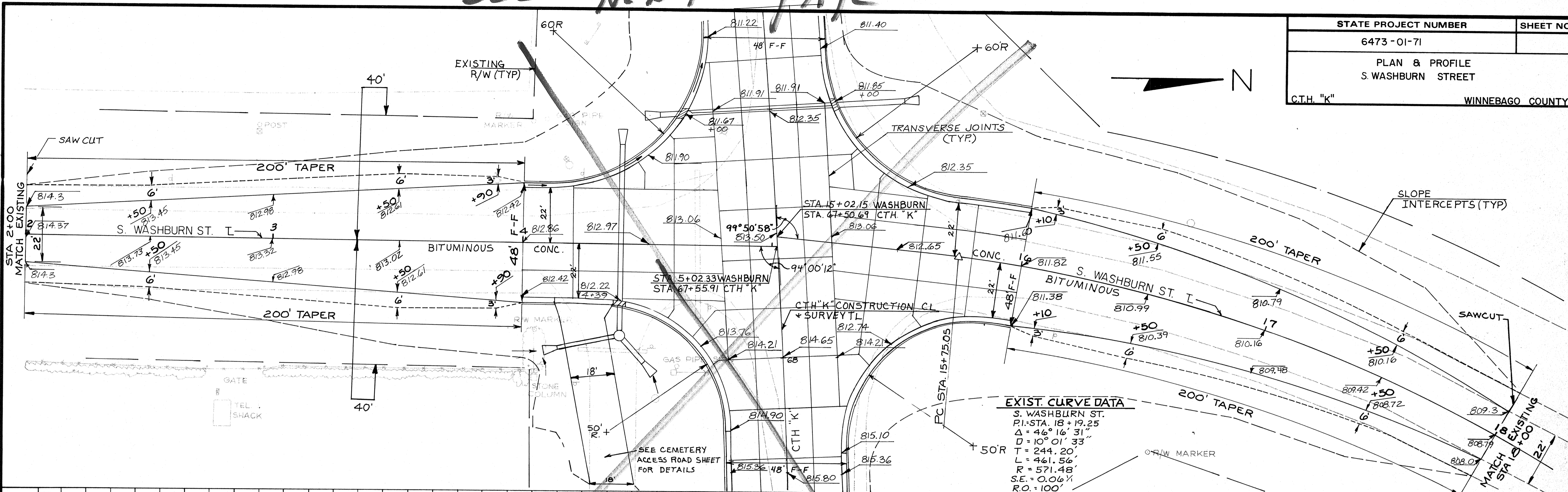


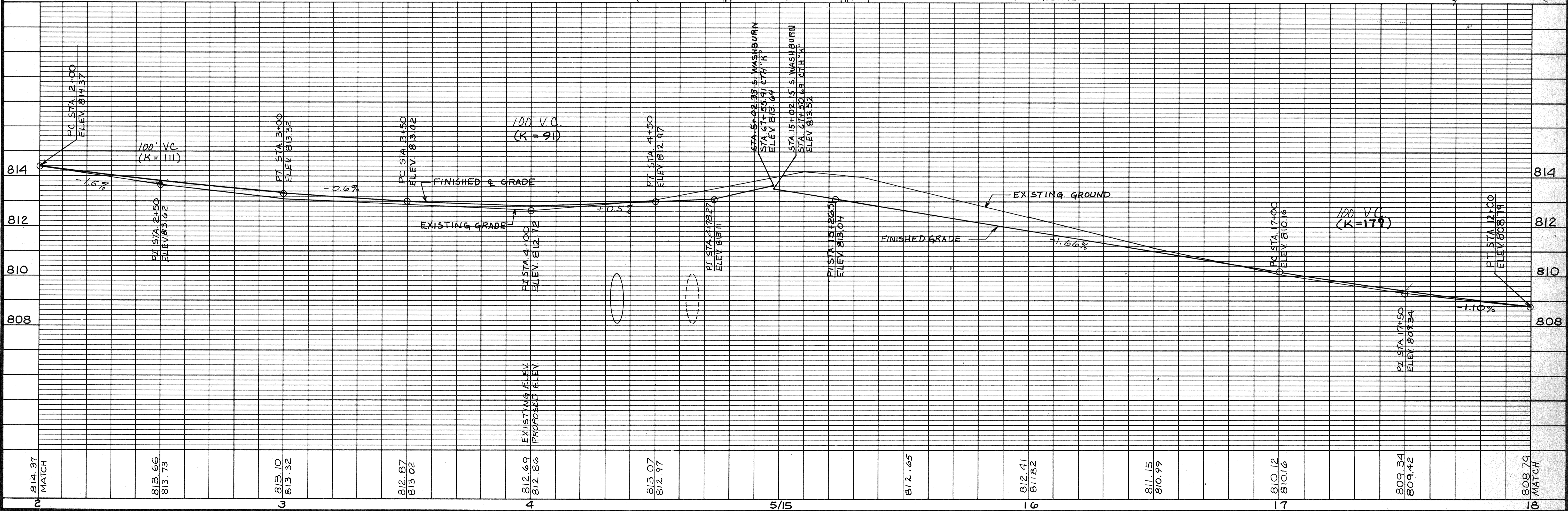
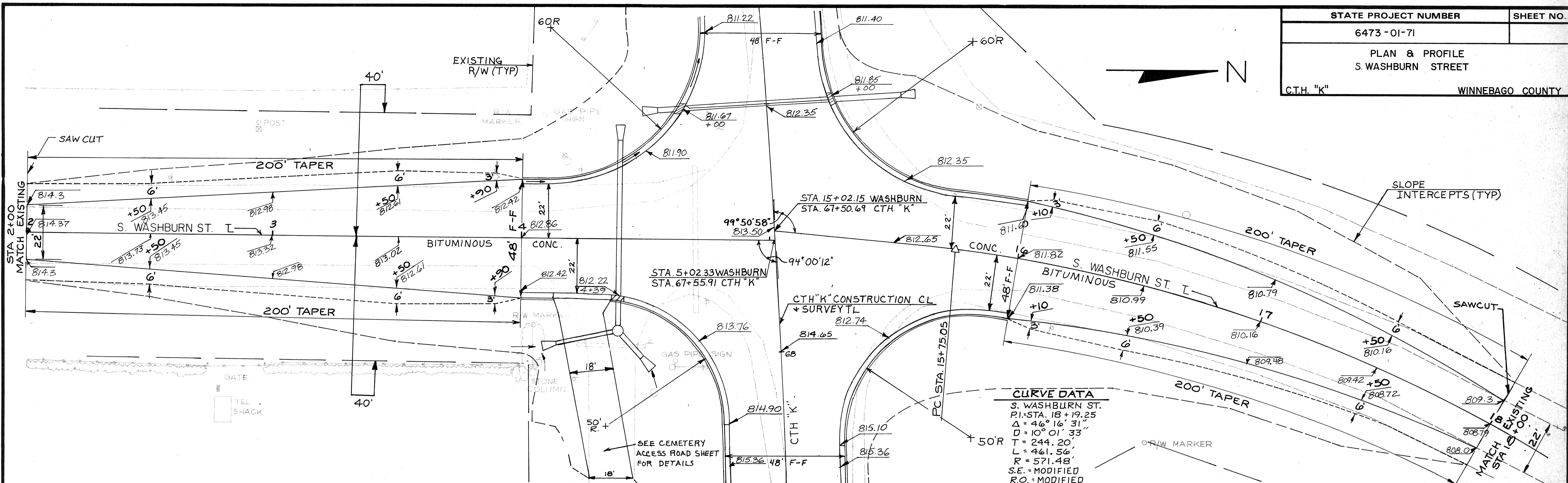
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
C.T.H. "K" WINNEBAGO COUNTY	



See Next Page

STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
S. WASHBURN STREET	
C.T.H. "K"	WINNEBAGO COUNTY



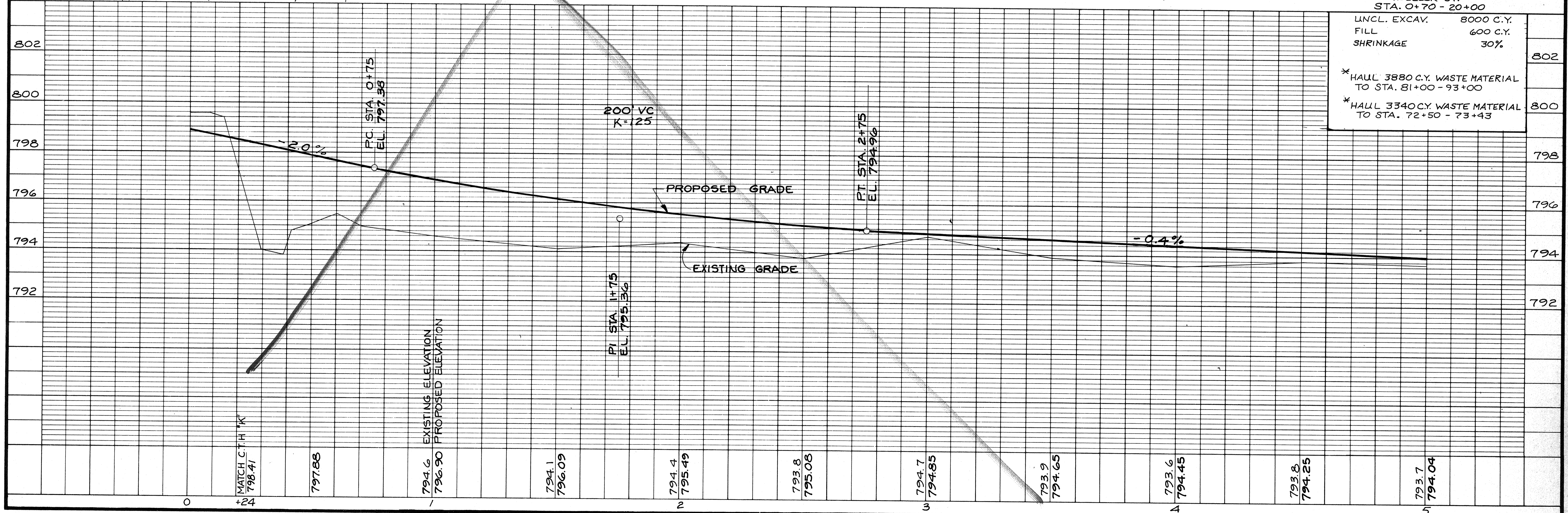
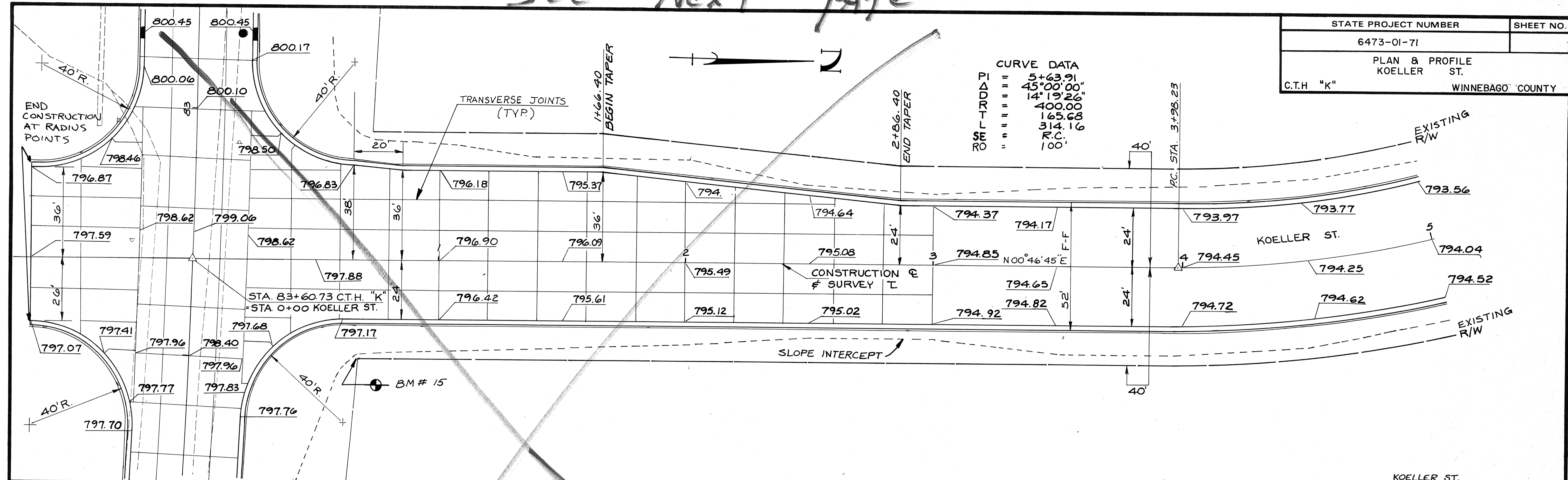


See Next page

STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
KOELLER ST.	
C.T.H. "K"	WINNEBAGO COUNTY

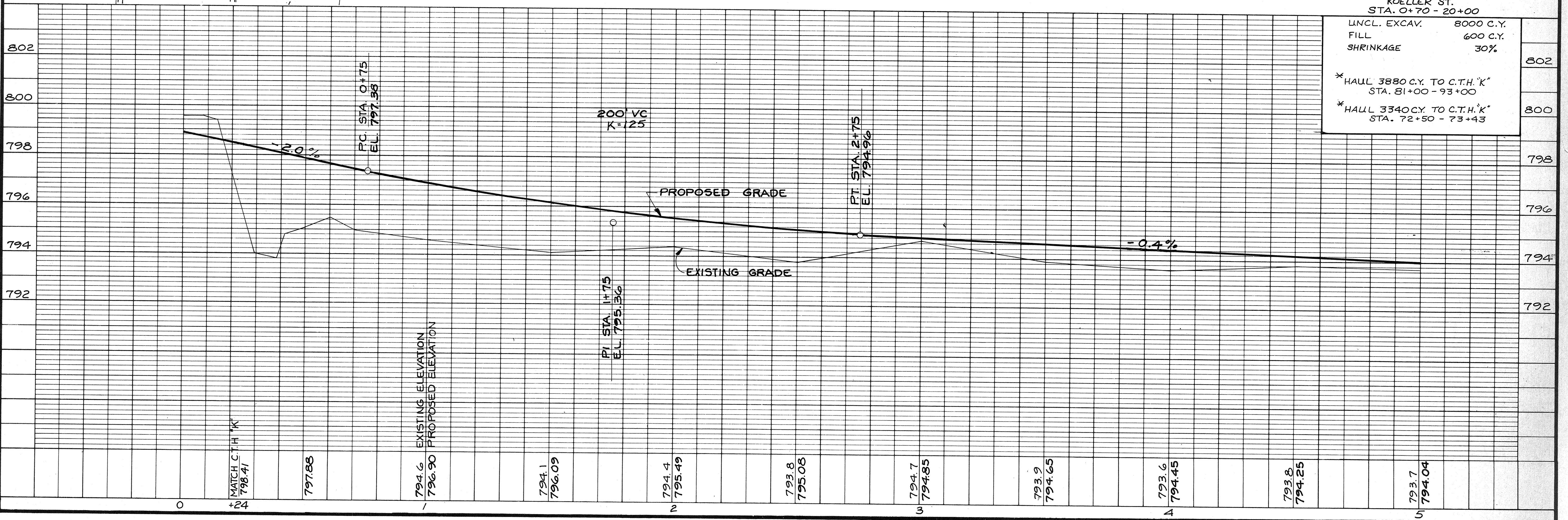
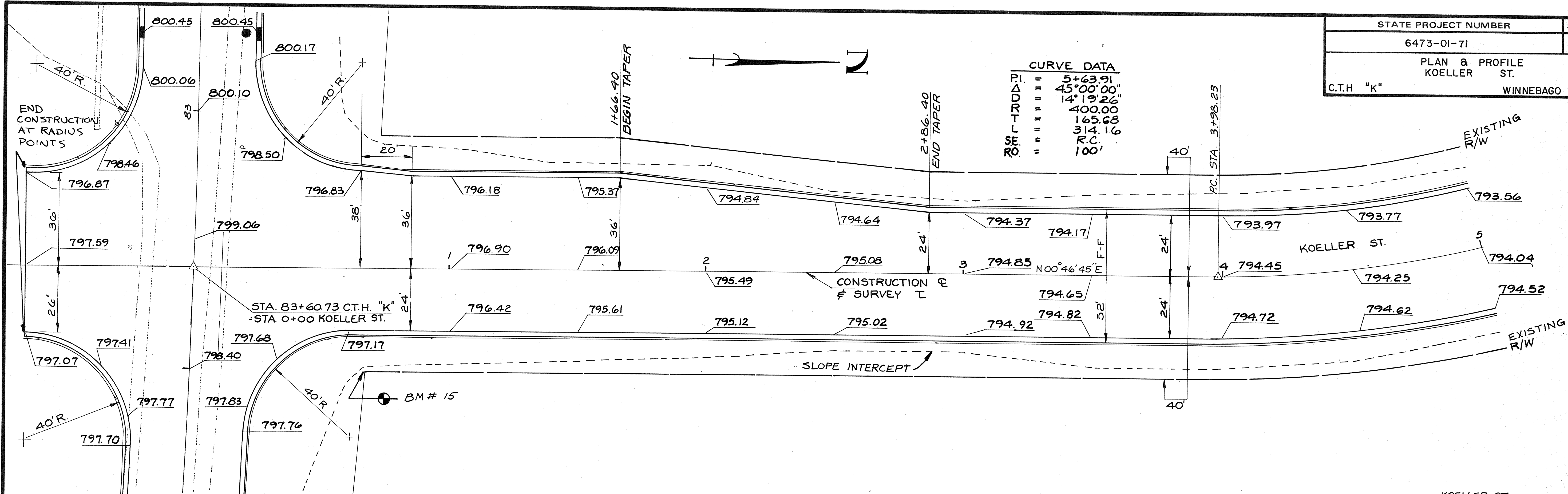
CURVE DATA

PI	5+63.91
Δ	45°00'00"
R	14°19'26"
T	400.00'
E	165.68'
S	314.16'
R.C.	16
RO	100'

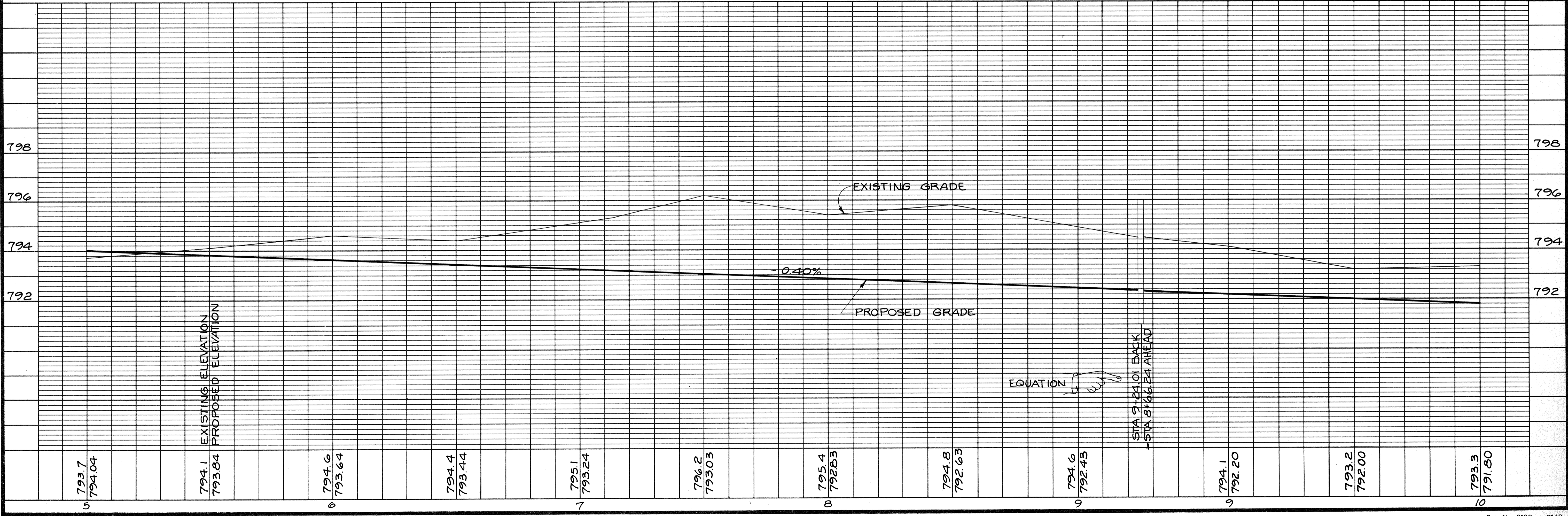
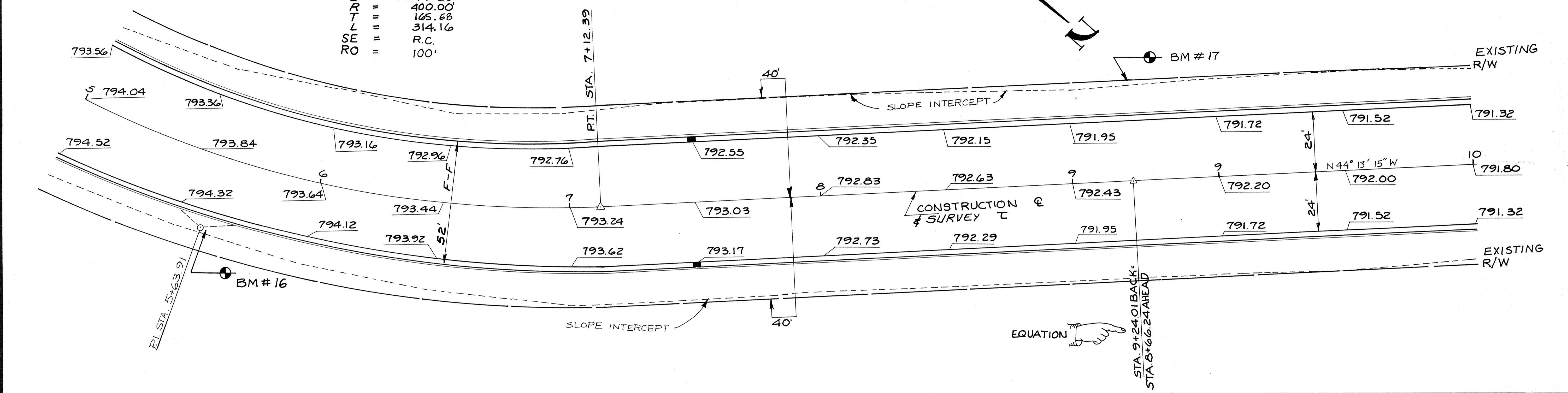




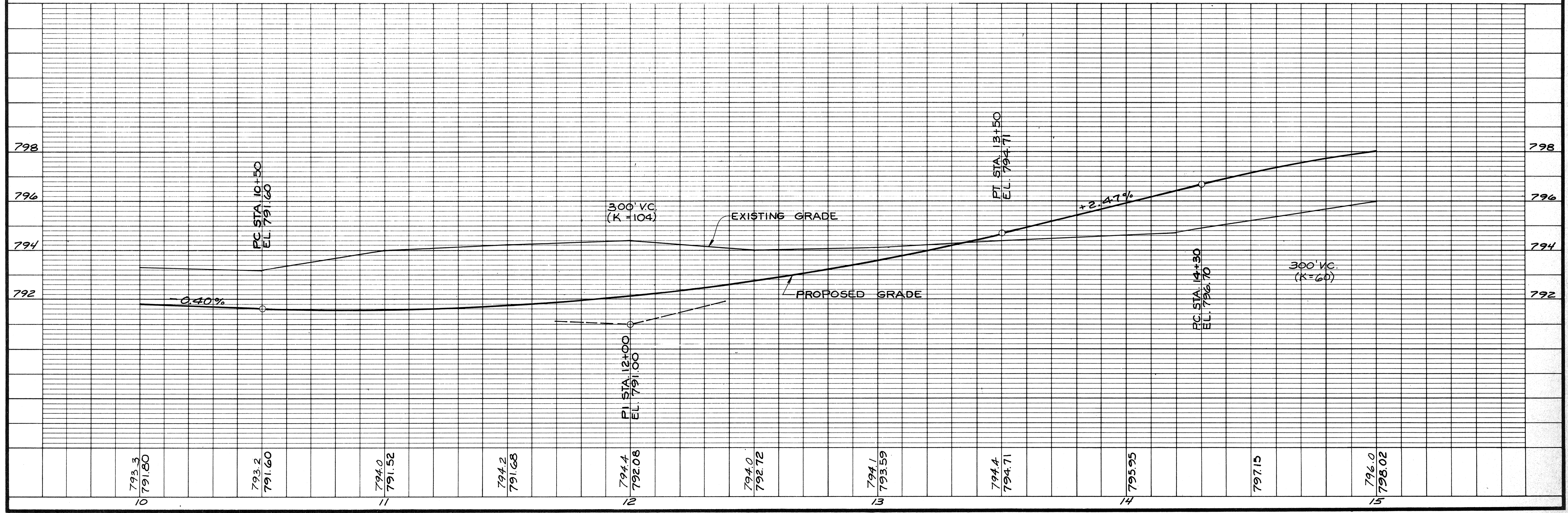
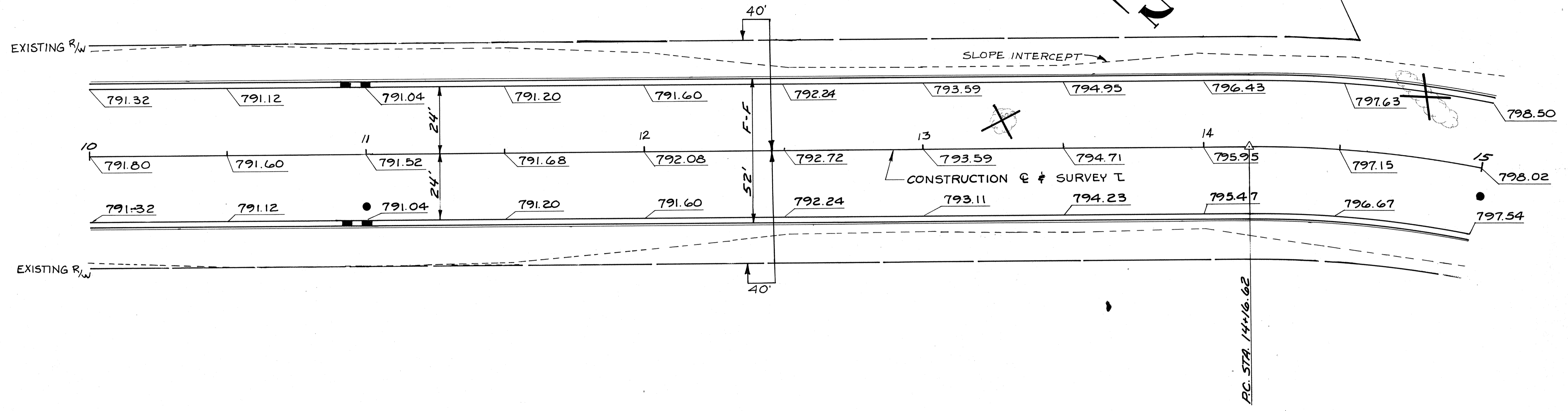
CURVE DATA	
PI	5+63.91
Δ	45°00'00"
LC	14°19'26"
LC	400.00
LC	165.68
LC	314.16
LC	100'



CURVE DATA  
 P I = 5+63.91  
 Δ = 45° 00' 00"  
 R = 141.926'  
 L = 400.00'  
 T = 165.68'  
 S E = 314.16'  
 R O = R.C.  
 = 100'

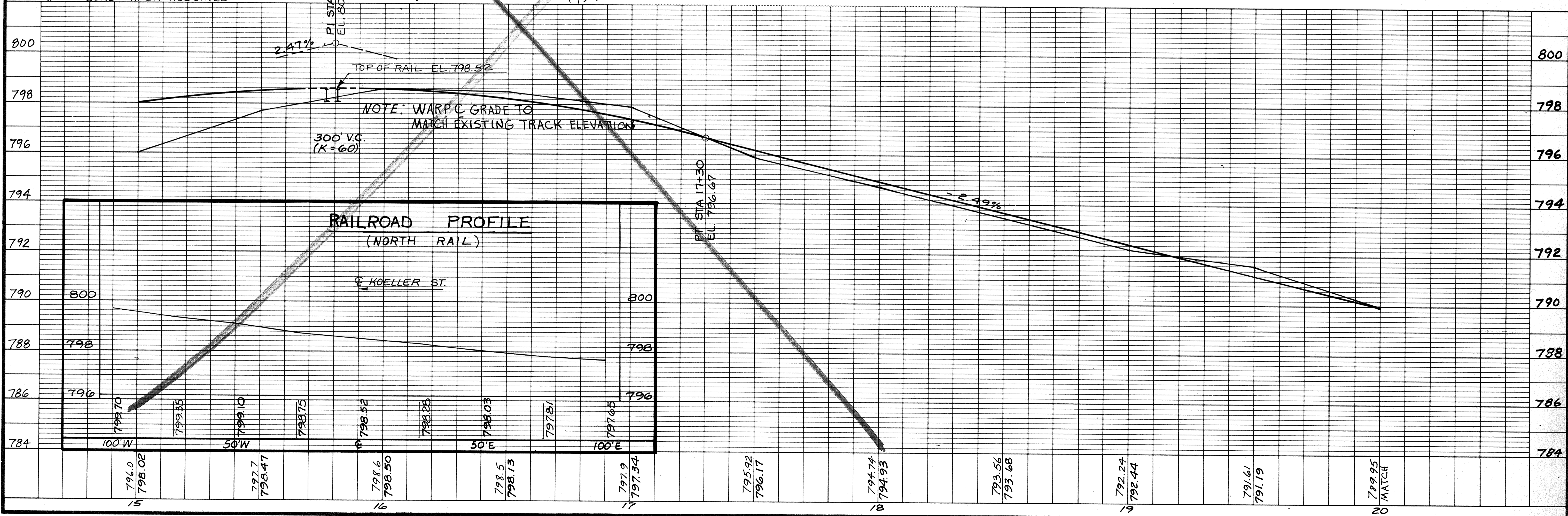
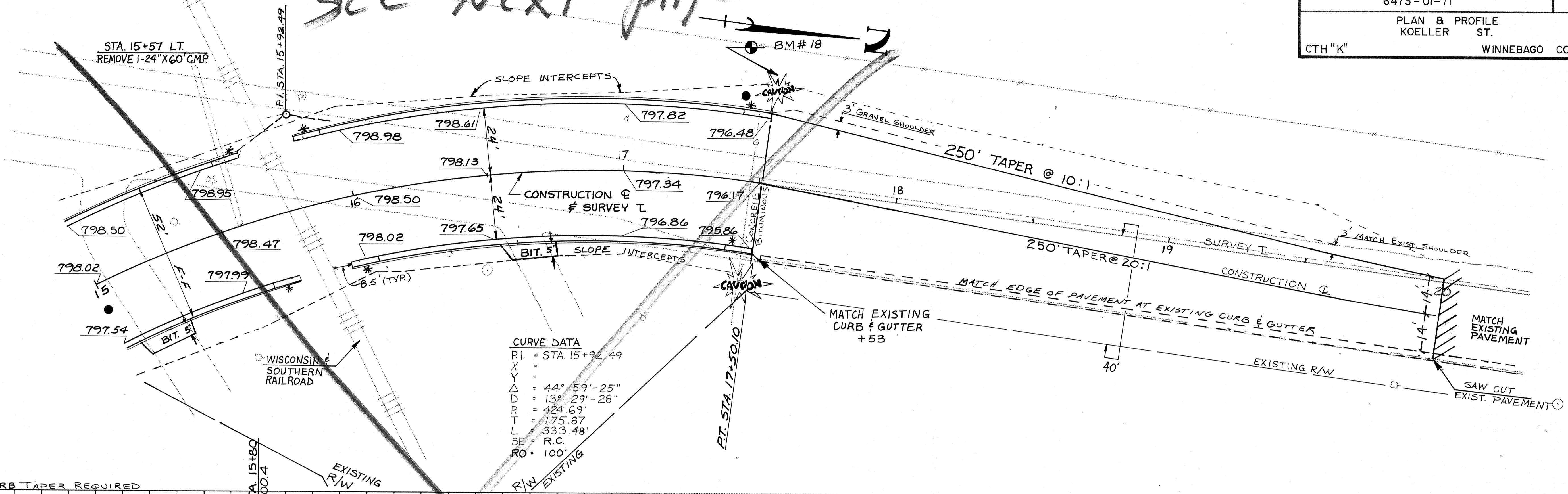


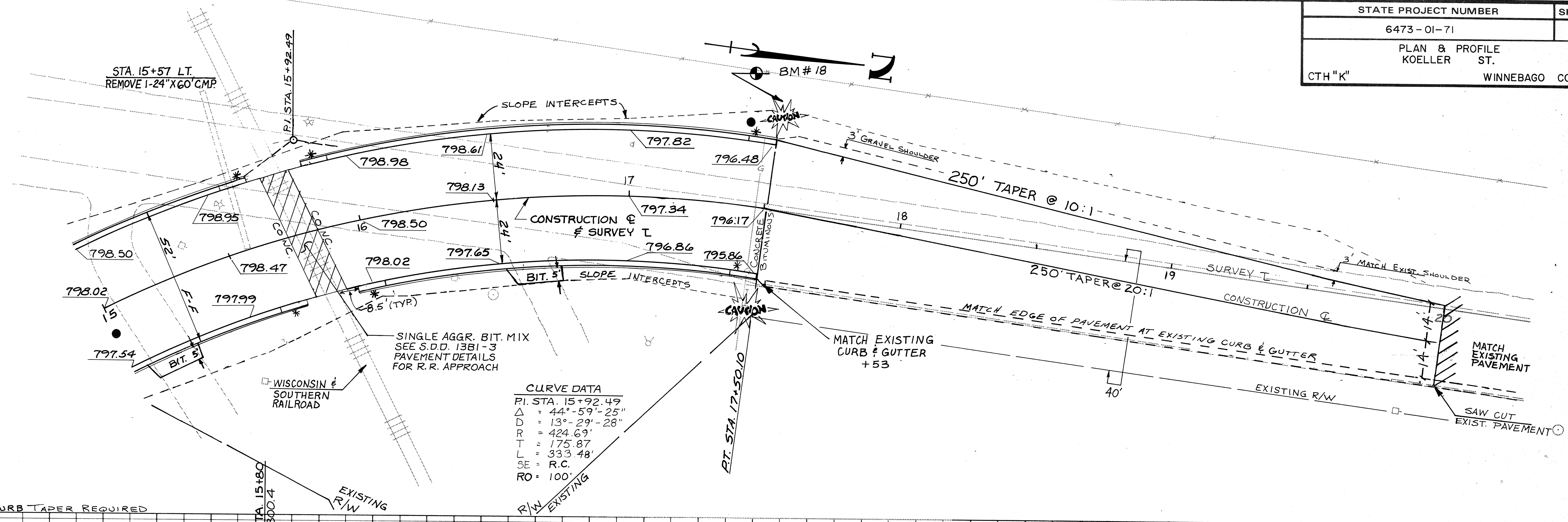
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
KOELLER ST.	
CTH "K" WINNEBAGO COUNTY	



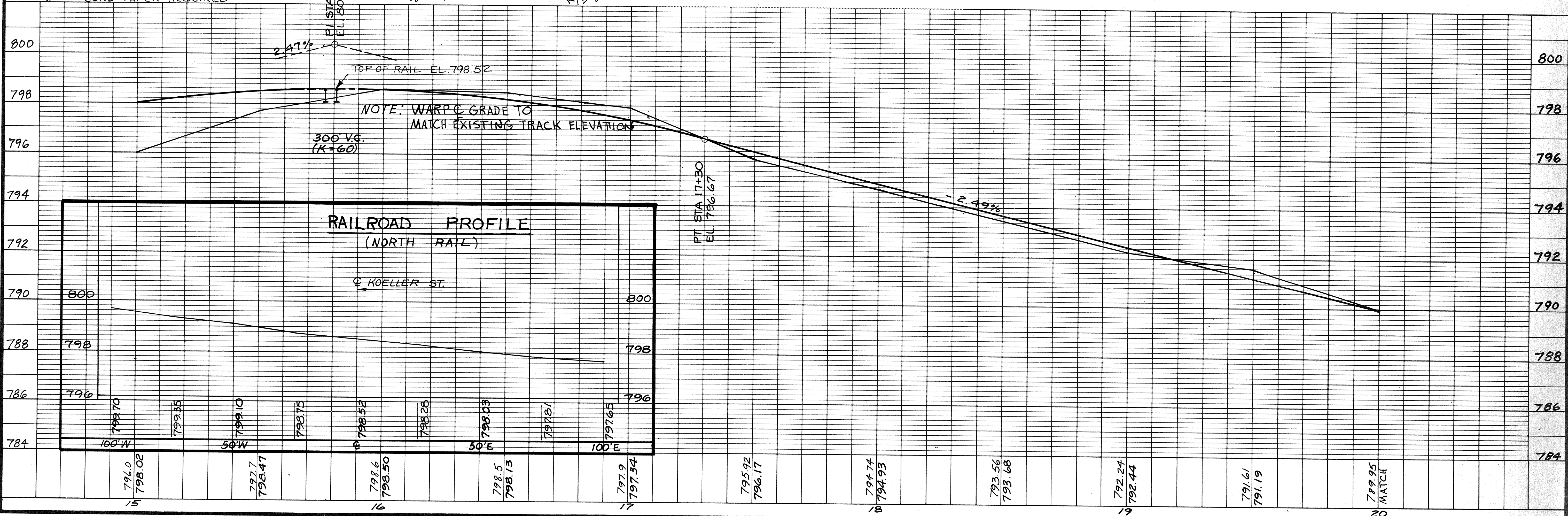
SEE NEXT PAGE

STATE PROJECT NUMBER	SHEET NO.
6473-01-71	
PLAN & PROFILE	
KOELLER ST.	
CTH "K"	WINNEBAGO COUNTY





**CURVE DATA**  
 P.I. STA. 15+92.49  
 $\Delta = 44^\circ-59'-25''$   
 $D = 13^\circ-29'-28''$   
 $R = 424.69'$   
 $T = 175.87'$   
 $L = 333.48'$   
 $SE = R.C.$   
 $RO = 100'$



STATE PROJECT NUMBER	SHEET NO.
6473-01-71	

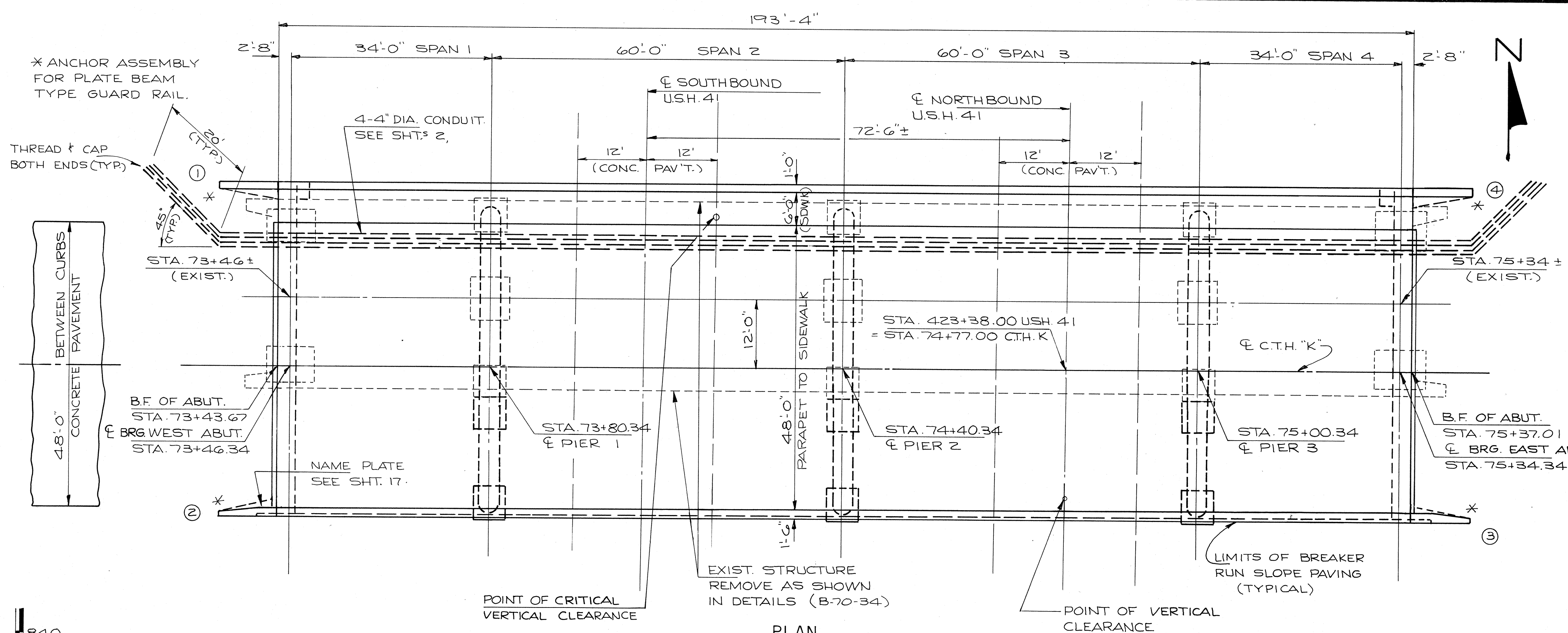
**DESIGN DATA**

**LIVELOAD**  
 DESIGN RATING: HS20  
 INVENTORY RATING: HS23  
 OPERATIONAL RATING: HS38  
 STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

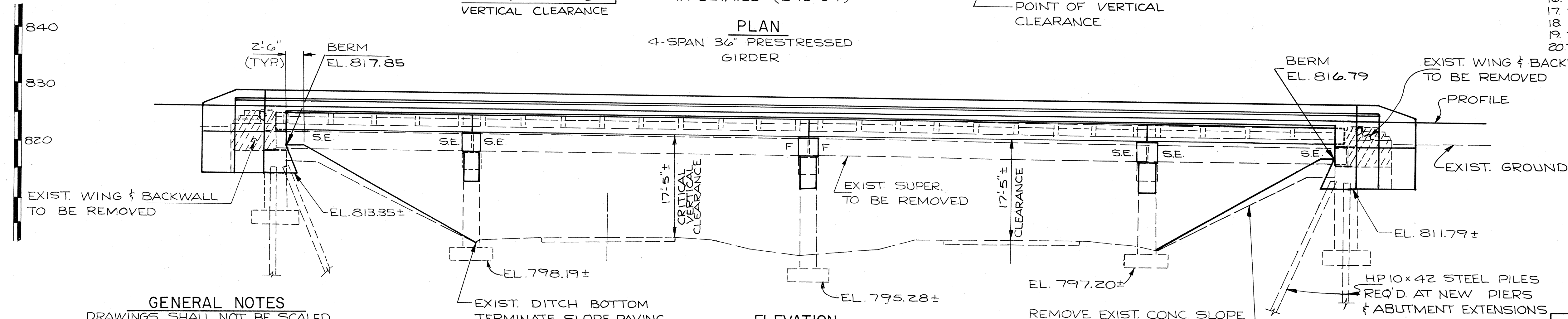
**ALLOWABLE DESIGN STRESSES**  
 CONCRETE MASONRY-SLAB  $f_c = 4000$  PSI  
 ALL OTHER  $f_c = 3500$  PSI  
 BAR STEEL REINFORCEMENT, GRADE 60  $f_y = 60,000$  PSI  
 36" PRESTRESSED GIRDERS  
 CONCRETE MASONRY  $f_c = 4000$  PSI  
 STRANDS  $\frac{1}{2}$ "  $\phi$  WITH ULTIMATE TENSILE STRENGTH OF 270,000 PSI.

**LIST OF DRAWINGS (X82362)**

1. GENERAL PLAN
2. GENERAL PLAN
3. GENERAL PLAN
4. SUBSURFACE EXPLORATION
5. WEST ABUTMENT
6. EAST ABUTMENT
7. ABUTMENT WINGS
8. ABUTMENT BILL OF BARS
9. PIER 1
10. PIER 2
11. PIER 3
12. 36" PRESTRESSED GIRDER DETAILS
13. ALTERNATE STEEL DIAPHRAGMS
14. SUPERSTRUCTURE
15. SUPERSTRUCTURE
16. SUPERSTRUCTURE BILL OF BARS
17. SLOPED FACE PARAPET "B"
18. VERTICAL FACE PARAPET "A"
19. TUBULAR RAILING, TYPE "H", STEEL
20. TUBULAR RAILING, TYPE "H", ALUMINUM



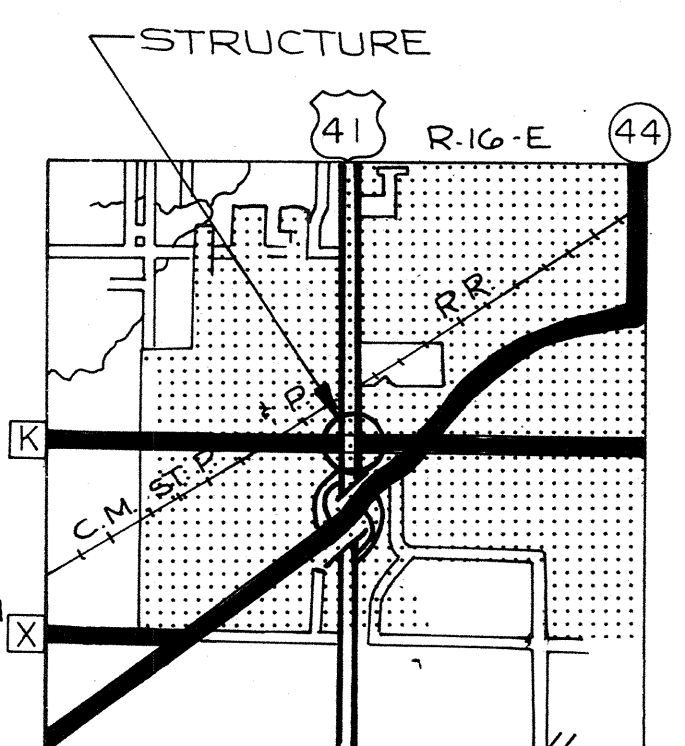
**PLAN**  
 4-SPAN 36" PRESTRESSED GIRDER



**ELEVATION**

**FOUNDATION DATA**  
 NEW ABUTMENTS & PIERS SUPPORTED ON HP10x42 STEEL PILES, DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE, EST. 25'-0" LONG AT ABUTMENTS AND 15'-0" LONG AT THE PIERS. PREBORE PIER PILING A MIN. OF 10'-0".

**TRAFFIC DATA**  
 ADT (1989) = 8900  
 (2009) = 16,000



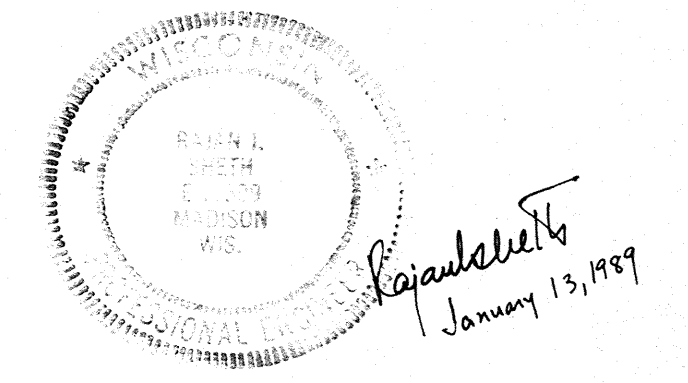
**LAYOUT**

**GENERAL NOTES**  
 DRAWINGS SHALL NOT BE SCALED.  
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.  
 ELASTOMERIC BEARING PADS NEED NOT BE INDIVIDUALLY MOLDED PROVIDED THE CUT EDGES ARE SMOOTH AND TRUE.  
 THE SLOPE OF FILL IN FRONT OF THE ABUTMENTS SHALL BE COVERED WITH BREAKER RUN SLOPE PAVING TO THE EXTENT SHOWN HERE AND IN THE ABUT. DETAILS.  
 ALL DIM.'S & EL.'S SHALL BE FIELD VERIFIED.  
 CONC. REMOVAL SHALL BE DEFINED BY A 1" DEEP SAWCUT.  
 UTILIZE EXIST. BAR STEEL WHERE SHOWN & EXTEND 24 BAR DIAMETERS INTO NEW WORK.  
 RESIN CARTRIDGES INSTALLED & FURNISHED BY CONTRACTOR.

**BENCH MARK**

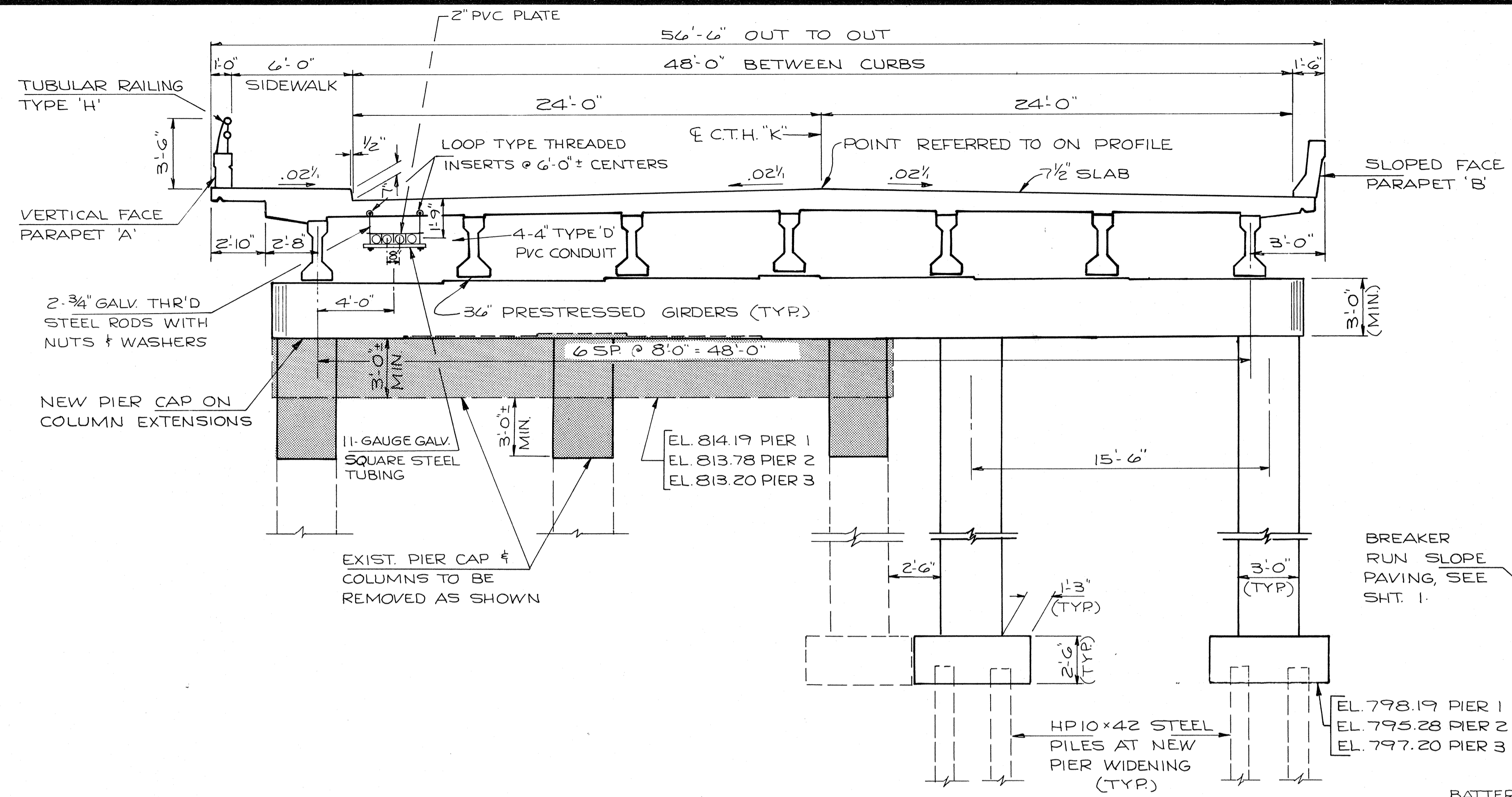
9	69+80.5	RR SPIKE IN 36" MAPLE	111' RT.	813.38
11	79+70	RR SPIKE IN CHINESE ELM	116' RT.	800.70

BRIDGE OFFICE CONTACT K. BAHLER  
 (608) 266-8486

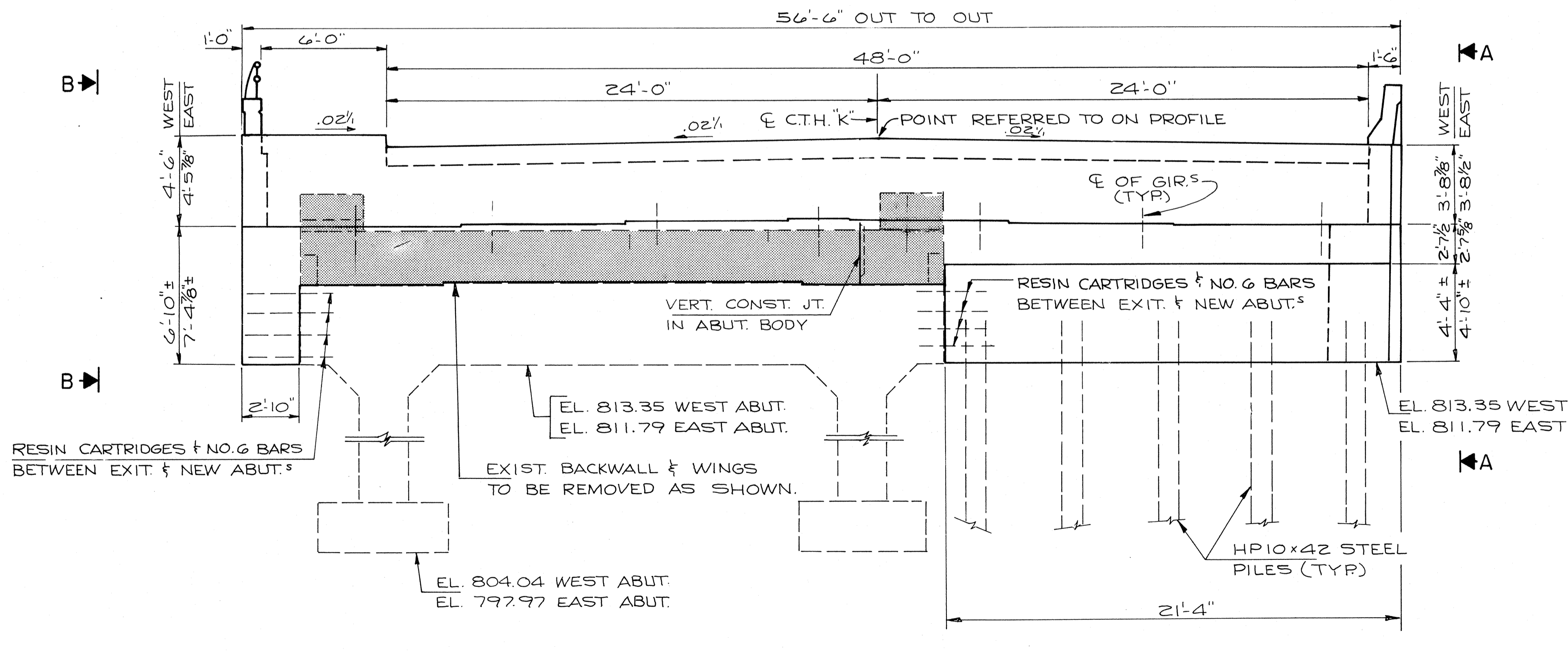


PLANS BY  
**MEAD & HUNT, INC.**  
 MADISON, WISCONSIN

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
C.T.H. "K" OVER U.S.H. 41			
County	WINNEBAGO	Town/City/Village	OSHKOSH
Design Spec.	AASHTO 1987	Load Spec.	HS20 Const. 1981
Designed By	DCM	Design Checked	TJC
Drawn By	NJA	Plans Checked	DCM
Approved		State Bridge Engineer	Date
<b>GENERAL PLAN</b>			SHEET 1 OF 20
			<b>X82362</b>



CROSS SECTION THRU ROADWAY LOOKING EAST  
(TYPICAL AT PIERS)



CROSS SECTION THRU ROADWAY LOOKING EAST  
(TYPICAL AT ABUTMENTS)

**UTILITY NOTES**

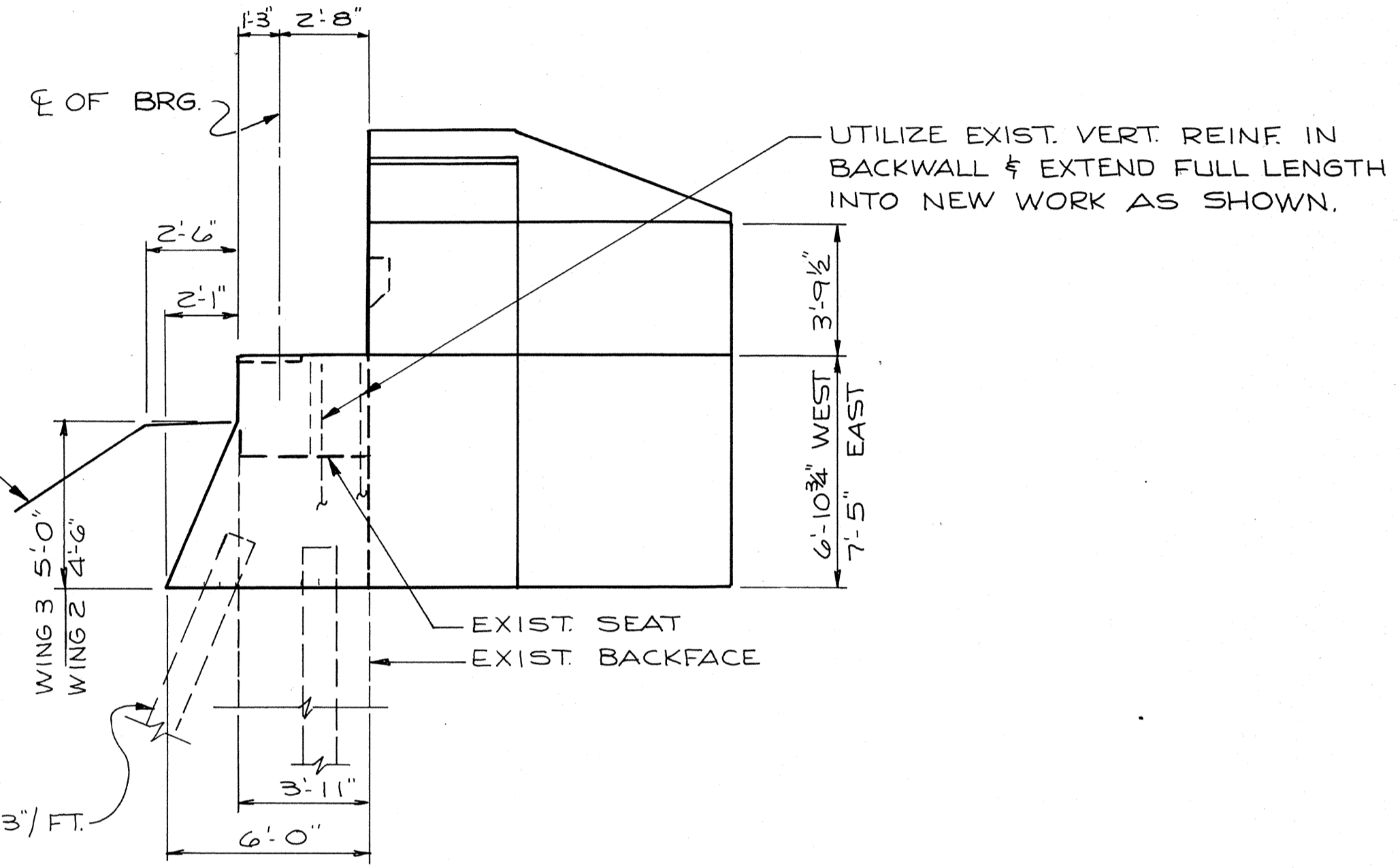
ALL CONDUIT, INSERTS, RODS, NUTS, WASHERS, PVC PLATES, TUBING, SLEEVES, JOINTS & CAPS SHALL BE PROVIDED BY THE UTILITY AND INSTALLED BY THE CONTRACTOR DURING BRIDGE CONSTRUCTION AS SHOWN ON THE PLANS AND SPECIFIED BY THE UTILITY.

ALL LOOP INSERTS, SLEEVES & 3/4" ROD SHALL BE GALVANIZED & HAVE A RECOMMENDED LOAD CAPACITY OF 4000 POUNDS.

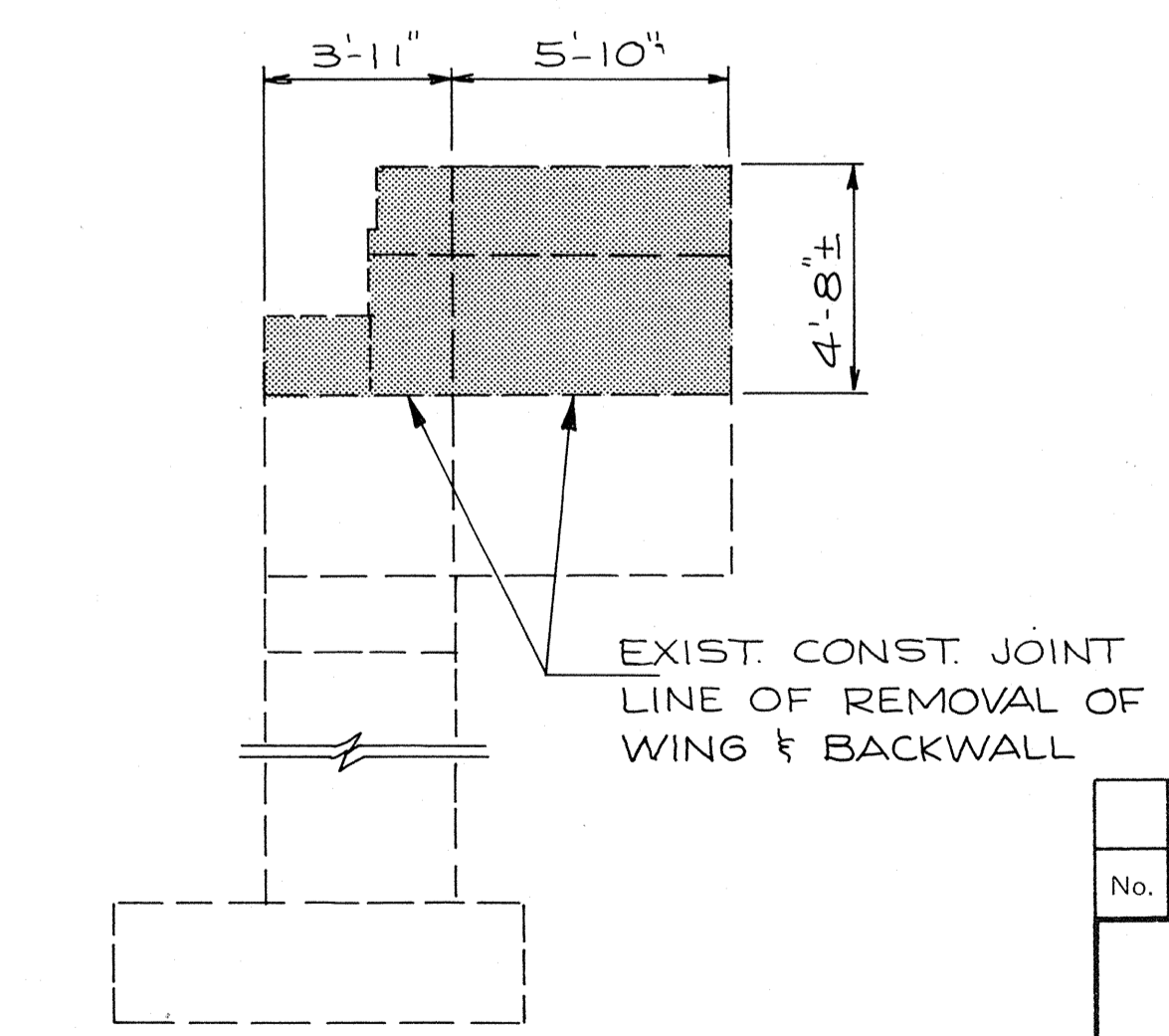
ALL CONDUIT SHALL BE FACTORY BENT TO PROVIDE FREE SLIDING THROUGH SLEEVES IN CONC. DIAPHS. AS SHOWN ON SHT. 14.

CONDUIT SHALL BE EXTENDED BY CONTRACTOR AS SHOWN ON SHT. 1.

EXPANSION JOINTS REQUIRED IN CONDUIT BOTH SIDES OF ABUT. DIAPHS AND AS SPECIFIED BY THE UTILITY.



SECTION A-A  
(WINGS 2 & 3)



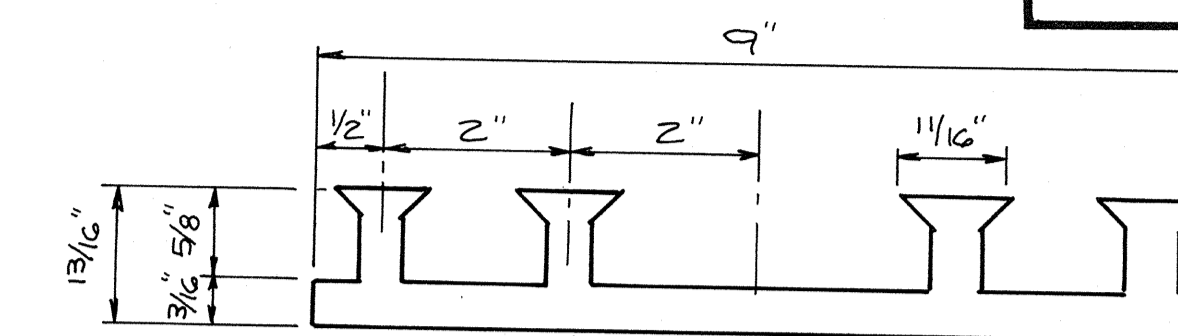
EXIST. BACKWALL & WING  
REMOVAL

NOTE: FOR SECTION B-B  
SEE SHT. 3.

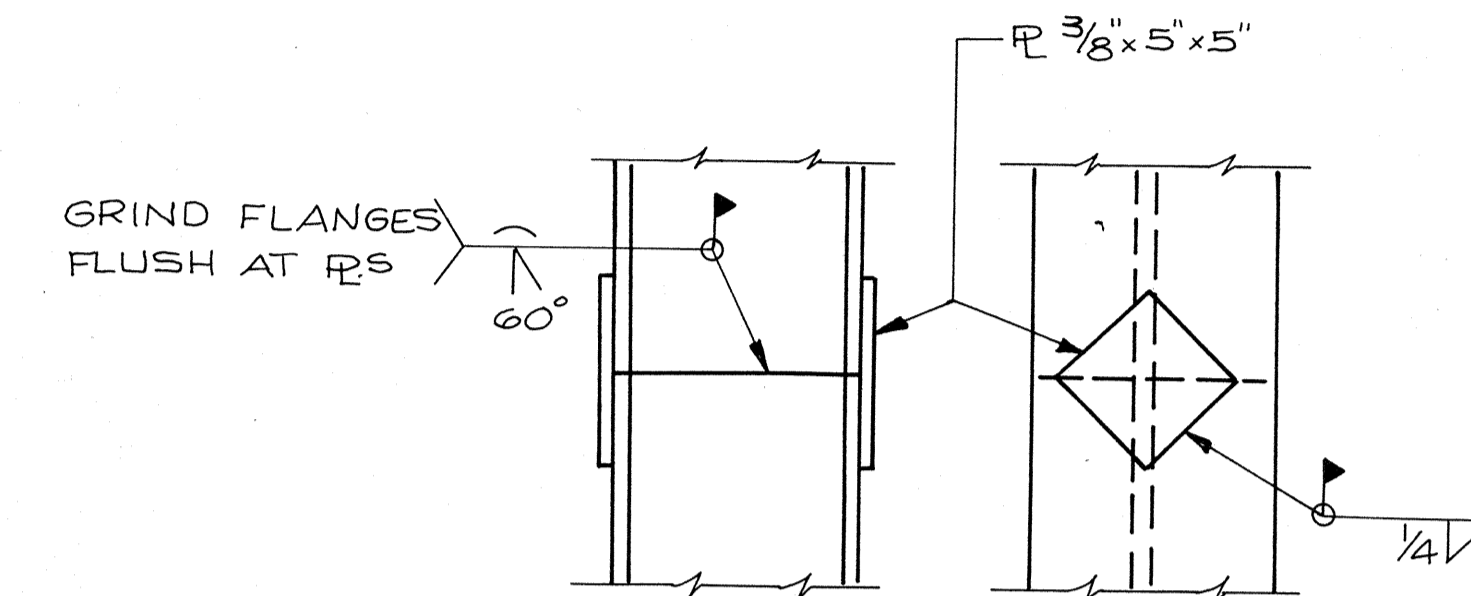
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
GENERAL PLAN			SHEET 2 OF 20
X82362			

TOTAL ESTIMATED QUANTITIES

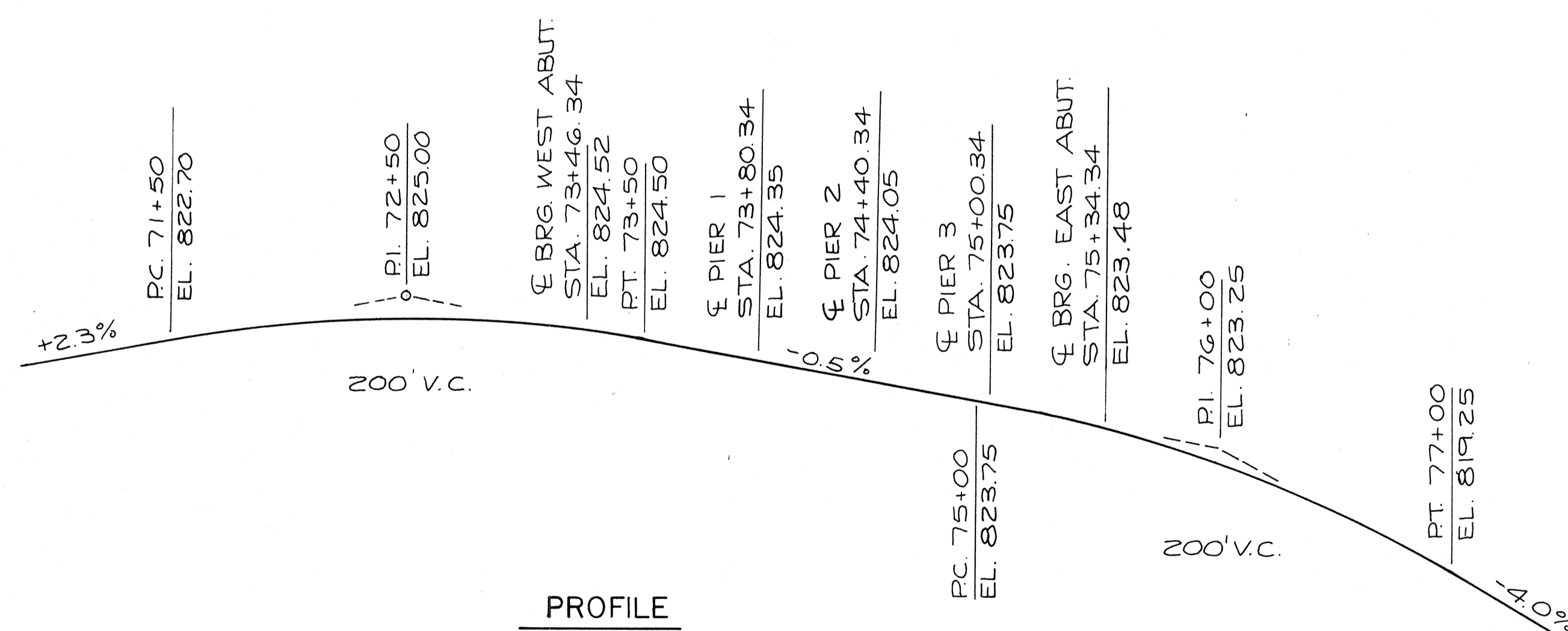
BID ITEM	UNIT	SUPER	WEST ABUT.	PIER 1	PIER 2	PIER 3	EAST ABUT.	TOTAL
REMOVING OLD BRIDGE, STATION 74+40	L.S.							1
EXCAVATION FOR STRUCTURES, BRIDGE B-70-34	L.S.							1
CONCRETE MASONRY, BRIDGES	C.Y.	406	58	41	42	41	61	649
PROTECTIVE SURFACE TREATMENT	GAL	55						55
PRESTRESSED GIRDER, I-TYPE, 36-INCH	L.F.	1318						1318
HIGH STRENGTH BAR STEEL REINFORCEMENT, BRIDGES	LBS.		2780	4980	5230	5030	2800	20,820
COATED HIGH STRENGTH BAR STEEL REINFORCEMENT	LBS.	87,640	110	80		80	110	88,020
BEARING PADS, ELASTOMERIC	S.F.	78						78
STEEL PILING, DELIVERED AND DRIVEN, HP10-INCH 42-POUND	L.F.		200	80	80	80	200	640
TUBULAR RAILING, TYPE "H", STRUCTURE B-70-34	L.S.							1
BREAKER RUN STONE	C.Y.		35				35	70
RESIN ANCHORS, NO. SIX BARS	EA.		23				23	46
MEMBRANE WATERPROOFING	S.Y.		14				14	28
ANCHOR ASSEMBLY FOR BEAM GUARD	EA.	4						4
PREBORING STEEL PILING	L.F.			80	80	80		240
GRAFFITI REMOVAL	L.S.							1
REMOVING CONCRETE SLOPE PAVING	S.Y.		160				140	300
NON-BID ITEMS								
FILLER	SIZE							1/2 3/4
POLYVINYL CHLORIDE WATERSTOP	L.F.		65				65	130
ALUMINUM OR ZINC PLATE	S.F.	46						46



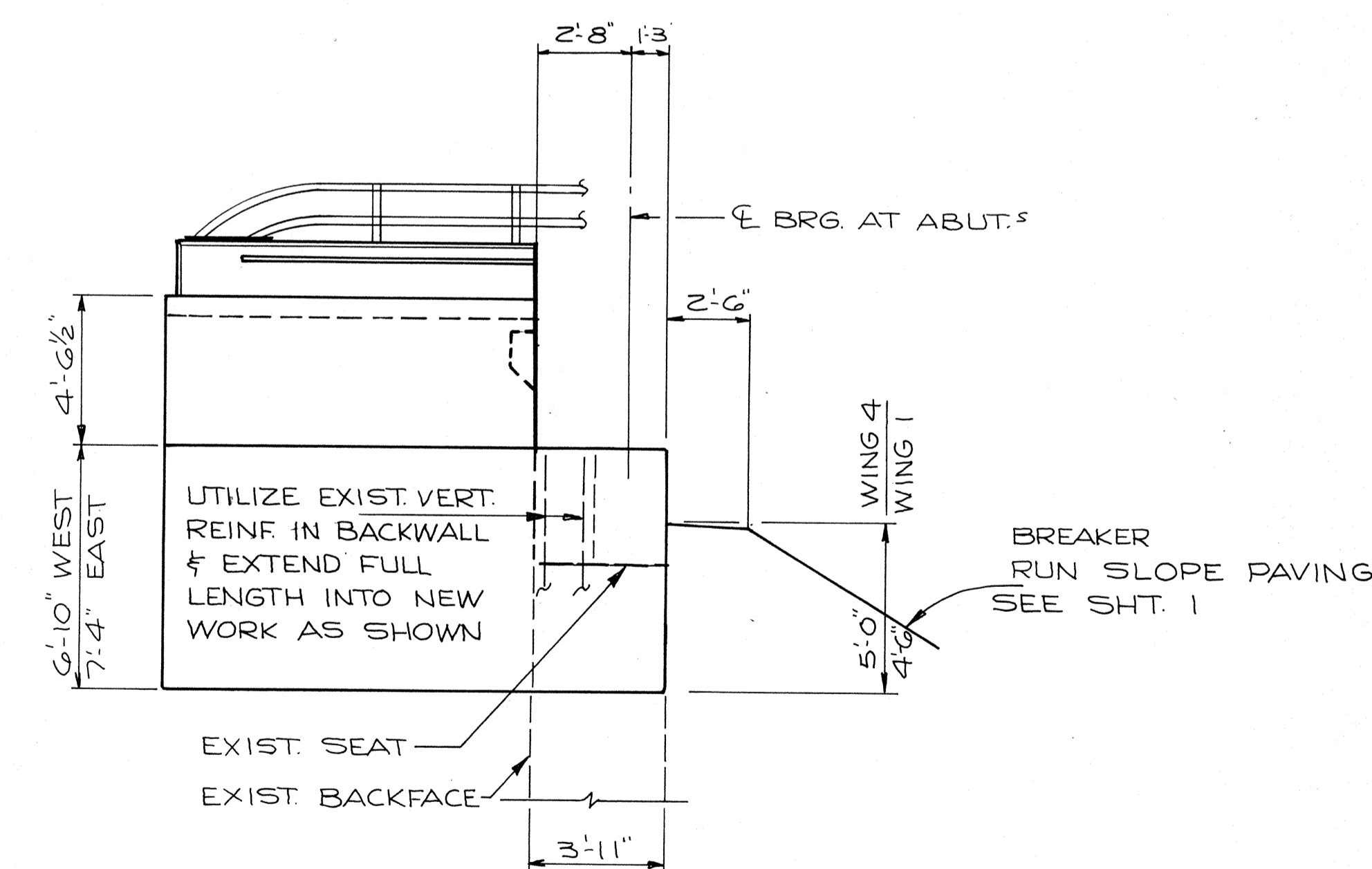
POLYVINYL CHLORIDE WATERSTOP



PILE SPLICE DETAIL



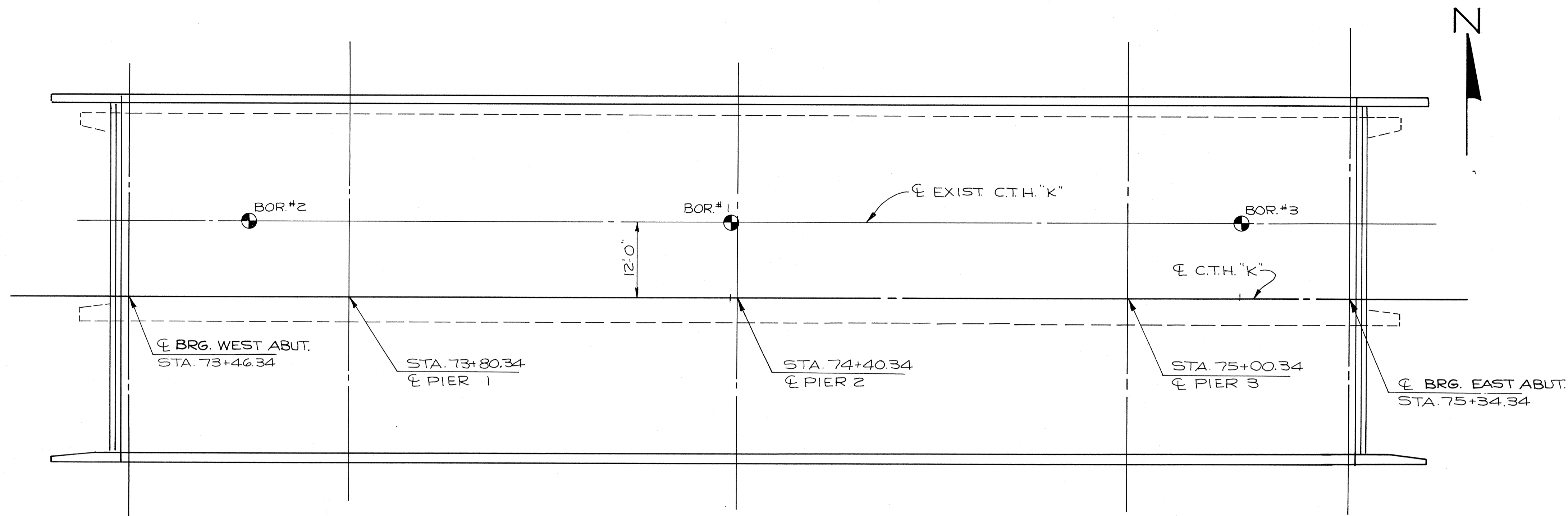
PROFILE



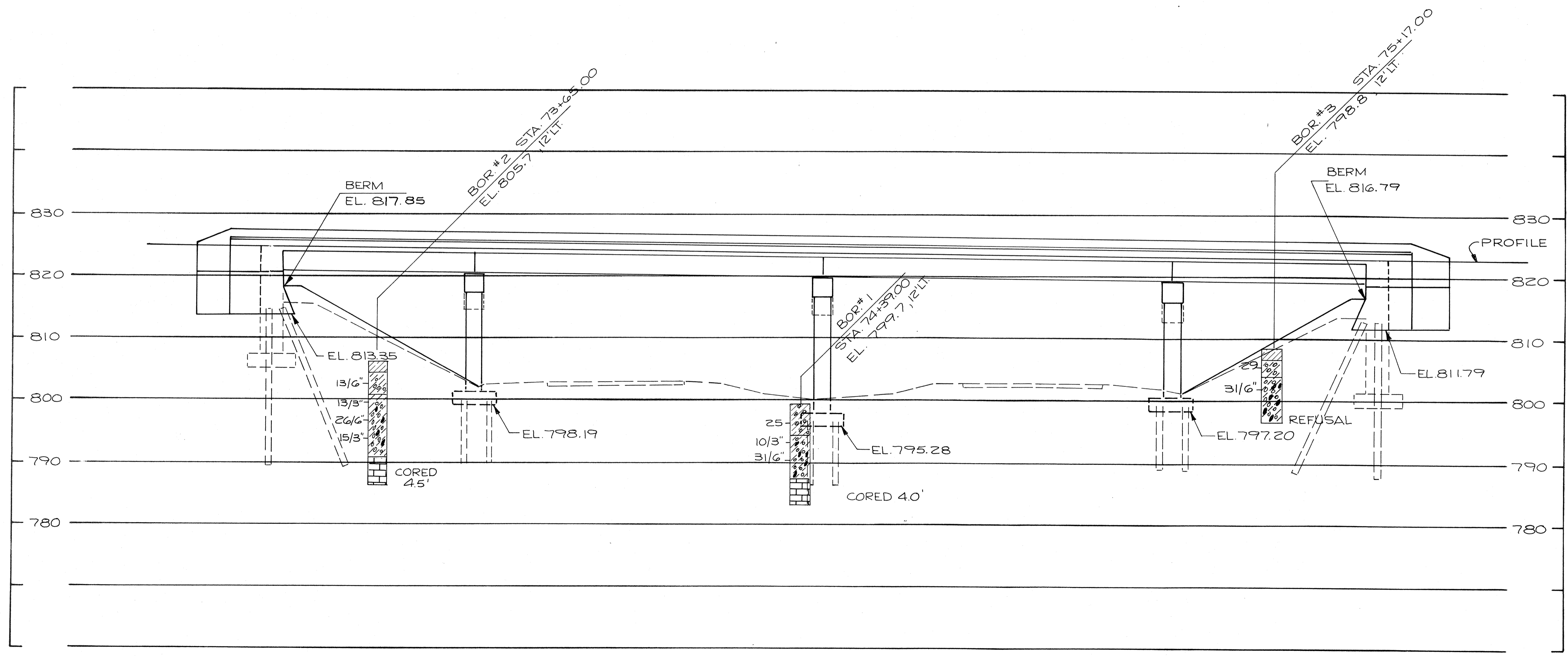
SECTION B-B  
(WINGS 1 & 4)

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
GENERAL PLAN			SHEET 3 OF 20
			<b>X82362</b>





NOTE: THESE BORINGS WERE TAKEN IN 1958. BECAUSE OF THE SOIL TYPES & PROXIMITY TO BEDROCK THEY ARE STILL CONSIDERED RELEVANT.

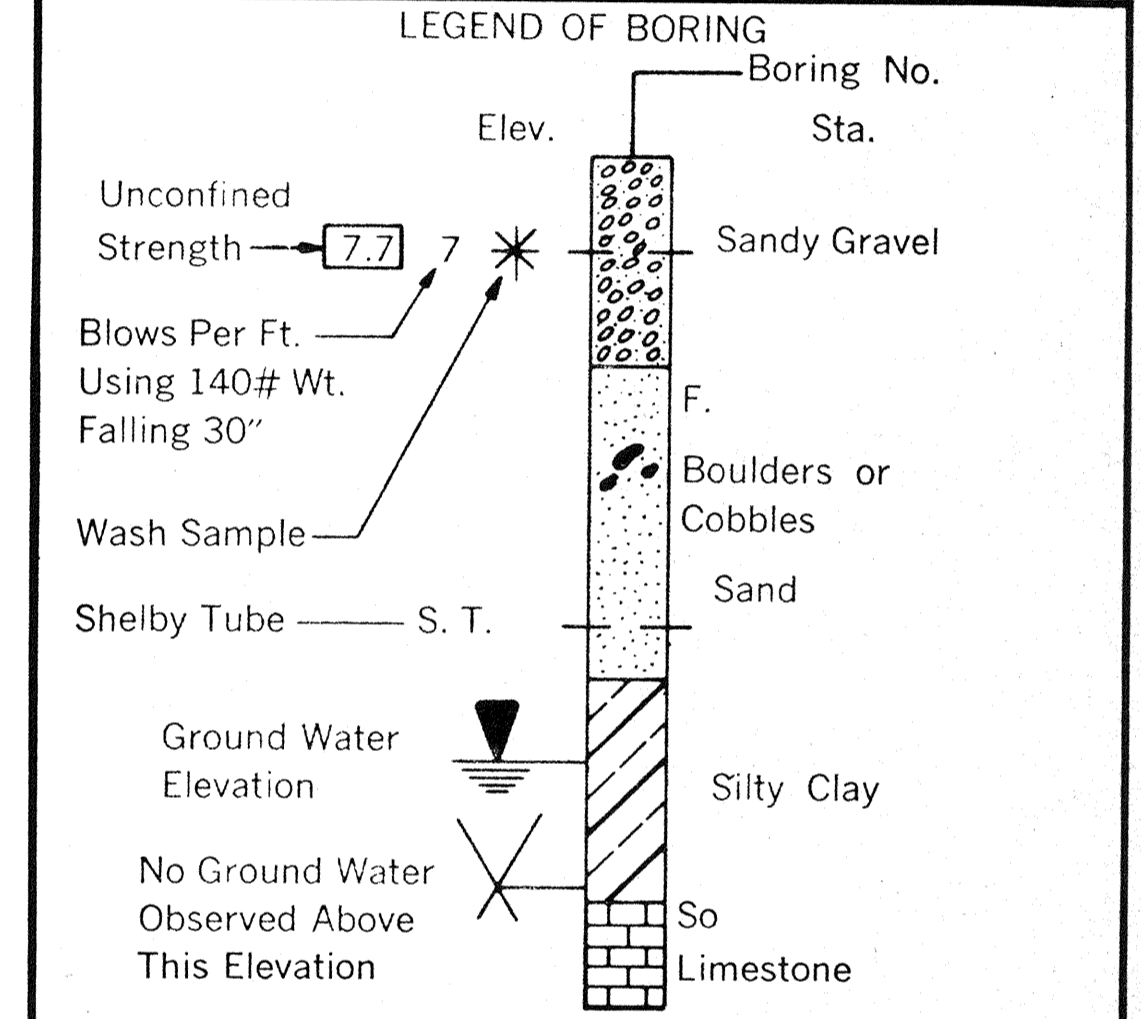
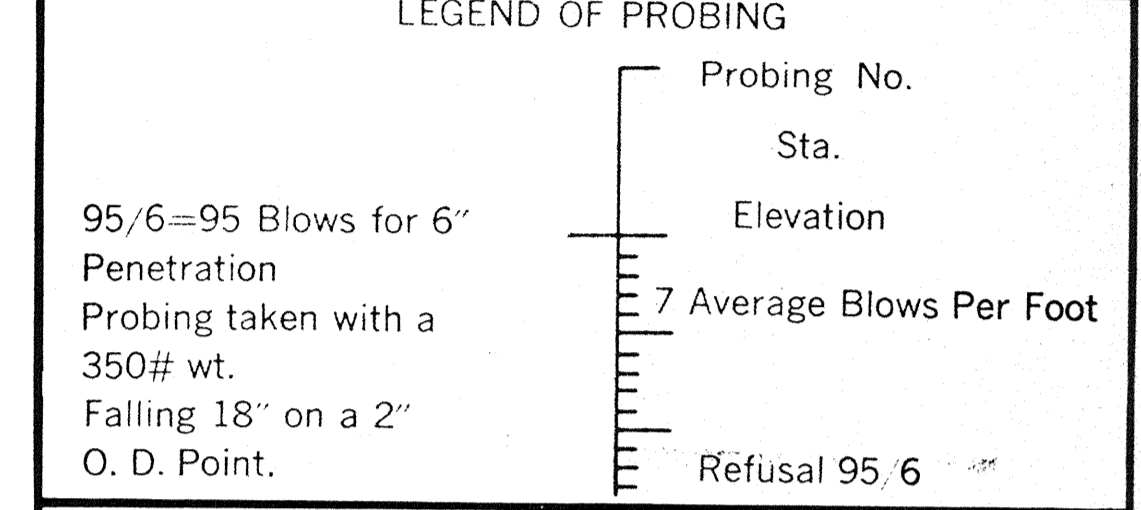


ABBREVIATIONS

F — Fine	M — Medium	C — Coarse
Ws — Weathered	So — Sound	

MATERIAL SYMBOLS

Topsoil	Silt	Sandstone
Sand	Peat	Limestone
Gravel	Clay	Igneous Rock

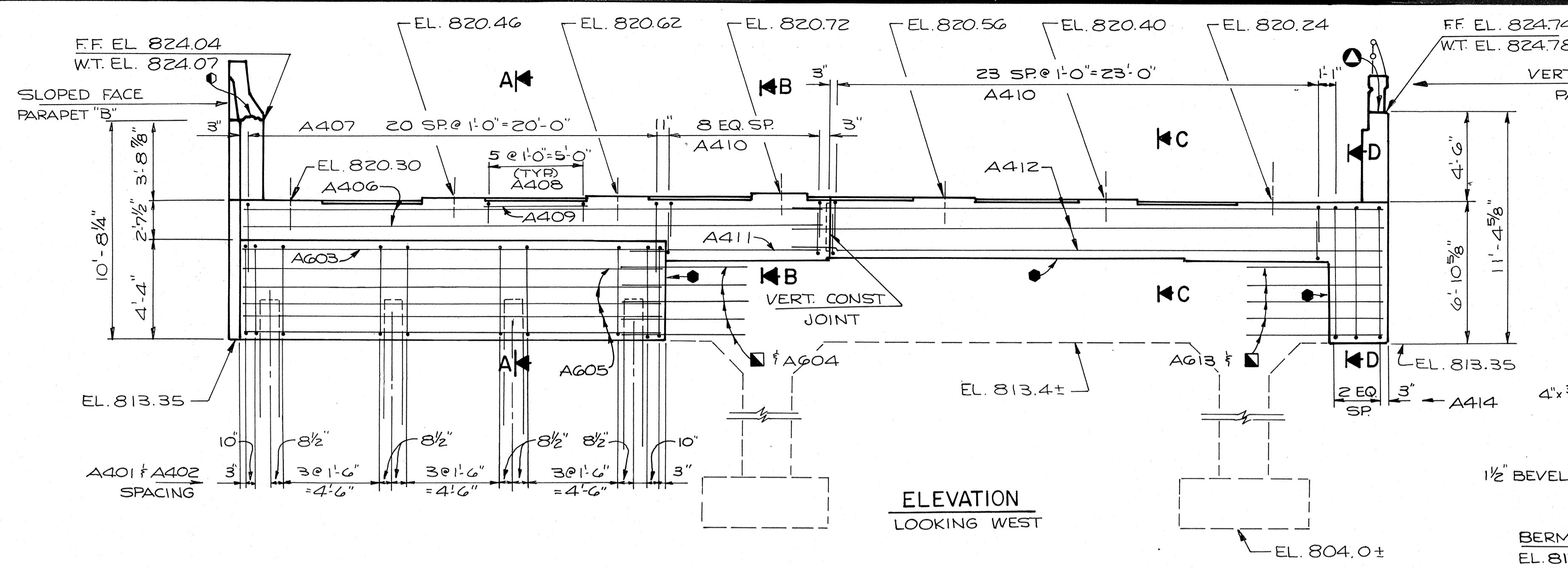


Unless otherwise specified, the blows per foot at the locations indicated are based on driving a 2" O. D. x 1.4" I. D. split spoon sampler with a 140# hammer having a free fall of 30". The blow count is taken in undisturbed soil immediately below a cased or open hole eliminating side friction on the drive pipe.

**SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION**

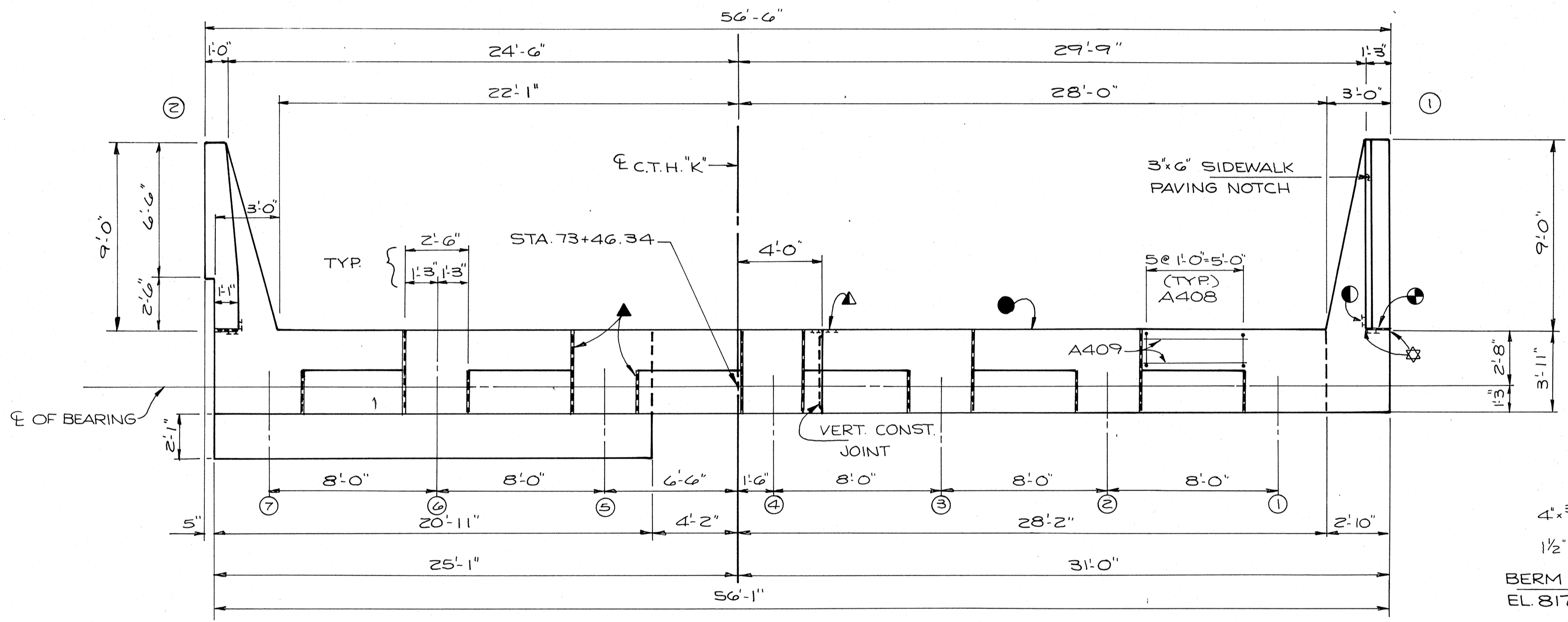
To obtain relative data concerning the character of material in and upon which the foundation might be built, borings and/or soundings were made at points approximately as indicated on this drawing. The data presented herein represents the findings of the subsurface explorations made. However, because the depths investigated are limited and the area of the borings and/or soundings is very small in relation to the entire area, the Division of Highways does not warrant conditions below the depths investigated or that the classification of material encountered in these investigations is necessarily typical of the entire site.

No.	Date.	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
<b>SUBSURFACE EXPLORATION</b>			SHEET 4 OF 20 <b>X82362</b>



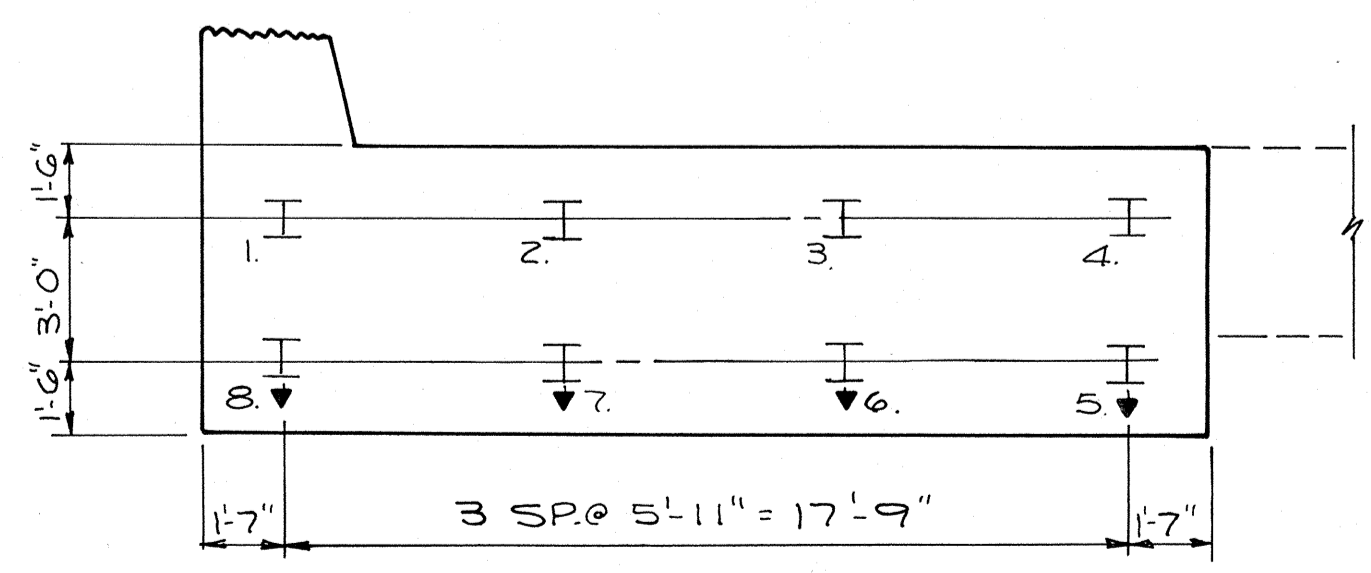
ELEVATION  
LOOKING WEST

- CONST. JOINT- STRIKE OFF AS SHOWN ON SHT. 17.
- CONST. JOINT- STRIKE OFF AS SHOWN ON SHT. 18.

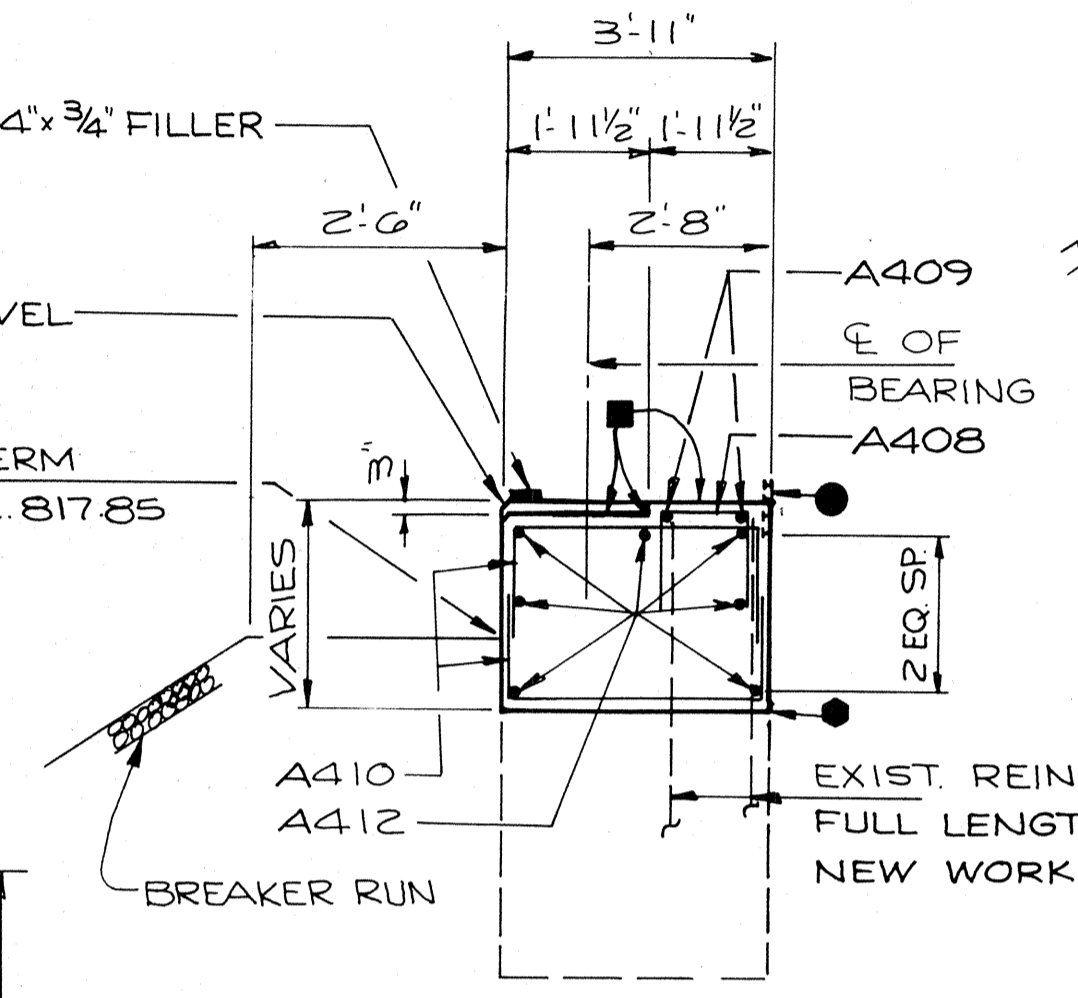


PLAN

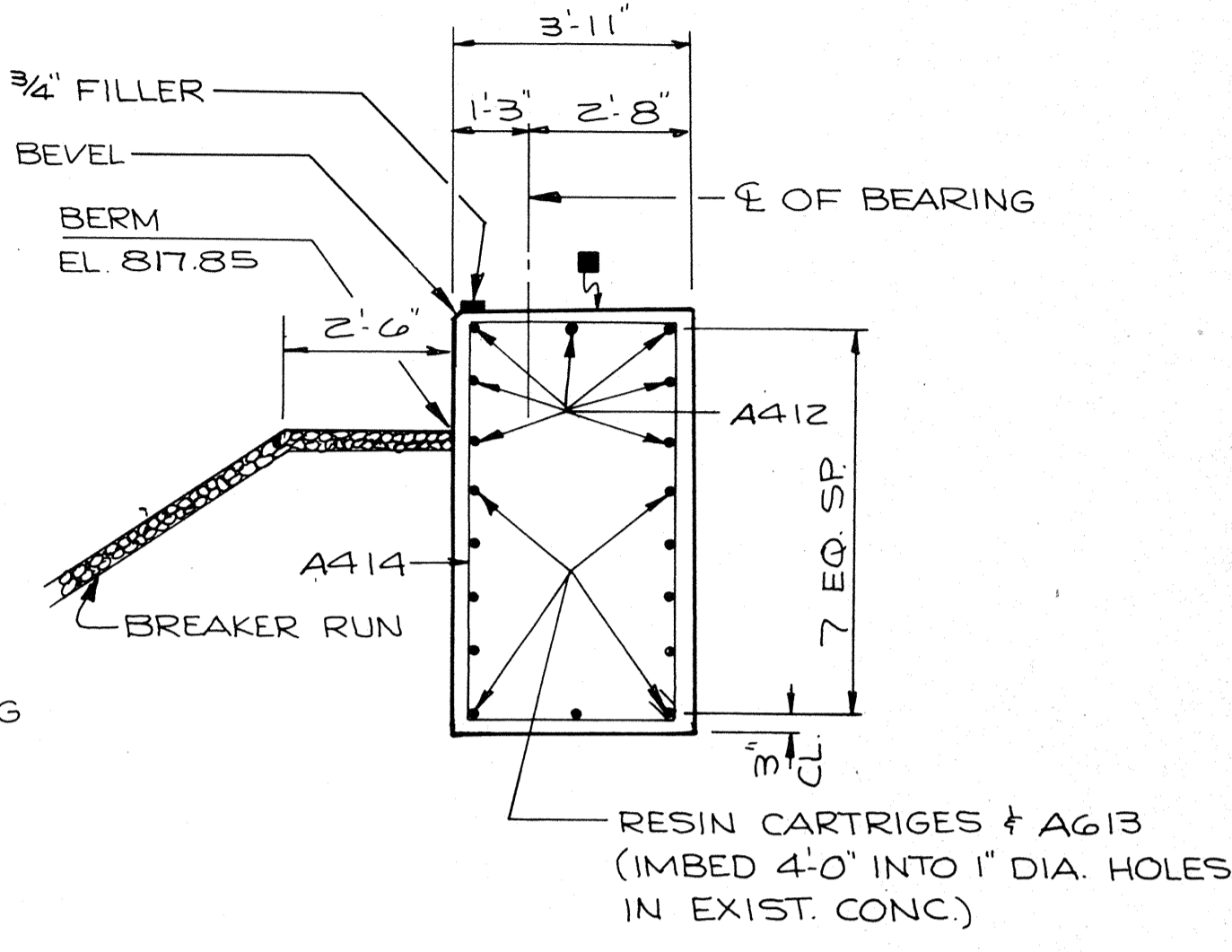
NOTE: ABUTMENT SUPPORTED ON HP10x42 STEEL PILES DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE EST. 25'-0" LONG.  
NOTE: FOR PILE SPLICE DETAIL SEE SHT. 3.  
NOTE: BATTER FRONT ROW PILES 3" PER FOOT IN DIRECTION INDICATED.



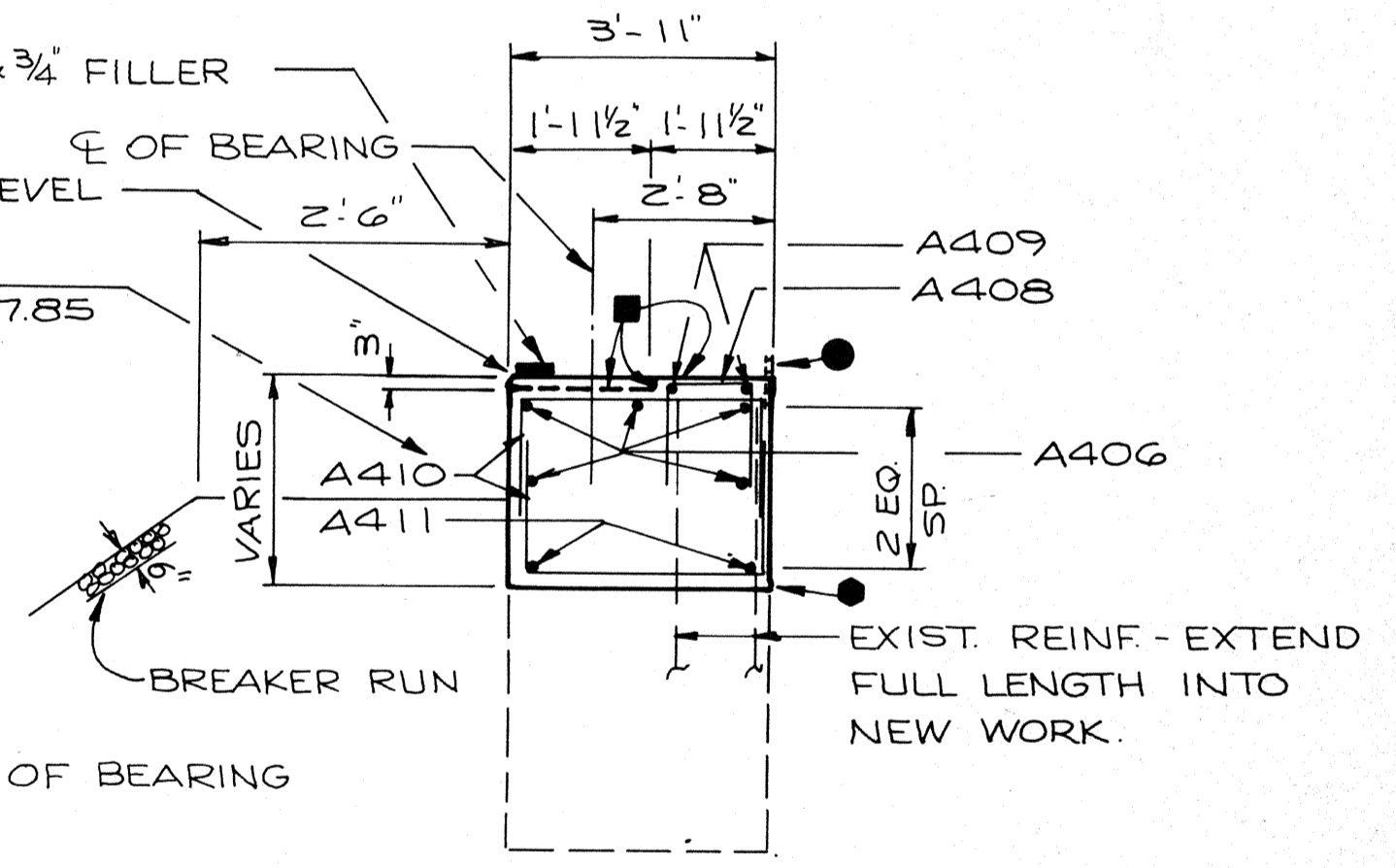
PILE PLAN



SECTION C-C

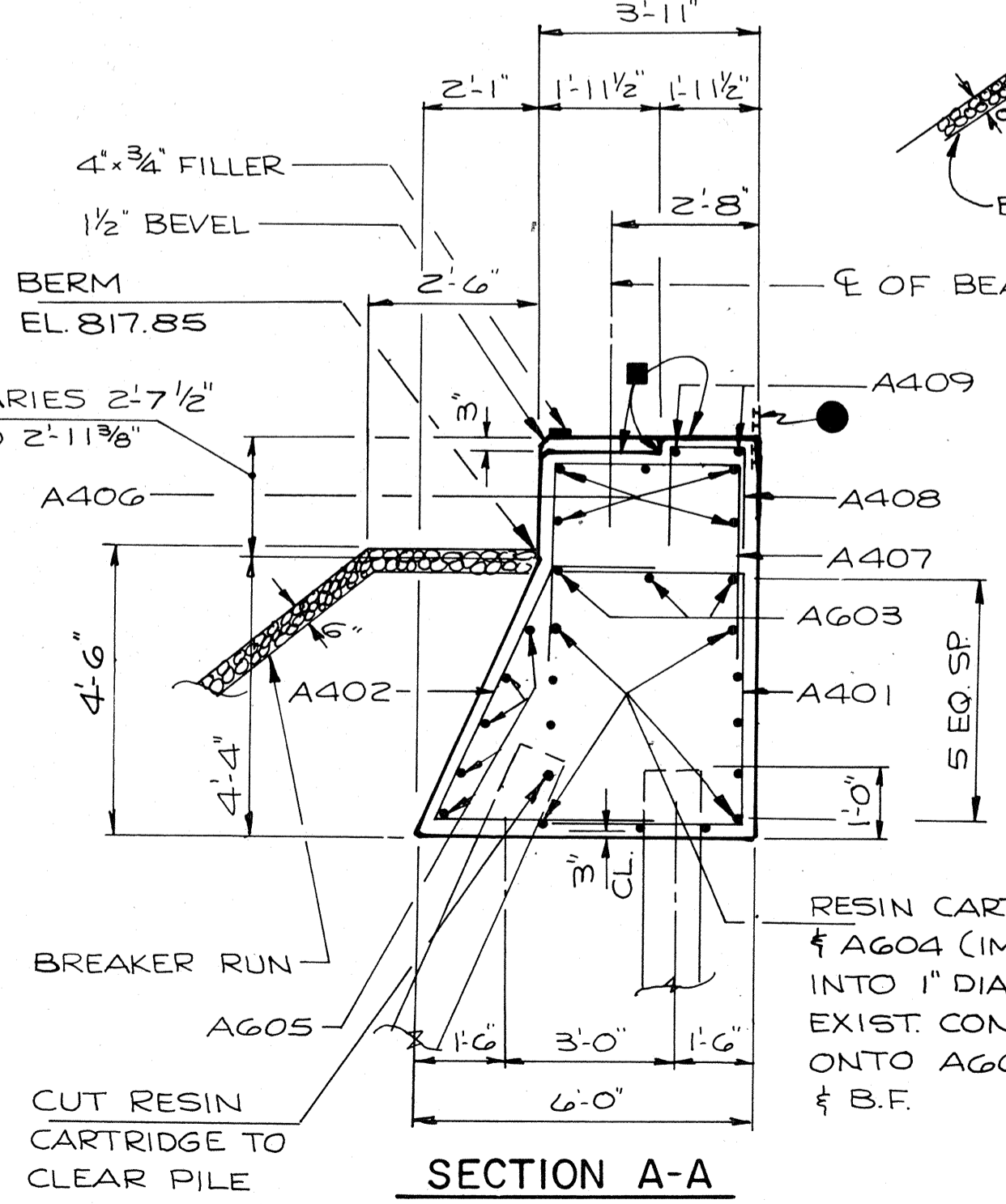


SECTION D-D



SECTION B-B

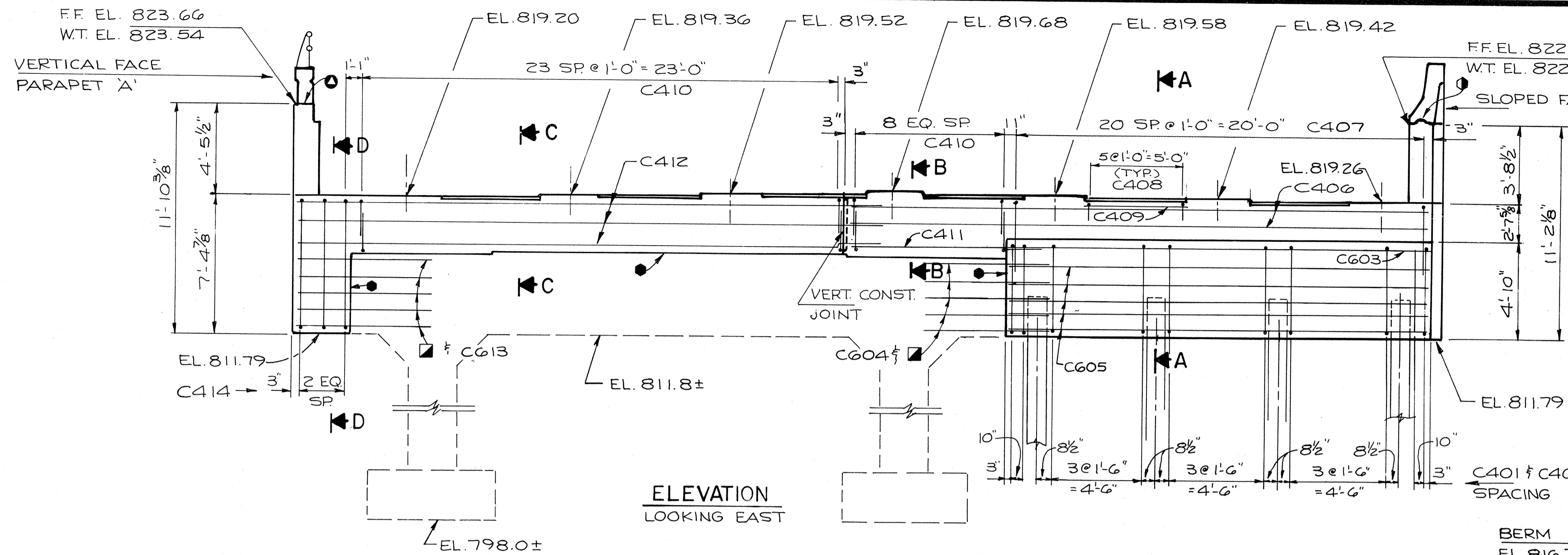
NOTE: FILL OR EXCAVATE TO EL. 813.35 BEFORE DRIVING PILES.  
NOTE: FOR REMOVAL LIMITS OF EXIST. STRUCTURE SEE SHT. 2.



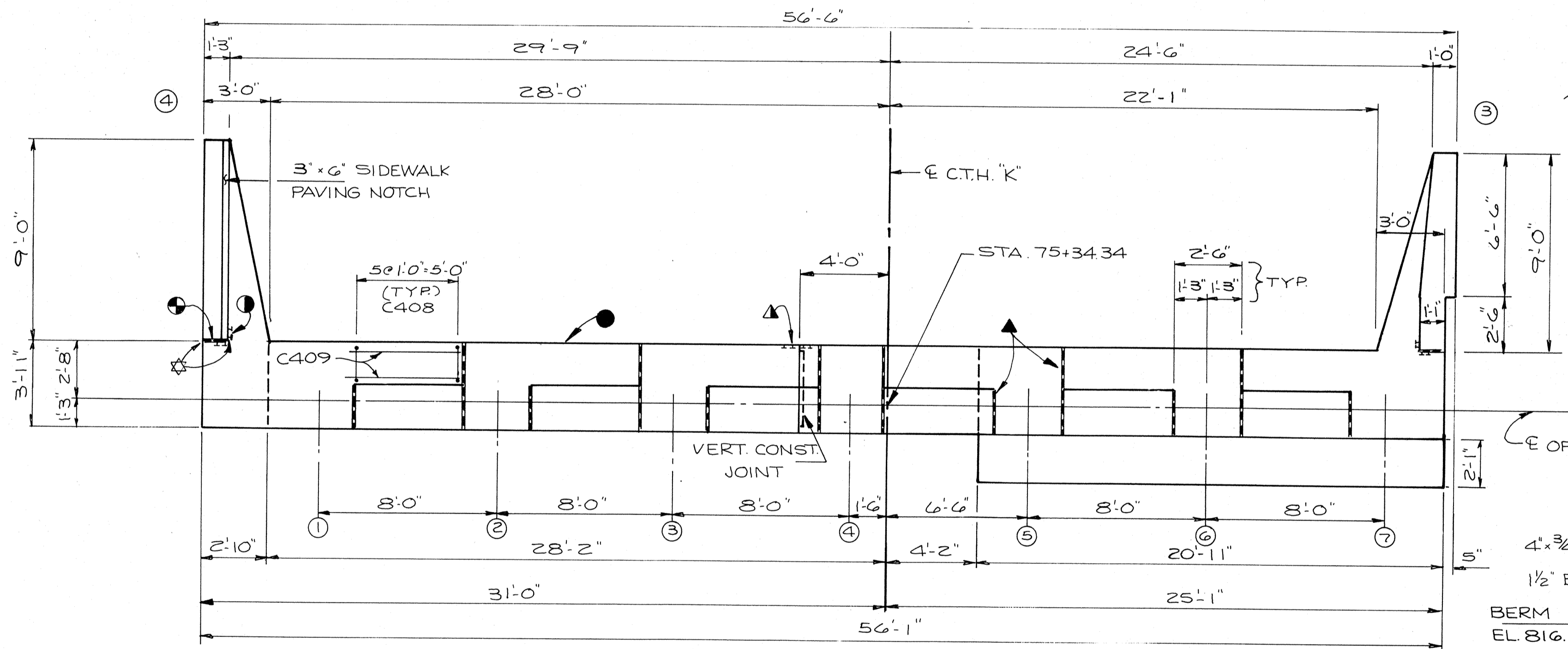
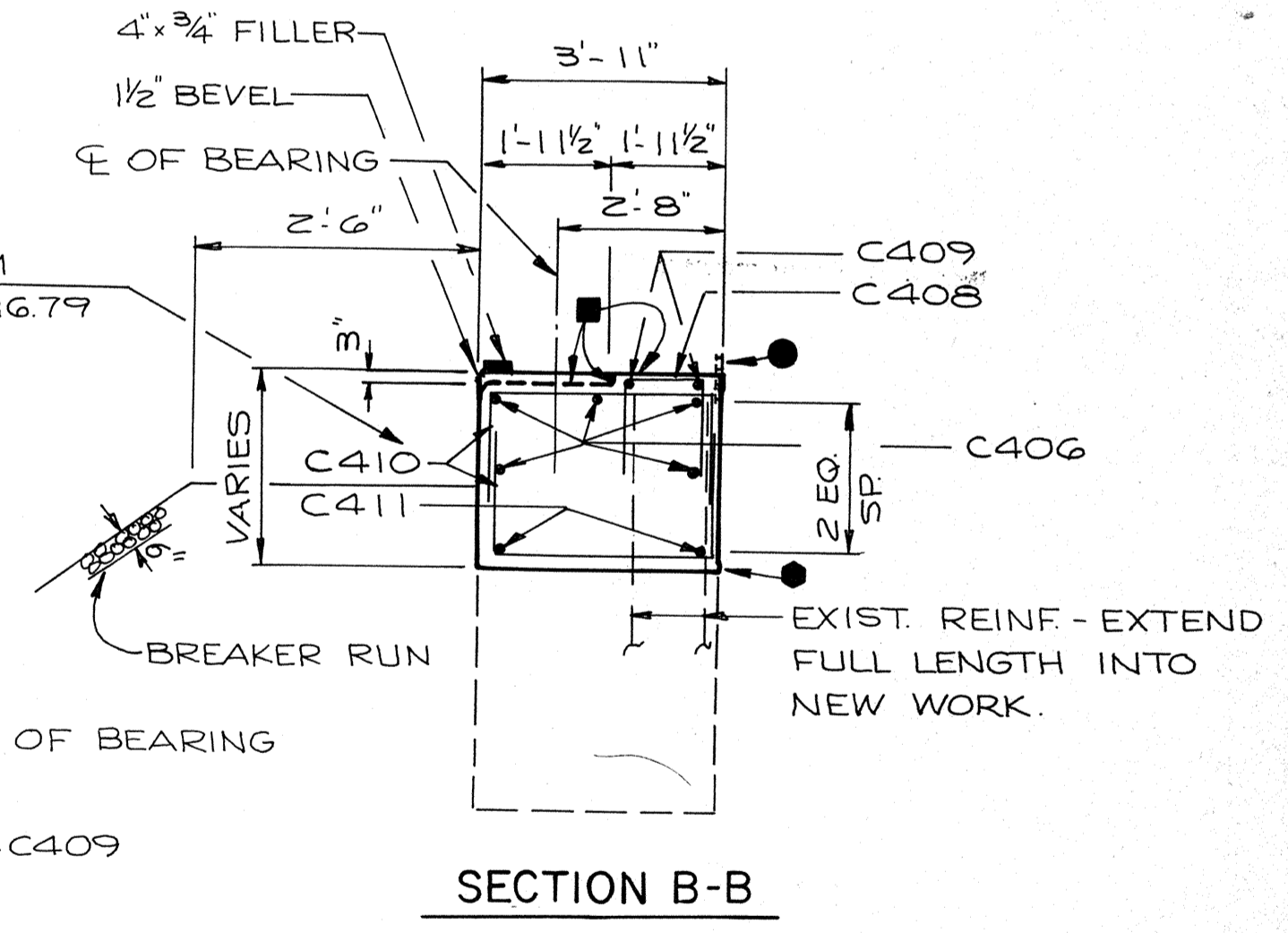
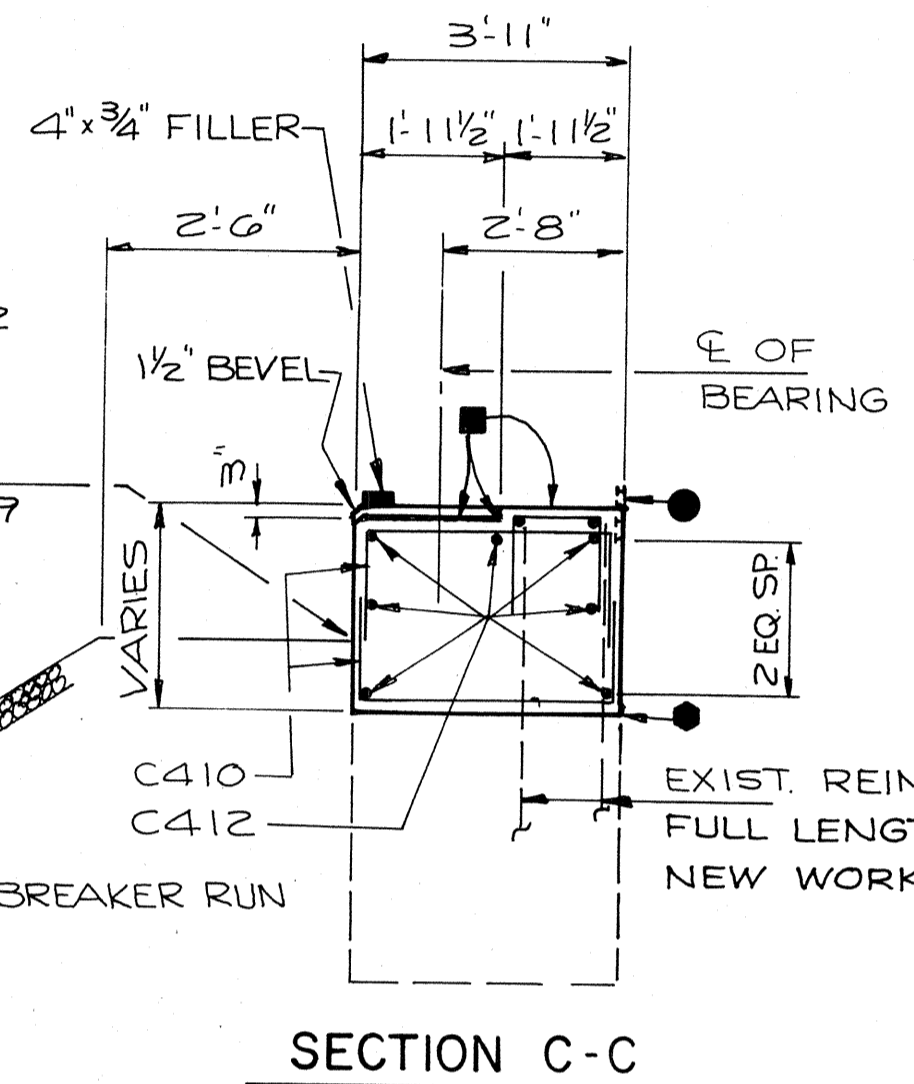
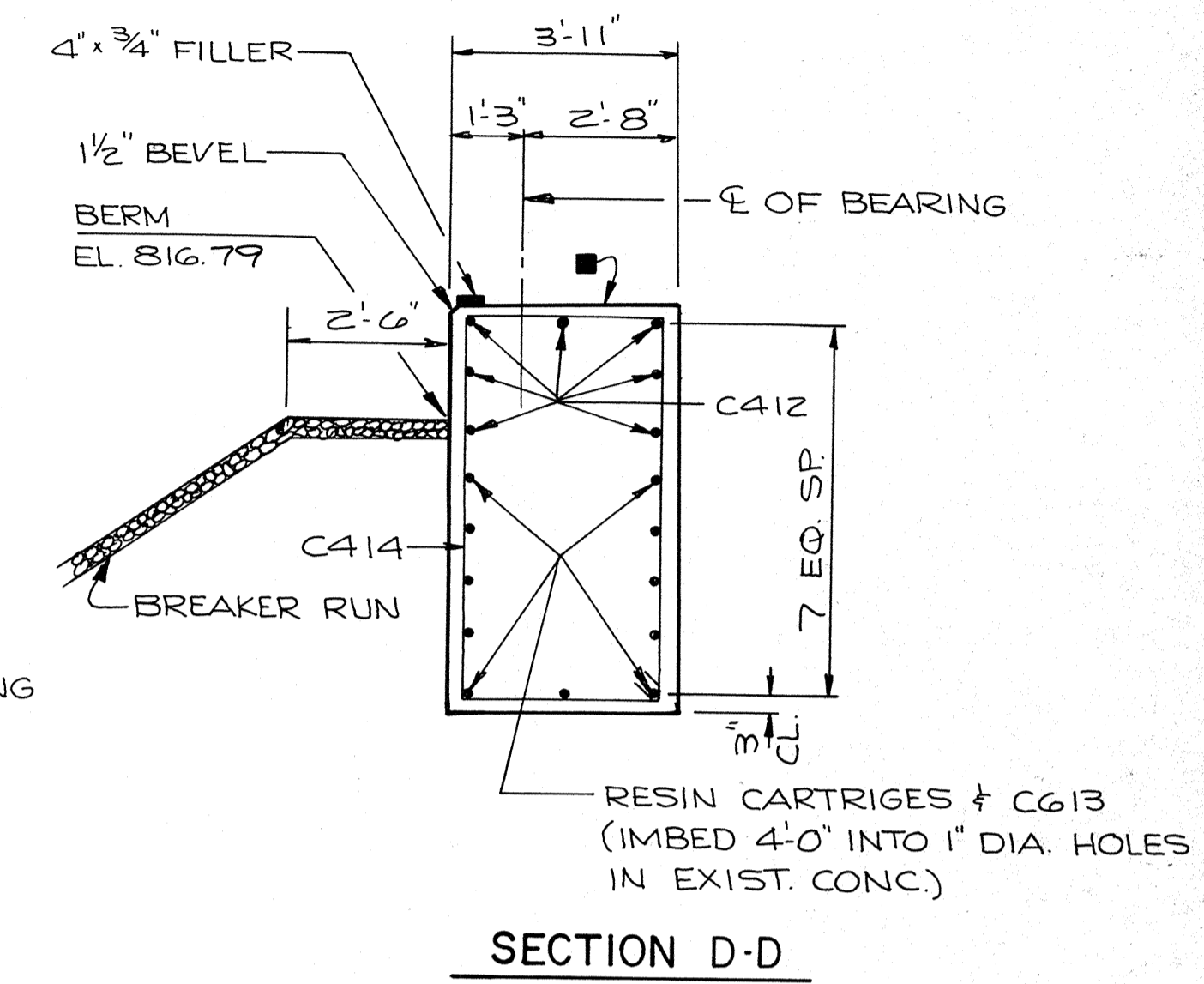
SECTION A-A

- POLYVINYL CHLORIDE WATERSTOP-● EXTEND FROM BEAM SEAT TO TOP OF WING ▲ EXTEND FROM EXIST. SEAT TO TOP OF NEW SEAT ALONG B.F. OF VERT. CONST. JOINT ● EXTEND BETWEEN INSIDE FACES OF WINGS. PLACE BOTTOM HALF HORIZONTAL OVER FILLETS. BUTT SPLICE AT ALL INTERSECTIONS USING A HEATED SPLICING IRON AND AS SPECIFIED BY THE ENGINEER. SEAL ALL VERT. ENDS OF P.C.W. WITH NON-STAINING BITUMINOUS JOINT SEALER. FLUSH WITH SURFACE OF CONC.. SEE DETAIL SHT. 3.
  - SEAL ALL JOINTS BETWEEN EXIST. & NEW CONC. ALONG THE B.F. WITH MEMBRANE WATERPROOFING.
  - ★ SEALER - RUN TO 3" BELOW GUTTER LINE.
  - 1/2" FILLER-EXTEND FROM BEAM SEAT TO TOP OF WING, INCLUDED IN WING LENGTH. SEAL ALL HORIZ. & VERT. SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONC.)
  - ▲ 3/4" CORK FILLER ON VERTICAL SURFACES ONLY.
  - STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS SHALL BE AT LEAST 0.03".
- NOTE: VERT. CONST. JOINT FORMED BY SURFACED, BEVELED 2"x6" KEYWAY. 3/4" V-GROOVE ON F.F. OF BODY.
- RESIN CARTRIDGES IMBED 4'-0" INTO 1" DIA. HOLES IN EXIST. CONC. SEE SECTIONS AT RIGHT.

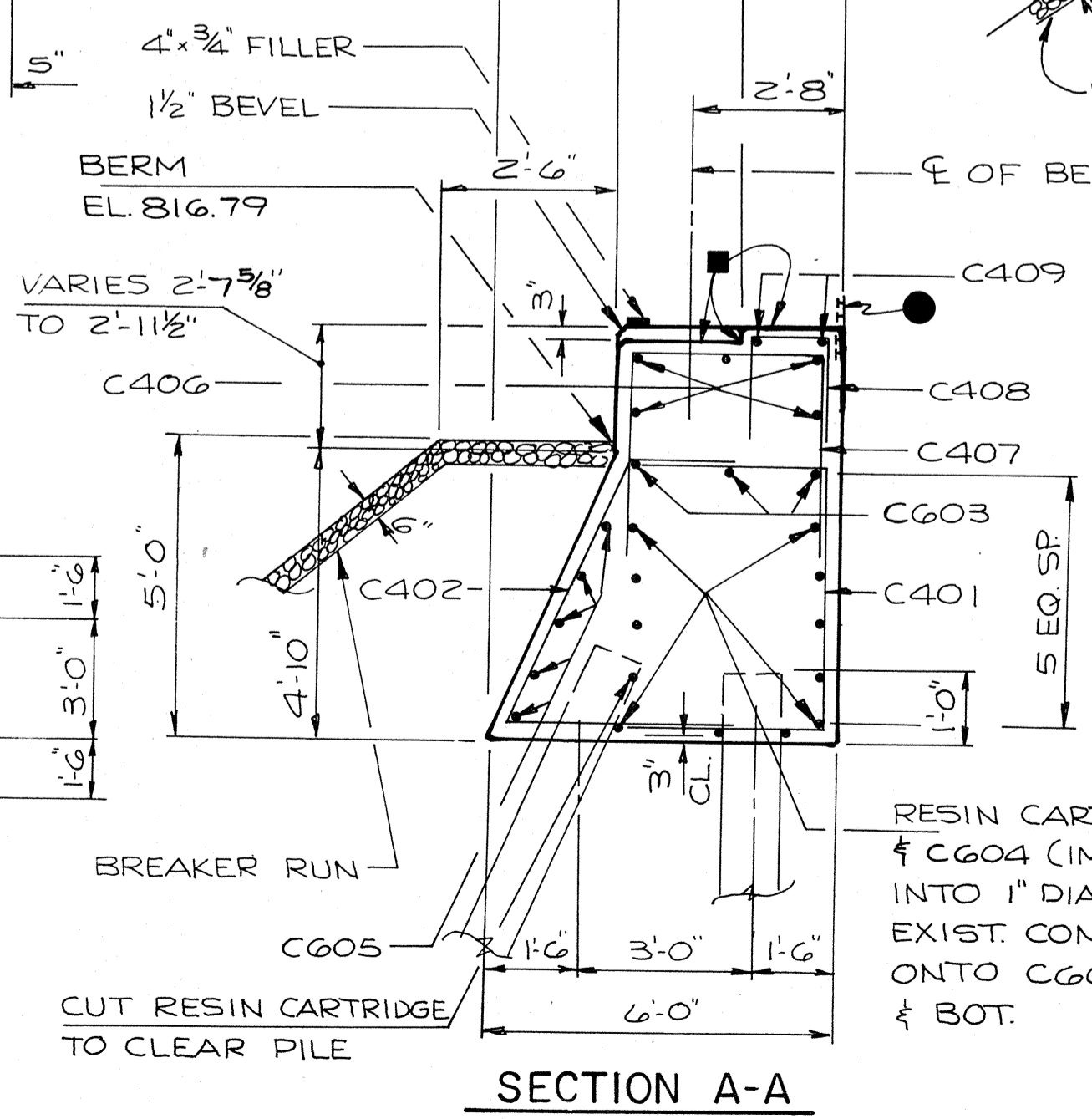
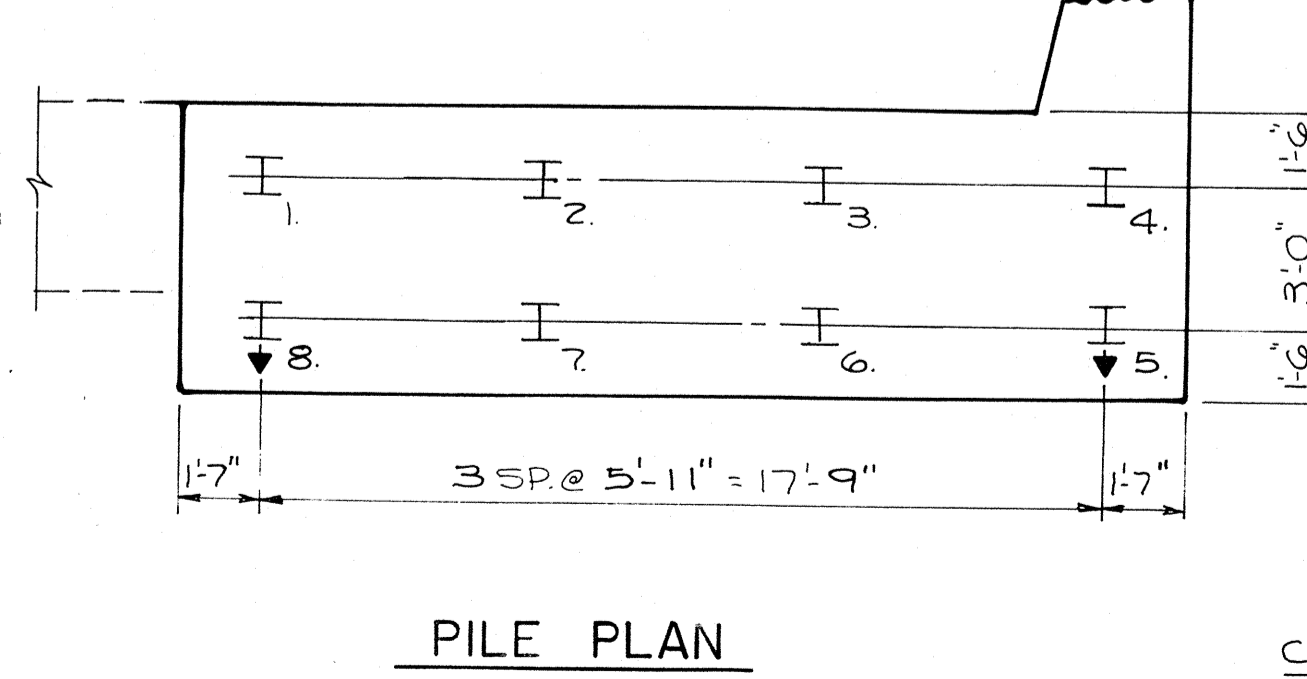
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec.	1981	Drawn By	NJA
		Plans Checked	DCM
<b>WEST ABUTMENT</b>			SHEET 5 OF 20
<b>X82362</b>			



CONST. JOINT-FOR DETAILS SEE SHT. 17.  
 CONST. JOINT-FOR DETAILS SEE SHT. 18.



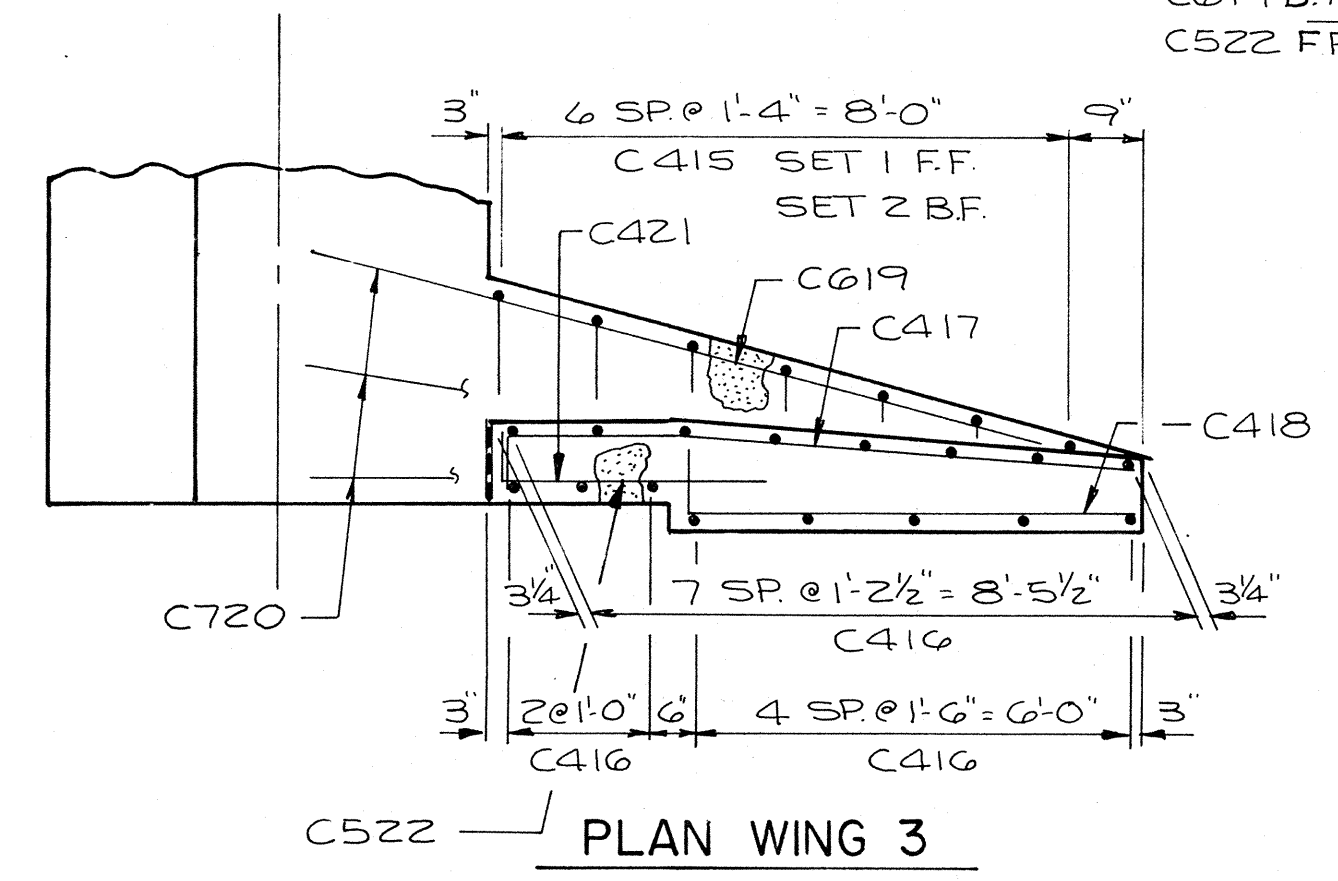
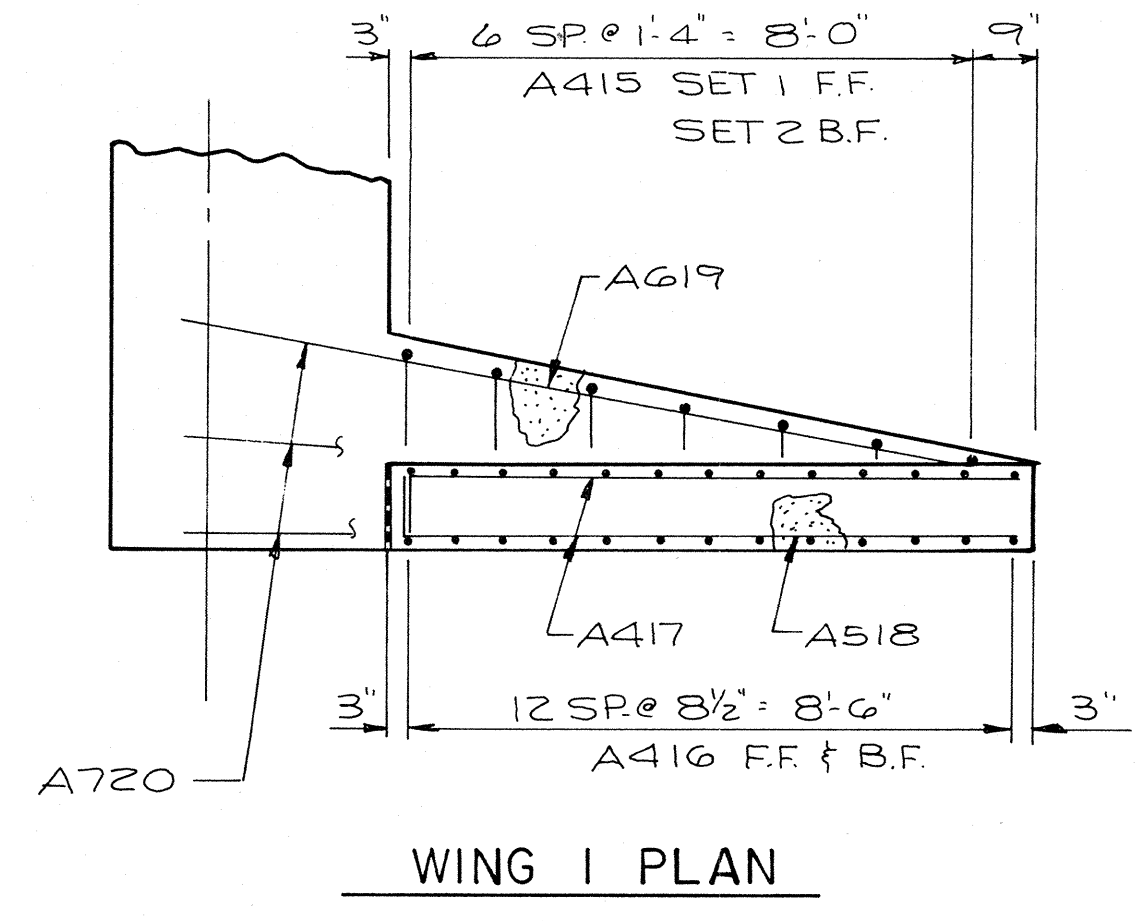
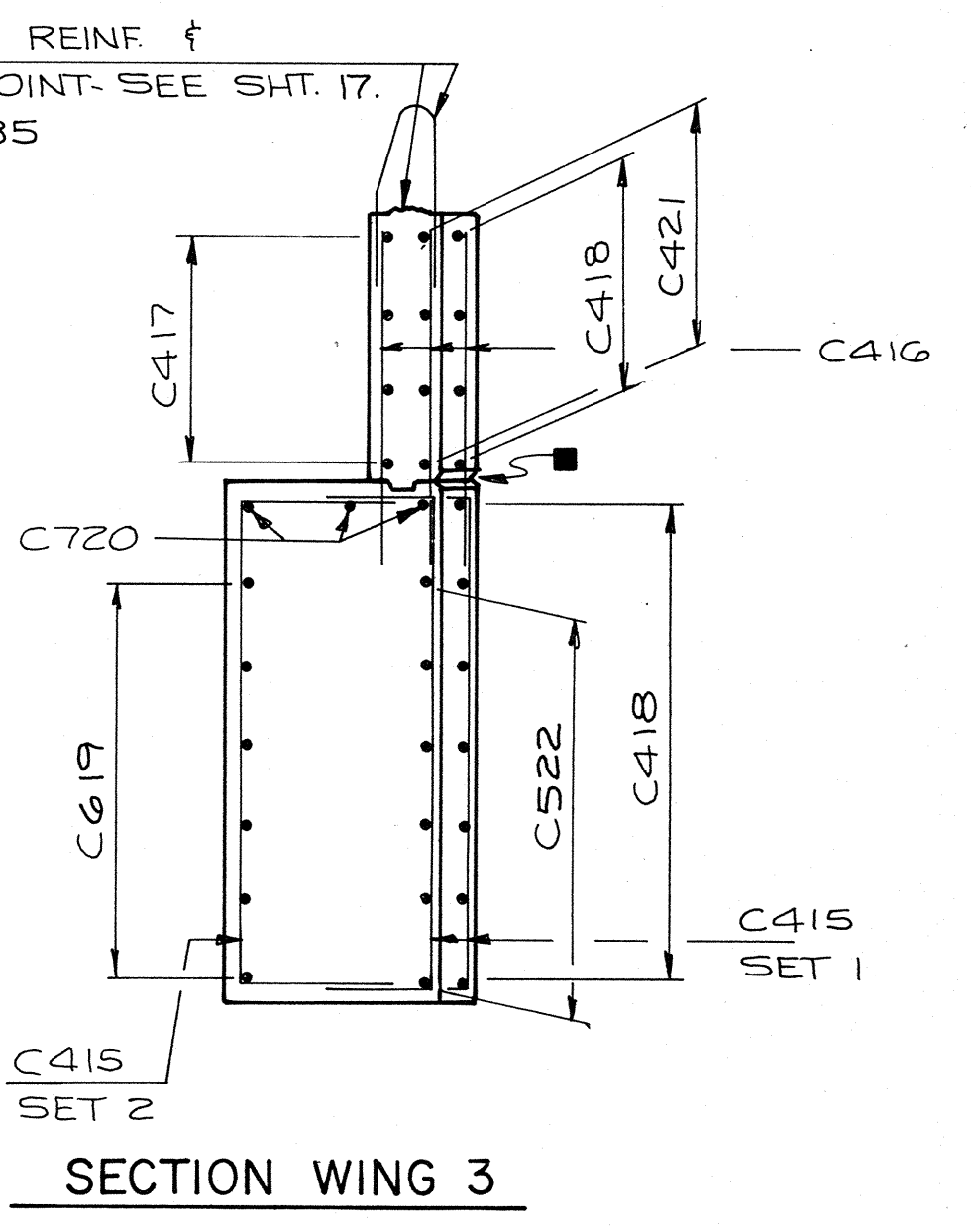
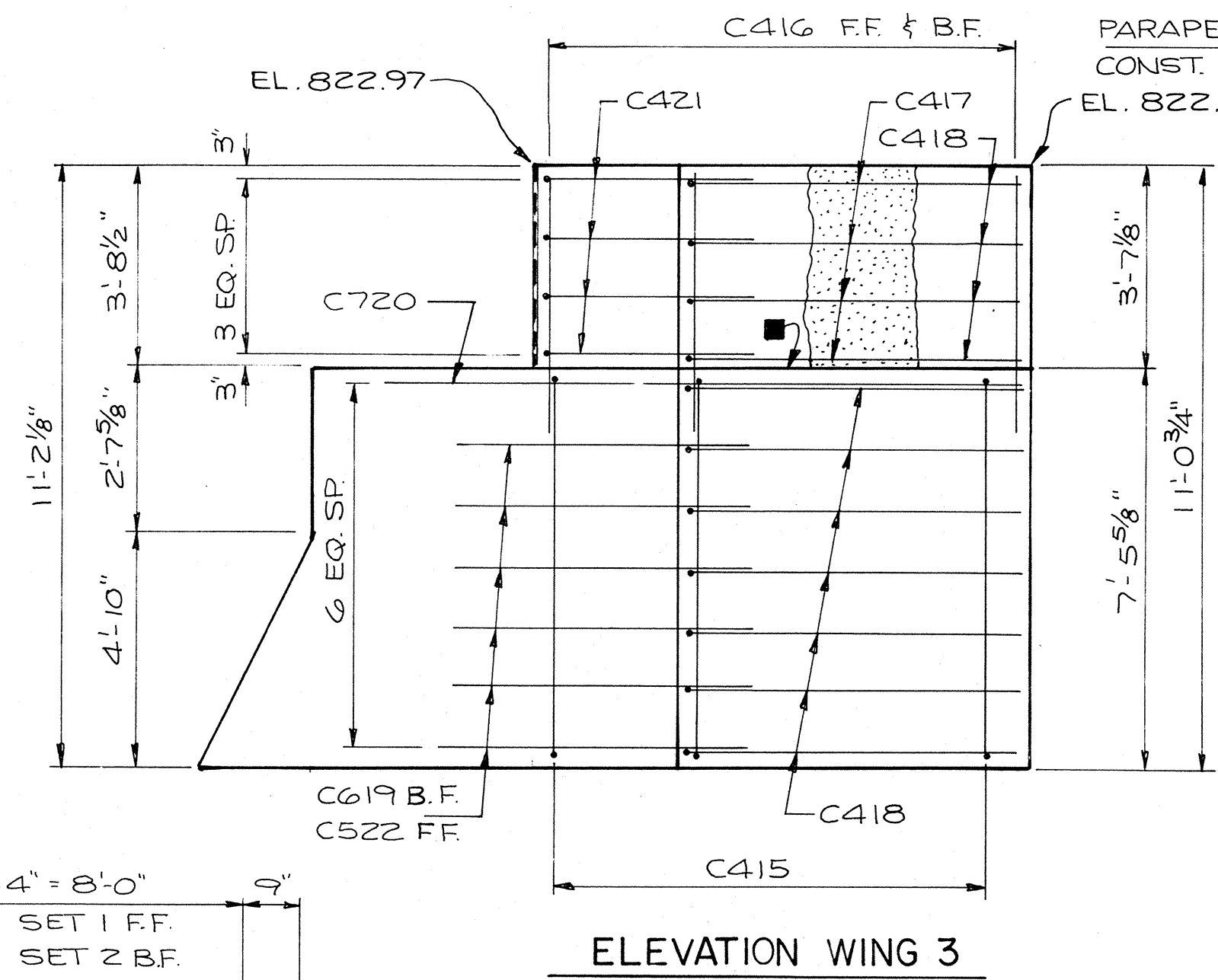
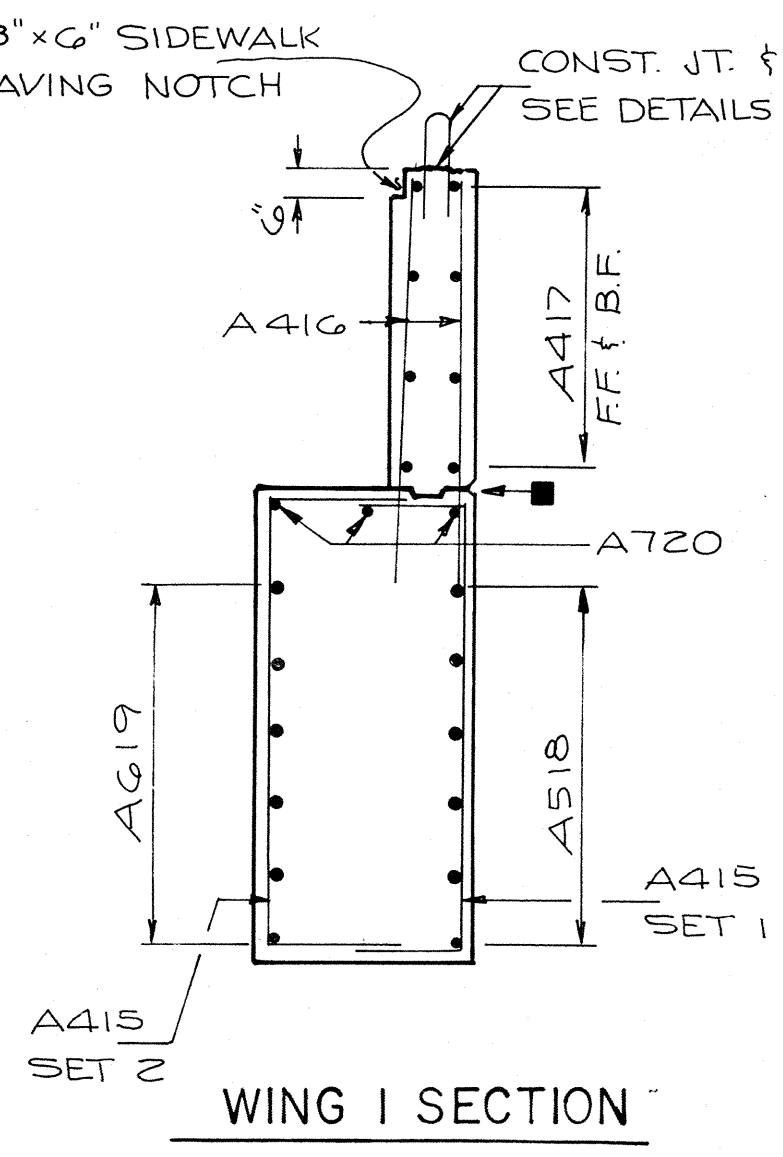
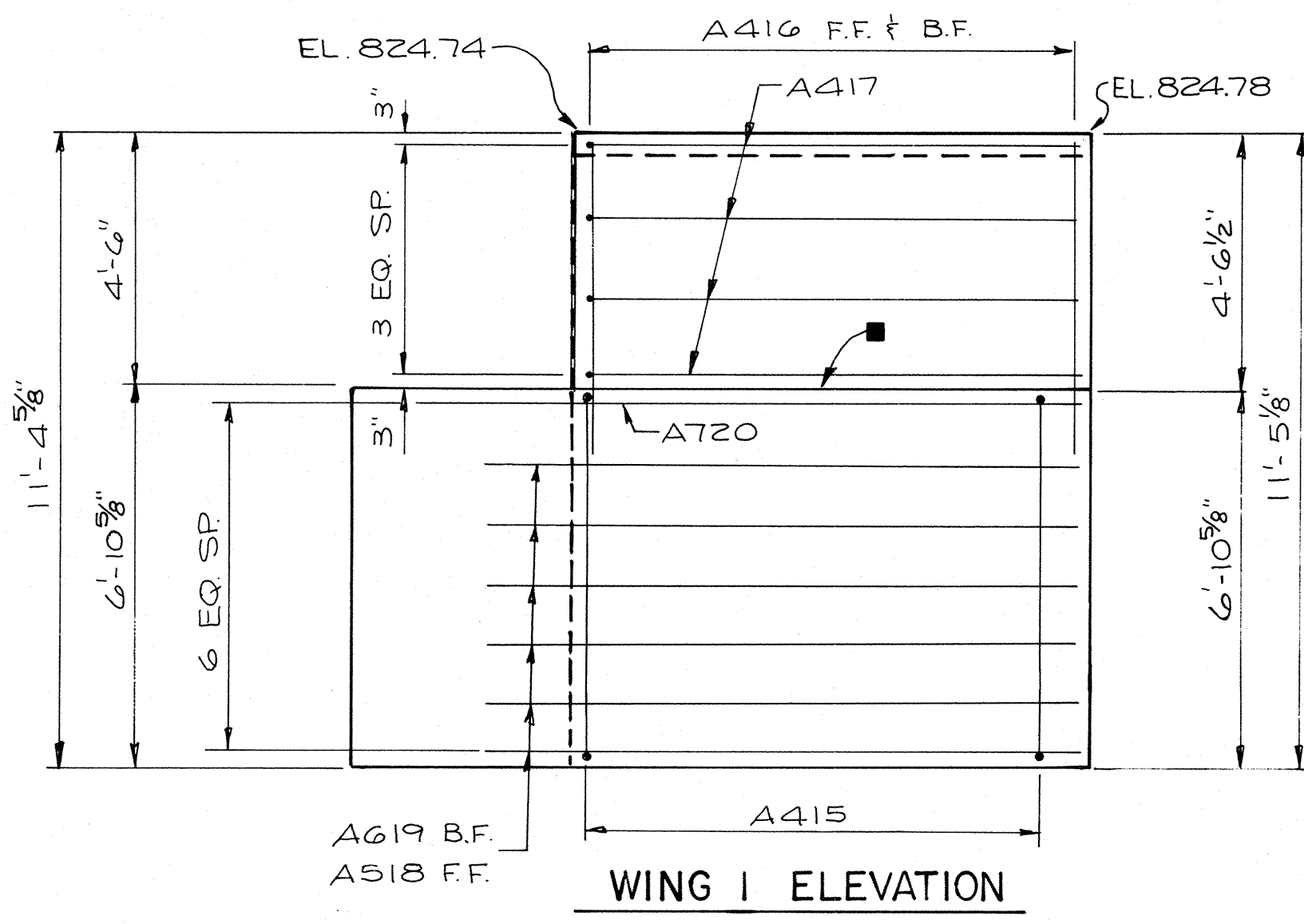
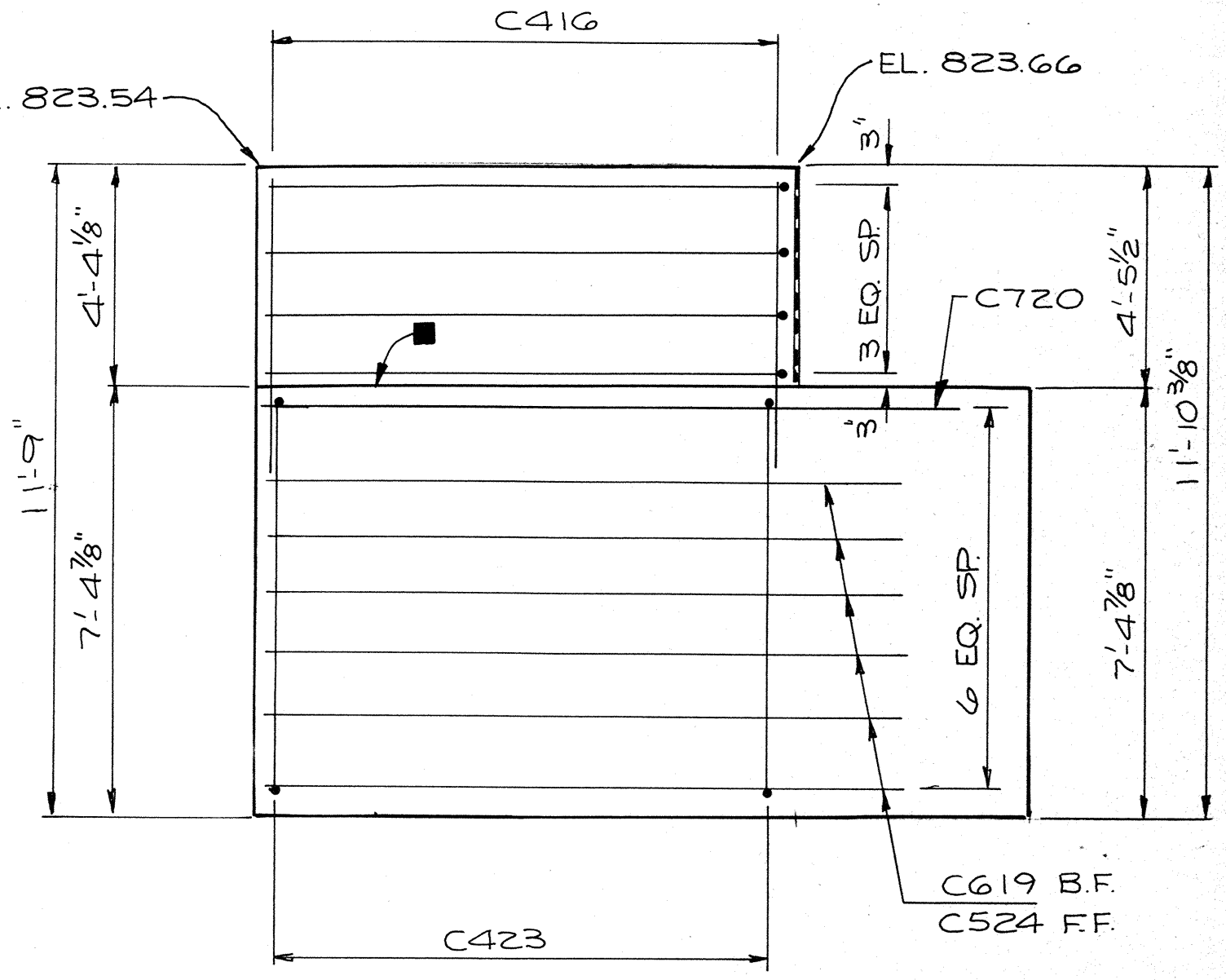
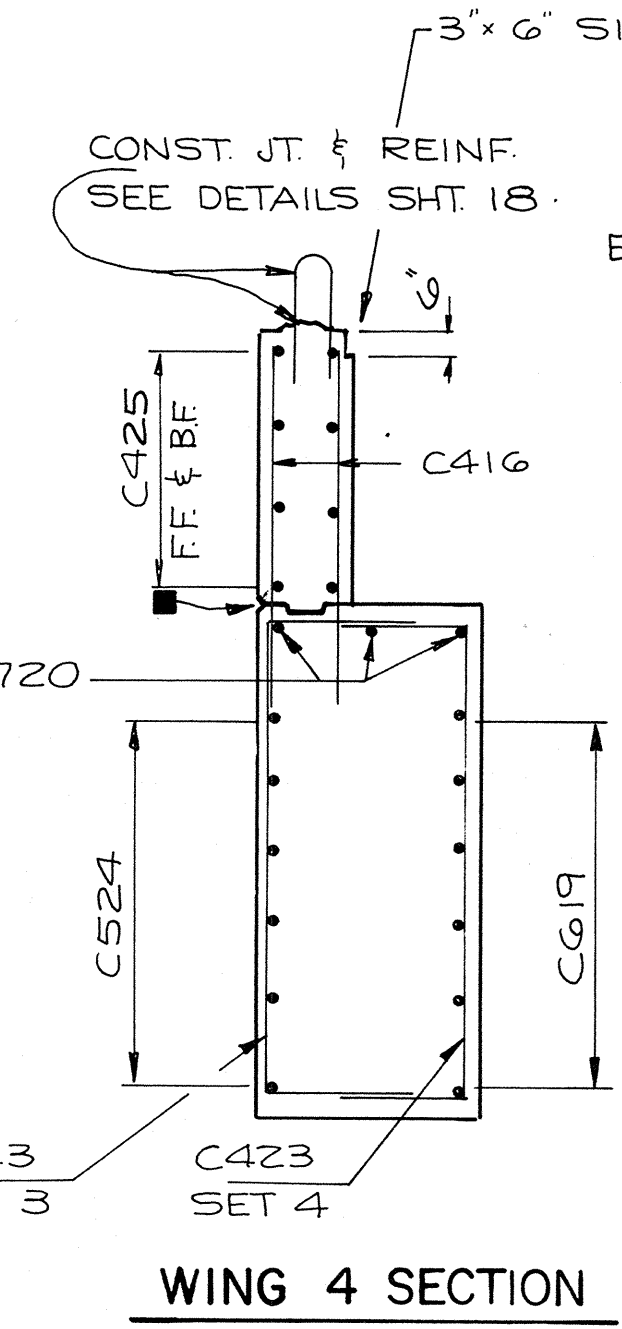
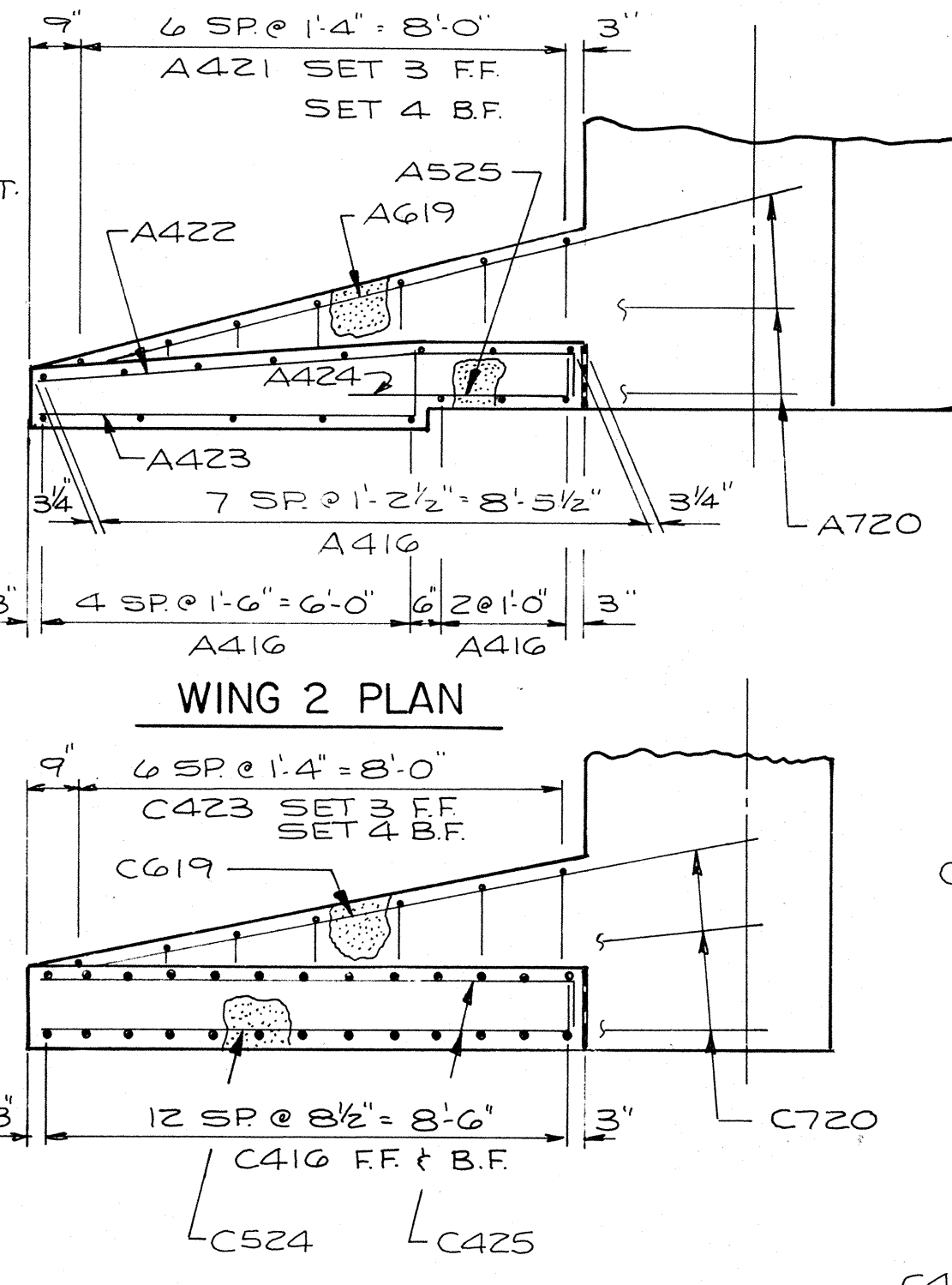
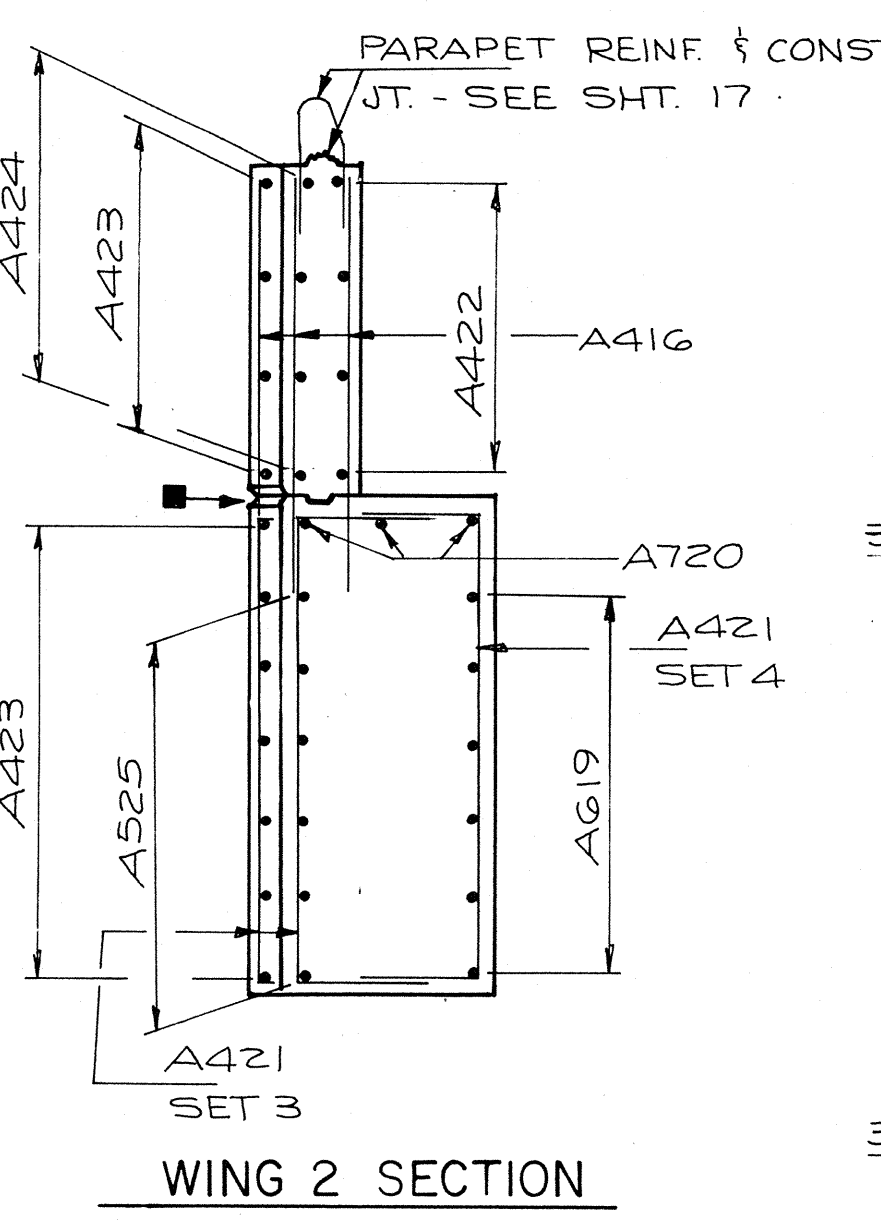
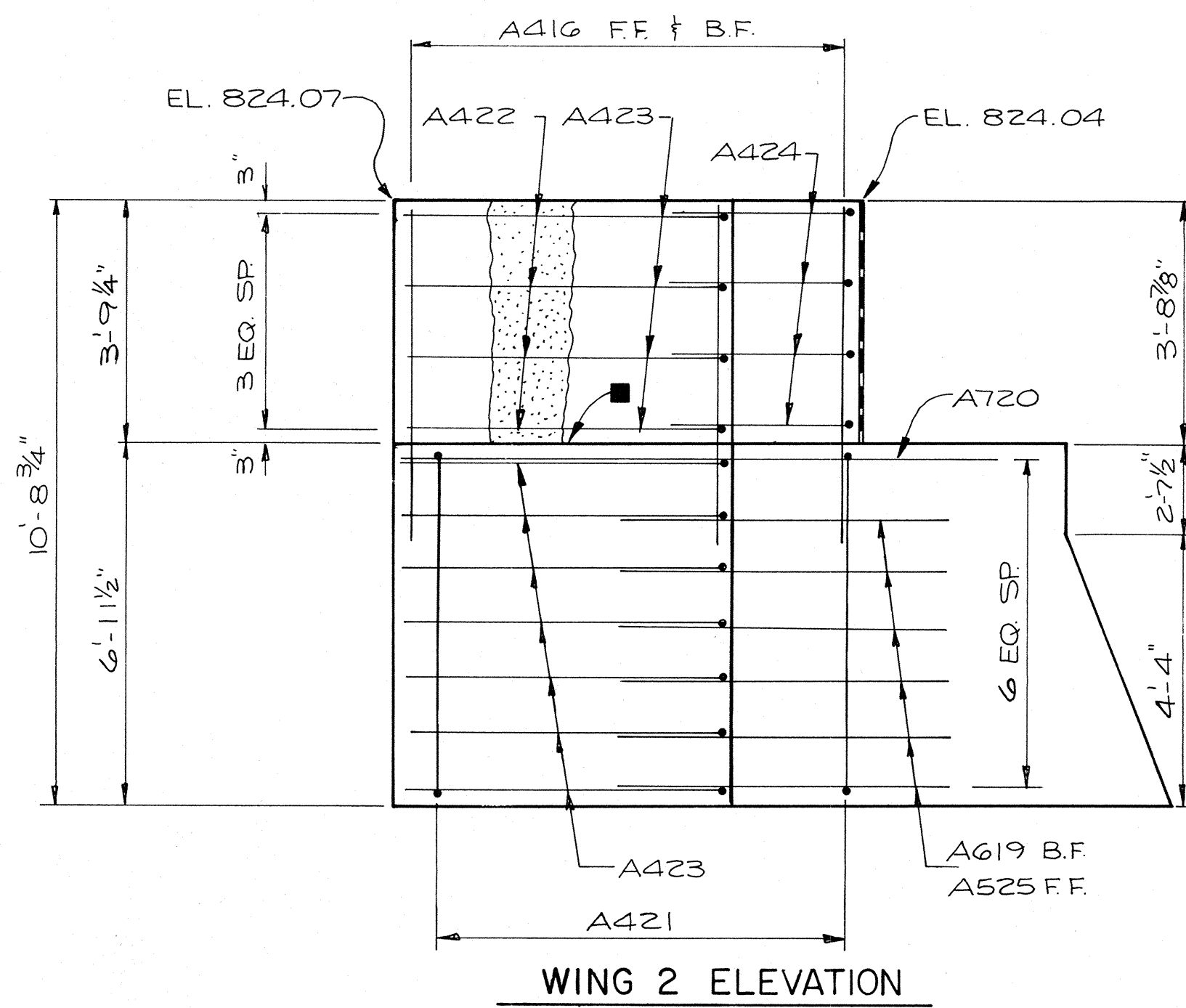
NOTE: ABUTMENT SUPPORTED ON HP10x42 STEEL PILES DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE EST 25'-0" LONG.  
 NOTE: FOR PILE SPLICE DETAIL SEE SHT. 3.  
 NOTE: BATTER FRONT ROW PILES 3" PER FOOT IN DIRECTION INDICATED.



- ▲ POLYVINYL CHLORIDE WATERSTOP-○ EXTEND FROM BEAM SEAT TO TOP OF WING ▲ EXTEND FROM EXIST. SEAT TO TOP OF NEW SEAT ALONG B.F. OF VERT. CONST. JOINT ○ EXTEND BETWEEN INSIDE FACES OF WINGS. PLACE BOTTOM HALF HORIZONTAL OVER FILLETS. BUTT SPLICE AT ALL INTERSECTIONS USING A HEATED SPLICING IRON AND AS SPECIFIED BY THE ENGINEER. SEAL ALL VERT. ENDS OF P.C.W. WITH NON-STAINING BITUMINOUS JOINT SEALER. FLUSH WITH SURFACE OF CONC. SEE DETAIL SHT. 3.
  - SEAL ALL JOINTS BETWEEN EXIST. & NEW CONC. ALONG THE B.F. WITH MEMBRANE WATERPROOFING.
  - ⊗ SEALER-RUN TO 3" BELOW GUTTER LINE.
  - 1/2" FILLER-EXTEND FROM BEAM SEAT TO TOP OF WING, INCLUDED IN WING LENGTH. SEAL ALL HORIZ. & VERT. SURFACES WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (1" DEEP & HOLD 1/8" BELOW SURFACE OF CONC.)
  - ▲ 3/4" CORK FILLER ON VERTICAL SURFACES ONLY.
  - STEEL TROWEL TOP SURFACE OF ABUTMENT. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE ABUTMENT TOP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS SHALL BE AT LEAST 0.03".
- NOTE: VERT. CONST. JOINT FORMED BY SURFACED, BEVELED 2"x6" KEYWAY. 3/4" V GROOVE ON F.F. OF BODY.
- RESIN CARTRIDGES IMBED 4'-0" INTO 1" DIA. HOLES IN EXIST. CONC. SEE SECTIONS AT RIGHT.

NOTE: FILL OR EXCAVATE TO EL. 811.79 BEFORE DRIVING PILES.  
 NOTE: FOR REMOVAL LIMITS OF EXIST. STRUCTURE SEE SHT. 2.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
<b>EAST ABUTMENT</b>			SHEET 6 OF 20
<b>X82362</b>			



■ OPT. CONST. JOINT-FORMED BY SURFACED BEVELED 2"x6" KEYWAY, 3/4" V GROOVE REQUIRED ON F.F. IF JOINT IS USED.

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec.	1981	Drawn By	NJA
		Plans Checked	DCM
ABUTMENT WINGS			SHEET 7 OF 20
			X82362

**BILL OF BARS (WEST ABUT.)**

MARK	NO. REQ'D	LENGTH	BENT	CUT DIAG.	LOCATION
A401	16	7-3	*		BODY B.F. VERT.
A402	16	12-10	*		" F.F. "
A603	3	20-7			" " HORIZ.
A604	13	7-0			" B.F. & F.F. "
A605	13	20-7			" " " "
A406	5	28-8			" TOP " "
A407	21	11-5	*		" " VERT.
A408	36	3-5	*		" " " "
A409	12	5-6			" " HORIZ.
A410	66	7-9	*		" " VERT.
A411	2	9-6			" " HORIZ.
A412	7	28-3			" " " "
A613	11	6-8			" " " "
A414	3	20-6	*		" " VERT.
A415	7	18-2	*	*	WING 1 BASE "
A416	42	5-8			" 1#2 TOP "
A417	8	9-5	*		" 1 " HORIZ.
A518	6	10-6			" 1 BASE "
A619	12	11-0			" 1#2 " "
A720	6	11-7			" 1#2 " "
A421	7	18-2	*	*	" 2 " VERT.
A422	4	9-3	*		" 2 TOP HORIZ.
A423	11	6-11	*		" 2 " f BASE "
A424	4	4-7	*		" 2 " " "
A525	6	5-8			" 2 BASE "

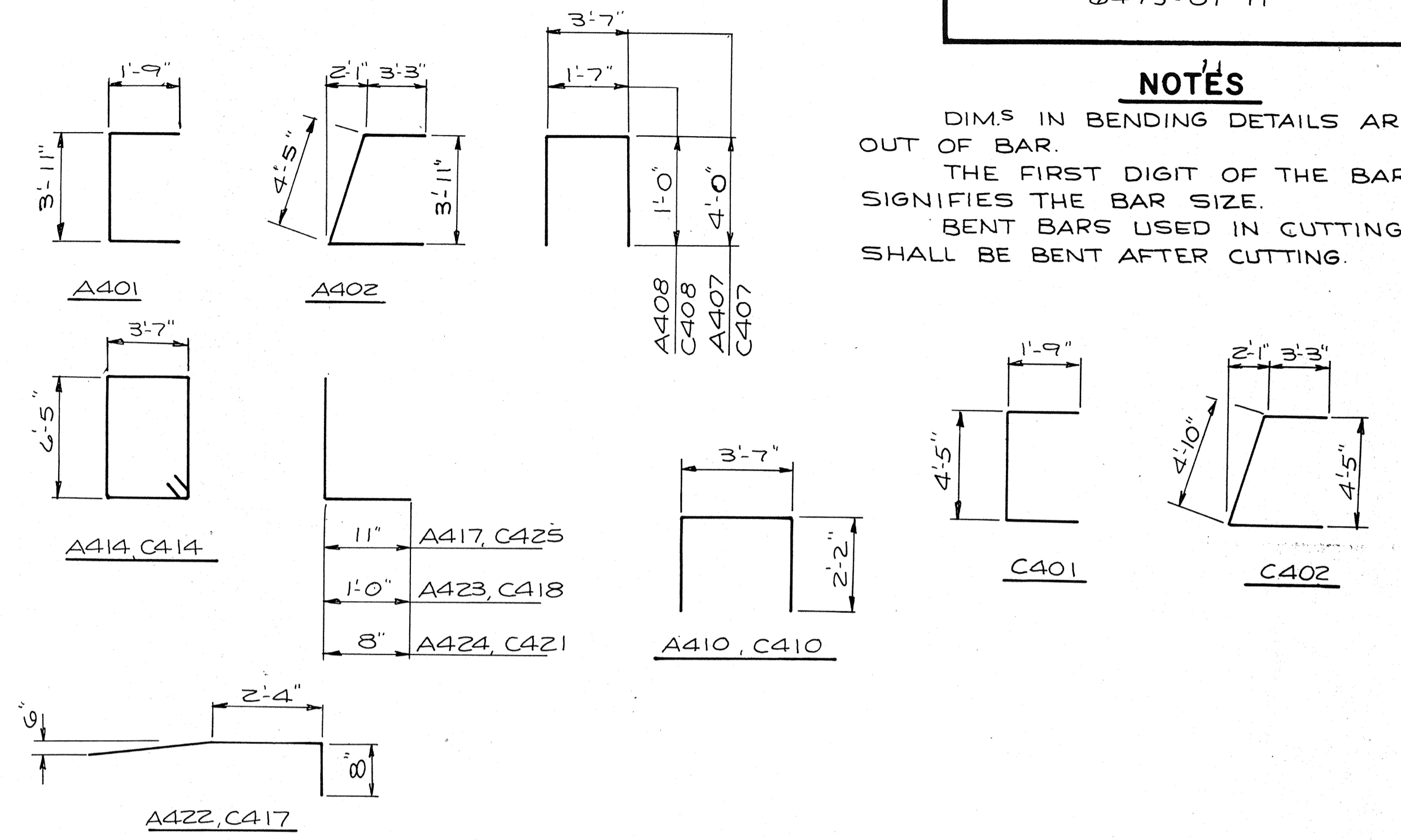
**BILL OF BARS (EAST ABUT.)**

MARK	NO. REQ'D	LENGTH	BENT	CUT DIAG.	LOCATION
C401	16	7-9	*		BODY B.F. VERT.
C402	16	13-3	*		" F.F. "
C603	3	20-7			" " HORIZ.
C604	13	7-0			" B.F. & F.F. "
C605	13	20-7			" " " "
C406	5	28-8			" TOP " "
C407	21	11-5	*		" " VERT.
C408	36	3-5	*		" " " "
C409	12	5-6			" " HORIZ.
C410	66	7-9	*		" " VERT.
C411	2	9-6			" " HORIZ.
C412	7	28-3			" " " "
C613	11	6-8			" " " "
C414	3	20-6	*		" " VERT.
C415	7	19-2	*	*	WINGS 3 BASE "
C416	42	5-8			" 3#4 TOP "
C417	4	9-3	*		" 3 " HORIZ.
C418	11	6-11	*		" 3 " " "
C619	12	11-0			" 3#4 BASE "
C720	6	11-7			" 3#4 " "
C421	4	4-7	*		" 3 TOP " "
C522	6	5-8			" 3 " " "
C423	7	19-2	*	*	" 4 BASE VERT.
C524	6	10-6			" 4 " HORIZ.
C425	8	9-5	*		" 4 TOP " "

STATE PROJECT NUMBER	SHEET NO.
6473-01-71	

**NOTES**

DIMS IN BENDING DETAILS ARE OUT TO OUT OF BAR.  
 THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.  
 BENT BARS USED IN CUTTING DIAGRAM SHALL BE BENT AFTER CUTTING.

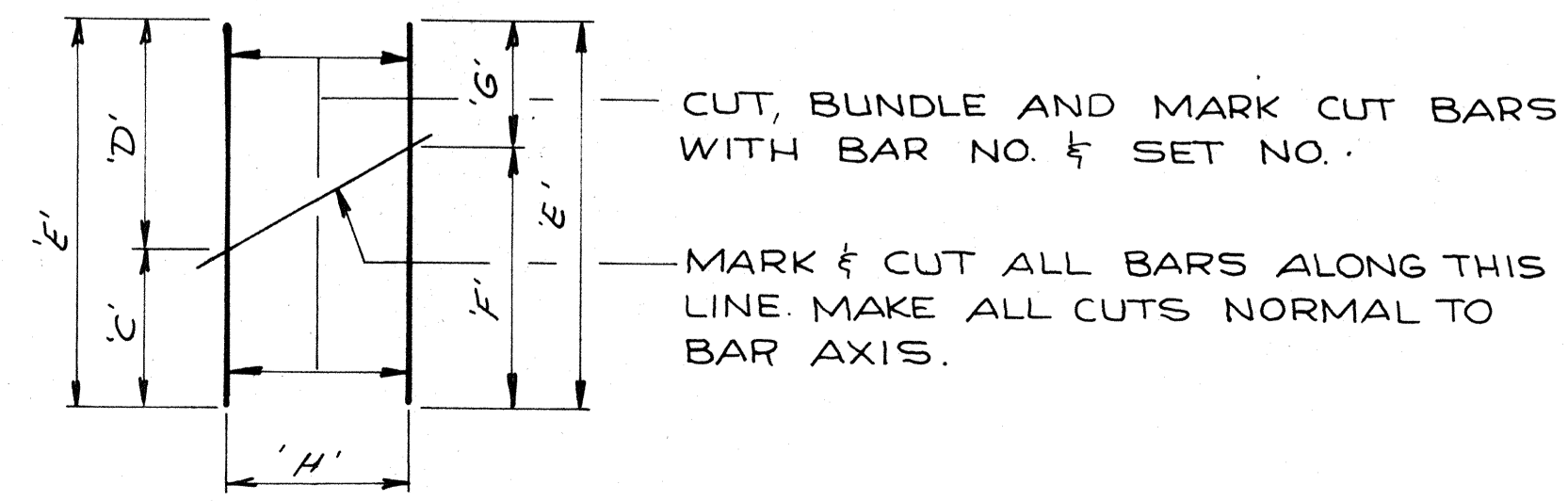


MARK	VARIES FROM TO INCREMENTS				B
	FROM	TO	NUMBER	SIZE	
A415	1-0	1-10	6	1 5/8	6-5
A421	1-0	1-10	6	1 5/8	6-5
C415	1-0	1-10	6	1 5/8	6-11
C423	1-0	1-10	6	1 5/8	6-11

**CUTTING DIAGRAM**

'H' IS NO. OF BARS REQ'D. BEFORE CUTTING.

MARK	SET NO.	C	D	E	F	G	H	SETS REQ'D.
A415	1	8-3		18-2	9-11		7	1
	2		9-11			8-3		1
	3	8-3		18-2	9-11		7	1
A421	4		9-11			8-3		1
C415	1	8-9		19-2	10-5		7	1
	2		10-5			8-9		1
C423	3	8-9		19-2	10-5		7	1
	4		10-5			8-9		1



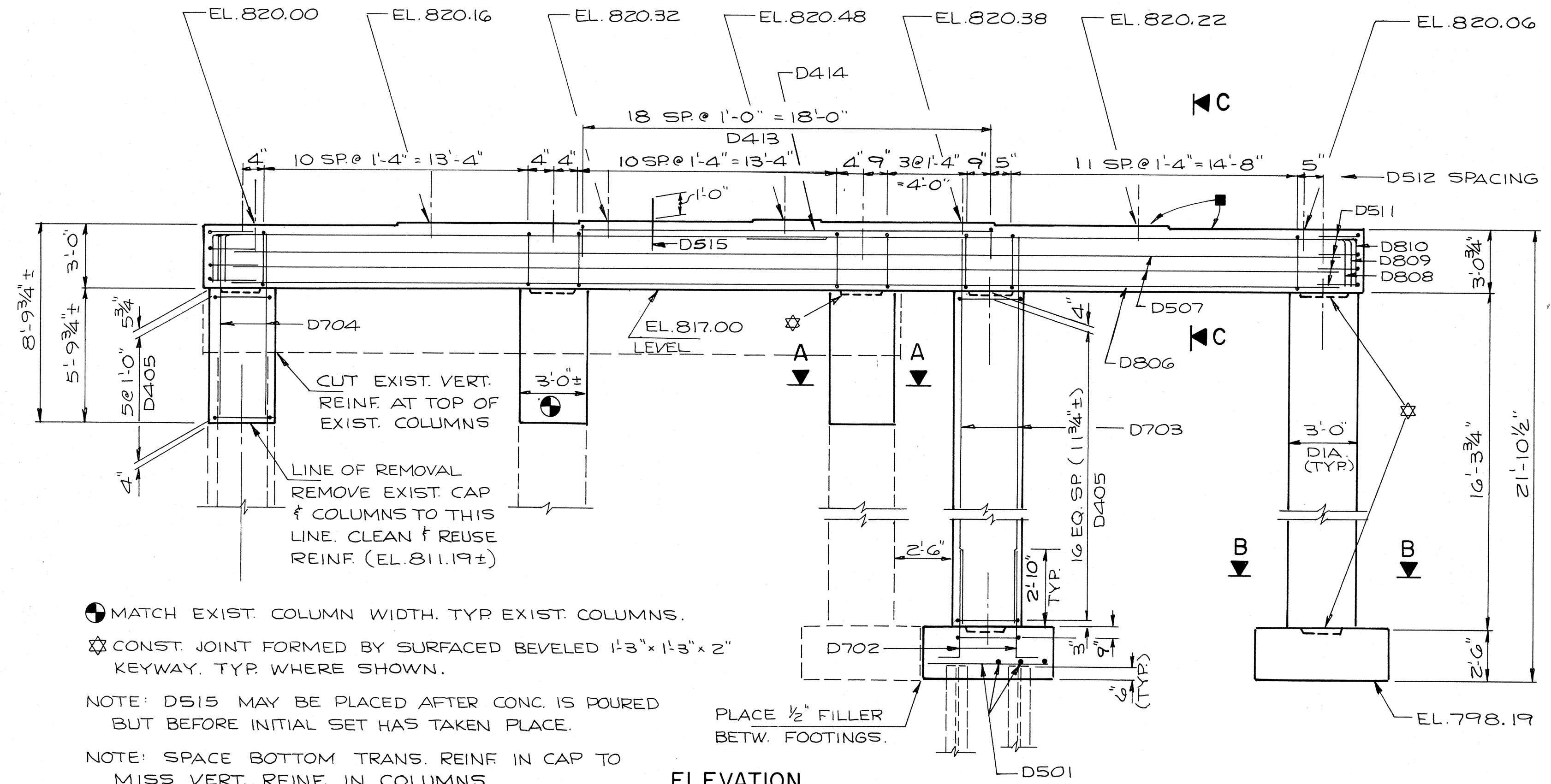
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
<b>ABUTMENT BILL OF BARS</b>			SHEET 8 OF 20 X82362

**BILL OF BARS**

THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.  
DIM'S IN BENDING DETAILS ARE OUT TO OUT OF BAR.

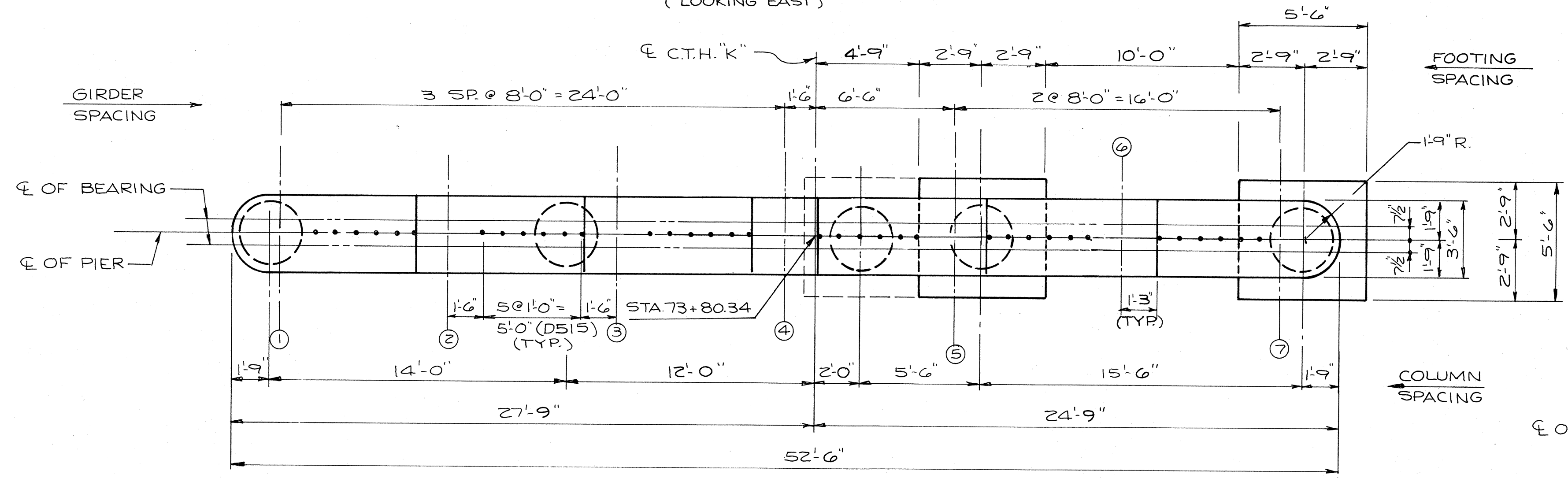
MARK	NO. REQ'D	LENGTH	BENT	LOCATION
D501	24	5-0		FOOTING
D702	24	6-0	*	" DOWELS VERT.
D703	24	18-9		COLUMNS - NEW
D704	36	8-3		" - EXTENSION "
D405	54	9-9	*	" HOOPS
D806	7	49-0		CAP - BOTTOM HORIZ.
D507	4	49-0		" SIDES "
D808	2	30-0	*	" TOP "
D809	2	30-9	*	" " "
D810	3	31-6	*	" " "
D511	8	8-6	*	ENDS "
D512	76	10-3	*	DOUBLE STIRRUPS
D413	19	6-0	*	" TOP VERT.
D414	2	18-2		" " HORIZ.
D515	36	2-0		" TOP VERT.

\*\* D515 SHALL BE EPOXY COATED.

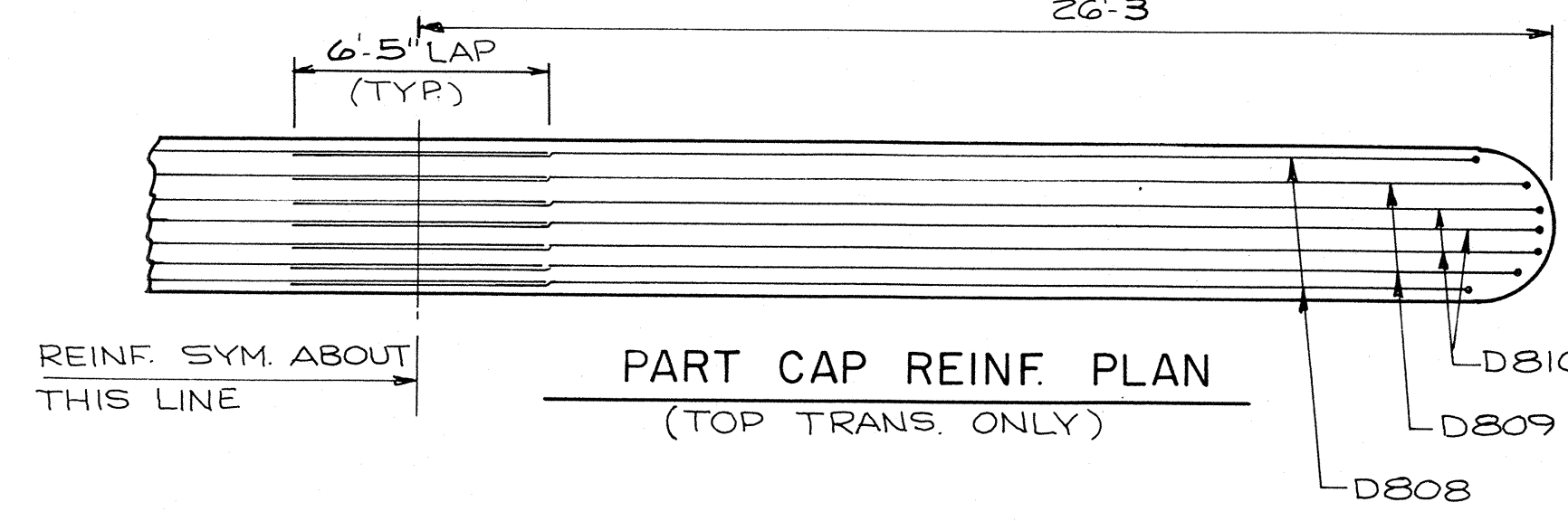


- MATCH EXIST. COLUMN WIDTH. TYP. EXIST. COLUMNS.
- ⊠ CONST. JOINT FORMED BY SURFACED BEVELED 1'-3" x 1'-3" x 2" KEYWAY. TYP. WHERE SHOWN.
- NOTE: D515 MAY BE PLACED AFTER CONC. IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- NOTE: SPACE BOTTOM TRANS. REINF. IN CAP TO MISS VERT. REINF. IN COLUMNS.

**ELEVATION**  
(LOOKING EAST)



**PLAN**

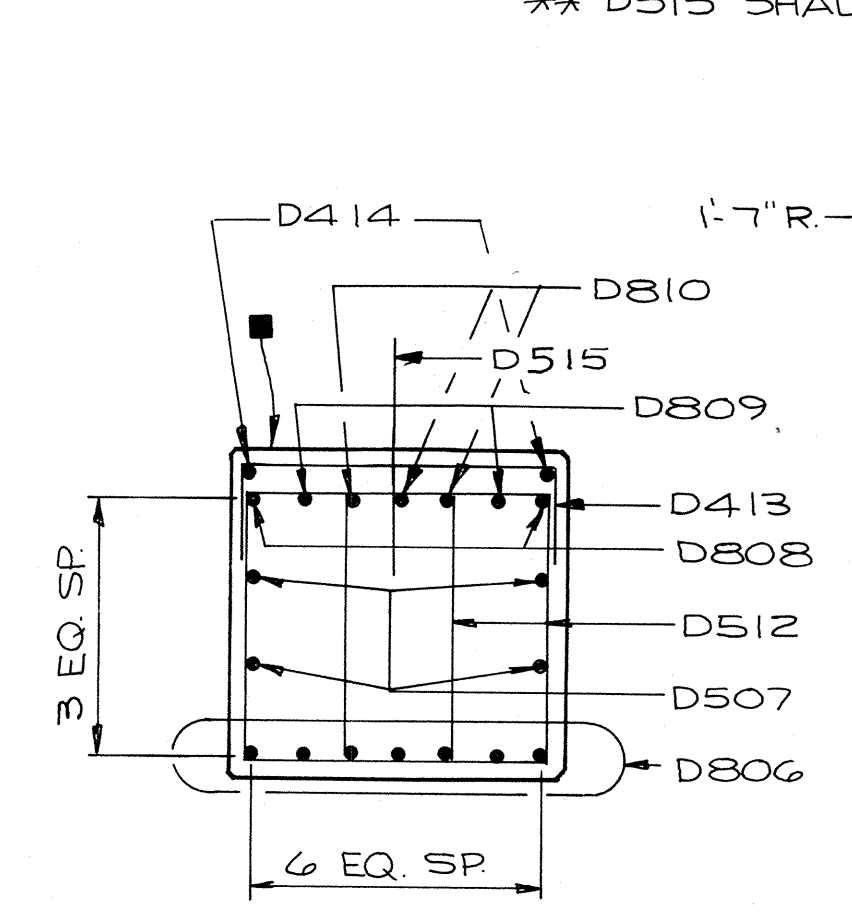
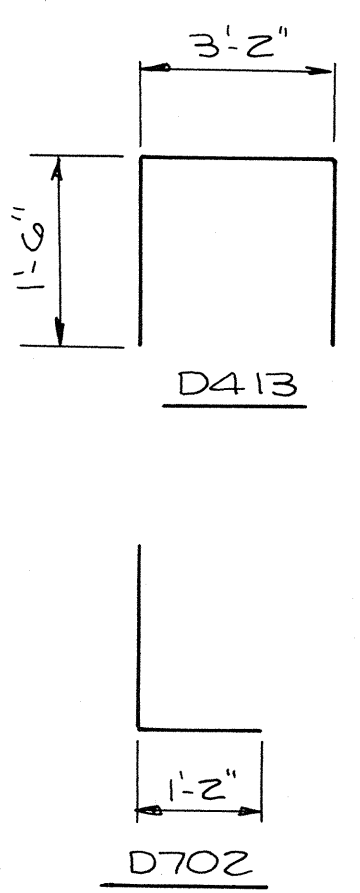


**PART CAP REINF. PLAN**  
(TOP TRANS. ONLY)

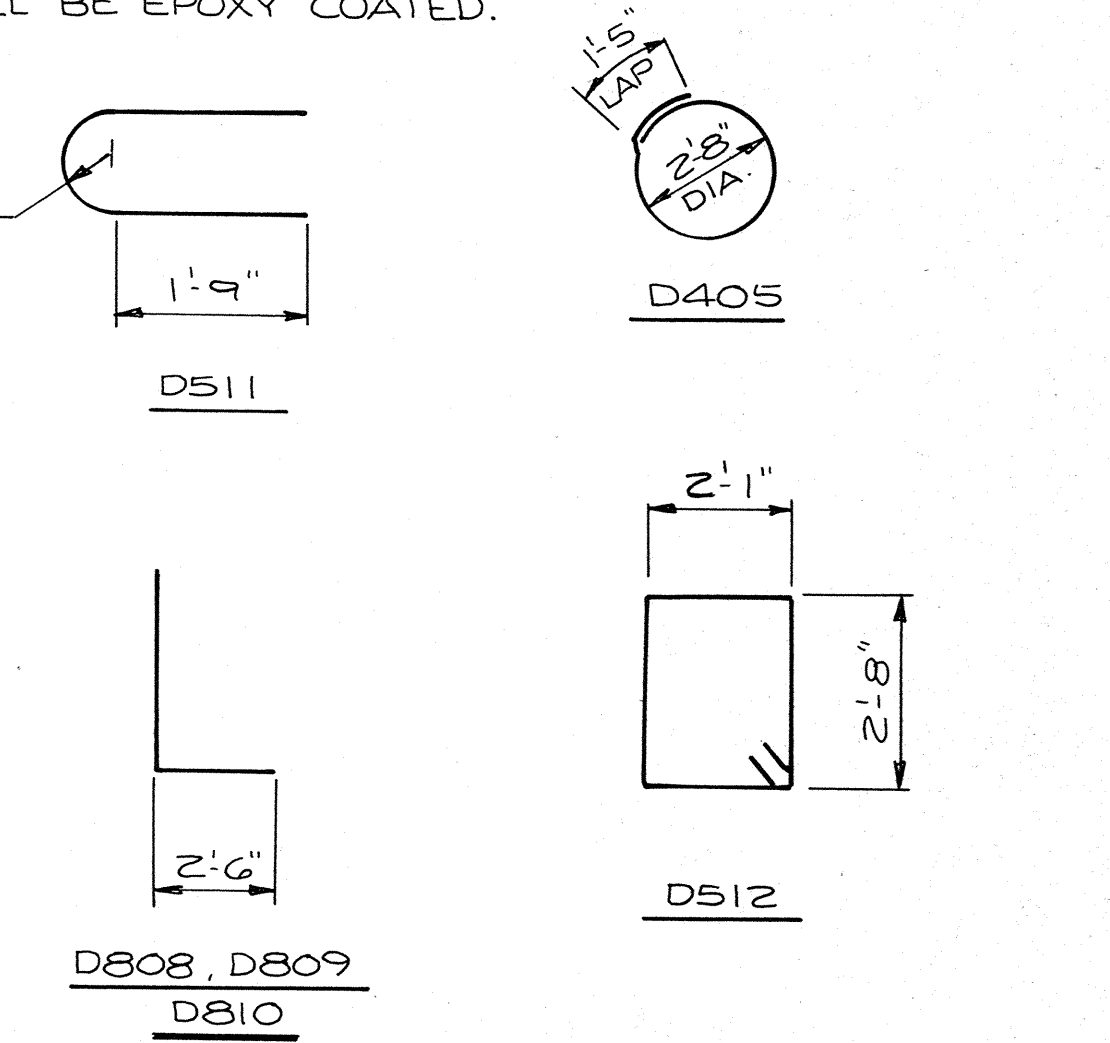
NOTE: PIER SUPPORTED ON HP10x42 STEEL PILES, DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE, EST. 10'-0" LONG.  
NOTE: FOR PILE SPLICE DETAIL SEE SHT. 3.  
NOTE: PILING SHALL BE PREBORED.

NOTE: STEEL TROWEL TOP SURFACE OF PIER. PLACE MULTIPLE LAYERS OF POLYETHYLENE SHEETS OVER ENTIRE CAP BEFORE PLACING BEARING PADS AND/OR SUPERSTRUCTURE. TOTAL THICKNESS SHALL BE AT LEAST 0.03".

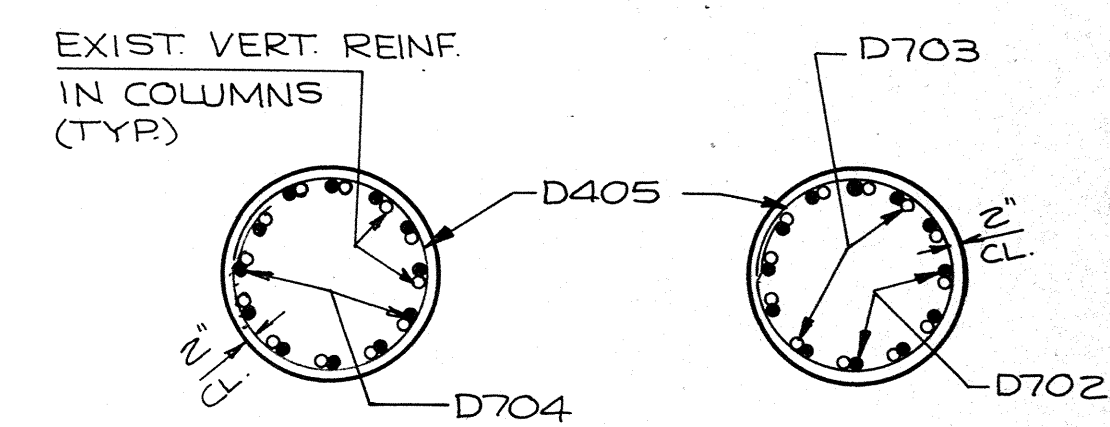
**NEW FOOTING PLAN - TYP.**



**SECTION C-C**



NOTE: ALL VERT. BARS IN COLUMNS ARE EQUALLY SPACED.



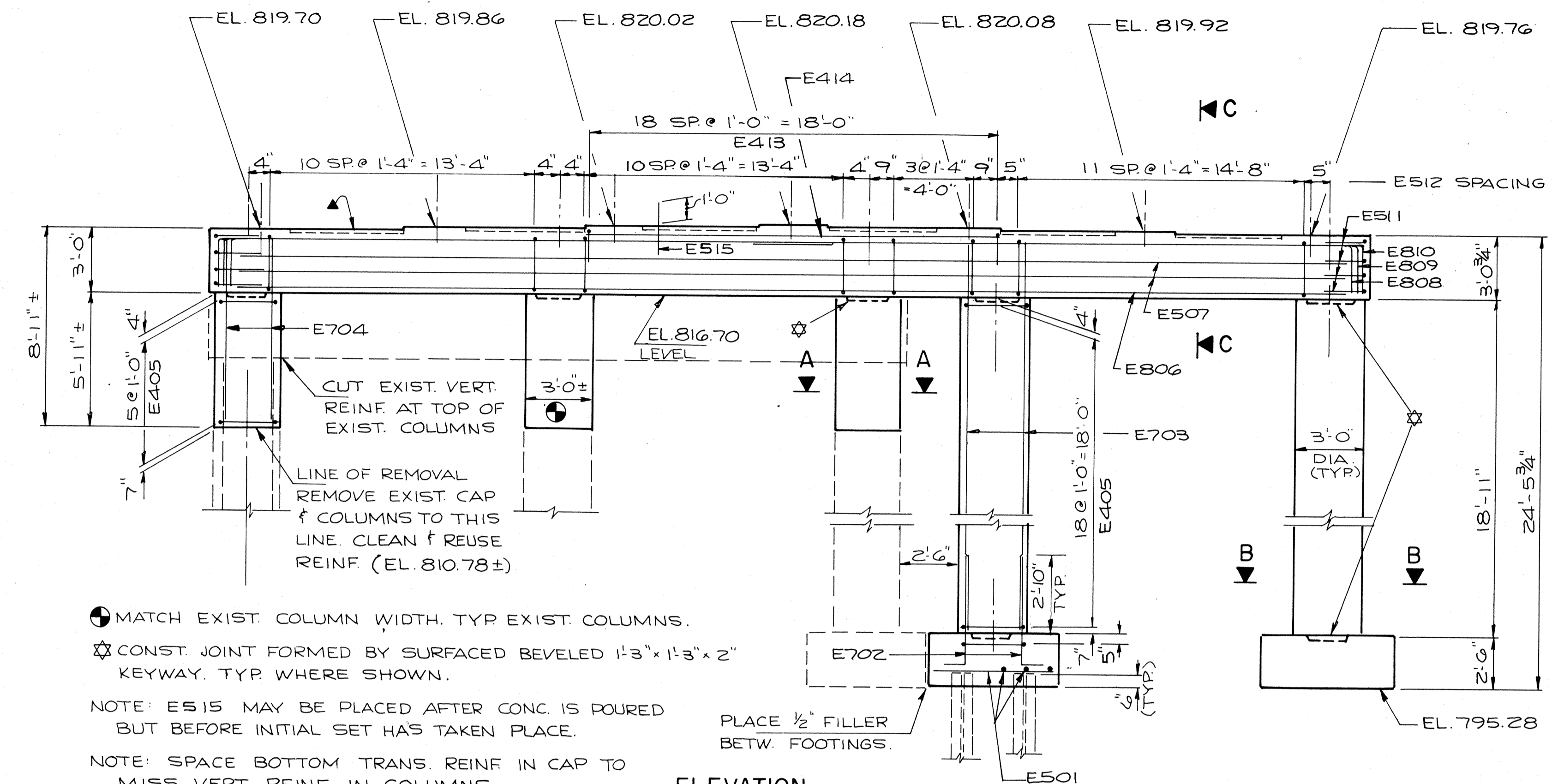
**SECTION A-A**      **SECTION B-B**

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
PIER 1			SHEET 9 OF 20
			<b>X82362</b>

### BILL OF BARS

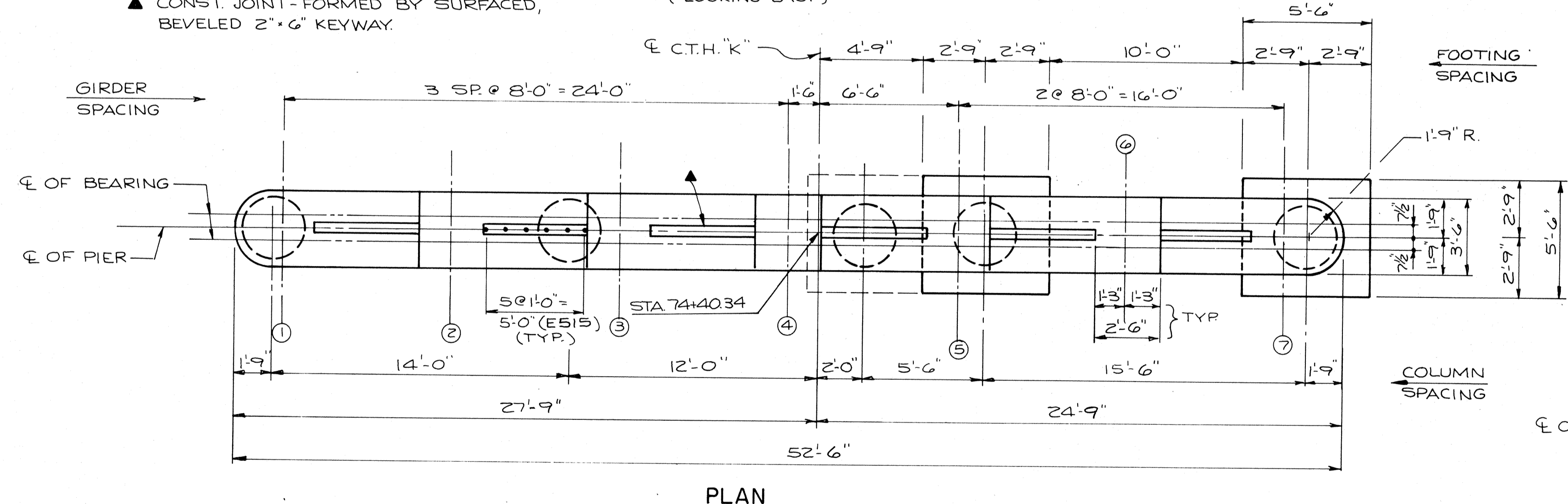
THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.  
 DIMS IN BENDING DETAILS ARE OUT TO OUT OF BAR.

MARK	NO. REQ'D	LENGTH	ENT	LOCATION
E501	24	5-0		FOOTING
E702	24	6-0	*	" DOWELS VERT.
E703	24	21-5		COLUMNS - NEW
E704	36	8-5		" - EXTENSION "
E405	58	9-9	*	" HOOPS
E806	7	49-0		CAP - BOTTOM HORIZ.
E507	4	49-0		" SIDES "
E808	2	30-0	*	" TOP "
E809	2	30-9	*	" " "
E810	3	31-6	*	" " "
E511	8	8-6	*	" ENDS "
E512	76	10-3	*	" DOUBLE STIRRUPS
E413	19	6-0	*	" TOP VERT.
E414	2	18-2		" " HORIZ.
E515	36	2-0		" TOP VERT.

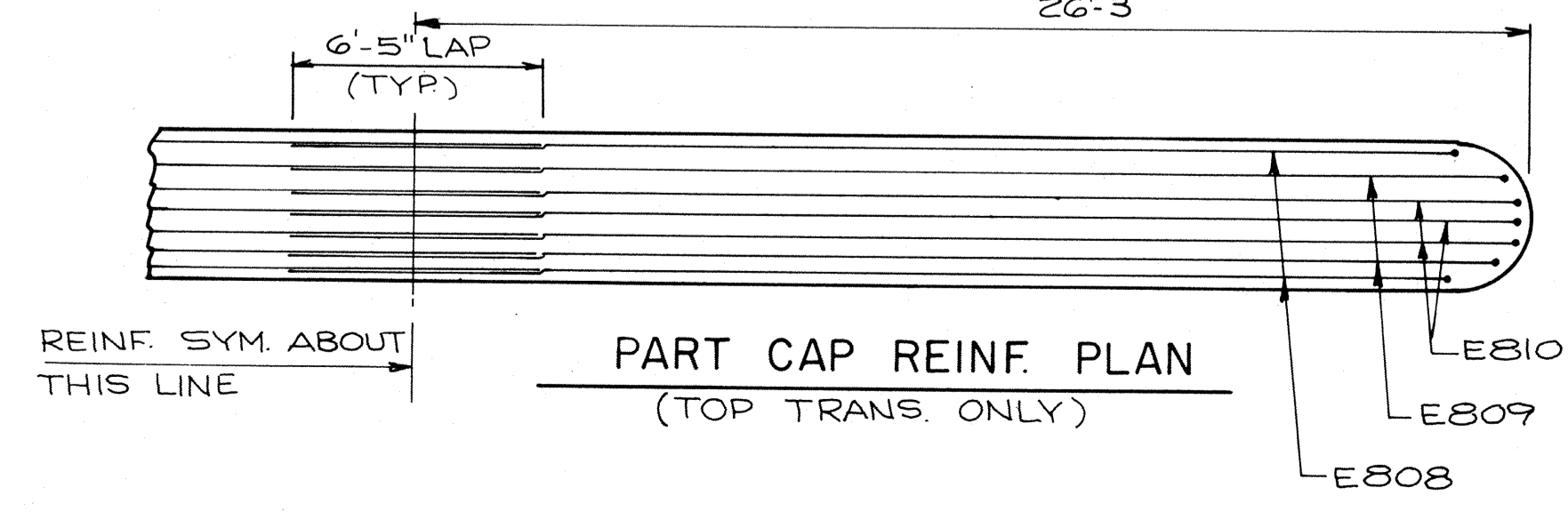


- ⊕ MATCH EXIST. COLUMN WIDTH. TYP EXIST. COLUMNS.
- ⊗ CONST. JOINT FORMED BY SURFACED BEVELED 1-3" x 1-3" x 2" KEYWAY. TYP WHERE SHOWN.
- NOTE: E515 MAY BE PLACED AFTER CONC. IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- NOTE: SPACE BOTTOM TRANS. REINF. IN CAP TO MISS VERT. REINF. IN COLUMNS.
- ▲ CONST. JOINT - FORMED BY SURFACED, BEVELED 2" x 6" KEYWAY.

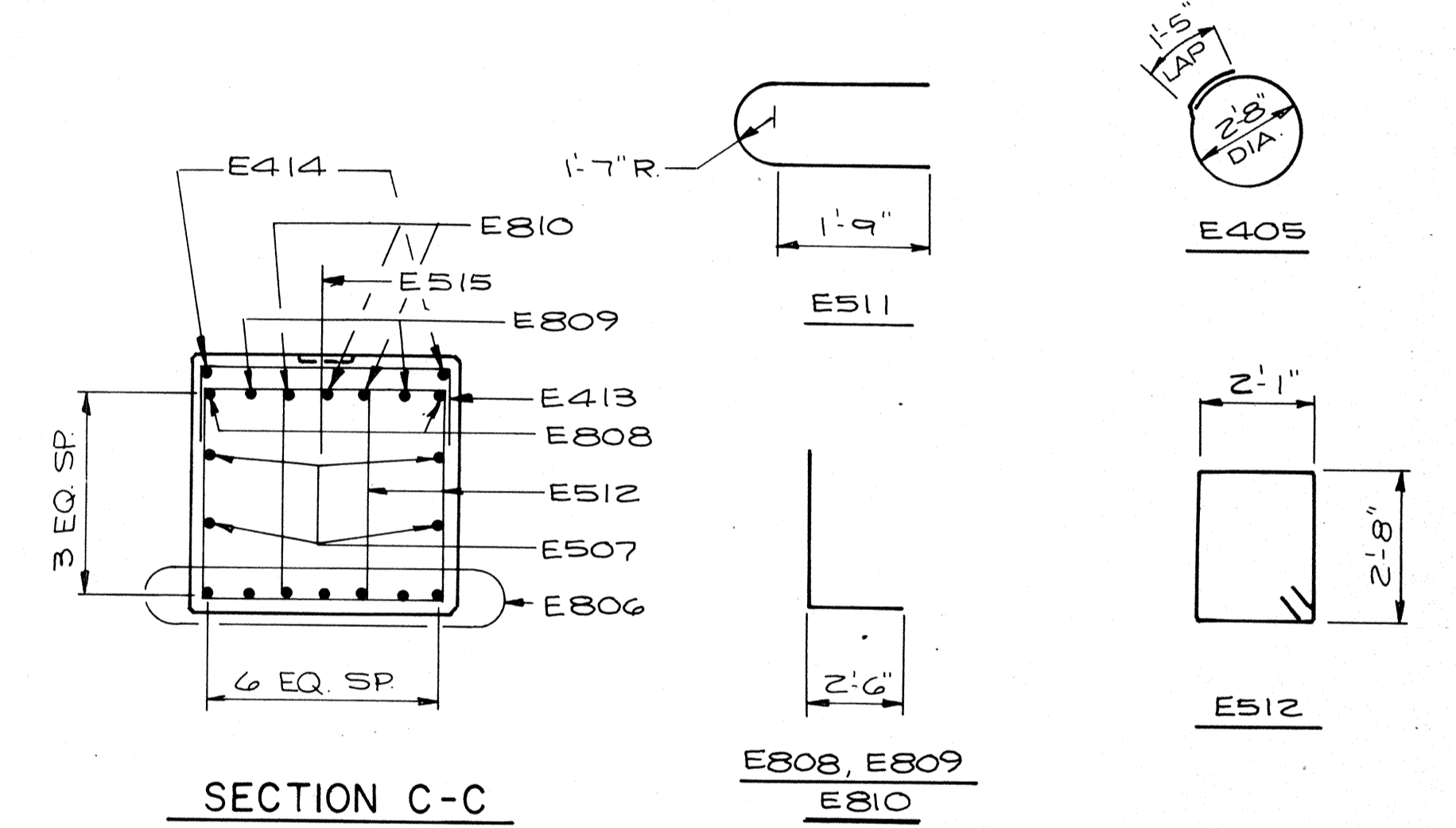
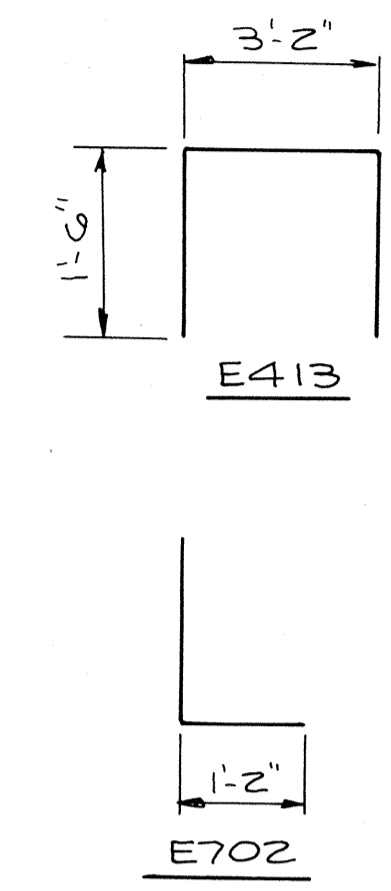
### ELEVATION (LOOKING EAST)



### PLAN

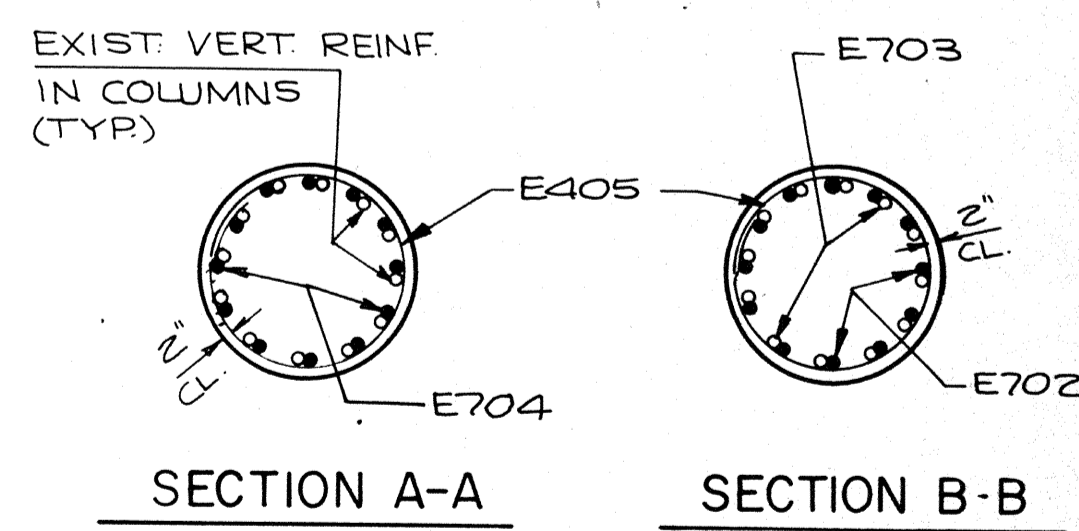


### PART CAP REINF. PLAN (TOP TRANS. ONLY)



### SECTION C-C

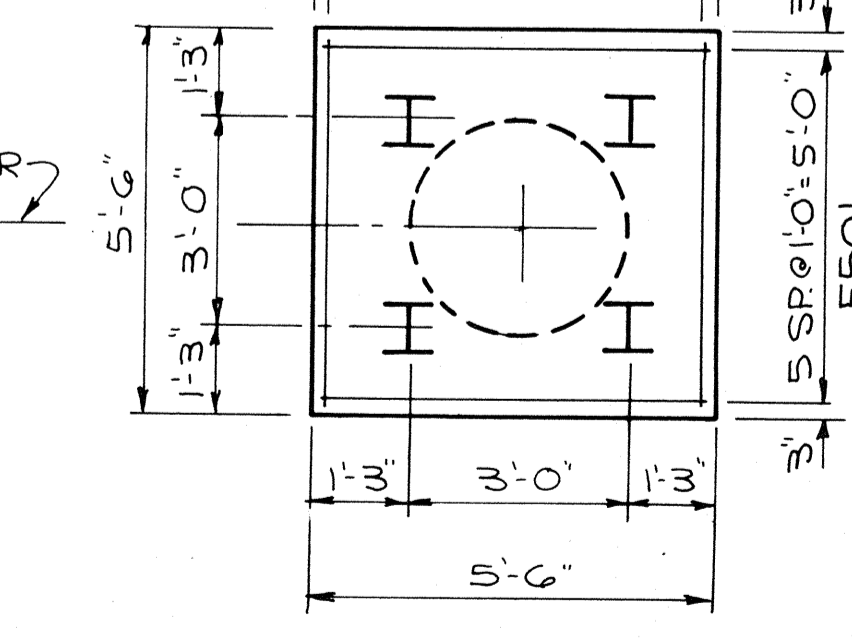
NOTE: ALL VERT. BARS IN COLUMNS ARE EQUALLY SPACED.



### SECTION A-A SECTION B-B

NOTE: PIER SUPPORTED ON HP10x42 STEEL PILES, DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE, EST. 10'-0" LONG.  
 NOTE: FOR PILE SPLICE DETAIL SEE SHT. 3.  
 NOTE: PILING SHALL BE PREBORED.

### NEW FOOTING PLAN - TYP.



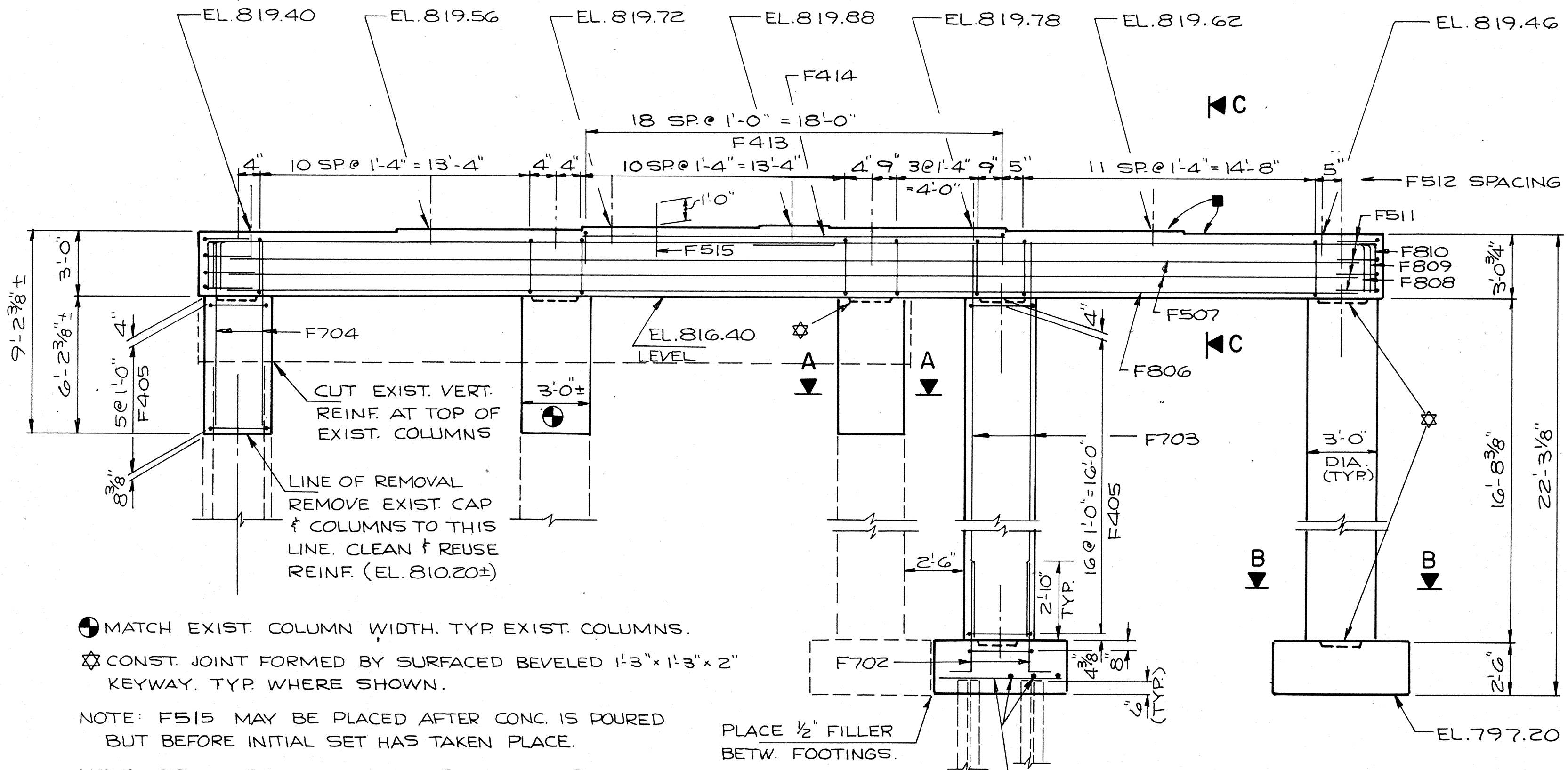
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec.	1981	Drawn By	NJA
		Plans Checked	DCM
PIER 2			SHEET 10 OF 20
<b>X82362</b>			

**BILL OF BARS**

THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.  
DIM'S IN BENDING DETAILS ARE OUT TO OUT OF BAR.

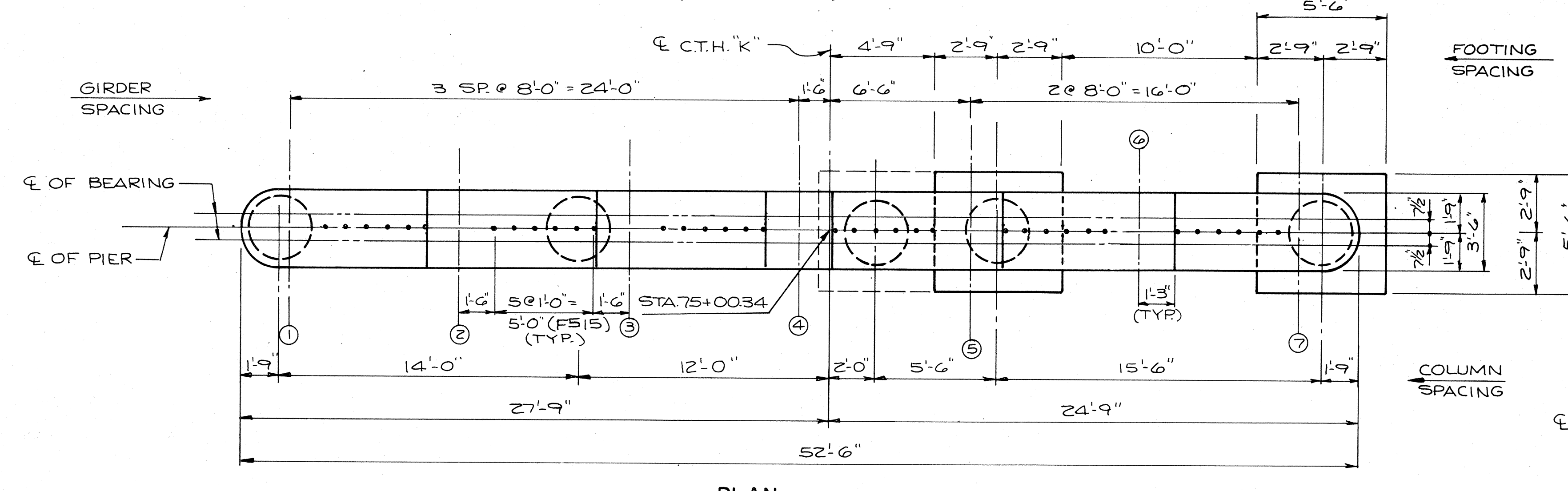
MARK	NO. REQ'D.	LENGTH	BENT	LOCATION
F501	24	5-0		FOOTING
F702	24	6-0	*	" DOWELS VERT.
F703	24	19-2		COLUMNS - NEW
F704	36	8-8		" - EXTENSION "
F405	54	9-9	*	" HOOPS
F806	7	49-0		CAP - BOTTOM HORIZ.
F507	4	49-0		" SIDES "
F808	2	30-0	*	" TOP "
F809	2	30-9	*	" " "
F810	3	31-6	*	" " "
F511	8	8-6	*	" ENDS "
F512	76	10-3	*	" DOUBLE STIRRUPS
F413	19	6-0	*	" TOP VERT.
F414	2	18-8		" " HORIZ.
** F515	36	2-0		" TOP VERT.

\*\* F515 SHALL BE EPOXY COATED.

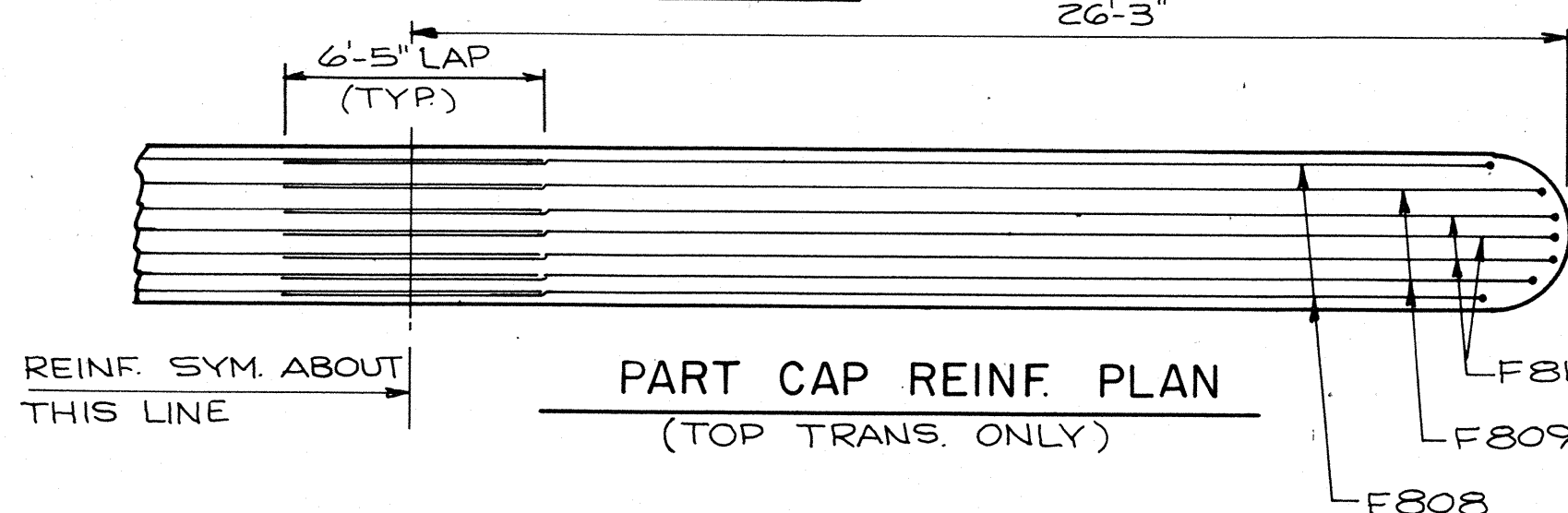


- ⊕ MATCH EXIST. COLUMN WIDTH. TYP EXIST. COLUMNS.
- ⊗ CONST. JOINT FORMED BY SURFACED BEVELED 1-3" x 1-3" x 2" KEYWAY. TYP WHERE SHOWN.
- NOTE: F515 MAY BE PLACED AFTER CONC. IS POURED BUT BEFORE INITIAL SET HAS TAKEN PLACE.
- NOTE: SPACE BOTTOM TRANS. REINF. IN CAP TO MISS VERT. REINF. IN COLUMNS.

**ELEVATION**  
(LOOKING EAST)



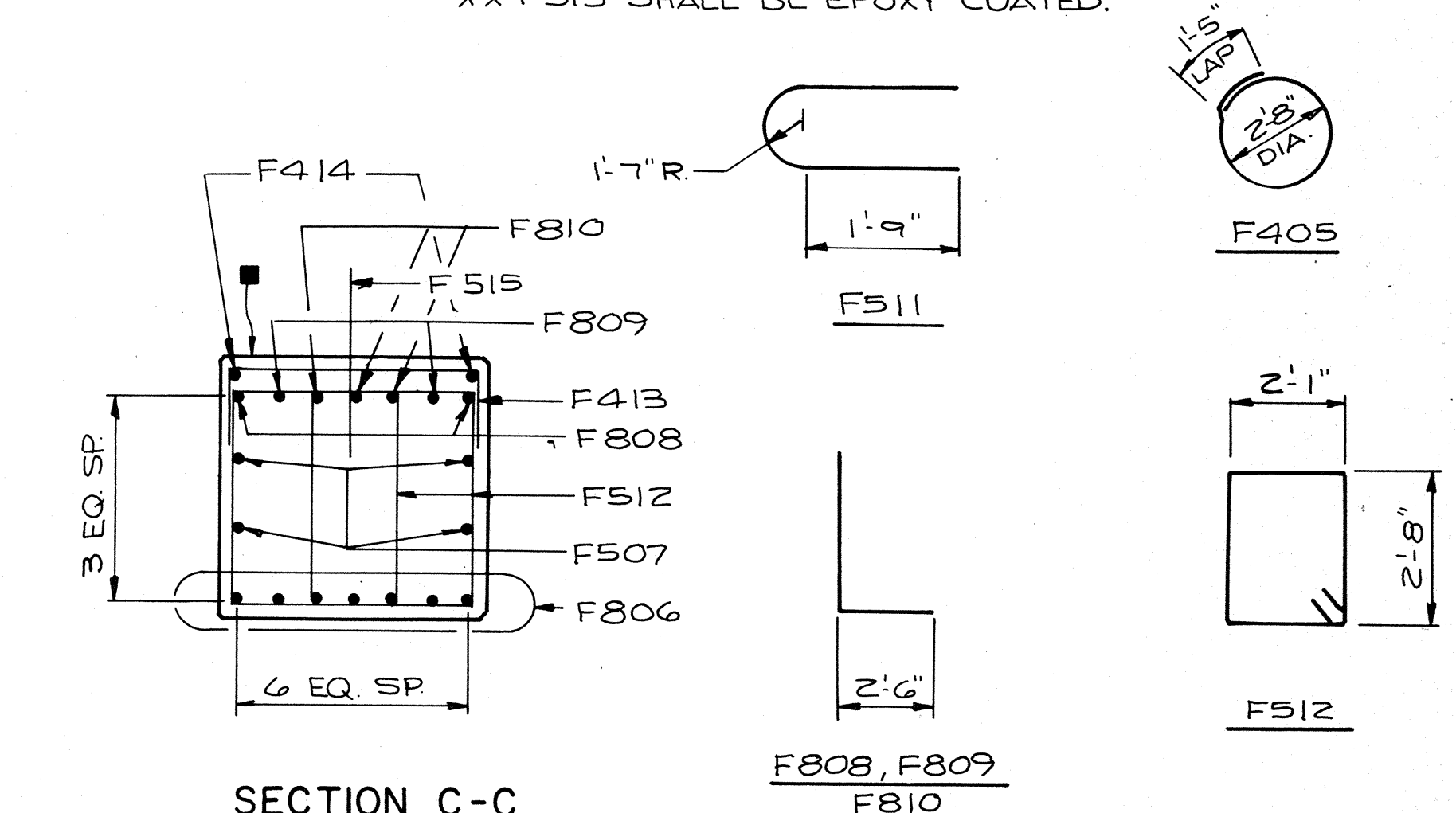
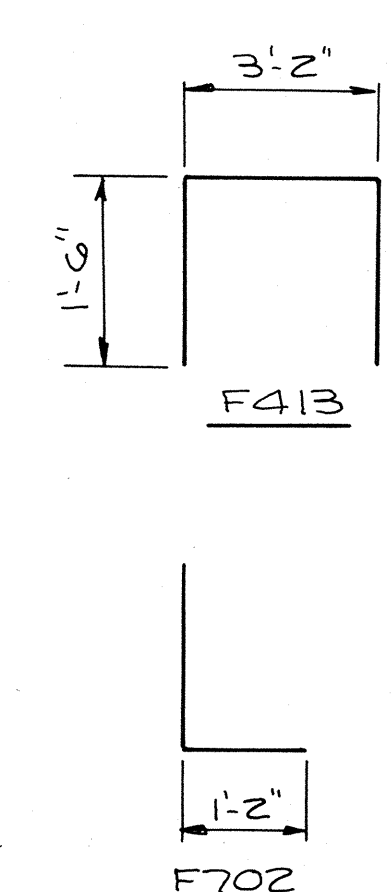
**PLAN**



**PART CAP REINF. PLAN**  
(TOP TRANS. ONLY)

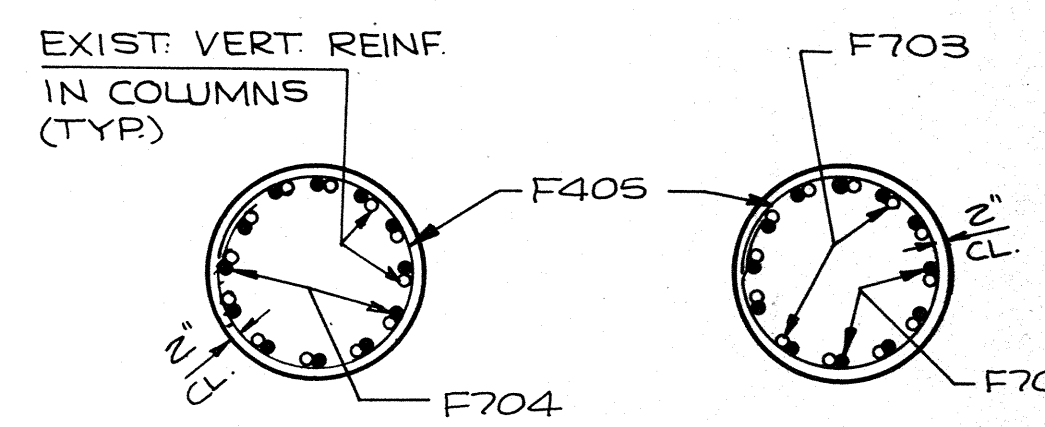
NOTE: PIER SUPPORTED ON HP10x42 STEEL PILES, DRIVEN TO A MIN. BRG. VALUE OF 55 TONS PER PILE, EST. 10'-0" LONG.  
NOTE: FOR PILE SPLICE DETAIL SEE SHT. 3.  
NOTE: PILING SHALL BE PREBORED.

**NEW FOOTING PLAN-TYP**



**SECTION C-C**

NOTE: ALL VERT. BARS IN COLUMNS ARE EQUALLY SPACED.



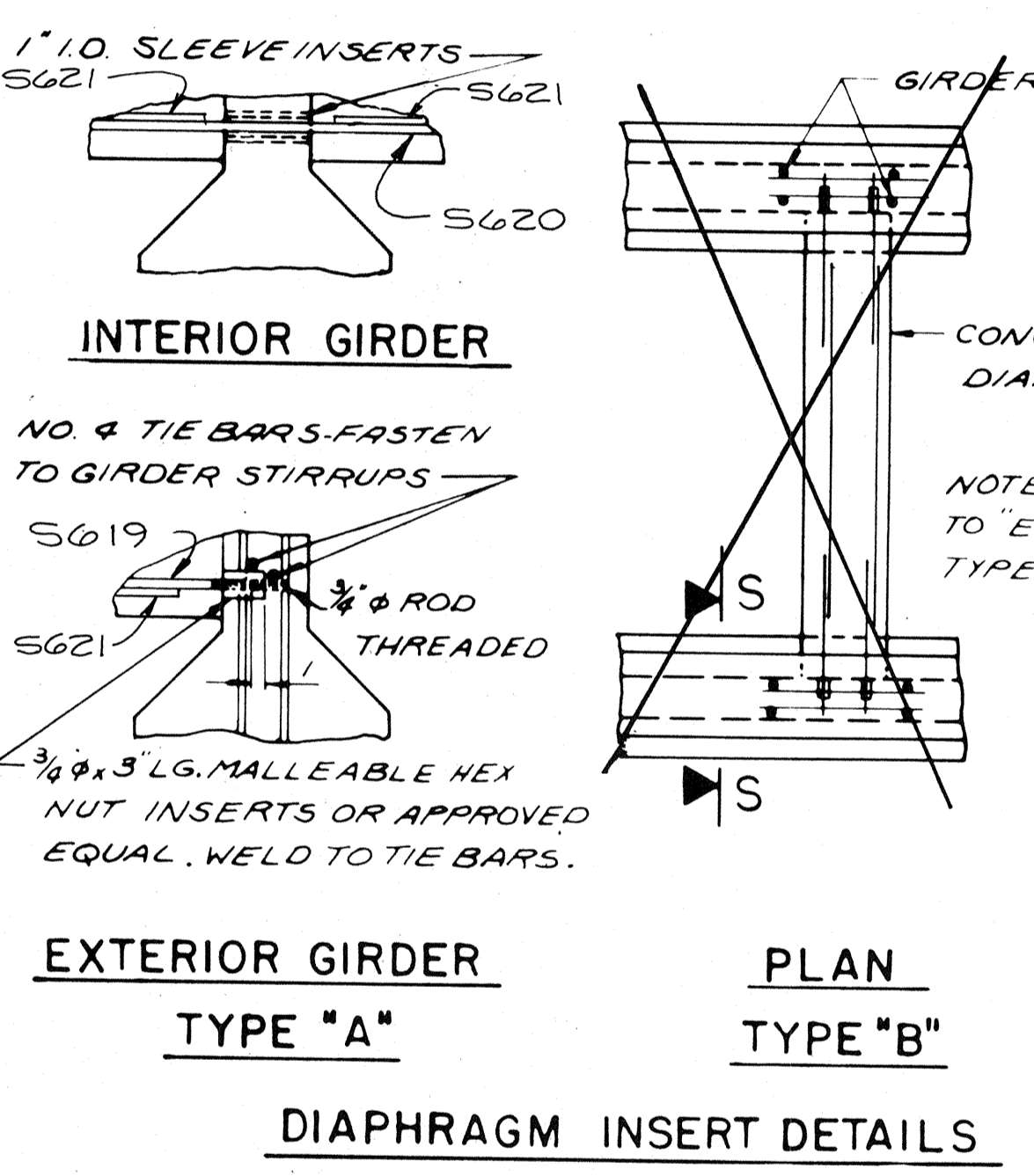
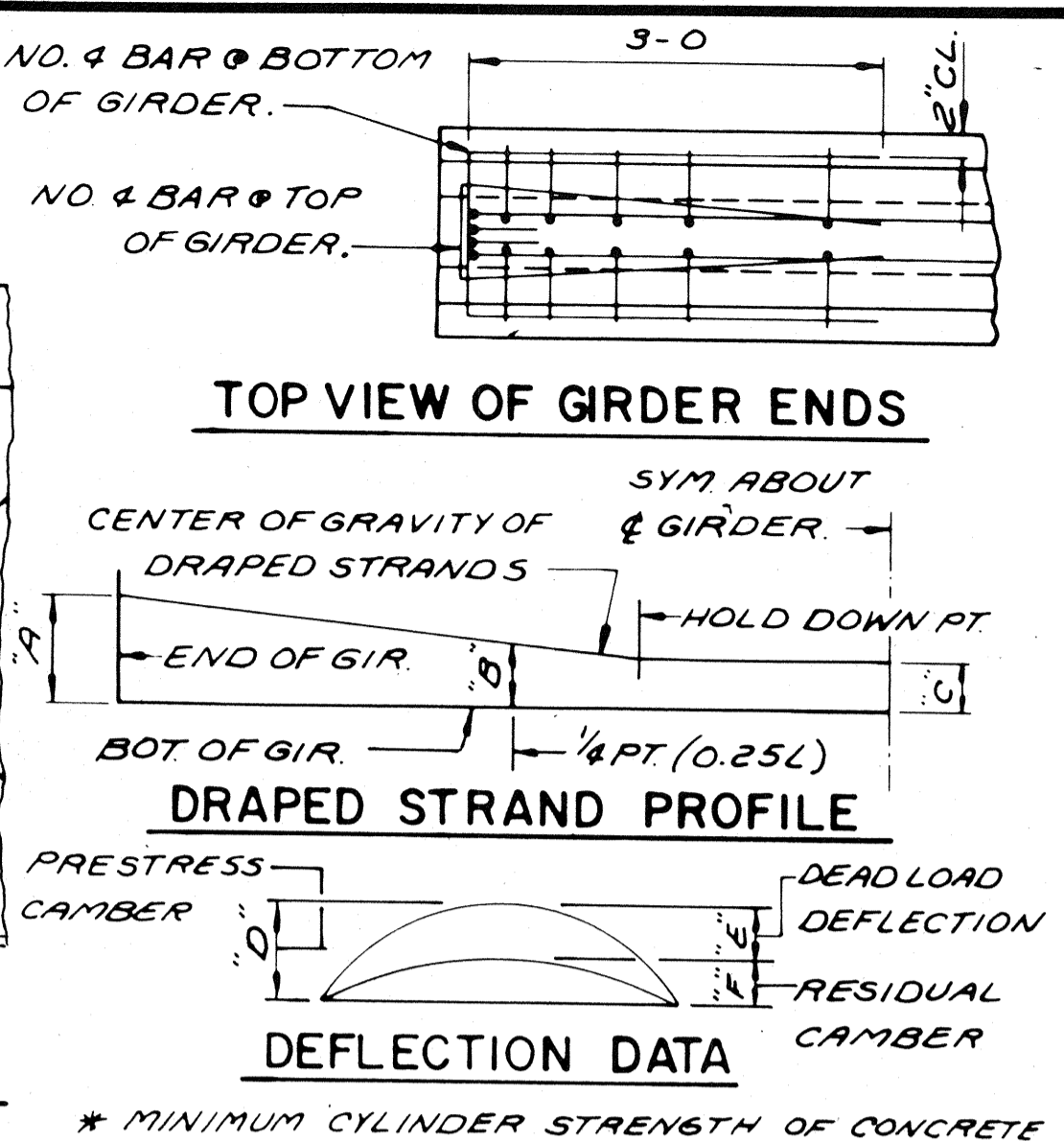
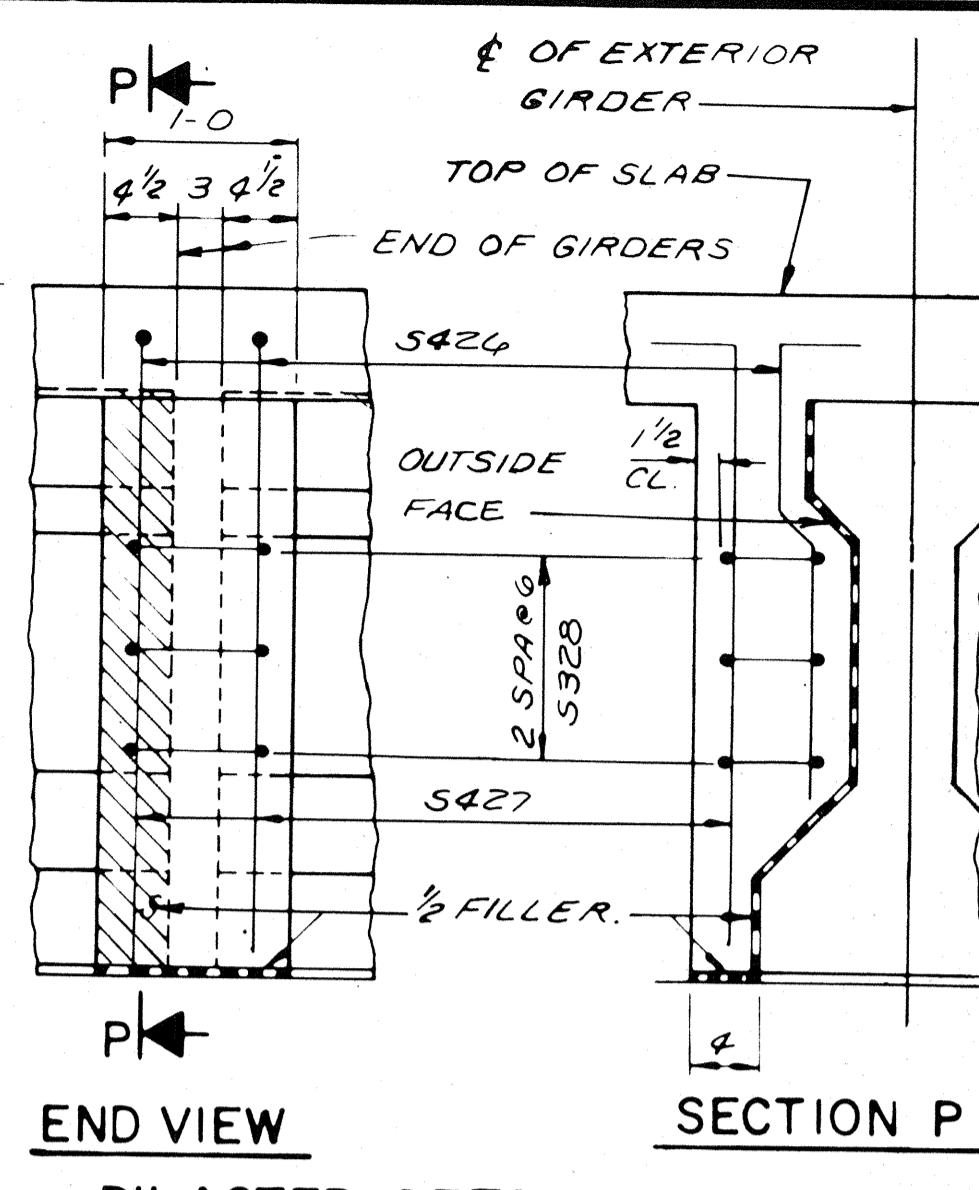
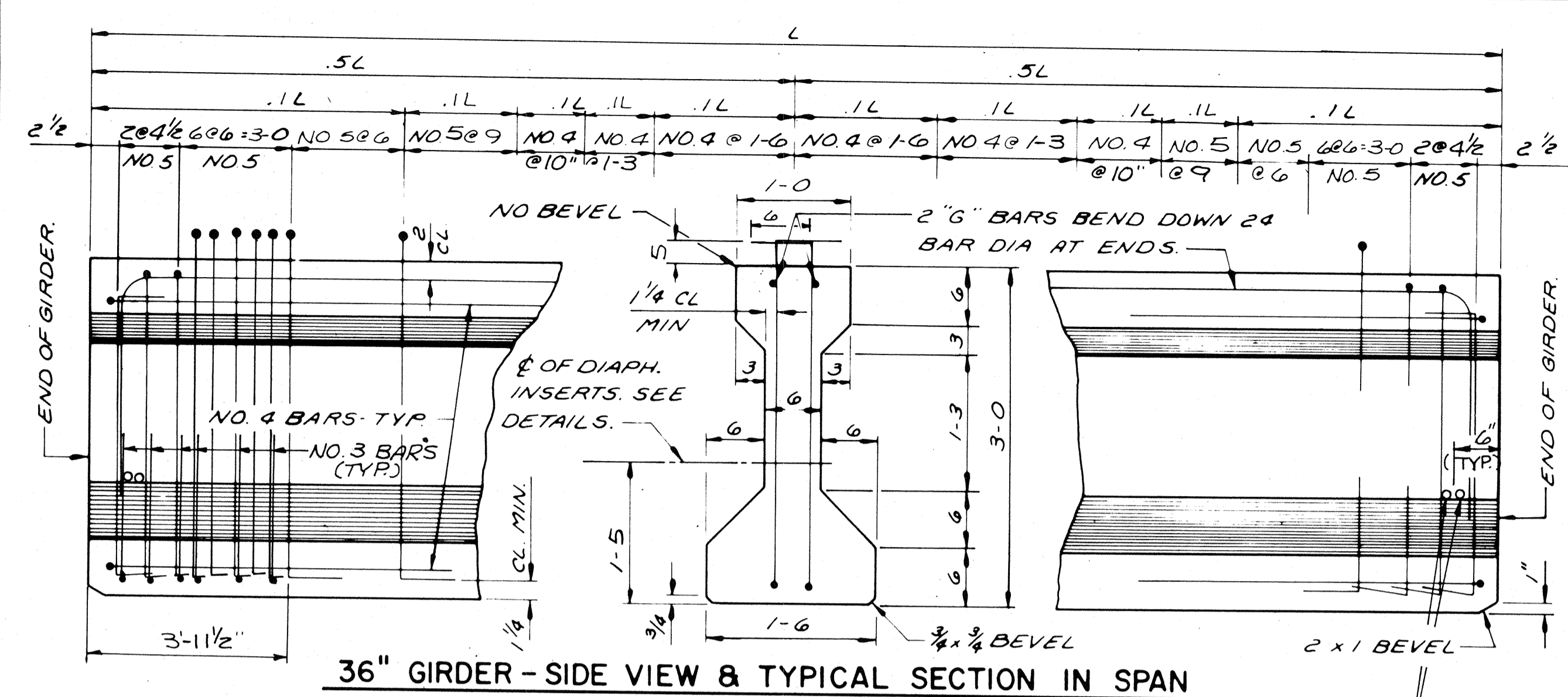
**SECTION A-A**      **SECTION B-B**

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
PIER 3			SHEET 11 OF 20 <b>X82362</b>

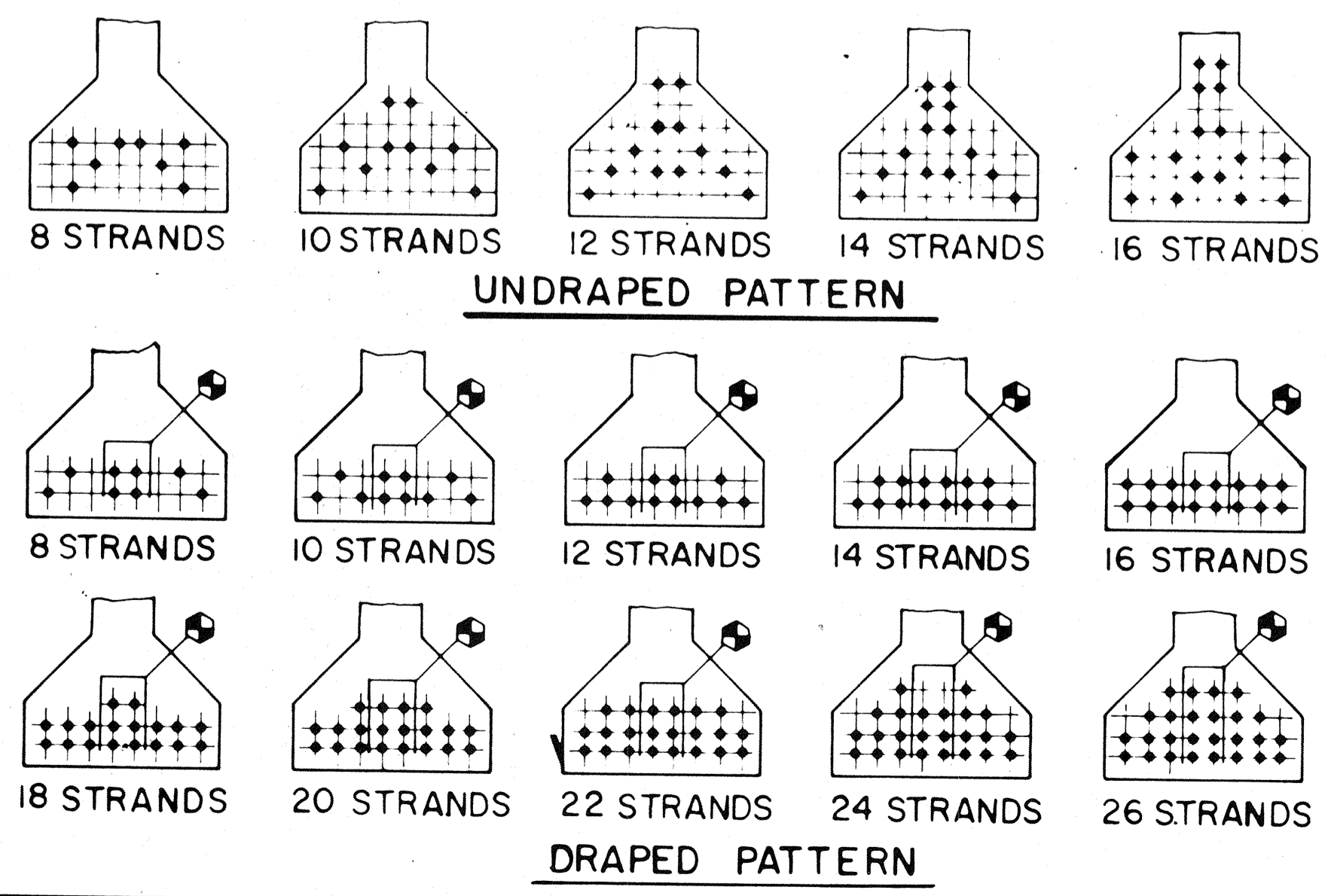
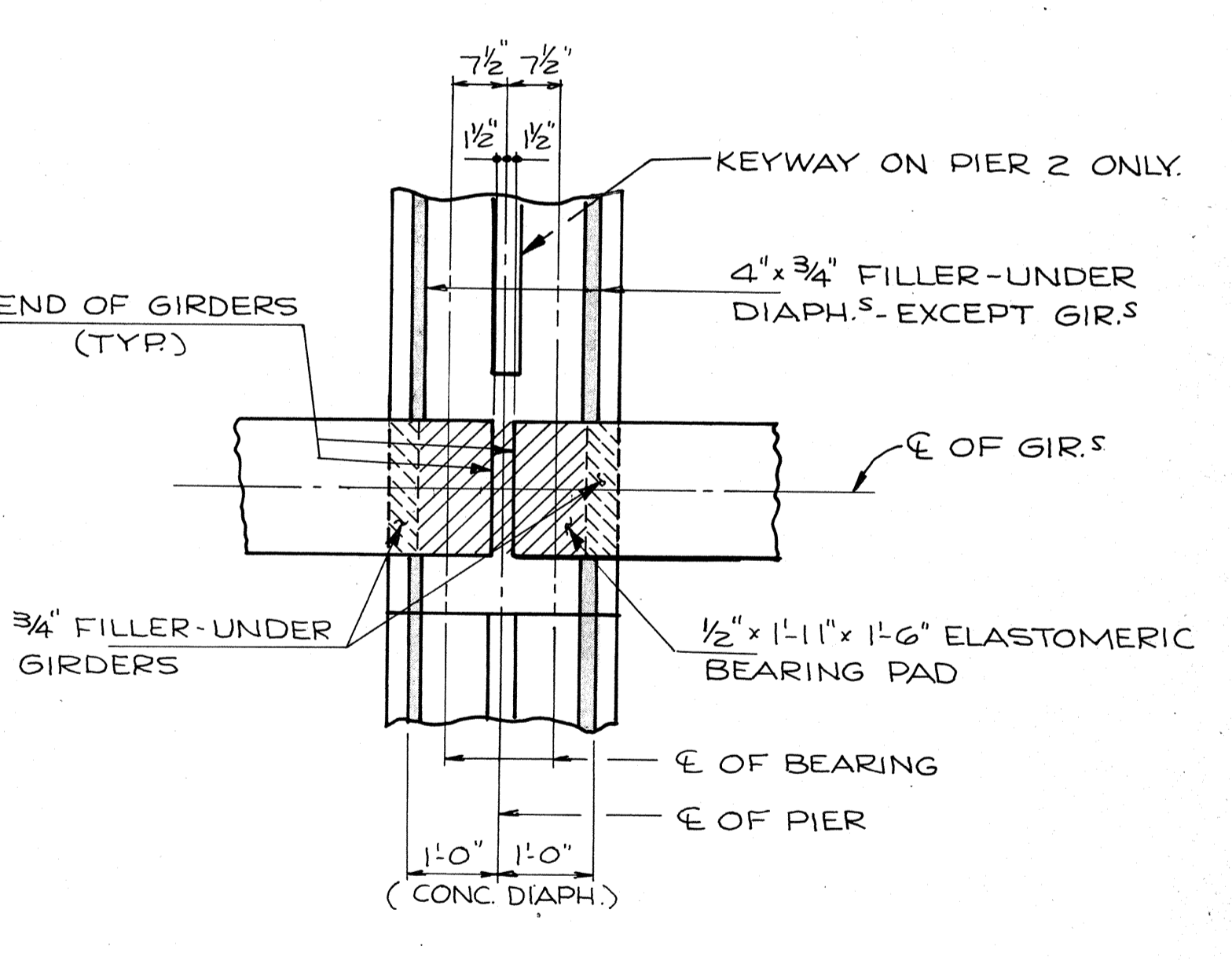
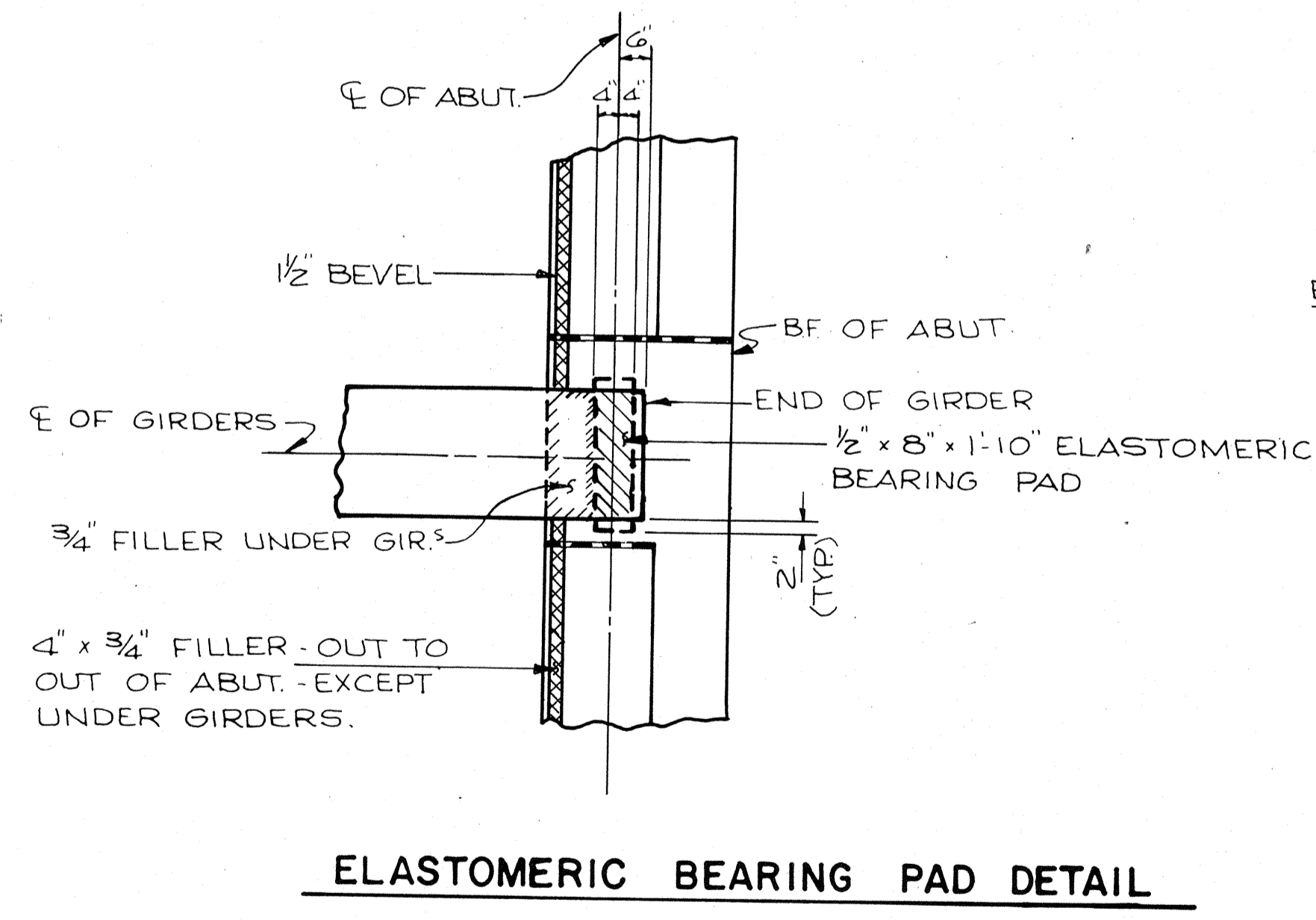


**NOTES**

TOP OF GIRDERS TO BE ROUGH FLOATED AND BROOMED TRANSVERSELY FOR BONDING TO SLAB. THE GIRDERS SHALL BE PROVIDED WITH A SUITABLE LIFTING DEVICE FOR HANDLING AND ERECTING THE GIRS. ALL GIRDERS SHALL BE CAST FULL LENGTH AS SHOWN. PRESTRESSING STRANDS SHALL BE 1/2" φ-7 WIRE STRANDS WITH AN ULTIMATE STRENGTH OF 270,000 PSI AND SHALL BE FLUSH WITH THE ENDS OF THE GIRDER. INSERTS SHALL BE PLACED ON 4" CENTERS SYMMETRICALLY ABOUT THE C.G. OF DIAPHRAGMS IN SPANS. ALL STIRRUPS SHALL BE IN PAIRS AND THE SPACING SHOWN IN "SIDE VIEW" IS MAXIMUM. THE LOCATION SHALL BE SHOWN IN THE SHOP DRAWINGS. BEND EACH END OF NO. 4 AND NO. 5 STIRRUPS 60° AND NO. 6 STIRRUPS 6 1/2°. ENDS OF STRANDS SHALL BE PAINTED WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER. (THIS APPLIES ONLY TO THOSE ENDS OF GIRDERS THAT ARE FINALLY EXPOSED.) BARS "G" MAY BE SPliced AT THE 1/3 POINTS OF GIRDER. USE LAP LENGTH SHOWN IN "GIRDER DATA". DEFLECTION DATA IS THEORETICAL AND MAY VARY WITH CONCRETE STRENGTH, VARIABLE PRESTRESS CONDITIONS AND PRESTRESS LOSSES. TROWEL FINISH EXTERIOR 2".

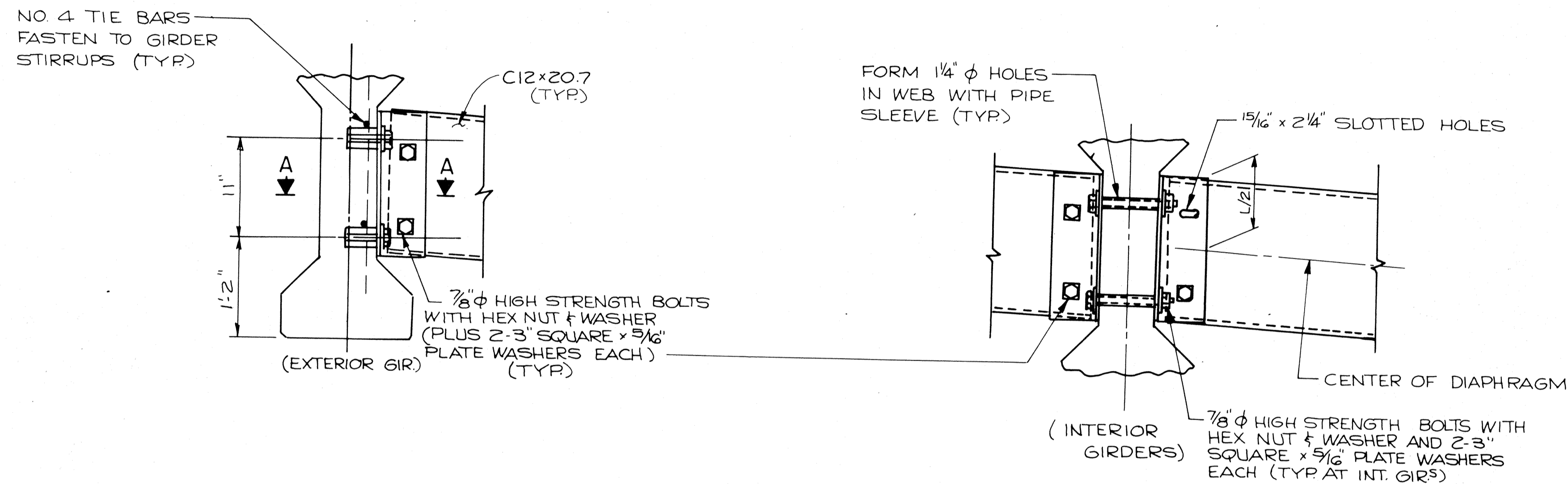


GIRDER DATA		DEFLECTION DATA (IN)			TYPE OF STRANDS	DRAPED STRANDS					UNDRAINED STRANDS				
SPAN	GIRDER LENGTH "L"	"D"	"E"	"F"		TOTAL NO OF STRANDS	f'ci * (PSI)	** "P"	"A" "B" "C" (INCHES) MIN MAX			TOTAL NO OF STRANDS	f'ci * (PSI)	** "P"	
1	34-4 1/2	1/4	1/8	1/8	LOW RELAXATION	8	4800	248	15	6	9	3	8	4800	248
2	59-9	1 1/2	3/4	3/4		18	4800	558	21	8 1/4	11 1/4	4			
3	59-9	1 1/2	3/4	3/4		18	4800	558	21	8 1/4	11 1/4	4			
4	34-4 1/2	1/4	1/8	1/8		8	4800	248	15	6	9	3	8	4800	248



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Sec.	1981	Drawn By	NJA
		Plans Checked	DCM
<b>36" PRESTRESSED GIRDER DETAILS</b>			SHEET 12 OF 20
			X82362

STATE PROJECT NUMBER	SHEET NO.
6473-01-71	



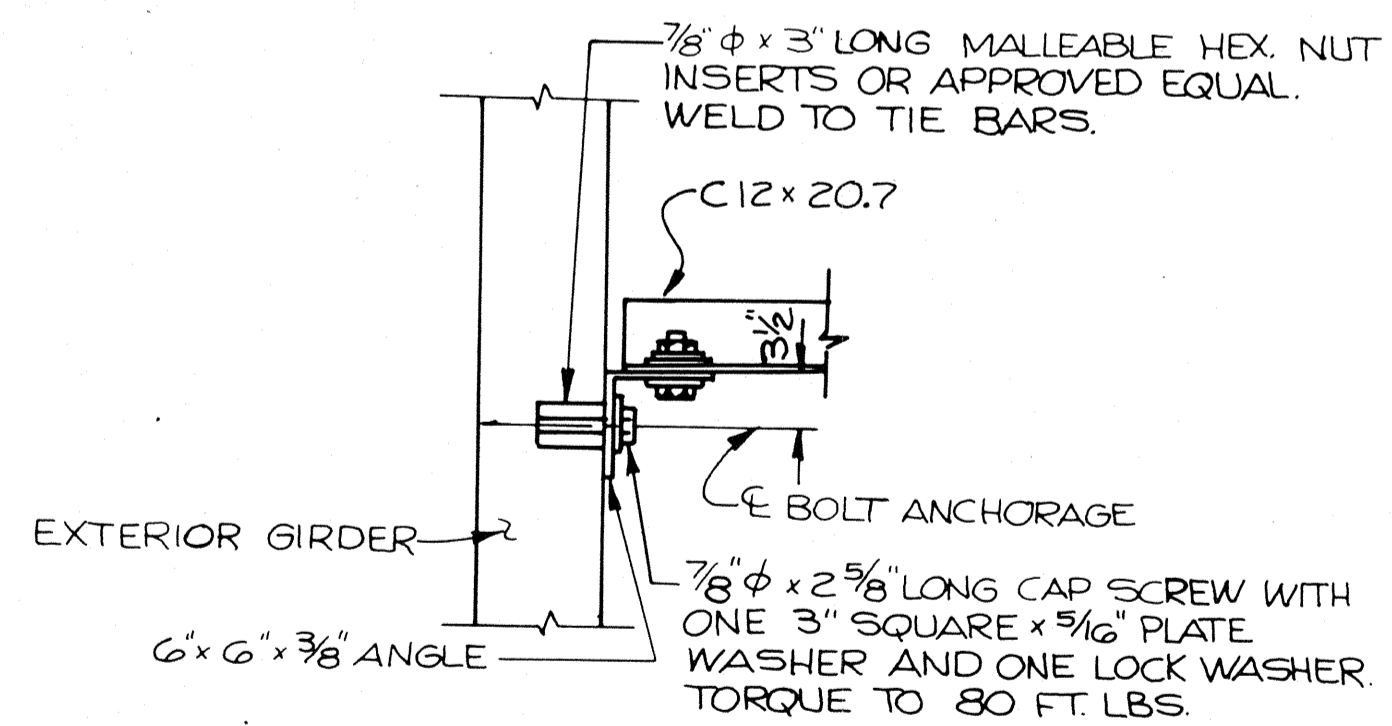
ELEVATION

NOTE: STEEL DIAPHRAGMS MAY BE USED IN LIEU OF CAST-IN-PLACE CONC. DIAPHRAGMS. PAYMENT IS BASED ON CAST-IN-PLACE CONC. DIAPHRAGMS.

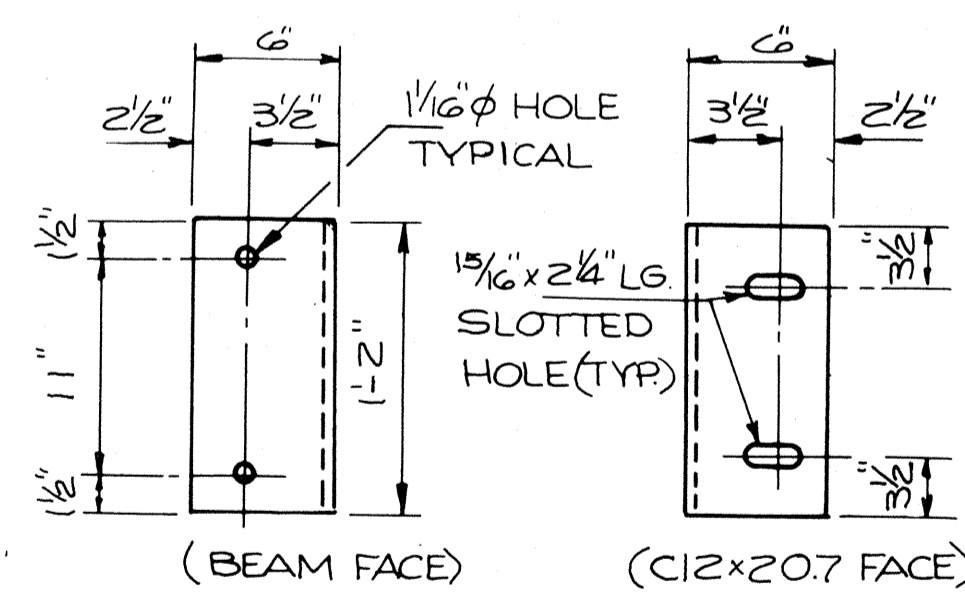
NOTE: C12x20.7 IS A36 STEEL. ALL BOLTS, NUTS & WASHERS ARE A325 TYPE 1 STEEL.

NOTE: ALL STEEL SHOWN SHALL BE HOT-DIPPED GALVANIZED. ALL BOLTS, NUTS & WASHERS SHALL BE HOT-DIPPED GALVANIZED PER ASTM A153 CLASS C. NUTS SHALL BE TAPPED OVERSIZE AS PER ASTM A563 AND MEET THE REQUIREMENTS OF S1 OF ASTM A563, LUBRICANT AND TEST FOR COATED NUTS.

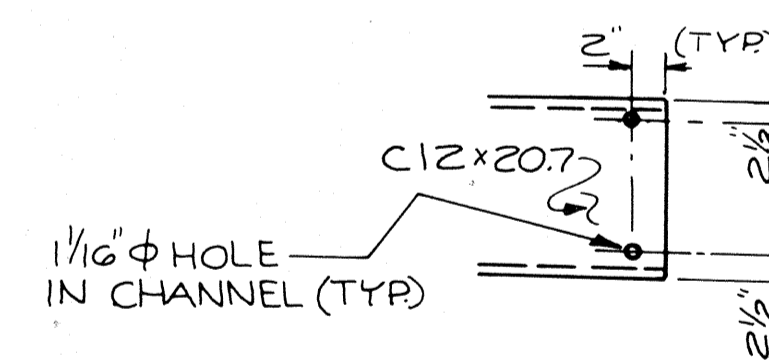
NOTE: IF STEEL DIAPHRAGMS ARE USED, UTILITY SHALL MODIFY SUSPENSION SYSTEM TO MISS DIAPHRAGMS.



SECTION A-A

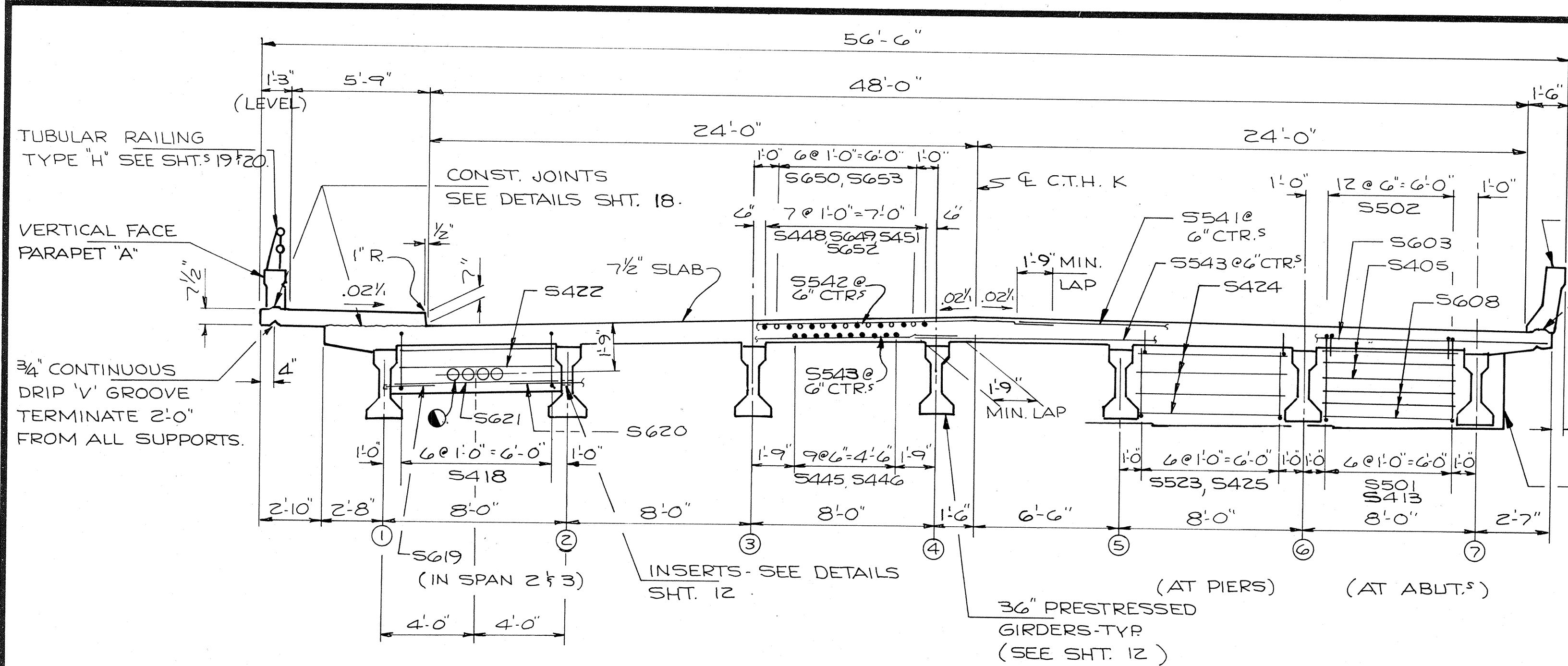


6 x 6 ANGLE DETAILS

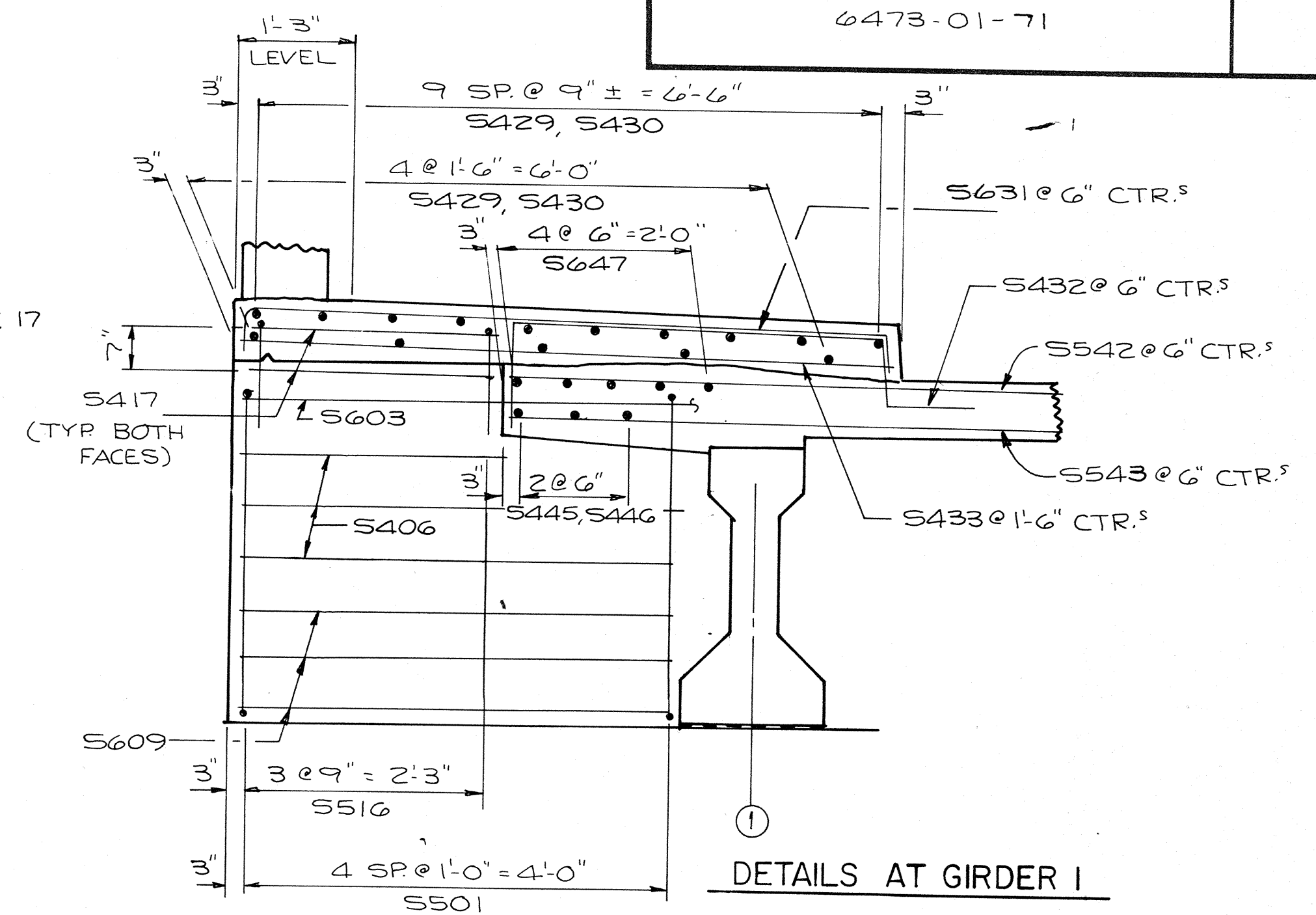


CHANNEL DETAILS

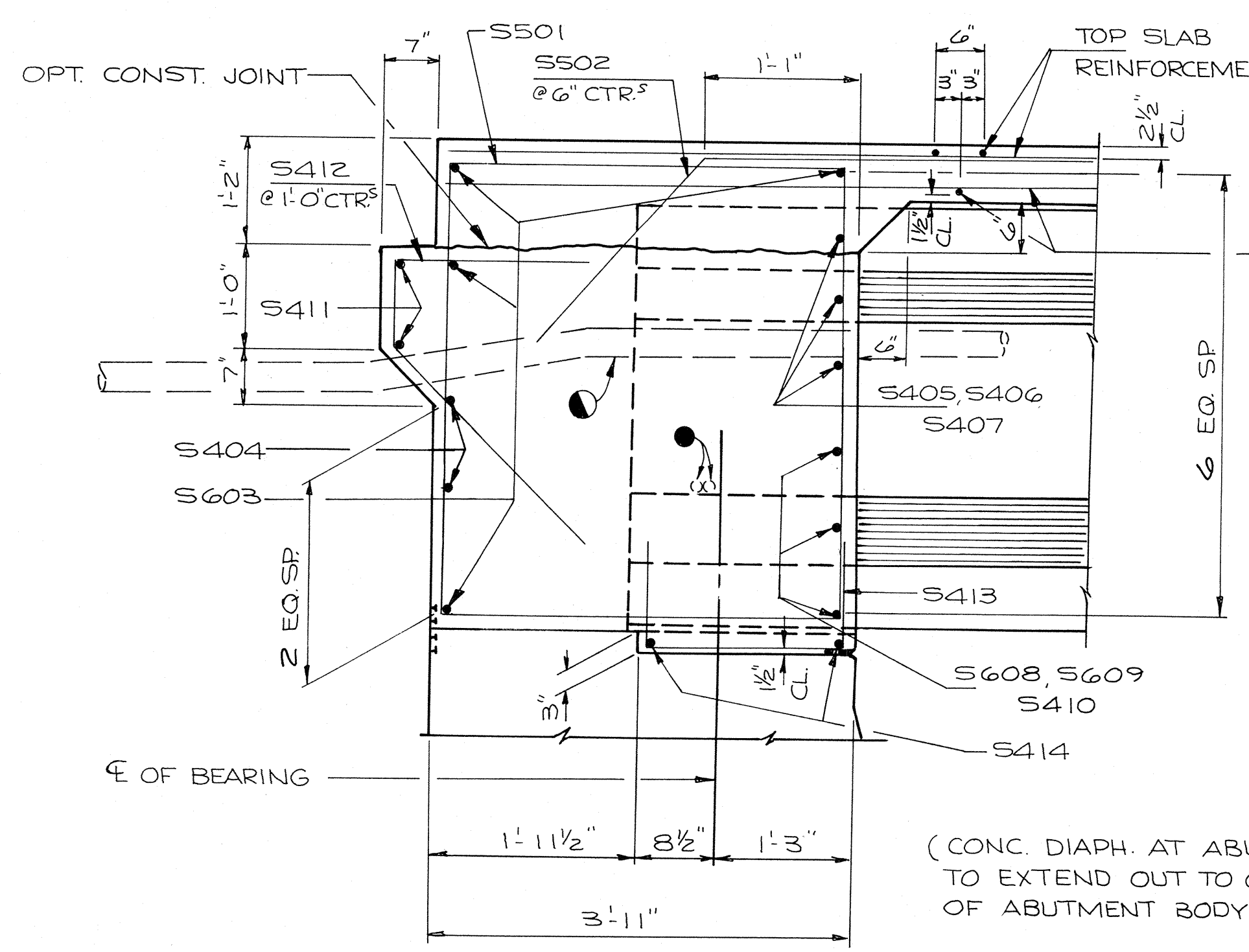
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
ALTERNATE STEEL DIAPHRAGMS		SHEET 13 OF 20	
		<b>X 82362</b>	



CROSS SECTION THRU ROADWAY LOOKING EAST

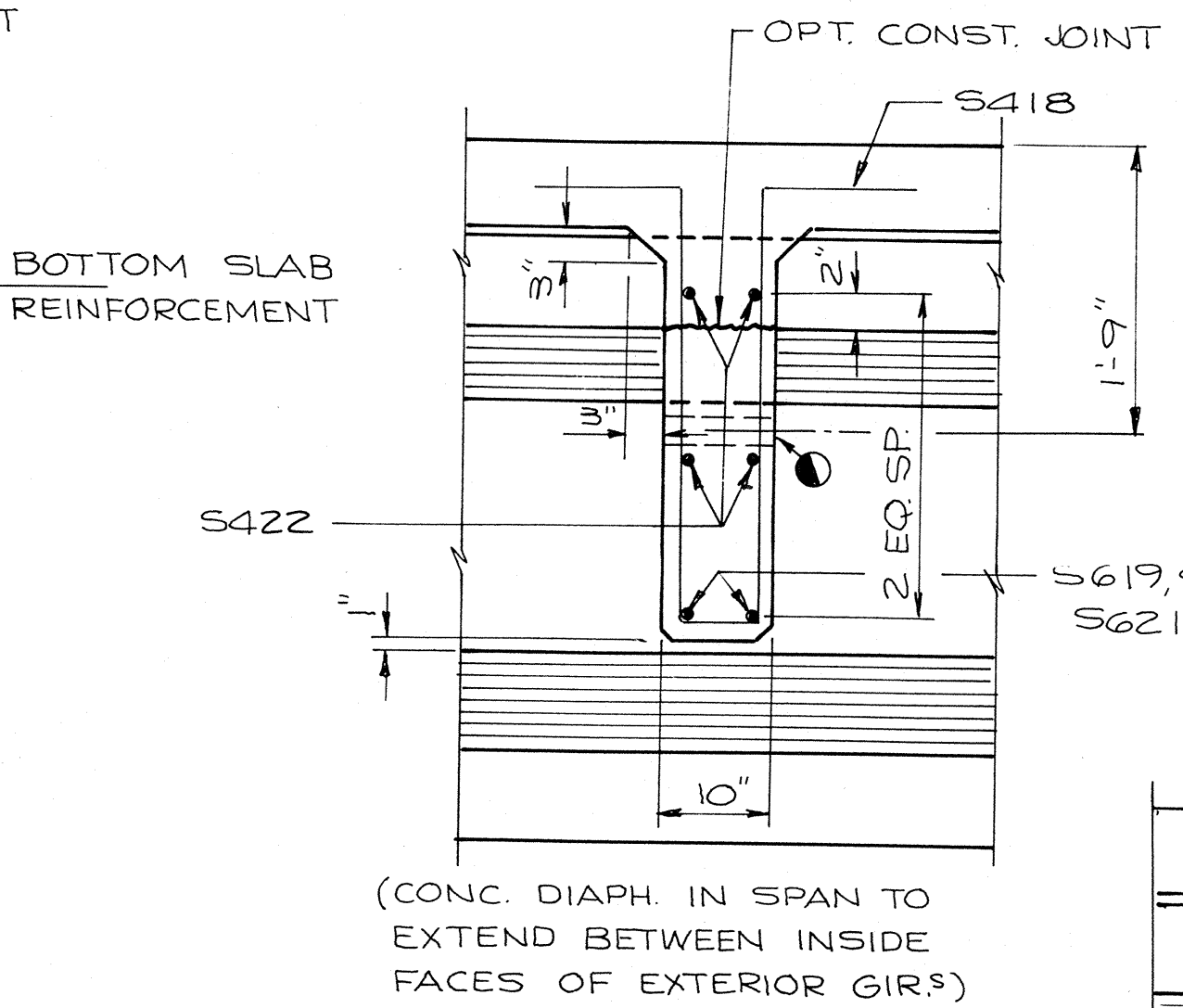


DETAILS AT GIRDER 1

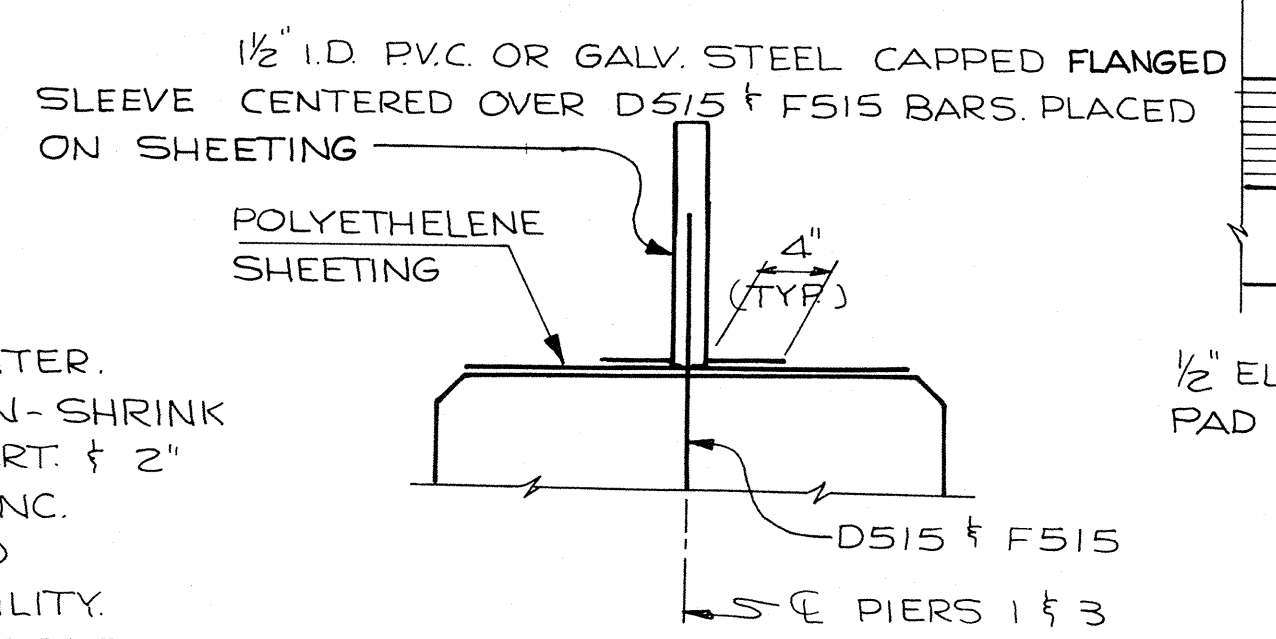


DIAPH. AT ABUTMENTS

- PLACE S515 BARS IN IN 1/2" DIA. HOLES IN GIRDER WEB SYM. ABOUT  $\bar{C}$  OF GIRDS (AS POSSIBLE AT EXTERIOR GIRDS)
- 4"-6" DIA. GALVANIZED STEEL SLEEVES. PLACE AS SHOWN HERE AND ON SHTS 1 & 2. PLACE AT 8" CENTER TO CENTER. AFTER PLACING CONDUIT FILL REMAINING VOID WITH NON-SHRINK GROUT. DISPLACE BAR STEEL TO CLEAR SLEEVES BY 1" VERT. & 2" HORIZ. BRUSH WITH BONDING AGENT BEFORE PLACING CONC. CONDUIT TO SLIDE FREELY. EXPANSION JOINTS REQUIRED BOTH SIDES OF ABUT. DIAPHS. SLEEVES SUPPLIED BY UTILITY. NOTE: 1/2" I.D. SLEEVES SHALL BE TIED TO DIAPH REINF TO INSURE STABILITY & LOCATION DURING CONCRETE POUR, AS APPROVED BY THE ENGINEER. (COST IS INCIDENTAL TO CONCRETE MASONRY.)

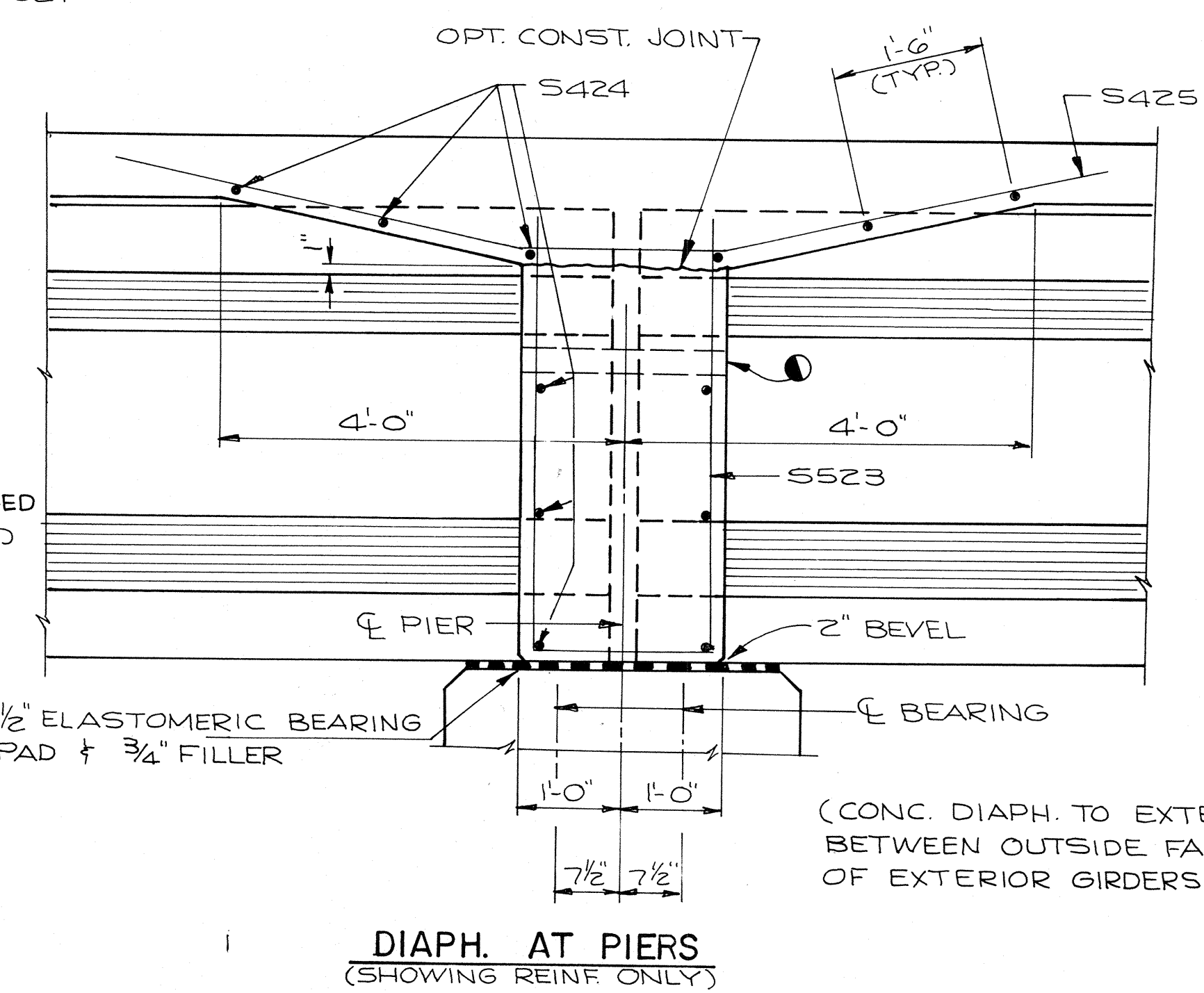


DIAPH. IN SPANS 2 & 3

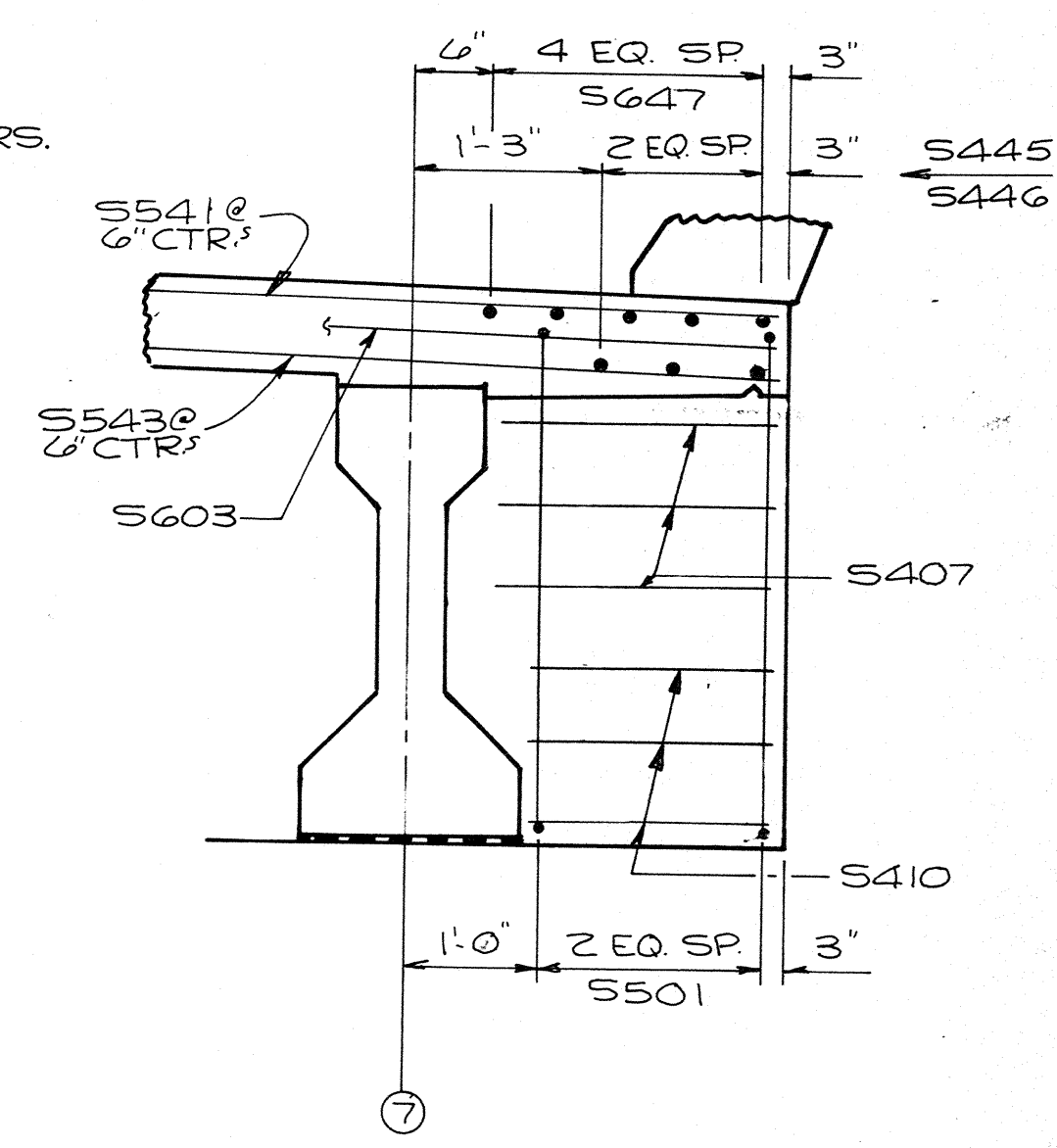


SLEEVES AT PIERS 1 & 3

NOTE: BOTTOM TRANS. BARS IN SLAB SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS ON OR ADJACENT TO EACH GIRDER AND BY INDIVIDUAL BAR CHAIRS AT 3'-0" CTR. AT APPROX. 1/3 POINTS BETWEEN GIRDERS.  
NOTE: TOP LONGITUDINAL BARS SHALL BE SUPPORTED BY CONTINUOUS BAR CHAIRS AT APPROXIMATELY 4'-0" CTR.  
NOTE: CORBEL TO EXTEND FULL WIDTH OF ROADWAY ONLY.



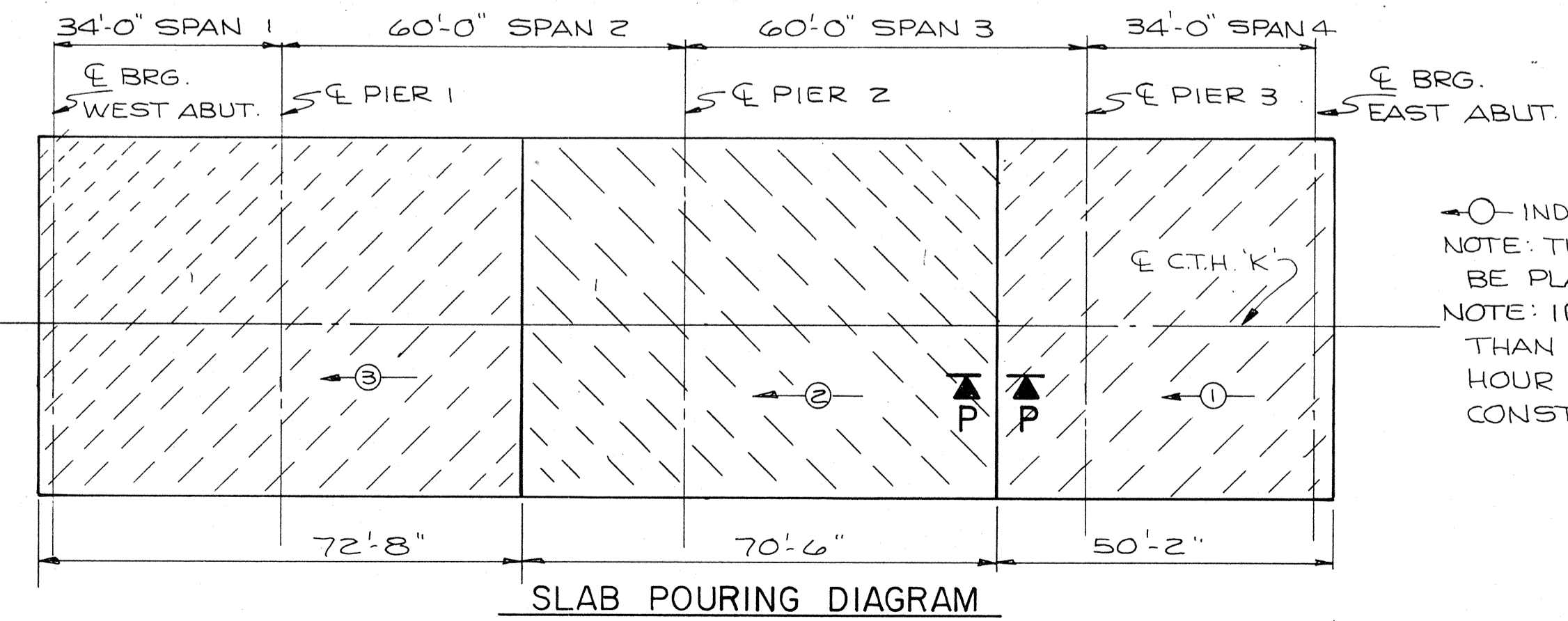
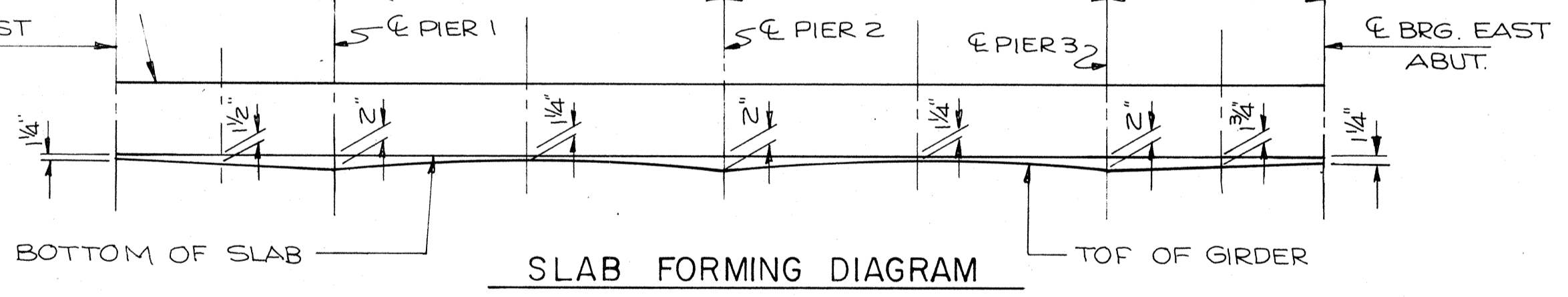
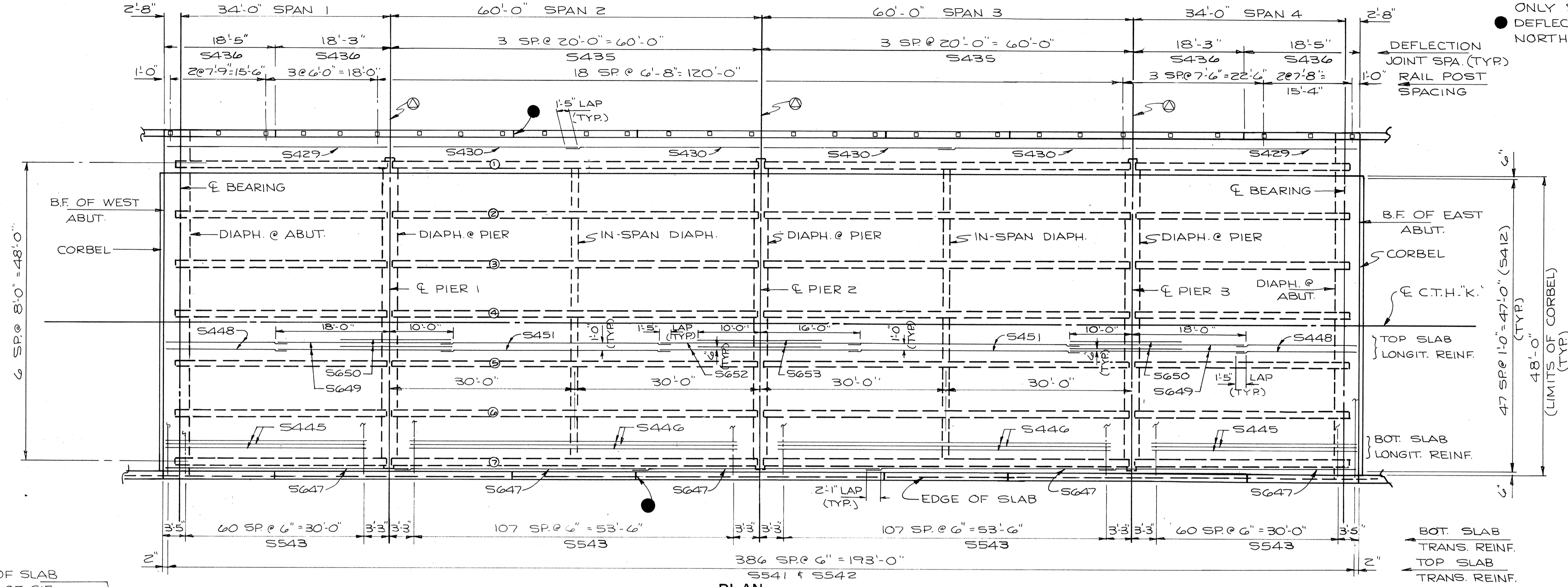
DIAPH. AT PIERS (SHOWING REIN. ONLY)



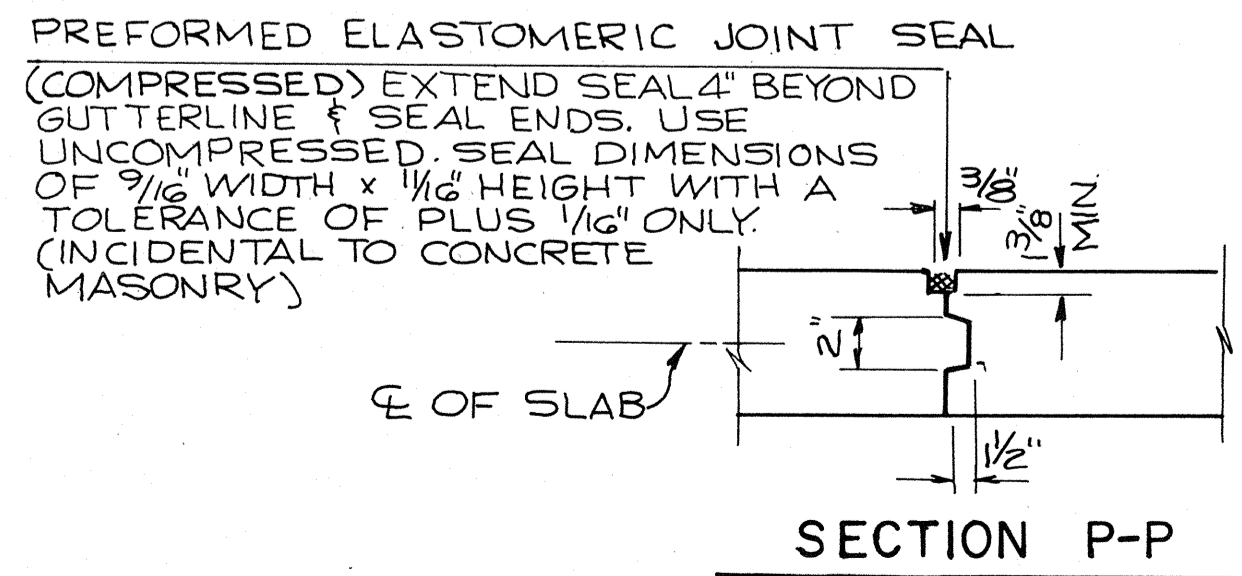
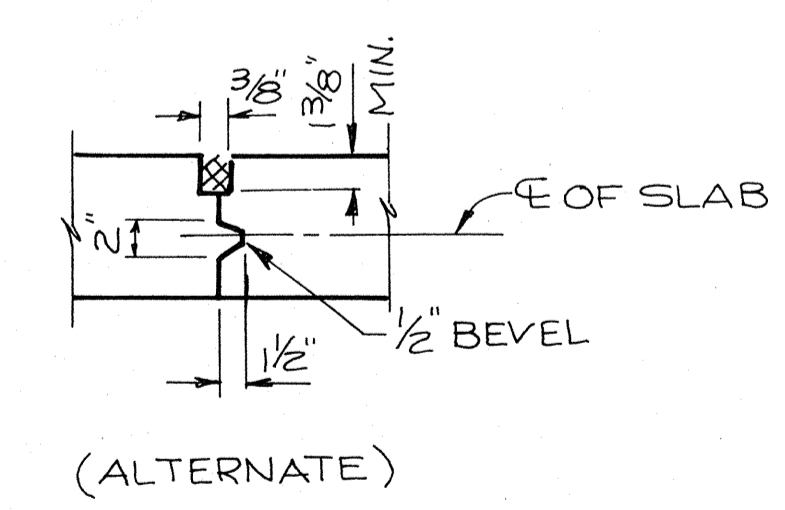
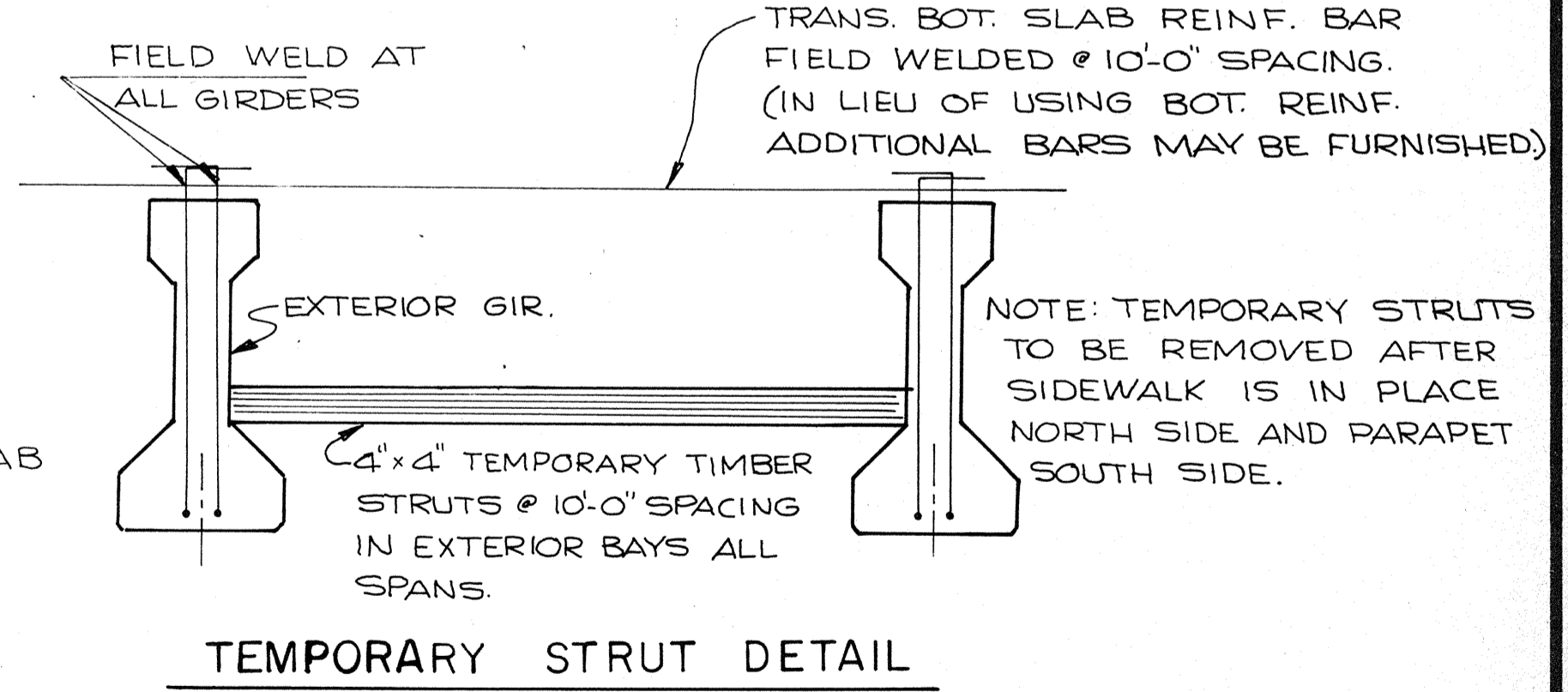
DETAILS AT GIRDER 7

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec.	1981	Drawn By	NJA
		Plans Checked	DCM
SUPERSTRUCTURE			SHEET 14 OF 20
X82362			

⊙ DEFLECTION JOINT IN PARAPET AND SIDEWALK NORTH SIDE AND PARAPET ONLY SOUTH SIDE.  
● DEFLECTION JOINT IN PARAPET ONLY NORTH & SOUTH SIDES.



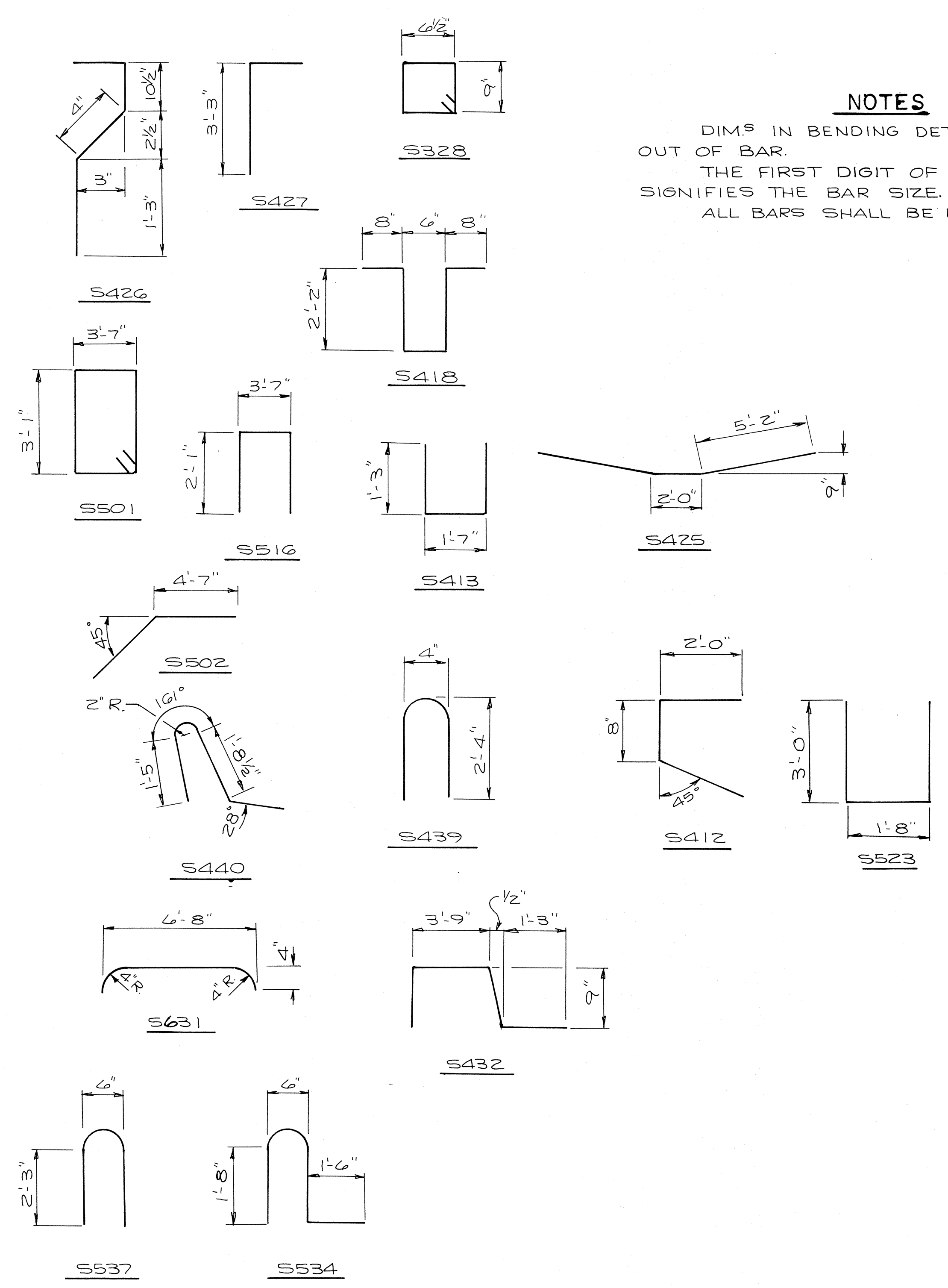
⊙ INDICATES POUR NO. & DIRECTION.  
NOTE: TWO ALTERNATE POURS MAY BE PLACED ON THE SAME DAY.  
NOTE: IF A POUR RATE GREATER THAN 0.6 SPAN LENGTH PER HOUR IS MAINTAINED, TRANS. CONST. JOINTS MAY BE OMITTED.



No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
SUPERSTRUCTURE			SHEET 15 OF 20
			X82362

**BILL OF BARS**

MARK	NO. REQ'D.	LENGTH	B <sub>E</sub> , N <sub>+</sub>	CUT DIAG.	LOCATION	
S501	100	13-11	*		DIAPH. @ ABUT. <sup>s</sup>	VERT.
S502	156	7-5	*		"	"
S603	8	56-0			"	HORIZ.
S404	4	56-0			"	"
S405	36	6-8			"	"
S406	6	4-7			" @ WINGS 1 f 4	"
S407	6	1-9			" @ " 2 f 3	"
S608	36	6-2			"	"
S609	6	4-4			" @ WINGS 1 f 4	"
S410	6	1-6			" @ WINGS 2 f 3	"
S411	4	47-8			CORBEL	"
S412	96	5-4	*		"	VERT.
S413	84	3-11	*		DIAPH. @ ABUT. <sup>s</sup> BETW SEATS	"
S414	24	5-0			"	HORIZ.
S515	28	6-0			GIRDER ENDS @ ABUT. <sup>s</sup>	"
S516	8	7-6	*		DIAPH. @ ABUT. <sup>s</sup> @ WINGS 1 f 4	VERT.
S417	8	2-6			" @ " @ " @ " @ " @ "	HORIZ.
S418	84	5-10	*		IN-SPAN 2 f 3 DIAPH.	VERT.
S619	8	3-0			"	HORIZ.
S620	20	6-0			"	"
S621	24	7-2			"	"
S422	48	6-8			"	"
S523	126	7-5	*		DIAPH. @ PIER	VERT.
S424	216	6-2			"	HORIZ.
S425	126	12-4	*		"	"
S426	12	2-10	*		PILASTER @ PIERS	VERT.
S427	12	3-7	*		"	"
S328	18	3-1	*		"	HORIZ.
S429	30	36-3			SIDEWALK	LONGIT.
S430	60	30-7			"	"
S631	388	7-1	*		"	TRANS.
S432	388	6-3	*		"	"
S433	130	6-6			"	"
S534	194	5-4	*		VERT. FACE PARAPET	VERT.
S535	54	19-8			" f SLOPED f	LONGIT.
S536	36	17-11			" f " "	"
S537	26	5-3	*		" FACE "	VERT.
S438	8	8-6			" " "	LONGIT.
S439	258	4-10	*		SLOPED FACE PARAPET	VERT.
S440	258	4-3	*		" " "	"
S541	387	23-4			SLAB TOP	TRANS.
S542	387	31-5			"	"
S543	676	27-4			" BOT.	"
S445	132	33-9			"	LONGIT.
S446	132	54-6			"	"
S647	50	40-4			" TOP	"
S448	96	20-0			"	"
S649	96	28-0			"	"
S650	84	18-0			"	"
S451	96	36-10			"	"
S652	48	32-0			"	"
S653	42	20-0			"	"

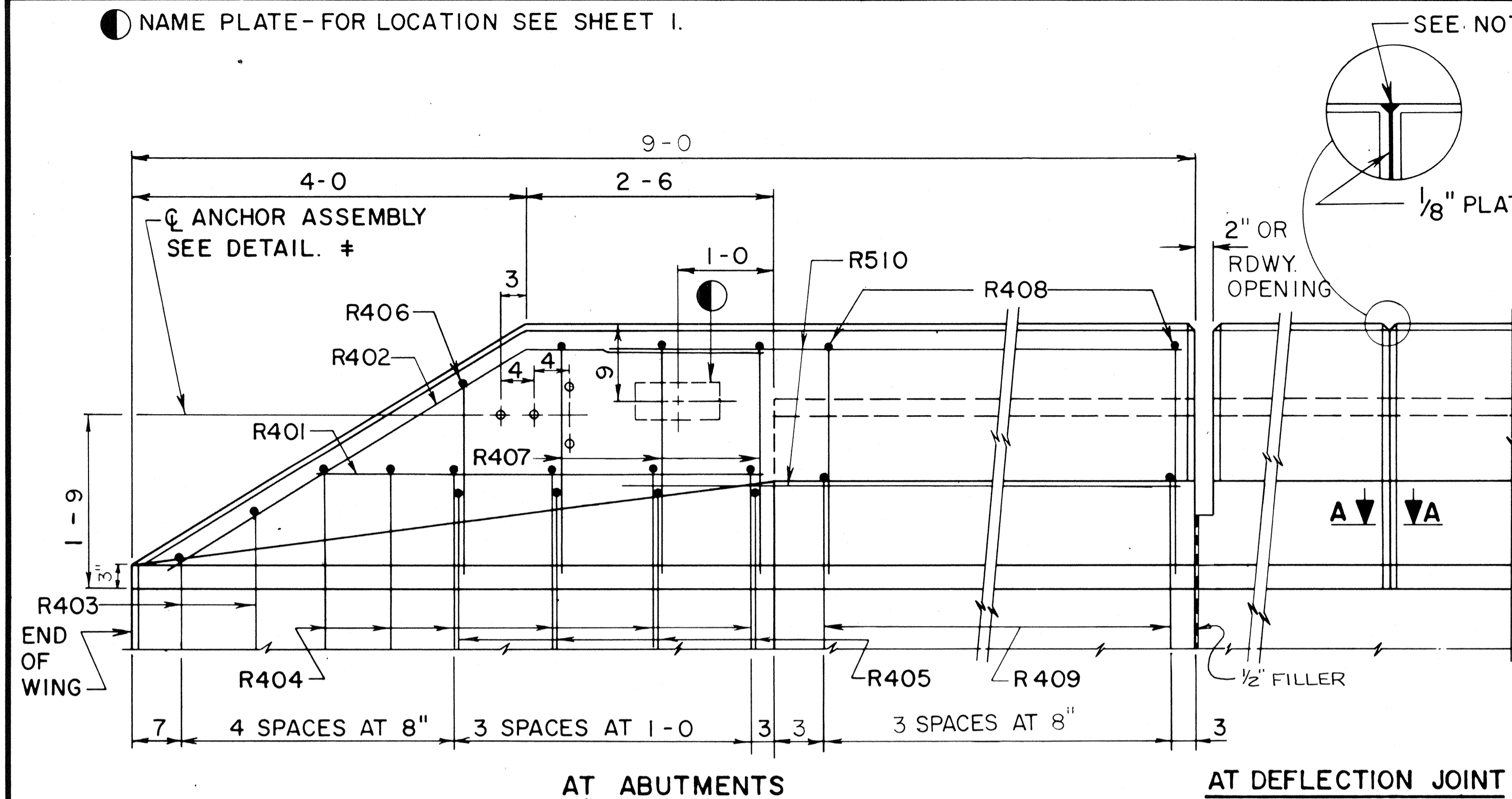


**NOTES**  
 DIMS IN BENDING DETAILS ARE OUT TO OUT OF BAR.  
 THE FIRST DIGIT OF THE BAR MARK SIGNIFIES THE BAR SIZE.  
 ALL BARS SHALL BE EPOXY COATED.

STATE PROJECT NUMBER	SHEET NO.
6473-01-1	

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec.	1981	Drawn By	NJA
Plans Checked		DCM	
SUPERSTRUCTURE BILL OF BARS			SHEET 16 OF 20 <b>X82362</b>

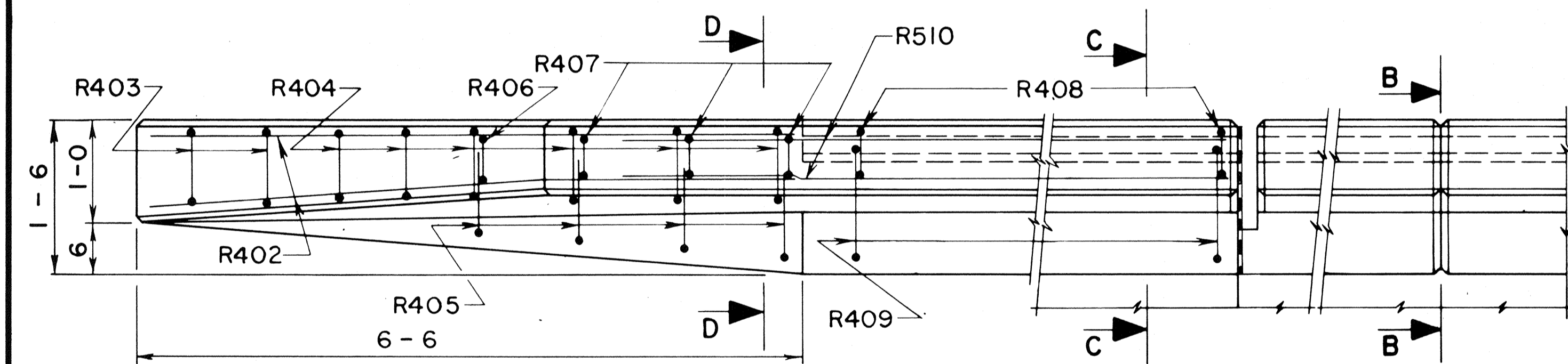
NAME PLATE - FOR LOCATION SEE SHEET I.



AT ABUTMENTS

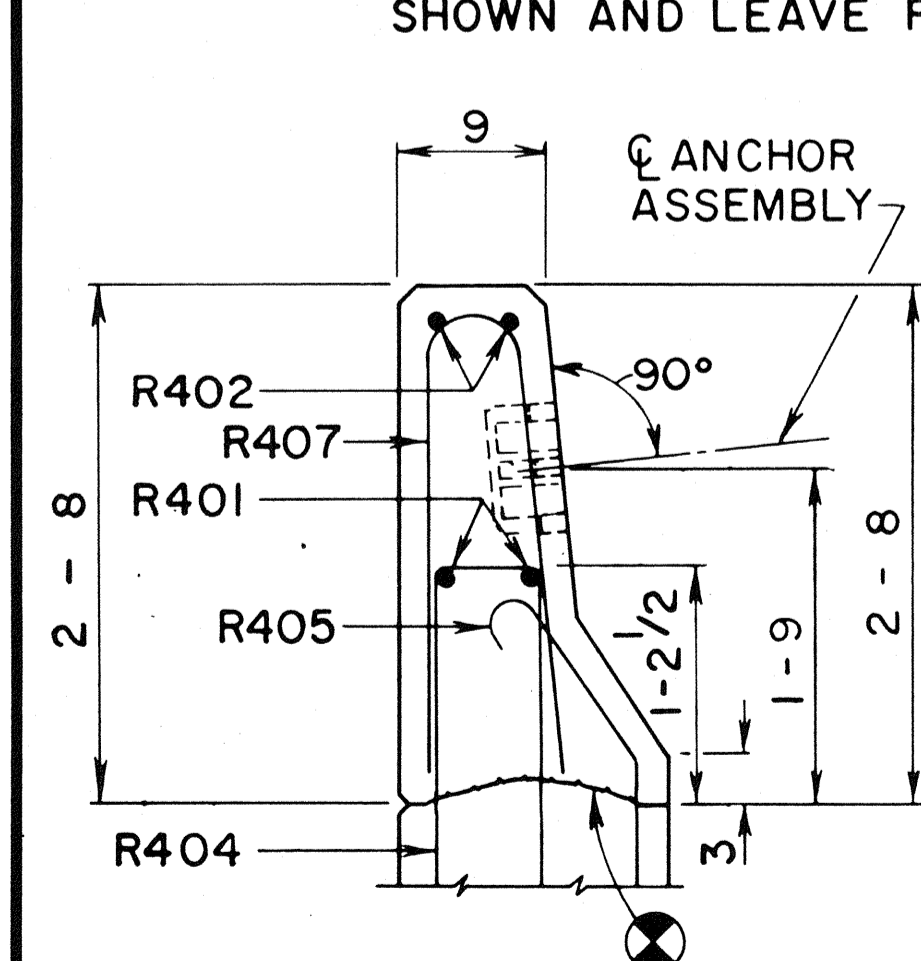
AT DEFLECTION JOINT

ELEVATION OF PARAPET

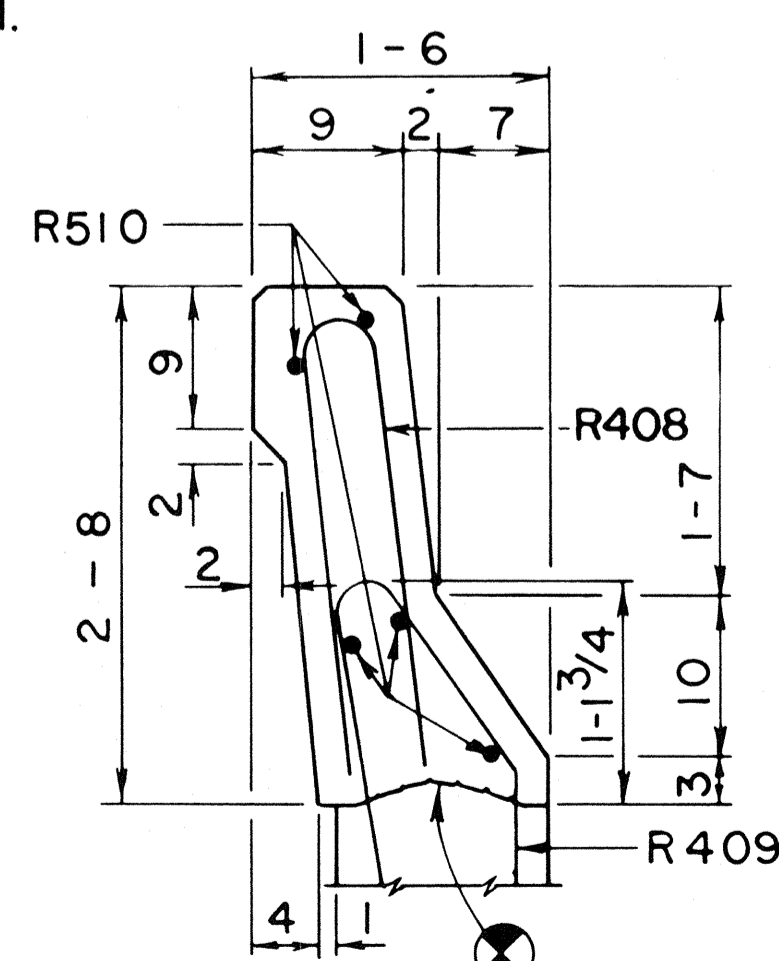


PLAN OF PARAPET

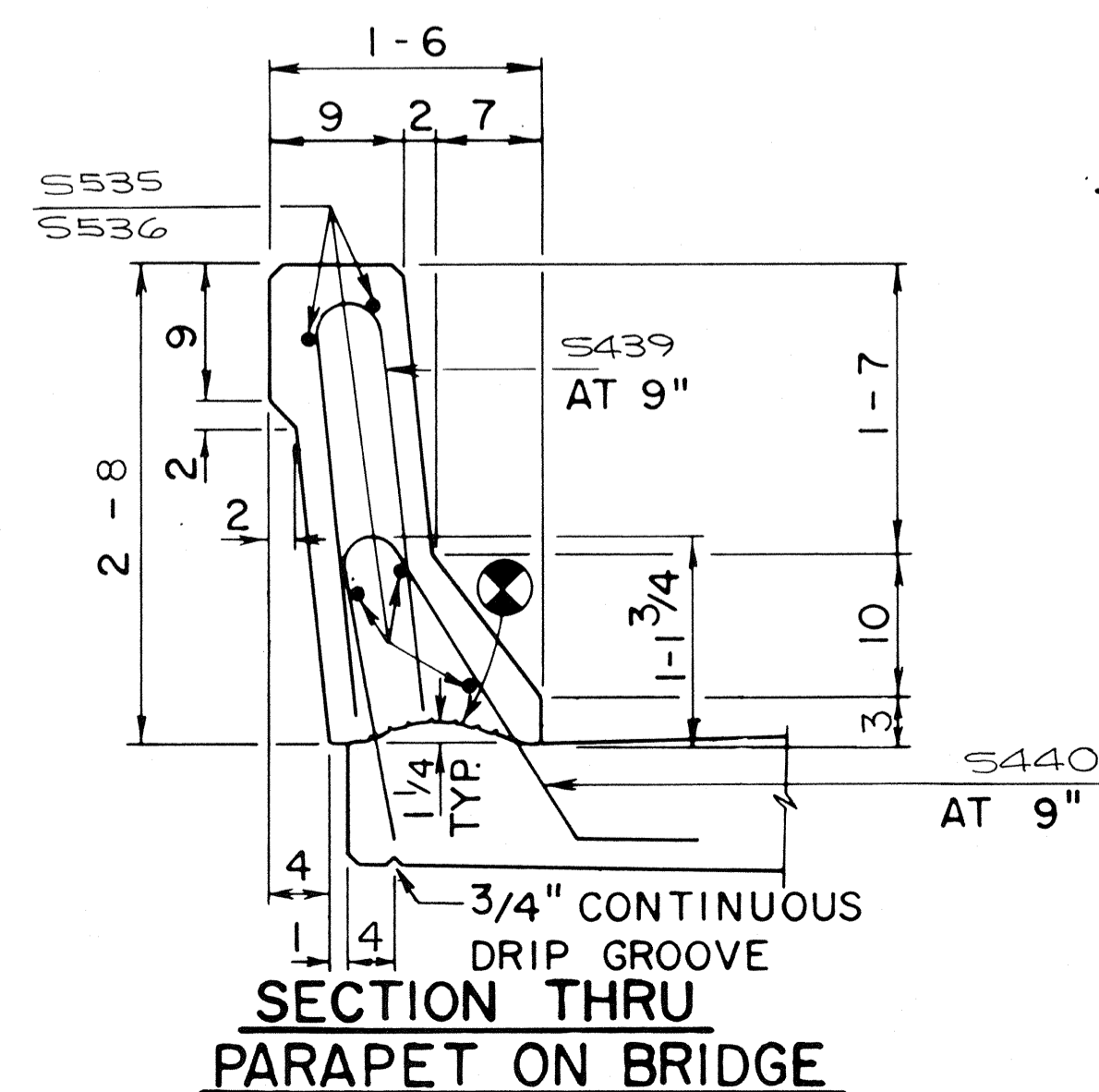
CONST. JOINT - STRIKE OFF AS SHOWN AND LEAVE ROUGH.



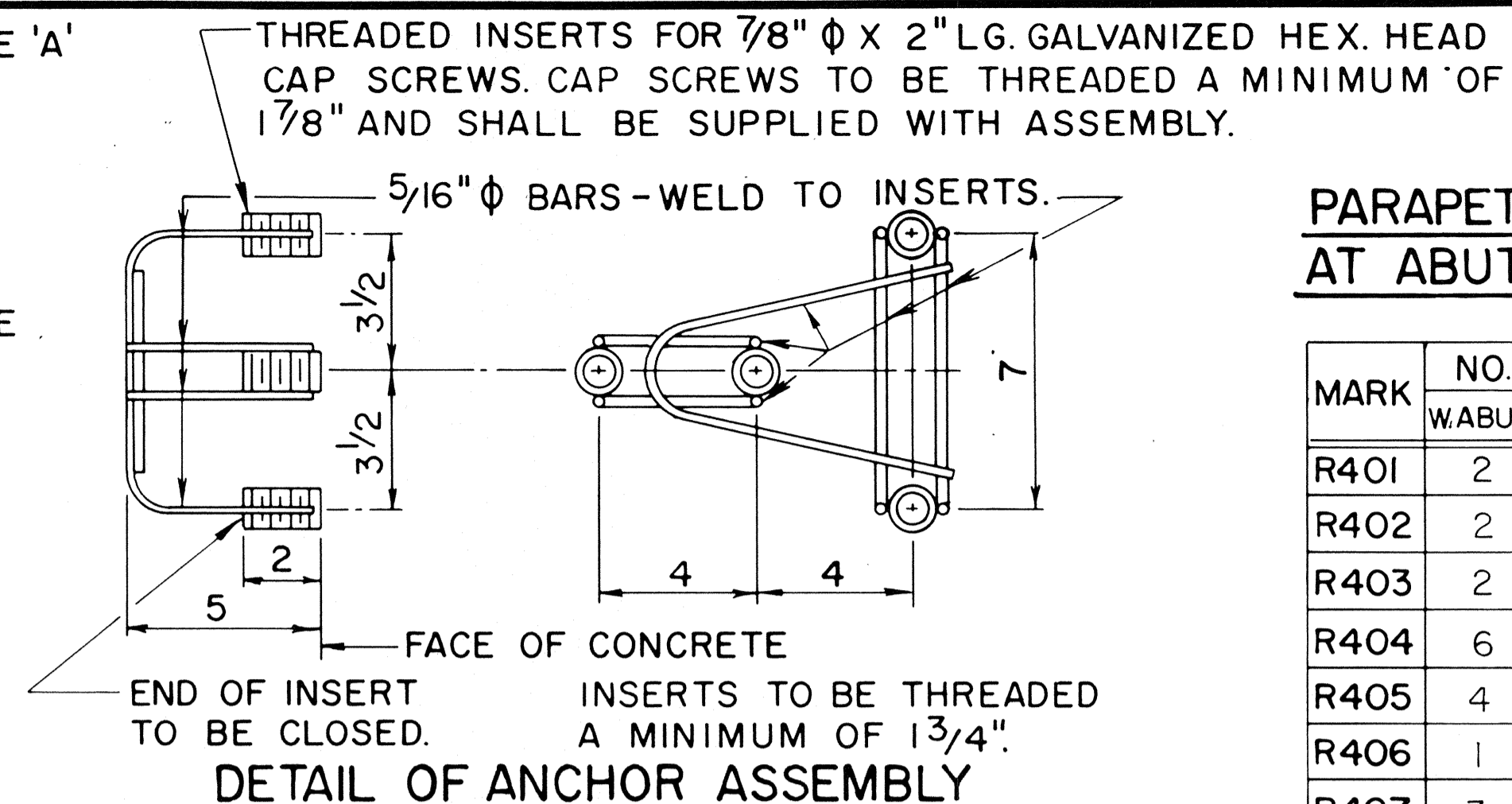
SECTION D



SECTION C



SECTION THRU PARAPET ON BRIDGE



ASSEMBLY SHALL BE PAID FOR AT THE UNIT PRICE BID FOR "ANCHOR ASSEMBLY FOR BEAM GUARD".

NOTES

WHEN PARAPETS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8" ALUMINUM OR ZINC PLATE CUT AS SHOWN IN SECTION 'B' BY SHADED AREA. IF CONSTRUCTION JOINTS IN PARAPETS ARE USED AT THE DEFLECTION JOINTS, ONE SIDE OF JOINT SHALL BE COATED WITH BITUMINOUS PAINT AND THE PLATE SEPARATORS MAY BE OMITTED.

NOTE 'A' - FILL WITH NON-STAINING, GRAY, NON-BITUMINOUS JOINT SEALER.

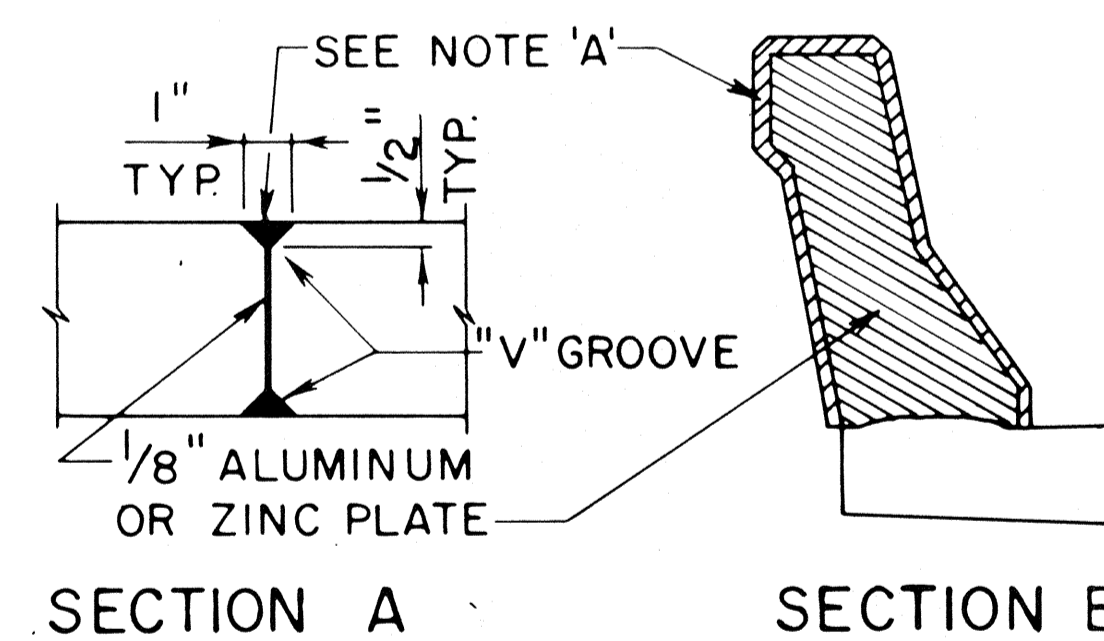
PLACE ANCHOR ASSEMBLY AT ALL ABUTMENT WINGS WHERE ATTACHMENT FOR BEAM GUARD RAIL IS NEEDED. SEE SHEET I.

PARAPET BILL OF BARS AT ABUTMENTS \*\*

110 # W. ABUT. \*  
110 # E. ABUT. \*

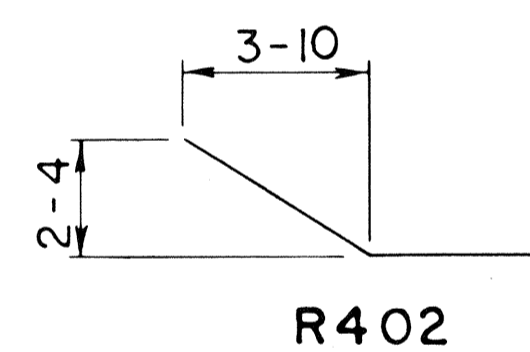
MARK	NO. REQ'D.		LENGTH	BENT	LOCATION
	W. ABUT.	E. ABUT.			
R401	2	2	4 - 6		WINGS 2 & 3
R402	2	2	6 - 8	X	" " "
R403	2	2	4 - 1	X	" " "
R404	6	6	4 - 11	X	" " "
R405	4	4	3 - 1	X	" " "
R406	1	1	4 - 0	X	" " "
R407	3	3	5 - 0	X	" " "
R408	4	4	4 - 10	X	" " "
R409	4	4	4 - 7	X	" " "
R510	5	5	4 - 1		" " "

\*\* ALL BARS ARE EPOXY COATED.  
\* ABUTMENT TOTAL ESTIMATED QUANTITIES INCLUDE THIS WEIGHT.

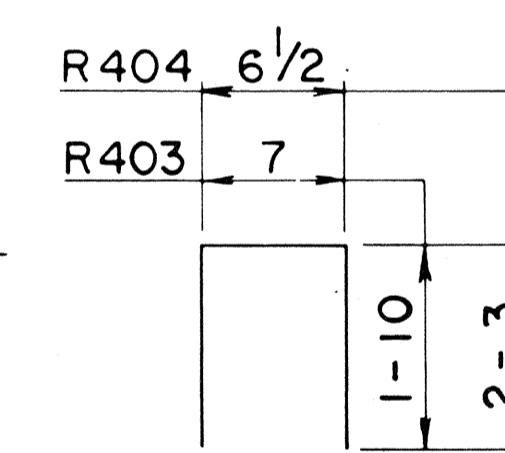


SECTION A

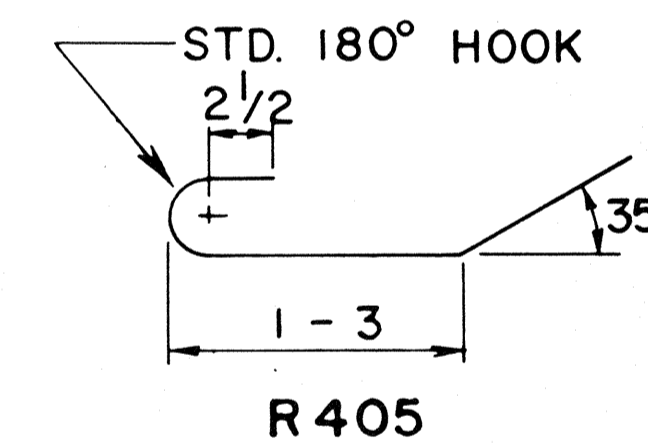
SECTION B



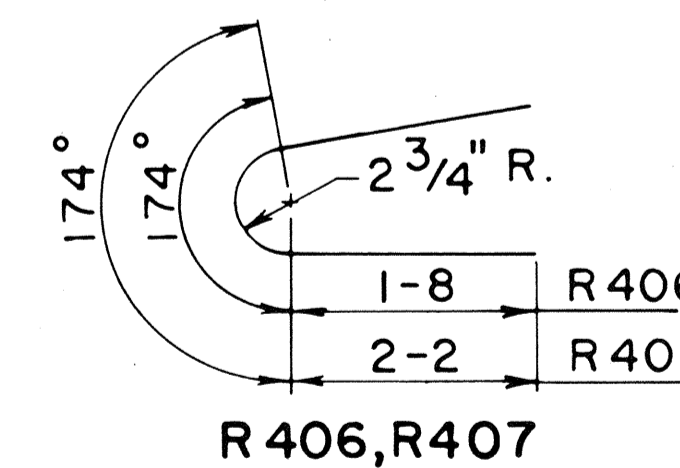
R402



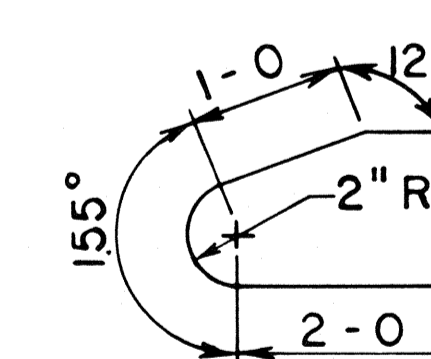
R403, R404



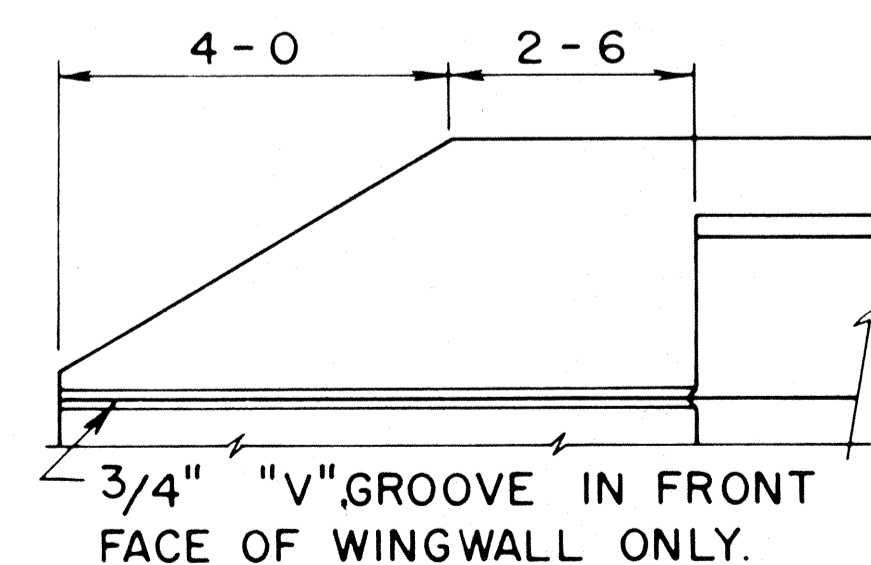
R405



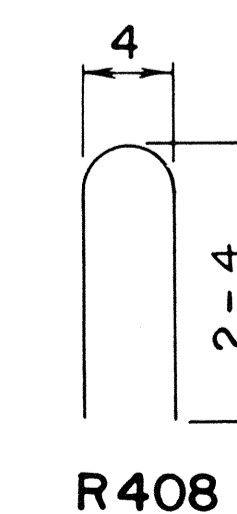
R406, R407



R409



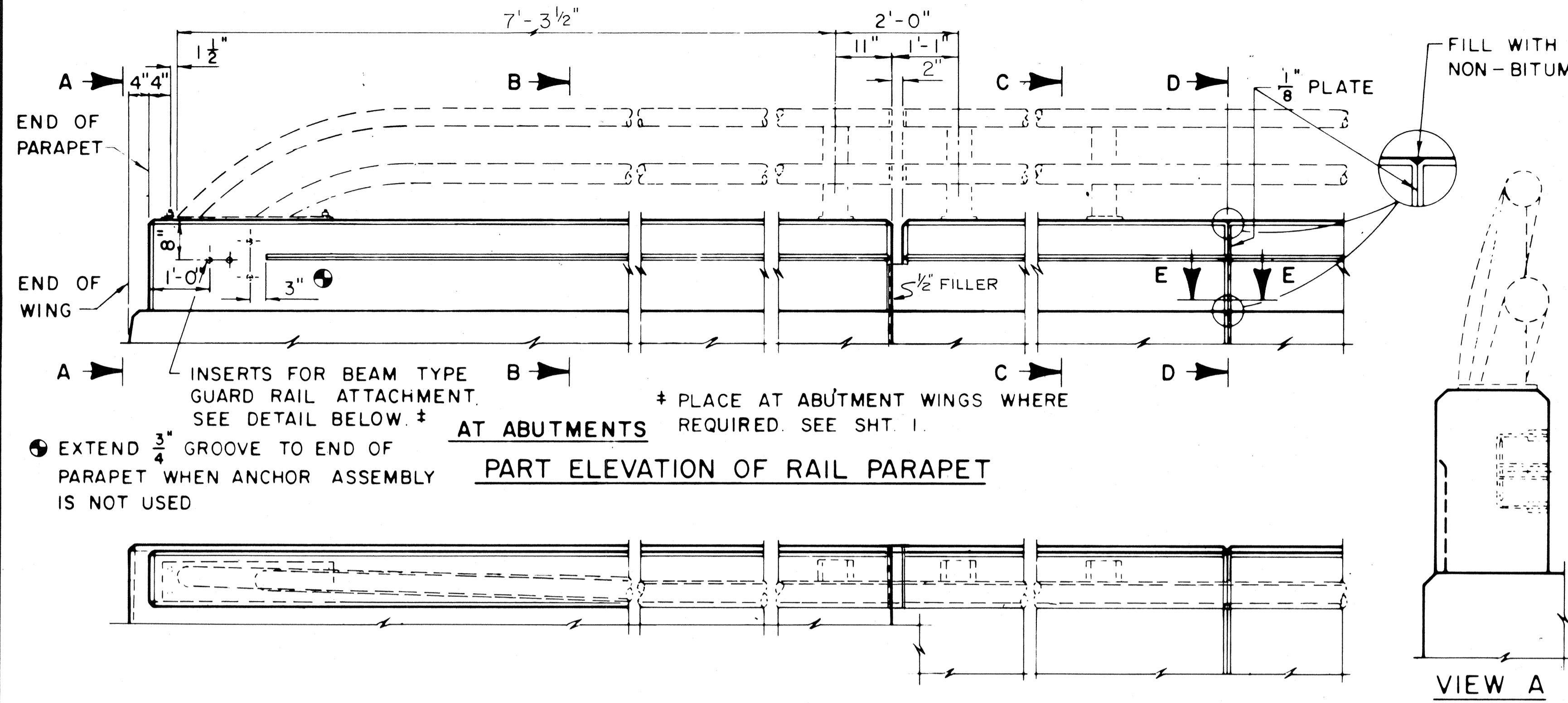
VIEW SHOWING FRONT FACE OF PARAPET



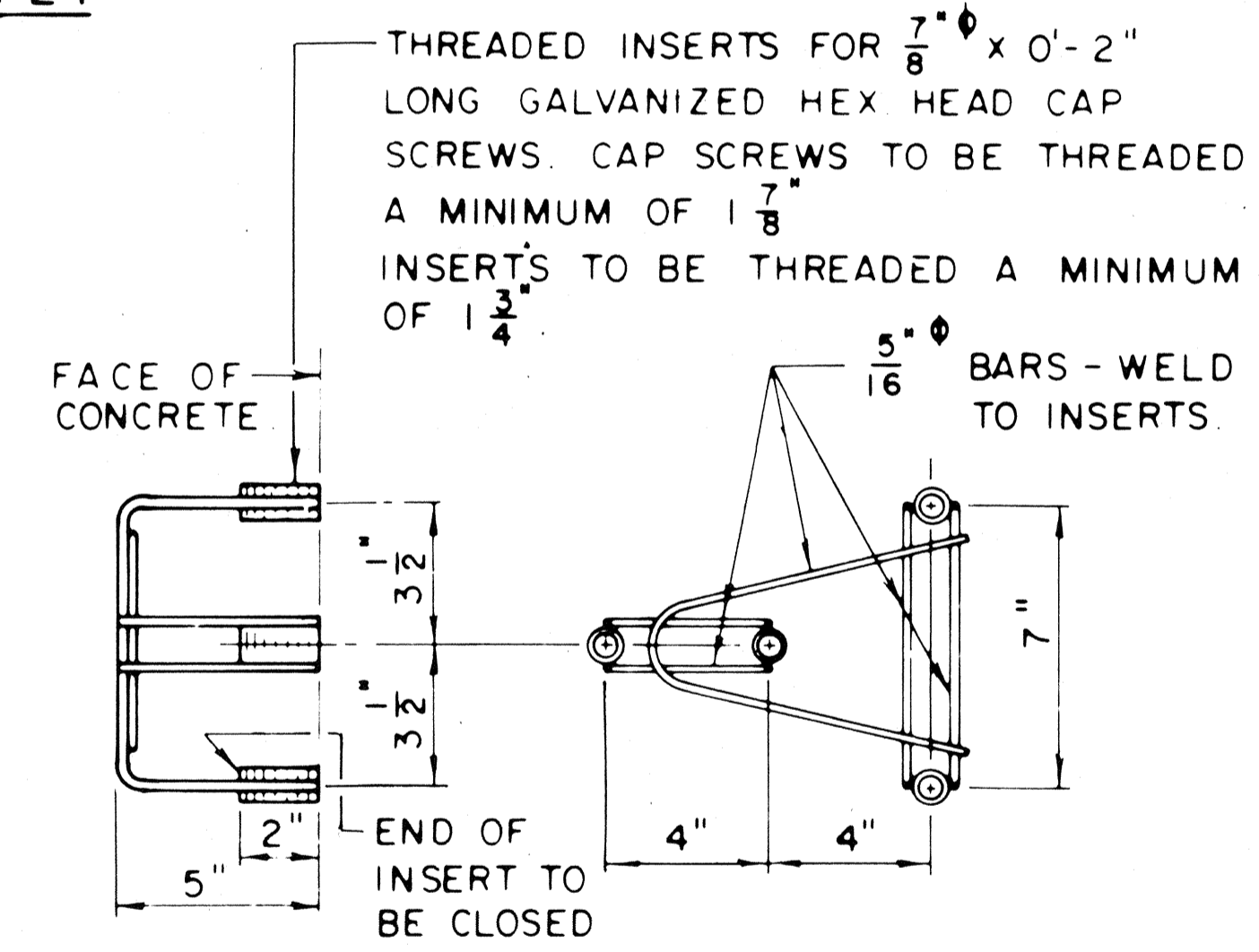
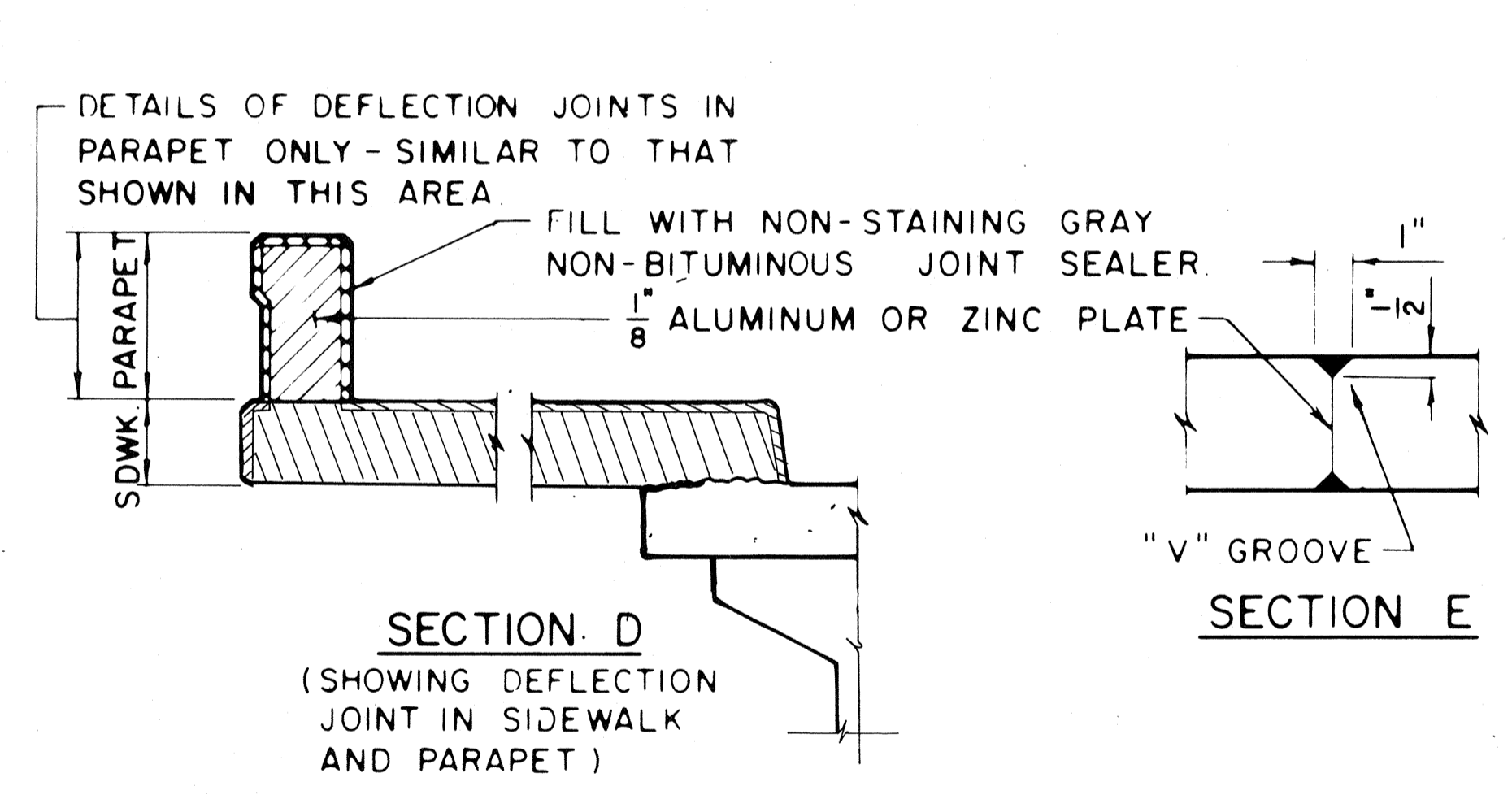
R408

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-34			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
SLOPED FACE PARAPET "B"			SHEET 17 OF 20
			X82362

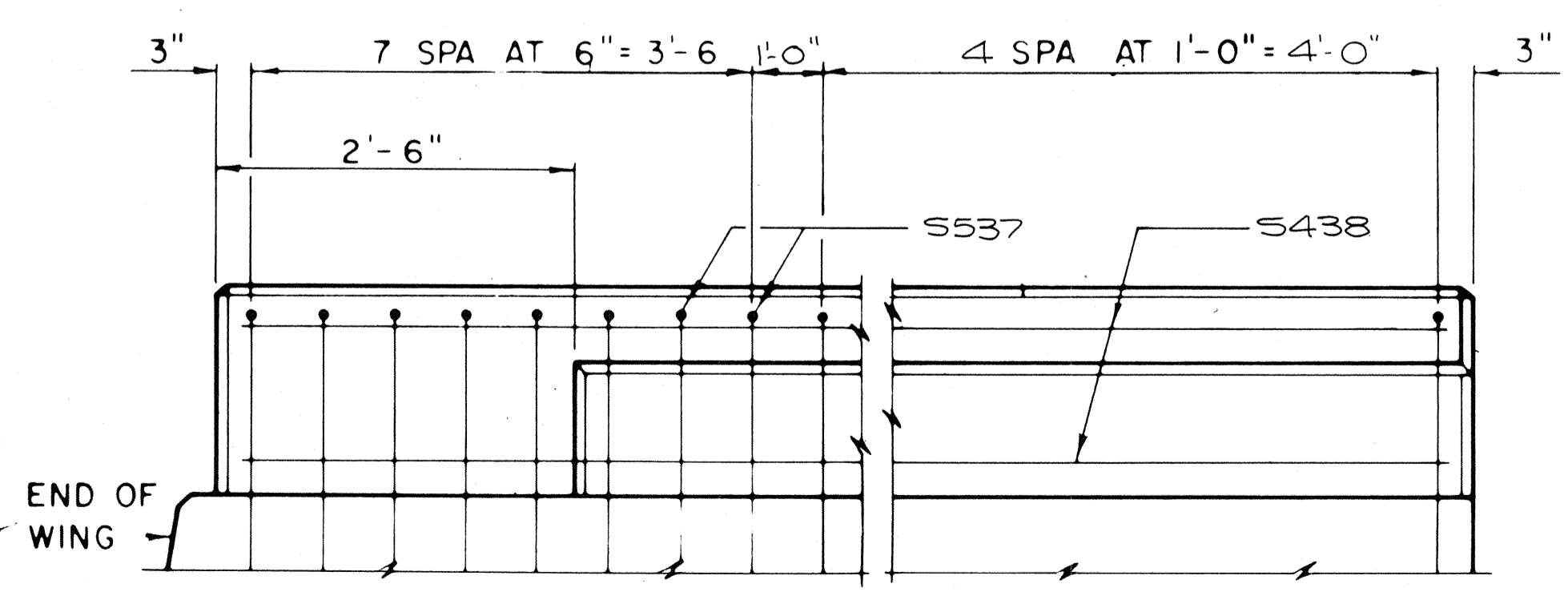
STATE PROJECT NUMBER	SHEET NO.
6473-01-71	



AT ABUTMENTS  
PART PLAN OF RAIL PARAPET

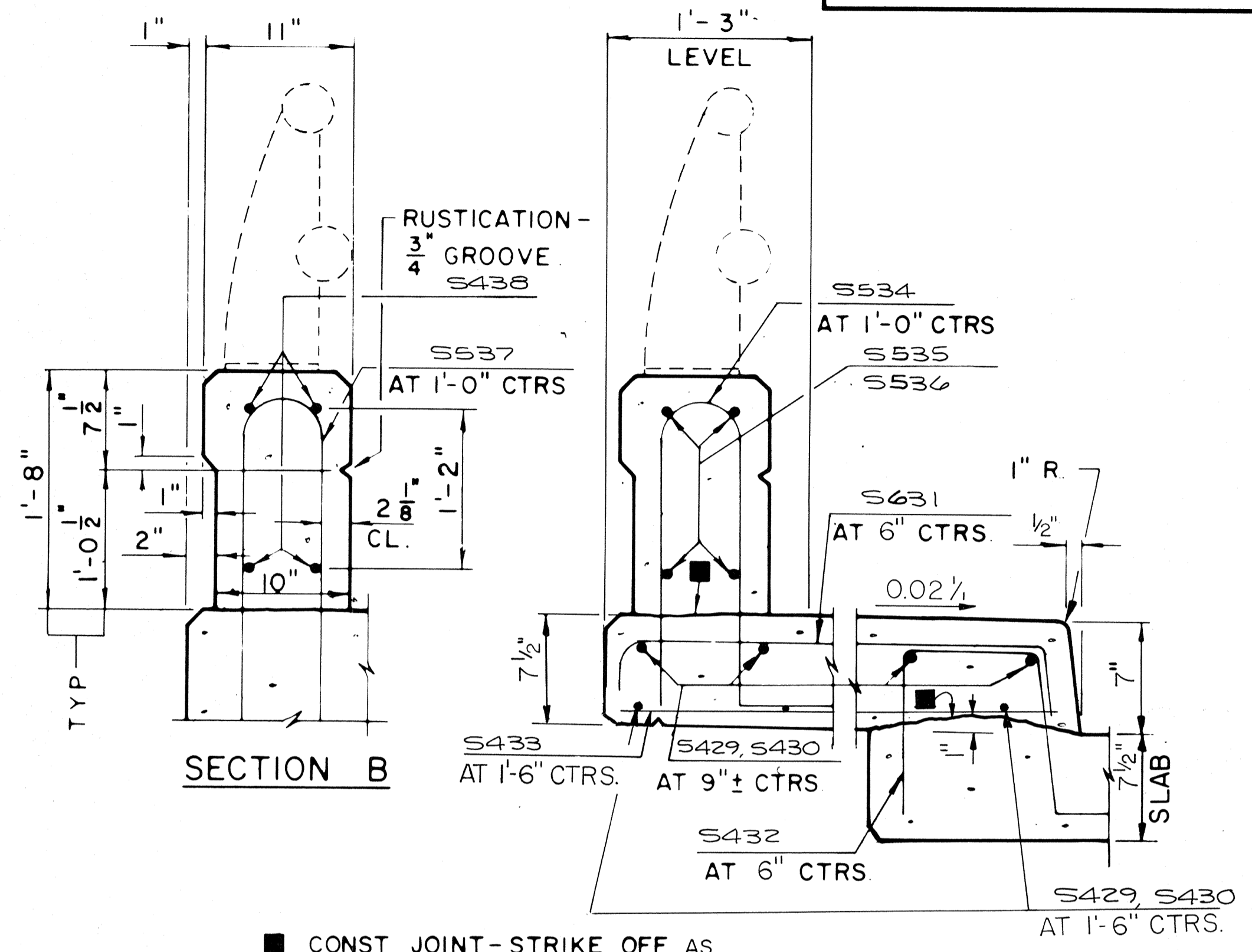


ANCHOR ASSEMBLY SHALL BE PAID FOR AT THE UNIT PRICE BID FOR ANCHOR ASSEMBLY FOR BEAM GUARD.



VIEW SHOWING OUTSIDE FACE OF PARAPET & REINF.

FILL WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.



CONST JOINT-STRIKE OFF AS SHOWN & LEAVE ROUGH.

AT SIDEWALK

SECTION C

NOTES

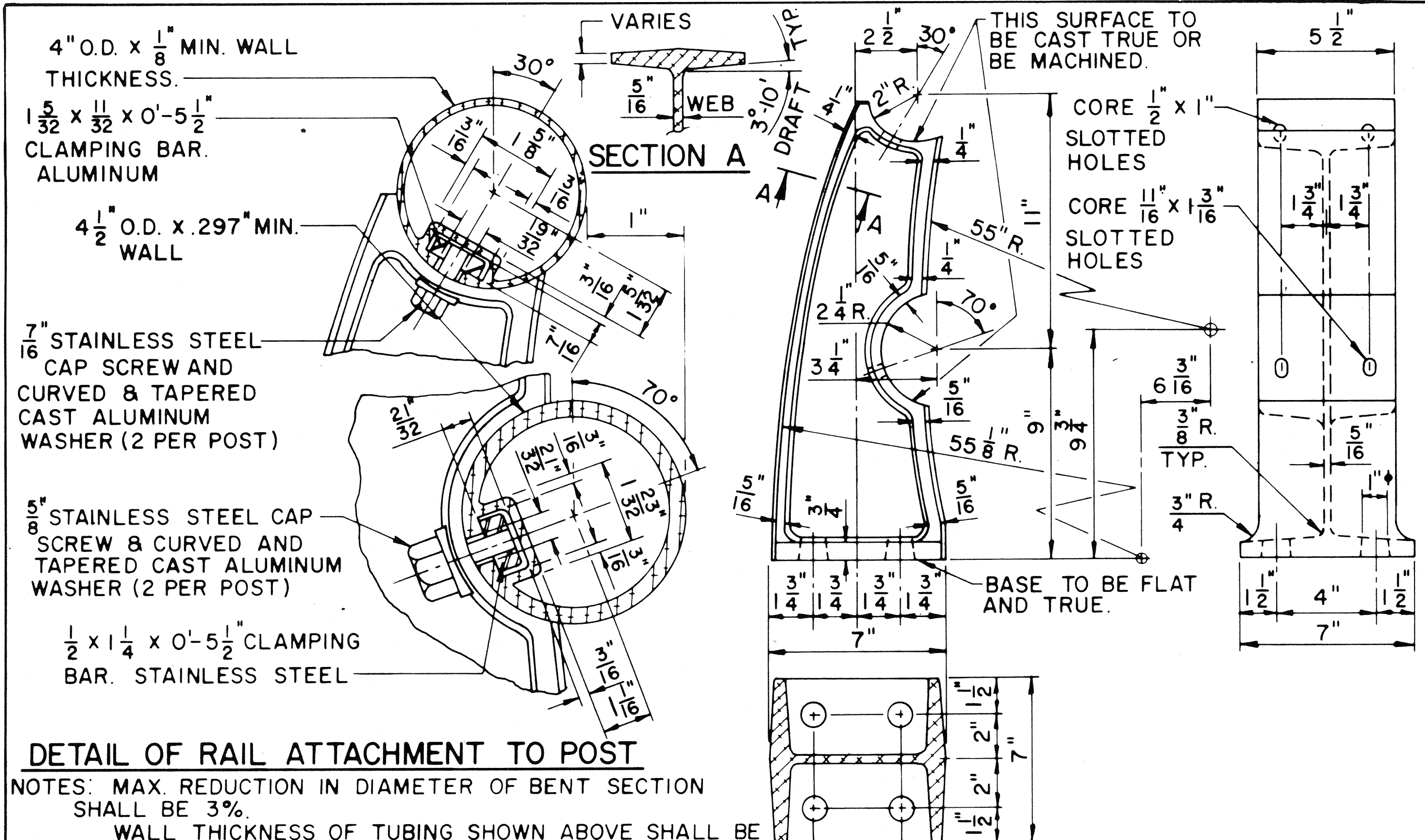
WHEN PARAPETS AND CURBS ARE POURED CONTINUOUSLY FROM END TO END, THEY SHALL BE SEPARATED AT THE DEFLECTION JOINTS BY A PIECE OF 1/8\"/>

No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE B-70-34</b>			
Const. Spec. 1981	Drawn By NJA	Plans Checked DCM	
VERTICAL FACE PARAPET "A"			SHEET 18 OF 20 X82362

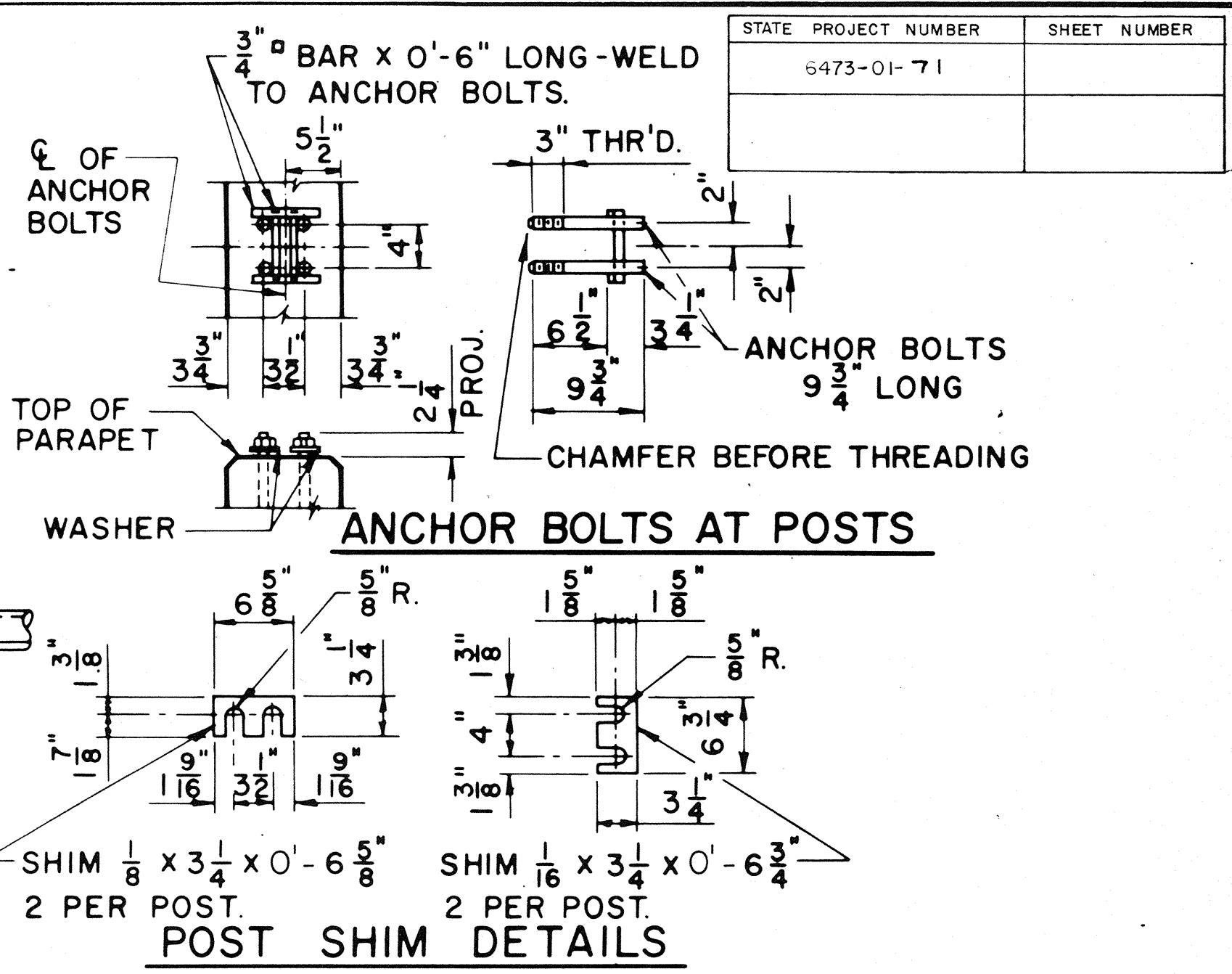
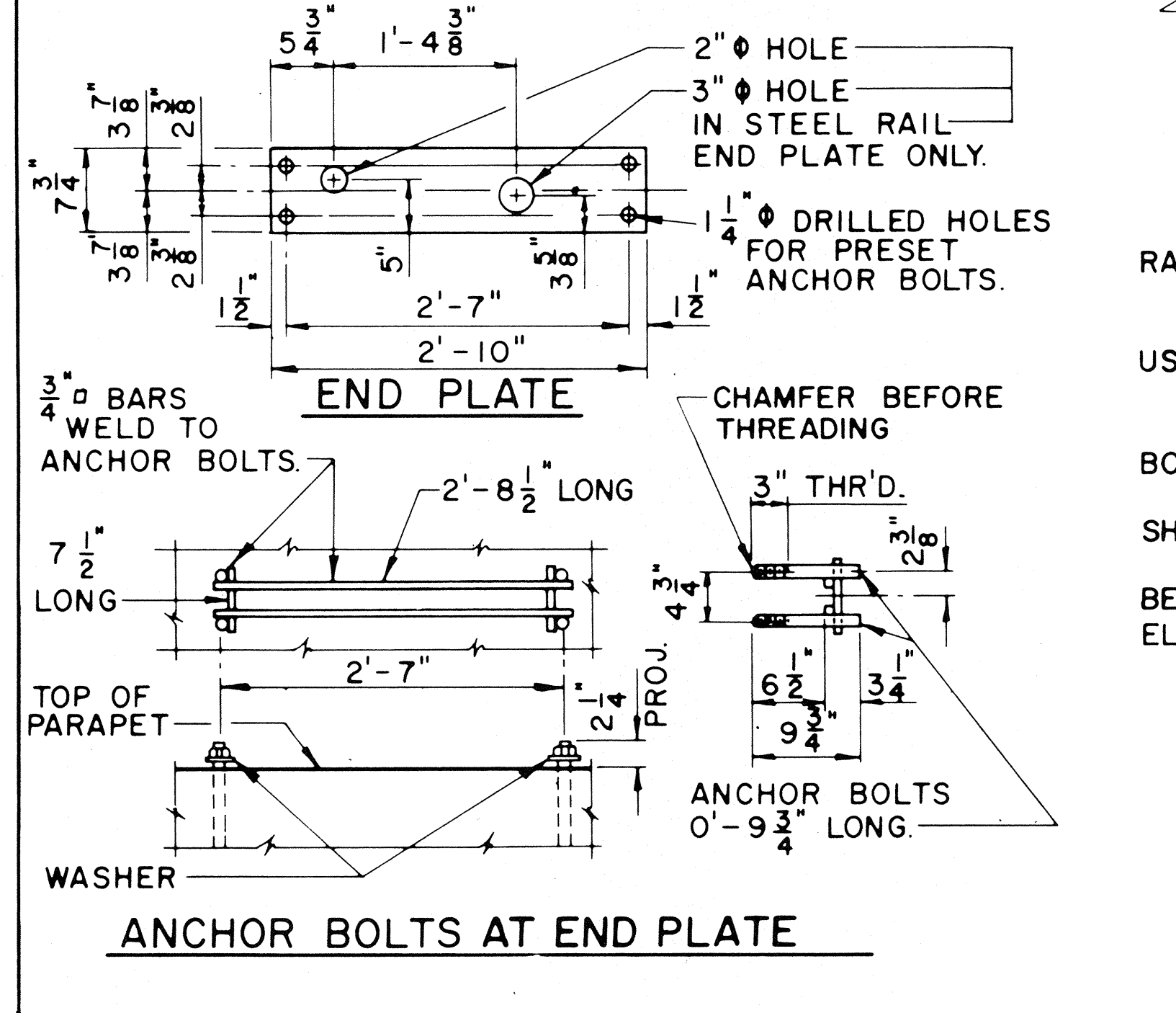
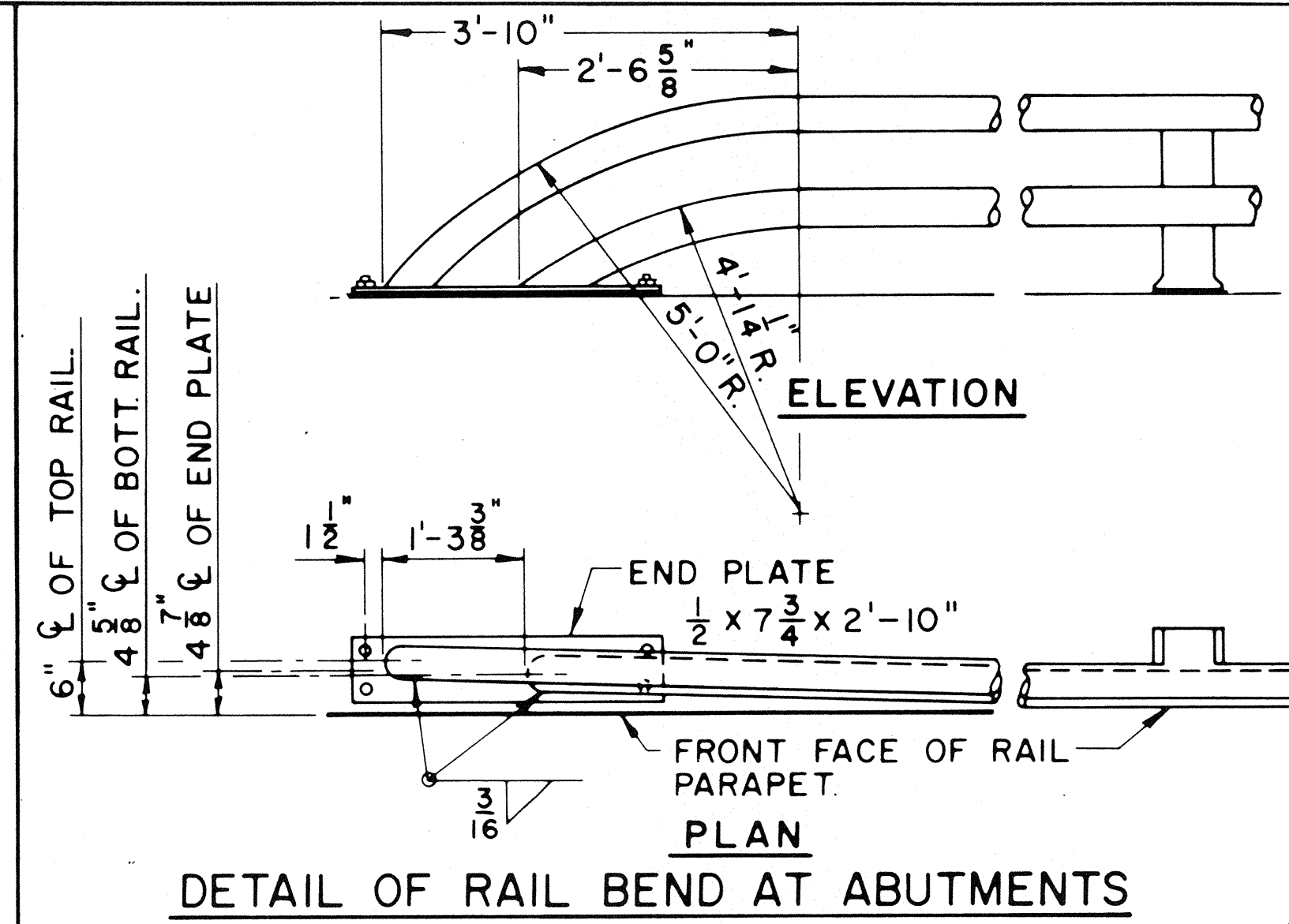
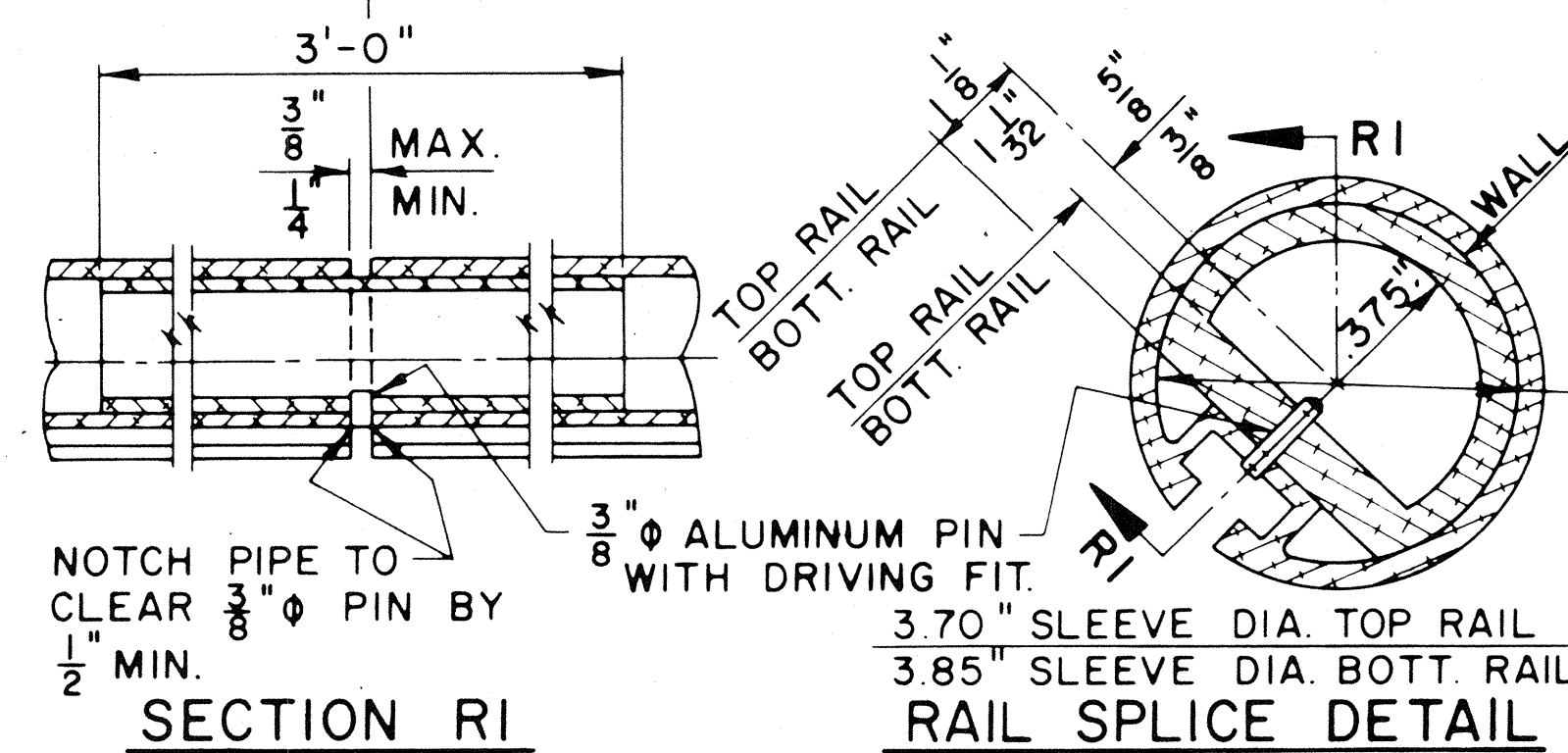
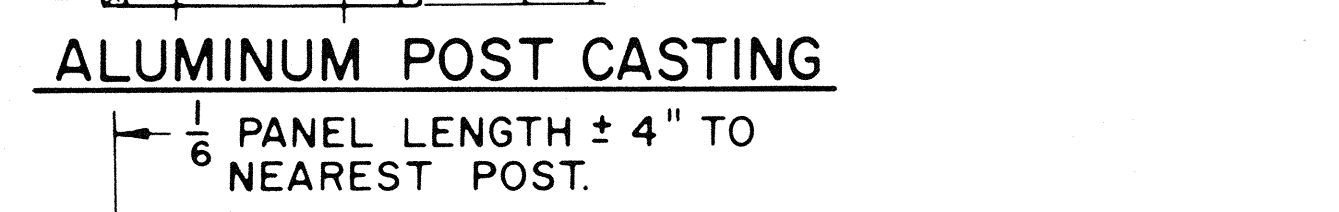




STATE PROJECT NUMBER	SHEET NUMBER
6473-01-71	

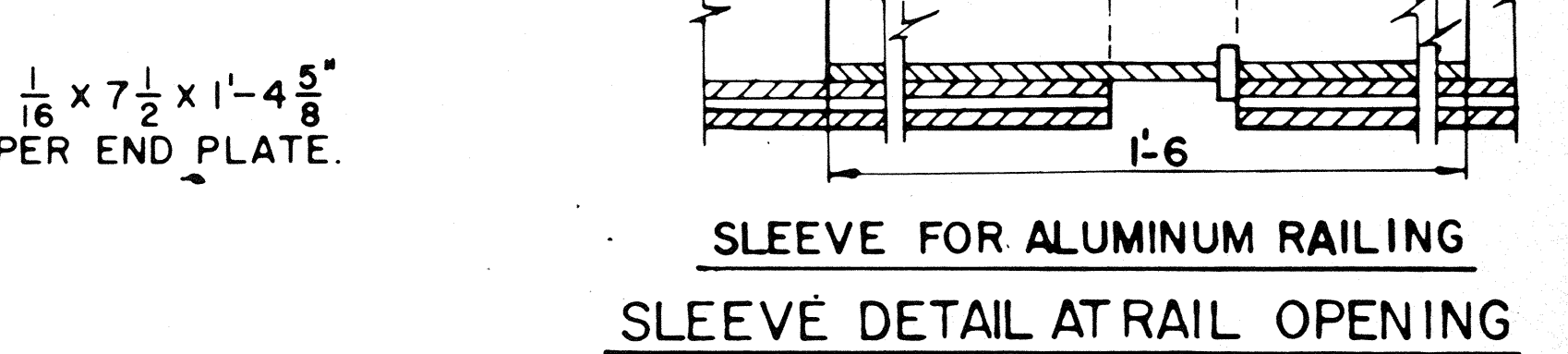
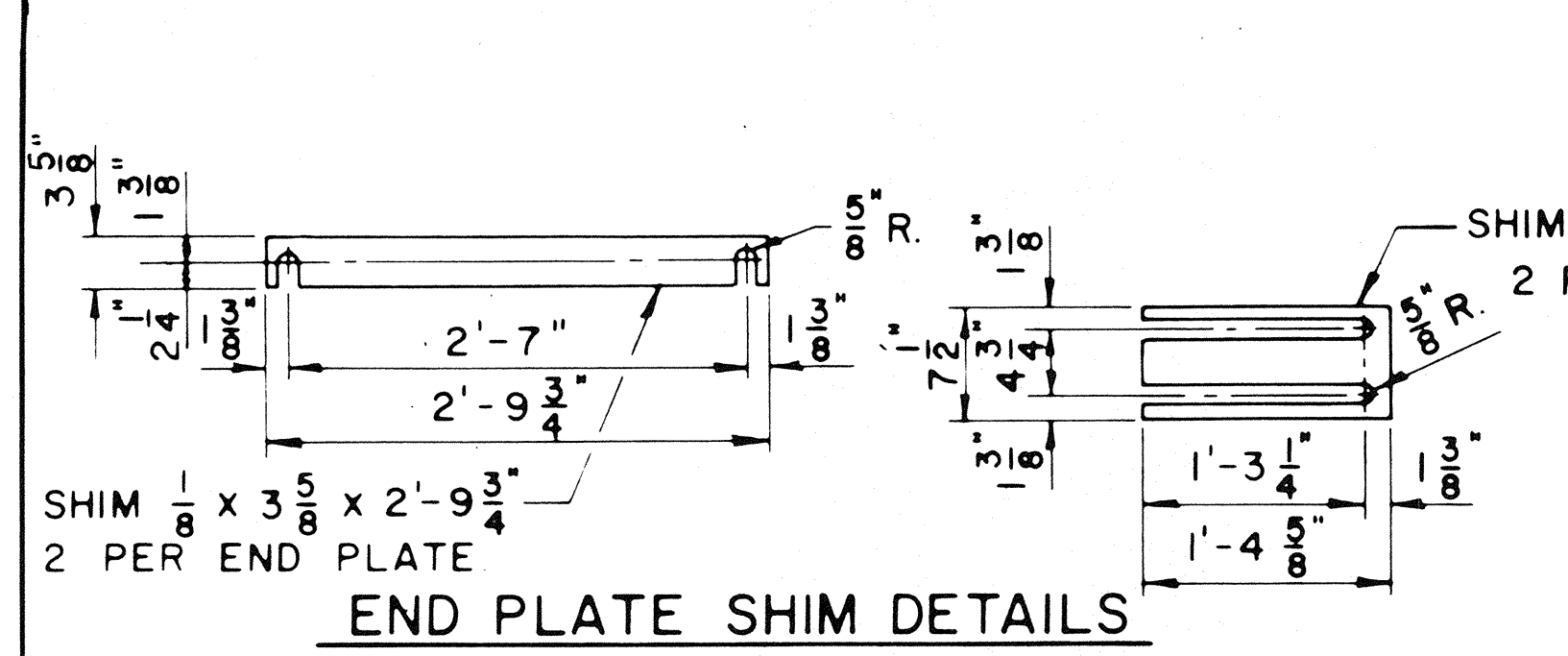
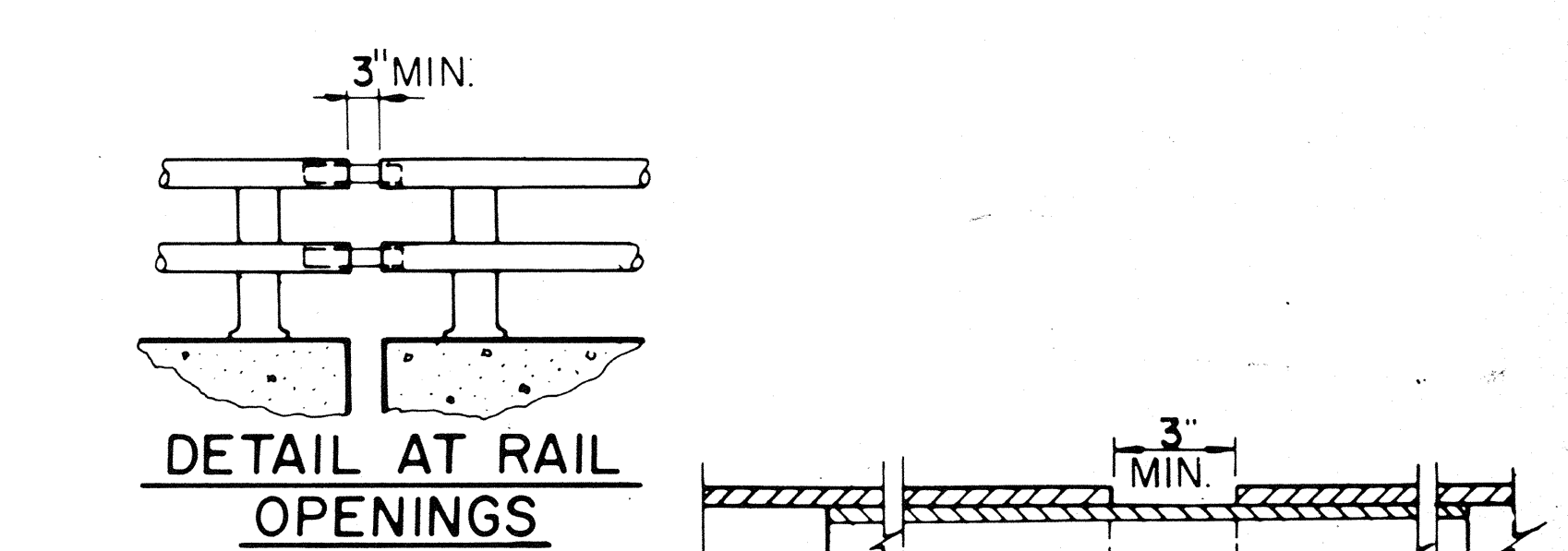


**DETAIL OF RAIL ATTACHMENT TO POST**  
 NOTES: MAX. REDUCTION IN DIAMETER OF BENT SECTION SHALL BE 3%.  
 WALL THICKNESS OF TUBING SHOWN ABOVE SHALL BE MIN. NOMINAL AVERAGE WALL THICKNESS.  
 MAX. REDUCTION IN SLOT WIDTH IN BENT TUBING SHALL BE 3/16".



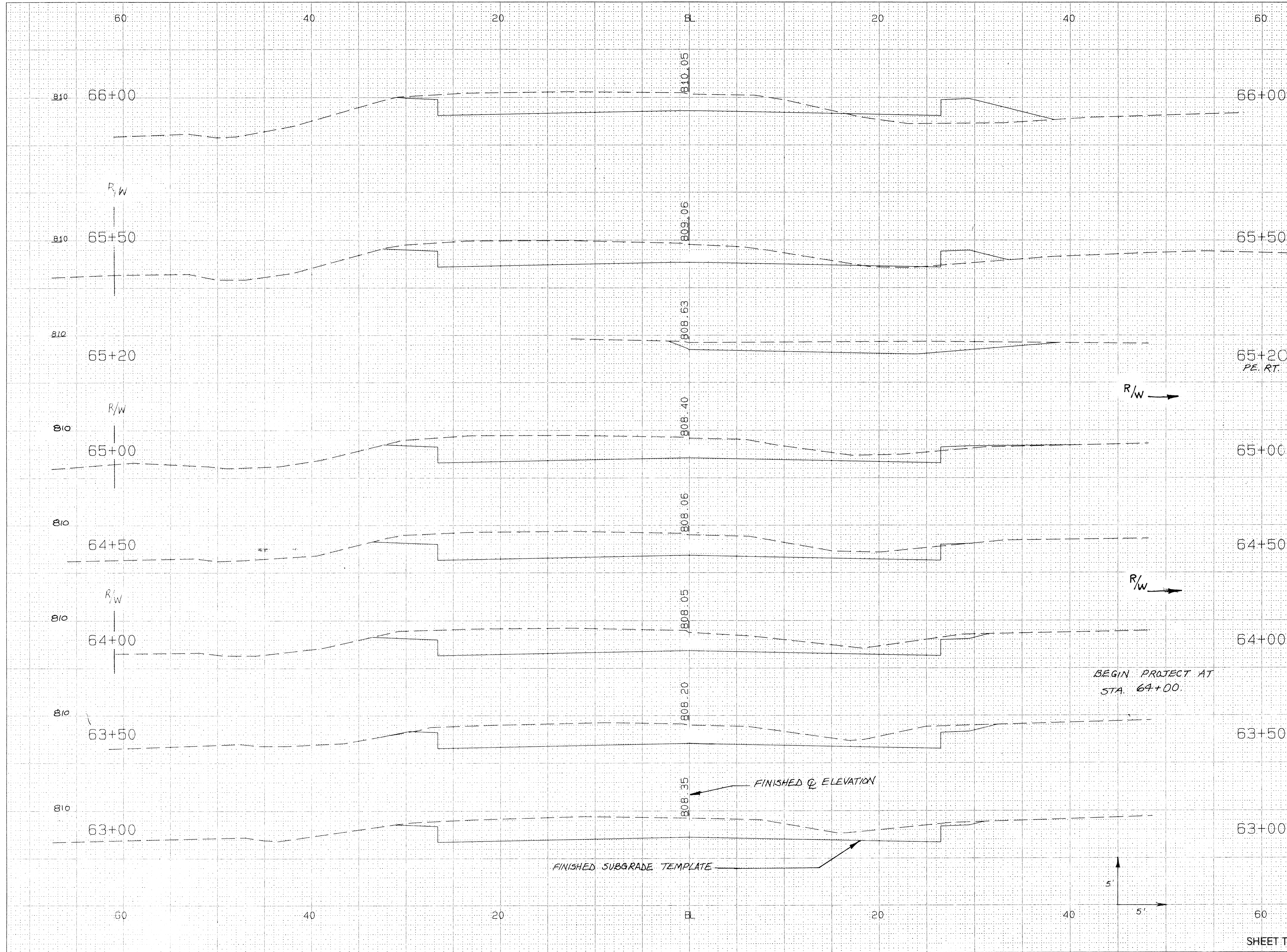
**GENERAL NOTES**

BID ITEM SHALL BE TUBULAR RAILING, TYPE 'H'.  
 ALL POST SPACINGS ARE TAKEN HORIZONTALLY ALONG C/L OF RAILING AT BASE OF POSTS.  
 RAILING SHALL BE FABRICATED IN TWO OR THREE PANEL LENGTHS. SHIMS CONFORMING TO SAME MATERIAL AS POSTS SHALL BE USED UNDER POSTS AND END PLATES WHERE REQ'D FOR ALIGNMENT. RAIL POSTS SHALL BE SET NORMAL TO GRADE.  
 THE SHANK AND ROOT OF THREAD DIAMETER FOR ANCHOR BOLTS SHALL BE A MIN. OF 0.62 INCHES.  
 ANCHOR BOLTS, NUTS & WASHERS FOR ALUMINUM RAILING SHALL BE STAINLESS STEEL.  
 ANCHOR BOLTS, NUTS & WASHERS FOR STEEL RAILING SHALL BE EITHER STAINLESS STEEL OR ASTM A307. IF A307 IS USED ELECTRO-GALVANIZE NUTS, WASHERS & TOP 3 1/2" OF ANCHOR BOLTS.

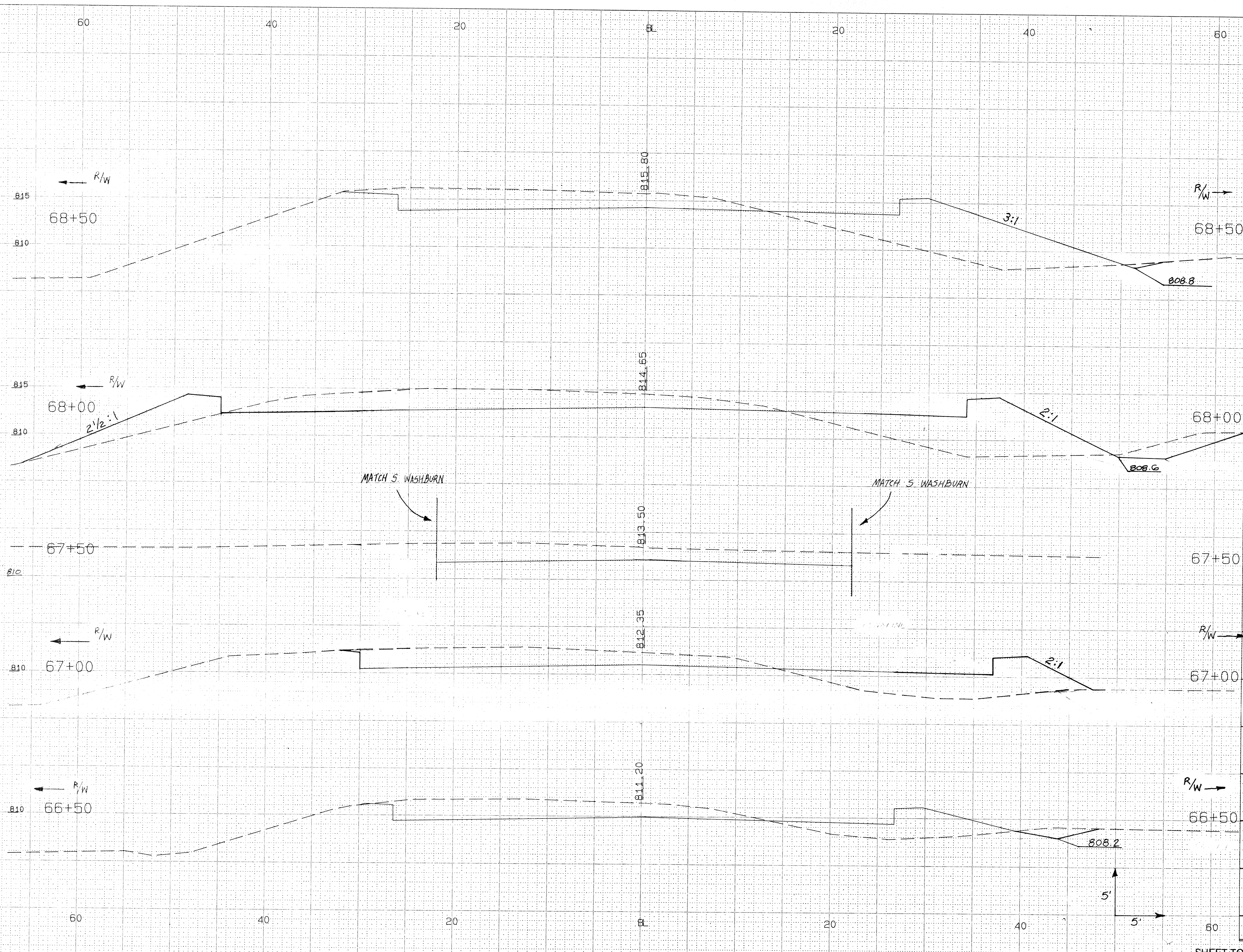


ALL SLEEVE DETAILS SAME AS "FIELD ERECTION JOINT DETAIL" OR "RAIL SPLICE DETAIL" UNLESS SHOWN OTHERWISE.

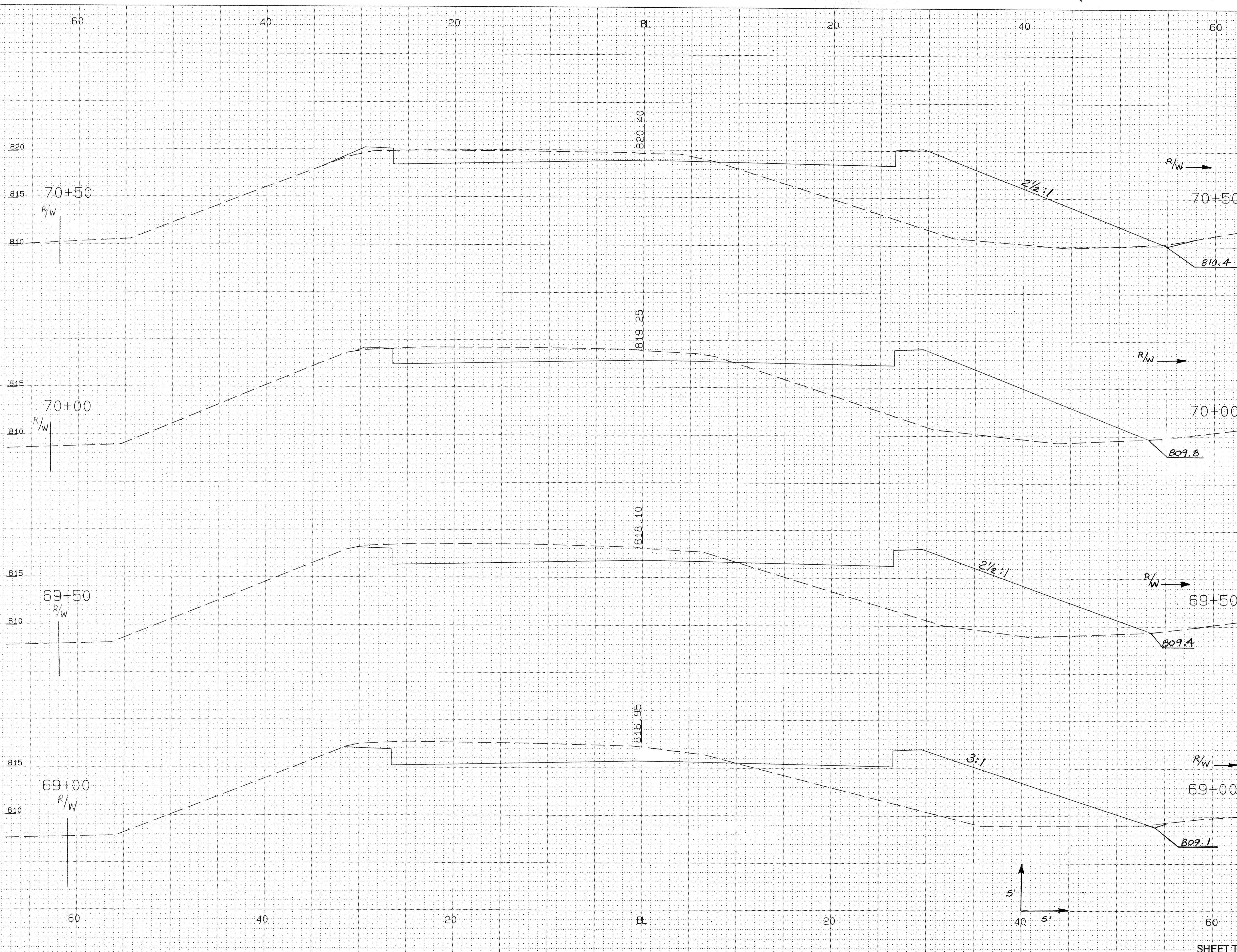
No.	Date	Revision	By
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-70-34			
Const. Spec.	1981	Drawn By	NJA
Plans Checked		Checked	DCM
TUBULAR RAILING TYPE 'H' ALUMINUM			SHEET 20 OF 20 X82362



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
64+00		206	0
64+50		204	2
65+00		180	9
65+50		155	31
66+00			
PE. RT.			
SHEET TOTAL		745	42



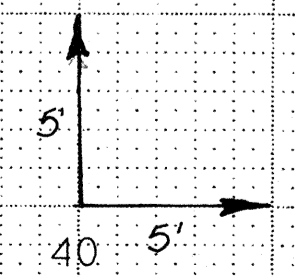
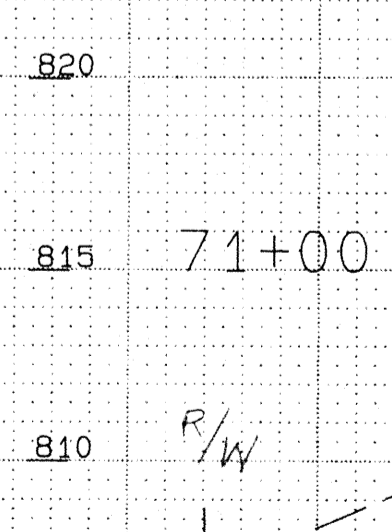
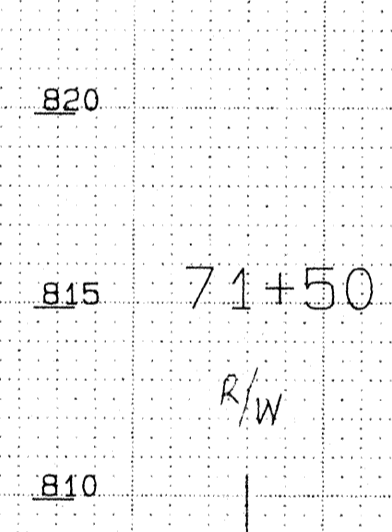
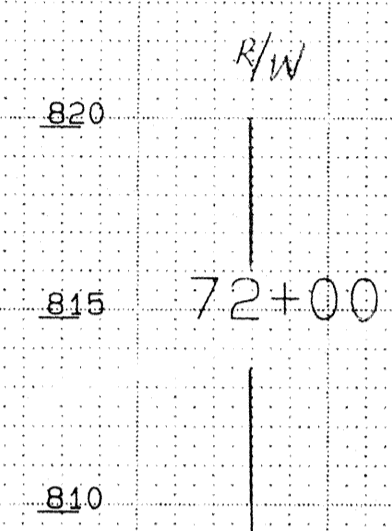
STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL	FILL
66+00	815	142	61
68+50	810	128	97
67+00	810	138	72
67+50	810	140	100
68+00	815	125	206
68+00	810		
67+50	810		
67+00	810		
66+50	810		
SHEET TOTAL		673	536



STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
68+50	0		
70+50	15	124	249
69+00	10	115	282
69+50	5	99	314
70+00	0	80	349
70+50	5		
69+50	5		
69+00	0		
SHEET TOTAL		418	1194

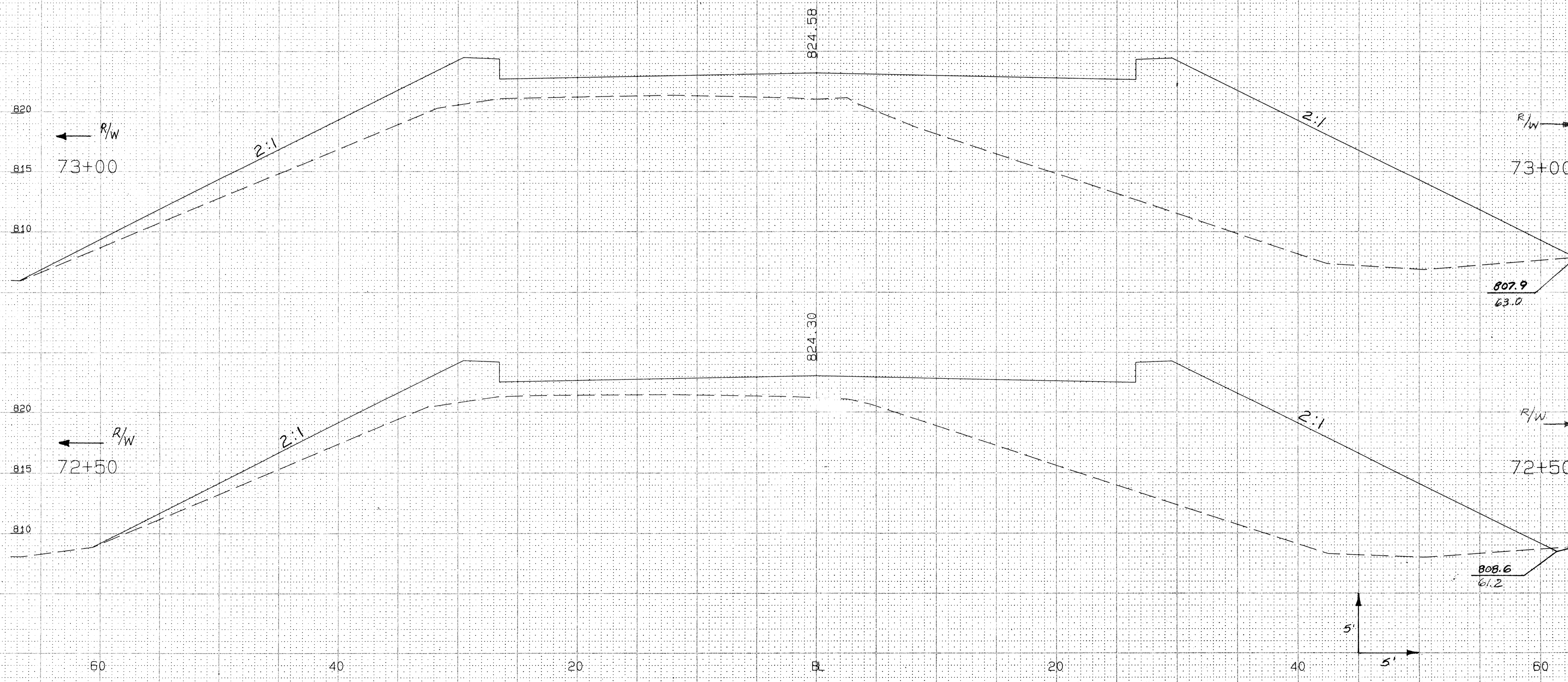
WINN. CO. CTH. "K" STA. 69+00 TO STA. 70+50

STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
70+50		49	418
71+00		19	516
71+50		2	675
72+00			
SHEET TOTAL		70	1609

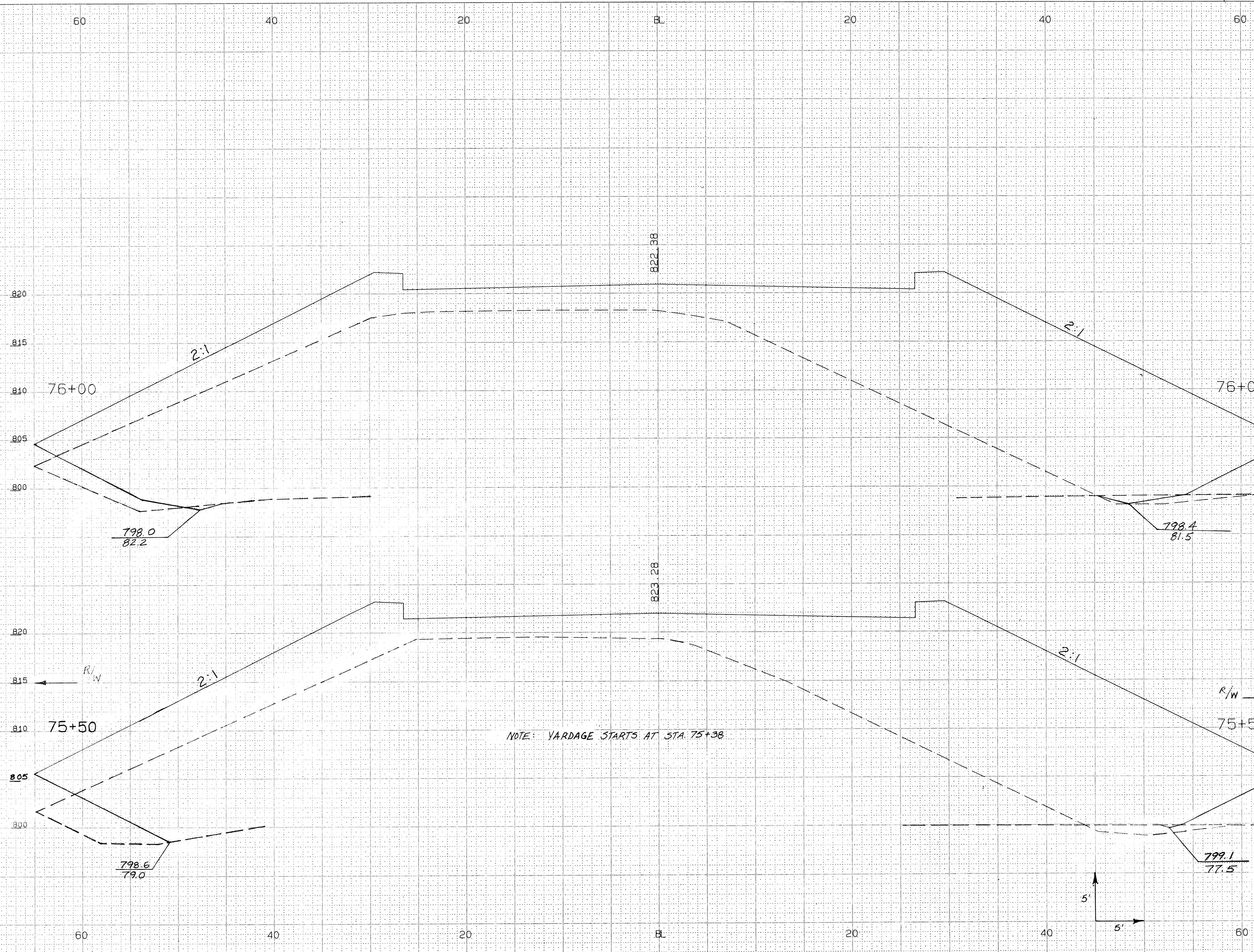


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
72+00		0	844
72+50		0	993
73+00		0	952
73+43			
SHEET TOTAL		0	2789

NOTE: YARDAGE ENDS AT STA. 73+43

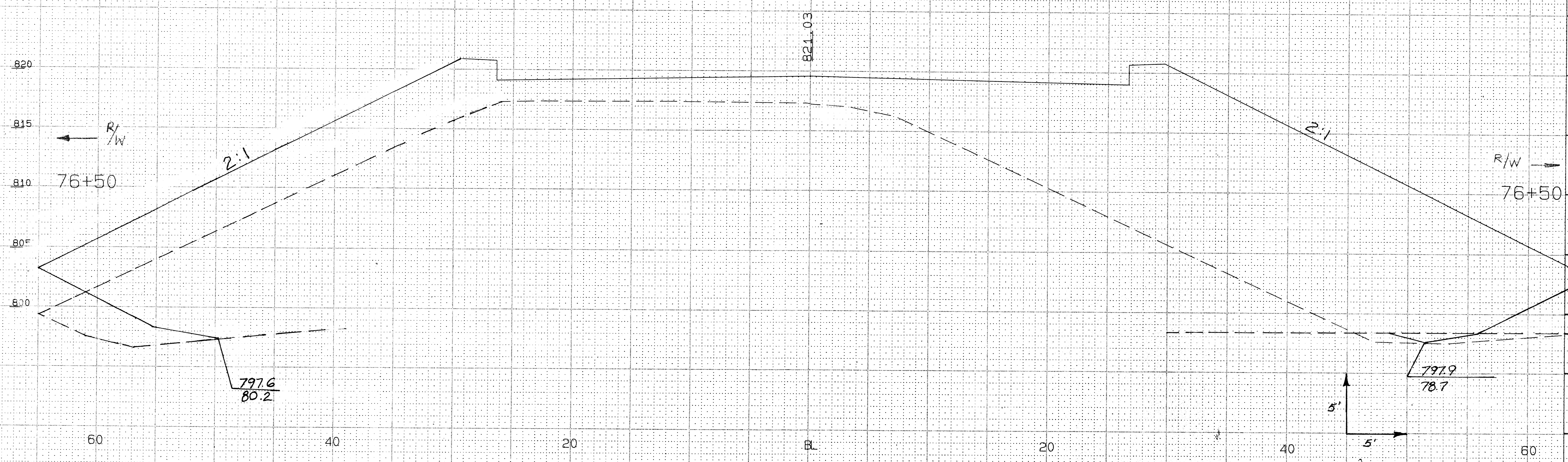
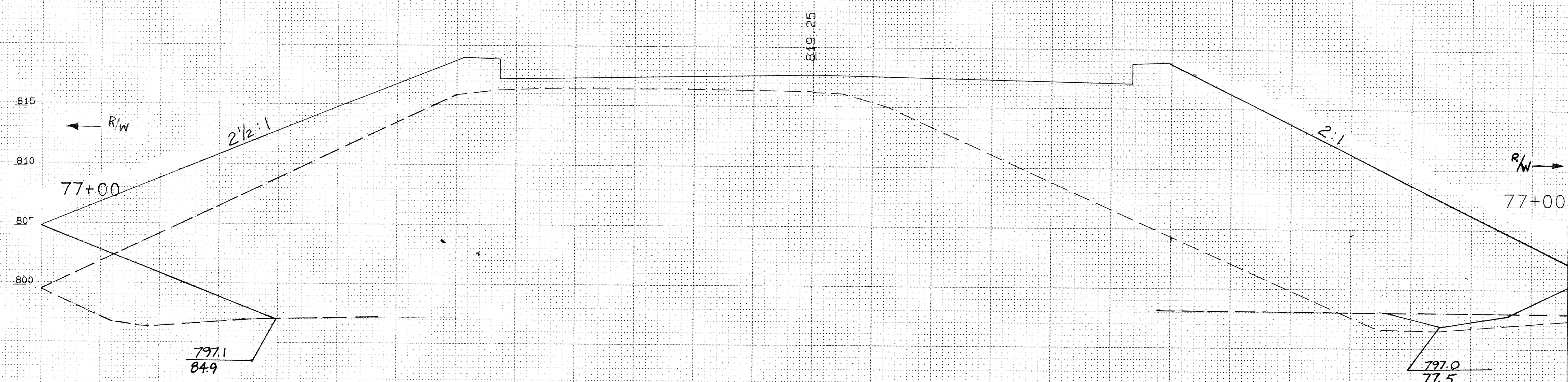


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
75+38		0	432
75+50		4	1731
76+00			



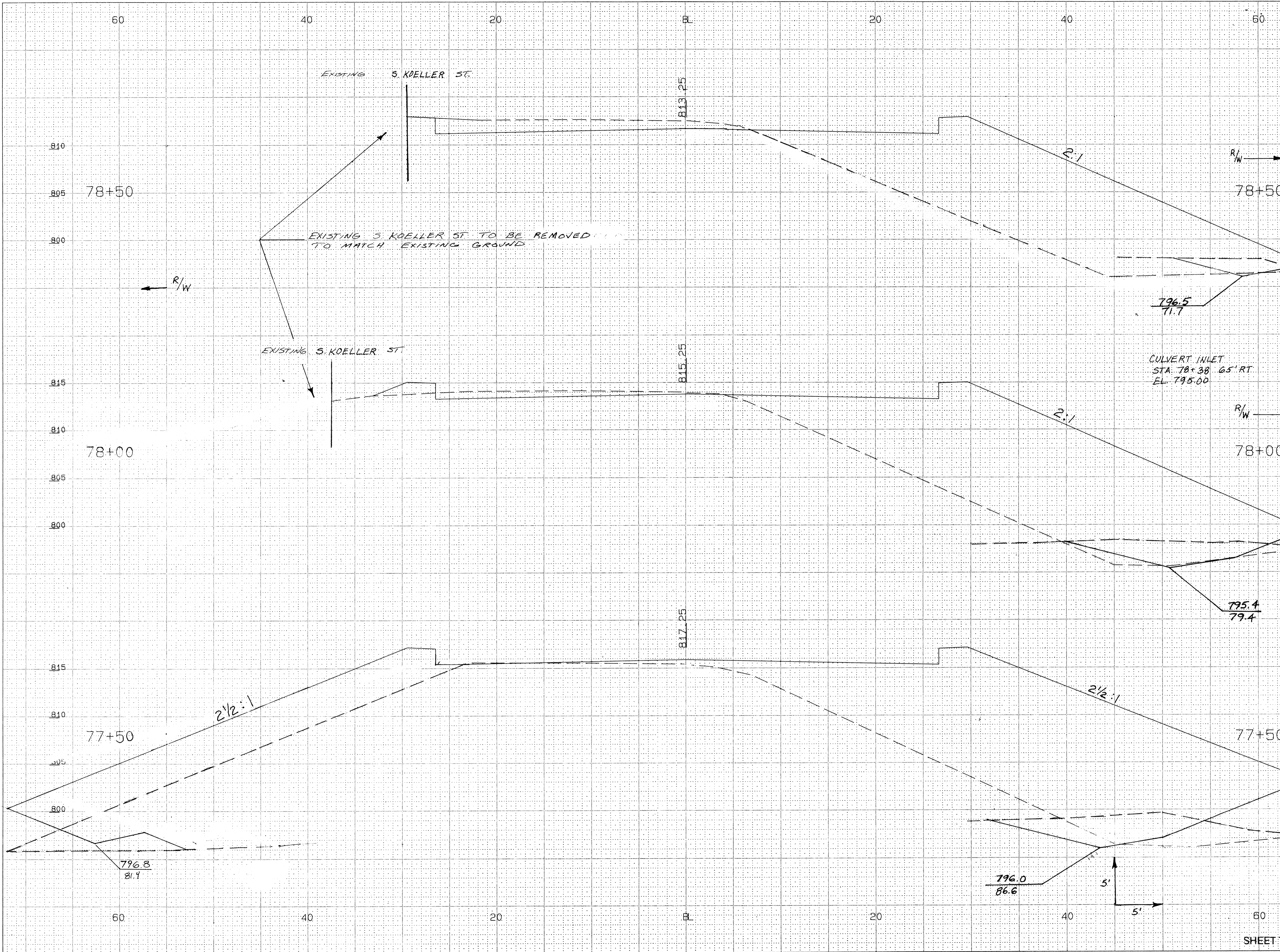
STATION	DISTANCE	EXCAVATION	FILL
75+38		0	432
75+50		4	1731
76+00			
SHEET TOTAL		4	2163

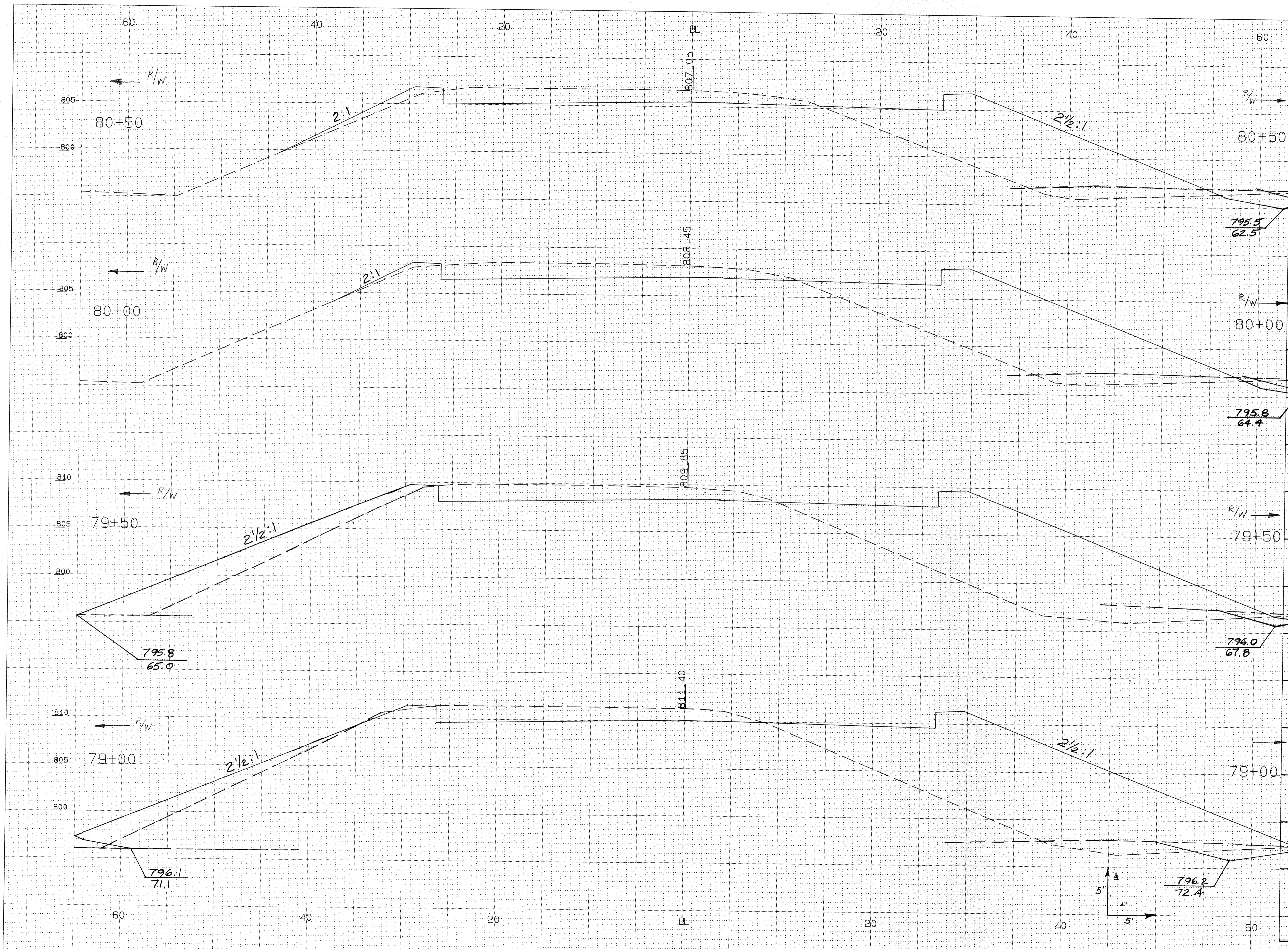
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
76+00		6	173
76+50		8	169
77+00			
SHEET TOTAL		14	3422



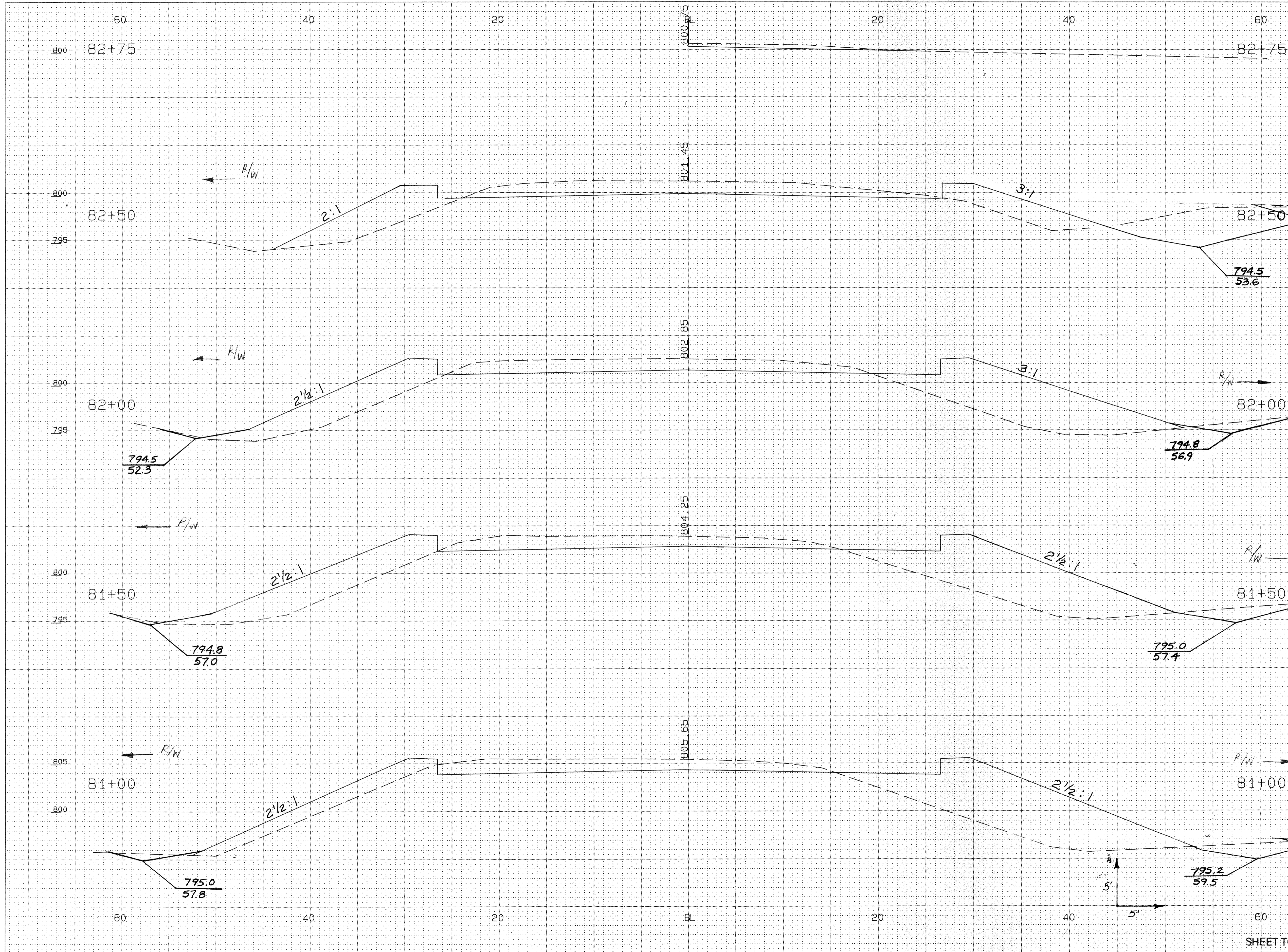


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
77+00			
77+50		39	1528
78+00		79	1151
78+50		89	838
SHEET TOTAL		207	3517

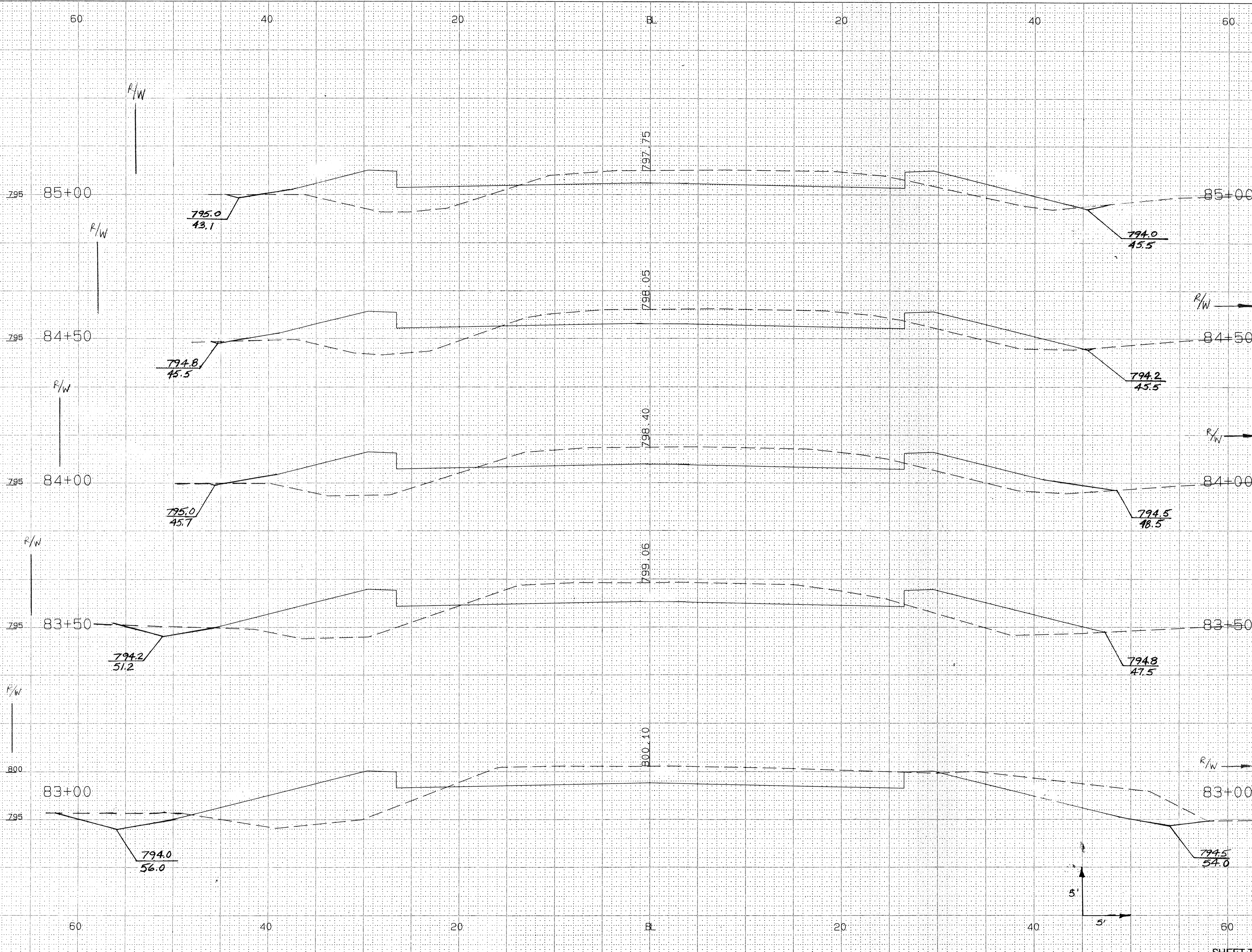




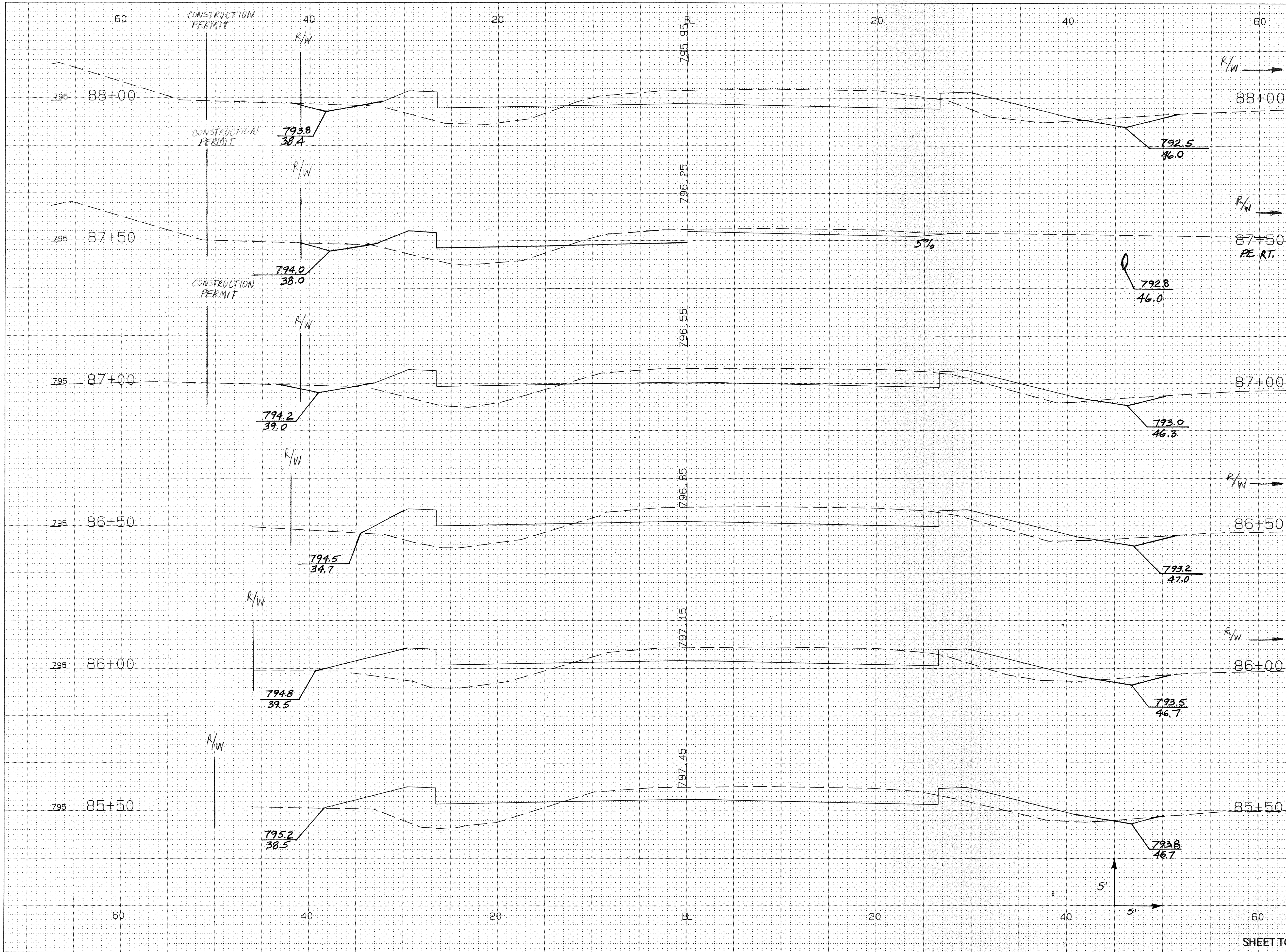
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
78+50			
79+00		104	712
79+50		107	619
80+00		104	509
80+50		112	394
SHEET TOTAL		427	2234



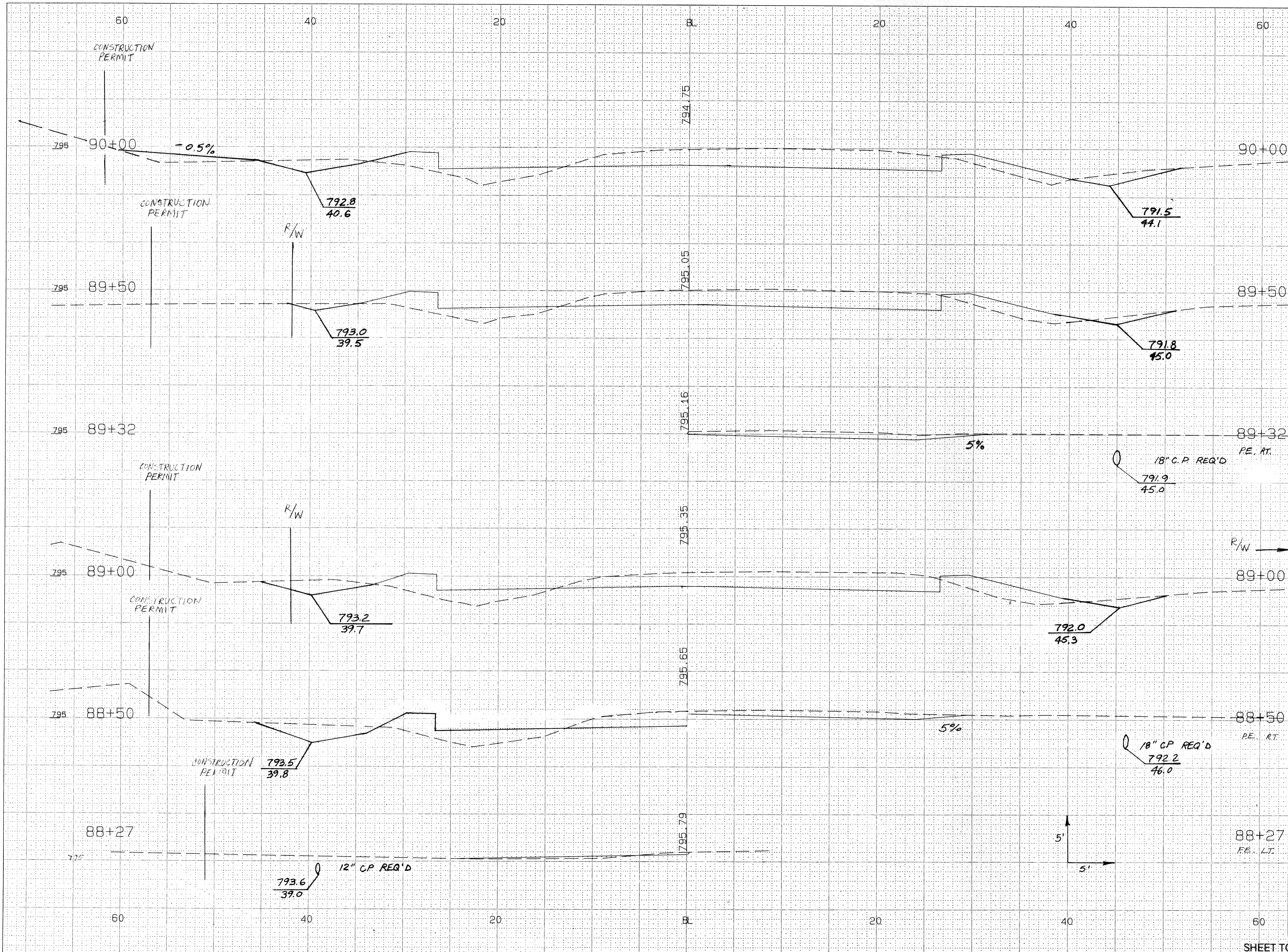
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
80+50			
81+00		113	341
81+50		106	340
82+00		99	331
82+50		145	226
SHEET TOTAL		463	1238



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		LNCL	
82+50			
83+00		225	144
83+50		207	168
84+00		144	175
84+50		122	153
85+00		104	144
SHEET TOTAL		802	784



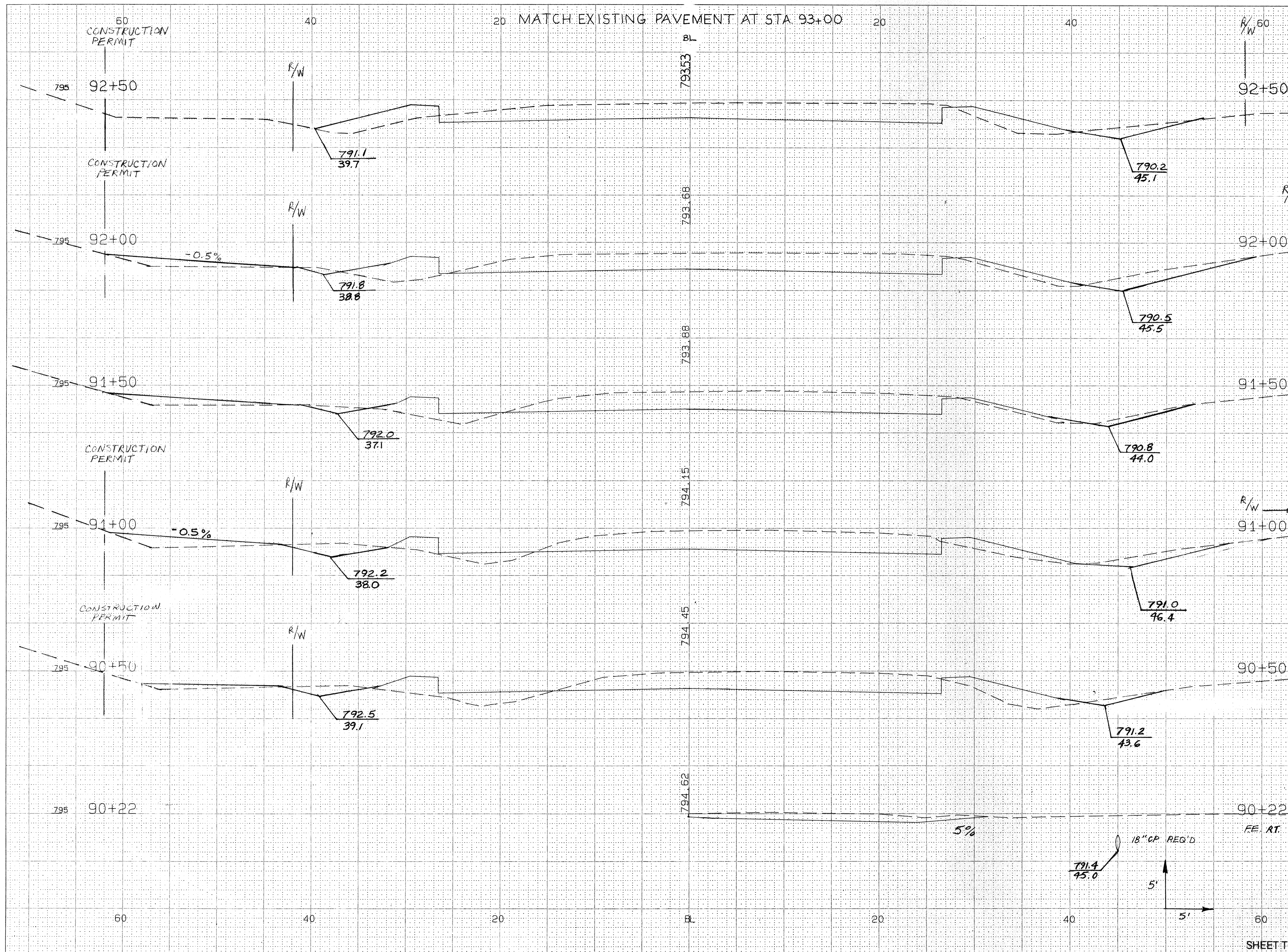
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
88+00			
85+00		95	131
85+50		96	124
86+00		105	115
86+50		113	98
87+00		135	104
87+50		135	105
88+00			
SHEET TOTAL		679	677



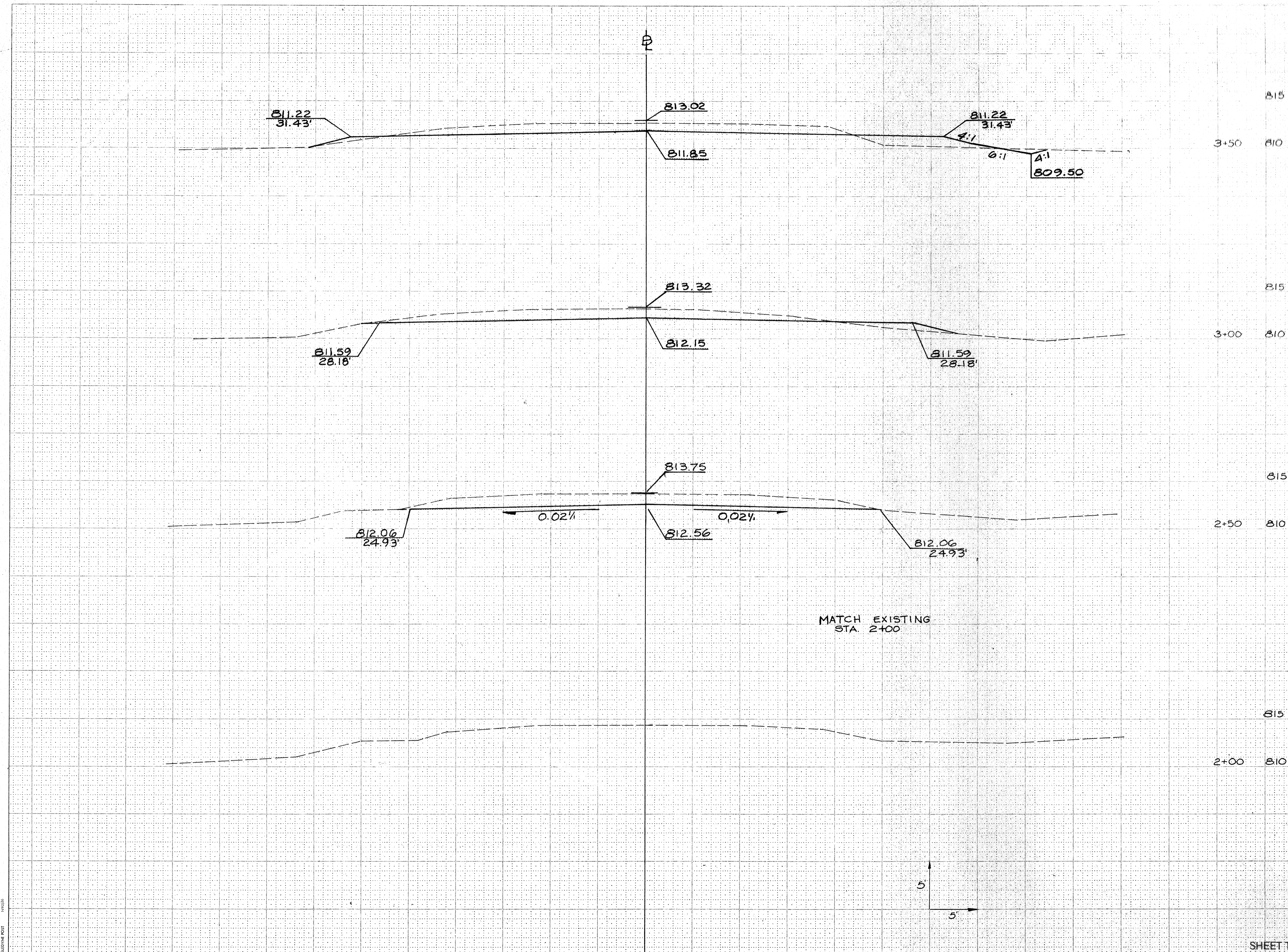
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
88+00		146	96
88+50		158	86
89+00		132	70
89+50		132	65
89+32			
89+00			
88+50			
88+27			
SHEET TOTAL		568	317

20 MATCH EXISTING PAVEMENT AT STA 93+00 20

STATE PROJECT NUMBER: SHEET NUMBER  
6473-01-71



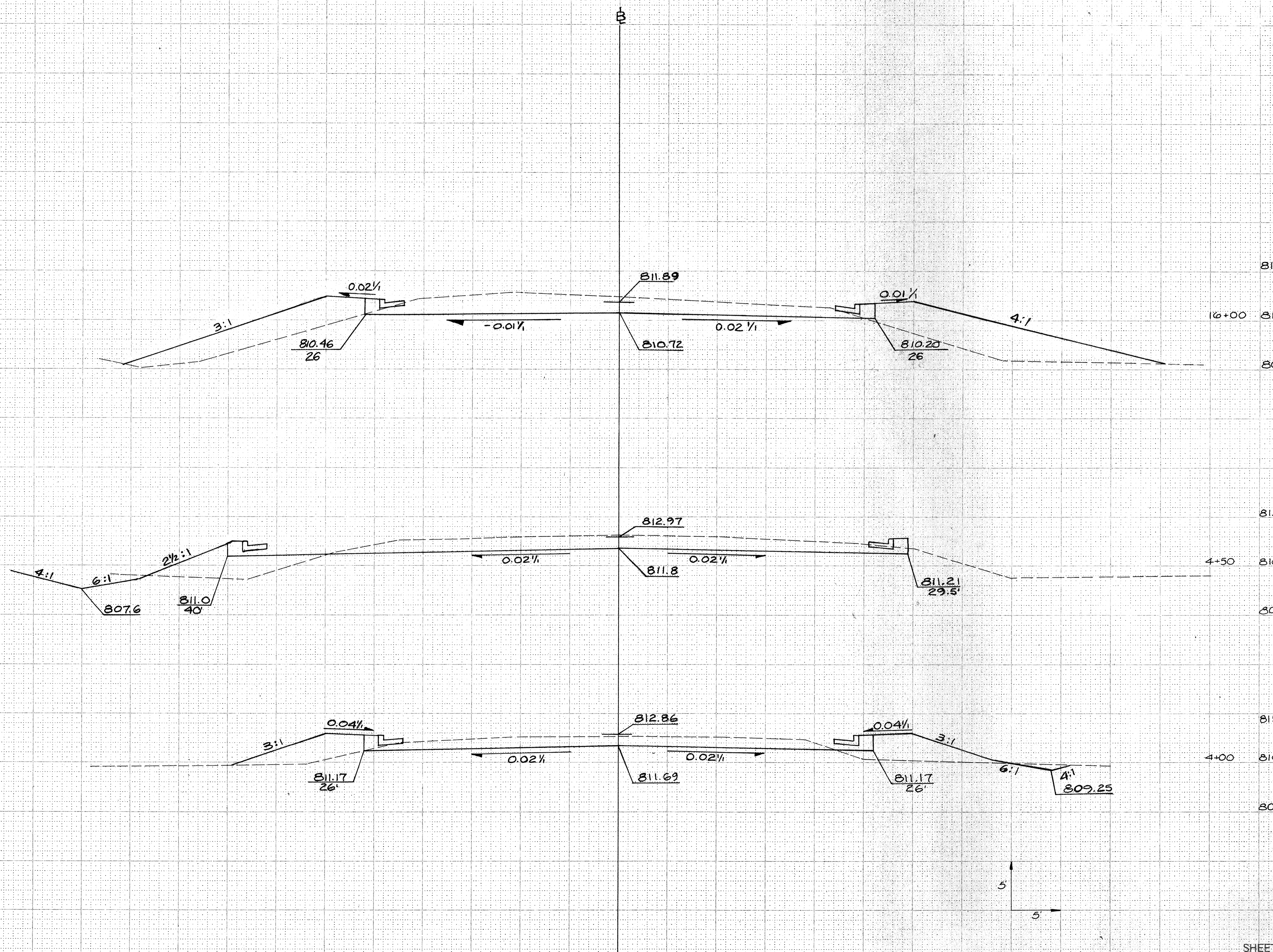
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
90+00		138	64
90+50		154	56
91+00		163	39
91+50		165	37
92+00		168	44
92+50		81	24
SHEET TOTAL		869	264



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
2+00		X	X
2+50		52	0
3+00		89	4
3+150		79	15
SHEET TOTAL		220	19

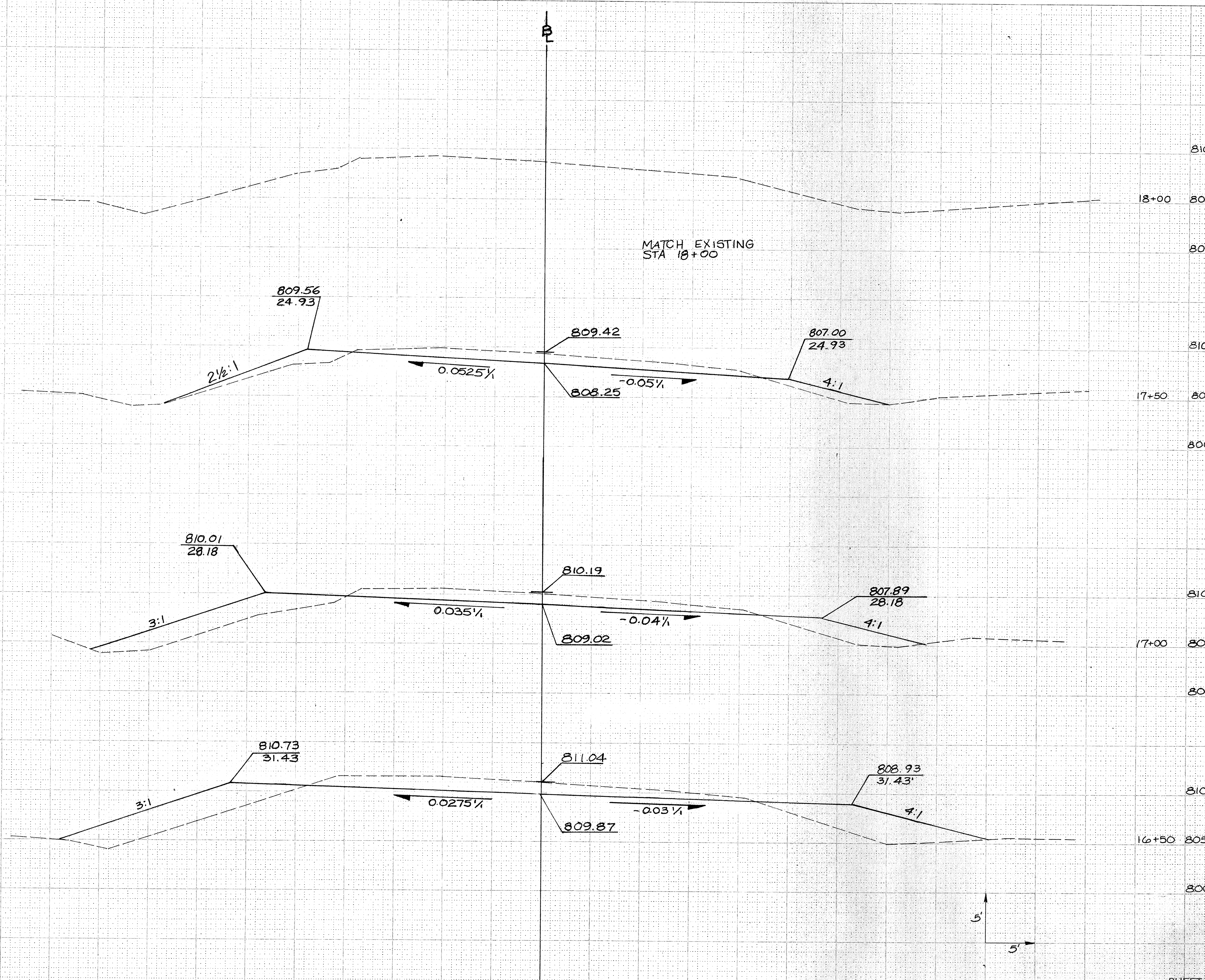
MATCH EXISTING  
STA. 2+00





STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL.	FILL
3+50		85	54
4+00		94	67
4+50			
16+00			
SHEET TOTAL		179	121

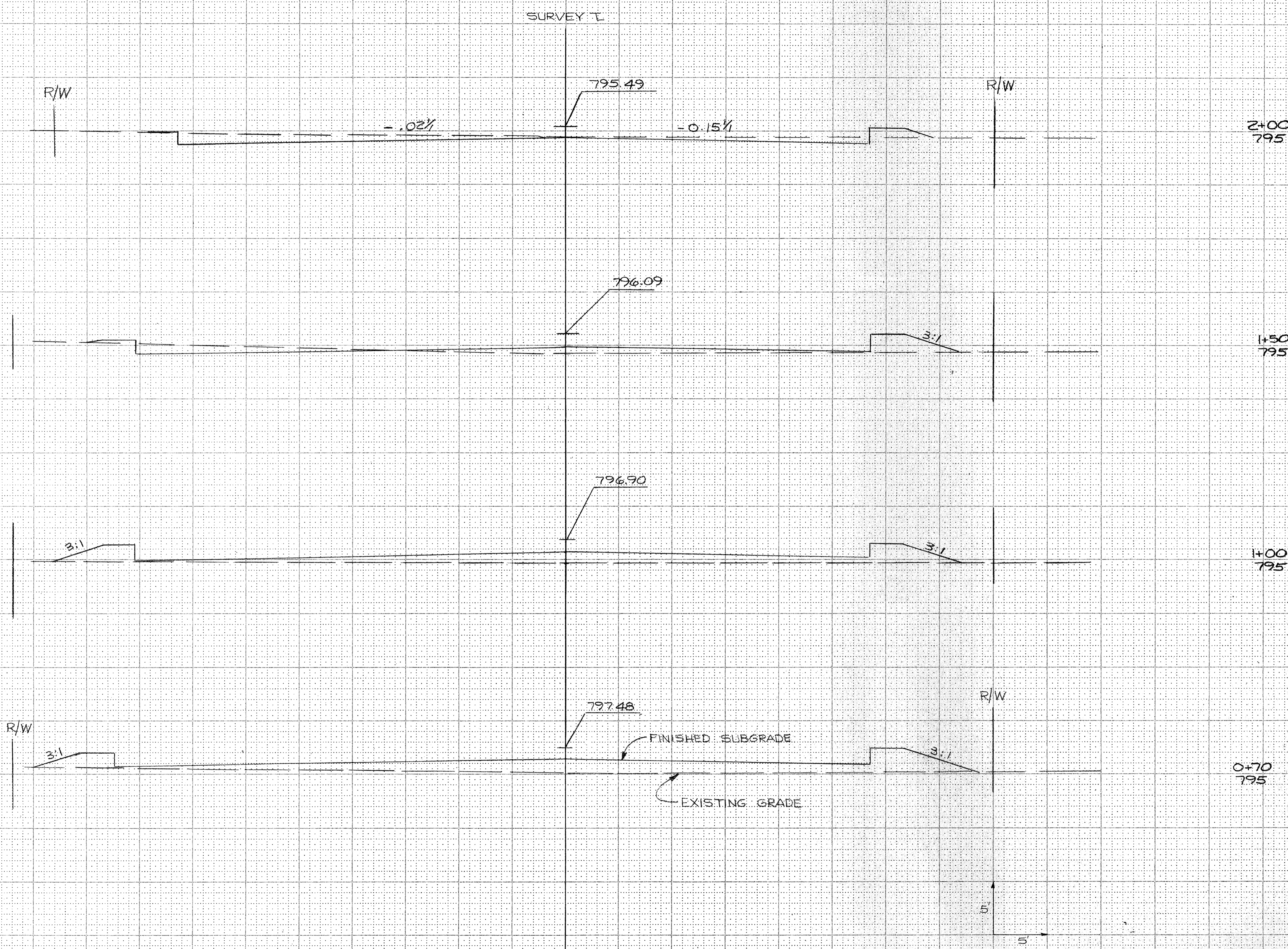
S. WASHBURN (S) STA 4+00 - STA 4+50  
S. WASHBURN (N) STA 16+00



MATCH EXISTING  
STA 18+00

STATION	DISTANCE	YARDAGE	
		UNCL	FILL
16+00	810		
16+50	805	94	181
17+00	800	69	130
17+50	805	67	73
18+00	810	34	20

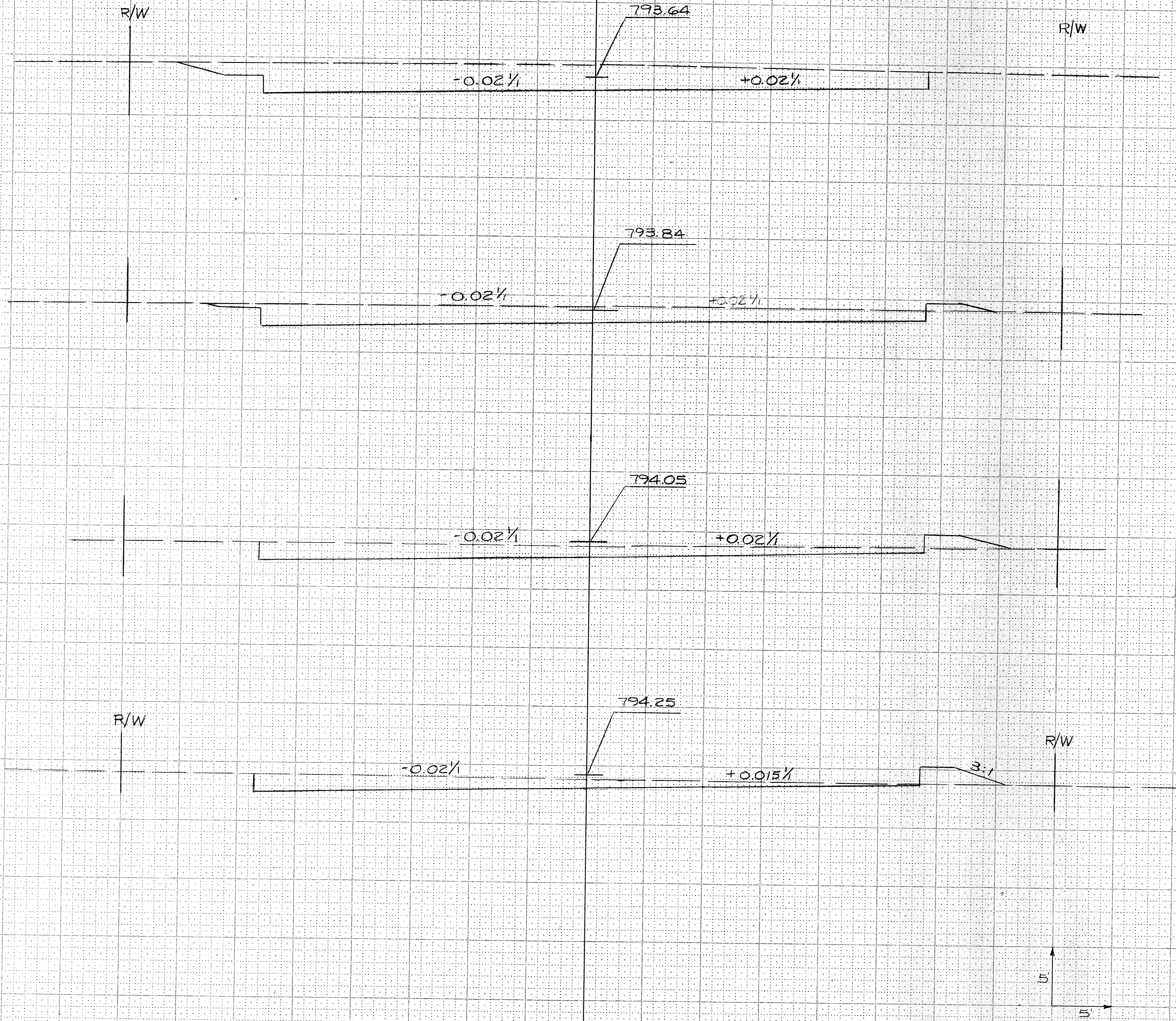
SHEET TOTAL 264 404



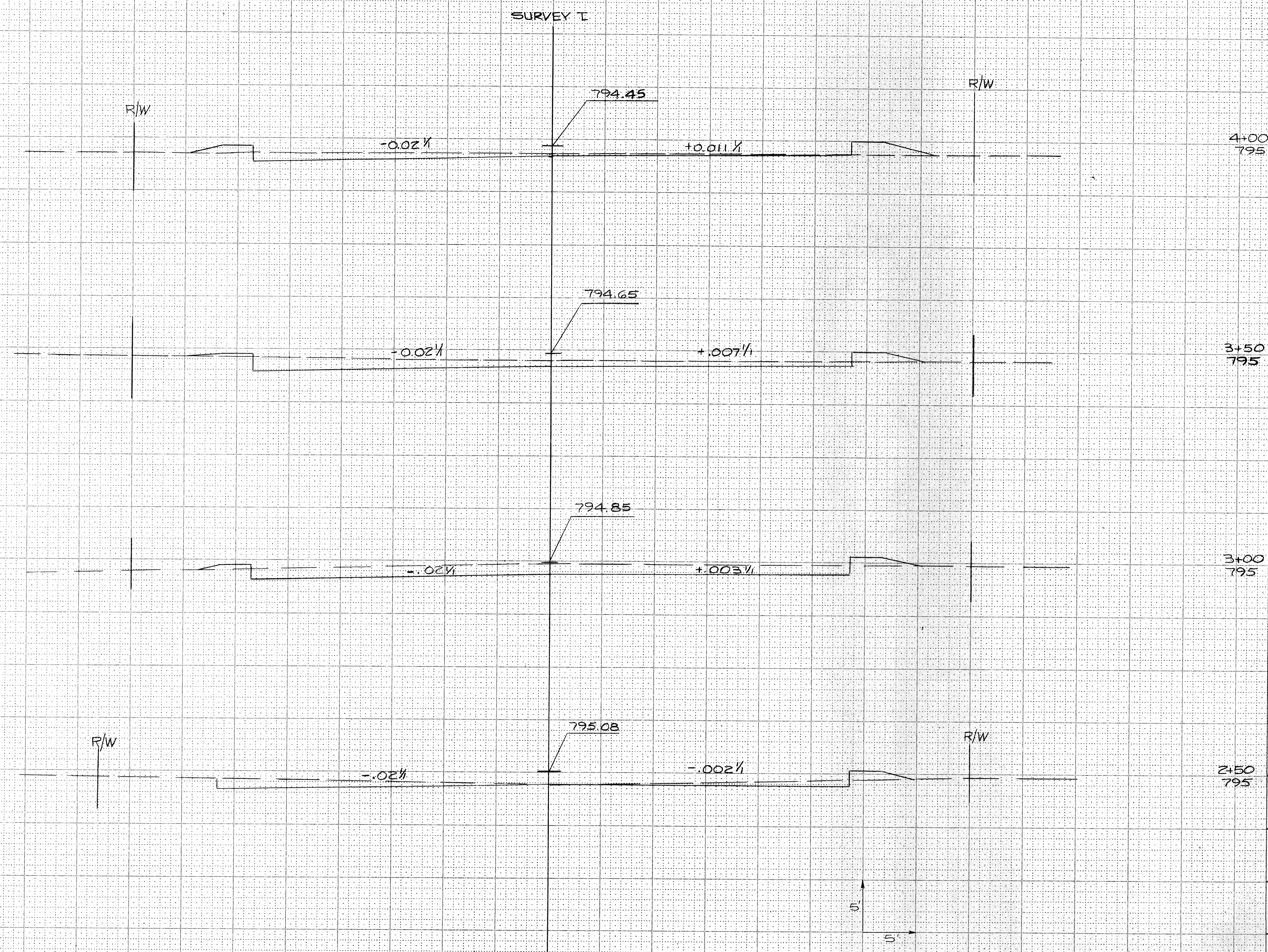
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
2+00	70+0	0	89
1+50	00	12	88
1+00	50	43	27
0+70	00		
SHEET TOTAL		55	204

SURVEY I

STATE PROJECT NUMBER: 6473-01-71  
SHEET NUMBER



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
6+00			
795			
4+00			
4+50	67		9
5+00	100		8
5+50	130		8
5+50	201		4
6+00			
5+00			
795			
4+50			
795			
SHEET TOTAL		501	29



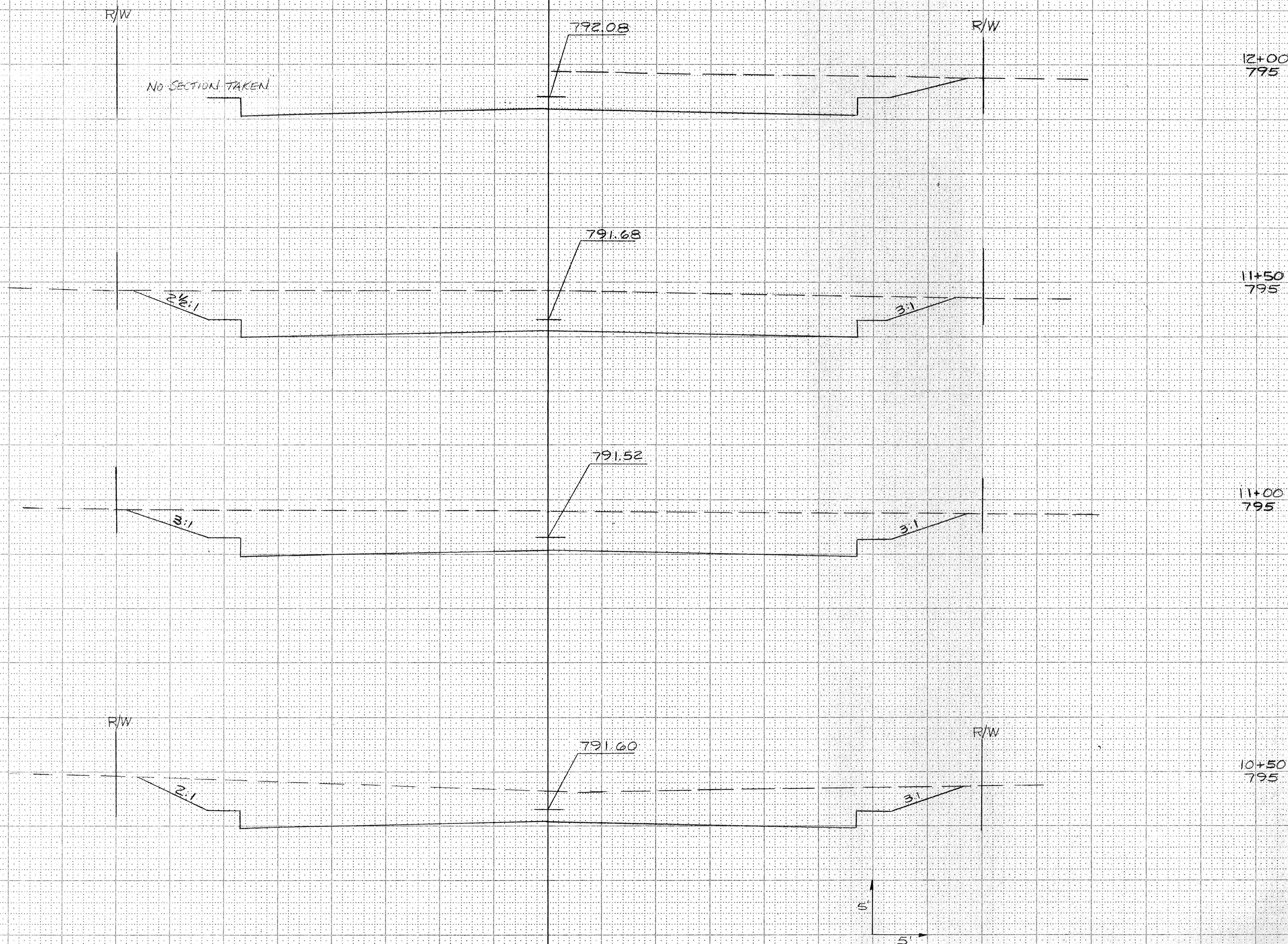
STATION	DISTANCE	YARDAGE		
		UNCL	EXCAVATION	FILL
4+00	00			
795		59		0
3+50	50	86		7
3+00	00	100		7
2+50	50	63		9
2+00	00			
1+50	50			
1+00	00			
0+50	50			
0+00	00			
<b>SHEET TOTAL</b>		<b>308</b>		<b>31</b>





6473-01-7

SURVEY I



12+00  
795

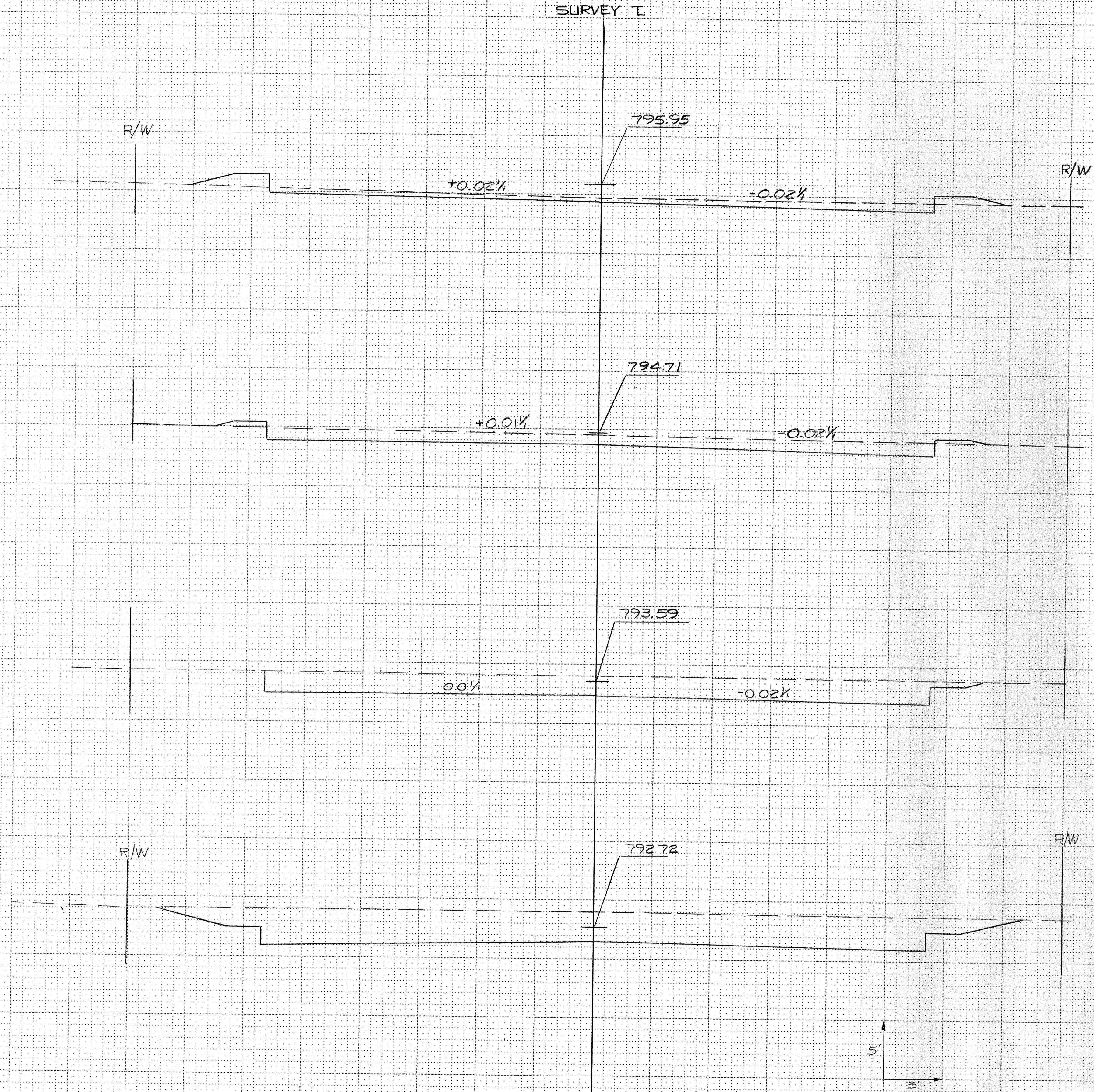
11+50  
795

11+00  
795

10+50  
795

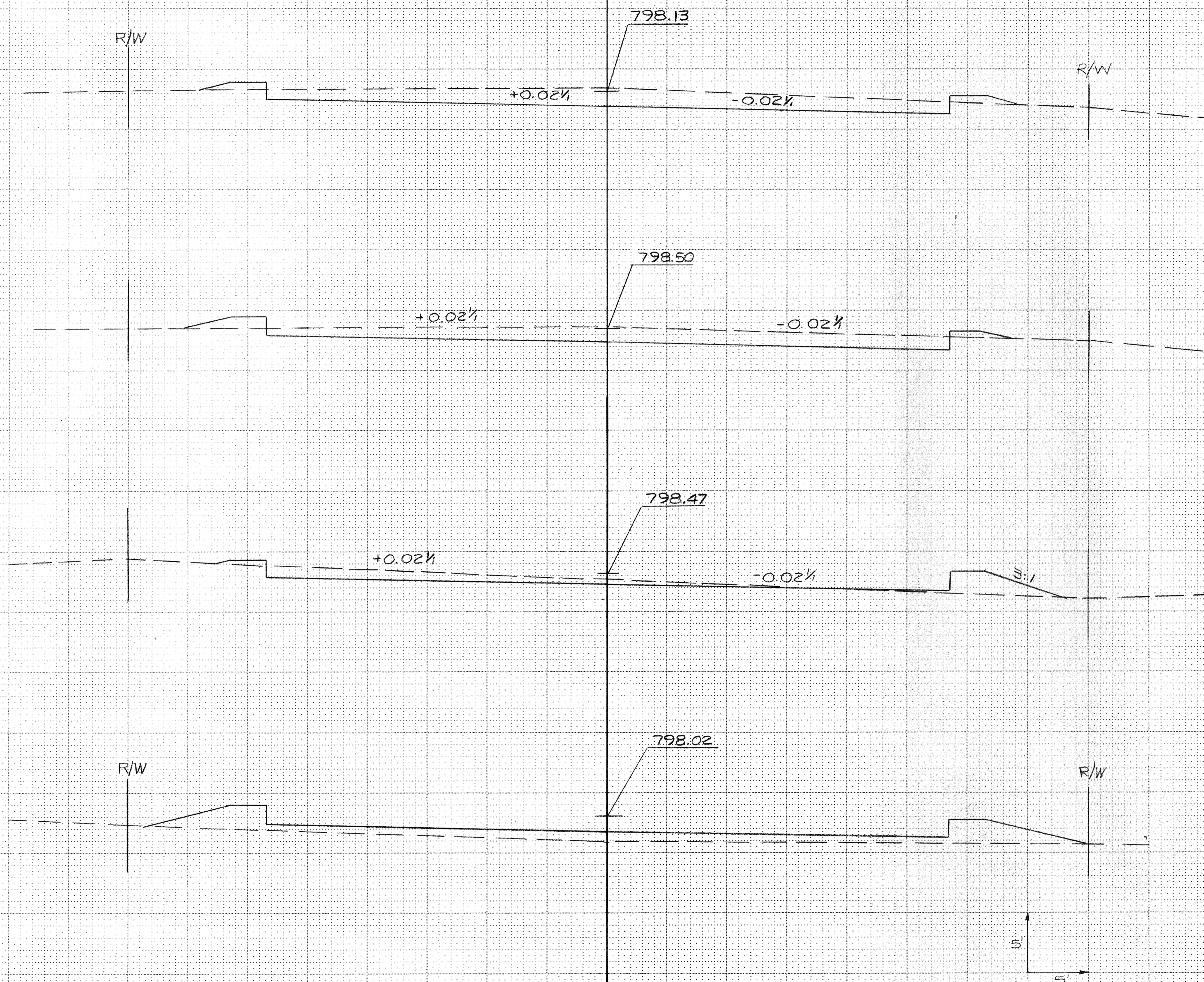
STATION	DISTANCE	YARDAGE	
		EXCAVATION	
		UNCL	FILL
12+00			
10+00		396	0
10+50		466	0
11+00		484	0
11+50		463	0
12+00			
SHEET TOTAL		1809	0



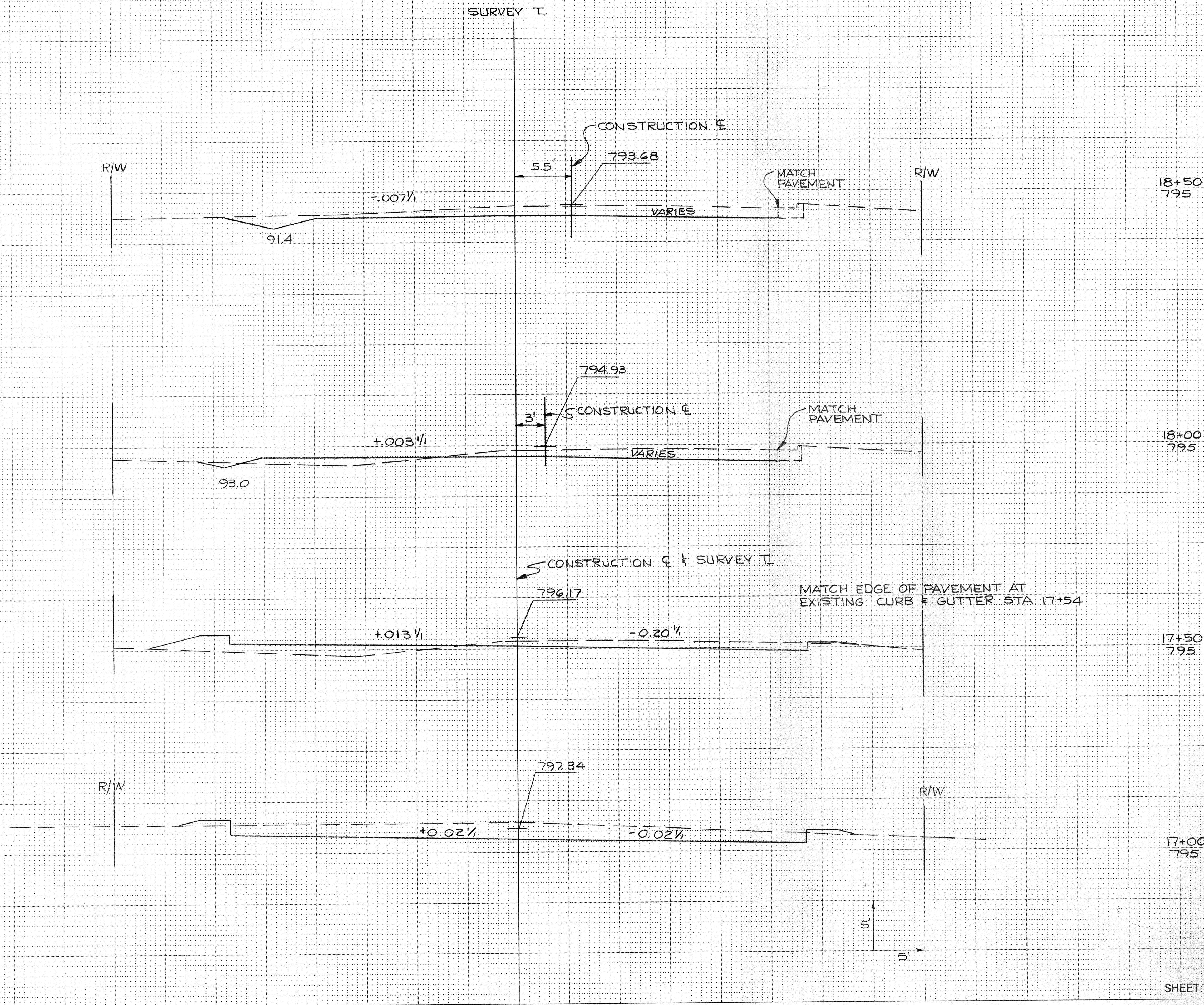


STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
		UNCL.	
12+00	00		
14+00	795	384	0
12+50	50	267	0
13+00	00	156	0
13+50	50	74	10
14+00	00		
13+50	795		
13+00	795		
12+50	795		
SHEET TOTAL		881	10

SURVEY I



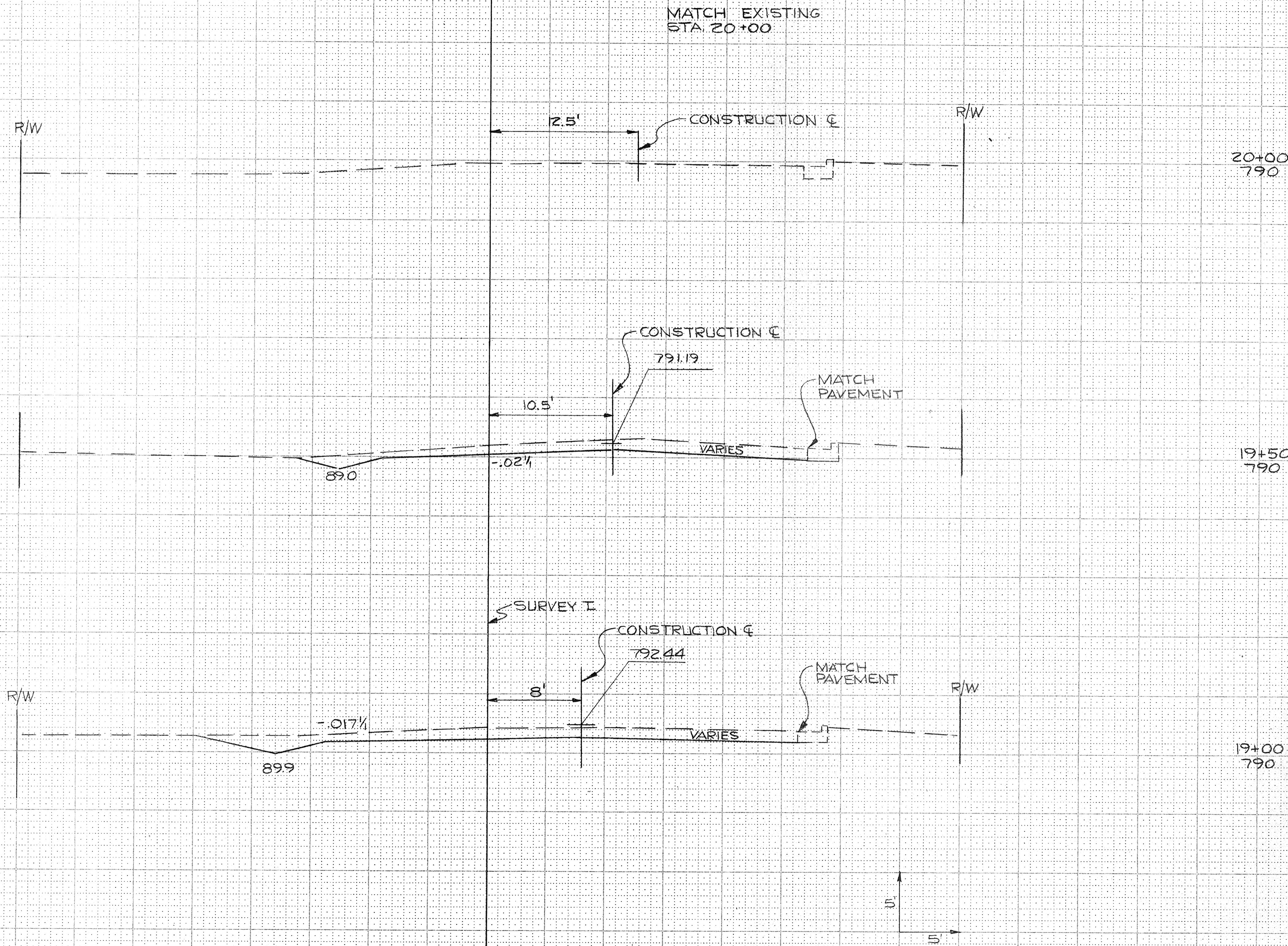
STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
16+50 795	0+14		
	0+15	46	130
	0+16	19	67
	0+17	73	17
	0+18	114	10
16+00 795	16+50		
15+50 795			
15+00 795			
SHEET TOTAL		252	224



STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL		
18+50				
18+50	795	130		7
17+00				
17+00	795	88		31
17+50				
17+50	795	46		37
18+00				
18+00	795	69		10
18+50				
18+50	795			
SHEET TOTAL		333		85

SURVEY I

STATE PROJECT NUMBER: 6473-01-71  
SHEET NUMBER:



STATION	DISTANCE	YARDAGE	
		EXCAVATION	FILL
20+00	82		0
19+50	73		0
19+00	32		0
SHEET TOTAL		187	0