MINNESOTA DEPARTMENT OF TRANSPORTATION

CONSTRUCTION PLAN FOR BITUMINOUS RESURFACING, SHOULDERS AND TURN LANES

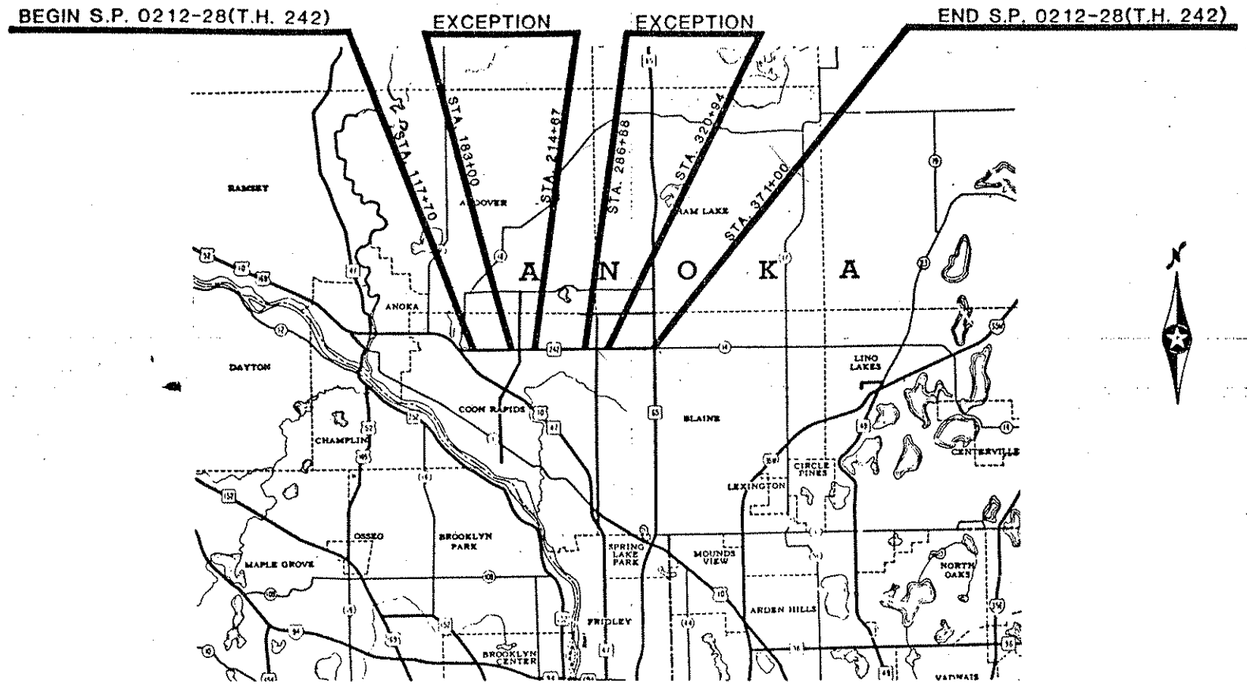
LOCATED ON T.H. 242 **FROM** 0.12 MILE EAST OF T.H. 10 **TO** 0.25 MILE WEST OF T.H. 65

STATE PROJ. NO. 0212-28
MINN. PROJ. NO. _____

GROSS LENGTH	25330.00 FEET	4.797 MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	6573.00 FEET	1.245 MILES
NET LENGTH	18757.00 FEET	3.552 MILES
MILE POINT	TO MILE POINT	

STATE PROJ. NO. _____
MINN. PROJ. NO. _____

GROSS LENGTH	FEET	MILES
BRIDGES-LENGTH	FEET	MILES
EXCEPTIONS-LENGTH	FEET	MILES
NET LENGTH	FEET	MILES
MILE POINT	TO MILE POINT	



FED. PROJ. NO. STATE FUNDS

GOVERNING SPECIFICATIONS

THE 1978 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" SHALL GOVERN.

INDEX

THIS PLAN CONTAINS 34 SHEETS

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

DATE 2/02/83 REG. NO. 8926 ENGR. Glen C. Ellis

DESIGN SQUAD GEORGE D. SHORBA: BASSETT CREEK PLAZA T.H. 100 & C.S.A.H. 66 TEL. 545-3761 X-189

Right of Way Approval _____ 3-7 1983
DIRECTOR, RIGHT OF WAY OPERATIONS

Recommended for Approval _____ 2-2 1983
ASSISTANT DISTRICT ENGINEER

Recommended for Approval _____ 3-7 1983
TRANSPORTATION PLANS ENGINEER

Recommended for Approval _____ 3-8- 1983
DESIGN SERVICES DIRECTOR

Recommended for Approval _____ 19____

Approved 3-8 1983 _____
DIRECTOR, OFFICE OF ENGINEERING SERVICES

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED
_____ _____
DIVISION ADMINISTRATOR DATE

I HEREBY CERTIFY THAT THE FINAL FIELD REVISIONS, IF ANY, OF THIS PLAN WERE MADE BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE _____ REG. NO. _____

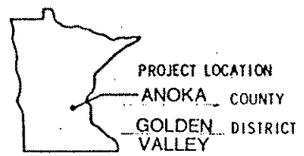
SCALES

PLAN	50'
PROFILE	5'
INDEX MAP	2 MILES
GENERAL LAYOUT	

PLAN REVISIONS		
DATE	SHEET NO.	APPROVED BY

DESIGN DESIGNATION–TIER III

ADT (Current Year) 1980	= 9000	Design Speed 50 MPH	POSTED
ADT (Future Year) 2002	= 26327	Based on _____	Sight Distance
DHV (Design Hr. Vol.)	= 1056	Height of eye _____	Height of object _____
D (Directional Distr.)	= 50 %	Design Speed not achieved at: _____	
T (Heavy Commercial)	= 6 %	STA. _____ TO STA. _____	MPH _____
		STA. _____ TO STA. _____	MPH _____



FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO.	AREA	JOB
0212-28		

55108

STATE PROJ. NO. 0212-28 (T.H. 242=242) SHEET NO. 1 OF 34 SHEETS

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	ITEM		UNIT	TOTAL ESTIMATED QUANTITIES	TOTAL FINAL QUANTITIES
2021.501	MOBILIZATION		LUMP SUM		
2031.503	FIELD LABORATORY TYPE D	(1)	EACH	2	
2051.501	MAINTENANCE AND RESTORATION OF HAUL ROADS		LUMP SUM		
2102.501	REMOVE PAVEMENT MARKING - TEMPORARY		SQ.FT.	185	
2104.501	REMOVE PIPE CULVERTS	(2)	LIN.FT.	158	
2104.521	SALVAGE PIPE CULVERTS		LIN.FT.	372	
2104.521	SALVAGE GUARDRAIL - PLATE BEAM		LIN.FT.	100	
104.604	MILL BITUMINOUS SURFACE	(3)	SQ.YD.	2133	
2105.501	COMMON EXCAVATION	(4)	CU.YD.	4117 (P)	
2105.521	GRANULAR BORROW (L.V.)		CU.YD.	4014	
2105.525	TOPSOIL BORROW (L.V.)		CU.YD.	3585	
2105.543	STABILIZING AGGREGATE		TON	100	
2221.502	AGGREGATE SHOULDERING, CLASS 5	(5)	CU.YD.	3377	
2331.504	BITUMINOUS MATERIAL FOR MIXTURE		TON	527	
2331.510	BINDER COURSE MIXTURE		TON	5407	
2331.514	BASE COURSE MIXTURE		TON	206	
2331.516	SHOULDER MIXTURE	(6)	TON	4567	
331.603	TEMPORARY LANE MARKING		LIN. FT.	1732	
2357.502	BITUMINOUS MATERIAL FOR TACK COAT		GALLON	5409	
2361.504	ASPHALT CEMENT		TON	122	
2361.508	WEARING COURSE MIXTURE		TON	2028	
2501.511	15" C.S. PIPE CULVERT		LIN.FT.	530	
2501.511	18" C.S. PIPE CULVERT		LIN.FT.	116	
2501.511	24" C.S. PIPE CULVERT		LIN.FT.	14	
2501.511	60" A.B.-C.S. PIPE CULVERT	(7)	LIN.FT.	92	
2501.515	15" G.S. PIPE APRON		EACH	13	
2501.515	18" G.S. PIPE APRON		EACH	7	
2501.515	60" G.S. PIPE APRON		EACH	2	
2501.571	INSTALL METAL CULVERTS		LIN. FT.	230	
2501.573	INSTALL METAL APRONS		EACH	58	
2501.573	INSTALL CONCRETE APRONS		EACH	2	
501.602	F & I 24" C.S. SAFETY APRON		EACH	6	
504.605	4" POLYSTYRENE INSULATION		SQ.YD.	56	
2506.507	CONSTRUCT CATCH BASINS DESIGN C OR G		LIN.FT.	4	
2506.511	RECONSTRUCT MANHOLES	(9)	LIN.FT.	8	
2506.516	CASTING ASSEMBLIES		EACH	1	
2506.521	INSTALL CASTINGS	(9)	EACH	1	
2554.501	TRAFFIC BARRIER DESIGN 8330		LIN.FT.	500	
2554.501	TRAFFIC BARRIER DESIGN B8307		LIN.FT.	238	
2554.509	GUIDE POSTS TYPE B		EACH	3	
2554.511	INSTALL TRAFFIC BARRIER DESIGN B8307		LIN.FT.	75	
2554.521	ANCHORAGE ASSEMBLIES - CABLE		EACH	2	
2554.521	ANCHORAGE ASSEMBLIES - PLATE BEAM		EACH	1	
554.602	INSTALL ANCHORAGE ASSEMBLIES - PLATE BEAM		EACH	1	
554.607	TWISTED END TREATMENT		EACH	1	
2575.501	ROADSIDE SEEDING		ACRE	3 (P)	
2575.502	SEED MIXTURE 8		POUND	128	
2575.505	SODDING		SQ.YD.	14,369	
2575.511	MULCH MATERIAL TYPE 1		TON	6	
2575.519	DISC ANCHORING		ACRE	3 (P)	
2575.531	COMMERCIAL FERTILIZER ANALYSIS 10-20-20		TON	1	
575.602	HAY OR STRAW BALES	(8)	EACH	150	

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

STANDARD PLATES

PLATE NO.	DESCRIPTION
0003A	SPECIFICATION REFERENCE TO STANDARD PLATES
3000I	REINFORCED CONCRETE PIPE
3040F	CORRUGATED METAL PIPE
3041B	CORRUGATED METAL PIPE
3123H	METAL APRON FOR C.M. PIPE
3128C	SAFETY APRON
3145A	CONCRETE PIPE TIES
3221C	CORRUGATED STEEL PIPE COUPLING BAND
4000H	MANHOLE OR CATCH BASIN
4002D	MANHOLE OR CATCH BASIN
4005K	MANHOLE OR CATCH BASIN
4006K	MANHOLE OR CATCH BASIN
4143D	STOOL GRATE AND CONCRETE FRAME
4180G	MANHOLE OR CATCH BASIN STEP
8000H	STANDARD BARRICADES
8150B	INSTALLATION OF CULVERT MARKERS
8307L	STRUCTURAL PLATE BEAM GUARDRAIL
8330D	3-CABLE GUARDRAIL
9102C	SODDING AT PIPE CULVERT ENDS

(1) A SECOND LABORATORY IS PROVIDED FOR USE, IF NEEDED, AT A PORTABLE BITUMINOUS PLANT AS DIRECTED BY THE ENGINEER.

(2) EXCAVATION NECESSARY FOR CULVERT REMOVAL AT STA. 178+95 INCLUDES 17 CU.YDS. OF BITUMINOUS REMOVAL. THIS IS INCIDENTAL WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER SPEC. 2104.

(3) FROM STA. 178+00 TO 183+00. 0 TO 16" DEPTH (8" AVERAGE) AND FROM STA. 324+00 TO 327+00. 0 TO 5" DEPTH (3" AVERAGE). SEE PROFILES ON SHEET NO. 7.

(4) INCLUDES 15 CU.YDS. OF BITUMINOUS REMOVALS OTHER THAN PAID FOR UNDER SPEC. 2501.515 - 60" A.B.-C.S. PIPE CULVERT AND SPEC. 2104.501 - REMOVE PIPE CULVERTS. THIS 15 CU.YDS. OF BITUMINOUS REMOVALS IS INCLUDED IN THE COMMON EXCAVATION. NO OTHER DIRECT PAYMENT WILL BE MADE FOR THEIR REMOVAL. ALL BITUMINOUS REMOVALS SHALL BE THE PROPERTY OF THE CONTRACTOR AND SHALL NOT BE DISPOSED OF WITHIN THE RIGHT OF WAY.

(5) INCLUDES 75 CU.YDS. FOR BEDDING CULVERT AT STA. 179+05 AS DIRECTED BY THE ENGINEER.

(6) INCLUDES 401 TONS FOR ROAD CONNECTIONS AND ENTRANCES.

(7) EXCAVATION NECESSARY FOR CULVERT CONSTRUCTION INCLUDES 36 CU.YDS. OF BITUMINOUS REMOVAL. THIS IS INCIDENTAL WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER SPEC. 2105. IF STD. PLATE 3041 IS USED, USE 12 GAGE MIN.

(8) TO BE USED FOR TEMPORARY EROSION CONSTROL AS DIRECTED BY THE ENGINEER.

(9) STA. 276+40. 57' LT.-PROVIDE STEPS IN RECONSTRUCTED M.H.

ESTIMATED QUANTITIES
STANDARD PLATES

CONSTRUCTION AND SOILS NOTES

SELECT GRADING MATERIAL SHALL CONSIST OF GRANULAR MATERIAL AND SELECT GRANULAR MATERIAL.

GRANULAR MATERIAL, REGARDLESS OF SOURCE, SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2A.

SELECT GRANULAR MATERIAL, REGARDLESS OF SOURCE, SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2B.

STABILIZING AGGREGATE WHETHER OBTAINED LOCALLY OR FROM BORROW SHALL MEET THE REQUIREMENTS OF SPEC. 3149.2C.

IN ANY NEW CONSTRUCTION (FILL SECTION) THE UPPER 4.0' OF THE GRADING SUBGRADE SHALL BE CONSTRUCTED OF SELECT GRADING MATERIAL, THE UPPER 1.0' OF WHICH SHALL BE SELECT GRANULAR MATERIAL.

STRIP AND REUSE AS SLOPE DRESSING, ALL TOPSOIL AND INPLACE SLOPE DRESSING IN AREAS TO BE DISTURBED BY CONSTRUCTION. APPROXIMATE DEPTH OF INPLACE SLOPE DRESSING IS 4" AVERAGE.

SLOPE DRESSING ON THE PROJECT IS DEFINED AS THE INPLACE NATURAL TOPSOIL AND THE TURF ESTABLISHMENT SOILS PLACED BY PRIOR CONSTRUCTION.

THE BOTTOM OF THE EXCAVATIONS MADE TO ACCCOMMODATE THE PROPOSED BITUMINOUS BASE AND CLASS 5 AGGREGATE SHALL BE PREPARED IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF SPEC. 2105 AND COMPACTED WITH A MINIMUM OF FOUR PASSES WITH AN APPROVE COMPACTING DEVICE AND TO THE SATISFACTION OF THE ENGINEER.

COMPACTION OF ALL BITUMINOUS ITEMS, THE SPEC. 2221 AGGREGATE SHOULDERING AND THE GRADING PORTION OF THIS PROJECT, SHALL BE OBTAINED BY THE "ORDINARY COMPACTION METHOD."

WHERE EXCAVATING ADJACENT TO PAVEMENT THAT WILL REMAIN INPLACE, MATERIAL SHALL NOT BE REMOVED FROM INSIDE A 1:1 SLOPED LINE DRAWN DOWNWARD AND OUTWARD FROM THE BOTTOM OF THE INPLACE PAVEMENT.

WHEN BEGINNING OR ENDING RESURFACING, NOTCH INTO EXISTING BITUMINOUS AS DIRECTED BY THE ENGINEER.

ANY TEMPORARY DIKING AND PUMPING REQUIRED FOR PIPE CULVERT INSTALLATIONS WILL BE AS DIRECTED BY THE ENGINEER. THIS IS INCIDENTAL WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER 2501.

BITUMINOUS AND CONCRETE ITEMS DISTURBED BY THIS CONSTRUCTION SHALL BE DISPOSED OF BY THE CONTRACTOR OFF THE RIGHT OF WAY AND PROJECT LIMITS.

TEST ROLLING WILL NOT BE REQUIRED ON THIS PROJECT.

GRAVEL PITS

20

CO. PIT NO	COUNTY	LEGAL DESCRIPTION	MATERIAL AVAILABLE
3125	HENNEPIN	15.0 A.C. IN THE S.W. 1/4 OF S.E. 1/4 OF SEC. 14, T119N, R22W	①

① POSSIBLE SOURCE OF GRANULAR MATERIAL, STABILIZING AGGREGATES, AGGREGATE SHOULDERING CLASS 5, AND AGGREGATES USED IN THE PRODUCTION OF BITUMINOUS MIXTURES, EXCEPT 2561 MAR. A GRADATION CORRECTION MAY BE REQUIRED.

GRAVEL PIT SHEETS ARE NOT INCLUDED IN THIS PLAN. PRINTS OF PIT SHEETS MAY BE OBTAINED AT THE TIME PLANS AND PROPOSALS ARE PURCHASED.

TURF ESTABLISHMENT

PLACE A MINIMUM OF 6" OF SLOPE DRESSING ON AREAS SCHEDULED FOR TURF ESTABLISHMENT.

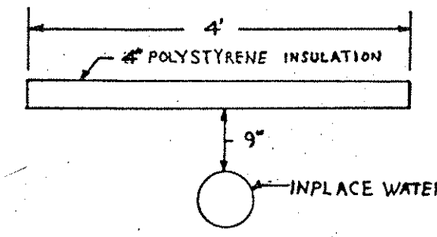
SOD ALL DISTURBED AREAS EXCEPT LT. AND RT. STA. 176+00 TO 182+75 AND LT. STA. 221+60 TO 226+80 AND RT. STA. 220+91 TO 226+10 WHICH WILL BE SEEDED WITH SEED MIXTURE 8 AT THE RATE OF 45 LBS./ACRE. SEEDING AREA WAS COMPUTED BY SLOPE MEASUREMENT. ALSO SOD DITCH LT. & RT. STA. 178+00 - 180+00.

FERTILIZE WITH COMMERCIAL FERTILIZER, ANALYSIS 10-20-20, AT THE RATE OF 350 LBS PER ACRE, OR EQUIVALENT, ON ALL AREAS TO BE SEEDED OR SODDED.

MULCH ALL SEEDED AREAS WITH TYPE 1 MULCH AT THE RATE OF 2 TONS PER ACRE AND DISC ANCHOR.

SLOPE DRESSING, SODDING AND TURF ESTABLISHMENT OPERATIONS WILL PROCEED IMMEDIATELY AFTER EACH AREA CONSTRUCTION TO PREVENT EROSION AS DIRECTED BY THE ENGINEER.

POLYSTYRENE INSULATION DETAIL

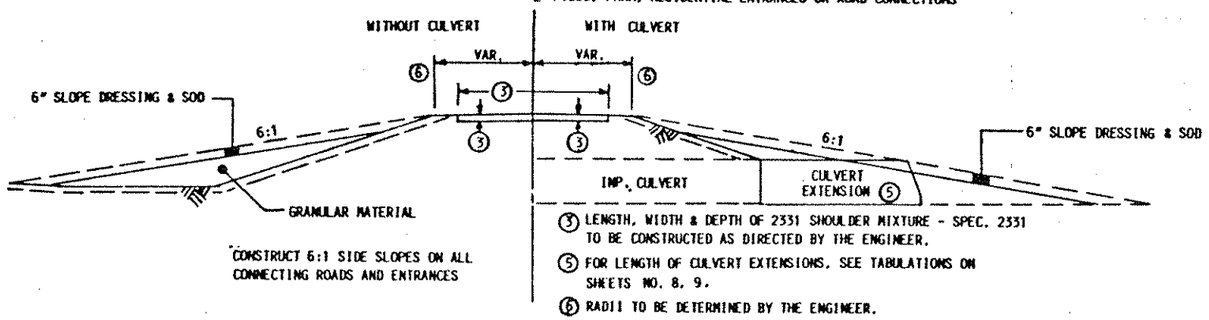


T.H. 242 STA. 275+25 TO 276+50 67' LT. (UNDER BACKSLOPE)

EARTHWORK SUMMARY

COMMON EXCAVATION	4117 C.Y.	2351	REGULAR
		1751	TOPSOIL STRIPPING
		15	BITUMINOUS PAVEMENT REMOVAL (ENT. APRS.) TO BE DISPOSED OF BY CONTRACTOR OFF OF R/W & PROJECT LIMITS.
EMBANKMENT	8484 C.Y.	4635	REGULAR
		3849	SLOPE DRESSING
GRANULAR BORROW	4014 C.Y. (L.V.)		
TOPSOIL BORROW	3585 C.Y. (L.V.)		

℄ FIELD, FARM, RESIDENTIAL ENTRANCES OR ROAD CONNECTIONS



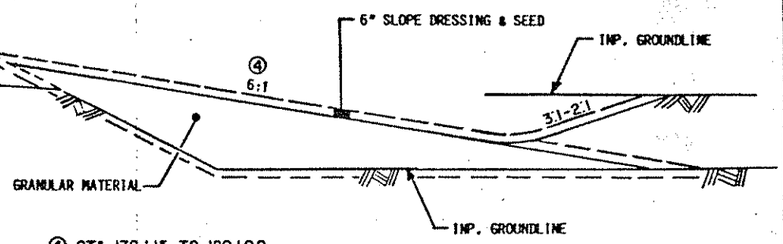
CONSTRUCT 6:1 SIDE SLOPES ON ALL CONNECTING ROADS AND ENTRANCES

③ LENGTH, WIDTH & DEPTH OF 2331 SHOULDER MIXTURE - SPEC. 2331 TO BE CONSTRUCTED AS DIRECTED BY THE ENGINEER.

⑤ FOR LENGTH OF CULVERT EXTENSIONS, SEE TABULATIONS ON SHEETS NO. 8, 9.

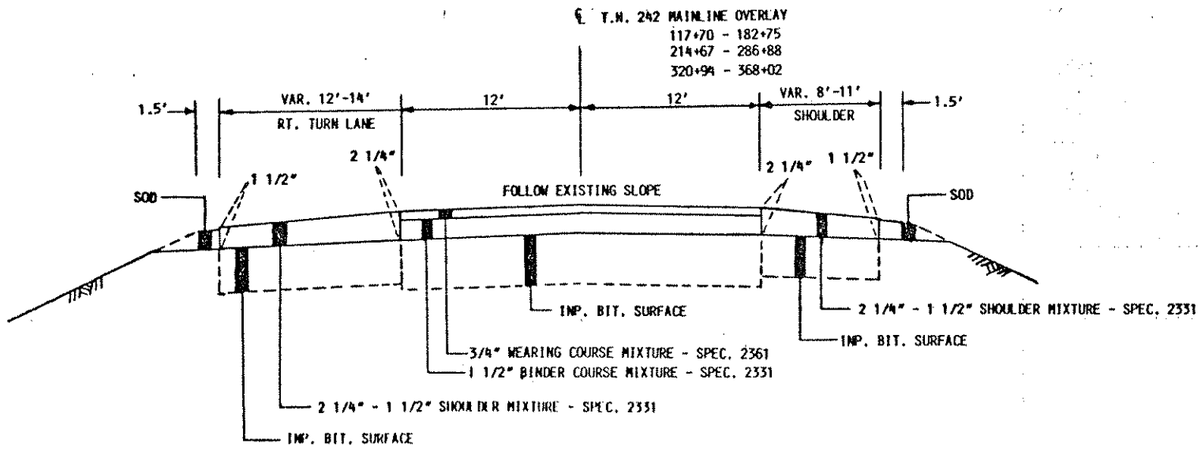
⑥ RADII TO BE DETERMINED BY THE ENGINEER.

℄ T.H. 242 SLOPE CONSTRUCTION
176+00 - 182+75 LT. & RT
220+90 - 225+80 RT.
221+45 - 226+40 LT.

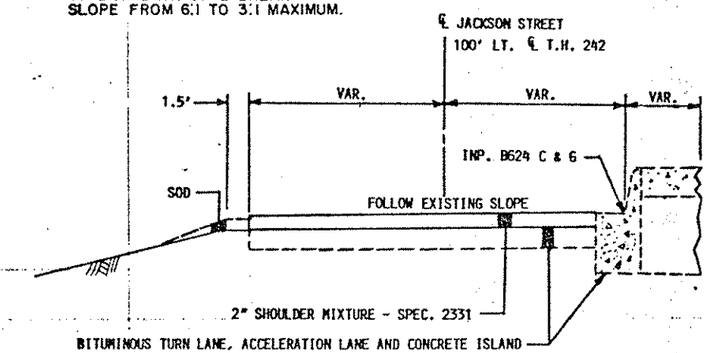


④ STA. 178+15 TO 180+00
47' LT. AND RT. OF ℄ BREAK
SLOPE FROM 6:1 TO 3:1 MAXIMUM.

℄ T.H. 242 MAINLINE OVERLAY
117+70 - 182+75
214+67 - 286+88
320+94 - 368+02

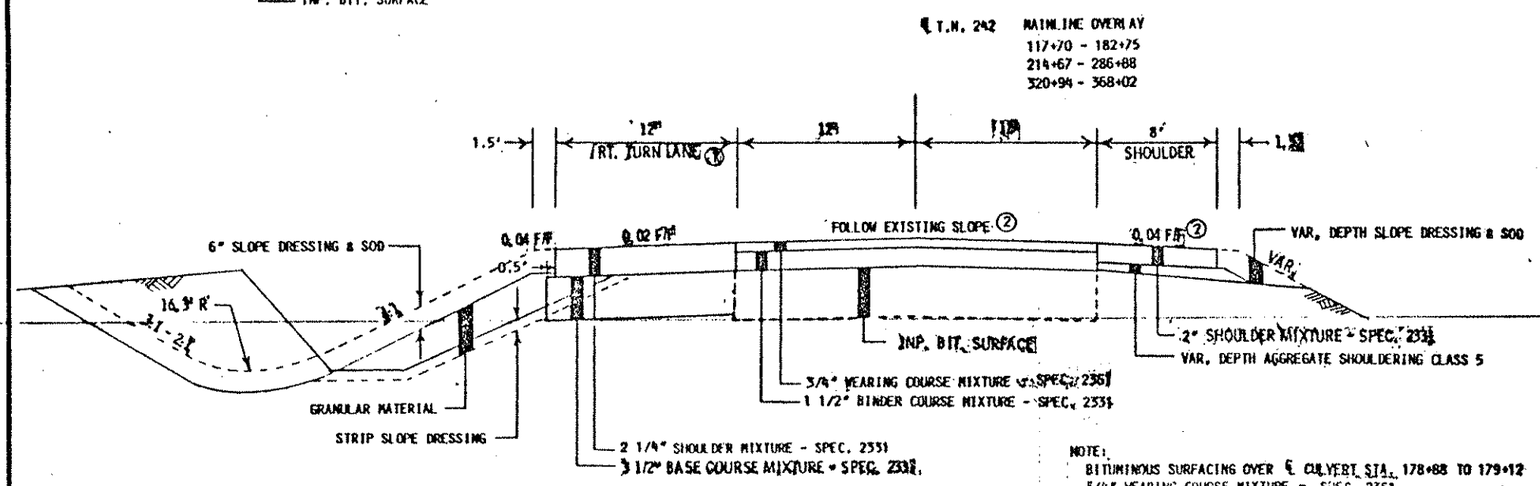


℄ JACKSON STREET
100' LT. ℄ T.H. 242



BITUMINOUS TURN LANE, ACCELERATION LANE AND CONCRETE ISLAND CONSTRUCTON TO BE DONE BY OTHERS.

℄ T.H. 242 MAINLINE OVERLAY
117+70 - 182+75
214+67 - 286+88
320+94 - 368+02

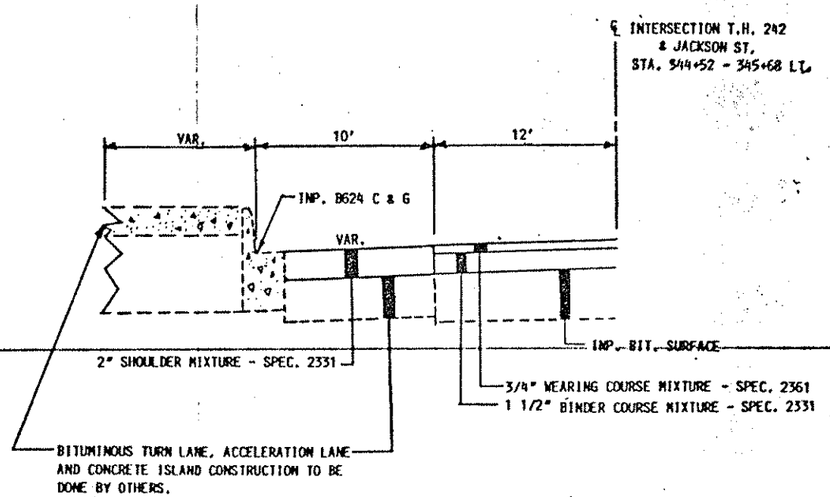


④ NEW CONSTRUCTION
268+00 - 278+20 LT.

② FROM STA. 178+00 TO 183+00 AND 323+85 TO 327+20, THIS AREA TO BE MILLED TO 0.015 F/F TRANSVERSE SLOPE. SHOULDERS TO BE GRADED TO 0.04 F/F TRANSVERSE SLOPE.

NOTE:
BITUMINOUS SURFACING OVER ℄ CULVERT STA. 178+88 TO 179+12
3/4" WEARING COURSE MIXTURE - SPEC. 2361
1 1/2" BINDER COURSE MIXTURE - SPEC. 2331
5 1/2" BASE COURSE MIXTURE - SPEC. 2331

℄ INTERSECTION T.H. 242 & JACKSON ST, STA. 344+52 - 345+68 LT.



BITUMINOUS TURN LANE, ACCELERATION LANE AND CONCRETE ISLAND CONSTRUCTION TO BE DONE BY OTHERS.

TYPICAL SECTIONS

ITEM INPLACE	STATION	LOCATION	OWNERSHIP	REMARKS
				POSSIBLY AFFECTED
6001TPH E TELEPHONE BURIED	117+00.00	16.0 R	X NWB 24U6008	
6002TPH E TELEPHONE BURIED	117+00.00	65.0 R	X NWB 24U6009	
6003POW E POWER BURIED	117+70.00	80.0 R	CABAEC024U6005	
6004POW E ANCHOR	118+37.	72.0 R	ANCAEC022U6005	
6005POW I END POWER BURIED	116+52.	73.0 R	CABAEC024UXXXX	
6006POW E POWER POLE	119+98.0	72.0 R	P AEC022U6007	
6007POW E POWER POLE	121+45.0	72.0 R	P AEC022U6010	
6008TPH E TELEPHONE BURIED	122+00.	16.0 R	X NWB 24U6013	
6009TPH E TELEPHONE BURIED	122+00.	65.0 R	X NWB 24U6014	
6010POW E POWER POLE	122+87.	72.0 R	P AEC 22U6011	
6011POW E POWER POLE	124+59.	72.0 R	P AEC022U6012	
6012POW E POWER POLE	126+04.	77.0 R	P AEC022U6015	
6013TPH E TELEPHONE BURIED	127+00.	16.0 R	X NWB 24U6021	
6014TPH E TELEPHONE BURIED	127+00.	65.0 R	X NWB 24U6022	
6015POW E POWER POLE	127+55.	72.0 R	P AEC022U6017	
6016POW E ANCHOR	127+55.	92.0 R	ANCAEC022U6015	
6017POW E POWER POLE	129+06.	72.0 R	P AEC022U6019	
6018POW E ANCHOR	129+06.	92.0 R	ANCAEC022U6017	
6019POW E POWER POLE	130+51.	72.0 R	P AEC022U6023	
6020POW E ANCHOR	130+51.	92.0 R	ANCAEC022U6019	
6021TPH E TELEPHONE BURIED	132+00.	16.0 R	X NWB 24U6032	
6022TPH E TELEPHONE BURIED	132+00.	65.0 R	X NWB 24U6033	
6023POW E POWER POLE	132+06.	72.0 R	P AEC022U6025	
6024POW E ANCHOR	132+06.	92.0 R	ANCAEC022U6023	
6025POW E POWER POLE	133+52.	72.0 R	P AEC022U6027	
6026POW E ANCHOR	133+52.	92.0 R	ANCAEC022U6025	
6027POW E POWER POLE	135+00.	72.0 R	P AEC022U6029	
6028POW E ANCHOR	135+00.	92.0 R	ANCAEC022U6027	
6029POW E POWER POLE	136+77.	70.0 R	P AEC022U6034	
6030POW E ANCHOR	136+77.	90.0 R	ANCAEC022U6029	
6031POW F ANCHOR	136+79.	44.0 R	ANCAEC022U6029	
6032TPH E TELEPHONE BURIED	137+00.	16.0 R	X NWB 24U6040	
6033TPH E TELEPHONE BURIED	137+00.	65.0 R	X NWB 24U6041	
6034POW E POWER POLE	138+10.	74.0 R	P AEC022U6036	
6035POW E ANCHOR	138+12.	80.0 R	ANCAEC022U6034	
6036POW E POWER POLE	139+84.	76.0 R	P AEC022U6037	
6037POW E POWER POLE	141+04.	72.0 R	P AEC022U6044	
6038POW E GUY POLE	141+13.	94.0 R	GP AEC022U6037	
6039POW E ANCHOR	141+16.	104.0 R	ANCAEC022U6038	
6040TPH E TELEPHONE BURIED	142+00.	16.0 R	X NWB 24U6050	
6041TPH E TELEPHONE BURIED	142+00.	65.0 R	X NWB 24U6044	
6042GAS E BEG 2"GAS	143+03.	60.0 R	PIPNCPS28U6051	
6043POW E ANCHOR	143+57.	72.0 R	ANCAEC022U6044	
6044TPH I END T-BUR	143+75.	72.0 R	X NWB 24UXXXX	
6045GAS E BEG 4"GAS	144+23.	45.0 L	PIPNCPS28U6049	
6046TAP E TELEPHONE AND POWER POLE	144+49.	72.0 R	P AEC022U6047	
6047TAP E TELEPHONE AND POWER POLE	146+16.	72.0 R	P AEC022U6052	
6048POW E ANCHOR	146+88.	77.0 R	ANCAEC022U6052	
6049GAS E 4"GAS	147+00.	45.0 L	PIPNCPS28U6060	
6050TPH E TELEPHONE AND POWER POLE	147+00.	16.0 R	X NWB 24U6061	
6051GAS E 2"GAS	147+00.	60.0 R	PIPNCPS28U6057	
6052TAP E TELEPHONE AND POWER POLE	147+00.	72.0 R	P AEC022U6056	
6053POW E ANCHOR	148+64.	70.0 R	ANCAEC022U6056	
6054POW E LIGHT POLE	148+91.	40.0 R	LITAEC022U6056	
6055POW E ANCHOR	148+95.	54.0 R	ANCAEC022U6056	
6056TAP E TELEPHONE AND POWER POLE	148+97.	70.0 R	P AEC022U6059	
6057GAS E 2" GAS TEE	149+95.	60.0 R	TEENCPS28U6062	
6058GAS E 2" GAS	149+95.	100.0 R	X NCPS28U6057	
6059TAP E TELEPHONE AND POWER POLE	148+64.	70.0 R	P AEC022U6063	
6060GAS E 4" GAS	152+00.	45.0 L	PIPNCPS28U6068	
6061TPH E TELEPHONE BURIED	152+00.	16.0 R	X NWB 24U6069	
6062GAS E 2" GAS	152+00.	60.0 R	PIPNCPS28U6070	
6063TAP E TELEPHONE AND POWER POLE	152+86.	70.0 R	P AEC022U6064	
6064TAP E TELEPHONE AND POWER POLE	154+10.	70.0 R	P AEC022U6065	
6065TAP E TELEPHONE AND POWER POLE	155+17.	70.0 R	P AEC022U6067	
6066POW E ANCHOR	155+40.	69.0 R	ANCAEC022U6065	
6067TAP E TELEPHONE AND POWER POLE	156+88.	70.0 R	P AEC022U6071	
6068GAS E 4 GAS	157+00.	45.0 L	PIPNCPS28U6073	
6069TPH E TELEPHONE BURIED	157+00.	16.0 R	X NWB 24U6077	
6070GAS E 2" GAS	157+00.	60.0 R	PIPNCPS28U6074	
6071TAP E TELEPHONE AND POWER POLE	158+54.	70.0 R	P AEC022U6072	
6072TAP E TELEPHONE AND POWER POLE	160+14.	70.0 R	P AEC022U6075	
6073GAS E 4" GAS	161+00.	45.0 L	PIPNCPS28U6078	
6074GAS E 2" GAS	161+00.	60.0 R	PIPNCPS28U6081	
6075TAP E TELEPHONE AND POWER POLE	161+76.	70.0 R	P AEC022U6086	
6076POW E ANCHOR	161+82.	60.0 R	ANCAEC022U6075	
6077TPH E TELEPHONE BURIED	162+00.	16.0 R	X NWB 24U6090	
6078GAS E 4" GAS	163+00.	45.0 L	PIPNCPS28U6088	
6079GAS E 2" GAS	163+00.	60.0 R	PIPNCPS28U6081	
6080GAS I 4"GAS	166+00.	45.0 L	PIPNCPS28U6088	
6081GAS E 2" TO 3" GAS TEE	163+13.	60.5 R	TEENCPS28U6082	
6082GAS E 2" GAS	163+38.	60.0 R	PIPNCPS28U6083	
6083GAS E 2"GAS	163+38.	100.0 R	PIPNCPS28UXXXX	
6084POW E LIGHT POLE	163+80.	48.0 R	LITAEC022U6086	
6085POW E ANCHOR	163+80.	60.0 R	ANCAEC022U6086	
6086POW E POWER POLE	163+80.	70.0 R	P AEC022U6087	
6087TAP E TELEPHONE AND POWER POLE	165+17.	70.0 R	P AEC022U6089	
6088GAS E 4" GAS	166+00.	45.0 L	PIPNCPS28U6091	
6089TAP E TELEPHONE AND POWER POLE	166+58.	70.0 R	P AEC022U6093	
6090TPH E TELEPHONE BURIED	167+00.	16.0 R	X NWB 24U6097	
6091GAS E 4" GAS	167+00.	45.0 L	PIPNCPS28U6096	
6092POW E GUY POLE	167+96.	100.0 R	GP AEC022U6093	
6093TAP E TELEPHONE AND POWER POLE	168+00.	70.0 R	P AEC022U6094	
6094TAP E TELEPHONE AND POWER POLE	169+59.	70.0 R	P AEC022U6095	
6094TAP E TELEPHONE AND POWER POLE	169+59.	70.0 R	P AEC022U6095	
6095TAP E TELEPHONE AND POWER POLE	170+75.	90.0 R	P AEC022U6098	
6096GAS E 4" GAS	172+00.	45.0 L	PIPNCPS28U6099	
6097TPH E TELEPHONE BURIED	172+00.	16.0 R	X NWB 24U6100	
6098TAP E TELEPHONE AND POWER POLE	172+14.	70.0 R	P AEC022U6101	
6099GAS E 4" GAS	173+00.	45.0 L	PIPNCPS28U6102	
6100TPH E TELEPHONE BURIED	173+00.	16.0 R	X NWB 24U6107	POSSIBLY AFFECTED

ITEM INPLACE	STATION	LOCATION	OWNERSHIP	REMARKS
				POSSIBLY AFFECTED
6101TAP E TELEPHONE BURIED	173+60.	70.0 R	P AEC022U6104	
6102GAS E 4" GAS	175+09.	45.0 L	PIPNCPS28U6106	
6103POW E ANCHOR	175+09.	80.0 R	ANCAEC022U6104	
6104TAP E TELEPHONE AND POWER POLE	175+10.	70.0 R	P AEC022U6105	
6105TAP E TELEPHONE AND POWER POLE	176+58.	70.0 R	P AEC022U6108	
6106GAS E 4" GAS	178+00.	48.0 L	PIPNCPS28U6110	
6107TPH E TELEPHONE BURIED	178+00.	16.0 R	X NWB 24U6114	
6108TAP E TELEPHONE AND POWER POLE	178+06.	70.0 R	P AEC022U6109	
6109TAP E TELEPHONE AND POWER POLE	179+51.	70.0 R	P AEC022U6111	
6110GAS E 4" GAS	180+00.	45.0 L	PIPNCPS28U6113	
6111TAP E TELEPHONE AND POWER POLE	180+96.	70.0 R	P AEC022U6112	
6112TAP E TELEPHONE AND POWER POLE	182+41.	70.0 R	P AEC022UXXXX	
6113GAS E 4" GAS	183+00.	45.0 L	PIPNCPS28UXXXX	
6114TPH E TELEPHONE BURIED	183+00.	16.0 R	X NWB 24UXXXX	
6115GAS E 4" GAS	214+00.	37.0 L	PIPNCPS28U6121	
6116TPH E TELEPHONE BURIED	214+00.	16.0 R	X NWB 24U6122	
6117TPH E TELEPHONE BURIED	214+00.	65.0 R	X NWB 24U6123	
6118TAP E TELEPHONE AND POWER POLE	214+32.	70.0 R	P AEC022U6119	
6119TAP E TELEPHONE AND POWER POLE	215+87.	70.0 R	P AEC022U6120	
6120TAP E TELEPHONE AND POWER POLE	217+10.	70.0 R	P AEC022U6124	
6121GAS E 4" GAS	218+00.	36.0 L	PIPNCPS28U6125	
6122TPH E TELEPHONE BURIED	218+00.	16.0 R	X NWB 24U6128	
6123TPH E TELEPHONE BURIED	218+00.	65.0 R	X NWB 24U6129	
6124TAP E TELEPHONE AND POWER POLE	218+86.	70.0 R	P NWB 22U6126	
6125GAS E 4" GAS	220+00.	30.0 L	PIPNCPS28U6127	
6126TAP E TELEPHONE AND POWER POLE	220+00.	70.0 R	P AEC022U6134	
6127GAS E 4" GAS	221+00.	36.0 L	PIPNCPS28U6130	
6128TPH E TELEPHONE BURIED	221+00.	16.0 R	X NWB 24U6136	
6129TPH E TELEPHONE BURIED	221+00.	65.0 R	X NWB 24U6132	
6130GAS E 4" TO 1.25" GAS TEE	221+52.	36.0 L	TEENCPS28U6138	
6131GAS E 1.25" GAS	221+52.	100.0 L	PIPNCPS28U6130	
6132TPH E TELEPHONE BURIED	221+60.	65.0 R	X NWB 24U6137	
6133TPH E TELEPHONE BURIED	221+60.	75.0 L	X NWB 24U6132	
6134TAP E TELEPHONE AND POWER POLE	221+60.	70.0 R	P AEC022U6135	
6135TAP E TELEPHONE AND POWER POLE	223+02.	70.0 R	P AEC022U6139	
6136TPH E TELEPHONE BURIED	224+00.	16.0 R	X NWB 24U6146	
6137TPH E TELEPHONE BURIED	224+00.	65.0 R	X NWB 24U6147	
6138GAS E 4" GAS	224+00.	36.0 L	PIPNCPS28U6140	
6139TAP E TELEPHONE AND POWER POLE	224+42.	70.0 R	P AEC022U6141	
6140GAS E 4" GAS	225+00.	45.0 R	PIPNCPS28U6145	
6141TAP E TELEPHONE AND POWER POLE	225+67.	70.0 R	P AEC022U6142	
6142TAP E TELEPHONE AND POWER POLE	226+94.	70.0 R	P AEC022U6143	
6143TAP E TELEPHONE AND POWER POLE	228+04.	70.0 R	P AEC022U6153	
6144POW E ANCHOR	228+98.	70.0 R	ANCAEC022U6153	
6145GAS E 4" GAS	229+00.	45.0 L	PIPNCPS28U6156	
6146TPH E TELEPHONE BURIED	229+00.	16.0 R	X NWB 24U6168	
6147TPH E TELEPHONE BURIED	229+00.	65.0 R	X NWB 24U6169	
6148POW E ANCHOR	229+00.	70.0 R	ANCAEC022U6153	
6150GAS E GAS VENT	229+09.	76.0 L	VENNCPS28UXXXX	
6151POW E ANCHOR	229+10.	98.0 L	ANCAEC022U6152	
6152POW E LIGHT POLE	229+11.	78.0 L	LITAEC022UXXXX	
6153TAP E TELEPHONE AND POWER POLE	229+17.	70.0 R	P AEC022U6160	
6154POW E ANCHOR	229+19.	94.0 L	ANCAEC022U6152	
6155TPH E TELEPHONE PEDESTAL	230+23.	70.0 R	PEDNWB 24UXXXX	
6156GAS E 4" GAS TEE	230+65.	45.0 L	TEENCPS28U6167	
6157GAS E 4" GAS	230+65.	100.0 L	PIPNCPS28U6156	
6158GAS E GAS VENT	230+69.	56.0 L	VENNNG 28UXXXX	
6159POW E ANCHOR	230+69.	56.0 R	ANCAEC022U6160	
6160TAP E TELEPHONE AND POWER POLE	230+70.	70.0 R	P AEC022U6166	
6161POW E ANCHOR	230+70.	92.0 R	ANCAEC022U6160	
6162GAS E 20" GAS	230+73.	35.0 L	PIPNNG 28U6163	
6163GAS E 20" GAS	230+80.	38.0 R	PIPNNG 28U6162	
6164GAS E GAS VENT	230+82.	70.0 R	VENNNG 28UXXXX	
6165POW E ANCHOR	230+87.	70.0 R	ANCAEC022U6160	
6166TAP E TELEPHONE AND POWER POLE	232+82.	70.0 R	P AEC022U6171	
6167GAS E 4" GAS	233+00.	45.0 L	PIPNCPS28U6170	
6168TPH E TELEPHONE BURIED	234+00.	16.0 R	X NWB 24U6177	
6169TPH E TELEPHONE BURIED	234+00.	65.0 R	X NWB 24U6178	
6170GAS E 4" GAS	234+00.	45.0 L	PIPNCPS28U6176	
6171TAP E TELEPHONE AND POWER POLE	234+01.	70.0 R	P AEC022U6173	
6172POW E ANCHOR	235+94.	60.0 R	ANCAEC022U6173	
6173TAP E TELEPHONE AND POWER POLE	235+34.	70.0 R	P AEC022U6174	
6174TAP E TELEPHONE AND POWER POLE	236+73.	70.0 R	P AEC022U6175	
6175TAP E TELEPHONE AND POWER POLE	238+12.	70.0 R	P AEC022U6179	
6176GAS E 4" GAS	239+00.	45.0 L	PIPNCPS28U6182	
6177TPH E TELEPHONE BURIED	239+00.	16.0 R	X NWB 24U6183	
6178TPH E TELEPHONE BURIED	239+00.	65.0 R	X NWB 24U6184	
6179TAP E TELEPHONE AND POWER POLE	239+61.	70.0 R	P AEC022U6180	
6180TAP E TELEPHONE AND POWER POLE	241+10.	70.0 R	P AEC022U6181	
6181TAP E TELEPHONE AND POWER POLE	242+61.	70.0 R	P AEC022U6185	
6182GAS E 4" GAS	244+00.	45.0 L	PIPNCPS28U6190	
6183TPH E TELEPHONE BURIED	244+00.	16.0 R	X NWB 24U6188	
6184TPH E TELEPHONE BURIED	244+00.	65.0 R	X NWB 24U6189	
6185TAP E TELEPHONE AND POWER POLE	244+14.	70.0 R	P AEC022U6186	
6186TAP E TELEPHONE AND POWER POLE	245+65.	70.0 R	P AEC022U6187	
6187TAP E TELEPHONE AND POWER POLE	247+08.	70.0 R	P AEC022U6191	
6188TPH E TELEPHONE BURIED	248+00.	16.0 R	X NWB 24U6194	
6189TPH E TELEPHONE BURIED	248+00.	65.0 R	X NWB 24U6195	
6190GAS E 4" GAS	248+00.	45.0 L	PIPNCPS28U6197	
6191POW I BEG. POWER BURIED	248+85.	70.0 R	CABAEC024U6192	
6192POW E POWER BURIED	249+06.	76.0 R	CABAEC024U6193	
6193POW E POWER BURIED	249+81.	76.0 R	CABAEC024U6199	
6194TPH E TELEPHONE BURIED	250+00.	16.0 R	X NWB 24U6210	
6195TPH E TELEPHONE BURIED	250+00.	65.0 R	X NWB 24U6211	
6196TAP E TELEPHONE AND POWER POLE	250+00.	74.0 R	P AEC022U6202	
6197GAS E 4" GAS	250+00.	45.0 L	PIPNCPS28U6206	
6198POW E LIGHT POLE	250+03.	42.0 R	LITAEC022U6196	
6199POW E POWER BURIED	250+10.	88.0 R	CABAEC024U6200	
6200POW E POWER BURIED	250+10.	125.0 R	CABAEC024UXXXX	
6201POW E ANCHOR	250+62.	44.0 R	ANCAEC022U6202	
6202TAP E TELEPHONE AND POWER POLE	250+62.	76.0 R	P AEC022U6204	POSSIBLY AFFECTED

AECO ANOKA ELECTRIC COOPERATIVE
BLAI CITY OF BLAINE
CRPD CITY OF COON RAPIDS
NCPS NORTH CENTRAL PUBLIC SERVICE GAS CO.
NNG NORTHERN NATURAL GAS CO.
NWB NORTHWESTERN BELL TELEPHONE CO.

PUBLIC UTILITIES

ITEM	INPLACE	STATION	LOCATION	OWNERSHIP	REMARKS
6203POH	E ANCHOR	251+72.	65.0 R	ANCAEC022U6204	POSSIBLY AFFECTED
6204TAP	E TELEPHONE AND POWER POLE	251+72.	72.0 R	P AEC022U6205	
6205TAP	E TELEPHONE AND POWER POLE	253+89.	70.0 R	P AEC022U6207	
6206GAS	E 4" GAS	254+00.	45.0 L	PIPNCPS28U6212	
6207TAP	E TELEPHONE AND POWER POLE	254+39.	70.0 R	P AEC022U6208	
6208TAP	E TELEPHONE AND POWER POLE	255+76.	70.0 R	P AEC022U6209	
6209TAP	E TELEPHONE AND POWER POLE	256+96.	70.0 R	P AEC022U6213	
6210TPH	E TELEPHONE BURIED	257+00.	16.0 R	X NWB 24U6214	
6211TPH	E TELEPHONE BURIED	257+00.	65.0 R	X NWB 24U6215	
6212GAS	E 4" GAS	257+00.	45.0 L	PIPNCPS28U6216	
6213TAP	E TELEPHONE AND POWER POLE	258+46.	70.0 R	P AEC022U6218	
6214TPH	E TELEPHONE BURIED	259+00.	16.0 R	X NWB 24U6226	
6215TPH	E TELEPHONE BURIED	259+00.	65.0 R	X NWB 24U6227	
6216GAS	E 4" GAS	259+00.	45.0 L	PIPNCPS28U6228	
6217POH	E BEG. POWER BURIED	259+95.	78.0 L	CABAEC024U6221	
6218POH	I BEG. POWER BURIED	260+20.	68.0 R	CABAEC024U6220	
6219POH	E ANCHOR	260+23.	62.0 R	ANCAEC022U6218	
6220POH	I END POWER BURIED	260+91.	50.0 R	CABALL024UXXXX	
6221POH	E POWER BURIED	260+87.	50.0 L	CABAEC024U6223	
6222WAT	E HYDRANT	261+22.	96.0 R	HYDCRPD26UXXXX	
6223POH	I END POWER BURIED	261+78.	52.0 L	CABAEC024UXXXX	
6224TAP	E TELEPHONE AND POWER POLE	261+96.	70.0 R	P AEC022U6225	
6225TAP	E TELEPHONE AND POWER POLE	263+42.	70.0 R	P AEC022U6231	
6226TPH	E TELEPHONE BURIED	264+00.	16.0 R	X NWB 24U6236	
6227TPH	E TELEPHONE BURIED	264+00.	65.0 R	X NWB 24U6230	
6228GAS	E 4" GAS	264+00.	45.0 L	PIPNCPS28U6239	
6419WAT	E HYDRANT	264+50.	78.0 L	HYDCRPD26UXXXX	
6229TPH	E TELEPHONE BURIED	264+84.	75.0 L	X NWB 24U6230	
6230TPH	E TELEPHONE BURIED	264+84.	65.0 R	X NWB 24U6237	
6231TAP	E TELEPHONE AND POWER POLE	264+84.	70.0 R	P AEC022U6232	
6418POH	E LIGHT POLE	265+32.	43.9 L	LITAEC022UXXXX	
6232TAP	E TELEPHONE AND POWER POLE	266+16.	70.0 R	P AEC022U6234	
6233GAS	E 4" GAS	267+00.	46.0 L	PIPNCPS28U6238	
6234TAP	E TELEPHONE AND POWER POLE	267+49.	70.0 R	P AEC022U6235	
6235TAP	E TELEPHONE AND POWER POLE	268+77.	70.0 R	P AEC022U6239	
6236TPH	E TELEPHONE BURIED	269+00.	16.0 R	X NWB 24U6247	
6237TPH	E TELEPHONE BURIED	269+00.	65.0 R	X NWB 24U6248	
6238GAS	E 4" GAS	269+00.	45.0 L	PIPNCPS28U6244	
6239TAP	E TELEPHONE AND POWER POLE	270+49.	70.0 R	P AEC022U6243	
6240POH	E ANCHOR	270+49.	82.0 R	ANCAEC022U6239	
6241POH	E ANCHOR	270+49.	84.0 R	ANCAEC022U6219	
6421WAT	E HYDRANT	270+90.	80.0 L	HYDCRPD26UXXXX	
6242POH	E POWER BURIED	271+80.	86.0 R	CABAEC024U6243	
6243POH	I END POWER BURIED	271+98.	70.0 R	CABAEC024UXXXX	
6244GAS	E 4" GAS	272+00.	45.0 L	PIPNCPS28U6249	
6245POH	E ANCHOR	273+35.	70.0 R	ANCAEC022U6246	
6246TAP	E TELEPHONE AND POWER POLE	273+49.	70.0 R	P AEC022U6250	
6247TPH	E TELEPHONE BURIED	274+00.	16.0 R	X NWB 24U6257	
6248TPH	E TELEPHONE BURIED	274+00.	65.0 R	X NWB 24U6258	
6249GAS	E 4" GAS	274+00.	45.0 L	PIPNCPS28U6254	
6250TAP	E TELEPHONE AND POWER POLE	275+32.	70.0 R	P AEC022U6251	POSSIBLY AFFECTED
6422SAN	E SANITARY MANHOLE	276+40.	57.0 L	MH CRPD26UXXXX	RECONSTRUCT
6251TAP	E TELEPHONE AND POWER POLE	276+52.	70.0 R	P AEC022U6256	POSSIBLY AFFECTED
6252POH	E ANCHOR	276+58.	86.0 R	ANCAEC022U6251	
6253WAT	E HYDRANT	276+65.	74.0 L	HYDCRPD26UXXXX	
6254GAS	E 4" GAS VALVE	276+29.	45.0 L	VLVNCPS28U6259	
6255TPH	E TELEPHONE PEDESTAL	277+16.	72.0 R	PEDNWB 24UXXXX	
6256TAP	E TELEPHONE AND POWER POLE	277+94.	70.0 R	P AEC022U6260	
6257TPH	E TELEPHONE BURIED	278+00.	16.0 R	X NWB 24U6266	
6258TPH	E TELEPHONE BURIED	278+00.	65.0 R	X NWB 24U6267	
6259GAS	E 4" GAS	278+00.	45.0 L	PIPNCPS28U6268	
6260TAP	E TELEPHONE AND POWER POLE	279+19.	70.0 R	P AEC022U6262	
6261POH	E ANCHOR	279+24.	59.0 R	ANCAEC022U6260	
6262TAP	E TELEPHONE AND POWER POLE	280+74.	70.0 R	P AEC022U6263	
6263TAP	E TELEPHONE AND POWER POLE	282+20.	70.0 R	P AEC022U6265	
6264POH	E ANCHOR	283+91.	58.0 R	ANCAEC022U6265	
6265TAP	E TELEPHONE AND POWER POLE	283+91.	70.0 R	P AEC022U6269	
6266TPH	E TELEPHONE BURIED	284+00.	16.0 R	X NWB 24U6271	
6267TPH	E TELEPHONE BURIED	284+00.	65.0 R	X NWB 24U6272	
6268GAS	E 4" GAS	284+00.	45.0 L	PIPNCPS28U6273	
6269TAP	E TELEPHONE AND POWER POLE	285+18.	70.0 R	P AEC022U6270	
6270TAP	E TELEPHONE AND POWER POLE	286+77.	70.0 R	P AEC022UXXXX	
6271TPH	E TELEPHONE BURIED	287+00.	16.0 R	X NWB 24UXXXX	
6272TPH	E TELEPHONE BURIED	287+00.	65.0 R	X NWB 24UXXXX	
6273GAS	E 4" GAS	287+00.	45.0 L	PIPNCPS28UXXXX	
6274GAS	E 4" GAS	320+00.	67.0 L	PIPNCPS28U6287	
6275TPH	E TELEPHONE BURIED	320+00.	16.0 R	X NWB 24U6282	
6276TPH	E TELEPHONE BURIED	320+00.	41.0 R	X NWB 24U6283	
6277GAS	E 4" GAS	320+00.	58.5 R	PIPNCPS28U6284	
6278TPH	E TELEPHONE BURIED	320+00.	60.0 R	X NWB 24U6285	
6279TPH	E TELEPHONE BURIED	320+00.	65.0 R	X NWB 24U6286	
6280TAP	E TELEPHONE AND POWER POLE	321+50.	70.0 R	P AEC022U6281	
6281TAP	E TELEPHONE AND POWER POLE	324+49.	70.0 R	P AEC022U6288	
6282TPH	E TELEPHONE BURIED	325+00.	16.0 R	X NWB 24U6289	
6283TPH	E TELEPHONE BURIED	325+00.	41.0 R	X NWB 24U6290	
6284GAS	E 4" GAS	325+00.	59.0 R	PIPNCPS28U6291	
6285TPH	E TELEPHONE BURIED	325+00.	60.0 R	X NWB 24U6292	
6286TPH	E TELEPHONE BURIED	325+00.	65.0 R	X NWB 24U6293	
6287GAS	E 4" GAS	325+00.	67.0 L	PIPNCPS28U6294	
6288TAP	E TELEPHONE AND POWER POLE	327+55.	70.0 R	P AEC022U6296	
6289TPH	E TELEPHONE BURIED	330+00.	16.0 R	X NWB 24U6319	
6290TPH	E TELEPHONE BURIED	330+00.	41.0 R	X NWB 24U6320	
6291GAS	E 4" GAS	330+00.	60.0 R	PIPNCPS28U6322	
6292TPH	E TELEPHONE BURIED	330+00.	60.0 R	X NWB 24U6321	
6293TPH	E TELEPHONE BURIED	330+00.	65.0 R	X NWB 24U6323	
6294GAS	E 4" GAS	330+00.	67.0 L	PIPNCPS28U6297	
6295POH	E ANCHOR	330+57.	92.0 R	ANCAEC022U6296	
6296TPH	I END TELEPHONE BURIED	330+58.	70.0 R	X NWB 24UXXXX	
6297GAS	E 4" TO 2" GAS TEE	330+64.	50.0 L	TEENCPS28U6315	
6298GAS	E 4" GAS	330+64.	100.0 L	PIPNCPS28U6317	
6299TPH	E TELEPHONE BURIED CROSSIN	330+70.	00.0 C	X NWB 24U6300	
6300TPH	E TELEPHONE BURIED COR.	330+70.	60.0 R	X NWB 24U6296	
6301TPH	E TELEPHONE BURIED	330+70.	100.0 R	X NWB 24U6299	
6302TPH	E TELEPHONE BURIED CROSSIN	330+75.	00.0 C	X NWB 24U6303	
6303TPH	E TELEPHONE BURIED COR.	330+75.	60.0 R	X NWB 24U6296	POSSIBLY AFFECTED

ITEM	INPLACE	STATION	LOCATION	OWNERSHIP	REMARKS
6304TPH	E TELEPHONE BURIED	330+75.	100.0 L	X NWB 24U6302	POSSIBLY AFFECTED
6305POW	E POWER BURIED COR.	330+77.	84.0 L	CABAEC024U6309	
6306POW	E POWER BURIED	330+77.	100.0 L	CABAEC024U6305	
6307POH	E ANCHOR	330+78.	70.0 R	ANCAEC022U6296	
6308POW	E POWER BURIED COR.	330+84.	70.0 R	CABAEC024U6311	
6309POW	E POWER BURIED COR.	330+87.	47.0 L	CABAEC024U6308	
6310POH	E LIGHT POLE	330+87.	65.0 L	LITAEC022U6311	
6311POW	I END POWER BURIED	330+96.	70.0 R	CABAEC024UXXXX	
6312POW	E POWER BURIED	330+99.	76.0 L	CABAEC024U6314	
6313POW	E POWER BURIED	331+04.	70.0 R	CABAEC024U6311	
6314POW	E POWER BURIED	331+08.	62.0 L	CABAEC024U6313	
6315GAS	E 4" GAS	331+45.	45.0 R	PIPNCPS28U6324	
6316POW	E POWER BURIED COR	333+30.	72.0 R	CABAEC024U6318	
6317POW	E POWER BURIED	333+30.	100.0 L	CABAEC024U6316	
6318POW	I END POWER BURIED	333+89.	72.0 R	CABALEC024UXXXX	
6319TPH	E TELEPHONE BURIED	335+00.	16.0 R	X NWB 24U6333	
6320TPH	E TELEPHONE BURIED	335+00.	41.0 R	X NWB 24U6334	
6321TPH	E TELEPHONE BURIED	335+00.	60.0 R	X NWB 24U6335	
6322GAS	E 4" GAS	335+00.	60.5 R	PIPNCPS28U6325	
6323TPH	E TELEPHONE BURIED	335+00.	65.0 R	X NWB 24U6335	
6324GAS	E 4" GAS	335+00.	45.0 L	PIPNCPS28U6328	
6325GAS	E 4" TO 3" GAS TEE	336+77.	60.5 R	TEENCPS28U6327	
6326GAS	E 3" GAS	336+77.	100.0 R	PIPNCPS28U6325	
6327GAS	E 4" GAS COR	336+92.	60.5 R	PIPNCPS28U6328	
6328GAS	E 4" GAS TEE	336+92.	45.0 L	TEENCPS28U6329	
6329GAS	E 4" GAS	337+00.	45.0 L	PIPNCPS28U6337	
6330POH	E LIGHT AND POWER POLE	337+91.	70.0 R	P AEC022U6331	
6331POW	E POWER POLE	337+96.	94.0 R	P AEC022U6332	
6332POW	E POWER POLE	339+90.	70.0 R	P AEC022U6340	
6333TPH	E TELEPHONE BURIED	340+00.	16.0 R	X NWB 24U6341	
6334TPH	E TELEPHONE BURIED	340+00.	41.0 R	X NWB 24U6342	
6335TPH	E TELEPHONE BURIED	340+00.	60.0 R	X NWB 24U6343	
6336TPH	E TELEPHONE BURIED	340+00.	65.0 R	X NWB 24U6344	
6337GAS	E 4" GAS	340+00.	45.0 L	PIPNCPS28U6345	
6338POH	E LIGHT POLE	342+15.	50.0 R	LITAEC022U6340	
6339POH	E ANCHOR	342+87.	56.0 R	ANCAEC022U6349	
6340POW	E POWER POLE	342+87.	70.0 R	P AEC022U6351	
6341TPH	E TELEPHONE BURIED	345+00.	16.0 R	X NWB 24U6357	
6342TPH	E TELEPHONE BURIED	345+00.	41.0 R	X NWB 24U6358	
6343TPH	E TELEPHONE BURIED	345+00.	60.0 R	X NWB 24U6359	
6344TPH	E TELEPHONE BURIED	345+00.	65.0 R	X NWB 24U6360	
6345GAS	E 4" GAS	345+00.	45.0 L	PIPNCPS28U6347	
6346POW	E LIGHT POLE	345+21.	37.0 R	LITAEC022U6351	
6347GAS	E 4" GAS TEE	345+59.	45.0 L	TEENCPS28U6352	
6348GAS	E 3" GAS	345+59.	100.0 L	PIPNCPS28U6347	
6349TPH	E TELEPHONE PEDESTAL	345+61.	70.0 R	PEDNWB 24UXXXX	
6350POW	E ANCHOR	345+79.	70.0 R	ANCAEC022U6351	
6351TAP	E TELEPHONE AND POWER POLE	345+88.	70.0 R	P AEC022U6355	
6352GAS	E 4" TO 0.75" GAS TEE	346+72.	45.0 R	TEENCPS28U6356	
6353GAS	E 0.75" GAS	346+72.	100.0 R	PIPNCPS28U6352	
6354POW	E ANCHOR	349+01.	62.0 R	ANCAEC022U6355	
6355TAP	E TELEPHONE AND POWER POLE	349+01.	70.0 R	P AEC022U6361	
6356GAS	E 4"GAS	350+00.	45.0 L	PIPNCPS28U6366	
6357TPH	E TELEPHONE BURIED	350+00.	16.0 R	X NWB 24U6362	
6358TPH	E TELEPHONE BURIED	350+00.	41.0 R	X NWB 24U6363	
6359TPH	E TELEPHONE BURIED	350+00.	60.0 R	X NWB 24U6364	
6360TPH	E TELEPHONE BURIED	350+00.	65.0 R	X NWB 24U6365	
6361TAP	E TELEPHONE AND POWER POLE	352+56.	70.0 R	P AEC022U6368	
6362TPH	E TELEPHONE BURIED	355+00.	16.0 R	X NWB 24U6381	
6363TPH	E TELEPHONE BURIED	355+00.	41.0 R	X NWB 24U6382	
6364TPH	E TELEPHONE BURIED	355+00.	60.0 R	X NWB 24U6407	
6365TPH	E TELEPHONE BURIED	355+00.	65.0 R	X NWB 24U6384	
6366GAS	E 4" GAS	355+00.	45.0 L	PIPNCPS28U6385	
6367POH	E ANCHOR	355+49.	88.0 R	ANCAEC022U6368	
6368TAP	E TELEPHONE AND POWER POLE	355+60.	70.0 R	P AEC022U6373	
6369TPH	E TELEPHONE UTILITY BOX	355+77.	62.0 R	X NWB 24UXXXX	
6370TPH	E TELEPHONE PEDESTAL	356+52.	77.0 L	PEDNWB 24UXXXX	
6407TPH	E TELEPHONE BURIED	356+52.	62.0 R	X NWB 24U6383	
6408TPH	E TELEPHONE BURIED	356+52.	75.0 L	X NWB 24U6407	
6371TPH	E TELEPHONE MANHOLE	356+55.	62.0 R	MH NWB 24U6384	
6372WAT	E HYDRANT	356+62.	77.0 L	HYDBLAI26UXXXX	
6373TAP	E TELEPHONE AND POWER POLE	356+83.	70.0 R	P AEC022U6376	
6374POW	E LIGHT POLE	356+89.	54.0 R	P AEC022U6373	
6375WAT	E HYDRANT	357+49.	96.0 R	HYDBLAI26UXXXX	
6376TAP	E TELEPHONE AND POWER POLE	357+50.	70.0 R	P AEC022U6378	
6377POW	E LIGHT POLE	358+59.	42.0 L	LITAEC022U6380	
6378TAP	E TELEPHONE AND POWER POLE	359+05.	70.0 R	P AEC022U6386	
6379POW	E ANCHOR	359+05.	82.0 R	ANCAEC022U6378	
6380POW	E POWER POLE	359+26.	75.0 L	P AEC022U6378	
6381TPH	E TELEPHONE BURIED	360+00.	16.0 R	X NWB 24U6392	
6382TPH	E TELEPHONE BURIED	360+00.	41.0 R	X NWB 24U6393	
6383TPH	E TELEPHONE BURIED	360+00.	60.0 R	X NWB 24U6394	
6384TPH	E TELEPHONE BURIED	360+00.	65.0 R	X NWB 24U6395	
6385GAS	E 4" GAS	360+00.	45.0 R	PIPNCPS28U6396	
6386TAP	E TELEPHONE AND POWER POLE	362+07.	70.0 R	P AEC022U6391	
6387POH	E ANCHOR	362+07.	82.0 R	ANCALC022U6386	
6388POW	E POWER POLE	362+18.	87.0 L	P AEC022U6386	
6389POW	E ANCHOR	362+19.	97.0 L	ANCALC022U6388	
6390TPH	E TELEPHONE MANHOLE	362+51.	59.0 R	MH NWB 24UXXXX	
6391TAP	E TELEPHONE AND POWER POLE	363+62.	70.0 R	P AEC022U6393	
6392TPH	E TELEPHONE BURIED	365+00.	16.0 R	X NWB 24U6402	
6393TPH	E TELEPHONE BURIED	365+00.	41.0 R	X NWB 24U6403	
6394TPH	E TELEPHONE BURIED	365+00.	60.0 R	X NWB 24U6404	
6395TPH	E TELEPHONE BURIED	365+00.	65.0 R	X NWB 24U6405	
6396GAS	E 4" GAS	365+00.	45.0 L	PIPNCPS28U6406	
6397POW	E ANCHOR	365+16.	81.0 R	ANCAEC022U6393	
6398TAP	E TELEPHONE AND POWER POLE	365+17.	70.0 R	P AEC022U6401	
6399POW	E ANCHOR	365+33.	70.0 R	ANCAEC022U6398	
6400POW	E POWER POLE	365+74.	48.0 L	P AEC022U6398	
6401TAP	E TELEPHONE AND POWER POLE	368+21.	70.0 R	P AEC022UXXXX	
6402TPH	E TELEPHONE BURIED	369+00.	16.0 R	X NWB 24UXXXX	
6403TPH	E TELEPHONE BURIED	369+00.	41.0 R	X NWB 24UXXXX	
6404TPH	E TELEPHONE BURIED	369+00.	60.0 R	X NWB 24UXXXX	
6405TPH	E TELEPHONE BURIED	369+00.	65.0 R	X NWB 24UXXXX	
6406GAS	E 4" GAS	369+00.	45.0 L	PIPNCPS28UXXXX	POSSIBLY AFFECTED

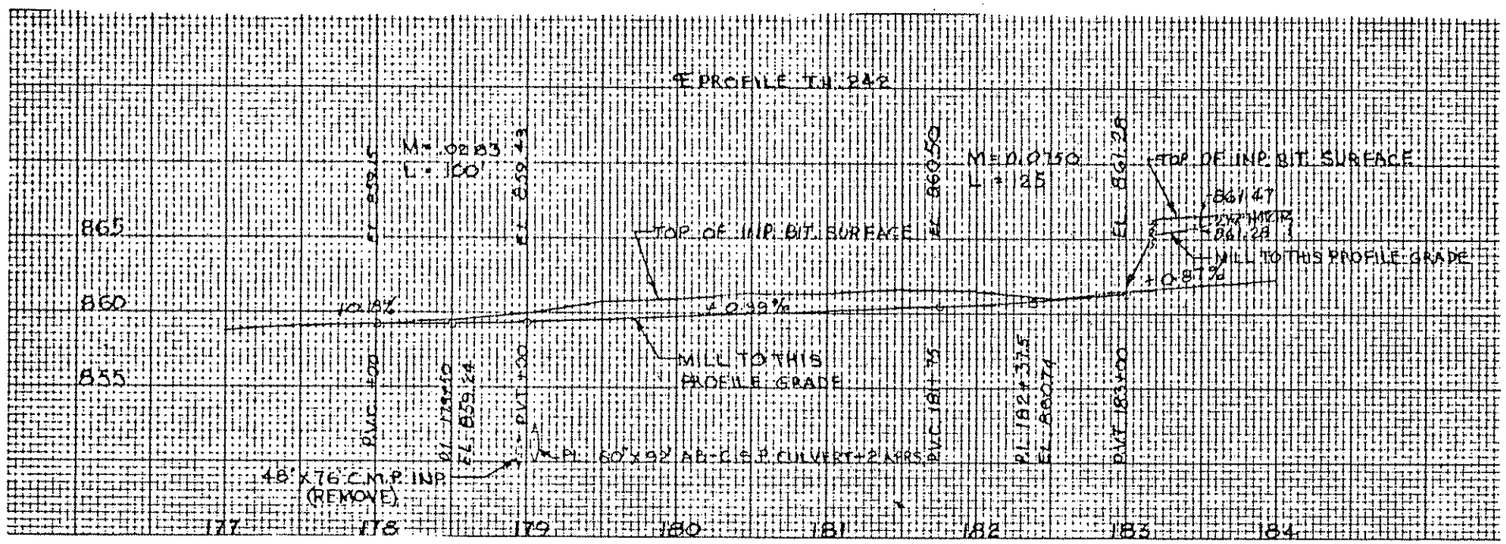
AECO ANOKA ELECTRIC COOPERATIVE
BLAI CITY OF BLAINE
CRPD CITY OF COON RAPIDS
NCPS NORTH CENTRAL PUBLIC SERVICE GAS CO.
NNG NORTHERN NATURAL GAS CO.
NWB NORTHWESTERN BELL TELEPHONE CO.

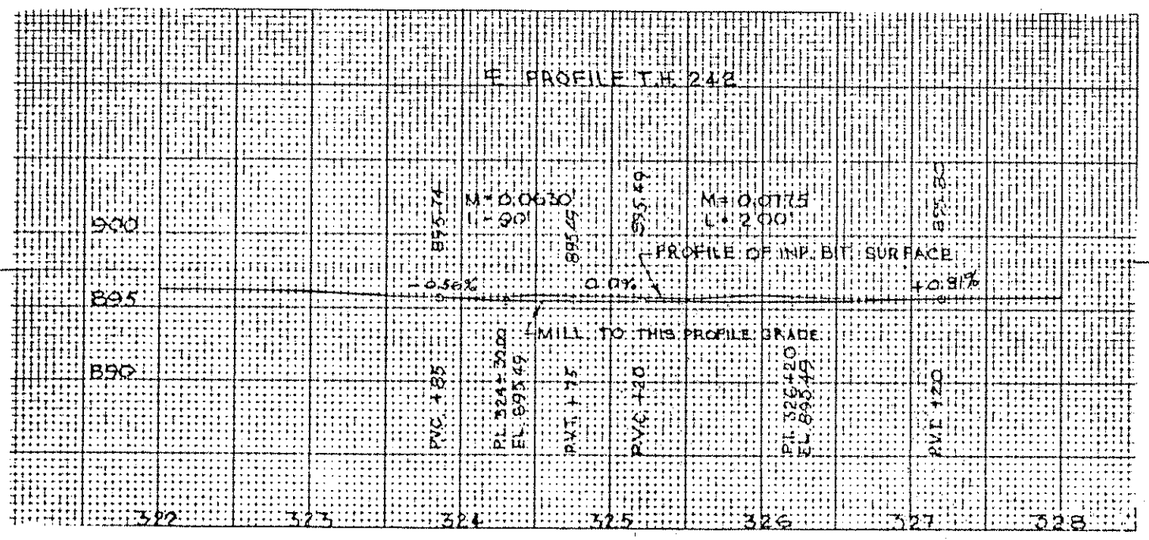
PUBLIC UTILITIES

TRAFFIC BARRIER

STATION	LOCATION	INPLACE		SALVAGE		INSTALL	CONSTRUCT	CONSTRUCT	ANCHORAGE ASSEMBLIES		INSTALL	TWISTED	REMARKS
		DESIGN B8307	DESIGN 8330	PLATE BEAM	CABLE	DESIGN B8307	DESIGN 8330	DESIGN B8307	CABLE	PLATE BEAM	ANCHORAGE ASSEMBLIES PLATE BEAM	END TREATMENT	
		LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	LIN. FT.	EACH	EACH	EACH	EACH	
139+00 TO 139+38	15' LT.					12.5		25.0				1	CONNECT TO BRIDGE RAIL
138+88 TO 139+38	15' RT.	62.5 ①		62.5 ①②		25.0						1	CONNECT TO BRIDGE RAIL
139+67 TO 140+00	15' LT.	37.5 ③		37.5 ③		37.5 ③					1		CONNECT TO BRIDGE RAIL
139+67 TO 139+92	15' RT.							25.0				1	CONNECT TO BRIDGE RAIL
324+00 TO 329+00	21.5' - 25.5' RT.						500.0		2				
327+73 TO 329+92	21.5'-55' LT.							187.5 ④		1		1	

① INCLUDES 25 LIN. FT. TRAFFIC BARRIER DESIGN 8319
② INCLUDES SALVAGING THE INP. ANCHORAGE ASSEMBLY
③ INCLUDES 25 LIN. FT. OF 15' RAD. BENDS
④ INCLUDES 12.5 LIN. FT. 5' RAD. BEND (CONVEX)





TRAFFIC BARRIER
MILLING PROFILE STA. 177 TO 184
AND STA. 322 TO 328

DRAINAGE

STATION	LOCATION	ITEM INPLACE	REMOVE PIPE CULVERT	SALVAGE PIPE CULVERT	CONSTRUCTION C.B.	CONSTRUCTION PAY HEIGHT	CONSTRUCTION T.C.	CASTING ASSEMBLY	PIPE SIZE	C.S.P.	R.C.P.	AB C.S.P.		END OF BARREL INLET	END OF BARREL OUTLET	END OF APRON INLET	END OF APRON OUTLET	APRONS G.S.	APRONS C.S. SAFETY APRON	INSTALL METAL APRONS	INSTALL CONCRETE APRONS	GUIDE POSTS TYPE B	INSTALL METAL CULVERT	BEDDING			REMARKS
			LIN. FT.	LIN. FT.	DESIGN	LIN. FT.	ELEV.	TYPE	DIA.	LIN. FT.	LIN. FT.	LIN. FT.		ELEV.	ELEV.	APRON	ELEV.	EACH	EACH	EACH	EACH	EACH	LIN. FT.	CU. YD.			
126+24 TO 126+66	48' LT	36" X 36' C.M.P.+ 2 APR																									LEAVE AS IS
131+50 TO 132+10	55' RT.	36" X 52' C.M.P.+ 2 APR																									LEAVE AS IS
135+48 TO 135+08	58' LT	36" X 52' C.M.P.+ 2 APR																									LEAVE AS IS
138+15 TO 138+75	64' RT	36" X 50' C.M.P.+ 2 APR																									LEAVE AS IS
140+28 TO 140+33	52' LT	18" X 44' C.M.P.+ 2 APR	3 (1)							2								1									
140+28 TO 140+74	54' RT	18" X 42' C.M.P.+ 2 APR																									LEAVE AS IS
144+91 TO 145+00	32' RT	24" X 92' C.M.P.+ 2 APR	2 (1)						24"					855.70	855.45				1								(4)
145+42 TO 145+51	32' RT.	24" X 42' C.M.P.+ 2 APR	2 (1)						24"	2				857.13	856.88				1								(8)
145+86 TO 145+90	34' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	2				857.32	857.31					1							
146+16 TO 146+22	34' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	4				857.44	857.41					1							
148+09 TO 148+40	39' RT	18" X 50' C.M.P.+ 2 APR																									LEAVE AS IS
148+14 TO 148+38	32' LT	15" X 40' C.M.P.+ 2 APR																									LEAVE AS IS
148+85 TO 149+23	47' RT	18" X 28' C.M.P.+ 2 APR																									LEAVE AS IS
149+96 TO 150+45	50' RT	15" X 44' C.M.P.+ 2 APR																									LEAVE AS IS
150+75 TO 150+93	56' LT	15" X 18' C.M.P.																									LEAVE AS IS
153+43 TO 153+49	31' RT	18" X 28' C.M.P.+ 2 APR		2 (1)					18"	4				869.84	869.80					1							
153+77 TO 153+83	31' RT	18" X 28' C.M.P.+ 2 APR		2 (1)					18"	4				870.07	870.04					1							
153+52 TO 153+66	34' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	12				869.45	869.45					1							
153+92 TO 154+00	34' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	6				870.25	870.10					1							
155+52 TO 155+68	35' RT	15" X 24' C.M.P.+ 2 APR		2 (1)					15"	14				872.77	872.70					1							
155+92 TO 156+08	35' RT	15" X 24' C.M.P.+ 2 APR		2 (1)					15"	4				873.75	873.55					1							
156+10 TO 156+12	33' LT	15" X 34' C.M.P.							15"						875.56			1									
156+46 TO 156+48	33' LT	15" X 34' C.M.P.							15"					877.00	876.95			1									
156+85 TO 156+97	35' RT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	10				876.29	876.23					1							
157+22 TO 157+34	35' RT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	10				876.50	876.44					1							
157+65 TO 157+75	34' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	8				878.36	878.24					1							
158+02 TO 158+10	34' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	6				878.75	878.68					1							
161+42 TO 161+54	35' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	10				878.85	878.74					1							
161+81 TO 161+93	35' LT	15" X 26' C.M.P.+ 2 APR		2 (1)					15"	10				878.43	878.32					1							
163+28 TO 163+32	51' LT	15" X 32' C.M.P.+ 2 APR		2 (1)					15"	2				877.05	877.03					1							
163+64 TO 163+68	51' LT	15" X 32' C.M.P.+ 2 APR		2 (1)					15"	2				877.12	877.10					1							
163+32 TO 163+84	45' RT	15" X 46' C.M.P.+ 2 APR																									LEAVE AS IS
164+35 TO 164+41	50' LT	15" X 42' C.M.P.+ 2 APR		2 (1)					15"	4				876.32	876.30					1							
165+87 TO 165+95	38' RT	12" X 30' C.M.P.	30						15"	42				871.80	870.40			2									
166+41 TO 166+55	34' LT	15" X 24' C.M.P.+ 2 APR		2 (1)					15"	8				872.21	872.00					1							
166+79 TO 166+97	34' LT	15" X 24' C.M.P.+ 2 APR		2 (1)					15"	16				871.20	871.19					1							
167+79 TO 167+81	36' LT	15" X 54' C.M.P.							15"									1									(4)
168+35 TO 168+51	40' LT	15" X 54' C.M.P.							15"	14				867.19	867.15			1									
175+01 TO 175+11	31' LT	18" X 40' C.M.P.							18"	8				855.14	855.01			1									(4)
175+51 TO 175+59	33' LT	18" X 40' C.M.P.							18"	6				854.36	854.30			1									(4)
175+05 TO 175+11	42' RT	18" X 38' C.M.P.							18"	4				855.45	855.44			1									
175+50 TO 175+58	42" RT.	18" X 38' C.M.P.							18"	6				854.05	854.00			1									
178+95	℄	48" X 76' C.M.P.	76																								
179+05	℄								60"			92		850.20	849.80			2				2		75 (11)			
219+65	℄	42" X 70' C.M.P.+ 2 APR																									LEAVE AS IS
220+86 TO 221+62	53' LT.	18" X 72' C.M.P.+ 2 APR																									LEAVE AS IS
225+73 TO 225+75	51' RT	15" X 32' C.M.P.							15"									1									
226+09 TO 226+11	51' RT	15" X 32' C.M.P.							15"											1							
230+25	℄	28" X 120' C.M.P.+2 APR																									LEAVE AS IS
235+20 TO 235+34	38' RT	15" X 28' C.M.P.+ 2 APR		2 (1)					15"	12				889.40	889.20					1							
235+62 TO 235+74	38' RT	15" X 28' C.M.P.+ 2 APR		2 (1)					15"	10				890.35	889.90					1							
236+49 TO 236+57	33' LT	15" X 28' C.M.P.+ 2 APR		2 (1)					15"	6				890.98	890.83					1							
236+85 TO 236+93	33' LT	15" X 28' C.M.P.+ 2 APR		2 (1)					15"	6				891.00	890.70					1							
249+12	℄	50" X 108' C.M.P.+2 APR																									LEAVE AS IS
249+68 TO 250+00	50' RT	15" X 62' C.M.P.+ 2 APR		2 (1)					15"	30				888.70	888.60					1							
250+88	48' RT				C OR G	3.5	894.00	(12)						890.74	890.64							1					
250+62 TO 250+90	48' RT	15" X 62' C.M.P.+ 2 APR		2 (1)					15"	26				890.54	890.35												
250+88 TO 251+78	48' RT	15" X 46' C.M.P.+ 2 APR		2 (1)					15"	28				991.40	890.74												
251+62 TO 251+80	48' RT	15" X 46' C.M.P.		2 (1)					15"	16				891.78	891.93					1							
255+01 TO 255+09	42' RT	15" X 62' C.M.P.+ 2 APR		2 (1)					15"	6				894.05	893.87					1							
255+43 TO 255+53	42' RT	15" X 34' C.M.P.							15"	8				893.09	892.89												
256+90 TO 257+65	56' RT	18" X 72' C.M.P.																									LEAVE AS IS
256+92 TO 256+98	44' LT	24" X 40' C.M.P.+ 2 APR							24"	4				891.41	891.30					1							(4)
257+38 TO 257+50	44' LT	24" X 40' C.M.P.+ 2 APR							24"	8				890.25	890.00					1							

(1) CONSISTS OF 1 APRON

(4) REPAIR DAMAGED END OF INPLACE CULVERT TO THE SATISFACTION OF THE ENGINEER. THIS IS INCIDENTAL WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER SPEC. 2501.

(8) INPLACE CULVERT SHALL BE CLEANED OF DIRT AND DEBRIS TO THE SATISFACTION OF THE ENGINEER. THIS IS INCIDENTAL WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER SPEC. 2501.

(11) AGGREGATE SHOULDERING, CLASS 5

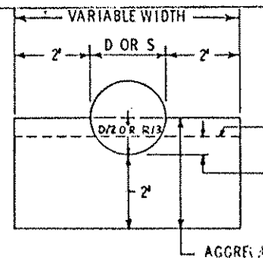
(12) CONSISTS OF CONCRETE FRAME AND CASTING NO. 731

DRAINAGE

STATION	LOCATION	ITEM INPLACE	REMOVE PIPE CULVERT LIN. FT.	SALVAGE PIPE CULVERT LIN. FT.	CONSTRUCTION C.B. DESIGN	CONSTRUCTION PAY HEIGHT LIN. FT.	CONSTRUCTION T.C. ELEV.	CASTING ASSEMBLY TYPE	PIPE SIZE DIA.	C.S.P. LIN. FT.	R.C.P. LIN. FT.	A B C.S.P. LIN. FT.		END OF BARREL INLET ELEV.	END OF BARREL OUTLET ELEV.	END OF APRON INLET ELEV.	END OF APRON OUTLET ELEV.	APRONS G.S. EACH	APRONS C.S. SAFETY APRON EACH	INSTALL METAL APRONS EACH	INSTALL CONCRETE APRONS EACH	GUIDE POSTS TYPE B EACH	INSTALL METAL CULVERTS LIN. FT.	BEDDING CU. YD.			REMARKS
257+91	℄	30" X 84' C.M.P.+ 2 APR																									LEAVE AS IS
258+41 TO 258+43	57' RT	15" X 52' C.M.P. + 2 APR																									LEAVE AS IS
259+38 TO 259+70	57' RT	15" X 38' C.M.P. + 2 APR																									LEAVE AS IS
260+50 TO 262+00	112' LT	12" X 140' C.M.P.																									LEAVE AS IS
260+86 TO 261+56	54' RT	15" X 68' C.M.P. + 2 APR																									LEAVE AS IS
262+73 TO 263+79	46' RT	15" X 58' C.M.P. + 2 APR		2 (1)					15"	4				897.87	897.83					1							
265+13 to 265+43	47' RT	15" X 26' C.M.P. + 2 APR																									LEAVE AS IS
269+17 TO 269+69	43' LT	15" X 44' C.M.P.	45						15"	48				902.21	901.96			2									
270+51 TO 271+15	43' LT	15" X 52' C.M.P. + 2 APR		56 (2)					15"	6				901.49	901.18					2			52				
271+64 TO 272+12	43' LT	15" X 26' C.M.P. + 1 APR		28 (3)					15"	18				900.98	900.74			1		1			26				
272+58 TO 273+04	43' LT	15" X 28' C.M.P. + 2 APR		32 (2)					15"	16				900.51	900.27					2			28				
273+28 TO 273+82	44' LT	15" X 26' C.M.P. + 2 APR		30 (2)					15"	24										2			26				
273+87 TO 273+97	35' RT	18" X 26' C.M.P. + 2 APR		2 (1)					18"	6				899.24	899.00					1							
274+23 TO 274+35	35' RT	18" X 26' C.M.P. + 2 APR		2 (1)					18"	8				898.86	898.80					1							
274+22 TO 274+76	45' LT	15" X 26' C.M.P. + 1 APR		28 (5)					15"	14				898.99	898.32			1		2			36 (5)				(6)
275+35 TO 276+01	45' LT	15" X 30' C.M.P. + 2 APR		34 (2)					15"											2			62 (5)				(7)
276+58 TO 277+02	36' LT	15" X 42' C.M.P. + 1 APR		44 (3)																							(9)
277+22 TO 277+26	36' RT	15" X 30' C.M.P.							15"	2				896.95	896.95			1									
277+56 TO 277+62	36' RT	15" X 30' C.M.P.							15"	4				896.21	896.11			1									
283+28 TO 285+93	60' RT	24" X 64' C.M.P. + 2 APR																									LEAVE AS IS
286+24	℄	36" X 74' C.M.P. + 2 APR																									LEAVE AS IS
322+94 TO 323+12	54' RT	18" X 52' C.M.P. + 2 APR		2 (1)					18"	16				889.24	889.24					1							
323+64 TO 323+90	54' RT	18" X 52' C.M.P. + 2 APR		2 (1)					18"	24				889.33	888.58					1							
328+16	℄	48" X 80' C.M.P.																									LEAVE AS IS
329+54 TO 331+24	51' LT	18" X 170' R.C.P.+ 2 APR																									LEAVE AS IS
329+75 TO 330+30	50' RT	24" X 50' C.M.P. + 2 APR																									LEAVE AS IS
330+49 TO 330+59	50' RT	18" X 36' C.M.P. + 2 APR		2 (1)					18"	8				890.10	890.05					1							
330+95 TO 331+01	50' RT	18" X 36' C.M.P. + 2 APR		2 (1)					18"	4				890.29	890.27					1							
332+73 TO 332+75	53' LT	18" X 40' C.M.P.							18"									1									
333+15 TO 333+17	53' LT	18" X 40' C.M.P.							18"									1									
334+05 TO 334+15	54' RT	15" X 60' R.C.P. + 2 APR		6 (1)					15"		4 (10)			892.19		892.18					1 (10)						
334+74 TO 334+86	51' RT	15" X 60' R.C.P. + 2 APR		6 (1)					15"		6 (10)				892.46	892.48					1 (10)						
335+85 TO 335+95	48' RT	18" X 104' R.C.P.+ 2 APR																									LEAVE AS IS
341+10 TO 342+27	48' RT	28" SPAN X 106' RCP+2 APR																									LEAVE AS IS
355+74 TO 356+76	43' LT	12" X 90' R.C.P. + 2 APR																									LEAVE AS IS
345+81 TO 345+95	38' RT	18" X 28' C.M.P. + 2 APR		2 (1)					18"	12				898.42	898.30					1							
346+23 TO 346+29	38' RT	18" X 28' C.M.P. + 2 APR		2 (1)					18"	4				899.85	899.93					1							
347+79 TO 347+95	32' RT	15" X 26' C.M.P. + 2 APR		2 (1)					15"	14				900.10	900.10					1							
348+22 TO 348+32	32' RT	15" X 26' C.M.P. + 2 APR		2 (1)					15"	8				900.62	900.45					1							
354+68 TO 354+76	37' LT	15" X 26' C.M.P. + 2 APR		2 (1)					15"	6				901.18	900.97					1							(4)
355+02 TO 355+06	37' LT	15" X 26' C.M.P. + 2 APR		2 (1)					15"	2				902.17	902.10					1							
357+83 TO 357+94	49' LT	24" X 32' C.M.P. + 2 APR		4 (1)					24"					904.20	904.15				1								
358+21 TO 358+30	49' LT	24" X 32' C.M.P. + 2 APR		4 (1)					24"					904.41	904.36				1								
358+76 TO 358+85	49' LT	24" X 36' C.M.P. + 2 APR		4 (1)					24"					904.73	904.72				1								
359+21 TO 359+25	49' LT	24" X 36' C.M.P. + 2 APR		4 (1)					24"					904.71	904.70				1								
360+68 TO 360+74	47' LT	15" X 22' C.M.P. + 2 APR		2 (1)					15"	4				905.99	905.95					1							
360+96 TO 361+00	47' LT	15" X 22' C.M.P. + 2 APR		2 (1)					15"	2				906.14	906.12					1							
362+36 TO 362+66	38' RT	15" X 30' C.M.P.																									LEAVE AS IS
366+07 TO 366+13	34' LT	15" X 22' C.M.P. + 2 APR		2 (1)					15"	4				903.38	903.29					1							
366+35 TO 366+45	34' LT	15" X 22' C.M.P. + 2 APR		2 (1)					15"	8				902.80	902.80					1							
366+08 TO 366+14	35' RT	15" X 22' C.M.P. + 2 APR		2 (1)					15"	4				903.38	903.38					1							
366+36 TO 366+48	35' RT	15" X 22' C.M.P. + 2 APR		2 (1)					15"	10				903.25	903.25					1							

(1) CONSISTS OF 1 APRON.
(2) INCLUDES 2 APRONS.
(3) INCLUDES 1 APRON.
(4) REPAIR DAMAGED END OF INPLACE CULVERT TO THE SATISFACTION OF THE ENGINEER. THIS IS INCIDENTAL WORK FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER SPEC. 2501.
(5) PIPE CULVERT TO BE CUT TO DESIRED LENGTH AS DIRECTED BY THE ENGINEER. THIS IS INCIDENTAL WORK INCLUDED UNDER ITEM NO. 2501.
(6) USE 10' OF SALVAGED PIPE & APRON FROM LT. STA. 276+75.
(7) USE 32' OF SALVAGED PIPE FROM LT. STA. 276+75.
(9) USE THIS SALVAGED PIPE AT LT. STA. 274+50 AND LT. STA. 275+65.
(10) TIE ALL JOINTS.

CULVERT BEDDING



D = OUTSIDE DIAMETER OF ROUND PIPE
R = OUTSIDE RISE OF PIPE-ARCH
S = OUTSIDE SPAN OF PIPE-ARCH

NOTE:
EXCAVATION NECESSARY FOR CULVERT BEDDING IS TO BE INCIDENTAL FOR WHICH NO DIRECT PAYMENT WILL BE MADE. COMPENSATION SHALL BE INCLUDED UNDER SPEC. 2501

DRAINAGE TABULATION
CULVERT BEDDING DETAIL

Fed. Proj. No.

Bunker Lake Blvd.
Co.Rd. 116

Red

Red

Red

Inplace STOP
Install ALL WAY

APPROXIMATE
0 500 1000
DISTANCE IN FEET

Flasher

Flag

* Deliver to locations shown, but do NOT install unless told to do so by by Traffic personal

Use 48" STOP signs

* Inplace STOP
install ALL WAY

Hanson Blvd.
Co.Rd. 78

131st Avenue

THIS ROAD WILL BE DETOURED
Date to be determined

60" x 48" No Borders
Black on Reflective Orange

Install a minimum of
7 days before the detour
is implamented

Crooked Lake Blvd.
Co.Rd. 18

Close Tight

Close Tight

Close Tight

Main Street

Thrush St.

Partridge St.

Ibis St.

125th Lane

500' 750' 1000'

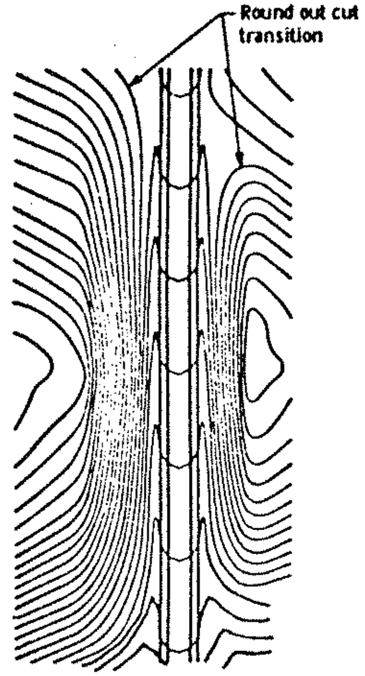
T.H.242
Main Street

T.H.10

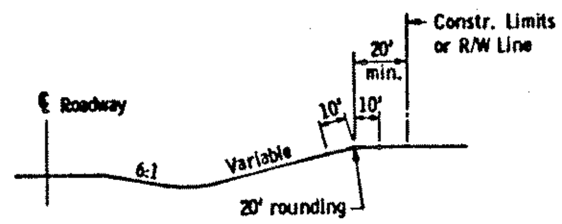
T.H.-242 DETOUR

State Proj. No. 0212 - 28

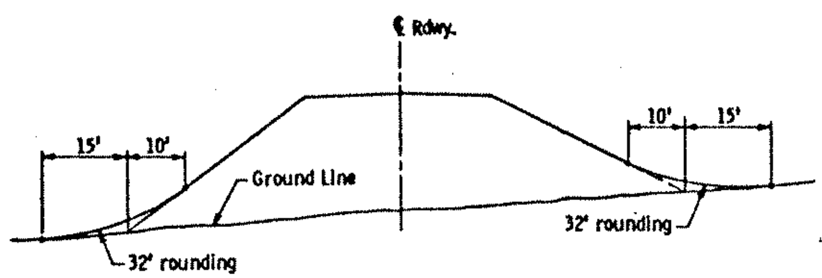
Sheet No. 10 of 34 Sheets



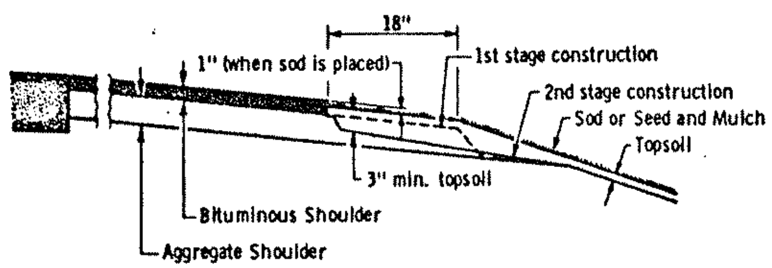
CONTOURING ROAD CUTS



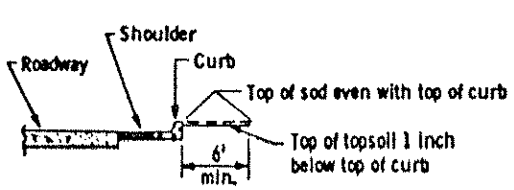
ROUNDING BACK SLOPES



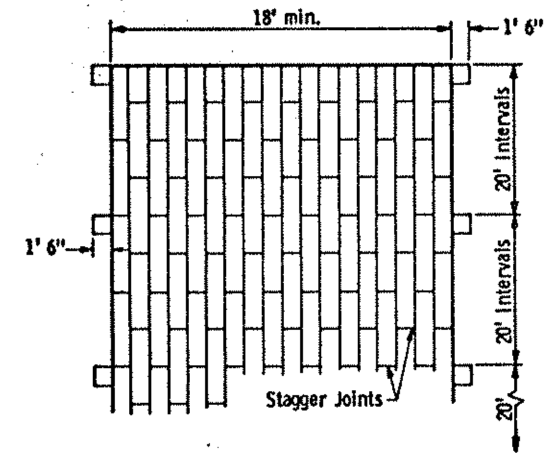
SHAPING FOR DRAINAGE ALONG THE TOE OF FILL SLOPES



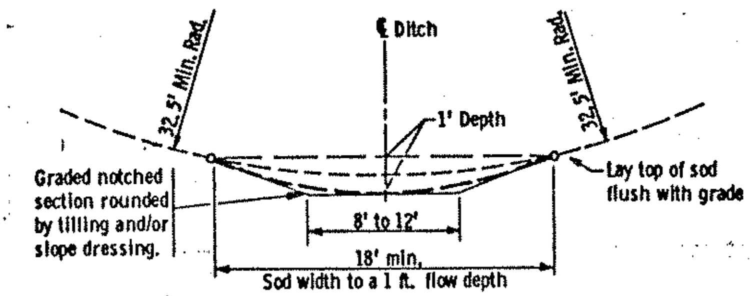
SHAPING AND TOPSOILING INSLOPES



SHAPING ADJACENT TO CURBS WHEN SOD IS PLACED

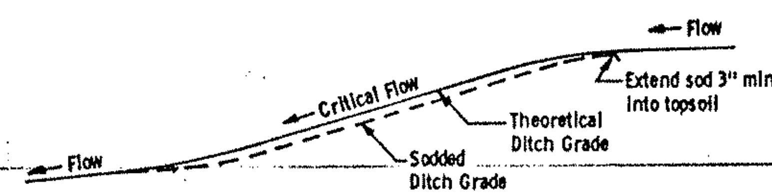


PLAN



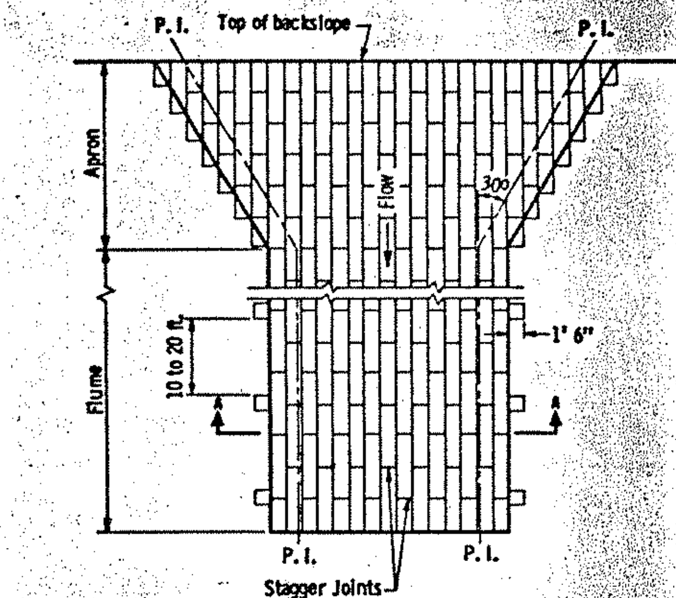
SODDED DITCH CROSS SECTION

Ditches having a minimum radius of 32.5 feet and requiring sod shall be constructed according to the above details. Where ditch radius is less than 32.5 feet, notching is not required. Sod a minimum of 18 feet in width.

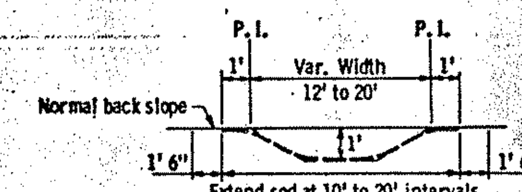


DITCH PROFILE

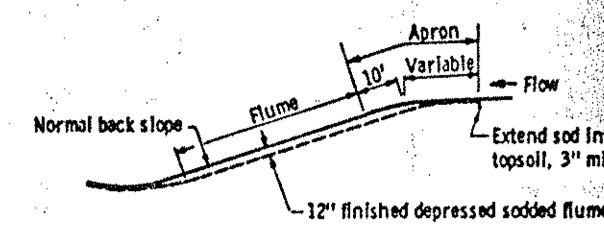
SODDED DITCH DETAILS



PLAN



SECTION A-A



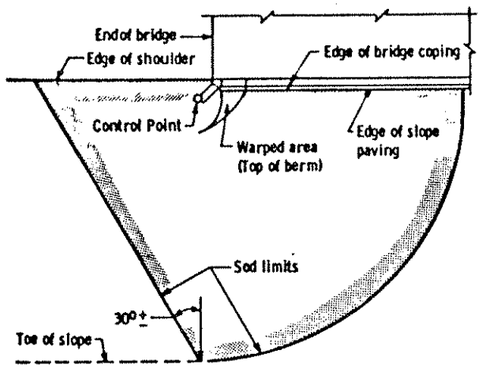
LONGITUDINAL CROSS SECTION

SODDED FLUME DETAILS

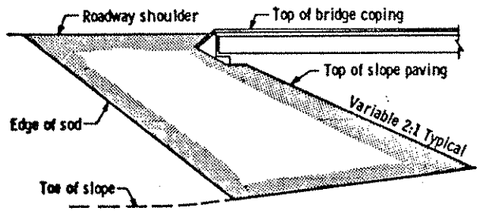
APPROVED Dec. 17, 1974
Leonard G. Eite
Engineering Standards Engineer
MATERIALS RESEARCH AND STANDARDS DIVISION

EROSION CONTROL

Fed. Proj. No.

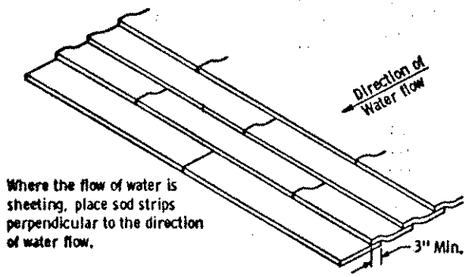


PLAN

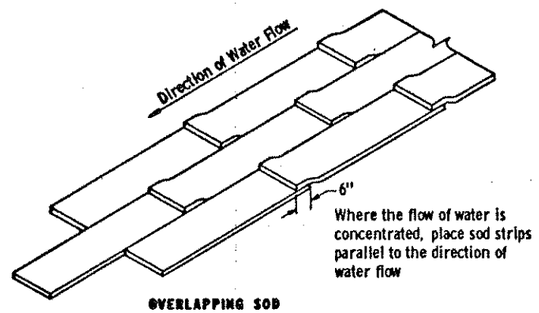


ELEVATION

SODDING LIMITS AT BRIDGE APPROACH FILLS

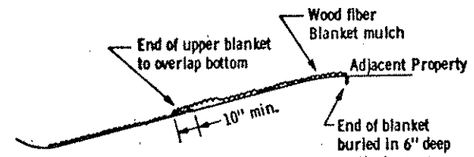


SHINGLING SOD

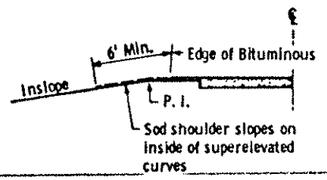


OVERLAPPING SOD

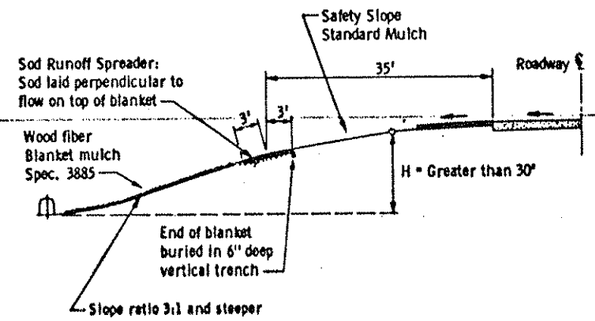
SPECIAL SOD PLACEMENT TECHNIQUES



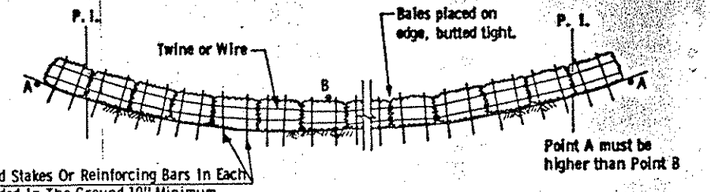
WOOD FIBER BLANKET INSTALLATION ON A CUT SLOPE (WHEN REQUIRED)



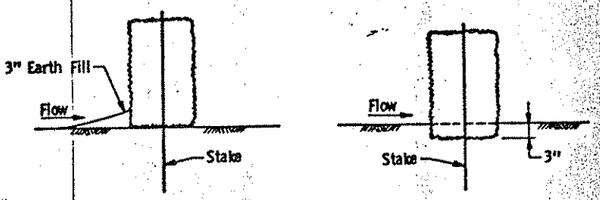
SODDING INSLOPES OF SUPERELEVATED CURVES



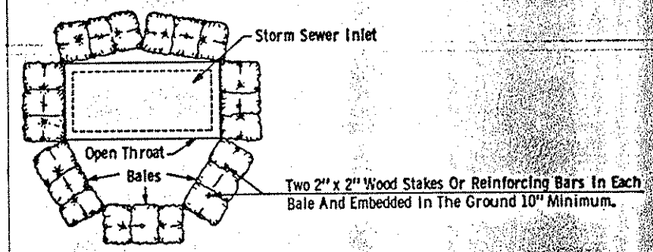
WOOD FIBER BLANKET INSTALLATION ON A SAFETY FILL SLOPE (WHEN REQUIRED)



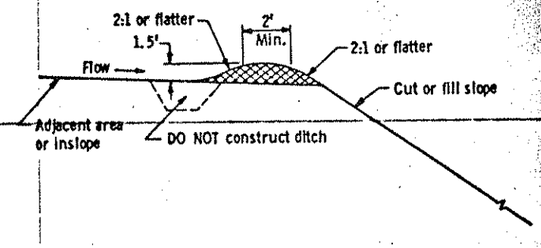
BALE HAY OR STRAW DITCH CHECK



DITCH CHECK SECTIONS



BALE DIVERSION TO PROTECT STORM SEWER INLETS



TEMPORARY OR PERMANENT SLOPE PROTECTION DIKE

APPROVED June 18, 1979

Director
ENGINEERING STANDARDS SECTION

EROSION CONTROL

State Proj. No. 0212-28 (T.H. 242) Sheet No. 12 of 34 Sheets

TREES AND BRUSH

TRAIL

TREES AND BRUSH

TRAIL

TREES AND BRUSH

TREES AND BRUSH

BEAVER DAM

102,000

120

125

130

T-BUR

SCATTERED BRUSH

STA. 117+70.

BEGIN S.P. 0212-28 (T.H. 242)

101,500

BRUSH

101,500

PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242)

SHEET NO. 13 OF 34 SHEETS

SCATTERED BRUSH & TREES

EVG.

EVG.

EVG.

CREEK

BR. NO. 3656

TRAIL

SHED

1-S-F

GAR.

DECK

102,000

4"GAS

15"X40'SMP
+2 APR.

135

140

145

P I

T-BUR

PC 143+42.30

2"GAS

18"X30'CMP
+2 APR.

18"X28'CMP
+2 APR.

MIXED

GR. DR.

GAR.

STORAGE BIN

SHED

COON

GP

TRAIL

B.M. 0212 A
STD. DISK IN CONC. ABUT.
STA. 139+67 RT. ℄, S.E. COR. (BR. NO. 3656)
ELEV. 862.164

101,500

LI PI 146+37.30
Δ=000-57-57.9RT
D=000-09-49.5
R=34990.368
L=589.986
T=295.000
X=873676.860
Y=101881.140

SHED

GAR. GR.DR.

PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242)

SHEET NO. 14 OF 34 SHEETS

TRAIL
SHED
2-S-F
DECK
DOG HSE
OUT HSE
GAR.
1-S-F 2309
WALL
1-S-F 2321
12'BIT DRWY
15'X18'CMP
4'GAS
TRAIL
SHED
GAR.
1-S-F 2245
GR.DR.
15'X26'CMP +2 APR.
D.I.
15'X34'CMP
SHED
BARN
SHED
SHED
2-S-ST 2209
DIRT DRWY
4'GAS
20'BIT.W/CURB
15'X 26'CMP +2 APR.
MIXED
DECK
GAR.
1-S-F 2155
GR.DR.
GR.DR.
15'X26'CMP +2 APR.
4'GAS
MIXED
TRAIL
1-S-F 2127
15'X32'CMP +2 APR.
GRAV.DRWY.
12'BIT.DRWY.
W/CURB
GAR.
PLANTERS
1-S-F
15'X42'CMP +2 APR.
MIXED

150 155 160

T-BUR
CMP +2 APR.
LP
15'X44'CMP +2 APR.
2'GAS
EVG.
EVG.
MIXED
1-S-F 2308
GAR.
LI PT 149+33.24
LI POT 149+32.28
1-S-F 12432
GAR
GR.DR.
1-S-F 12424
GAS LAMP
THRUSH ST. (GRAV.)
LP
GR.DR.
GAR
SHED
1-S-F 2254
2-S-F 2230
DECK
DECK
18"X28'CMP +2 APR.
GR.DR.
MIXED
MIXED
1-S-F 2214
GAR.
MIXED
BIRD HSE.
PUMP HSE
MIXED
15'X24'CMP +2 APR.
15'X26'CMP +2 APR.
2'GAS
GAR.
SHED
1-S-F 2158
GR.DR.
MIXED
1-S-F
LI PT 151+64.52
TRAIL
MIXED
SHED
MIXED
SHED
MIXED
SHED
MIXED
SHED
1-S-F 2148
ELEC. POLE
GR.DR.
GR.DR.
2'GAS
EVG.
1-S-F 2116
GAR.
EVG.
1-S-F
SHED
GAR.
1-S-F
CONC.
SHED
MIXED
1-S-F 12434
MIXED
SHED
SHED
MIXED
SHED
1-S-F
3"GAS
15'X46'CMP +2 APR.
LP
MIXED
(GRAV.)
GAR
1-S-F
PATIO
SHED
SHED
EVG.
EVG.
PARTRIDGE ST.
PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242) SHEET NO. 15 OF 34 SHEETS

B.M. 0212 F
STD. DISK IN CONC. MON.
STA. 166+90 67' LT. ℄ 26' EAST OF ℄ ENT.
ELEV. 878.689

SHED
BRD. HSE.
GAR.
1-S-F 2045
1-S-F 2061
GRAV.
TRAIL
WOOD SIGN
4"GAS
15'X24'CMP +2 APR.
15'X54'CMP
18"X40'CMP
GRAVEL
48"X76"CMP INR
15'X24' RCP
165
170
175
180
T-BUR
12"X30'CMP
18"X38'CMP
POT 171+83.99
POT 171+83.40
GRAV.
1-S-F 2108
PATIO (2)
SHED
PATIO
BRUSH PILES
EARTHWORK
TRAIL
GAR.
EVG.
1-S-F
M/L

STA. 179+05 PL. 60"X 92' AB-CS PIPE CULVERT + 2 APRONS
END OF BBL. INL. EL. 850.20
END OF BBL. OUT. EL. 849.80

COUNTY DITCH NO. 34 BRANCH NO. 4

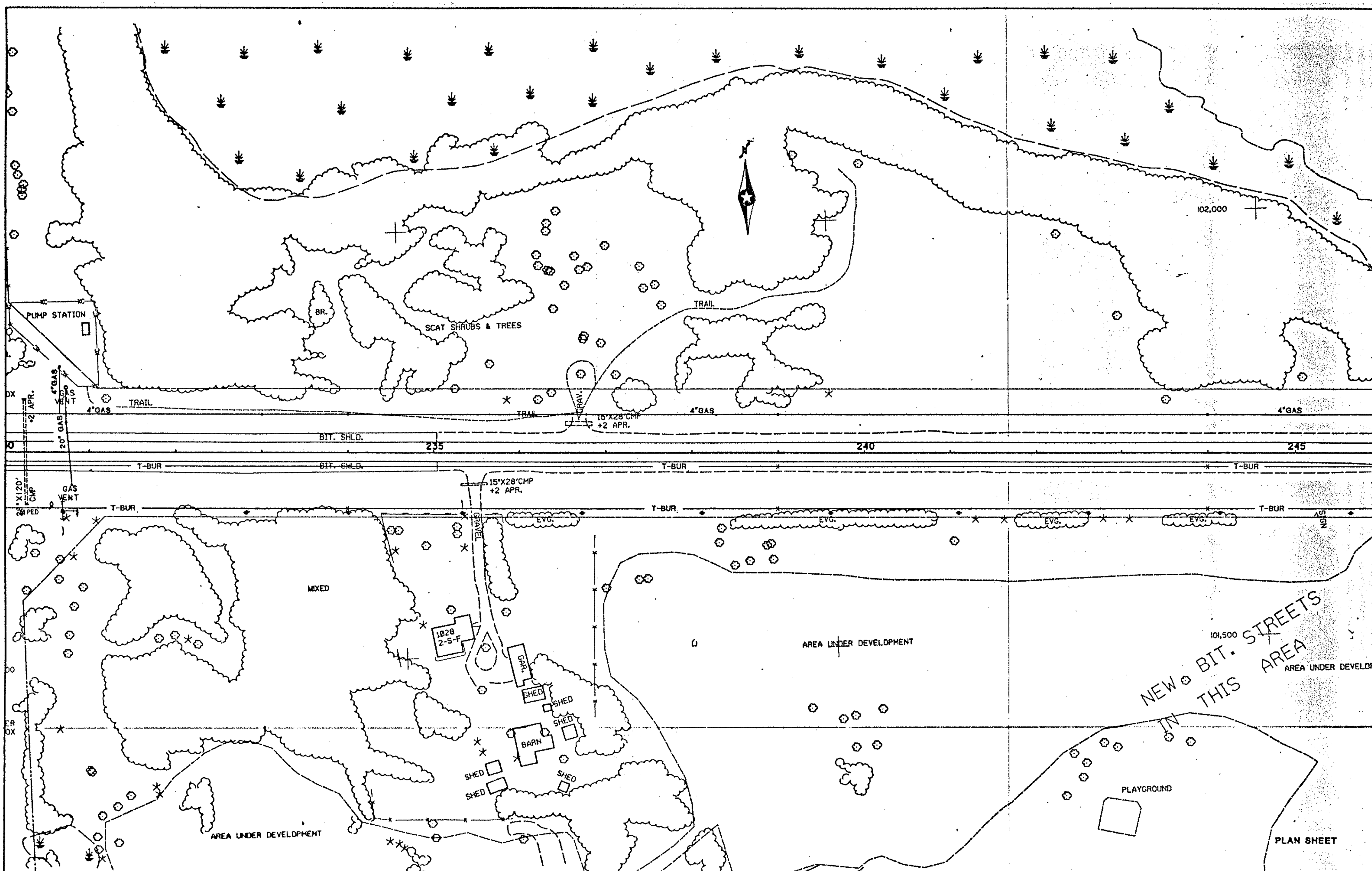
182
185
BIT. SHLD.
BIT. SHLD.
STA. 183+00
BEGIN EXCEPTION AREA

B.M. 0212 G
STD. DISK IN CONC. MON.
STA. APPROX. 198+00 67' RT. ℄
S.W. QUAD. HANSON BLVD.
ELEV. 893.983

PLAN SHEET

BR.
SCAT BRUSH & TREES
SCATTERED BRUSH & TREES
BRUSH
BR.
BR.
BRUSH
BR.
28'CONC BLK. WALL
1 3/4" GAS
40'X70' CMP +2 APR.
18'X72' CMP +2 APR.
4"GAS
4"GAS
TRAIL
WOOD POSTS
GRAV.
BURLINGTON NORTHERN R.R.
BR.
4"GAS
215
220
PIOR - 225
BIT. SHLD.
230
T BUR
T-BUR
T-BUR
BIT. SHLD.
T-BUR
T-BUR
T-BUR
15'X32' CMP +2 APR.
T-BUR
T-BUR
TRAIL
STA. 214+67
SCATTERED TREES & BRUSH
BRUSH
MIXED
EVG.
MIXED
TRAIL
END EXCEPTION AREA
SCATTERED TREES & BRUSH
MIXED
1-S-ST 1148
PATIO
PATIO
MIXED
MIXED
& TREES
GAR.
SHED
SHED
MIXED
MIXED
PLAN SHEET
LI PIOR 224+36.05
Δ=000°03'32.6" T
R=L=T=0.
X=881473.195
Y=101772.575

STATE PROJ. NO. 0212-28(T.H.242) SHEET NO. 17 OF 34 SHEETS



PUMP STATION
BR.
SCAT SHRUBS & TREES
TRAIL
102,000
4"GAS
GAS VENT
20" GAS
+2 APR.
GRAV.
15"X28"CMP +2 APR.
BIT. SHLD.
235
240
245
T-BUR
CMP
GAS VENT
GRAVEL
EVG.
MIXED
1028 2-S-F
GAR.
SHED
BARN
AREA UNDER DEVELOPMENT
101,500
NEW BIT. STREETS IN THIS AREA
PLAYGROUND
PLAN SHEET

LI PI 250+33.50
Δ=003-16-12.0LT
D=000-29-52.8
R=11505.071
L=656.622
T=328.400
X=884069.531
Y=101696.502

LI PC 247+05.10

LI POT 253+62.26
LI PT 253+61.72

102,000

FOLEY BLVD. (BIT.)

SHRUBS IN BLK. WALL

12"X148' CMP

BLK. WALL (50' BIT.)

38"X84'CMP +2 APR.

24"X48'CMP

DIRT

4"GAS

260

255

250

T-BUR

P-BUR

P.I.

30"X108'CMP +2 APR.

15"X62'CMP +2 APR.

15"X46'CMP +2 APR.

15"X34'CMP

18"X72' CMP

15"X52' CMP +2 APR.

15"X38' CMP +2 APR.

MIXED

GRAVEL

TRAIL

0' BIT.

5'CONC.SDWK.

OLIVE ST. (26'BIT.)

18'CONC.

28' BIT.

2-S-F 760 750 DECK DECK

1-S-F 744 GAR.

2-S-F 12453 DECK

12431 PATIO DECK

1-S-F 724 22' CONC. DECK PATIO

BIT. GAR.

SHED

2-S-F 688 DECK PATIO

S-S 644

SMALL EVG.

1249B 1-S-ST

GAR.

EVG.

UTIL BOX

2-S-F 12484

2-S-F 12441

2-S-F 12487

DEVELOPMENT

REDWOOD ST. (28' BIT.)

MH

SIDS

PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242)

SHEET NO. 19 OF 34 SHEETS

FOLEY BLVD. (BIT.)
LARCH ST. (GRAVEL)
B.M. 0212 L
STD. DISK IN CONC.MON.
STA. 265+47 76' RT.℄
ELEV. 900.259
CONST. RT. TURN LANE
LI POT 267+92.10
PTOR
PLAN SHEET
STATE PROJ. NO. 0212-28(T,H.242)
SHEET NO. 20 OF 34 SHEETS

102,000

GRAVEL

TREES AND BRUSH

TREES AND BRUSH

SCATTERED BRUSH & TREES

BRUSH & TREES

BEGIN EXCEPTION AREA

STA. 288+86

B.M. 0212 M
STD. DISK IN CONC.MON.
STA.304+12 N.E. QUAD. UNIV. AVE.
ELEV. 990.225

15'X42' CMP +1 APR.

4"GAS

4"GAS

36"X74' CMP +2 APR.

4"GAS

18"X50

20

15:1

CONST. BIT. SHOULDER

BIT. SHLD.

PTOR

280

285

290

T-BUR

T-BUR

T-BUR

BIT. SHLD.

15'X30' CMP

24"X64' CMP +2 APR.

T-BUR

T-BUR

T-BUR

T-BUR

BIT.

18' BIT.

MIXED

1-S-F 358

GAR.

SHED

MIXED

MIXED

101,500

DECK

12456 2-S-F

16' BIT.

MIXED

SHED

MIXED

SHED

GRAVEL

POLE

1-S-F 12416

GRAVEL

FLINTWOOD ST.

12449 2-S-F

GRAVEL

SHED

MIXED

SHED

BRUSH & TREES

BRUSH & TREES

SHED

SHED

DECK

1243I 2-S-F

GRAVEL

BARN

FLAG POLE

LI PIOR 276+95.90
Δ=000-29-57.9 T
R=L=T=0.
X=886730.546
Y=101770.446

PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242)

SHEET NO. 21 OF 34 SHEETS

BASEBALL FIELD

FILL AREA

TREES AND BRUSH

END EXCEPTION AREA

STA. 320 + 84

4"GAS

325

330

335

T-BUR

TRAIL

18"X52'CMP +2 APR.

24"X80' CMP +2 APR.

L1 POT 330+37.37

L1 POT 330+36.79

JEFFERSON AVE. (48'BIT.)

CURB

CONC. GUTTER

B618 C&G

B612 C&G

B615 C&G

D4 C&G

125 TH LANE (32' BIT.)

EVG.

DITCH WITH WATER

36"X136"RCP +2 6'APR.

SAN. MH

MH

MADISON

28' BIT.

22' BIT.

16'BIT.

1-S-F 713 709

2-S-F 721 717

TELE. PED.

D.I.

32' ENT.

PHONE BOOTH

G.P.

28'X28' CONC. SLAB

SIGN

WOOD FENCE

18"X70'RCP

18"X48'CMP

16"X36' CMP APR.

5' CONC. SDWK.

15"X60'RCP +2-6'APR.

12"X88'CMP +2 APR.

CONC. SDWK.

20' BIT.

28' BIT.

GOAL POST

PUMP

B.M. 0212 N
STD. DISK IN CONC. MON.
STA. 330+68 129' RT. ℄
ELEV. 893.700

PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242)

SHEET NO. 22 OF 34 SHEETS

2-S-F 729 725
2-S-F 737 733
2-S-F 733 749
2-S-F 769 765
2-S-F 805 801
2-S-F 821 817
2-S-F 837 833
2-S-F 851
1.5-S-ST
DECK (2)
16'BIT.
18'BIT.
38'BIT.
32'BIT.
22'BIT.
26'BIT.
28'BIT.
(32' BIT.)
(28' BIT)
D4 C&G
B615
B615 C&G
UTILITY BOX
DECK
TELE.PED.
UTIL. BOX
UTILITY B
MH
CB
SIGN
JACKSON ST.
G.P.
BIT.
1-S-BLK
4"GAS
3"GAS
3 1/4"GAS
340
345
350
T-BUR
18"X104'RCP +2 APR.
28"X106'RCP +2 APR.
18"X28'CMP +2 APR.
15"X26'CMP +2 APR.
15"X12'CMP +2 APR.
12"X88'CMP +4PR.
12"X90'CMP +4PR.
12"X92'CMP +4PR.
BIT. ISL.
5'CONC.SDWK.
5'CONC. SDWK.
CONC. SDWK.
EVG.
GRAVEL
D.I.
FLAG POLE
RAIL
FENCE
RAIL FENCE
SHRUB
ROOSEVELT
JR. HIGH SCHOOL
1-S-BR
MIXED
GAR.
2-S-ST
SHED
WINDMILL
2-S-F 867
1-S-F 807
DUNE DRIVE
PLAN SHEET
PUMP
STATE PROJ. NO. 0212-28(T.H.242)
SHEET NO. 23 OF 34 SHEETS

125 TH LANE

MINI - GOLF COURSE

POLK ST.

JOHNSVILLE SCHOOL

B.M. 0212P
STD. DISK IN CONC. MON.
STA. 361+77 66' LT.℄
ELEV. 909.362

BSKBALL HOOPS

BALL COURT

OLD FD'N

NEW FND'N

PUMP HSE.

UTIL. BOX

TELE. PED.

BIRD HSE.

BLK.WALL

OAK PARK BLVD.

TRAIL

SMALL SCATTERED TREES

UNDER CONSTRUCTION

LI PIOR 357+01.52
Δ=000-03-17.8 T
R=L=T=0.
X=894734.505
Y=101899.330

(INSERT)

STA. 368 + 02

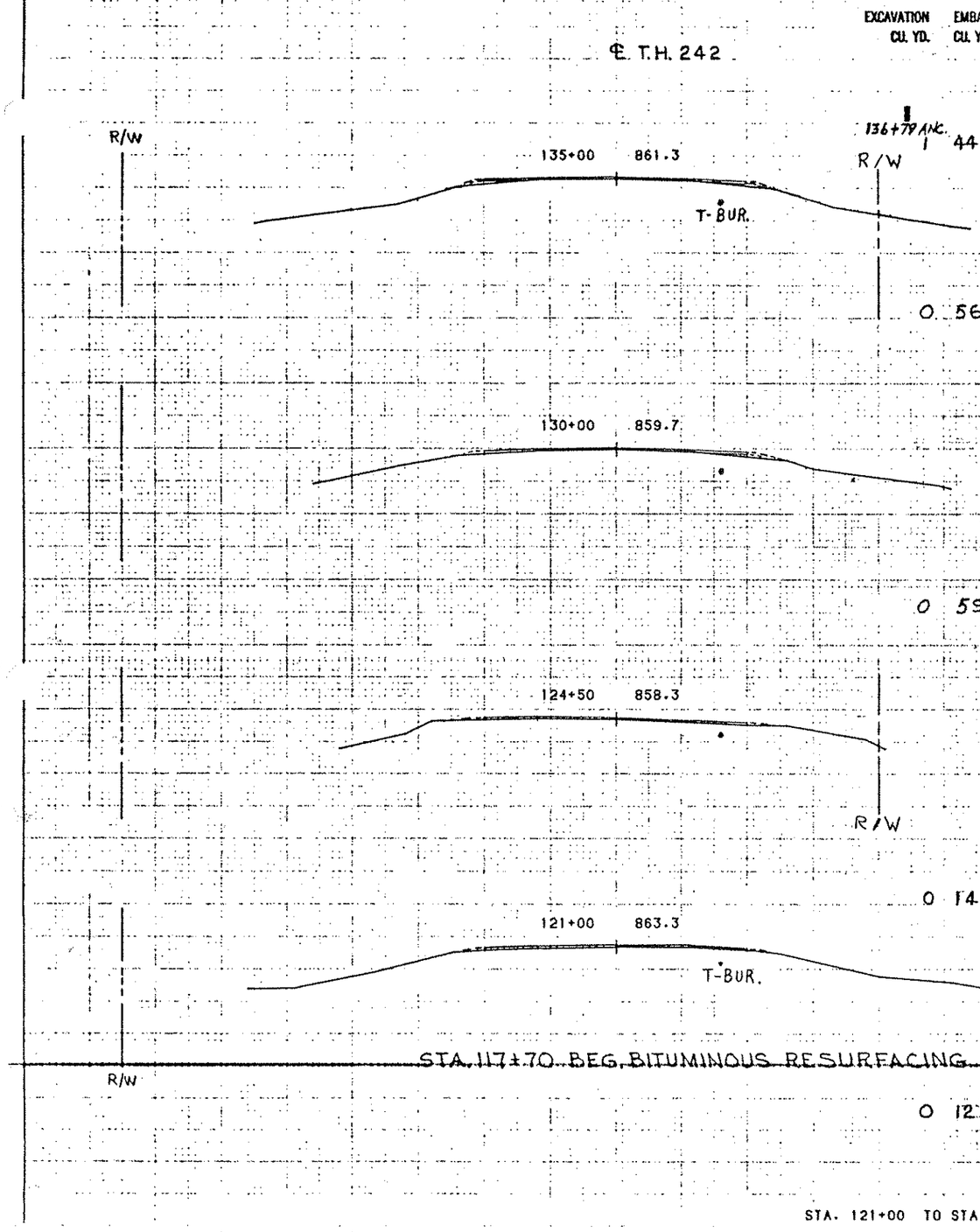
STA. 371 + 00

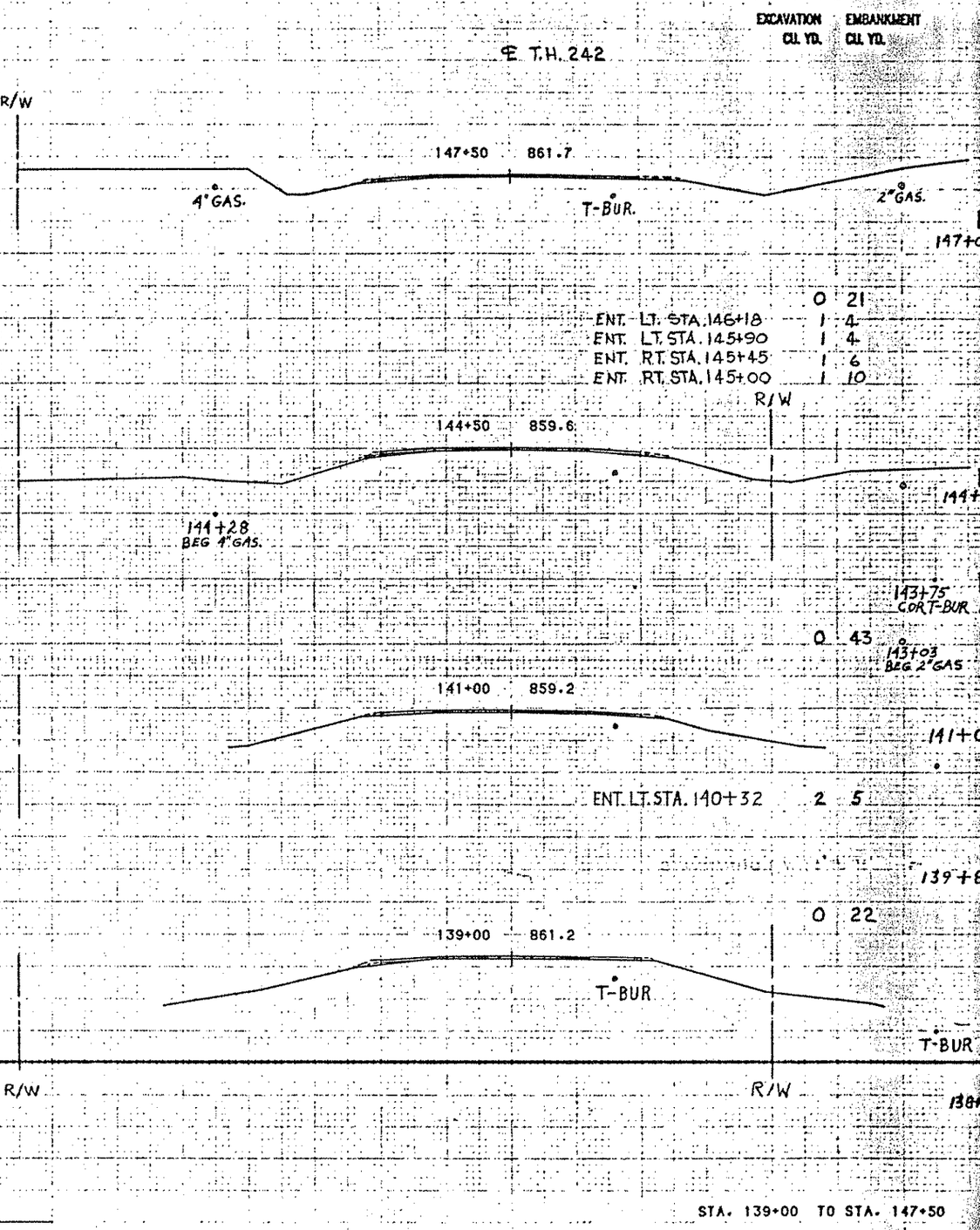
END S.P. 0212-28 (T.H. 242)

PLAN SHEET

STATE PROJ. NO. 0212-28(T.H.242)

SHEET NO. 24 OF 34 SHEETS


℄ T.H. 242
EXCAVATION CU. YD.
EMBANKMENT CU. YD.
R/W
135+00 861.3
T-BUR.
136+79 ANC.
44
136+77 P.P.
R/W
135+00 P.P.
T-BUR.
0 56
130+00 859.7
0 59
124+50 P.P.
124+50 858.3
R/W
122+87 P.P.
0 14
121+45 P.P.
121+00 863.3
T-BUR.
132' R/W
T-BUR.
STA. 117+70 BEG. BITUMINOUS RESURFACING
R/W
0 12
STA. 121+00 TO STA. 135+00


℄ T.H. 242
EXCAVATION CU. YD.
EMBANKMENT CU. YD.
R/W
147+50 861.7
4° GAS.
T-BUR.
2° GAS.
147+00
0 21
ENT. LT. STA. 146+18 1 4
ENT. LT. STA. 145+90 1 4
ENT. RT. STA. 145+45 1 6
ENT. RT. STA. 145+00 1 10
R/W
144+50 859.6
144+49
141+28
BEG 4° GAS.
143+75
COR T-BUR 143
0 43
143+03
BEG 2° GAS
141+00 859.2
141+04
ENT. LT. STA. 140+32 2 5
139+84
0 22
139+00 861.2
T-BUR
T-BUR
R/W
R/W
STA. 139+00 TO STA. 147+50

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242

R/W

ENT. LT. STA. 164+30 — 2 — 7
ENT. LT. STA. 163+65 — 2 — 9
ENT. LT. STA. 163+30 — 2 — 6

162+25 882.2

4"GAS

T-BUR

2" GAS

R/W

2 — 39
ENT. LT. STA. 161+85 — 2 — 14
ENT. LT. STA. 161+50 — 2 — 14
ENT. LT. STA. 158+05 — 1 — 8
ENT. LT. STA. 157+75 — 1 — 8
ENT. RT. STA 157+22 — 2 — 25
ENT. RT. STA. 156+95 — 2 — 25
ENT. LT. STA. 156+45 — 0 — 1
ENT. LT. STA. 156+12 — 1 — 2

156+88 T.P.P.

156+75 880.0

155+44 A.H.C.

155+17 T.P.P.

0 — 30
ENT. RT. STA 155+93 — 2 — 8
ENT. RT. STA. 155+60 — 2 — 13

154+50 875.0

154+10 T.P.P.

1 — 25
ENT. LT. STA. 153+90 — 2 — 13
ENT. LT. STA 153+80 — 2 — 11
ENT. RT. STA. 153+65 — 2 — 13
ENT. RT. STA. 153+50 — 2 — 11

STA. 153+52 END +0.5% D.G. LT. EL. 869.45

153+00 871.5

4"GAS

T-BUR

2" GAS

152+86 T.P.P.

R/W

R/W

STA. 153+00 TO STA. 162+25

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242

173+60 T.P.P.

98 . 205

R/W

R/W

173+00 863.0

T-BUR

4"GAS.

0 — 51 — 172+14 T.P.P.

168+43 871.3

ENT. LT. STA. 168+40 — 2 — 25
0 — 13

168+00 T.P.P.

167+50 873.2

0 — 23 — 166+58 T.P.P.
ENT. LT. STA. 166+80 — 2 — 20
ENT. LT. STA. 166+50 — 2 — 14
ENT. RT. STA. 166+40 — 2 — 16
ENT. RT. STA. 166+00 — 1 — 6

165+00 878.1

165+17 T.P.P.

163+13 3"GAS

T-BUR

R/W

R/W

2"CORGAS 163+38

4"GAS TEE. 163+13

3"x2" GAS TEE 163+13

STA. 165+00 TO STA. 173+00

STA. 152+00 BEG. +0.5% D.G. LT. EL. 868.69

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242

R/W

178+90 859.88

12'R 4:1 6:1 6:1 T-BUR 8'R 2.5:1 3:1 2:1

+95 48"X76' C.M.P. INP. (NO APRONS)

4" GAS INL. 851.78

OUT. 847.74

16 74

142 236

14.5'R 178+50 859.55 4:1 6:1 4:1 2.5:1 5:1 3:1

STA. 178+16 BEG. -3.0% D.G. LT. EL. 852.82 END -0.7%

STA. 178+06 BEG. -3.0% D.G. RT. EL. 952.70 END -0.5%

176 243

178+00 859.15 178+06 T.P.P.

147 244

177+50 859.06 6:1

113 203

16.5'R 177+00 858.87 16.5'R 3:1 6:1 6:1 3:1 T-BUR 4" GAS

176+58 T.P.P.

STA. 176+00 BEG. SLOPE CONSTRUCTION LT. & RT.

STA. 176+00 BEG. -0.7% D.G. LT. EL. 854.34

STA. 176+00 BEG. -0.5% D.G. RT. EL. 853.70

ENT.	LT. STA. 175+50	2	14
ENT.	RT. STA. 175+50	2	10
ENT.	LT. STA. 175+10	2	14
ENT.	RT. STA. 175+10	2	8

R/W

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242

R/W

92 146

181+00 861.42 16.5'R 3:1 6:1 T-BUR 6:1 16.5'R 3:1 4" GAS

180+96 T.P.P.

92 162

180+50 861.30 3:1

STA. 180+37 BEG. +1.2% D.G. LT. EL. 853.57 END +3.0%

113 145

STA. 180+34 BEG. +1.0% D.G. RT. EL. 853.4 END +3.0%

180+00 861.04 6:1 3:1 2:1

246 171

179+50 860.75 16.5'R 4:1 179+51 T.P.P. 2:1 3:1 3:1 3:1

156 322

STA. 179+25 BEG. +3.0% D.G. LT. EL. 850.20 STA. 179+03 END -3.0%

STA. 179+11 BEG. +3.0% D.G. RT. EL. 850.20 STA. 179+03 END -3.0%

179+00 860.01 16.5'R 3:1 6:1 T-BUR 6:1 4:1 3:1 2:1 4" GAS

PL. CULVERT BEDDING PL. CULVERT BEDDING

END OF BARREL INL. EL. 850.20

STA. 179+05 PL. 60"X92 A.B.-CS PIPE CULVERT + 2 APRONS

END OF BARREL OUT. EL. 849.80

R/W

STA. 177+00 TO STA. 181+00

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242

R/W

214+80 885.6

4"GAS

T-BUR.

T-BUR.

0 1

214+32 T.P.P.

214+30 886.0

T-BUR.

← STA. 192+50 R/W 100' TO 75'

← STA. 185+10 R/W 75' TO 100'

STA. 182+75 END SLOPE CONSTRUCTION LT.

STA. 182+75 END +1.0% D.G. RT. EL. 855.93

STA. 182+75 END SLOPE CONSTRUCTION RT.

34 77

182+50 860.48

6:1

T-BUR

6:1

3:1

4"GAS

86 131

182+41 T.P.P.

182+00 861.55

101 106

STA. 181+50 END +1.20% D.G. LT. EL. 855.14

181+50 861.74

6:1

T-BUR

6:1

4"GAS

R/W

R/W

STA. 181+50 TO STA. 214+80

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242

R/W

234+70 894.0

0 64

4"GAS

T-BUR

T-BUR.

R/W 75'

226+91 T.P.P.

STA. 226+40 END SLOPE CONSTRUCTION LT.

ENT. RT. STA. 226+08 2 8

225+95 889.1

6:1

STA. 225+80 END SLOPE CONSTRUCTION RT.

454 1687

ENT. RT. STA. 225+75 2 8

R/W

225+56 888.6

225+47 T.P.P.

6:1

223+02 T.P.P.

222+00 885.70

6:1

T-BUR

221+60 T-BUR

T-BUR

6:1

T-BUR

221+40 T.P.P.

STA. 221+45 BEG. SLOPE CONSTRUCTION LT.

STA. 220+90 BEG. SLOPE CONSTRUCTION RT.

219+65 885.8

53 213

220+00 T.P.P.

T-BUR

+65 42" X 68' C.M.P. + 2 APRS. INP.

4"GAS INL. EL. 877.29

OUT. EL. 877.16

T-BUR

R/W

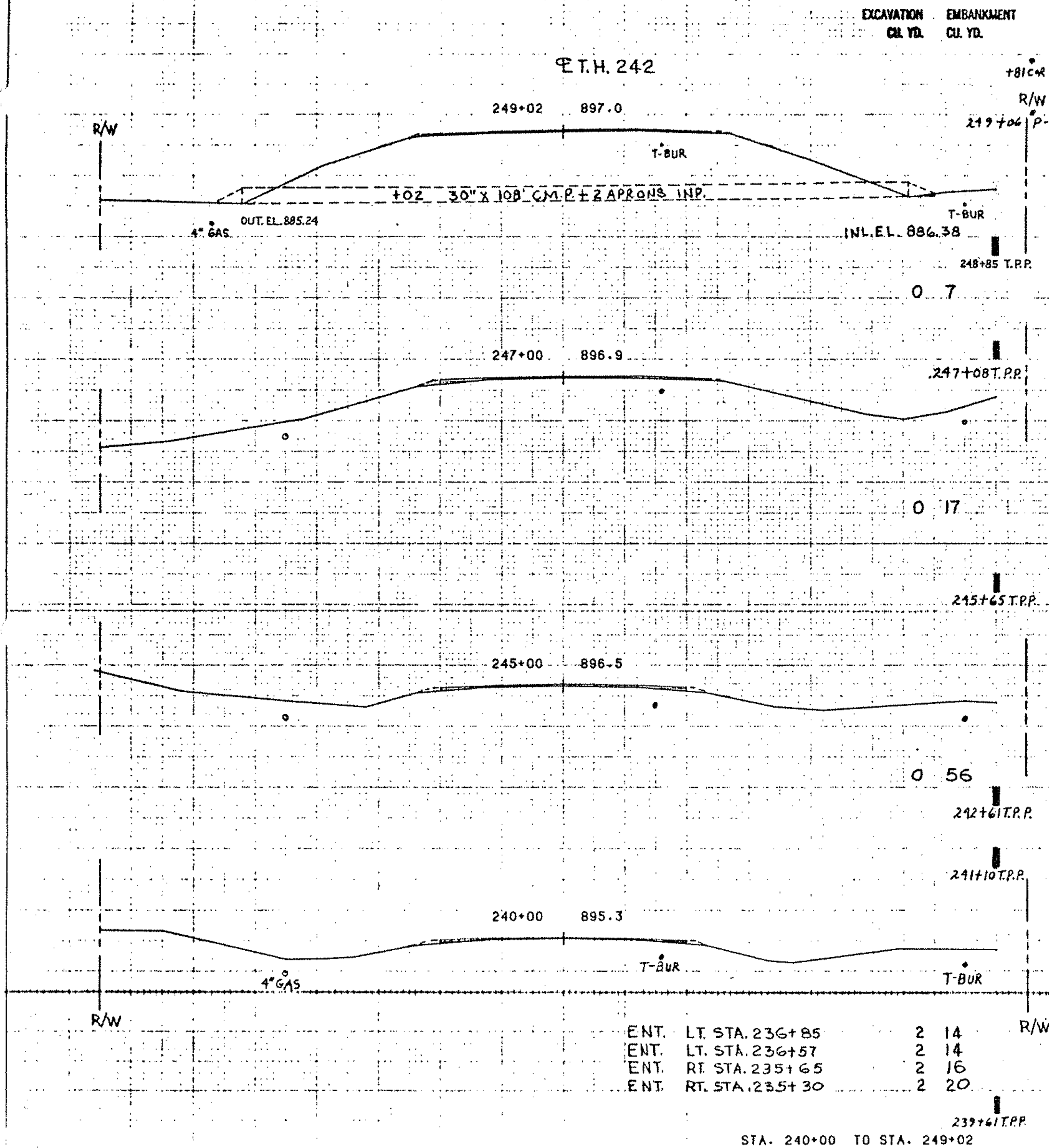
R/W

218+86 T.P.P.

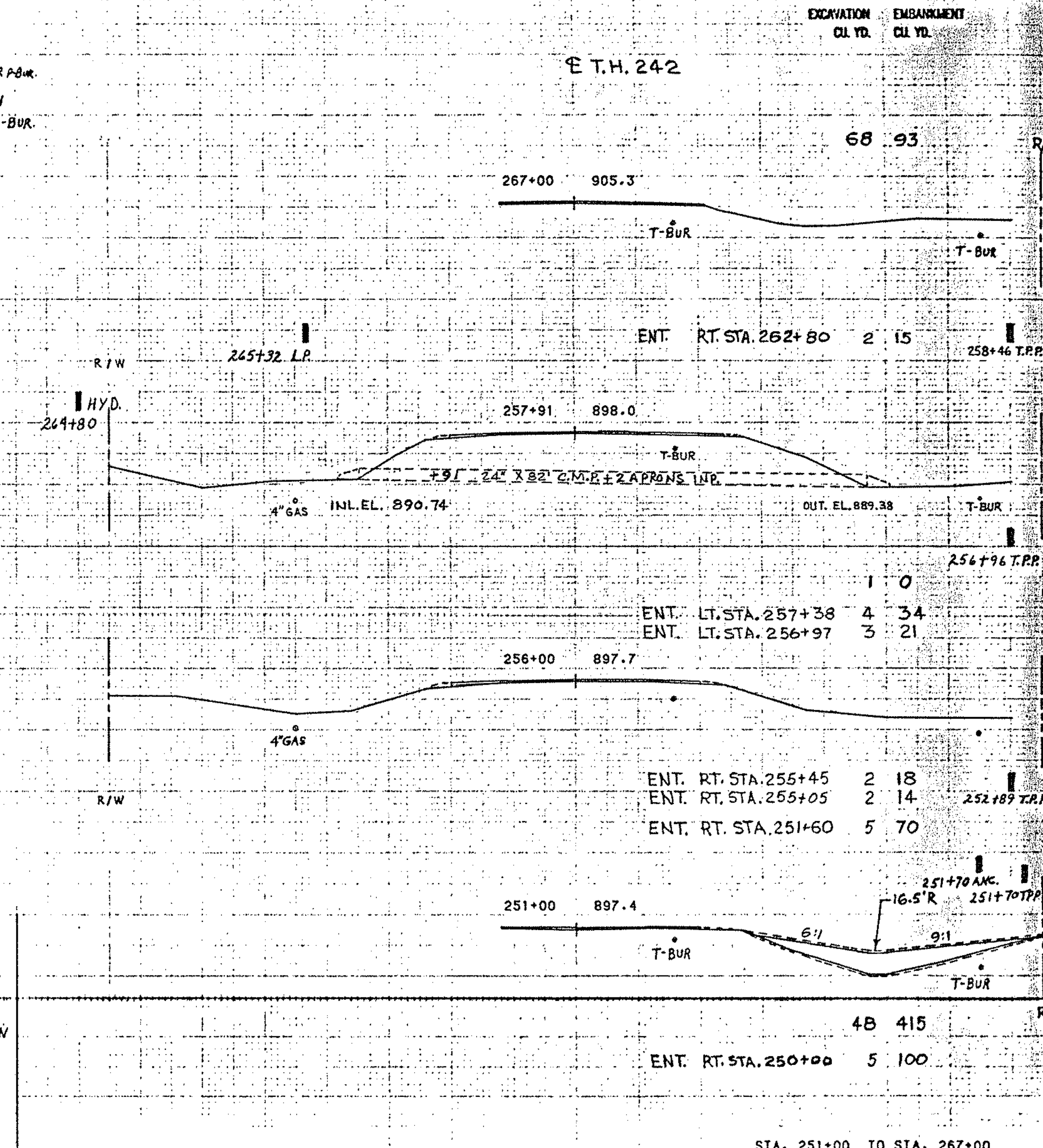
0 54

R/W 75'

STA. 219+65 TO STA. 234+70



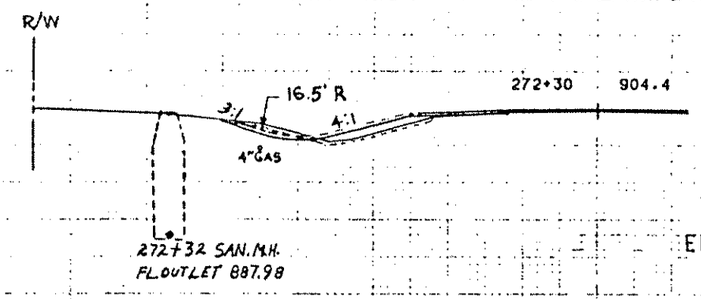
EXCAVATION CU. YD.
EMBANKMENT CU. YD.
℄ T.H. 242
R/W
249+02 897.0
+81 C+R P-BUR.
249+06 P-BUR.
T-BUR
+02 30" X 108' C.M.P. + 2 APRONS INP.
OUT. EL. 885.24
4" GAS
INL. EL. 886.38
248+85 T.P.P.
0 7
247+00 896.9
247+08 T.P.P.
0 17
245+65 T.P.P.
245+00 896.5
0 56
242+61 T.P.P.
241+10 T.P.P.
240+00 895.3
T-BUR
4" GAS
R/W
ENT. LT. STA. 236+85 2 14
ENT. LT. STA. 236+57 2 14
ENT. RT. STA. 235+65 2 16
ENT. RT. STA. 235+30 2 20
239+61 T.P.P.
STA. 240+00 TO STA. 249+02



EXCAVATION CU. YD.
EMBANKMENT CU. YD.
℄ T.H. 242
68 93
R/W
267+00 905.3
T-BUR
ENT. RT. STA. 262+80 2 15
258+46 T.P.P.
265+32 L.P.
HYD.
264+80
257+91 898.0
+91 24" X 82' C.M.P. + 2 APRONS INP.
4" GAS
INL. EL. 890.74
OUT. EL. 889.38
256+96 T.P.P.
1 0
ENT. LT. STA. 257+38 4 34
ENT. LT. STA. 256+97 3 21
256+00 897.7
ENT. RT. STA. 255+45 2 18
ENT. RT. STA. 255+05 2 14
252+89 T.P.P.
ENT. RT. STA. 251+60 5 70
251+70 ANC.
251+70 T.P.P.
16.5'R
251+00 897.4
6:1
9:1
48 415
ENT. RT. STA. 250+00 5 100
STA. 251+00 TO STA. 267+00

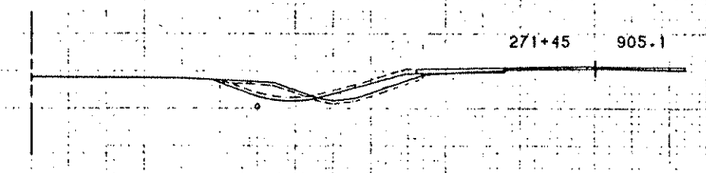
EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242



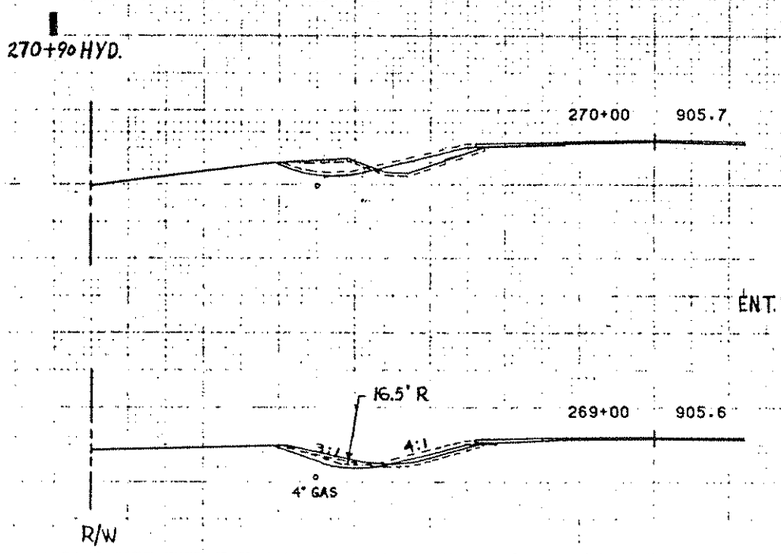
56 112

ENT. LT. STA. 271+87 28 42



126 176

ENT. LT. STA. 270+92 65 69

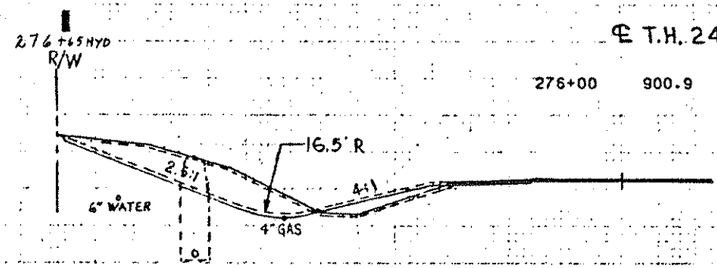


STA. 268+75 BEG. 0.5% D.G. LT. EL. 902.43

STA. 269+00 TO STA. 272+30

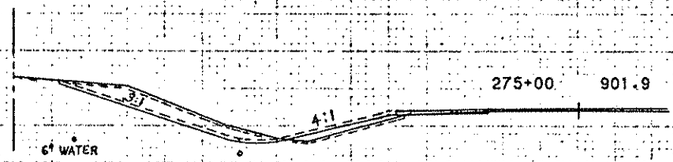
EXCAVATION CU. YD. | EMBANKMENT CU. YD.

℄ T.H. 242



ENT. LT. STA. 275+65 35 56

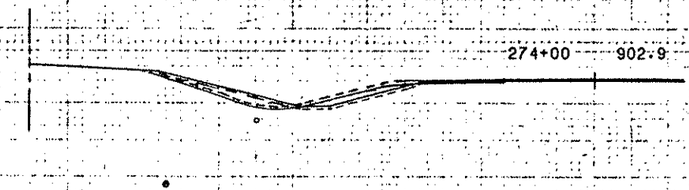
420 180



ENT. LT. STA. 274+48 28 42

ENT. RT. STA. 274+25 3 12

208 135

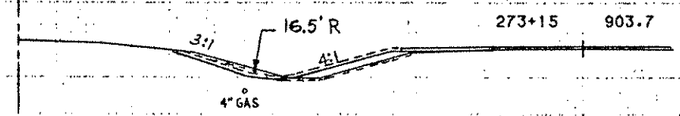


ENT. RT. STA. 273+95 3 11

ENT. LT. STA. 273+53 34 49

47 94

STA. 273+26 BEG. - 1.23% END - 0.5% D.G. LT. EL. 900.17

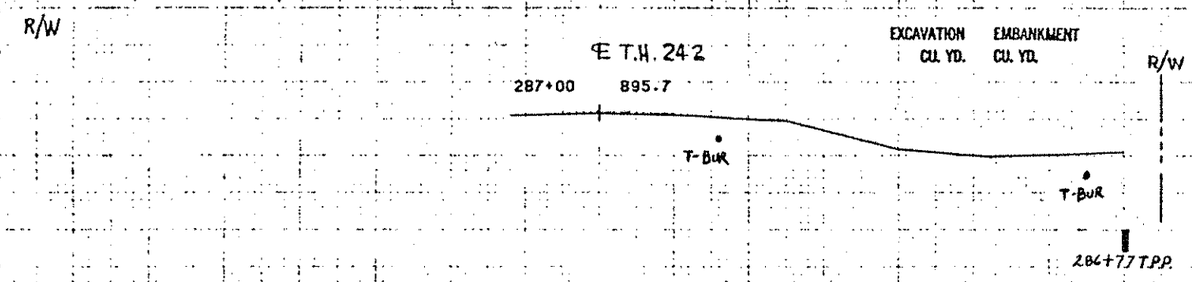


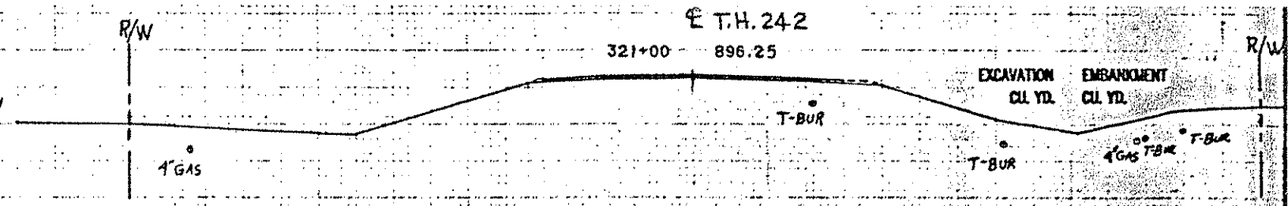
8" SAN. SEW.

ENT. LT. STA. 272+80 28 42

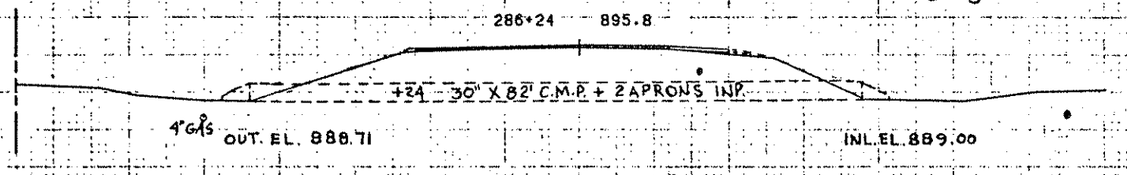
46 113

STA. 273+15 TO STA. 276+00





0 5



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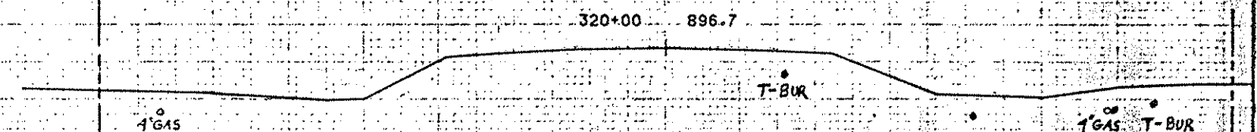
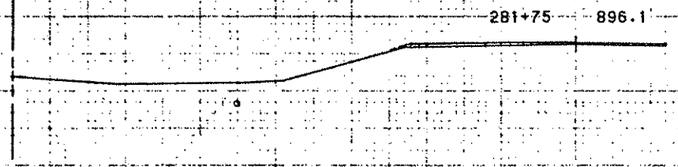


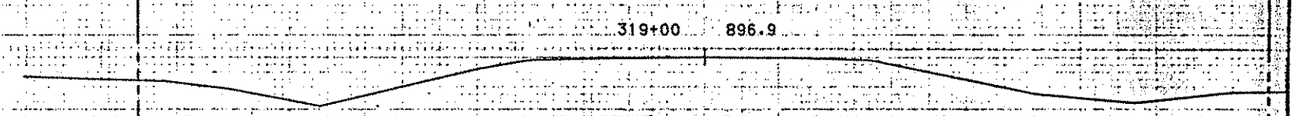


33 60

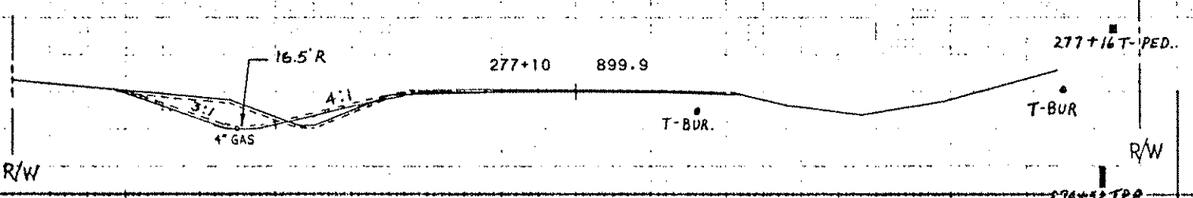
ENT. RT. STA. 279+57 1 6

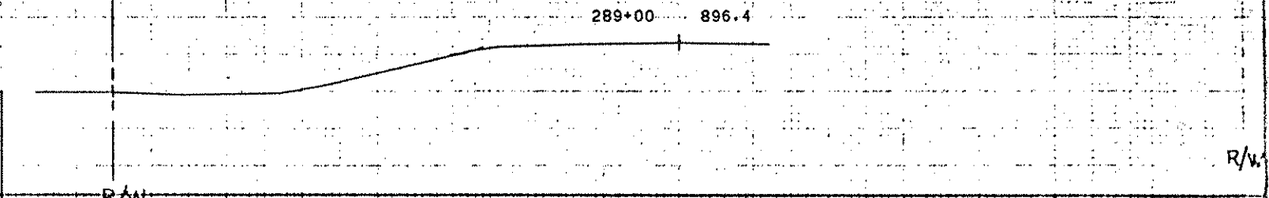
ENT. RT. STA. 277+56 2 7
ENT. RT. STA. 277+27 2 7

STA. 277+40 END - 1.23% D.G. LT. EL. 895.08



277+84 T.P.P.





LT. STA. 276+82 ENT. (REMOVE)

ENT. LT. STA. 276+82 56 0

380 163

STA. 277+10 TO STA. 287+00

STA. 289+00 TO STA. 321+00

R/W

℄ T.H. 242

324+50 895.89

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

0 6

T-BUR

4" GAS

T-BUR

T-BUR T-BUR

R/W

324+19 T.P.R

0 6

324+00 895.66

ENT. RT. STA. 323+65

2 33

0 6

323+50 895.94

ENT. RT. STA. 323+10

2 33

0 6

323+00 896.10

0 6

322+50 896.16

PROFILE 10' BIT. DRIVEWAY (ON SKEW)

0 6

322+00 896.20

4" GAS

0 6

321+50 896.25

321+50 T.P.R.F.L.P.

T-BUR

T-BUR

T-BUR T-BUR

R/W

0 6

R/W

℄ T.H. 242

327+55 T.P.R.

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

R/W

327+50 895.80

T-BUR

4" GAS

T-BUR

T-BUR

T-BUR 4" GAS T-BUR T-BUR

0 4

327+00 895.81

0 4

326+50 895.83

0 6

326+00 896.07

0 6

325+50 895.85

0 6

325+00 895.93

T-BUR

4" GAS

T-BUR

4" GAS T-BUR T-BUR

STA. 321+50 TO STA. 327+50

R/W

R/W

S.P. 0212-28(T.H.242) SHEET 32 OF 34

℄ T.H. 242

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

R/W

340+00 900.3

P-BUR 4"GAS P-BUR P-BUR 333+30 P-BUR X-ING T-BUR P-BUR T-BUR P-BUR T-BUR T-BUR 339+90 P.P.

STA. 336+70 R/W 100' TO 75' →

333+89 P.P.

0 39 333+30 COR BUR-P.

ENT. RT. STA. 334+80 6 11

STA. 334+50 R/W 75' TO 100' →

ENT. LT. STA. 334+10 7 12

ENT. LT. STA. 333+15 3 18

ENT. LT. STA. 332+75 3 18

332+00 897.1

P-BUR P-BUR P-BUR P-BUR 331+04 P-BUR X-ING 330+84 P-BUR X-ING P-BUR P-BUR P-BUR 331+09 POW COR BUR

331+45 COR GAS

330+96 T.P.P.

330+84 COR BUR POW

ENT. RT. STA. 330+95 2 13

ENT. RT. STA. 330+60 2 17 330+76 ANC

+64 4"GAS TEE

330+00 896.39

T-BUR T-BUR 330+70 T-BUR X-ING 330+70 T-BUR X-ING T-BUR T-BUR T-BUR

0 10

330+58 TPP

329+40 896.3

329+00 896.12

0 3

0 2

328+16 896.2

+16 48" X 78' C.M.P. INP. NO APRONS

INL. EL. 886.50 OUT. EL. 885.80

0 4

328+00 895.89

T-BUR T-BUR 4"GAS T-BUR T-BUR

4"GAS

R/W

STA. 328+00 TO STA. 340+00

0 4

℄ T.H. 242

EXCAVATION CU. YD. | EMBANKMENT CU. YD.

R/W

355+77 T-UTILITY BOX

354+00 906.3

T-BUR T-BUR T-BUR T-BUR

4"GAS

1 41 352+36 T.P.P.

350+00 904.8

4"GAS

R/W

349+01 T.P.P.

ENT. RT. 348+25 3 10

ENT. RT. 347+90 3 17

347+00 903.4

346+72 ¾"GAS X-ING G G G G

STA. 346+70 R/W 130' TO 75' →

1 53 345+88 T.P.P.

ENT. RT. STA. 346+20 2 13 345+79 ANC

ENT. RT. STA. 345+90 2 24

345+00 902.6

345+61 T-PED

345+21 L.P.

T-BUR T-BUR T-BUR T-BUR

STA. 342+40 R/W 75' TO 130' →

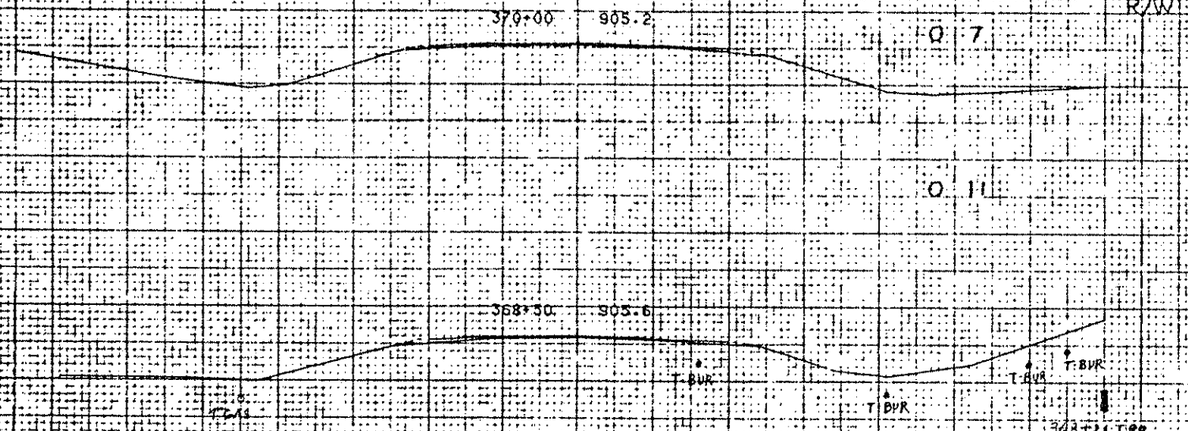
342+87 ANC 342+87 P

342+15 L.P.

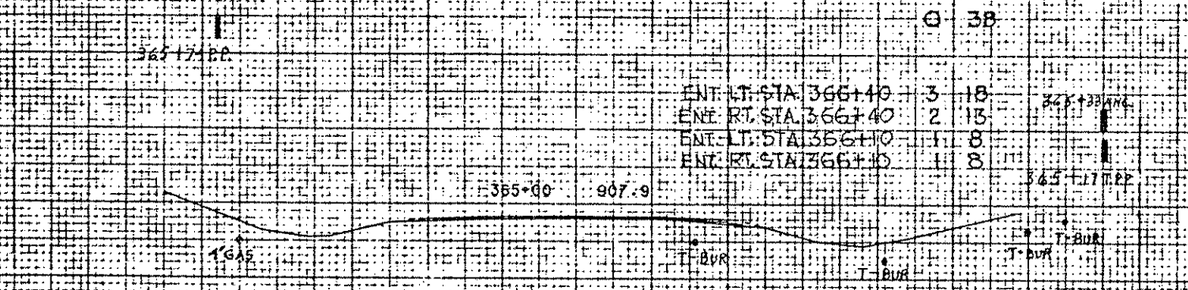
STA. 345+00 TO STA. 354+00

℄ T.H. 242

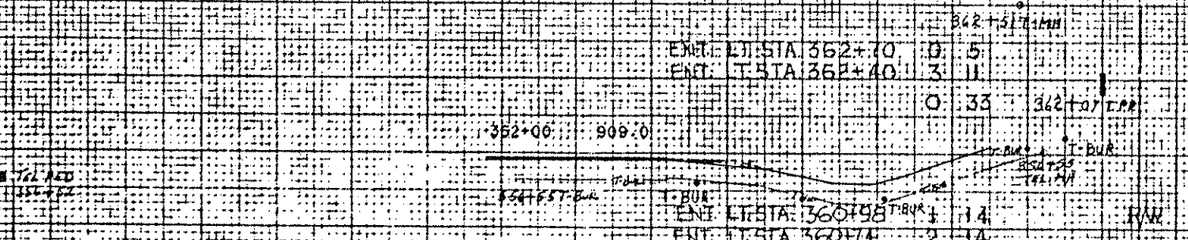
STA. 371+00 END BIT. SHOULDER CONST. RT.



STA. 368+02 END MAINLINE BITUMINOUS CONST.



	EXCAVATION CU. YD.	EMBANKMENT CU. YD.
	0	7
	0	11
	0	38
ENT. LT. STA. 366+40	3	18
ENT. RT. STA. 366+40	2	15
ENT. LT. STA. 366+10	1	8
ENT. RT. STA. 366+10	1	8
	0	33
ENT. LT. STA. 362+70	0	5
ENT. T STA. 362+40	3	11
	0	33
ENT. LT. STA. 360+98	1	14
ENT. LT. STA. 360+74	2	14
ENT. LT. STA. 359+26	3	18
ENT. LT. STA. 358+82	3	18
ENT. LT. STA. 358+38	3	18
ENT. LT. STA. 357+90	3	18
ENT. LT. STA. 355+00	7	4
ENT. T STA. 354+72	2	7



L STA. 362+00 TO STA. 370+00