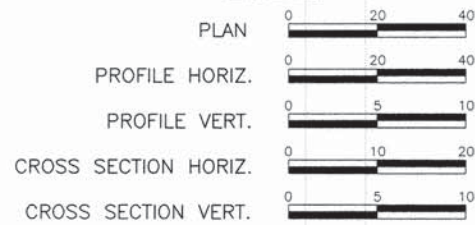


INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES, HIGHWAY STANDARDS AND UTILITIES
- 3.-4. SUMMARY OF QUANTITIES
- 5.-7. TYPICAL SECTIONS
- 8.-14. CONSTRUCTION SCHEDULES
15. TIE POINTS
- 16.-27. ROADWAY PLAN AND PROFILE
- 28.-29. TRAFFIC CONTROL/STAGING PLAN
- 30.-33. DRAINAGE PROFILES
- 34.-35. BOX CULVERT DETAILS
36. INTERSECTION GEOMETRIC DETAIL
- 37.-43. PAVEMENT MARKING & SIGNING PLAN
- 44.-47. ~~ROW PLANS~~ PLAT OF HIGHWAYS
- 48.-52. REMOVAL PLAN
- 53.-59. EROSION AND SEDIMENT CONTROL SHEETS
60. BORROW PIT PLAN
- 61.-86. BRIDGE PLANS
- 87.-90. MSE RETAINING WALL PLANS
- 91.-94. TRAFFIC SIGNAL PLANS
95. TEMPORARY TRAFFIC SIGNAL PLANS
96. TRAFFIC SIGNAL SOIL BORINGS
97. ENTRANCE DETAILS
98. MISCELLANEOUS DETAILS
- 99.-121. CROSS SECTIONS
- 122.-125. BOX CULVERT CROSS SECTIONS

SCALES:



VENITA DRIVE

ROADWAY DESIGNATION: URBAN LOCAL COLLECTOR
DESIGN SPEED: 30 M.P.H (SOUTH)

ADT: CURRENT (2012) 9,200
20-YEAR (2032) 11,000

ROADWAY DESIGNATION: URBAN LOCAL COLLECTOR
DESIGN SPEED: 30 M.P.H (NORTH)

ADT: CURRENT (2012) 5,000
20-YEAR (2032) 6,200

FRONTAGE ROAD

ROADWAY DESIGNATION: RURAL COLLECTOR
DESIGN SPEED: 30 M.P.H

ADT: CURRENT (2012) 4,400
20-YEAR (2032) 5,300

WEST HIGHWAY 50

ROADWAY DESIGNATION: MINOR ARTERIAL
DESIGN SPEED: 45 M.P.H

ADT: CURRENT (2012) 26,000
20-YEAR (2032) 31,200

HOLD IT ! CALL BEFORE YOU DIG !
Phone J.U.L.I.E.



The owner would like to remind you that underground utility facilities can be damaged by shovel blades or other digging equipment. You can prevent damage or possible personal danger by phoning 800/892-0123 at least 48-hours before you dig. That's the toll-free number for "J.U.L.I.E.", which stands for Joint Utilities Location Information for Excavators.

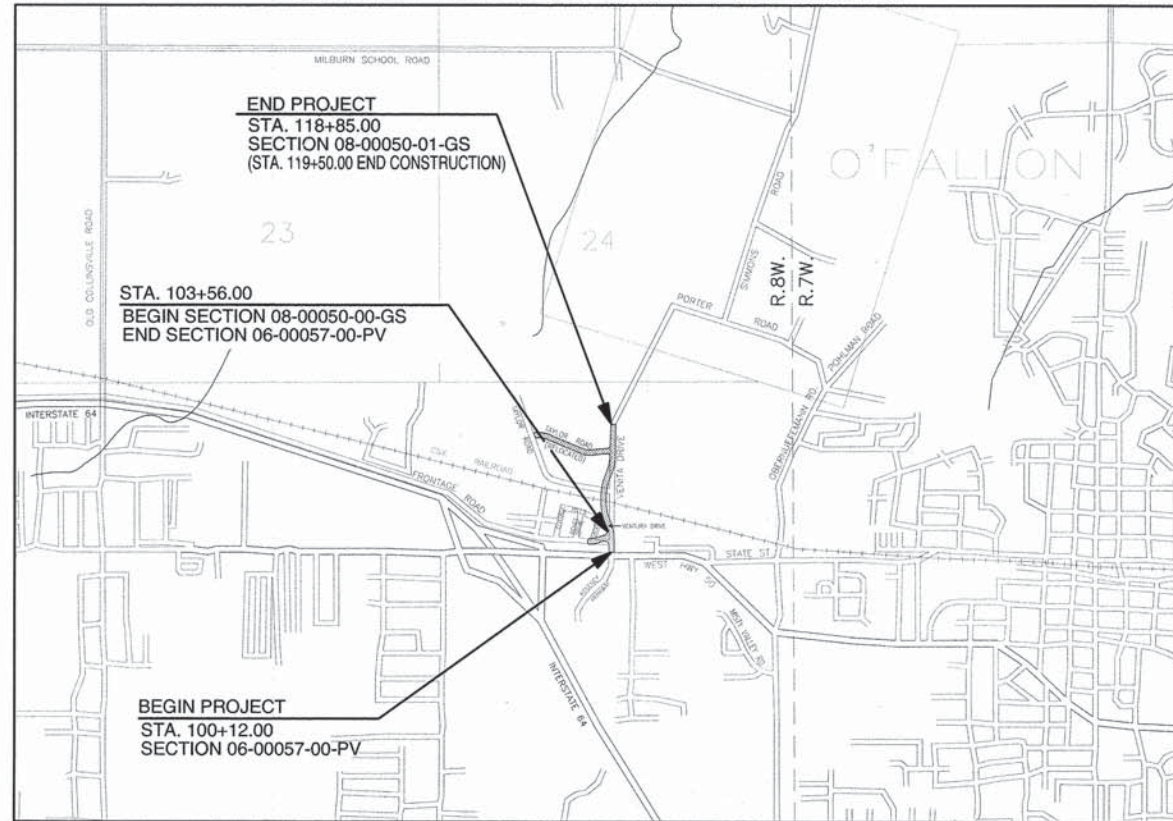
If there are any pipes, cables, lines or mains in the excavation area, utility personnel will be out to mark the facilities so you can work around them.

Toll Free 800/892-0123

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
LOCAL AGENCY PROJECT**

FAU ROUTE 9336 (VENITA DRIVE SOUTH)
SECTION 06-00057-00-PV
FAU ROUTE 9331 (VENITA DRIVE NORTH)
SECTION 08-00050-01-GS
PROJECT NO. CMM-5011(264)
CITY OF O'FALLON, ILLINOIS
ST. CLAIR COUNTY
JOB NO. C-98-343-09
CMAQ / ILLINOIS GCPF PROGRAM



LOCATION MAP
NOT TO SCALE

SECTION 06-00059-00-PV	
VENITA DRIVE:	344.00 FT. = 0.065 MILES
FRONTAGE ROAD:	365.52 FT. = 0.069 MILES
W. HWY. 50:	193.34 FT. = 0.037 MILES
SUBTOTAL	902.86 FT. = 0.171 MILES (21% TOTAL)
SECTION 08-00050-01-GS	
VENITA DRIVE:	1594.00 FT. = 0.302 MILES
COTTAGE HILLS DRIVE:	75.78 FT. = 0.014 MILES
TAYLOR ROAD:	1631.33 FT. = 0.309 MILES
SUBTOTAL:	3301.11 FT. = 0.625 MILES (79% TOTAL)
NET LENGTH OF IMPROVEMENTS: 4203.97 FT. = 0.796 MILES	

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	1
FEDERAL AID / GCPF PROJECT			CONTRACT 97533	



ILLINOIS
DEPARTMENT OF
TRANSPORTATION

APPROVED: 11-4-13 DATE
Angie S. Abraham
MAYOR, CITY OF O'FALLON

PASSED: 11-12-13 DATE
[Signature]
DISTRICT EIGHT ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW: 11-12-13 DATE
[Signature]
DEPUTY DIRECTOR OF HIGHWAYS, REGION FIVE ENGINEER

PRINTED BY AUTHORITY OF THE STATE OF ILLINOIS

PREPARED BY:
RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS

CORPORATE OFFICE
4 INDUSTRIAL DRIVE
FREEBURG, ILLINOIS 62243
(618) 539-3176

REGIONAL OFFICE
201 SOUTH LOCUST STREET
CENTRALIA, ILLINOIS 62801
(618) 532-1992



Mark A. Rujawski
Mark A. Rujawski
10/31/2013
Date of Signing
11/30/2013
Date of License Expiration

GENERAL NOTES

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV				
9336/08-00050-01-GS		ST. CLAIR	125	2
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

- 1.) A QUANTITY FOR TEMPORARY PAVEMENT MARKING EQUAL TO THE AMOUNT FOR PERMANENT PAVEMENT MARKING HAS BEEN ADDED TO THE PLANS TO ACCOMMODATE STAGE CONSTRUCTION INTERVALS. SHORT-TERM PAVEMENT MARKING SHALL BE APPLIED TO THE BINDER AND FINAL HMA SURFACE. ONLY REMOVAL OF TEMPORARY PAVEMENT MARKING FROM THE FINAL SURFACE SHALL BE PAID FOR AS WORK ZONE PAVEMENT MARKING REMOVAL.
- 2.) THE PROPOSED EMBANKMENT SHALL BE BENCHED INTO THE EXISTING SLOPES TO THE SATISFACTION OF THE ENGINEER.
- 3.) "ROAD CONSTRUCTION AHEAD" SIGNS SHALL BE PLACED AT THE BEGINNING AND END OF THE PROJECT PLUS THE INTERSECTING SIDE ROADS AND WILL BE INCLUDED IN THE TRAFFIC CONTROL PAY ITEMS. ALL CONSTRUCTION SIGNS SHALL BE FLUORESCENT ORANGE 48"x48".
- 4.) ALL AREAS DISTURBED FOR ANY REASON WITHIN THE CONSTRUCTION LIMITS SHALL BE SEEDED WITH CLASS 2 SEEDING. NUTRIENTS SHALL CONFORM TO ARTICLE 250.04. AREAS DISTURBED BEYOND THE CONSTRUCTION LIMITS SHALL BE SEEDED BY THE CONTRACTOR AT HIS/HER OWN EXPENSE.
- 5.) THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
- 6.) AN ESTIMATED 1170 TONS OF HMA SURFACE WILL BE REMOVED FROM THIS PROJECT.
- 7.) PROTECTIVE COAT SHALL BE APPLIED TO ALL GUTTER FLAGS AND FACE OF CURBS.
- 8.) AN ESTIMATED QUANTITY OF 150 TONS OF AGGREGATE FOR TEMPORARY ACCESS HAS BEEN INCLUDED IN THE PLANS FOR THE PURPOSE OF MAINTAINING ACCESS TO PRIVATE PROPERTY AND LOCAL TRAFFIC THROUGHOUT CONSTRUCTION OPERATIONS.
- 9.) FACTORS USED FOR APPLICATION RATES AND QUANTITY CALCULATIONS ARE AS FOLLOWS:

PAVING

ALL HOT-MIX ASPHALT	0.056 TONS/SQ. YD./INCH
BITUMINOUS MATERIALS (PRIME COAT)	0.075 GAL./SQ. YD.
	*AGGREGATE BASES (0.375 GAL./SQ.YD.)
AGGREGATE (PRIME COAT)	0.0015 TONS/SQ. YD.
AGGREGATE BASE COURSE	0.0555 TONS/SQ. YD./INCH

SEEDING

NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
MULCH	2 TONS/ACRE

LIME MODIFIED SOILS

SOIL	1.4445 TONS/CU. YD.
LIME (4% OF SOIL)	0.01926 TONS/SQ. YD./12 IN.
WATER	15 GAL./SQ. YD./12 IN.

- 10.) WHERE PROPOSED CONCRETE PAVEMENT OR PCC CURB AND GUTTER IS TO BE CONSTRUCTED ADJACENT TO EXISTING CONCRETE PAVEMENT OR PCC CURB AND GUTTER, THE CONTRACTOR SHALL DRILL AND GROUT NO. 6 X 30 EPOXY COATED TIE BARS AT 30" CENTERS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PCC PAVEMENT 8" OR COMBINATION CONCRETE CURB AND GUTTER AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- 11.) THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT.
- 12.) IF ASH TREES ARE REMOVED ON THE PROJECT, THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND COMPLY WITH MEASURES SPECIFIED BY THE ILLINOIS DEPARTMENT OF AGRICULTURE (IDOA) TO PREVENT THE SPREAD OF THE EMERALD ASH BORER. THE IDOA INFORMATION FOR ASH TREE REMOVAL CAN BE FOUND ON THE IDOA WEBSITE AT WWW.AGR.STATE.IL.US/EAB.
- 13.) SAW CUTTING ON ALL EDGES FOR REMOVAL ITEMS SHALL BE INCLUDED IN THE COST OF THE REMOVAL ITEM AS INDICATED AND IN ACCORDANCE WITH SECTION 440 OF THE STANDARD SPECIFICATIONS.
- 14.) EXCAVATION ADJACENT TO THE EDGE OF PAVEMENT OPEN TO TRAFFIC SHALL BE PROTECTED WITH EXTENDED LEG BARRICADES AND APPROPRIATE LIGHTS.
- 15.) ALL EXISTING AND PROPOSED RIGHT-OF-WAY LINES AND PROPERTY LINES SHOWN ON THE PLAN SHEETS ARE GRAPHICAL REPRESENTATIONS AND SHALL NOT BE USED AS A MEANS TO ESTABLISH OWNERSHIP. IN ALL MATTERS RELATING TO RIGHT-OF-WAY, THE PLAT OF HIGHWAYS SHALL BE THE CONTROLLING DOCUMENT.
- 16.) THE RIGHT OF WAY MARKER SHALL BE INSTALLED SO THAT THE BACK OF THE POST IS TWELVE INCHES (12") INSIDE THE RIGHT OF WAY BOUNDARY. THE RIGHT OF WAY MARKER SHALL BE A WITNESS TO THE RIGHT-OF-WAY CORNER WHICH IS THE PROPERTY PIN. THE RIGHT-OF-WAY CORNER OR PROPERTY PIN IS A 5/8" IRON ROD WITH IDOT ALUMINUM CAP THAT SHALL NOT BE REMOVED, DAMAGED OR DISTURBED WHEN SETTING THE RIGHT OF WAY MARKER AT THE TWELVE INCH (12") OFFSET.

APPLICABLE IDOT HIGHWAY STANDARDS:

280001-07	601110-01	606006-02	701101-04	720016-03	878001-09
406201-01	602301-04	606101-04	701306-03	729001-01	880001-01
424006-01	602306-03	630301-06	701311-03	780001-04	880006-01
424016-01	602401-03	631031-12	701326-04	781001-03	886001-01
442201-03	602601-03	635006-03	701427-02	805001-01	886006-01
482001-02	602701-02	635011-02	701701-09	814001-02	B.L.R. 21-9
482011-03	604036-02	664001-02	701901-03	814006-02	B.L.R. 22-7
515001-03	604066-02	666001-01	720001-01	857001-01	
542301-03	604091-02	667101-02	720006-04	873001-02	
601101-01	606001-05	701006-05	720011-01	877001-05	

UTILITY TYPE	NAME OF UTILITY	PHONE NUMBER	CONTACT NAME
ELECTRIC	AMEREN IP	618-236-4351	TIMOTHY KERN
GAS	AMEREN IP	618-236-4351	TIMOTHY KERN
WATER/SEWER	CITY OF O'FALLON	618-624-4500	HEIDE BELL
TELEPHONE	AT&T	618-628-2957	DEAN LITZENBURG
FIBER OPTIC	AT&T	618-346-6422	LANCE OSBORNE
CABLE	CHARTER COMMUNICATIONS	618-387-6633	SARAH BISHOP
FIBER OPTIC	QWEST COMMUNICATIONS	303-837-3926	GEORGE McELVAIN
FIBER OPTIC	MCLEOD USA	217-876-7194	MARK MILLS

COMMITMENTS

EXCAVATION IN THE AREA OF THE REGULATED WATERWAY SHALL FOLLOW SPECIAL CONDITIONS AS OUTLINED IN THE DEPARTMENT OF THE ARMY 404 PERMIT INCLUDED IN THE SPECIAL PROVISIONS.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	3
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SECTION 06-00057-00-PV		SECTION 08-00050-01-GS
				ROADWAY	SIGNALS	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	312	74	0	238
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	780	166	0	614
20200100	EARTH EXCAVATION	CU YD	6,244	1,364	0	4,880
20300100	CHANNEL EXCAVATION	CU YD	768	0	0	768
20400100	BORROW EXCAVATION	CU YD	104,986	919	0	104,067
20700220	POROUS GRANULAR EMBANKMENT	CU YD	316	0	0	316
20800150	TRENCH BACKFILL	CU YD	918	165	0	753
20900110	POROUS GRANULAR BACKFILL	CU YD	128	0	0	128
25000200	SEEDING, CLASS 2	ACRE	6.2	0.9	0	5.3
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	557	80	0	477
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	557	80	0	477
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	557	80	0	477
25100115	MULCH, METHOD 2	ACRE	6.2	0.9	0	5.3
25100630	EROSION CONTROL BLANKET	SQ YD	1,810	0	0	1,810
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	618	88	0	530
28000305	TEMPORARY DITCH CHECKS	FOOT	50	16	0	34
28000400	PERIMETER EROSION BARRIER	FOOT	4,451	197	0	4,254
28000500	INLET AND PIPE PROTECTION	EACH	27	11	0	16
28100705	STONE DUMPED RIPRAP, CLASS A3	SQ YD	6	0	0	6
28100707	STONE DUMPED RIPRAP, CLASS A4	SQ YD	149	19	0	130
28200200	FILTER FABRIC	SQ YD	149	19	0	130
30200650	PROCESSING MODIFIED SOIL 12"	SQ YD	15,474	4,376	0	11,098
30201500	LIME	TON	299	85	0	214
31100910	SUB-BASE GRANULAR MATERIAL, TYPE A 12"	SQ YD	983	314	0	669
35100700	AGGREGATE BASE COURSE, TYPE A 8"	SQ YD	108	0	0	108
40200800	AGGREGATE SURFACE COURSE, TYPE B	TON	24	20	0	4
40201000	AGGREGATE FOR TEMPORARY ACCESS	TON	150	125	0	25
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1,417	426	0	991
40600300	AGGREGATE (PRIME COAT)	TON	21.4	6.6	0	14.8
40600895	CONSTRUCTING TEST STRIP	EACH	2	1	0	1
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	92	0	0	92
40603085	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N70	TON	5,222	1,964	0	3,258
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	568	0	0	568
40603340	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70	TON	1,033	492	0	541
42001300	PROTECTIVE COAT	SQ YD	4,008	306	0	3,702
42300200	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6 INCH	SQ YD	291	291	0	0
42300400	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 8 INCH	SQ YD	262	0	0	262
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	18,551	180	0	18,371
42400800	DETECTABLE WARNINGS	SQ FT	68	0	0	68
44000100	PAVEMENT REMOVAL	SQ YD	4,005	2,923	0	1,082
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	337	217	0	120
44000300	CURB REMOVAL	FOOT	139	115	0	24
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	9	9	0	0
44000600	SIDEWALK REMOVAL	SQ FT	439	43	0	396
44201717	CLASS D PATCHES, TYPE II, 6 INCH	SQ YD	24	24	0	0
44201769	CLASS D PATCHES, TYPE III, 10 INCH	SQ YD	17	17	0	0
44201771	CLASS D PATCHES, TYPE IV, 10 INCH	SQ YD	48	48	0	0
48101200	AGGREGATE SHOULDERS, TYPE B	TON	16	0	0	16
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	30	24	0	6
48203021	HOT-MIX ASPHALT SHOULDERS, 6"	SQ YD	372	372	0	0
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1	0	0	1
50105220	PIPE CULVERT REMOVAL	FOOT	665	409	0	256

* SPECIALTY ITEM

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SECTION 06-00057-00-PV		SECTION 08-00050-01-GS
				ROADWAY	SIGNALS	
50200100	STRUCTURE EXCAVATION	CU YD	1,258	0	0	1,258
50300225	CONCRETE STRUCTURES	CU YD	250.9	0	0	250.9
50300255	CONCRETE SUPERSTRUCTURE	CU YD	433.3	0	0	433.3
50300260	BRIDGE DECK GROOVING	SQ YD	629	0	0	629
50300280	CONCRETE ENCASMENT	CU YD	14.2	0	0	14.2
50300285	FORM LINER TEXTURED SURFACE	SQ FT	1,910	0	0	1,910
50300300	PROTECTIVE COAT	SQ YD	1,072	0	0	1,072
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	0	0	1
50500505	STUD SHEAR CONNECTORS	EACH	5,886	0	0	5,886
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	113,410	0	0	113,410
50800515	BAR SPLICERS	EACH	62	0	0	62
* 50900805	PEDESTRIAN RAILING	FOOT	199	0	0	199
* 50901730	BRIDGE FENCE RAILING	FOOT	201	0	0	201
* 50901735	BRIDGE FENCE RAILING (SIDEWALK)	FOOT	201	0	0	201
* 50901750	PARAPET RAILING	FOOT	201	0	0	201
51100100	SLOPE WALL 4 INCH	SQ YD	528	0	0	528
51202100	FURNISHING STEEL PILES HP 14X117	FOOT	4,217	0	0	4,217
51202305	DRIVING PILES	FOOT	4,217	0	0	4,217
51204100	TEST PILES HP 14X117	EACH	4	0	0	4
51500100	NAME PLATES	EACH	1	0	0	1
52100520	ANCHOR BOLTS 1"	EACH	36	0	0	36
52100530	ANCHOR BOLTS 1 1/4"	EACH	12	0	0	12
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	73	0	0	73
54001001	BOX CULVERT END SECTIONS, CULVERT NO. 1	EACH	2	0	0	2
54001002	BOX CULVERT END SECTIONS, CULVERT NO. 2	EACH	2	0	0	2
54010704	PRECAST CONCRETE BOX CULVERTS 7' X 4'	FOOT	318	0	0	318
54010804	PRECAST CONCRETE BOX CULVERTS 8' X 4'	FOOT	126	0	0	126
54210015	PIPE CULVERTS, CLASS D, TYPE 1 15" (TEMPORARY)	FOOT	40	40	0	0
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	2	0	0	2
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	7	7	0	0
54213663	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 18"	EACH	2	0	0	2
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	1	0	0	1
550A2320	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 12"	FOOT	1,438	0	0	1,438
550A2330	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 15"	FOOT	419	261	0	158
550A2340	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 18"	FOOT	73	0	0	73
550A2380	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 1 30"	FOOT	165	0	0	165
550A2520	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 12"	FOOT	562	0	0	562
550A2540	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 18"	FOOT	27	0	0	27
550A2560	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 24"	FOOT	237	0	0	237
550A2580	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 2 30"	FOOT	71	0	0	71
550A2760	STORM SEWERS, RUBBER GASKET, CLASS A, TYPE 3 24"	FOOT	58	0	0	58
* 56109210	WATER VALVES TO BE ADJUSTED	EACH	3	2	0	1
* 56400500	FIRE HYDRANTS TO BE REMOVED	EACH	1	0	0	1
* 56500400	DOMESTIC METER VAULTS TO BE REMOVED	EACH	1	0	0	1
60219540	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 24 FRAME AND GRATE	EACH	2	0	0	2
60221700	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 8 GRATE	EACH	3	0	0	3
60236200	INLETS, TYPE A, TYPE 8 GRATE	EACH	1	1	0	0
60237000	INLETS, TYPE A, TYPE 15 FRAME AND LID	EACH	1	1	0	0
60237470	INLETS, TYPE A, TYPE 24 FRAME AND GRATE	EACH	4	0	0	4
60240301	INLETS, TYPE B, TYPE 8 GRATE	EACH	1	1	0	0
60240320	INLETS, TYPE B, TYPE 15 FRAME AND LID	EACH	1	1	0	0

* SPECIALTY ITEM

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	4
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SECTION 06-00057-00-PV		SECTION 08-00050-01-GS
				ROADWAY	SIGNALS	
60240328	INLETS, TYPE B, TYPE 24 FRAME AND GRATE	EACH	4	0	0	4
60255500	MANHOLES TO BE ADJUSTED	EACH	1	1	0	0
60257900	MANHOLES TO BE RECONSTRUCTED	EACH	2	2	0	0
60500060	REMOVING INLETS	EACH	4	0	0	4
60500105	FILLING MANHOLES	EACH	2	0	0	2
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	9.2	6.2	0	3.0
60600605	CONCRETE CURB, TYPE B	FOOT	120	73	0	47
60602500	CONCRETE GUTTER, TYPE A	FOOT	211	0	0	211
60604400	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.18	FOOT	3,104	0	0	3,104
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	3,402	903	0	2,499
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	0	0	4
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	0	0	4
63200310	GUARDRAIL REMOVAL	FOOT	236	0	0	236
* 66400305	CHAIN LINK FENCE, 6'	FOOT	50	0	0	50
* 66407600	CHAIN LINK GATES, 6' X 12' DOUBLE	EACH	1	0	0	1
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	8	8	0	0
66700205	PERMANENT SURVEY MARKERS, TYPE 1	EACH	8	8	0	0
* 66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	120	0	0	120
* 66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	0	0	1
* 66900530	SOIL DISPOSAL ANALYSIS	EACH	3	0	0	3
67100100	MOBILIZATION	L SUM	1	0.25	0	0.75
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	32	16	0	16
70300100	SHORT TERM PAVEMENT MARKING	FOOT	1966	520	0	1446
70300210	TEMPORARY PAVEMENT MARKING-LETTERS AND SYMBOLS	SQ FT	453	359	0	94
70300220	TEMPORARY PAVEMENT MARKING-LINE 4"	FOOT	10,532	3221	0	7311
70300240	TEMPORARY PAVEMENT MARKING-LINE 6"	FOOT	173	0	0	173
70300250	TEMPORARY PAVEMENT MARKING-LINE 8"	FOOT	505	505	0	0
70300260	TEMPORARY PAVEMENT MARKING-LINE 12"	FOOT	511	369	0	142
70300280	TEMPORARY PAVEMENT MARKING-LINE 24"	FOOT	244	146	0	98
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	656	174	0	482
72000100	SIGN PANEL-TYPE 1	SQ FT	135	17.75	37.5	79.75
72000200	SIGN PANEL-TYPE 2	SQ FT	30	20	0	10
72900100	METAL POST-TYPE A	FOOT	182	39	0	143
72900200	METAL POST-TYPE B	FOOT	54	54	0	0
* 78000100	THERMOPLASTIC PAVEMENT MARKING-LETTERS & SYMBOLS	SQ FT	224	224	0	0
* 78000200	THERMOPLASTIC PAVEMENT MARKING-LINE 4"	FOOT	2821	2821	0	0
* 78000500	THERMOPLASTIC PAVEMENT MARKING-LINE 8"	FOOT	505	505	0	0
* 78000600	THERMOPLASTIC PAVEMENT MARKING-LINE 12"	FOOT	369	369	0	0
* 78000650	THERMOPLASTIC PAVEMENT MARKING-LINE 24"	FOOT	146	146	0	0
* 780008200	POLYUREA PAVEMENT MARKING TYPE 1 - LETTERS & SYMBOLS	SQ FT	135	135	0	0
* 780008210	POLYUREA PAVEMENT MARKING TYPE 1 - LINE 4"	FOOT	924	400	0	524
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	53	53	0	0
* 78200100	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	12	0	0	12
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	16	0	0	16
* 78201000	TERMINAL MARKERS - DIRECT APPLIED	EACH	4	0	0	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	393	393	0	0
* 80500100	SERVICE INSTALLATION, TYPE A	EACH	1	0	1	0
* 81028180	UNDERGROUND CONDUIT, GALVANIZED STEEL, 1-1/4" DIA.	FOOT	8	0	8	0
* 81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	110	0	110	0
* 81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	133	0	133	0
* 81028340	UNDERGROUND CONDUIT, PVC, 1 1/2" DIA.	FOOT	220	0	220	0
* 81028360	UNDERGROUND CONDUIT, PVC, 2 1/2" DIA.	FOOT	34	0	34	0

* SPECIALTY ITEM

SUMMARY OF QUANTITIES

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	SECTION 06-00057-00-PV		SECTION 08-00050-01-GS
				ROADWAY	SIGNALS	
* 81028390	UNDERGROUND CONDUIT, PVC, 4" DIA.	FOOT	146	0	146	0
* 81028400	UNDERGROUND CONDUIT, PVC, 5" DIA.	FOOT	5	0	5	0
* 81400100	HANDHOLE	EACH	1	0	1	0
* 81400300	DOUBLE HANDHOLE	EACH	1	0	1	0
* 84500120	REMOVAL OF ELECTRICAL SERVICE INSTALLATION	EACH	1	0	1	0
* 85700200	FULLY ACTUATED CONTROLLER AND TYPE IV CABINET	EACH	1	0	1	0
* 87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	2669	0	2669	0
* 87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	1115	0	1115	0
* 87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	5604	0	5604	0
* 87301815	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 3C	FOOT	23	0	23	0
* 87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	480	0	480	0
* 87700270	STEEL MAST ARM AND ASSEMBLY AND POLE, 46 FT.	EACH	1	0	1	0
* 87700320	STEEL MAST ARM AND ASSEMBLY AND POLE, 55 FT.	EACH	1	0	1	0
* 87800200	CONCRETE FOUNDATION, TYPE D	FOOT	3	0	3	0
* 87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	35	0	35	0
* 87900200	DRILL EXISTING HANDHOLE	EACH	6	0	6	0
* 88040090	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 3-SECTION, MAST ARM MOUNTED	EACH	7	0	7	0
* 88040150	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	6	0	6	0
* 88040160	SIGNAL HEAD, POLYCARBONATE, LED, 1-FACE, 5-SECTION, MAST ARM MOUNTED	EACH	1	0	1	0
* 88200400	TRAFFIC SIGNAL BACKPLATE, FORMED PLASTIC	EACH	7	0	7	0
* 88500100	INDUCTIVE LOOP DETECTOR	EACH	24	0	24	0
* 88600100	DETECTOR LOOP, TYPE 1	FOOT	2529	0	2529	0
* 88700200	LIGHT DETECTOR	EACH	4	0	4	0
* 88700300	LIGHT DETECTOR AMPLIFIER	EACH	1	0	1	0
* 89000100	TEMPORARY TRAFFIC SIGNAL INSTALLATION	EACH	1	0	1	0
* 89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	7784	0	7784	0
* 89502350	REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT	FOOT	290	0	290	0
* 89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	1	0	1	0
* 89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	1	0	1	0
* 89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	3	0	3	0
X0322936	REMOVE EXISTING FLARED END SECTION	EACH	4	1	0	3
* X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	915	0	915	0
X4402805	ISLAND REMOVAL	SQ FT	801	729	0	72
X6024242	INLETS, SPECIAL, NO. 1	EACH	21	1	0	20
X6024244	INLETS, SPECIAL, NO. 2	EACH	1	0	0	1
X6026622	VALVE VAULTS TO BE REMOVED	EACH	3	1	0	2
X6660410	REMOVE RIGHT OF WAY MARKERS	EACH	4	4	0	0
X6660445	RIGHT OF WAY PROPERTY CORNERS	EACH	3	3	0	0
X7010216	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L SUM	1	0.5	0	0.5
* X7801000	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	94	0	0	94
* X7801004	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	7311	0	0	7311
* X7801006	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	173	0	0	173
* X7801012	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	142	0	0	142
* X7801024	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	98	0	0	98
* X8140105	HANDHOLE (SPECIAL)	EACH	1	0	1	0
Z0034210	MECHANICALLY STABILIZED EARTH RETAINING WALL	SQ FT	1,910	0	0	1910
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	204	0	0	204
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0	0	1
Z0056608	STORM SEWER (WATER MAIN REQUIREMENTS) 12 INCH	FOOT	238	238	0	0
Z0056620	STORM SEWER (WATER MAIN REQUIREMENTS) 30 INCH	FOOT	146	0	0	146
Z0065100	SETTLEMENT PLATFORMS	EACH	6	0	0	6
Δ Z0076600	TRAJUEES	HOURL	1,500			
Δ Z0076604	TRAJUEES TRAINING PROGRAM GRADUATE	HOURL	1,500			

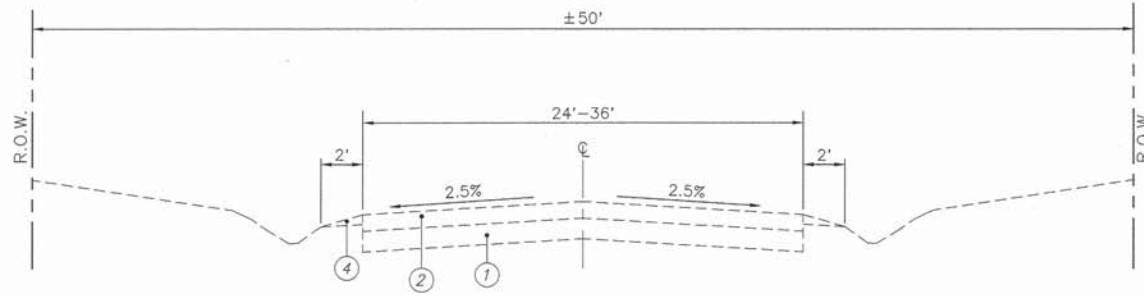
* SPECIALTY ITEM

Δ 0042

FAU. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	5
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

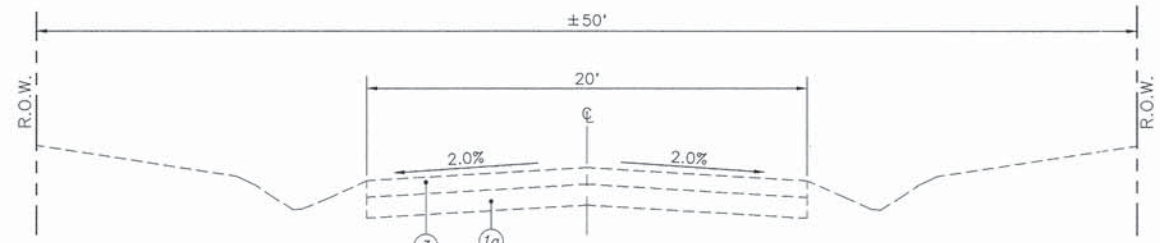
LEGEND

- ① EXISTING AGGREGATE PAVEMENT, ±13"
- ⑩ EXISTING AGGREGATE PAVEMENT, ±8"
- ② EXISTING HOT-MIX ASPHALT PAVEMENT, ±5"
- ②① EXISTING OIL & CHIP SURFACE, ±2"
- ③ EXISTING HOT-MIX ASPHALT PAVEMENT, ±3"
- ③① EXISTING TURF SHOULDERS
- ④ EXISTING AGGREGATE WEDGE
- ⑤ EXISTING HOT-MIX ASPHALT SHOULDER STRIP, 6"
- ⑤A EXISTING HOT-MIX ASPHALT SHOULDERS, 8"
- ⑥ EXISTING PORTLAND CEMENT CONCRETE PAVEMENT, 9"
- ⑦ EXISTING LIME MODIFIED SOIL, 12"
- ⑧ EXISTING COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑨ EXISTING CONCRETE MEDIAN SURFACE, 4"
- ⑩ EXISTING PAVEMENT MARKING
- ⑪ EXISTING HOT-MIX ASPHALT RESURFACING, 2½"
- ⑫ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑬ HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70, 8"
- ⑭ BITUMINOUS MATERIALS (PRIME COAT)
- ⑮ AGGREGATE (PRIME COAT)
- ⑮ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑰ SUB-BASE GRANULAR MATERIAL, 12"
- ⑱ THERMOPLASTIC PAVEMENT MARKING



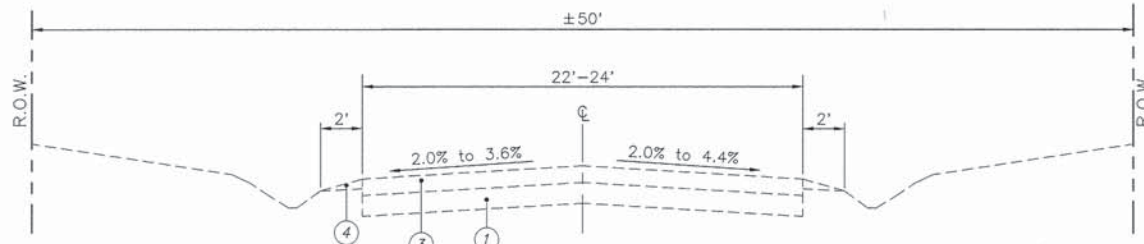
EXISTING TYPICAL SECTION VENITA DRIVE

Scale: 1"=4' (Horizontal)
1"=2' (Vertical)
STA: 100+12.00 - FRONTAGE ROAD



EXISTING TYPICAL SECTION COTTAGE HILLS DRIVE

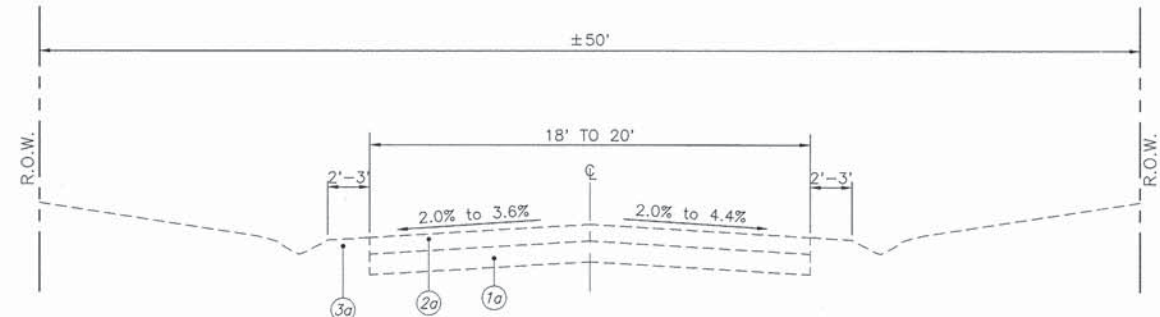
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1"=2' (Vertical)
STA: 1+00.00 - 1+75.78



EXISTING TYPICAL SECTION VENITA DRIVE

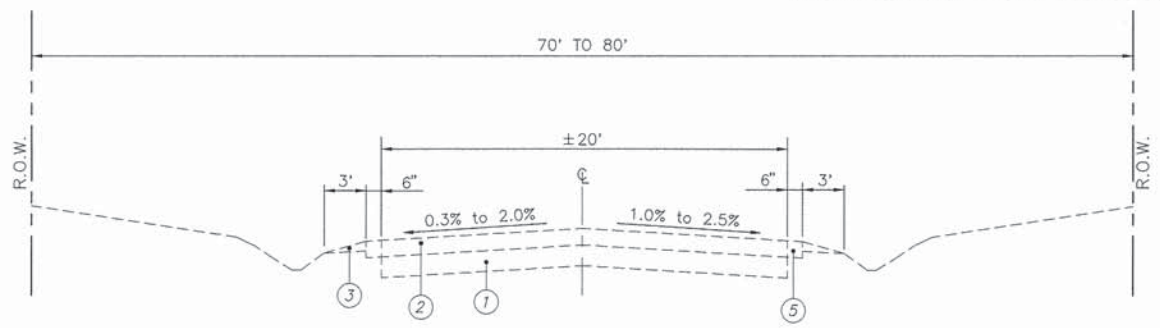
Scale: 1"=4' (Horizontal)
1"=2' (Vertical)
FRONTAGE ROAD - STA: 118+85.00

NOTE: SEE PLAN SHEETS FOR LIMITS OF PAVEMENT REMOVAL.



EXISTING TYPICAL SECTION TAYLOR ROAD

N.T.S.

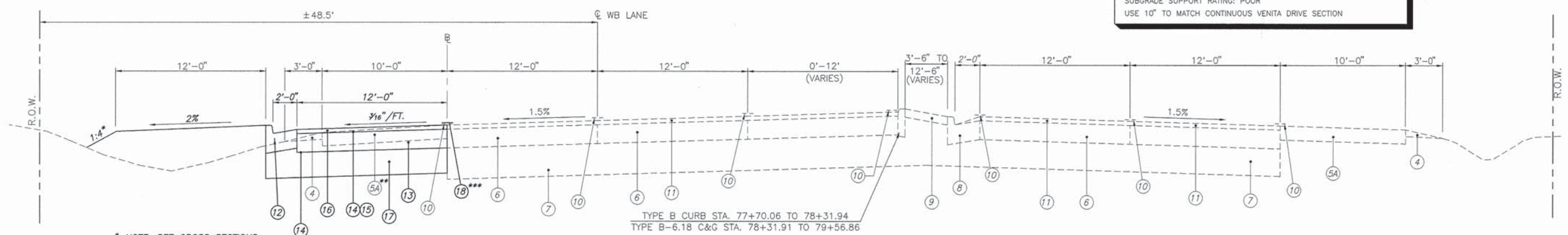


EXISTING TYPICAL SECTION FRONTAGE ROAD

Scale: 1"=4' (Horizontal)
1"=2' (Vertical)

PAVEMENT DESIGN

FAU 9166 (W. HWY. 50 RIGHT TURN LANE)
STRUCTURAL DESIGN TRAFFIC: YEAR 2022
PV= 2,219 SU= 50 MU= 13
ROAD/STREET CLASSIFICATION: URBAN MINOR ARTERIAL CLASS ROAD: I
TRAFFIC FACTOR: Actual TF= 0.26 Minimum TF= 0.70
PG GRADE: Binder= 64-22 Surface= 64-22
THICKNESS - 8.5"
SUBGRADE SUPPORT RATING: POOR
USE 10" TO MATCH CONTINUOUS VENITA DRIVE SECTION



EXISTING & PROPOSED TYPICAL SECTION WEST HIGHWAY 50

Scale: 1"=4' (Horizontal)
1"=2' (Vertical)
STA: 77+74.22 - STA: 79+67.71

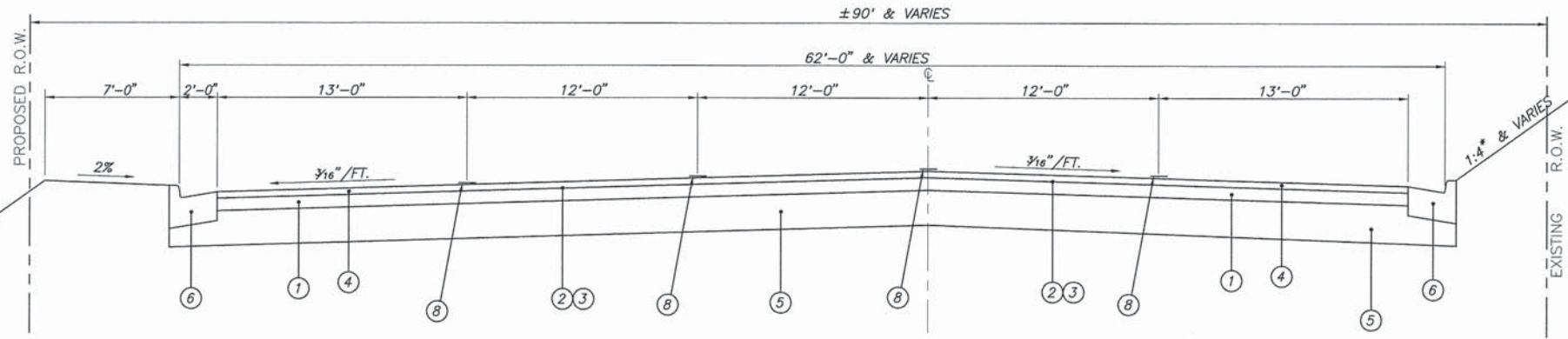
* NOTE: SEE CROSS SECTIONS FOR VARIABLE DITCH DEPTHS
** TO BE REMOVED
*** AS SHOWN IN THE PLANS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	6
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

LEGEND

- ① HOT-MIX ASPHALT BINDER COURSE, IL. 19.0, N70, 8"
- ①A HOT-MIX ASPHALT BINDER COURSE, IL. 19.0, N70, 6"
- ② BITUMINOUS MATERIALS (PRIME COAT)
- ③ AGGREGATE (PRIME COAT)
- ④ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑤ LIME MODIFIED SOIL, 12"
- ⑥ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑦ P.C.C. SIDEWALK, 4"
- ⑧ THERMOPLASTIC PAVEMENT MARKING
- ⑨ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.18
- ⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70, 2"
- ⑪ HOT-MIX ASPHALT SHOULDERS, 6"
- ⑫ AGGREGATE SHOULDERS, TYPE B, 6"
- ⑬ SUB-BASE GRANULAR MATERIAL, 12"
- ⑭ AGGREGATE WEDGE SHOULDERS, TYPE B
- ⑮ WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
- ⑯ TRAFFIC BARRIER TERMINAL



PROPOSED TYPICAL SECTION VENITA DRIVE

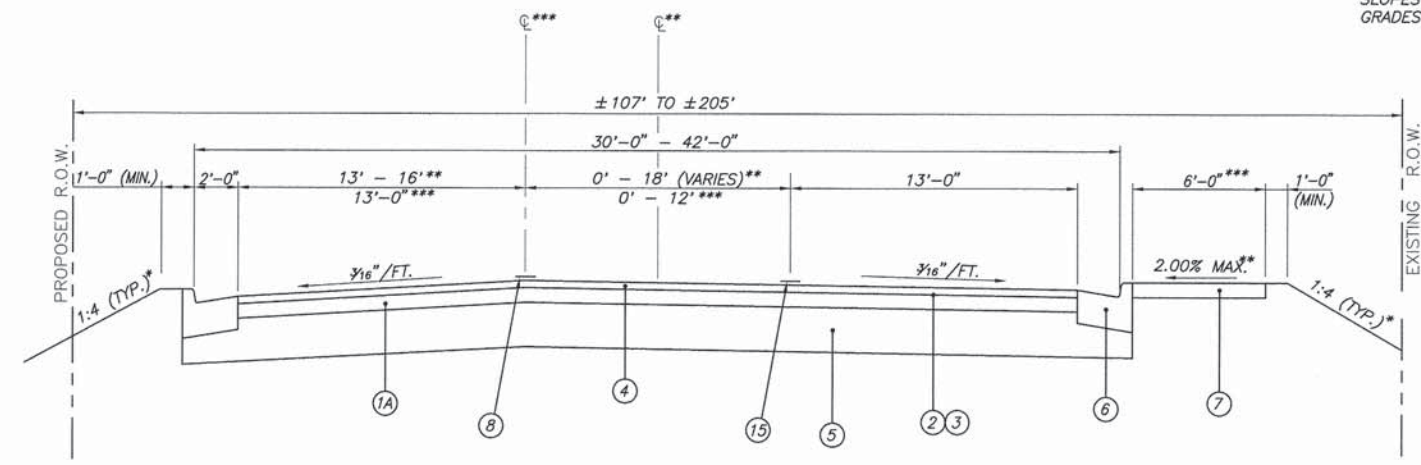
Scale: 1"=4' (Horizontal)
1"=2' (Vertical)
STA: 100+12.00 - STA: 103+56.00

NOTE: FOR LANE TRANSITION DIMENSIONS, SEE PLAN SHEET.

* SEE CROSS SECTIONS FOR VARIABLE EARTH SLOPES AND ENTRANCE GRADES

PAVEMENT DESIGN

FAU 9336 (VENITA DRIVE SOUTH)
STRUCTURAL DESIGN TRAFFIC: YEAR 2022
PV= 9,747 SU= 252 MU= 101
ROAD/STREET CLASSIFICATION: URBAN COLLECTOR CLASS ROAD: I
TRAFFIC FACTOR: Actual TF= 0.75 Minimum TF= N/A
PG GRADE: Binder= 64-22 Surface= 64-22
THICKNESS - 10"
SUBGRADE SUPPORT RATING: POOR



PROPOSED TYPICAL SECTION VENITA DRIVE W/LEFT TURN LANE

Scale: 1"=4' (Horizontal)
1"=2' (Vertical)
STA: 103+56.00 - STA: 105+85.72 **
STA: 111+69.02 - STA: 118+85.00 (POINT OF PAVEMENT CROWN) ***

NOTE: FOR LANE TRANSITION DIMENSIONS, SEE PLAN SHEET.

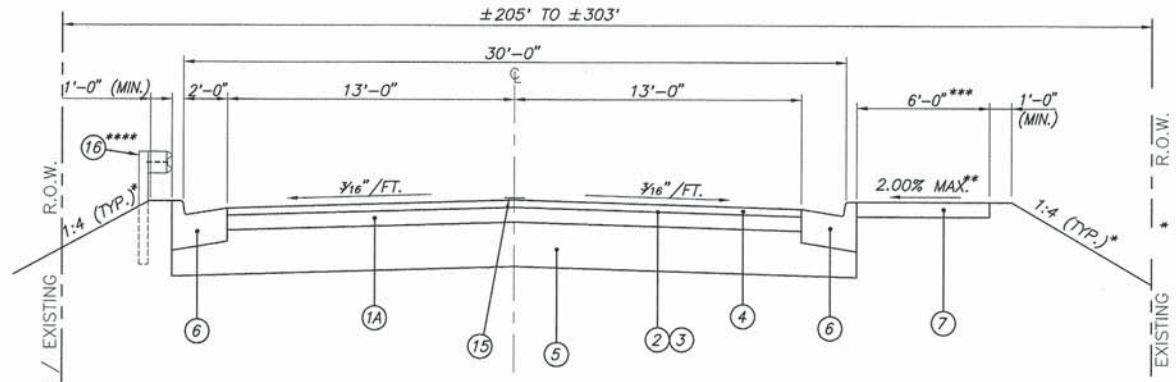
* SEE CROSS SECTIONS FOR VARIABLE EARTH SLOPES AND ENTRANCE GRADES

** SEE PLANS FOR SIDEWALK SLOPE TRANSITIONS

*** SEE PLANS FOR BUFFER SPACE AREAS

PAVEMENT DESIGN

FAU 9331 (VENITA DRIVE NORTH)
STRUCTURAL DESIGN TRAFFIC: YEAR 2022
PV= 5,404 SU= 140 MU= 56
ROAD/STREET CLASSIFICATION: URBAN COLLECTOR CLASS ROAD: II
TRAFFIC FACTOR: Actual TF= 0.38 Minimum TF= N/A
PG GRADE: Binder= 64-22 Surface= 64-22
THICKNESS - 8"
SUBGRADE SUPPORT RATING: POOR



PROPOSED TYPICAL SECTION VENITA DRIVE

Scale: 1"=4' (Horizontal)
1"=2' (Vertical)
**** - STA. 106+34.00 RT. TO 107+18.25 RT.
STA. 106+43.30 LT. TO 107+25.45 LT.
STA. 109+20.66 RT. TO 110+04.33 RT.
STA. 109+27.54 LT. TO 110+09.87 LT.
STA: 105+85.72 - STA: 106+91.89
STA: 109+53.97 - STA: 111+69.02

NOTE: FOR LANE TRANSITION DIMENSIONS, SEE PLAN SHEET.

NOTE: PAVING OMISSION FOR APPROACH PAVEMENT AND STRUCTURE FROM STA. 106+91.89 TO STA. 109+53.97

* SEE CROSS SECTIONS FOR VARIABLE EARTH SLOPES AND ENTRANCE GRADES

** SEE PLANS FOR SIDEWALK SLOPE TRANSITIONS

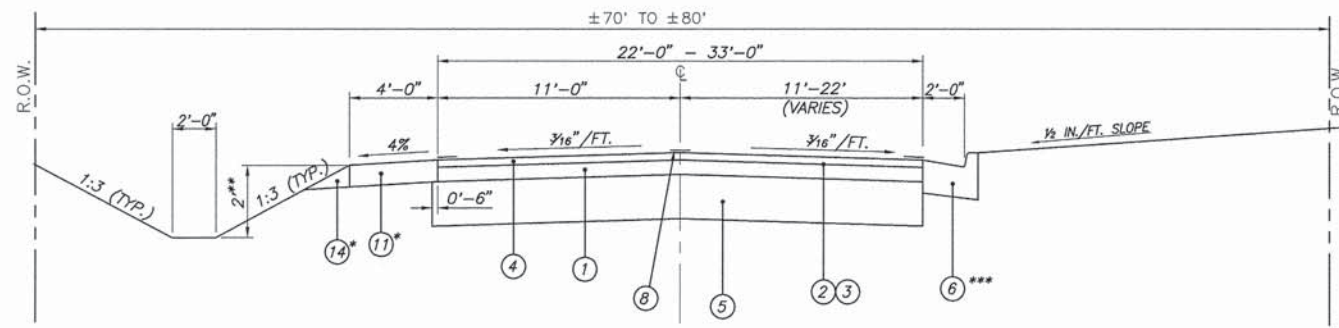
*** SEE PLANS FOR BUFFER SPACE AREAS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	7
FEDERAL AID/GCPF PROJECT		CONTRACT 97533		

LEGEND

- ① HOT-MIX ASPHALT BINDER COURSE, IL. 19.0, N70, 8"
- ①A HOT-MIX ASPHALT BINDER COURSE, IL. 19.0, N70, 6"
- ② BITUMINOUS MATERIALS (PRIME COAT)
- ③ AGGREGATE (PRIME COAT)
- ④ HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70, 2"
- ⑤ LIME MODIFIED SOIL, 12"
- ⑥ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.24
- ⑦ P.C.C. SIDEWALK, 4"
- ⑧ THERMOPLASTIC PAVEMENT MARKING
- ⑨ COMBINATION CONCRETE CURB & GUTTER, TYPE B-6.18
- ⑩ HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70, 2"
- ⑪ HOT-MIX ASPHALT SHOULDERS, 6"
- ⑫ AGGREGATE SHOULDERS, TYPE B, 6"
- ⑬ SUB-BASE GRANULAR MATERIAL, 12"
- ⑭ AGGREGATE WEDGE SHOULDERS, TYPE B
- ⑮ WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
- ⑯ TRAFFIC BARRIER TERMINAL



PROPOSED TYPICAL SECTION FRONTAGE ROAD W/OPEN DITCHES

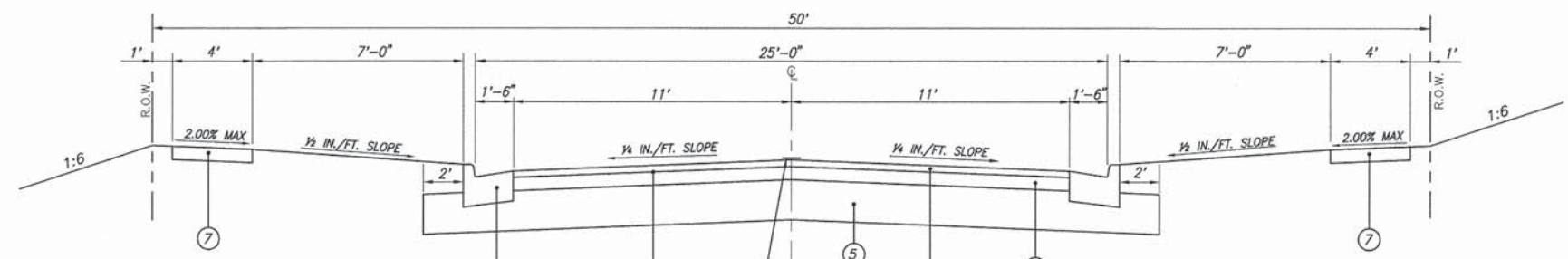
Scale: 1"=4' (Horizontal)
1"=2' (Vertical)

NOTE: FOR LANE TRANSITION DIMENSIONS, SEE PLAN SHEET.

* SHOULDERS SHALL BE CONSTRUCTED STARTING AT STA. 197+69.96 RT. AND STA. 198+44.74 LT.

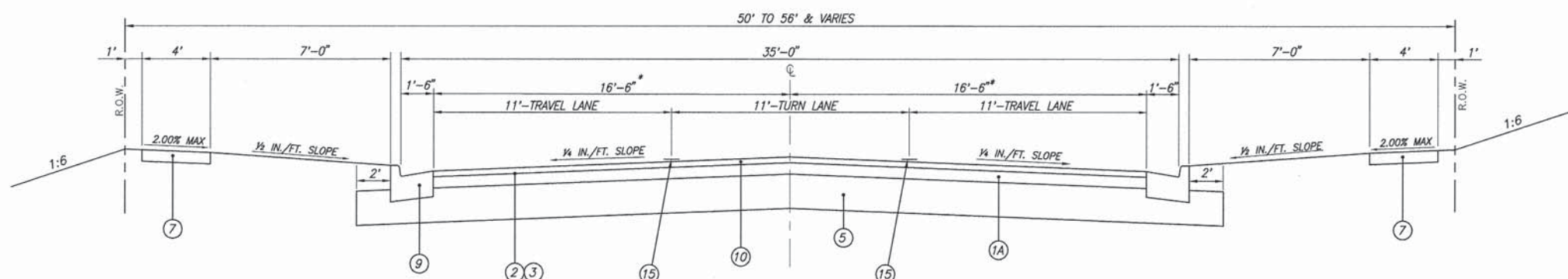
**SEE CROSS SECTIONS FOR VARIABLE DITCH DEPTHS

***TYPE B-6.24 COMB. CURB & GUTTER SHALL BE CONSTRUCTED STARTING AT STA. 202+73.90 RT. AND STA. 202+78.03 LT.



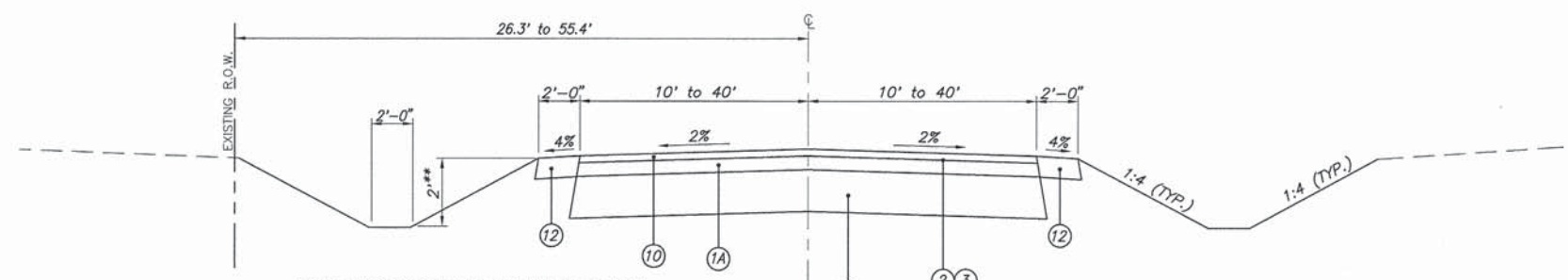
PROPOSED TYPICAL SECTION (RELOCATED) TAYLOR ROAD

N.T.S.
STA: 10+06.97 - STA: 23+31.89



PROPOSED TYPICAL SECTION (RELOCATED) TAYLOR ROAD

N.T.S.
STA: 23+31.89 - STA: 26+38.30
* - TRANSITION 11' TO 16'-6" STA. 23+31.89 - 24+97.13



PROPOSED TYPICAL SECTION COTTAGE HILLS DRIVE

Scale: 1"=4' (Horizontal)
1"=2' (Vertical)

NOTE: EXISTING COTTAGE HILLS DRIVE AGGREGATE SUB-BASE MAY REMAIN IF SO DIRECTED BY THE ENGINEER.

**SEE CROSS SECTIONS FOR VARIABLE DITCH DEPTHS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	9
FEDERAL AID/GCPF PROJECT		CONTRACT 97533		

STORM SEWER SCHEDULE

No.	STRUCTURE PT. - PT.	RUBBER GASKET, CLASS A									WATER MAIN REQUIREMENTS	PIPE DRAINS	TRENCH BACKFILL
		TYPE 1			TYPE 2			TYPE 3					
		12" FOOT	15" FOOT	18" FOOT	12" FOOT	18" FOOT	24" FOOT	30" FOOT	24" FOOT	30" FOOT			
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 100+12.00 TO 103+56.00													
1	1 - 2										66		9
2	2 - 3										41		5
3	3 - 4										131		25
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00													
4	4 - 5											146	38
5	5 - 6			165									94
7	7 - 8								27				0
8	8 - 9									55			11
9	9 - 4									16			3
10	11 - 12	26											3
11	12 - 9						236						66
12	13 - 14	35											0
13	14 - 8								210				0
14	15 - 16	26											3
15	16 - 15B	122											19
15A	15A - 15B	27											5
16	17 - 18	195											26
16A	15B - 17	120											18
17	19 - 17	38											7
18	20 - 18	58											8
19	18 - 21	136											0
20	EX. 24" - PRECAST BOX							58					0
44	47 - 48	39											5
45	48 - 50	150											20
46	49 - 50	32											4
47	50 - OPEN DITCH	33											0
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92													
21	22 - 23	44											9
22	24 - 25	44											13
23	12" CMP - OPEN DITCH										8		0
24	26 - 27	66											10
25	27A - 27										24		0
26	27 - OPEN DITCH	49											13
27	28 - 29	58											7
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30													
28	30 - 31						23						2
29	31 - 32						26						5
30	32 - 33						24						3
31	34 - 32	175											51
32	35 - 34	26											7
33	36 - 34						172						44
34	37 - 36	26											6
35	38 - 39	26											6
36	39 - 40						154						40
37	41 - 40	26											6
38	40 - 42	122											39
39	44 - 43	16											3
40	43 - 42	26											3
41	42 - 46	116											35
42	45 - 46	27											8
43	46 - PRECAST BOX						27						23
SUBTOTAL 06-00057-00-PV 0 261 0 0 0 0 0 0 0 238 0 32 91													
SUBTOTAL 08-00050-01-GS 1438 158 73 165 562 27 237 71 58 0 146 0 611													
TOTAL 1438 419 73 165 562 27 237 71 58 238 146 32 706													

* - THE CONTRACTOR SHALL REMOVE THE EXISTING END SECTION AND BEGIN LAYING THE PROPOSED STORM SEWER FROM ELEV. 535.75 AND EXTEND INTO THE PROPOSED BOX CULVERT AT ELEV. 533.44. THE ANNULAR SPACE LEFT AT THE PROPOSED BOX CULVERT SHALL BE FILLED WITH NON-SHRINK GROUT. THE COST FOR REMOVING THE END SECTION AND SEALING THE JOINT BETWEEN THE STORM SEWER AND BOX CULVERT SHALL BE INCLUDED IN THE COST OF THE STORM SEWER CONSTRUCTION.

TRENCH BACKFILL SCHEDULE

LOCATION	TRENCH BACKFILL
	CU YD
SECTION 06-00057-00-PV	
STORM SEWER SCHEDULE	91
DRAINAGE REMOVAL SCHEDULE	74
SECTION 08-00050-01-GS	
STORM SEWER SCHEDULE	611
DRAINAGE REMOVAL SCHEDULE	142
SUBTOTAL 06-00057-00-PV	165
SUBTOTAL 08-00050-01-GS	753
TOTAL	918

DRAINAGE REMOVAL SCHEDULE

LOCATION	DESCRIPTION	PIPE CULVERT REMOVAL	REMOVING INLETS	REMOVAL OF EXISTING STRUCTURES	REMOVE EXISTING FLARED END SECTION	TRENCH BACKFILL
						CU YD
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27						
STA. 79+75 LT.	15" RCCP					1
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 100+12.00 TO 103+56.00						
STA. 101+37 LT.	12" CMP	36				4
STA. 102+24 LT.	15" CMP	44				6
STA. 102+38 RT.	12" CMP	94				14
STA. 103+03 RT.	12" CMP	16				2
STA. 103+30 RT.	12" CMP	24				3
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00						
STA. 103+81 RT.	12" CMP	20				3
STA. 104+64 RT.	10" CMP	10				1
STA. 104+70 RT.	EXISTING INLET		1			
STA. 104+75 RT.	18" CMP	8				1
STA. 104+76 RT.	18" CMP	38				7
STA. 105+00 RT.	20" CMP	57				12
STA. 105+19 LT.	15" CMP	25				11
STA. 105+24 RT.	24" CMP	42				3
STA. 105+28 LT.	24" CMP	15				
STA. 105+33 RT.	EXISTING INLET		1			
STA. 105+53 LT.	EXISTING INLET		1			
STA. 106+16 RT.	30"X42" CMP	140				60
STA. 106+97 RT.	EXISTING INLET		1			
STA. 108+56 RT.	18" CMP	39				15
STA. 112+63 RT.	2"X6" CONC. BOX			1		24
STA. 112+92 RT.	24" RCCP				1	
STA. 112+97 RT.	15" CMP	29				5
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92						
STA. 199+10 RT.	15" CMP	51				8
STA. 200+01 RT.	15" CMP	43				11
STA. 201+06 RT.	12" CMP				1	
STA. 201+13 LT.	15" CMP	59				6
STA. 201+57 RT.	15" CMP	42				9
STA. 201+74 RT.	12" CMP				1	
STA. 202+07 RT.	15" CMP	58				11
COTTAGE HILLS DRIVE - SECTION NO. 08-00050-01-GS STATION 1+00.00 TO 1+75.78						
STA. 1+00 LT.	12" CMP	20				74
STA. 2+14 RT.	12" CMP	5				
STA. 2+53 RT.	26"X30" CMP	8				
SUBTOTAL 06-00057-00-PV 409 0 0 0 1 74						
SUBTOTAL 08-00050-01-GS 256 4 1 3 142						
TOTAL 665 4 1 4 216						

MISCELLANEOUS REMOVAL SCHEDULE

LOCATION	PAVEMENT REMOVAL	HMA SURFACE REMOVAL - BUTT JOINT	CURB REMOVAL	CURB & GUTTER REMOVAL	GUARDRAIL REMOVAL	ISLAND REMOVAL	SIDEWALK REMOVAL	VALVE VAULTS TO BE REMOVED	DOMESTIC METER VAULTS TO BE REMOVED	FIRE HYDRANTS TO BE REMOVED	FILLING MANHOLES
								EACH	EACH	EACH	EACH
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27											
STA. 75+64 TO 79+68 LT.	434										
STA. 76+35 TO 76+50 RT.						385					
STA. 76+89 TO 77+14 RT.						154					
STA. 78+39 TO 78+67 LT.			28								
STA. 79+57 TO 79+68 LT.				9			43				
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+35.97 TO 103+56.00											
STA. 100+22 TO 102+98 @/RT.	1053							1			
STA. 101+82 LT.											
STA. 102+00 RT.				11		97					
STA. 102+33 RT.				13		93					
STA. 102+77 TO 102+36 RT.				63							
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00											
STA. 104+08 RT.								1			
STA. 104+71 RT.			8								
STA. 104+82 RT.								1			
STA. 104+99 TO 105+23 LT.						396					
STA. 105+04 RT.									1		
STA. 105+07 LT.											
STA. 105+12 RT.				16		72					
STA. 105+14 TO 105+56 LT.	264										
STA. 106+67 RT.										1	
STA. 106+95 RT.											1
STA. 112+27 TO 114+06 RT./LT.					180						
STA. 112+32 TO 112+84 RT.					56						
STA. 115+75 TO 118+85 @	818										
STA. 119+15 TO 119+35 @		92									
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92											
STA. 200+23 TO 203+89 @/RT.	1436										
SUBTOTAL 06-00057-00-PV 2923 0 115 9 0 729 43 1 0 0 0											
SUBTOTAL 08-00050-01-GS 1082 92 24 0 236 72 396 2 1 1 2											
TOTAL 4005 92 139 9 236 801 439 3 1 1 2											

NOTE: FOR EXISTING PAVEMENT TO REMAIN, SECTION 205 OF THE IDOT STANDARD SPECIFICATIONS SHALL APPLY.
* - INCLUDES PAVEMENT TO BE REMOVED ON COTTAGE HILLS DRIVE

E:\1478 - CT\Bills - Hwy 50 & Venita Drive\CONSTRUCTION\SCHEDULES\06-00057-00-PV.dwg

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	10
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

PAVING SCHEDULE

LOCATION	PROCESSING MODIFIED SOIL, 12" SQ YD	LIME TON	SUB-BASE GRANULAR MATERIAL, TYPE A 12" SQ YD	AGGREGATE BASE COURSE, TYPE A 8" SQ YD	HMA BINDER CRSE. IL-19.0, N70, 6" TON	HMA BINDER CRSE. IL-19.0, N70, 8" TON	BIT. MATERIALS (PRIME COAT) GALLON	AGGREGATE (PRIME COAT) TON	HMA SURFACE CRSE., MIX "C", N70, 2" TON	HMA SURFACE CRSE., MIX "D", N70, 2" TON	HMA SHOULDERS, 6" SQ YD	AGGREGATE SHOULDERS, TYPE B, 6" TON	AGGREGATE WEDGE SHOULDERS, TYPE B TON
SECTION NO. 06-00057-00-PV													
WEST HIGHWAY 50													
STA. 77+74.22 TO 79+67.46 LT.			314			115	116	0.4		29			
VENITA DRIVE													
STA. 100+12.00 TO 103+56.00 @	3,147	61				1,318	221	4.4		330			
FRONTAGE ROAD													
STA. 197+69.96 TO 202+78.13 LT./RT.											372		24
STA. 200+23.36 TO 203+49.11 @	1,229	24				531	89	1.8		133			
SECTION NO. 08-00050-01-GS													
VENITA DRIVE													
STA. 103+56.00 TO 106+91.89 @	1,457	28			424		95	1.9		141			
STA. 109+53.97 TO 118+85.00 @	3,893	75			1,129		252	5.0		376			
STA. 118+85.00 TO 119+50.00 @							13	0.3		24*			6
TAYLOR ROAD													
STA. 10+06.97 TO 26+25.30 @	5,748	111			1,480		330	6.6	493				
COTTAGE HILLS DRIVE													
STA. 1+00.00 TO 1+75.78 @			669		225		301	1.0	75			16	
ACCESS ROAD													
STA. 303+23.33 TO 305+04.13 @				108									
SUBTOTAL 06-00057-00-PV	4,376	85	314			1,864	426	6.6		492	372		24
SUBTOTAL 08-00050-01-GS	11,098	214	669	108	3,258		991	14.8	568	541		16	6
TOTAL	15,474	299	983	108	3,258	1,864	1,417	21.4	568	1,033	372	16	30

* - 1 1/2" NOMINAL THICKNESS AT THE @ (SEE CROSS SECTIONS FOR VARYING THICKNESS)

CONCRETE CURB AND GUTTER SCHEDULE

LOCATION	C & G TYPE B6.18	C & G TYPE B6.24	CONCRETE CURB TYPE B	CONC. GUTTER TYPE A	CLASS SI CONCRETE (OUTLET)
	FOOT	FOOT	FOOT	FOOT	CU YD
SECTION NO. 06-00057-00-PV					
HIGHWAY 50					
STA. 78+39.53 TO 78+67.53 LT			28		
STA. 77+74.22 TO 79+67.46 LT		193			
VENITA DRIVE					
STA. 100+26.70 RT TO 102+78.42 RT		296			
STA. 103+26.90 RT TO 103+56.00 RT		39			
STA. 100+20.85 LT TO 102+96.78 LT*		330			
STA. 101+93.24 RT TO 102+37.98 RT			45		
FRONTAGE ROAD					
STA. 202+59.84 RT TO 203+00.37 RT					3.2
STA. 202+67.60 LT TO 202+99.97 LT					3.0
STA. 202+99.97 LT TO 203+40.31 LT (103+56.00 LT. -VENITA)		45			
SECTION NO. 08-00050-01-GS					
VENITA DRIVE					
STA. 103+56.00 RT TO 106+88.70 RT		330			
STA. 103+56.00 LT TO 106+95.00 LT		349			
STA. 104+64.54 RT TO 105+13.48 RT			47		
STA. 105+05.09 RT TO 105+15.71 RT					3.0
STA. 105+15.71 RT TO 107+48.59 RT				211	
STA. 109+50.80 RT TO 118+85.00 RT		939			
STA. 109+57.10 LT TO 115+76.06 LT		624			
STA. 116+32.42 LT TO 118+85.00 LT		257			
TAYLOR ROAD					
STA. 10+08.87 LT TO 26+07.88 LT	1,619				
STA. 10+08.00 RT TO 18+67.73 RT	871				
STA. 18+97.73 RT TO 19+71.28 RT	86				
STA. 20+48.60 RT TO 22+67.77 RT	236				
STA. 23+10.55 RT TO 25+96.81 RT	292				
SUBTOTAL 06-00057-00-PV		903	73		6.2
SUBTOTAL 08-00050-01-GS	3,104	2,499	47	211	3.0
TOTAL	3,104	3,402	120	211	9.2

* INCLUDES FRONTAGE ROAD RIGHT CURB AND GUTTER

PROTECTIVE COAT SCHEDULE

LOCATION	PROTECTIVE COAT AREA
	SQ YD
SECTION NO. 06-00057-00-PV	
HIGHWAY 50	
STA. 77+74.22 LT TO 79+67.46 LT, COMBINATION CURB AND GUTTER, B-6.24	54
VENITA DRIVE	
STA. 100+26.70 RT TO 102+78.40 RT, COMBINATION CURB AND GUTTER, B-6.24	82
STA. 103+26.90 RT TO 103+56.00 RT, COMBINATION CURB AND GUTTER, B-6.24	11
STA. 100+20.85 LT TO 102+96.78 LT, COMBINATION CURB AND GUTTER, B-6.24	92
STA. 103+30 RT TO 103+56 RT, PCC SIDEWALK, 4"	20
FRONTAGE ROAD	
STA. 202+59.66 RT TO 203+00.37 RT, CLASS SI CONCRETE (OUTLET)	18
STA. 202+67.59 LT TO 202+99.97 LT, CLASS SI CONCRETE (OUTLET)	16
STA. 202+99.97 LT TO 203+40.31 LT, COMBINATION CURB AND GUTTER, B-6.24	13
SECTION NO. 08-00050-01-GS	
VENITA DRIVE	
STA. 103+56.00 RT TO 106+88.70 RT, COMBINATION CURB AND GUTTER, B-6.24	92
STA. 103+56.00 LT TO 106+95.00 LT, COMBINATION CURB AND GUTTER, B-6.24	97
STA. 105+15.71 RT TO 107+48.59 RT, CONCRETE GUTTER, TYPE A	70
STA. 109+50.80 RT TO 118+85.00 RT, COMBINATION CURB AND GUTTER, B-6.24	261
STA. 109+57.10 LT TO 115+76.06 LT, COMBINATION CURB AND GUTTER, B-6.24	173
STA. 116+32.42 LT TO 118+85.00 LT, COMBINATION CURB AND GUTTER, B-6.24	71
STA. 103+56 RT TO 107+18 RT, PCC SIDEWALK, 4"	240
STA. 106+92 @ TO 107+18 @, BRIDGE APPROACH PAVEMENT	104
STA. 109+18 RT TO 115+76 RT, PCC SIDEWALK, 4"	444
STA. 109+24 @ TO 109+54 @, BRIDGE APPROACH PAVEMENT	104
TAYLOR ROAD	
STA. 10+08.87 LT TO 26+07.88 LT, COMBINATION CURB AND GUTTER, B-6.18	360
STA. 10+08.00 RT TO 18+67.73 RT COMBINATION CURB AND GUTTER, B-6.18	194
STA. 18+97.73 RT TO 19+71.28 RT COMBINATION CURB AND GUTTER, B-6.18	19
STA. 20+48.60 RT TO 22+67.77 RT COMBINATION CURB AND GUTTER, B-6.18	52
STA. 23+10.55 RT TO 25+96.81 RT COMBINATION CURB AND GUTTER, B-6.18	65
STA. 10+11 RT. TO 18+67 RT. PCC SIDEWALK, 4"	377
STA. 10+12 LT. TO 26+03 LT. PCC SIDEWALK, 4"	716
STA. 18+99 RT. TO 19+70 RT. PCC SIDEWALK, 4"	31
STA. 20+49 RT. TO 22+66 RT. PCC SIDEWALK, 4"	100
STA. 23+12 RT. TO 26+04 RT. PCC SIDEWALK, 4"	132
SUBTOTAL 06-00057-00-PV	306
SUBTOTAL 08-00050-01-GS	3,702
TOTAL	4,008

PCC SIDEWALK SCHEDULE

LOCATION	P.C.C. SIDEWALK, 4"	DETECTABLE WARNINGS
	SQ FT	SQ FT
SECTION NO. 06-00057-00-PV		
VENITA DRIVE		
STA. 103+30 RT. TO 103+56 RT.	180	
SECTION NO. 08-00050-01-GS		
VENITA DRIVE		
STA. 103+56 RT. TO 107+18 RT.	2162	
STA. 109+18 RT. TO 115+76 RT.	3996	
STA. 115+72 RT.		12
TAYLOR ROAD		
STA. 10+11 RT. TO 18+67 RT.	3397	
STA. 10+14 RT.		16
STA. 10+12 LT. TO 26+03 LT.	6443	
STA. 10+14 LT.		15
STA. 18+99 RT. TO 19+70 RT.	281	
STA. 20+49 RT. TO 22+66 RT.	901	
STA. 23+12 RT. TO 26+04 RT.	1191	
STA. 26+00 LT.		12
STA. 26+01 RT.		13
SUBTOTAL 06-00057-00-PV	180	
SUBTOTAL 08-00050-01-GS	18,371	68
TOTAL	18,551	68

PATCHING SCHEDULE

LOCATION	CLASS D PATCHES, TYPE II, 6"	CLASS D PATCHES, TYPE III, 10"	CLASS D PATCHES, TYPE IV, 10"
	SQ YD	SQ YD	SQ YD
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+35.97 TO 103+56.00			
STA. 99+09 TO 99+37 RT.			48
STA. 99+19 TO 99+34 LT.		17	
STA. 101+95 TO 102+00 RT.	10		
STA. 102+24 TO 102+35 RT.	14		
SUBTOTAL 06-00057-00-PV	24	17	48
SUBTOTAL 08-00050-01-GS	0	0	0
TOTAL	24	17	48

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	11
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	

TREE REMOVAL SCHEDULE

LOCATION	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	TREE REMOVAL (OVER 15 UNITS DIAMETER)
	UNITS	UNITS
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 100+12.00 TO 103+56.00		
STA. 102+66, 32' LT.	12	
STA. 102+69, 54' LT.		18
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00		
STA. 104+19, 1' RT.		30
STA. 104+48, 10' RT.		24
STA. 104+70, 63' LT.		36
STA. 104+73, 61' LT.		36
STA. 104+93, 55' LT.		24
STA. 104+96, 69' LT.		18
STA. 105+05, 108' LT.		36
STA. 105+23, 43' RT.		18
STA. 105+37, 51' LT.	12	
STA. 105+39, 52' LT.	14	
STA. 105+40, 47' LT.	14	
STA. 105+66, 40' RT.		16
STA. 105+72, 10' RT.		28
STA. 106+28, 27' RT.		24
STA. 106+53, 15' LT.		36
STA. 106+94, 6' RT.		36
STA. 107+24, 125' LT.		24
STA. 107+44, 138' LT.		48
STA. 111+32, 142' RT. TO 112+83, 38' RT.	3@6", 1@7" & 1@10"	
STA. 113+40, 58' RT.	7	
STA. 113+57, 51' RT.	6	
STA. 113+74, 53' RT.	7	
STA. 113+84, 36' LT. TO 114+62, 67' LT.	2@6"	22
STA. 113+93, 53' RT.	6	
STA. 114+12, 60' RT.	6	
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92		
STA. 201+97, 93' LT.		20
STA. 201+98, 90' LT.	12	
STA. 202+45, 23' LT.		20
STA. 202+46, 26' LT.	12	
STA. 202+57, 45' LT.		36
STA. 202+62, 25' RT.		16
STA. 202+73, 4' RT.	12	
STA. 202+80, 1' RT.	6	
STA. 202+81, 1' RT.	12	
STA. 202+89, 34' RT.		18
STA. 202+98, 12' RT.		20
STA. 203+19, 42' RT.	8	
STA. 203+23, 44' RT.		18
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30		
STA. 24+59, 83' RT. TO 23+79, 86' LT.	4@6", 3@8", 2@13", 3@15"	2@18", 2@24", 1@30", 1@44"
SUBTOTAL 06-00057-00-PV	74	166
SUBTOTAL 08-00050-01-GS	238	614
TOTAL	312	780

GUARDRAIL SCHEDULE

LOCATION	TERMINAL MARKER - DIRECT APPLIED	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT	GUARDRAIL MARKERS, TYPE A
	EACH	EACH	EACH	EACH
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00				
STA. 106+33.97 RT.	1			
STA. 106+33.97 TO STA. 106+87.60 RT.			1	2
STA. 106+43.31 LT.	1			
STA. 106+43.31 TO STA. 106+94.88 LT.			1	2
STA. 106+87.60 TO STA. 107+20.46 RT.		1		2
STA. 106+94.88 TO STA. 107+27.74 LT.		1		2
STA. 109+18.12 TO STA. 109+50.97 RT.		1		2
STA. 109+25.40 TO STA. 109+58.26 LT.		1		2
STA. 109+50.97 TO STA. 110+04.33 RT.			1	2
STA. 109+58.26 TO STA. 110+09.87 LT.			1	2
STA. 110+04.33 RT.	1			
STA. 110+09.87 LT.	1			
SUBTOTAL 06-00057-00-PV	0	0	0	0
SUBTOTAL 08-00050-01-GS	4	4	4	16
TOTAL	4	4	4	16

EARTHWORK SCHEDULE

LOCATION	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (25%)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	BORROW EXCAVATION (15%)
	CU YD	CU YD	CU YD	CU YD	CU YD
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27					
STA. 77+74.22 TO 79+56.61	69	52	221	-169	199
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+35.97 TO 103+56.00					
STA. 100+12.00 TO 103+56.00	226	170	1,089	-919	1,081
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00					
STA. 103+56.00 TO 107+70.85	6	4	30,961	-30,957	36,420
STA. 108+40.85 TO 118+85.00	590	443	57,551	-57,108	67,186
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92					
STA. 200+23.36 TO 203+88.92	1,069	802	441	+361	-361
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30					
STA. 10+00.00 TO 26+38.30	3,656	2,742	3,533	-791	931
COTTAGE HILLS - SECTION NO. 08-00050-01-GS STATION 1+00.00 TO 1+76.07					
STA. 1+00.00 TO 1+76.07	347	260	1	+259	-259
ACCESS ROAD - SECTION NO. 08-00050-01-GS STATION 303+00.00 TO 305+04.13					
STA. 303+23.33 TO 305+04.13	281	211	0	+211	-211
SUBTOTAL 06-00057-00-PV	1,364				919
SUBTOTAL 08-00050-01-GS	4,880				104,067
TOTAL	6,244				104,986

FENCE SCHEDULE

LOCATION	CHAIN LINK FENCE, 6'	CHAIN LINK GATES, 6'X12' DOUBLE
	FOOT	EACH
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00		
STA. 108+48.75 TO STA. 108+76.34 LT.		1
STA. 108+76.34 TO STA. 109+26.51 LT.	50	
SUBTOTAL 06-00057-00-PV	0	0
SUBTOTAL 08-00050-01-GS	50	1
TOTAL	50	1

ENTRANCE / SIDEROAD SCHEDULE

STATION	EXISTING SURFACE	TYPE	"L"	"W"	DRIVEWAY PAV'T REMOVAL	PCC DRIVEWAY PAVEMENT, 6"	PCC DRIVEWAY PAVEMENT, 8"	AGG. SURFACE COURSE, TY B, 6"	AGGREGATE FOR TEMPORARY ACCESS	COMMENTS
			FOOT	FOOT	SQ YD	SQ YD	SQ YD	TON	TON	
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27										
78+54.91 LT.	TURF	C.E.	31.7	24.0					30 ****	TEMPORARY ACCESS ENTRANCE
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 100+12.00 TO 103+56.00										
102+15.83 RT.	ASPHALT	C.E.			42.8					
***103+10.31 RT.	ASPHALT	C.E.		46.6						SHARED USE ENTRANCE
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00										
104+88.31 RT.	ASPHALT	C.E.			71.1					
107+60.77 RT.	ASPHALT	C.E.			26.7					
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92										
199+10.84 RT.	AGGREGATE	F.E.	14.0	24.0				12.6		
200+00.92 RT.	CONCRETE	C.E.	18.4	24.0	58.0	52.7 **				GREGORY MUREN
201+57.43 RT.	CONCRETE	C.E.	32.7	24.0	54.5	90.8 **		3.0 *		RICKHOFF & ASSOCIATES
202+06.70 RT.	ASPHALT	C.E.	53.7	24.0	61.9	147.1**		4.0 *		MODERN HAIR STUDIO
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30										
18+82.71 RT.		C.E.	14.1	27.0			53.5			FIREHOUSE ENTRANCE
20+10.00 RT.		C.E.	14.1	74.5			127.5			FIREHOUSE ENTRANCE
22+89.15 RT.		C.E.	14.1	39.5			81.1			PARKING LOT ENTRANCE
COTTAGE HILLS - SECTION NO. 08-00050-01-GS STATION 1+00.00 TO 1+76.07										
1+00.00 LT.	AGGREGATE	P.E.	6.0	16.6				4.1		
2+25.00 RT.	ASPHALT	P.E.	9.3	21.4	22.0					DRIVEWAY ON VENTURA DRIVE
SUBTOTAL 06-00057-00-PV					217.2	290.6	0	19.6	125	
SUBTOTAL 08-00050-01-GS					119.8	0	262.1	4.1	25	
TOTAL					337.0	290.6	262.1	23.7	150	

NOTE: PLEASE REFER TO ENTRANCE DETAILS ON SHEET 93 TO SEE APPLICATION OF THE DIMENSIONS.
 * - MAILBOX TURNOUT QUANTITIES
 ** - HIGH EARLY STRENGTH CONCRETE MIX SHALL BE USED FOR THE CONSTRUCTION OF PCC ENTRANCES AND CURB IN FRONT OF ENTRANCES. THE COST SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR PCC DRIVEWAY PAVEMENT OF THICKNESS SPECIFIED AND CONCRETE CURB AND GUTTER OF TYPE SPECIFIED.
 *** - QUANTITIES FOR THIS ENTRANCE ARE INCLUDED IN THE ROADWAY PAVING QUANTITIES.
 **** - AN ADDITIONAL 120 TONS OF AGGREGATE FOR TEMPORARY ACCESS HAS BEEN INCLUDED IN THE PLANS FOR THE PURPOSE OF MAINTAINING ACCESS TO PRIVATE PROPERTY AND LOCAL TRAFFIC THROUGHOUT THE CONSTRUCTION OPERATIONS.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	12
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

SIGN SCHEDULE

PROPOSED LOCATION	LT/RT	PROPOSED OFFSET FOOT	SIGN PANEL TYPE 1 SQ FT	SIGN PANEL TYPE 2 SQ FT	METAL POST TYPE A FOOT	METAL POST TYPE B FOOT	DESCRIPTION
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27							
SEE TRAFFIC SIGNAL PLANS FOR LOCATIONS							
STA 79+14	LT	31.00	4.00		13.0		R3-1100 (RIGHT TURN LANE)
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+35.97 TO 103+56.00							
STA 97+93	RT	31.00		10.0		2 @ 13.5	R3-8a (DIRECTIONAL ARROWS)
STA 100+39	LT	87.00					INTERSTATE SIGN (RELOCATED)
STA 101+50	RT	30.00	7.5		13.0		R2-1 (SPEED LIMIT, 30 MPH)
STA 102+04	LT	43.00		10.0		2 @ 13.5	R3-8a (DIRECTIONAL ARROWS)
STA 102+38	RT	32.00					FRONTAGE ROAD ENTRANCE (RELOCATED)
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00							
STA 106+75	LT	21.00					SPEED LIMIT (RELOCATED)
STA 108+65	LT	20.00		10.00			R11-2 (ROAD CLOSED, MOUNTED TO FENCE))
STA 109+50	RT	18.00	6.00		13.0		R2-1 (SPEED LIMIT, 30 MPH)
STA 113+50	RT	35.00	6.25/2.00		13.0		W11-2 W/W-16-9P (CROSSWALK/AHEAD)
STA 114+50	RT	35.5	6.25/1.00		13.0		W2-2 W/W17-1100 (T-INTERSECTION/NAME PLAQUE)
STA 115+00	LT	24.00	6.00		13.0		W2+2 (SPEED LIMIT/CROSSWALK/ARROW)
STA 115+62	LT	37.50	6.25/2.00		13.0		
STA 115+76	RT	28.50	6.25/2.00		13.0		W11-2 W/W-16-7P (CROSSWALK/ARROW)
STA 117+00	LT	17.5	6.25/1.00		13.0		W2-2 W/W17-1100 (T-INTERSECTION/NAME PLAQUE)
STA 117+00	RT	27.00					CURVE AHEAD WARNING (RELOCATED)
STA 118+00	LT	17.5	6.25/2.00		13.0		W11-2 W/W-16-9P (CROSSWALK/AHEAD)
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92							
STA 201+00	RT	20.00	6.25		13.0		W3-1 (STOP AHEAD)
STA 202+14	LT	23.00					SPEED LIMIT (RELOCATED)
STA 202+32	RT	34.00					NO PASSING ZONE (RELOCATED)
STA 203+36	RT	43.00					STOP SIGN (RELOCATED)
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30							
STA 10+23	LT	17.00	6.25		13.0		R1-1 (STOP SIGN)
STA 11+50	RT	15.00	6.00		13.0		R2-1 (SPEED LIMIT, 30 MPH)
STA 25+00	LT	22.00	6.00		13.0		R2-1 (SPEED LIMIT, 30 MPH)
STA 25+92	RT	47.00	2.00				STOP SIGN (RELOCATED) W/NEW W4-4P (CROSS TRAFFIC DOES NOT STOP)
SUBTOTAL 06-00057-00-PV			55.25	20.00	39	54	
SUBTOTAL 08-00050-01-GS			79.75	10.00	143	0	
TOTAL			135.00	30.00	182	54	

PERIMETER EROSION BARRIER SCHEDULE

LOCATION	PERIMETER EROSION BARRIER FOOT	
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+35.97 TO 103+56.00		
STA 100+42 TO STA 101+00	88	
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00		
STA 103+66 TO STA 107+70 RT	444	
STA 103+88 TO STA 107+79 LT	559	
STA 108+71 TO STA 115+00 RT	818	
STA 108+80 TO STA 115+63 LT	785	
STA 116+00 TO STA 117+50 RT	150	
STA 116+50 TO STA 117+50 LT	100	
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92		
STA 202+38 TO STA 203+31 LT	109	
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30		
STA 10+22 TO STA 14+00	358	
STA 10+25 TO STA 13+50	345	
STA 22+00 TO STA 25+00	300	
STA 22+00 TO STA 25+89	395	
ACCESS ROAD - SECTION NO. 08-00050-01-GS STATION 303+23.33 TO 305+04.13		
STA 305+30	35	
SUBTOTAL 06-00057-00-PV		197
SUBTOTAL 08-00050-01-GS		4,254
TOTAL		4,451

RIP RAP SCHEDULE

LOCATION	LENGTH (FOOT)	WIDTH (FOOT)			DEPTH (FOOT)	STONE DUMPED RIPRAP CLASS A3 SQ YD	STONE DUMPED RIPRAP CLASS A4 SQ YD	FILTER FABRIC SQ YD	AGGREGATE BEDDING TON
		A	B	C					
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00									
STA 103+62 TO 103+71, RT.	10	5	5	1.83	5.6		5.6		
STA 107+49 TO 107+61, RT.	12	10	10	1.83		13.3	13.3	4.7	
STA 113+88 TO 114+24, LT.	25	6	8	6	5.83		55.6	19.4	
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92									
STA 201+95 TO 202+13, LT.	17	2	2	2	1.83		18.6	6.5	
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30									
STA 23+50 TO 23+75, RT.	25	6	8	6	5.83		55.6	19.4	
SUBTOTAL 06-00057-00-PV						0.0	18.6	18.6	6.5
SUBTOTAL 08-00050-01-GS						5.6	130.1	130.1	43.5
TOTAL						5.6	148.7	148.7	50.0

NOTES: PLEASE REFER TO RIPRAP DETAILS ON SHEET 94 TO SEE APPLICATION OF THE DIMENSIONS. AGGREGATE BEDDING QUANTITY PROVIDED FOR INFORMATION ONLY.

ADJUSTMENT SCHEDULE

LOCATION	WATER VALVES TO BE ADJUSTED EACH	MANHOLE TO BE ADJUSTED EACH	MANHOLE TO BE RECONSTRUCTED EACH			
				WATER VALVES TO BE ADJUSTED EACH	MANHOLE TO BE ADJUSTED EACH	MANHOLE TO BE RECONSTRUCTED EACH
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 100+12.00 TO 103+56.00						
STA 100+56, 5' LT, EXISTING ELEVATION 547.80, PROPOSED ELEVATION 548.92		1				
STA 101+26, 32' RT, EXISTING ELEVATION 547.07, PROPOSED ELEVATION 547.37						
STA 101+78, 7' LT, EXISTING ELEVATION 545.72, PROPOSED ELEVATION 546.67	1					
STA 102+21, 6', EXISTING ELEVATION 545.99, PROPOSED ELEVATION 546.90	1					
STA 103+33, 13' RT, EXISTING ELEVATION 545.61, PROPOSED ELEVATION 549.38			1			
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00						
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92						
STA 201+29, 41' RT, EXISTING ELEVATION 546.98, PROPOSED ELEVATION 549.51			1			
SUBTOTAL 06-00057-00-PV				2	1	2
SUBTOTAL 08-00050-01-GS				1	0	0
TOTAL				3	1	2

NOTE: EXISTING AND PROPOSED ELEVATION SHALL BE VERIFIED IN THE FIELD AND ADJUSTED ACCORDINGLY.

TEMPORARY DITCH CHECKS

LOCATION	TEMPORARY DITCH CHECKS FOOT	
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27		
STA 78+25, 45' LT.	6	
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00		
STA 119+14, 25' LT.	6	
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92		
STA 202+00, 24' LT.	10	
ACCESS ROAD - SECTION NO. 08-00050-01-GS STATION 303+23.33 TO 305+04.13		
STA 303+11, 13' LT.	8	
STA 303+18, 12' RT.	8	
STA 304+68, 13' LT.	6	
STA 305+04, 8' RT.	6	
SUBTOTAL 06-00057-00-PV		16
SUBTOTAL 08-00050-01-GS		34
TOTAL		50

SEEDING SCHEDULE

LOCATION	SEEDING CLASS 2 ACRE	MULCH METHOD 2 ACRE	FERTILIZER NUTRIENTS			TEMPORARY EROSION CONTROL SEEDING POUND	
			NITROGEN POUND	PHOSPHORUS POUND	POTASSIUM POUND		
SECTION 06-00057-00-PV							
HWY 50 - STATION 75+63.79 TO 80+95.27	0.15	0.15	14	14	14	15	
VENITA DR - STATION 97+35.97 TO 103+56.00	0.23	0.23	21	21	21	23	
FRONTAGE RD - STATION 200+23.36 TO 203+88.92	0.50	0.50	45	45	45	50	
SECTION 08-00050-01-GS							
VENITA DR - STATION 103+56.00 TO 118+85.00	4.26	4.26	383	383	383	426	
TAYLOR RD - STATION 10+06.97 TO 26+38.30	1.04	1.04	94	94	94	104	
SUBTOTAL 06-00057-00-PV							88
SUBTOTAL 08-00050-01-GS							530
TOTAL							618

EROSION CONTROL BLANKET

LOCATION	EROSION CONTROL BLANKET SQ YD	
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00		
STA 107+03 TO STA 107+70 RT.	395	
STA 107+27 TO STA 107+85 LT.	420	
STA 108+55 TO STA 109+17 RT.	470	
STA 108+81 TO STA 109+54 LT.	525	
SUBTOTAL 06-00057-00-PV		0
SUBTOTAL 08-00050-01-GS		1,810
TOTAL		1,810

INLET AND PIPE PROTECTION SCHEDULE

LOCATION	INLET AND PIPE PROTECTION EACH	
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27		
STA 75+16.96 44.45'L	1	
STA 79+75.69 42.27'L	1	
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+35.97 TO 103+56.00		
STA 101+90.96 41.00'L	1	
STA 101+87.83 29.00'R	1	
STA 102+30.79 29.58'R	1	
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00		
STA 103+58.97 47.68'R	1	
STA 105+03.14 85.96'R	1	
STA 106+97.31 105.28'R	1	
STA 103+76.81 57.51'L	1	
STA 105+20.34 157.13'L	1	
STA 105+52.47 148.63'L	1	
STA 115+50.14 17.00'L	1	
STA 115+50.14 29.00'R	1	
STA 118+78.00 17.36'R	1	
STA 118+78.00 17.00'L	1	
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92		
STA 198+86.11 25.50'R	1	
STA 199+76.03 25.00'R	1	
STA 201+17.92 26.84'R	1	
STA 201+85.00 31.85'R	1	
STA 201+73.33 54.72'R	1	
STA 202+41.77 37.55'R	1	
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30		
STA 12+93.40 37.92'R	1	
STA 12+91.95 14.50'R	1	
STA 12+91.95 14.50'L	1	
STA 22+53.30 33.12'R	1	
STA 23+64.36 14.80'R	1	
STA 23+64.36 14.80'L	1	
SUBTOTAL 06-00057-00-PV		11
SUBTOTAL 08-00050-01-GS		16
TOTAL		27

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	13
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

PAVEMENT MARKING SCHEDULE

LOCATION	THERMOPLASTIC PAVEMENT MARKINGS							POLYUREA PAVEMENT MARKING, TYPE 1			RAISED REFLECTIVE PAVEMENT MARKERS			SHORT TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL	PAVEMENT MARKING REMOVAL	
	SOLID WHITE 4" LANE LINE	WHITE SKIP DASH 4" LANE LINE (2' - 6')	WHITE SKIP DASH 4" LANE LINE (10' - 30')	SOLID DOUBLE YELLOW 4" LANE LINE	WHITE 8" CHANNELIZATION	SOLID 12" DIAGONAL LINE	SOLID WHITE 24" BAR	LETTERS AND SYMBOLS WHITE ARROW	SOLID WHITE 4" LANE LINE	SOLID DOUBLE YELLOW 4" LANE LINE	LETTERS AND SYMBOLS WHITE ARROW	ONE-WAY CRYSTAL	ONE-WAY AMBER				TWO-WAY AMBER
	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	FOOT	SQ FT	EACH	EACH				EACH
HIGHWAY 50 - SECTION NO. 06-00057-00-PV STATION 75+63.79 TO 80+95.27																	
STA. 75+58.08 TO 75+79.03 LT.	21																
STA. 75+58.08 TO 76+39.33 LT.																	25
STA. 76+09.95 TO 99+35.89		24															
STA. 100+27.08 TO 77+25.57		26															
STA. 77+19.85 TO 81+24.82 LT.																	
STA. 77+42.76 LT.								15.6				6					
STA. 78+19.02 LT.								15.6									
STA. 78+93.05 LT.								15.6									
STA. 79+24.61 TO 81+24.82 LT.	200		48												16	5.2	66
VENITA DRIVE - SECTION NO. 06-00057-00-PV STATION 97+92.67 TO 103+56.00																	
STA. 97+92.67 TO 99+22.67 LT.															32	10.6	
STA. 97+92.67 TO 99+32.67 C/RT.			30						140	260				48	16.0		
STA. 98+38.00 RT./LT.											67.6						10.4
STA. 98+86.63 RT./LT.											67.6						10.4
STA. 98+97.31 TO 99+51.16 RT.																	229
STA. 99+16.74 TO 99+51.16 RT.					120	62											
STA. 99+14.61 TO 99+33.71 LT.						50											
STA. 99+22.67 LT.								12									
STA. 99+23.68 TO 99+40.96 RT.								18									
STA. 99+30.42 LT./RT.																	52
STA. 99+32.67 RT.								26				2					
STA. 100+12.00 TO 100+47.17 RT.					128	72											
STA. 100+12.00 TO 100+58.88 LT.					141	62						1					
STA. 100+27.08 LT.								13									
STA. 100+27.08 TO 101+70.60 LT.			50									4		28	9.3		
STA. 100+28.54 TO 100+85.76 C/RT.				235		28							8	48	16.0		
STA. 100+28.59 LT.								18									
STA. 100+37.08 LT.								12									
STA. 100+37.08 TO 101+68.73 RT.		32												24	8.0		
STA. 100+41.20 RT.								18									
STA. 100+54.29 LT.									57.2								
STA. 100+58.88 TO 101+70.60 LT.	112											3		28	9.3		
STA. 100+85.76 TO 102+30.60 C				290										56	18.6		
STA. 101+41.60 LT.									57.2					4			
STA. 101+70.60 TO 102+68.53 LT.		22												24	8.0		
STA. 101+68.73 TO 102+83.73 RT.	115											4		24	8.0		
STA. 101+93.73 RT.								15.6									
STA. 102+30.98 TO 102+89.23 C/LT.				235		25							8	48	16.0		
STA. 102+57.84 RT.								15.6									
FRONTAGE ROAD - SECTION NO. 06-00057-00-PV STATION 200+23.36 TO 203+88.92																	
STA. 200+23.36 TO 203+54.46 C				662											9	132	44.0
STA. 200+23.36 TO 203+40.98 RT.	321																
STA. 200+23.36 TO 203+20.88 LT.	299																
STA. 202+31.02 TO 203+33.20 RT.	99											3		12	4.0		
STA. 202+57.95 RT.								15.6									
STA. 203+23.05 RT.								15.6									
STA. 203+33.20 TO 203+65.21 RT.					116	70											
STA. 203+40.98 RT.								18									
STA. 203+54.46 RT.								11									
SUBTOTAL 06-00057-00-PV	1,167	104	128	1,422	505	369	146	223.6	140	260	135.2	24	16	13	520	173.4	392.8

NOTE: TEMPORARY PAVEMENT MARKINGS SHALL BE USED IN THE SAME QUANTITY AND LOCATION AS PERMANENT PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	14
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

SURVEY MARKERS

DESCRIPTION/ LOCATION	STATION	OFFSET	DIRECTION	66600105	66700205	X6660410	X6660445
				FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	PERMANENT SURVEY MARKERS, TYPE 1	REMOVE RIGHT-OF-WAY MARKERS	RIGHT-OF-WAY AND PROPERTY CORNERS
SECTION NO. 06-00057-00-PV							
FRONTAGE ROAD	201+58.64	43.59	LT	1			
FRONTAGE ROAD	202+30.89	97.99	RT	1			
FRONTAGE ROAD	202+52.83	48.33	RT	1			
FRONTAGE ROAD	202+25+/-	11+/-	RT			1	
VENITA DRIVE	100+91.64	50.00	LT	1			
VENITA DRIVE	101+10.97	19.15	LT			1	
VENITA DRIVE	101+11.83	29.09	RT				1
VENITA DRIVE	101+79.52	16.53	LT			1	
VENITA DRIVE	101+86.10	49.68	LT	1			
VENITA DRIVE	102+35.00	49.00	LT	1			
VENITA DRIVE	102+50+/-	19+/-	LT			1	
VENITA DRIVE	102+71.58	82.07	LT	1			
VENITA DRIVE	102+86.40	39.51	RT				1
VENITA DRIVE	103+89.53	54.74	LT	1			
VENITA DRIVE	107+14.32	107.99	RT				1
FRONTAGE ROAD	200+23.36	PC			1		
FRONTAGE ROAD	202+12.95	PRC			1		
FRONTAGE ROAD	203+13.67	PT			1		
VENITA DRIVE	100+00.00	POB			1		
VENITA DRIVE	102+03.45	PC			1		
VENITA DRIVE	103+13.93	PI			1		
VENITA DRIVE	104+19.13	PT			1		
VENITA DRIVE	104+88.78	PC			1		
SECTION NO. 08-00050-01-GS							
SUBTOTAL 06-00057-00-PV				8	8	4	3
SUBTOTAL 08-00050-01-GS				0	0	0	0
TOTAL				8	8	4	3

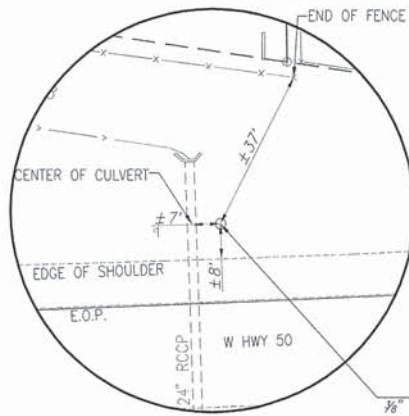
PAVEMENT MARKING SCHEDULE

LOCATION	WET REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS											SHORT TERM PAVEMENT MARKING	WORK ZONE PAVEMENT MARKING REMOVAL
	SOLID WHITE 4" LANE LINE	SOLID YELLOW 4" LANE LINE	WHITE SKIP DASH 4" LANE LINE (2' - 6')	YELLOW SKIP DASH 4" LANE LINE	SOLID DOUBLE YELLOW 4" LANE LINE	SOLID WHITE 6" CROSSWALK LINE	SOLID WHITE 12" DIAGONAL LINE	SOLID WHITE 24" BAR	LETTERS AND SYMBOLS WHITE ARROW	POLYUREA PAVEMENT MARKING, TYPE 1 - 4" LINE DOUBLE YELLOW	MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR CRYSTAL		
	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	EACH	FOOT	SQ FT
VENITA DRIVE - SECTION NO. 08-00050-01-GS STATION 103+56.00 TO 118+85.00													
STA. 103+56.00 TO 105+39.61 RT.					651		34					120	40.0
STA. 103+59.30 TO 104+34.69 LT.	75											16	5.3
STA. 103+69.86 C									15.6				
STA. 104+12.38 C									15.6				
STA. 104+34.69 TO 105+39.61 LT.			26										
STA. 105+39.61 TO 106+91.89 C					305							60	20.0
STA. 106+91.89 TO 109+53.97 C										524	12	96	32.0
STA. 109+53.97 TO 111+93.59 C					480							88	29.3
STA. 111+93.59 TO 114+54.06 C/RT.					923		39					176	58.7
STA. 114+54.06 TO 115+78.83 C/RT.	115				230							40	13.3
STA. 114+76.12 RT.									15.6				
STA. 115+41.12 RT.									15.6				
STA. 115+69.06 TO 115+75.06 C/LT./RT.								60					
STA. 116+30.00 TO 118+85.00 C/RT.					990		69					190	63.3
STA. 118+85.00 TO 119+50	130				130							16	5.3
TAYLOR ROAD - SECTION NO. 08-00050-01-GS STATION 10+06.97 TO 26+38.30													
STA. 10+11.50 TO 10+17.50 C						74							
STA. 10+23.00 LT.								13					
STA. 10+23.00 TO 23+58.20 C					2,671							524	174.7
STA. 23+58.20 TO 25+93.20 RT.					470							96	32.0
STA. 24+78.20 TO 25+93.20 RT.	115											24	8.0
STA. 25+12.37 C									15.6				
STA. 25+73.87 C									15.6				
STA. 25+93.20 C/RT.								25					
STA. 26+12.20 TO 26+18.70 LT./RT.						99							
SUBTOTAL 08-00050-01-GS													
	435		26		6,850	173	142	98	93.6	524	12	1,446	482

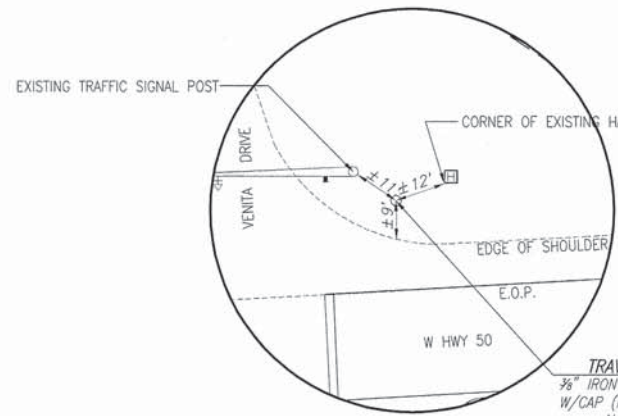
NOTE: TEMPORARY PAVEMENT MARKINGS SHALL BE USED IN THE SAME QUANTITY AND LOCATION AS PERMANENT PAVEMENT MARKINGS AS DIRECTED BY THE ENGINEER.

HORIZONTAL CONTROL TIE POINTS

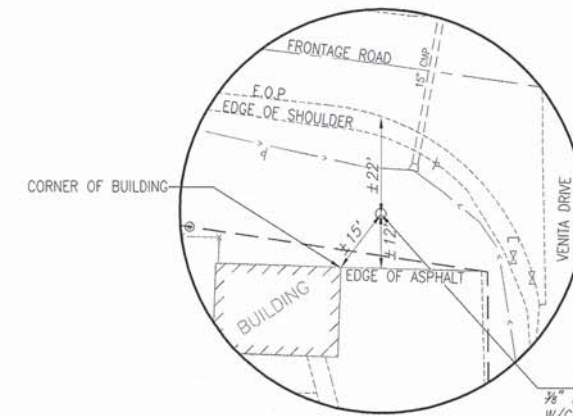
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
93317 93336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	15
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	



TRAV. PIN 505
 3/8" IRON PIN, 18" LONG
 W/CAP (R&A PLS 2579)
 N 2243.99
 E 1359.73
 STA. 75+23.60
 29.70' RT.



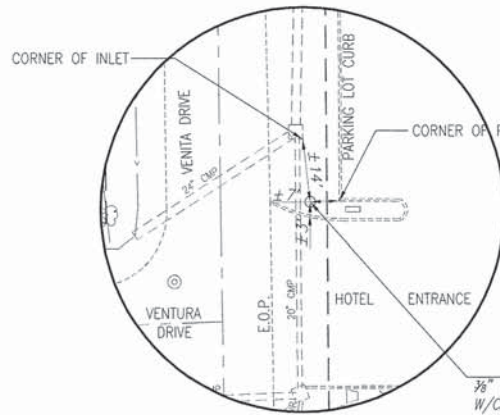
TRAV. PIN 504
 3/8" IRON PIN, 18" LONG
 W/CAP (R&A PLS 2579)
 N 2257.13
 E 1572.27
 STA. 100+32.78
 59.96' RT.



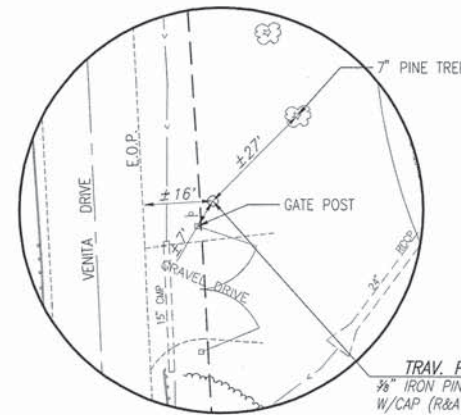
TRAV. PIN 503
 3/8" IRON PIN, 18" LONG
 W/CAP (R&A PLS 2579)
 N 2413.10
 E 1464.68
 STA. 203+50.28
 118.39' RT.



NOTE: ALL DISTANCES NOT PLUMBED.



TRAV. PIN 501
 3/8" IRON PIN, 18" LONG
 W/CAP (R&A PLS 2579)
 N 2750.52
 E 1529.22
 STA. 105+14.72
 89.34' RT.



TRAV. PIN 500
 3/8" IRON PIN, 18" LONG
 W/CAP (R&A PLS 2579)
 N 3526.31
 E 1514.23
 STA. 113+20.59
 40.36' RT.

COORDINATE TABLE

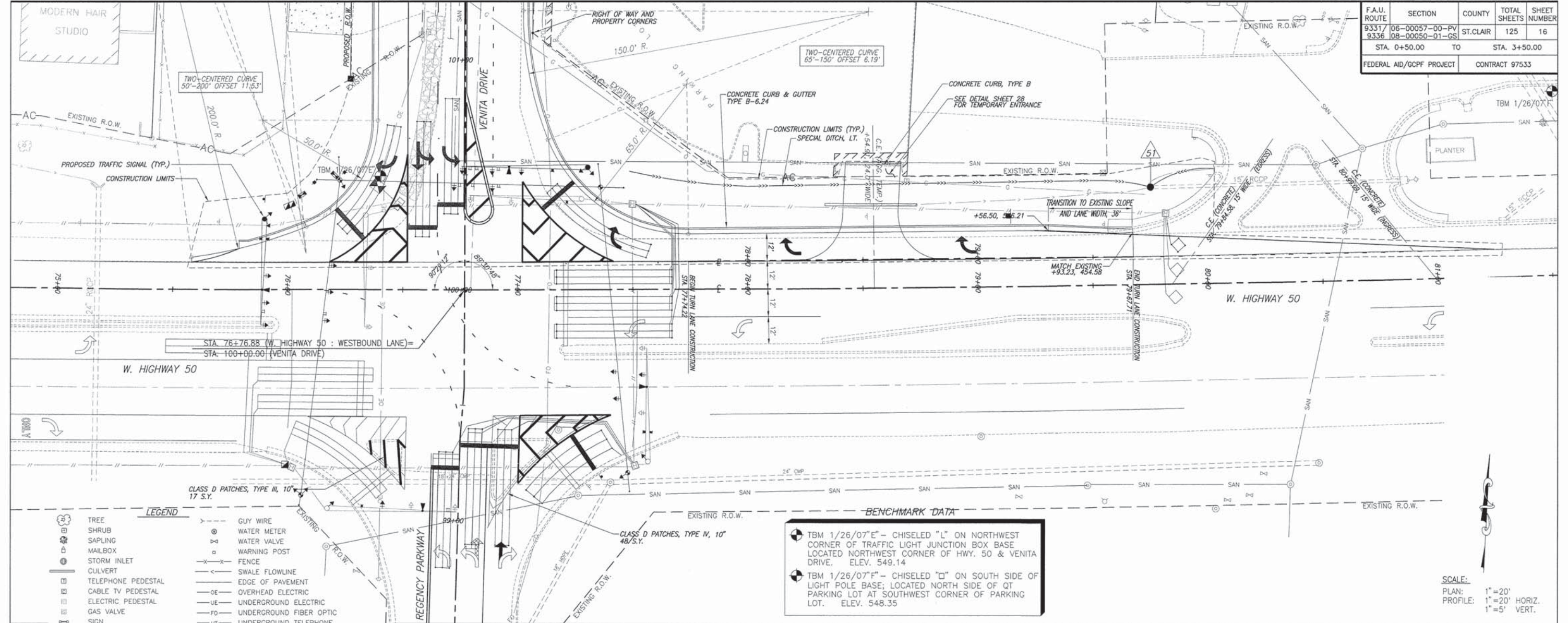
STATION / DESCRIPTION	NORTHING	EASTING
W HWY 50 BASELINE		
STA. 1+00.00 / BEGIN CONSTRUCTION	2238.83	1610.45
STA. 2+93.34 / END PROJECT	2250.93	1803.41
VENITA DRIVE		
@ STA. 100+12.00 / BEGIN PROJECT	2233.52	1513.38
P.C. STA. 102+03.45	2424.75	1504.25
P.I. STA. 103+11.78	2532.95	1499.08
P.T. STA. 104+19.11	2636.96	1468.79
P.C. STA. 104+88.78	2703.86	1449.30
P.I. STA. 105+86.41	2797.59	1422.00
P.T. STA. 106+82.66	2895.22	1422.80
P.C. STA. 109+58.19	3170.75	1425.04
P.I. STA. 110+57.92	3270.47	1425.85
P.T. STA. 111+56.86	3367.68	1448.13
P.C. STA. 111+69.02	3379.53	1450.84
P.I. STA. 113+17.71	3524.10	1485.63
P.T. STA. 114+63.83	3672.24	1472.86
@ STA. 118+85.00 / END PROJECT	4091.86	1436.68

COORDINATE TABLE

STATION / DESCRIPTION	NORTHING	EASTING
FRONTAGE ROAD		
P.C. STA. 200+23.36 / BEGIN PROJECT	2460.15	1137.04
P.I. STA. 201+19.58	2461.27	1233.25
P.R.C. STA. 202+12.95	2501.65	1320.60
P.I. STA. 202+63.80	2522.98	1366.76
P.T. STA. 203+13.67	2527.64	1417.40
@ STA. 203+88.92 / @ STA. 103+13.93	2534.52	1492.33
COTTAGE HILLS DRIVE		
P.C. STA. 1+00.00 / BEGIN PROJECT	2592.64	1273.05
P.I. STA. 1+41.48	2622.67	1244.43
P.T. STA. 1+75.75 / END PROJECT	3379.53	1450.84
TAYLOR ROAD		
STA. 10+06.97 / BEGIN PROJECT	4110.24	-100.59
P.C. STA. 10+07.49	4110.36	-100.09
P.I. STA. 11+63.70	4152.22	+50.41
P.T. STA. 13+08.20	4091.82	+194.47
P.C. STA. 20+43.62	3807.47	+872.69
P.I. STA. 21+54.44	3764.62	+974.89
P.T. STA. 22+60.95	3774.14	+1085.32
@ STA. 26+38.30 / @ STA. 115+98.65	3806.56	+1461.28

NOTE: SEE SHEET 47 (SHEET 7 OF PLAT OF HIGHWAYS) FOR CENTERLINE TIES.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331 9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	16
STA. 0+50.00		TO		STA. 3+50.00
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



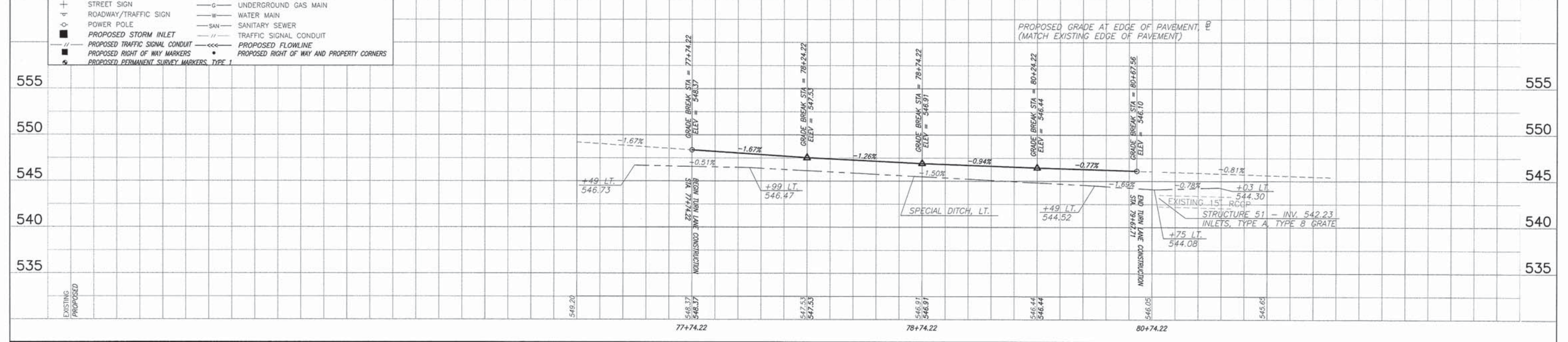
LEGEND

TREE	GUY WIRE	PROPOSED STORM INLET	PROPOSED FLOWLINE
SHRUB	WATER METER	PROPOSED TRAFFIC SIGNAL CONDUIT	PROPOSED RIGHT OF WAY AND PROPERTY CORNERS
SAPLING	WATER VALVE	PROPOSED RIGHT OF WAY MARKERS	
MAILBOX	WARNING POST	PROPOSED PERMANENT SURVEY MARKERS, TYPE 1	
STORM INLET	FENCE		
CULVERT	SWALE FLOWLINE		
TELEPHONE PEDESTAL	EDGE OF PAVEMENT		
CABLE TV PEDESTAL	OVERHEAD ELECTRIC		
ELECTRIC PEDESTAL	UNDERGROUND ELECTRIC		
GAS VALVE	UNDERGROUND FIBER OPTIC		
SIGN	UNDERGROUND TELEPHONE		
STREET SIGN	UNDERGROUND GAS MAIN		
ROADWAY/TRAFFIC SIGN	WATER MAIN		
POWER POLE	SANITARY SEWER		
	TRAFFIC SIGNAL CONDUIT		

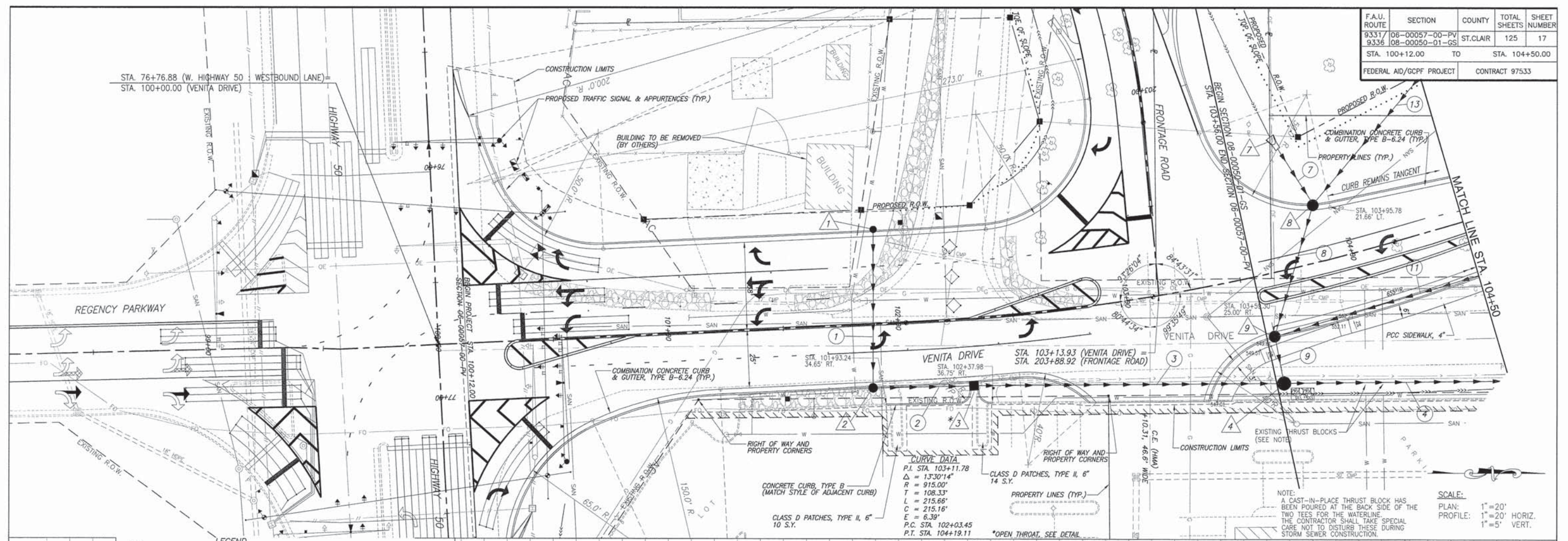
BENCHMARK DATA

- TBM 1/26/07"E - CHISELED "L" ON NORTHWEST CORNER OF TRAFFIC LIGHT JUNCTION BOX BASE LOCATED NORTHWEST CORNER OF HWY. 50 & VENITA DRIVE. ELEV. 549.14
- TBM 1/26/07"E - CHISELED "D" ON SOUTH SIDE OF LIGHT POLE BASE; LOCATED NORTH SIDE OF QT PARKING LOT AT SOUTHWEST CORNER OF PARKING LOT. ELEV. 548.35

SCALE:
 PLAN: 1"=20'
 PROFILE: 1"=20' HORIZ.
 1"=5' VERT.

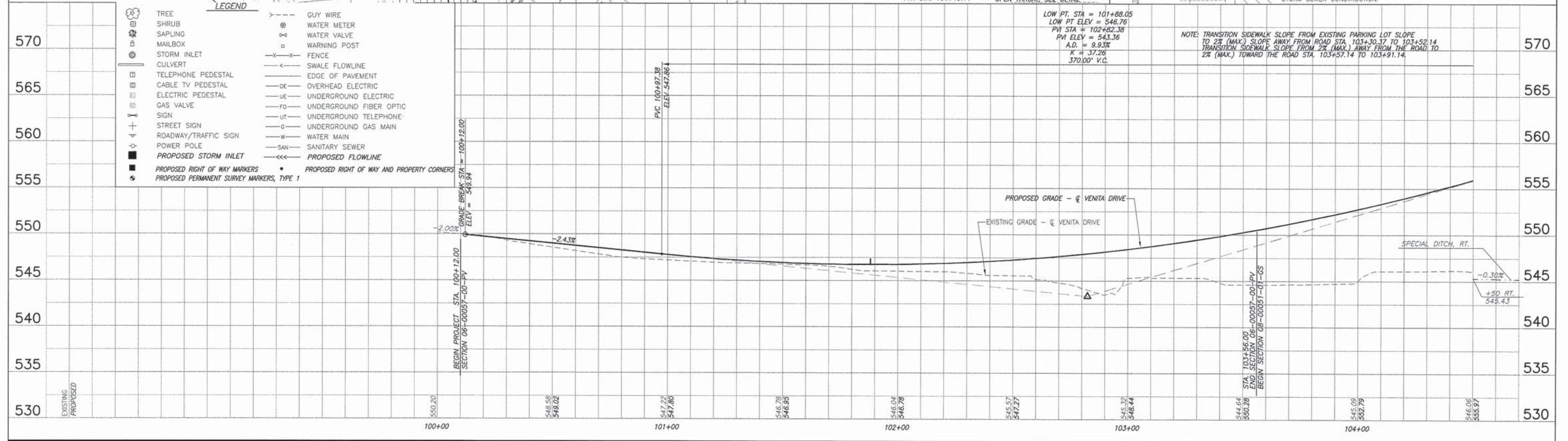


F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	17
STA. 100+12.00		TO		STA. 104+50.00
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



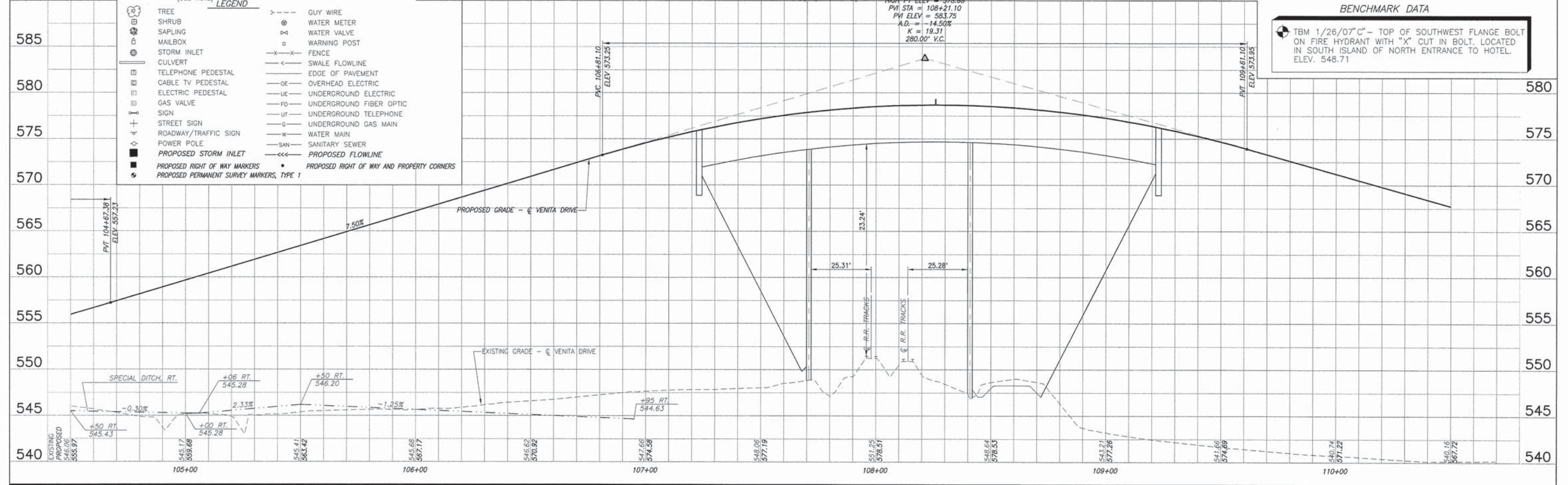
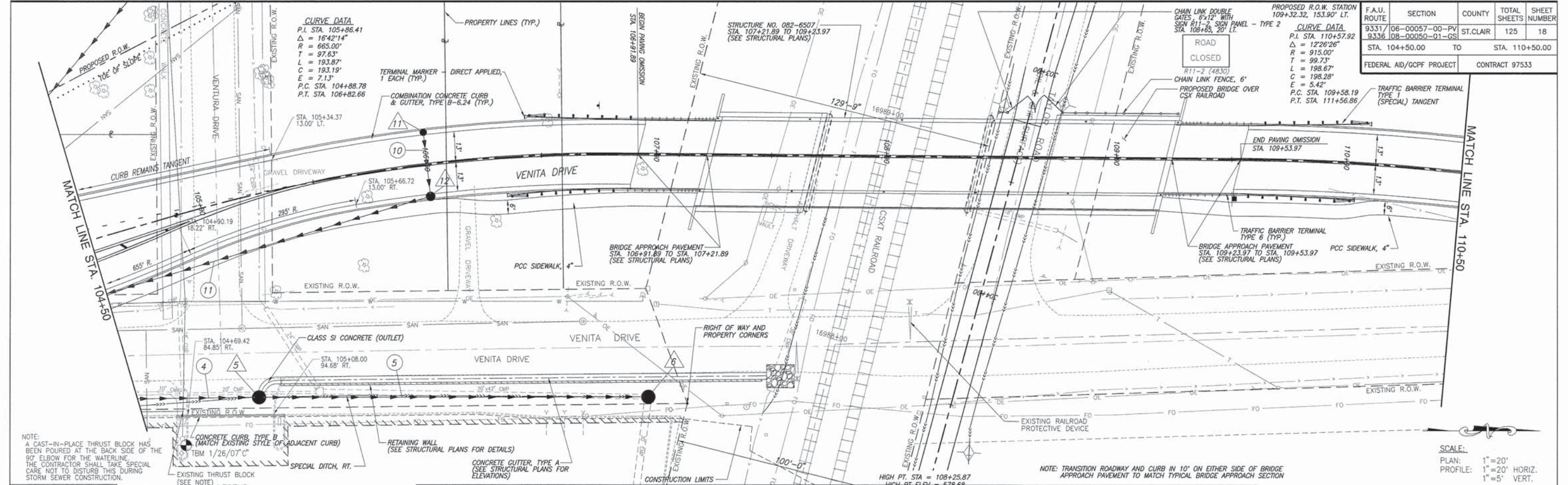
LEGEND

	TREE		GUY WIRE
	SHRUB		WATER METER
	SAPLING		WATER VALVE
	MAILBOX		WARNING POST
	STORM INLET		FENCE
	CULVERT		SWALE FLOWLINE
	TELEPHONE PEDESTAL		EDGE OF PAVEMENT
	CABLE TV PEDESTAL		OVERHEAD ELECTRIC
	ELECTRIC PEDESTAL		UNDERGROUND ELECTRIC
	GAS VALVE		UNDERGROUND FIBER OPTIC
	SIGN		UNDERGROUND TELEPHONE
	STREET SIGN		UNDERGROUND GAS MAIN
	ROADWAY/TRAFFIC SIGN		WATER MAIN
	POWER POLE		SANITARY SEWER
	PROPOSED STORM INLET		PROPOSED FLOWLINE
	PROPOSED RIGHT OF WAY MARKERS		PROPOSED RIGHT OF WAY AND PROPERTY CORNERS
	PROPOSED PERMANENT SURVEY MARKERS, TYPE 1		



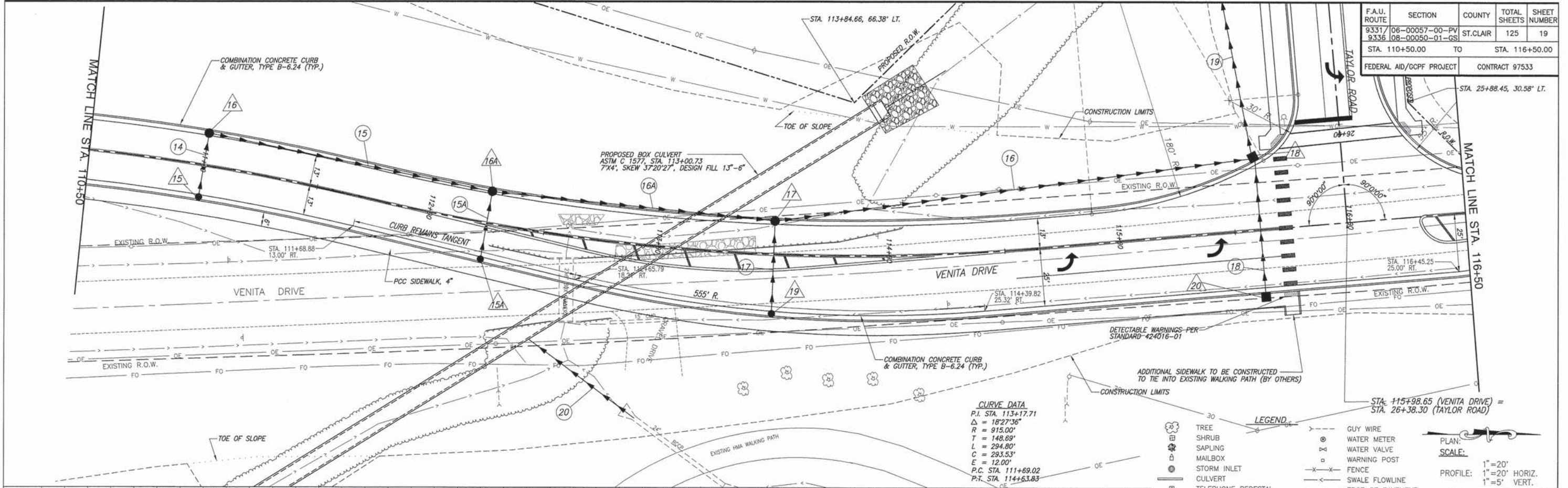
ROADWAY PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS
SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV	08-00050-01-GS	ST. CLAIR	125	18
STA. 104+50.00 TO STA. 110+50.00		FEDERAL AID/GCPF PROJECT CONTRACT 97533		



ROADWAY PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS
 SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

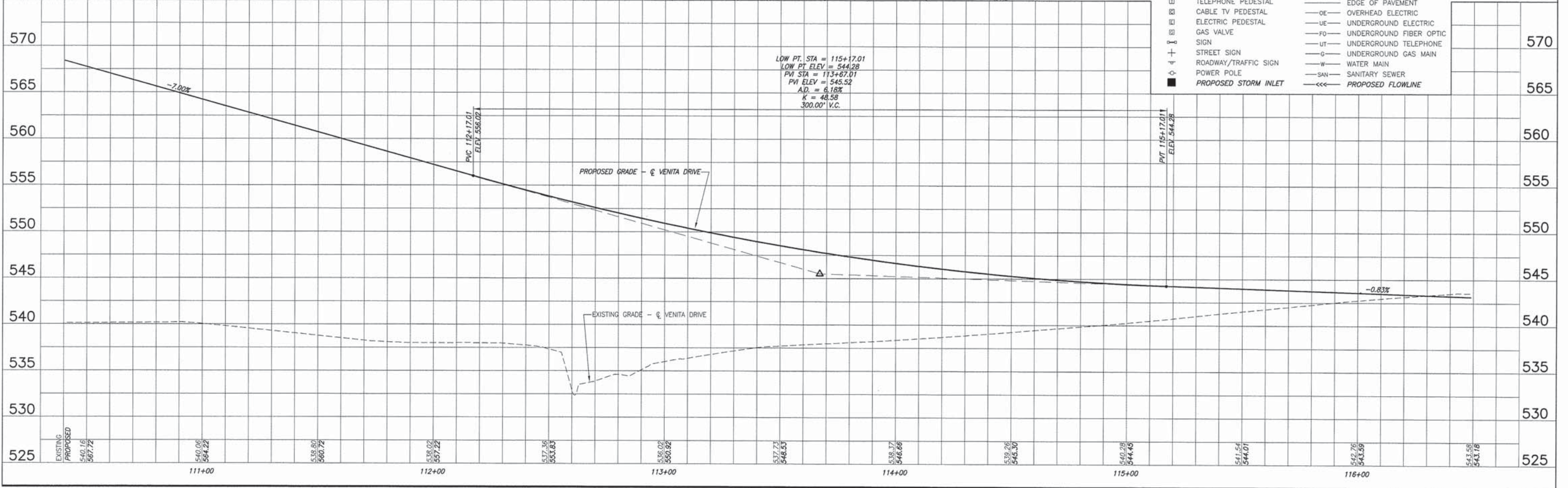
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV	08-00050-01-GS	ST. CLAIR	125	19
STA. 110+50.00 TO STA. 116+50.00		FEDERAL AID/GC/PF PROJECT CONTRACT 97533		



CURVE DATA
 P.I. STA. 113+17.71
 $\Delta = 1827^{\circ}36'$
 $R = 915.00'$
 $T = 148.69'$
 $L = 294.80'$
 $C = 293.53'$
 $E = 12.00'$
 P.C. STA. 111+69.02
 P.T. STA. 114+63.83

LEGEND

	TREE		GUY WIRE
	SHRUB		WATER METER
	SAPLING		WATER VALVE
	MAILBOX		WARNING POST
	STORM INLET		FENCE
	CULVERT		SWALE FLOWLINE
	TELEPHONE PEDESTAL		EDGE OF PAVEMENT
	CABLE TV PEDESTAL		OVERHEAD ELECTRIC
	ELECTRIC PEDESTAL		UNDERGROUND ELECTRIC
	GAS VALVE		UNDERGROUND FIBER OPTIC
	SIGN		UNDERGROUND TELEPHONE
	STREET SIGN		UNDERGROUND GAS MAIN
	ROADWAY/TRAFFIC SIGN		WATER MAIN
	POWER POLE		SANITARY SEWER
	PROPOSED STORM INLET		PROPOSED FLOWLINE



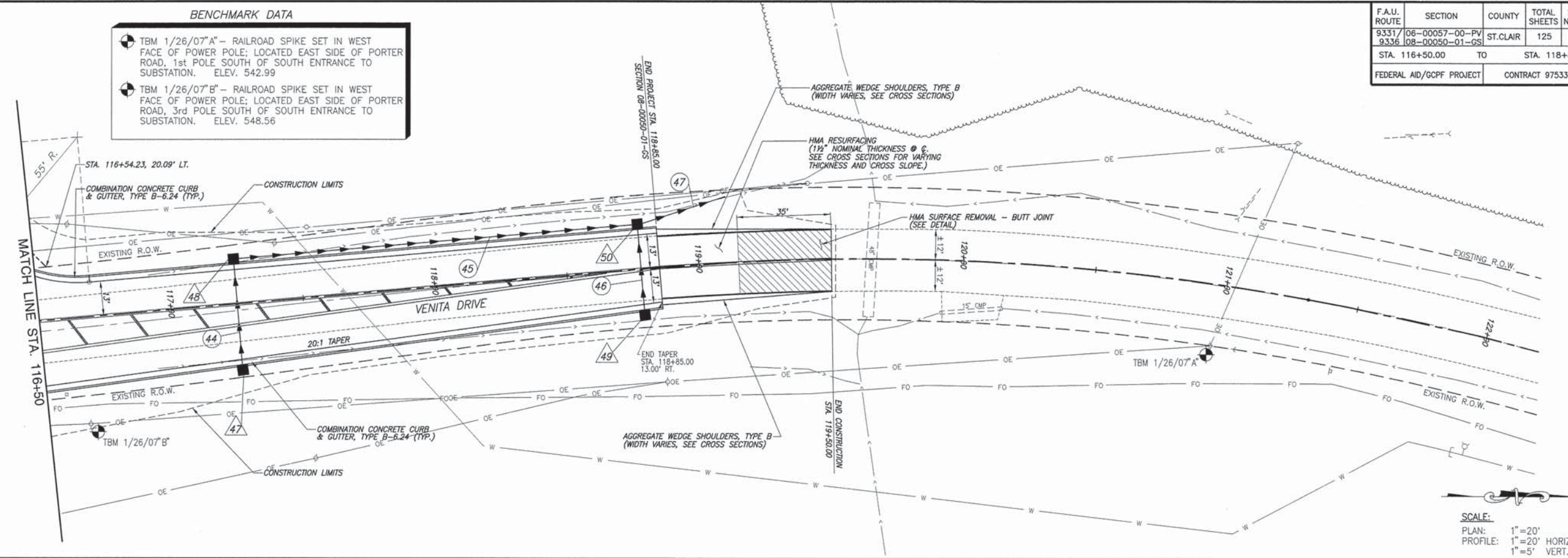
ROADWAY PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS
 SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

K:\11706 - 0\Folder - Hwy 50 & Venita Drive\Drawings\VENITA DRIVE & FRONTAGE PLAN AND PROFILE.dwg - 7/17/2013 10:01:19 AM. Plotted by MJK

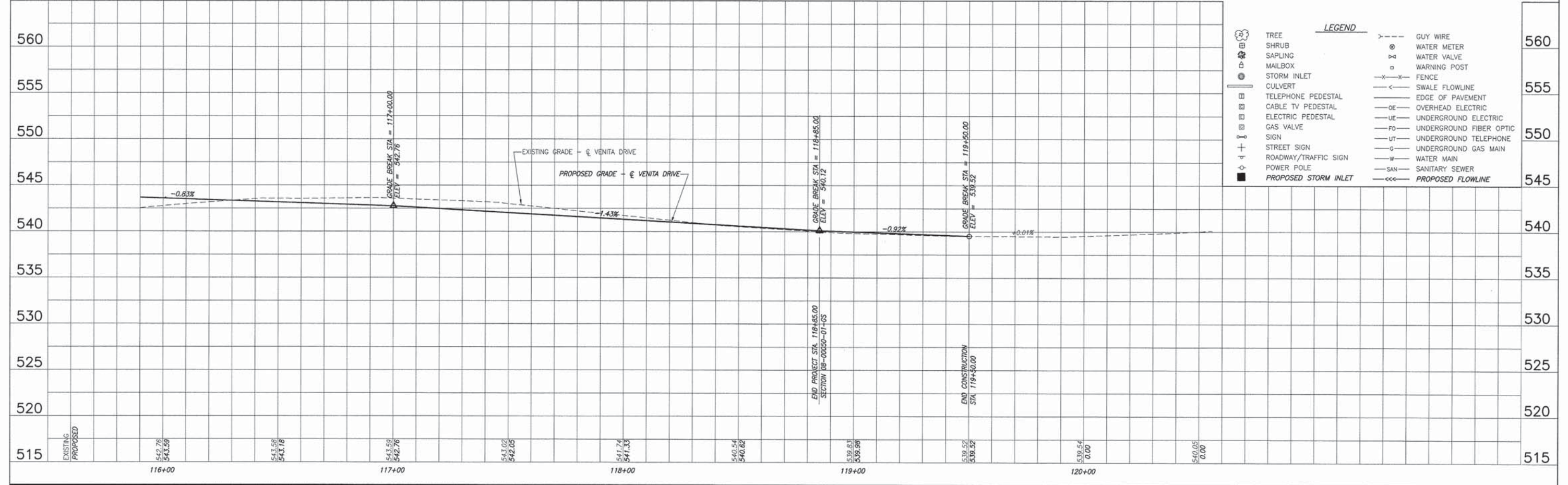
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	20
STA. 116+50.00 TO STA. 118+85.00		FEDERAL AID/GC/PF PROJECT CONTRACT 97533		

BENCHMARK DATA

TBM 1/26/07"A" - RAILROAD SPIKE SET IN WEST FACE OF POWER POLE; LOCATED EAST SIDE OF PORTER ROAD, 1st POLE SOUTH OF SOUTH ENTRANCE TO SUBSTATION. ELEV. 542.99
 TBM 1/26/07"B" - RAILROAD SPIKE SET IN WEST FACE OF POWER POLE; LOCATED EAST SIDE OF PORTER ROAD, 3rd POLE SOUTH OF SOUTH ENTRANCE TO SUBSTATION. ELEV. 548.56



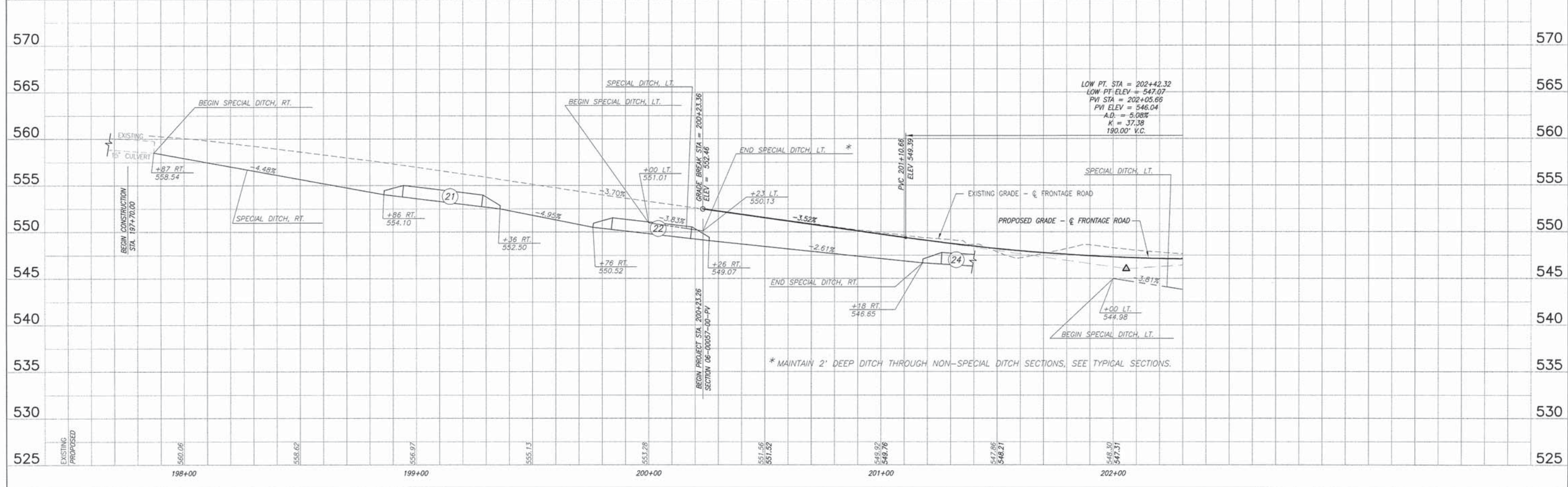
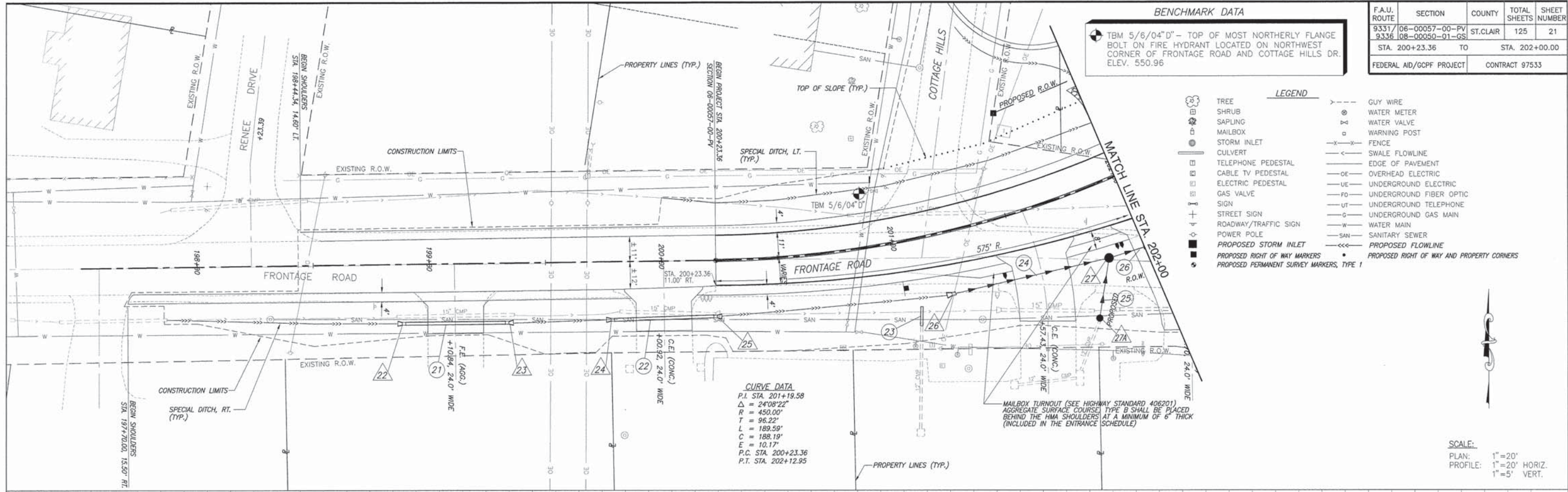
SCALE:
 PLAN: 1" = 20'
 PROFILE: 1" = 20' HORIZ.
 1" = 5' VERT.



LEGEND

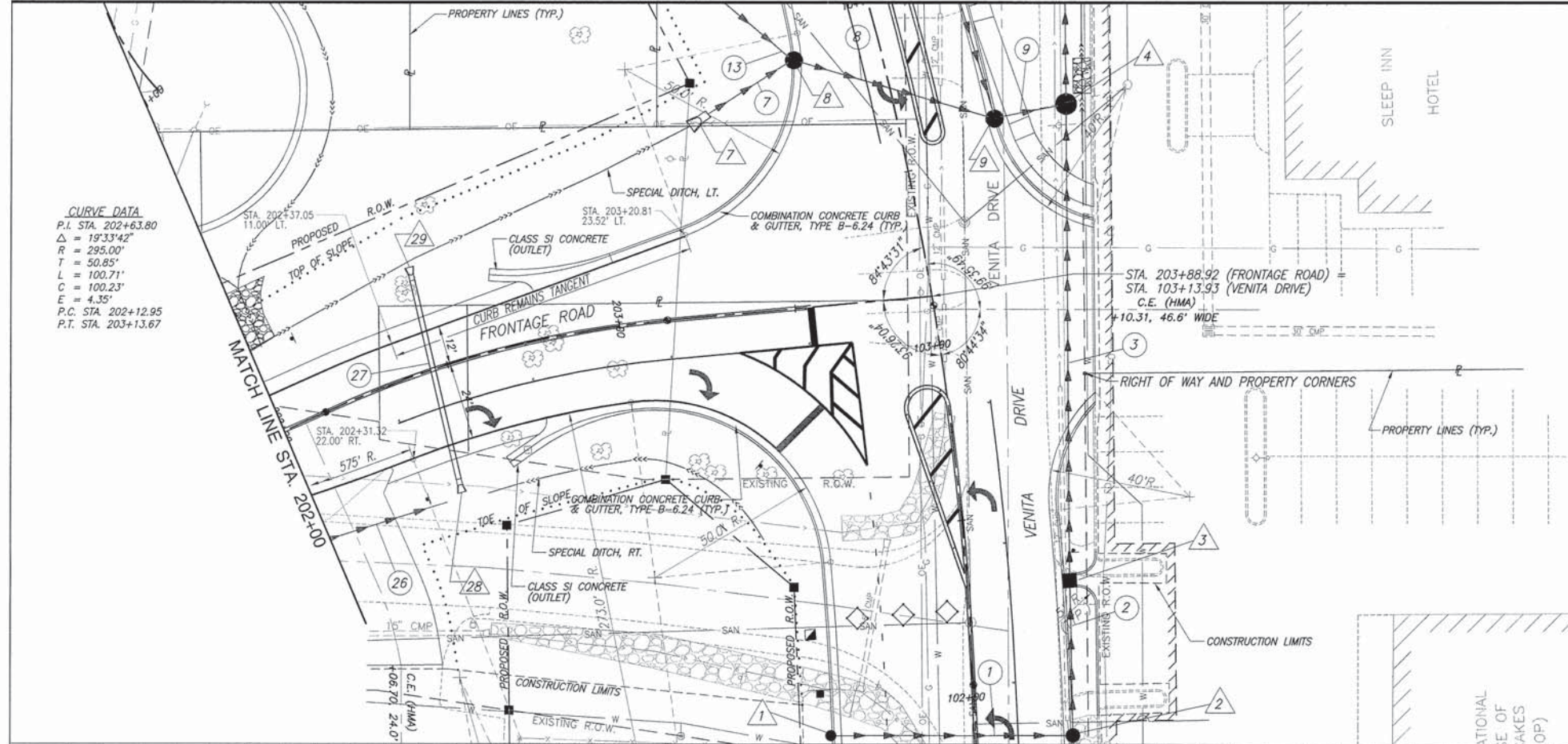
(Tree symbol)	TREE	(Dashed line symbol)	GUY WIRE
(Shrub symbol)	SHRUB	(Circle with cross symbol)	WATER METER
(Sapling symbol)	SAPLING	(Circle with dot symbol)	WATER VALVE
(Mailbox symbol)	MAILBOX	(Square with dot symbol)	WARNING POST
(Storm inlet symbol)	STORM INLET	(X-X symbol)	FENCE
(Culvert symbol)	CULVERT	(Line with arrow symbol)	SWALE FLOWLINE
(Telephone pedestal symbol)	TELEPHONE PEDESTAL	(Line with dash symbol)	EDGE OF PAVEMENT
(Cable TV pedestal symbol)	CABLE TV PEDESTAL	(Line with dash symbol)	OVERHEAD ELECTRIC
(Electric pedestal symbol)	ELECTRIC PEDESTAL	(Line with dash symbol)	UNDERGROUND ELECTRIC
(Gas valve symbol)	GAS VALVE	(Line with dash symbol)	UNDERGROUND FIBER OPTIC
(Sign symbol)	SIGN	(Line with dash symbol)	UNDERGROUND TELEPHONE
(Street sign symbol)	STREET SIGN	(Line with dash symbol)	UNDERGROUND GAS MAIN
(Roadway/traffic sign symbol)	ROADWAY/TRAFFIC SIGN	(Line with dash symbol)	WATER MAIN
(Power pole symbol)	POWER POLE	(Line with dash symbol)	SANITARY SEWER
(Proposed storm inlet symbol)	PROPOSED STORM INLET	(Line with arrow symbol)	PROPOSED FLOWLINE

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV	08-00050-01-GS	ST. CLAIR	125	22
STA. 202+00.00		TO	STA. 203+88.92	
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	

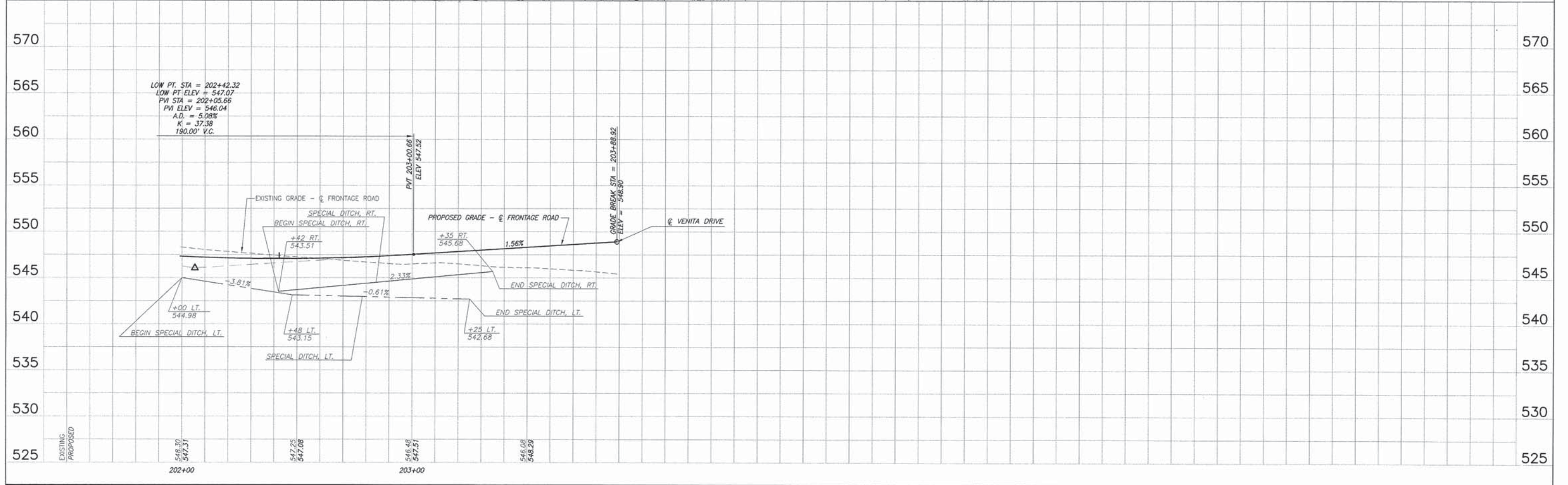
CURVE DATA
 P.I. STA. 202+63.80
 $\Delta = 19.33'42"$
 $R = 295.00'$
 $T = 50.85'$
 $L = 100.71'$
 $C = 100.23'$
 $E = 4.35'$
 P.C. STA. 202+12.95
 P.T. STA. 203+13.67



LEGEND

	TREE		GUY WIRE
	SHRUB		WATER METER
	SAPLING		WATER VALVE
	MAILBOX		WARNING POST
	STORM INLET		FENCE
	CULVERT		SWALE FLOWLINE
	TELEPHONE PEDESTAL		EDGE OF PAVEMENT
	CABLE TV PEDESTAL		OVERHEAD ELECTRIC
	ELECTRIC PEDESTAL		UNDERGROUND ELECTRIC
	GAS VALVE		UNDERGROUND FIBER OPTIC
	SIGN		UNDERGROUND TELEPHONE
	STREET SIGN		UNDERGROUND GAS MAIN
	ROADWAY/TRAFFIC SIGN		WATER MAIN
	POWER POLE		SANITARY SEWER
	PROPOSED STORM INLET		PROPOSED FLOWLINE
	PROPOSED RIGHT OF WAY MARKERS		PROPOSED RIGHT OF WAY AND PROPERTY CORNERS
	PROPOSED PERMANENT SURVEY MARKERS, TYPE 1		

SCALE:
 PLAN: 1" = 20'
 PROFILE: 1" = 20' HORIZ.
 1" = 5' VERT.



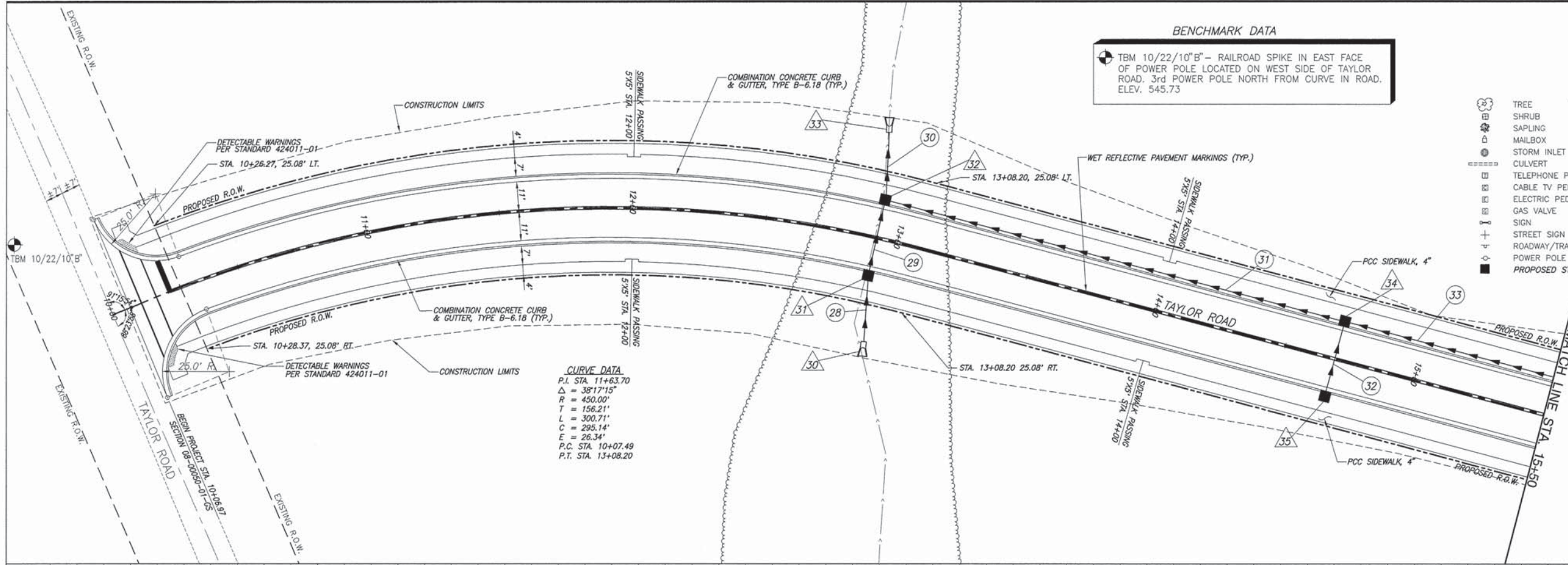
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	23
STA. 10+07.00		TO		STA. 15+50.00
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

BENCHMARK DATA

⊕ TBM 10/22/10" B" - RAILROAD SPIKE IN EAST FACE OF POWER POLE LOCATED ON WEST SIDE OF TAYLOR ROAD. 3rd POWER POLE NORTH FROM CURVE IN ROAD. ELEV. 545.73

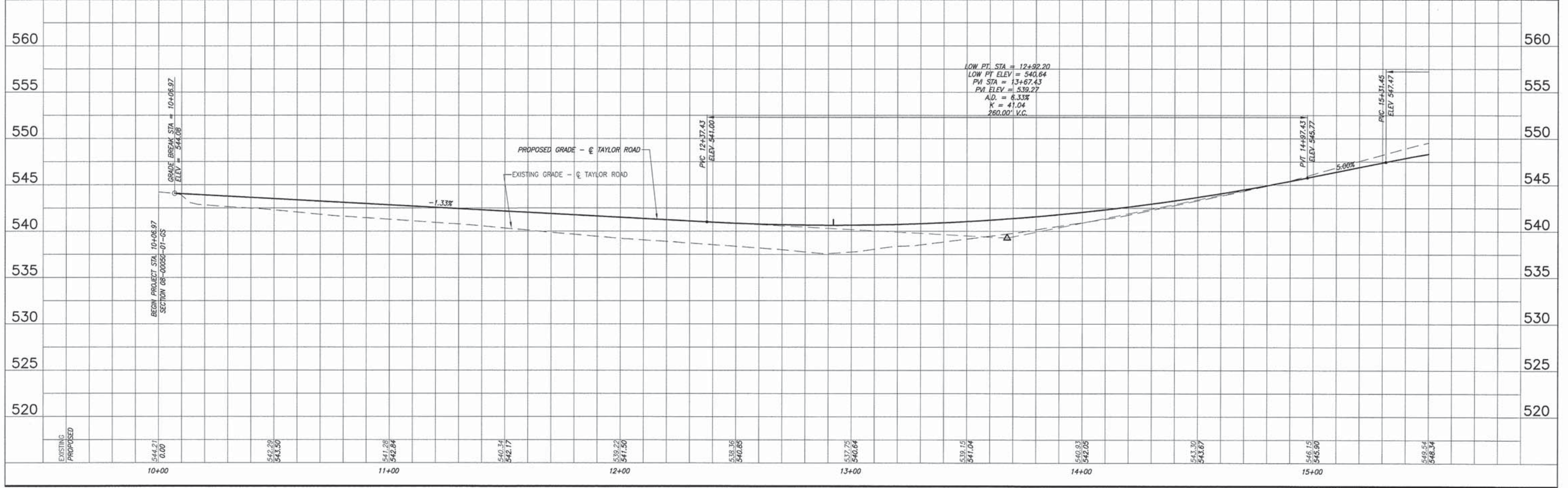
LEGEND

⊕	TREE	—	GUY WIRE
⊗	SHRUB	⊕	WATER METER
⊙	SAPLING	⊕	WATER VALVE
⊕	MAILBOX	⊕	WARNING POST
⊕	STORM INLET	—	FENCE
⊕	CULVERT	—	SWALE FLOWLINE
⊕	TELEPHONE PEDESTAL	—	EDGE OF PAVEMENT
⊕	CABLE TV PEDESTAL	—	OVERHEAD ELECTRIC
⊕	ELECTRIC PEDESTAL	—	UNDERGROUND ELECTRIC
⊕	GAS VALVE	—	UNDERGROUND FIBER OPTIC
⊕	SIGN	—	UNDERGROUND GAS MAIN
⊕	STREET SIGN	—	UNDERGROUND TELEPHONE
⊕	ROADWAY/TRAFFIC SIGN	—	WATER MAIN
⊕	POWER POLE	—	SANITARY SEWER
⊕	PROPOSED STORM INLET	—	PROPOSED FLOWLINE



CURVE DATA
 P.I. STA. 11+63.70
 $\Delta = 38^{\circ}17'15''$
 $R = 450.00'$
 $T = 156.21'$
 $L = 300.71'$
 $C = 295.14'$
 $E = 26.34'$
 P.C. STA. 10+07.49
 P.T. STA. 13+08.20

SCALE:
 PLAN: 1" = 20'
 PROFILE: 1" = 20' HORIZ.
 1" = 5' VERT.

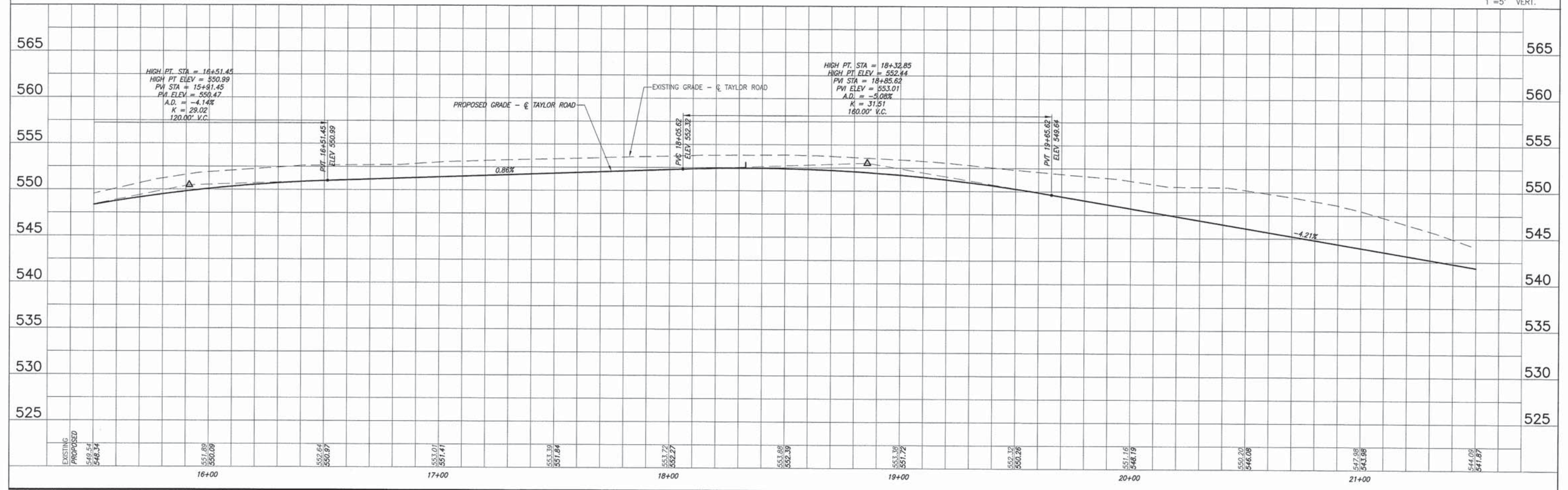
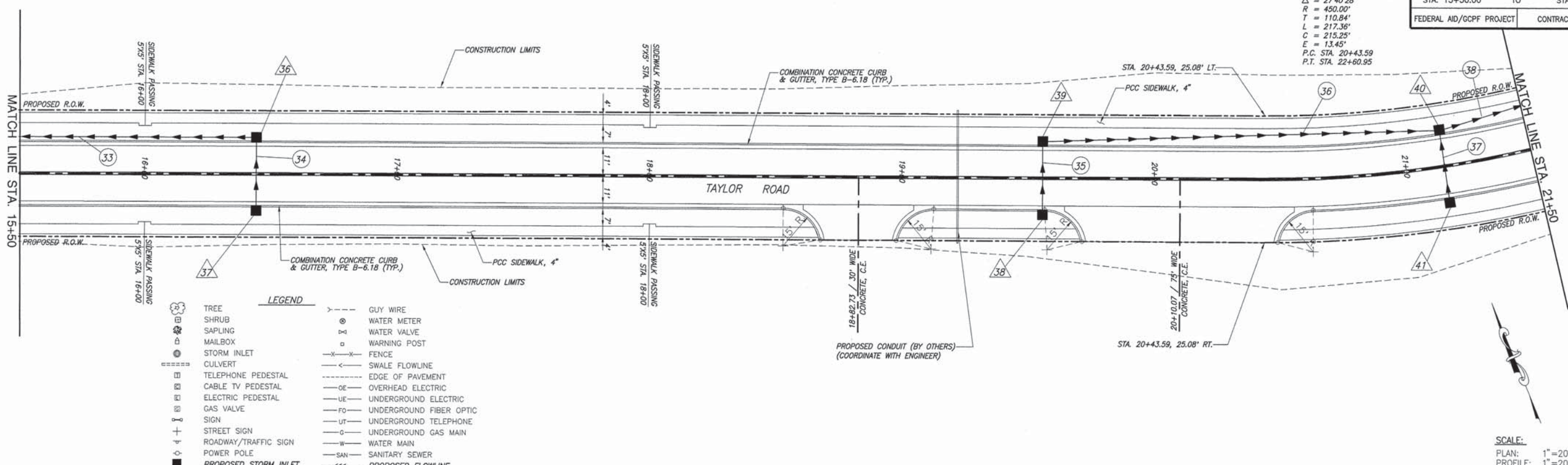


ROADWAY PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV	08-00050-01-GS	ST. CLAIR	125	24
STA. 15+50.00 TO STA. 21+50.00		FEDERAL AID/GCPF PROJECT CONTRACT 97533		

CURVE DATA
 P.I. STA. 21+54.44
 $\Delta = 27^{\circ}40'28''$
 $R = 450.00'$
 $T = 110.84'$
 $L = 217.36'$
 $C = 215.25'$
 $E = 13.45'$
 P.C. STA. 20+43.59
 P.T. STA. 22+60.95



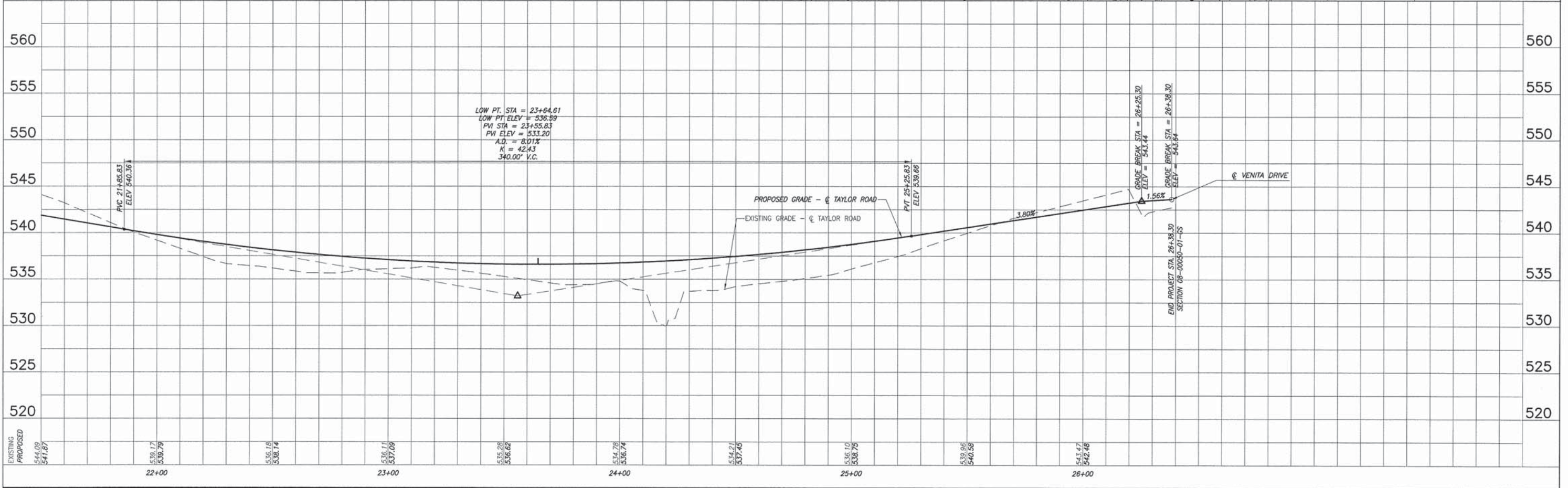
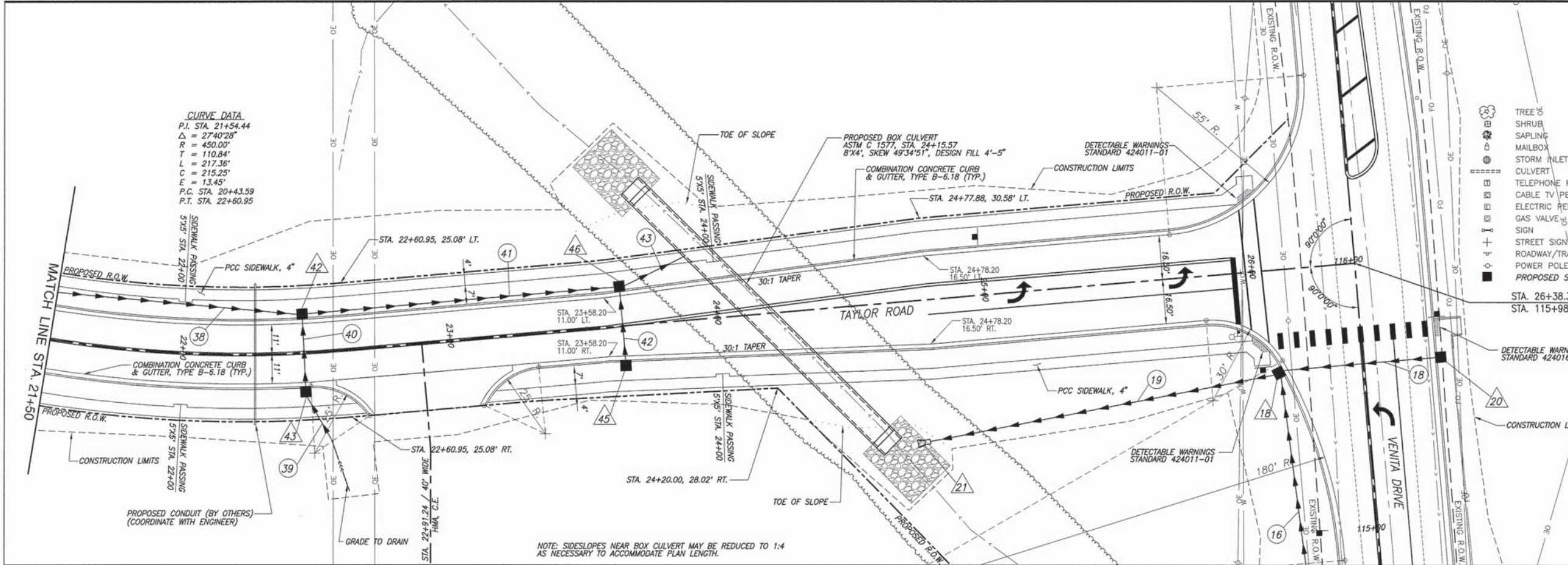
ROADWAY PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS
 SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV	08-00050-01-GS	ST. CLAIR	125	25
STA. 21+50.00 TO STA. 26+38.30		FEDERAL AID/GCPF PROJECT CONTRACT 97533		

LEGEND

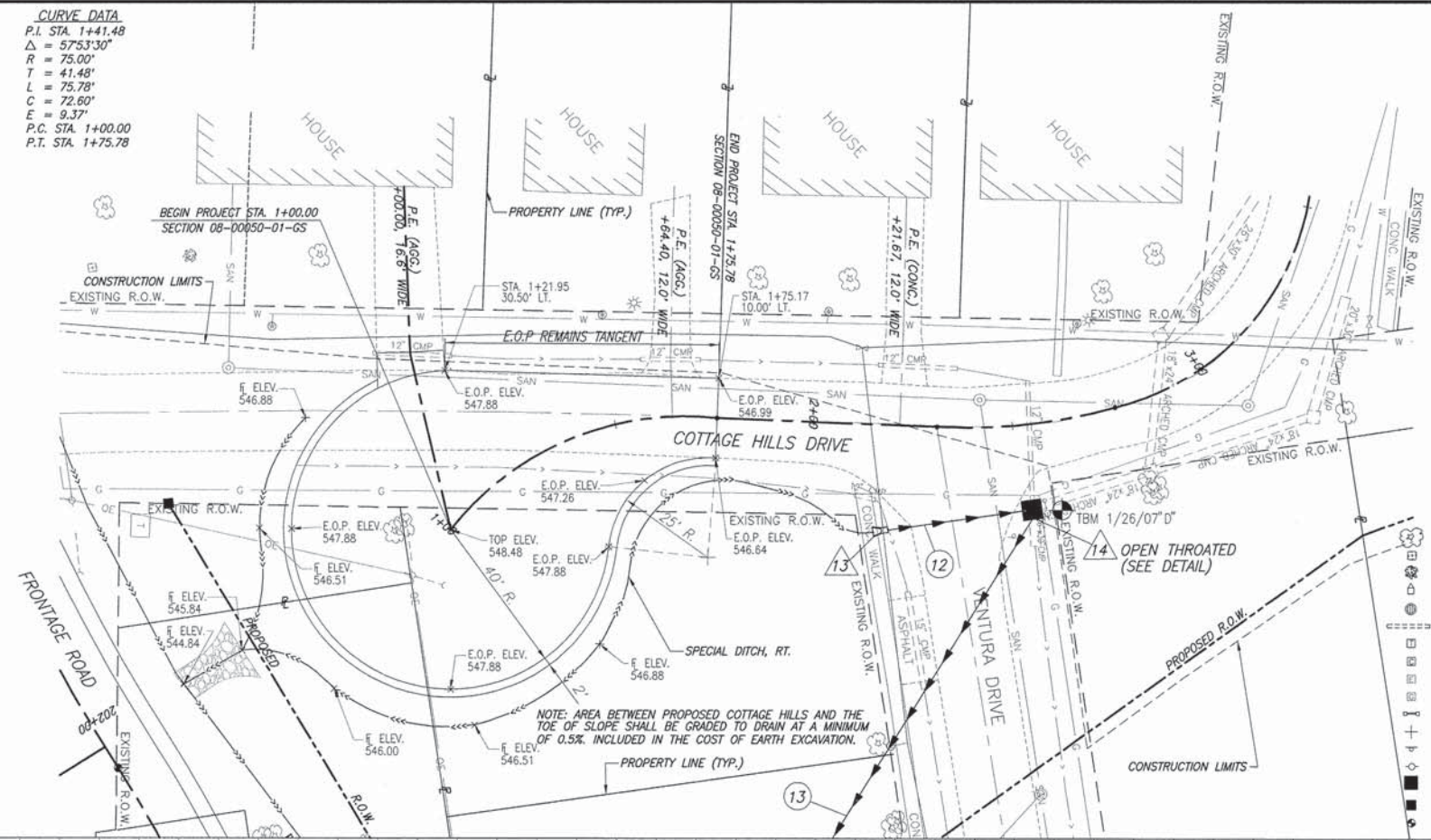
○	TREE	---	GUY WIRE
○	SHRUB	⊗	WATER METER
○	SAPLING	⊗	WATER VALVE
⊗	MAILBOX	⊗	WARNING POST
⊗	STORM INLET	---	FENCE
⊗	CULVERT	---	SWALE FLOWLINE
⊗	TELEPHONE PEDESTAL	---	EDGE OF PAVEMENT
⊗	CABLE TV PEDESTAL	---	OVERHEAD ELECTRIC
⊗	ELECTRIC PEDESTAL	---	UNDERGROUND ELECTRIC
⊗	GAS VALVE	---	UNDERGROUND FIBER OPTIC
⊗	SIGN	---	UNDERGROUND TELEPHONE
⊗	STREET SIGN	---	UNDERGROUND GAS MAIN
⊗	ROADWAY/TRAFFIC SIGN	---	WATER MAIN
⊗	POWER POLE	---	SANITARY SEWER
⊗	PROPOSED STORM INLET	---	PROPOSED FLOWLINE



ROADWAY PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS
SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	26
STA. 1+00.00 TO STA. 1+75.78		FEDERAL AID/GCPF PROJECT CONTRACT 97533		



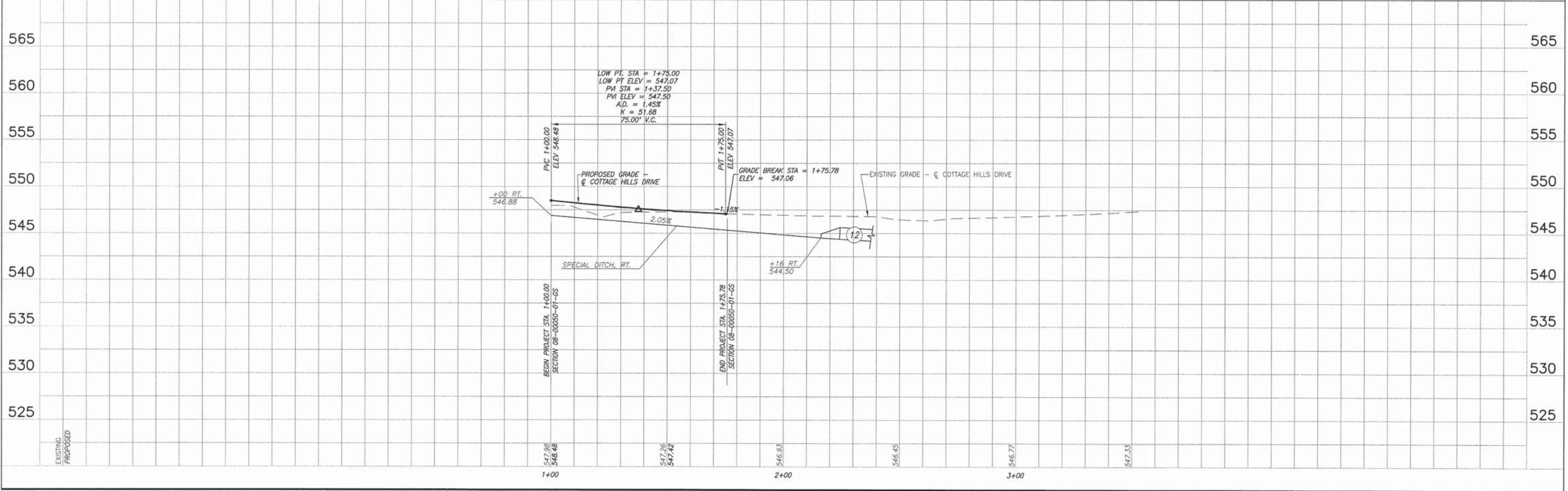
CURVE DATA
 P.I. STA. 1+41.48
 $\Delta = 57^{\circ}53'30''$
 $R = 75.00'$
 $T = 41.48'$
 $L = 75.78'$
 $C = 72.60'$
 $E = 9.37'$
 P.C. STA. 1+00.00
 P.T. STA. 1+75.78

BENCHMARK DATA
 TBM 1/26/07" D" - RAILROAD SPIKE IN WEST FACE OF POWER POLE; LOCATED NORTHEAST CORNER OF VENTURA DRIVE AND COTTAGE HILLS DRIVE. ELEV. 548.55

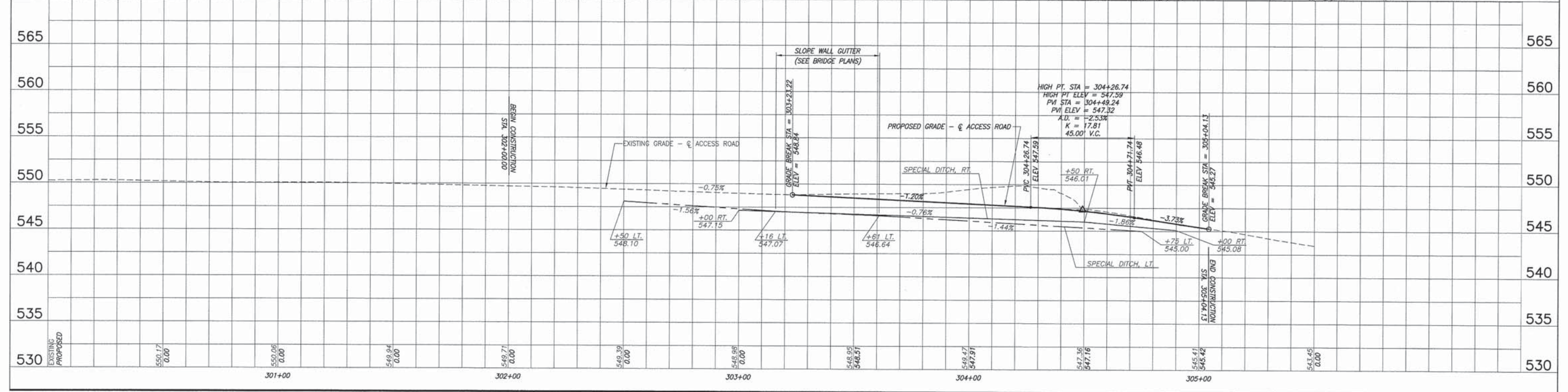
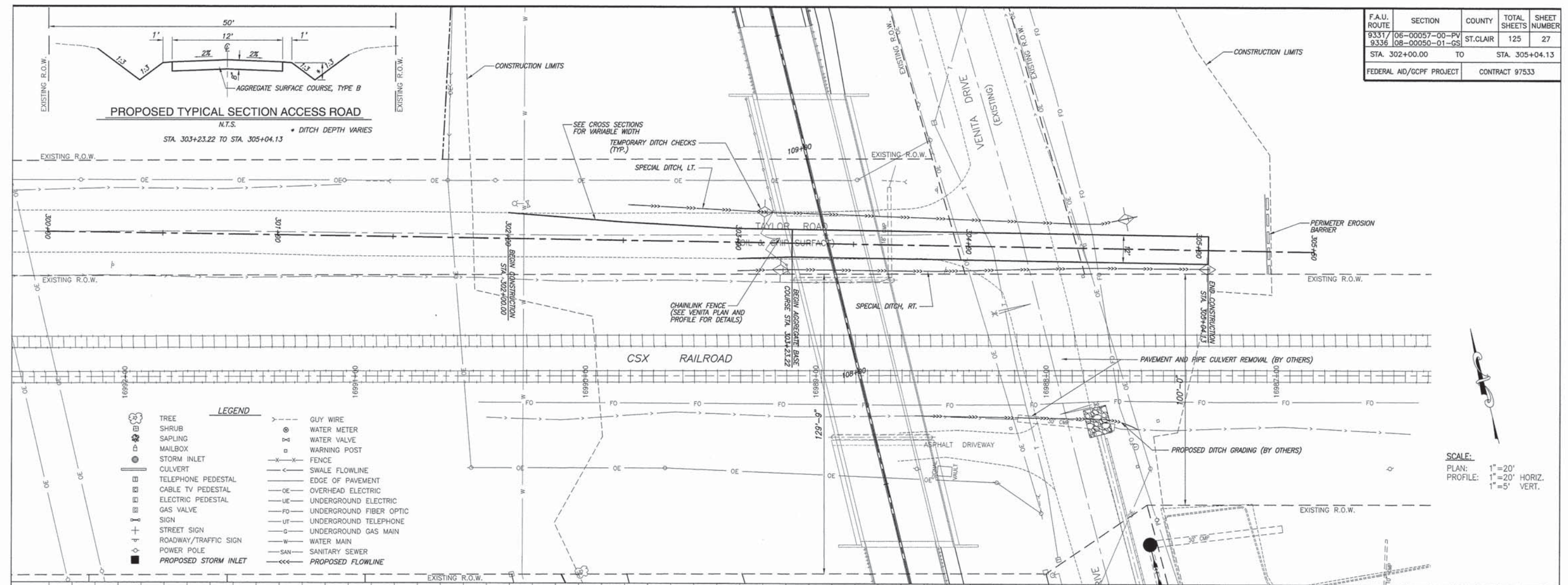
- LEGEND**
- TREE
 - SHRUB
 - SAPLING
 - MAILBOX
 - STORM INLET
 - CULVERT
 - TELEPHONE PEDESTAL
 - CABLE TV PEDESTAL
 - ELECTRIC PEDESTAL
 - GAS VALVE
 - SIGN
 - STREET SIGN
 - ROADWAY/TRAFFIC SIGN
 - POWER POLE
 - PROPOSED STORM INLET
 - PROPOSED RIGHT OF WAY MARKERS
 - PROPOSED PERMANENT SURVEY MARKERS, TYPE 1
 - GUY WIRE
 - WATER METER
 - WATER VALVE
 - WARNING POST
 - FENCE
 - SWALE FLOWLINE
 - EDGE OF PAVEMENT
 - OVERHEAD ELECTRIC
 - UNDERGROUND ELECTRIC
 - UNDERGROUND FIBER OPTIC
 - UNDERGROUND TELEPHONE
 - UNDERGROUND GAS MAIN
 - WATER MAIN
 - SANITARY SEWER
 - PROPOSED FLOWLINE
 - PROPOSED RIGHT OF WAY AND PROPERTY CORNERS



SCALE:
 PLAN: 1"=20'
 PROFILE: 1"=20' HORIZ.
 1"=5' VERT.



F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	27
STA. 302+00.00 TO STA. 305+04.13		FEDERAL AID/GC/PF PROJECT CONTRACT 97533		



ACCESS ROAD PLAN AND PROFILE VENITA DRIVE IMPROVEMENTS
SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

K:\41706 - 07\plan - 07\plan - 07\Folder - Hwy 50 & Venita Drive\VENITA DRIVE & FRONTAGE PLAN AND PROFILES.dwg, 7/17/2013, 11:37:22 AM, Plotted by MA

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	28
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

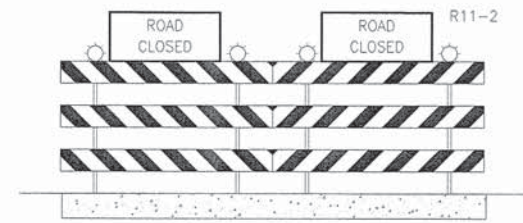
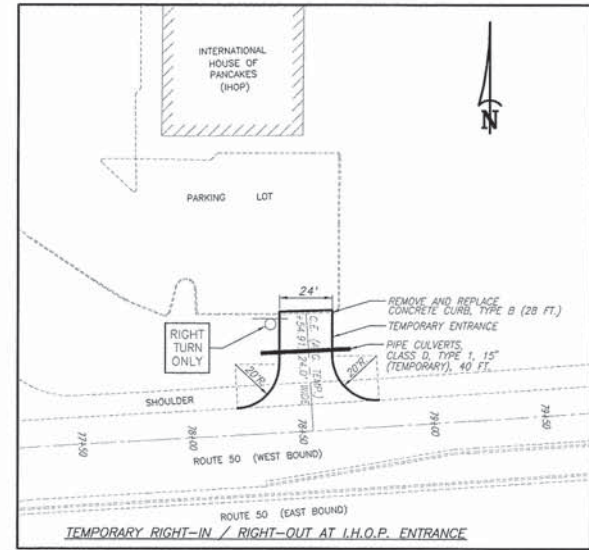
MAINTENANCE OF TRAFFIC AND SEQUENCE OF CONSTRUCTION

GENERAL
THE CONTRACTOR SHALL USE TYPE III BARRICADES WITH FLASHING LIGHTS AND SIGNS "ROAD CLOSED TO THRU TRAFFIC" (R11-4) OR "ROAD CLOSED" (R11-2) AT ALL CLOSURE POINTS. "ROAD CONSTRUCTION AHEAD" (W20-1(O)) AND "ROAD CLOSED AHEAD" (W20-3(O)) WARNING SIGNS WITH FLASHING LIGHTS SHALL BE PLACED IN CONFORMANCE WITH STANDARD BLR 21-9 AND BLR 22-7 AND AS DIRECTED BY THE ENGINEER TO ACCOMMODATE FIELD CONDITIONS. INITIAL WARNING SIGNS ON WEST HIGHWAY 50, SALEM PLACE, AND SIMMONS ROAD SHALL HAVE FLASHING LIGHTS.

STAGE II
VENITA DRIVE SHALL BE CLOSED TO ALL TRAFFIC AT WEST HIGHWAY 50 AND THRU TRAFFIC AT FRONTAGE ROAD STA. 200+15 AND THE VENITA DRIVE WEST PARK ENTRANCE. TEMPORARY SIGNALS SHALL BE IMPLEMENTED AS SHOWN IN THE PLANS. THE CONTRACTOR SHALL PROVIDE ALTERNATE ACCESS SIGNING FOR THE HOTEL AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL CONSTRUCT A RIGHT-IN/RIGHT-OUT TEMPORARY ENTRANCE TO I.H.O.P. RESTAURANT OFF OF WEST HIGHWAY 50 PRIOR TO CLOSING VENITA DRIVE. THE CONTRACTOR SHALL ALSO MAINTAIN ACCESS TO ALL DRIVEWAYS AT THE EAST END OF THE FRONTAGE ROAD. TYPE III BARRICADES WILL BE STATIONED ACROSS BOTH SIDES OF THE TRACK TO PREVENT TRACK CROSSING AT ALL TIMES. VENITA DRIVE WILL BE REOPENED TO TRAFFIC TO THE RELOCATED FRONTAGE ROAD IMMEDIATELY AFTER COMPLETION OF THE NEW TRAFFIC CONTROL SYSTEM. AT SUCH TIME, THE TEMPORARY ENTRANCE TO I.H.O.P. RESTAURANT SHALL ALSO BE REMOVED. THE RIGHT TURN LANE FROM WEST HIGHWAY 50 WILL BE CONSTRUCTED UNDER TRAFFIC USING STANDARD 701701.

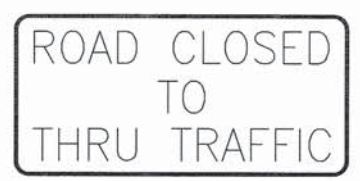
STAGE III
THE CONTRACTOR SHALL CONSTRUCT THE FINAL SURFACE COURSE LEFT UNDER TRAFFIC UTILIZING THE APPLICABLE SECTIONS OF STANDARDS 701306 AND 701501.

- NOTES:**
- 1.) SHORT-TERM PAVEMENT MARKING SHALL BE INSTALLED AT THE END OF EACH STAGE BEFORE THE ROAD IS OPEN TO TRAFFIC. TEMPORARY PAVEMENT MARKING SHALL BE INSTALLED PER SECTION 703.
 - 2.) THE CONTRACTOR SHALL CONDUCT WORK IN STAGE II WITHIN RAILROAD SAFETY PROCEDURES AND MEASURES AS DEFINED BY CSXT PERSONNEL.
 - 3.) VENITA DRIVE AT WEST HIGHWAY 50 WILL NOT BE CLOSED TO TRAFFIC FROM MEMORIAL DAY TO LABOR DAY.



TYPE III BARRICADE (ROAD CLOSED)

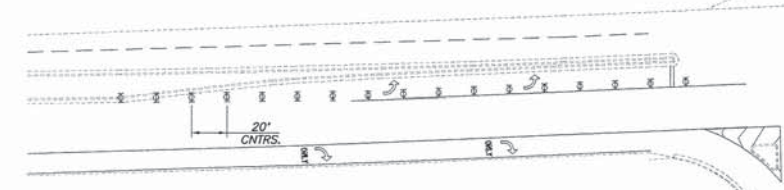
TYPE III BARRICADES WITH STANDARD SIGN R11-2 MOUNTED AS SHOWN, PLACED AT THE LOCATIONS AS SHOWN.



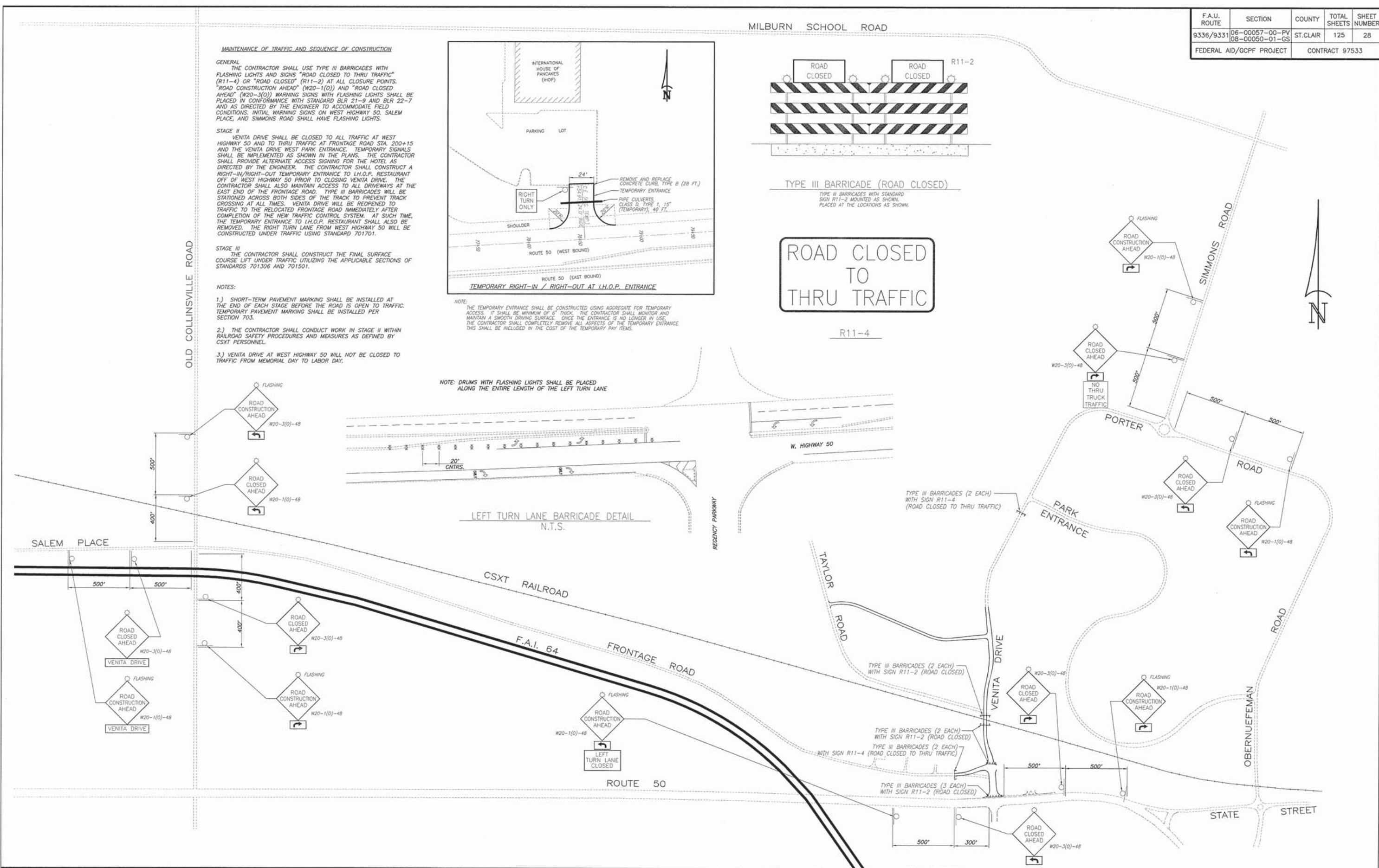
R11-4

NOTE: THE TEMPORARY ENTRANCE SHALL BE CONSTRUCTED USING AGGREGATE FOR TEMPORARY ACCESS. IT SHALL BE MINIMUM OF 6" THICK. THE CONTRACTOR SHALL MONITOR AND MAINTAIN A SMOOTH DRIVING SURFACE. ONCE THE ENTRANCE IS NO LONGER IN USE, THE CONTRACTOR SHALL COMPLETELY REMOVE ALL ASPECTS OF THE TEMPORARY PAY ITEMS. THIS SHALL BE INCLUDED IN THE COST OF THE TEMPORARY PAY ITEMS.

NOTE: DRUMS WITH FLASHING LIGHTS SHALL BE PLACED ALONG THE ENTIRE LENGTH OF THE LEFT TURN LANE



LEFT TURN LANE BARRICADE DETAIL N.T.S.



F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	29
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

MAINTENANCE OF TRAFFIC AND SEQUENCE OF CONSTRUCTION

GENERAL
THE CONTRACTOR SHALL USE TYPE III BARRICADES WITH FLASHING LIGHTS AND SIGNS "ROAD CLOSED TO THRU TRAFFIC" (R11-4) OR "ROAD CLOSED" (R11-2) AT ALL CLOSURE POINTS. "ROAD CONSTRUCTION AHEAD" (W20-1(O)) AND "ROAD CLOSED AHEAD" (W20-3(O)) WARNING SIGNS WITH FLASHING LIGHTS SHALL BE PLACED IN CONFORMANCE WITH STANDARD BLR 21-9 AND BLR 22-7 AND AS DIRECTED BY THE ENGINEER TO ACCOMMODATE FIELD CONDITIONS. INITIAL WARNING SIGNS ON WEST HIGHWAY 50 AND SIMMONS ROAD SHALL HAVE FLASHING LIGHTS.

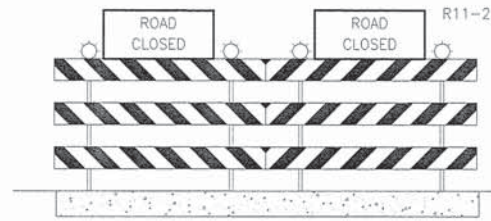
STAGE 1A
CONSTRUCT RELOCATED TAYLOR ROAD TO THE DESIGN SPECIFICATIONS SHOWN IN THE PLANS WITH VENITA DRIVE CLOSED BETWEEN WEST PARK ENTRANCE AND EXISTING TAYLOR ROAD.

STAGE 1B
UPON COMPLETION OF TAYLOR ROAD, VENITA DRIVE SHALL BE CLOSED TO TRAFFIC FROM THE RELOCATED FRONTAGE ROAD (STA. 103+75) TO RELOCATED TAYLOR ROAD (STA. 115+75) IN ACCORDANCE WITH THE SIGNING PLAN SHOWN BELOW. THE CONTRACTOR SHALL STAGE EMBANKMENT OPERATIONS TO UTILIZE EXISTING VENITA DRIVE AND THE AT-GRADE CROSSING AT THE CSXT RAILROAD.

NOTES:

- 1.) THE CONTRACTOR SHALL CONDUCT WORK IN STAGE I WITHIN RAILROAD SAFETY PROCEDURES AND MEASURES AS DEFINED BY CSXT PERSONNEL.
- 2.) HOTEL TRAFFIC WILL USE THE IHOP ENTRANCE FOR INGRESS / EGRESS AT THE PARKING LOT DURING STAGE 1B.
- 3.) TYPE III BARRICADES (ROAD CLOSED) WILL BE PLACED ACROSS VENITA DRIVE AT THE RAILROAD WHEN THE ROADWAY IS NO LONGER OPEN TO PUBLIC ACCESS.

MILBURN SCHOOL ROAD



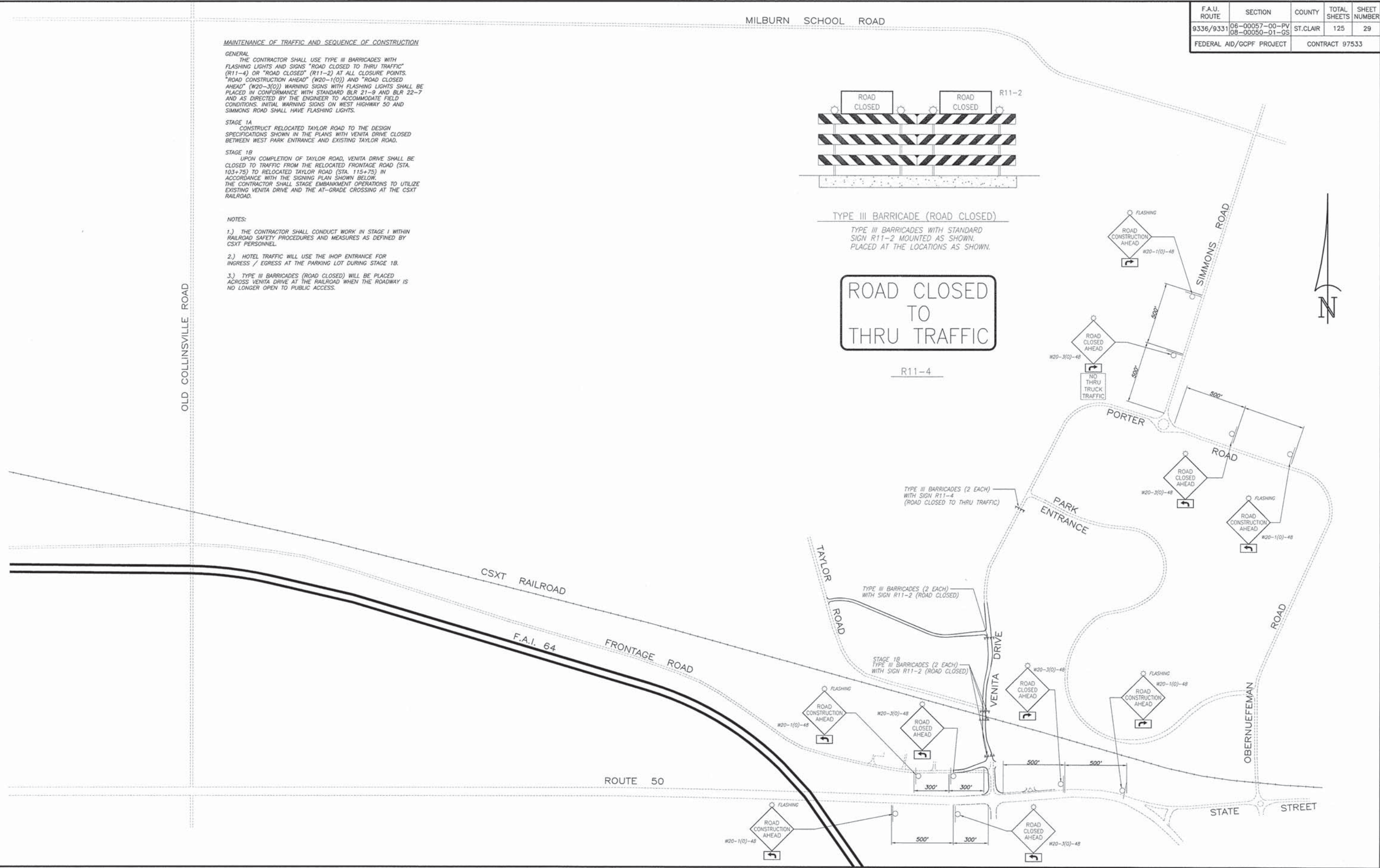
TYPE III BARRICADE (ROAD CLOSED)

TYPE III BARRICADES WITH STANDARD SIGN R11-2 MOUNTED AS SHOWN. PLACED AT THE LOCATIONS AS SHOWN.

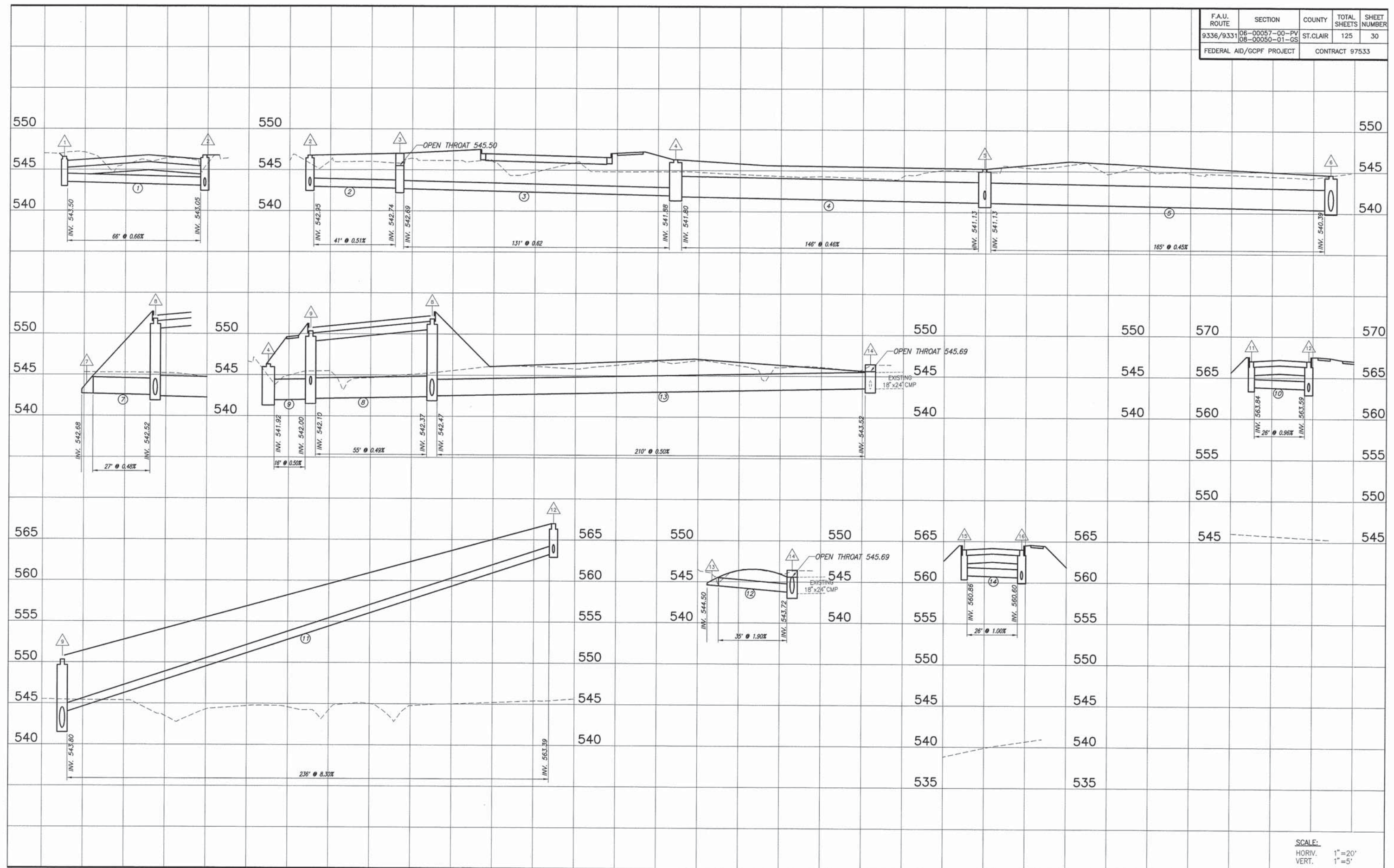


R11-4

OLD COLLINSVILLE ROAD



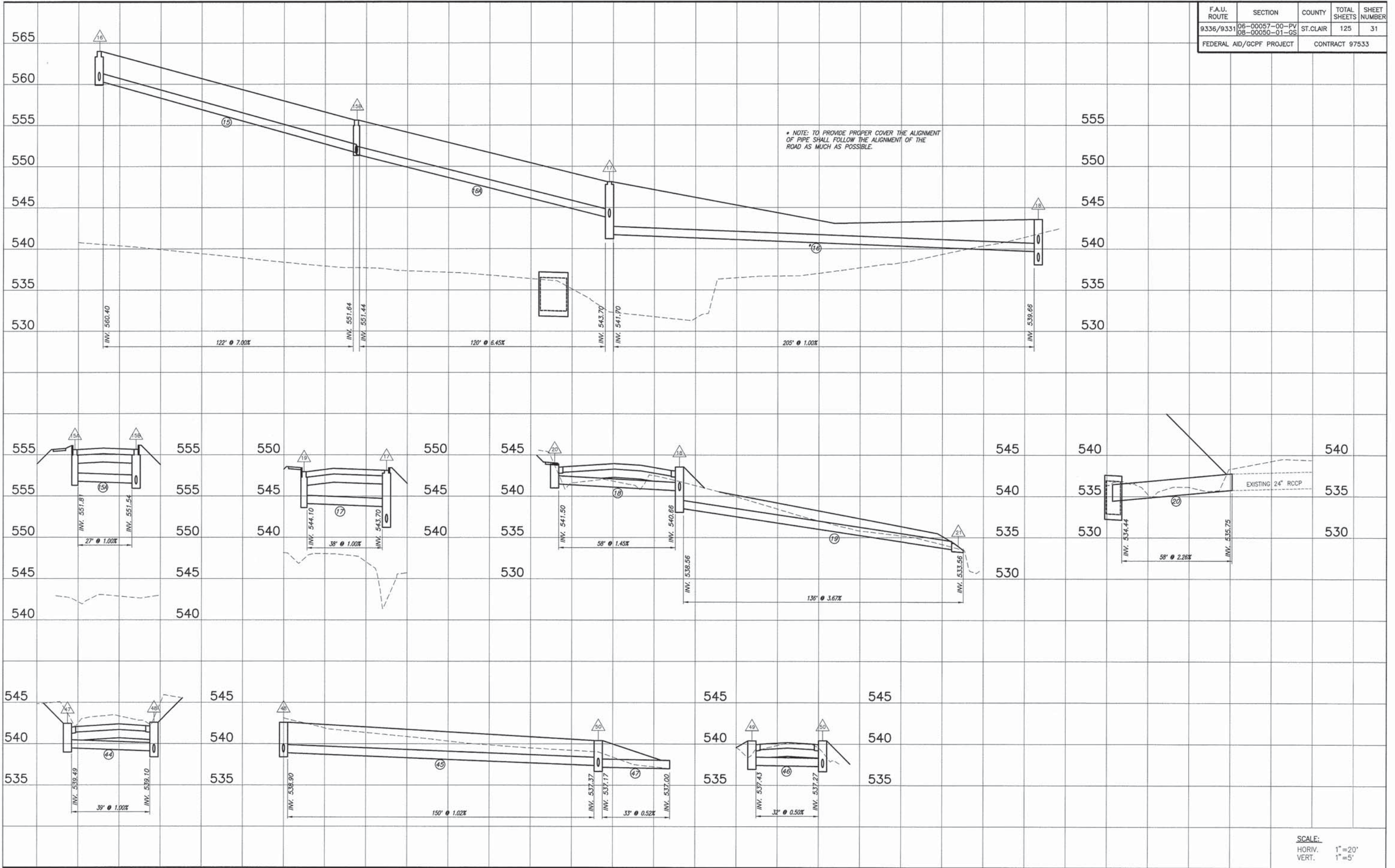
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	30
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



SCALE:
 HORIV. 1"=20'
 VERT. 1"=5'

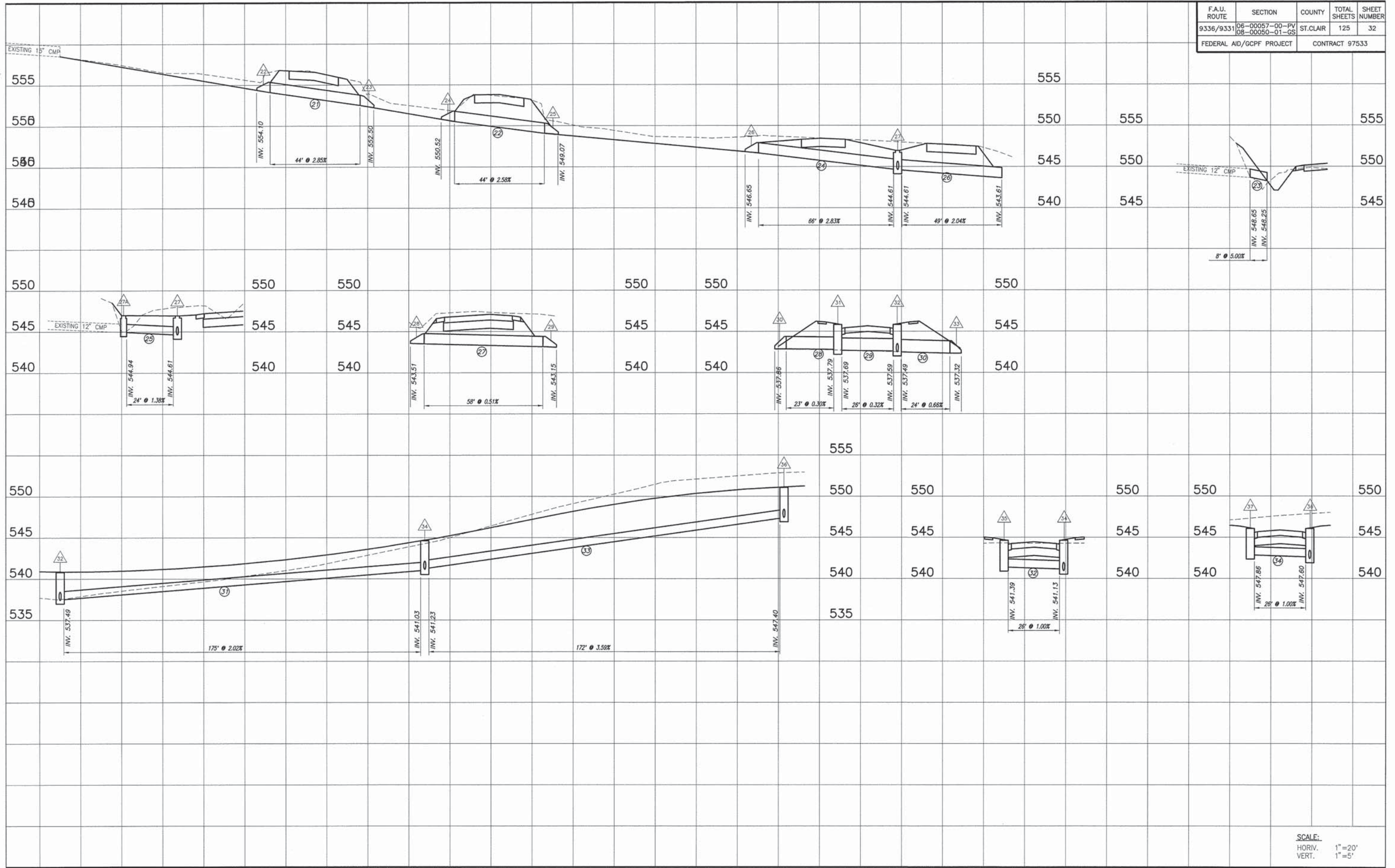
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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	31
FEDERAL AID/GCPF PROJECT		CONTRACT 97533		



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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	32
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

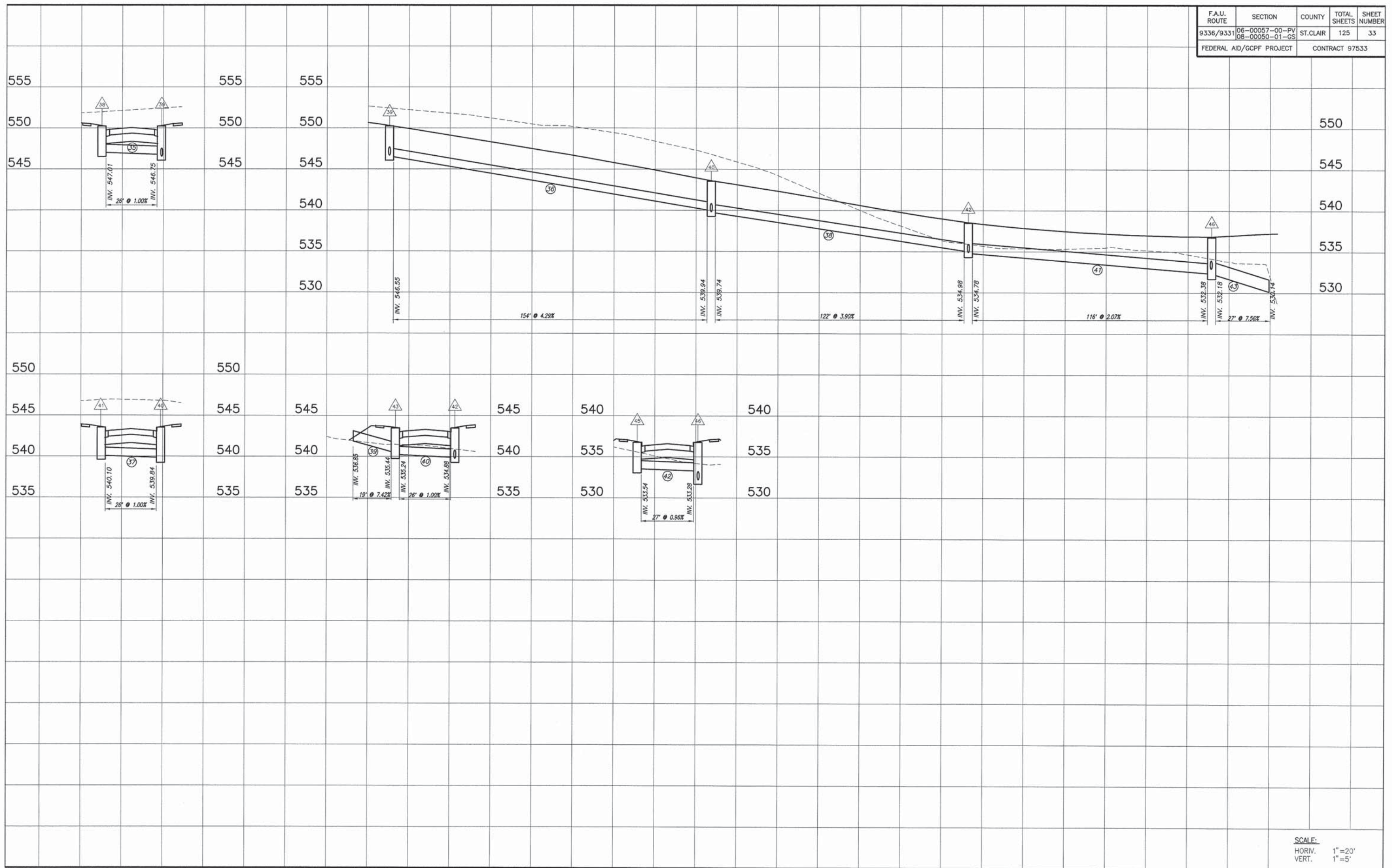


SCALE:
 HORIV. 1"=20'
 VERT. 1"=5'

STORM SEWER PROFILES VENITA DRIVE IMPROVEMENTS
 SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	33
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



SCALE:
 HORIV. 1"=20'
 VERT. 1"=5'

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EXISTING STRUCTURE: THE EXISTING STRUCTURE CONSISTS OF A 6'x2' CAST-IN-PLACE CONCRETE BOX CULVERT. THE EXISTING STRUCTURE SHALL BE REMOVED AND REPLACED WITH A PRECAST SINGLE BARREL 7'x4' BOX CULVERT UTILIZING TOTAL ROAD CLOSURE.

GENERAL NOTES

THIS BOX CULVERT HAS A MAXIMUM FILL HEIGHT OF 13'-6". PRECAST CONCRETE BOX CULVERT SECTIONS AND PRECAST END SECTIONS SHALL BE ACCORDING TO ASTM C 1577, EXCEPT THAT THE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1003.02 AND 1004.02 OF THE STANDARD SPECIFICATIONS WITH EXCEPTION OF "GRADATION."

REMOVAL AND DISPOSAL OF ALL MATERIALS REQUIRED TO PROVIDE NEW STREAM ALIGNMENT PRIOR TO FINAL SHAPING AND EXCAVATION FOR THE STRUCTURE SHALL BE PAID FOR AS CHANNEL EXCAVATION.

ALL MATERIAL EXCAVATED FROM THE EXISTING WATERWAY SHALL BE TRANSPORTED TO A LOCATION IN THE FAMILY SPORTS PARK AS DIRECTED BY A REPRESENTATIVE OF THE CITY OF O'FALLON. THE CONTRACTOR SHALL NOT STOCKPILE EXCAVATED MATERIAL ALONG THE BANK FOR THE PURPOSE OF DRYING BUT SHALL LOAD SAID MATERIAL DIRECTLY ONTO TRUCKS FOR TRANSPORT TO THE OFF-SITE LOCATION. THE CONTRACTOR SHALL USE DUE CARE DURING REMOVAL OPERATIONS SO AS TO NOT LEAVE ANY EXCAVATED MATERIAL ALONG THE STREAM BED WHICH MAY RETURN TO THE WATERWAY.

THE LAYOUT OF SLOPE PROTECTION MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

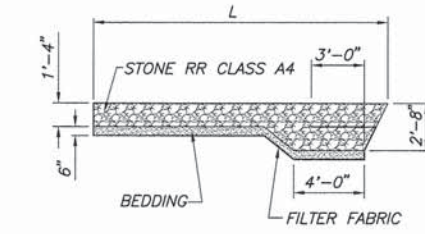
THE CAST-IN-PLACE TOEWALL WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR "BOX CULVERTS END SECTION". APPROXIMATELY 0.9 CU. YD. OF CONCRETE WILL BE NEEDED PER TOE WALL.

WATER INFORMATION TABLE

DRAINAGE AREA = 0.22 SQ. MI.		EXISTING LOW GRADE ELEVATION = 537.54 FT. @ STA. 112+95, 6.4' RT. PROPOSED LOW GRADE ELEVATION = 543.35 FT. @ STA. 116+29.84								
FLOOD YEAR	FREQUENCY	DISCHARGE (CFS)		WATERWAY OPENING (SQ. FT.)		NATURAL H.W.E.	HEAD (FT.)		HEADWATER ELEV.	
		EXISTING	PROPOSED	EXISTING	PROPOSED		EXISTING	PROPOSED	EXISTING	PROPOSED
DESIGN	50	76.9	86.7	12.0	18.7	536.55			536.50	536.37
BASE	100	92.7	105.3	12.0	21.3	537.30			537.24	536.74

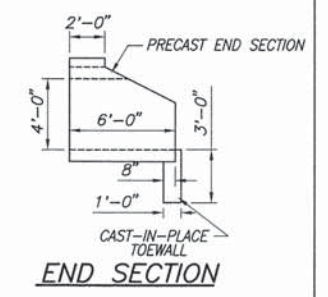
BILL OF MATERIAL

ITEM	UNIT	TOTAL
REMOVAL OF EXISTING STRUCTURES	EACH	1
CHANNEL EXCAVATION	CU. YD.	768
STRUCTURE EXCAVATION	CU. YD.	314
BOX CULVERT END SECTIONS	EACH	2
PRECAST CONCRETE BOX CULVERT 7'x4'	FOOT	318
POROUS GRANULAR EMBANKMENT	CU. YD.	180



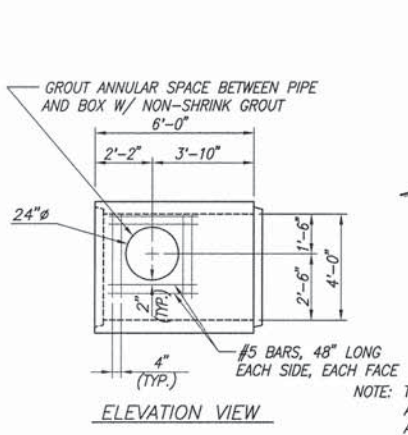
SECTION A-A'
NOTE: SEE EROSION CONTROL PLAN AND SCHEDULES FOR ADDITIONAL SIZES AND DIMENSIONS.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	34
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

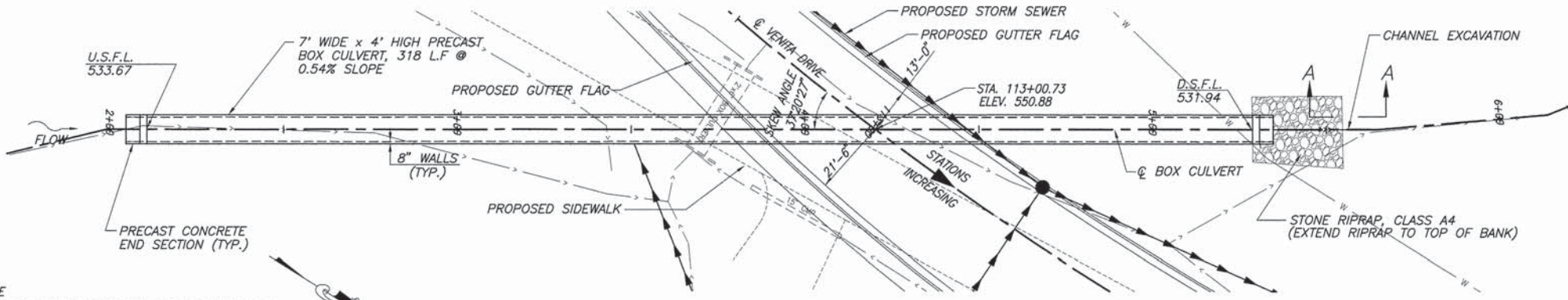


PRECAST BOX CULVERT SCHEDULE

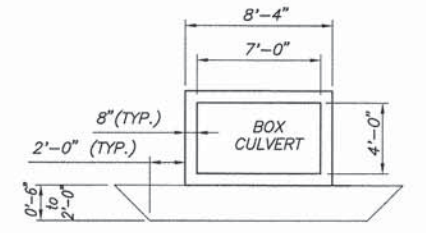
STATION	SIZE (SPAN X HEIGHT)	SKEW	DESIGN FILL (FT.)		POROUS GRANULAR BACKFILL
			MINIMUM	MAXIMUM	
113+00.73	7'x4'	37°20'27"	12'-4"	13'-6"	180 C.Y.



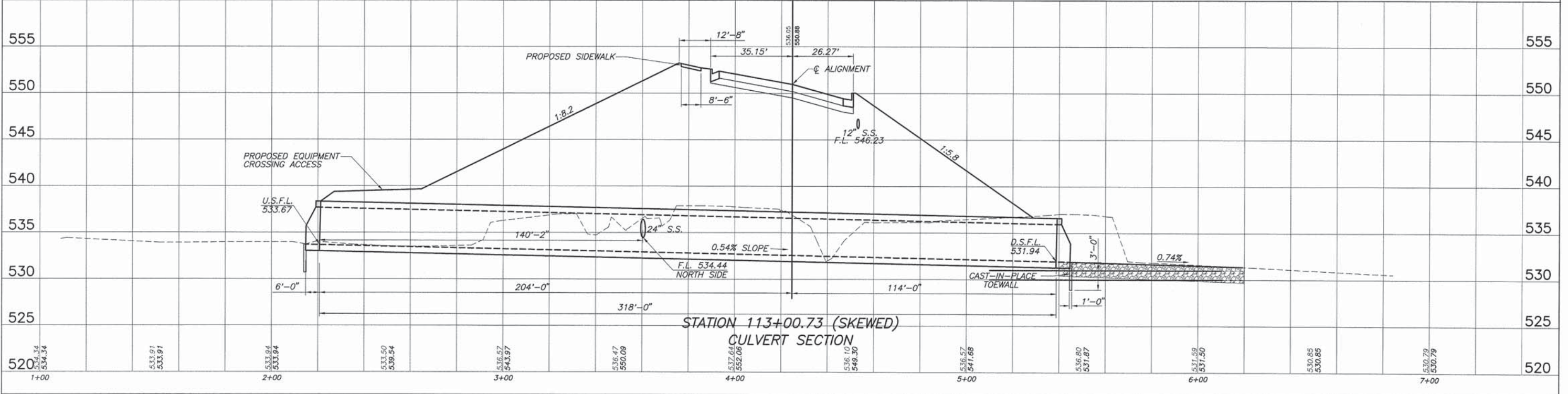
STORM SEWER CONNECTION DETAIL
N.T.S.



PLAN
N.T.S.
DIMENSIONS ARE GIVEN AT RT. ANGLES TO THE ϕ RDWY. UNLESS OTHERWISE NOTED



SECTION THRU BARREL
REMOVE UNSUITABLE SOIL BELOW BOTTOM OF CULVERT 2 FT. OUTSIDE THE FOOTPRINT OF THE BOX. REMOVAL DEPTH SHALL BE 6" MINIMUM IN AREAS OF EXISTING EMBANKMENT AND 2' WITHIN LIMITS OF THE EXISTING STREAM BED AS DIRECTED BY THE ENGINEER. COST SHALL BE INCLUDED IN THE COST OF "STRUCTURE EXCAVATION". REPLACE WITH CA-7 OR CA-11 "POROUS GRANULAR EMBANKMENT." (SEE GENERAL NOTES)



STATION 113+00.73 (SKEWED)
CULVERT SECTION

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	35
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

GENERAL NOTES

THIS BOX CULVERT HAS A MAXIMUM FILL HEIGHT OF 4'-4". PRECAST CONCRETE BOX CULVERT SECTIONS AND PRECAST END SECTIONS SHALL BE ACCORDING TO ASTM C 1577, EXCEPT THAT THE AGGREGATE SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 1003.02 AND 1004.02 OF THE STANDARD SPECIFICATIONS WITH EXCEPTION OF "GRADATION."

ALL MATERIAL EXCAVATED FROM THE EXISTING WATERWAY SHALL BE TRANSPORTED TO A LOCATION IN THE FAMILY SPORTS PARK AS DIRECTED BY A REPRESENTATIVE OF THE CITY OF O'FALLON. THE CONTRACTOR SHALL NOT STOCKPILE EXCAVATED MATERIAL ALONG THE BANK FOR THE PURPOSE OF DRYING BUT SHALL LOAD SAID MATERIAL DIRECTLY ONTO TRUCKS FOR TRANSPORT TO THE OFF-SITE LOCATION. THE CONTRACTOR SHALL USE DUE CARE DURING REMOVAL OPERATIONS SO AS TO NOT LEAVE ANY EXCAVATED MATERIAL ALONG THE STREAM BED WHICH MAY RETURN TO THE WATERWAY.

THE LAYOUT OF SLOPE PROTECTION MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.

THE CAST-IN-PLACE TOEWALL WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST FOR "BOX CULVERTS END SECTION". APPROXIMATELY 1.0 CU. YD. OF CONCRETE WILL BE NEEDED PER TOEWALL.

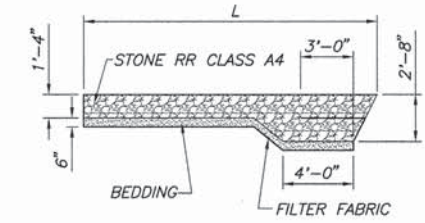
WATER INFORMATION TABLE

DRAINAGE AREA = 0.23 SQ. MI. PROPOSED LOW GRADE ELEVATION = 537.03 FT. @ STA. 23+79.01

FLOOD YEAR	FREQUENCY	DISCHARGE (CFS)	WATERWAY OPENING (SQ. FT.)		NATURAL H.W.E.	HEAD (FT.)		HEADWATER ELEV.
			EXISTING	PROPOSED		EXISTING	PROPOSED	
DESIGN	50	90.1	N/A	20.0	533.24			532.84
BASE	100	109.3	N/A	22.8	533.39			533.18

BILL OF MATERIAL

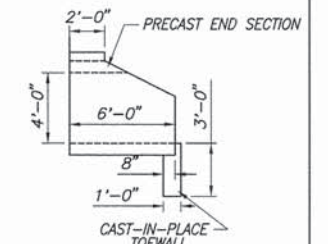
ITEM	UNIT	TOTAL
STRUCTURE EXCAVATION	CU. YD.	4.33
BOX CULVERT END SECTIONS	EACH	2
PRECAST CONCRETE BOX CULVERT 8'x4'	FOOT	126
POROUS GRANULAR EMBANKMENT	CU. YD.	1.36



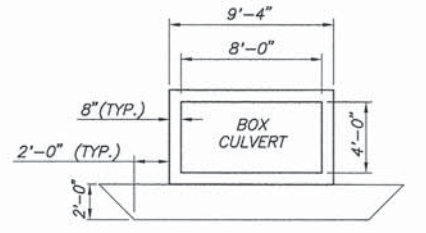
SECTION A-A'
NOTE: SEE EROSION CONTROL PLAN AND SCHEDULES FOR ADDITIONAL SIZES AND DIMENSIONS.

PRECAST BOX CULVERT SCHEDULE

STATION	SIZE (SPAN X HEIGHT)	SKEW	DESIGN FILL (FT.)		POROUS GRANULAR BACKFILL
			MINIMUM	MAXIMUM	
24+15.57	8'x4'	49°34'51"	2'-9"	4'-4"	1.36 C.Y.

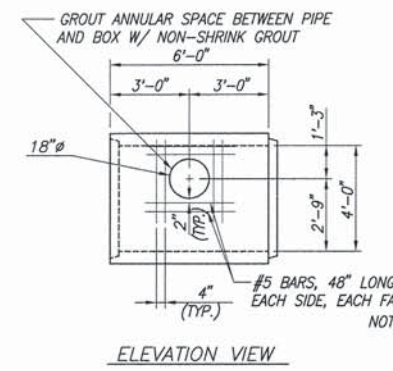


END SECTION

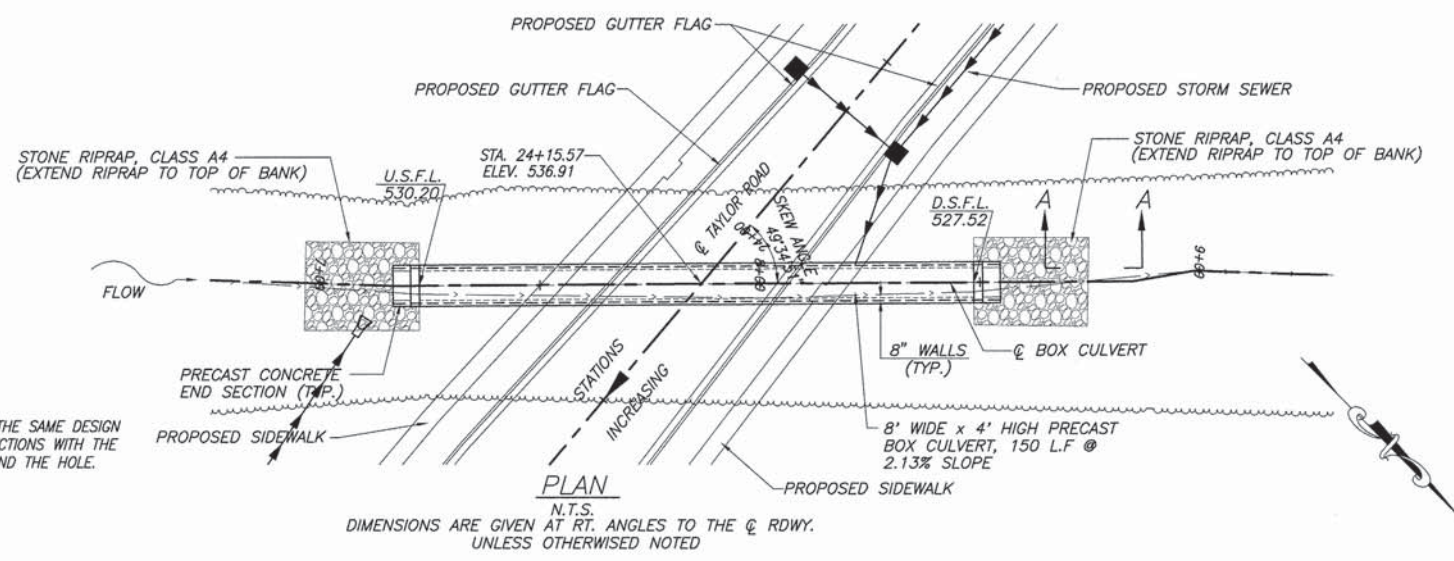


SECTION THRU BARREL

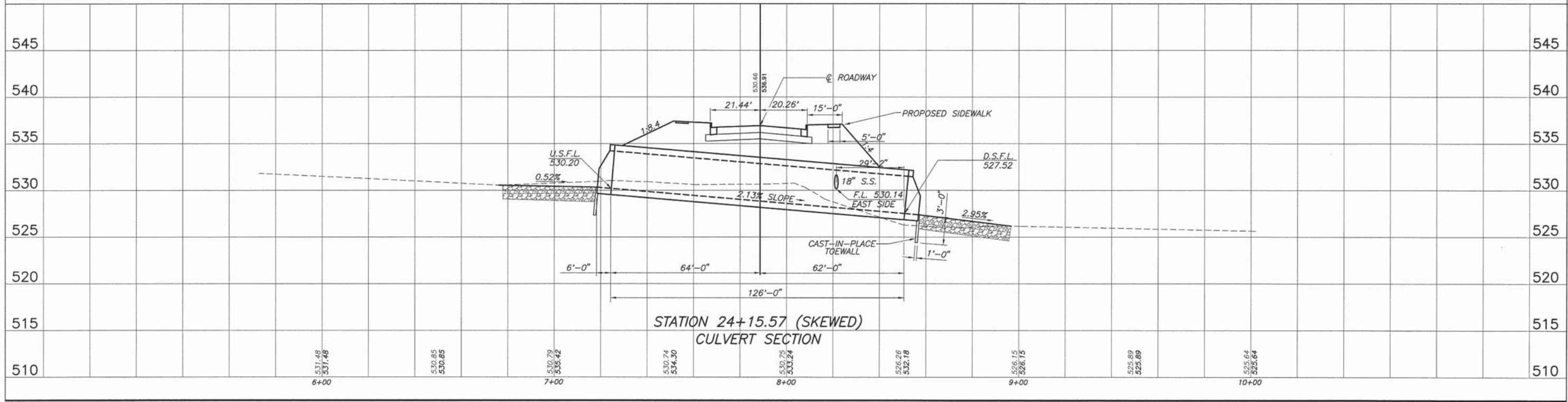
REMOVE UNSUITABLE SOIL BELOW BOTTOM OF CULVERT TO DEPTH OF 2 FT. OR AS DIRECTED BY THE ENGINEER AND 2 FT. OUTSIDE THE FOOTPRINT OF THE BOX. COST SHALL BE INCLUDED IN THE COST OF "STRUCTURE EXCAVATION". REPLACE WITH CA-7 OR CA-11 "POROUS GRANULAR EMBANKMENT." (SEE GENERAL NOTES)



STORM SEWER CONNECTION DETAIL
N.T.S.



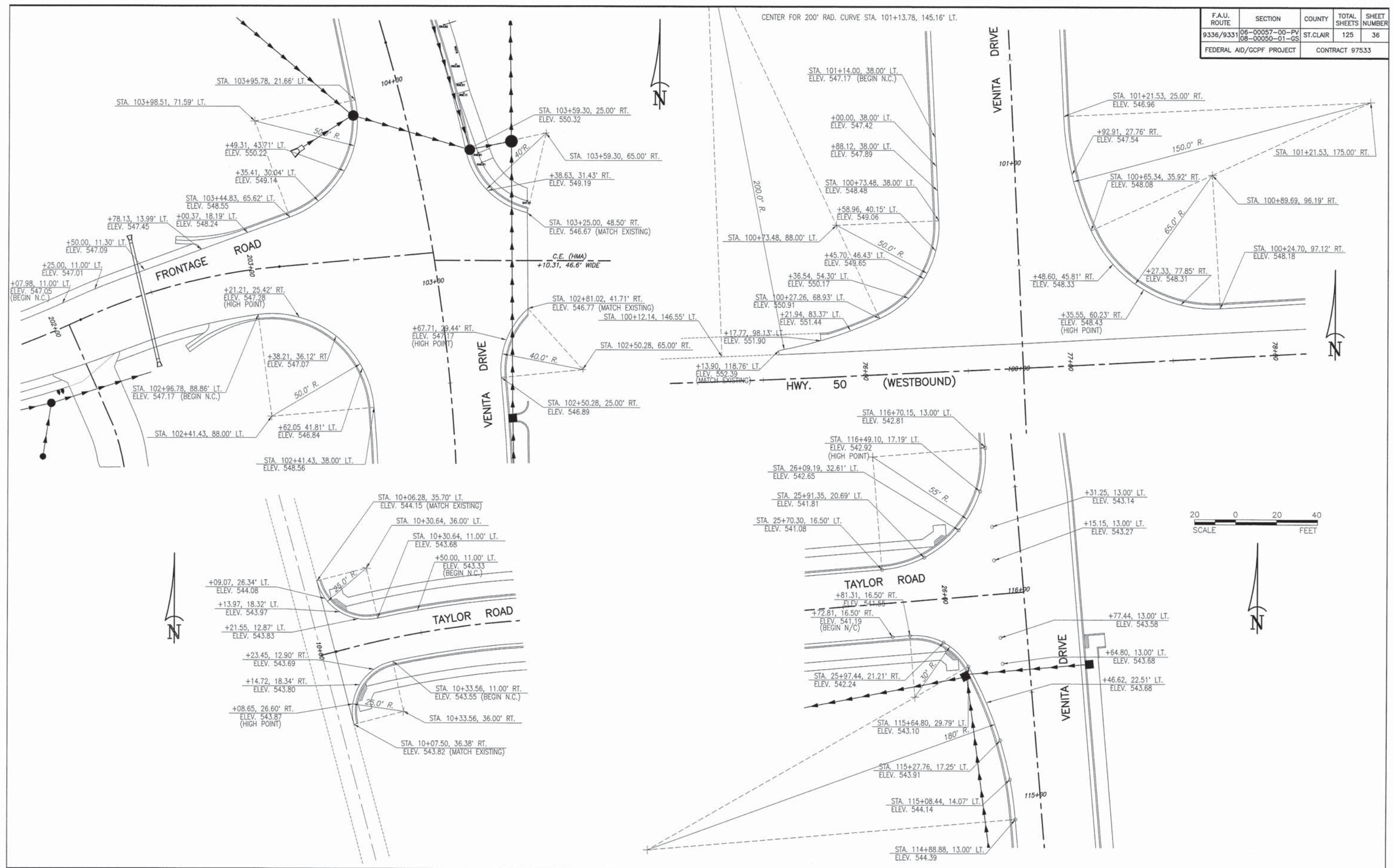
PLAN
N.T.S.
DIMENSIONS ARE GIVEN AT RT. ANGLES TO THE C.R.D.W.Y. UNLESS OTHERWISE NOTED



STATION 24+15.57 (SKEWED)
CULVERT SECTION

K:\41706 - 0'Fallon - 0'Fallon - Hwy 56 & Venita Drive\06-00057-00-PV\08-00050-01-GS\DWG\06-00057-00-PV-08-00050-01-GS.dwg, 7/17/2013 10:27:56 AM, Plotted by: MML

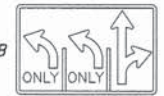
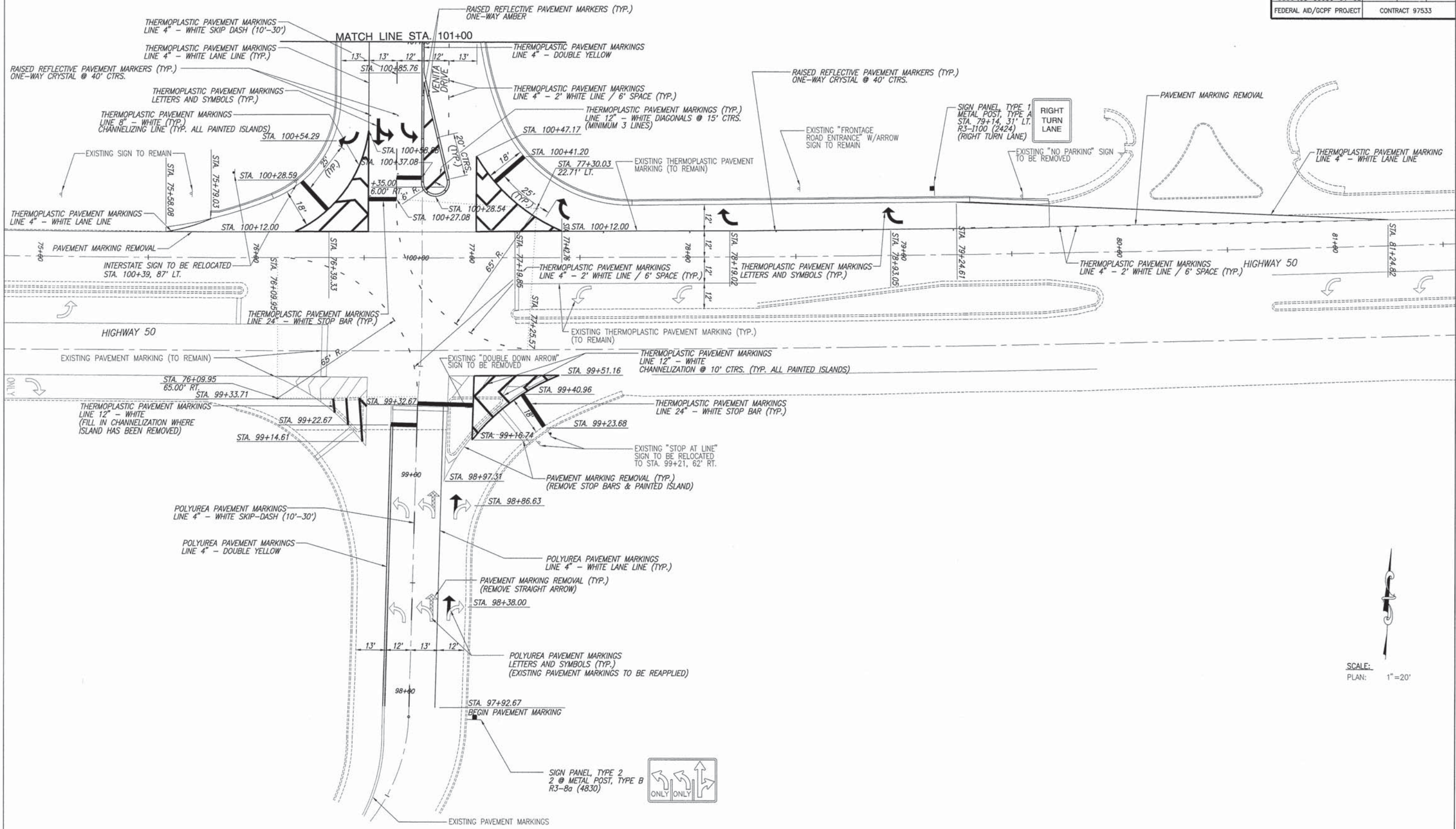
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	36
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	



K:\v1706 - 0\Fallon - Hwy 50 & Venita Drive\Geometric\INTERSECTION_DETAL.dwg, 7/17/2013 10:50:47 AM, Plotted by MBI

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	37
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	

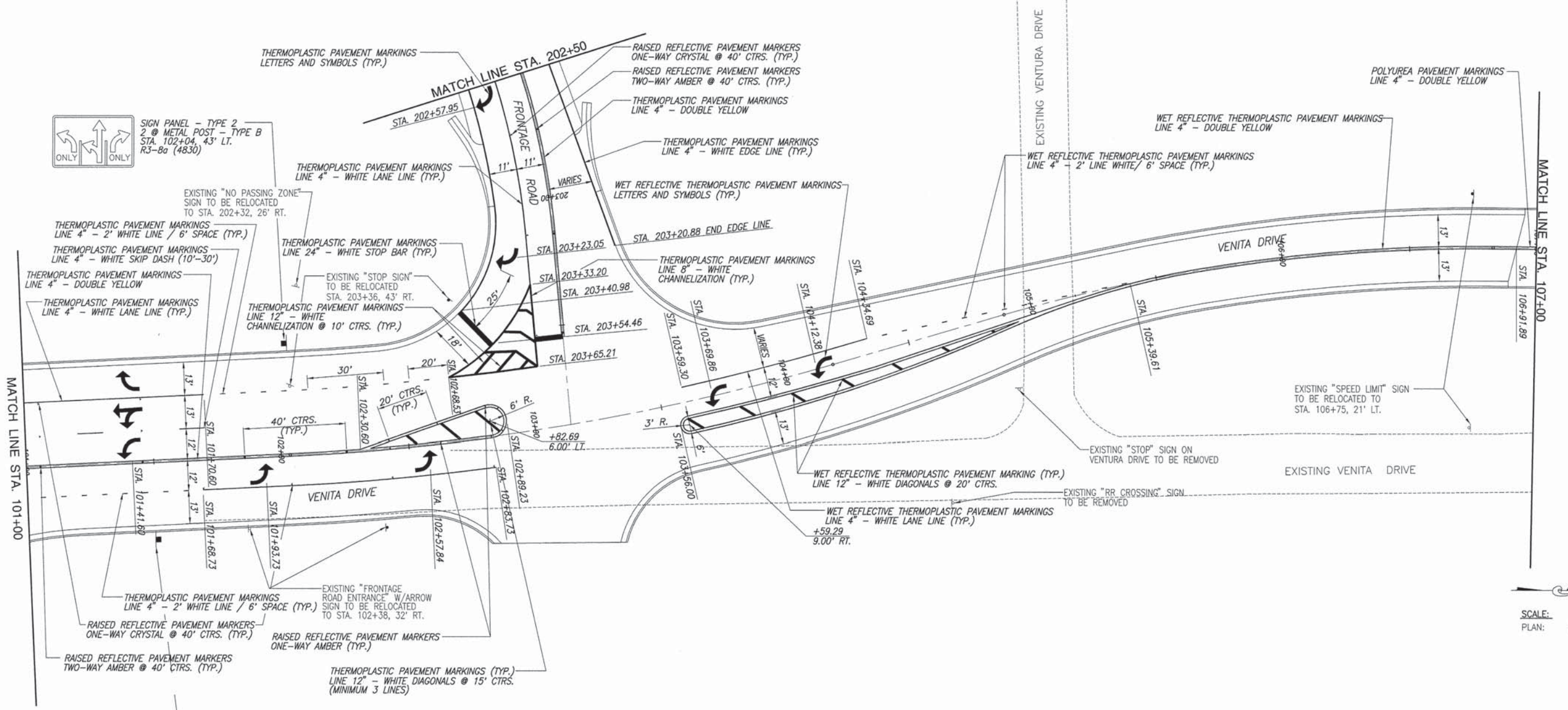
NOTE: THE COST OF REMOVING & RELOCATING ALL SIGNS SHALL BE INCLUDED IN THE COST OF THE CONTRACT.



K:\1706 - 07eller - Hwy 50 & Venita Drive\eng\DRAWING\MARKING.dwg, 7/17/2013 11:50:09 PM, Plotted by MLE

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	38
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

NOTE: THE COST OF REMOVING & RELOCATING ALL SIGNS SHALL BE INCLUDED IN THE COST OF THE CONTRACT.



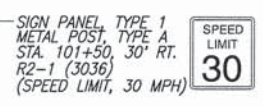
EXISTING "NO PASSING ZONE" SIGN TO BE RELOCATED TO STA. 202+32, 26' RT.

EXISTING "STOP" SIGN TO BE RELOCATED STA. 203+36, 43' RT.

EXISTING "SPEED LIMIT" SIGN TO BE RELOCATED TO STA. 106+75, 21' LT.

EXISTING "STOP" SIGN ON VENTURA DRIVE TO BE REMOVED

EXISTING "RR CROSSING" SIGN TO BE REMOVED

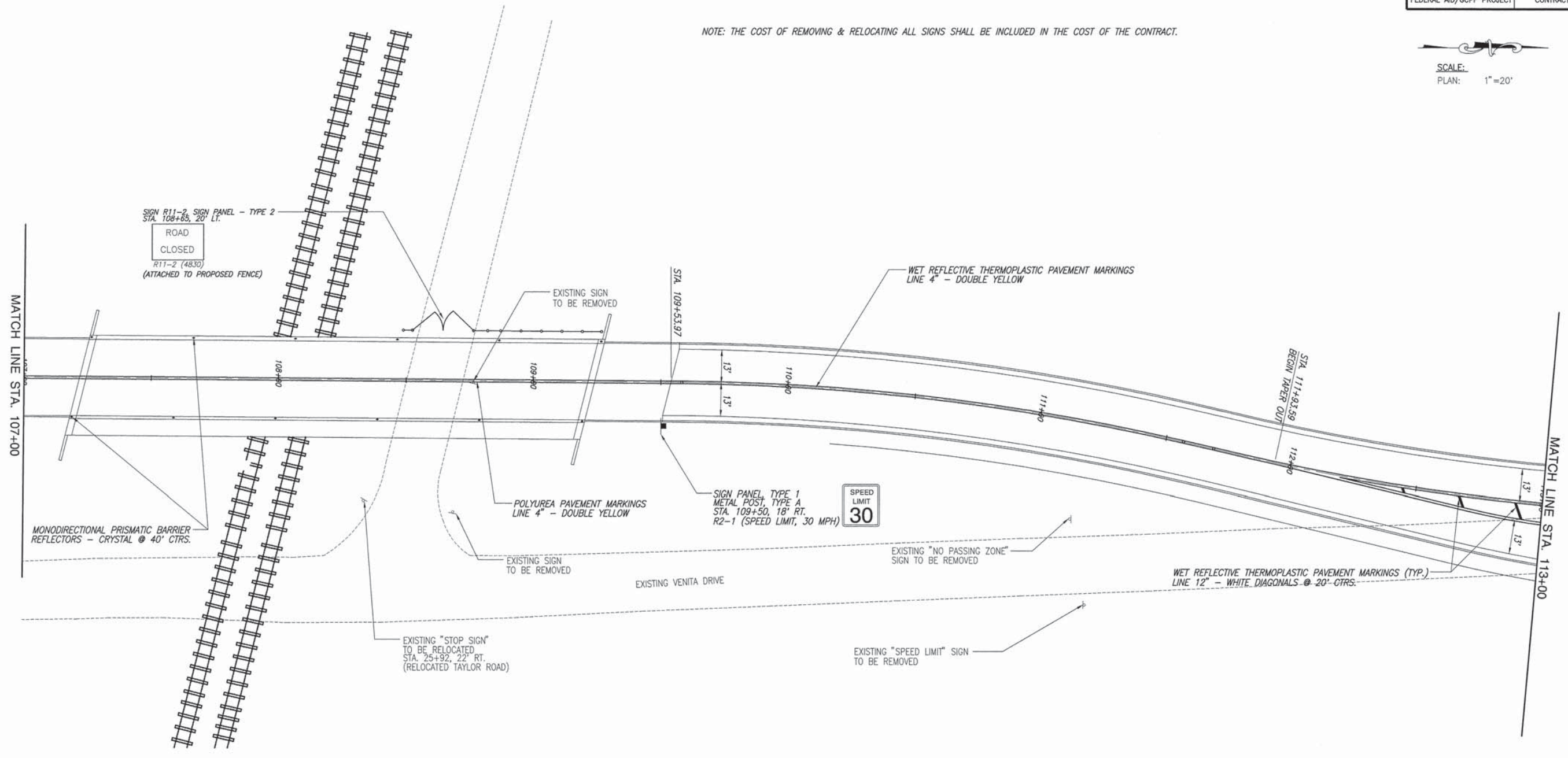


SCALE: PLAN: 1"=20'

K:\V1706 - 07Feb08 - Hwy 50 & Venita Drive\Drawings\PAVEMENT MARKINGS.dwg, 7/17/2013 10:34:09 AM, Plotted by MLE

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	39
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

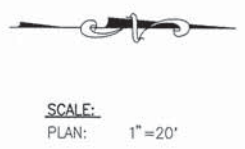
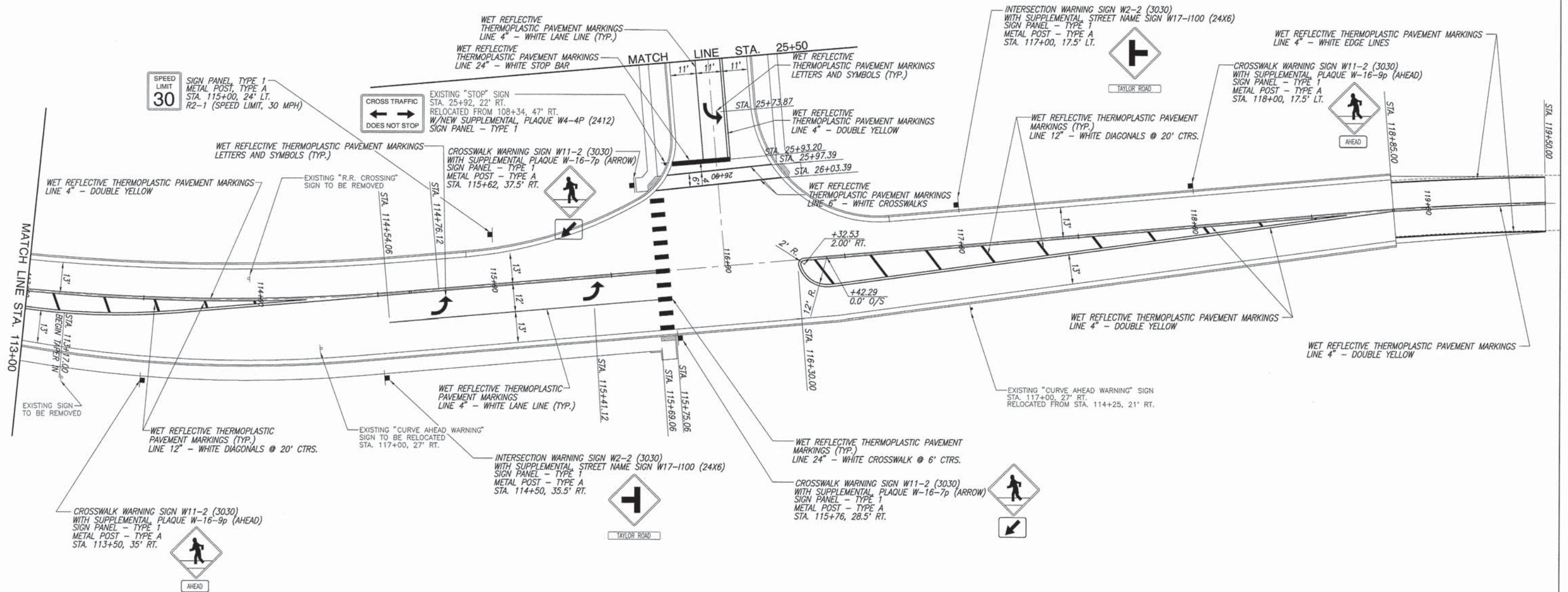
NOTE: THE COST OF REMOVING & RELOCATING ALL SIGNS SHALL BE INCLUDED IN THE COST OF THE CONTRACT.



K:\11766 - 07Fellon - Hwy 36 & Venita Drive\Drawings\DWG\DWG\1176613 10:37:39 AM Plotted by MML

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV 9336/08-00050-01-GS		ST. CLAIR	125	40
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

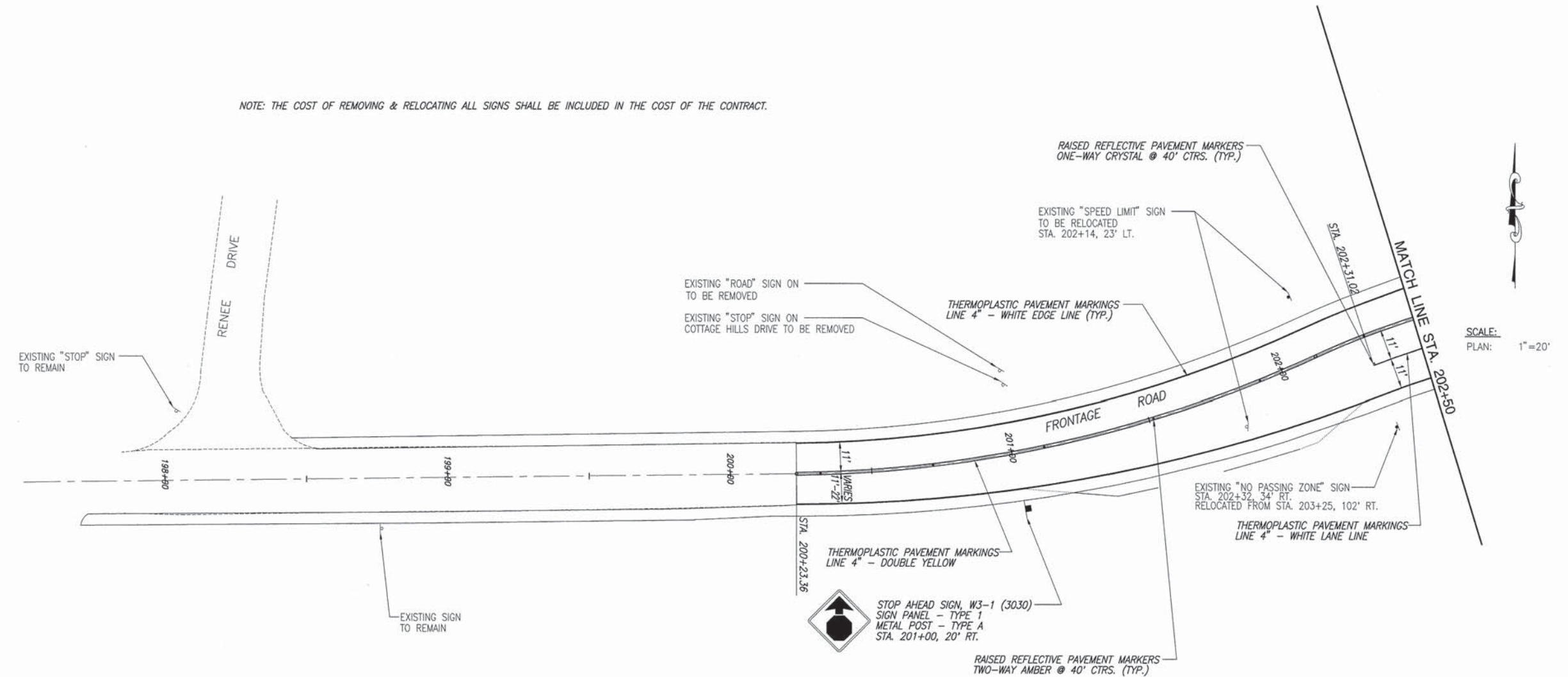
NOTE: THE COST OF REMOVING & RELOCATING ALL SIGNS SHALL BE INCLUDED IN THE COST OF THE CONTRACT.



K:\V1706 - 07Editor - Hwy 50 & Venita Drive\Drawings\PAVEMENT MARKINGS.dwg, 7/17/2013 10:36:53 AM, Plotted by: MAL

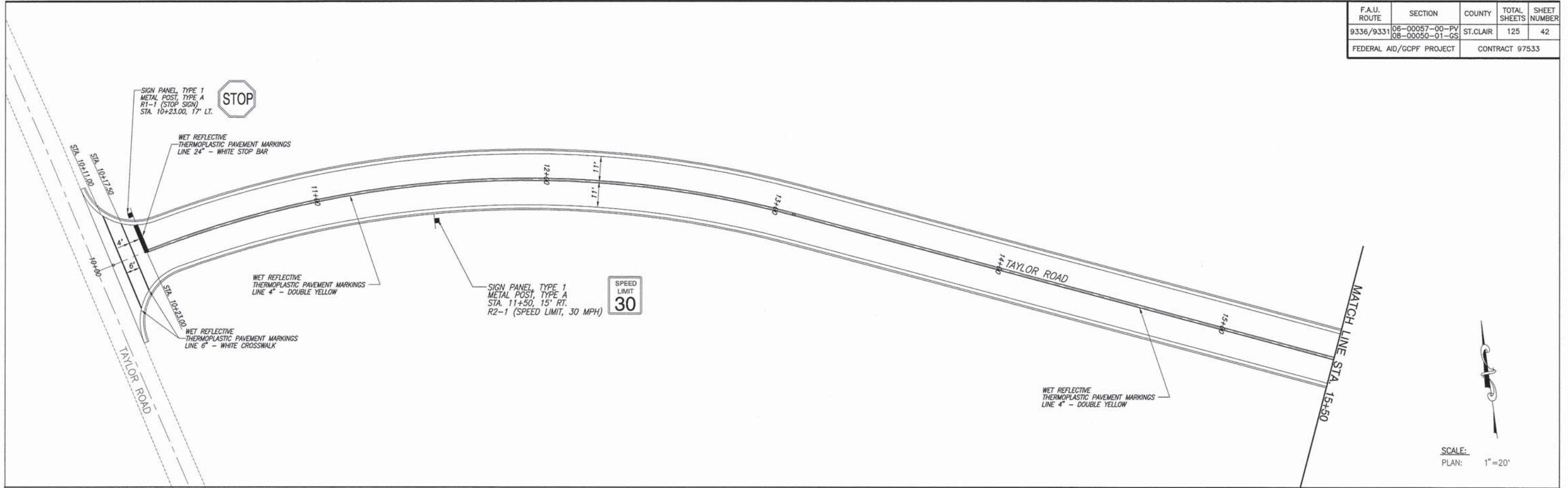
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	41
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

NOTE: THE COST OF REMOVING & RELOCATING ALL SIGNS SHALL BE INCLUDED IN THE COST OF THE CONTRACT.

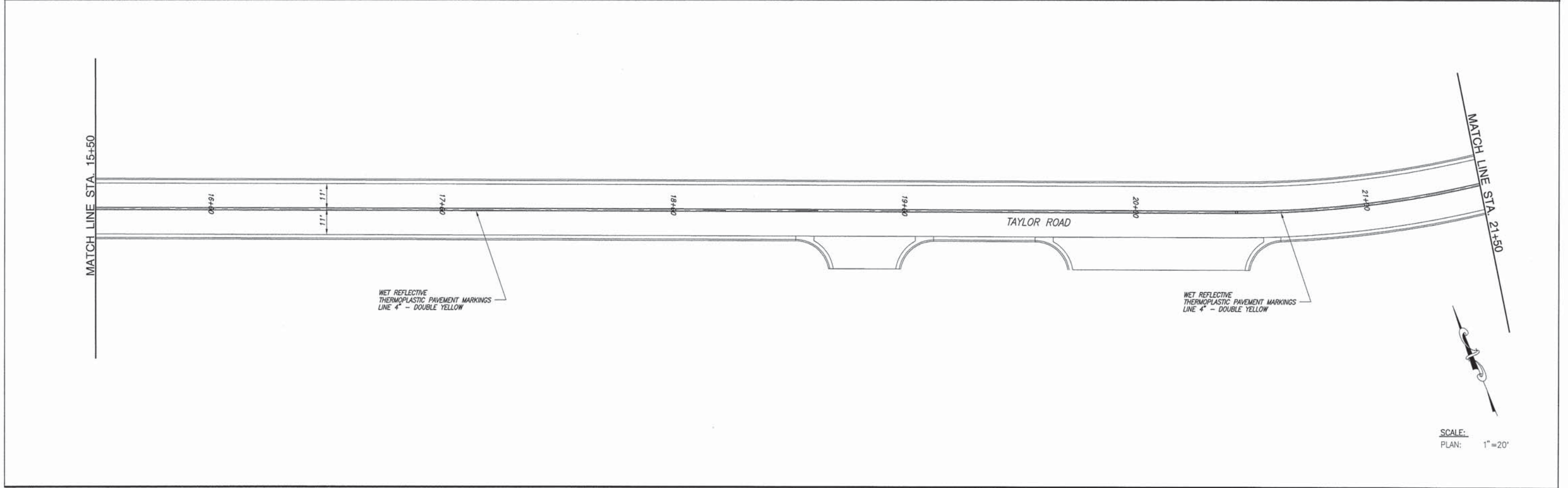


K:\1706 - 07Fallon - Hwy 50 & Venita Drive\Drawings\PAVEMENT MARKINGS.dwg, 7/17/2013 10:35:09 AM, Plotted by MLE

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	42
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



SCALE:
PLAN: 1" = 20'

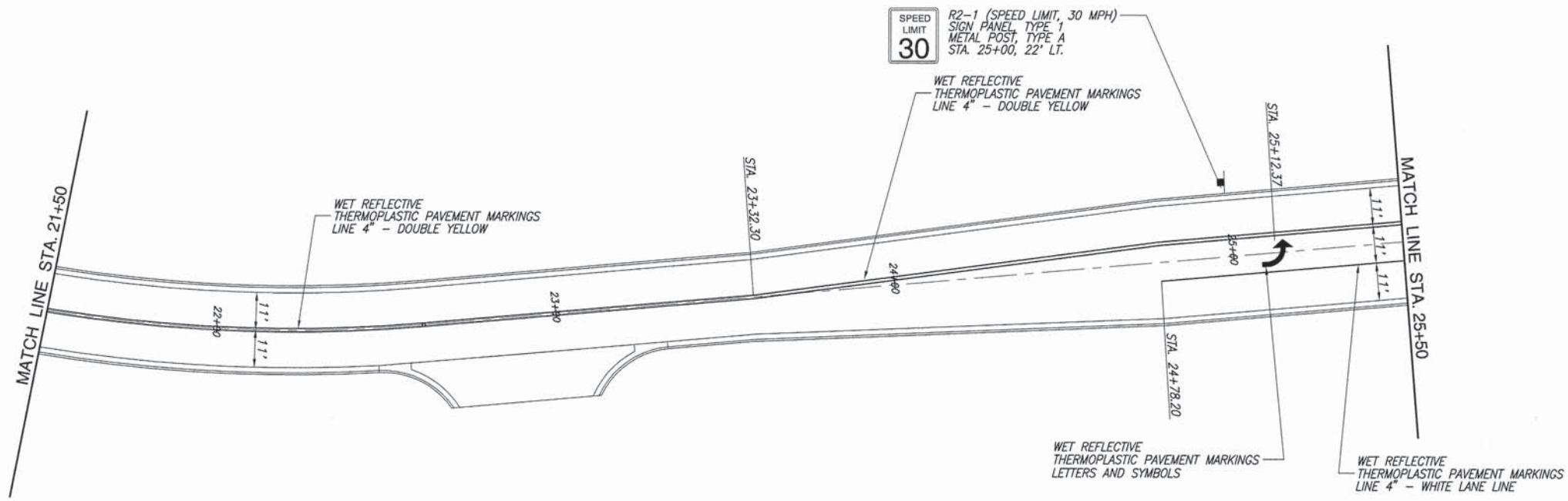


SCALE:
PLAN: 1" = 20'

PAVEMENT MARKING AND SIGNING PLAN VENITA DRIVE IMPROVEMENTS
SECTION 06-00057-00-PV, 08-00050-01-GS ST. CLAIR COUNTY, ILLINOIS

K:\1106 - 07Fellor - Hwy 50 & Venita Drive\Drawings\DWG\MARKING_TAYLOR.dwg, 7/17/2013 10:40:42 AM, Plotted by: MAL

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	43
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



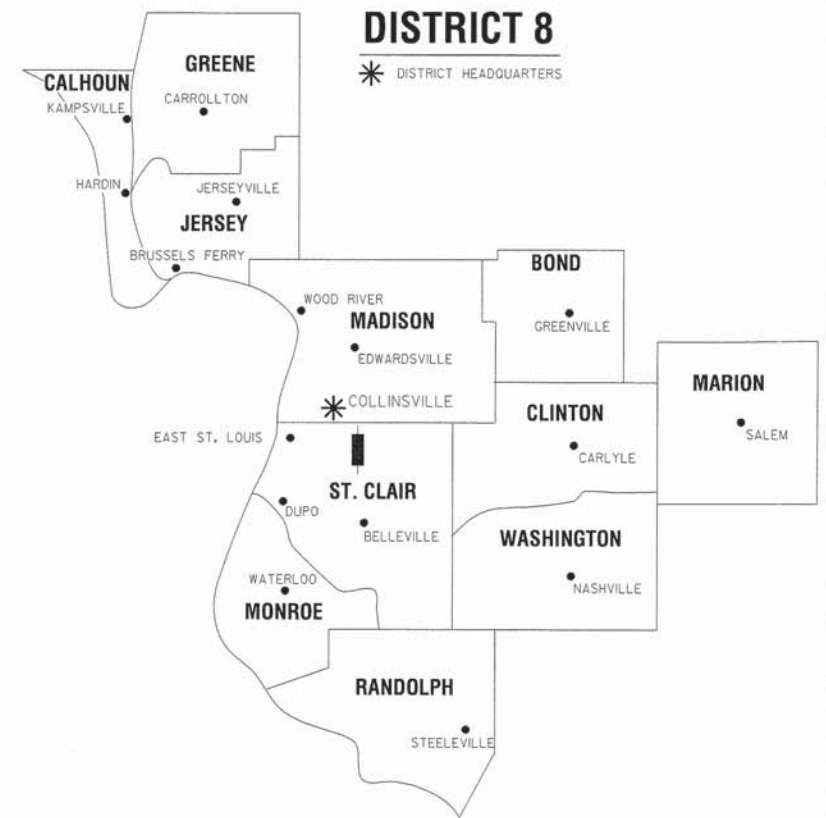
K:\1706 - 07plan - Hwy 50 & Venita Drive\Drawings\PAVEMENT MARKING\TAI\OR 2.dwg, 7/17/2013 10:42:10 AM, Plotted by MAL

SHEET INDEX		
SHEET NO.	STATION TO STATION	PARCELS
1	COVER SHEET	N/A
2	GENERAL NOTES AND LEGEND	N/A
3	100+00.00 TO 103+13.93	800XD30 & 8303051
4	103+13.93 TO 105+50.00	8303052
5	100+00.00 TO 102+86.40	8303053
6	102+86.40 TO 107+14.32	8303054
7	CENTERLINE TIE SHEET	N/A

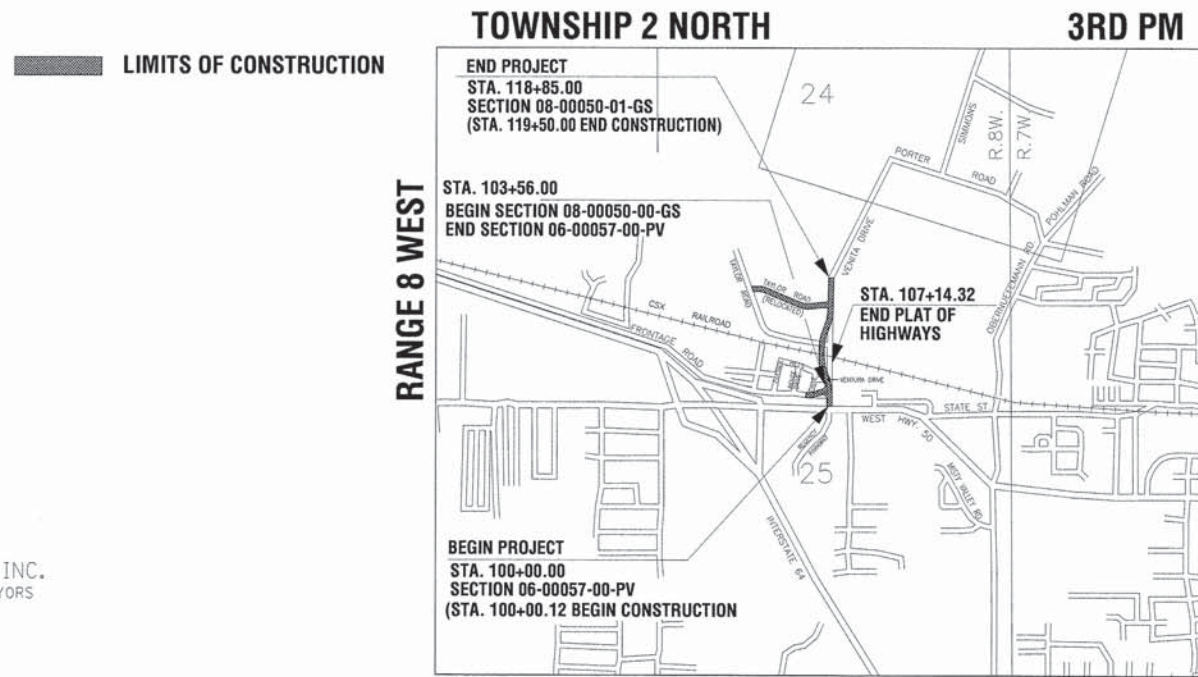
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PLAT OF HIGHWAYS

SPACE RESERVED FOR RECORDING OFFICER

**FAU ROUTE 9331 (FRONTAGE ROAD AND VENITA DRIVE NORTH)
FAU ROUTE 9336 (VENITA DRIVE SOUTH)
SECTION 06-00057-00-PV
SECTION 08-00050-01-GS
PROJECT NO. CMM-5011(226)
CITY OF O'FALLON
ST. CLAIR COUNTY
JOB NO. R-98-003-13**



LOCATION OF SECTION INDICATED THUS:



PROJECT LENGTH = 714 LIN. FT. = 0.02 MILES

PREPARED BY:

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
4 INDUSTRIAL DRIVE
FREEBURG, ILLINOIS 62243
(618) 539-3178
IL. LICENSE NO. 184-000287

GREG J. HAHN, PLS #3769
EXPIRATION DATE OF LICENSE: 11/30/2014



SHEET 1 OF 7

ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8 1102 EASTPORT PLAZA DRIVE COLLINSVILLE, ILLINOIS 62234-6198				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	44
9336	06-00057-00-PV			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 97533				

PART OF THE NORTH HALF OF SECTION 25, T. 2 N., R. 8 W., OF THE 3RD P.M., ST. CLAIR COUNTY, ILLINOIS

SPACE RESERVED FOR RECORDING OFFICER

LEGEND FOR EXISTING TOPOGRAPHIC SYMBOLS

TRAFFIC SIGNAL HANDHOLE	
TRAFFIC SIGNAL STEEL MAST ARM	
TRAFFIC SIGNAL COMBINED MAST ARM	
TRAFFIC SIGNAL JUNCTION BOX	
TRAFFIC SIGNAL CONTROLLER	
TELEPHONE SPLICE BOX ABOVE GROUND	
UTILITY LIGHT POLE	
FIRE HYDRANT	
MANHOLE	
WATER VALVE	
UTILITY GUY WIRE	
UTILITY WATER METER	
STORM SEWER INLET	
GRATED STORM SEWER INLET	
ROADWAY DITCH FLOW	
SHRUB	
TREE	
SIGN	
MAIL BOX	
FENCE	

RIGHT OF WAY LEGEND

	EXISTING CENTERLINE
	EXISTING RIGHT OF WAY LINE
	EXISTING RIGHT OF WAY AND ACCESS CONTROL LINE
	EXISTING EASEMENT LINE
	BUILDING SETBACK LINE
	EXISTING RIGHT OF WAY AND PROPOSED ACCESS CONTROL LINE
	PROPOSED RIGHT OF WAY LINE
	PROPOSED RIGHT OF WAY AND ACCESS CONTROL LINE
	PROPOSED TEMPORARY EASEMENT LINE
	PROPERTY LINE
	MEASURED DIMENSION
	RECORDED DIMENSION
	FOUND IRON PIPE OR IRON ROD AT CORNER UNLESS OTHERWISE NOTED
	CONCRETE RIGHT-OF-WAY MARKER FOUND
	CONCRETE MONUMENT FOUND
	EXISTING BUILDING
	SAME OWNERSHIP

CURVE ABBREVIATIONS

PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENCY
PRC	POINT OF REVERSE CURVE
PCC	POINT OF COMPOUND CURVE
CB	CHORD BEARING
R	RADIUS OF CURVE
L	CURVE LENGTH
CB	CHORD BEARING
C	CHORD LENGTH
D	DEGREE OF CURVE
e	EXTERNAL
Δ	CENTRAL ANGLE

LEGEND FOR ABBREVIATIONS

A/C	ACCESS CONTROL
AC	ACRE
BK	BOOK
CL	CENTERLINE
E	EAST
EX	EXISTING
FAU	FEDERAL AID URBAN
LT	LEFT
N	NORTH
NE	NORTHEAST
NW	NORTHWEST
PB	PLAT BOOK
PG	PAGE
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
P	PROPERTY LINE
RD	ROAD
ROW	RIGHT OF WAY
RR	RAILROAD
RT	RIGHT
S	SOUTH
SE	SOUTHEAST
SO FT	SQUARE FEET
ST	STREET
STA	STATION
SW	SOUTHWEST
TWP	TOWNSHIP
W	WEST

STAKING OF PROPOSED RIGHT OF WAY CORNERS, SET 5/8 INCH METAL ROD WITH DIVISION OF HIGHWAY SURVEY ALUMINUM CAP TO MONUMENT THE POSITION SHOWN, IDENTIFIED BY INSCRIPTION DATA AND SURVEYORS LICENSE NUMBER. (PROPOSED RIGHT OF WAY CORNERS SET IN CULTIVATED AREAS SHALL BE A MINIMUM OF 20 INCHES BELOW THE GROUND SURFACE).

PROPOSED PARCEL NUMBER LEGEND

	PROPOSED FEE SIMPLE ACQUISITION
	PROPOSED TEMPORARY EASEMENT
	PROPOSED ACCESS CONTROL LINE
	PROPOSED EXCESS ACCESS CONTROL LINE

TOTAL HOLDING AREA SOURCE TABLE

1	AREA ACCORDING TO THE SURVEY PERFORMED BY THE CONSULTANT.
2	AREA LISTED IN RECORDED DEED.
3	AREA ACCORDING TO A RECORDED SUBDIVISION PLAT.
4	AREA ACCORDING TO A PLAT OF SURVEY.
5	AREA CALCULATED FROM RECORDED DEEDS OR TITLE COMMITMENTS - NOT SURVEYED.
6	AREA ACCORDING TO COUNTY TAX MAPS AND COUNTY ASSESSMENT RECORDS.
7	AREA ACCORDING TO OTHER RECORDS, SEE NOTE ON THE PLAT OF HIGHWAYS.

TOPOGRAPHIC STATEMENT

THE TOPOGRAPHY SHOWN HEREON WAS PHYSICALLY LOCATED IN THE FIELD BY THE SURVEYOR DURING THE MONTHS OF JANUARY AND FEBRUARY 2007.

BASIS OF COORDINATE & BEARING STATEMENT

THE PROJECT COORDINATES AND BASIS OF BEARING ARE ON AN ASSUMED DATUM.

PREPARED BY:



RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
4 INDUSTRIAL DRIVE
FREEBURG, ILLINOIS 62243
(618) 539-3178
IL. LICENSE NO. 184-000287

Greg J. Hahn
GREG J. HAHN, PLS #3769
EXPIRATION DATE OF LICENSE: 11/30/2014



ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAU ROUTE 9336 (VENITA DRIVE SOUTH)
SECTION 06-00057-00-PV
FAU ROUTE 9331 (VENITA DRIVE NORTH
AND FRONTAGE ROAD)
SECTION 08-00050-01-GS
ST. CLAIR COUNTY
JOB NO. R-98-003-013
GENERAL NOTES AND LEGEND



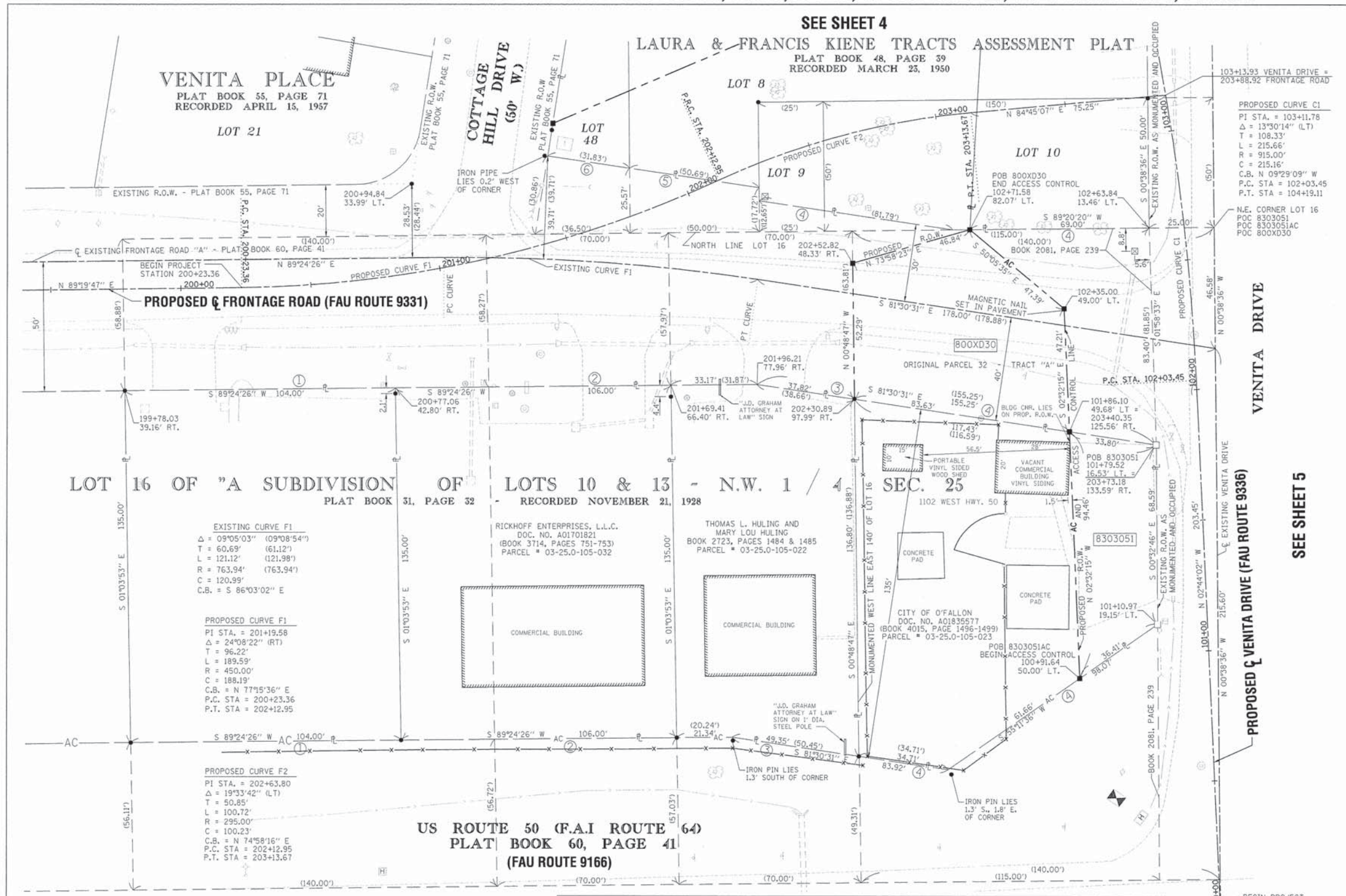
ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8 1102 EASTPORT PLAZA DRIVE COLLINGSVILLE, ILLINOIS 62234-6198				
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	44A
9336	06-00057-00-PV			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 97533				

PART OF THE N.W. 1/4 OF SECTION 25, T. 2 N., R. 8 W., OF THE 3RD P.M., ST. CLAIR COUNTY, ILLINOIS

SEE SHEET 4

LAURA & FRANCIS KIENE TRACTS ASSESSMENT PLAT

PLAT BOOK 48, PAGE 39
RECORDED MARCH 23, 1950



SPACE RESERVED FOR RECORDING OFFICER

COORDINATES SHOWN HEREON ARE ASSUMED
BEARINGS SHOWN HEREON ARE ASSUMED

STATION	OFFSET	NORTH	EAST
200+23.36	CL	2460.1454	1137.0383
202+12.95	CL	2501.6465	1320.5969
203+13.67	CL	2527.6364	1417.3972
103+13.93	CL	2534.5196	1492.3350
203+88.92			
100+00.00	CL	2221.5297	1513.9504
102+03.45	CL	2424.7481	1504.2464
101+86.10	49.68' LT.	2405.0438	1455.4543
100+91.64	50.00' LT.	2310.6804	1459.6364
102+35.00	49.00' LT.	2452.2070	1453.3641
102+71.58	82.07' LT.	2482.6120	1417.0090
202+30.89	97.99' RT.	2417.3937	1372.7350
202+52.82	48.33' RT.	2469.6809	1371.9931

EXISTING RIGHT-OF-WAY TABLE

- ① BOOK 2054, PAGE 229
- ② BOOK 2054, PAGE 510
- ③ BOOK 2054, PAGE 512
- ④ BOOK 2081, PAGE 239
- ⑤ BOOK 2075, PAGE 64
- ⑥ BOOK 2049, PAGE 411

STATE OF ILLINOIS)
COUNTY OF ST. CLAIR) SS

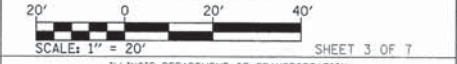
I, GREG J. HAHN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.

DATED 7/19/13
GREG J. HAHN, PLS NO. 3769
LICENSE EXPIRATION DATE: 11/30/2014



RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
4 INDUSTRIAL DRIVE FREEBURG, IL 62243
(618) 539-3178
IL LICENSE NO. 184-000287

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAU ROUTE 9336 (VENITA DRIVE SOUTH)
SECTION 06-00057-00-PV
FAU ROUTE 9331 (VENITA DRIVE NORTH AND FRONTAGE ROAD)
SECTION 08-00050-01-GS
ST. CLAIR COUNTY
JOB NO. R-98-003-013
STATION 100+00.00 TO STATION 103+13.93



SCALE: 1" = 20'
SHEET 3 OF 7

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	45

COMPLETION DATE OF FIELD WORK PERFORMED		FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT	
LAND SURVEY: JAN, 2007 AND DEC, 2012	ROW STAKING: APRIL 8, 2013	9336	06-00057-00-PV	9336	06-00057-00-PV

CONTRACT NO. 97533

EXCESS PARCEL - CONVEYANCE RECORD					
EXCESS PARCEL NO.	GRANTOR	GRANTEE	AREA (ACRES)	RECORDING DATE	DOCUMENT NO.
800XD30	THE PEOPLE OF THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION		0.1143		

ORIGINAL STATE OF ILLINOIS ACQUISITION RECORD						
ORIGINAL PARCEL NO.	GRANTOR	GRANTEE	AREA (ACRES)	INTEREST CONVEYED	RECORDING DATE	DOCUMENT NO./ BOOK & PAGE
PARCEL 31 TRACT "A"	EDWARD R. LYNN AND EDNA J. LYNN, HIS WIFE	STATE OF ILLINOIS	0.096	FEE SIMPLE	MARCH 7, 1967	BOOK 2054, PAGE 512
PARCEL 32 TRACT "A"	PAUL G. PENROD AND BONNIE M. PENROD, HIS WIFE	STATE OF ILLINOIS	0.192	FEE SIMPLE	SEPT. 1, 1967	BOOK 2081, PAGE 239

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	FEE SIMPLE ACQUISITION		PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY	LENGTH OF ACCESS RIGHTS TO BE ACQUIRED	ACCESS RIGHTS ACQUIRED BY
			ACRES	SQ. FT.				
8303051	CITY OF O'FALLON TITLE REPORT NO. 18-2012C-6550.0 DOCUMENT NO. A01835577	0.2996	0.0597	2,599	03-25.0-105-023		94.46'	

PART OF THE N.W. 1/4 OF SECTION 25, T. 2 N., R. 8 W., OF THE 3RD P.M., ST. CLAIR COUNTY, ILLINOIS



SPACE RESERVED FOR RECORDING OFFICER

COORDINATES SHOWN HEREON ARE ASSUMED BEARINGS SHOWN HEREON ARE ASSUMED

COORDINATE TABLE			
STATION	OFFSET	NORTH	EAST
200+23.36	CL	2460.1454	1137.0383
202+12.95	CL	2501.6465	1320.5969
203+13.67	CL	2527.6364	1417.3972
103+13.93	CL	2534.5196	1492.3350
203+88.92			
104+19.11	CL	2636.9636	1468.7874
104+88.78	CL	2703.8597	1449.3043
102+71.58	82.07' LT.	2482.6120	1417.0090
201+58.64	43.59' LT.	2523.3633	1256.6568
103+89.33	54.74' LT.	2594.8415	1423.5770

EXISTING RIGHT-OF-WAY TABLE

- ④ BOOK 2081, PAGE 239
- ⑤ BOOK 2075, PAGE 64
- ⑥ BOOK 2049, PAGE 411

SEE SHEET 5 AND 6

PROPOSED CURVE C1
 PI STA. = 103+11.78
 Δ = 13°30'14" (LT)
 T = 108.33'
 L = 215.66'
 R = 915.00'
 C = 215.16'
 C.B. N 09°29'09" W
 P.C. STA = 102+03.45
 P.T. STA = 104+19.11

STATE OF ILLINOIS)
) SS
 COUNTY OF ST. CLAIR)

I, GREG J. HAHN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.

DATED 7/19/13

GREG J. HAHN, PLS. NO. 3769
 LICENSE EXPIRATION DATE: 11/30/2014



RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 4 INDUSTRIAL DRIVE FREEBURG, IL 62243
 (618) 539-3178
 IL. LICENSE NO. 184-000287

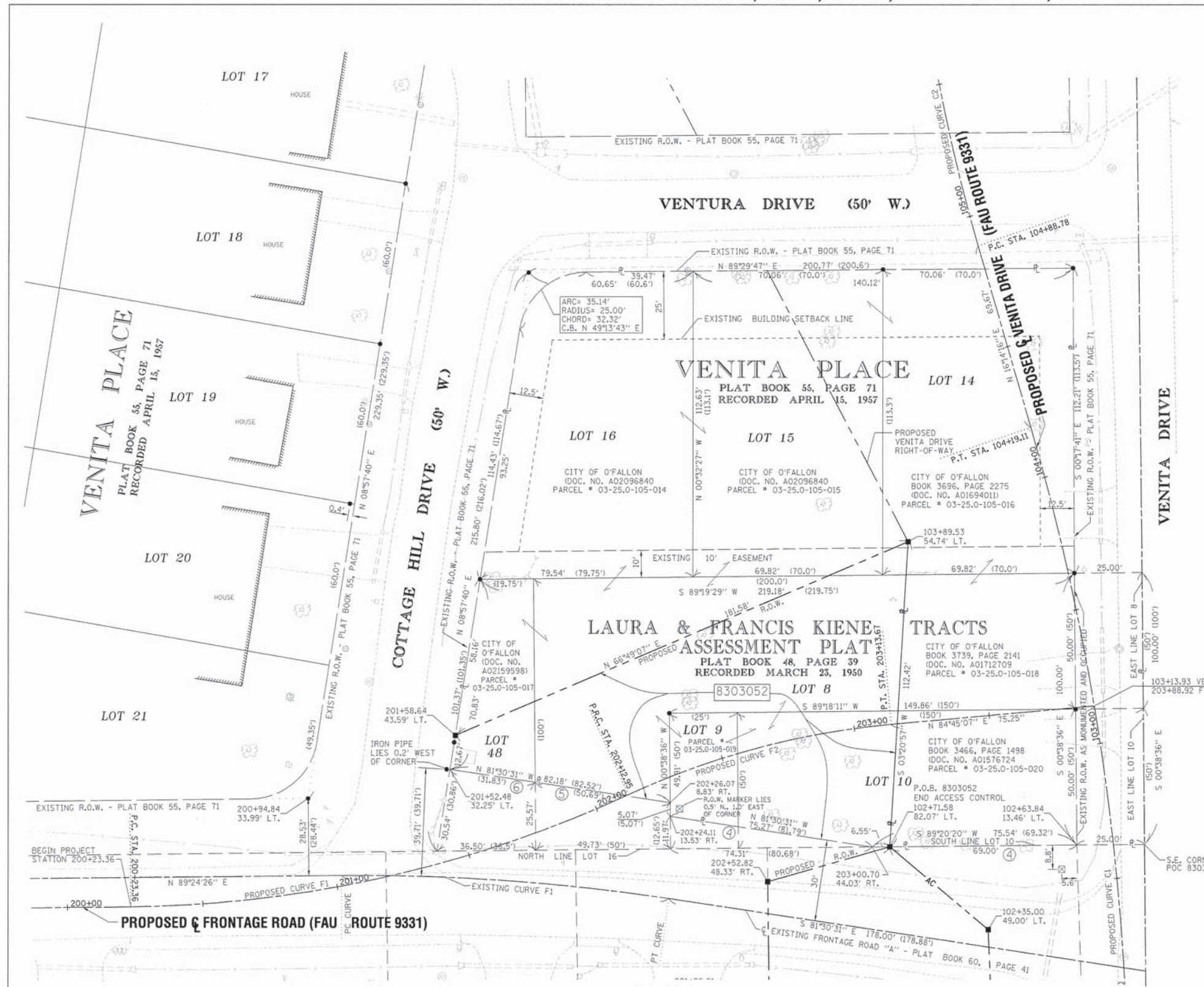
ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
 FAU ROUTE 9336 (VENITA DRIVE SOUTH)
 SECTION 06-00057-00-PV
 FAU ROUTE 9331 (VENITA DRIVE NORTH AND FRONTAGE ROAD)
 SECTION 08-00050-01-GS
 ST. CLAIR COUNTY
 JOB NO. R-98-003-013
 STATION 103+13.93 TO STATION 105+50

SCALE: 1" = 20'
 SHEET 4 OF 7

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
 1102 EASTPORT PLAZA DRIVE
 COLLINGSVILLE, ILLINOIS 62234-6198

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	45A
9336	06-00057-00-PV			

COMPLETION DATE OF FIELD WORK PERFORMED
 LAND SURVEY: JAN. 2007 AND DEC. 2012
 ROW STAKING: April 8, 2013
 FED. ROAD DIST. NO. ILLINOIS
 FED. AID PROJECT
 CONTRACT NO. 97533



SEE SHEET 3

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	FEE SIMPLE ACQUISITION		REMAINDER ACRES	PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
			ACRES	SQ. FT.			
8303052	CITY OF O'FALLON, AN ILLINOIS MUNICIPAL ORGANIZATION TITLE REPORT NO. 18-2012SC-6545.0, 18-2012SC-6546.0, 18-2012SC-6547.0, 18-2012SC-6548.0, 18-2012SC-6549.0	1.0643	0.2355	10,257	0.8288	03-25.0-105-015, 03-25.0-105-016, 03-25.0-105-017, 03-25.0-105-018, 03-25.0-105-019, 03-25.0-105-020	

EXISTING CURVE F1	PROPOSED CURVE F1	PROPOSED CURVE F2
Δ = 09°05'03" (09°08'54") T = 60.69' (61.12') L = 121.12' (121.98') R = 763.94' (763.94') C = 120.99' C.B. = S 86°03'02" E	PI STA. = 201+19.58 Δ = 24°08'22" (RT) T = 96.22' L = 189.59' R = 450.00' C = 188.19' C.B. = N 77°15'36" E P.C. STA = 200+23.36 P.T. STA = 202+12.95	PI STA. = 202+63.80 Δ = 19°33'42" (LT) T = 50.85' L = 100.72' R = 295.00' C = 100.23' C.B. = N 74°58'16" E P.C. STA = 202+12.95 P.T. STA = 203+13.67

PART OF THE N.E. 1/4 OF SECTION 25, T. 2 N., R. 8 W., OF THE 3RD P.M., ST. CLAIR COUNTY, ILLINOIS

PROPOSED CURVE C1
 PI STA. = 103+11.78
 $\Delta = 13^{\circ}30'14''$ (LT)
 T = 108.33'
 L = 215.66'
 R = 915.00'
 C = 215.16'
 C.B. N 09°29'09" W
 P.C. STA = 102+03.45
 P.T. STA = 104+19.11

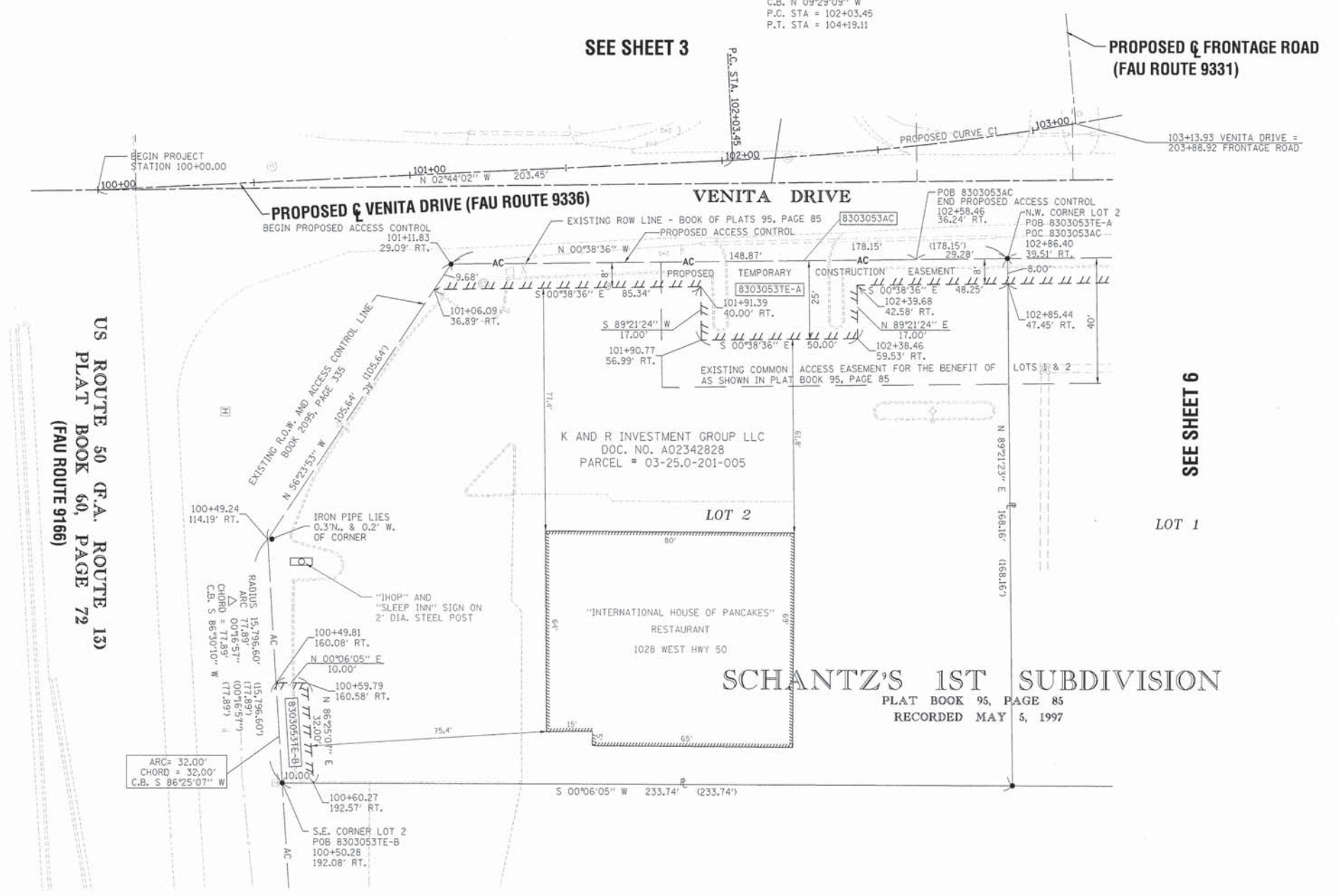
SEE SHEET 3

PROPOSED FRONTAGE ROAD
 (FAU ROUTE 9331)

SPACE RESERVED FOR RECORDING OFFICER

COORDINATES SHOWN HEREON ARE ASSUMED
 BEARINGS SHOWN HEREON ARE ASSUMED

COORDINATE TABLE			
STATION	OFFSET	NORTH	EAST
103+13.93	CL	2534.5196	1492.3350
203+88.92			
100+00.00	CL	2221.5297	1513.9504
102+03.45	CL	2424.7481	1504.2464
101+06.10	36.89	2329.2681	1545.7388
101+91.39	40.00	2414.6053	1544.7806
101+90.77	56.99	2414.7962	1561.7795
102+38.46	59.53	2464.7931	1561.2182
102+39.68	42.58	2464.6022	1544.2193
102+85.44	47.45	2512.8527	1543.6775
100+49.81	160.08	2278.9144	1671.4733
100+59.79	160.58	2288.9144	1671.4910
100+50.28	191.93	2280.9068	1703.2650
100+60.27	192.57	2290.9134	1703.4285



SEE SHEET 6

STATE OF ILLINOIS)
) SS
 COUNTY OF ST. CLAIR)
 I, GREG J. HAHN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.
 DATED 7/19/13
 GREG J. HAHN, PLS NO. 3769
 LICENSE EXPIRATION DATE: 11/30/2014



RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 4 INDUSTRIAL DRIVE FREEBURG, IL 62243
 (618) 539-3178
 IL. LICENSE NO. 184-000287

ILLINOIS DEPARTMENT OF TRANSPORTATION
 PLAT OF HIGHWAYS
 FAU ROUTE 9336 (VENITA DRIVE SOUTH)
 SECTION 06-00057-00-PV
 FAU ROUTE 9331 (VENITA DRIVE NORTH AND FRONTAGE ROAD)
 SECTION 08-00050-01-GS
 ST. CLAIR COUNTY
 JOB NO. R-98-003-013
 STATION 100+00.00 TO STATION 102+86.40



ILLINOIS DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
 1102 EASTPORT PLAZA DRIVE
 COLLINGSVILLE, ILLINOIS 62234-6198

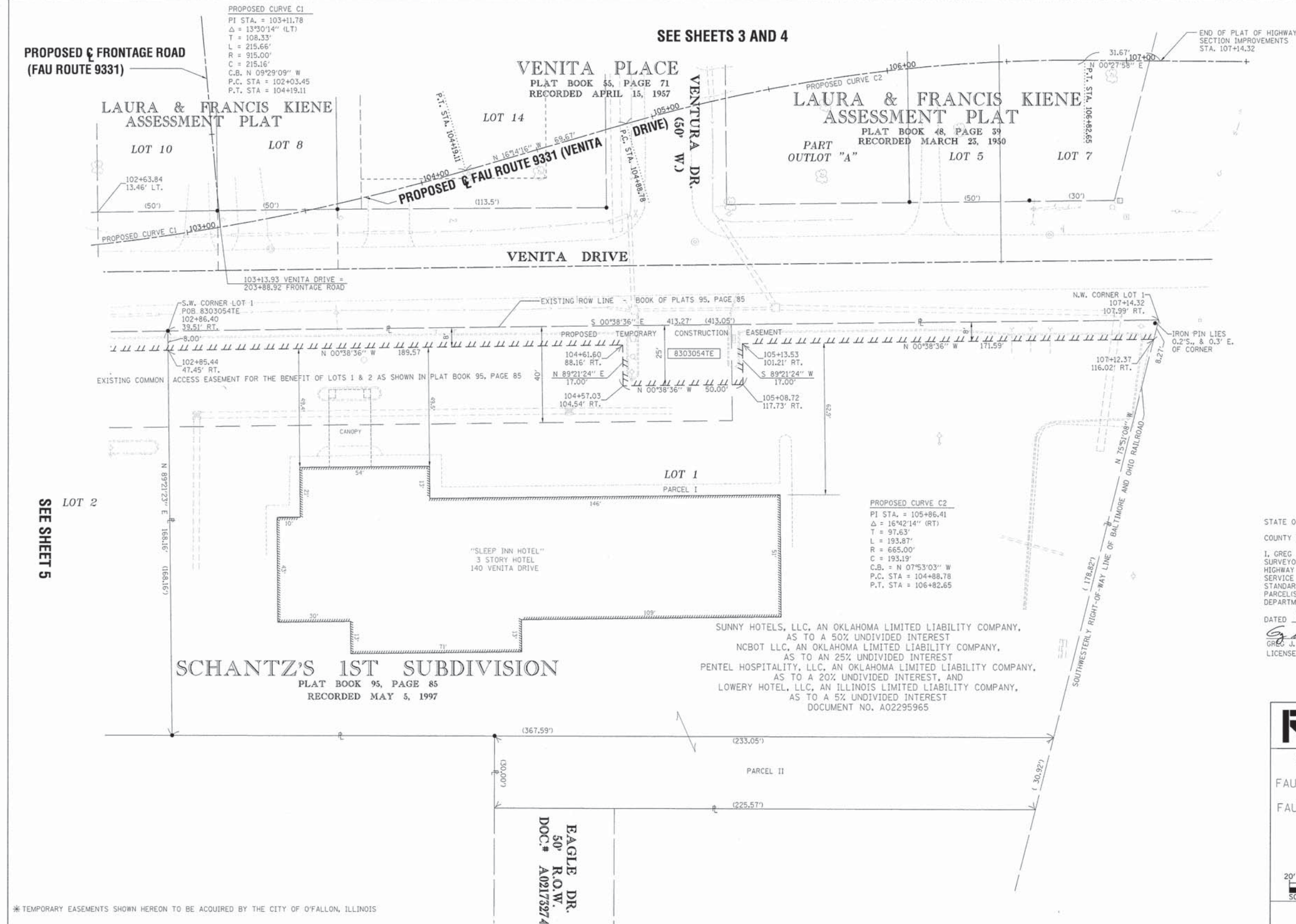
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	46
9336	06-00057-00-PV			

COMPLETION DATE OF FIELD WORK PERFORMED
 LAND SURVEY: JAN. 2007 AND DEC. 2012 ROW STAKING: APRIL 8, 2013
 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT
 CONTRACT NO. 97533

*TEMPORARY EASEMENTS SHOWN HEREON TO BE ACQUIRED BY THE CITY OF O'FALLON, ILLINOIS

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	EASEMENTS		PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY	LENGTH OF ACCESS RIGHTS TO BE ACQUIRED BY THE STATE OF ILLINOIS	ACCESS RIGHTS ACQUIRED BY
			TE = TEMPORARY *SEE NOTE ABOVE ACRES	SO. FT.				
8303053	K AND R INVESTMENT GROUP LLC TITLE REPORT NO. 1303066 DOCUMENT NO. A02342828	0.8458	TE A 0.0527 TE B 0.0073	2,297 320	03-25.0-201-005		148.87'	

PART OF THE N.E. 1/4 OF SECTION 25, T. 2 N., R. 8 W., OF THE 3RD P.M., ST. CLAIR COUNTY, ILLINOIS



SEE SHEETS 3 AND 4

PROPOSED FRONTAGE ROAD
(FAU ROUTE 9331)

PROPOSED CURVE C1
PI STA. = 103+11.78
Δ = 13°30'14" (LT)
T = 108.33'
L = 215.66'
R = 915.00'
C = 215.16'
C.B. N 09°29'09" W
P.C. STA = 102+03.45
P.T. STA = 104+19.11

LAURA & FRANCIS KIENE
ASSESSMENT PLAT

VENITA PLACE
PLAT BOOK 55, PAGE 71
RECORDED APRIL 15, 1957

LAURA & FRANCIS KIENE
ASSESSMENT PLAT
PLAT BOOK 48, PAGE 39
RECORDED MARCH 23, 1950

VENITA DRIVE

SCHANTZ'S 1ST SUBDIVISION
PLAT BOOK 95, PAGE 85
RECORDED MAY 5, 1997

SUNNY HOTELS, LLC, AN OKLAHOMA LIMITED LIABILITY COMPANY,
AS TO A 50% UNDIVIDED INTEREST
NCBOT LLC, AN OKLAHOMA LIMITED LIABILITY COMPANY,
AS TO A 25% UNDIVIDED INTEREST
PENTEL HOSPITALITY, LLC, AN OKLAHOMA LIMITED LIABILITY COMPANY,
AS TO A 20% UNDIVIDED INTEREST, AND
LOWERY HOTEL, LLC, AN ILLINOIS LIMITED LIABILITY COMPANY,
AS TO A 5% UNDIVIDED INTEREST
DOCUMENT NO. A02295965

SPACE RESERVED FOR RECORDING OFFICER

COORDINATES SHOWN HEREON ARE ASSUMED
BEARINGS SHOWN HEREON ARE ASSUMED

STATION	OFFSET	NORTH	EAST
103+13.93	CL	2534.5196	1492.3350
203+88.92			
104+19.11	CL	2636.9636	1468.7874
104+88.78	CL	2703.8597	1449.3043
106+82.65	CL	2895.2203	1422.7986
107+14.32	CL	2926.8873	1423.0562
102+85.44	47.45	2512.8527	1543.6775
104+61.60	88.16	2702.4159	1541.5491
104+57.03	104.54	2702.6068	1558.5480
105+08.72	117.73	2752.6036	1557.9867
105+13.53	101.21	2752.4128	1540.9877
107+12.37	116.02	2923.9866	1539.0613

STATE OF ILLINOIS)
) SS
COUNTY OF ST. CLAIR)

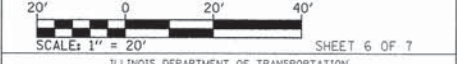
I, GREG J. HAHN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.

DATED 7/19/13
GREG J. HAHN
GREG J. HAHN, PLS NO. 3769
LICENSE EXPIRATION DATE: 11/30/2014



RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
4 INDUSTRIAL DRIVE FREEBURG, IL 62243
(618) 539-3178
IL. LICENSE NO. 184-000287

ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAU ROUTE 9336 (VENITA DRIVE SOUTH)
SECTION 06-00057-00-PV
FAU ROUTE 9331 (VENITA DRIVE NORTH
AND FRONTAGE ROAD)
SECTION 08-00050-01-GS
ST. CLAIR COUNTY
JOB NO. R-98-003-013
STATION 102+86.40 TO STATION 107+14.32



ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINGSVILLE, ILLINOIS 62234-6198

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	46A
9336	06-00057-00-PV			

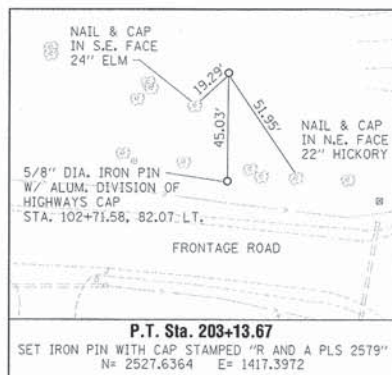
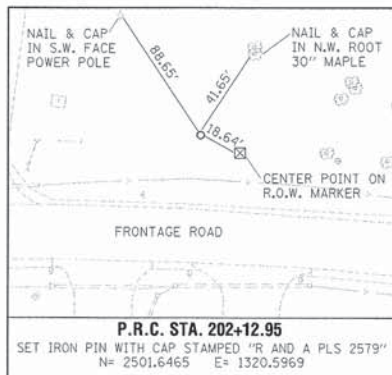
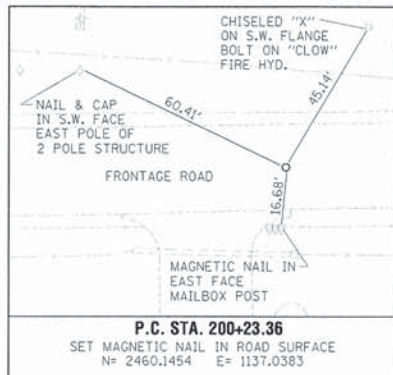
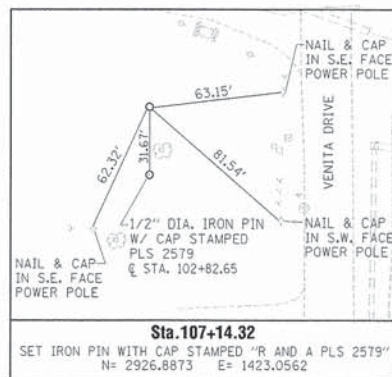
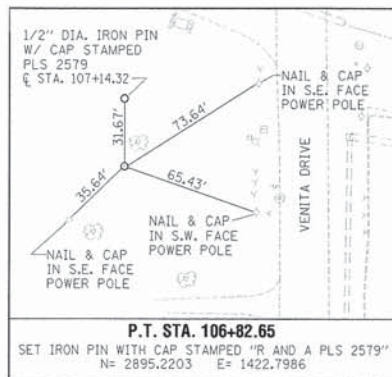
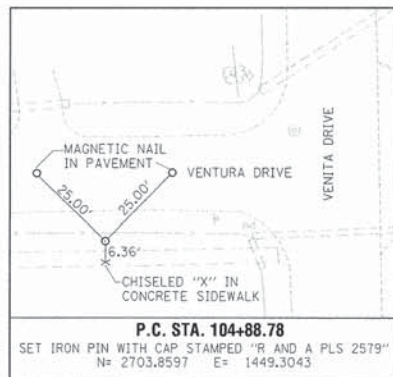
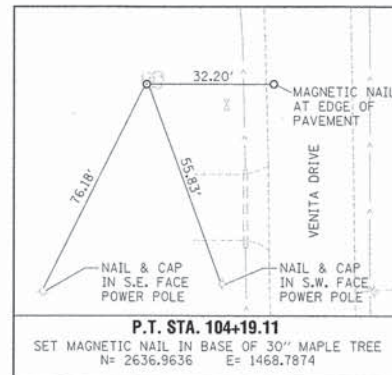
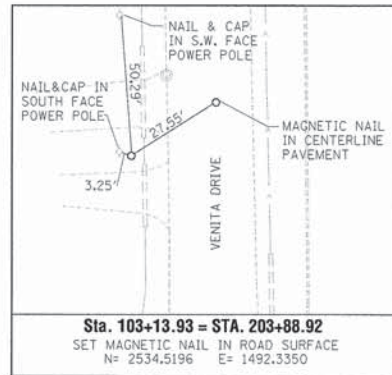
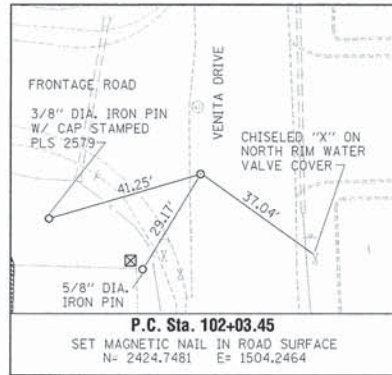
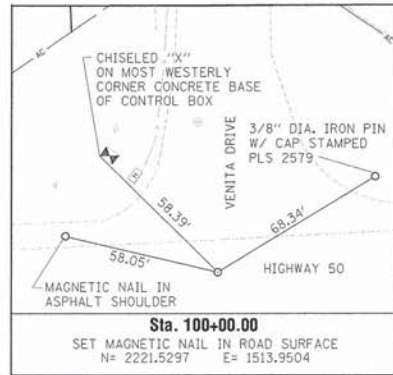
COMPLETION DATE OF FIELD WORK PERFORMED		FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	
LAND SURVEY:	JAN. 2007 AND	ILLINOIS					
	DEC. 2012						
CONTRACT NO. 97533							

* TEMPORARY EASEMENTS SHOWN HEREON TO BE ACQUIRED BY THE CITY OF O'FALLON, ILLINOIS

PARCEL NO.	OWNER	TOTAL HOLDING ACRES	EASEMENTS		PERMANENT TAX NUMBER	PROPERTY ACQUIRED BY
			TE = TEMPORARY * SEE NOTE ABOVE	EASEMENT PURPOSE		
8303054	SUNNY HOTELS, LLC, AN OKLAHOMA LIMITED LIABILITY COMPANY, AS TO A 50% UNDIVIDED INTEREST NCBOT LLC, AN OKLAHOMA LIMITED LIABILITY COMPANY, AS TO A 25% UNDIVIDED INTEREST PENTEL HOSPITALITY, LLC, AN OKLAHOMA LIMITED LIABILITY COMPANY, AS TO A 20% UNDIVIDED INTEREST, AND LOWERY HOTEL, LLC, AN ILLINOIS LIMITED LIABILITY COMPANY, AS TO A 5% UNDIVIDED INTEREST TITLE REPORT NO. 1210038 DOCUMENT NO. A02295965	1.69	0.0952	4.148	03-25.0-201-006	

CENTERLINE TIE SHEET

SPACE RESERVED FOR RECORDING OFFICER



STATE OF ILLINOIS)
) SS
COUNTY OF ST. CLAIR)
I, GREG J. HAHN, AN ILLINOIS PROFESSIONAL LAND SURVEYOR, STATE THAT I HAVE SURVEYED THE PLAT OF HIGHWAY SHOWN HEREON AND THAT THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY FOR THE PROPOSED PARCEL(S) TO BE ACQUIRED BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, SHOWN HEREON.

DATED 7/19/13
GREG J. HAHN
GREG J. HAHN, PLS NO. 3769
LICENSE EXPIRATION DATE: 11/30/2014



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CONSULTING ENGINEERS • LAND SURVEYORS
4 INDUSTRIAL DRIVE FREEBURG, IL 62243
(618) 539-3178
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ILLINOIS DEPARTMENT OF TRANSPORTATION
PLAT OF HIGHWAYS
FAU ROUTE 9336 (VENITA DRIVE SOUTH)
SECTION 06-00057-00-PV
FAU ROUTE 9331 (VENITA DRIVE NORTH AND FRONTAGE ROAD)
SECTION 08-00050-01-GS
ST. CLAIR COUNTY
JOB NO. R-98-003-13
CENTERLINE TIE SHEET

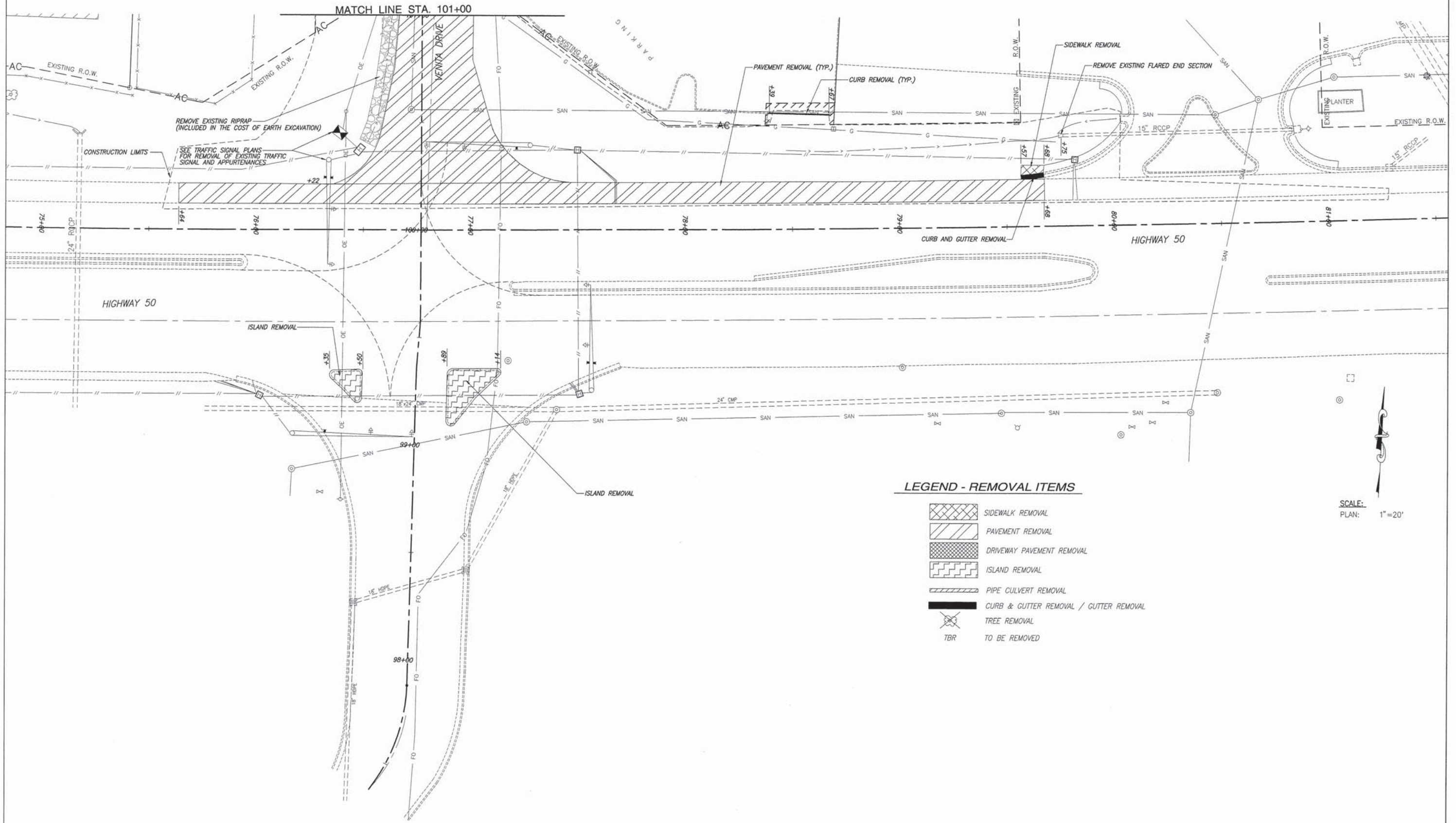
NOT TO SCALE SHEET 7 OF 7

ILLINOIS DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS/REGION 5/DISTRICT 8
1102 EASTPORT PLAZA DRIVE
COLLINSVILLE, ILLINOIS 62234-6198









F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	08-00050-01-GS	ST. CLAIR	125	47
9336	06-00057-00-PV			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	
CONTRACT NO. 97533				

NOTE: SEE TRAFFIC SIGNAL PLANS FOR ADDITIONAL REMOVAL WORK RELATING TO SIGNAL CONSTRUCTION.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	48
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	



LEGEND - REMOVAL ITEMS









-  SIDEWALK REMOVAL
-  PAVEMENT REMOVAL
-  DRIVEWAY PAVEMENT REMOVAL
-  ISLAND REMOVAL
-  PIPE CULVERT REMOVAL
-  CURB & GUTTER REMOVAL / GUTTER REMOVAL
-  TREE REMOVAL
-  TO BE REMOVED

SCALE:
PLAN: 1" = 20'

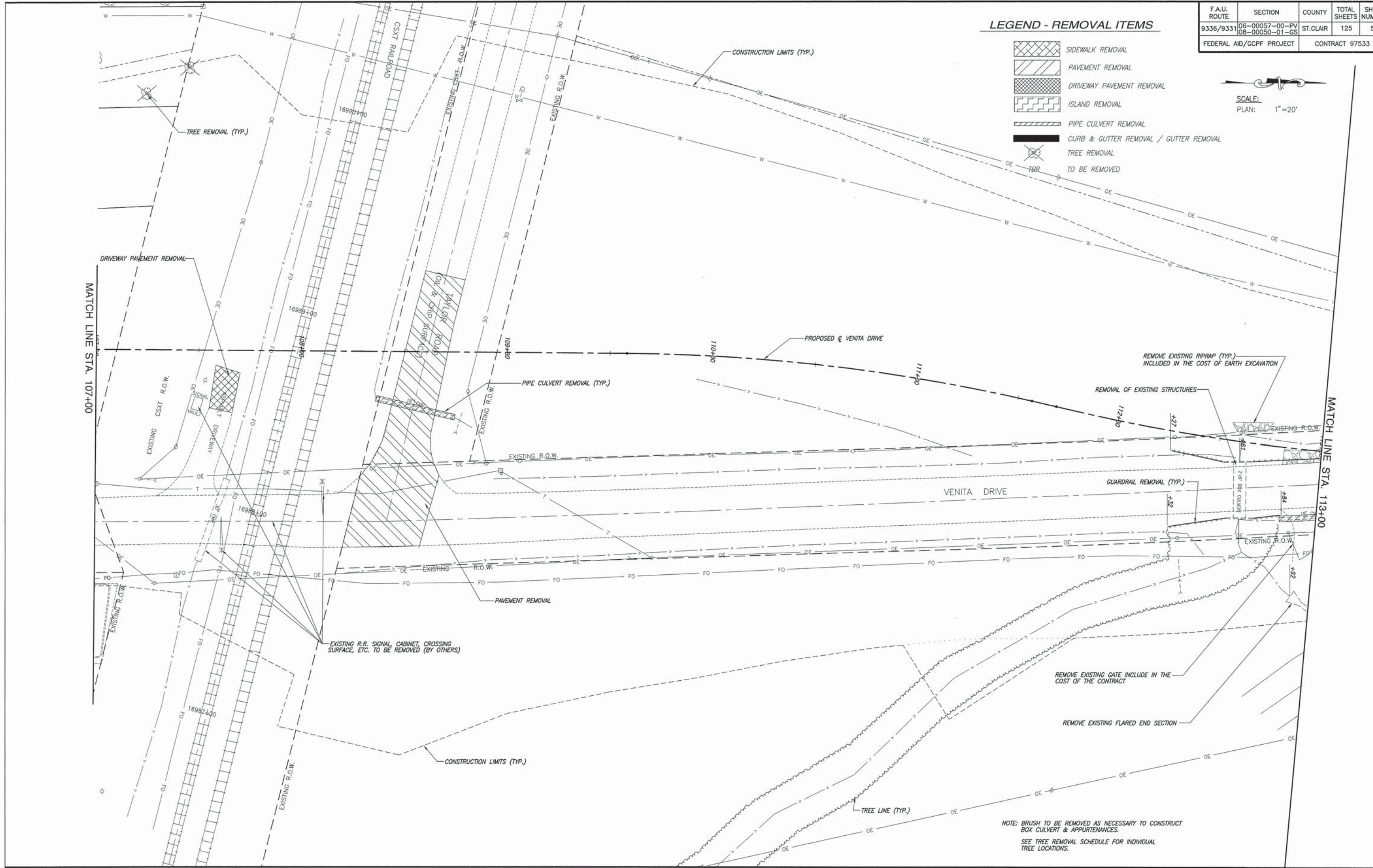
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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	50
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

LEGEND - REMOVAL ITEMS

-  SIDEWALK REMOVAL
-  PAVEMENT REMOVAL
-  DRIVEWAY PAVEMENT REMOVAL
-  ISLAND REMOVAL
-  PIPE CULVERT REMOVAL
-  CURB & GUTTER REMOVAL / GUTTER REMOVAL
-  TREE REMOVAL
-  TO BE REMOVED









SCALE:
PLAN: 1"=20'



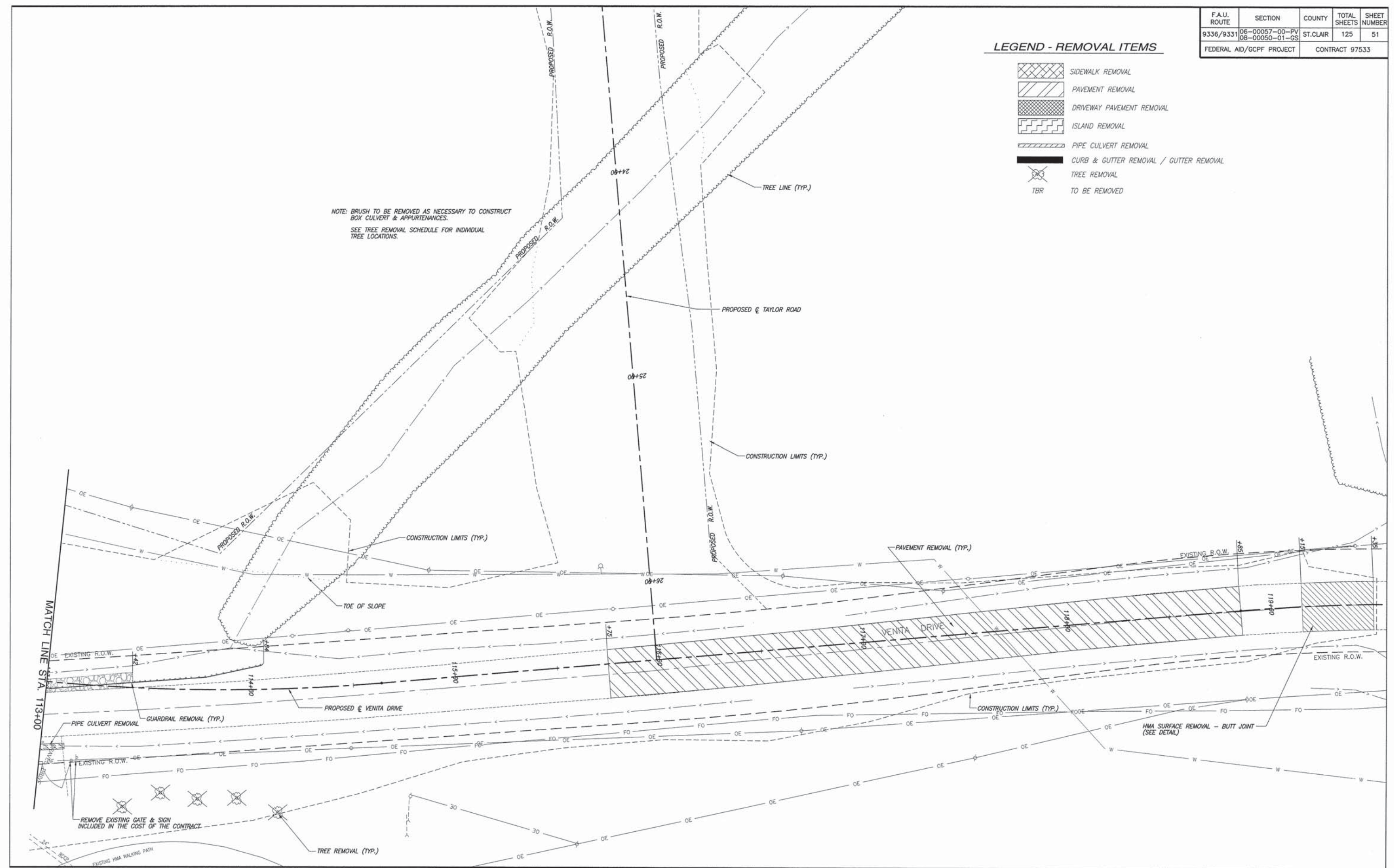
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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	51
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	

LEGEND - REMOVAL ITEMS

-  SIDEWALK REMOVAL
-  PAVEMENT REMOVAL
-  DRIVEWAY PAVEMENT REMOVAL
-  ISLAND REMOVAL
-  PIPE CULVERT REMOVAL
-  CURB & GUTTER REMOVAL / GUTTER REMOVAL
-  TREE REMOVAL
-  TBR TO BE REMOVED





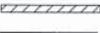



NOTE: BRUSH TO BE REMOVED AS NECESSARY TO CONSTRUCT BOX CULVERT & APPURTENANCES.
SEE TREE REMOVAL SCHEDULE FOR INDIVIDUAL TREE LOCATIONS.

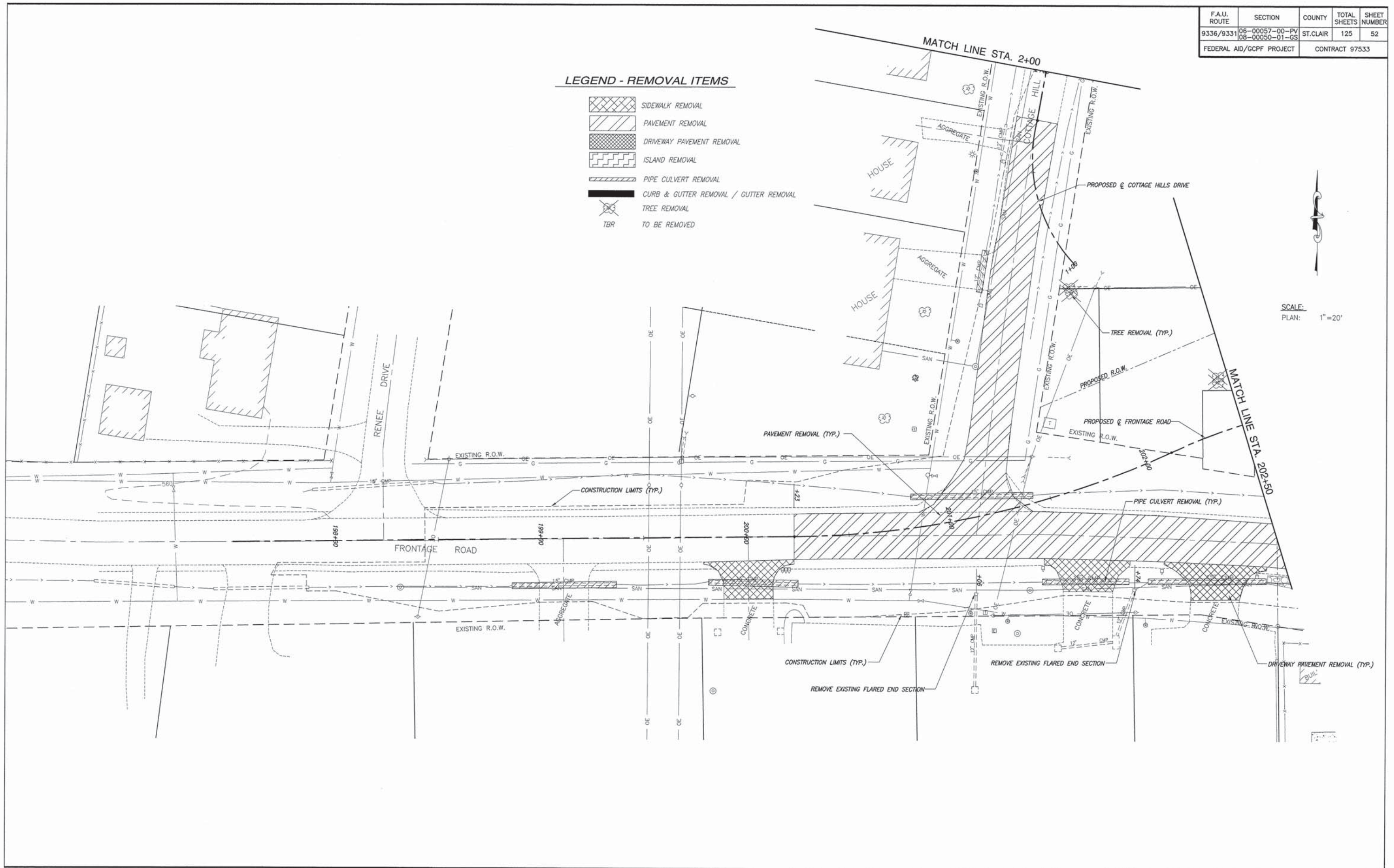


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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	52
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

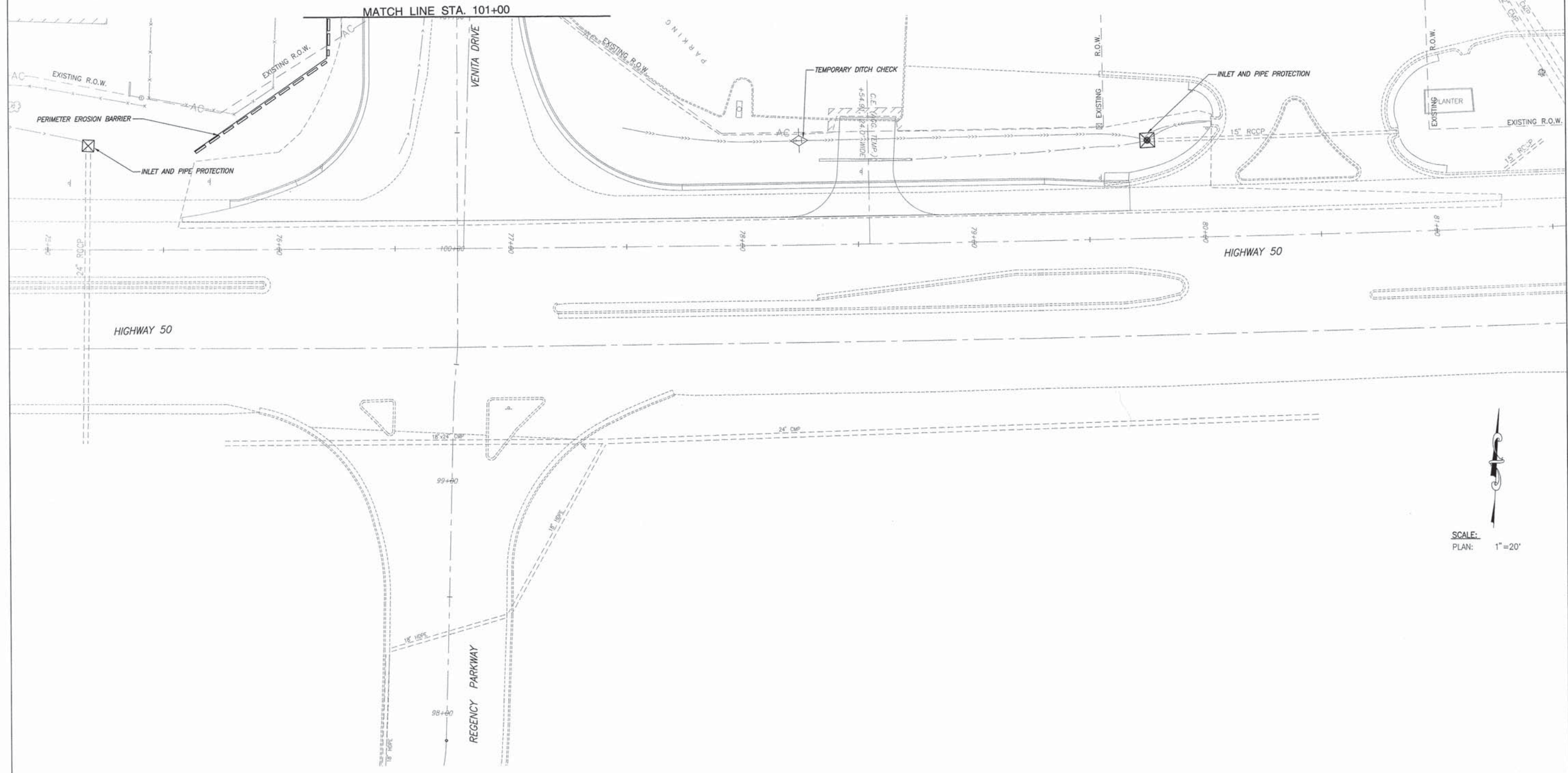
LEGEND - REMOVAL ITEMS

-  SIDEWALK REMOVAL
-  PAVEMENT REMOVAL
-  DRIVEWAY PAVEMENT REMOVAL
-  ISLAND REMOVAL
-  PIPE CULVERT REMOVAL
-  CURB & GUTTER REMOVAL / GUTTER REMOVAL
-  TREE REMOVAL
-  TBR TO BE REMOVED



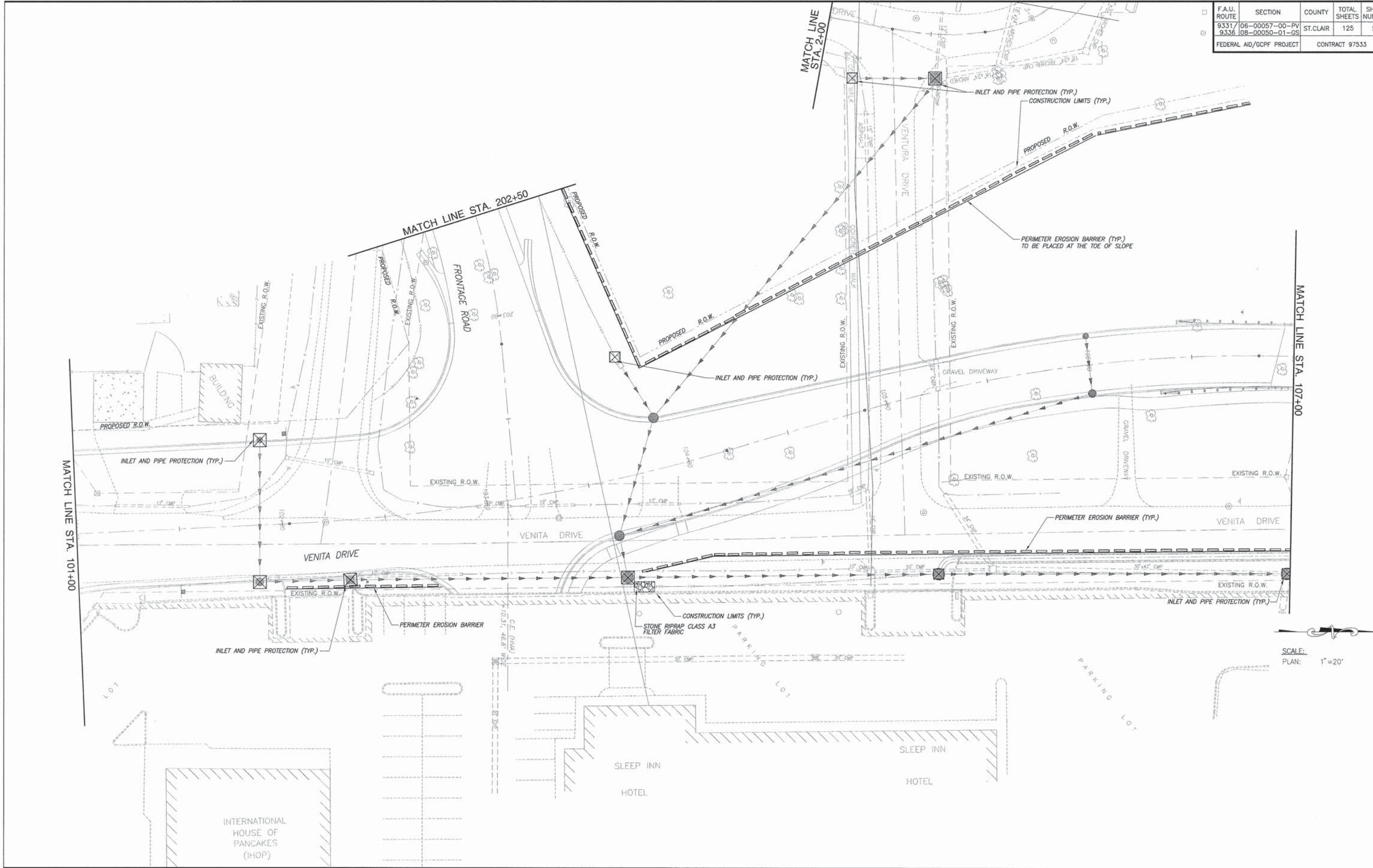
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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	53
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



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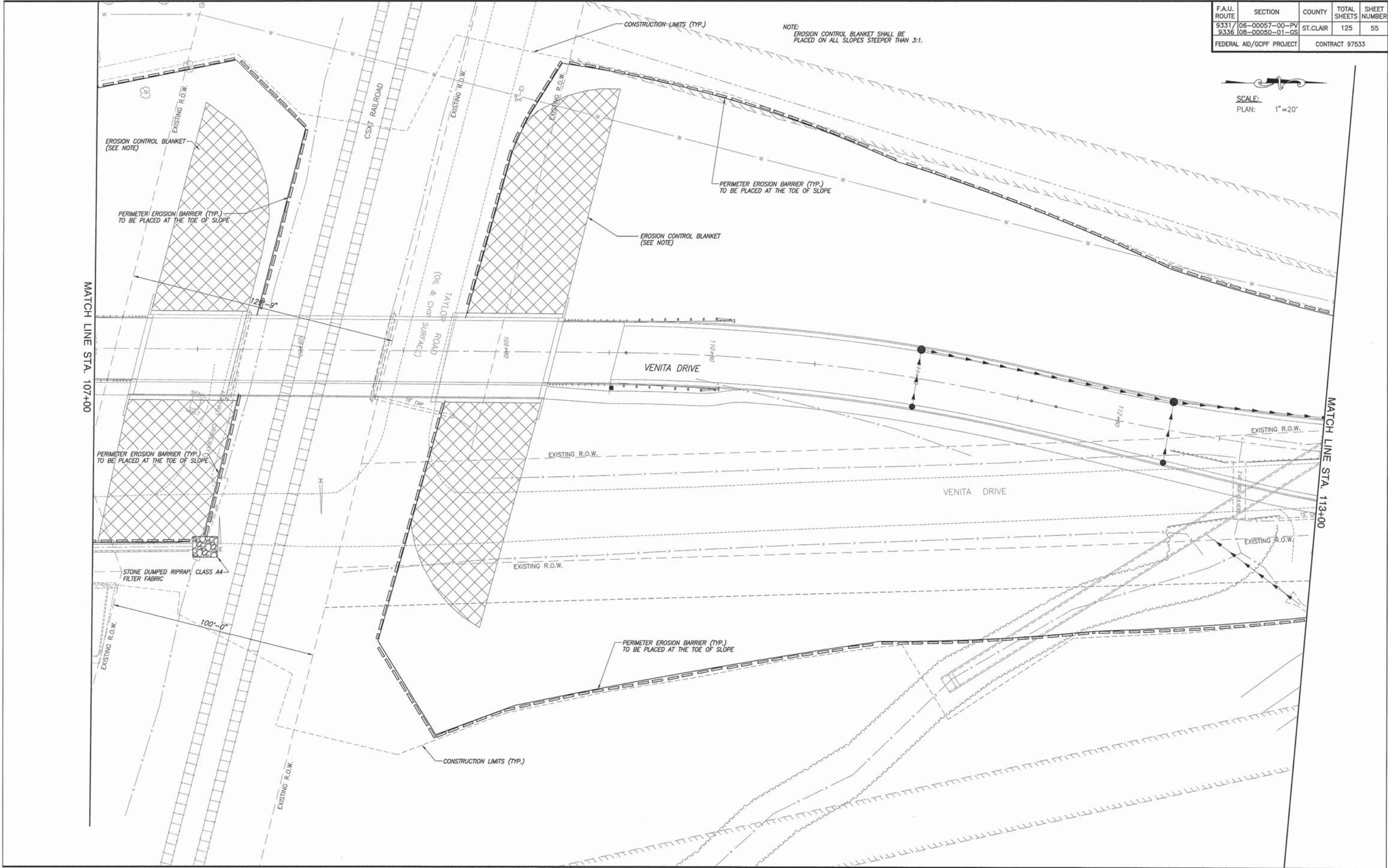
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	54
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/06-00057-00-PV		ST. CLAIR	125	55
9336/08-00050-01-GS				
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	

SCALE:
PLAN: 1"=20'

NOTE:
EROSION CONTROL BLANKET SHALL BE PLACED ON ALL SLOPES STEEPER THAN 3:1.

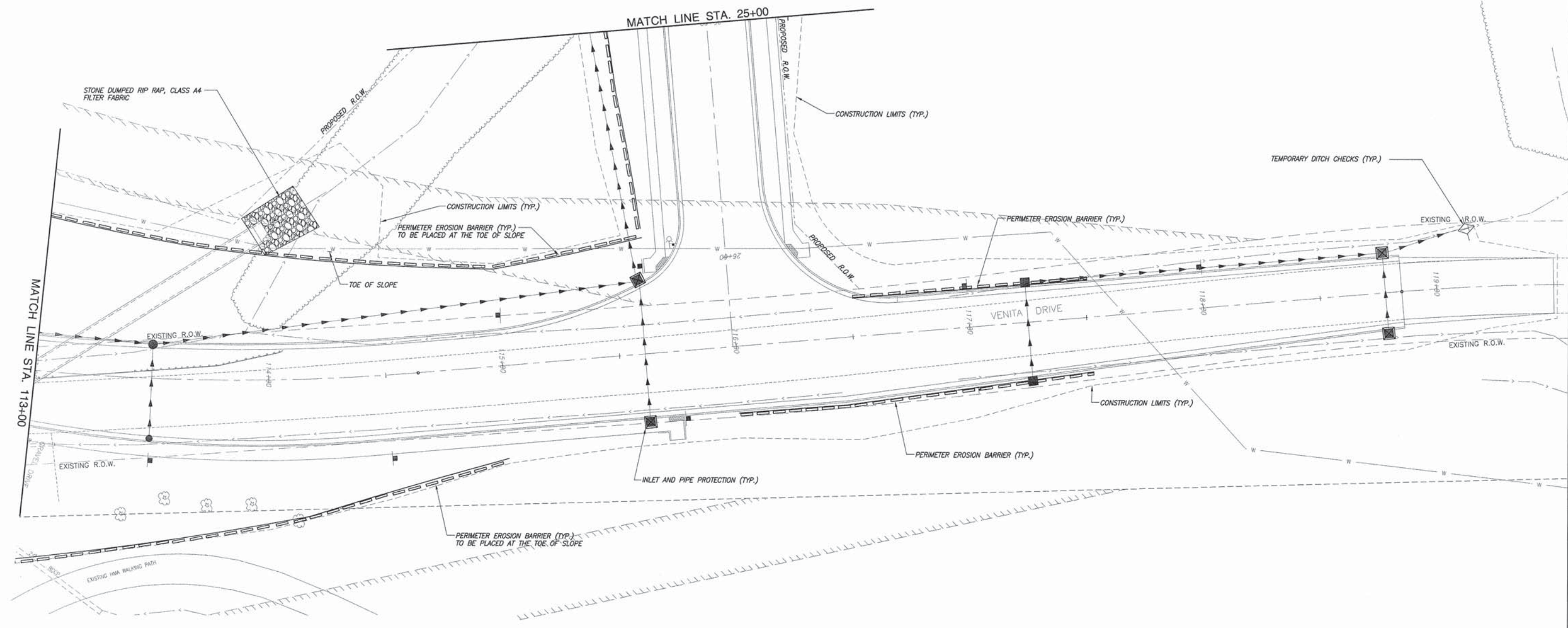


MATCH LINE STA. 107+00

MATCH LINE STA. 113+00

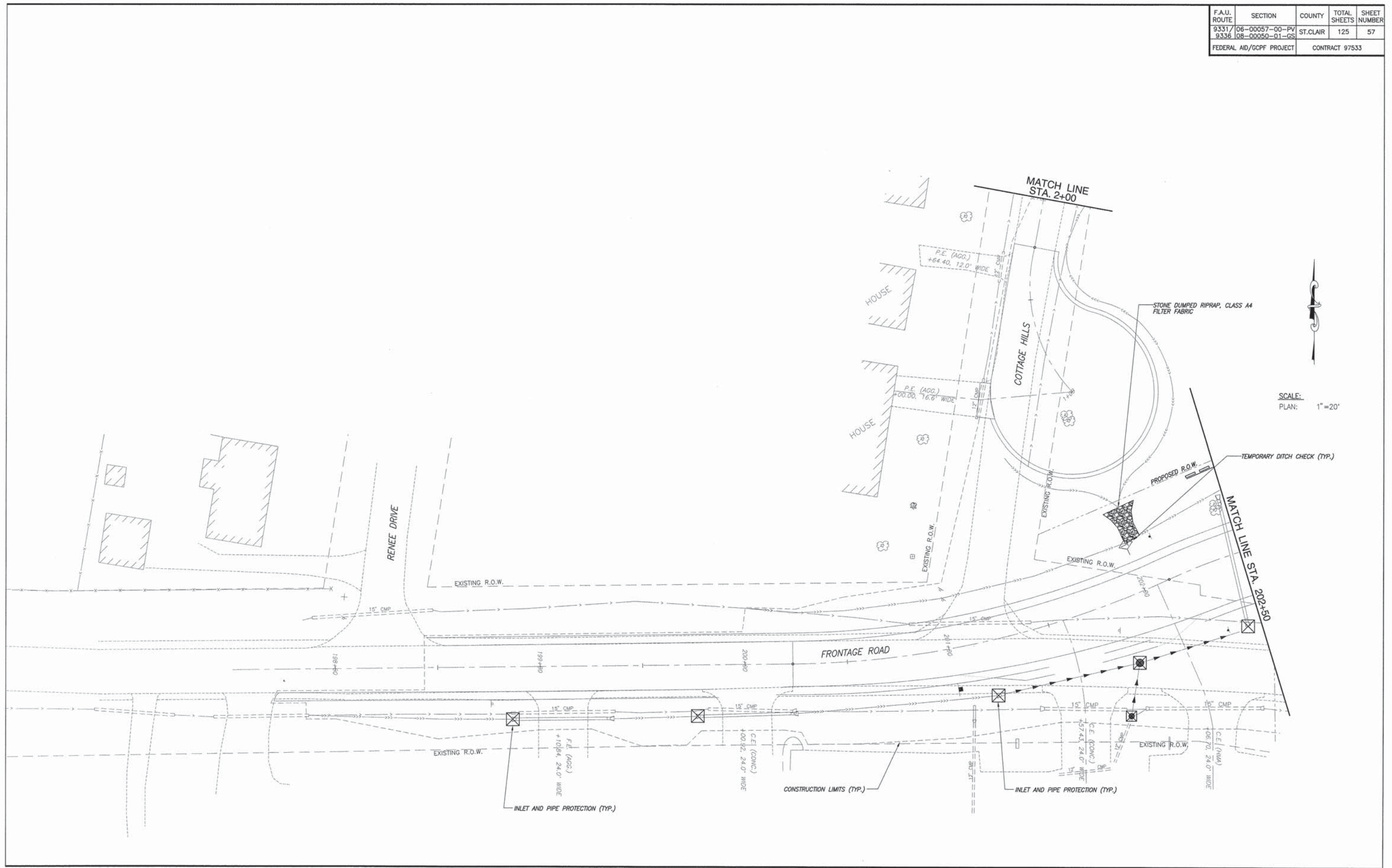
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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	56
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	



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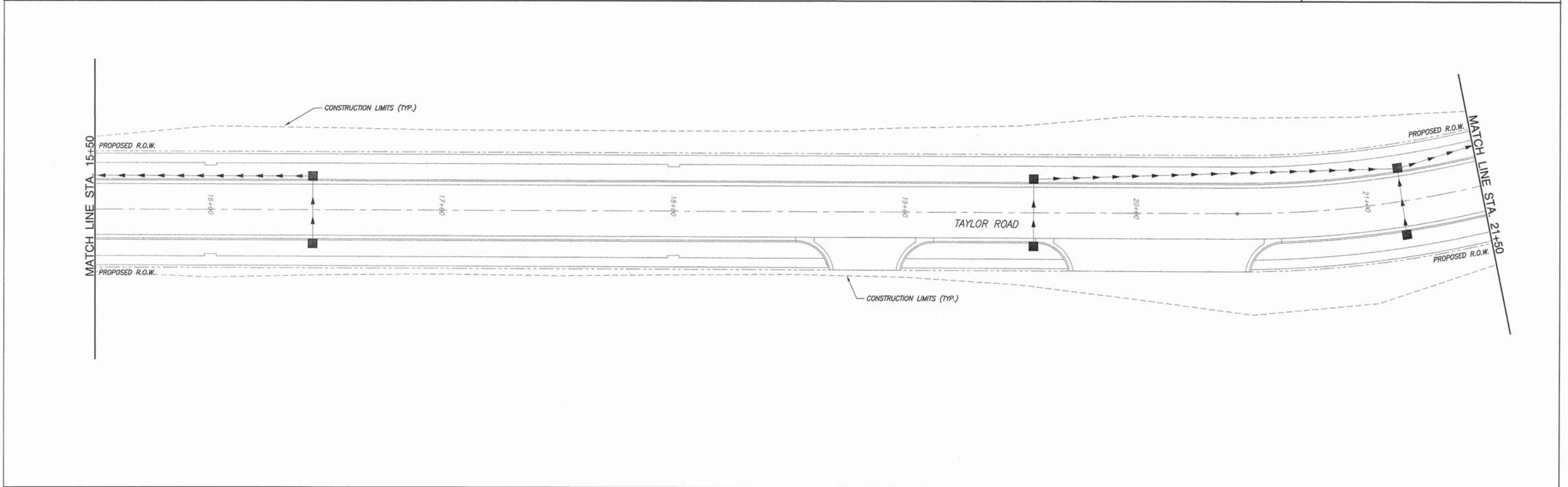
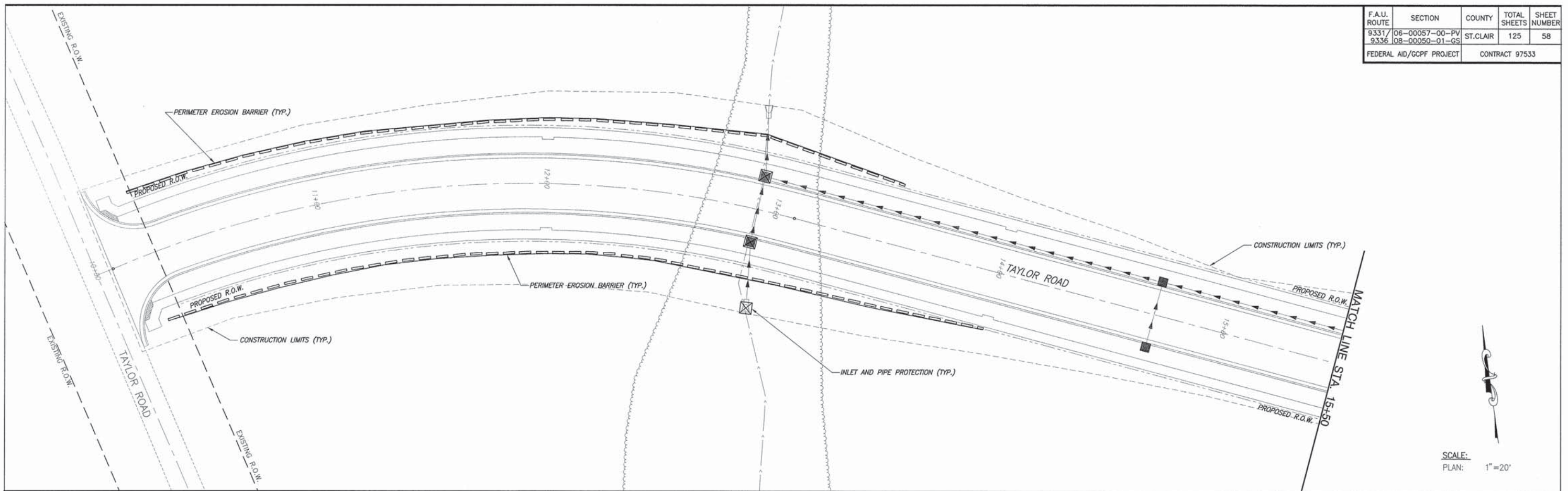
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	57
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



SCALE:
PLAN: 1"=20'

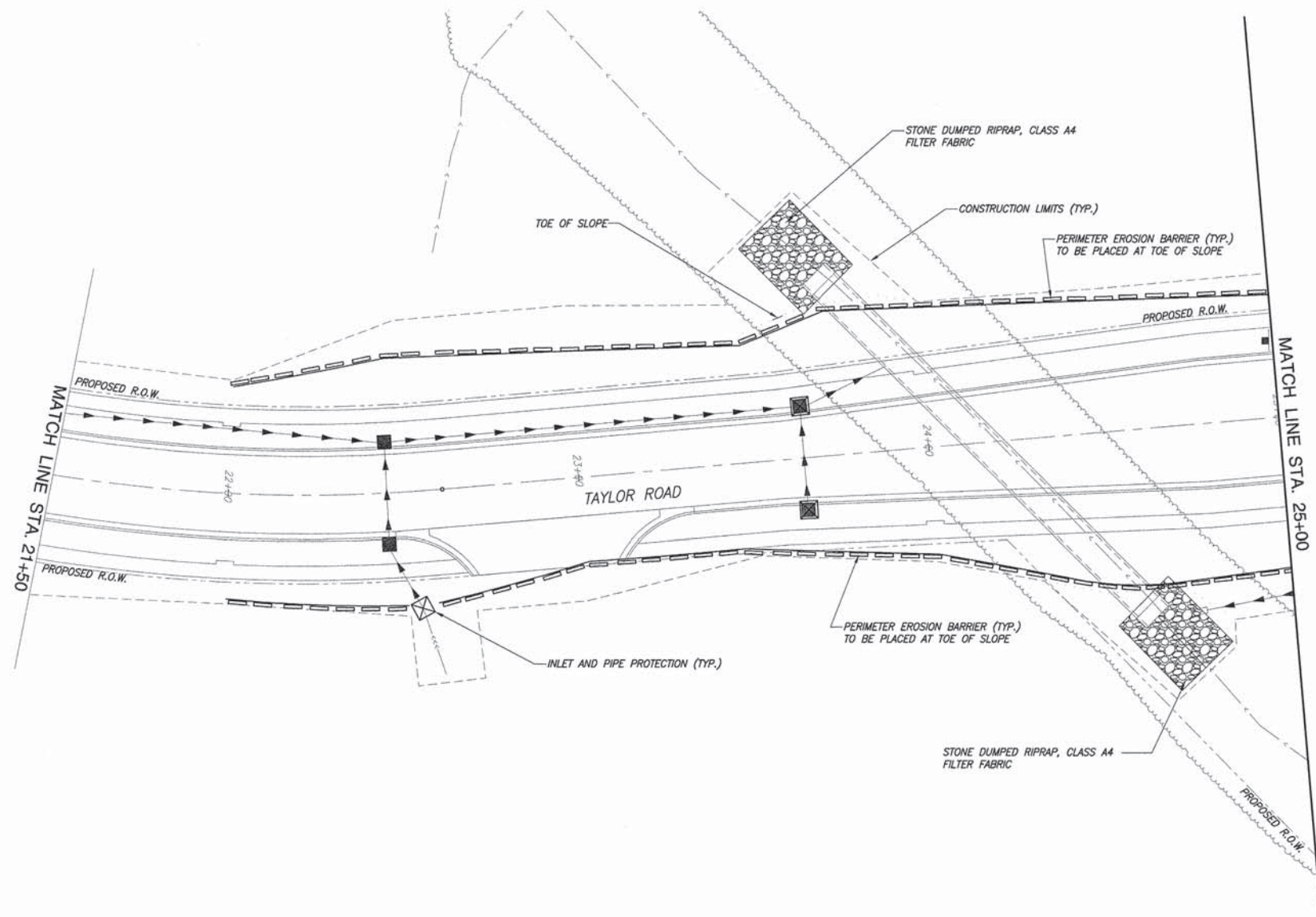
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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	58
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



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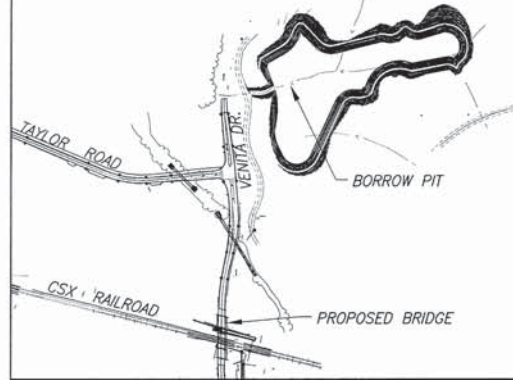
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	59
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	



SCALE:
PLAN: 1" = 20'

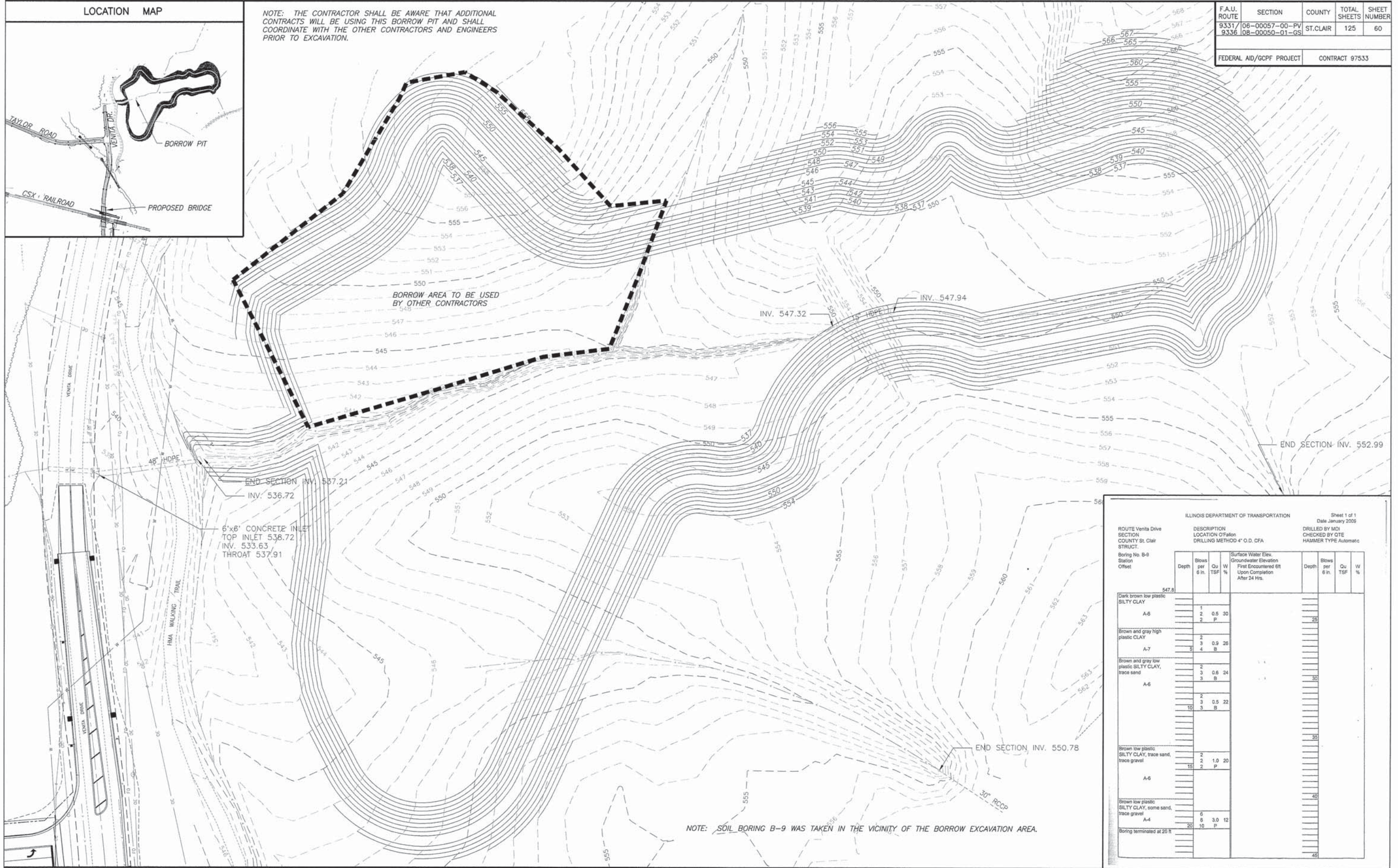
K:\41706 - 0\Folder - Hwy 50 & Venita Drive\Eng\Erosion Taylor Road 2.dwg, 7/17/2013 10:58:24 AM, Plotted by MA.

LOCATION MAP



NOTE: THE CONTRACTOR SHALL BE AWARE THAT ADDITIONAL CONTRACTS WILL BE USING THIS BORROW PIT AND SHALL COORDINATE WITH THE OTHER CONTRACTORS AND ENGINEERS PRIOR TO EXCAVATION.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	60
FEDERAL AID/GC/PF PROJECT		CONTRACT 97533		



NOTE: SOIL BORING B-9 WAS TAKEN IN THE VICINITY OF THE BORROW EXCAVATION AREA.

ILLINOIS DEPARTMENT OF TRANSPORTATION									
ROUTE Venita Drive		DESCRIPTION		Surface Water Elev.		Blows per 6 in.		Blows per 6 in.	
SECTION COUNTY St. Clair		LOCATION O'Fallon		Groundwater Elevation		Depth		Depth	
STRUCT.		DRILLING METHOD 4" O.D. CFA		First Encountered 6ft		Qu		W	
Station				Upon Completion		TSF		%	
Offset				After 24 Hrs.		TSF		%	
	547.8								
Dark brown low plastic SILTY CLAY	A-6	1	0.5	30					
		2		P					25
Brown and gray high plastic CLAY	A-7	2	0.9	26					
		3		B					
		4							
Brown and gray low plastic SILTY CLAY, trace sand	A-6	2	0.6	24					
		3		B					
		3							
		4	0.5	22					
		10		B					35
									35
Brown low plastic SILTY CLAY, trace sand, trace gravel	A-6	2	1.0	20					
		2		P					
		15							
Brown low plastic SILTY CLAY, some sand, trace gravel	A-4	6	3.0	12					
		8		P					
		20							
Boring terminated at 20 ft									
									45

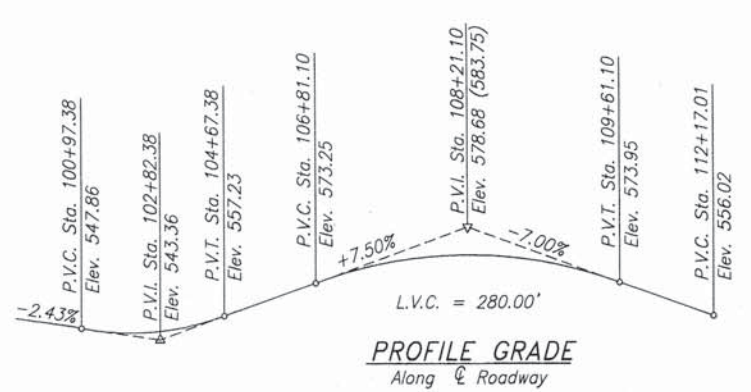
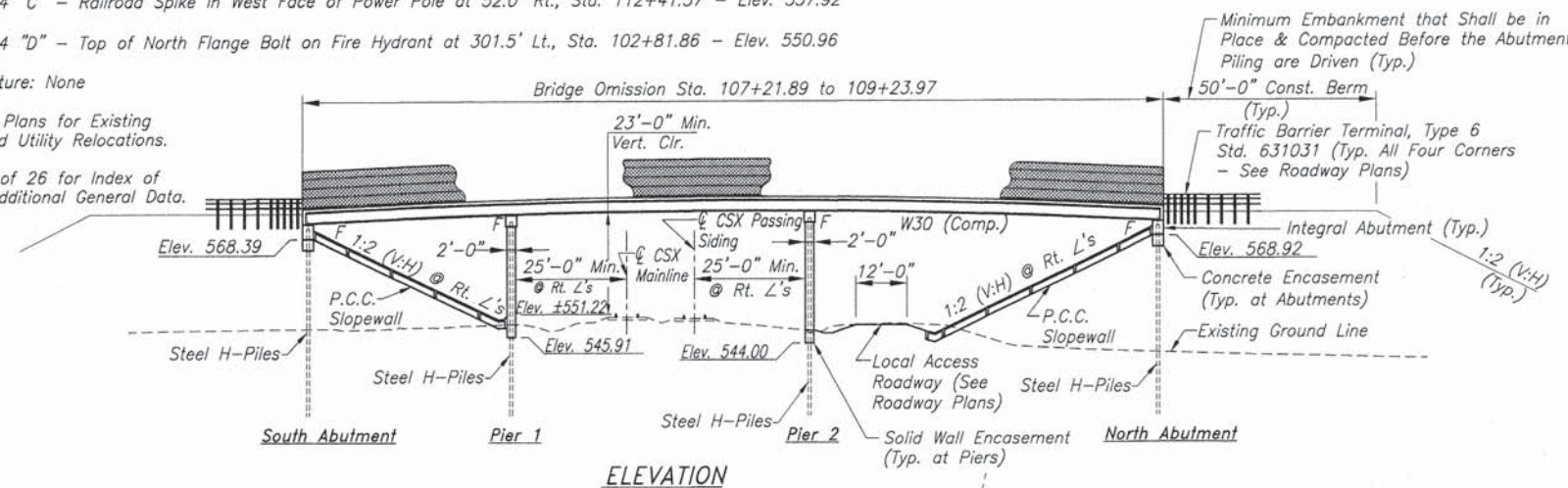
T.B.M.: 5/6/04 "C" - Railroad Spike in West Face of Power Pole at 52.0' Rt., Sta. 112+41.37 - Elev. 537.92

T.B.M.: 5/6/04 "D" - Top of North Flange Bolt on Fire Hydrant at 301.5' Lt., Sta. 102+81.86 - Elev. 550.96

Existing Structure: None

See Roadway Plans for Existing Demolition and Utility Relocations.

See Sheet 2 of 26 for Index of Sheets and additional General Data.



PROFILE GRADE
Along \bar{C} Roadway

DESIGN SPECIFICATIONS
2010 A.A.S.H.T.O. LRFD Bridge
Design Specifications

LOADING HL 93
Allow 50#/Sq. Ft. for future wearing surface.

DESIGN STRESSES
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (structural, steel, AASHTO M270, Grade 50)
 $f_y = 36,000$ psi (AASHTO M270, Grade 36)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec (S_{D1}) = 0.250g
Design Spectral Acceleration at 0.2 sec (S_{D5}) = 0.549g
Soil Site Class = D

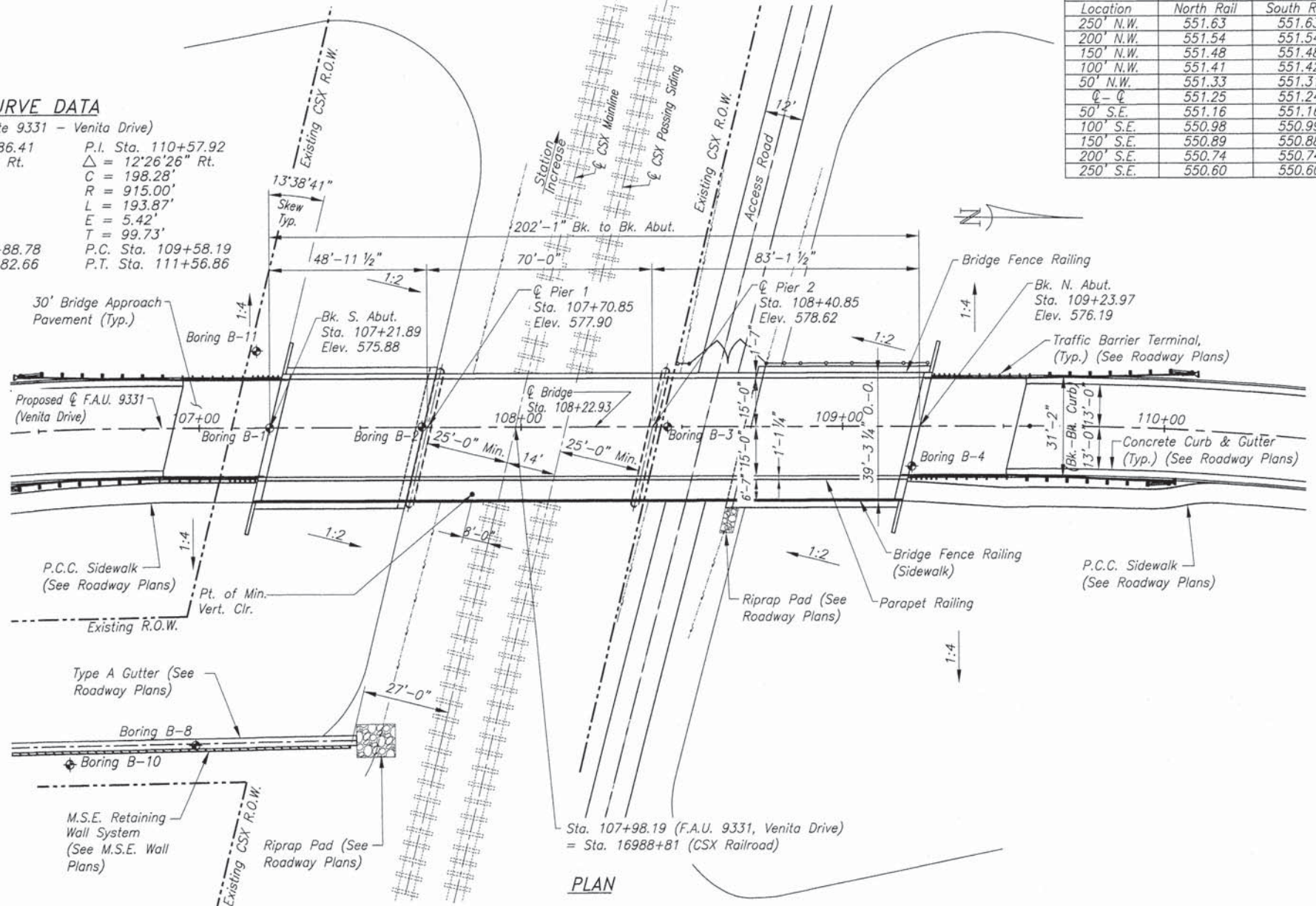
TOP OF TRACK ELEVATIONS

Location	Mainline		Passing Siding	
	North Rail	South Rail	North Rail	South Rail
250' N.W.	551.63	551.63	550.83	550.85
200' N.W.	551.54	551.54	550.72	550.75
150' N.W.	551.48	551.48	550.67	550.70
100' N.W.	551.41	551.42	550.72	550.75
50' N.W.	551.33	551.31	550.80	550.82
$\bar{C}-\bar{C}$	551.25	551.24	550.91	550.93
50' S.E.	551.16	551.16	551.00	551.02
100' S.E.	550.98	550.99	550.88	550.87
150' S.E.	550.89	550.88	550.65	550.65
200' S.E.	550.74	550.74	550.42	550.42
250' S.E.	550.60	550.60	550.25	550.25

CURVE DATA

(F.A.U. Route 9331 - Venita Drive)

P.I. Sta. 105+86.41	P.I. Sta. 110+57.92
$\Delta = 16^\circ 42' 14''$ Rt.	$\Delta = 12^\circ 26' 26''$ Rt.
C = 193.19'	C = 198.28'
R = 665.00'	R = 915.00'
L = 193.87'	L = 193.87'
E = 7.13'	E = 5.42'
T = 97.63'	T = 99.73'
P.C. Sta. 104+88.78	P.C. Sta. 109+58.19
P.T. Sta. 106+82.66	P.T. Sta. 111+56.86



PLAN

STA 108+22.93
SEC. 08-00050-01-GS BUILT 201_
CITY OF O'FALLON
ST. CLAIR COUNTY
LOADING HL-93
STR. NO. 082-6507

NAME PLATE

(See State Standard 515001 for details)
(Locate on Front Face of SE Wing Wall)



Proposed Structure
LOCATION SKETCH

I certify that to the best of knowledge, information and belief, this bridge design is structurally adequate for the design loading shown on the plans. The design is an economical one for the style of structure and complies with requirements of the current AASHTO Standard Specifications for Highway Bridges.



William D. Lueking
William D. Lueking
07-16-2013
Date of Signing
11-30-2014
Date of License Expiration

GENERAL NOTES

Calculated weight of Structural Steel =
 238,360 lbs (Grade 50)
 13,760 lbs (Grade 36)

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of 1/8 Inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/L. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be black, Munsell No. N1. See Section 506 of the Standard Specifications.

The embankment configuration shown on Sheet 1 of 26 shall be the minimum that must be placed and compacted prior to construction of the abutments.

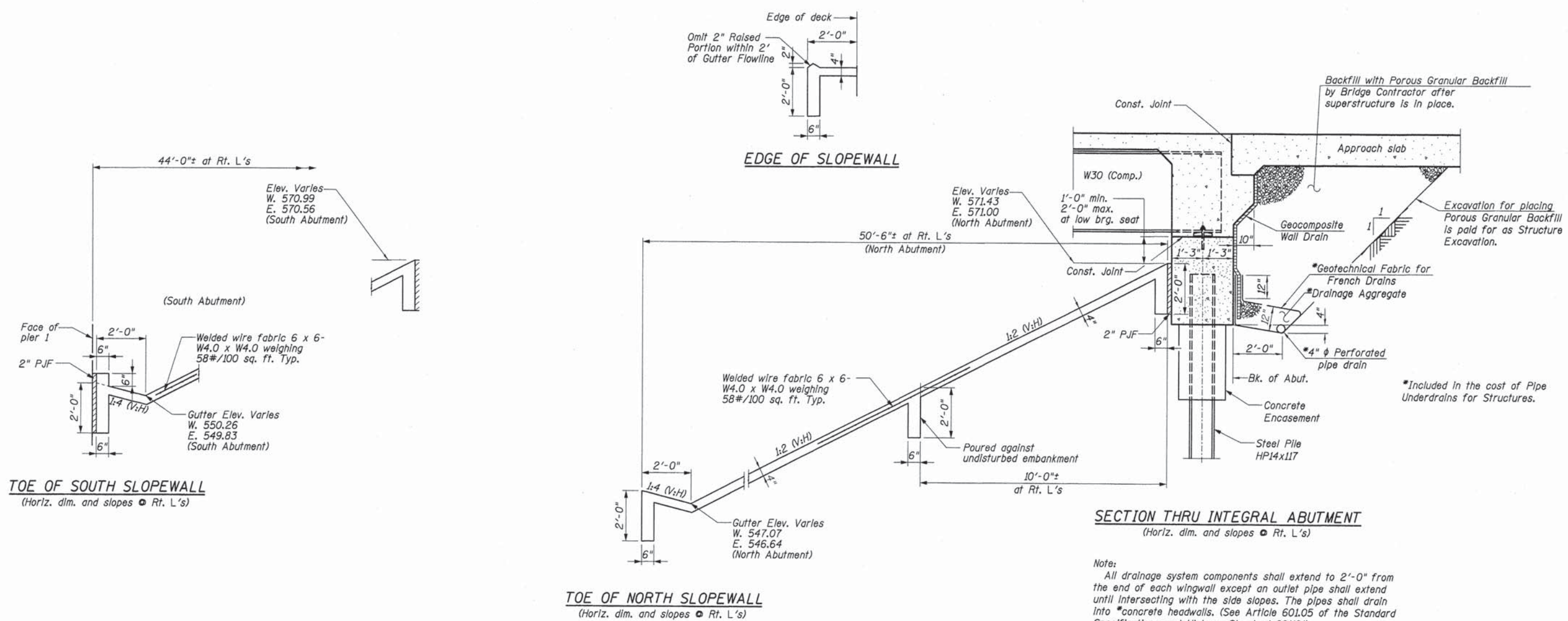
Sloped wall shall be reinforced with welded wire fabric, 6" x 6" - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

INDEX OF SHEETS

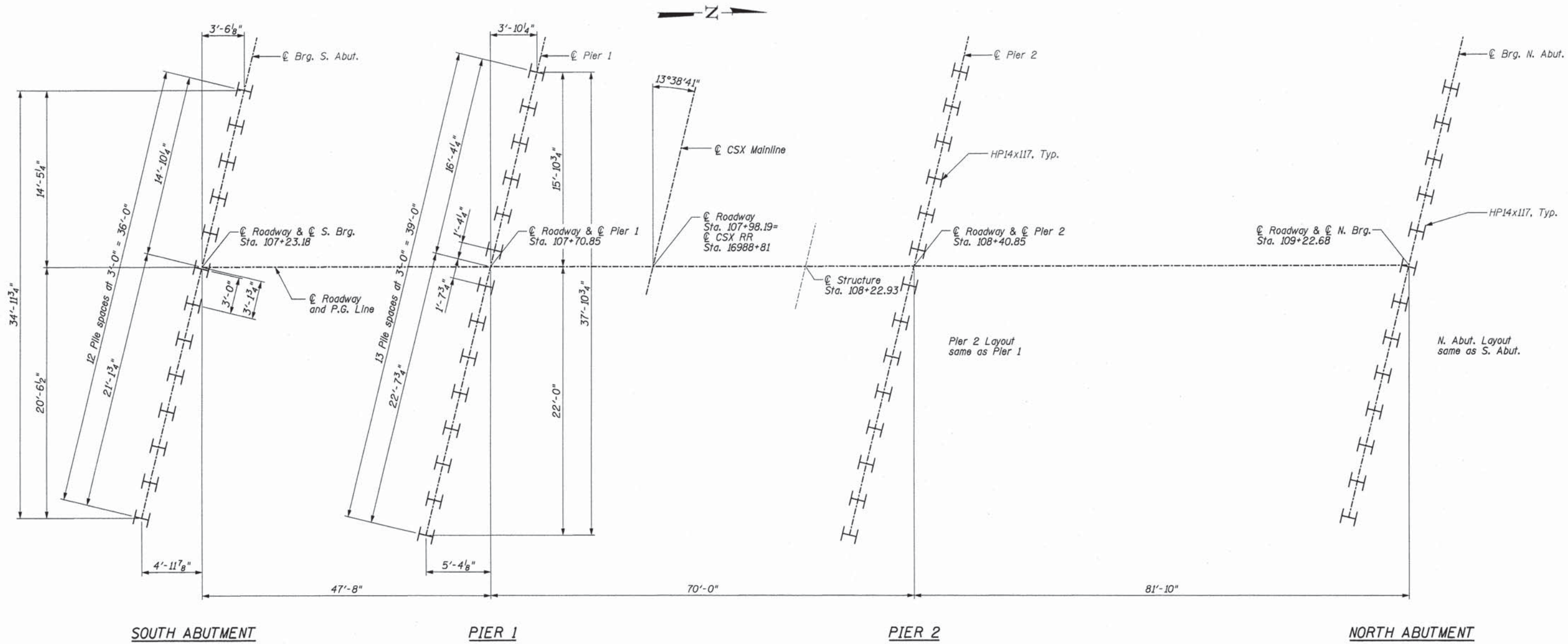
1. General Plan and Elevation
2. General Data Sheet
3. Piling Layout
- 4.-5. Top of Slab Elevations
6. Top of Approach Slab Elevations
7. Superstructure Plan and Cross Section
8. Integral Abutment Diaphragm Details
9. Parapet Details
10. Parapet and Sidewalk Details
11. Bridge Approach Slab
12. Bridge Approach Slab Details
13. Bridge Fence Railing, Sidewalk Mounted
14. Framing Plan and Beam Details
15. Beam Details and Moment Tables
16. Bearing Details
17. South Abutment
18. North Abutment
19. Pler 1
20. Pler 2
21. HP Pile Details
22. Bar Splicer Assembly and Mechanical Splicer Details
23. Soil Borings
24. Soil Borings
25. Soil Borings
26. Soil Borings

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Backfill	Cu Yd	-	128	128
Protective Coat	Sq Yd	208	-	208
Structure Excavation	Cu Yd	-	75	75
Concrete Structures	Cu Yd	-	250.9	250.9
Concrete Superstructure	Cu Yd	433.3	-	433.3
Bridge Deck Grooving	Sq Yd	629	-	629
Concrete Encasement	Cu Yd	-	14.2	14.2
Protective Coat	Sq Yd	1050	22	1072
Furnishing and Erecting Structural Steel	L Sum	1	-	1
Stud Shear Connectors	Each	5886	-	5886
Reinforcement Bars, Epoxy Coated	Pound	86,590	26,820	113,410
Bar Splicers	Each	62	-	62
Bridge Fence Railing	Foot	201	-	201
Bridge Fence Railing (Sidewalk)	Foot	201	-	201
Parapet Railing	Foot	201	-	201
Slope Wall 4 Inch	Sq Yd	-	528	528
Furnishing Steel Piles HP 14x117	Foot	-	4217	4217
Driving Piles	Foot	-	4217	4217
Test Piles HP 14x117	Each	-	4	4
Name Plates	Each	-	1	1
Anchor Bolts 1"	Each	36	-	36
Anchor Bolts 1 1/4"	Each	12	-	12
Geocomposite Wall Drain	Sq Yd	-	73	73
Pipe Underdrains for Structures 4"	Foot	-	204	204



Note:
 All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



PLAN

RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

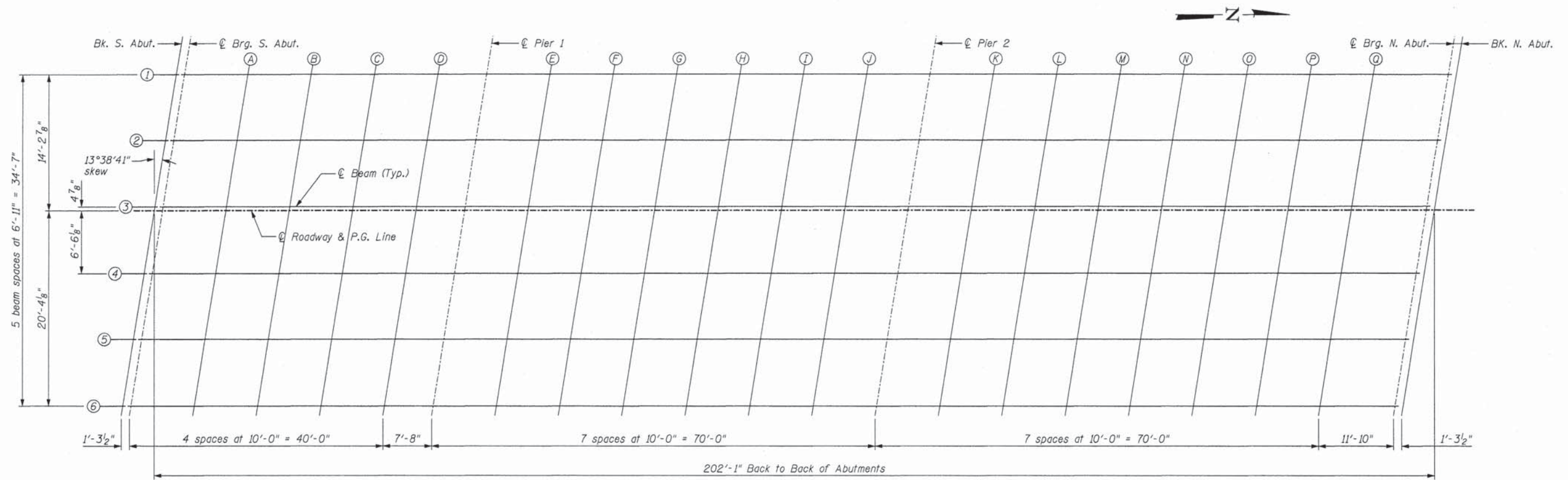
DESIGNED -	BLT	REVISED -	
DRAWN -	JN	REVISED -	
CHECKED -	WDL	REVISED -	
DATE -	07/16/2013	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 9331 SECTION 08-00050-01-GS
VENITA DRIVE OVER CSX RAILROAD
ST. CLAIR COUNTY

PILING LAYOUT
STRUCTURE NO. 082-6507

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	63
9336	08-00050-01-GS			
RAAI JOB NO. 40508 ILLINOIS FED. AID PROJECT / GCPF PROJECT			CONTRACT NO. 97533	



PLAN

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+25.35	14.24' Lt.	575.83	575.83
☉ Brg. S. Abut.	107+26.63	14.24' Lt.	575.89	575.89
A	107+36.63	14.24' Lt.	576.38	576.39
B	107+46.63	14.24' Lt.	576.82	576.84
C	107+56.63	14.24' Lt.	577.20	577.22
D	107+66.63	14.24' Lt.	577.54	577.54
☉ Pier 1	107+74.30	14.24' Lt.	577.76	577.76
E	107+84.30	14.24' Lt.	578.00	578.00
F	107+94.30	14.24' Lt.	578.19	578.20
G	108+04.30	14.24' Lt.	578.33	578.34
H	108+14.30	14.24' Lt.	578.41	578.42
I	108+24.30	14.24' Lt.	578.45	578.44
J	108+34.30	14.24' Lt.	578.43	578.42
☉ Pier 2	108+44.30	14.24' Lt.	578.36	578.36
K	108+54.30	14.24' Lt.	578.24	578.28
L	108+64.30	14.24' Lt.	578.07	578.15
M	108+74.30	14.24' Lt.	577.84	577.98
N	108+84.30	14.24' Lt.	577.56	577.74
O	108+94.30	14.24' Lt.	577.24	577.42
P	109+04.30	14.24' Lt.	576.86	577.01
Q	109+14.30	14.24' Lt.	576.42	576.52
☉ Brg. N. Abut.	109+26.14	14.24' Lt.	575.85	575.85
Bk. N. Abut.	109+27.42	14.24' Lt.	575.78	575.78

BEAM 2

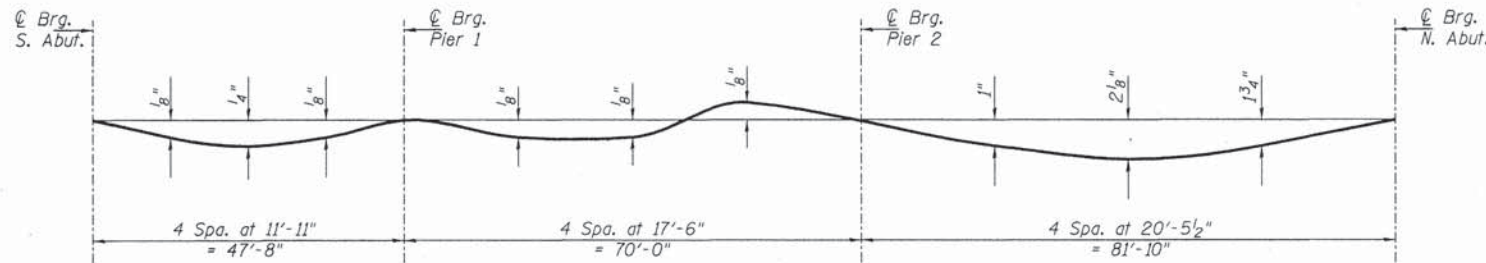
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+23.67	7.32' Lt.	575.86	575.86
☉ Brg. S. Abut.	107+24.95	7.32' Lt.	575.93	575.93
A	107+34.95	7.32' Lt.	576.42	576.44
B	107+44.95	7.32' Lt.	576.87	576.89
C	107+54.95	7.32' Lt.	577.26	577.28
D	107+64.95	7.32' Lt.	577.60	577.61
☉ Pier 1	107+72.62	7.32' Lt.	577.83	577.83
E	107+82.62	7.32' Lt.	578.08	578.09
F	107+92.62	7.32' Lt.	578.28	578.29
G	108+02.62	7.32' Lt.	578.43	578.44
H	108+12.62	7.32' Lt.	578.52	578.52
I	108+22.62	7.32' Lt.	578.56	578.56
J	108+32.62	7.32' Lt.	578.56	578.54
☉ Pier 2	108+42.62	7.32' Lt.	578.49	578.49
K	108+52.62	7.32' Lt.	578.38	578.42
L	108+62.62	7.32' Lt.	578.22	578.31
M	108+72.62	7.32' Lt.	578.00	578.14
N	108+82.62	7.32' Lt.	577.73	577.91
O	108+92.62	7.32' Lt.	577.41	577.59
P	109+02.62	7.32' Lt.	577.04	577.20
Q	109+12.62	7.32' Lt.	576.62	576.71
☉ Brg. N. Abut.	109+24.46	7.32' Lt.	576.05	576.05
Bk. N. Abut.	109+25.74	7.32' Lt.	575.99	575.99

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+21.99	0.41' Lt.	575.88	575.88
☉ Brg. S. Abut.	107+23.27	0.41' Lt.	575.95	575.95
A	107+33.27	0.41' Lt.	576.45	576.46
B	107+43.27	0.41' Lt.	576.91	576.92
C	107+53.27	0.41' Lt.	577.31	577.32
D	107+63.27	0.41' Lt.	577.66	577.66
☉ Pier 1	107+70.94	0.41' Lt.	577.89	577.89
E	107+80.94	0.41' Lt.	578.15	578.15
F	107+90.94	0.41' Lt.	578.36	578.37
G	108+00.94	0.41' Lt.	578.51	578.52
H	108+10.94	0.41' Lt.	578.62	578.62
I	108+20.94	0.41' Lt.	578.67	578.66
J	108+30.94	0.41' Lt.	578.67	578.66
☉ Pier 2	108+40.94	0.41' Lt.	578.62	578.62
K	108+50.94	0.41' Lt.	578.51	578.55
L	108+60.94	0.41' Lt.	578.36	578.44
M	108+70.94	0.41' Lt.	578.15	578.28
N	108+80.94	0.41' Lt.	577.89	578.06
O	108+90.94	0.41' Lt.	577.58	577.76
P	109+00.94	0.41' Lt.	577.22	577.37
Q	109+10.94	0.41' Lt.	576.80	576.90
☉ Brg. N. Abut.	109+22.78	0.41' Lt.	576.25	576.25
Bk. N. Abut.	109+24.06	0.41' Lt.	576.18	576.18

☉ ROADWAY & P.G. LINE

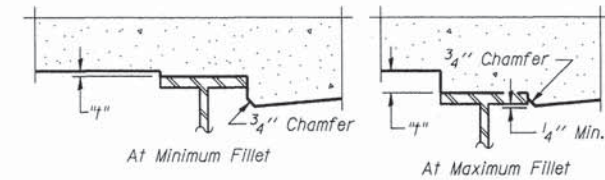
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+21.89	0.00'	575.88	575.88
☉ Brg. S. Abut.	107+23.18	0.00'	575.95	575.95
A	107+33.18	0.00'	576.45	576.47
B	107+43.18	0.00'	576.91	576.93
C	107+53.18	0.00'	577.31	577.33
D	107+63.18	0.00'	577.66	577.67
☉ Pier 1	107+70.85	0.00'	577.90	577.90
E	107+80.85	0.00'	578.15	578.16
F	107+90.85	0.00'	578.36	578.37
G	108+00.85	0.00'	578.52	578.53
H	108+10.85	0.00'	578.62	578.63
I	108+20.85	0.00'	578.67	578.67
J	108+30.85	0.00'	578.67	578.66
☉ Pier 2	108+40.85	0.00'	578.62	578.62
K	108+50.85	0.00'	578.52	578.56
L	108+60.85	0.00'	578.37	578.45
M	108+70.85	0.00'	578.16	578.29
N	108+80.85	0.00'	577.90	578.07
O	108+90.85	0.00'	577.59	577.77
P	109+00.85	0.00'	577.23	577.38
Q	109+10.85	0.00'	576.81	576.91
☉ Brg. N. Abut.	109+22.68	0.00'	576.26	576.26
Bk. N. Abut.	109+23.97	0.00'	576.19	576.19



DEAD LOAD DEFLECTION DIAGRAM

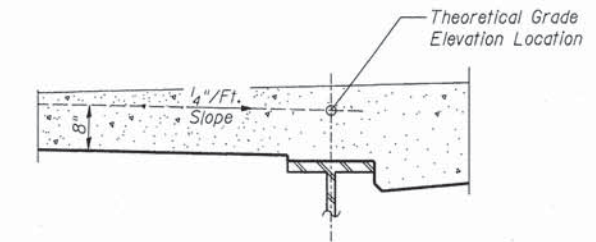
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown below.



To determine "h": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown below, minus slab thickness, equals the fillet heights "h" above top flange of beams.

FILLET HEIGHTS



BEAM 6

BEAM 4

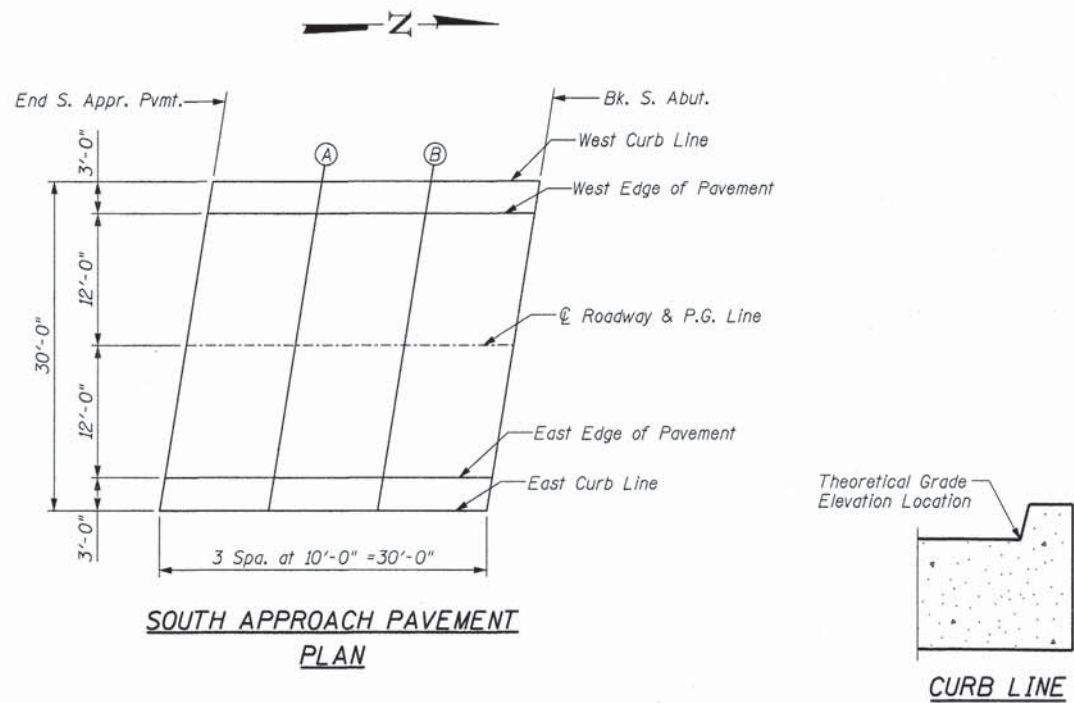
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+20.31	6.51' Rt.	575.69	575.69
☉ Brg. S. Abut.	107+21.60	6.51' Rt.	575.76	575.76
A	107+31.60	6.51' Rt.	576.28	576.29
B	107+41.60	6.51' Rt.	576.74	576.76
C	107+51.60	6.51' Rt.	577.15	577.16
D	107+61.60	6.51' Rt.	577.51	577.51
☉ Pier 1	107+69.27	6.51' Rt.	577.75	577.75
E	107+79.27	6.51' Rt.	578.02	578.02
F	107+89.27	6.51' Rt.	578.23	578.24
G	107+99.27	6.51' Rt.	578.40	578.41
H	108+09.27	6.51' Rt.	578.51	578.51
I	108+19.27	6.51' Rt.	578.57	578.56
J	108+29.27	6.51' Rt.	578.58	578.58
☉ Pier 2	108+39.27	6.51' Rt.	578.53	578.53
K	108+49.27	6.51' Rt.	578.44	578.48
L	108+59.27	6.51' Rt.	578.29	578.38
M	108+69.27	6.51' Rt.	578.09	578.23
N	108+79.27	6.51' Rt.	577.84	578.01
O	108+89.27	6.51' Rt.	577.54	577.72
P	108+99.27	6.51' Rt.	577.19	577.34
Q	109+09.27	6.51' Rt.	576.78	576.88
☉ Brg. N. Abut.	109+21.10	6.51' Rt.	576.23	576.23
Bk. N. Abut.	109+22.39	6.51' Rt.	576.17	576.17

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+18.63	13.43' Rt.	575.48	575.48
☉ Brg. S. Abut.	107+19.92	13.43' Rt.	575.55	575.55
A	107+29.92	13.43' Rt.	576.08	576.09
B	107+39.92	13.43' Rt.	576.55	576.57
C	107+49.92	13.43' Rt.	576.97	576.98
D	107+59.92	13.43' Rt.	577.34	577.34
☉ Pier 1	107+67.59	13.43' Rt.	577.58	577.58
E	107+77.59	13.43' Rt.	577.86	577.86
F	107+87.59	13.43' Rt.	578.08	578.09
G	107+97.59	13.43' Rt.	578.26	578.27
H	108+07.59	13.43' Rt.	578.38	578.38
I	108+17.59	13.43' Rt.	578.45	578.44
J	108+27.59	13.43' Rt.	578.46	578.45
☉ Pier 2	108+37.59	13.43' Rt.	578.43	578.43
K	108+47.59	13.43' Rt.	578.34	578.38
L	108+57.59	13.43' Rt.	578.20	578.29
M	108+67.59	13.43' Rt.	578.01	578.15
N	108+77.59	13.43' Rt.	577.77	577.94
O	108+87.59	13.43' Rt.	577.48	577.66
P	108+97.59	13.43' Rt.	577.13	577.29
Q	109+07.59	13.43' Rt.	576.74	576.83
☉ Brg. N. Abut.	109+19.42	13.43' Rt.	576.20	576.20
Bk. N. Abut.	109+20.71	13.43' Rt.	576.14	576.14

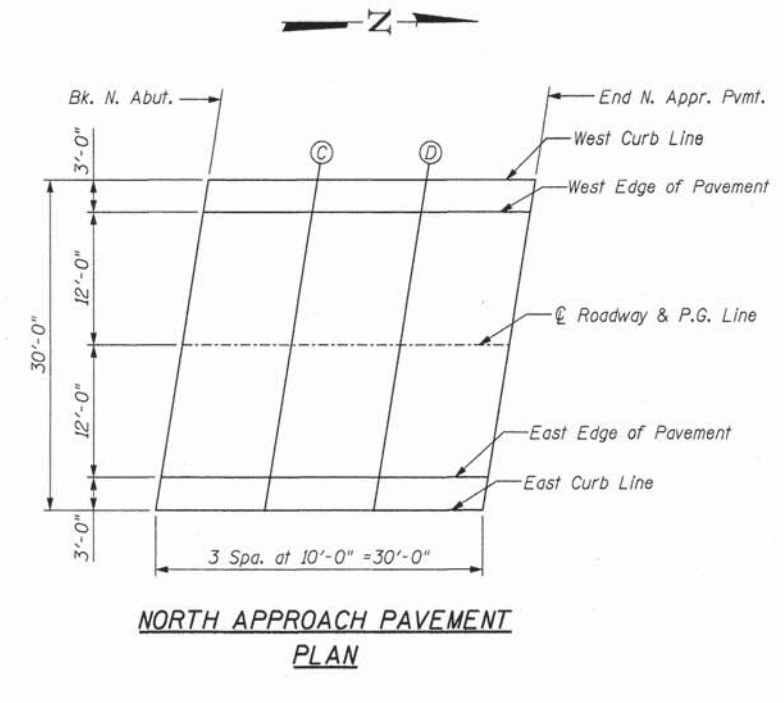
BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adjusted For Dead Load Deflection
Bk. S. Abut.	107+16.95	20.34' Rt.	575.24	575.24
☉ Brg. S. Abut.	107+18.24	20.34' Rt.	575.32	575.32
A	107+28.24	20.34' Rt.	575.85	575.86
B	107+38.24	20.34' Rt.	576.33	576.35
C	107+48.24	20.34' Rt.	576.76	576.77
D	107+58.24	20.34' Rt.	577.13	577.14
☉ Pier 1	107+65.91	20.34' Rt.	577.39	577.39
E	107+75.91	20.34' Rt.	577.67	577.68
F	107+85.91	20.34' Rt.	577.91	577.91
G	107+95.91	20.34' Rt.	578.09	578.10
H	108+05.91	20.34' Rt.	578.22	578.22
I	108+15.91	20.34' Rt.	578.29	578.29
J	108+25.91	20.34' Rt.	578.32	578.31
☉ Pier 2	108+35.91	20.34' Rt.	578.29	578.29
K	108+45.91	20.34' Rt.	578.22	578.26
L	108+55.91	20.34' Rt.	578.09	578.17
M	108+65.91	20.34' Rt.	577.91	578.04
N	108+75.91	20.34' Rt.	577.67	577.84
O	108+85.91	20.34' Rt.	577.39	577.57
P	108+95.91	20.34' Rt.	577.05	577.21
Q	109+05.91	20.34' Rt.	576.66	576.76
☉ Brg. N. Abut.	109+17.74	20.34' Rt.	576.14	576.14
Bk. N. Abut.	109+19.03	20.34' Rt.	576.08	576.08



SOUTH APPROACH PAVEMENT PLAN

CURB LINE



NORTH APPROACH PAVEMENT PLAN

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pvmt.	106+95.53	15.00' Lt.	574.03
A	107+05.53	15.00' Lt.	574.68
B	107+15.53	15.00' Lt.	575.28
Bk. S. Abut.	107+25.53	15.00' Lt.	575.82

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pvmt.	106+88.98	12.00' Rt.	573.64
A	106+98.98	12.00' Rt.	574.32
B	107+08.98	12.00' Rt.	574.95
Bk. S. Abut.	107+18.98	12.00' Rt.	575.53

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pvmt.	106+94.80	12.00' Lt.	574.04
A	107+04.80	12.00' Lt.	574.69
B	107+14.80	12.00' Lt.	575.30
Bk. S. Abut.	107+24.80	12.00' Lt.	575.85

EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pvmt.	106+88.25	15.00' Rt.	573.52
A	106+98.25	15.00' Rt.	574.21
B	107+08.25	15.00' Rt.	574.85
Bk. S. Abut.	107+18.25	15.00' Rt.	575.43

☉ ROADWAY & P.G. LINE

Location	Station	Offset	Theoretical Grade Elevations
End S. Appr. Pvmt.	106+91.89	0.00'	574.03
A	107+01.89	0.00'	574.70
B	107+11.89	0.00'	575.31
Bk. S. Abut.	107+21.89	0.00'	575.88

WEST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	109+27.61	15.00' Lt.	575.75
C	109+37.61	15.00' Lt.	575.20
D	109+47.61	15.00' Lt.	574.60
End N. Appr. Pvmt.	109+57.61	15.00' Lt.	573.94

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	109+21.06	12.00' Rt.	576.15
C	109+31.06	12.00' Rt.	575.63
D	109+41.06	12.00' Rt.	575.06
End N. Appr. Pvmt.	109+51.06	12.00' Rt.	574.44

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	109+26.88	12.00' Lt.	575.85
C	109+36.88	12.00' Lt.	575.31
D	109+46.88	12.00' Lt.	574.71
End N. Appr. Pvmt.	109+56.88	12.00' Lt.	574.05

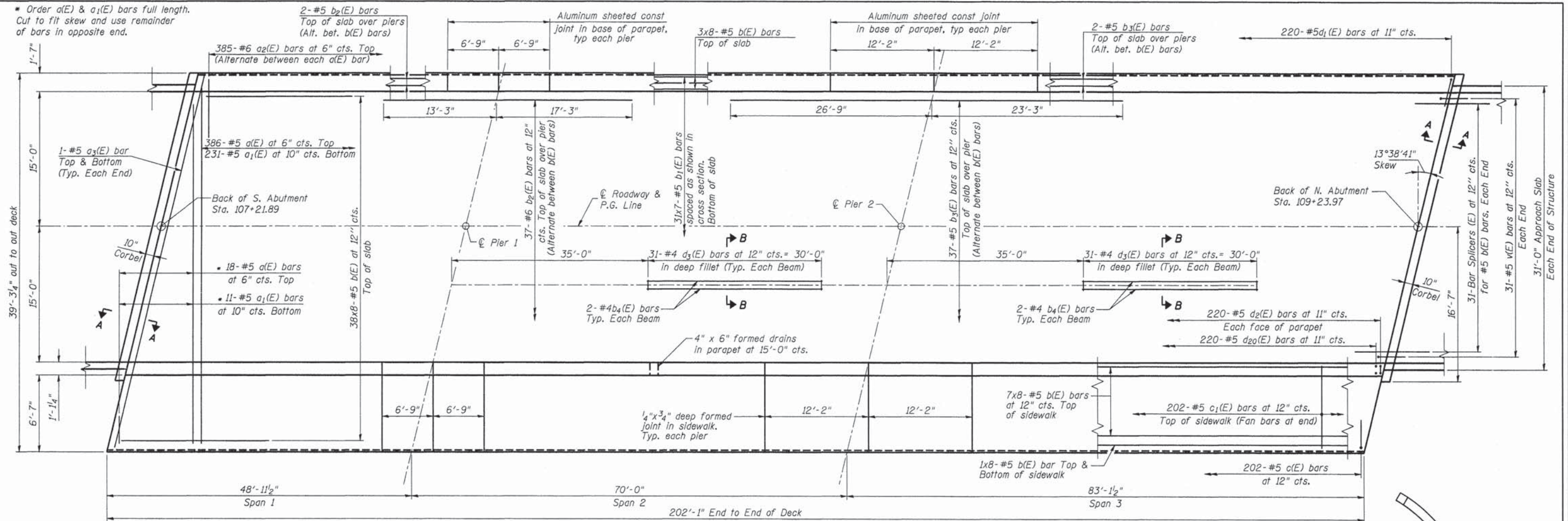
EAST CURB LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	109+20.33	15.00' Rt.	576.12
C	109+30.33	15.00' Rt.	575.61
D	109+40.33	15.00' Rt.	575.04
End N. Appr. Pvmt.	109+50.33	15.00' Rt.	574.42

☉ ROADWAY & P.G. LINE

Location	Station	Offset	Theoretical Grade Elevations
Bk. N. Abut.	109+23.97	0.00'	576.19
C	109+33.97	0.00'	575.66
D	109+43.97	0.00'	575.07
End N. Appr. Pvmt.	109+53.97	0.00'	574.44

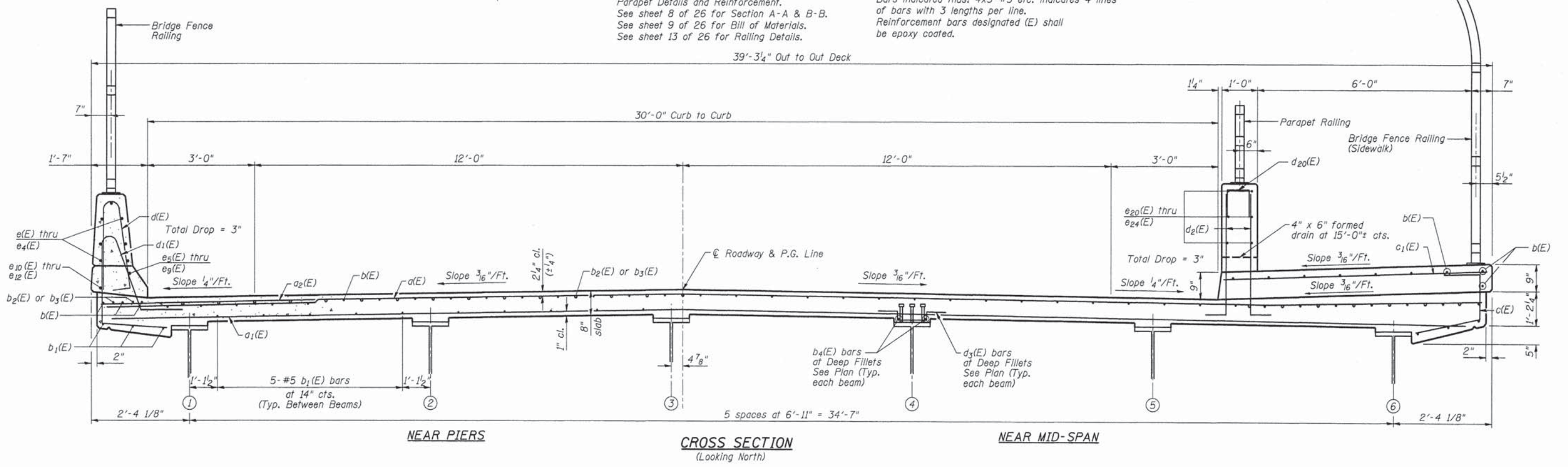
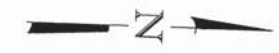
* Order a(E) & a₁(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



PLAN

See sheets 9 & 10 of 26 for Sidewalk and Parapet Details and Reinforcement. See sheet 8 of 26 for Section A-A & B-B. See sheet 9 of 26 for Bill of Materials. See sheet 13 of 26 for Railing Details.

Min. Bar Lap #5 bars = 2'-7"
Bars indicated thus: 4x3-#5 etc. indicates 4 lines of bars with 3 lengths per line.
Reinforcement bars designated (E) shall be epoxy coated.



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ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

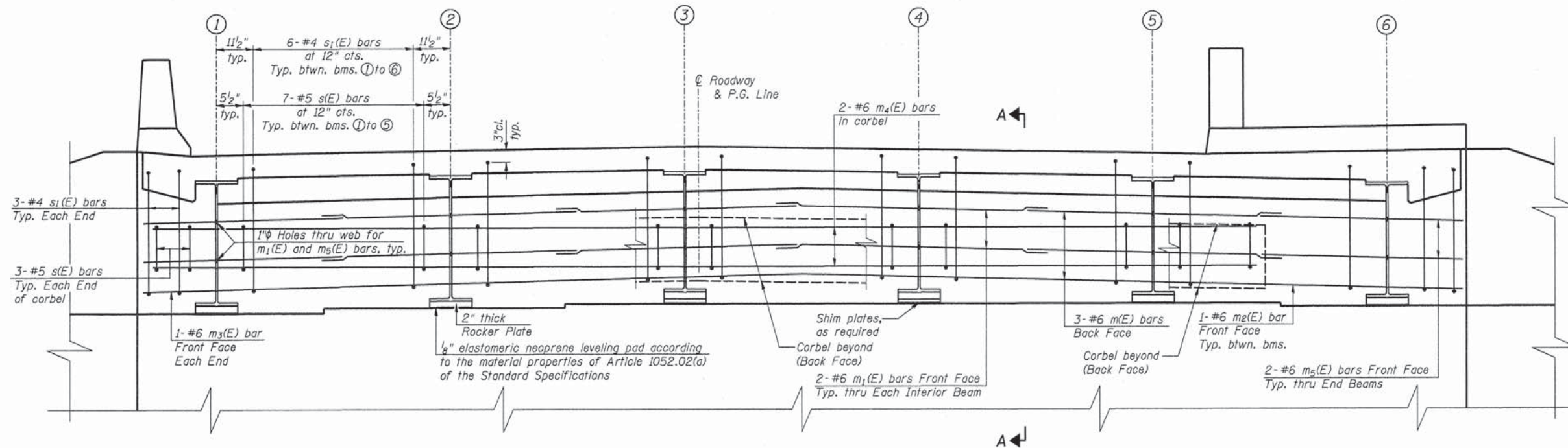
DESIGNED -	BLT	REVISED -	
DRAWN -	JN /JSD	REVISED -	
CHECKED -	WDL	REVISED -	
DATE -	07/16/2013	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 9331 SECTION 08-00050-01-GS
VENITA DRIVE OVER CSX RAILROAD
ST. CLAIR COUNTY

SUPERSTRUCTURE PLAN AND CROSS SECTION
STRUCTURE NO. 082-6507

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	67
9336	08-00050-01-GS	CONTRACT NO. 97533		
RAAI JOB NO. 40508 ILLINOIS FED. AID PROJECT / GCPF PROJECT				



DIAPHRAGM ELEVATION AT ABUTMENT

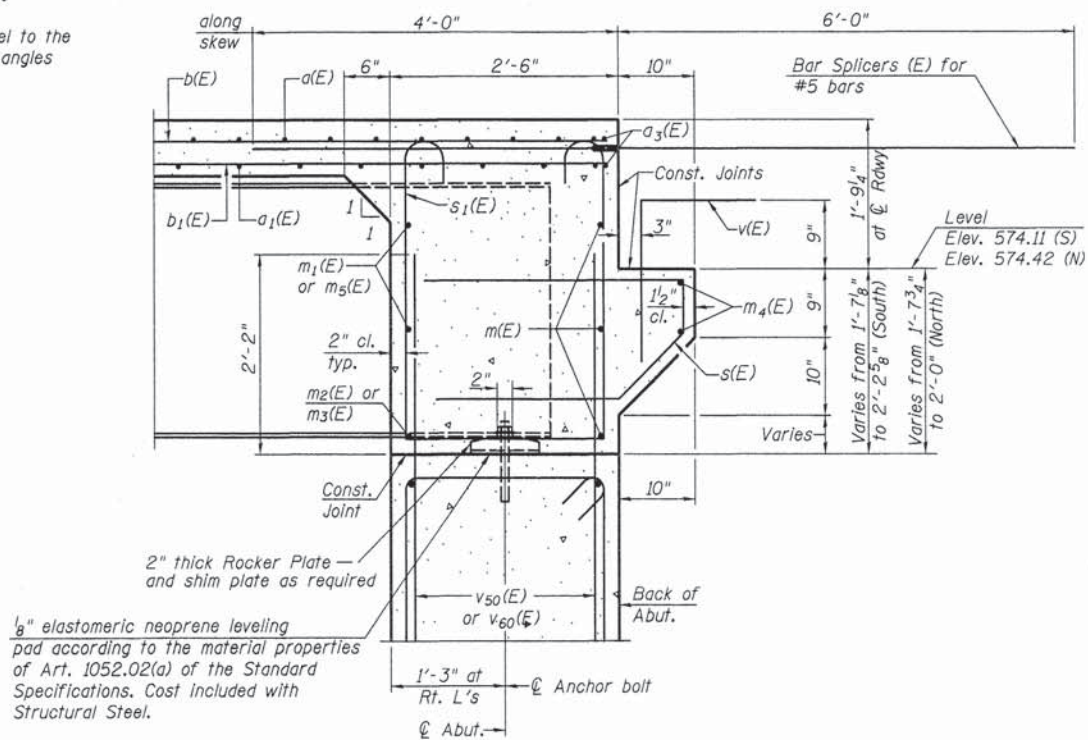
North abutment shown, South abutment similar.
(Looking North)

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 9 of 26.
Concrete in diaphragm is included with Concrete Superstructure on sheet 9 of 26.
The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
For anchor bolt details see sheet 16 of 26

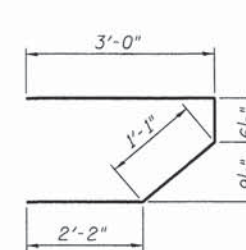
MIN. BAR LAP

#6 bar = 3'-4"

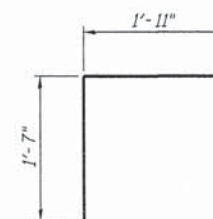


SECTION A-A

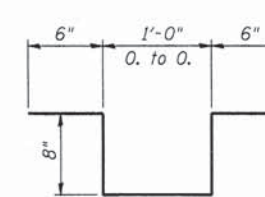
Dimensions at right angles to abutment, except as shown.



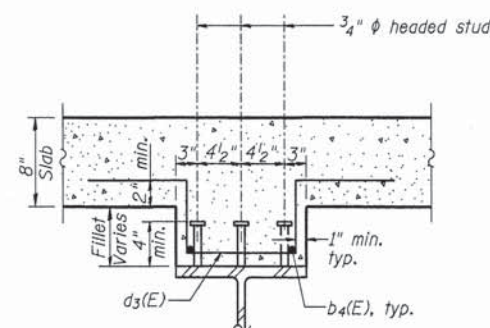
BAR s(E)



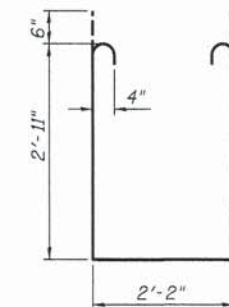
BAR v(E)



BAR d3(E)



SECTION B-B



BAR s1(E)

BRIDGE SHEET 8 OF 26

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DESIGNED	- BLT	REVISED	-
DRAWN	- JN /JSD	REVISED	-
CHECKED	- WDL	REVISED	-
DATE	- 07/16/2013	REVISED	-

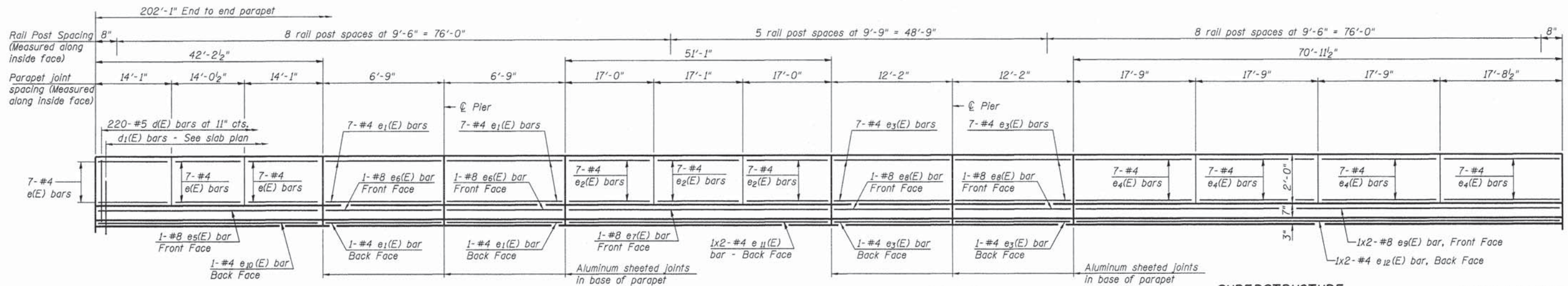
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 9331 SECTION 08-00050-01-GS
VENITA DRIVE OVER CSX RAILROAD
ST. CLAIR COUNTY

INTEGRAL ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NO. 082-6507

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	68
9336	08-00050-01-GS			
RAAI JOB NO. 40508 ILLINOIS FED. AID PROJECT / GCPF PROJECT				

CONTRACT NO. 97533



SOUTH ABUTMENT

PIER 1

PIER 2

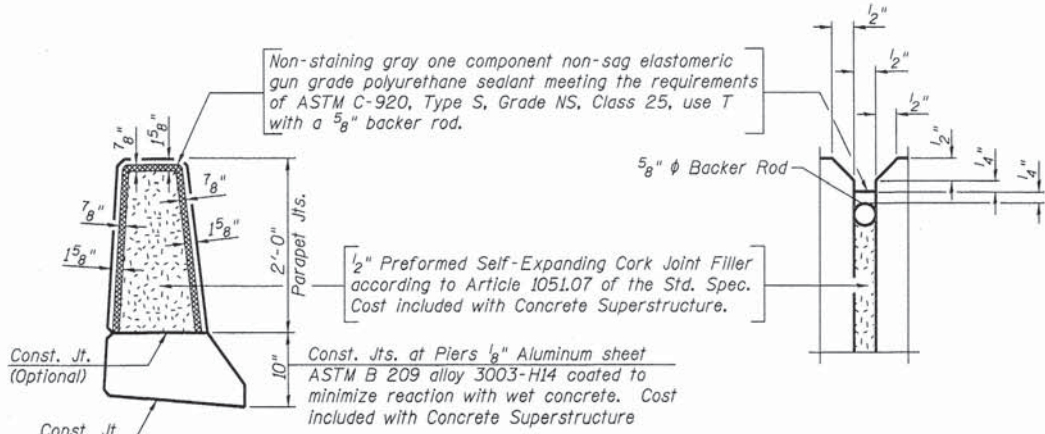
SUPERSTRUCTURE
BILL OF MATERIAL

NORTH ABUTMENT

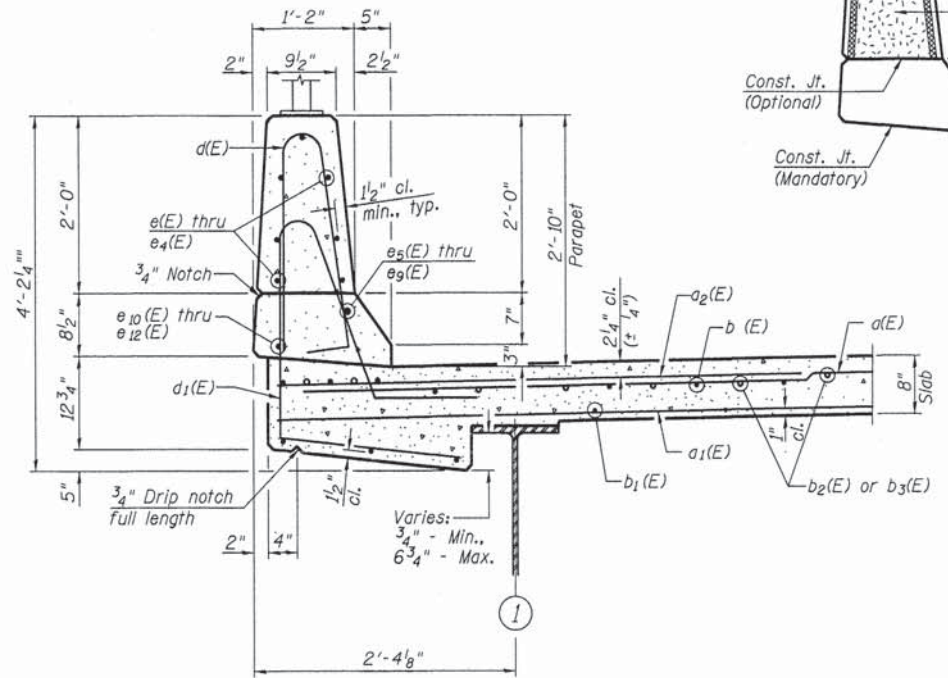
INSIDE ELEVATION OF WEST PARAPET
(Looking West)

MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"

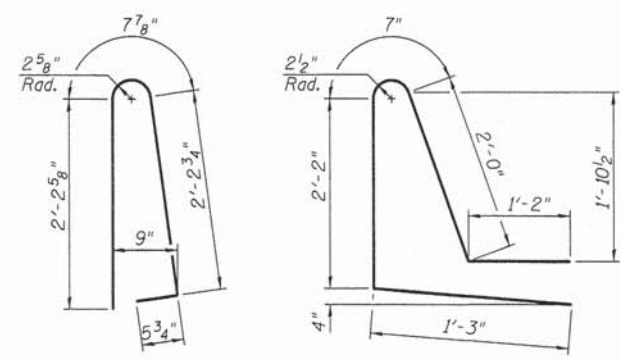
Bar	No.	Size	Length	Shape
a(E)	404	#5	38'-7"	—
a1(E)	242	#5	37'-9"	—
a2(E)	385	#6	6'-6"	—
a3(E)	4	#5	39'-8"	—
b(E)	400	#5	27'-6"	—
b1(E)	217	#5	31'-1"	—
b2(E)	39	#6	30'-6"	—
b3(E)	39	#6	50'-0"	—
b4(E)	24	#4	30'-4"	—
c(E)	202	#5	3'-10"	U
c1(E)	202	#5	7'-3"	—
d(E)	220	#5	5'-7"	—
d1(E)	220	#5	7'-2"	—
d2(E)	440	#5	4'-4"	—
d3(E)	372	#4	3'-4"	—
d20(E)	220	#5	2'-3"	—
e(E)	21	#4	13'-9"	—
e1(E)	16	#4	6'-5"	—
e2(E)	21	#4	16'-8"	—
e3(E)	16	#4	11'-10"	—
e4(E)	28	#4	17'-5"	—
e5(E)	1	#8	41'-10"	—
e6(E)	2	#8	6'-5"	—
e7(E)	1	#8	50'-9"	—
e8(E)	2	#8	11'-10"	—
e9(E)	2	#8	37'-10"	—
e10(E)	1	#4	41'-10"	—
e11(E)	2	#4	26'-5"	—
e12(E)	2	#4	36'-3"	—
e20(E)	18	#4	13'-9"	—
e21(E)	12	#4	6'-5"	—
e22(E)	18	#4	16'-8"	—
e23(E)	12	#4	11'-10"	—
e24(E)	24	#4	17'-5"	—
m(E)	6	#6	40'-0"	—
m1(E)	16	#6	10'-6"	—
m2(E)	10	#6	6'-8"	—
m3(E)	4	#6	2'-0"	—
m4(E)	4	#6	33'-11"	—
m5(E)	8	#6	7'-8"	—
s(E)	68	#5	6'-10"	U
s1(E)	72	#4	9'-0"	—
v(E)	62	#5	3'-6"	—
Reinforcement Bars, Epoxy Coated		Pound	66,580	
Concrete Superstructure		Cu. Yds.	337.9	



PARAPET JOINT DETAILS



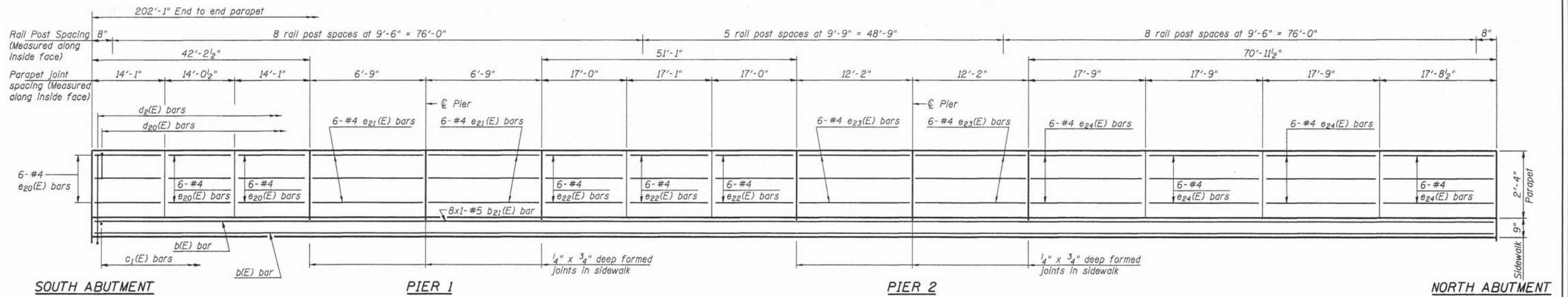
SECTION THRU PARAPET



BAR d(E)

BAR d1(E)

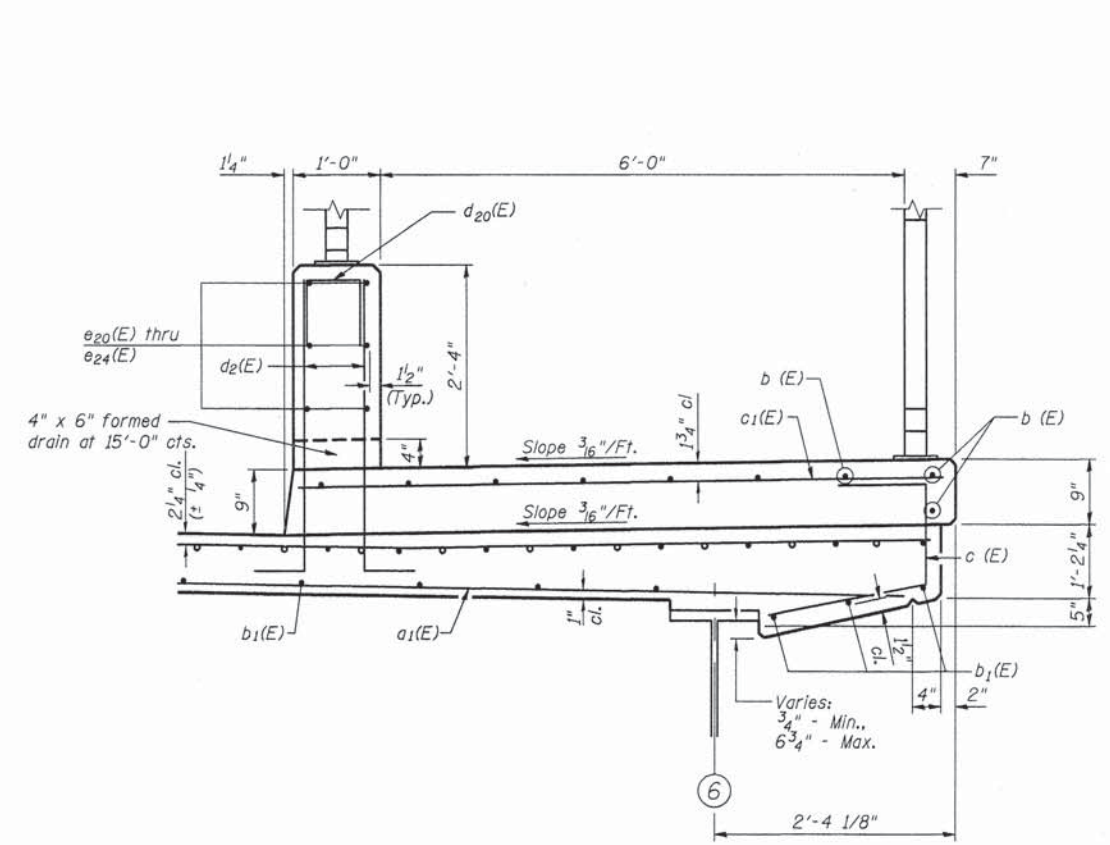
Bars indicated thus: 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.
Reinforcement bars designated (E) shall be epoxy coated.



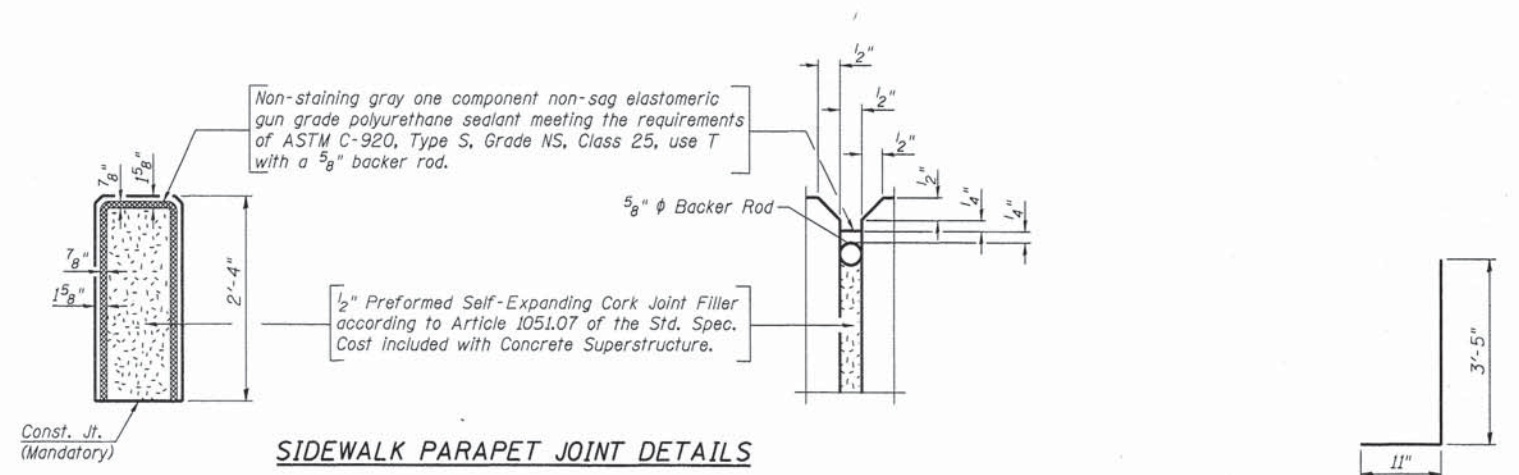
ELEVATION OF EAST SIDEWALK PARAPET
(Looking West)

Bars indicated thus: 1x2-#5 etc. indicates 1 line of bars with 2 lengths per line.
Reinforcement bars designated (E) shall be epoxy coated.

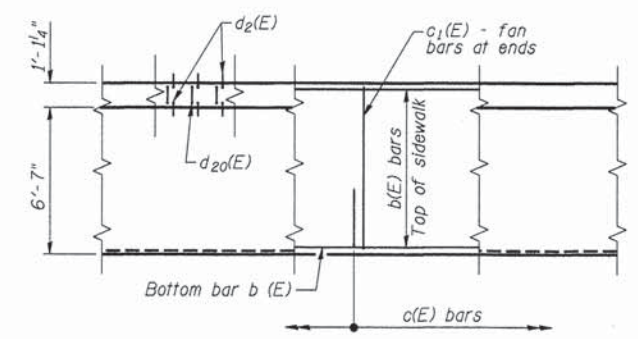
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"
#5 bar = 2'-6"



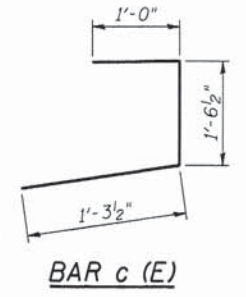
SECTION THRU PARAPET



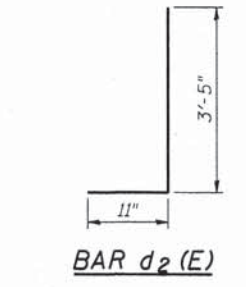
SIDEWALK PARAPET JOINT DETAILS



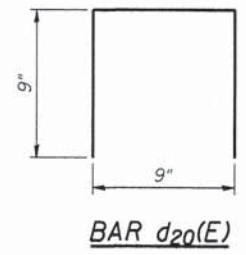
PARAPET/SIDEWALK PLAN



BAR c (E)

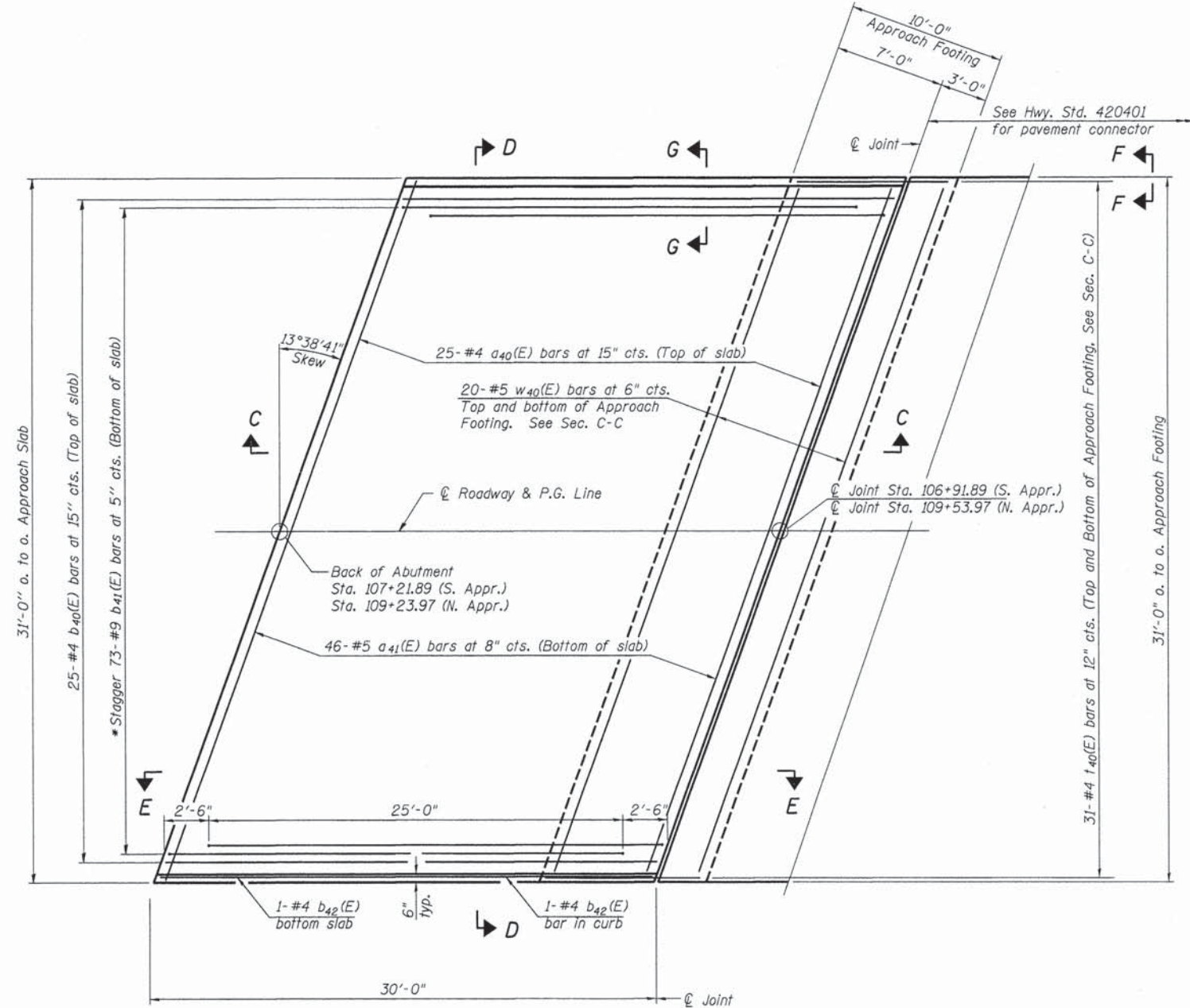


BAR d2 (E)



BAR d20 (E)

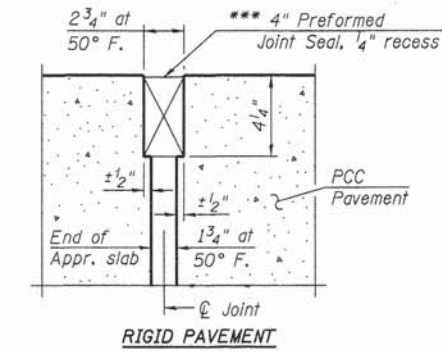
Notes:
 See sheet 12 of 26 for Sections C-C & D-D and View E-E.
 a₄₀(E) and a₄₁(E) bar spacings measured along \varnothing Rdwy.
 See sheet 12 of 26 for approach slab Bill of Materials and bar details.



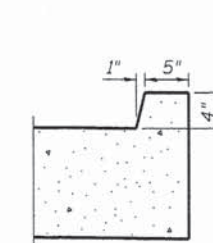
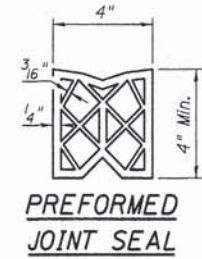
PLAN

* Tilt b₄₁(E) bars as required to maintain clearance.

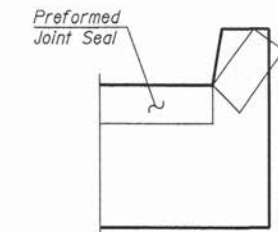
*** Cost included with Concrete Superstructure.



DETAIL H



VIEW G-G

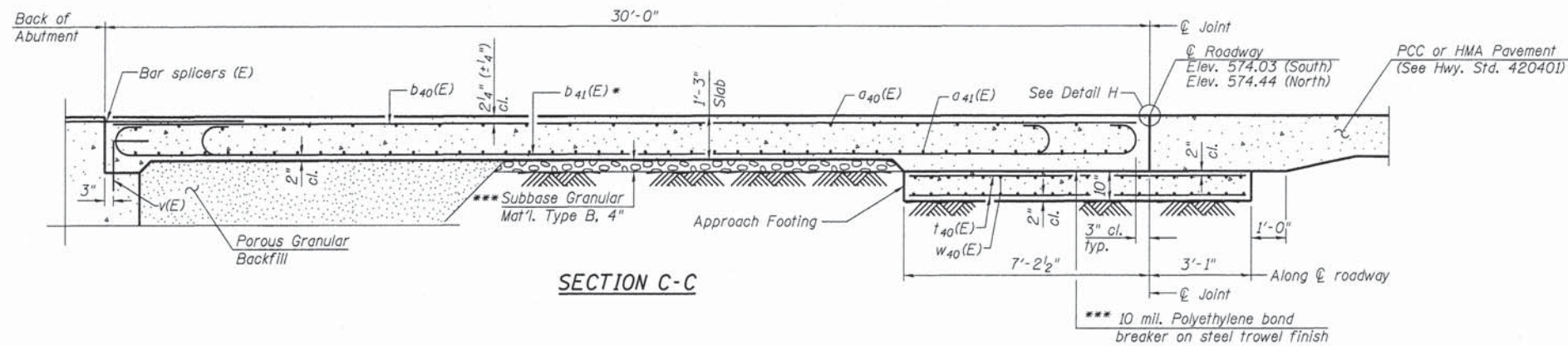


VIEW F-F

Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.

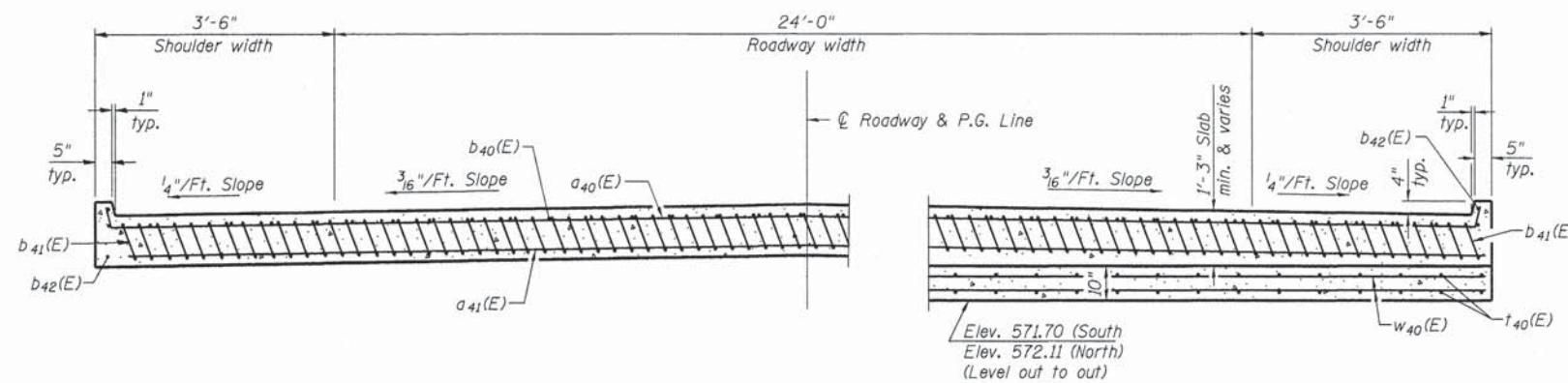
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DRAWN -	JN	REVISED -	
CHECKED -	WDL	REVISED -	
DATE -	07/16/2013	REVISED -	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	71
9336	08-00050-01-GS			
RAAI JOB NO. 40508 ILLINOIS			CONTRACT NO. 97533	
			FED. AID PROJECT / GCPF PROJECT	



Notes:

- See sheet 11 of 26 for Detail H.
- Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
- Approach footing concrete shall be paid for as Concrete Structures.
- Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- For v(E) bar details, see sheet 8 of 26.
- The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- For bar splicer details, see sheet 22 of 26.
- Cost of excavation for approach footing included with Concrete Structures.
- For Porous Granular Backfill and drainage treatment details, see sheet 2 of 26.

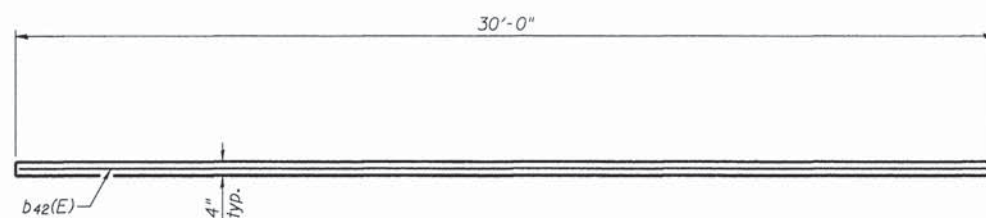


- * Tilt b41(E) bars as required to maintain clearance.
- *** Cost included with Concrete Superstructure.

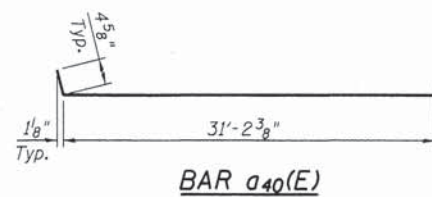
NEAR ABUTMENT

SECTION D-D
(See Plan for dimensions not shown)

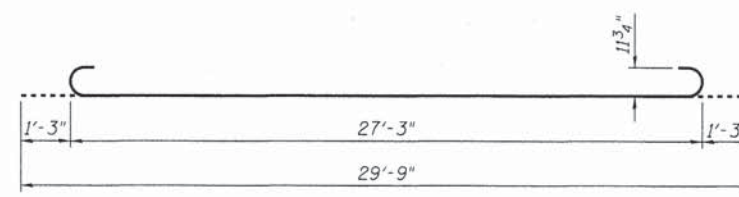
AT APPROACH FOOTING



VIEW E-E



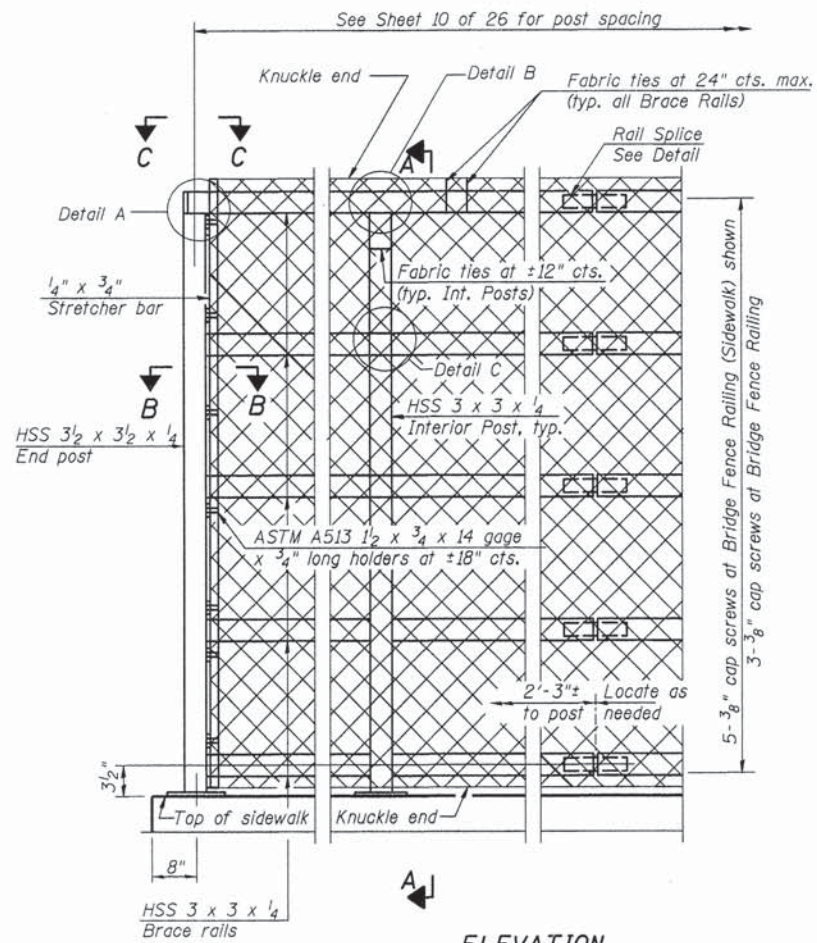
BAR a40(E)



BAR b41(E)

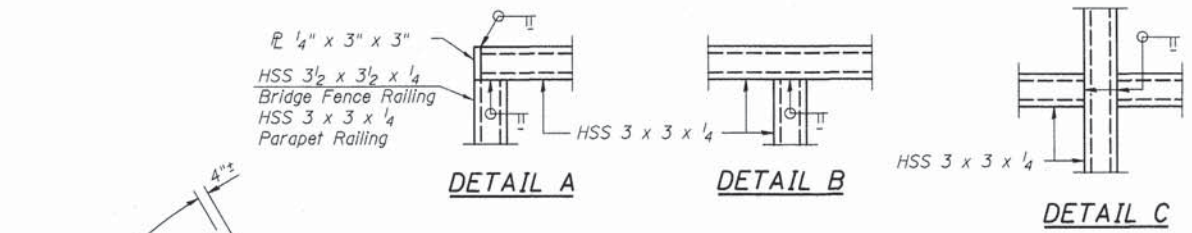
**TWO APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a40(E)	50	#4	32'-0"	—
a41(E)	92	#5	31'-6"	—
b40(E)	50	#4	29'-8"	—
b41(E)	146	#9	29'-9"	—
b42(E)	8	#4	29'-8"	—
t40(E)	124	#4	10'-0"	—
w40(E)	80	#5	31'-6"	—
Concrete Superstructure		Cu. Yd.	95.4	
Concrete Structures		Cu. Yd.	19.8	
Reinforcement Bars, Epoxy Coated		Pound	23,470	

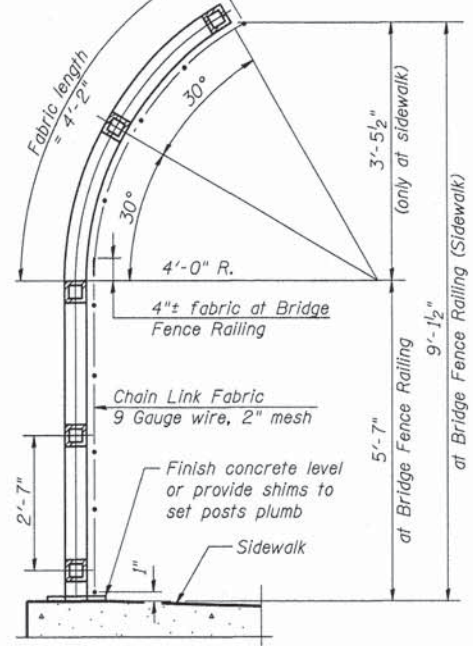


ELEVATION

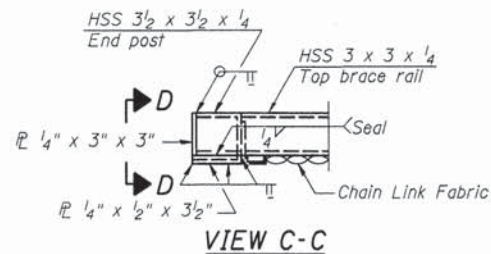
(Inside Face)
Bridge Fence Railing (Sidewalk) Shown
Bridge Fence Railing Similar



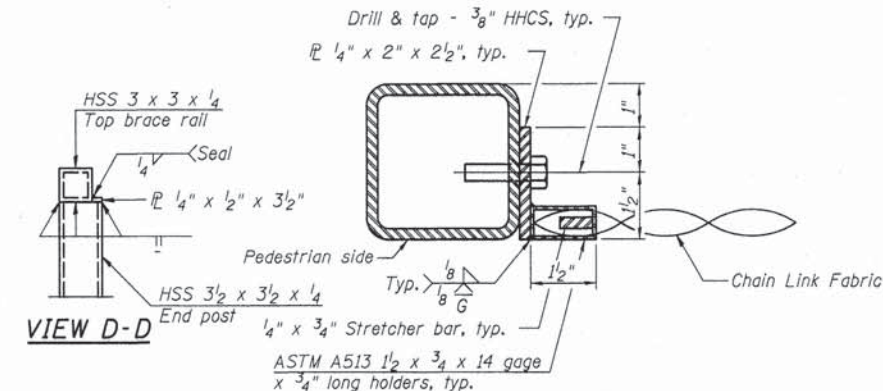
All post, railing, splices, anchor devices, and plates shall be painted black. See sheet 2 or 26 for Paint system.



SECTION A-A

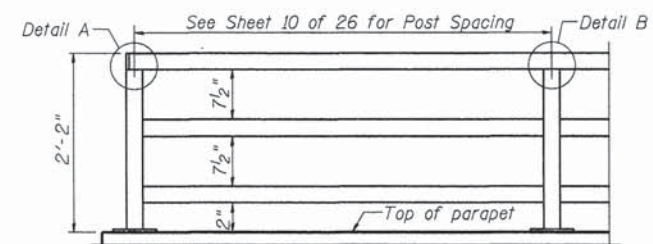


VIEW C-C

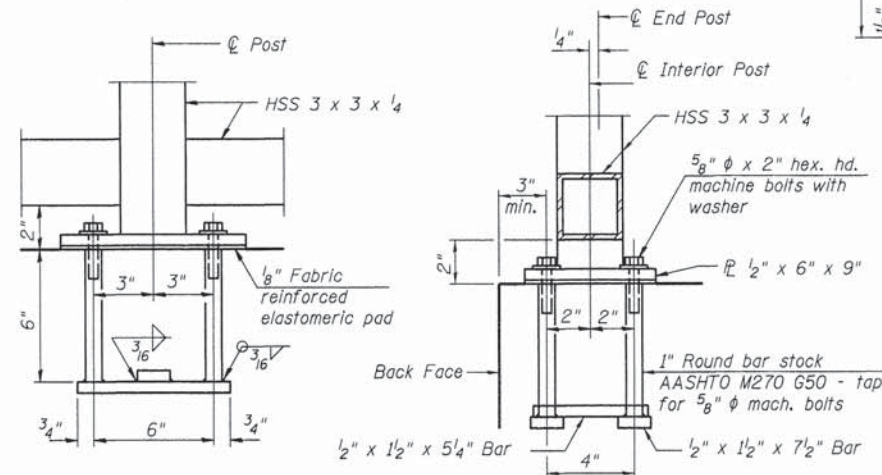


VIEW D-D

SECTION E-E

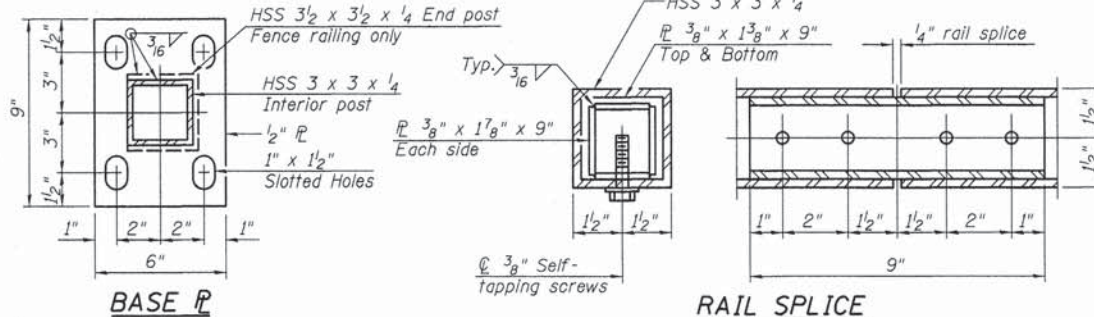


PARAPET RAILING ELEVATION
(Inside Face of Three Element Rail)



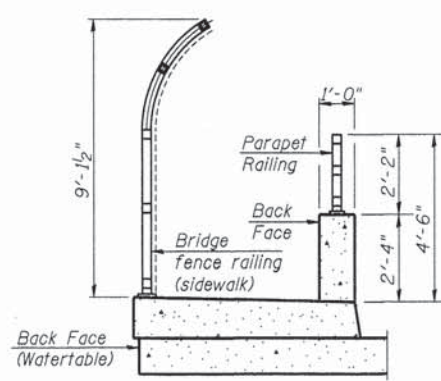
ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 5/8" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

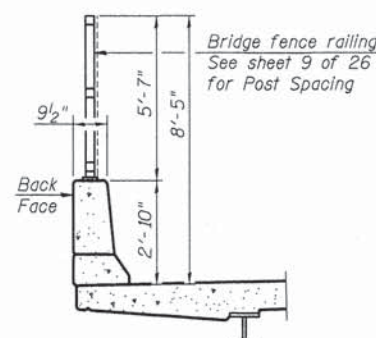


BASE

RAIL SPLICE



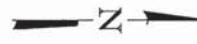
SECTION THRU SIDEWALK



SECTION THRU DECK

BILL OF MATERIAL

Item	Unit	Quantity
Bridge Fence Railing (Sidewalk)	Foot	201
Parapet Railing	Foot	201
Bridge Fence Railing	Foot	201



NOTES

All beams, plates, and splices shall be A.A.S.H.T.O. M270, Grade 50 steel (N.T.R.).

All channel diaphragms and angle connections shall be A.A.S.H.T.O. M270, Grade 36.

"N.T.R." Denotes notch toughness requirements. Structural steel designated with (N.T.R.) shall conform to the supplemental requirements for notch toughness (Zone 2). These components are the beams and all splice plate materials of the steel beams.

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

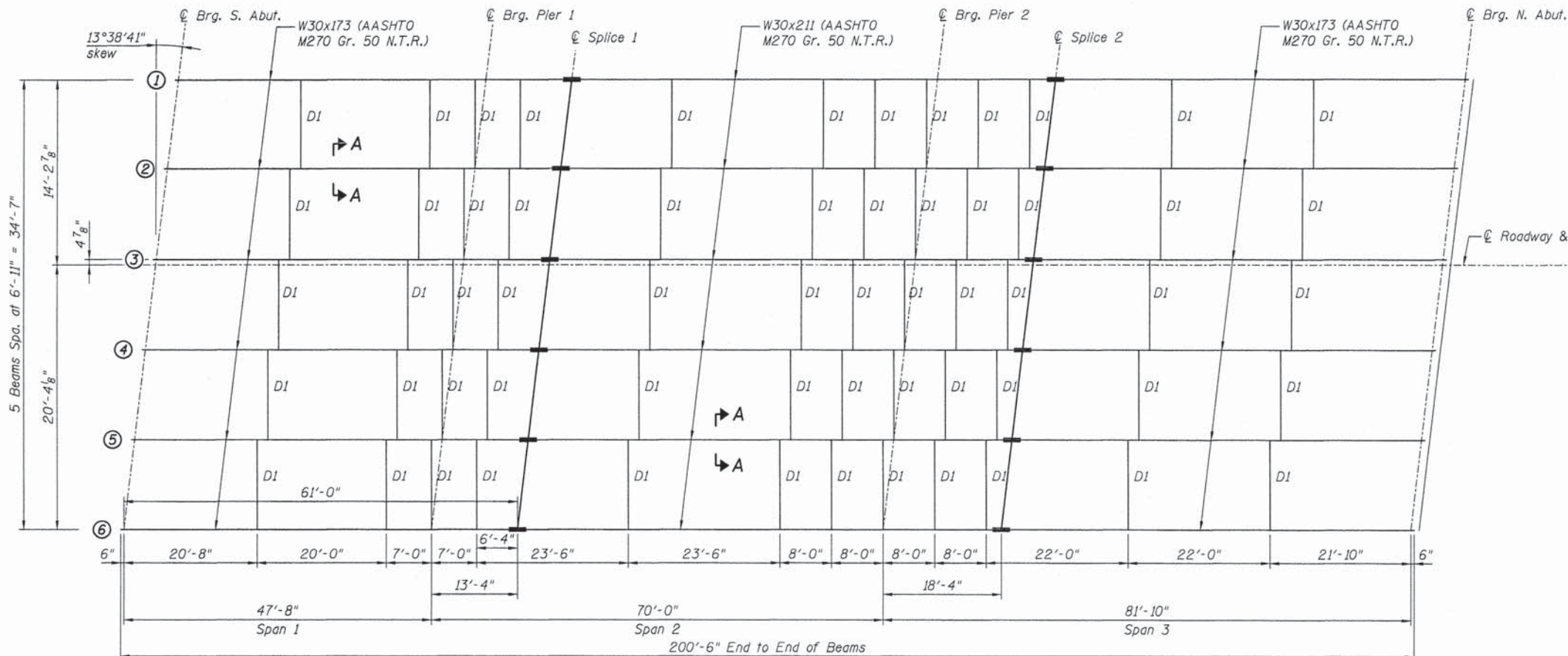
TOP OF BEAM ELEVATIONS BEFORE DEFLECTIONS

(For Fabrication Only)
(Does not include Dead Load Deflection)

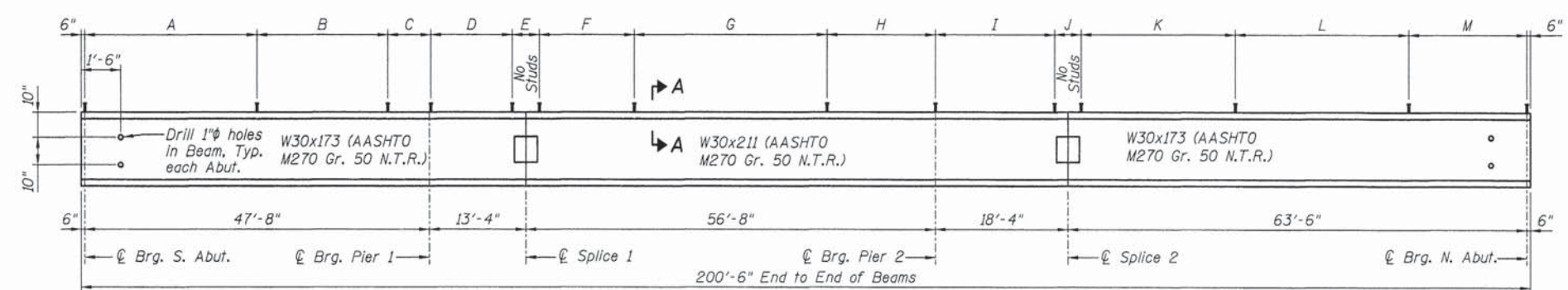
LOCATION	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6
⊙ Brg. S. Abut.	575.175	575.208	575.227	575.042	574.835	574.598
⊙ Pier 1	576.819	576.893	576.954	576.811	576.645	576.449
⊙ Splice	577.279	577.365	577.437	577.305	577.151	576.967
⊙ Pier 2	577.318	577.453	577.575	577.492	577.387	577.252
⊙ Splice	577.330	577.481	577.619	577.552	577.463	577.344
⊙ Brg. N. Abut.	575.128	575.334	575.527	575.515	575.482	575.418

STUD SHEAR CONNECTORS

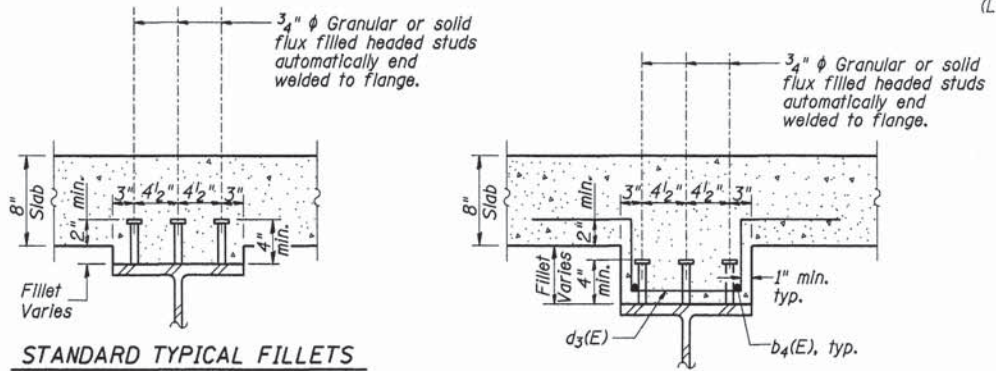
Location	Spaces	Spacing	Distance	Studs	Total
A	44	6 1/2"	23'-10"	45	810
B	31	7"	18'-1"	31	558
C	11	6 1/2"	5'-11 1/2"	11	198
D	27	5"	11'-3"	27	486
E	-	-	3'-9"	-	-
F	21	7 1/2"	13'-1 1/2"	22	396
G	32	10"	26'-8"	32	576
H	30	6"	15'-0"	30	540
I	36	5 1/2"	16'-6"	36	648
J	-	-	3'-8"	-	-
K	32	8"	21'-4"	33	594
L	32	9"	24'-0"	32	576
M	28	7"	16'-4"	28	504
				Total	5886



FRAMING PLAN



BEAM ELEVATION
(Looking West)



SECTION A-A
(See sht. 7 of 26 for locations and additional information)

RHUTASEL and ASSOCIATES, INC.
CONSULTING ENGINEERS • LAND SURVEYORS
CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
ILLINOIS DESIGN FIRM LICENSE NO. 184-000297

DESIGNED - TML/BLT	REVISED -
DRAWN - JN	REVISED -
CHECKED - WDL	REVISED -
DATE - 07/16/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 9331 SECTION 08-00050-01-GS
VENITA DRIVE OVER CSX RAILROAD
ST. CLAIR COUNTY

FRAMING PLAN AND BEAM DETAILS
STRUCTURE NO. 082-6507

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	74
9336	08-00050-01-GS			
RAAI JOB NO. 40508	ILLINOIS	FED. AID PROJECT / GCPF PROJECT		

MOMENT TABLE NOTES

- I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in.⁴ and in.³).
- $I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to short-term composite live loads (in.⁴ and in.³).
- $I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads (in.⁴ and in.³).
- $I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite dead loads (in.⁴ and in.³).
- DC1: Un-factored non-composite dead load (kips/ft.).
- M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
- DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
- M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
- DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
- M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
- M_{ℓ + IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
- M_u (Strength I): Factored design moment (kip-ft.).
1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{ℓ + IM}
- φ_rM_n: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
- φ_rM_{nc}: Compact composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
- f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
M_{DC1} / S_{nc}
- f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
M_{DC2} / S_{c(3n)} or M_{DC2} / S_{c(cr)} as applicable.
- f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
M_{DW} / S_{c(3n)} or M_{DW} / S_{c(cr)} as applicable.
- f_s (ℓ+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
M_{ℓ + IM} / S_{c(3n)} or M_{ℓ + IM} / S_{c(cr)} as applicable.
- f_s (Service II): Sum of stresses as computed below (ksi).
f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_{s(ℓ + IM)}
- 0.95R_nF_{yf}: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
- V_r: Maximum factored shear range in composite portion of span computed according to Article 6.10.10.

INTERIOR BEAM MOMENT TABLE						
	0.4 Sp. 1	Pier 1	0.5 Span 2	Pier 2	0.6 Span 3	
I _s	(in⁴)	8,230	8,230	10,300	10,300	8,230
I _c (n)	(in⁴)	19,740	19,740	23,460	23,460	19,740
I _c (3n)	(in⁴)	14,478	14,478	17,098	17,098	14,478
I _c (cr)	(in⁴)	10,519	10,519	12,701	12,701	10,519
S _s	(in³)	541.4	541.4	666.7	666.7	541.4
S _c (n)	(in³)	743.4	743.4	902.2	902.2	743.4
S _c (3n)	(in³)	675.1	675.1	815.7	815.7	675.1
S _c (cr)	(in³)	600.4	600.4	729.0	729.0	600.4
DC1	(k/')	0.908	0.908	0.946	0.946	0.908
M _{DC1}	(k)	150.1	244.6	143.7	660.1	468.4
DC2	(k/')	0.285	0.285	0.285	0.285	0.285
M _{DC2}	(k)	47.6	75.5	42.0	200.8	148.8
DW	(k/')	0.25	0.25	0.25	0.25	0.25
M _{DW}	(k)	41.7	66.3	36.9	176.1	130.5
M _{ℓ + IM}	(k)	531.6	528.1	661.5	931.0	941.5
M _u (Strength I)	(k)	1239	1,423	1,445	2,969	2,615
φ _r M _n , φ _r M _{nc}	(k)	3570	2498	4,342	3,080	3,570
f _s DC1	(ksi)	3.33	5.43	2.59	11.88	10.38
f _s DC2	(ksi)	0.85	1.51	0.62	3.31	2.64
f _s DW	(ksi)	0.74	1.33	0.54	2.90	2.32
f _s (ℓ+IM)	(ksi)	8.58	10.55	8.80	15.33	15.20
f _s (Service II)	(ksi)	16.08	21.99	15.19	38.02	35.10
0.95R _n F _{yf}	(ksi)	47.5	47.5	47.5	47.5	47.5
V _r	(k)	Lt. 40.8		Lt. 55.5		Lt. 52.5
	(k)	Rt. 43.0		Rt. 47.6		Rt. 46.4

*** Compact Section

INTERIOR BEAM REACTION TABLE					
	S. Abut.	Pier 1	Pier 2	N. Abut.	
R _{DC1}	(k)	16.5	53.5	84.8	29.2
R _{DC2}	(k)	5.2	16.6	25.9	9.2
R _{DW}	(k)	4.6	14.5	22.7	8.1
R _{ℓ + IM}	(k)	70.1	97.5	129.9	81.9
R _{Total}	(k)	96.4	182.1	263.3	128.4

Unfactored reactions

NOTES

All beams, plates, and splices shall be A.A.S.H.T.O. M270, Grade 50 steel (N.T.R.).

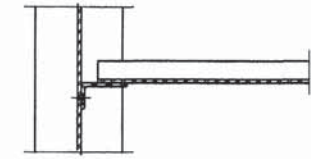
All channel diaphragms and angle connections shall be A.A.S.H.T.O. M270, Grade 36.

"N.T.R." Denotes notch toughness requirements. Structural steel designated with (N.T.R.) shall conform to the supplemental requirements for notch toughness (Zone 2). These components are the beams and all splice plate materials of the steel beams.

HS Bolts shall be 7/8" AASHTO M164/ASTM A325 for the splices and 3/4" AASHTO M164/ASTM A325 for the diaphragm connections

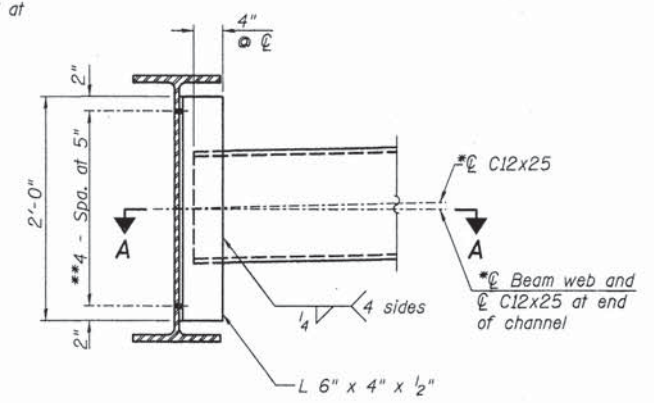
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

Two 1/8 in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

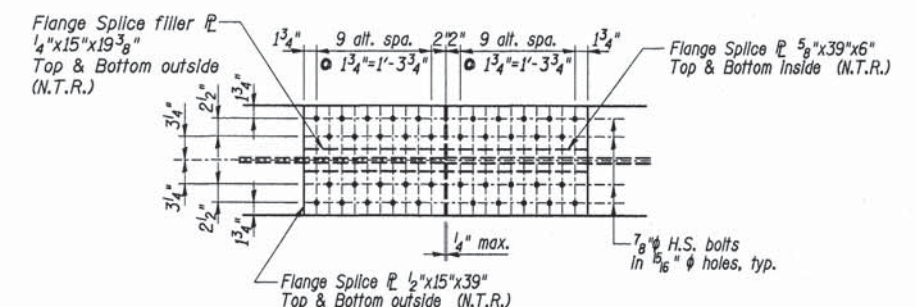


SECTION A-A

Diaphragm Note:
Two hardened washers required for each set of oversized holes.
*Alternate channels (C12x30) are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
The alternate, if utilized, shall be provided at no additional cost to the Department.
**3/4" φ HS bolts, 5/16" φ holes

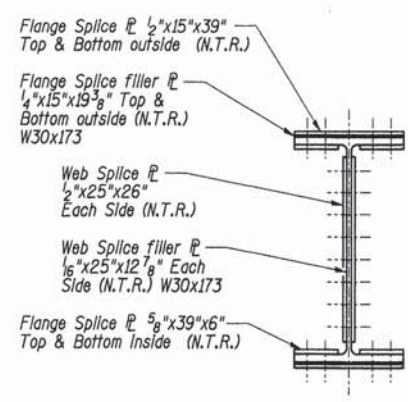


INTERIOR DIAPHRAGM D1
(60 Required)

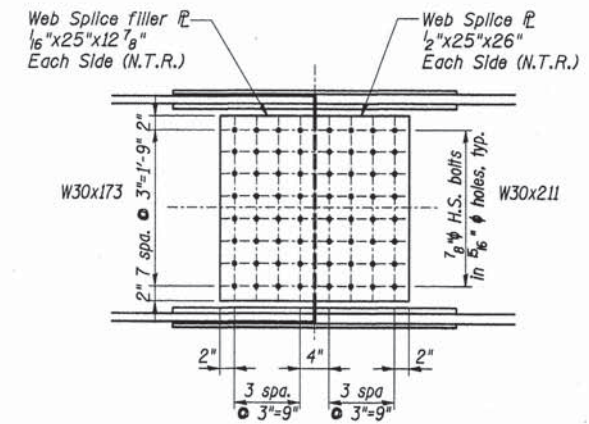


PLAN

(Typ. Top and Bot. Flange)



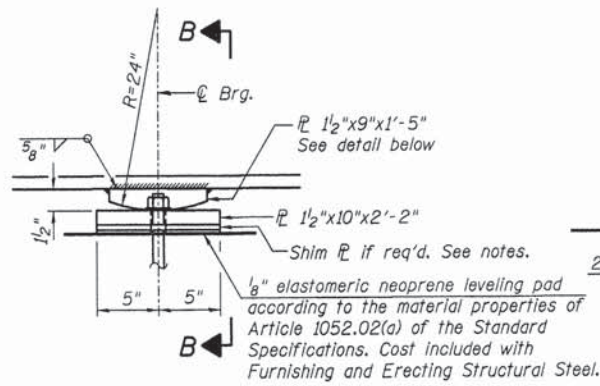
SECTION



ELEVATION

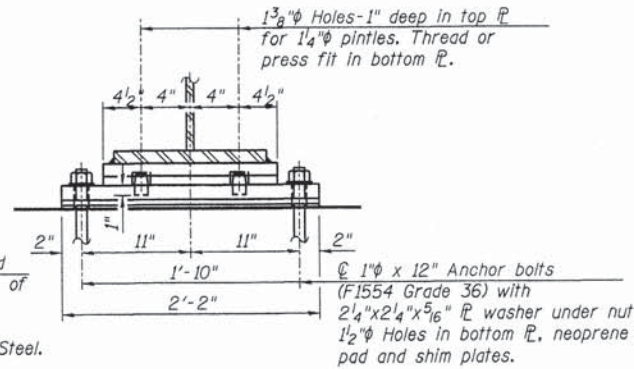
SPLICE - 1 AND 2 DETAIL

(12 Required)

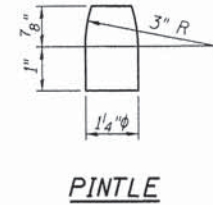


ELEVATION AT PIER 1

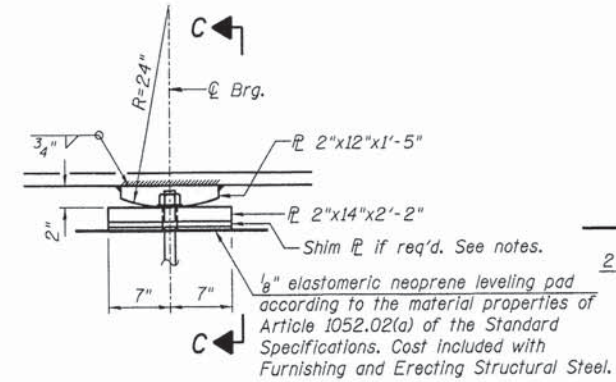
FIXED BEARING - PIER 1
(6 Required)



SECTION B-B

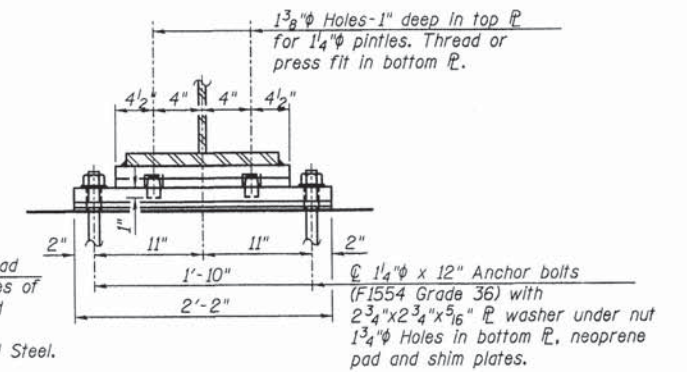


PINTLE

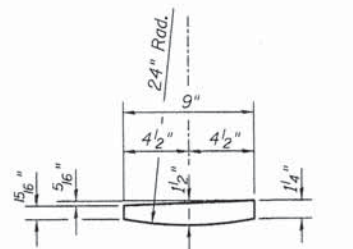


ELEVATION AT PIER 2

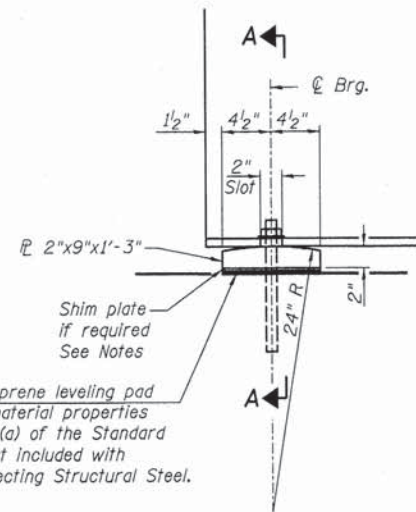
FIXED BEARING - PIER 2
(6 Required)



SECTION C-C

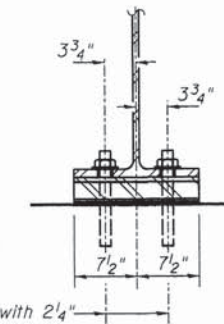


ROCKER DETAIL - PIER 1



ELEVATION AT ABUTMENT

FIXED BEARING - SOUTH AND NORTH ABUTMENT
(12 Required)



SECTION A-A

Notes:
Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

All plates and pintles shall be AASHTO M270, Grade 50.

The anchor bolt sizes and grades shown constitute a calculated seismic structural fuse. Substitution of higher diameter and/or grade anchor bolts will not be allowed.

Fixed bearing material is included in the lump sum cost of Furnishing and Erecting Structural Steel.

Two - 1/8" adjusting shims shall be provided for at each bearing in addition to all other plates or shims and placed as shown on bearing details.

1/8" elastomeric neoprene leveling pad according to the material properties of Article 1052.02(a) of the Standard Specifications. Cost included with Furnishing and Erecting Structural Steel.

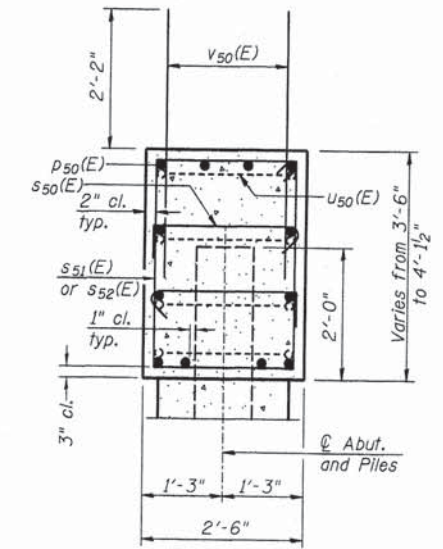
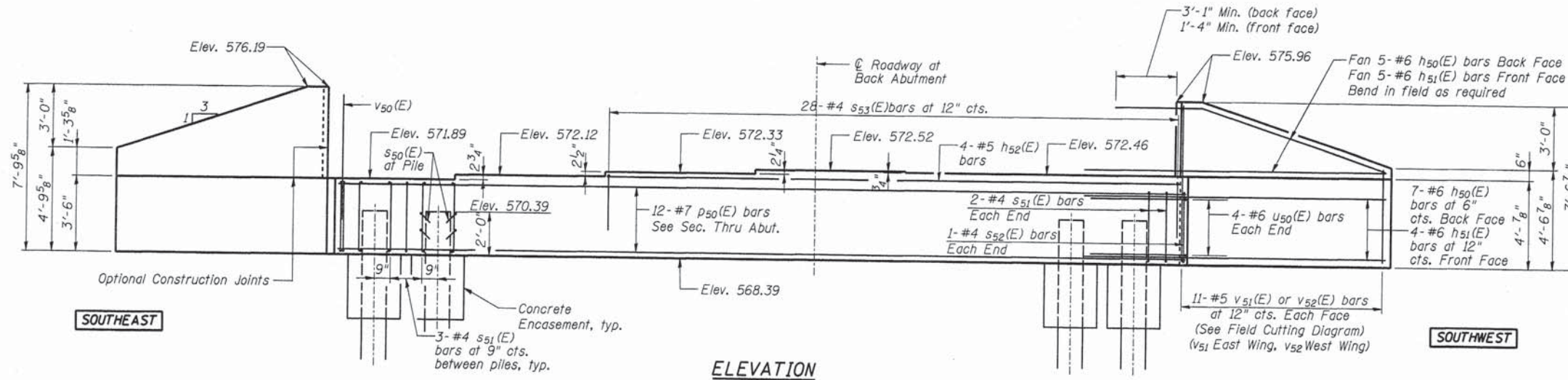
1" diameter x 12" anchor bolts with 2 1/4" x 2 1/4" x 5/16" washer under nut. 1 3/8" x 2" slotted hole in flange. 1/2" diameter holes in bearing plate, neoprene pad, and shim plates.

Shim Plates (In addition to construction tolerance shims.)
South Abutment: 1/2" x 9" x 1' - 3" at Beam 2
North Abutment: 5/8" x 9" x 1' - 3" at Beam 3
North Abutment: 3/8" x 9" x 1' - 3" at Beam 4

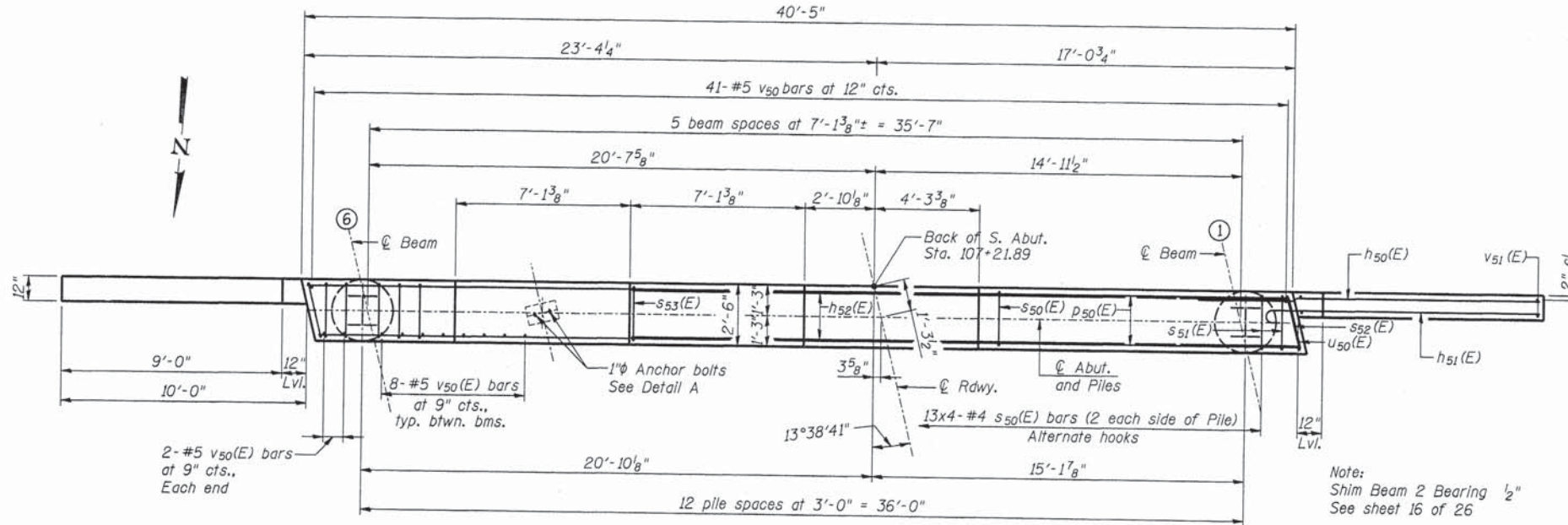
BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	36
Anchor Bolts, 1 1/4"	Each	12

Notes:
 Pour steps monolithically with cap.
 For details of piles and Concrete Encasement, see sheet 21 of 26.



SEC. THRU ABUT.



PLAN

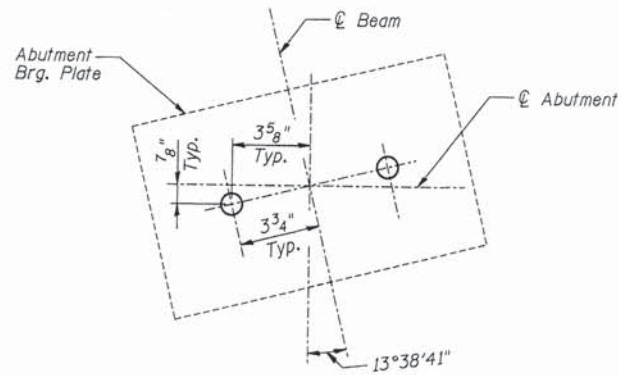
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h50(E)	24	#6	14'-3"	U
h51(E)	18	#6	12'-1"	U
h52(E)	4	#5	26'-9"	U
p50(E)	12	#7	40'-0"	—
s50(E)	52	#4	3'-3"	U
s51(E)	40	#4	11'-3"	U
s52(E)	2	#4	11'-5"	U
s53(E)	28	#4	7'-0"	U
u50(E)	8	#6	10'-3"	U
v50(E)	85	#5	5'-0"	—
v51(E)	11	#5	11'-0"	—
v52(E)	11	#5	11'-6"	—
Concrete Structures			Cu. Yd.	19.4
Reinforcement Bars, Epoxy Coated			Pound	3320
Furnishing - Piles, Steel HP14x117			Foot	1128
Driving Piles			Foot	1128
Test Pile, HP14x117			Each	1
Concrete Encasement			Cu. Yd.	7.1

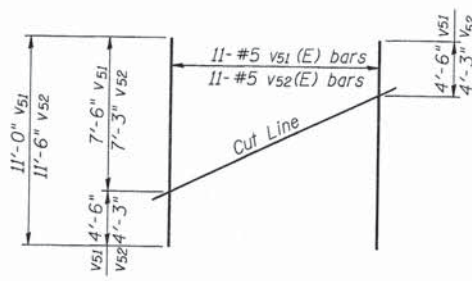
For details of piles and Concrete Encasement, see sheet 21 of 26.

PILE DATA

Type: Steel HP14x117
 Nominal Required Bearing: 929 kips
 Factored Resistance Available: 255 kips
 Estimated Length: 94'/pile
 No. Production Piles: 12
 No. Test Piles: 1

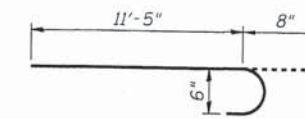


DETAIL A

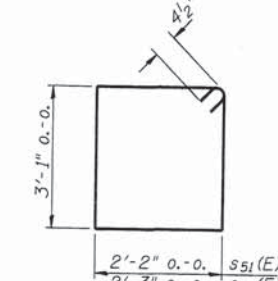


FIELD CUTTING DIAGRAM

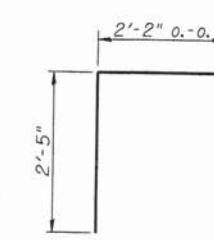
Order v51(E) & v52(E) full length. Cut as shown and use remainder of bars in opposite face.



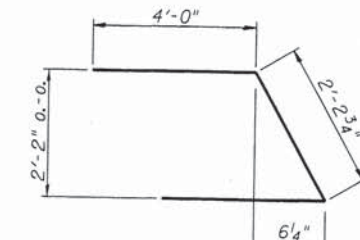
BARS h51(E)



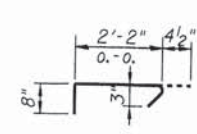
BARS s51(E) & s52(E)



BARS s53(E)

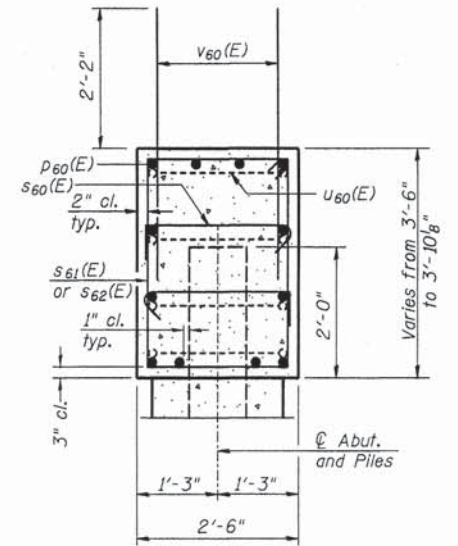
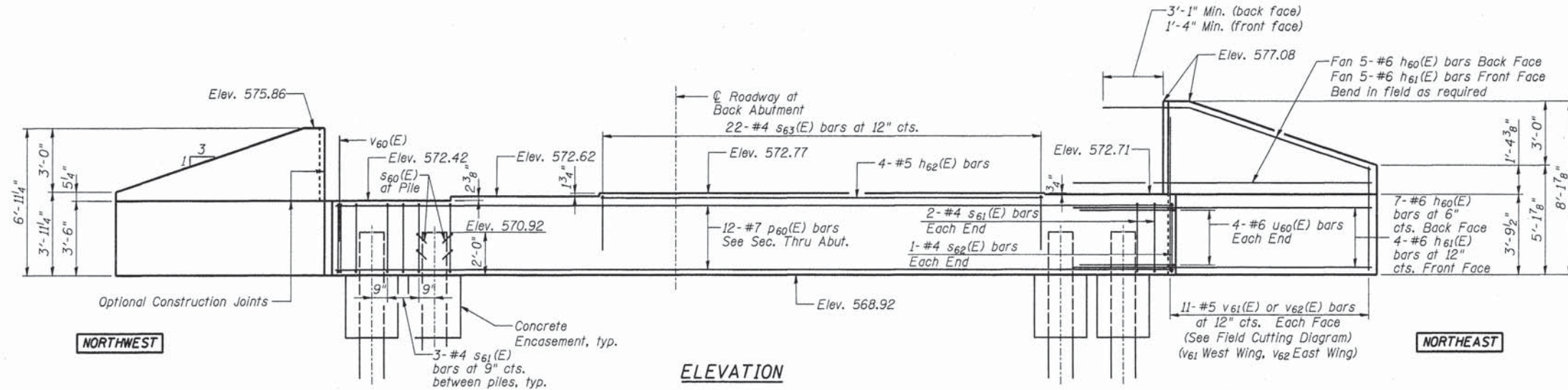


BAR u50(E)

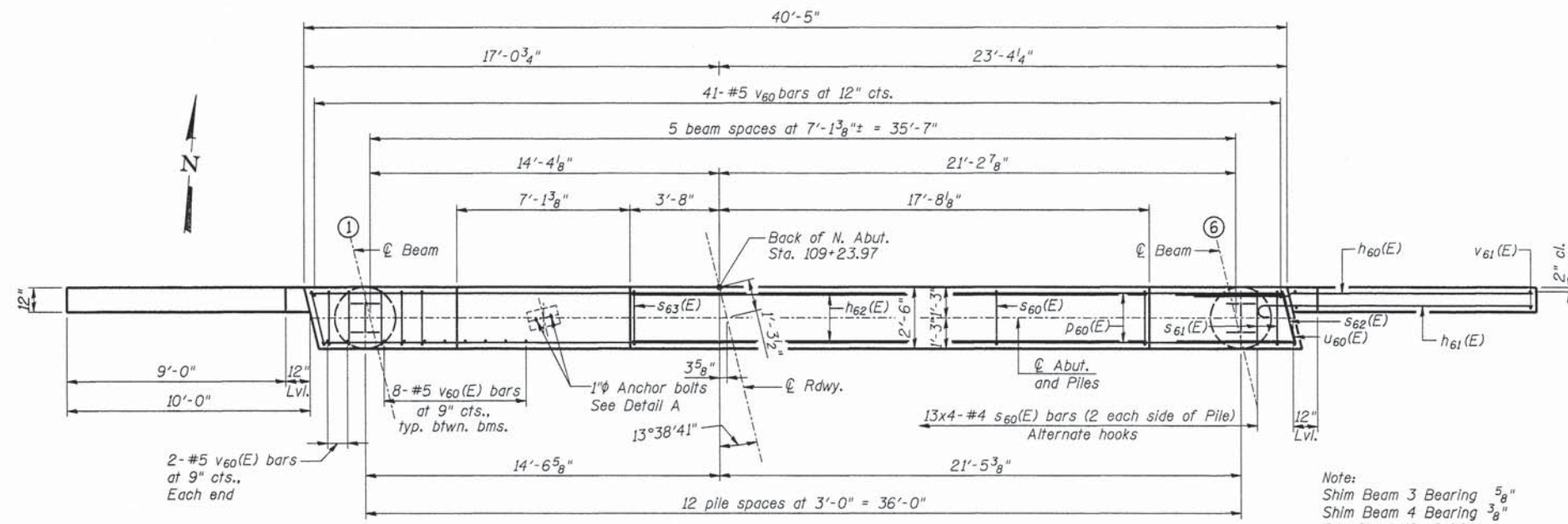


BAR s50(E)

Notes:
 Pour steps monolithically with cap.
 For details of piles and Concrete Encasement, see sheet 21 of 26.



SEC. THRU ABUT.



PLAN

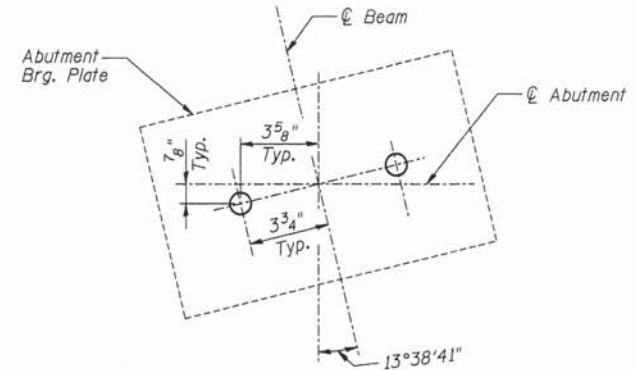
BILL OF MATERIAL

	No.	Size	Length	Shape
h60(E)	24	#6	14'-3"	—
h61(E)	18	#6	12'-1"	—
h62(E)	4	#5	21'-1"	—
p60(E)	12	#7	40'-0"	—
s60(E)	52	#4	3'-3"	—
s61(E)	40	#4	11'-3"	—
s62(E)	2	#4	11'-5"	—
s63(E)	22	#4	7'-0"	—
u60(E)	8	#6	10'-3"	—
v60(E)	85	#5	4'-8"	—
v61(E)	11	#5	10'-2"	—
v62(E)	11	#5	12'-8"	—
Concrete Structures		Cu. Yd.	18.7	
Reinforcement Bars, Epoxy Coated		Pound	3240	
Furnishing - Piles, Steel HP14x117		Foot	1152	
Driving Piles		Foot	1152	
Test Pile, HP14x117		Each	1	
Concrete Encasement		Cu. Yd.	7.1	

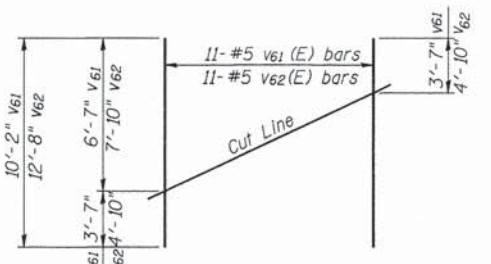
For details of piles and Concrete Encasement, see sheet 21 of 26.

PILE DATA

Type: Steel HP14x117
 Nominal Required Bearing: 916 kips
 Factored Resistance Available: 200 kips
 Estimated Length: 96'/pile
 No. Production Piles: 12
 No. Test Piles: 1

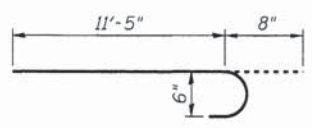


DETAIL A

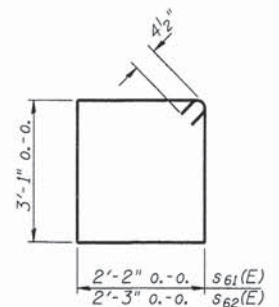


FIELD CUTTING DIAGRAM

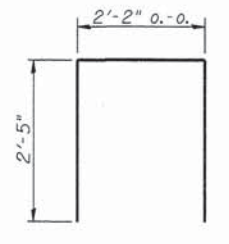
Order v61(E) & v62(E) full length. Cut as shown and use remainder of bars in opposite face.



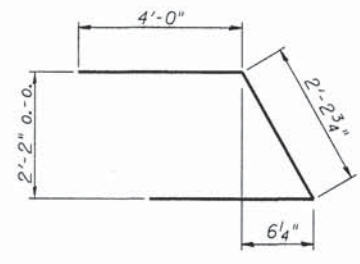
BARS h61(E)



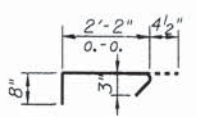
BARS s61(E) & s62(E)



BARS s63(E)



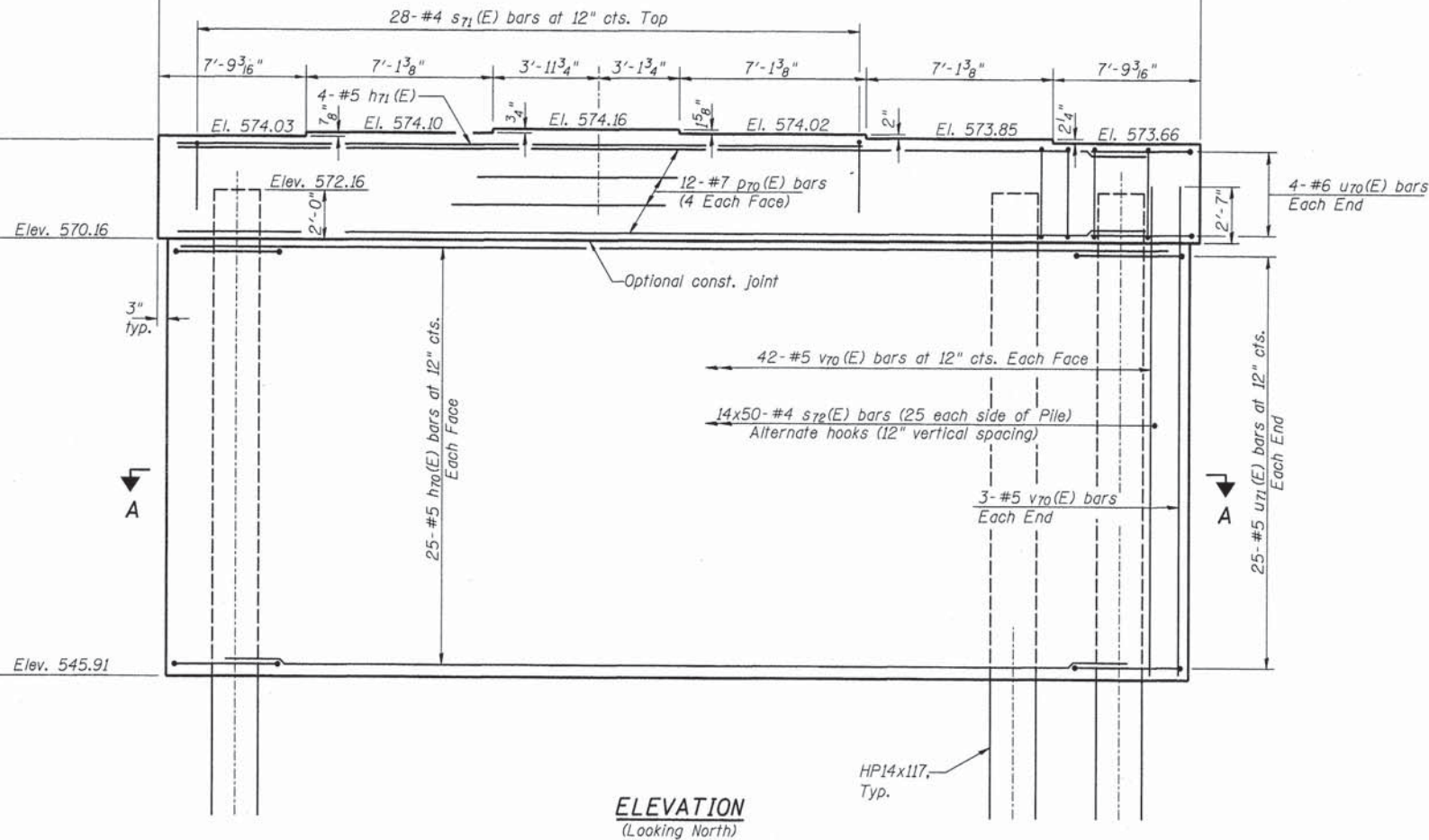
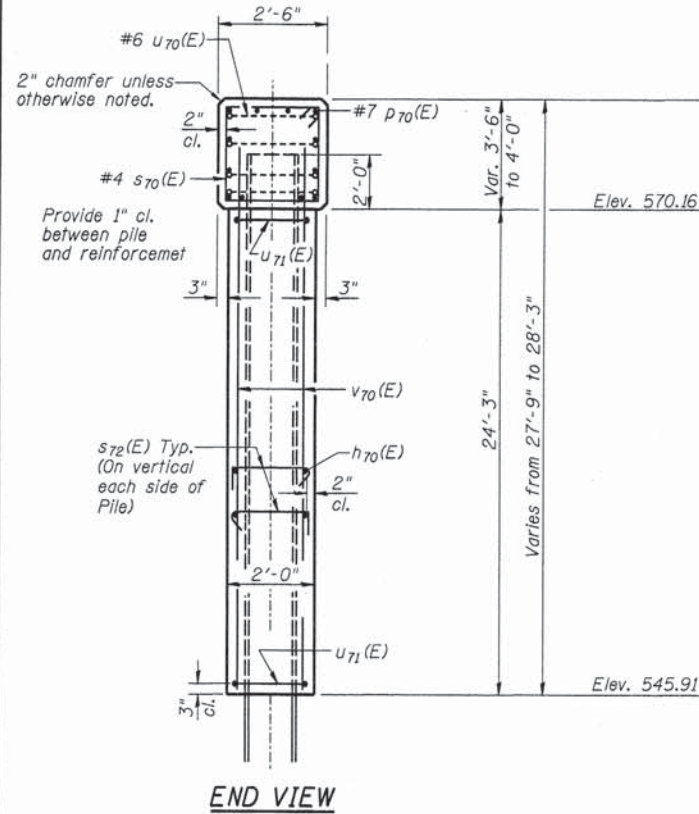
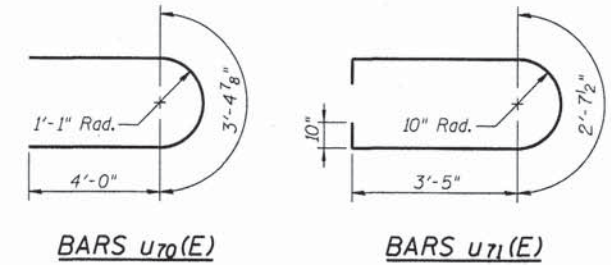
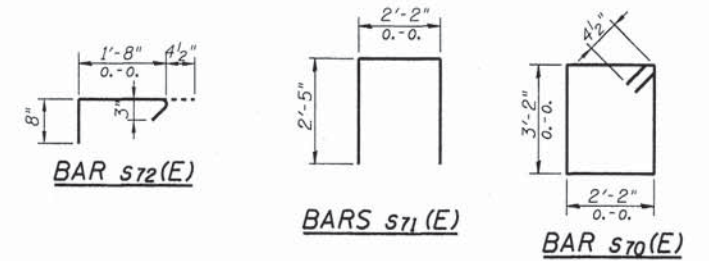
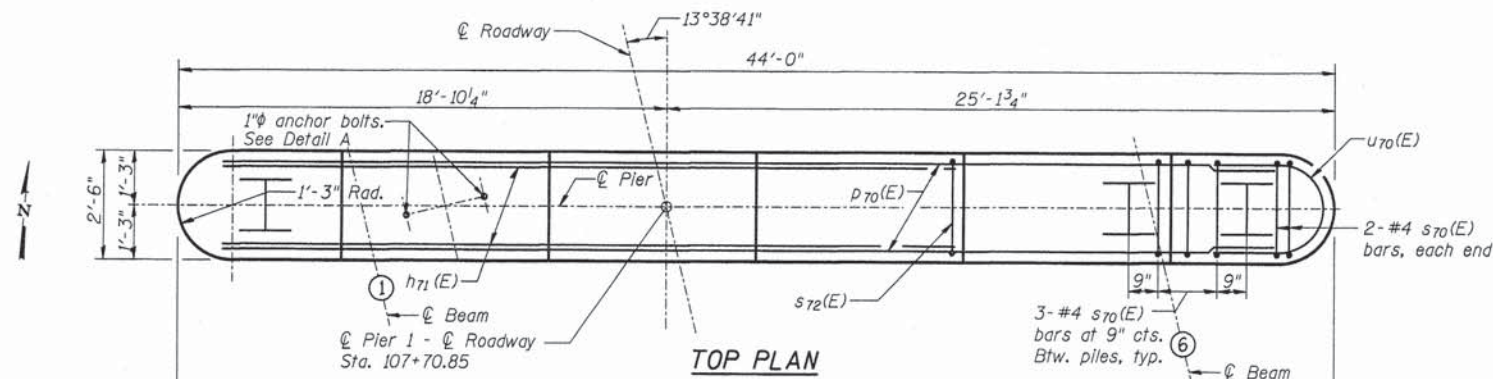
BAR u60(E)



BAR s60(E)

PILE DATA

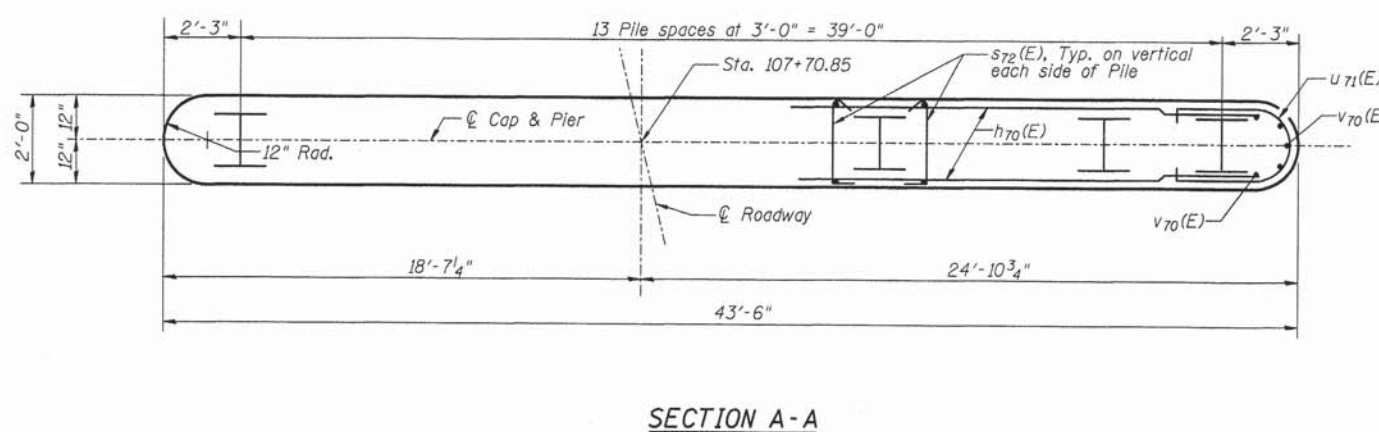
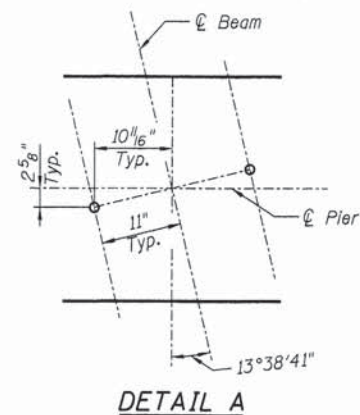
Type: Steel HP14x117
 Nominal Required Bearing: 313 kips
 Factored Resistance Available: 110 kips
 Est. Length: 66 Ft.
 No. Production Piles: 13
 No. Test Piles: 1



BILL OF MATERIAL

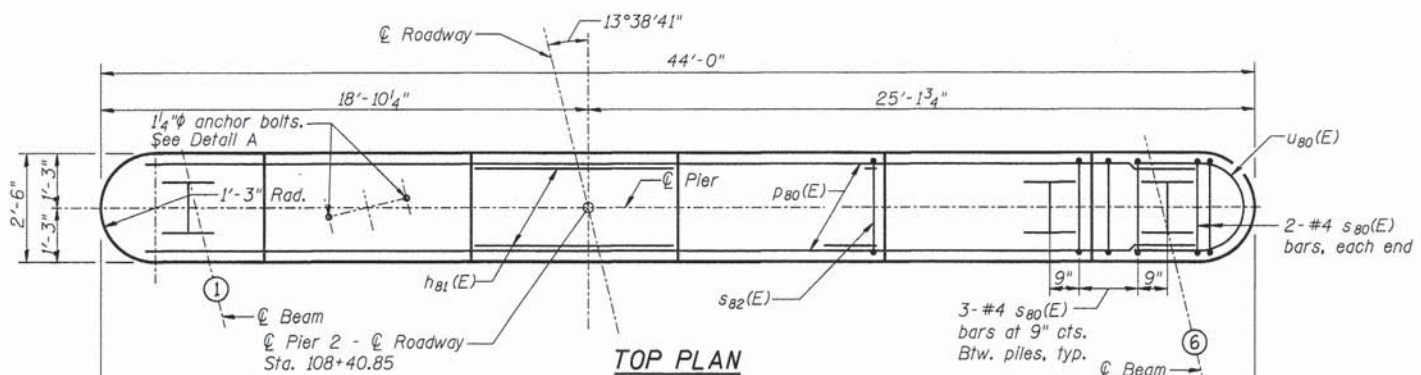
Bar	No.	Size	Length	Shape
h70	50	#5	41'-6"	—
h71	4	#5	27'-8"	—
p70	12	#7	41'-6"	—
s70	43	#4	11'-5"	□
s71	28	#4	7'-0"	□
s72	700	#4	2'-9"	┌
u70	8	#6	11'-5"	U
u71	50	#5	11'-2"	U
v70	90	#5	26'-8"	—
Structure Excavation		Cu. Yd.	32	
Concrete Structures		Cu. Yd.	92.7	
Reinforcement Bars, Epoxy Coated		Pound	8270	
Furnishing - Piles,		Foot	858	
Driving Piles		Foot	858	
Test Pile, Steel HP14x117		Each	1	

Notes:
 Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.
 For details of piles, see sheet 21 of 26.
 s72(E) bars shall enclose both the vertical and horizontal reinforcing bars. The position of the 90 and 135 degree hooked end shall be alternated between adjacent bars as shown, both vertically and horizontally.

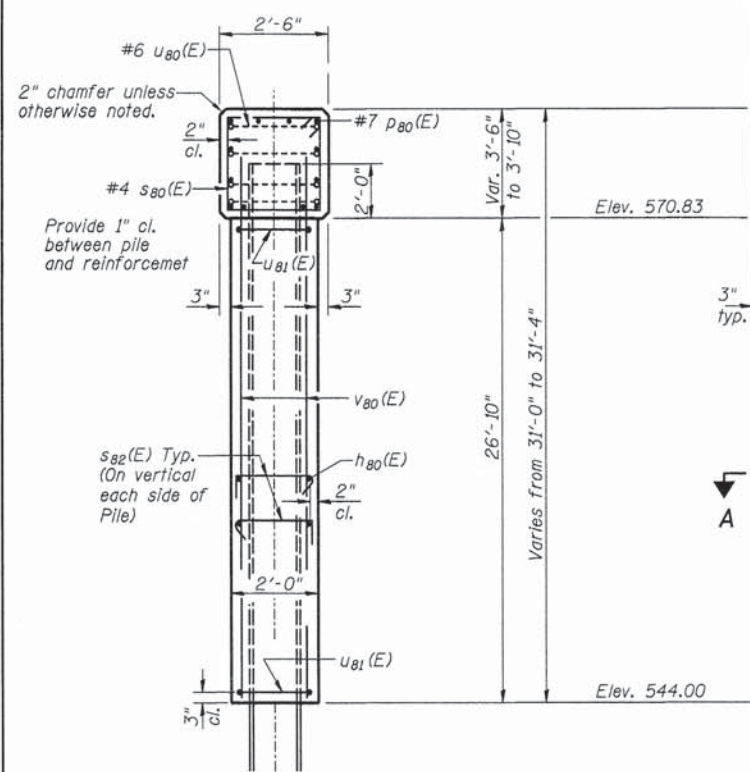
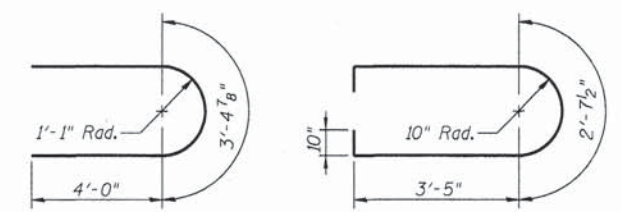
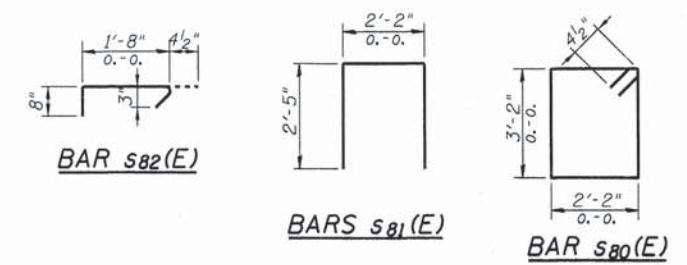


PILE DATA

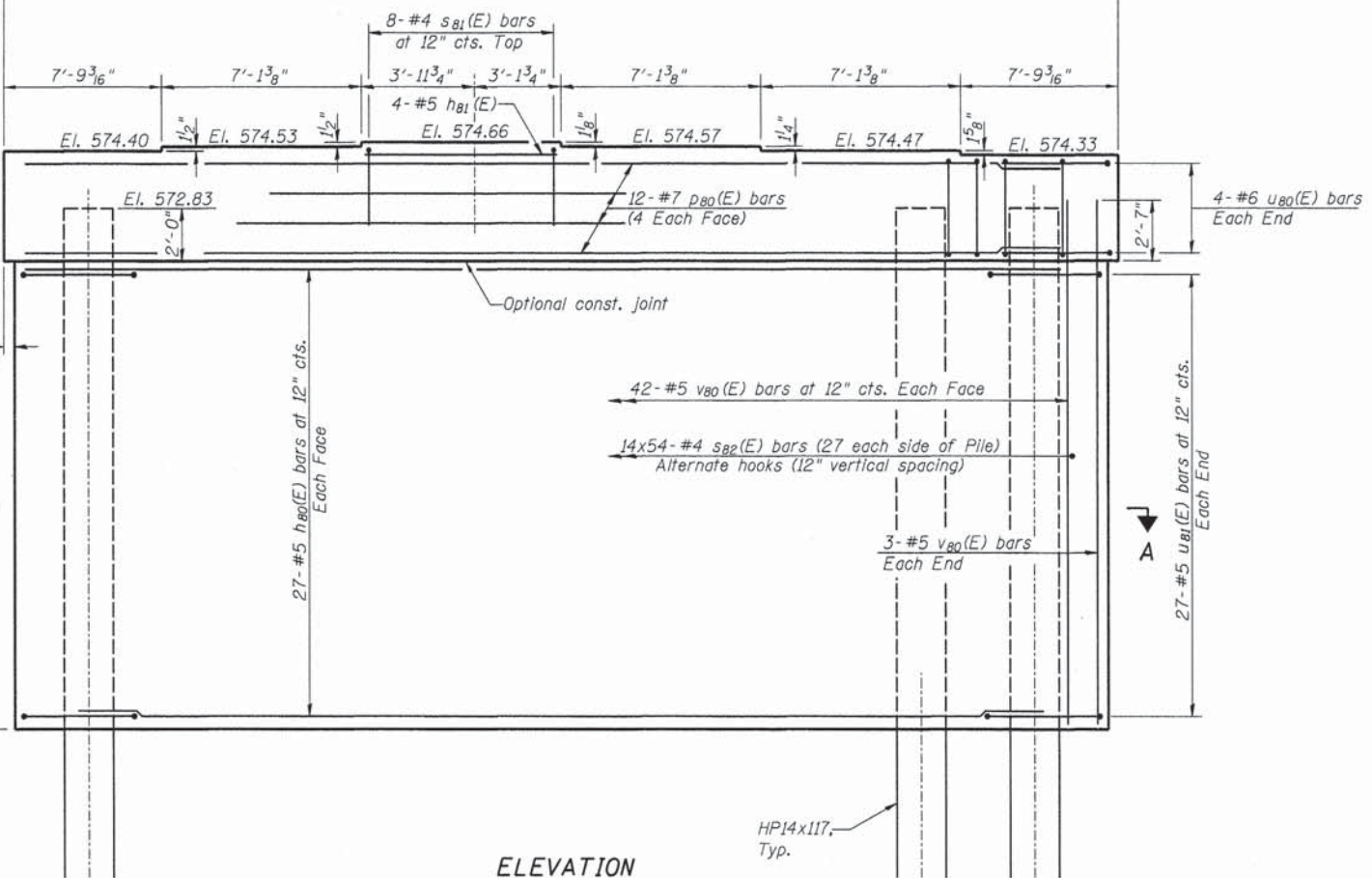
Type: Steel HP14x117
 Nominal Required Bearing: 427 kips
 Factored Resistance Available: 150 kips
 Est. Length: 83 Ft.
 No. Production Piles: 13
 No. Test Piles: 1



TOP PLAN



END VIEW

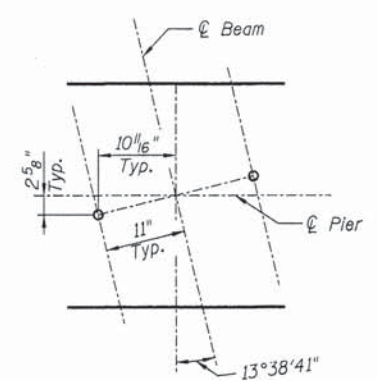


ELEVATION
(Looking North)

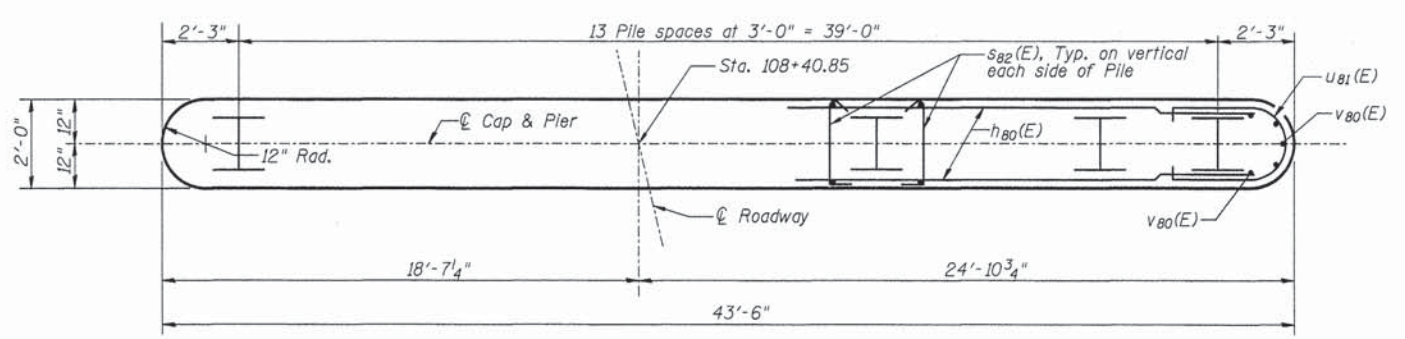
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h80	54	#5	41'-6"	—
h81	4	#5	6'-9"	—
p80	12	#7	41'-6"	—
s80	43	#4	11'-5"	U
s81	8	#4	7'-0"	U
s82	756	#4	2'-9"	U
u80	8	#6	11'-5"	U
u81	54	#5	11'-2"	U
v80	90	#5	29'-3"	—
Structure Excavation		Cu. Yd.	43	
Concrete Structures		Cu. Yd.	100.3	
Reinforcement Bars, Epoxy Coated		Pound	8530	
Furnishing - Piles,		Foot	1079	
Driving Piles		Foot	1079	
Test Pile, Steel HP14x117		Each	1	

Notes:
 Space reinforcement in cap to miss anchor bolts.
 Pour steps monolithically with cap.
 For details of piles, see sheet 21 of 26.
 s82(E) bars shall enclose both the vertical and horizontal reinforcing bars. The position of the 90 and 135 degree hooked end shall be alternated between adjacent bars as shown, both vertically and horizontally.



DETAIL A



SECTION A-A

RHUTASEL and ASSOCIATES, INC.
 CONSULTING ENGINEERS • LAND SURVEYORS
 CENTRALIA, ILLINOIS FREEBURG, ILLINOIS
 ILLINOIS DESIGN FIRM LICENSE NO. 184-000287

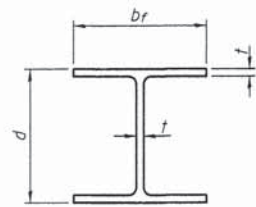
DESIGNED - BLT	REVISED -
DRAWN - JN	REVISED -
CHECKED - WDL	REVISED -
DATE - 07/16/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.U. RTE. 9331 SECTION 08-00050-01-GS
VENITA DRIVE OVER CSX RAILROAD
ST. CLAIR COUNTY

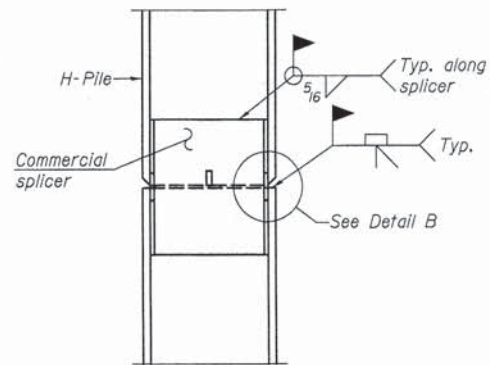
PIER 2
STRUCTURE NO. 082-6507

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	80
9336	08-00050-01-GS			
CONTRACT NO. 97533				
RAAT JOB NO. 40508	ILLINOIS	FED. AID PROJECT / GCPF PROJECT		

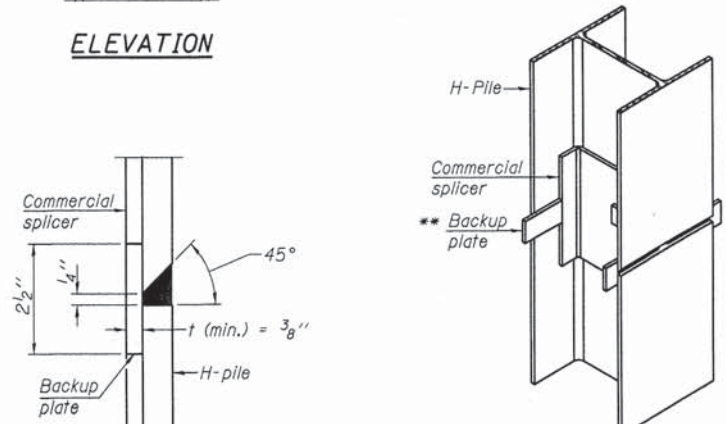


STEEL PILE TABLE

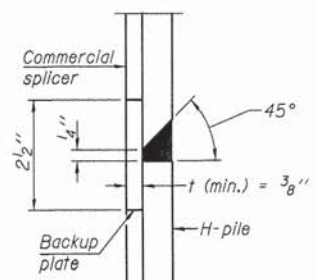
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	13/16"	30"
x102	14"	14 3/4"	11/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	11/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"
x53	11 3/4"	12"	7/16"	24"
HP 10x57	10"	10 1/4"	9/16"	24"
x42	9 3/4"	10 1/8"	7/16"	24"
HP 8x36	8"	8 1/8"	7/16"	18"



ELEVATION

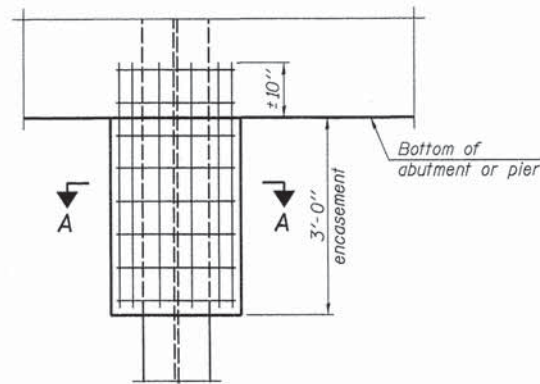


ISOMETRIC VIEW



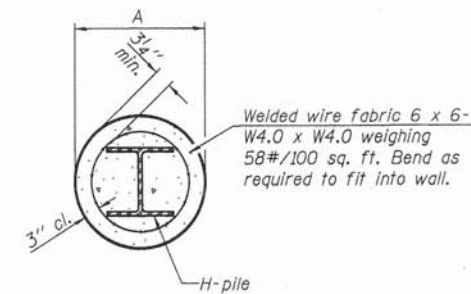
DETAIL "B"

WELDED COMMERCIAL SPLICE



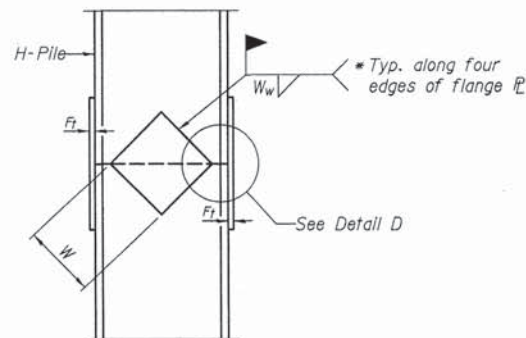
ELEVATION

PILE ENCASEMENT

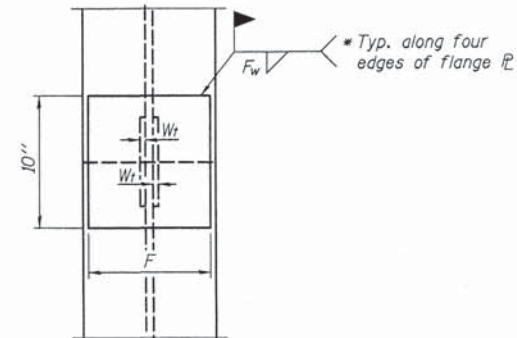


SECTION A-A

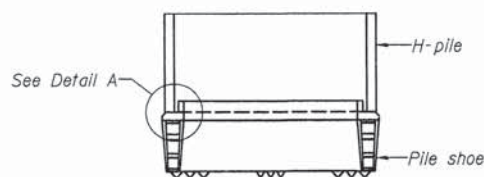
Note:
Forms for encasement may be omitted when soil conditions permit.



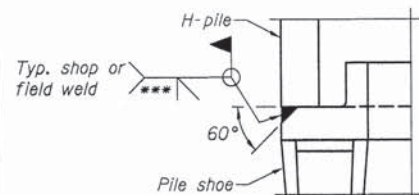
ELEVATION



END VIEW

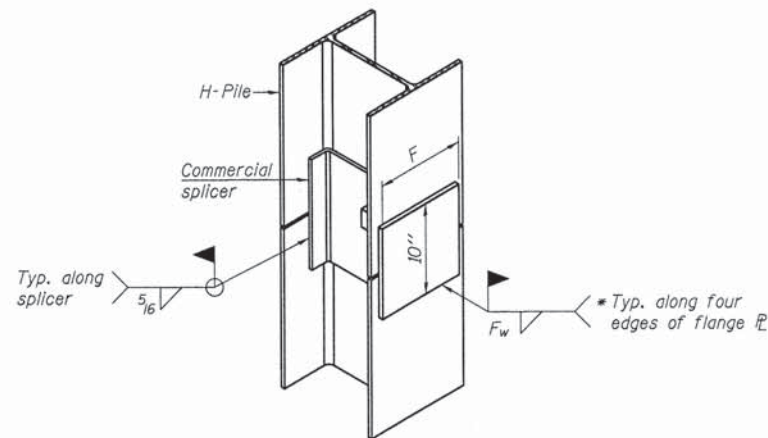


ELEVATION



DETAIL A

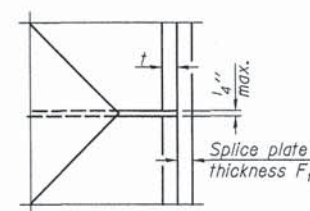
H-PILE SHOE ATTACHMENT



ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

- * Interrupt welds 1/4" from end of web and/or each flange.
- ** Remove portions of backup plates that extend outside the flanges.
- *** Weld size per pile shoe manufacturer (5/16" min.).

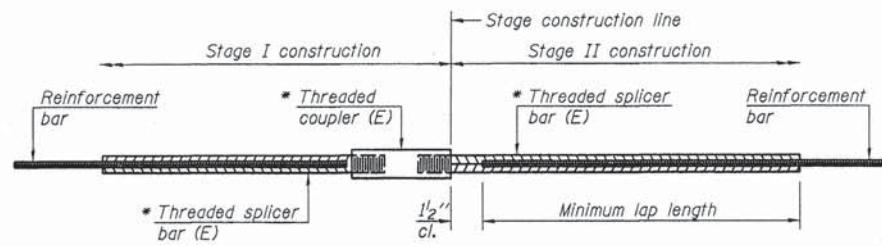


DETAIL D

WELDED PLATE FIELD SPLICE

Designation	F	Ft	Fw	W	Wt	Ww
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	1/6"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	1/6"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1/6"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



STANDARD BAR SPLICER ASSEMBLY

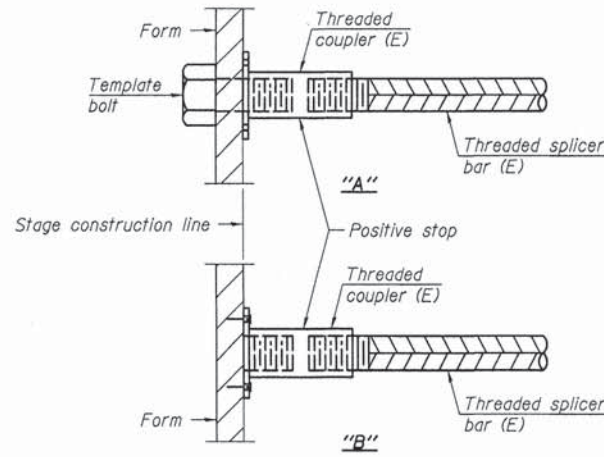
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Top bar lap, Class B

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

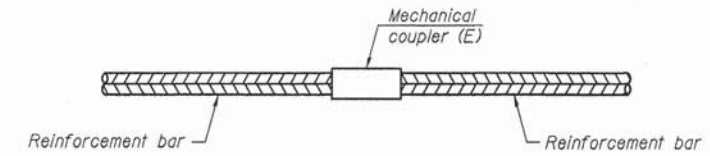
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
NA			



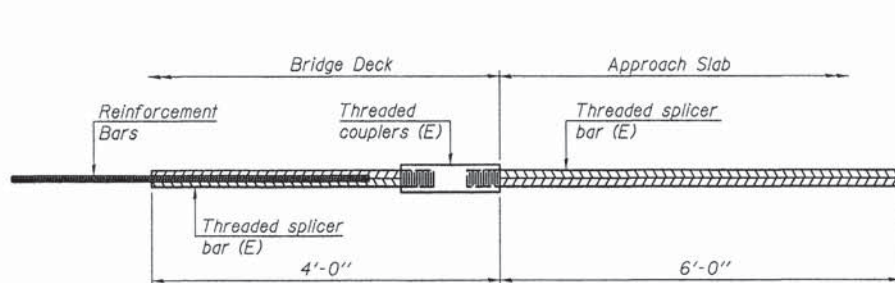
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



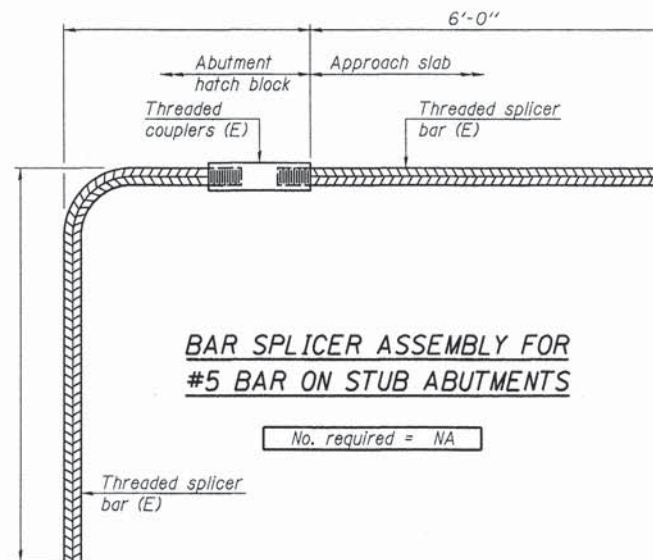
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
NA		



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required = 62



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = NA

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See special provision for Mechanical Splicers.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

ILLINOIS DEPARTMENT OF TRANSPORTATION											
SOIL BORING LOG						Page 2 of 2					
ROUTE Venita Dr						DESCRIPTION Venita Dr CSX Overpass					
SECTION _____						LOCATION O'Fallon, IL					
COUNTY St. Clair						STRUCTURE NO. _____ (Exist.) _____ (Prop.)					
BORING NO. B-2						DRILLING METHOD CFA					
Station 107+69.18						HAMMER TYPE Automatic					
Offset 0'						Surface Water Elev. _____ (ft.)					
Ground Surface Elev. 549.1 (ft.)						Groundwater Elev. _____ (ft.)					
SOIL DESCRIPTION						SOIL DESCRIPTION					
Brown high plastic CLAY, trace sand, gravel						Brown high plastic CLAY, trace sand, gravel					
A-7						A-7					
Gray CLAYEY SHALE						Gray CLAYEY SHALE					
Boring terminated at 73.6 feet						Boring terminated at 73.6 feet					
Brown and gray low plastic SILTY CLAY, trace sand, gravel						Brown and gray low plastic SILTY CLAY, trace sand, gravel					
A-6						A-6					

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

ILLINOIS DEPARTMENT OF TRANSPORTATION											
DESCRIPTION LOCATION						DRILLED BY MDI					
ROUTE Venita Drive						CHECKED BY QTE					
SECTION COUNTY St. Clair						HAMMER TYPE Automatic					
STRUCTURE DRILLING METHOD 4" O.D. CFA						Date January 2009					
Boring No. B-3						Surface Water Elev. _____ (ft.)					
Station 108+45.52						Groundwater Elevation _____ (ft.)					
Offset 10'-South 0'						First Encountered Upon Completion After 24 Hrs.					
SOIL DESCRIPTION				SOIL DESCRIPTION				SOIL DESCRIPTION			
Depth	Blows per 6 in.	Qu	W %	Depth	Blows per 6 in.	Qu	W %	Depth	Blows per 6 in.	Qu	W %
Dark brown low plastic SILTY CLAY				Gray high plastic CLAY				Dark brown low plastic ORGANIC SILT			
A-6				A-7				A-4			
Brown high plastic CLAY				Gray and brown low plastic SILTY CLAY, trace sand				Brown and gray low plastic SILTY CLAY, trace sand, gravel			
A-7				A-4				A-6			
Gray low plastic SILTY CLAY				Dark brown ORGANIC SILT				Gray low plastic SILTY CLAY			
A-6				A-4				A-6			
Dark brown ORGANIC SILT				Gray low plastic SILTY CLAY				Brown SHALE			
A-4				A-6				Brown SHALE			

ILLINOIS DEPARTMENT OF TRANSPORTATION											
DESCRIPTION LOCATION						DRILLED BY MDI					
ROUTE Venita Drive						CHECKED BY QTE					
SECTION COUNTY St. Clair						HAMMER TYPE Automatic					
STRUCTURE DRILLING METHOD 4" O.D. CFA						Date January 2009					
Boring No. B-3						Surface Water Elev. _____ (ft.)					
Station 108+45.52						Groundwater Elevation _____ (ft.)					
Offset 0'						First Encountered Upon Completion After 24 Hrs.					
SOIL DESCRIPTION				SOIL DESCRIPTION				SOIL DESCRIPTION			
Depth	Blows per 6 in.	Qu	W %	Depth	Blows per 6 in.	Qu	W %	Depth	Blows per 6 in.	Qu	W %
Brown high plastic CLAY, trace sand, gravel				Gray SHALE				Brown high plastic CLAY			
A-7				Brown SHALE				A-7			
Gray and brown high plastic CLAY				Brown SHALE				Brown and gray low plastic SILTY CLAY, trace sand, gravel			
A-7				Brown SHALE				A-6			
Brown and gray low plastic SILTY CLAY, trace sand, gravel				Brown SHALE				Brown and gray low plastic SILTY CLAY, trace sand, gravel			
A-6				Brown SHALE				Brown and gray low plastic SILTY CLAY, trace sand, gravel			
Brown and gray low plastic SILTY CLAY, trace sand, gravel				Brown SHALE				Brown and gray low plastic SILTY CLAY, trace sand, gravel			
A-6				Brown SHALE				Brown and gray low plastic SILTY CLAY, trace sand, gravel			

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ROUTE Venita Drive
 SECTION COUNTY St. Clair
 STRUCT. Boring No. B-7
 Station 105+89.28
 Offset 93.12' RT

DESCRIPTION
 LOCATION O'Fallon
 DRILLING METHOD 4" O.D. CFA

DRILLED BY MDI
 CHECKED BY QTE
 HAMMER TYPE Automatic

Sheet 1 of 1
 Date January 2009

Depth	Blows per 6 in.	Qu	W %	Surface Water Elev. Groundwater Elevation First Encountered dry Upon Completion After 24 Hrs.	Depth	Blows per 6 in.	Qu	W %
Gravel 4"								
Dark brown low plastic SILTY CLAY	2	1.5	28					
A-6	3	P			25			
Brown and gray low plastic SILTY CLAY	2	1.2	27					
A-7	3	B						
LL=49 PL=24 PI=25	5							
Gray and brown low plastic SILTY CLAY	2	0.6	30					
A-6	3	B			30			
	2	0.7	33					
	3	B						
Boring terminated at 10 ft	10							

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ROUTE Venita Drive
 SECTION COUNTY St. Clair
 STRUCT. Boring No. B-8
 Station 106+98.51
 Offset 97.02' RT

DESCRIPTION
 LOCATION O'Fallon
 DRILLING METHOD 4" O.D. CFA

DRILLED BY MDI
 CHECKED BY QTE
 HAMMER TYPE Automatic

Sheet 1 of 1
 Date January 2009

Depth	Blows per 6 in.	Qu	W %	Surface Water Elev. Groundwater Elevation First Encountered dry Upon Completion After 24 Hrs.	Depth	Blows per 6 in.	Qu	W %
FILL - Brown and gray low plastic SILTY CLAY								
A-6	2	1.5	28					
	2	P			25			
Brown high plastic CLAY	2	1.2	27					
A-7	3	B						
Brown and gray low plastic SILTY CLAY	2	1.3	30					
A-6	3	B			30			
95.1 pcf		2.7	30					
	10	B						
Boring terminated at 10 ft								

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ROUTE Venita Drive
 SECTION Venita Drive CSX Overpass
 COUNTY St. Clair
 STRUCTURE NO. (Exist.) (Prop.)

DESCRIPTION Venita Drive CSX Overpass
 LOCATION O'Fallon, IL
 SEC. 25 TWP. 2 N RNG. 8 W PM

LOGGED BY WKS

SOIL BORING LOG
 Page 1 of 1
 Date 01/18/2011

BORING NO. B-10
 DRILLING METHOD CFA
 HAMMER TYPE Automatic

Station 105 + 55.27
 Offset 102.00 B R
 Ground Surface Elev. 544.7 (ft.)

SOIL DESCRIPTION	(ft.)	(ft.)	(blows)	(tsf)	(%)	SOIL DESCRIPTION	(ft.)	(ft.)	(blows)	(tsf)	(%)
FILL - Dark brown low plastic SILTY CLAY						Gray low plastic SILTY CLAY, trace sand					
A-6	2		1.0	28		A-6					
	2		P								
Brown low plastic SILTY CLAY											
A-6	2		0.8	28							
Gray and brown low plastic SILTY CLAY, some sand											
A-6	-6		2			Gray high plastic CLAY					
			2			A-7					
	1		0.5	33							
	3		P								
	1		0.8	29							
	2		P								
	-10		2								
Dark brown ORGANIC SILT											
A-4	2		1.3	29							
	3		B								
	4										
	1		0.6	39							
	2		B								
	-15		3								
Gray low plastic SILTY CLAY, trace sand and organics						Boring terminated at 35 feet					
A-6	1		0.3	14							
	2		P								
Dark brown low plastic ORGANIC SILT											
A-4	2		0.5	87							
	3		P								
	-20		3								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
 The Standard Penetration Test (SPT) N Value is per (AASHTO T206)
 BBS 137 (9/05)

ILLINOIS DEPARTMENT OF TRANSPORTATION
 ROUTE Venita Drive
 SECTION Venita Drive CSX Overpass
 COUNTY St. Clair
 STRUCTURE NO. (Exist.) (Prop.)

DESCRIPTION Venita Drive CSX Overpass
 LOCATION O'Fallon, IL
 SEC. 25 TWP. 2 N RNG. 8 W PM

LOGGED BY WKS

SOIL BORING LOG
 Page 1 of 1
 Date 01/18/2011

BORING NO. B-11
 DRILLING METHOD CFA
 HAMMER TYPE Automatic

Station 407 + 20.07 107+17.84
 Offset 23.90 B L
 Ground Surface Elev. 548.3 (ft.)

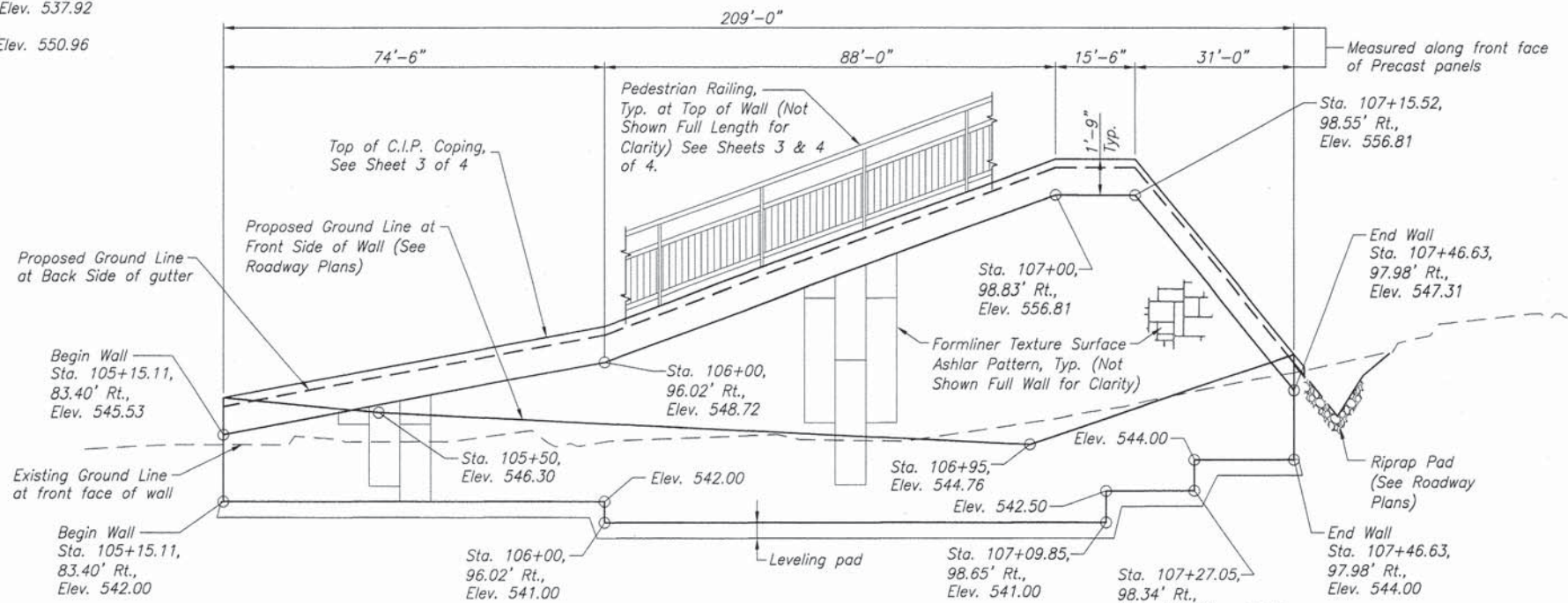
SOIL DESCRIPTION	(ft.)	(ft.)	(blows)	(tsf)	(%)	SOIL DESCRIPTION	(ft.)	(ft.)	(blows)	(tsf)	(%)
Topsoil 10"						Gray low plastic SILTY CLAY					
FILL - Brown low plastic SILTY CLAY						A-4					
A-6	2		0.5	25							
	3		P			Dark brown low plastic ORGANIC SILT					
	4					A-4					
Gray and brown low plastic SILTY CLAY						Gray low plastic SILTY CLAY, trace sand					
A-6	3		1.3	29		A-6					
	3		P								
	-5		4								
Gray and brown low plastic SILTY CLAY, some sand						Gray and brown low plastic SILTY CLAY					
A-6	1		0.5	29		A-6					
	2		P								
	3										
	-10		2								
Gray and brown low plastic SILTY CLAY						Gray medium plastic SILTY CLAY					
A-6	1		0.5	29		A-7					
	2		P								
	3										
	-10		2								
Dark brown low plastic ORGANIC SILT						Gray high plastic CLAY					
A-4	3		1.3	29		A-7					
	4		B								
	6										
	1		0.8	73							
	2		B								
	-15		3								
Gray low plastic SILTY CLAY, some sand						Boring terminated at 35 feet					
A-4	1		0.7	38							
	1										
	2		B								
	-20		3								

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
 The Standard Penetration Test (SPT) N Value is per (AASHTO T206)
 BBS 137 (9/05)

T.B.M.: 5/6/04 "C" - Railroad Spike in West Face of Power Pole at 52.0' Rt., Sta. 112+41.37 - Elev. 537.92

T.B.M.: 5/6/04 "D" - Top of North Flange Bolt on Fire Hydrant at 301.5' Lt., Sta. 102+81.86 - Elev. 550.96

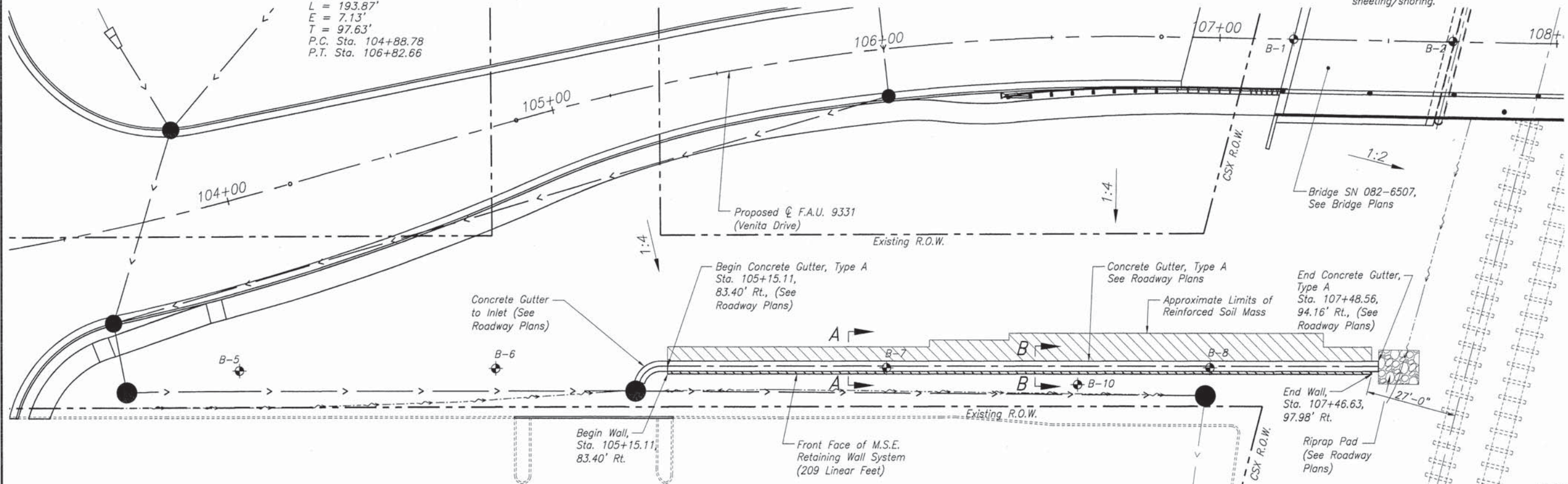
Existing Structure: None



CURVE DATA
(F.A.U. Route 9331 - Venita Drive)

P.I. Sta. 105+86.41
 $\Delta = 16^{\circ}42'14''$ Rt.
 $C = 193.19'$
 $R = 665.00'$
 $L = 193.87'$
 $E = 7.13'$
 $T = 97.63'$
 P.C. Sta. 104+88.78
 P.T. Sta. 106+82.66

NOTE:
If Contractor encroaches on the Railroad "Live Load Influence Zone" a detailed procedure for installing sheeting/shoring adjacent to Railroad Tracks will be required - See specifications. No additional compensation will be allowed for temporary sheeting/shoring.



NOTE
Stations and Offset distances are measured from the front face of MSE wall panels to the Proposed ϕ F.A.U. 9331 at right angles. See Bridge Sheets 23-26 for soil boring information. See Sheet 2 of 4 for Section A. See Sheet 3 of 4 for Section B.

LEGEND

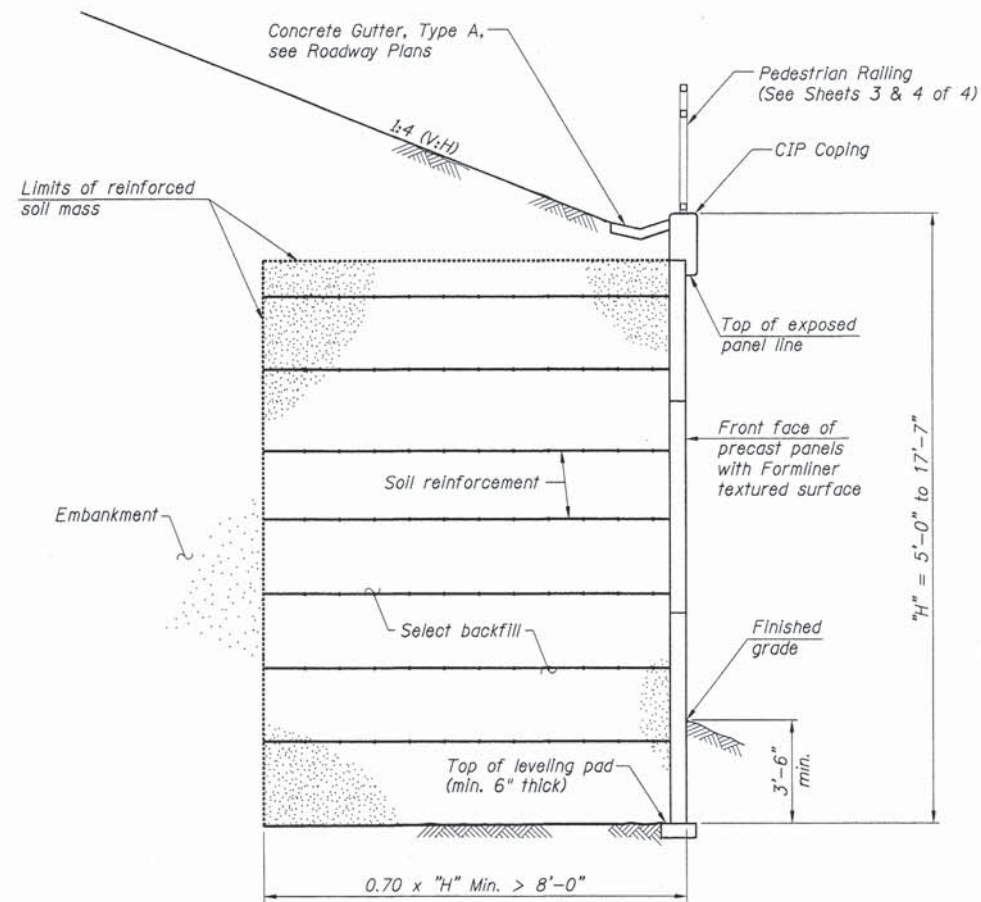
Reinforced Soil Mass

Soil Boring B-#



William D. Lueking
 William D. Lueking
 07-16-2013
 Date of Signing
 11-30-2014
 Date of License Expiration

<p>RHUTASEL and ASSOCIATES, INC. CONSULTING ENGINEERS • LAND SURVEYORS CENTRALIA, ILLINOIS FREEBURG, ILLINOIS ILLINOIS DESIGN FIRM LICENSE NO. 184-000287</p>	DESIGNED - TML/BLT	REVISED -	<p>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p>	<p>F.A.U. RTE. 9331 SECTION 08-00050-01-GS VENITA DRIVE OVER CSX RAILROAD ST. CLAIR COUNTY</p>	<p>M.S.E. RETAINING WALL GENERAL PLAN AND ELEVATION</p>	ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	DRAWN - JSD	REVISED -				9331	06-00057-00-PV	ST. CLAIR	125	87
	CHECKED - WDL	REVISED -				9336	08-00050-01-GS	CONTRACT NO. 97533		
	DATE - 07/16/2013	REVISED -				RAAI JOB NO. 40508	ILLINOIS	FED. AID PROJECT / GCPF PROJECT		



SECTION A-A
THRU MSE WALL

INDEX OF SHEETS

1. M.S.E. Retaining Wall General Plan and Elevation
2. General Data and M.S.E. Retaining Wall Sections
3. M.S.E. Retaining Wall Coping Details
4. Pedestrian Railing Details

GENERAL NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60.

Reinforcement bars designated (E) shall be epoxy coated.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new Pedestrian Railing except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat shall be black, Munsell No. N1. See Section 506 of the Standard Specifications.

DESIGN SPECIFICATIONS
2010 A.A.S.H.T.O. LRFD Bridge
Design Specifications

DESIGN STRESSES

$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)
 $f_y = 50,000$ psi (structural, steel, AASHTO M270, Grade 50)
 $f_y = 36,000$ psi (AASHTO M270, Grade 36)

SEISMIC DATA

Seismic Performance Zone (SPZ) = 2
 Design Spectral Acceleration at 1.0 sec (S_{D1}) = 0.250g
 Design Spectral Acceleration at 0.2 sec (S_{D5}) = 0.549g
 Soil Site Class = D

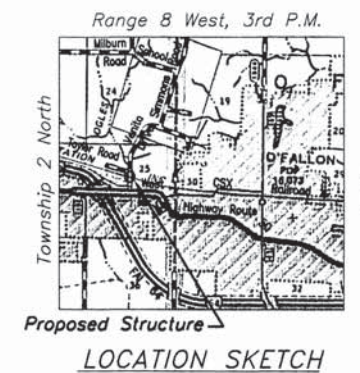
PRECAST UNITS

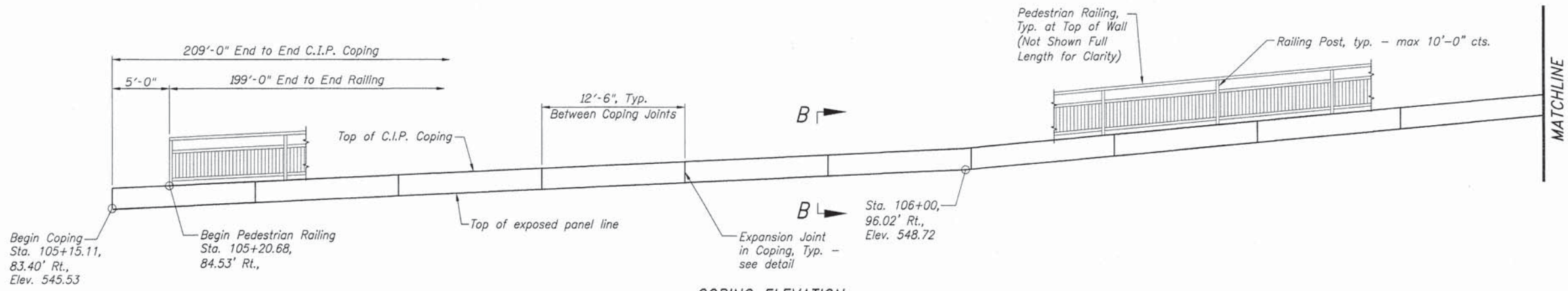
DESIGN STRESSES

$f_y = 60,000$ psi
 $f'_c = 5,000$ psi (Precast)

TOTAL BILL OF MATERIAL

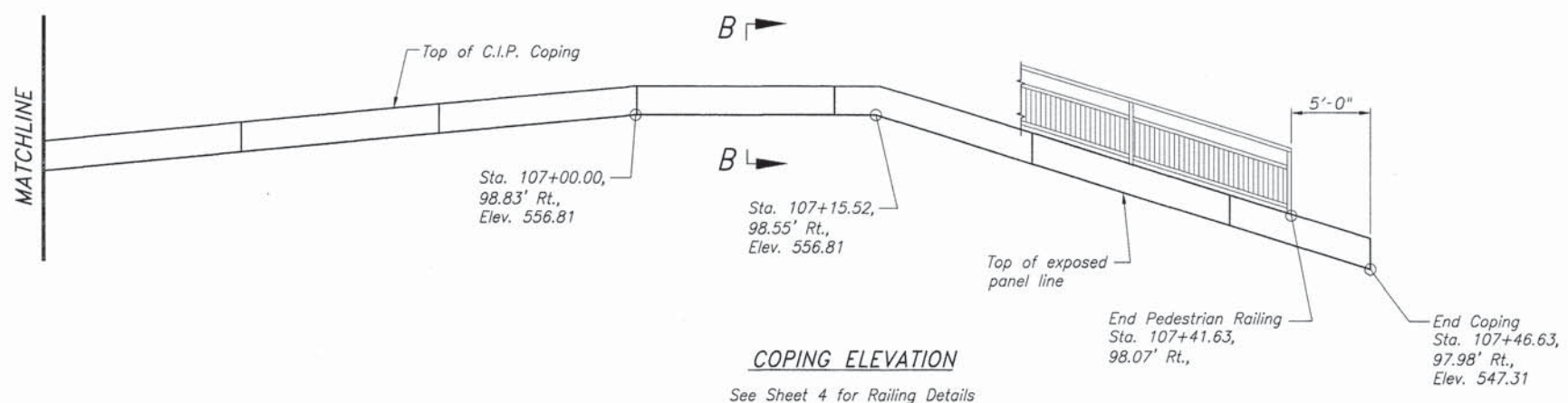
ITEM	UNIT	TOTAL
Form Liner Textured Surface	Sq Ft	1910
Pedestrian Railing	Foot	199
Mechanically Stabilized Earth Retaining Wall	Sq Ft	1910
Structure Excavation	Cu Yd	436





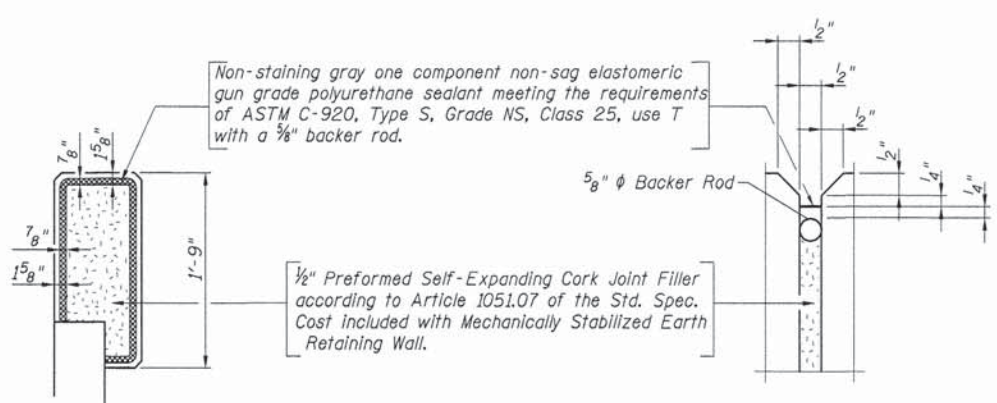
COPING ELEVATION

See Sheet 4 for Railing Details

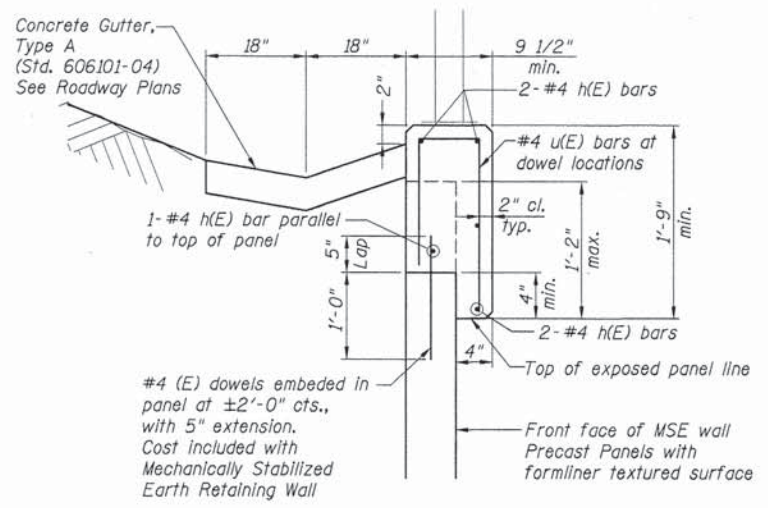


COPING ELEVATION

See Sheet 4 for Railing Details



EXPANSION JOINT DETAILS



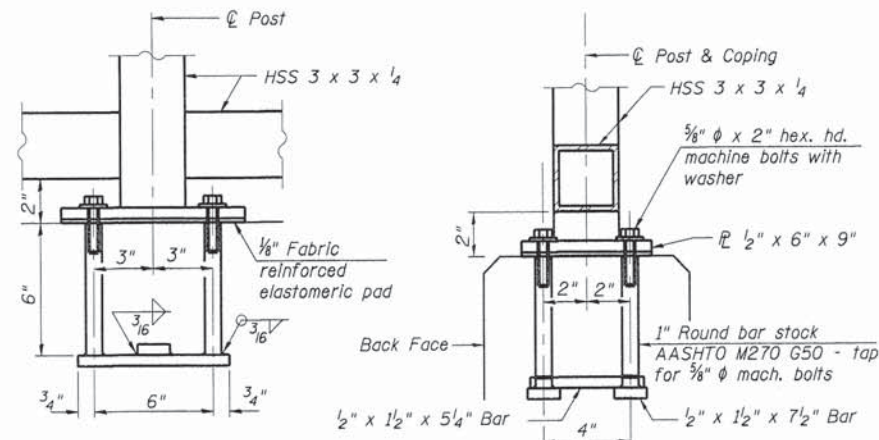
**SECTION B-B
CAST IN PLACE COPING
FOR MSE WALL**

Note: Concrete and Reinforcement Bar cost included with MSE Retaining Wall unit price.

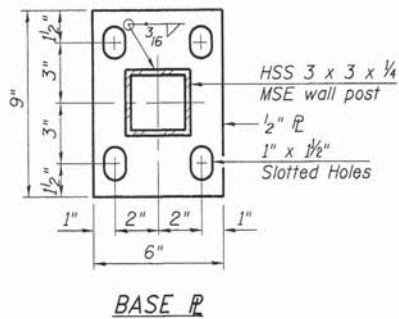
See Sht. 2 of 4 for Bill of Material

DESIGNED -	BLT	REVISED -	
DRAWN -	JSD	REVISED -	
CHECKED -	WDL	REVISED -	
DATE -	07/16/2013	REVISED -	

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9331	06-00057-00-PV	ST. CLAIR	125	89
9336	08-00050-01-GS			
RAAT JOB NO. 40508 ILLINOIS FED. AID PROJECT / GCPF PROJECT			CONTRACT NO. 97533	



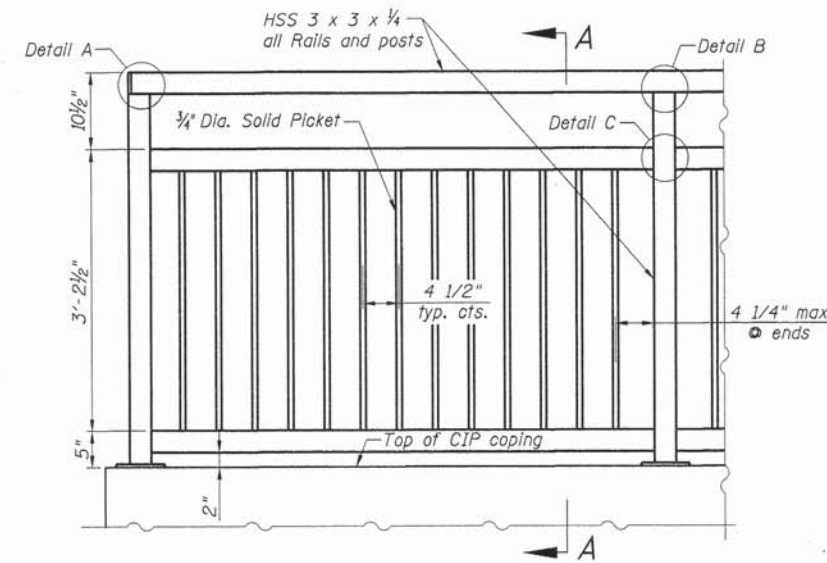
ANCHOR BOLT DETAILS



BASE PLATE

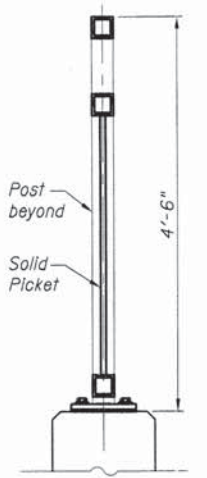
NOTES

- In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting 3/8 inch diameter stainless steel anchor rods according to Articles 509.06 and 1006.31 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.
- Posts and pickets shall be vertical when erected.

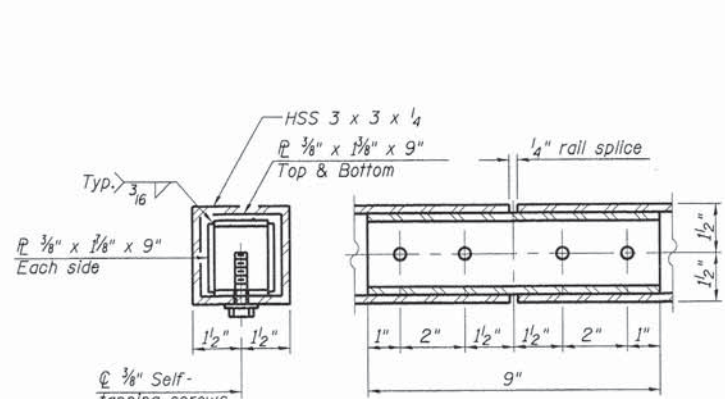


PEDESTRIAN RAILING ELEVATION

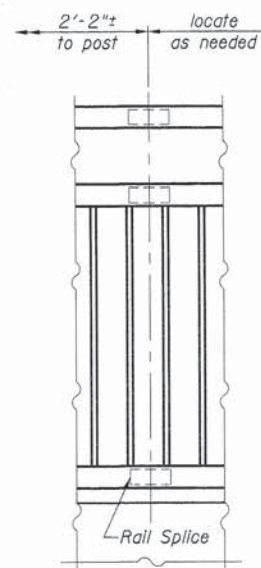
Note: All posts, railing, pickets, splices anchor devices and plates shall be painted black. See Sheet 2 of 4 for paint system.



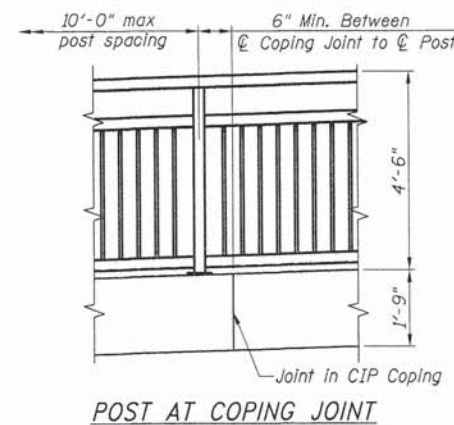
SECTION A-A



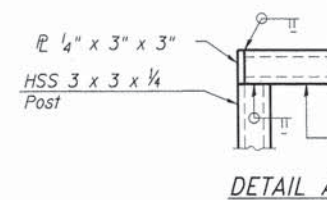
RAIL SPLICE



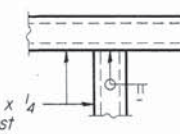
RAIL SPLICE ELEVATION
(Select Joint Location to miss pickets)



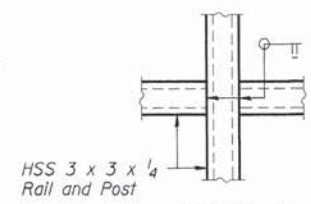
POST AT COPING JOINT



DETAIL A



DETAIL B



DETAIL C

See Sht. 2 of 4
For Bill of Material

MSE SHEET 4 OF 4

ELECTRICAL GENERAL NOTES

- ALL VEHICLE SIGNAL HEADS SHALL BE POLYCARBONATE AND SHALL HAVE 12 INCH L.E.D. INDICATIONS. ALL MOUNTING HARDWARE, SIGNAL POSTS, MAST ARMS, LUMINAIRES, AND BASES SHALL BE UNPAINTED ALUMINUM. THE CONTROLLER CABINET SHALL BE UNPAINTED ALUMINUM. ALL BOLTS, SCREWS, AND WASHERS SHALL BE STAINLESS STEEL. ANTI-SIEZE PASTE COMPOUND SHALL BE USED ON ALL MOUNTING HARDWARE FIELD CONNECTIONS.
- BACKPLATES SHALL BE ABS PLASTIC.
- THE LOCATIONS OF THE MAST ARM SUPPORTS SHALL BE APPROVED BY THE ENGINEER BEFORE FOUNDATIONS ARE CONSTRUCTED. MAST ARM POLES SHALL BE LOCATED A MINIMUM OF 10 FEET FROM THE EDGE OF PAVEMENT OR 2 FEET FROM THE EDGE OF A SHOULDER, WHICHEVER DISTANCE IS GREATER. IN CURBED SECTIONS, THE MAST ARM POLE SHALL BE LOCATED A MINIMUM OF 5 FEET FROM THE FACE OF CURB. THESE DISTANCES ARE TO THE NEAR FACE OF THE MAST ARM POLES. ALL MAST ARMS AND POLES SHALL BE GALVANIZED.
- THE DEPTHS OF THE FOUNDATIONS FOR MAST ARMS SUPPORT POLES ARE:
US HIGHWAY 50/VENTA DRIVE
N.E. CORNER MAST ARM LENGTH = 55' (36" DIA) : 19.0 FT.
N.W. CORNER MAST ARM LENGTH = 46' (36" DIA) : 16.0 FT.
- ALL TRAFFIC SIGNAL CABLE SHALL BE #14 AWG STRANDED COPPER UNLESS OTHERWISE SPECIFIED.
- THE LOCATION OF ALL DETECTOR LOOPS SHALL BE APPROVED BY THE ENGINEER BEFORE ANY SLOTS ARE SAWED IN THE PAVEMENT.
- DETECTOR LOOP LEAD-IN SPLICES SHALL BE MADE IN THE HANDHOLE PER ARTICLE 873.03 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARD DRAWING 886001. CONDUCTORS SHALL BE SPLICED IN RIGID MOLD. ROSIN-CORE SOLDER SHALL BE USED.
- CALL DELAY SHALL NOT FUNCTION WHEN THE RELATED PHASES ARE IN GREEN.
- ALL HANDHOLES SHALL BE CAST IN PLACE PORTLAND CEMENT CONCRETE (PER ARTICLE 814.03(b)). THE CAST IN PLACE LEGEND IN THE COVER SHALL BE "TRAFFIC SIGNALS". SLOPE HANDHOLE COVERS TO MATCH PROPOSED GRADE ELEVATIONS.
- ALL UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY ATTEMPT TO CONSTRUCT ANY COMPONENT OF THE VARIOUS TRAFFIC SIGNAL INSTALLATIONS. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE LIMITS OF THIS IMPROVEMENT ARE THE FOLLOWING:
CITY OF OFALLON (WATER & SEWER)
AMEREN ILLINOIS (GAS & ELECTRIC)
AT & T (TELEPHONE)
CHARTER COMMUNICATIONS (CABLE TV)
THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS HAVE LOCATED AT THE TIME OF SURVEY, OR BASE ON EXISTING AVAILABLE INFORMATION. NO GUARANTEE IS IMPLIED THAT ALL UTILITIES HAVE BEEN LOCATED OR DEPICTED ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXACT LOCATION OF ALL UTILITIES. IT MAY BE NECESSARY TO HAND DIG TEST HOLES TO EXPOSE EXISTING UTILITIES AT SOME LOCATIONS.
- SEE "JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS" (JULIE) IN THE SPECIAL PROVISIONS. CALL (800) 892-0123 ONE WEEK BEFORE PLANNING TO DIG.
- ALL INDUCTIVE LOOP DETECTORS SUPPLIED FOR THIS PROJECT SHALL HAVE THE CAPACITY OF OPERATING WITH BOTH DELAY AND EXTENSION MODES ACTIVE, IF A TIME SETTING IS PROGRAMMED. THEY SHALL BE RACK MOUNTED.
- THE EXISTING STREET NAME SIGNS LOCATED ON THE EXISTING MAST ARMS THAT ARE TO BE REMOVED, SHALL BE REMOVED AND REINSTALLED ON THE PROPOSED MAST ARMS AS SHOWN IN THE PLANS. THE INSTALLATION OF THE SIGNS SHALL CONFORM TO SECTION 720 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STANDARDS 720001 AND 720016.
- CABLE MARKING TAPE SHALL BE INCLUDED WITH THE PAY ITEM "TRENCH AND BACKFILL FOR ELECTRICAL WORK" AND INSTALLED PER ARTICLE 815.03(d) OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE.
- ANCHOR BOLTS, NUTS, AND WASHERS REQUIRED WITH THE TYPE D FOUNDATION SHALL BE INCLUDED IN THE PAY ITEM "RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER."
- THE CONTRACTOR SHALL INSTALL FOUR (4) GROUND RODS (1/2"X12' LONG) AND #6 AWG BARE COPPER GROUND CONDUCTORS IN THE CONTROLLER FOUNDATION AS PER SPECIAL PROVISION, "CONCRETE FOUNDATION, TYPE D."
- A 1/2" NYLON ROPE SHALL BE FURNISHED AND INSTALLED IN ALL SIGNAL CONDUITS, THIS WORK SHALL BE INCLUDED WITH THE CONDUIT PAY ITEMS.
- THE SOIL BORINGS ARE INCLUDED IN THE PLANS.
- ALL DETECTORS LOOPS IN PAVEMENT RECONSTRUCTION AREAS SHALL BE INSTALLED IN THE BINDER COURSE.
- CENTER TO CENTER DISTANCE BETWEEN THE CONDUITS, WHERE TWO OR MORE LOOP LEAD-IN CONDUITS ARE INSTALLED FROM THE EDGE OF PAVEMENT TO THE NEAREST HANDHOLE, SHALL BE SIX INCHES MINIMUM AT THE EDGE OF PAVEMENT.
- LIGHT DETECTOR AMPLIFIERS MAY BE INSTALLED INTO THE EXISTING DETECTOR RACK OR AN INDEPENDENT CHASSIS PROVIDED BY THE MANUFACTURER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
- INSTALLATION OF DETECTOR LOOPS ON OR NEAR THE PAVEMENT MARKING AREA SHALL BE DONE WITH EXTREME CARE. THE CONTRACTOR SHALL ALSO TAKE CARE IN APPLYING SEALER SO THAT IT WILL NOT SPILL OVER THE PAVEMENT MARKING AS A RESULT OF NEGLIGENCE OR POOR WORKMANSHIP. DAMAGE SHALL BE REPAIRED AT HIS/HER EXPENSE TO THE SATISFACTION OF THE ENGINEER.

DETECTOR LOOP REQUIREMENTS & CALCULATIONS

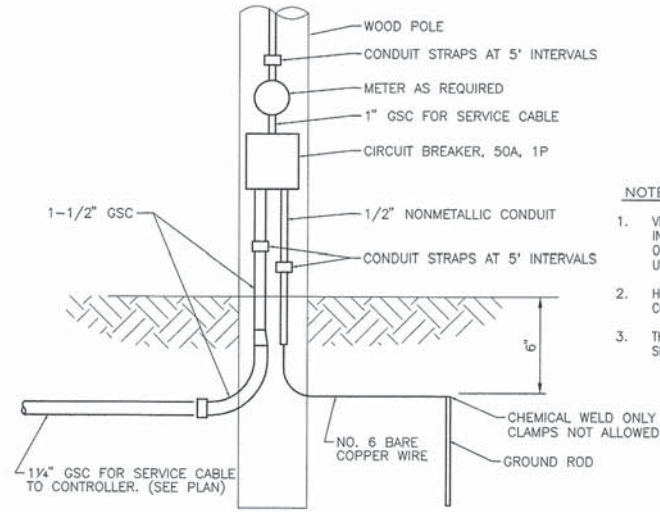
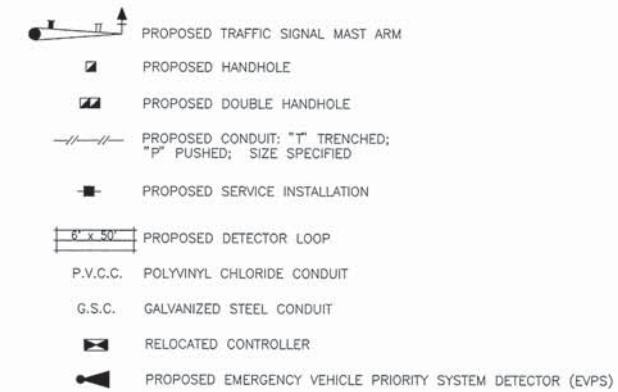
LOOP	PHASE	LOOP SIZE (FT)	REQUIRED NO. OF TURNS	CALCULATED INDUCTANCE microhenries	CALCULATED RESISTANCE ohms
3	WB RT CCO	6' X 6'	6	347.8	2.4
4	WB LT CD	6' X 50'	3-6-3	838.0	2.8
5	WB THRU CD	6' X 50'	3-6-3	835.2	2.7
6	WB THRU CD	6' X 50'	3-6-3	832.1	2.6
7	WB RT CD	6' X 50'	3-6-3	826.8	2.5
8	SB LT CD	6' X 50'	3-6-3	809.3	2.1
9	SB THRU/LT CD	6' X 50'	3-6-3	804.5	2.0
10	SB RT CD	6' X 50'	3-6-3	795.7	1.7
11	SB LT CCO	6' X 6'	6	311.4	1.5
12	SB THRU/LT CCO	6' X 6'	6	308.6	1.4
13	SB RT CCO	6' X 6'	6	305.7	1.3
21	NB LT CD	6' X 50'	3-6-3	870.9	3.7
22	NB LT CD	6' X 50'	3-6-3	866.5	3.6
23	NB THRU CD	6' X 50'	3-6-3	863.7	3.5
24	NB RT CD	9' X 40'	3-6-3	719.3	2.9

THE ABOVE VALUES ARE CALCULATION OF COMBINED LOOP & LEAD-IN INDUCTANCE AND RESISTANCE. ACTUAL MEASURED VALUES SHOULD BE WITHIN ± 20% OF THE VALUES.

STANDARDS

- 720001
- 720016
- 805001
- 814001
- 814006
- 857001
- 873001
- 877001
- 878001
- 880001
- 880006
- 886001
- 886006

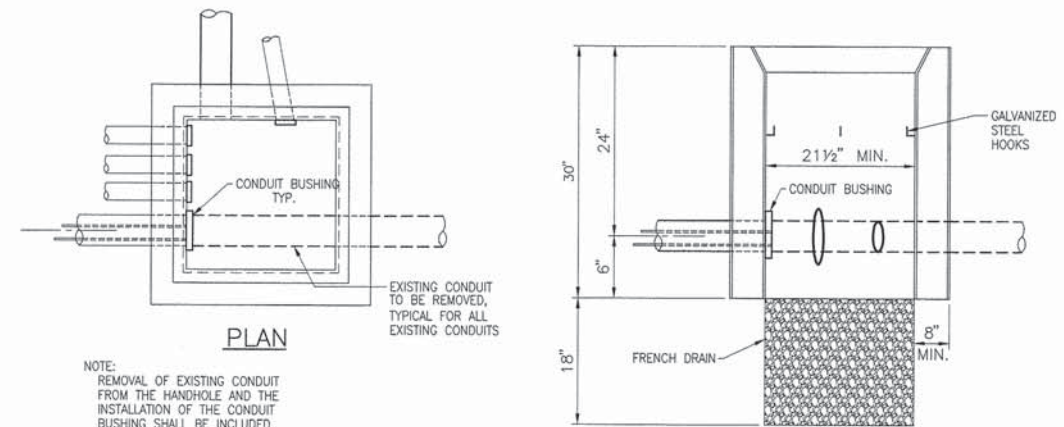
TRAFFIC SIGNAL LEGEND



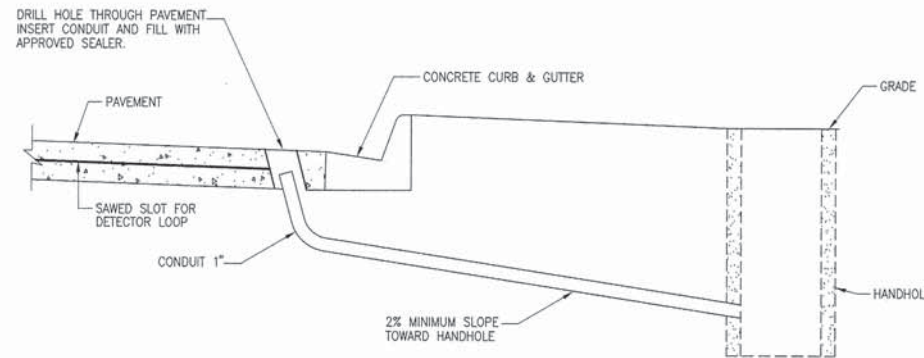
NOTES

- VERTICAL CONDUIT SECTIONS ATTACHED TO THE SERVICE POLE SHALL BE INCIDENTAL TO THE SERVICE INSTALLATION. SUCH INSTALLATION OF CONDUIT ON THE SERVICE POLE SHALL BE DONE TO THE SATISFACTION OF THE UTILITY COMPANY.
- HORIZONTAL CONDUIT LEADING FROM THE UTILITY COMPANY POLE TO CONTROLLER CABINET SHALL BE PAID FOR SEPARATELY.
- THE CONTROLLER SHALL SUPPLY AND INSTALL ATTACHMENT FOR AMEREN IP'S SERVICE LINE TO THE SATISFACTION OF THE UTILITY COMPANY.

DETAIL OF SERVICE INSTALLATION



NOTE: REMOVAL OF EXISTING CONDUIT FROM THE HANDHOLE AND THE INSTALLATION OF THE CONDUIT BUSHING SHALL BE INCLUDED IN THE COST OF THE HANDHOLE.



NOT A PAY ITEM. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PAY ITEM "UNDERGROUND CONDUIT, PVC, 1" DIA."

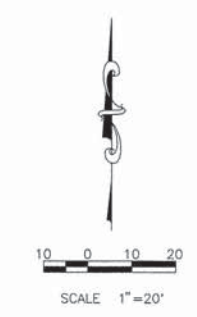
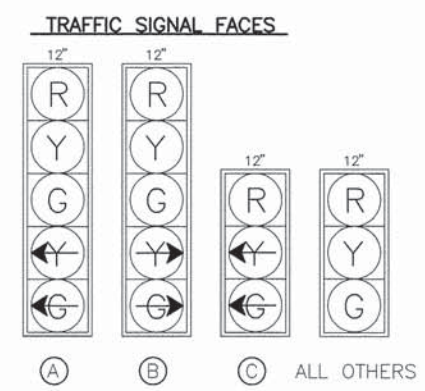
DETECTOR LOOP LEAD-IN WITH CURB & GUTTER

N.T.S.

HANDHOLE TO INTERCEPT EXISTING CONDUIT(S) DETAIL

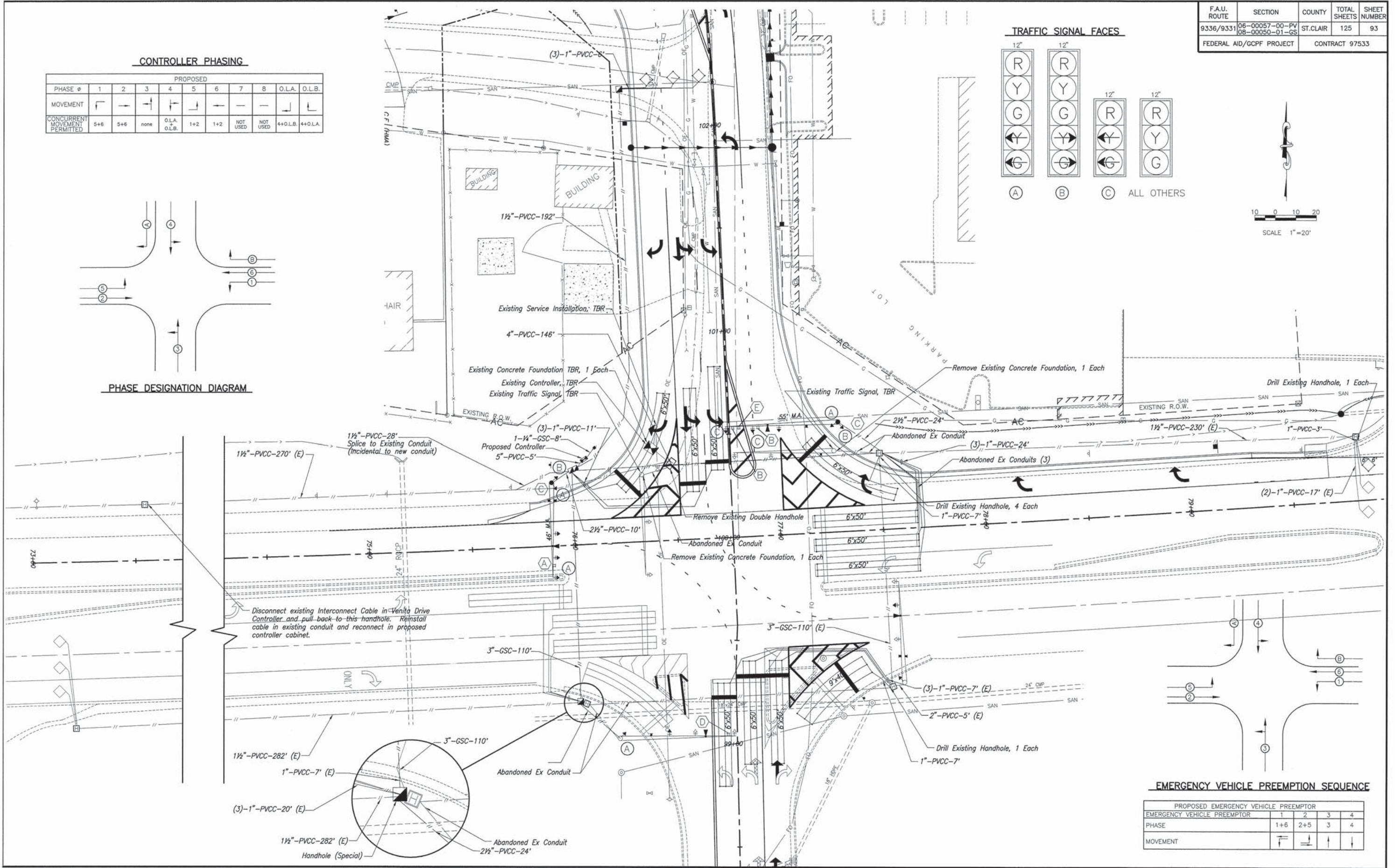
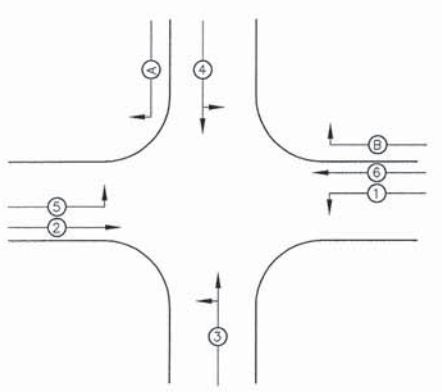
N.T.S.

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	93
FEDERAL AID/GCPF PROJECT		CONTRACT 97533		



CONTROLLER PHASING

PHASE #	PROPOSED								O.L.A.	O.L.B.
	1	2	3	4	5	6	7	8		
MOVEMENT	←	→	↑	↓	←	→	—	—	—	—
CONCURRENT MOVEMENT PERMITTED	5+6	5+6	none	O.L.A. + O.L.B.	1+2	1+2	NOT USED	NOT USED	4+O.L.B.	4+O.L.A.



EMERGENCY VEHICLE PREEMPTION SEQUENCE

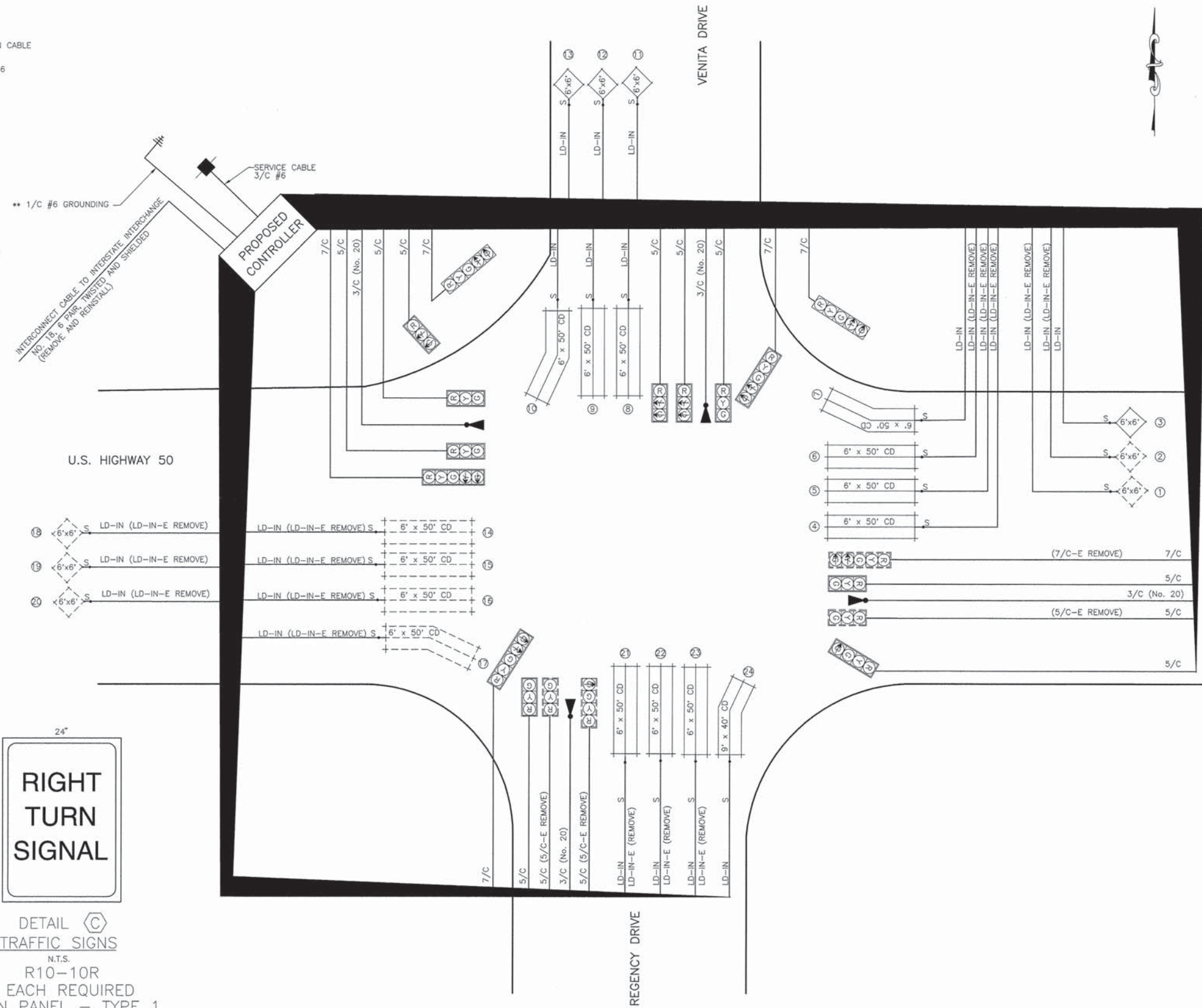
PROPOSED EMERGENCY VEHICLE PREEMPTOR				
EMERGENCY VEHICLE PREEMPTOR	1	2	3	4
PHASE	1+6	2+5	3	4
MOVEMENT	←	↓	↑	↓

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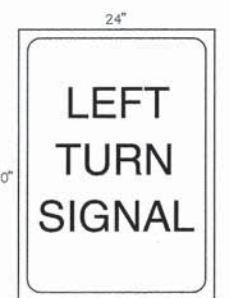
F.A.P. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	94
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

CABLE DIAGRAM LEGEND

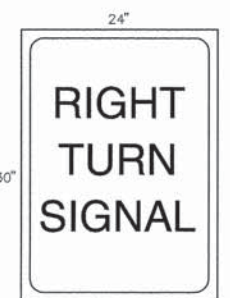
- ELECTRIC CABLE IN CONDUIT
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE
- #6 INDICATES AMERICAN WIRE (AWG) SIZE 6
- LD-IN ELECTRICAL CABLE LEAD-IN 1 PAIR
- CD CALL DELAY
- CCO CALL CARRY OVER
- SERVICE INSTALLATION
- TRAFFIC SIGNAL HEAD
- TRAFFIC SIGNAL HEAD WITH BACKPLATE
- LOOP DETECTOR
- ** GROUNDING SHALL INCLUDE:
4 EACH MAST ARM POLES
4 EACH HANDHOLES



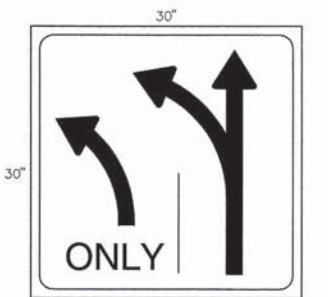
DETAIL **A**
TRAFFIC SIGNS
N.T.S.
R10-12
MAST ARM MOUNTED
4 EACH REQUIRED
SIGN PANEL - TYPE 1



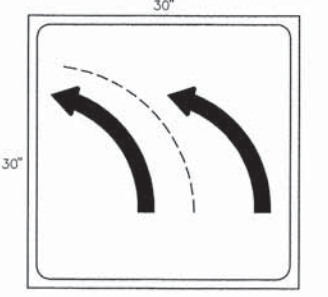
DETAIL **B**
TRAFFIC SIGNS
N.T.S.
R10-10L
MAST ARM MOUNTED
2 EACH REQUIRED
SIGN PANEL - TYPE 1



DETAIL **C**
TRAFFIC SIGNS
N.T.S.
R10-10R
2 EACH REQUIRED
SIGN PANEL - TYPE 1



DETAIL **D**
TRAFFIC SIGNS
N.T.S.
R3-8
MAST ARM MOUNTED
1 EACH REQUIRED
SIGN PANEL - TYPE 1



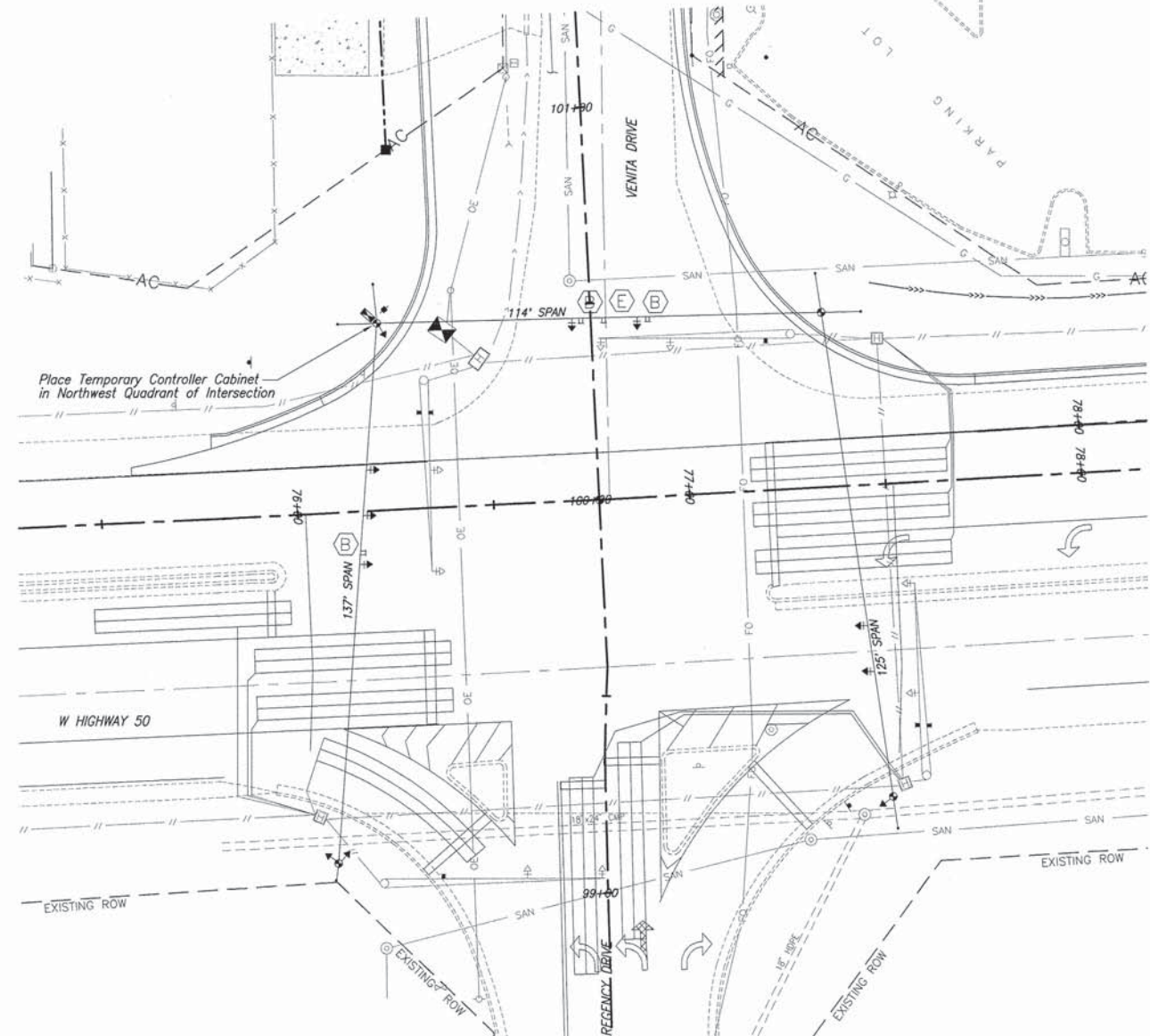
DETAIL **E**
TRAFFIC SIGNS
N.T.S.
R3-8 (MODIFIED)
MAST ARM MOUNTED
1 EACH REQUIRED
SIGN PANEL - TYPE 1

K:\11706 - 07Fallon - Hwy 50 & Venita Drive\Drawings\TRAFFIC_SIGNAL_PLAN.dwg, 7/17/2013 11:17:29 AM, Plotted by: MW

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9336/9331	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	95
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

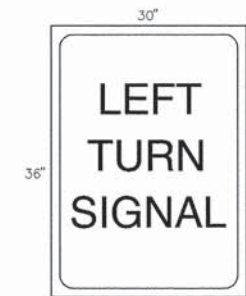
TEMPORARY TRAFFIC SIGNAL NOTES

- ALL CONTROL EQUIPMENT FOR THE TEMPORARY TRAFFIC SIGNALS SHALL BE FURNISHED BY THE CONTRACTOR. TEMPORARY TRAFFIC SIGNAL SETUP ON THIS SHEET SHALL BE OPERATIONAL DURING STAGE 1.
- THE TEMPORARY SIGNALS MUST BE FULLY INSTALLED AND OPERATIONAL PRIOR TO THE EXISTING SIGNALS BEING DISCONNECTED. THE PROPOSED SIGNAL INSTALLATION SHALL BE INSTALLED AND OPERATIONAL BEFORE THE TEMPORARY INSTALLATION IS DISCONNECTED.
- THE PROPOSED TRAFFIC SIGNALS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD 880001 AND SECTION 890 OF THE STANDARD SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WOOD POLES OF SUFFICIENT LENGTH TO MAINTAIN THE CLEARANCE REQUIREMENTS SHOWN IN STANDARD 880001.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE WOOD POLES OF THE CLASS REQUIRED TO SUPPORT THE TEMPORARY TRAFFIC SIGNAL INSTALLATION IN ACCORDANCE WITH STANDARD 880001 AND SECTION 890 OF THE STANDARD SPECIFICATIONS.
- ALL HARDWARE NECESSARY TO INSTALL THE SPAN WIRE, SIGNAL HEADS, WOOD POLES, GUY WIRES AND OTHER ITEMS NECESSARY FOR THE COMPLETE INSTALLATION OF THE TEMPORARY TRAFFIC SIGNALS SHALL BE PROVIDED BY THE CONTRACTOR.
- ALL TRAFFIC SIGNAL SECTIONS SHALL BE LED 12". THE TEMPORARY SIGNAL HEADS SHALL BE PLACED AS INDICATED ON THE TEMPORARY SIGNAL PLAN OR AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL FURNISH ENOUGH CABLE SLACK TO RELOCATE THE HEADS TO ANY POSITION ON ITS SPAN WIRE. EACH SIGNAL HEAD SHALL HAVE ITS OWN CABLE FROM THE CONTROLLER CABINET TO THE SIGNAL HEAD.
- ALL EXISTING STREET NAME AND INTERSECTION REGULATORY SIGNS SHALL BE REMOVED FROM EXISTING POLES. THEY SHALL BE RELOCATED AND SECURELY FASTENED TO THE SIGNAL SPAN WIRE OR WOOD POLE AS DIRECTED BY THE ENGINEER.
- THE EXISTING TRAFFIC SIGNAL SYSTEM IS INTERCONNECTED WITH THE TRAFFIC SIGNALS AT THE INTERSECTION OF W. HIGHWAY 50 AND INTERSTATE 64 INTERCHANGE VIA COPPER COMMUNICATION CABLE. THIS CABLE SHALL NOT BE SPLICED OR CUT AND SHALL BE REMOVED AND REINSTALLED AS SHOWN IN THE PLANS.
- THE TEMPORARY SIGNALS SHALL BE OPERATED AS SEMI-ACTUATED PHASING. THE DUAL LEFT MOVEMENT ON REGENCY DRIVE AND WESTBOUND LEFT TURN MOVEMENT ON W. HIGHWAY 50 SHALL BE ACTUATED. TEMPORARY INTERCONNECTION WILL NOT BE REQUIRED.
- ALL EXISTING TRAFFIC SIGNAL CABLE SHALL BE REMOVED FROM THE EXISTING CONDUIT PRIOR TO INSTALLATION OF THE NEW TRAFFIC SIGNAL CABLE.
- THE INTERCONNECT CABLE SHALL BE REMOVED AND STORED IN SUCH A MANNER AS TO MAINTAIN THE INTEGRITY OF THE CABLE AND INSULATION AS DETERMINED BY THE ENGINEER. THE INTERCONNECT CABLE SHALL BE REINSTALLED IN THE EXISTING CONDUIT TO THE RELOCATED CONTROLLER. THIS WORK SHALL INCLUDE THE COST OF THE REMOVE AND REINSTALL ELECTRIC CABLE FROM CONDUIT.
- ALL LABOR AND MATERIALS REQUIRED TO COMPLY WITH THESE REQUIREMENTS SHALL BE CONSIDERED INCLUDED IN THE CONTRACT UNIT PRICE FOR TEMPORARY TRAFFIC SIGNAL INSTALLATION. THE ITEMS AND QUANTITIES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE TEMPORARY TRAFFIC SIGNAL INSTALLATION FOR THE DURATION OF THE SIGNAL WORK.

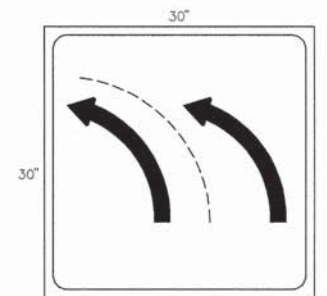


TEMPORARY TRAFFIC SIGNAL LEGEND

- TEMPORARY CONTROLLER
- TEMPORARY WOOD POLE
- TEMPORARY SPAN WIRE, TETHER WIRE AND CABLE
- TEMPORARY GUY WIRE
- TEMPORARY SERVICE INSTALLATION
- TEMPORARY TRAFFIC SIGNAL HEAD, SPAN WIRE MOUNTED



DETAIL B
TRAFFIC SIGNS
N.T.S.
R10-10L
2 EACH REQUIRED
SIGN PANEL - TYPE 1



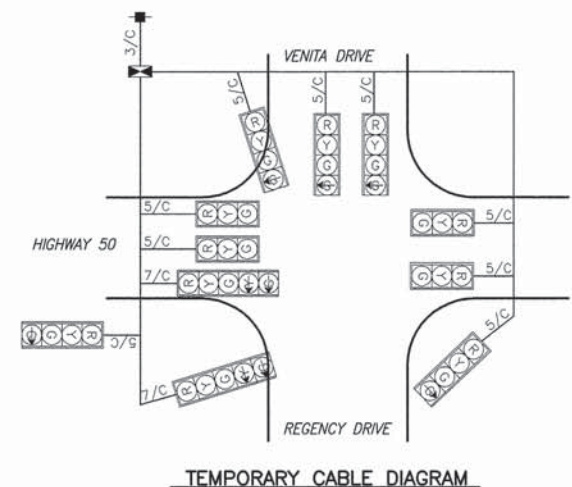
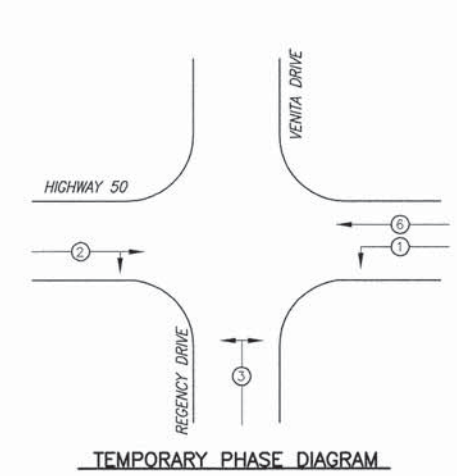
DETAIL E
TRAFFIC SIGNS
N.T.S.
R3-8 (MODIFIED)
1 EACH REQUIRED
SIGN PANEL - TYPE 1

TEMPORARY CABLE DIAGRAM LEGEND

- TEMPORARY CONTROLLER
- TEMPORARY TRAFFIC SIGNAL HEAD WITH BACKPLATE
- TEMPORARY SERVICE INSTALLATION
- 2/C INDICATES NUMBER OF CONDUCTORS IN CABLE

CONTROLLER PHASING

PHASE #	PROPOSED			
	1	2	3	6
MOVEMENT	←	→	←	→
CONCURRENT MOVEMENT PERMITTED	6	6	NONE	2



EXISTING TRAFFIC SIGNAL EQUIPMENT TO BE REMOVED

A. THE FOLLOWING EXISTING TRAFFIC SIGNAL EQUIPMENT SHALL BE REMOVED BY THE CONTRACTOR, SHALL BECOME THE PROPERTY OF THE STATE, AND SHALL BE DELIVERED TO ILLINOIS DEPARTMENT OF TRANSPORTATION, TRAFFIC AND MAINTENANCE YARD, 9601 ST. CLAIR AVENUE, FAIRVIEW HEIGHTS, ILLINOIS.

ITEM	UNIT	QUANTITY
MAST ARM POLE AND ASSEMBLY	EACH	2
TRAFFIC SIGNAL BACKPLATE	EACH	4
SIGNAL HEAD	EACH	4

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT. REMOVAL OF INDIVIDUAL ITEMS WILL NOT BE PAID FOR SEPARATELY.

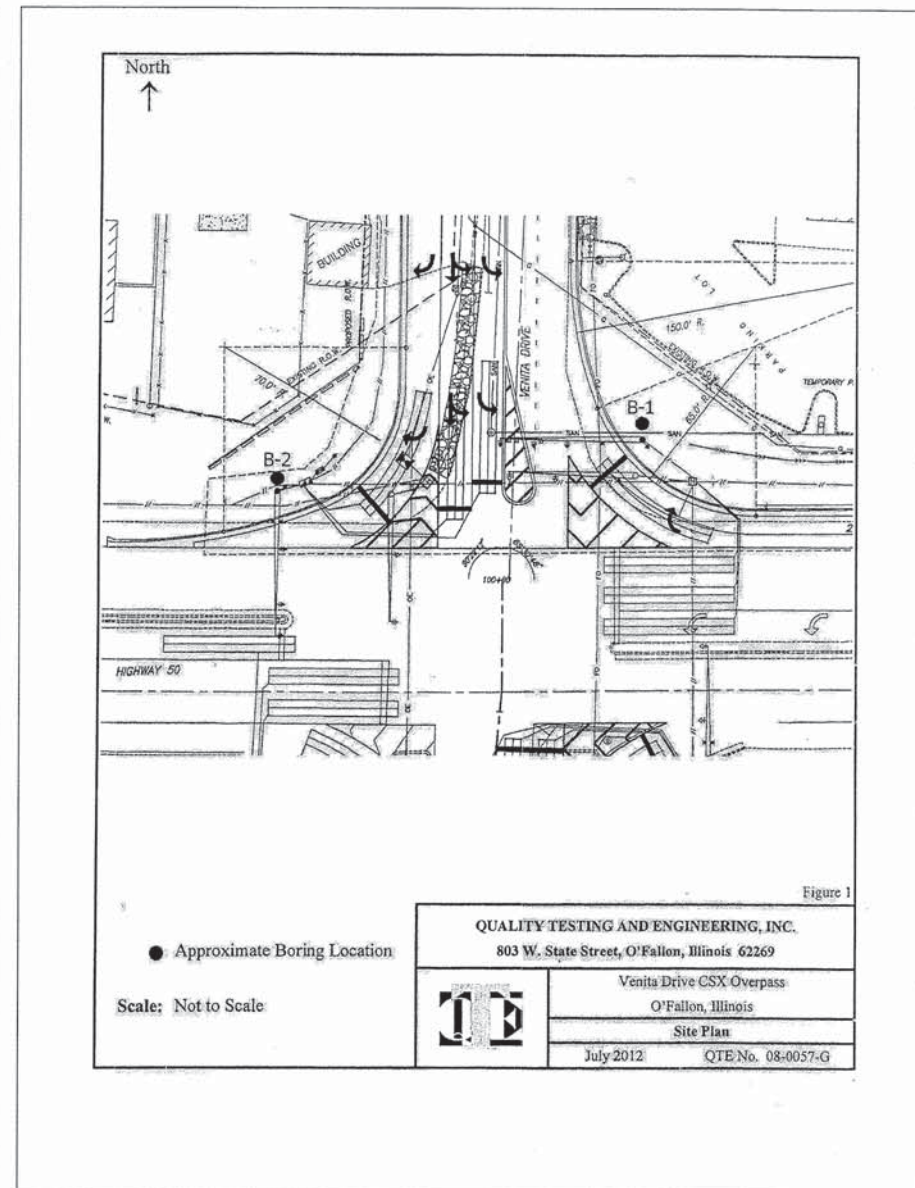
B. THE CONTRACTOR SHALL REMOVE THE FOLLOWING EXISTING TRAFFIC SIGNAL ITEMS AND DISPOSE OF THEM IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

ITEM	UNIT	QUANTITY
DOUBLE HANDHOLE	EACH	1
CONCRETE FOUNDATIONS	EACH	3
ELECTRICAL SERVICE INSTALLATION	EACH	1

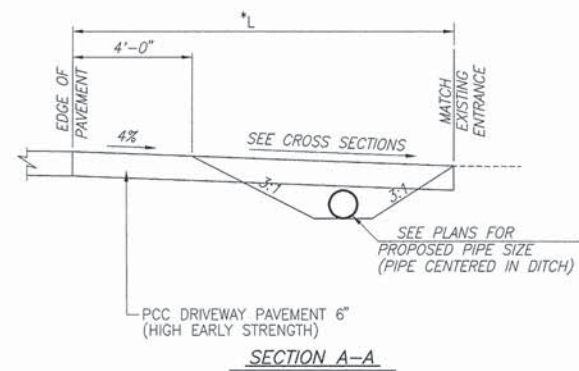
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REMOVE EXISTING DOUBLE HANDHOLE, REMOVE EXISTING CONCRETE FOUNDATION, AND REMOVAL OF ELECTRICAL SERVICE INSTALLATION.

Illinois Department of Transportation		Quality Testing and Engineering, Inc. Project No. 08-0057-G			
Soil Boring Log					
Route: Venita Drive		Structure No.: (Exist.) (Prop.)			
Date: 6/19/12		Page: 1 of 1			
Section: Mast Arms at Venita Dr & W. Hwy 50					
County: St. Clair		Drilling Method: 4" O.D. CFA			
Hammer Type: Automatic SPT Hammer		Boring No.: B-1			
Logged by: WKS					
Station:	Surface Water Elev.: -- ft	E	D		
Offset:	Groundwater Elev.:	E	D		
Latitude:	First Encounter: 12 ft	L	P		
Longitude:	Upon Completion: ft	T	H		
Ground Surface El.: ft	After: Hours	W	S		
		U	C.		
		M	O		
		I	S		
		T.			
Soil Type, Description & Observations	(ft)	(ft)	/6 in.	(tsf)	(%)
FILL - Brown low plastic SILTY CLAY	5	6	1.5	13	
	6	6	P		
	2	2	0.4	26	
	-5	2	B		
FILL - Gray low plastic SILTY CLAY	1	1	0.3	29	
	1	1	P		
Gray and brown low plastic SILT	1	1	0.8	35	
	-10	3	B		
	2	3	0.8	28	
	3	4	B		
Dark brown low plastic ORGANIC SILT	2	3	0.8	74	
	-15	4	P		
	3	3	1.3	84	
	5	5	P		
Gray low plastic SILTY CLAY, some sand	1	2	1.1	29	
	-20	2	B		

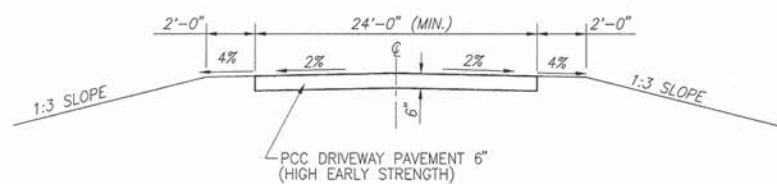
Illinois Department of Transportation		Quality Testing and Engineering, Inc. Project No. 08-0057-G			
Soil Boring Log					
Route: Venita Drive		Structure No.: (Exist.) (Prop.)			
Date: 6/19/12		Page: 1 of 1			
Section: Mast Arms at Venita Dr & W. Hwy 50					
County: St. Clair		Drilling Method: 4" O.D. CFA			
Hammer Type: Automatic SPT Hammer		Boring No.: B-2			
Logged by: WKS					
Station:	Surface Water Elev.: -- ft	E	D		
Offset:	Groundwater Elev.:	E	D		
Latitude:	First Encounter: 8 ft	L	P		
Longitude:	Upon Completion: ft	T	H		
Ground Surface El.: ft	After: Hours	W	S		
		U	C.		
		M	O		
		I	S		
		T.			
Soil Type, Description & Observations	(ft)	(ft)	/6 in.	(tsf)	(%)
Brown low plastic SILTY CLAY, trace sand	5	5	1.5	12	
	5	5	P		
Brown and gray medium plastic SILTY CLAY	2	2	1.6	30	
	-5	3	B		
Gray and brown low plastic SILTY CLAY	1	1	0.4	33	
	2	2	B		
Gray and brown low plastic SILTY CLAY, some sand	2	2	0.5	29	
	-10	4	P		
Gray low plastic SILT	2	3	1.9	27	
	3	4	B		
Dark brown low plastic ORGANIC SILT	3	3	0.8	58	
	-15	6	P		
	3	3	1.3	57	
	4	4	P		
Gray low plastic SILTY CLAY, trace sand	2	3	1.5	28	
	-20	4	B		



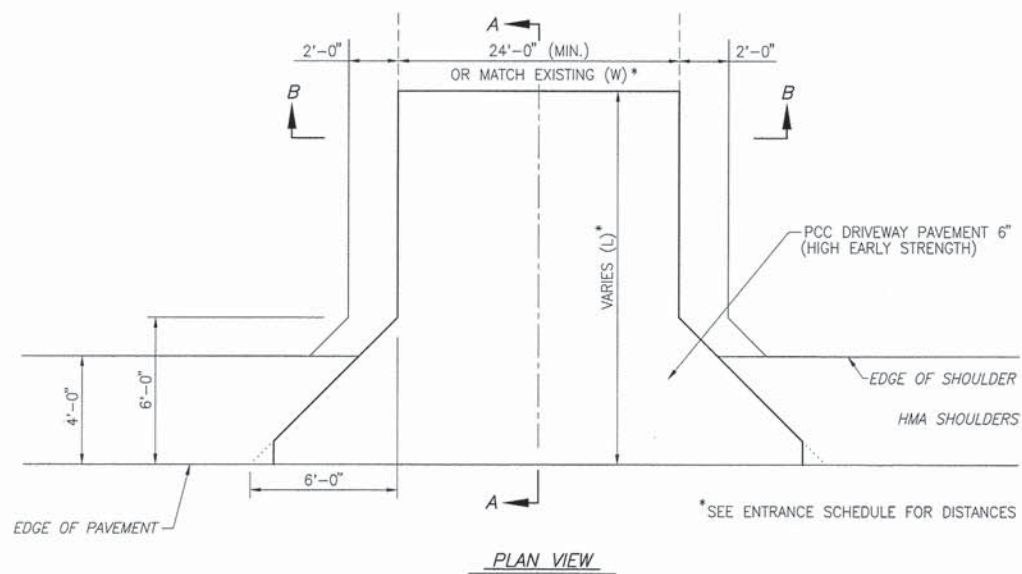
F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	97
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	



SECTION A-A



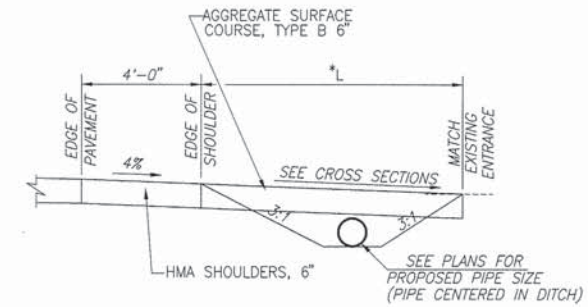
SECTION B-B



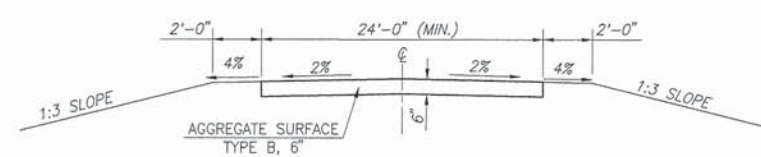
PLAN VIEW

TYPICAL COMMERCIAL ENTRANCE (C.E.) - CONCRETE

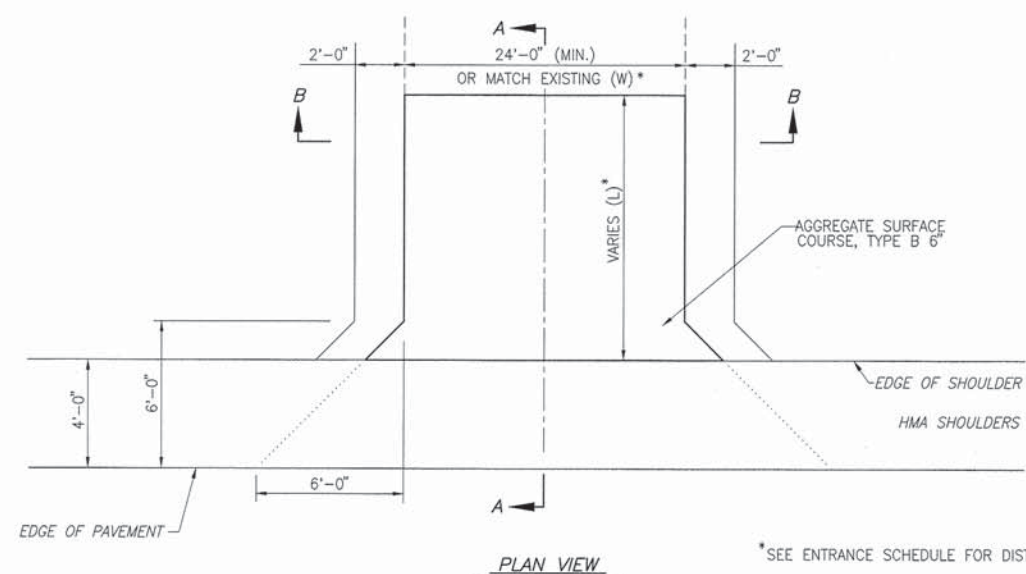
N.T.S.



SECTION A-A



SECTION B-B



PLAN VIEW

TYPICAL FIELD ENTRANCE (F.E.) - AGGREGATE

N.T.S.

OPEN THROAT STRUCTURES

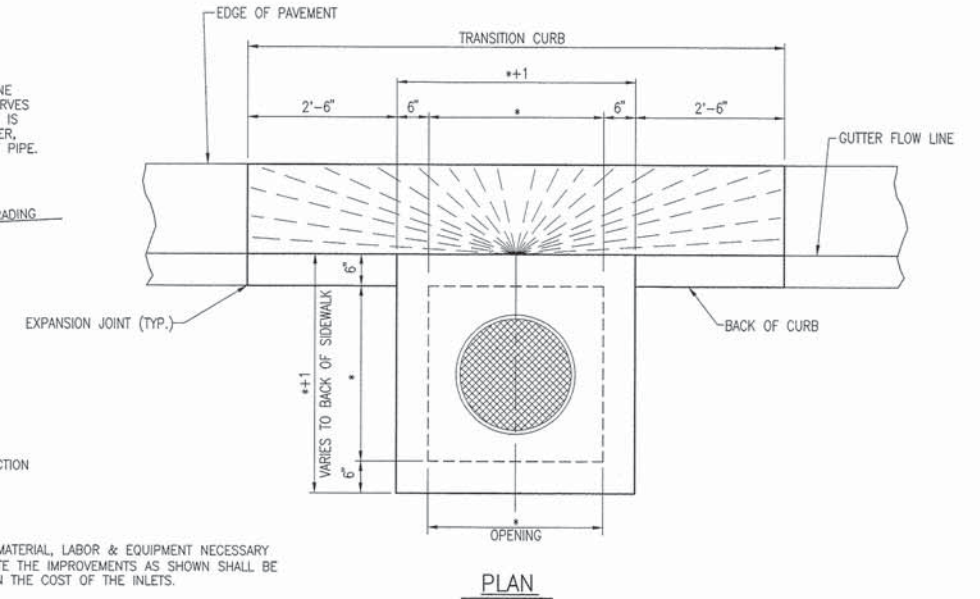
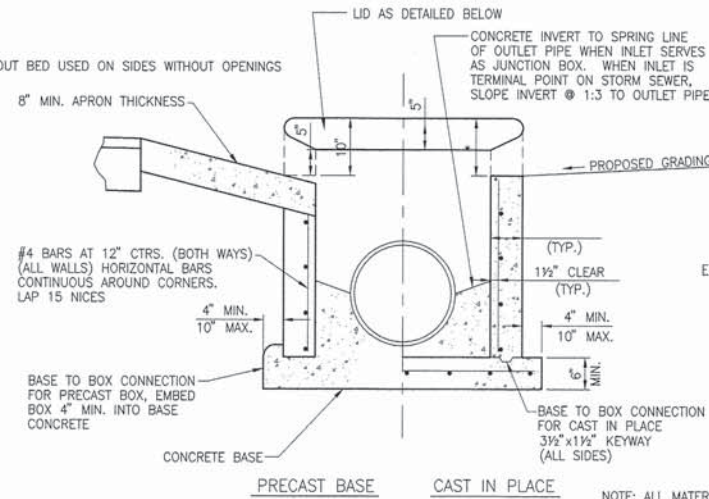
PT	LOCATION STATION / OFFSET	DESCRIPTION	HEIGHT OF OPENING FROM TOP OF LID
3	102+30.79 29.00'R	INLET SPECIAL, NO. 1 (3'X3')	18"
(1) 14	105+52.47 148.63'L	INLET SPECIAL, NO. 2 (4'X4')	9"

INLET TYPE	INSIDE WIDTH
INLETS, SPECIAL, NO. 1	3' X 3'
INLETS, SPECIAL, NO. 2	4' X 4'

F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	98
FEDERAL AID/GCPF PROJECT			CONTRACT 97533	

(1) - INLET NOT ADJACENT TO CURB OPENINGS ON 2 SIDES (NORTH & SOUTH)

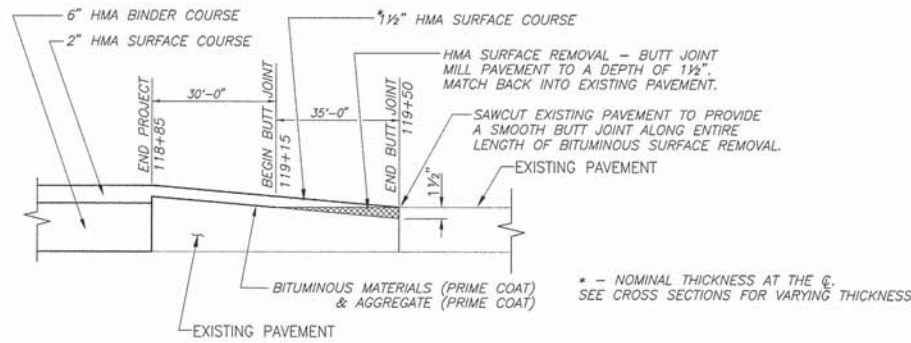
NOTE: FULL WIDTH GROUT BED USED ON SIDES WITHOUT OPENINGS



NOTE: ALL MATERIAL, LABOR & EQUIPMENT NECESSARY TO COMPLETE THE IMPROVEMENTS AS SHOWN SHALL BE INCLUDED IN THE COST OF THE INLETS.

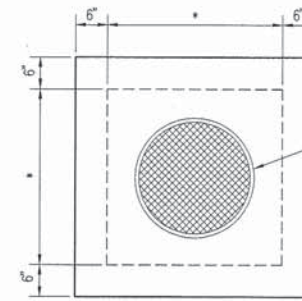
INLETS, SPECIAL, NO. 1 & 2 - WITH MULTIPLE OPENINGS

N.T.S.

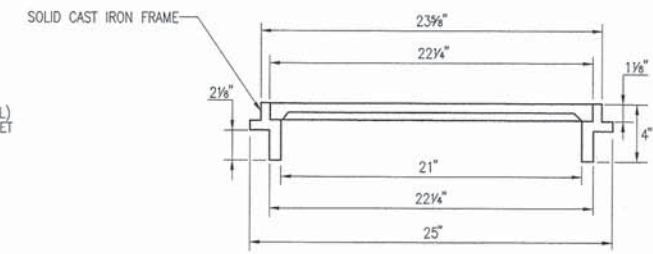


BUTT JOINT DETAIL

N.T.S.

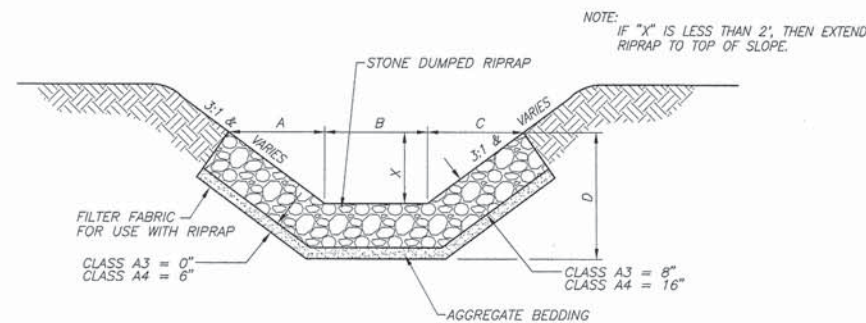


PRECAST LID DETAIL



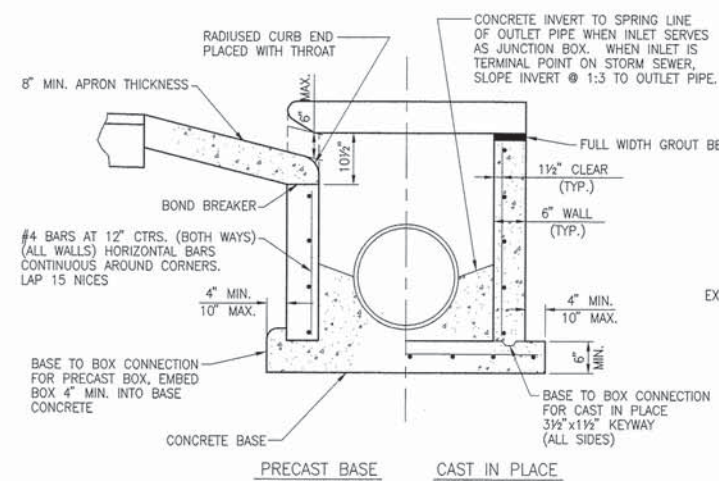
FRAME AND CLOSED LID

INLET TYPE	INSIDE WIDTH
INLETS, SPECIAL, NO. 1	3' X 3'
INLETS, SPECIAL, NO. 2	4' X 4'

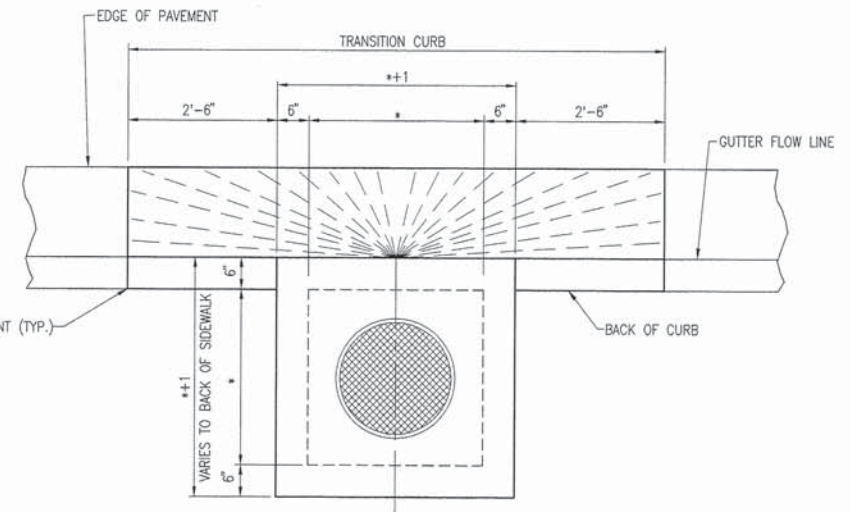


STONE DUMPED RIPRAP DITCH LINING

N.T.S.



END VIEW



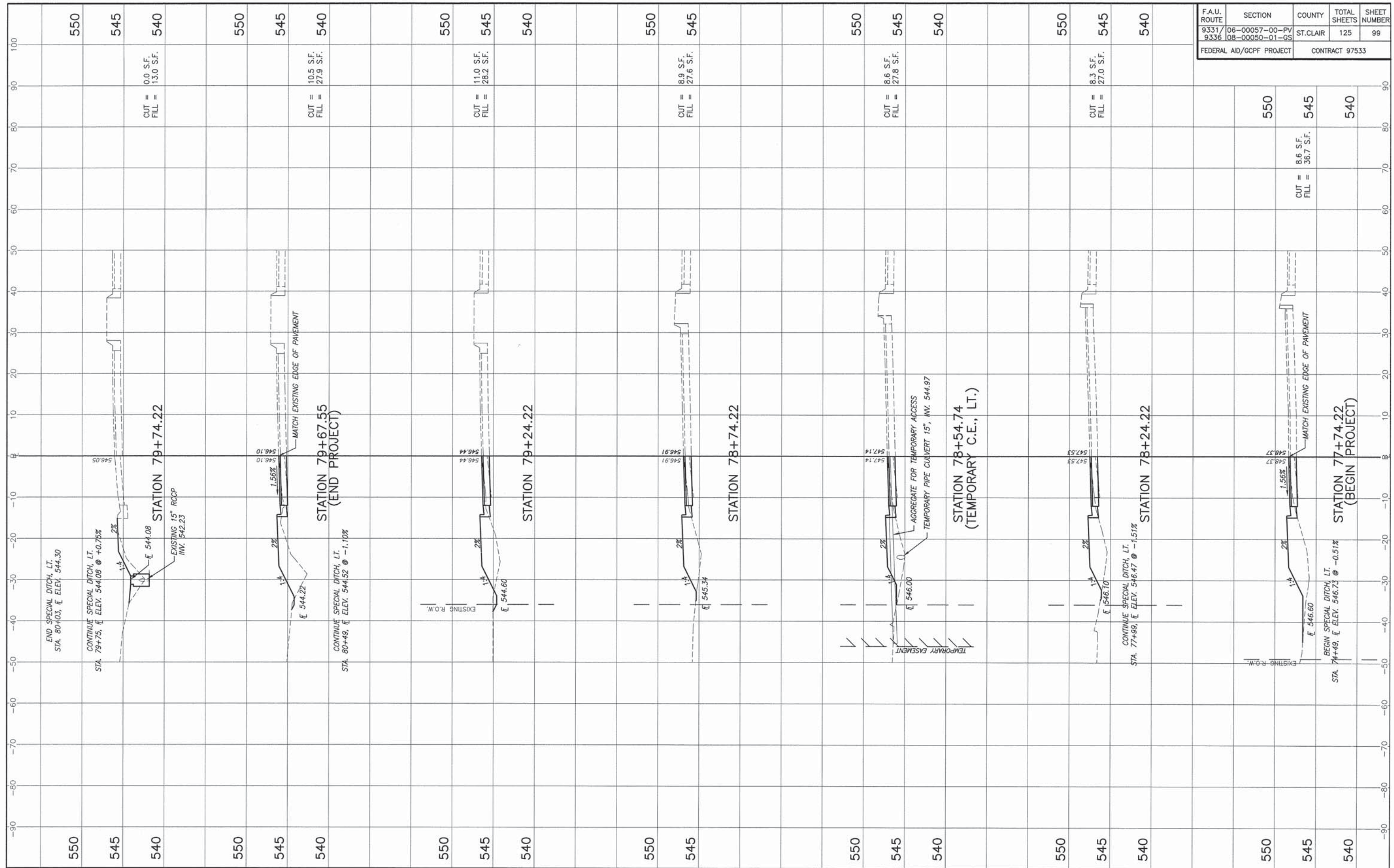
PLAN

INLETS, SPECIAL, NO. 1 & 2

N.T.S.

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F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	99
FEDERAL AID/GC/PF PROJECT		CONTRACT 97533		



CUT = 0.0 S.F.
FILL = 13.0 S.F.

CUT = 10.5 S.F.
FILL = 27.9 S.F.

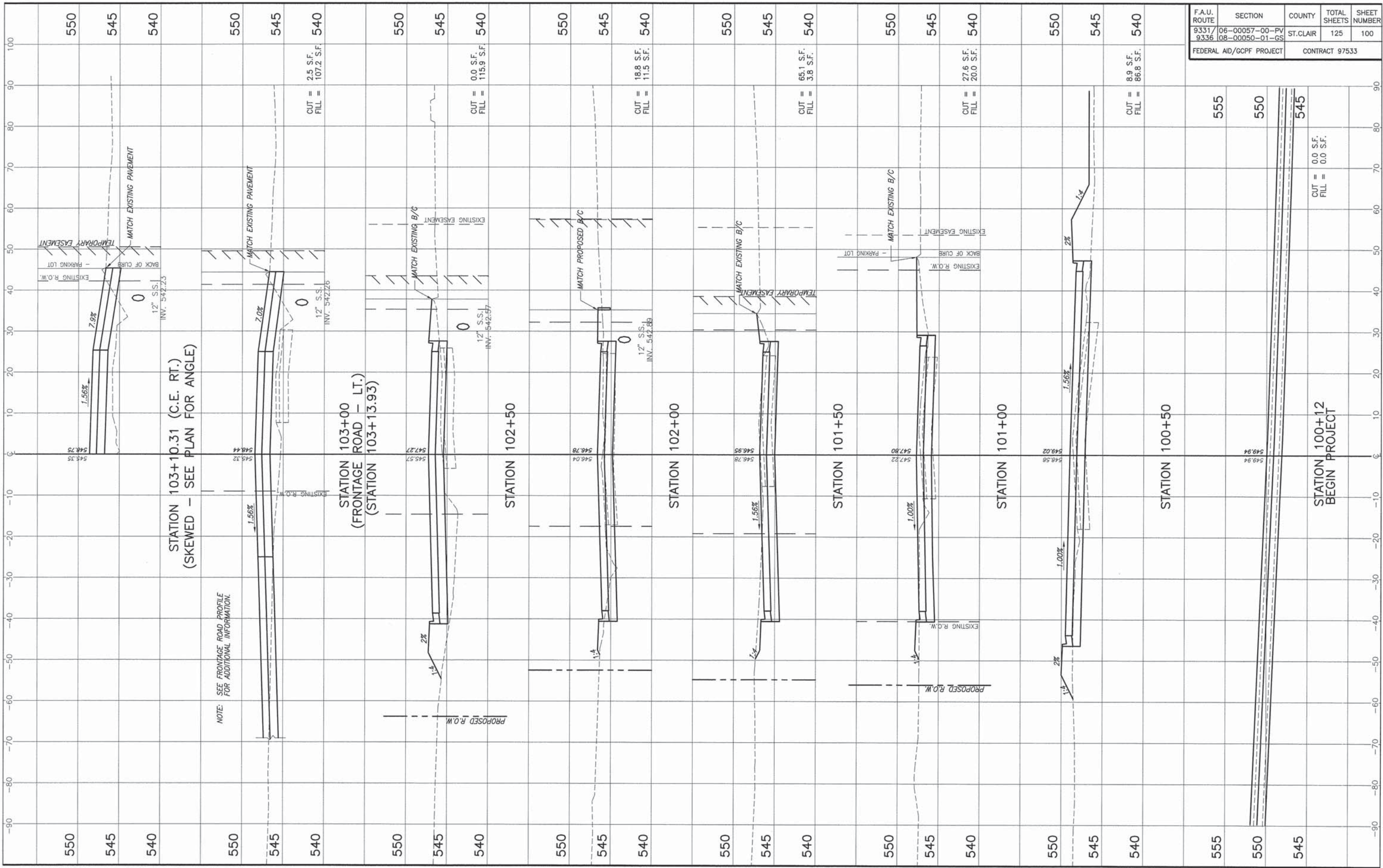
CUT = 11.0 S.F.
FILL = 28.2 S.F.

CUT = 8.9 S.F.
FILL = 27.6 S.F.

CUT = 8.6 S.F.
FILL = 27.8 S.F.

CUT = 8.3 S.F.
FILL = 27.0 S.F.

CUT = 8.6 S.F.
FILL = 36.7 S.F.



F.A.U. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
9331/9336	06-00057-00-PV 08-00050-01-GS	ST. CLAIR	125	100
FEDERAL AID/GC/PF PROJECT			CONTRACT 97533	