

22

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7140-6-71	GR0699(3)	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

TREMPEALEAU-U.S.H. 53 ROAD

C.T.H. 'M'-USH 53 SEC.

S.T.H. 93

TREMPEALEAU AND LA CROSSE COUNTIES

Index of Sheets

Sheet No. 1	Title
Sheet No. 2-2.2	Typical Sections and Details
Sheet No. 3-3.1	Estimate of Quantities
Sheet No. 3A-3B	Miscellaneous Quantities
Sheet No. -	Right of Way Plat
Sheet No. 5-5.2	Plan and Profile STA. 5+53.3 - STA. 284+13.0
Sheet No. 6-6.5	Standard Detail Drawings
Sheet No. -	Standard Sign Plates
Sheet No. -	Structure Plans
Sheet No. -	Computer Earthwork Data
Sheet No. 9-9.2	Cross Sections

TOTAL SHEETS = 20



STATE PROJECT NUMBER
7140-6-71

Scales PLAN 1" = 200'



Design Designation

A.D.T. 1980	= 1200
A.D.T. 2000	= 2100
D.H.V.	= 279
D.	= 60-40
T.	= 11.3%
V.	= 55 M.P.H.
DESIGN CLASS	= S2

Conventional Signs

County Line	-----
Township or Range Line	-----
Section Line	-----
Corporate or City Limits	-----
Property line	-----
Lot Line	-----
Existing Right of Way Line	-----
New Right of Way Line	-----
Base or Survey Line	-----
Slope Intercept	-----
Existing Roadway or Private Entrance	-----

Caution Symbol (Combustible fluids under pressure)	
Railroads	-----
Fence	-----
Culverts in Place	-----
Culverts Required	-----
Power Pole	-----
Telephone or Telegraph Pole	-----
Right of Way Markers	-----
Marsh	-----
Wooded Area	-----
Grade Elevation	-----

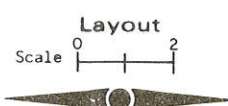
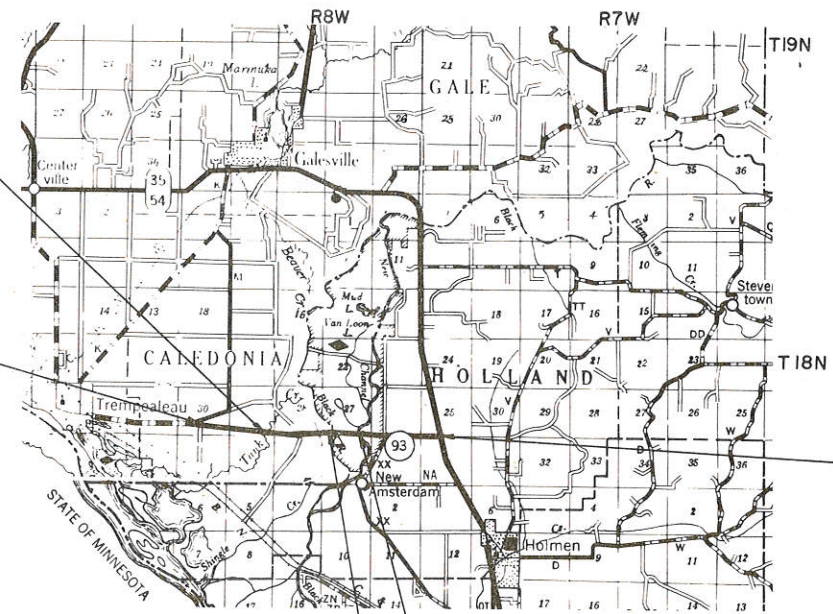
EXCEPTION TO NET CENTERLINE LENGTH
STA. 99 + 42.5 - 100 + 77.5

BEGIN PROJECT 7140-6-71
STA. 5 + 53.3
X=1,634,600 ± 200'
Y=64,730 ± 200'
± 550 FT. EAST AND 1285 FT. NORTH OF THE
SOUTHWEST COR. OF SEC. 30, T18N, R8W

EXCEPTION TO NET CENTERLINE LENGTH
STA. 161 + 89.0 - 167 + 11.0

EXCEPTION TO NET CENTERLINE LENGTH
STA. 183 + 42.5 - 191 + 57.5

END PROJECT 7140-6-71
STA. 284 + 13.0
X=1,662,370 ± 200'
Y=63,050 ± 200'
± 1990 FT. EAST AND ± 6 FT. NORTH OF
THE SOUTHWEST CORNER OF SEC. 25, T18N, R8W



Total Net Length of Centerline = 2.936 MI. TREMPEALEAU
2.062 MI. LA CROSSE
4.998 MI. TOTAL

NOTE: ALL COORDINATES SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE SYSTEM, CENTRAL ZONE. COORDINATES SCALED FROM U.S.G.S. TOPOGRAPHIC MAP FOR IDENTIFICATION ONLY.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
Surveyor <u>M.E.W.</u>	District Checker <u>D.G.G.</u>
Designer <u>D.P.A.</u>	C.O. Checker <u>R.G.P.</u>
District Supervisor <u>G.W.P.</u>	C.O. Coordinator <u>E.H.</u>
Approved: _____	
Date <u>1-3-80</u>	<u>J.R. Kinsey</u> District Transportation Director
Approved: _____	
Date <u>2/26/80</u>	<u>John Smith</u> Chief Design Engineer
Approved: _____	
Date <u>2/27/80</u>	<u>E.J. Ryshit</u> Director of Development
U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION REGION 5 WISCONSIN DIVISION	
Approved: _____	
Date _____ Division Administrator	

GENERAL TELEPHONE CO.
BLACK RIVER FALLS, WI. 54615
REP: 808 TEEPLES
PHONE: 715-284-4379

ARCADIA, WI 54612
REP: BRUCE MESTAD
PHONE: 223-3381

NORTHERN STATES POWER CO.
LA CROSSE, WI 54601
REP: JOHN RITTER
PHONE: 782-8110

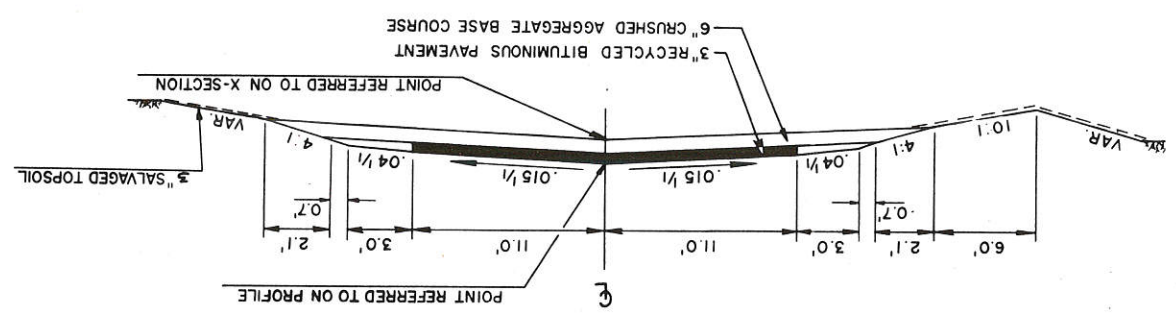
8F1-8 APRON ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
9A1-3 LAYOUT DETAILS FOR AT-GRADE SIDE ROAD INTERSECTIONS
1385-1 PAVEMENT MARKING
1482-4a & b CLASS "A" STEEL PLATE BEAM GUARD AND STEEL PLATE BEAM MEDIAN GUARD
15C1-5 CONSTRUCTION BARRICADES AND STANDARD SIGNS

UTILITIES

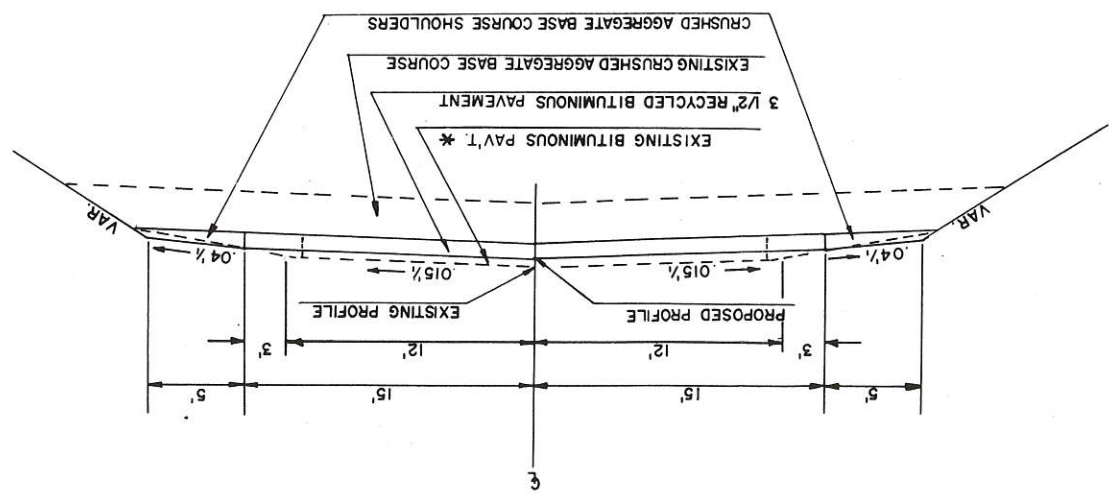
STANDARD ABBREVIATIONS

ADT	AVERAGE DAILY TRAFFIC
AH	AHEAD
ET.AL.	AND OTHERS
BK	BACK
B	BARN
B.M.	BENCH MARK
BIT.	BITUMINOUS
C.B.	CATCH BASIN
CL	CLASS
C.M.C.P.	CORRUGATED METAL CULVERT PIPE
CONC.	CONCRETE
CONST.	CONSTRUCTION
C.P.	CULVERT PIPE
C.T.H.	COUNTY TRUNK HIGHWAY
CWT.	HUNDRED WEIGHT
C.Y.	CUBIC YARD
D	DIRECTIONAL DISTRIBUTION
D.H.V.	DESIGN HOUR VOLUME
DIS.	DISCHARGE
E	EAST
ELEV.	ELEVATION
EXC.	EXCAVATION
F	FACE TO FACE
F.E.	FIELD ENTRANCE
F.L.	FLOW LINE
FT.	FOOT (FEET)
G.	GARAGE
GAL.	GALLON
H	HOUSE
HOR.	HORIZONTAL
IN.	INCHES
INT.	INTERSECTION ANGLE
I	IRON PIN
L.F.	LINEAL FEET
L.H.F.	LEFT HAND FORWARD
LT.	LEFT
L.H.F.	LEFT HAND FORWARD
L	LENGTH OF CURVE
L.S.	LUMP SUM
L.H.E.	LIMITED HIGHWAY EASEMENT
M.H.	MANHOLE
MAX.	MAXIMUM
MI.	MILE
MIN.	MINIMUM
N	NORTH
PAV.T.	PAVEMENT
P.C.	POINT OF CURVATURE
P.I.	POINT OF INTERSECTION
P.T.	POINT OF TANGENCY
P.C.C.	PORTLAND CEMENT CONCRETE
P.E.	PRIVATE ENTRANCE
P.L.	PROPERTY LINE
P.P.	POWER POLE
PROJ.	PROJECT
R	RADIUS
R.C.C.P.	REINFORCED CONCRETE CULVERT PIPE
R.C.P.S.S.	REINFORCED CONCRETE PIPE, STORM SEWER
REQ'D.	REQUIRED
RT.	RIGHT
R.H.F.	RIGHT HAND FORWARD
R.W.	RIGHT OF WAY
RD.	ROAD
SAN.	SANITARY
S	SOUTH
S.W.	SIDEWALK
STD.	STANDARD
STH	STATE TRUNK HIGHWAY
STA.	STATION
S.S.	STORM SEWER
S.E.	SUPERELEVATION
S.Y.	SQUARE YARD
SHR.	SHRINKAGE
SURF.	SURFACE
T	TRUCK PERCENTAGE
T	TANGENT LENGTH OF CURVE
TAV.	TAVERN
T.P.	TELEPHONE POLE
T	TRANSIT LINE
UNCL.	UNCLASSIFIED EXCAVATION
V	DESIGN SPEED
VAR.	VARIABLE
V.C.	VERTICAL CURVE
VERT.	VERTICAL
W	WEST
CR.	CRUSHED
H.P.	HIGH POINT

TYPICAL TOWN ROAD SECTION
"AA" LINE



TYPICAL TANGENT SECTION
5 FT. CRUSHED AGGREGATE SHOULDERS



- CURVE DATA IS BASED ON ARC DEFINITION.
- MULCH ALL CUT AND FILL SLOPES AS DIRECTED BY THE ENGINEER.
- ALL SIDE ROAD INTERSECTIONS TO BE TYPE "C" INTERSECTIONS, UNLESS OTHERWISE DESIGNATED.
- EXACT SIZE AND LOCATION OF PRIVATE ENTRANCES SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
- SALVAGED TOPSOIL SHALL BE PLACED TO AN APPROXIMATE DEPTH OF 3 INCHES AT TIME OF PLACING.
- WHEN THE QUANTITY OF THE ITEM OF BASE OR SURFACE COURSE IS MEASURED FOR PAVEMENT BY THE TON THE DEPTH OR THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- A SAVED BUTT JOINT WILL BE REQUIRED WHERE THE NEW BITUMINOUS CONCRETE MATCHES INTO THE EXISTING SURFACE.
- PRIOR TO THE PLACEMENT OF STEEL PLATE BEAM GUARD EXISTING SHOULDER MATERIAL SHALL BE SPREAD OVER THE EXISTING BASE COURSE AND SHAPED TO THE CROSS SLOPE AS SHOWN ON THE TYPICAL SECTIONS AND PLANS. COST OF THIS SHAPING WILL BE INCLUDED IN THE ITEM OF PREPARATION OF FOUNDATION FOR BITUMINOUS PAVING.
- THE LOCATION OF SAW JOINTS AND THE AMOUNT OF "SALVAGED BITUMINOUS PAVEMENT" AT SIDE ROADS WILL BE DETERMINED IN THE FIELD BY THE ENGINEER.

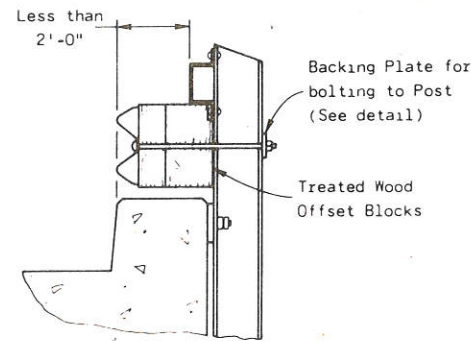
GENERAL NOTES

STATION	DEPTH (INCHES)
32+00	5-1/2
52+50	5-1/2
113+50	7
143+50	6-1/2
173+00	6-1/2
202+00	5
237+00	6

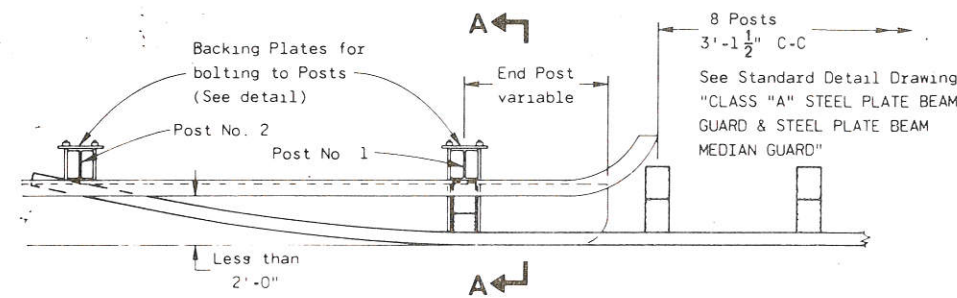
STEEL PLATE BEAM GUARD CONNECTIONS TO EXISTING STRUCTURES

B61-19, B32/61-18 & B32-16

NOTE NOTCH BEAM GUARD RAIL AND OR WOODEN OFFSET BLOCKS AS NECESSARY TO MAINTAIN REQUIRED RAIL HEIGHT.

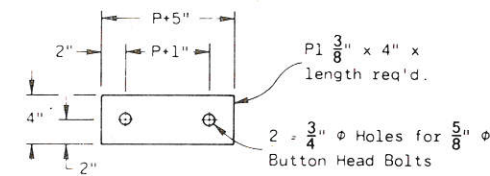


SECTION A - A



PLAN VIEW

TYPE "B"



BACKING PLATE
(Galvanized)

NOTES

Expansion and contraction of the bridge superstructure precludes a rigid connection between the existing structure and the guardrail installation. The guardrail splice at the terminal connection must permit any expansion or contraction to be absorbed within the splice. Bolt (splice) tension necessary to prevent the connection from becoming a rigid connection shall be determined by the Engineer.

The method illustrated for attaching guardrail to existing structures are TYPE SOLUTIONS ONLY. Specific dimensions must be based on the existing structure design, with guardrail height and post spacing meeting the requirements of the current Standard Detail Drawing for "CLASS "A" STEEL PLATE BEAM GUARD & STEEL PLATE BEAM MEDIAN GUARD".

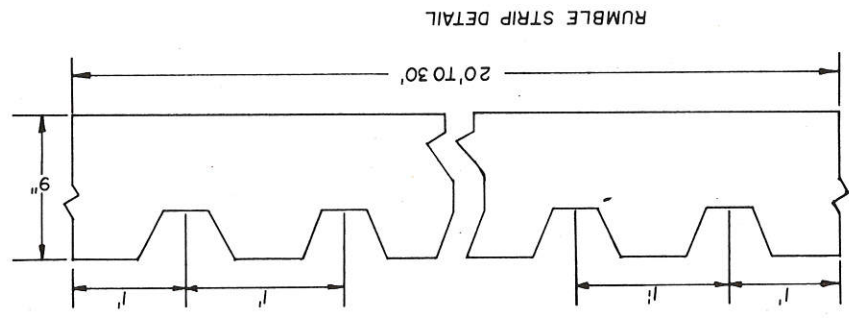
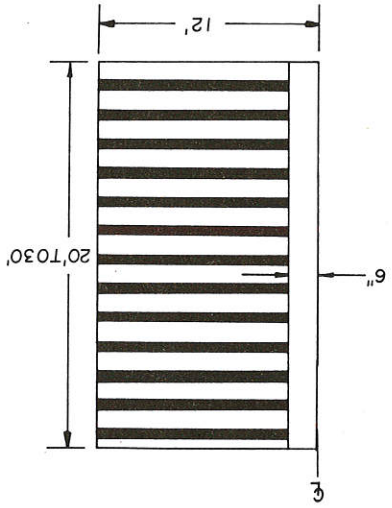
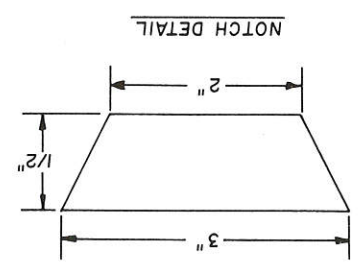
Bolts, studs, nuts and washers to be ASTM Specification A 325, and galvanized in accordance with ASTM A 153.

Maximum rate of flare for guardrail shall be 10:1 where normal guardrail alignment is outside the structure railing.

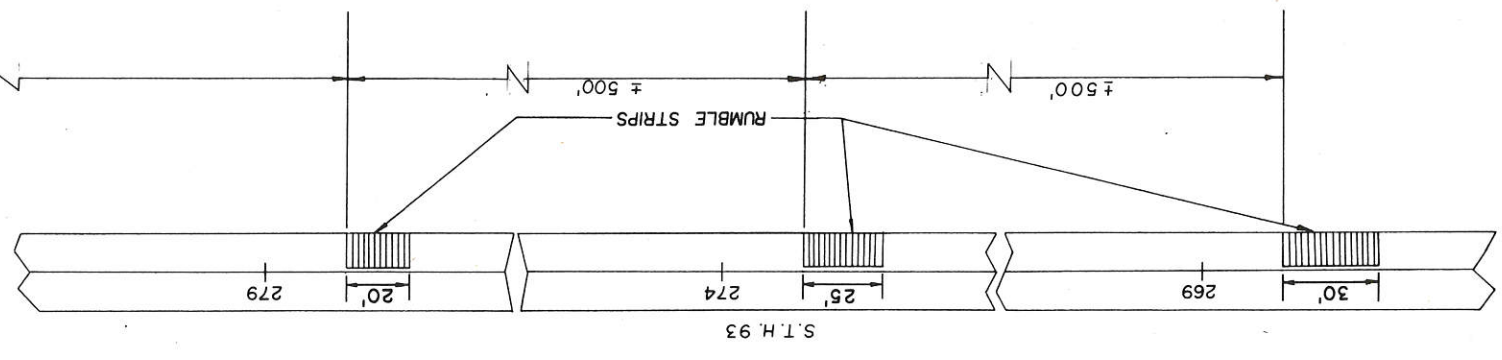
Type "B" structure connection shall be used only on traffic approach end of structure. Connect directly to structure end post on exit end of structure.

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SHEET NO.	2.2

NOTE: INSTALL SIGN POST AND SURFACE ISLAND WITH 2" RECYCLED BITUMINOUS PAVEMENT AND 6" CRUSHED AGGREGATE BASE COURSE.



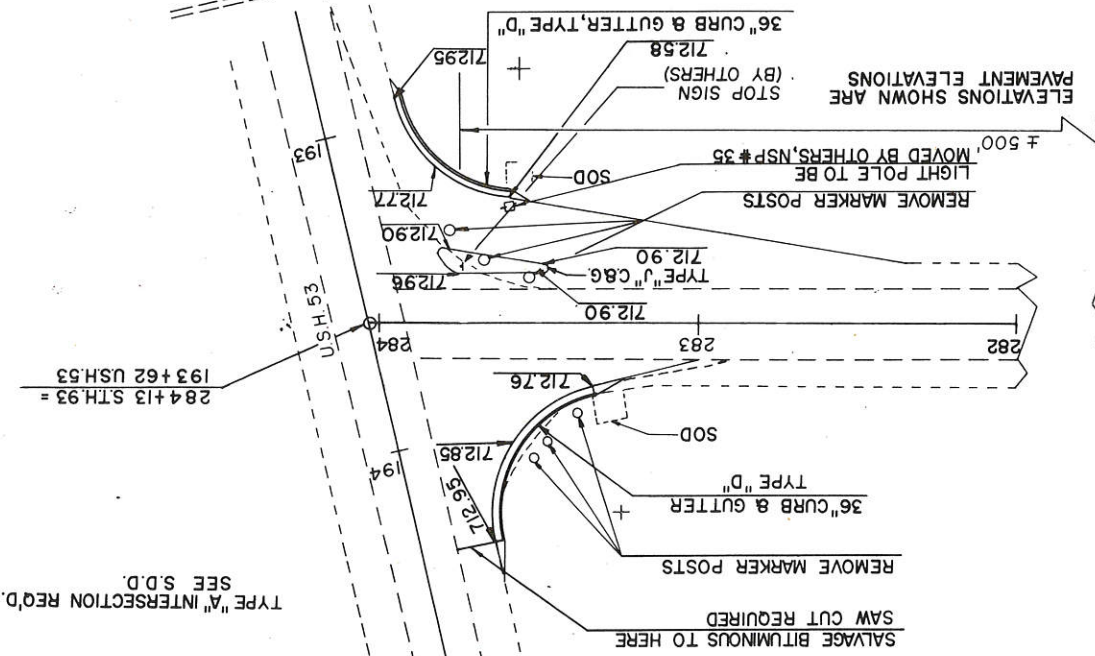
NOTE: FILL BEHIND CURB AND GUTTER ON RADIUS WILL BE ACQUIRED FROM CURB AND GUTTER EXCAVATION AND/OR CRUSHED AGGREGATE BASE COURSE. 6" CRUSHED AGGREGATE BASE COURSE SHALL BE PLACED UNDER CURB AND GUTTER.



SCALE 1"=30'

T.B.M.#6 KIEL MARK, TOP R.C.C.P., WEST END, STA. 192+51, ELEV. 712.14

T.B.M.#6



TYPE "A" INTERSECTION REQ'D. SEE S.D.D.

284+13 S.T.H. 93 =
193+62 USH. 53

ESTIMATE OF QUANTITIES

PROJECT ID: 7140-6-71
 TREMPLEALEAU COUNTY
 AND LACROSSE COUNTY
 TREMPLEALEAU - U.S.H. 53 ROAD
 C.T.H. "M" - U.S.H. 53 SECTION
 S.T.H. 93

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7140-06-71 QUANTITY
20411	REMOVING GUARDRAIL	L.F.	1,248.00	1,248.00
20503	UNCLASSIFIED EXCAVATION	C.Y.	1,115.00	1,115.00
21101	PREPARATION OF FOUNDATION FOR BITUMINOUS PAVING	L.S.	1.00	1.00
21301	FINISHING ROADWAY	L.S.	1.00	1.00
30404	CRUSHED AGGREGATE BASE COURSE	TON	10,580.00	10,580.00
40602	BITUMINOUS MATERIAL FOR SURFACE COURSE	TON	687.00	687.00
52003	CULVERT PIPE, CLASS III, 18-INCH	L.F.	28.00	28.00
52005	CULVERT PIPE, CLASS III, 24-INCH	L.F.	52.00	52.00
52061	APRON ENDWALLS FOR CULVERT PIPE, 18-INCH	EACH	2.00	2.00
52063	APRON ENDWALLS FOR CULVERT PIPE, 24-INCH	EACH	2.00	2.00
60104	CONCRETE CURB, TYPE J	L.F.	80.00	80.00
60170	CONCRETE CURB AND GUTTER, 36-INCH, TYPE D	L.F.	108.00	108.00
61406	ANCHORAGES FOR STEEL PLATE BEAM GUARD	EACH	12.00	12.00
61408	STEEL PLATE BEAM GUARD, CLASS A	L.F.	1,802.00	1,802.00
61801	MAINTENANCE AND REPAIR OF HAUL ROADS	L.S.	1.00	1.00
61910	MOBILIZATION	L.S.	1.00	1.00
62301	CALCIUM CHLORIDE SURFACE TREATMENT	TON	30.00	30.00
62505	SALVAGED TOPSOIL	S.Y.	3,636.00	3,636.00
62702	MULCHING	S.Y.	3,368.00	3,368.00
62901	FERTILIZER	CWT.	3.00	3.00
63002	SEEDING	LB.	82.00	82.00
63101	SODDING	S.Y.	100.00	100.00
64202	FIELD OFFICE, TYPE B	L.S.	1.00	1.00
64210	FIELD LABORATORY	L.S.	1.00	1.00
64301	TRAFFIC CONTROL	L.S.	1.00	1.00
90001	SALVAGED BITUMINOUS PAVEMENT	S.Y.	67,885.00	67,885.00

ITEM	ITEM DESCRIPTION	UNIT	TOTAL	7140-06-71 QUANTITY
90002	RECYCLED BITUMINOUS PAVEMENT	TON	19,630.00	19,630.00
90003	REMOVING MARKER POSTS	EACH	19.00	19.00
90004	CONCRETE RUMBLE STRIPS	S.Y.	100.00	100.00
90005	TEMPORARY PAVEMENT MARKING	L.F.	792.00	792.00
90006	CENTER LINE/NO PASSING MARKING, PAINT	MI.	1.85	1.85
<hr/>				
90007	EDGE LINE MARKING, PAINT	MI.	9.76	9.76
90008	FUEL, \$59,000 MAXIMUM	L.S.	1.00	1.00
90009	STRUCTURE ATTACHMENT FOR STEEL PLATE BEAM GUARD, TYPE "B"	EACH	12.00	12.00
90010	MINORITY BUSINESS ENTERPRISE DEVELOPMENT	L.S.	1.00	1.00

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

CONCRETE RUMBLE STRIPS

Sta.	Location	S.Y.	Remarks
+278+87	Rt. Lane	26.7	500 Ft. from stop sign
+273+87	Rt. Lane	33.3	1000 ft. "
+268+87	Rt. Lane	40	1500 ft. "

REMOVING GUARDRAIL

Sta.	Sta.	Location	L.F.	Remarks
98+39	99+43	Lt. & Rt.	208	B-61-19 *
100+77	101+81	Lt. & Rt.	208	B-61-19 *
160+85	161+89	Lt. & Rt.	208	B-32/61-18 *
167+11	168+15	Lt. & Rt.	208	B-32/61-18 *
182+39	183+43	Lt. & Rt.	208	B-32-16 *
191+58	192+62	Lt. & Rt.	208	B-32-16 *

* Removing guardrail also includes removing all concrete anchorages

REMOVING MARKER POSTS

Sta.	Sta.	Location	Each	Remarks
97+42.3	99+42.3	Rt.	3	Delineator Posts
100+77.5	101+77.5	Lt.	2	"
160+89.8	161+89.8	Rt.	2	"
167+10.3	168+10.3	Lt.	2	"
182+42.8	183+42.8	Rt.	2	"
191+57.3	192+57.3	Lt.	2	"
	283+55	Lt.	3	"
	283+55	Rt.	3	Wood Posts

SALVAGED BITUMINOUS PAVEMENT

Sta. - Sta.	Location	S.Y.	Remarks
5+53.3 - 284+02.7	Mainline	64503	C.T.H. "M"
	Lt.	1100	Tn. Road
	Lt.	287	"
	Rt.	287	"
	Lt.	256	"
	Rt.	256	"
	Lt.	247	Amsterdam Road
	Rt.	247	CTH "XX"
	Rt.	465	
	Rt.	137	
	Lt.	56	
	Lt.	44	

STH 93 & USH 53 Inter.

RECYCLED BITUMINOUS PAVEMENT, AC AND PRIME COAT

Sta.	Sta.	Location	Depth	Tons of Mix	AC @ 3.5% Tons	Remarks
5+53.3 - 284+02.7		Mainline	3 1/2"	17,285	605.0	Passing Lane
19+43	25+93	Rt.	3 1/2"	86	3.0	Type "C" Int.
"AA" Line		CTH "M"	3 1/2"	90	3.2	"
26+37		Lt.	3 1/2"	28	1.0	"
26+37		Rt.	3 1/2"	28	1.0	"
124+48		Lt.	3 1/2"	18	0.6	"
169+50		Rt.	3 1/2"	27	.9	"
124+48		Rt.	3 1/2"	18	0.6	"
224+80		Lt.	3 1/2"	28	1.0	"
224+80		Rt.	3 1/2"	28	1.0	"
280+00		Lt.	3 1/2"	17	0.6	Historical Marker Ent.
282+00		Lt.	3 1/2"	13	0.5	Historical Marker Ent
Intersection of STH 93 & USH 53 Undistributed				180	6.3	Type "A" Int.
				1,784	62.3	

UNCLASSIFIED EXCAVATION AND EROSION CONTROL

STA.	STA.	Location	Uncl. Exca. C.Y.	Sal. Topsoil S.Y.	Mulching S.Y.	Fertilizer CWT	Seeding LB.	Sodding S.Y.
18+00 - 24+50		"AA" Line	1,115	3,561	3,368	3	80	40
20 "AA" + 50 - 21 "AA" + 73		Intersection STH 93 & USH 53					2	20
Undistributed								40

STATE PROJECT NUMBER
7140-6-71

SHEET NO
3A

DETAIL SUMMARY SHEET OF MISCELLANEOUS QUANTITIES

CRUSHED AGGREGATE BASE COURSE

Sta. - Sta.	Location	Tons	Remarks
5+53.3 - 282+65	Lt. & Rt.	4,377	5 Ft. Shoulders
5+53.3 - 282+65	Mainline	4,692	Restore & Shape Base: Use only as directed by the Engineer
20"AA"+25 - 21"AA"+82	CTH "M"	180	
26+37	Lt.	10	Type "C" Inter
26+37	Rt.	10	"
127+48	Lt.	10	"
127+48	Rt.	10	"
224+80	Lt.	10	"
224+80	Rt.	10	"
STH 93 & USH 53 Inter		32	Type "A" Inter.
Private & Field Entrances		280	
Undistributed		959	

STEEL PLATE BEAM GUARD CLASS "A"

Sta. - Sta.	Location	L.F.	Anchorage Terminal Sections	Req'd. Structure Attachment
46+00 - Cattle Pass	Lt. & Rt.	206	2	2
98+12 - 99+55	Lt. & Rt.	266	2	2
100+65 - 102+08	Lt. & Rt.	266	2	2
160+59 - 162+02	Lt. & Rt.	266	2	2
166+98 - 168+41	Lt. & Rt.	266	2	2
182+12 - 183+55	Lt. & Rt.	266	2	2
191+45 - 192+88	Lt. & Rt.	266	2	2

CONCRETE CURB TYPE "J"

Location	L.F.
Intersection S.T.H. 93 & USH 53 Island	80

CONCRETE CURB AND GUTTER 36 INCH TYPE "D"

Location	L.F.
Intersection STH 93 & USH 53	58
Radius	50

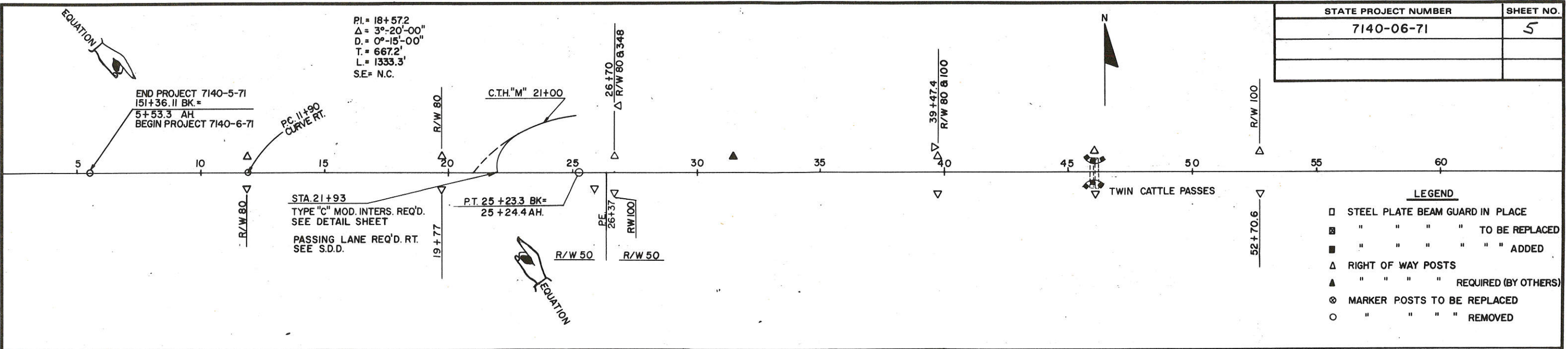
CULVERT PIPE

Sta.	Location	Dia. In.	Length	Type	Class	Steel	Aluminum	Endwalls
19+50	Lt.	18	28	C.P.	III	0.064	0.060	2
21"AA"+33	C/L	24	52	C.P.	III	0.064	0.075	2

PAVEMENT MARKING, PAINT

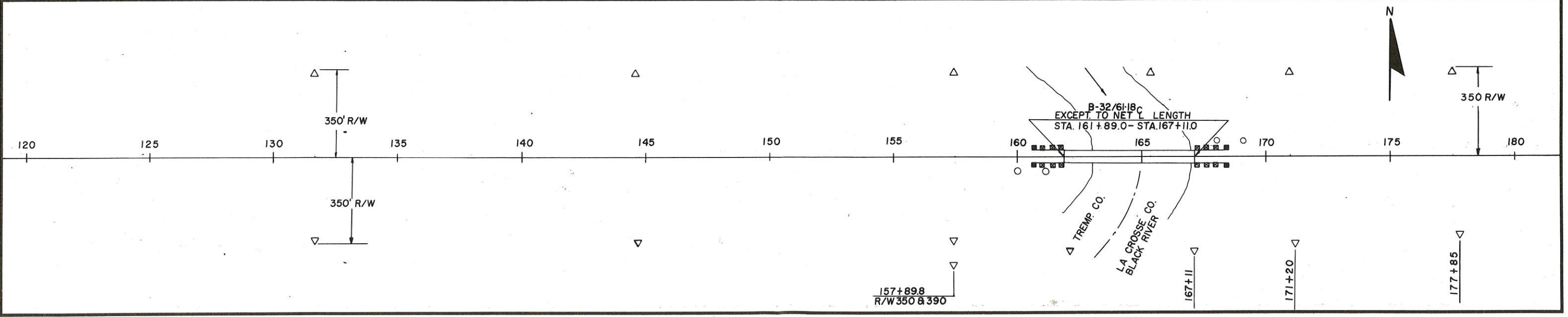
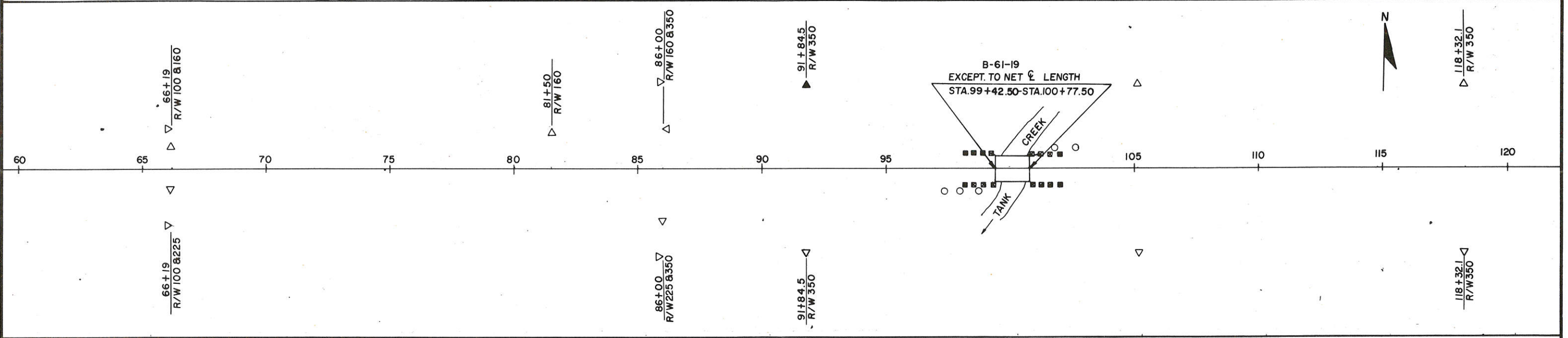
CENTERLINE 1.48 MI.
NO PASSING 0.37 MI.

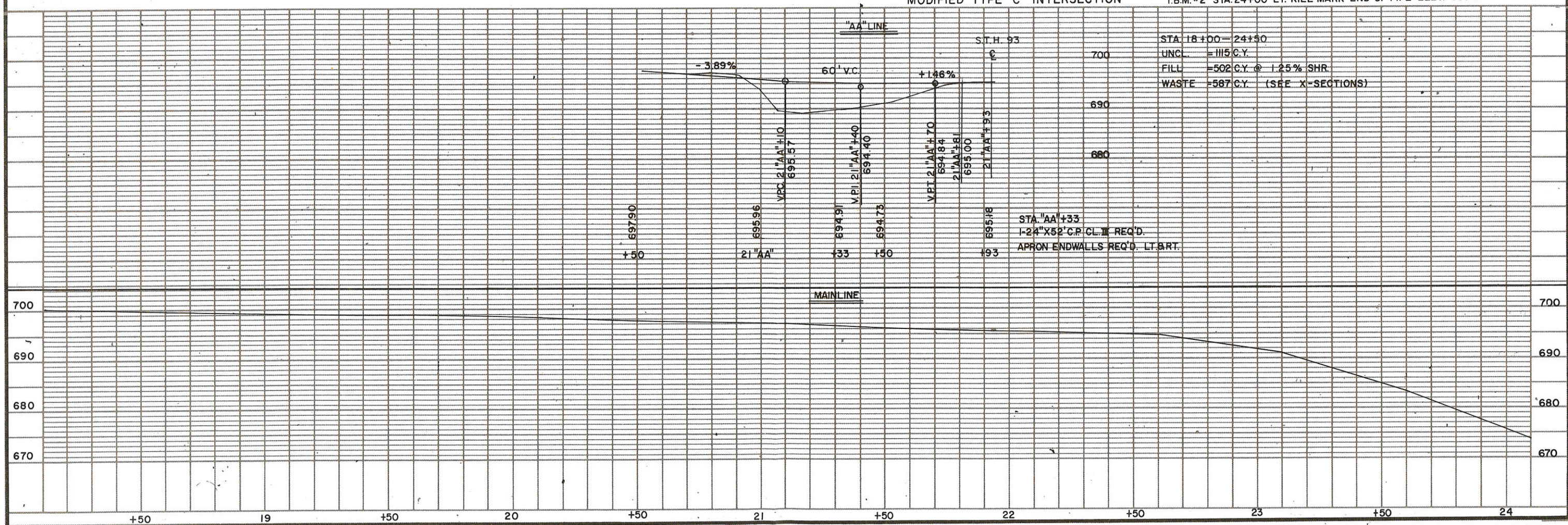
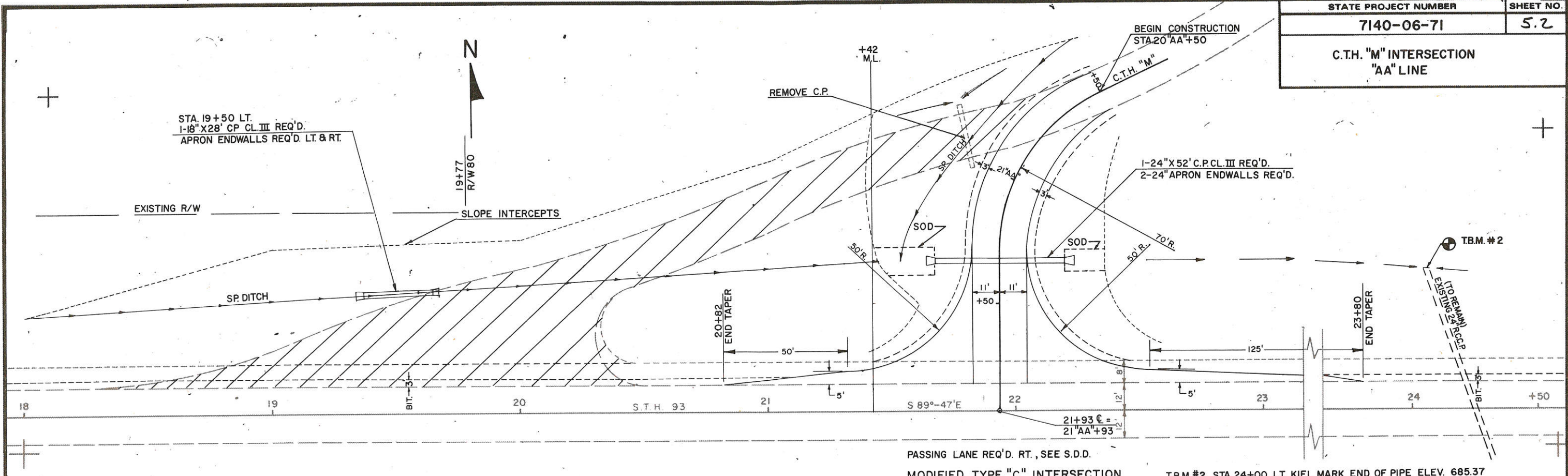
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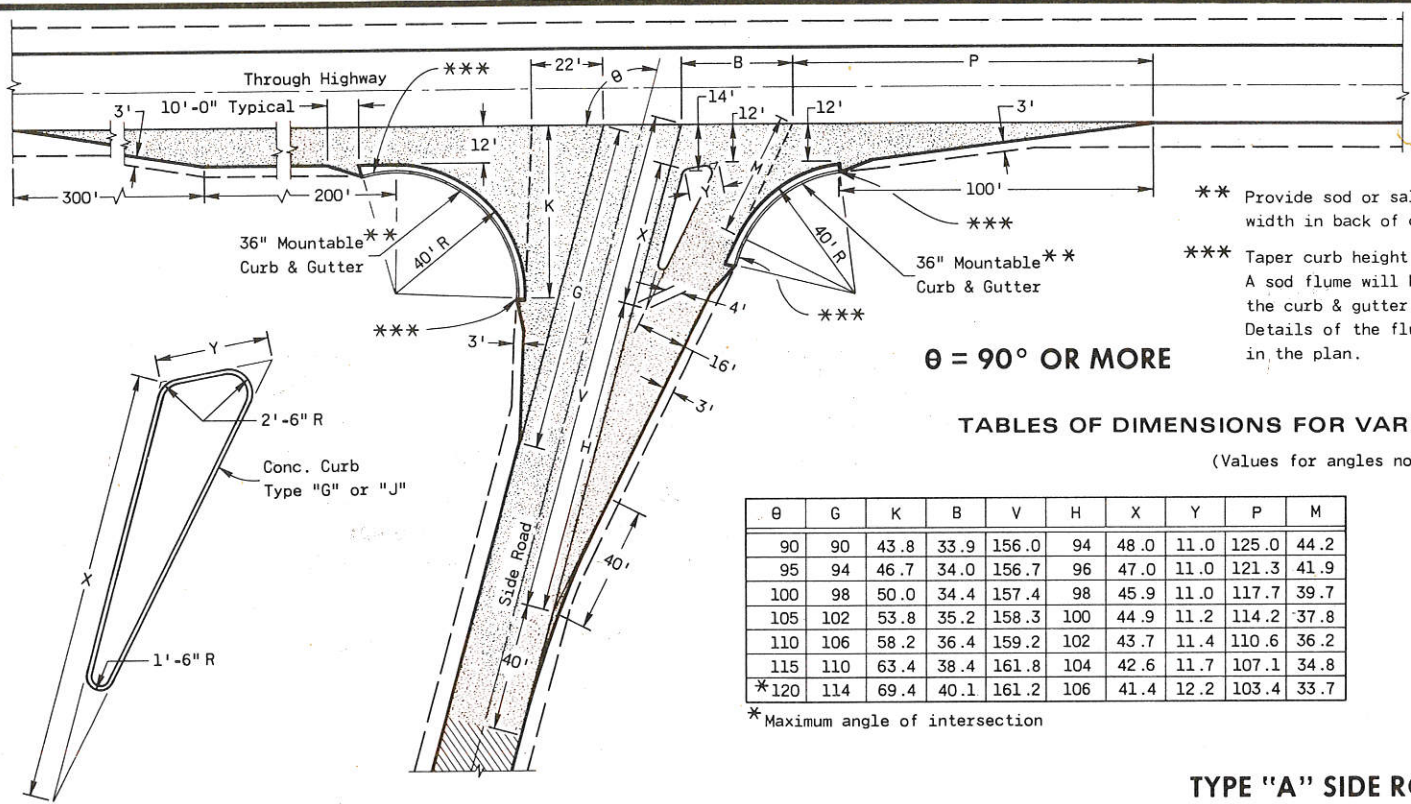


LEGEND

- STEEL PLATE BEAM GUARD IN PLACE
- " " " " TO BE REPLACED
- " " " " " " ADDED
- △ RIGHT OF WAY POSTS
- ▲ " " " " REQUIRED (BY OTHERS)
- ⊗ MARKER POSTS TO BE REPLACED
- " " " " REMOVED

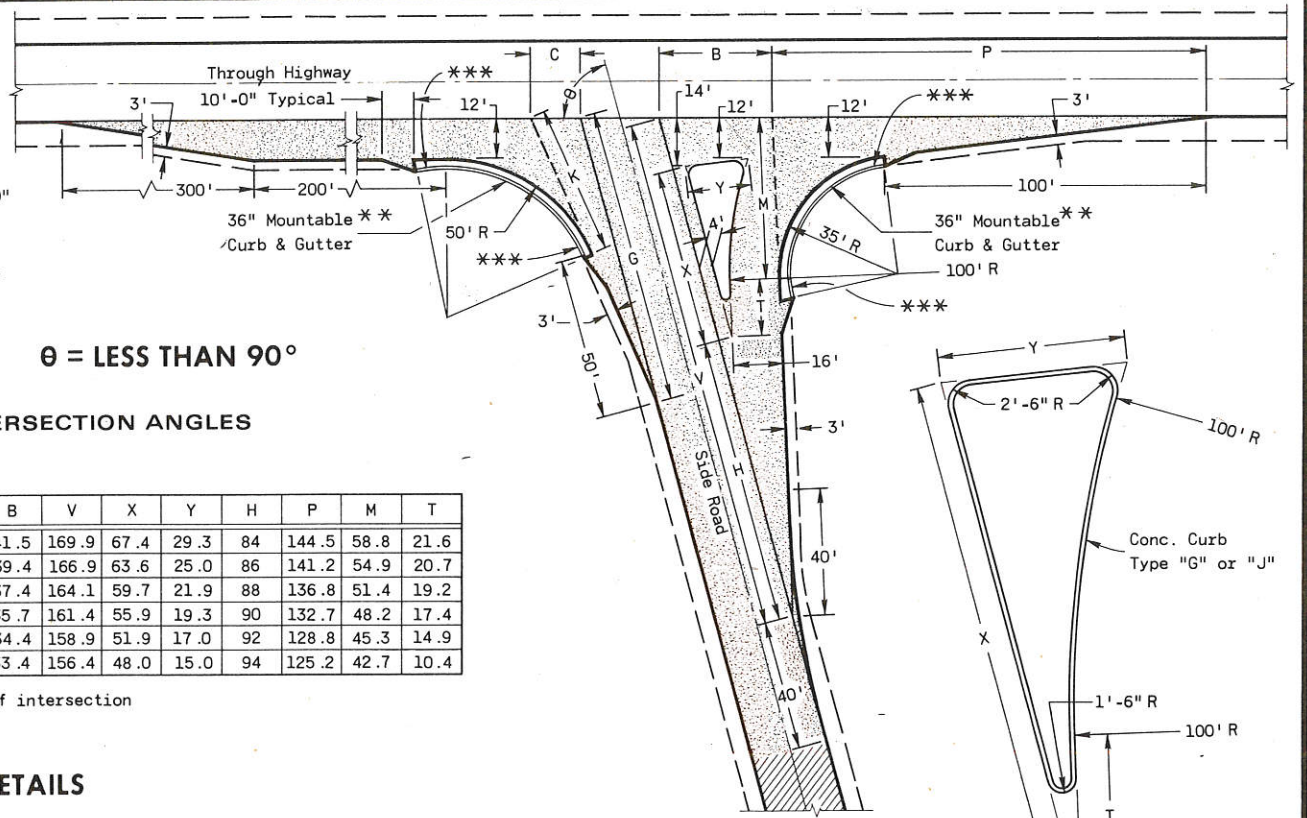






** Provide sod or salvaged topsoil & seed to a 3'-0" width in back of curb & gutter sections.
 *** Taper curb height 0" to 6" in 10'-0". A sod flume will be required at discharge end of the curb & gutter. Details of the flume(s) will be shown elsewhere in the plan.

$\theta = 90^\circ$ OR MORE



$\theta = \text{LESS THAN } 90^\circ$

TABLES OF DIMENSIONS FOR VARIABLE SIDE ROAD INTERSECTION ANGLES

(Values for angles not shown shall be interpolated)

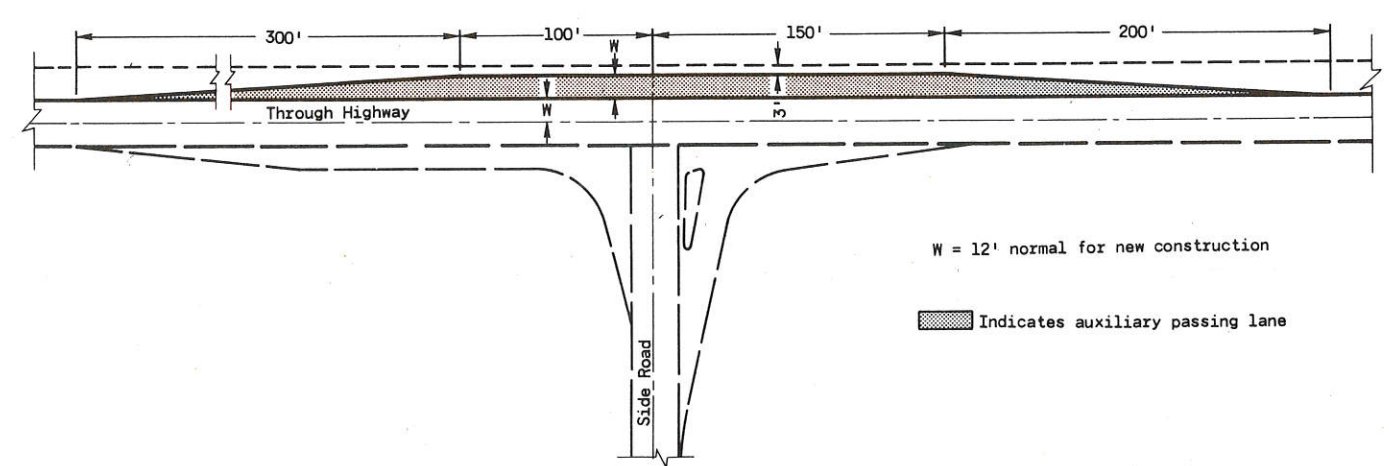
θ	G	K	B	V	H	X	Y	P	M
90	90	43.8	33.9	156.0	94	48.0	11.0	125.0	44.2
95	94	46.7	34.0	156.7	96	47.0	11.0	121.3	41.9
100	98	50.0	34.4	157.4	98	45.9	11.0	117.7	39.7
105	102	53.8	35.2	158.3	100	44.9	11.2	114.2	37.8
110	106	58.2	36.4	159.2	102	43.7	11.4	110.6	36.2
115	110	63.4	38.4	161.8	104	42.6	11.7	107.1	34.8
*120	114	69.4	40.1	161.2	106	41.4	12.2	103.4	33.7

θ	C	G	K	B	V	X	Y	H	P	M	T
*60	19.7	76.3	38.6	41.5	169.9	67.4	29.3	84	144.5	58.8	21.6
65	17.8	82.6	40.6	39.4	166.9	63.6	25.0	86	141.2	54.9	20.7
70	15.8	87.2	43.1	37.4	164.1	59.7	21.9	88	136.8	51.4	19.2
75	15.7	90.9	45.6	35.7	161.4	55.9	19.3	90	132.7	48.2	17.4
80	15.9	94.9	48.3	34.4	158.9	51.9	17.0	92	128.8	45.3	14.9
85	16.2	99.3	51.4	33.4	156.4	48.0	15.0	94	125.2	42.7	10.4

*Maximum angle of intersection

*Desirable minimum angle of intersection

TYPE "A" SIDE ROAD INTERSECTION DETAILS



PASSING LANE DETAIL

W = 12' normal for new construction

Indicates auxiliary passing lane

GENERAL NOTES

Designs may be used interchangeably in combination or separately for any one complete intersection depending upon intersection angle and surfacing of each approach roadway.

Details on this drawing are for minimum design only, and not applicable to special conditions, as shown elsewhere on the plans.

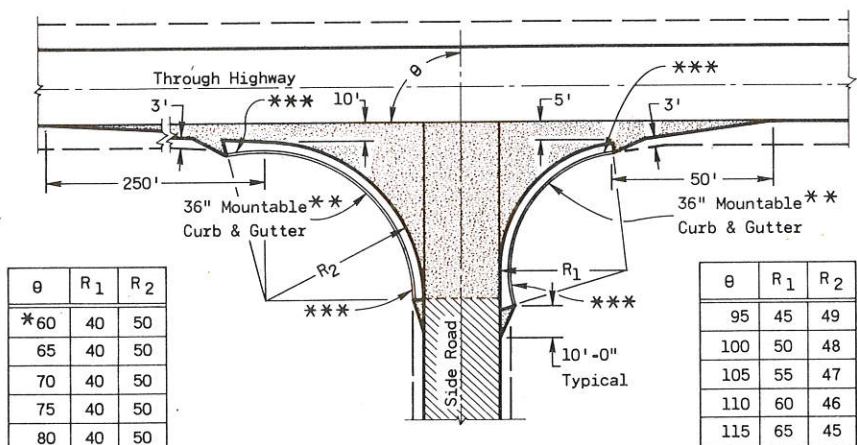
SIDE ROAD SURFACING NOTE

If the side road is not presently paved, pavement shall be placed to the limits shown. In the case where the construction limits are beyond the paving limits, gravel or crushed stone surfacing shall be placed between the paving limits and construction limits.

If the side road is presently paved, new pavement shall be placed to the limits of design as shown and beyond, if necessary, to meet existing pavement.

If the side road is the construction project, the intersection surfacing shall be the same as for the project.

Legend:
 [Stippled] New Pavement
 [Hatched] Existing Surface



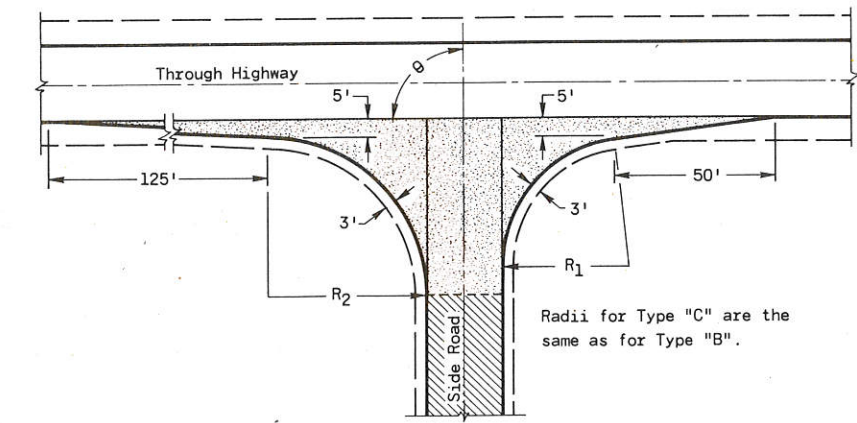
TYPE "B" SIDE ROAD INTERSECTION DETAILS

θ	R ₁	R ₂
*60	40	50
65	40	50
70	40	50
75	40	50
80	40	50
85	40	50
90	40	50

*Min. Angle of Intersection

θ	R ₁	R ₂
95	45	49
100	50	48
105	55	47
110	60	46
115	65	45
*120	70	44

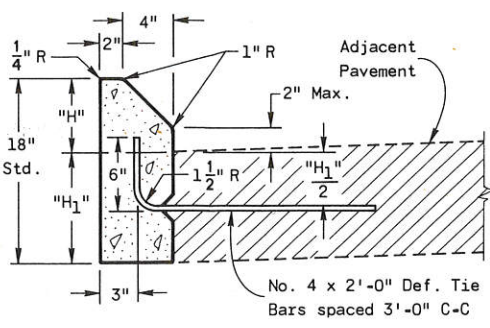
*Max. Angle of Intersection



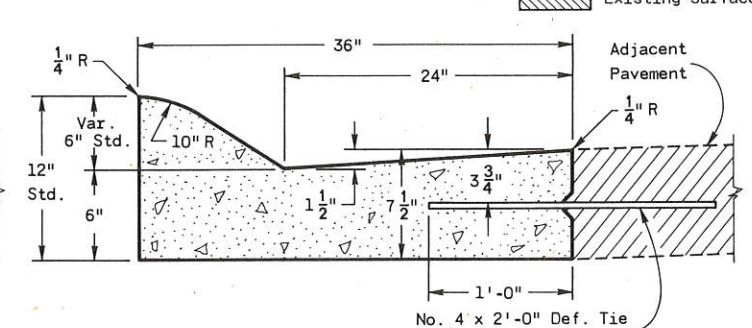
TYPE "C" SIDE ROAD INTERSECTION DETAILS

Radii for Type "C" are the same as for Type "B".

"H" = 6" Max. and 4" Min. and shall be 6" unless otherwise shown on the plans.
 "H₁" = Same as adjacent pavement thickness for rigid pavement and 12" for non-rigid pavement (Tie Bars omitted).



TYPE "G" MOUNTABLE CONCRETE CURB
 (INCLUDING TIE BARS)



TYPE "A" MOUNTABLE CONCRETE CURB & GUTTER 36"
 (INCLUDING TIE BARS)

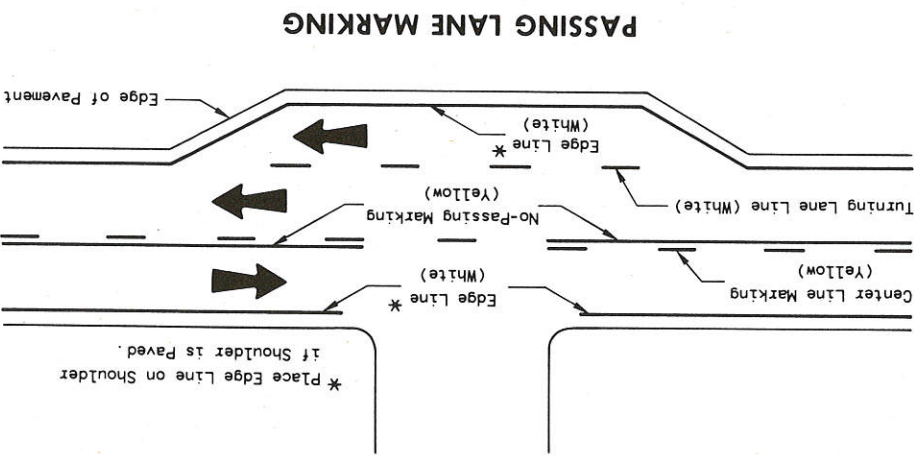
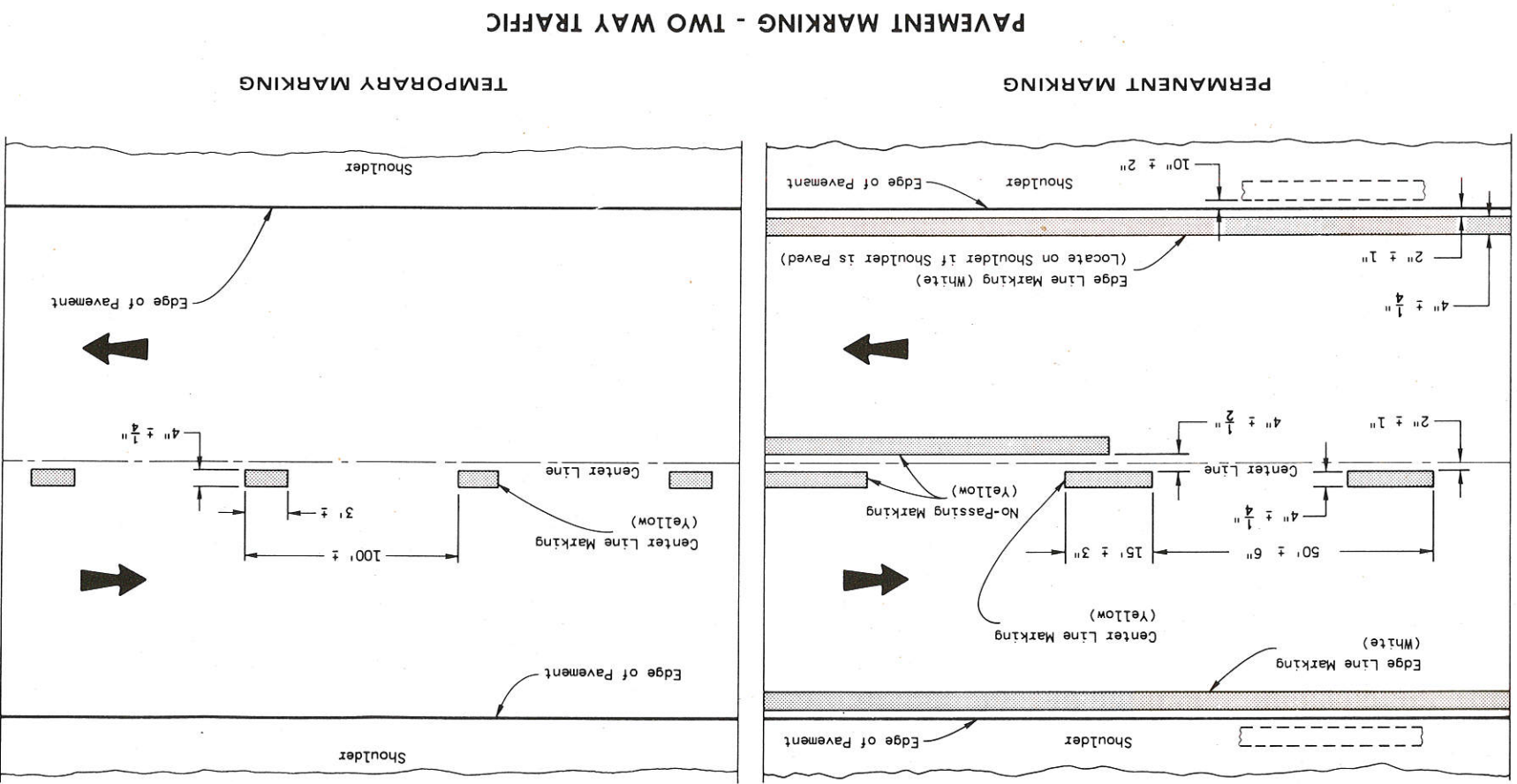
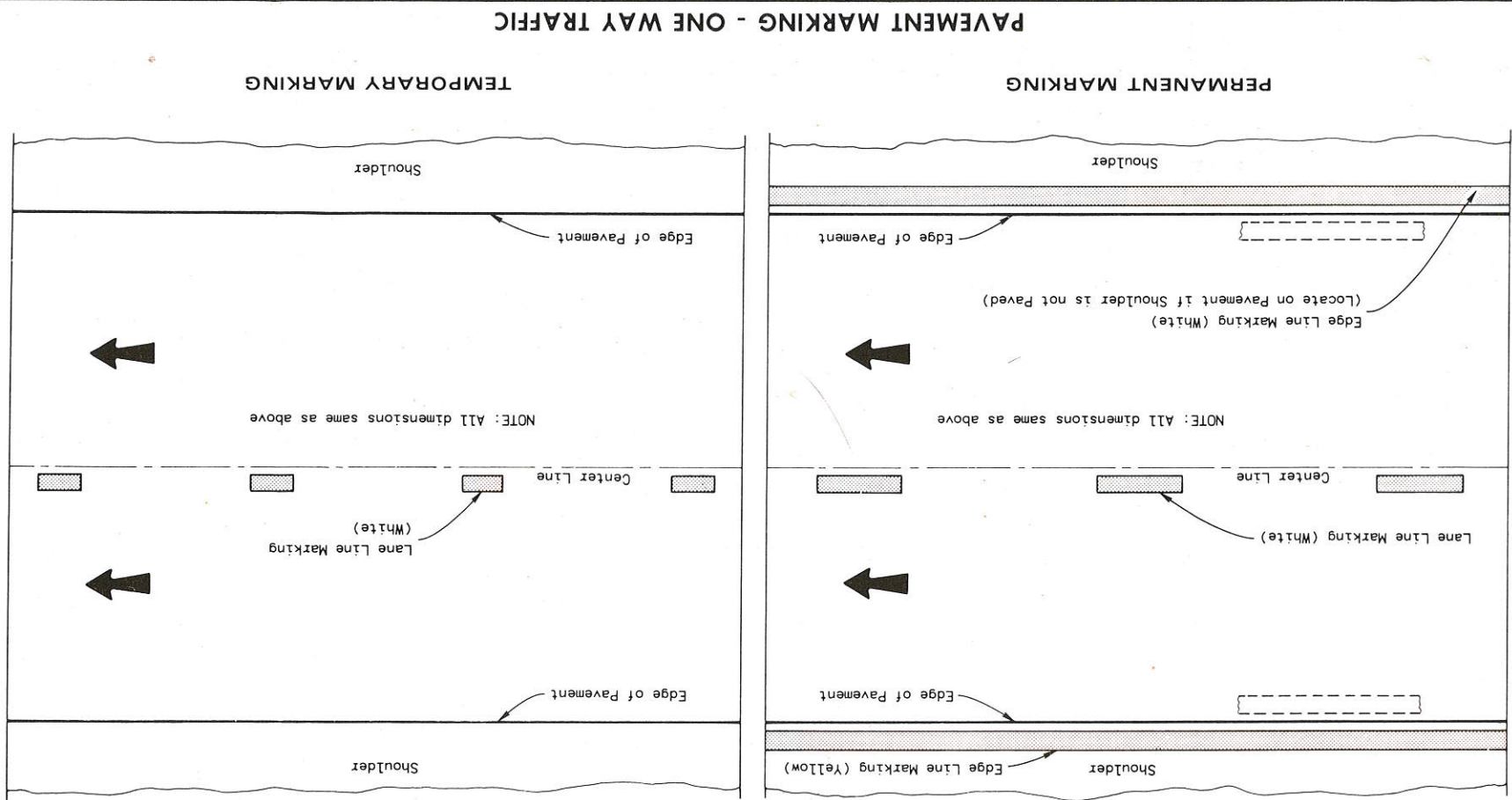
LAYOUT DETAILS FOR AT-GRADE SIDE ROAD INTERSECTIONS

State of Wisconsin
 Department of Transportation
 Division of Highways

RECOMMENDED FOR APPROVAL:
 DATE 9-10-76
 APPROVED: [Signature]
 DATE 9-10-76
 [Signature]
 STATE HIGHWAY ENGINEER

S. D. D. 9A1-3

S. D. D. 9A1-3



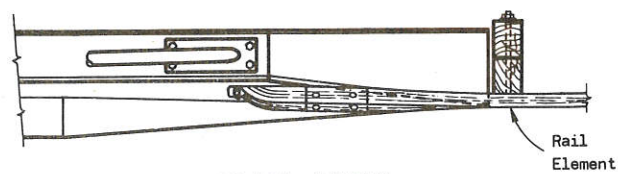
GENERAL NOTES

Details of construction not shown on this drawing shall conform to Standard Specifications and Special Provisions.

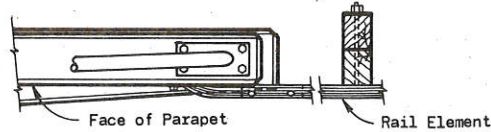
PAVEMENT MARKING

State of Wisconsin
 Department of Transportation
 Division of Transportation Facilities

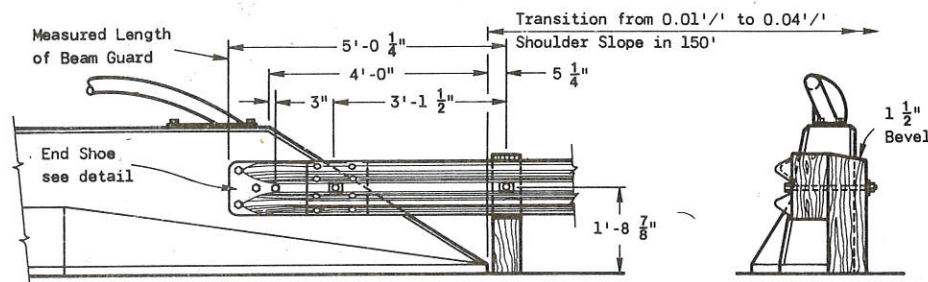
APPROVED
 DATE 8-7-79
 CHIEF DESIGN ENGINEER



PLAN VIEW



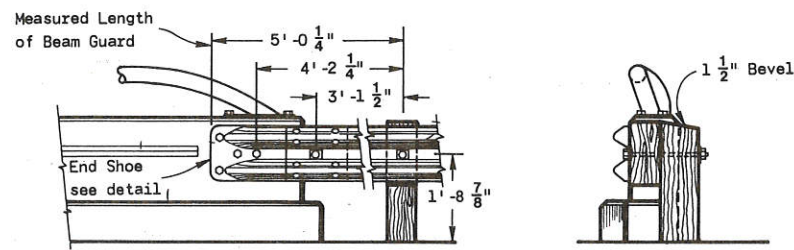
PLAN VIEW



FRONT ELEVATION

END ELEVATION

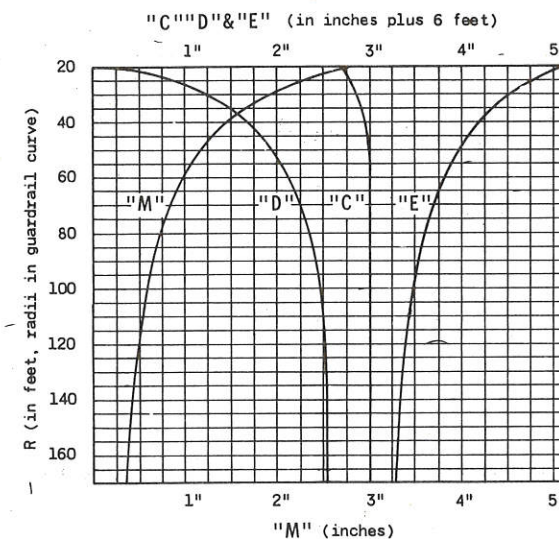
STRUCTURE MOUNTING DETAIL
SLOPING TYPE PARAPET WALL



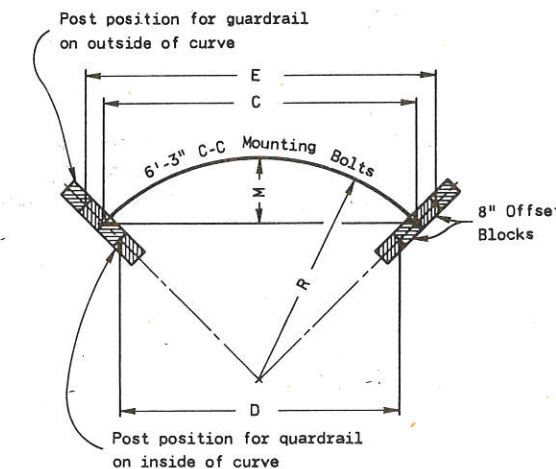
FRONT ELEVATION

END ELEVATION

STRUCTURE MOUNTING DETAIL
VERTICAL TYPE PARAPET WALL



CURVE DATA FOR POST SPACING AND BEAM CURVING



CHORD LENGTHS FOR POST SPACING AND MIDDLE ORDINATES FOR BEAM CURVING

GENERAL NOTES

Details of construction, materials and workmanship not shown on this drawing shall conform to the pertinent requirements of the Standard Specifications and the applicable Special Provisions.

The exact location of the beginning and end of each Guardrail installation shall be as shown on the plans or as directed by the Engineer.

Square anchor alternates will be permitted. Square anchors shall be a minimum of 24 inches x 24 inches.

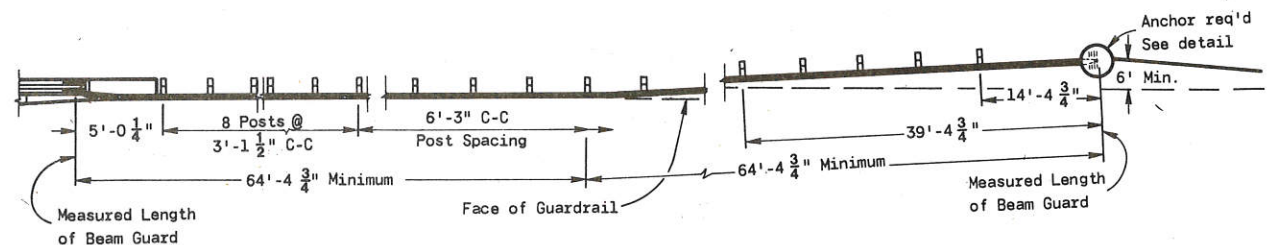
The shoulder widening to accommodate the anchored end of the guardrail shall be accomplished at the rate of widening not to exceed 15 to 1.

Upon approval of the Engineer, the 6 foot anchor offset may be reduced to nothing for replacement installations where existing conditions will not permit the desirable offset. However, when no offset greater than or equal to 3 feet can be provided, the minimum length of guardrail in advance of an obstacle (obstacle to anchor) shall be 150 feet.

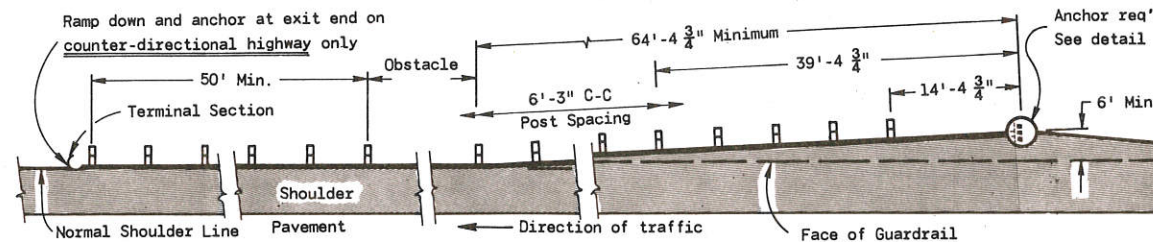
The minimum clearance from the front face of guardrail to obstacle shall be 3 feet unless otherwise shown on contract plans. When clearance is less than 3 feet post spacing shall be reduced to 3 feet - 1 1/2 inches C.C.

The "Post Footing Details At Piers" shall be used when guardrail posts are over structure footings and less than 3 feet - 6 inches of earth is provided over the top of the footing.

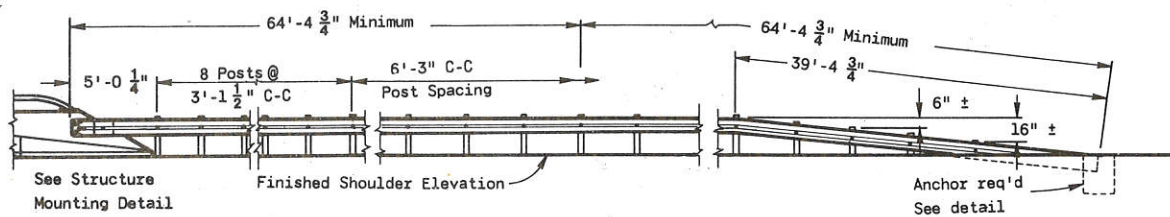
NOTE:
THIS STANDARD DETAIL DRAWING CONSISTS OF TWO PLATES, AND BOTH PLATES ARE REQUIRED WHEN THIS STANDARD IS CALLED FOR IN THE PLANS.



PLAN VIEW

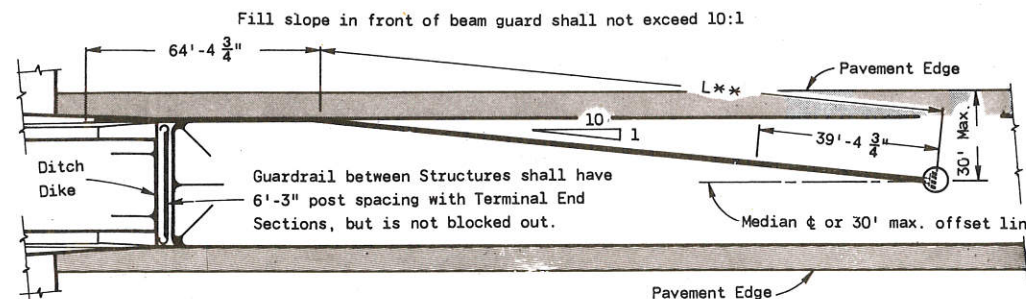


TYPICAL INSTALLATION AT
LOCATIONS OTHER THAN STRUCTURES



FRONT ELEVATION

TYPICAL INSTALLATION AT STRUCTURES



PLAN VIEW

MEDIAN PROTECTION

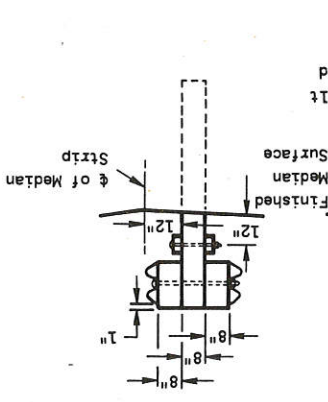
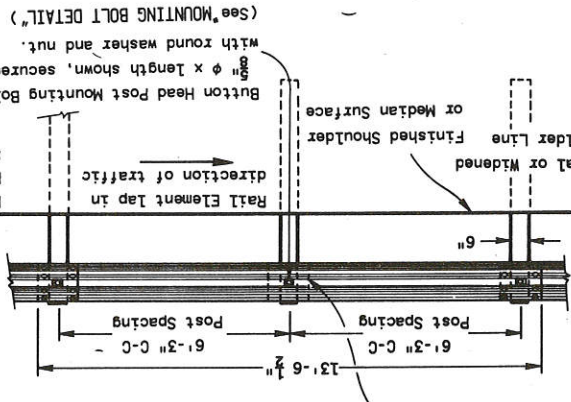
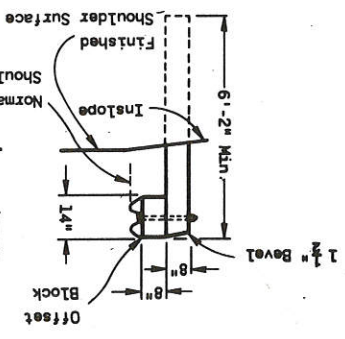
** Variable based on Median width or 30' max. offset

CLASS "A"
STEEL PLATE BEAM GUARD &
STEEL PLATE BEAM MEDIAN GUARD

State of Wisconsin
Department of Transportation
Division of Highways

S.D.D. 14 B 2-4a

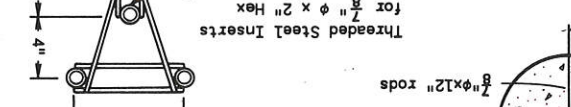
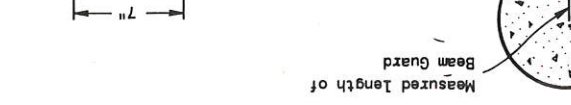
STEEL PLATE BEAM GUARD



One foot long section of rail element, with a 3/8\"/>

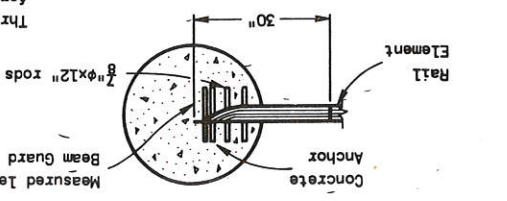
STEEL PLATE BEAM GUARD OR STEEL PLATE BEAM MOUNTING GUARD

END ELEVATION

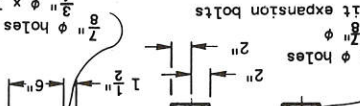
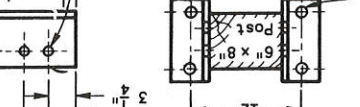
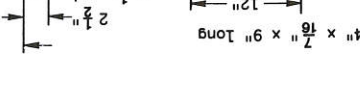
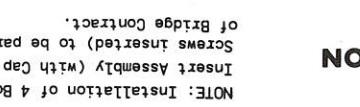
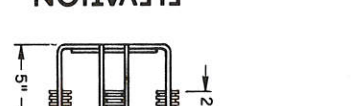
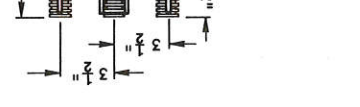


Sawn and treated timber posts and offset blocks shall be furnished and placed in accordance with Standard Specifications. Posts shall be 6\"/>

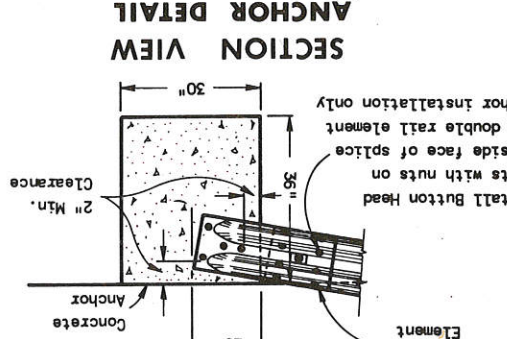
SECTION VIEW



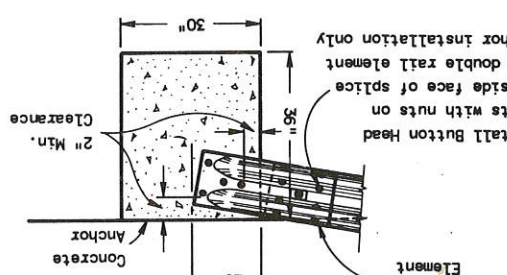
PLAN VIEW



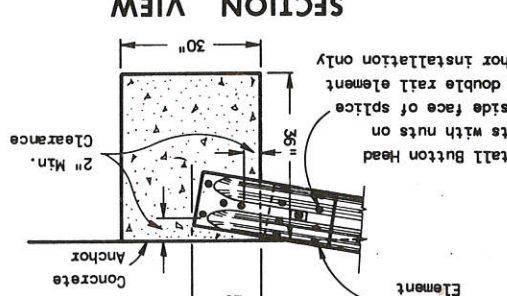
SECTION VIEW



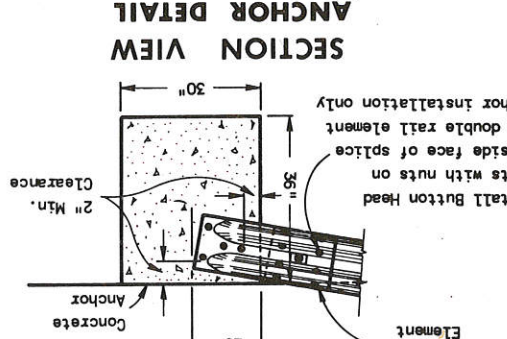
SECTION VIEW



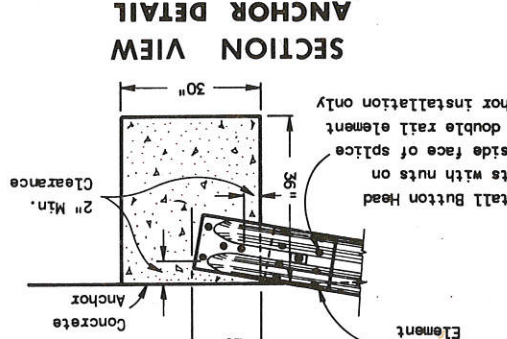
ANCHOR DETAIL



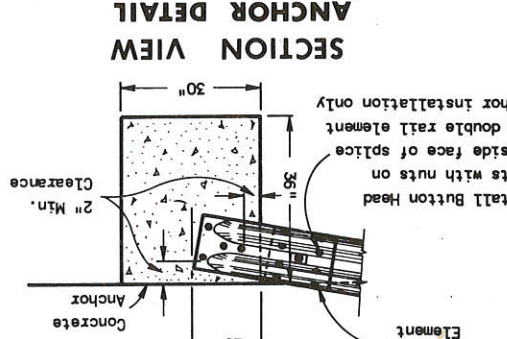
SECTION VIEW



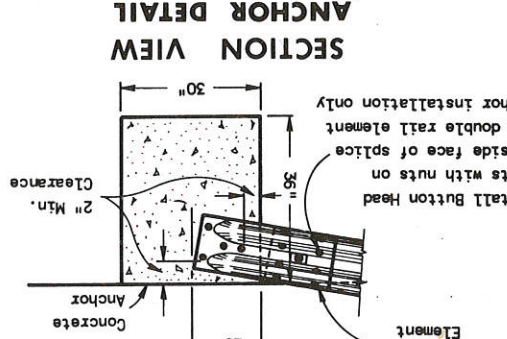
SECTION VIEW



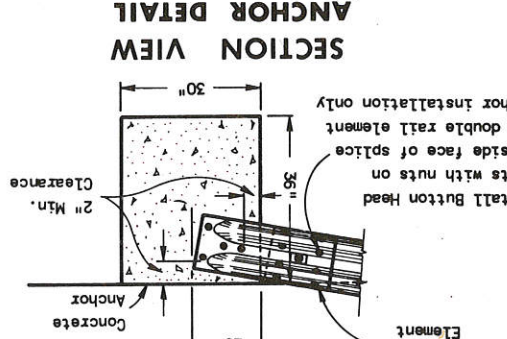
SECTION VIEW



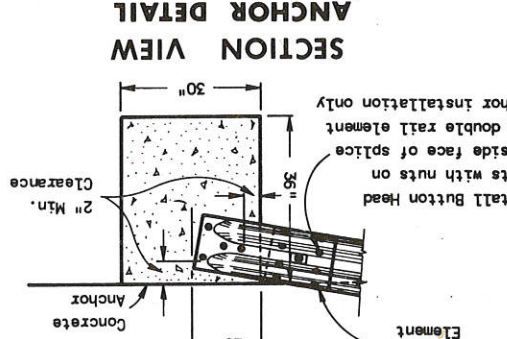
SECTION VIEW



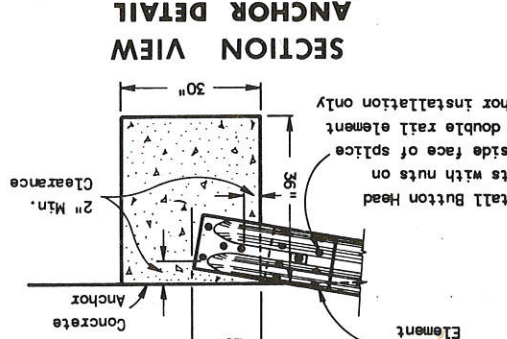
SECTION VIEW



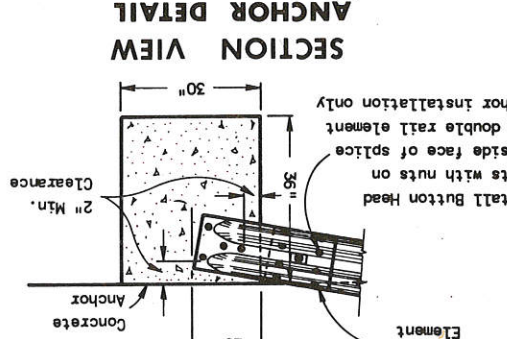
SECTION VIEW



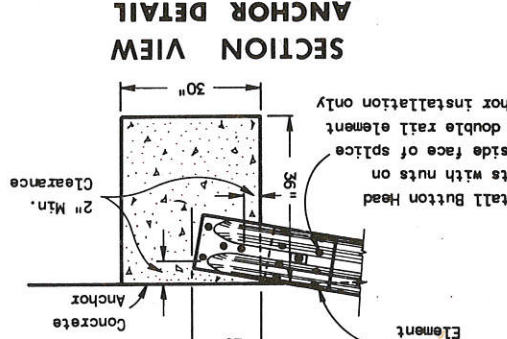
SECTION VIEW



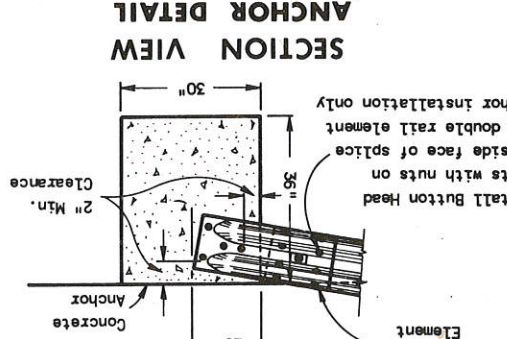
SECTION VIEW



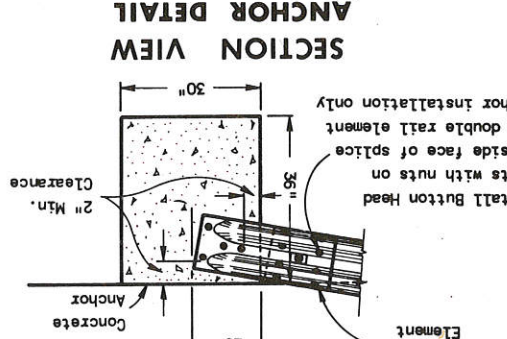
SECTION VIEW



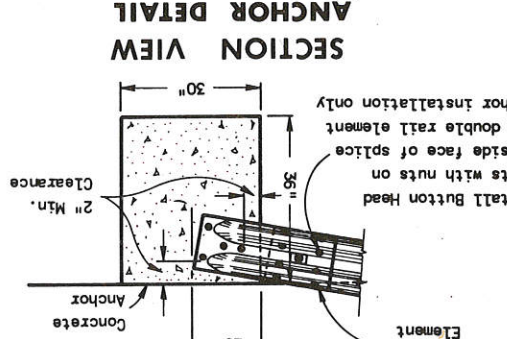
SECTION VIEW



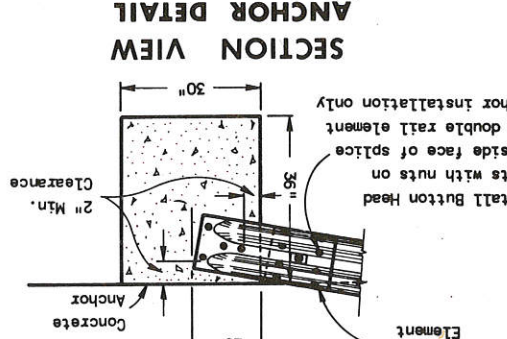
SECTION VIEW



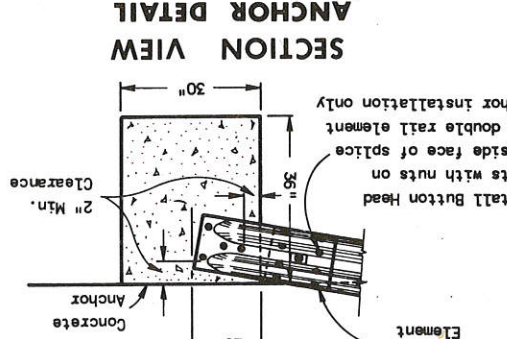
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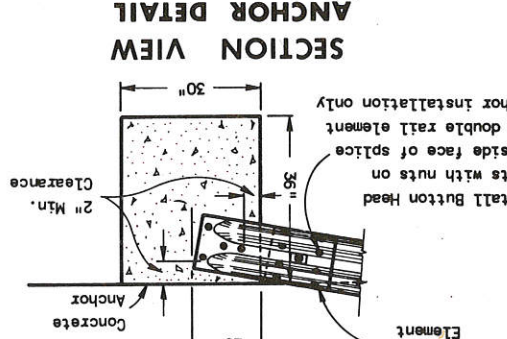
SECTION VIEW



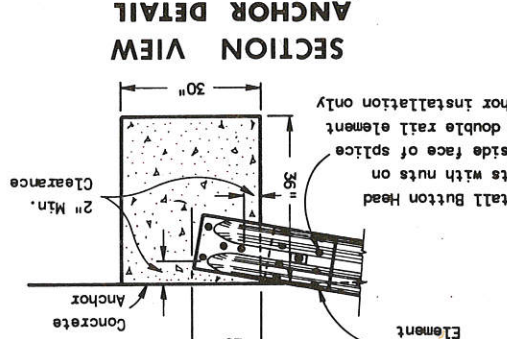
SECTION VIEW



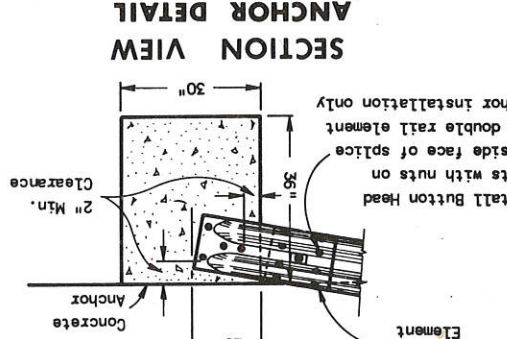
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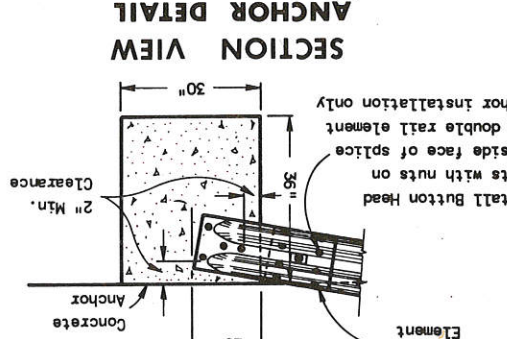
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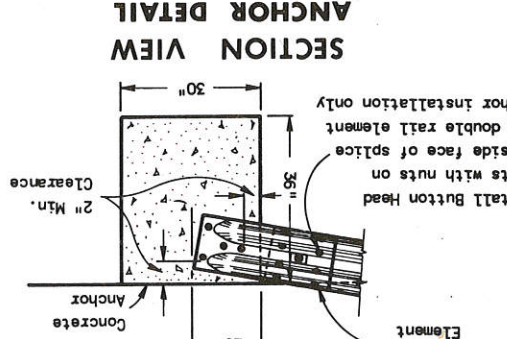
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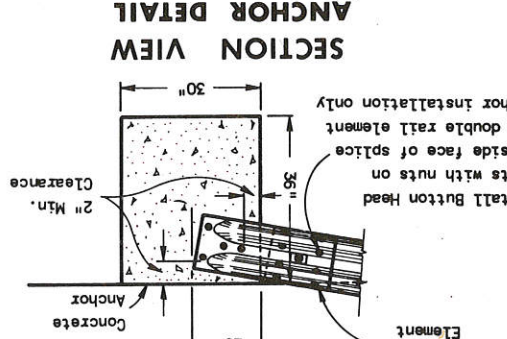
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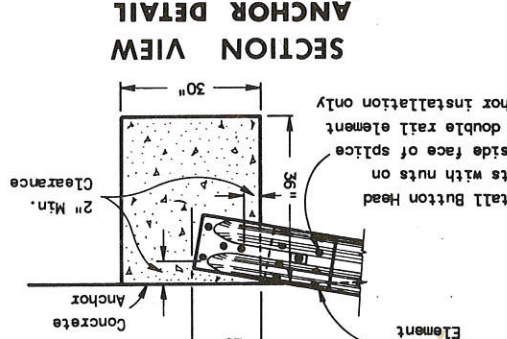
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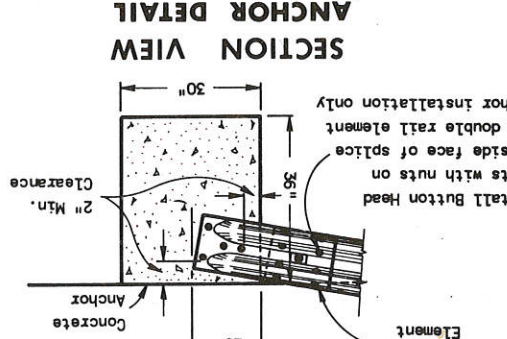
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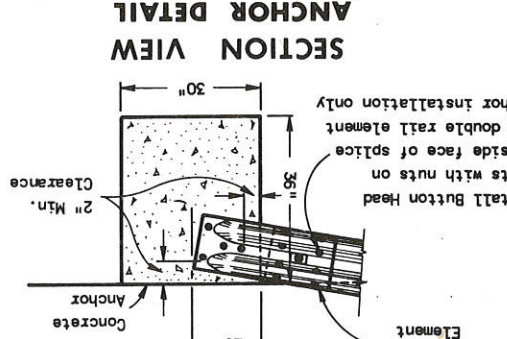
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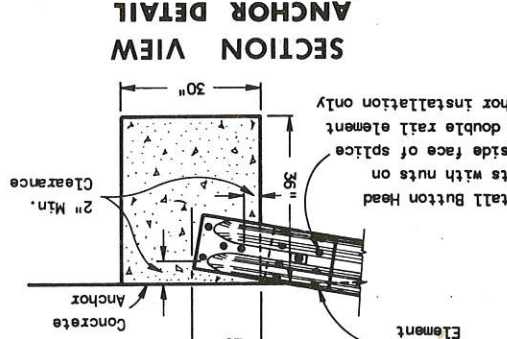
SECTION VIEW



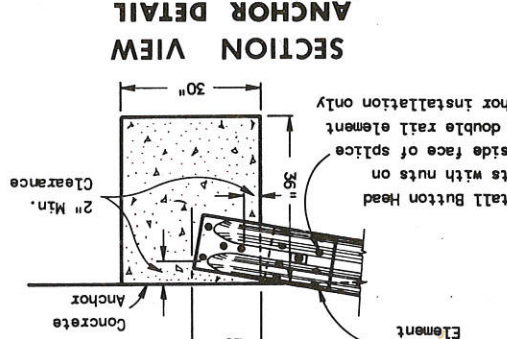
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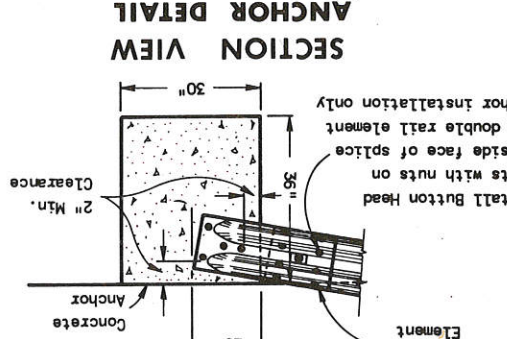
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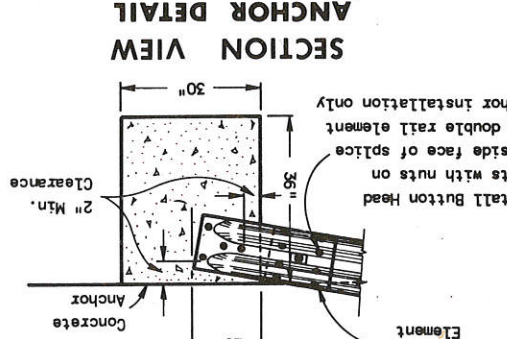
SECTION VIEW



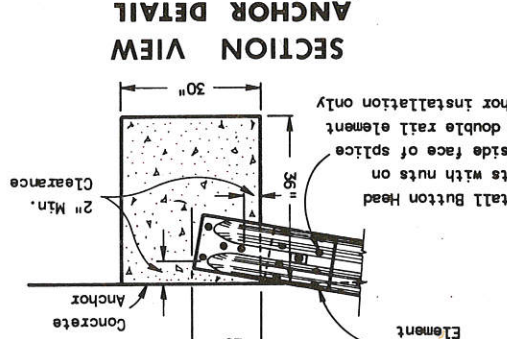
SECTION VIEW



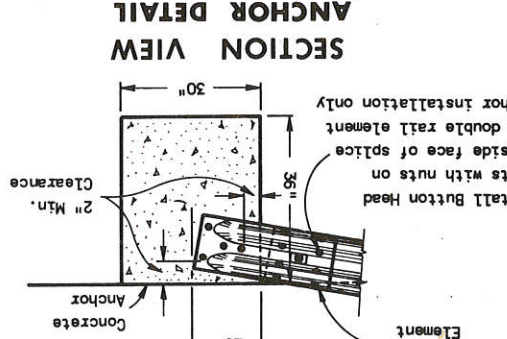
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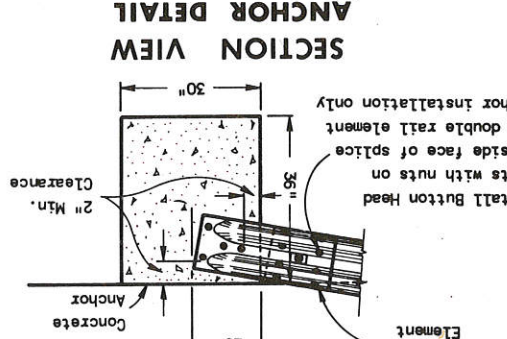
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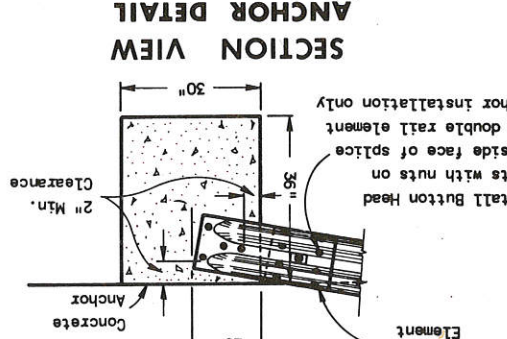
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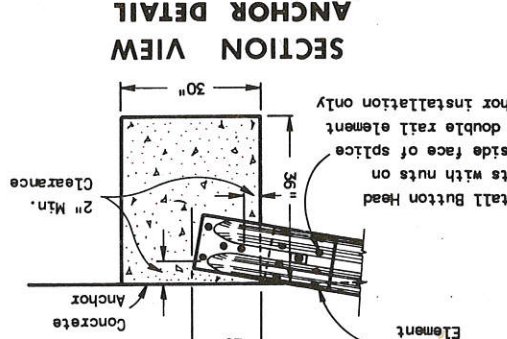
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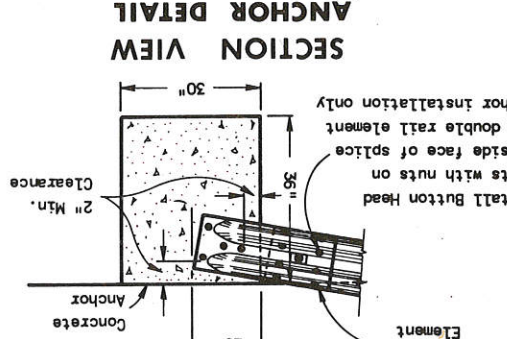
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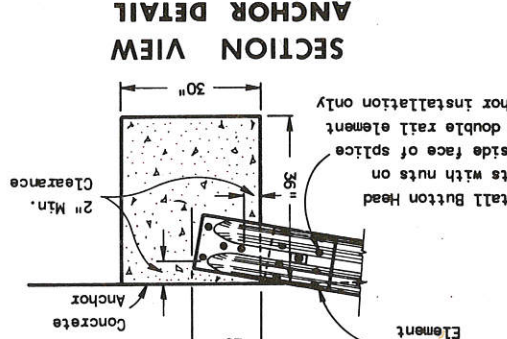
SECTION VIEW



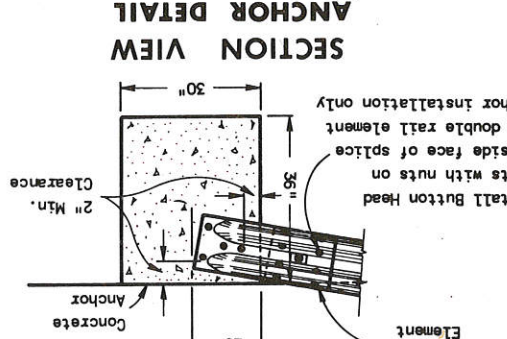
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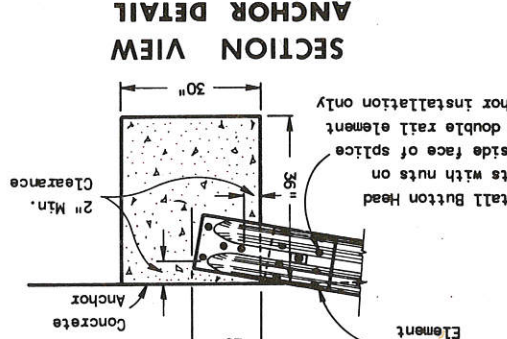
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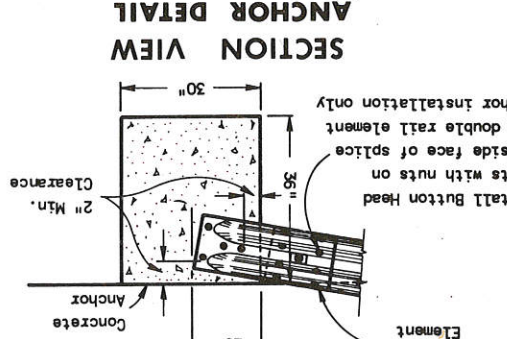
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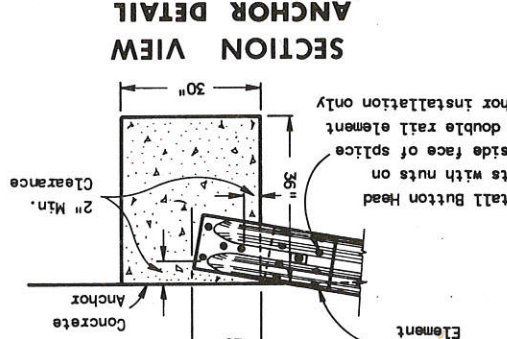
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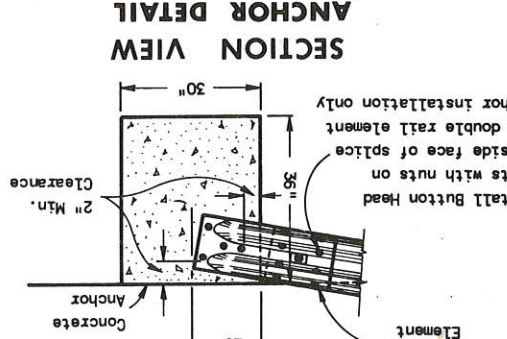
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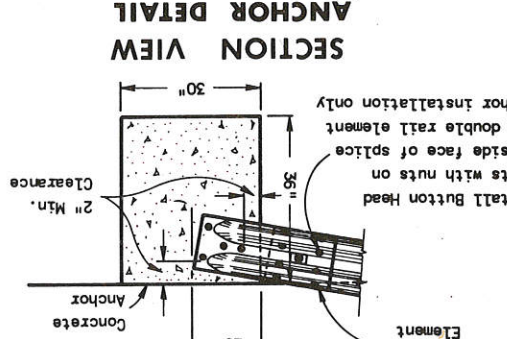
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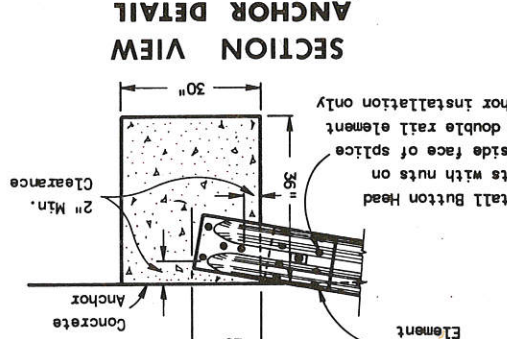
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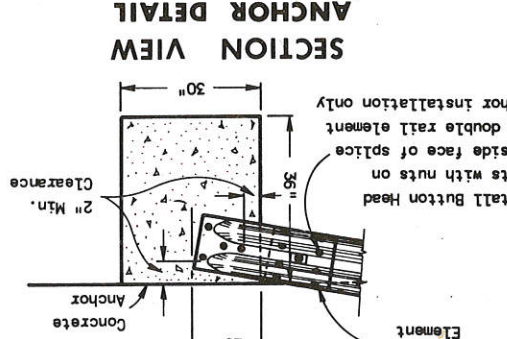
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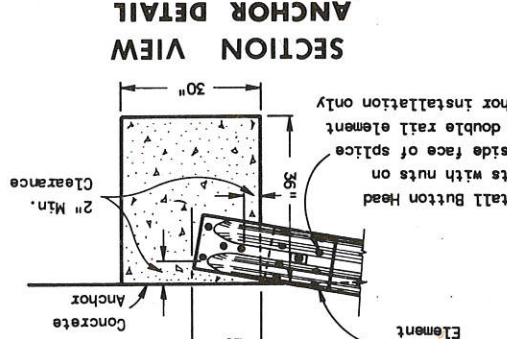
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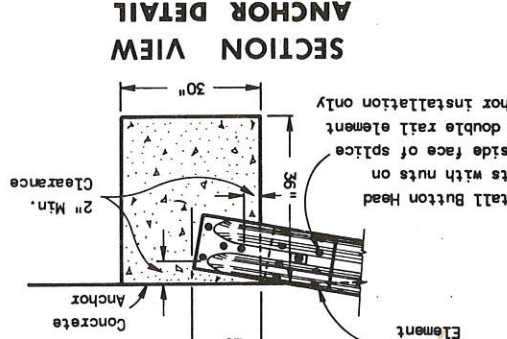
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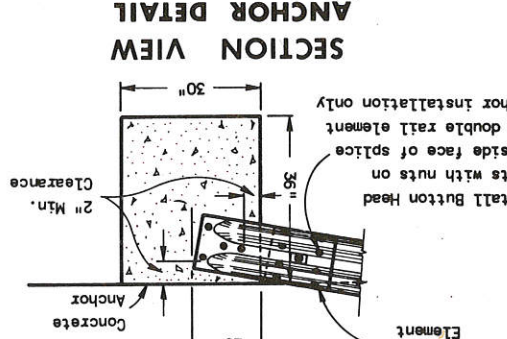
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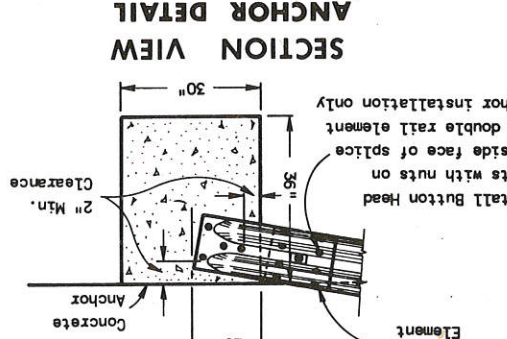
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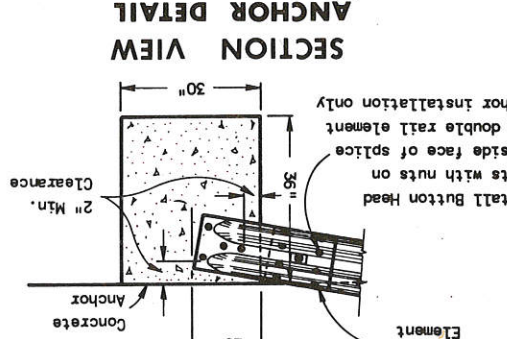
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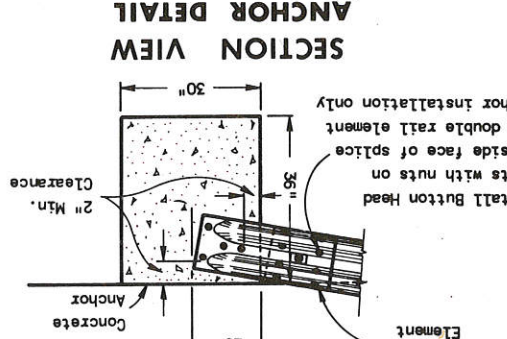
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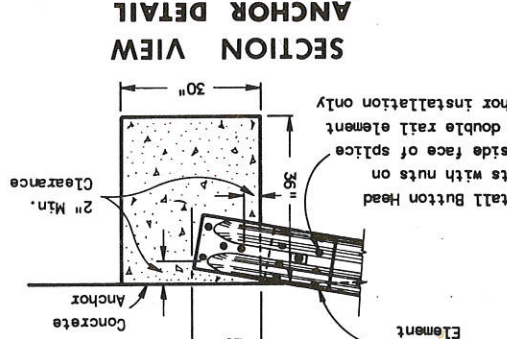
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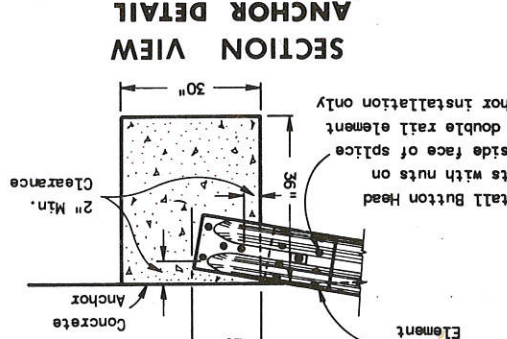
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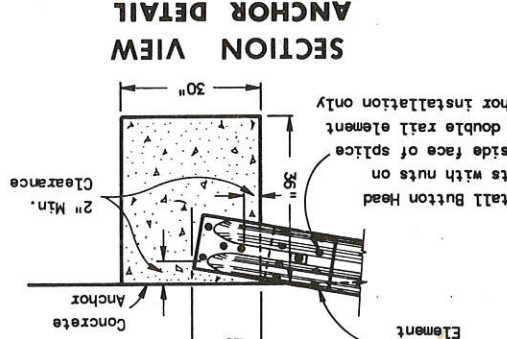
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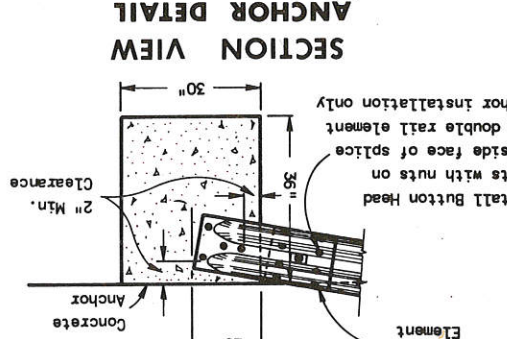
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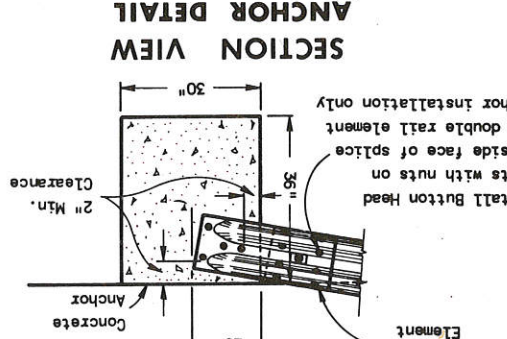
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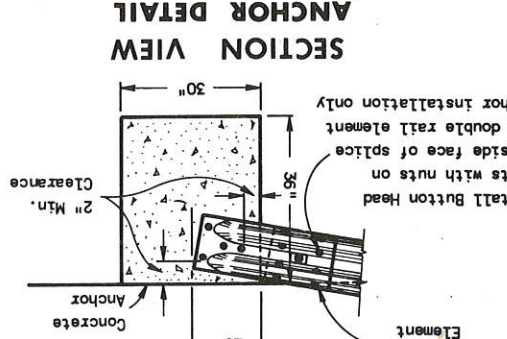
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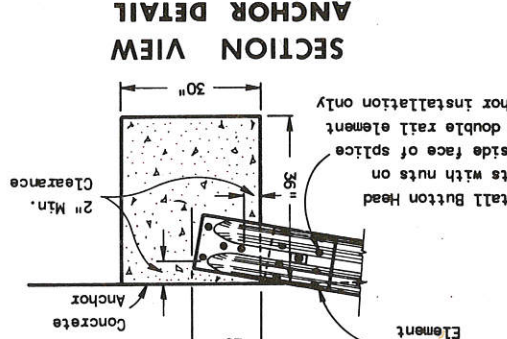
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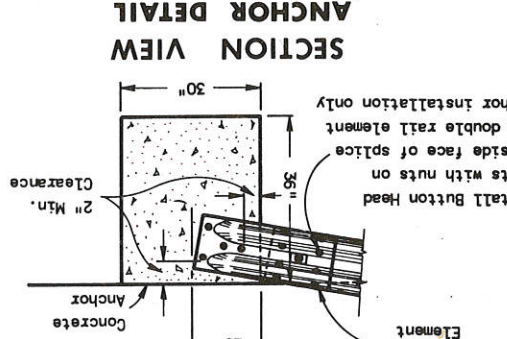
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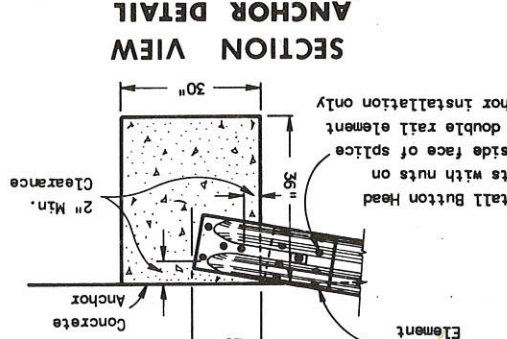
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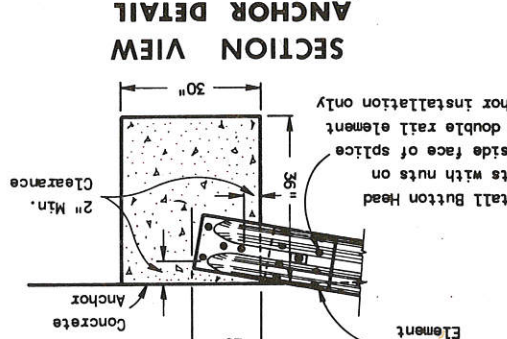
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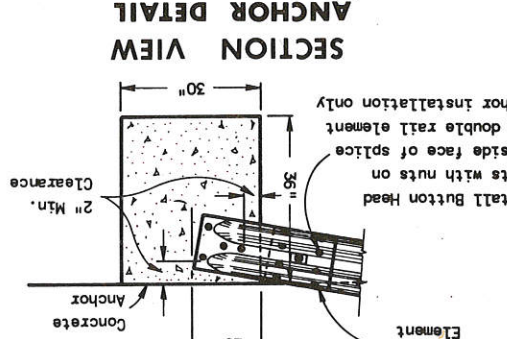
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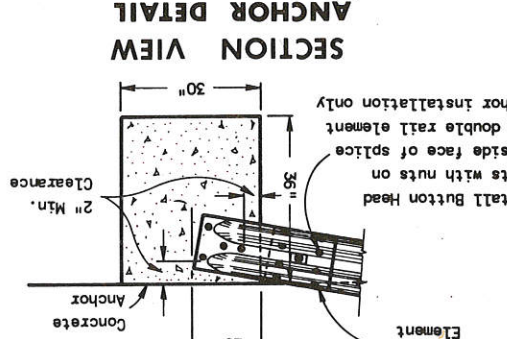
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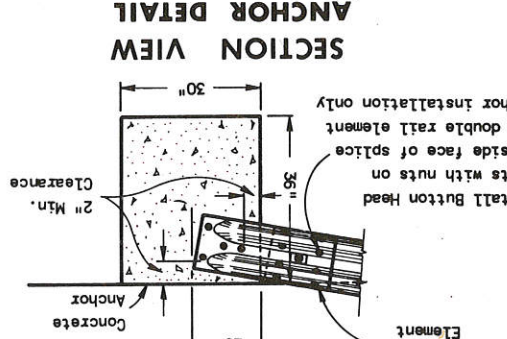
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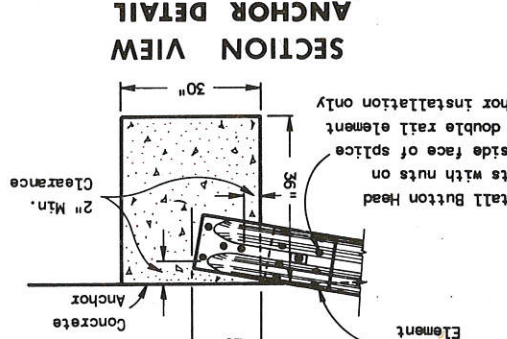
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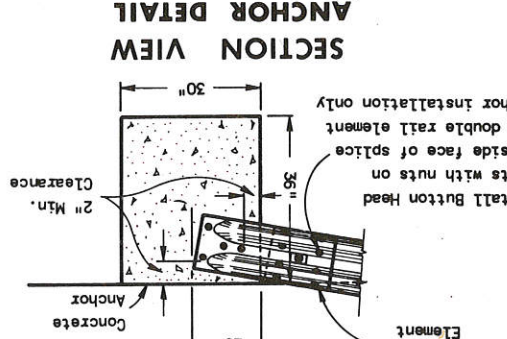
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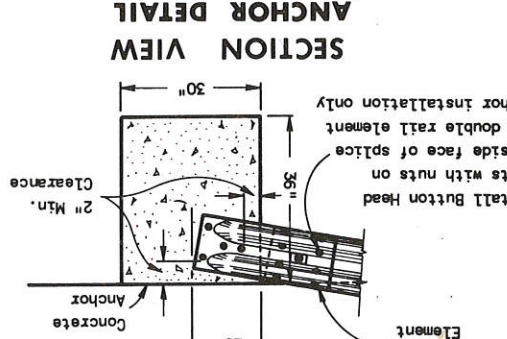
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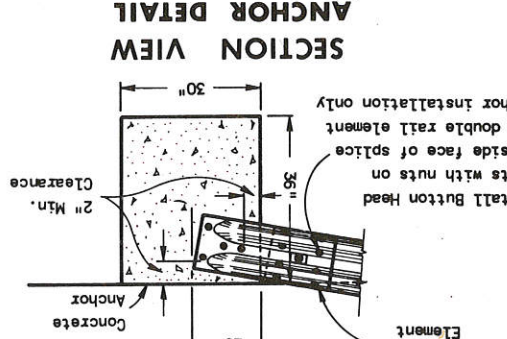
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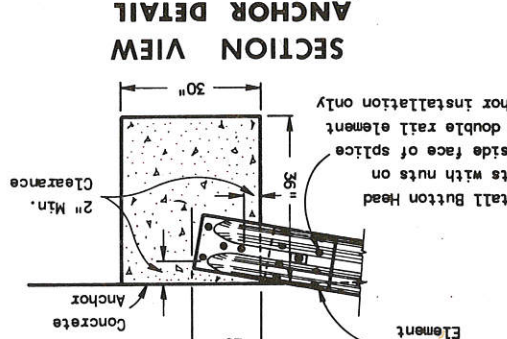
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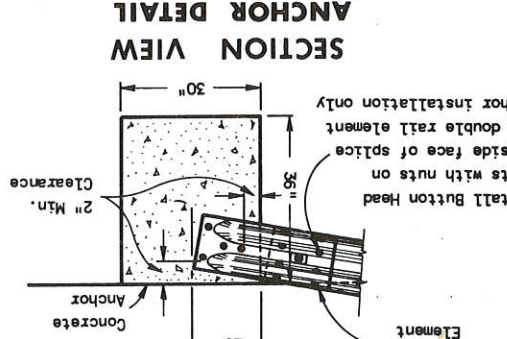
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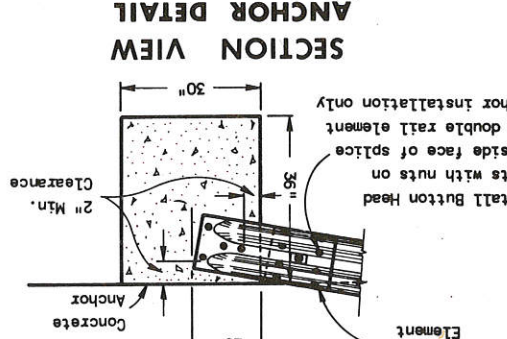
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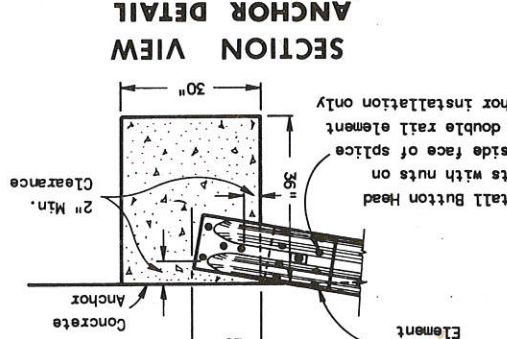
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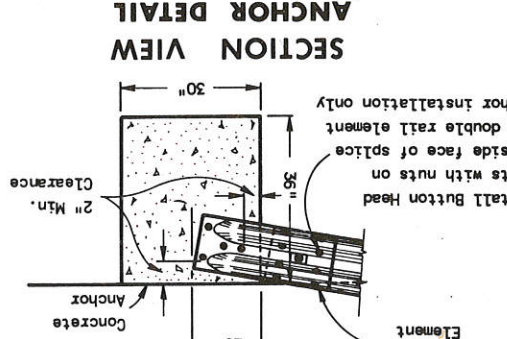
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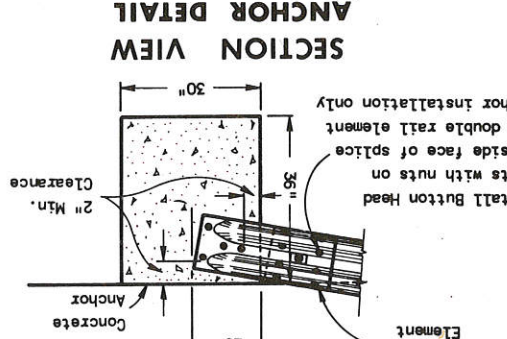
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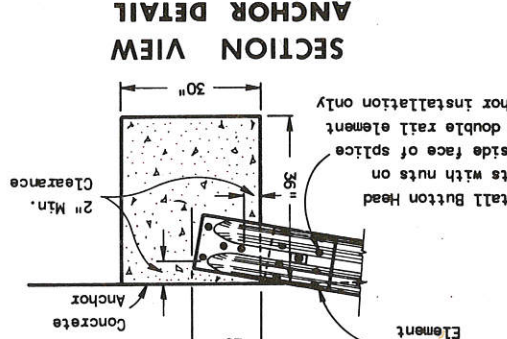
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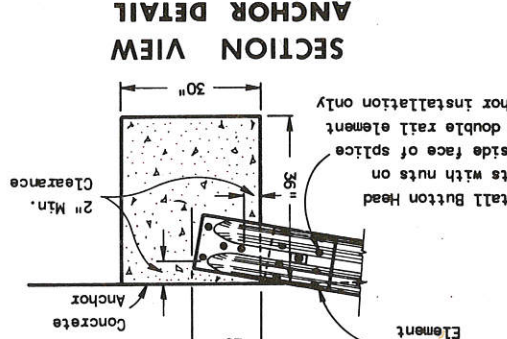
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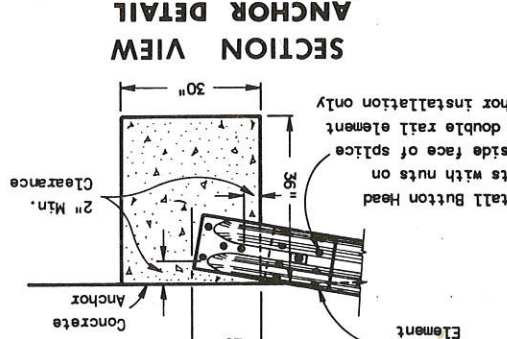
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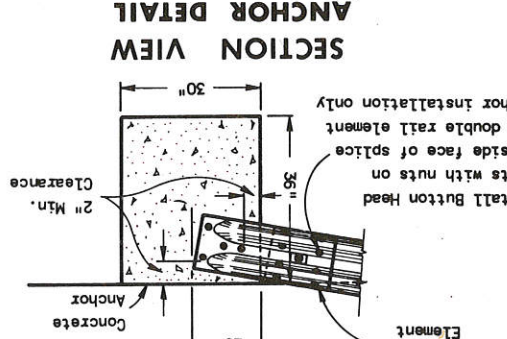
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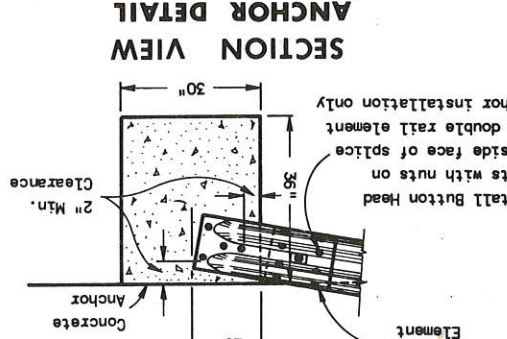
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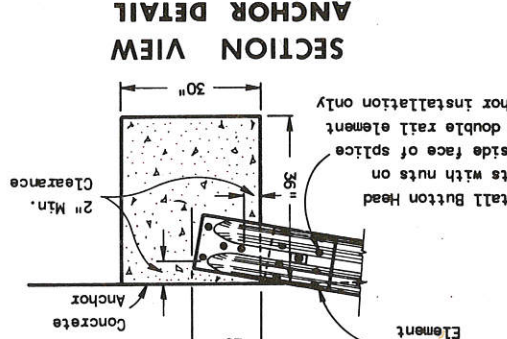
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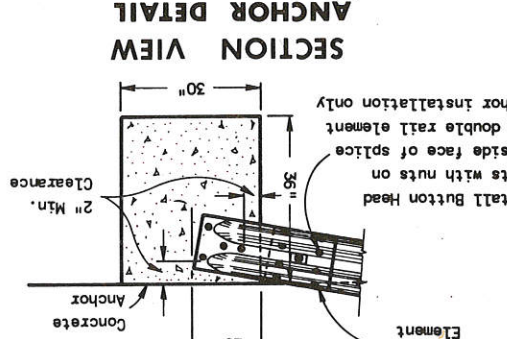
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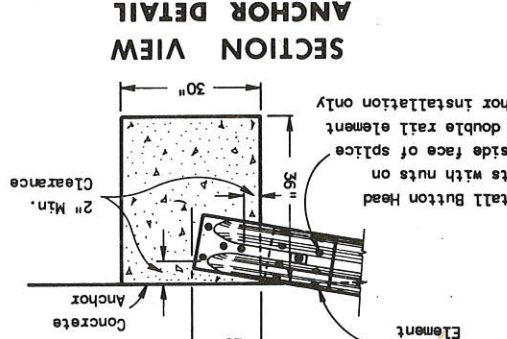
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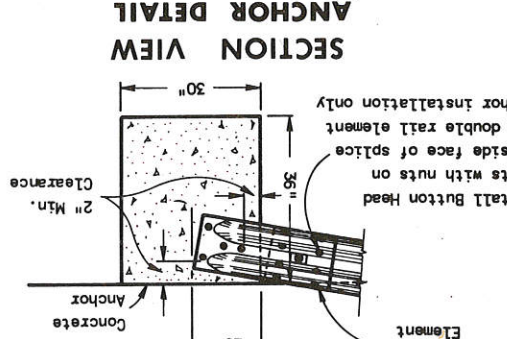
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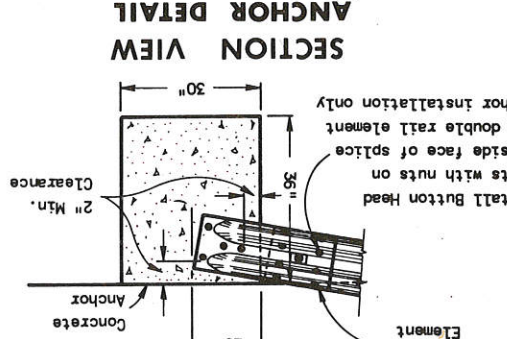
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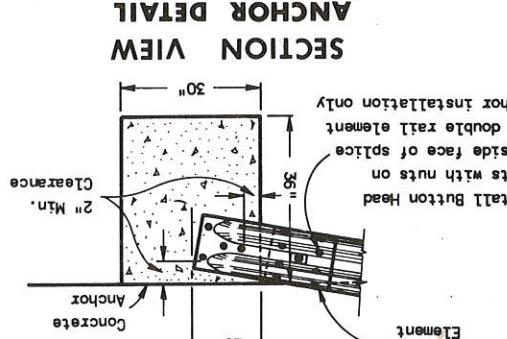
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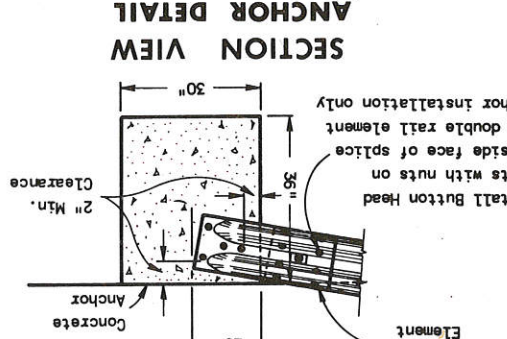
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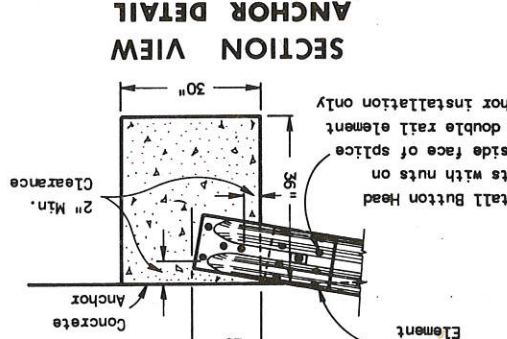
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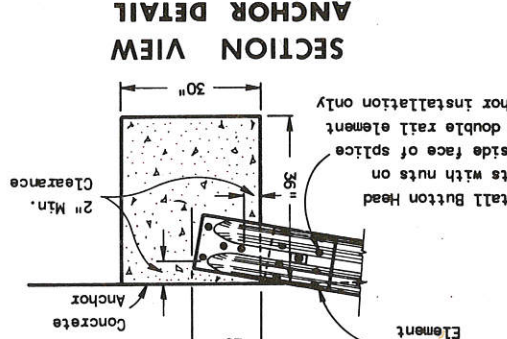
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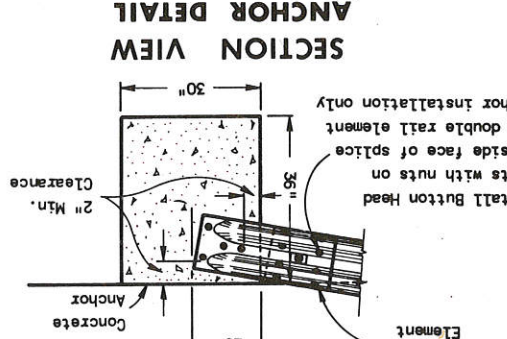
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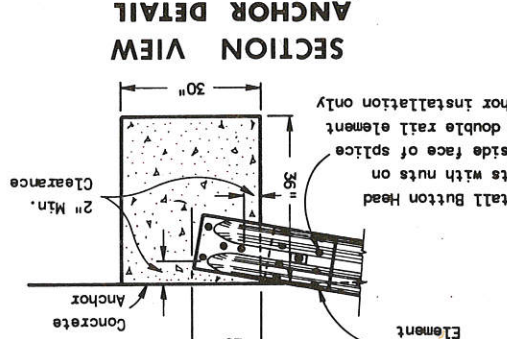
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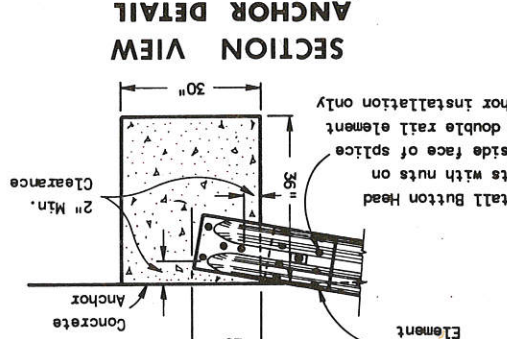
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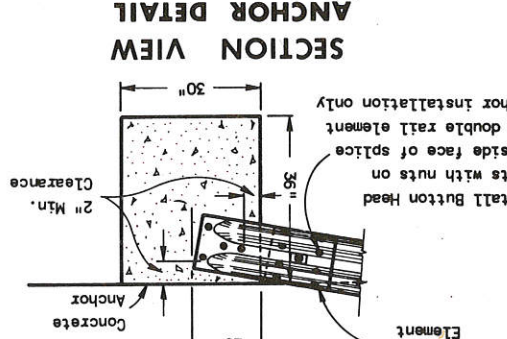
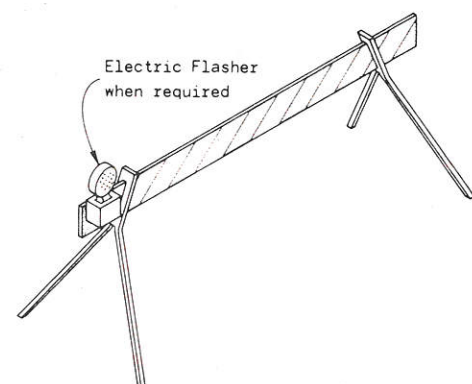


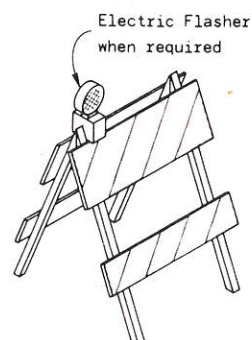
TABLE OF BARRICADE CHARACTERISTICS

BARRICADE TYPE	I	II	III
Height	3' Minimum		5' Minimum
* Rail Width	8" Minimum to 12" Maximum		
Rail Length	2' Minimum to variable Maximum		
** Stripe Width	6" at 45° Angle		
Stripe Colors	Reflectorized Orange & White		

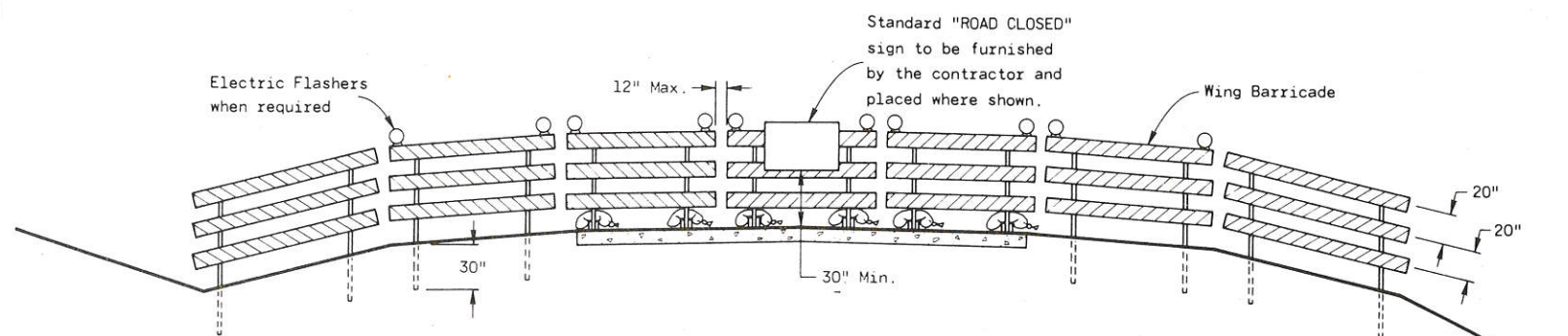
* Nominal dimensions when barricade is constructed of lumber.
 ** May be 4" for rail lengths less than 3'.



TYPICAL TYPE I BARRICADE

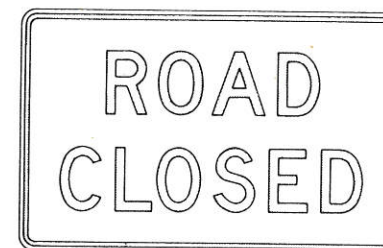


TYPICAL TYPE II BARRICADE



TYPICAL INSTALLATION SHOWING TYPE III BARRICADE

CONSTRUCTION BARRICADES



R11-2

48" x 30"

Black Lettering on Reflective
 White Background
 Letter Series "D"
 Letter height 8"



W20-3

48" x 48"

Black Lettering on Reflective
 Orange Background
 Letter Series "D"
 Letter height 7"

STANDARD SIGNS-TYPE II

GENERAL NOTES

The contractor shall furnish, erect and maintain Barricades and Signs. Details regarding location, spacing, dimensions, fabrication, material, sign lettering, lighting devices and color of Barricades and Signs shall conform to this drawing, the Wisconsin Manual on Uniform Traffic Control Devices, the Standard Specifications, Special Provisions and/or plans.

Type III Barricades and Signs shall be erected at the termini of projects and at other road or street locations where it is necessary to control or eliminate public access to the construction area.

Type I and II Barricades shall be used on projects when traffic is to be maintained through the construction area.

The actual field location of barricade installations and advance signs shall be as directed by the Engineer.

Each barricade shall have the name and telephone number of a person responsible for 24 hour emergency service printed in letters at least 3/4 inch in height.

CONSTRUCTION BARRICADES
 & STANDARD SIGNS

State of Wisconsin
 Department of Transportation
 Division of Highways

APPROVED
 10-1-76
 DATE

D. J. Stank
 CHIEF OF FACILITIES DEVELOPMENT

APPROVED
 10-1-76
 DATE

H. J. Siedler
 STATE HIGHWAY ENGINEER

SHEET PROJECT NUMBER 7140-6-71 9

STATE PROJECT NUMBER 7140-6-71

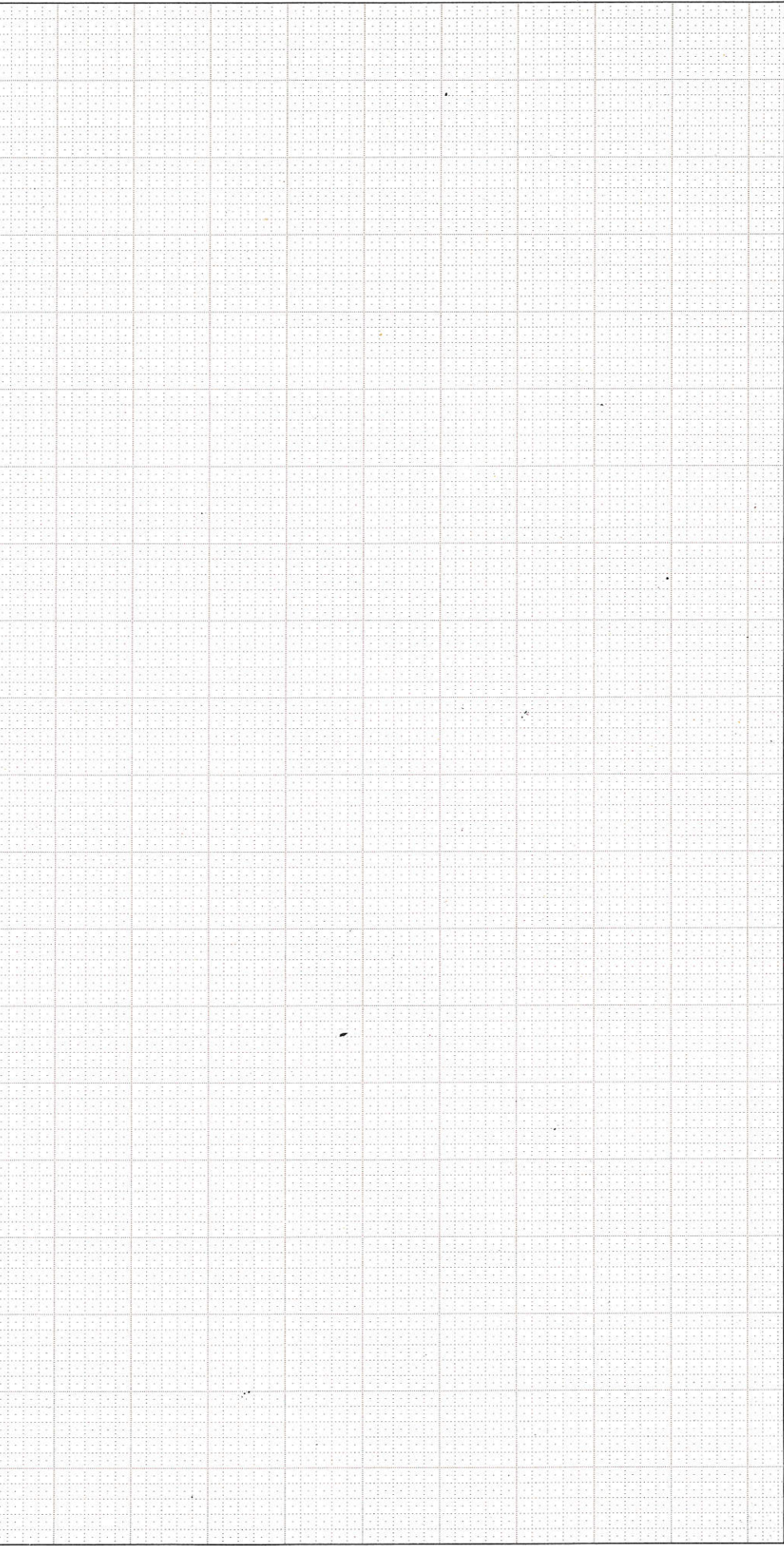
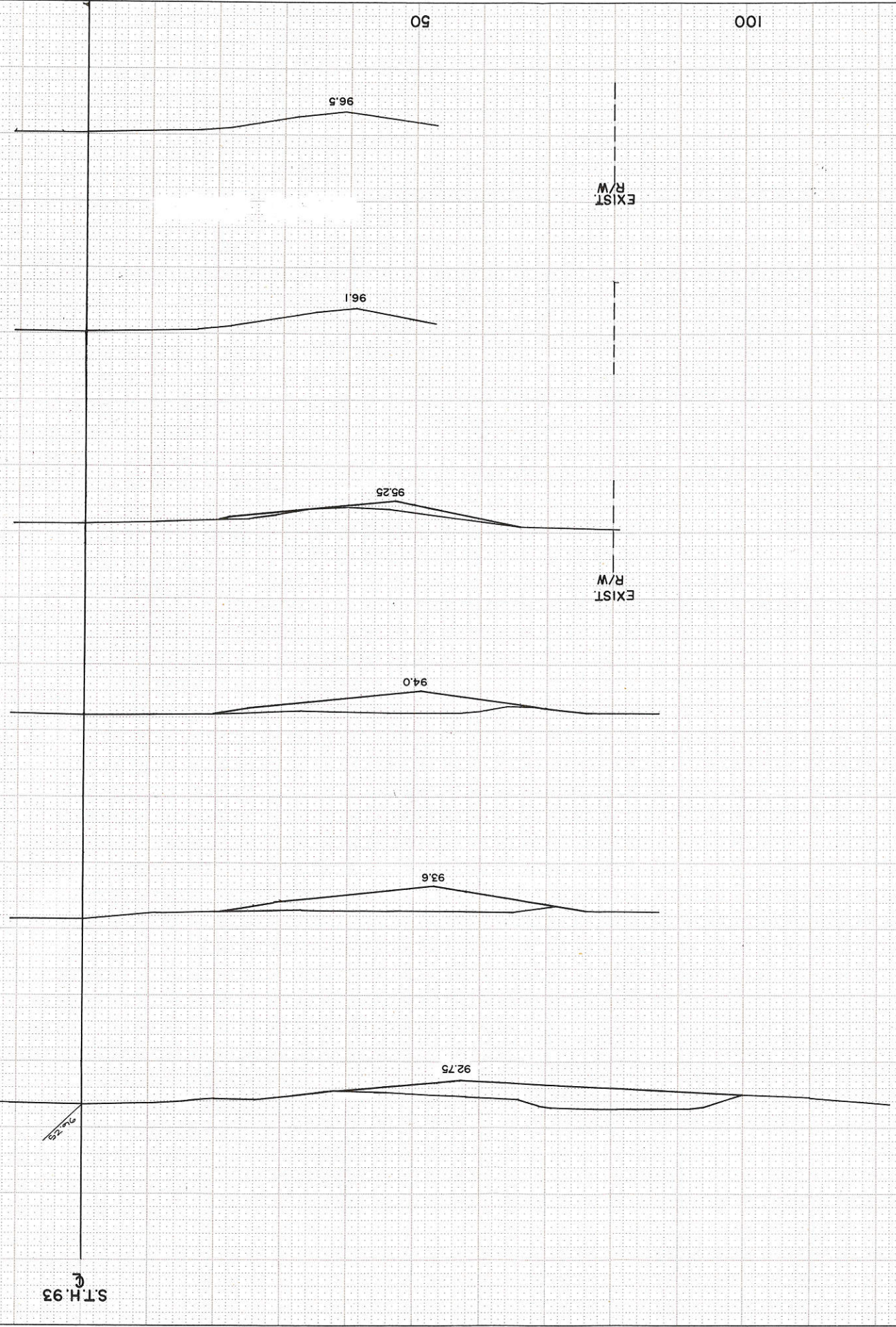
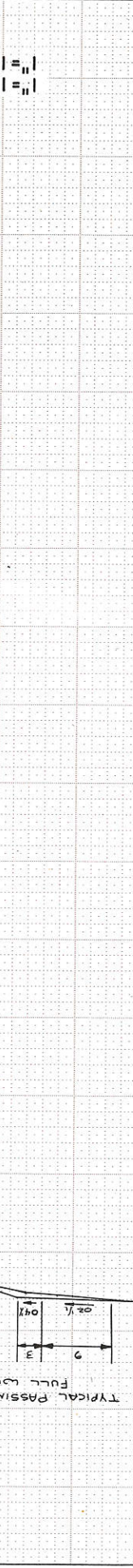
YARDAGE
EXCAVATION
UNCL.
FILL

STATION	DISTANCE
18+00	4
18+30	39
19+00	104
19+30	315

STATION	DISTANCE
20+00	100
20+30	194
21+00	315

STATION DISTANCE SHEET TOTAL 656

1" = 10' VERT. 1" = 10' HORIZ.



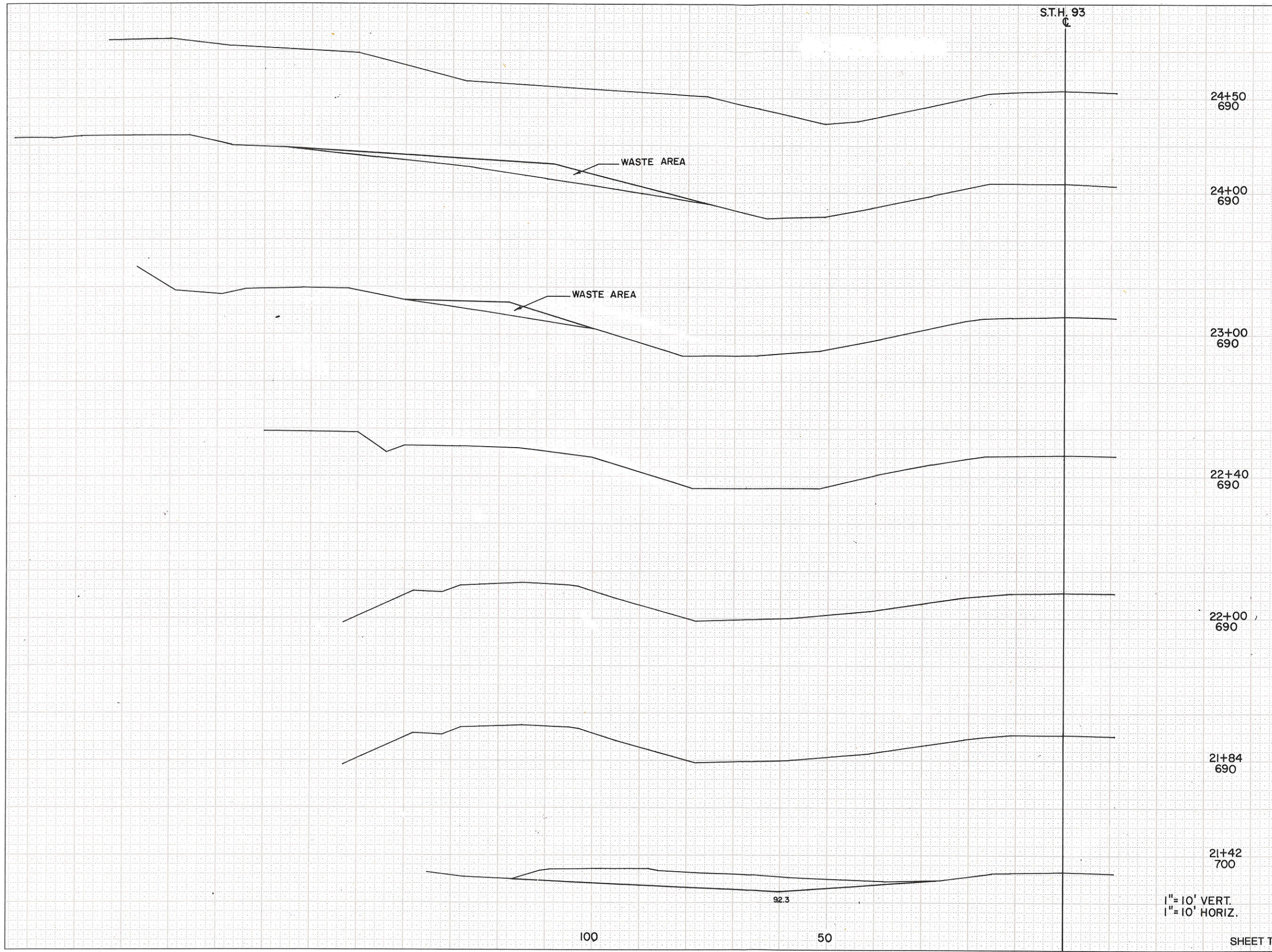
S.T.H. 93

STATE PROJECT NUMBER

7140-6-71

SHEET NUMBER

9.1



STATION	DISTANCE	YARDAGE		
		EXCAVATION		FILL
		UNCL.		
24+50 690				
24+00 690	21+00	272		0
	21+42	42		0
	21+84	16	0	0
23+00 690	22+00	40	0	0
	22+40	60	0	
	23+00	100	0	
22+40 690	24+00	50	0	
	24+50			
22+00 690				
21+84 690				
21+42 700				
SHEET TOTAL		272		

1" = 10' VERT.
1" = 10' HORIZ.

100 50

Plan # 263