MINNESOTA DEPARTMENT OF TRANSPORTATION

THE COUNTY OF OLMSTED

CONSTRUCTION PLAN FOR AGGREGATE BASE & BITUMINOUS PAVING

LOCATED ON C.S.A.H. 3 BETWEEN T.H. 30 AND 648 FT. WEST CR.117 (GEOGRAPHIC DESCRIPTION)

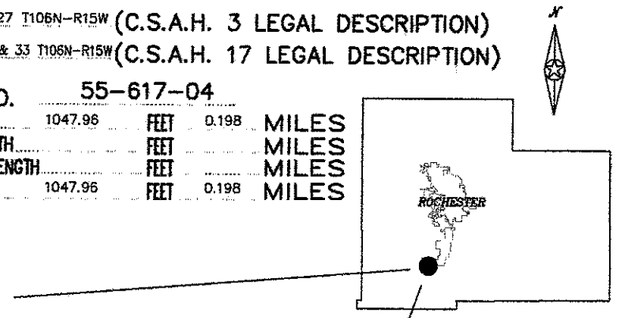
LOCATED ON C.S.A.H. 17 BETWEEN C.S.A.H. 3 AND 1047.96 FT. WEST (GEOGRAPHIC DESCRIPTION)

FROM 34.65' S. SEC. COR 16 & 17 T105N–R15W TO 824.54' WEST CENTER SEC. 27 T106N–R15W (C.S.A.H. 3 LEGAL DESCRIPTION)

FROM SEC. COR 28, 29, 32, & 33 T106N–R15W TO 1047.96' WEST SEC. 28, 29, 32, & 33 T106N–R15W (C.S.A.H. 17 LEGAL DESCRIPTION)

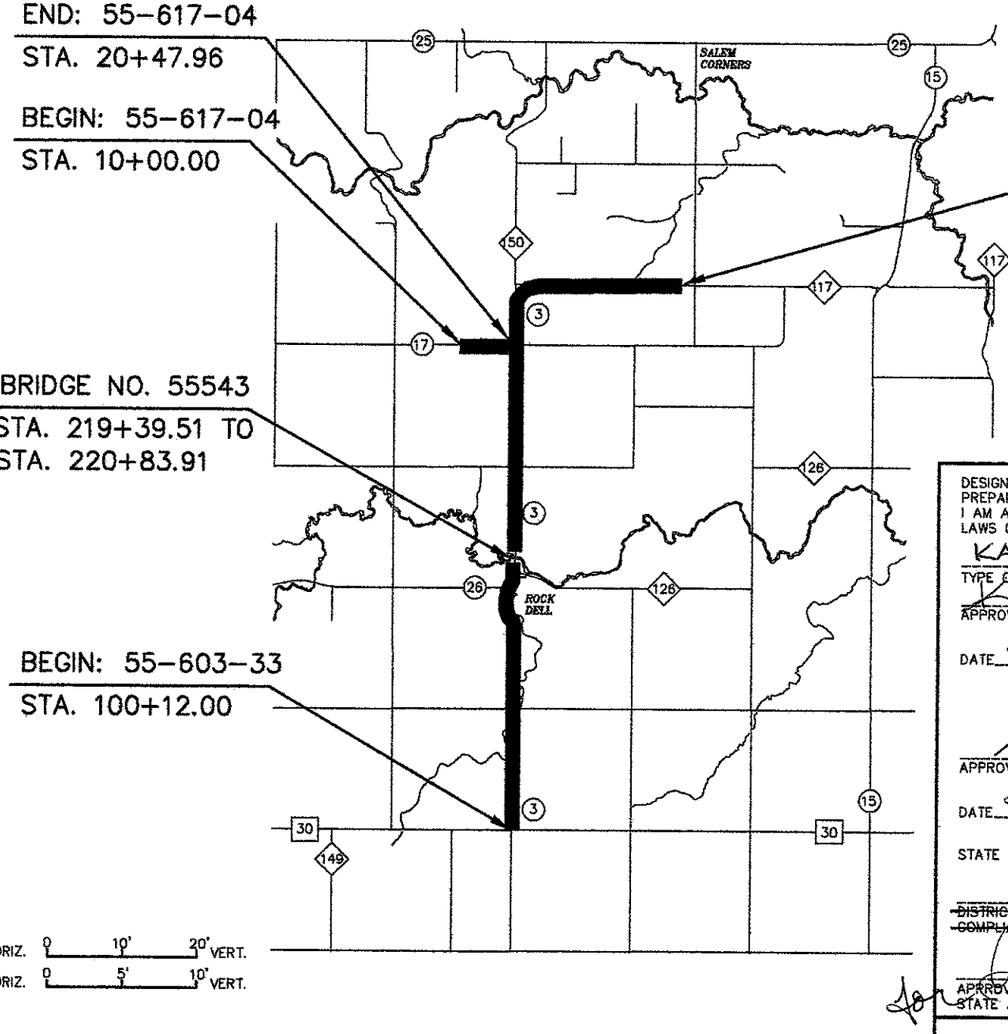
S.A.P. NO.	55–603–33			
GROSS LENGTH	30,590.40	FEET	5.794	MILES
BRIDGE–LENGTH	144.40	FEET	0.027	MILES
EXCEPTIONS–LENGTH	144.40	FEET	0.027	MILES
NET LENGTH	30,446.00	FEET	5.766	MILES

S.A.P. NO.	55–617–04			
GROSS LENGTH	1047.96	FEET	0.198	MILES
BRIDGE–LENGTH		FEET		MILES
EXCEPTIONS–LENGTH		FEET		MILES
NET LENGTH	1047.96	FEET	0.198	MILES



END: 55–617–04
STA. 20+47.96

BEGIN: 55–617–04
STA. 10+00.00



END: 55–603–33
STA. 406+02.40

BRIDGE NO. 55543
STA. 219+39.51 TO
STA. 220+83.91

BEGIN: 55–603–33
STA. 100+12.00

AS-BUILT

MAR 22 2005

ENGINEERING

REVISED 4/7/03

PLAN SYMBOLS

STATE LINE
COUNTY LINE
TOWNSHIP OR RANGE LINE
SECTION LINE
QUARTER LINE
SIXTEENTH LINE
RIGHT-OF-WAY LINE
PRESENT RIGHT-OF-WAY LINE
CONTROL OF ACCESS LINE
PROPERTY LINE (Except Land Lines)
VACATED PLATTED PROPERTY
CORPORATE OR CITY LIMITS
TRUNK HIGHWAY CENTER LINE
RETAINING WALL
RAILROAD
RAILROAD RIGHT-OF-WAY
RIVER OR CREEK
DRY RUN
DRAINAGE DITCH
DRAIN TILE
CULVERT
DROP INLET
GUARD RAIL
BARBED WIRE FENCE
WOVEN WIRE FENCE
CHAIN LINK FENCE
RAILROAD SNOW FENCE
STONE WALL OR FENCE
HEDGE
RAILROAD CROSSING SIGN
RAILROAD CROSSING BELL
ELECTRIC WARNING SIGN
CROSSING GATE
MEANDER CORNER
SPRINGS
MARSH
TIMBER
ORCHARD
BRUSH
NURSERY
CATCH BASIN
FIRE HYDRANT
CATTLE GUARD
OVERPASS (HIGHWAY OVER)
UNDERPASS (HIGHWAY UNDER)
BRIDGE
BUILDING (ONE STORY FRAME)
F – FRAME C – CONCRETE
S – STONE T – TILE
B – BRICK ST – STUCCO
IRON PIPE OR ROD
MONUMENT (STONE, CONCRETE, OR METAL)
WOODEN HUB
GRAVEL PIT
SAND PIT
BORROW PIT
ROCK QUARRY
SLOPE EASEMENT

UTILITIES SYMBOLS

POWER POLE LINE
TELEPHONE OR TELEGRAPH POLE LINE
JOINT TELEPHONE AND POWER ON POWER POLE
ON TELEPHONE POLES
ANCHOR
STEEL TOWER
STREET LIGHT
PEDESTAL (TELEPHONE CABLE TERMINAL)
GAS MAIN
WATER MAIN
CONDUIT
TELEPHONE CABLE IN CONDUIT
ELECTRICAL CABLE IN CONDUIT
TELEPHONE MANHOLE
ELECTRICAL MANHOLE
BURIED TELEPHONE CABLE
BURIED ELECTRICAL CABLE
AERIAL TELEPHONE CABLE
SEWER (SANITARY OR SEWER)
SEWER MANHOLE

EROSION CONTROL SYMBOLS

TEMPORARY SILT FENCE
RIP RAP DITCH CHECKS

SCALES

PLAN 0 100'
PROFILE 0 100' HORIZ. 0 10' 20' VERT.
CROSS SECTIONS 0 10' 20' HORIZ. 0 5' 10' VERT.

INDEX MAP: NOT TO SCALE

DESIGN ENGINEER: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

KAYE M. BIENIEK
TYPE OR PRINT NAME

Kaye M Bieniek
APPROVED: COUNTY DESIGN ENGINEER

DATE 9/10/02 REG. NO. 19917

Michael Sheehan
APPROVED: COUNTY ENGINEER

DATE 9/10/02 REG. NO. 10397

STATE AID APPROVALS:

~~DISTRICT STATE AID ENGINEER. REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY~~ DATE:

APPROVED FOR STATE AID FUNDING: STATE AID ENGINEER DATE: 9-20-02

MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 2000 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET NO. 1	TITLE SHEET
SHEET NO. 2	ESTIMATE OF QUANTITIES & TABLES
SHEET NO. 3 – 5	TYPICAL SECTIONS & DETAIL
SHEET NO. 6– 8	PLAN SHEETS FOR CURB & GUTTER
SHEET NO. 9 – 13	GUARDRAIL PLAN & DETAILS
SHEET NO. 14 – 15	TRAFFIC CONTROL PLANS

THIS PLAN CONTAINS ~~15~~ 16 SHEETS.

DESIGN DESIGNATION: RURAL
S.A.P. 55–603–33

R ΣN18(20)
ADT (Current Year) = 1016(2002) Design Speed 55 MPH
ADT (Future Year) = 1626(2022) Based on STOPPING Sight Distance
DHV (Design Hr. Vol.) = Height of eye 3.5 FT. Height of object 0.5 FT
D (Directional Distr.) = Design Speed not achieved at:
T (Heavy Commercial) = STA. 166+27 TO STA. 181+77 MPH. 50
SUBGRADE = K=150 STA. 195+39.19 TO STA. 199+39.19 MPH. 40
SOIL FACTOR = 130% STA. 196+40.73 TO STA. 201+60.92 MPH. 40
SHOULDER WIDTH 6 FT STA. 245+54.26 TO STA. 253+04.26 MPH. 40
MAJOR COLLECTOR STA. 330+23.48 TO STA. 343+62.71 MPH. 50
10 TON DESIGN

DESIGN DESIGNATION: URBAN (ROCKDELL)
STA. 195+20 TO STA. 213+65
S.A.P. 55–603–33

R ΣN18(20)
ADT (Current Year) = 447(2002) Design Speed 30 MPH
ADT (Future Year) = 714(2022) Based on STOPPING Sight Distance
DHV (Design Hr. Vol.) = Height of eye 3.5 FT. Height of object 0.5 FT
D (Directional Distr.) = Design Speed not achieved at:
T (Heavy Commercial) =
SUBGRADE = K=150
SOIL FACTOR = 130%
SHOULDER WIDTH 6 FT.
SHOULDER WITH PARKING 8 FT
MAJOR COLLECTOR
10 TON DESIGN

DESIGN DESIGNATION: (C.S.A.H. 17)
S.A.P. 55–617–04

R ΣN18(20)
ADT (Current Year) = 343(2002) Design Speed 55 MPH
ADT (Future Year) = 548(2022) Based on STOPPING Sight Distance
DHV (Design Hr. Vol.) = Height of eye 3.5 FT. Height of object 0.5 FT
D (Directional Distr.) = Design Speed not achieved at:
T (Heavy Commercial) = STA. 10+06.00 TO STA. 17+66.00 MPH. 45
SUBGRADE = K=150
SOIL FACTOR = 130%
SHOULDER WIDTH 6 FT.
MINOR COLLECTOR
10 TON DESIGN

ESTIMATED QUANTITIES

	SPECIFICATION NO.	ITEM	UNIT	055-603-33 NON PARTICIPATING RURAL	055-603-33 PARTICIPATING RURAL	055-617-04 NON PARTICIPATING RURAL	055-617-04 PARTICIPATING RURAL	TOTAL ESTIMATED QUANTITIES
	2105.523	COMMON BORROW (LV)	CU. YDS.		1,454			1,454(P)
	2105.525	TOPSOIL BORROW (LV)	CU. YDS.		343			343(P)
①	2130.501	WATER	M-GAL.		177		4	181
②	2211.501	AGGREGATE BASE CL. 5	TON		45,154		1581	46,735
③	2221.501	AGGREGATE SHOULDERING CL. 2	TON		16,124		600	16,724
④	2331.604	BITUMINOUS PAVEMENT RECLAMATION	SQ. YDS.		4,862			4,862
⑤	2350.501	TYPE MV4 WEARING COURSE MIXTURE (MVWE45035C)	TON		9,670		306	9,976
	2350.502	TYPE MV4 NON WEARING COURSE MIXTURE (MVNW45035C)	TON		11,651		371	12,022
	2350.502	TYPE ~~MV4~~ MV3 NON WEARING COURSE MIXTURE (MVNW35035B)	TON		14,503		468	14,971
⑥	2502.501	4" PRECAST CONCRETE HEADWALL	EACH		107			107
⑥	2502.521	4" TP PIPE DRAIN	LIN FT		868			868
⑥	2502.541	4" PERF PE PIPE DRAIN	LIN FT		52,425			52,425
⑦	2506.521	INSTALL CASTING	EACH		2			2
⑧	2531.501	CONCRETE CURB & GUTTER DESIGN B424	LIN. FT.		1,191			1,191
⑨	2531.501	CONCRETE CURB & GUTTER DESIGN B624	LIN. FT.		2,247			2,247
*	2554.501	TRAFFIC BARRIER DESIGN SPECIAL	LIN FT		100			100
	2554.501	TRAFFIC BARRIER DESIGN B8307	LIN. FT.		~~400~~ 300			300 ~~400~~
	2554.602	T-BARRIER CONN DESIGN B318	EACH		4			4
	2554.602	ECCENTRIC LOADER BCT	EACH		4			4
	2563.601	TRAFFIC CONTROL	LUMP SUM		0.96		0.04	1
	2564.603	4" SOLID LINE WHITE - EPOXY	LIN. FT.		61,838		1,272	63,110
	2564.603	4" BROKEN LINE YELLOW - EPOXY	LIN. FT.		6,190		130	6,320
	2564.603	4" SOLID LINE YELLOW - EPOXY	LIN. FT.		10,350		630	10,980
	2564.603	4" DOUBLE SOLID LINE YELLOW - EPOXY	LIN. FT.		6,750			6,750
⑩	2575.505	SODDING TYPE LAWN	SQ. YD.		4,340			4,340
	2580.603	INTERIM PAVEMENT MARKINGS	LIN. FT.		6,876		144	7,020

* 7FT CURB TRANSITION WILL BE INCIDENTAL TO ITEM

(P) PLAN QUANTITY

QUANTITY NOTES

① WATER TO BE USED AS A DUST PREVENTATIVE AS DIRECTED BY THE ENGINEER.

② MAINLINE C.S.A.H 3 43,760 TON
MAINLINE C.S.A.H. 26 453 TON
MAINLINE C.S.A.H. 126 260 TON
MAINLINE C.S.A.H. 17 1,581 TON
TURN LANE & CHURCH DR. 681 TON

③ C.S.A.H. 3 - APPROACHES AND ENTRANCES 3,334 TON
C.S.A.H. 26 - ENTRANCES 27 TON
C.S.A.H. 126 - ENTRANCES 60 TON
C.S.A.H. 17 - ENTRANCES 73 TON

④ DEPTH TO BE RECLAIMED SHALL BE 4". LOCATION IS FROM STA. 213+65 TO INPLACE BRIDGE NO. 55543 AND FROM INPLACE BRIDGE NO. 55543 TO STA. 233+31.59.

⑤ C.S.A.H. 3 - APPROACHES AND ENTRANCES 804 TON
C.S.A.H. 26 - ENTRANCES 17 TON
C.S.A.H. 126 - ENTRANCES 17 TON
C.S.A.H. 17 - ENTRANCES 35 TON

⑥ SEE TABULATION THIS SHEET FOR PERF. PIPE & HEADWALL LOCATIONS. TILE OPERATION MUST BE PREFORMED BEFORE THE PAVING OF THE APPROACHES & ENTRANCES.

⑦ GRATE FRAME CASTING NO. 806, CURB BOX CASTING NO. 825, GRATE CASTING NO. 814, ADJUSTING RINGS, AND ANY FIELD ADJUSTMENT SHALL BE CONSIDERED INCIDENTAL TO ITEM NO. 2506.516 INSTALL CASTING.

⑧ SEE SHEET NO. 8

⑨ SEE SHEETS NO. 6 AND 7

⑩ SPEC 1903 DOES NOT APPLY TO ITEM 2575.505 SODDING

SODDING

LOCATION	SQ. YDS.
LT. STA. 198+75 TO STA. 206+40	487
RT. STA. 201+50 TO STA. 214+00	2,183
LT. STA. 245+00 TO STA. 249+05	375
RT. STA. 245+00 TO STA. 249+00	1,149
RT. STA. 10+20.67 TO STA. 12+50	146
TOTAL	4,340

STANDARD PLATES

THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION SHALL APPLY ON THIS PROJECT.

PLATE NO.	DESCRIPTION
	NUMERICAL INDEX OF STANDARD PLATES
3131C	PRECAST CONCRETE HEADWALL FOR SUBSURFACE DRAINS
4108F	ADJUSTING RING
4125D	CATCH BASIN FRAME CASTING
4134A	CURB BOX CASTING FOR CATCH BASIN
4152C	CATCH BASIN GRATE CASTING
7100G	CONCRETE CURB & GUTTER
8000I	STANDARD BARRICADES
8307P	STANDARD PLATE BEAM GUARDRAIL
8318C	GUARDRAIL ANCHORAGE PLATE FOR BRIDGES AND BCT'S
8329F	ECCENTRIC LOADER BREAKAWAY CABLE TERMINAL (ECT)

BASIS OF PLANNED QUANTITIES

AGGREGATE BASE CLASS 5 -	140 LBS / CU. FT. COMPACTED
AGGREGATE SHOULDER CLASS 2 -	140 LBS / CU. FT COMPACTED
BITUMINOUS MIXTURE	110 LBS / SQ. YD./ 1 INCH DEPTH

EDGE DRAIN TABULATIONS

STATIONS	LOCATION	PERF. PIPE (feet)	HEADWALLS (each)	HEADWALL STATIONS
101+00 - 106+00	LT.&RT.	1000	2	106+00
106+00 - 111+00	LT.&RT.	1000	2	111+00
111+00 - 116+00	LT.&RT.	1000	2	116+00
116+00 - 121+00	LT.&RT.	1000	2	121+00
121+00 - 126+00	LT.&RT.	1000	2	126+00
126+00 - 130+25	LT.	425	1	130+25
126+00 - 130+00	RT.	400	1	130+00
130+25 - 134+00	LT.	375	1	133+50 LOW POINT
131+00 - 134+00	RT.	300	1	131+00
134+50 - 142+50	LT.&RT.	1600	4	134+00 & 142+50
142+50 - 147+00	LT.&RT.	900	2	145+50*
147+00 - 158+00	LT.&RT.	2200	4	147+00
158+00 - 167+00	LT.&RT.	900	2	163+00*
167+00 - 179+00	LT.&RT.	2400	4	167+00 & 179+00
179+00 - 184+00	LT.&RT.	1000	2	184+00
184+00 - 189+00	LT.	500	1	189+00
184+00 - 188+00	RT.	400	1	188+00
189+00 - 195+25	LT.	625	1	195+25
194+75 - 201+25	RT.	650	1	199+00 LOW POINT
207+50 - 212+50	LT.	500	1	212+50
212+50 - 218+75	LT.	625	1	218+50
214+75 - 218+75	RT.	400	1	218+75
221+25 - 226+00	LT.&RT.	950	2	221+25
226+00 - 231+00	LT.&RT.	1000	2	226+00
231+00 - 236+00	LT.&RT.	1000	2	231+00
236+00 - 241+00	LT.&RT.	1000	2	236+00
241+00 - 244+75	LT.&RT.	750	2	241+25
249+50 - 255+00	RT.	550	1	255+00
251+25 - 255+00	LT.	375	1	255+00
255+00 - 259+25	LT.&RT.	850	2	259+25
260+75 - 264+50	LT.&RT.	750	2	264+50*
265+00 - 270+00	LT.&RT.	1000	2	265+00
270+00 - 272+50	LT.	250	1	270+00
270+00 - 272+75	RT.	275	1	270+00
274+00 - 279+00	LT.&RT.	1000	2	274+00
279+00 - 284+00	LT.&RT.	1000	2	279+00
284+00 - 289+00	LT.&RT.	1000	2	284+00
289+00 - 294+00	LT.&RT.	1000	2	289+00
294+00 - 299+00	LT.&RT.	1000	2	294+00
299+00 - 305+00	LT.&RT.	1200	2	299+00
305+00 - 316+00	LT.&RT.	2200	4	305+00 & 316+00
316+00 - 321+00	LT.&RT.	1000	2	321+00
321+00 - 326+00	LT.&RT.	1000	2	326+00
326+00 - 331+00	RT.	500	1	331+00
326+00 - 329+00	LT.	300	1	329+00
331+00 - 337+00	RT.	600	1	336+00
337+00 - 339+50	RT.	200	1	339+50
340+25 - 348+00	RT.	650	1	340+25*
344+75 - 348+00	LT.	775	1	344+75
348+00 - 358+00	LT.&RT.	2000	4	348+00
358+00 - 363+00	LT.&RT.	1000	2	363+00
363+00 - 368+00	LT.&RT.	1000	2	368+00
368+00 - 373+00	LT.&RT.	1000	2	373+00
373+00 - 378+00	LT.&RT.	1000	2	378+00
378+00 - 382+50	LT.&RT.	900	2	382+50
382+50 - 386+50	LT.&RT.	800	2	386+50
387+25 - 393+50	LT.&RT.	1250	2	393+00
394+50 - 399+50	LT.&RT.	1000	2	394+50
399+50 - 405+00	LT.&RT.	1100	2	398+50
	TOTAL	52,425	107	

* ADJUST AS NESSASARY TO DRAIN.

AS-BUILT
MAR 22 2005
ENGINEERING

- Lengths & Locations Adjusted in Field

ESTIMATED QUANTITIES & TABLES

CERTIFIED BY Kurt M Biernick REG. NO. 19917 6/3 2062
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-603-33 & 55-617-04

SHEET 2 OF 15 SHEETS

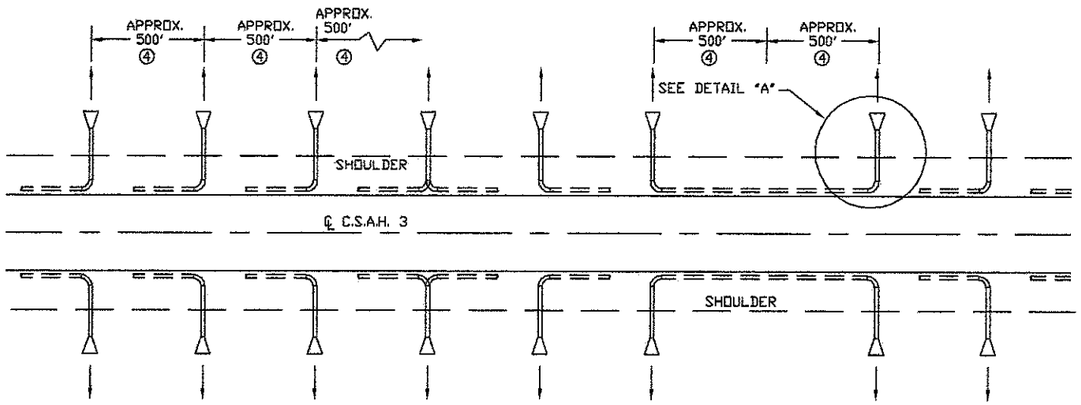
EDGE DRAIN DETAILS AND CONSTRUCTION NOTES

AS-BUILT

MAR 22 2005

ENGINEERING

PLAN VIEW



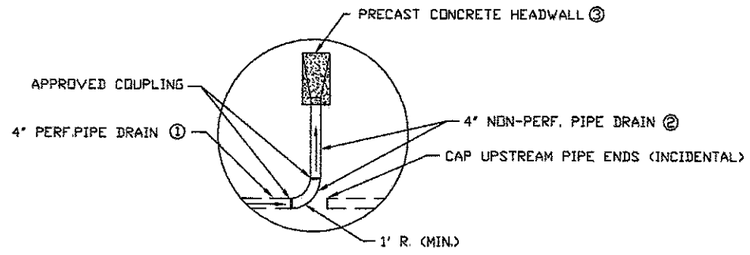


LEGEND

= = = 4" PERFORATED PIPE DRAIN

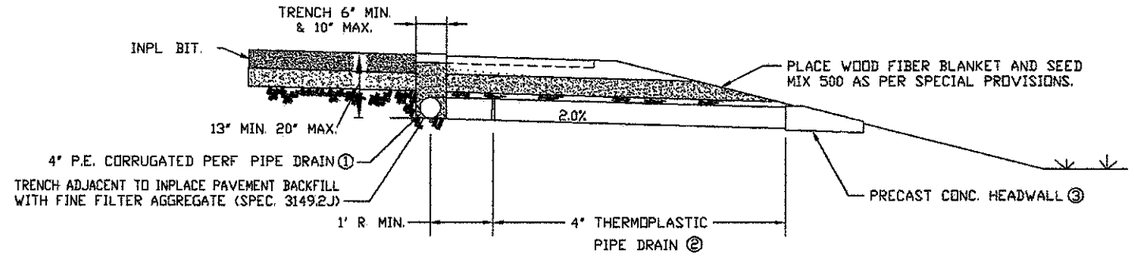
═══ 4" NON-PERFORATED PIPE DRAIN

▷ PRECAST CONCRETE HEADWALL



DETAIL "A"

X-SECTION VIEW



CONSTRUCTION NOTES

① PAYMENT FOR 4" PERFORATED PIPE DRAIN SHALL BE FULL COMPENSATION FOR TRENCHING, FABRIC WRAPPED P.E PIPE, INSTALLATION, FILTER AGGREGATE BACKFILL AND COMPACTION, BITUMINOUS OR AGGREGATE CAP, AND ALL OTHER ASSOCIATED WORK.

② PAYMENT FOR 4" NON-PERFORATED PIPE DRAIN SHALL BE FULL COMPENSATION FOR TRENCHING, FURNISHING AND PLACING PIPE AND CONNECTIONS, BACKFILL AND COMPACTION, AND ALL OTHER ASSOCIATED WORK.

③ PAYMENT FOR PRECAST CONCRETE HEADWALLS SHALL BE FULL COMPENSATION FOR PLACING HEADWALL, WOOD FIBER BLANKET AND SEED, AND ALL OTHER ASSOCIATED WORK.

④ IF AN OUTLET HAPPENS TO FALL WITHIN A CROSS-OVER OR DITCH-BLOCK INCREASE THE LENGTH OF THE PERFORATED PIPE TO A POINT WHERE AN OUTLET CAN BE SATISFACTORLY CONSTRUCTED AS DIRECTED BY THE ENGINEER

⑤ EXCESS EXCAVATED MATERIAL SHALL BE DISPOSED OF IN ACCORDANCE WITH MN/DOT SPEC. 2104.303.

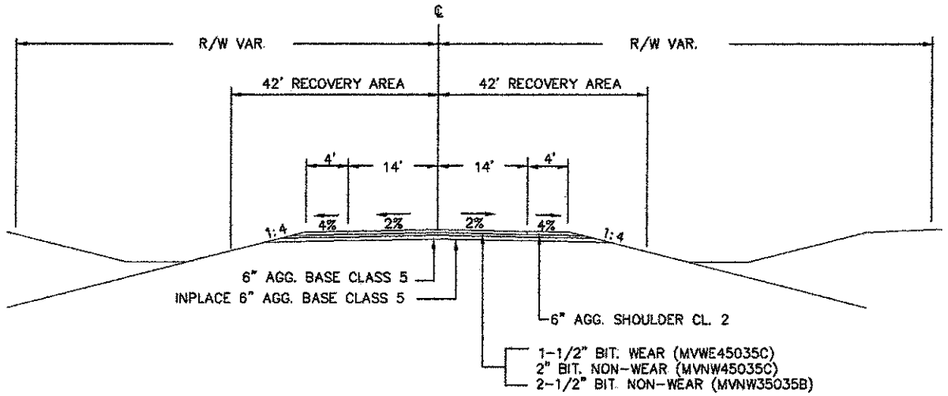
⑥ NO EDGEDRAINS WILL BE PLACED ON ELEVATED SUPER SIDE AS DIRECTED BY ENGINEER

EDGE DRAIN DETAIL & TYPICAL

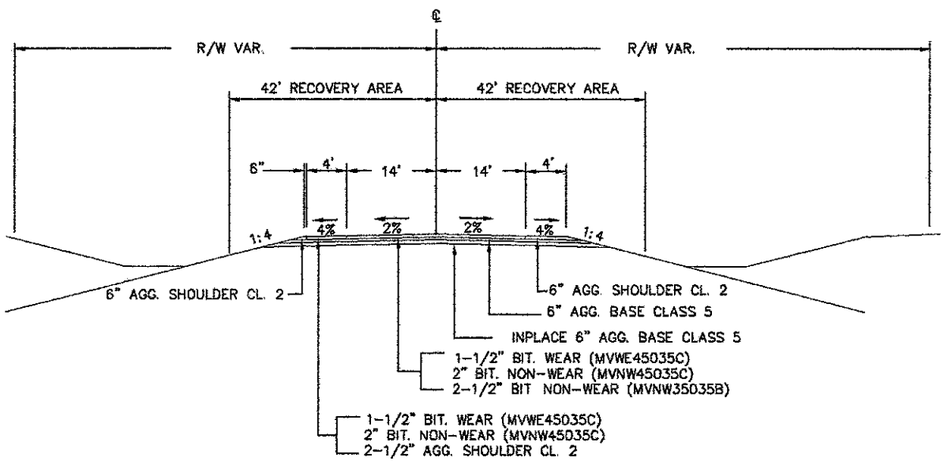
CERTIFIED BY Kurt M Bierniak REG. NO. 19917 10/3 2002
PROFESSIONAL ENGINEER

S.A.P. 55-603-33 & 55-617-04

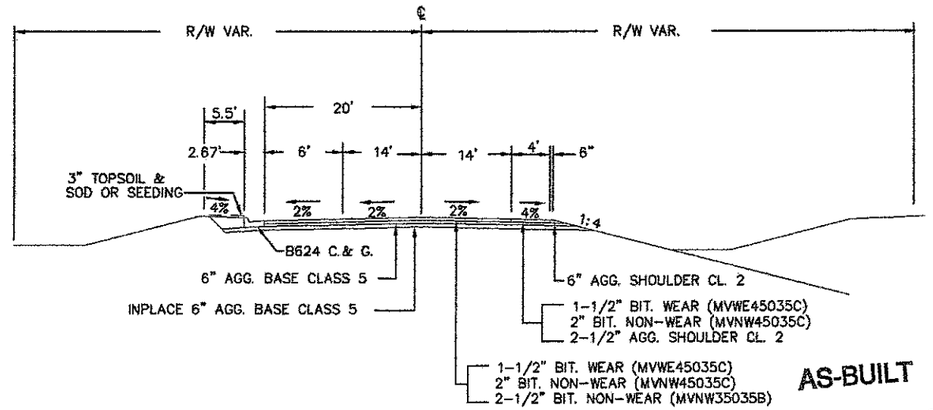
SHEET 2A OF 15 SHEETS



STA. 100+12 TO STA. 188+90.12
STA. 193+70.05 TO STA. 196+40.73
STA. 213+63 TO STA. 219+39.51
STA. 220+83.91 TO STA. 245+00
STA. 251+00 TO STA. 330+23.48
STA. 343+82.71 TO STA. 406+02.45
STA. 10+00 TO STA. 20+47.96 (CSAH 17)
STA. 12+40 TO STA. 13+10 (CSAH 26)

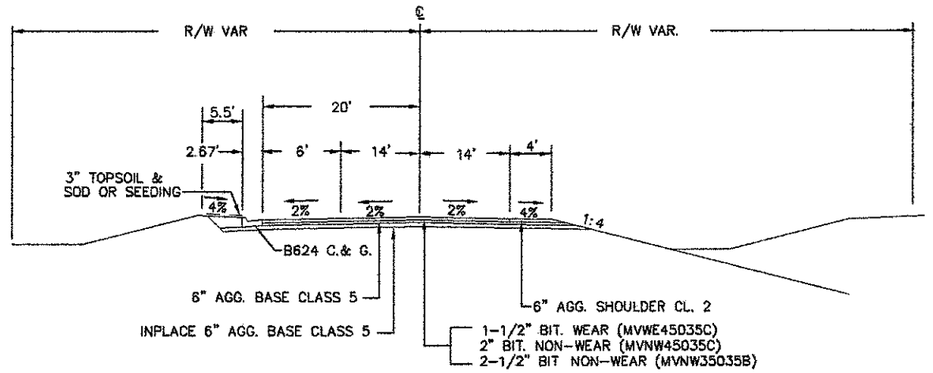


STA. 188+90.12 TO STA. 193+70.05 (PAVE LT. SHOULDER ONLY)
STA. 196+40.23 TO STA. 198+25 (PAVE RT. SHOULDER ONLY)
STA. 330+23.48 TO STA. 343+82.71 (PAVE RT. SHOULDER ONLY)

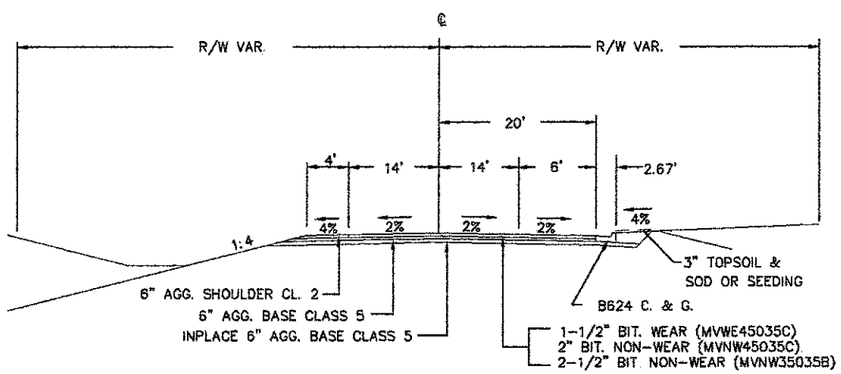


URBAN SECTION
STA. 198+25 TO STA. 201+50

AS-BUILT
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URBAN SECTION
STA. 10+00 TO STA. 12+40 (CSAH 26)



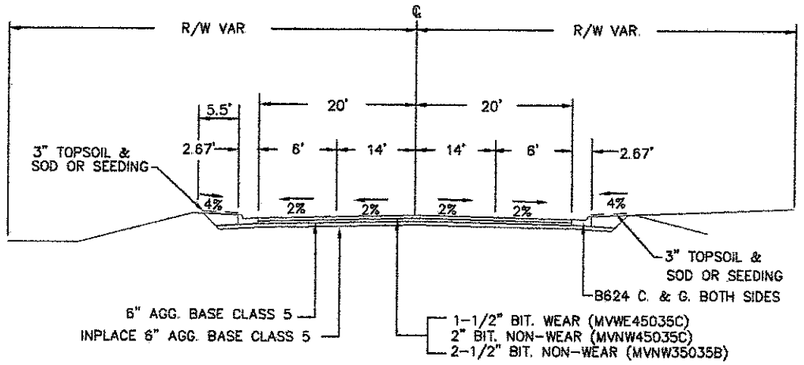
URBAN SECTION
STA. 206+65 TO STA. 213+63

TYPICAL SECTIONS

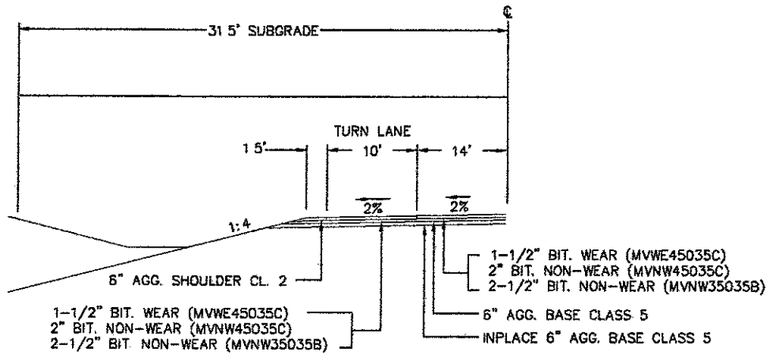
CERTIFIED BY Kaye M Bierwirth REG. NO. 19917 9/10 2002
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-603-33 & 55- 617-04

SHEET NO. 3 OF 15 SHEETS



URBAN SECTION
STA. 201+50 TO STA. 206+65

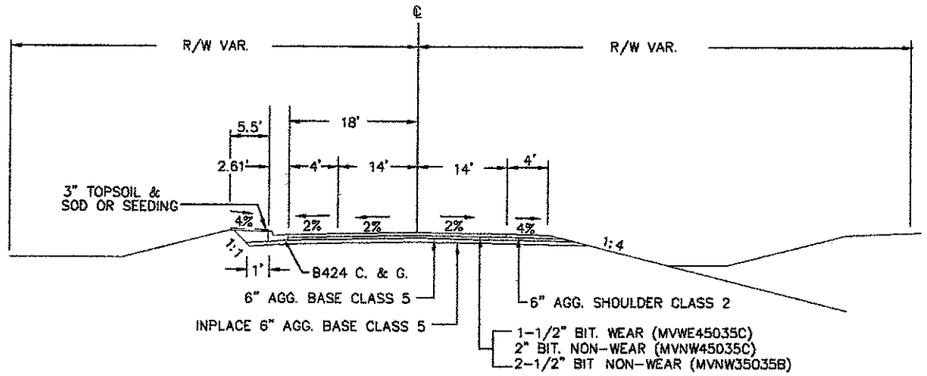


TURN LANE TYPICAL
STA. 206+77 TO STA. 208+75
STA. 312+62 TO STA. 317+42
STA. 336+09 TO STA. 340+89

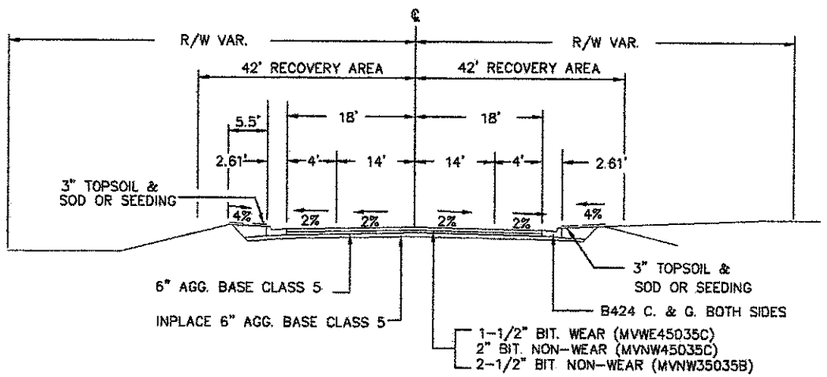
AS-BUILT

MAR 22 2005

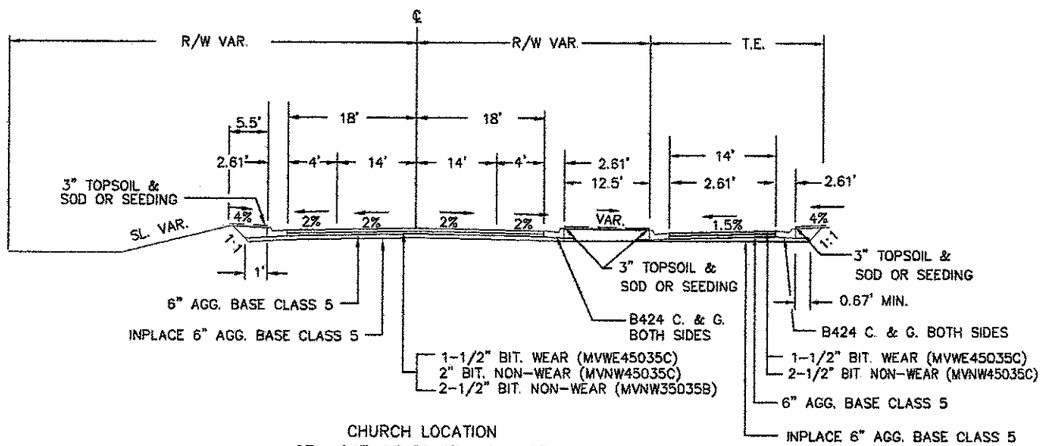
ENGINEERING



CHURCH LOCATION
STA. 249+03 TO STA. 251+00



CHURCH LOCATION
STA. 245+00 TO STA. 247+87



CHURCH LOCATION
STA. 247+87 TO STA. 249+03

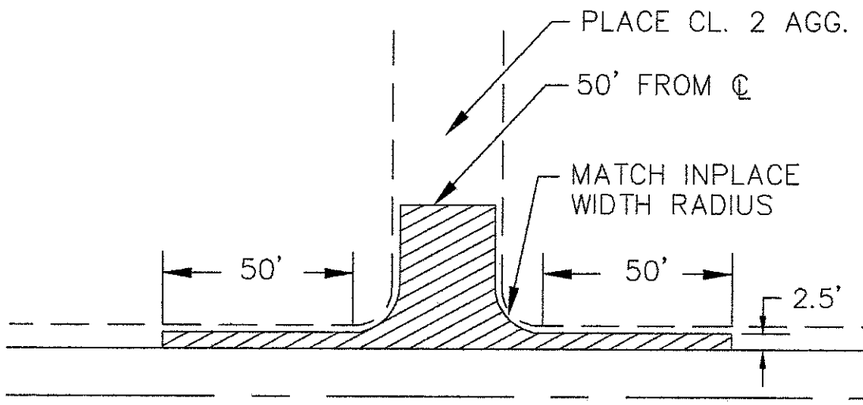
TYPICAL SECTIONS

CERTIFIED BY Kaye M Reinert REG. NO. 19917 9/10 2002
LICENSED PROFESSIONAL ENGINEER

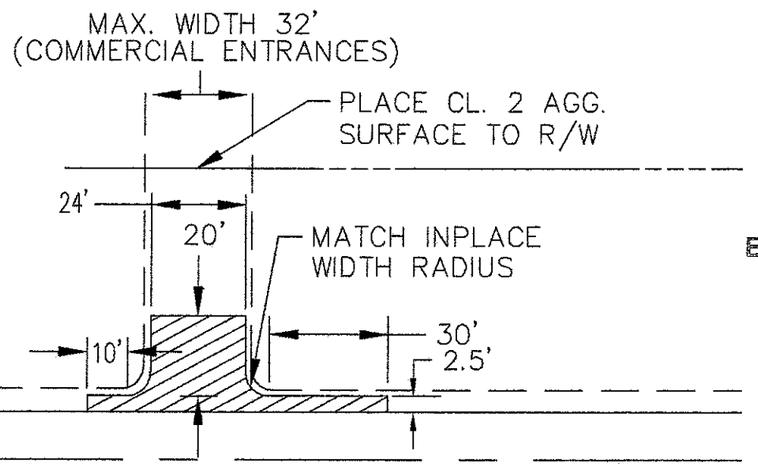
S.A.P. 55-603-33 & 55-617-04

SHEET NO. 4 OF 15 SHEETS

ROAD APPROACHES



COMMERCIAL ENTRANCES
FARM OR RESIDENTIAL ENTRANCES



AS-BUILT
MAR 2 2 2005
ENGINEERING

PLACE 2" THICK WEARING COURSE

	ROAD APPROACHES	FARM OR RESIDENTIAL ENTRANCES
C.S.A.H. 3	6	47 (9 ENTRANCES ARE 32' WIDE. PAVEMENT FULL DEPTH FOR COMMERCIAL ENTRANCE.)
C.S.A.H. 26	0	1 (ENTRANCE IS 32' WIDE. PAVEMENT FULL DEPTH FOR COMMERCIAL ENTRANCE.)
C.R. 126	0	1 (ENTRANCE IS 32' WIDE. PAVEMENT FULL DEPTH FOR COMMERCIAL ENTRANCE.)
C.S.A.H. 17	0	2

ENTRANCE DETAILS

CERTIFIED BY Gary M Riemer LICENSED PROFESSIONAL ENGINEER REG. NO. 19917 9/10 2002

S.A.P. 55-603-33 & S.A.P. 55-617-04

SHEET 5 OF 15 SHEETS

STA. 198+25
BEGIN B624
CURB & GUTTER

GARAGE

STA. 12+25.88 BEGIN RADIUS
18.96' ALONG GUTTER END
B624 CURB AND GUTTER

END STA. 13+10

STA. 206+04 C.B. NO. 1
TOP GRATE EL. 1161.44

AS-BUILT
MAR 22 2005
ENGINEERING

TIP CURB BACK

ROCK DELL MEATS

VAR. R/W

50' R/W

C.S.A.H. 26

C.B. NO. 1

C.B. NO. 2

P.T. STA. 201+60.92

P.C. STA. 204+26.91

T.E.

C.S.A.H. 3 STA. 206+65.45 =
C.R. 26 STA. 10+00

P.T. STA. 209+80.51

P.C. STA. 210+64.11

RECYCLING SHED

OLMSTED COUNTY SHOP

HOUSE

GARAGE

CREAMERY

STA. 201+50
BEGIN B624
CURB & GUTTER

STA. 206+65 C.B. NO. 2
TOP GRATE EL. 1160.73

STA. 213+63 END CURB

C.R. 126

CURB & GUTTER

CERTIFIED BY Kevin M Peterson REG. NO. 19917 9/16 2002
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-603-33 & S.A.P. 55-617-04

SHEET 6 OF 15 SHEETS

6' 14' CURB ELEVATIONS 14' 6'

STA.	LT. TOP CURB	LT. GUTTER	LT. EDGE 6' SHOULDER	LT. EDGE 12' LANE	℄ ELEV.	RT. EDGE 12' LANE	RT. EDGE 6' SHOULDER	RT. GUTTER	RT. TOP CURB
198+25	1168.86	1168.36	1168.57	1168.73 1168.55	1168.13	1168.21 1167.53 1167.63			
198+50	1168.98	1168.48	1168.43	1168.59 1168.70	1167.99	1168.17 1167.39 1167.64	1167.41		
198+75	1168.94	1168.44	1168.36	1168.52 1168.75	1167.92	1168.22 1167.32 1167.69			
199+00	1168.76	1169.08	1168.26	1168.54 1168.82	1167.94	1168.29 1167.34 1167.76	1167.53		
199+25	1168.94	1169.24	1168.46	1168.72 1169.00	1169.12	1168.47 1167.52 1167.94			
199+50	1169.10	1168.60	1168.68	1168.86 1169.19	1168.36	1168.66 1167.76 1168.13	1167.09		
199+75	1169.48	1168.94	1169.06	1169.22 1169.45	1168.62	1168.92 1168.02 1168.39			
200+00	1169.78	1169.28	1169.32	1169.48 1169.71	1168.88	1169.18 1168.28 1168.65	1168.42		
200+25	1169.96	1169.46	1169.58	1169.75 1169.93	1169.15	1169.40 1168.55 1168.87			
200+50	1170.25	1169.72	1169.84	1170.00 1170.13	1168.40	1169.60 1168.80 1169.07	1168.84		
200+75	1170.48	1169.98	1170.10	1170.26 1170.34	1169.66	1169.81 1169.06 1169.78			
201+00	1170.72	1170.22	1170.34	1170.50 1170.53	1169.90	1170.00 1169.30 1169.47	1169.24		
201+25	1170.80	1170.30	1170.42	1170.58	1170.01	1169.48	1169.25		
201+50	1170.62	1170.12	1170.25	1170.41 .37	1169.96	1169.91 .48	1169.35 .25	1169.22 .13	1169.72 .63
201+75	1170.30	1169.80	1169.92	1170.08 .03	1169.75	1169.42 .34	1169.26 .16	1169.14 .04	1169.64 .54
202+00	1169.84	1169.34	1169.47 .45	1169.63 .57	1169.42	1169.18 .07	1169.02 1168.95	1168.80 .83	1169.48 .38
202+25	1169.28 .24	1168.78 .74	1168.90 .86	1168.96 1168.98	1168.97	1168.73 .68	1168.57 .56	1168.44	1168.94
202+50	1168.92 .59	1168.42 .09	1168.19 .21	1168.31 .33	1168.52	1168.28 .24	1168.12	1168.00	1168.50
202+75	1168.10	1167.60	1167.73	1167.89 .85	1168.07	1167.83 .79	1167.67	1167.54	1168.04
203+00	1167.60	1167.10	1167.22	1167.38 .34	1167.62	1167.38 .34	1167.22	1167.10	1167.60
203+25	1167.14	1166.64	1166.77	1166.98 .89	1167.17	1166.98 .89	1166.77	1166.64	1167.14
203+50	1166.70	1166.20	1166.32	1166.48 .44	1166.72	1166.48 .44	1166.32	1166.20	1166.70
203+75	1166.24	1165.74	1165.87	1166.03 65.99	1166.27	1166.03 65.99	1165.87	1165.74	1166.24
204+00	1165.80	1165.30	1165.42	1165.58 .54	1165.82	1165.58 .54	1165.42	1165.30	1165.80
204+25	1165.26	1164.76	1164.89	1165.05 .01	1165.29	1165.05 .01	1164.89	1164.76	1165.26
204+50	1164.74	1164.24	1164.37	1164.58 .49	1164.77	1164.58 .49	1164.37	1164.24	1164.74
204+75	1164.22	1163.72	1163.85	1164.01 1163.97	1164.25	1164.01 1163.97	1163.85	1163.72	1164.22
205+00	1163.70	1163.20	1163.32	1163.48 .44	1163.72	1163.48 .44	1163.32	1163.20	1163.70
205+25	1163.32	1162.82	1162.95	1163.14 .07	1163.35	1163.14 .07	1162.95	1162.82	1163.32
205+50	1162.96	1162.46	1162.59	1162.75 .71	1162.99	1162.75 .71	1162.59	1162.46	1162.96
205+75	1162.60	1162.10	1162.23	1162.39 .35	1162.63	1162.39 .35	1162.23	1162.10	1162.60
206+00	1162.24	1161.74	1161.87	1162.03 1161.99	1162.27	1162.03 1161.99	1161.87	1161.74	1162.24
206+25	1161.87	1161.37	1161.50	1161.66 .62	1161.90	1161.66 .62	1161.50	1161.37	1161.87
206+50	1161.52	1161.02	1161.14	1161.30 .26	1161.54	1161.30 .26	1161.14	1161.02	1161.52
206+75	1161.16	1160.66	1160.78	1160.94 .90	1161.18	1160.94 .90	1160.78	1160.66	1161.16
207+00	1160.78	1160.28	1160.41	1160.57 .53	1160.81	1160.57 .53	1160.41	1160.28	1160.78
207+25	1160.50	1160.00	1160.12	1160.38 .24	1160.52	1160.38 .24	1160.12	1160.00	1160.50
207+50	1160.20	1159.70	1159.83	1159.99 .95	1160.23	1159.99 .95	1159.83	1159.70	1160.20
207+75	1159.92	1159.42	1159.54	1159.70 .66	1159.94	1159.70 .66	1159.54	1159.42	1159.92
208+00	1159.62	1159.12	1159.25	1159.41 .37	1159.65	1159.41 .37	1159.25	1159.12	1159.62
208+25	1159.34	1158.84	1158.96	1159.12 .08	1159.36	1159.12 .08	1158.96	1158.84	1159.34
208+50	1159.04	1158.54	1158.67	1158.83 .79	1159.07	1158.83 .79	1158.67	1158.54	1159.04
208+75	1158.76	1158.26	1158.38	1158.54 .50	1158.78	1158.54 .50	1158.38	1158.26	1158.76
209+00	1158.46	1157.96	1158.09	1158.25 .21	1158.49	1158.25 .21	1158.09	1157.96	1158.46
209+25	1158.18	1157.68	1157.80	1157.96 .92	1158.20	1157.96 .92	1157.80	1157.68	1158.18
209+50	1157.88	1157.38	1157.51	1157.67 .63	1157.91	1157.67 .63	1157.51	1157.38	1157.88
209+75	1157.60	1157.10	1157.22	1157.38 .34	1157.62	1157.38 .34	1157.22	1157.10	1157.60
210+00	1157.30	1156.80	1156.93	1157.09 .05	1157.33	1157.09 .05	1156.93	1156.80	1157.30
210+25	1157.02	1156.52	1156.64	1156.80 .76	1157.04	1156.80 .76	1156.64	1156.52	1157.02
210+50	1156.72	1156.22	1156.35	1156.51 .47	1156.75	1156.51 .47	1156.35	1156.22	1156.72
210+75	1156.44	1155.94	1156.06	1156.22 .18	1156.46	1156.22 .18	1156.06	1155.94	1156.44
211+00	1156.16	1155.66	1155.78	1155.94 .90	1156.18	1155.94 .90	1155.78	1155.66	1156.16
211+25	1155.86	1155.36	1155.49	1155.65 .61	1155.89	1155.65 .61	1155.49	1155.36	1155.86
211+50	1155.58	1155.08	1155.20	1155.36 .32	1155.60	1155.36 .32	1155.20	1155.08	1155.58
211+75	1155.28	1154.78	1154.91	1155.07 .03	1155.31	1155.07 .03	1154.91	1154.78	1155.28
212+00	1155.00	1154.50	1154.62	1154.78 .74	1155.02	1154.78 .74	1154.62	1154.50	1155.00
212+25	1154.70	1154.20	1154.33	1154.49 .45	1154.73	1154.49 .45	1154.33	1154.20	1154.70
212+50	1154.41	1153.92	1154.04	1154.20 .16	1154.44	1154.20 .16	1154.04	1153.92	1154.41
212+75	1154.12	1153.62	1153.75	1153.91 .87	1154.15	1153.91 .87	1153.75	1153.62	1154.12
213+00	1153.84	1153.34	1153.46	1153.62 .58	1153.86	1153.62 .58	1153.46	1153.34	1153.84
213+25	1153.54	1153.04	1153.17	1153.33 .29	1153.57	1153.33 .29	1153.17	1153.04	1153.54
213+50	1153.26	1152.76	1152.88	1153.04 .00	1153.28	1153.04 .00	1152.88	1152.76	1153.26
213+63	1153.10	1152.60	1152.73	1152.89 .85	1153.13	1152.89 .85	1152.73	1152.60	1153.10

CURB ELEVATIONS 6' 14'

	STA.	LT. TOP CURB	LT. GUTTER	LT. EDGE 6' SHOULDER	LT. EDGE 12' LANE	℄ ELEV.	
①	206+04.66	1161.94	1161.44	1161.57	1161.78 .69	1161.97	
	206+18.74	1162.14	1161.64				
10+61.3	206+32.82	49.63 1162.34	62.63	1161.94 62.13	1162.07 62.26	1162.13 62.54	1162.37 62.82
	10+75	1163.06 62.99	1160.86 62.49		1163.49 62.62	1163.65 62.90	1163.09 63.18
	11+00	1163.00 63.64	1160.80 63.14		1163.43 63.27	1163.59 .55	1163.83
	11+25	1164.74 64.66	1164.24 64.16		1164.37 64.29	1164.53 .49	1164.77
	11+50	1165.70	1165.20	1165.32		1165.48 .44	1165.72
	11+75	1166.64	1166.14	1166.26		1166.42 .38	1166.66
	12+00	1167.58	1167.08	1167.20		1167.36 .32	1167.60
②	12+25.88	1168.55	1168.05	1168.18		1168.34 .30	1168.58
	12+35.36	1169.59	1169.09				
③	12+44.84	1170.63	1170.13				

NOTES:

① START OF RADIUS, THE STATIONING FROM STA. 206+04.66 TO STA. 206+32.82 IS ALONG THE CURB GUTTER NOT THE ROAD CENTERLINE. +49.63

② START OF RADIUS, THE STATIONING FROM STA. 12+25.88 TO STA. 12+44.84 IS ALONG THE CURB GUTTER NOT THE ROAD CENTERLINE.

③ END B624 CURB & GUTTER.

AS-BUILT

MAR 22 2005

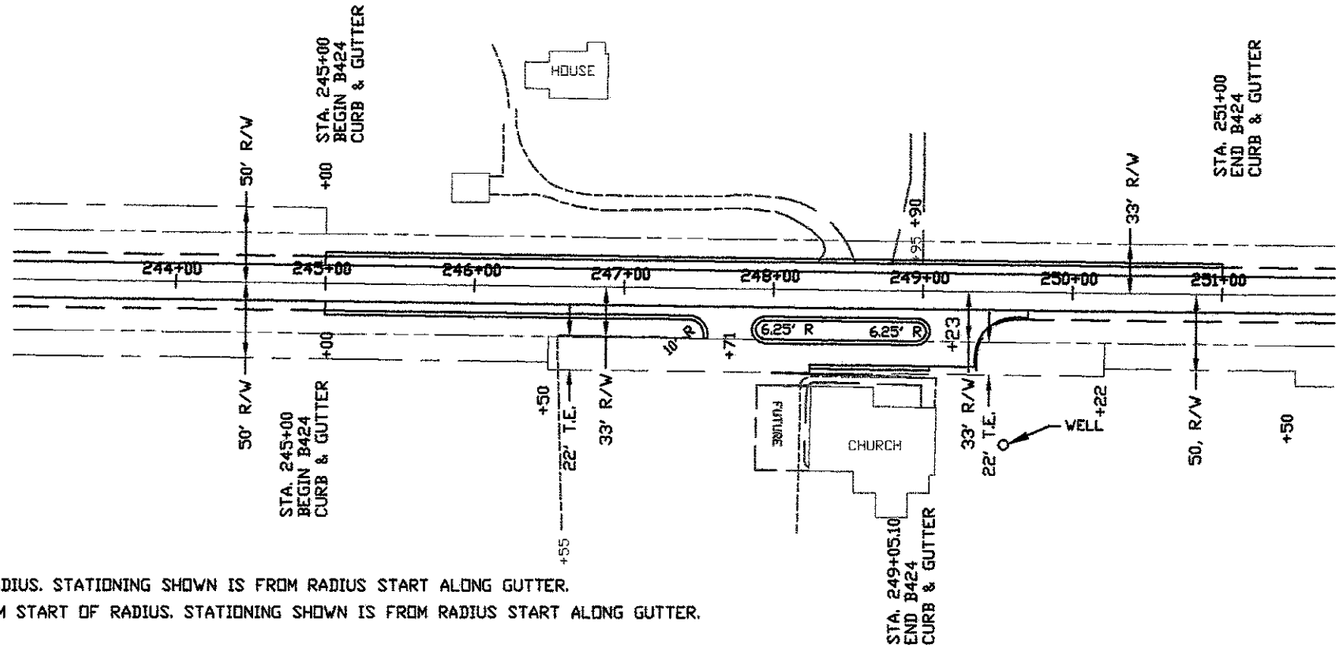
ENGINEERING

CURB & GUTTER

CERTIFIED BY Kayle M Roemer LICENSED PROFESSIONAL ENGINEER REG. NO. 19917 9/10 2002

S.A.P. 55-603-33 & S.A.P. 55-617-04

SHEET 7 OF 15 SHEETS



AS-BUILT

MAR 22 2005

ENGINEERING

NOTE:
① BEGIN OF RADIUS
② END RADIUS LOCATION 10.61' FROM START OF RADIUS. STATIONING SHOWN IS FROM RADIUS START ALONG GUTTER.
③ END B424 CURB & GUTTER LOCATION 12.91' FROM START OF RADIUS. STATIONING SHOWN IS FROM RADIUS START ALONG GUTTER.
④ MIDPOINT AROUND RADIUS GUTTER
⑤ BOTH ENDS OF RADIUS
⑥ BOTH ENDS OF RADIUS
⑦ MIDPOINT AROUND RADIUS GUTTER
⑧ END B424 CURB & GUTTER AND TAPER FROM GUTTER TO TOP BACK CURB STA. 249+00

CURB ELEVATIONS

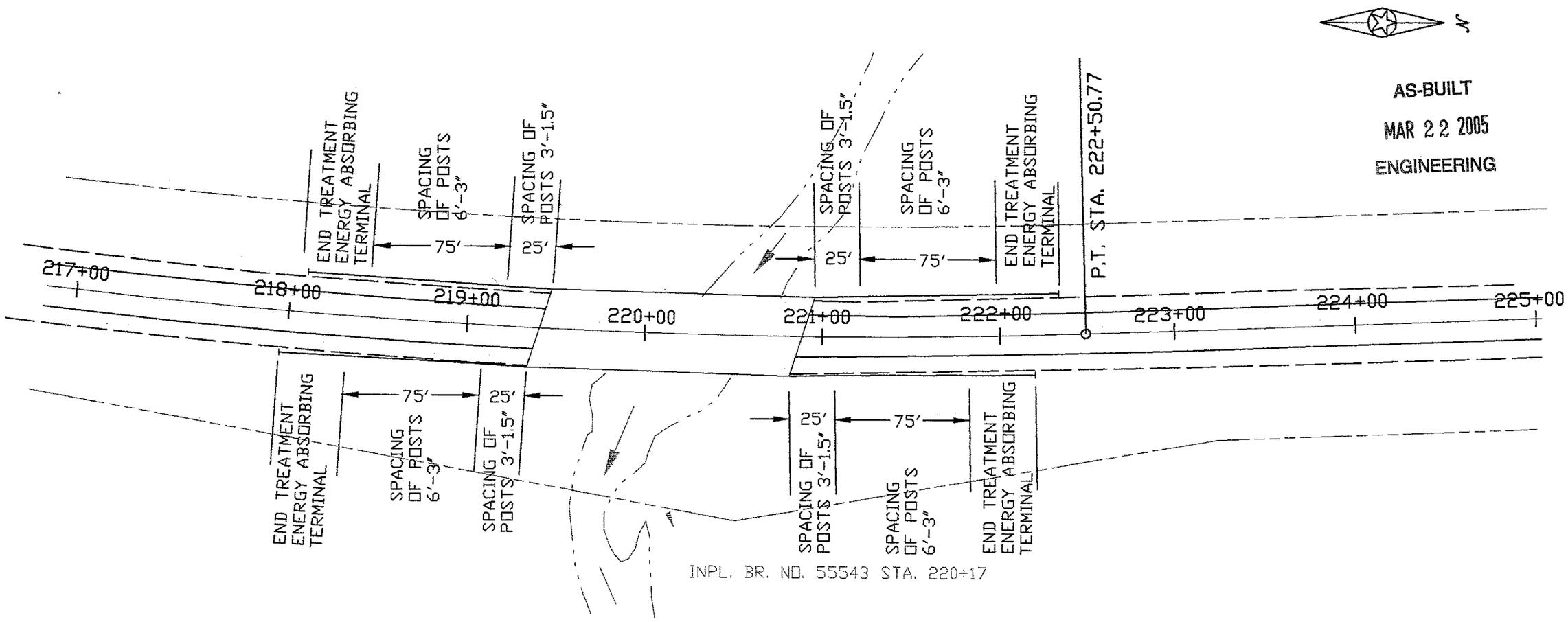
STA.	LT. TOP CURB	LT. GUTTER	LT. EDGE 6' SHOULDER	LT. EDGE 14' LANE	℄ ELEV.	RT. EDGE 14' LANE	RT. EDGE 6' SHOULDER	RT. GUTTER	RT. TOP CURB	RT. 33.11' TOP CURB	RT. 33.72' GUTTER	RT. 35.72' EDGE PAVE.	RT. 49.72' EDGE PAVE.	RT. 51.72' GUTTER	RT. 52.33' T.B.C.
245+00	1199.~~48~~ .01	1198.68	1198.80	1198.~~92~~ .88	1199.16	1198.~~92~~ .88	1198.80	1198.68	1199.~~18~~ 98.34						
245+25	1200.~~48~~ .31	1199.98	1200.10	1200.~~22~~ .18	1200.46	1200.~~28~~ .18	1200.10	1199.98	1200.~~48~~ .31						
245+50	1201.~~98~~ .61	1201.28	1201.40	1201.~~52~~ .48	1201.76	1201.~~52~~ .48	1201.40	1201.28	1201.~~78~~ .61						
245+75	1203.~~06~~ 2.89	1202.56	1202.68	1202.~~90~~ .76	1203.04	1202.~~80~~ .76	1202.68	1202.56	1203.~~06~~ 2.89						
246+00	1204.~~84~~ .07	1203.74	1203.87	1203.~~98~~ .95	1204.23	1203.~~98~~ .95	1203.87	1203.74	1204.~~34~~ .07						
246+25	1205.~~36~~ .19	1204.86	1204.99	1205.~~14~~ .07	1205.35	1205.~~14~~ .07	1204.99	1204.86	1205.~~36~~ .19						
246+50	1206.~~40~~ .23	1205.90	1206.03	1206.~~15~~ .11	1206.39	1206.~~15~~ .11	1206.03	1205.90	1206.~~40~~ .23						
246+75	1207.~~36~~ .19	1206.86	1206.99	1207.~~14~~ .07	1207.35	1207.~~14~~ .07	1206.99	1206.86	1207.~~36~~ .19						
247+00	1208.~~84~~ .07	1207.74	1207.87	1207.~~92~~ .95	1208.23	1207.~~98~~ .95	1207.87	1207.74	1208.~~34~~ .07						
247+25	1209.~~06~~ 8.89	1208.56	1208.68	1208.~~80~~ .76	1209.04	1208.~~80~~ .76	1208.68	1208.56	1209.~~06~~ 8.89						
① 247+43.58					1209.58	1209.~~34~~ .30	1209.22	1209.10	1209.~~58~~ .33						
247+50	1209.~~78~~ .61	1209.28	1209.40	1209.~~52~~ .48	1209.76	1209.~~52~~ .48	1209.40								
② 247+54.19								1209.15	1209.~~53~~ .38						
③ 247+56.49								1209.16	1209.~~66~~ .49						
247+75	1210.~~42~~ .25	1209.92	1210.05	1210.~~17~~ .13	1210.41	1210.~~17~~ .13	1210.05	1209.92	1210.~~42~~ .25						
④ 247+88.06					1210.72			1210.18	1210.~~68~~ .51						
⑤ 247+94.93					1210.87	1210.~~68~~ .59	1210.51	1210.38	1210.~~88~~ .71	~~1210.88 .71~~ 1210.71	1210.38	1210.58			
248+00	1211.~~00~~ 10.83	1210.50	1210.62	1210.~~74~~ .70	1210.98	1210.~~74~~ .76	1210.62	1210.50	1211.~~80~~ 10.83	~~1210.90 .73~~ 1210.83	1210.40	1210.62			
248+25	1211.~~48~~ .31	1210.98	1211.11	1211.~~38~~ .19	1211.47	1211.~~38~~ .19	1211.11	1210.98	1211.~~48~~ .31	~~1211.00 .08~~ 1211.35	1210.58	1210.92	1210.83	1210.70	~~1211.80 .03~~ 1211.63
248+50	1211.~~96~~ .73	1211.40	1211.52	1211.~~64~~ .60	1211.88	1211.~~64~~ .60	1211.52	1211.40	1211.~~96~~ .73	~~1211.38 .13~~ 1211.66	1210.80	1211.02	1211.03	1211.01	~~1211.84 .34~~ 1211.94
248+75	1212.~~34~~ .07	1211.74	1211.86	1211.~~98~~ .94	1212.22	1211.~~98~~ .94	1211.86	1211.74	1212.~~34~~ .07	~~1211.50 .33~~ 1211.85	1211.00	1211.32	1211.32	1211.20	~~1211.78 .53~~ 1212.13
⑥ 248+96.24					1212.44	1212.~~28~~ .16	1212.08	1211.96	1212.~~45~~ .29	~~1211.50 .41~~ 1211.95	1211.08	1211.30			
249+00	1212.~~48~~ .31	1211.99	1212.11	1212.~~28~~ .19	1212.47	1212.~~28~~ .19	1212.11	1211.99	1212.~~48~~ .31	~~1211.00 .45~~	1211.10	1211.28	1211.43	1211.30	
⑦ 249+03.10										~~1210.00 1.85~~	1211.56	1211.64			
⑧ 249+05.10					1212.51						1211.54				
249+25	1212.~~66~~ .49	1212.16	1212.29	1212.~~41~~ .37	1212.65	1212.~~41~~ .37	1212.29	1212.16	1212.~~66~~ .49						
249+50	1212.~~76~~ .59	1212.26	1212.39	1212.~~91~~ .47	1212.75	1212.~~51~~ .47	1212.39	1212.26	1212.~~76~~ .59						
249+75	1212.~~78~~ .61	1212.28	1212.41	1212.~~58~~ .49	1212.77	1212.~~58~~ .49	1212.41	1212.28	1212.~~78~~ .61						
250+00	1212.~~82~~ .55	1212.22	1212.35	1212.~~47~~ .43	1212.71	1212.~~47~~ .43	1212.35	1212.22	1212.~~72~~ .55						
250+25	1212.~~68~~ .43	1212.10	1212.22	1212.~~34~~ .30	1212.58	1212.~~34~~ .30	1212.22	1212.10	1212.~~68~~ .43						
250+50	1212.~~38~~ .21	1211.88	1212.00	1212.~~12~~ .08	1212.36	1212.~~12~~ .08	1212.00	1211.88	1212.~~38~~ .21						
250+75	1210.~~08~~ 11.91	1211.58	1211.71	1211.~~83~~ .79	1212.07	1211.~~83~~ .79	1211.71	1211.58	1210.~~08~~ 11.91						
251+00	1211.~~78~~ .55	1211.22	1211.34	1211.~~46~~ .42	1211.11	1211.~~46~~ .42	1211.34	1211.22	1211.~~72~~ .55						

CURB & GUTTER

CERTIFIED BY Kaye M Bierwirth REG. NO. 12917 9/10 2002
LICENSED PROFESSIONAL ENGINEER

S.A.P. 55-603-33 & S.A.P. 55-617-04

SHEET 8 OF 15 SHEETS



CONST. GUARDRAIL

4 - T. BARRIER BRIDGE CONNECTION DESIGN 8313

4 - 100 LIN. FT. OF TRAFFIC BARRIER DESIGN B8307

4 - END TREATMENT ENERGY ABSORBING TERMINALS

NOT TO SCALE

REVISED 10-22-02

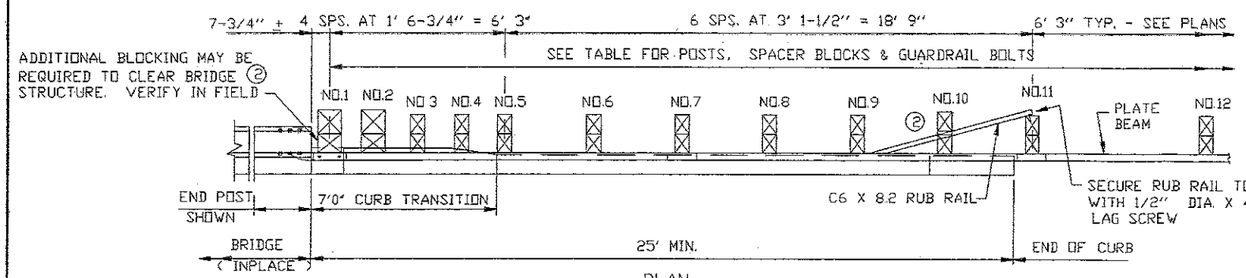
CERTIFIED BY [signature] LICENSED PROFESSIONAL ENGINEER REG. NO. 10597 10/22 2002

Revised Sheet See Addendum No. 1

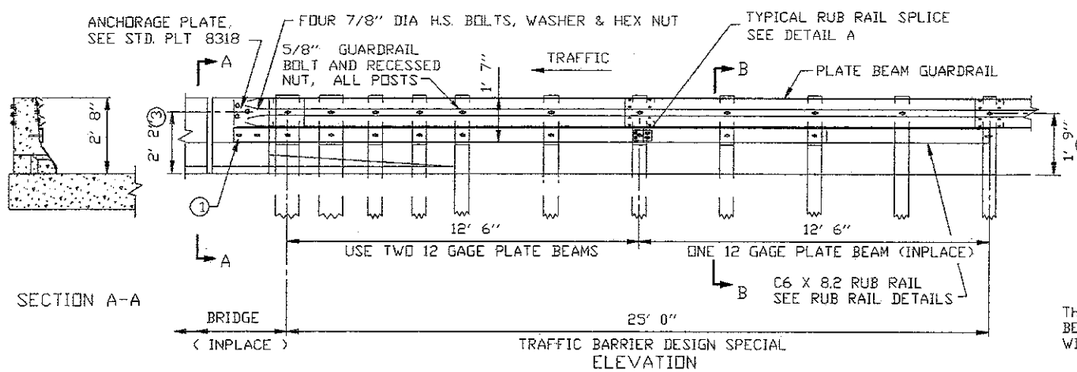
GUARDRAIL

S.A.P. 55-603-33 & S.A.P. 55-617-04

SHEET 9 OF 15 SHEETS

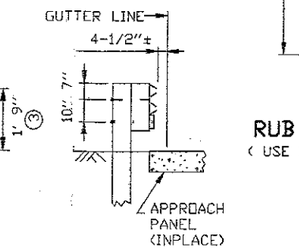


PLAN



SECTION A-A

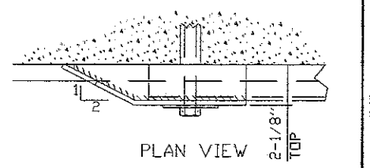
ELEVATION



SECTION B-B

THE TRANSITION SECTION HAS BEEN TESTED AND APPROVED WITH THE CURB PLACED AS SHOWN.

GENERAL ASSEMBLY DETAILS

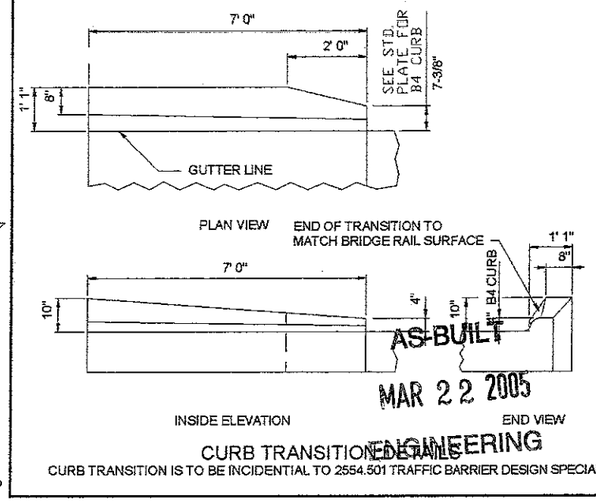


PLAN VIEW

ELEVATION

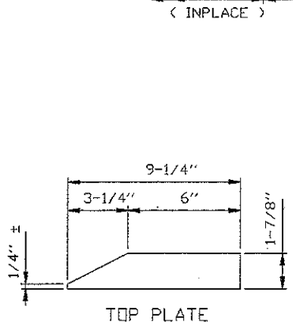
RUB RAIL END SHOE ASSEMBLY

(USE IF TWO WAY TRAFFIC WITH NO MEDIAN)

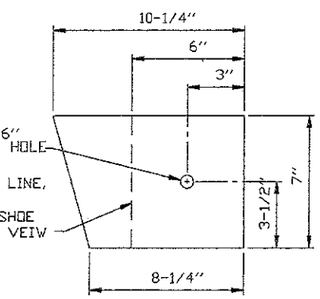


CURB TRANSITION DETAILS

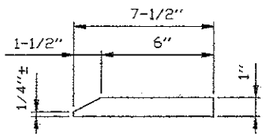
CURB TRANSITION IS TO BE INCIDENTIAL TO 2554.501 TRAFFIC BARRIER DESIGN SPECIAL



TOP PLATE



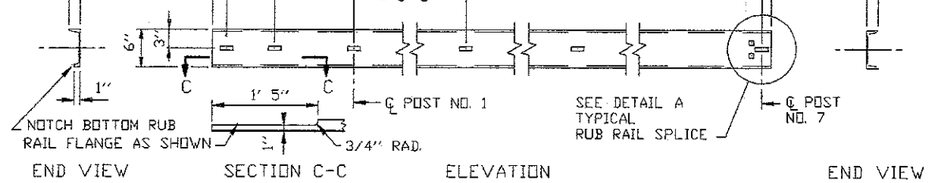
FRONT PLATE



BOTTOM PLATE

END SHOE PLATE DETAILS ①

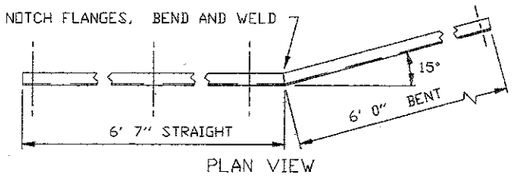
(1/4" PLATE)



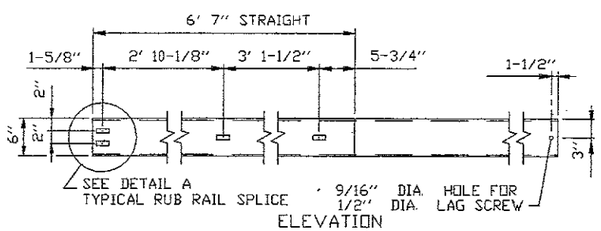
END VIEW SECTION C-C ELEVATION END VIEW

RUB RAIL STRAIGHT SECTION

NON-STANDARD RUB RAIL LENGTH



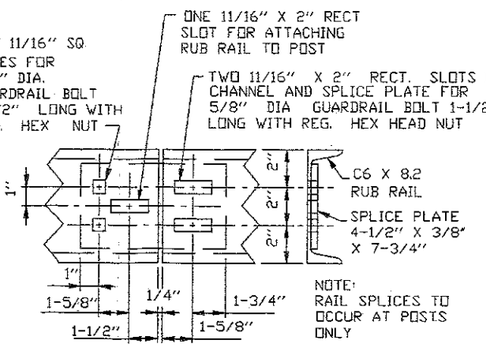
PLAN VIEW



ELEVATION

RUB RAIL BENT SECTION

NON-STANDARD RUB RAIL LENGTH



NOTE: RAIL SPLICES TO OCCUR AT POSTS ONLY

DETAIL A

TYPICAL RUB RAIL SPLICE

NOTES:

STRUCTURAL STEEL TO BE 3306' EXCEPT AS NOTED.

ALL SLOTTED HOLES ARE 11/16" X 2".

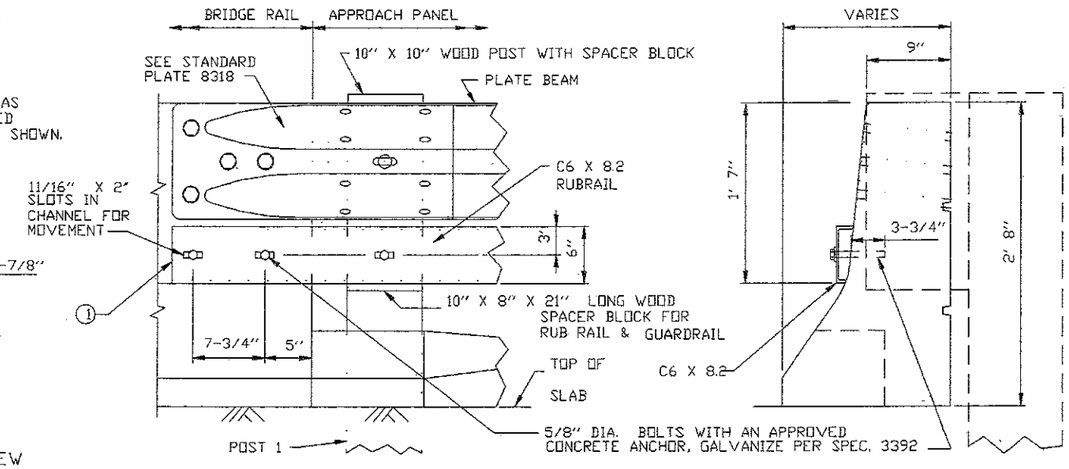
ALL SQUARE HOLES ARE 11/16"

RUB RAIL IS C6 X 8.2

GALVANIZE STRUCTURAL SHAPES PER SPEC. 3394 AFTER FABRICATION, EXCEPT AS NOTED.

MATERIALS AND CONSTRUCTION PER SPEC. 2554, EXCEPT AS NOTED.

GALVANIZE ALL HARDWARE PER SPEC. 3392



TRAFFIC SIDE ELEVATION END VIEW

RAIL ATTACHMENT DETAIL

POST, SPACER BLOCK & BOLT TABLE

DESCRIPTION	POST NO.	SIZE
POST	1 & 2	10" X 10"X 8' 0" MIN. LONG
	3 - 5	6" X 8" X 7' 0" MIN. LONG
	6 - 12	6" X 8" X 6' 0" MIN. LONG
SPACER BLOCK	1 - 2	10" X 8" X 21"
	3 - 9	6" X 8" X 21"
	10 - 12	6" X 8" X 14"
GUARDRAIL BOLT & RECESSED NUT	1 - 2	5/8" DIA. X 20"- GUARDRAIL
	3 - 12	5/8" DIA. X 18' - GUARDRAIL
	1 - 2	5/8" DIA. X 22"- RUB RAIL
	3 - 9	5/8" DIA. X 20"- RUB RAIL

① END SHOE REQUIRED IF TWO WAY TRAFFIC AND NO MEDIAN.

② ADDITIONAL BLOCKING MAY BE REQUIRED AT POST NO. 1 OR 10.

③ HEIGHT IS 2' 2" FROM 0' TO 12' 6" FROM BRIDGE. HEIGHT TAPERS FROM 2' 2" TO 1' 9" BETWEEN 12' 6" TO 25' 0" FROM BRIDGE.

TRAFFIC BARRIER DESIGN SPECIAL

REVISION DATE 01-10-02

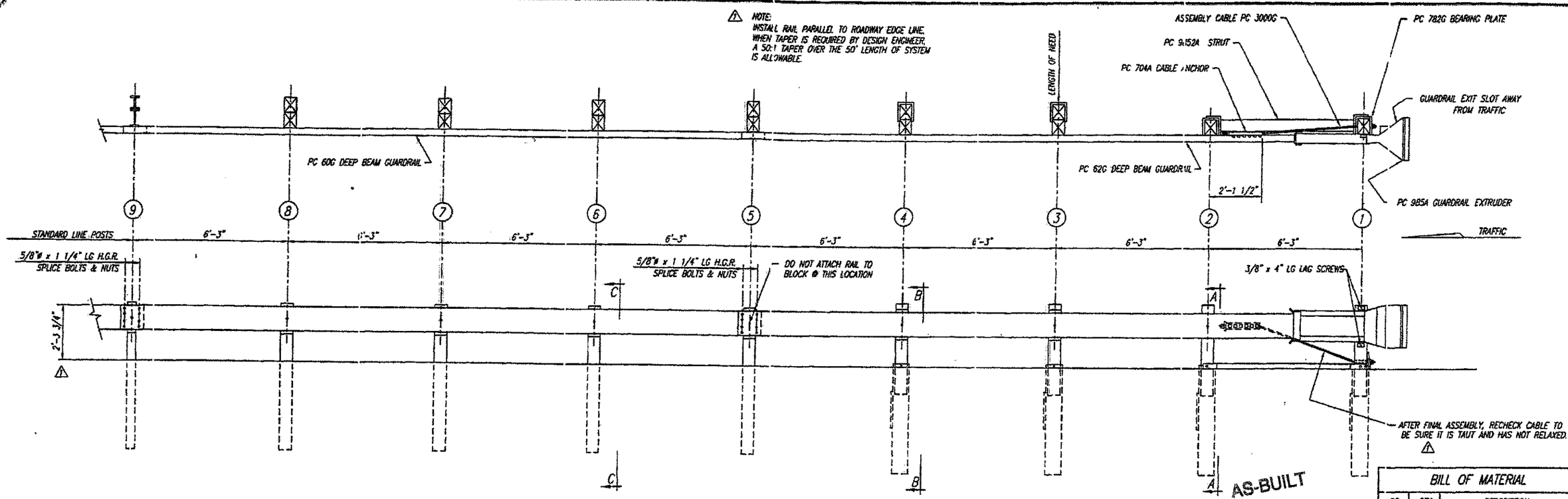
STANDARD SHEET NO. 5-297.607

STANDARD APPROVED: DECEMBER 20, 2001

TITLE: NEW W-BEAM TRANSITION TO CONCRETE J-SHAPE SAFETY RAIL (MODIFIED) (WOOD POST)

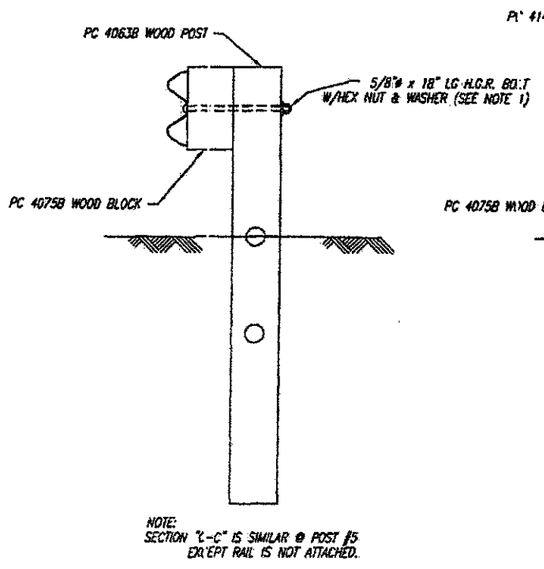
CERTIFIED BY Michael E. Shuler LICENSED PROFESSIONAL ENGINEER REG. NO 10397 10/20 2002

STATE PROJ NO S.A.P. 55-603-33 & S.A.P. 55-617-04 SHEET NO. OF SHEETS

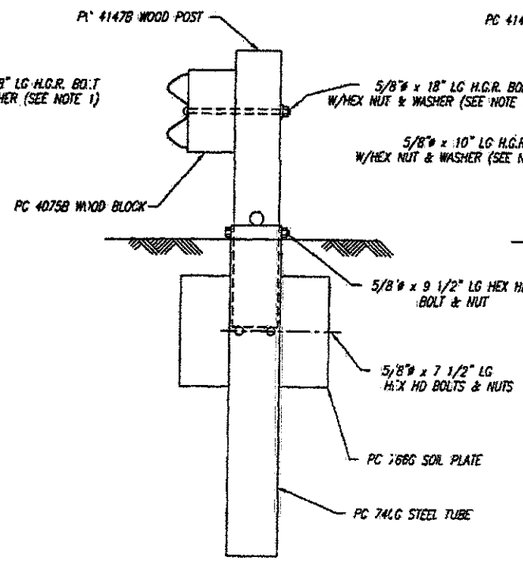


BILL OF MATERIAL		
PC	QTY	DESCRIPTION
60G	1	12/25/6'3/S (GUARDRAIL)
62G	1	12/25/6'3/S ANC (GUARDRAIL)
704A	1	CABLE ANCHOR BRACKET
705G	1	2" x 5 1/2" PIPE
740G	4	4'6 TUBE SLEEVE
766G	4	1/4" x 18" x 24" SOIL PLATE
782G	1	5/8" x 8" x 8" BEARING PLATE
985A	1	ET-2000 EXTRUDER
3000G	1	CABLE 3/4 x 6'6
3006G	11	5/8" WASHER
3406G	35	5/8" HEX NUT
3606G	16	5/8"ø x 1 1/4" SPLICE BOLT
4786G	8	5/8"ø x 7 1/2" HEX HD BOLT
4976G	4	5/8"ø x 9 1/2" HEX HD BOLT
5006G	1	5/8"ø x 10" POST BOLT
5806G	6	5/8"ø x 18" POST BOLT
3006G	2	1" WASHER
3106G	2	1" HEX NUT
4063B	4	WD 6'0 POST 6 x 8
4075B	6	WD BLOCK 1'2 6" x 8" DR
4147B	4	WD 3'9 POST 5 1/2 x 7 1/2
4228G	2	3/8"ø x 4" LAG SCREW
9852A	1	6'3 STRUT

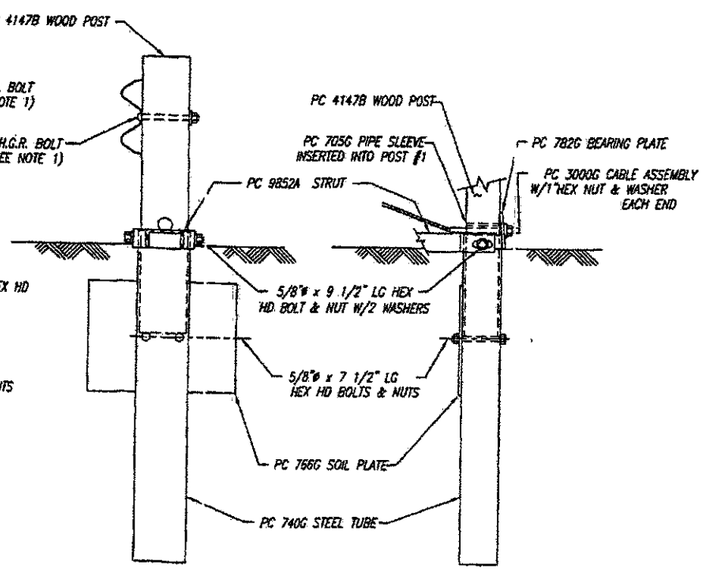
NOTES:
1.) THE 5/8" FLAT WASHER IS USED UNDER THE NUT, BEHIND THE POST ONLY. NO WASHER IS USED AT THE RAIL.
2.) MANUFACTURER SUGGESTS CUSTOMER TO PROVIDE REFLECTORIZATION OF TERMINAL.



SECTION "C-C"
(TYP @ POSTS #6, 7 & 8)



SECTION "B-B"
(TYP @ POSTS #3 & 4)



SECTION "A-A"
(@ POST #2)

PARTIAL VIEW @ POST #1

REV.	CHK'D	BY	DATE	REMARKS
1		BT	5-27-98	ADDED TAPER & CABLE NOTE, CHG DIM

SYRO ET-2000

ET-2000 (1997)
PLAN, ELEVATION & SECTIONS

DRAWN	B.T.
CHECKED	
APPROVED	
DATE	4-26-97
ENG. FILE #	SS265
SHT.No.	
DRAWING No.	SS 265 REV. 1

CUSTOMER | P.O. No.

TRINITY INDUSTRIES, INC. SYRO
DALLAS, TX CENTERVILLE, UT | GRAND, OH LIMA, OH | FORT WORTH, TX ELIZABETHTOWN, KY

WSN 450A414

STATE AID PROJ NO. 55-603-33 & 55-617-04 SHEET NO. 13 OF 15 SHEETS