

ROUTE NO.	CONTRACT NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAU. 6923	89356	03-00128-00-BR	McDonough	43	1

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED  
**WIGWAM HOLLOW ROAD BRIDGE REPLACEMENT**  
SECTION 03-00128-00-BR  
PROJECT # BRM-5040(008)  
CITY OF MACOMB  
McDONOUGH COUNTY  
C-94-078-04

**CITY OFFICIALS**

MAYOR \_\_\_\_\_ MIKE INMAN  
CITY CLERK \_\_\_\_\_ MELANIE FALK  
CITY TREASURER \_\_\_\_\_ RONALD WARD  
CITY ADMINISTRATOR \_\_\_\_\_ DEAN TORRESON






**ALDERMEN**

DAVE DORSETT                      DENNIS MOON  
LOU GILBERT                      DON WYNN  
KAY HILL                              CLAY HINDERLITER  
THOMAS KOCH                      RYAN HANSEN  
TIM LOBDELL

**INDEX OF SHEETS**

1. TITLE SHEET, LOCATION MAP AND INDEX OF SHEETS
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5. TABULATION OF QUANTITIES
6. REMOVAL PLAN
7. ROADWAY PLAN AND PROFILE
8. ROADWAY PLAN AND PROFILE & DRIVEWAY DETAILS
- 9.-10. STORM SEWER PLAN AND PROFILE
- 11.-12. WATER MAIN PLAN AND PROFILE
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14. EROSION CONTROL PLAN
15. TYPICAL DETAILS
16. TYPE B INLET BOX, STD 609006 (SPL) DETAILS
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- 18.-39. STRUCTURE DETAILS
- 40.-43. ROADWAY CROSS SECTIONS

**SCALES**

PLAN	1 INCH = 20 FEET	
PROFILE HORIZ.	1 INCH = 20 FEET	
PROFILE VERT.	1 INCH = 5 FEET	
CROSS SECTIONS HORIZ.	1 INCH = 10 FEET	
CROSS SECTIONS VERT.	1 INCH = 5 FEET	

**HIGHWAY STANDARDS**

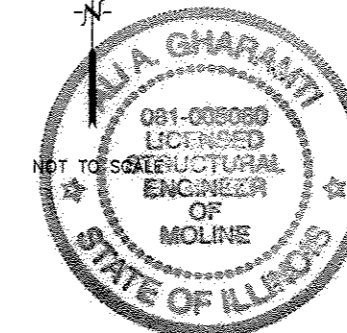
000001-06	515001-03	604006-04	635011-02
001001-02	542301-03	606001-05	701901-03
001008	601101-01	609006-05	BLR 21-9
280001-07	602101-02	630001-10	BLR 22-7
420001-07	602301-04	630301-06	
420111-03	602401-03	631026-05	
420401-10	602701-02	631032-08	
421001-02	604001-03	635006-03	

**LIST OF UTILITIES**

- WATER \_\_\_\_\_ CITY OF MACOMB
- SANITARY SEWER \_\_\_\_\_ CITY OF MACOMB
- TELEPHONE \_\_\_\_\_ FRONTIER
- GAS \_\_\_\_\_ AMEREN CIPS
- ELECTRIC \_\_\_\_\_ McDONOUGH POWER COOP
- CABLE TELEVISION \_\_\_\_\_ COMCAST



CALL J.U.L.I.E. BEFORE YOU DIG  
1-800-892-0123  
TOLL FREE



Signature: *[Signature]*  
Date: 5/14/13  
Exp. Date: 11/30/14

CATALOG # 032738-00

APPROVED: *[Signature]*  
MAYOR 8/5/13  
LOCAL AGENCY/CITY OF MACOMB (MAYOR)

PASSED: 28-14 20 13  
*[Signature]*  
DISTRICT FOUR ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID BASED ON LIMITED REVIEW: 8-14 20 13  
*[Signature]*  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 3 ENGINEER  
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

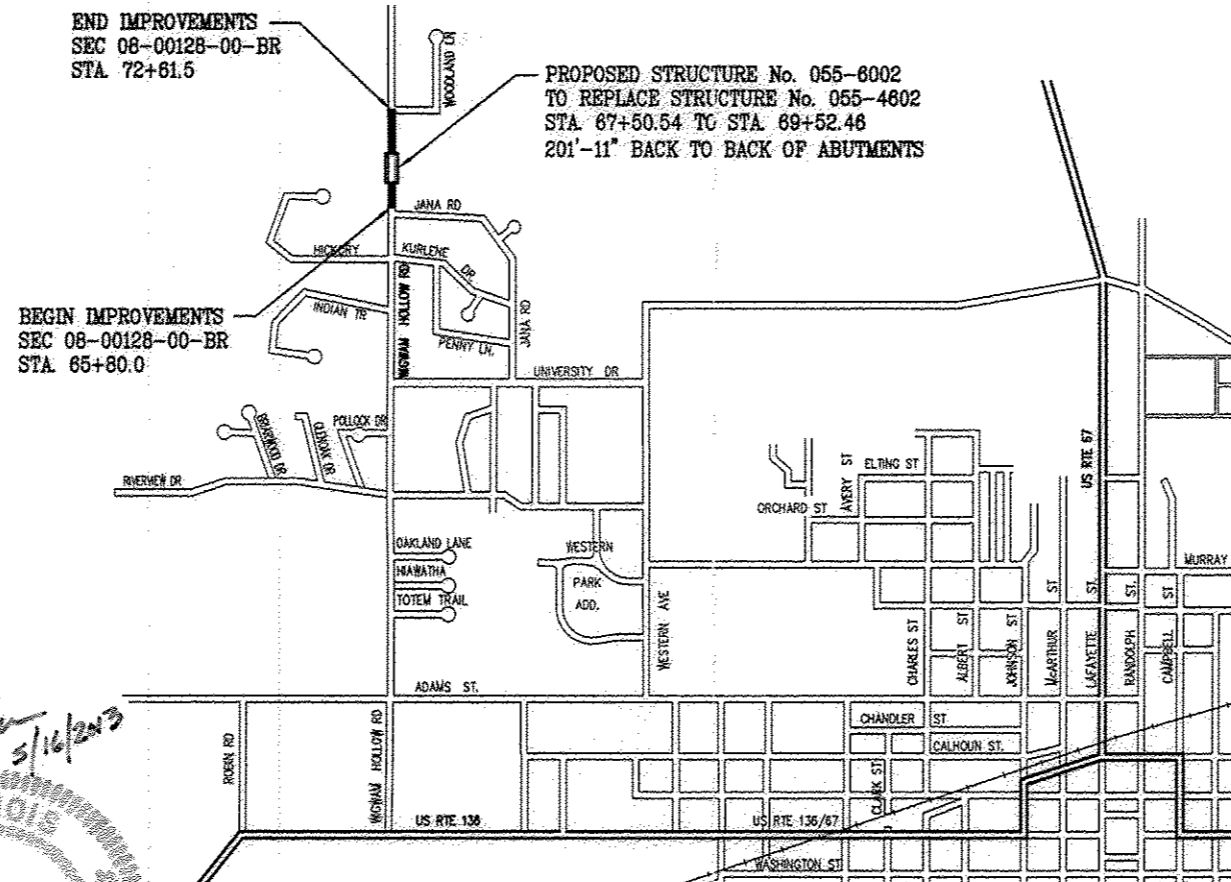


LOCATION OF SECTION INDICATED THUS

**REGIONAL MAP**



Exp. 11/30/2013



TOTAL AND NET LENGTH OF PROJECT : 681.50 FEET, 0.129 MILES  
FUNCTIONAL CLASSIFICATION: COLLECTOR (URBAN)  
CURRENT ADT 1700; DESIGN SPEED/POSTED SPEED : 30 MPH

**LOCATION MAP**

REVISIONS		
NO.	ITEM	DATE

DRAWN BY:	TAB
CHECKED BY:	ECM
DATE:	JANUARY 2013

**McClure Engineering Associates, Inc.**  
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Macomb, Illinois 61455  
(309) 833-4584  
FAX (309) 837-4909  
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**WIGWAM HOLLOW BRIDGE REPLACEMENT**  
TITLE SHEET, LOCATION MAP AND INDEX OF SHEETS  
CITY OF MACOMB  
292 EAST JACKSON ST.  
McDONOUGH COUNTY, ILLINOIS  
FILE NAME: \\clcl\proj\112800-2007\112800-2007.dwg FIELD BOOK No: 2262 JOB NUMBER: 03-28-07-104

**GENERAL NOTES**

- ALL WORK SHALL BE IN CONFORMANCE WITH APPLICABLE SECTIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2012 AND SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2012.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING UTILITY PROPERTY DURING CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 1-800-892-0123.
- A NATIONWIDE 404 PERMIT HAS BEEN OBTAINED FOR THIS PROJECT AND THE CONDITIONS OF THAT PERMIT MUST BE ADHERED TO.
- ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT TERM CLOSURES.
- WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND PRESERVE PROPERTY MARKERS AND MONUMENTS UNTIL AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATIONS.
- ALL EXISTING PUBLICLY AND PRIVATELY OWNED UTILITIES REQUIRING ADJUSTMENT WILL BE MADE BY THE UTILITY COMPANY INVOLVED. WHERE NO PROVISIONS HAVE BEEN MADE FOR ADJUSTMENTS ON THE PLANS, NO ADDITIONAL COMPENSATION WILL BE ALLOWED DUE TO DELAYS OR INCONVENIENCE CAUSED BY SAID UTILITY ADJUSTMENTS.
- WHEREVER IT IS NECESSARY TO REMOVE EXISTING GRAVEL OR CRUSHED STONE BASE COURSE, IT SHALL BE REMOVED AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR ADDITIONAL LABOR OR EQUIPMENT REQUIRED.
- THE CONTRACTOR MAY BE REQUIRED TO CONDUCT SOME OF HIS GRADING OPERATIONS AROUND TRANSMISSION POLES AND UNDER TRANSMISSION LINES. THE ADDED COST OF SO DOING SHALL BE CONSIDERED INCLUDED IN THE COST OF THE VARIOUS BID ITEMS BEING CONSTRUCTED.
- PROTECTIVE COAT SHALL BE APPLIED TO THE BRIDGE CONCRETE WEARING SURFACE, CURB AND SIDEWALK, INCLUDING THE BRIDGE APPROACH PAVEMENT IN ACCORDANCE WITH SECTION 503 OF THE STANDARD SPECIFICATIONS. IF THE PCC PAVEMENT IS CONSTRUCTED AFTER OCTOBER 15 AND THE PAVEMENT WILL BE OPENED TO TRAFFIC BEFORE THE FOLLOWING APRIL 15 THEN PROTECTIVE COAT WILL BE APPLIED TO THE PAVEMENT IN ACCORDANCE WITH ARTICLE 420.18 OF THE STANDARD SPECIFICATIONS AND PAYMENT WILL BE AT THE CONTRACT PRICE PER SQUARE YARD.
- 2009 AUTOCAD FILES OF THIS PROJECT WILL BE MADE AVAILABLE TO THE CONTRACTOR. IF THERE IS A CONFLICT BETWEEN THE ELECTRONIC FILES AND THE PRINTED CONTRACT PLANS AND DOCUMENTS, THE PRINTED CONTRACT PLANS AND DOCUMENTS SHALL TAKE PRECEDENCE OVER THE ELECTRONIC FILES UNLESS OTHERWISE DETERMINED BY THE ENGINEER. CONTRACTOR SHALL ACCEPT ALL RISK ASSOCIATED WITH THE USE OF THE ELECTRONIC FILES AND SHALL HOLD THE ENGINEER AND CITY HARMLESS FOR ANY ERRORS AND OMISSIONS IN THE ELECTRONIC FILES AND THE DATA CONTAINED THEREIN. ERRORS OR DELAYS RESULTING FROM THE USE OF THE ELECTRONIC FILES BY THE CONTRACTOR SHALL NOT RESULT IN AN EXTENSION OF TIME FOR ANY INTERIM OR FINAL COMPLETION DATE OR SHALL NOT BE CONSIDERED CAUSE FOR ADDITIONAL COMPENSATION. THE CONTRACTOR SHALL NOT USE, SHARE, OR DISTRIBUTE THESE ELECTRONIC FILES EXCEPT FOR THE PURPOSE OF CONSTRUCTING THIS CONTRACT. ANY CLAIMS BY THIRD PARTIES DUE TO USE OR ERRORS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL INCLUDE THIS DISCLAIMER WITH THE TRANSFER OF THESE ELECTRONIC FILES TO ANY OTHER PARTIES AND SHALL INCLUDE APPROPRIATE LANGUAGE BINDING THEM TO SIMILAR RESPONSIBILITIES.
- THE POWER COMPANY WILL DE-ENERGIZE AND DROP THE POWER LINE FROM THE POLE AT 38' LT. STA. 67+57± TO THE POLE AT 32' RT. STA. 70+80± DURING DRIVING THE PILES AND SETTING THE DECK BEAMS. THE CONTRACTOR SHALL LIMIT THE TIME OF THESE CONSTRUCTION OPERATIONS TO 14 CONSECUTIVE CALENDAR DAYS EACH. THE CONTRACTOR SHALL PROVIDE A TENTATIVE CONSTRUCTION SCHEDULE AT THE PRE-CONSTRUCTION MEETING.

**ENVIRONMENTAL REVIEWS**

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

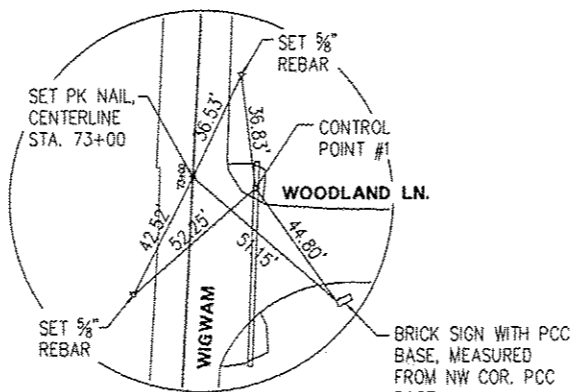
PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS WILL NEED TO BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

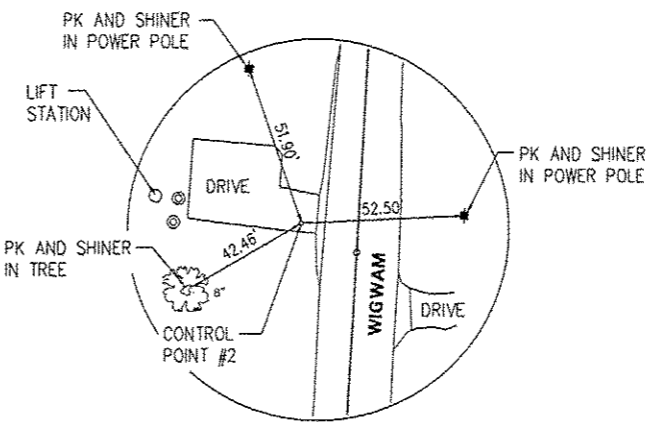
THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (ENVIRONMENTAL SURVEY REQUEST)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- SIGNED PROPERTY OWNER AGREEMENT FORM -D4 PI0100
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM -D4 PI0101

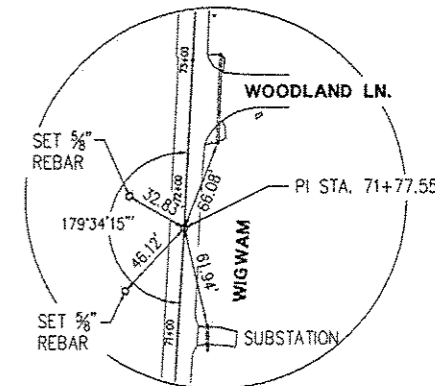
PLEASE NOTE THAT A MINIMUM OF TWO WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED ENVIRONMENTAL CLEARANCES.



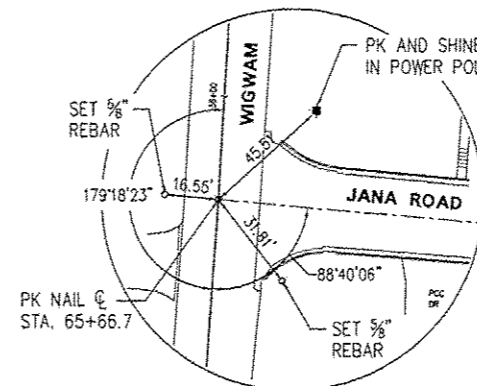
**CONTROL POINT NO. 1**  
20.34' RT, STA. 72+97.43  
CENTERLINE STA. 73+00



**CONTROL POINT NO. 2**  
67.08' LT, STA. 67+08.48



**CENTERLINE PI STA.**  
71+77.55



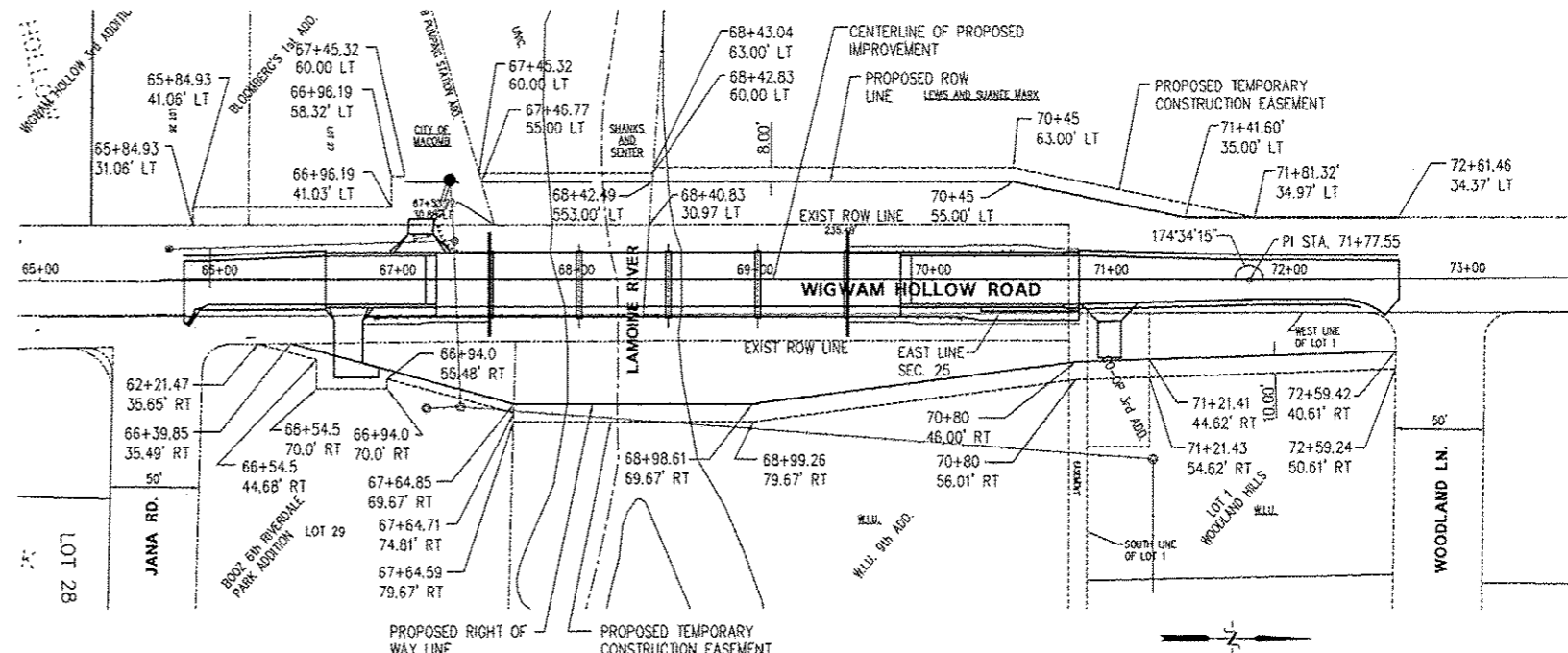
**CENTERLINE PI STA.**  
65+66.7

**COMMITMENTS:**

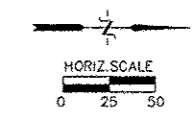
- IDOT DISTRICT 4 AND THE McDONOUGH COUNTY HIGHWAY DEPARTMENT WILL APPROVE THE DETOUR ROUTE PRIOR TO LETTING.
- THE CITY OF MACOMB WILL PUBLISH A NOTICE IN THE NEWSPAPER PRIOR TO CONSTRUCTION TO NOTIFY MOTORING PUBLIC OF THE UPCOMING ROAD CLOSURE.
- 30 TREES WILL BE REMOVED AS PART OF THIS PROJECT. THE CITY HAS AGREED TO PLAN 30 TREES AT VARIOUS OTHER LOCATIONS IN THE CITY.

**BENCH MARKS:**

- CHISELED SQUARE ON TOP OF NORTHEAST WINGWALL OF EXISTING WIGWAM HOLLOW BRIDGE ELEVATION = 599.89
- TOP SPINDLE OF FIRE HYDRANT AT NORTHEAST CORNER OF WIGWAM HOLLOW ROAD AND JANA ROAD ELEVATION = 605.51
- CAP BOLT IN MUELLER ON FIRE HYDRANT AT NORTHWEST CORNER OF WIGWAM HOLLOW ROAD AND HICKORY BOW ELEVATION = 611.71
- RR SPIKE IN WEST FACE OF POWER POLE, 200'± NORTH OF BRIDGE ON EAST SIDE OF WIGWAM HOLLOW ROAD ELEVATION = 597.05



**RIGHT OF WAY STRIP MAP**



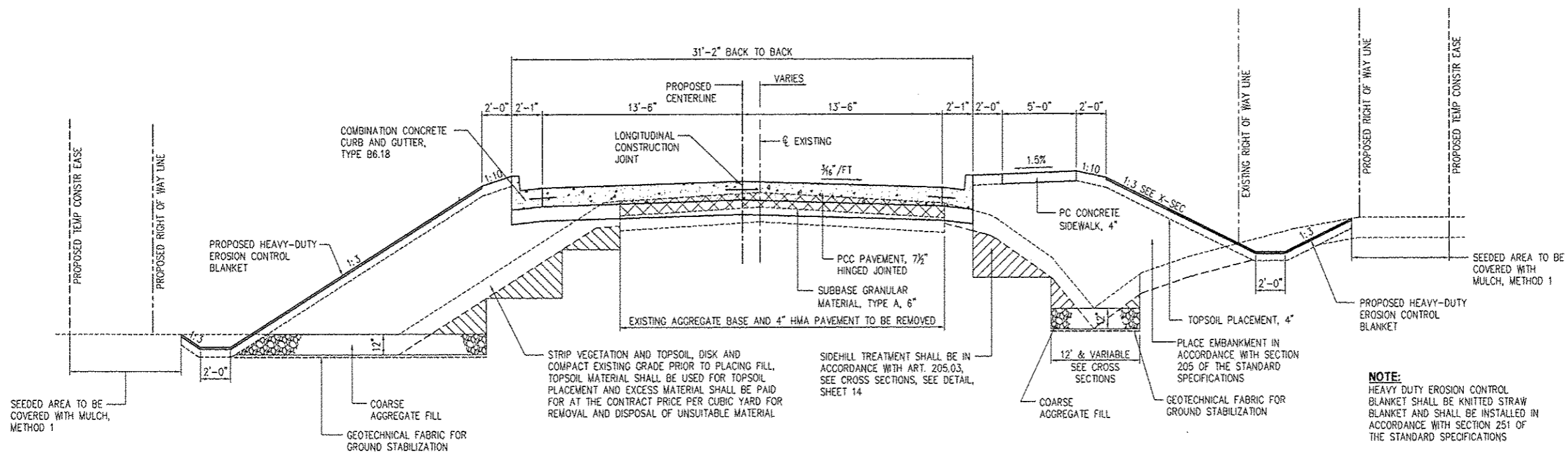
REVISIONS		
NO.	ITEM	DATE

PLOTTING SCALE: 1" = 50'
DRAWN BY: TAB
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DATE: JANUARY 2013

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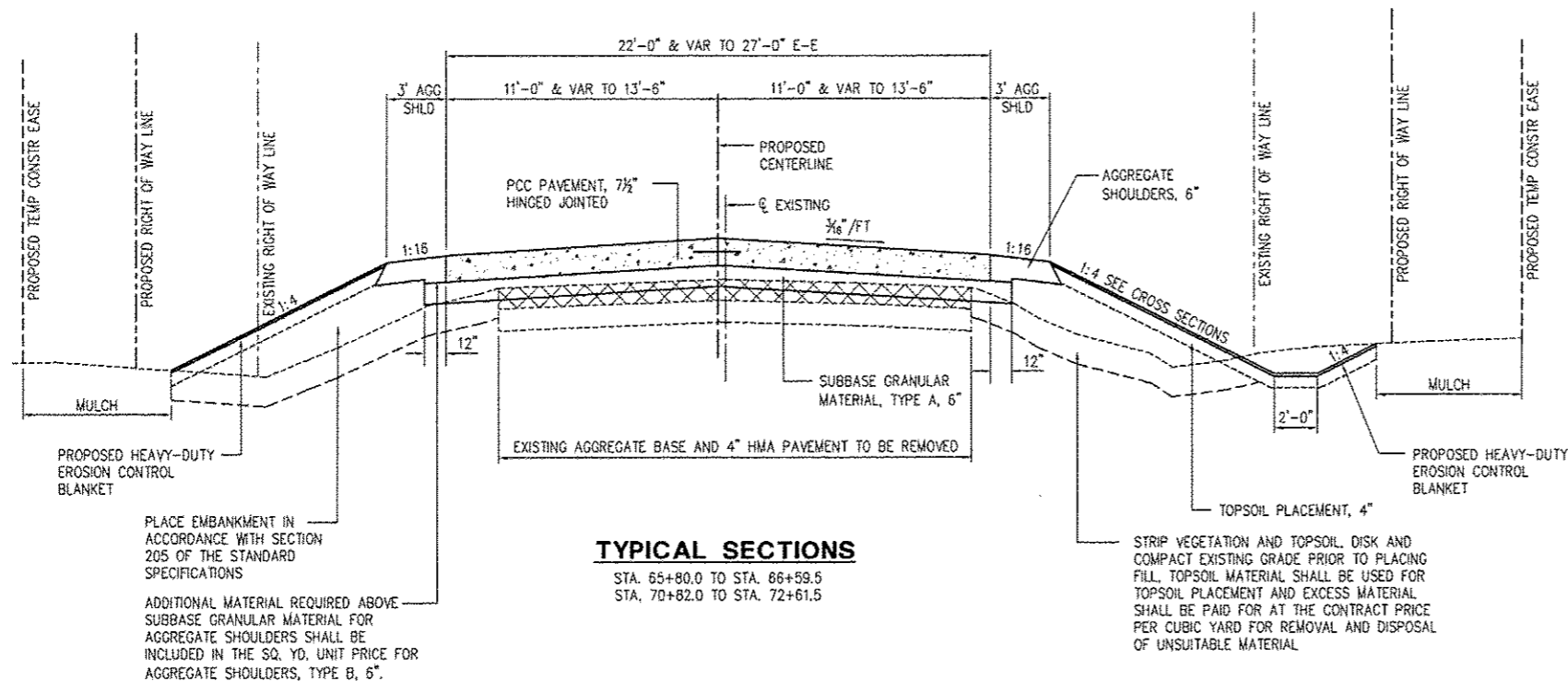
**WIGWAM HOLLOW BRIDGE REPLACEMENT**  
**GENERAL NOTES, TIE POINTS AND ROW STRIP MAP**  
CITY OF MACOMB  
232 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS  
FILE NAME: MCDONOUGH\BRIDGE-2011\WIGWAM-BRIDGE-2011.DWG FIELD BOOK NO: 2262 JOB NUMBER: 03-28-07-104  
2267

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03--00128--00--BR	McDONOUGH	43	2
CONTRACT NO. 89356				



**TYPICAL SECTIONS**

STA. 66+59.5 TO STA. 67+21.54  
 STA. 69+81.46 TO STA. 70+82.0



**TYPICAL SECTIONS**

STA. 65+80.0 TO STA. 66+59.5  
 STA. 70+82.0 TO STA. 72+61.5

RATE OF APPLICATION TABLE	
AGGREGATE (SURFACE, SUB-BASE OR BACKFILL)	2.05 TONS/CU YD
STONE RIPRAP	1.75 TONS/CU YD
SEEDING AREAS	
NITROGEN FERTILIZER NUTRIENT	90 LBS/ACRE
PHOSPHORUS FERTILIZER NUTRIENT	90 LBS/ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS/ACRE
MULCH	2 TONS/ACRE
TEMPORARY EROSION CONTROL SEEDING	100 LBS/ACRE

REVISIONS		
NO.	ITEM	DATE

NO.		

PLOTTING SCALE:	1" = 4'
DRAWN BY:	TAB
CHECKED BY:	ECM
DATE:	JANUARY 2015

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**WIGWAM HOLLOW BRIDGE REPLACEMENT**  
**TYPICAL SECTIONS**  
 CITY OF MACOMB  
 292 EAST JACKSON ST.      McDONOUGH COUNTY, ILLINOIS  
 FILE NAME: WIGWAM\WIGWAM\BRIDGE-2007\WIGWAM-0002-2007.DWG      FIELD BOOK No: 2262      JOB NUMBER: 03-20-07-104  
 2262

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	3
CONTRACT NO. 89356				


PAY ITEM #	SP	ITEM DESCRIPTION	UNIT	QUANTITY
20100110		TREE REMOVAL (6-15 UNITS DIAMETER)	UNIT	38
20100210		TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	52
20100500		TREE REMOVAL, ACRES	ACRE	0.23
20200100	D4	EARTH EXCAVATION	CU YD	579
20201200	**	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	565
20300100		CHANNEL EXCAVATION	CU YD	2,391
20400800	D4	FURNISHED EXCAVATION	CU YD	1,504
20800150	D4	TRENCH BACKFILL	CU YD	107.1
21001000		GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	802
21101505	**	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	145
25000100	BDE	SEEDING, CLASS 1	ACRE	0.13
25000300	BDE	SEEDING, CLASS 3	ACRE	0.83
25000400		NITROGEN FERTILIZER NUTRIENT	POUND	85
25000500		PHOSPHORUS FERTILIZER NUTRIENT	POUND	85
25000600		POTASSIUM FERTILIZER NUTRIENT	POUND	85
25100105		MULCH, METHOD 1	ACRE	0.58
25100635		HEAVY DUTY EROSION CONTROL BLANKET	SQ YD	1,853
28000250	BDE	TEMPORARY EROSION CONTROL SEEDING	POUND	95
28000305	BDE	TEMPORARY DITCH CHECKS	FOOT	590
28000400	BDE	PERIMETER EROSION BARRIER	FOOT	620
28000500	BDE	INLET & PIPE PROTECTION	EACH	5
28100107		STONE RIPRAP, CLASS A4	SQ YD	514
28100109		STONE RIPRAP, CLASS A5	SQ YD	1,458
28200200		FILTER FABRIC	SQ YD	1,972
31100500	D4	SUB-BASE GRANULAR MATERIAL, TYPE A, 6"	SQ YD	1,335
40200700		AGGREGATE SURFACE COURSE, TYPE A, 8"	SQ YD	55
40201000	**	AGGREGATE FOR TEMPORARY ACCESS	TON	88
42000211		PCC PAVEMENT, 7 1/2" (JOINTED)	SQ YD	1,168.3
42001300		PROTECTIVE COAT	SQ YD	1069
42001420		BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	36
42300200		PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 6"	SQ YD	80.7
42300300		PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7"	SQ YD	40.1
42400100		PORTLAND CEMENT CONCRETE SIDEWALK, 4"	SQ FT	700
44000100		PAVEMENT REMOVAL	SQ YD	1,155
44000200		DRIVEWAY PAVEMENT REMOVAL	SQ YD	69.2
48101500		AGGREGATE SHOULDERS, TYPE B, 6"	SQ YD	182
50100100		REMOVAL OF EXISTING STRUCTURES	EA	1
50105220	**	PIPE CULVERT REMOVAL	FOOT	37
50200100		STRUCTURE EXCAVATION	CU YD	83.1
50300225		CONCRETE STRUCTURES	CU YD	208.0
50300255		CONCRETE SUPERSTRUCTURES	CU YD	145.1
50300280		CONCRETE ENCASEMENT	CU YD	11.1
50400505	GBSP	PRECAST PRESTRESSED CONCRETE DECK BEAMS (27" DEPTH)	SQ FT	7,188
50800105		REINFORCEMENT BARS	POUND	8,920
50800205		REINFORCEMENT BARS (EPOXY COATED)	POUND	50,495
50900405		STEEL RAILING TYPE TP-1	FOOT	200
50901050		STEEL RAILING TYPE SM	FOOT	200
51201400		FURNISHING STEEL PILES, HP 10x42	FOOT	240
51201500		FURNISHING STEEL PILES, HP 10x57	FOOT	570
51202305		DRIVING PILES	FOOT	810
51203400		TEST PILE, STEEL, HP 10x42	EA	2
51203500		TEST PILE, STEEL, HP 10x57	EA	3
51500100		NAME PLATES	EA	1
542A0217		PIPE CULVERT, CLASS A, TYPE 1 12"	FOOT	33
542A0220		PIPE CULVERT, CLASS A, TYPE 1 15"	FOOT	25
54213657		PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 12"	EACH	3
54213660		PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 15"	EACH	2
54213675		PRECAST REINFORCED CONCRETE FLARED END SECTIONS, 30"	EACH	1

PAY ITEM #	SP	ITEM DESCRIPTION	UNIT	QUANTITY
550A0050	**	STORM SEWERS, CLASS A, TYPE 1, 12"	FOOT	103
550A0120	**	STORM SEWERS, CLASS A, TYPE 1, 24"	FOOT	47
550A0340	**	STORM SEWERS, CLASS A, TYPE 2, 12"	FOOT	12
550A0410	**	STORM SEWERS, CLASS A, TYPE 2, 24"	FOOT	132
550A0430	**	STORM SEWERS, CLASS A, TYPE 2, 30"	FOOT	27
56100050	**	DUCTILE IRON WATER MAIN TEE 12"x6"	EACH	1
56100065	**	DUCTILE IRON WATER MAIN TEE 12"x12"	EACH	1
56100600	**	WATER MAIN 8"	FOOT	15
56100800	**	WATER MAIN 12"	FOOT	644
56101158	**	DUCTILE IRON WATER MAIN REDUCER, 12"x6"	EACH	1
56105200	**	WATER VALVES 12"	EACH	1
56109404	**	DUCTILE IRON WATER MAIN FITTINGS, 12" 11.25 DEGREE BEND	EACH	3
56109438	**	DUCTILE IRON WATER MAIN FITTINGS, 12" 90.00 DEGREE BEND	EACH	1
60100880		CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	2
60221000	**	MANHOLES, TYPE A, 5-DIAMETER, TYPE 1 FRAME, OPEN LID	EACH	4
60238700	**	INLETS, TYPE A, TYPE 3 FRAME AND GRATE	EACH	2
60255000		MANHOLES TO BE ADJUSTED	EACH	1
60604400		COMBINATION CONCRETE CURB AND GUTTER, TYPE B-8.18	FOOT	325
63100070		TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	2
63100087		TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	1
63100167		TRAFFIC BARRIER TERMINAL, TYPE 1, SPECIAL TANGENT	EACH	3
67100100		MOBILIZATION	L SUM	1
X7010216	**	TRAFFIC CONTROL & PROTECTION (SPECIAL)	L SUM	1
70300220		TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	1801
70301000		WORK ZONE PAVEMENT MARKING REMOVAL	SQ. FT.	600
78005110		EPOXY PAVEMENT MARKING - LINE 4"	FOOT	1801
78200100		MONODIRECTIONAL PRISMATIC BARRIER REFLECTOR	EACH	4
78200300		PRISMATIC CURB REFLECTOR	EACH	5
78201000		TERMINAL MARKER - DIRECT APPLIED	EACH	3
X2070304		POROUS GRANULAR EMBANKMENT, SPECIAL	CU. YD.	71.2
X4400220	**	CURB REMOVAL & REPLACEMENT	FOOT	12
X5030305	GBSP	CONCRETE WEARING SURFACE, 5"	SQ. YD.	800
X5610012	**	CAP EXISTING WATER MAIN	EACH	2
X5620025	**	WATER SERVICE CONNECTION 3/2"	EACH	1
X5630706	**	CONNECTION TO EXISTING WATER MAIN 6"	EACH	1
X5840150	**	FIRE HYDRANT ASSEMBLY COMPLETE	EACH	1
X6020075	**	INLETS, TYPE B, TYPE 3V FRAME AND GRATE	EACH	1
X6024240	**	INLETS, SPECIAL	EACH	2
X6090150	**	TYPE B INLET BOX, STANDARD 609006 (SPECIAL)	EACH	2
X6310088	**	TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL)	EACH	1
Z0013798		CONSTRUCTION LAYOUT	L SUM	1
Z0014500	**	CURB STOPS 3/2"	EACH	1
Z0046306	GBSP	PIPE UNDERDRAINS FOR STRUCTURES, 6"	FT	122
Z0056652	**	STORM SEWERS, TYPE 1, WATER MAIN QUALITY PIPE, 18"	FT	24
XX008748	D4	COARSE AGGREGATE FILL	TON	576
XX008836	**	PRESSURE TESTING AND DISINFECTING	L SUM	1
XX008908	**	LAMOINE RIVER CROSSING	L SUM	1
XX008909	**	WATER VALVE & METER VAULT	L SUM	1

**SPECIAL PROVISIONS KEY:**  
 \*\* - PROJECT SPECIFIC SPECIAL PROVISION  
 D4 - DISTRICT 4 SPECIAL PROVISION  
 GBSP - GUIDE BRIDGE SPECIAL PROVISION  
 BDE - BUREAU OF DESIGN AND ENVIRONMENT SPECIAL PROVISION

**Δ SPECIALTY ITEMS**

U:\PROJECTS\2007\WIGWAM BRIDGE\WIGWAM BRIDGE.DWG, 2/27/2013 10:25:53 AM, 2013/02/27 10:25:53 AM

REVISIONS NO. ITEM DATE  		PLOTTING SCALE: 1" = 20' DRAWN BY: TAB CHECKED BY: ECM DATE: JANUARY 2013	 714 East Jackson Street (309) 837-4594 Macomb, Illinois 61455 (309) 837-4909 FAX (309) 837-4909 <small>Design Firm License #184-000816 Copyright 2011 by McClure Engineering Associates, Inc.</small>		<b>WIGWAM HOLLOW BRIDGE REPLACEMENT</b> <b>SUMMARY OF QUANTITIES</b> <b>CITY OF MACOMB</b> 282 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS <small>FILE NAME: \\clcl\proj\wigmbr-2007\WIGWAM-BRIDGE-SUM-2013.dwg FIELD BOOK No: 2225 JOB NUMBER: 03-28-07-104</small>		F.A.U. R.T.E. 6923	SECTION 03-00128-00-BR	COUNTY McDONOUGH	TOTAL SHEETS 43	SHEET NO. 4	CONTRACT NO. 89356	
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EARTHWORK SUMMARY							
LOCATION	EARTH EXC	EMBANK *	FURNISH EXCAV. **	REM & DISP UNSUITABLE MATERIAL	TOPSOIL EXCAV. & PLACEMENT	COARSE AGGREGATE FILL	GEOTECH FABRIC FOR GROUND STAB
CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	TON	SQ YD
STA. 65+93 TO STA. 67+70	202	703	551	178	59	129	179
STA. 69+40 TO STA. 72+62	377	1236	953	387	86	447	723
<b>TOTAL</b>	<b>579</b>	<b>1939</b>	<b>1504</b>	<b>565</b>	<b>145</b>	<b>576</b>	<b>902</b>

\* FOR INFORMATION ONLY, NOT A PAY ITEM

\*\* A SHRINKAGE FACTOR OF 0.25 WAS APPLIED TO THE EARTH EXCAVATION QUANTITY TO DETERMINE THE FURNISHED EXCAVATION QUANTITY.

DRIVEWAY SCHEDULE		
LOCATION	PCC DR	PCC DR
	PAVT 6"	PAVT 7"
	SQ. YD.	SQ. YD.
RT. STA. 66+83.3	80.7	---
LT. STA. 67+11.8	---	40.1
<b>TOTAL</b>	<b>80.7</b>	<b>40.1</b>

SCHEDULE OF PAVEMENT QUANTITIES						
LOCATION	BRIDGE APPROACH PAVT CONNECTOR PCC	SUBBASE GRANULAR MATERIAL, TYPE A, 6"	AGGREGATE SURFACE COURSE, TYPE A, 8"	PCC PAVT 7 1/2" (JOINTED)	AGGREGATE SHOULDER, TYPE B, 6"	COMBINATION CONCRETE CURB & GUTTER, TYPE 86.18
	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	FOOT
STA. 65+93.5 TO STA. 66+59.5	---	247	---	232.6	52	---
STA. 66+59.5 TO STA. 67+21.54	18.0	215	---	168.1	---	124
STA. 67+21.33 TO STA. 67+51.33 (APPROACH PAVT)	---	---	---	---	---	---
<b>BRIDGE OMISSION</b>						
STA. 69+51.67 TO STA. 69+81.67 (APPROACH PAVT)	---	---	---	---	---	---
STA. 69+81.67 TO STA. 70+82.00	18.0	348	---	283.6	---	201
RT. STA. 70+99	---	---	55	---	---	---
STA. 70+82.00 TO STA. 72+61.50	---	525	---	485.0	130	---
<b>TOTAL</b>	<b>36.0</b>	<b>1,335</b>	<b>55</b>	<b>1169.3</b>	<b>182</b>	<b>325</b>

AGGREGATE FOR TEMPORARY ACCESS	
LOCATION	TON
LT. STA. 65+60± TO STA. 67+00±	66
<b>TOTAL</b>	<b>66</b>

TRENCH BACKFILL	
LOCATION	CU. YD.
SEE STORM SCHEDULE	61.0
SEE WATER MAIN SCHEDULE	40.1
PIPE CULVERT REMOVAL SCHEDULE	6.0
<b>TOTAL</b>	<b>107.1</b>

SIDEWALK SCHEDULE	
LOCATION	PC CONCRETE SIDEWALK, 4" SQ. FT.
RT. STA. 66+82.4 TO STA. 67+51.54	187.5
RT. STA. 69+51.46 TO STA. 70+82.0	512.7
<b>TOTAL</b>	<b>700.2</b>

PAVEMENT MARKING SCHEDULE				
LOCATION	EPOXY PM - LINE 4" DBL YELLOW	EPOXY PM - LINE 4" WHITE	TEMPORARY PM - LINE 4"	WORK ZONE PM REMOVAL
	FOOT	FOOT	FOOT	SQ. FT.
CL STA. 65+80 TO 72+61.5	1363	---	1363	454
LT. STA. 65+80 TO 66+59.5	---	79.5	79.5	26.5
LT. STA. 70+80 TO 72+61.5	---	181.5	181.5	60.5
RT. STA. 65+95 TO 66+59.5	---	64.5	64.5	21.5
RT. STA. 71+16 TO 72+28	---	112	112	37.3
<b>TOTAL</b>	<b>1363</b>	<b>438</b>	<b>1801</b>	<b>600</b>

SEEDING & FERTILIZER SCHEDULE							
LOCATION	SEEDING		FERTILIZER NUTRIENT			MULCH	HEAVY DUTY EROSION CONTROL
	CLASS 1	CLASS 3	NITROGEN	PHOSPHORUS	POTASSIUM	METHOD 1	CONTROL BLANKET
	ACRE	ACRE	POUND	POUND	POUND	ACRE	SQ. YD.
LT. STA. 65+85 TO 67+04	0.08	---	6.5	6.5	6.5	.05	146
RT. STA. 65+86 TO 66+77	0.05	---	4.1	4.1	4.1	.02	115
LT. STA. 67+20 TO 67+66	---	0.04	3.7	3.7	3.7	.02	96
RT. STA. 66+90 TO 67+92	---	0.11	9.5	9.5	9.5	.10	66
LT. STA. 68+51 TO 72+66	---	0.30	26.8	26.8	26.8	.15	722
RT. STA. 68+64 TO 72+66	---	0.38	34.4	34.4	34.4	.24	708
<b>TOTAL</b>	<b>0.13</b>	<b>0.83</b>	<b>85</b>	<b>85</b>	<b>85</b>	<b>0.58</b>	<b>1853</b>

WATER MAIN SCHEDULE																
LOCATION	12" WATER MAIN, PVC, RESTRAINED JOINT	6" WATER MAIN, PVC	LAMORNE RIVER CROSSING	CONNECTION TO EXISTING WATER MAIN 6"	DI WATER MNF 12" 11.25 DEGREE BEND	DI WATER MNF 12" 90.00 DEGREE BEND	DI WATER MAIN REDUCER, 12"x6"	6" FIRE HYDRANT ASSEMBLY COMPLETE	DI WATER MAIN TEE 12"x12"	DI WATER MAIN TEE 12"x6"	WATER VALVE 12"	CAP EXIST WATER MAIN	WATER VALVE & METER VAULT	CURB STOPS 3/4"	WATER SVC CONN 3/4"	TRENCH BACKFILL
	FOOT	FOOT	L SUM	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	L SUM	EACH	EACH	CU. YD.
	LT. STA. 65+66 TO 65+86	20														
27' LT. TO 30' RT. STA. 65+86	57															15.3
30' RT. TO 46' RT. STA. 65+86		16														
28' LT. STA. 65+66																
27' LT. STA. 65+86						1								1	1	
30' RT. STA. 65+86							1			1						
46 RT. STA. 65+86				1												17.0
RT. STA. 65+95 TO STA. 72+50	567															
30' RT. STA. 66+05																
30' RT. STA. 66+35					1											
64.7' RT. STA. 67+72 TO 68+72			1													
64.7' RT. STA. 67+67					1											
64.7' RT. STA. 68+77					1											
35' RT. STA. 70+99																7.8
29.3' RT. STA. 72+29								1								
35.4' RT. STA. 72+29									1							
35.4' RT. STA. 72+22										1						
35.4' RT. STA. 72+50											1					
<b>TOTAL</b>	<b>644</b>	<b>16</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>40.1</b>

GUARDRAIL SCHEDULE					
LOCATION	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 5	TRAFFIC BARRIER TERMINAL, TYPE 6A	TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL)	TERMINAL MARKERS - DIRECT APPLIED
	EACH	EACH	EACH	EACH	EACH
21.17' RT., STA. 66+86.83 TO 20.17' RT., STA. 67+36.83	1				1
20.17' RT., STA. 67+36.83 TO STA. 67+51.50		1			
30.25' LT., STA. 67+21.91 TO 14.89' LT., STA. 67+54.0				1	
20.17' RT., STA. 69+51.50 TO STA. 69+66.17			1		
20.17' RT., STA. 69+66.17 TO 21.17' RT., STA. 70+16.17	1				1
14.89' LT., STA. 69+49.00 TO STA. 69+95.40				1	
14.89' LT., STA. 69+95.40 TO 15.89' LT., STA. 70+45.40	1				1
<b>TOTAL</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>3</b>

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REVISIONS		
NO.	ITEM	DATE

PLOTTING SCALE: 1" = 20'

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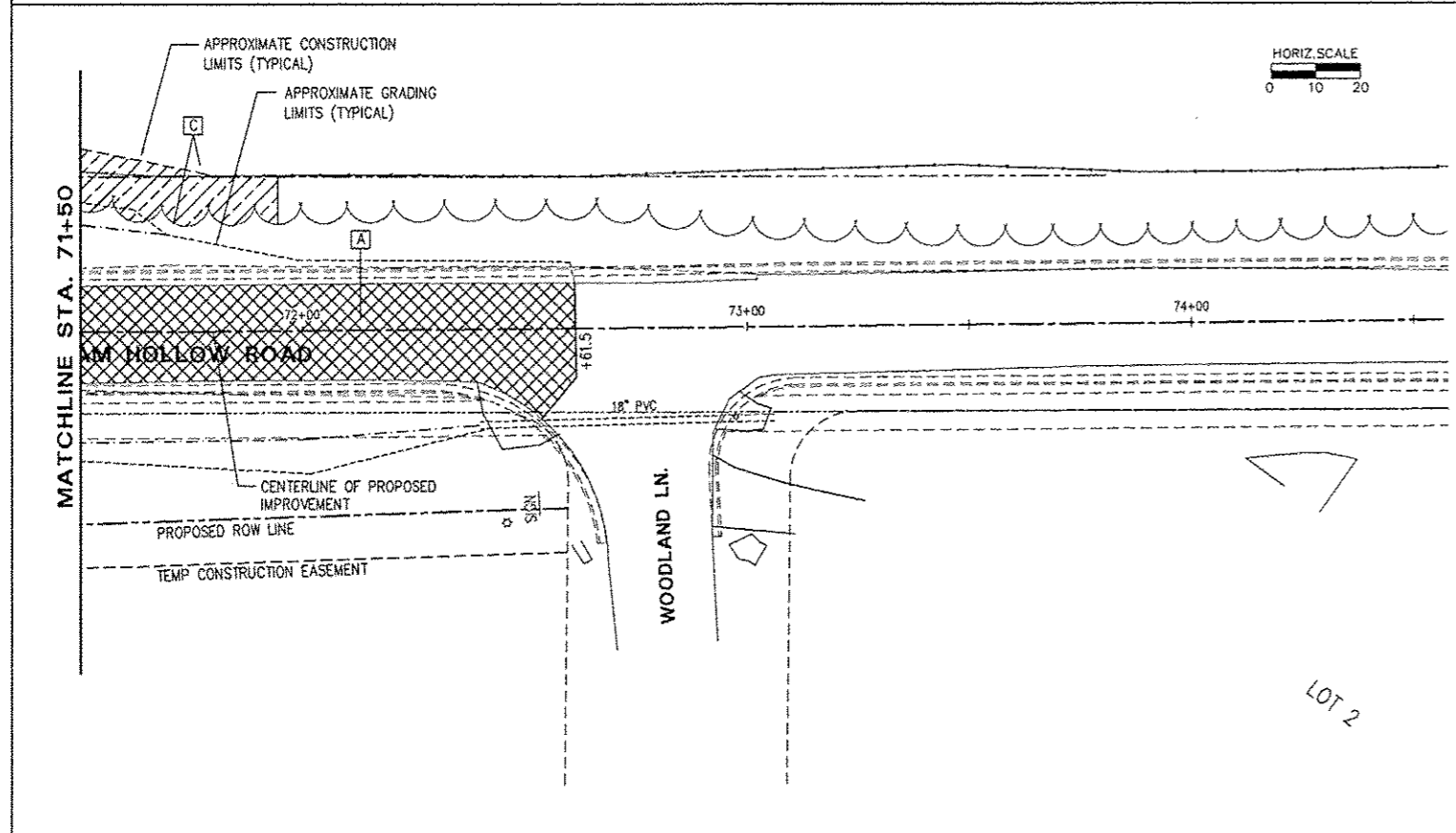
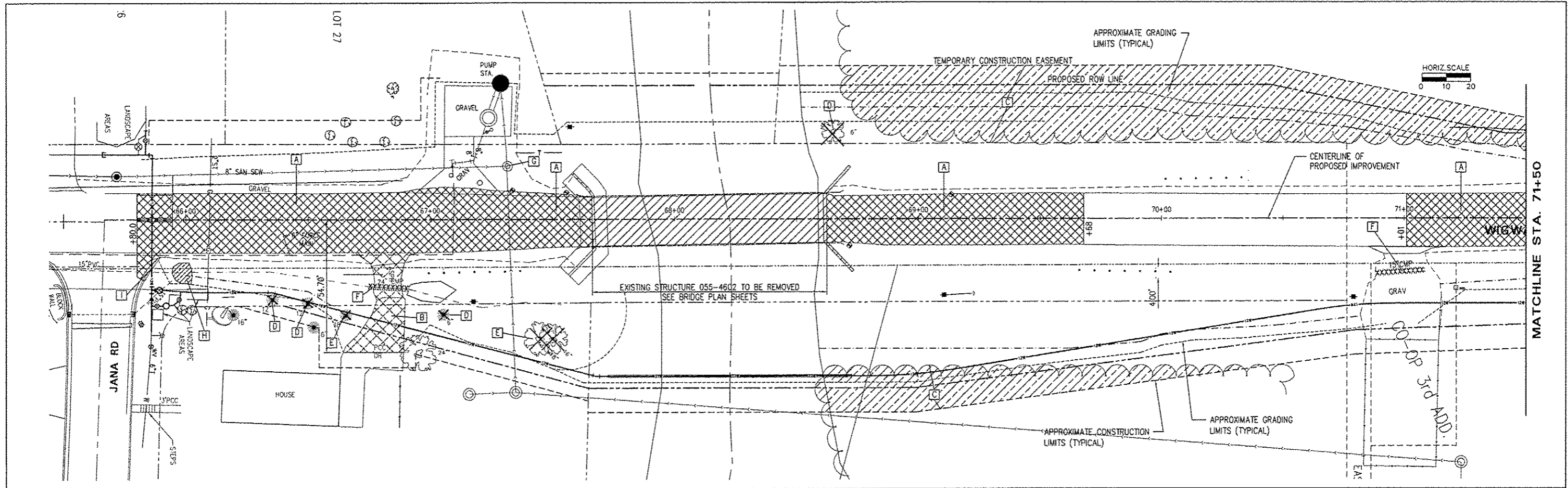
**WIGWAM HOLLOW BRIDGE REPLACEMENT  
TABULATION OF QUANTITIES**  
CITY OF MACOMB

232 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS

FILE NAME: WIGWAM\WIGWAMBRIDGE\_2007\WIGWAM BRIDGE\_2007.dwg FIELD BOOK No: 2203 JOB NUMBER: 03-28-07-104  
2267

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	5

CONTRACT NO. 89356



- REMOVAL LEGEND**
- [A] PAVEMENT REMOVAL (SQ. YDS.)
  - [B] DRIVEWAY PAVEMENT REMOVAL (SQ. YDS.)
  - [C] TREE REMOVAL (ACRES)
  - [D] TREE REMOVAL (6 TO 15 IN. DIA.)
  - [E] TREE REMOVAL (OVER 15 IN. DIA.)
  - [F] CULVERT REMOVAL (FT.)
  - [G] MANHOLE TO BE ADJUSTED (EACH)
  - [H] PAVED DITCH REMOVAL (FT.)
  - [I] CURB REMOVAL & REPLACEMENT (FT.)

- [Cross-hatched] PAVEMENT REMOVAL
- [Diagonal lines] DRIVEWAY PAVEMENT REMOVAL
- [Horizontal lines] REMOVAL OF EXISTING STRUCTURE
- [Vertical lines] TREE REMOVAL (ACRES)
- [Circle with cross] 16" TREE REMOVAL (UNITS)

**TREE REMOVAL SCHEDULE**

LOCATION	6 - 15 UNITS DIA.	OVER 15 UNITS DIA.
33' RT. STA. 66+35	12	
34.5' RT. STA. 66+50	12	
39.4' RT. STA. 66+66		18
39.2' RT. STA. 67+05	6	
49.6' RT. STA. 67+45		18
49.6' RT. STA. 67+50		16
35.9' LT. STA. 68+65 (STUMP)	8	
<b>TOTAL</b>	<b>38</b>	<b>52</b>

**TREE REMOVAL, ACRES**

LOCATION	ACRES
LT. STA. 68+65 TO 71+95	0.18
RT. STA. 69+24 TO 70+69	0.05
<b>TOTAL</b>	<b>0.23</b>

**MANHOLES TO BE ADJUSTED**

LOCATION	EACH
22.0' LT. STA. 67+31	1
<b>TOTAL</b>	<b>1</b>

**PIPE CULVERT REMOVAL**

LOCATION	SIZE	LENGTH	TRENCH BACKFILL
RT. STA. 65+83.1	24"	16'	6.0
RT. STA. 70+98.3	15"	21'	0
<b>TOTAL</b>		<b>37'</b>	<b>6.0</b>

**DRIVEWAY PAVEMENT REMOVAL**

LOCATION	SQ. YD.
RT. STA. 65+83.3	69.2
<b>TOTAL</b>	<b>69.2</b>

**PAVEMENT REMOVAL**

LOCATION	SQ. YD.
STA. 65+80.0 TO 67+65.4	514.1
STA. 68+62.4 TO 69+68	243.3
STA. 71+01 TO 72+61.5	398.6
<b>TOTAL</b>	<b>1156.0</b>

**CURB REMOVAL & REPLACEMENT**

LOCATION	FOOT
21' RT. STA. 65+84	12.0
<b>TOTAL</b>	<b>12.0</b>

**REVISIONS**

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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
REMOVAL PLAN**

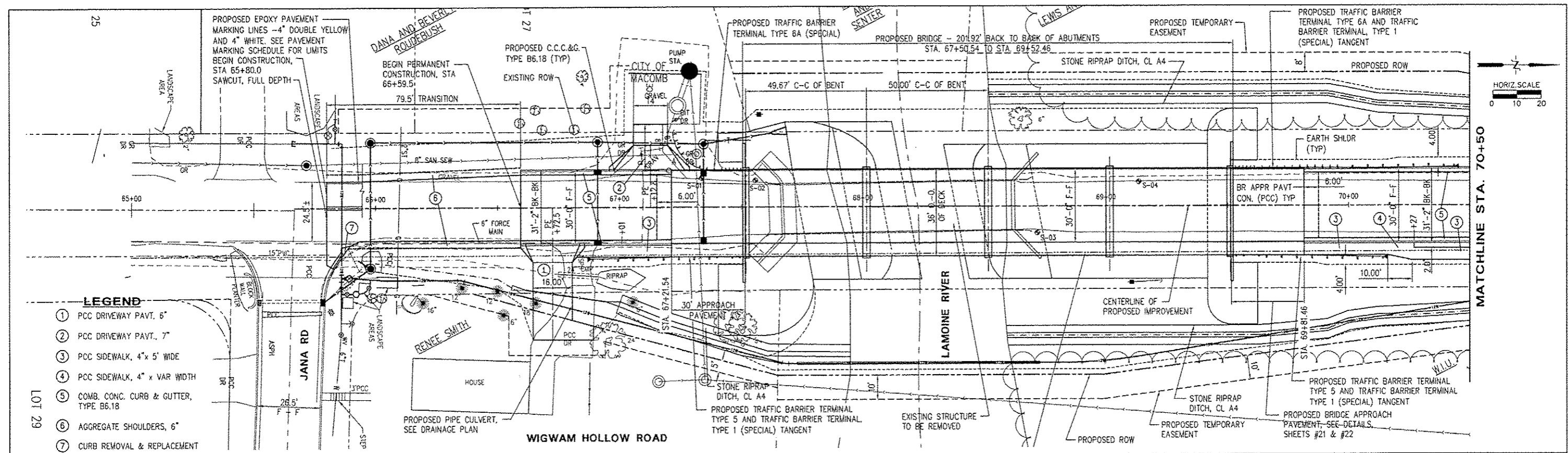
CITY OF MACOMB

292 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS

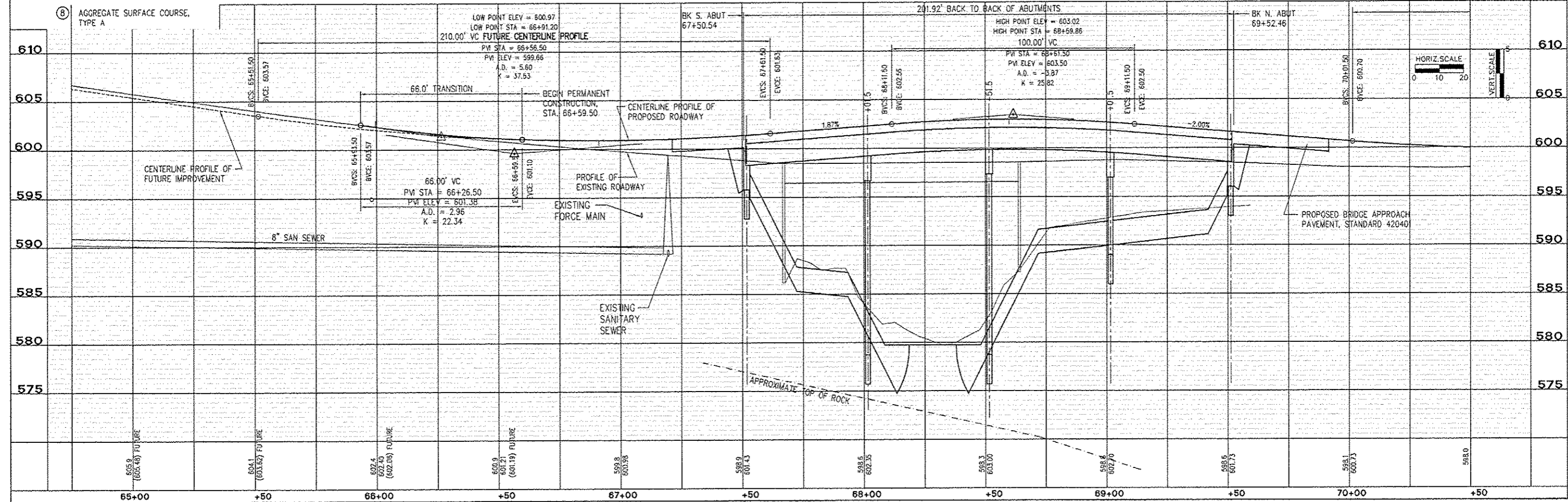
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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	6

CONTRACT NO. 89356



- ### LEGEND
- ① PCC DRIVEWAY PAVT., 5"
  - ② PCC DRIVEWAY PAVT., 7"
  - ③ PCC SIDEWALK, 4' x 5' WIDE
  - ④ PCC SIDEWALK, 4' x VAR WIDTH
  - ⑤ COMB. CONC. CURB & GUTTER, TYPE B6.18
  - ⑥ AGGREGATE SHOULDERS, 6"
  - ⑦ CURB REMOVAL & REPLACEMENT
  - ⑧ AGGREGATE SURFACE COURSE, TYPE A



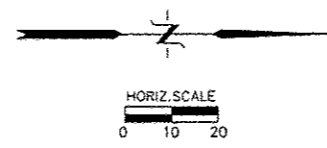
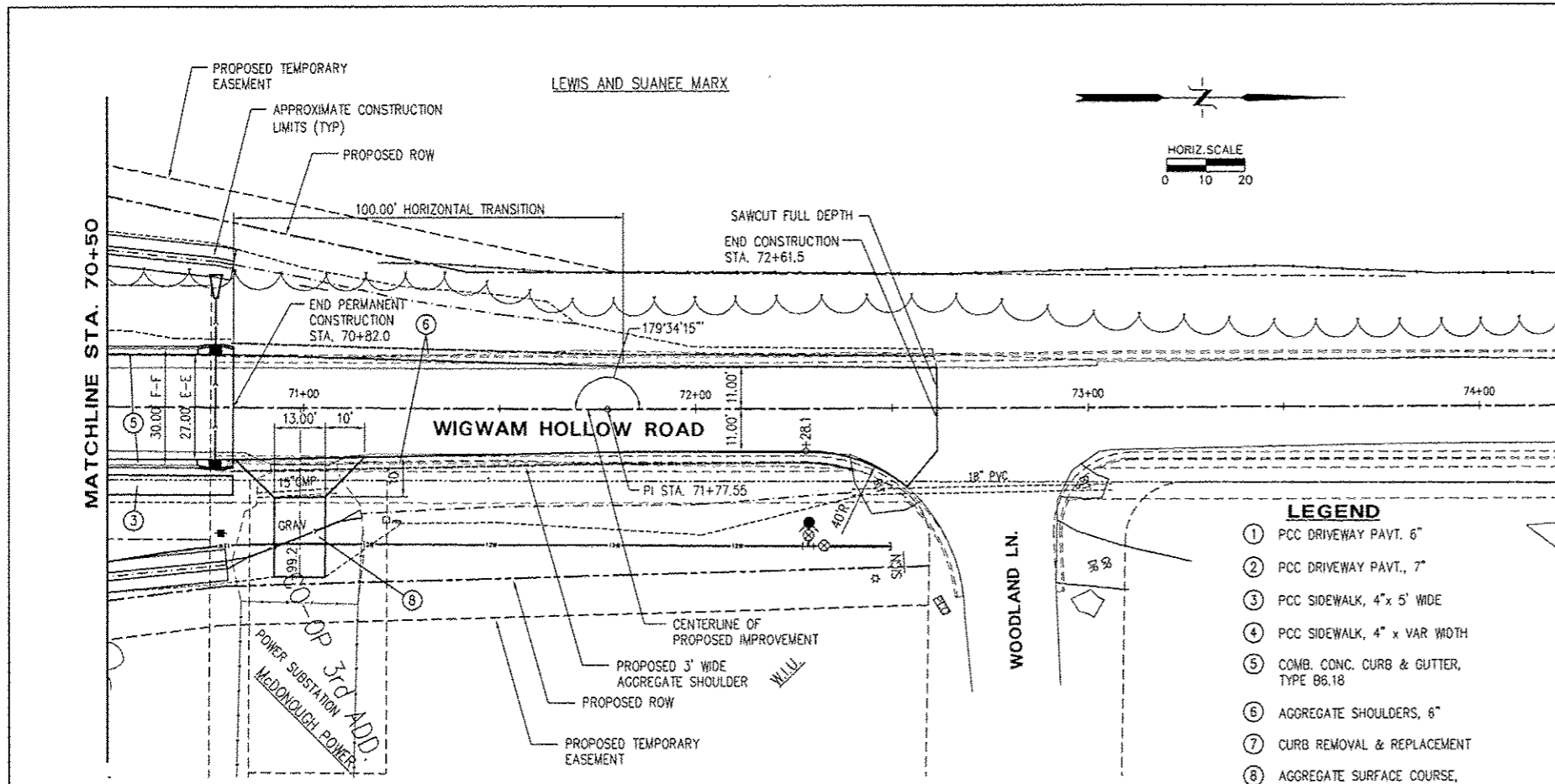
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NO.	ITEM	DATE

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 DATE: JANUARY 2013

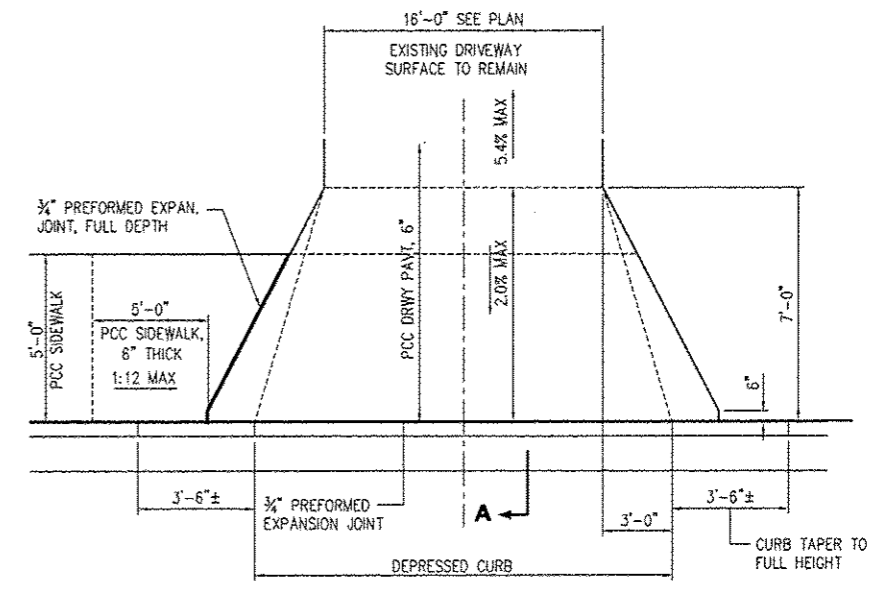
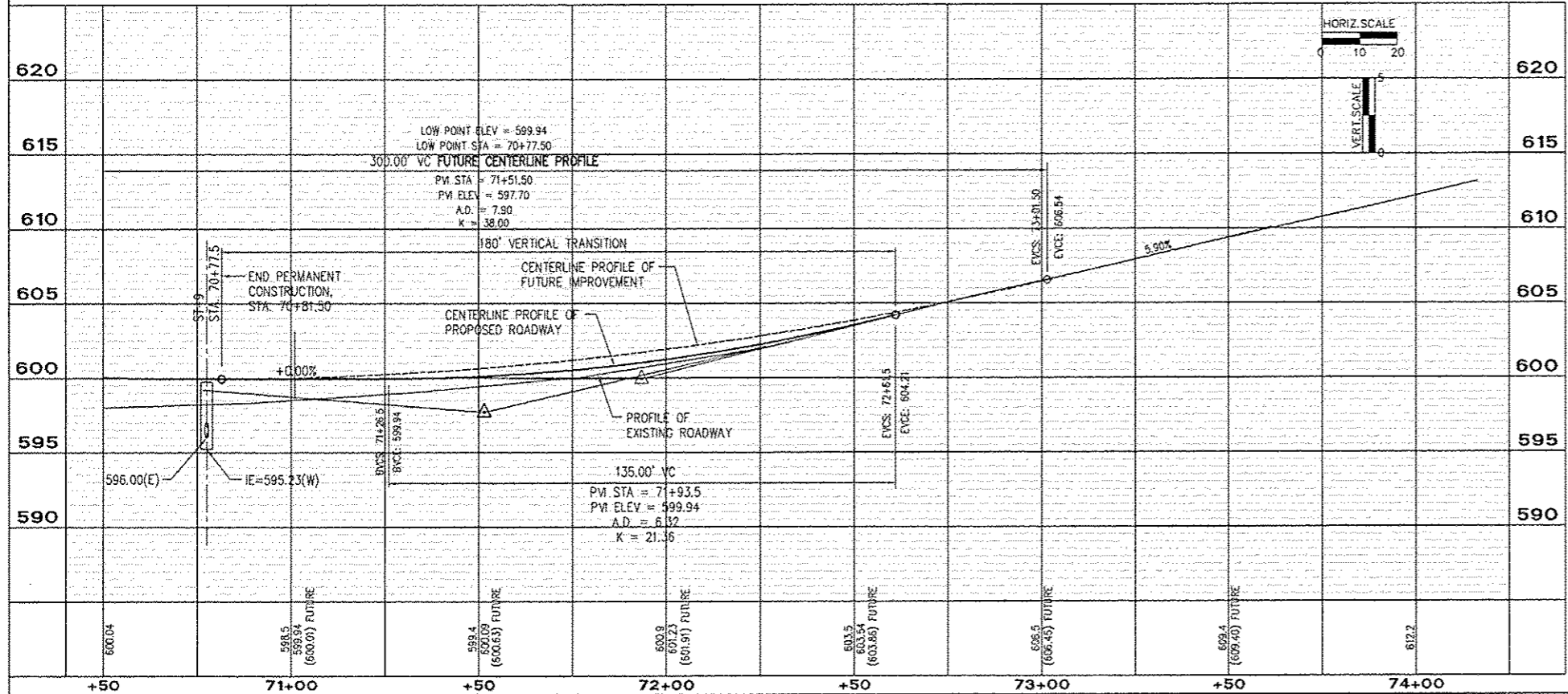
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**WIGWAM HOLLOW BRIDGE REPLACEMENT**  
**ROADWAY PLAN AND PROFILE**  
 CITY OF MACOMB  
 292 EAST JACKSON ST. McDONOUGH COUNTY, ILLINOIS  
 FILE NAME: \\C:\DWG\WIGWAMBRIDGE-2011\MCHM-BRIDGE-2011.DWG FIELD BOOK No: 2263 JOB NUMBER: 03-28-07-104  
 2267

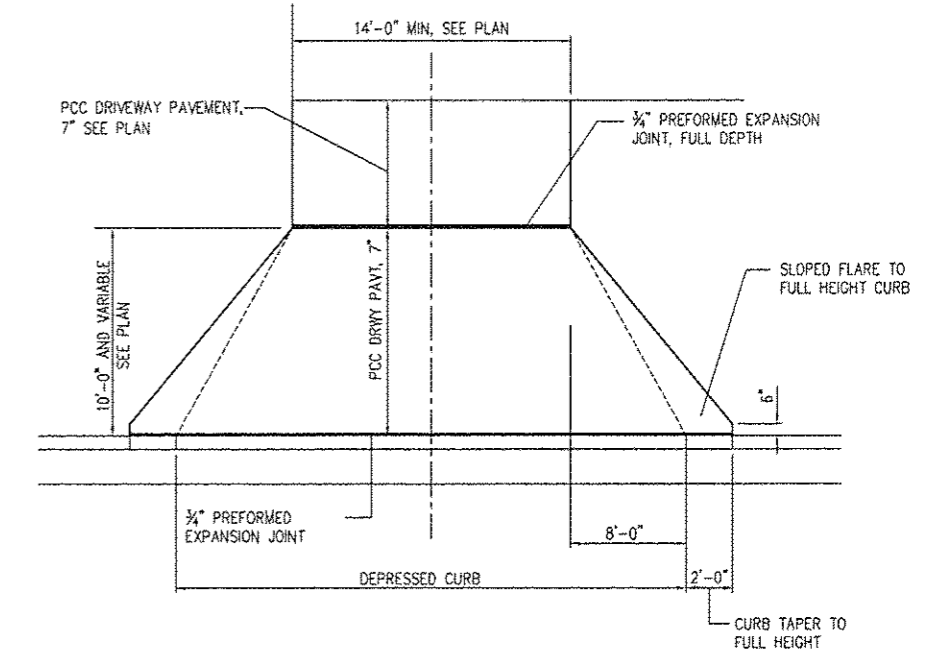
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	7
CONTRACT NO. 89356				



- LEGEND**
- ① PCC DRIVEWAY PAVT. 6"
  - ② PCC DRIVEWAY PAVT. 7"
  - ③ PCC SIDEWALK, 4" x 5' WIDE
  - ④ PCC SIDEWALK, 4" x VAR WIDTH
  - ⑤ COMB. CONC. CURB & GUTTER, TYPE B6.18
  - ⑥ AGGREGATE SHOULDERS, 6"
  - ⑦ CURB REMOVAL & REPLACEMENT
  - ⑧ AGGREGATE SURFACE COURSE, TYPE A



**PRIVATE ENTRANCE PLAN  
EAST SIDE OF WIGWAM HOLLOW ROAD**



**COMMERCIAL ENTRANCE PLAN  
WEST SIDE OF WIGWAM HOLLOW ROAD**

NO.	ITEM	DATE

REVISIONS		
NO.	ITEM	DATE

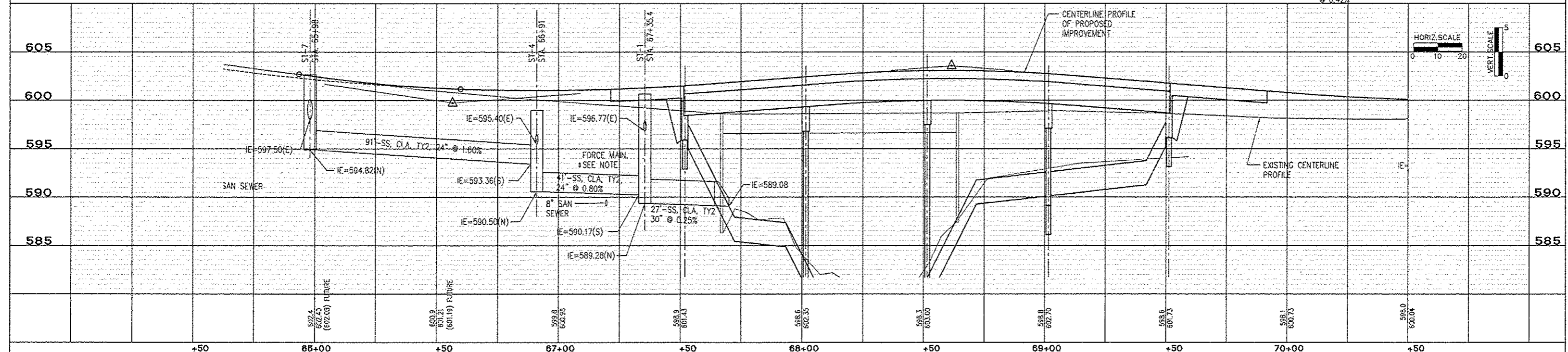
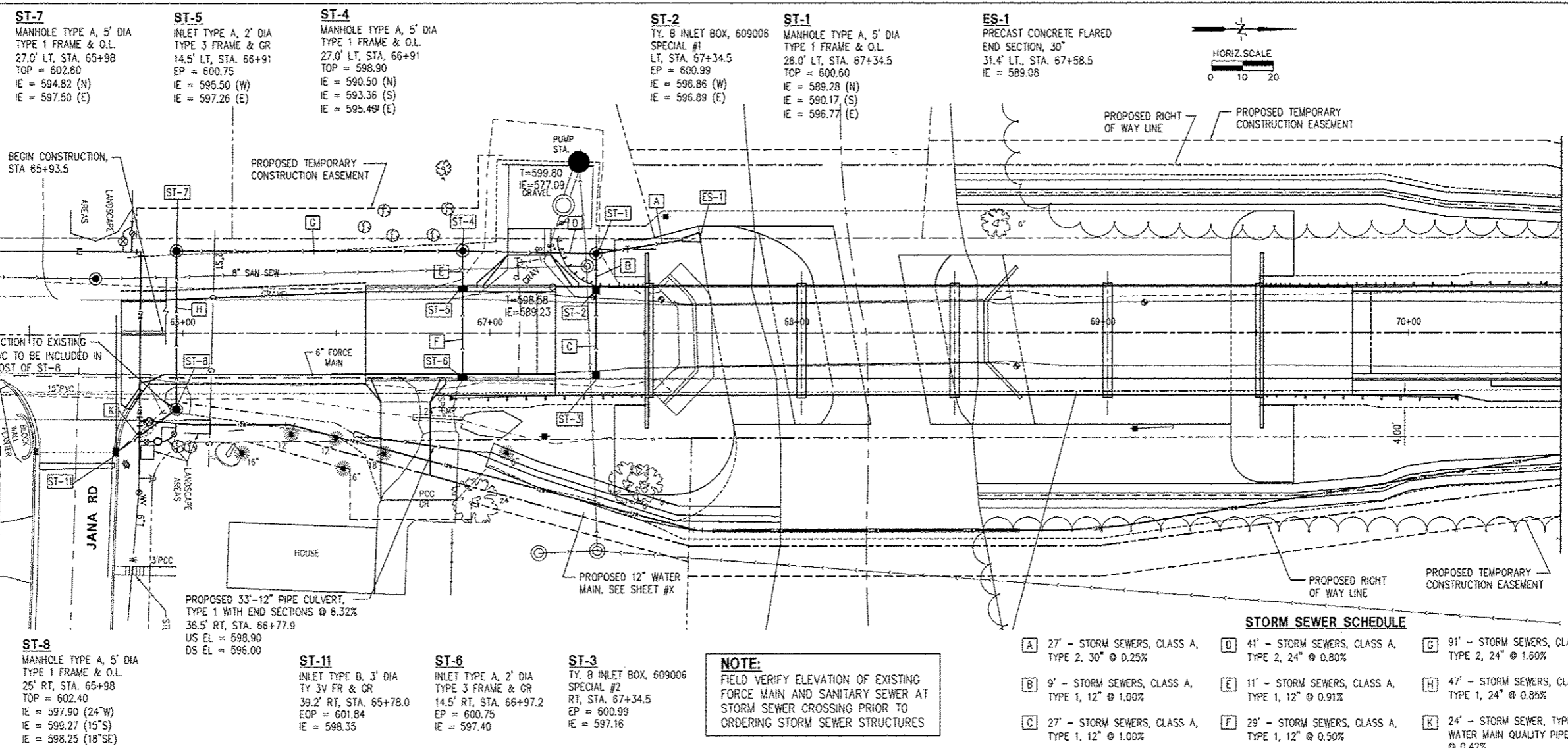
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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
ROADWAY PLAN AND PROFILE & DRIVEWAY DETAILS**  
CITY OF MACOMB  
292 EAST JACKSON ST. MACOMB, ILLINOIS 61455  
FILE NAME: MACOMB\WIGWAMBRIDGE-2007\WIGWAM-BRIDGE-2007.DWG FIELD BOOK No. 2203 JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	8
CONTRACT NO. 89356				



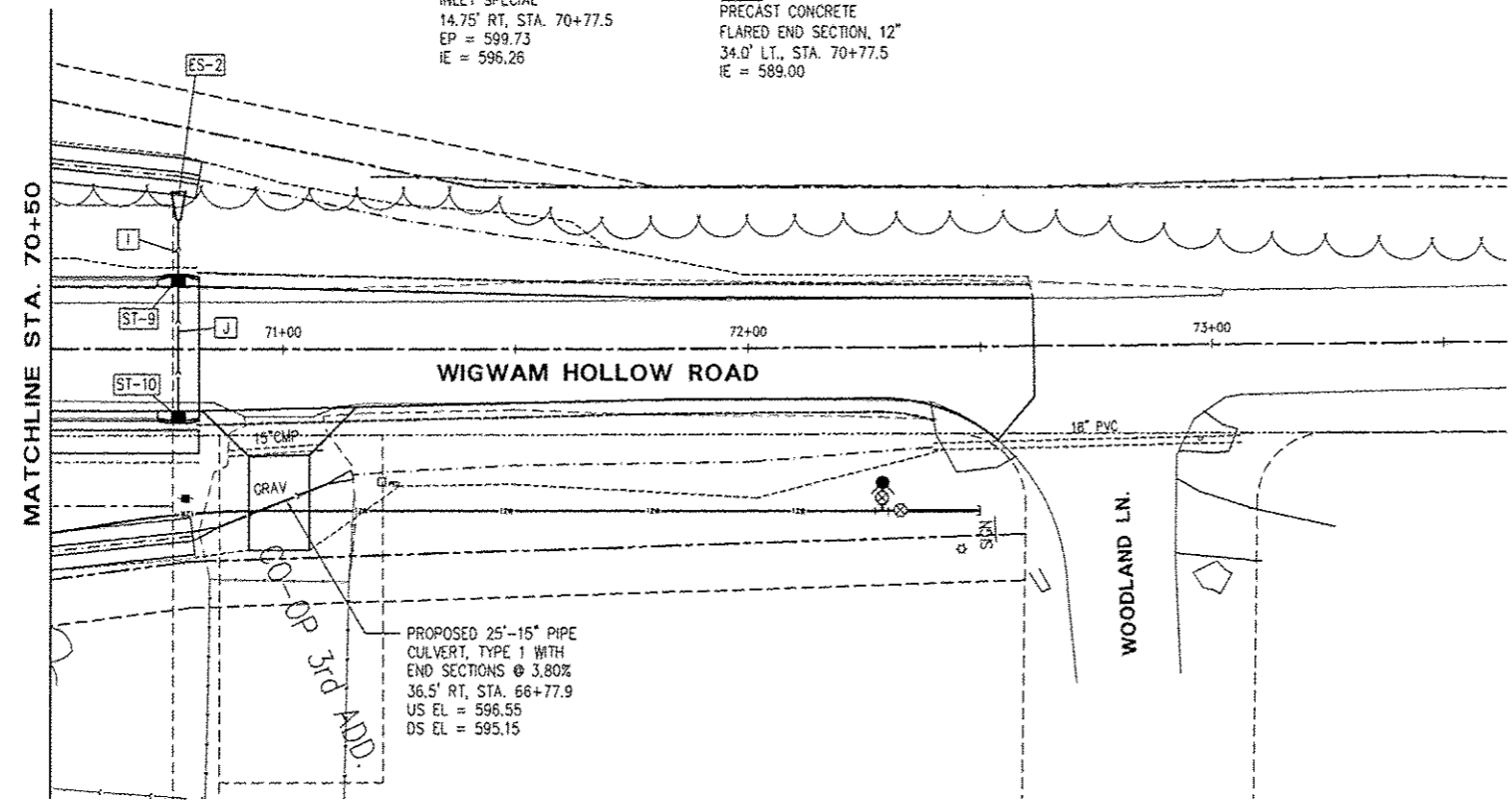
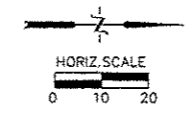


<b>REVISIONS</b> NO. ITEM DATE			<b>PLOTTING SCALE:</b> 1" = 20' <b>DRAWN BY:</b> TAB <b>CHECKED BY:</b> ECM <b>DATE:</b> JANUARY 2013		 714 East Jackson Street (309) 833-4594 Macomb, Illinois 61455 FAX (309) 837-4909 File Name: WIGWAM\WIGWAM\BRIDGE-2007\WIGWAM-0002-2007.DWG FIELD BOOK No: 2203 JOB NUMBER: 03-28-07-104		<b>WIGWAM HOLLOW BRIDGE REPLACEMENT STORM SEWER PLAN AND PROFILE</b> CITY OF MACOMB McDONOUGH COUNTY, ILLINOIS		<b>F.A.U. RTE.</b> 6923 <b>SECTION</b> 03-00128-00-BR <b>COUNTY</b> McDONOUGH <b>TOTAL SHEETS</b> 43 <b>SHEET NO.</b> 9		<b>CONTRACT NO.</b> 89356	
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**ST-9**  
 INLET SPECIAL  
 14.75' LT, STA. 70+77.5  
 EP = 599.73  
 IE = 595.23 (W)  
 IE = 596.00 (E)

**ST-10**  
 INLET SPECIAL  
 14.75' RT, STA. 70+77.5  
 EP = 599.73  
 IE = 596.26

**ES-2**  
 PRECAST CONCRETE  
 FLARED END SECTION, 12"  
 34.0' LT, STA. 70+77.5  
 IE = 589.00

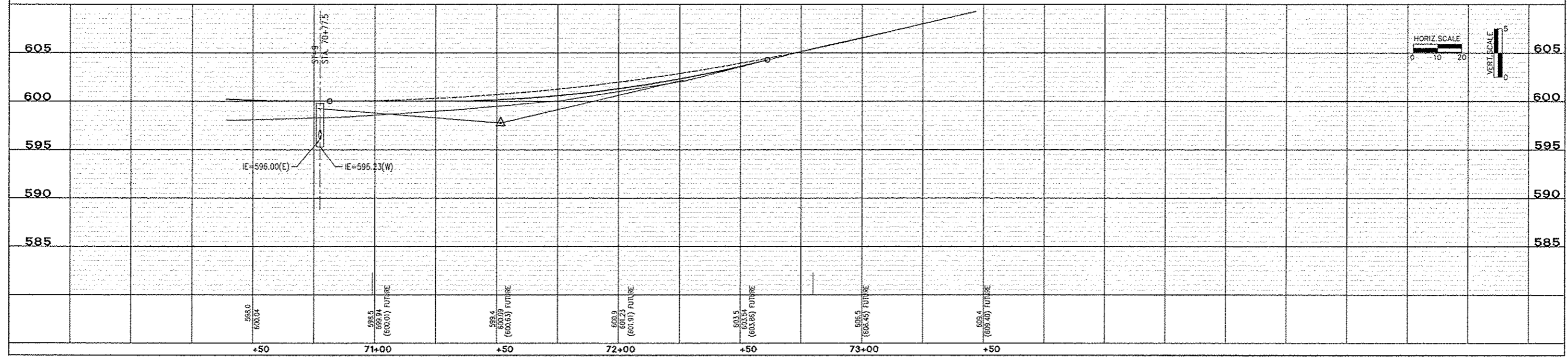


PROPOSED 25'-15" PIPE  
 CULVERT, TYPE 1 WITH  
 END SECTIONS @ 3.80%  
 36.5' RT, STA. 66+77.9  
 US EL = 596.55  
 DS EL = 595.15

**NOTE:**  
 FIELD VERIFY ELEVATION OF EXISTING  
 FORCE MAIN AND SANITARY SEWER AT  
 STORM SEWER CROSSING PRIOR TO  
 ORDERING STORM SEWER STRUCTURES

**STORM SEWER SCHEDULE**

- I 12" - STORM SEWERS, CLASS A,  
TYPE 2, 12" @ 5.16%
- J 27" - STORM SEWERS, CLASS A,  
TYPE 1, 12" @ 1.00%



REVISIONS		
NO.	ITEM	DATE

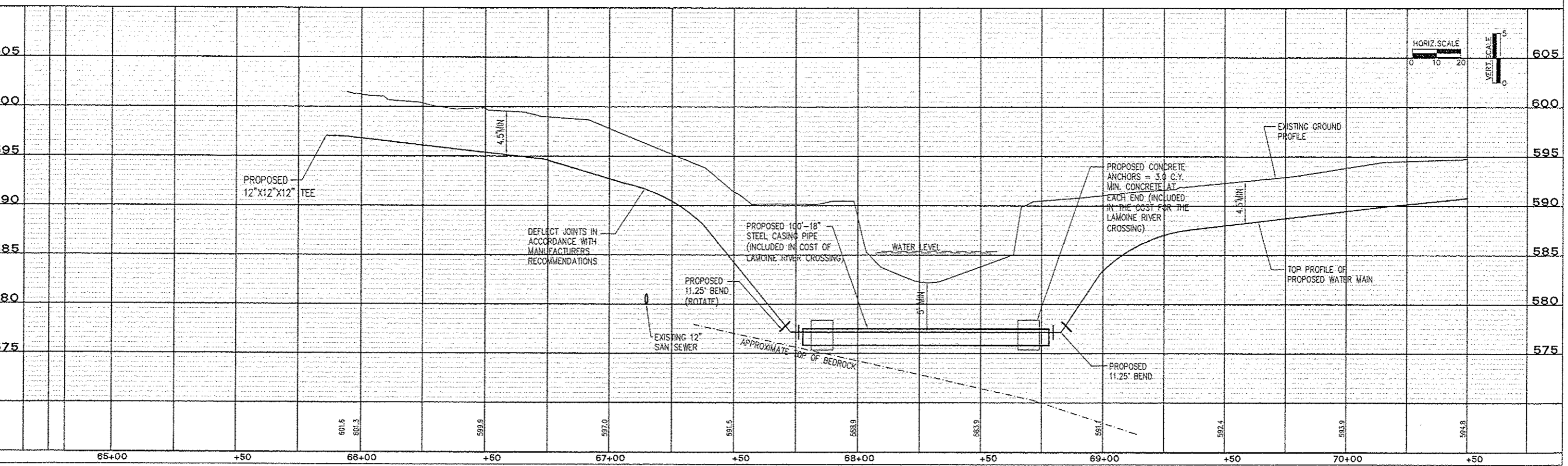
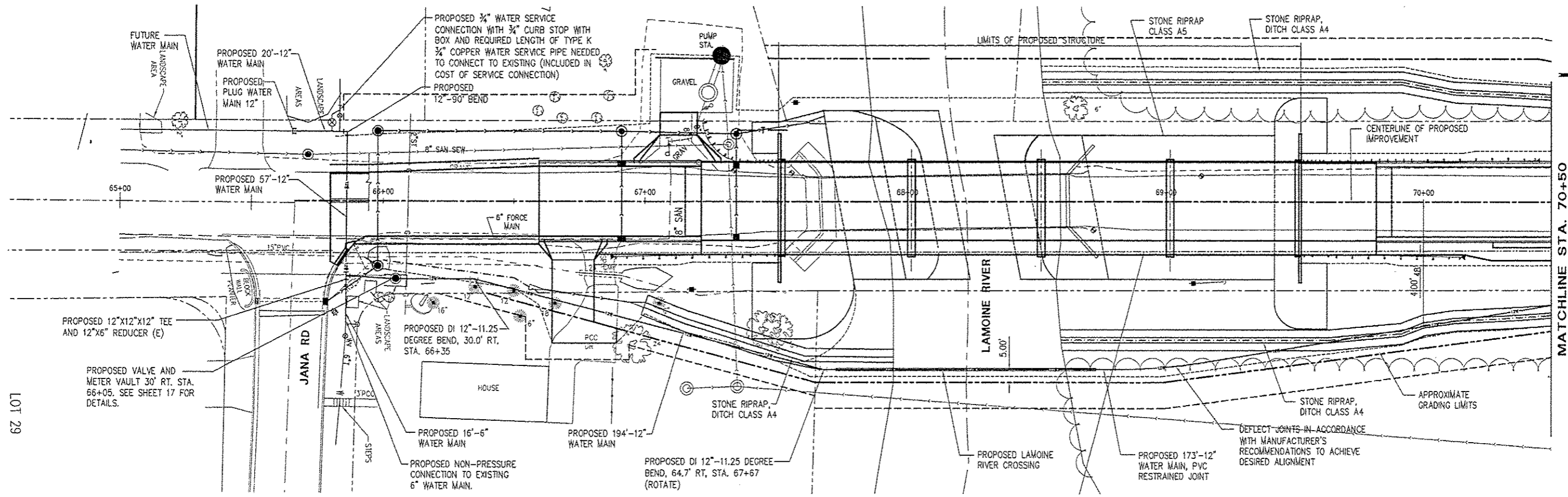
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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
 STORM SEWER PLAN AND PROFILE**  
 CITY OF MACOMB  
 292 EAST JACKSON ST. MACOMB, ILLINOIS 61455  
 FILE NAME: MACOMB\WIGWAMBRIDGE-2007\WIGWAM-09000-2007.DWG FIELD BOOK No: 2203  
 2202  
 2207  
 JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	10
CONTRACT NO. 89356				



24. WIGWAM HOLLOW BRIDGE REPLACEMENT 2007-04-09, 7:22:20.5, 17.00 PM, 9.46P AM, MICHIGAN PLOT.

REVISIONS		
NO.	ITEM	DATE

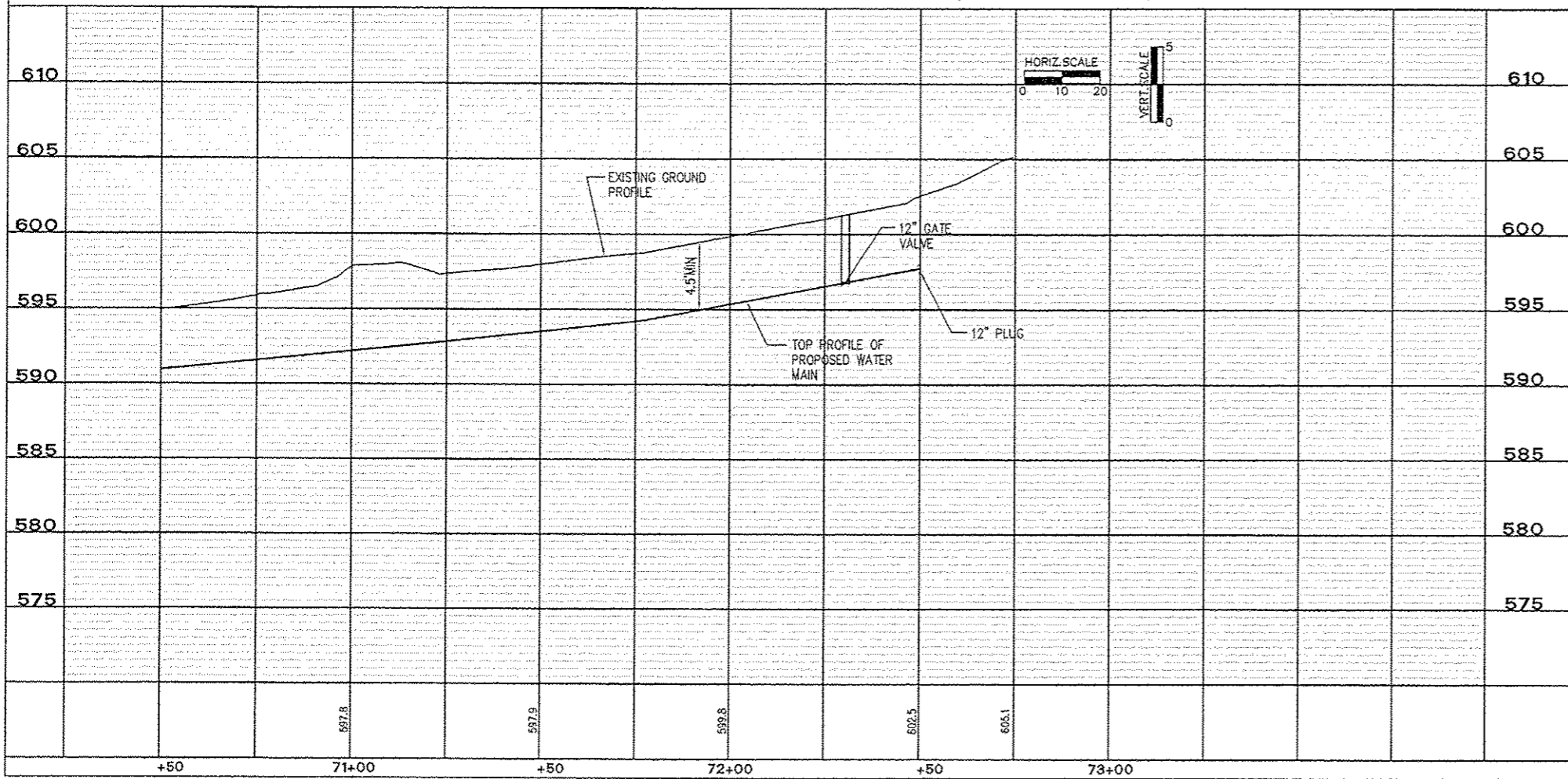
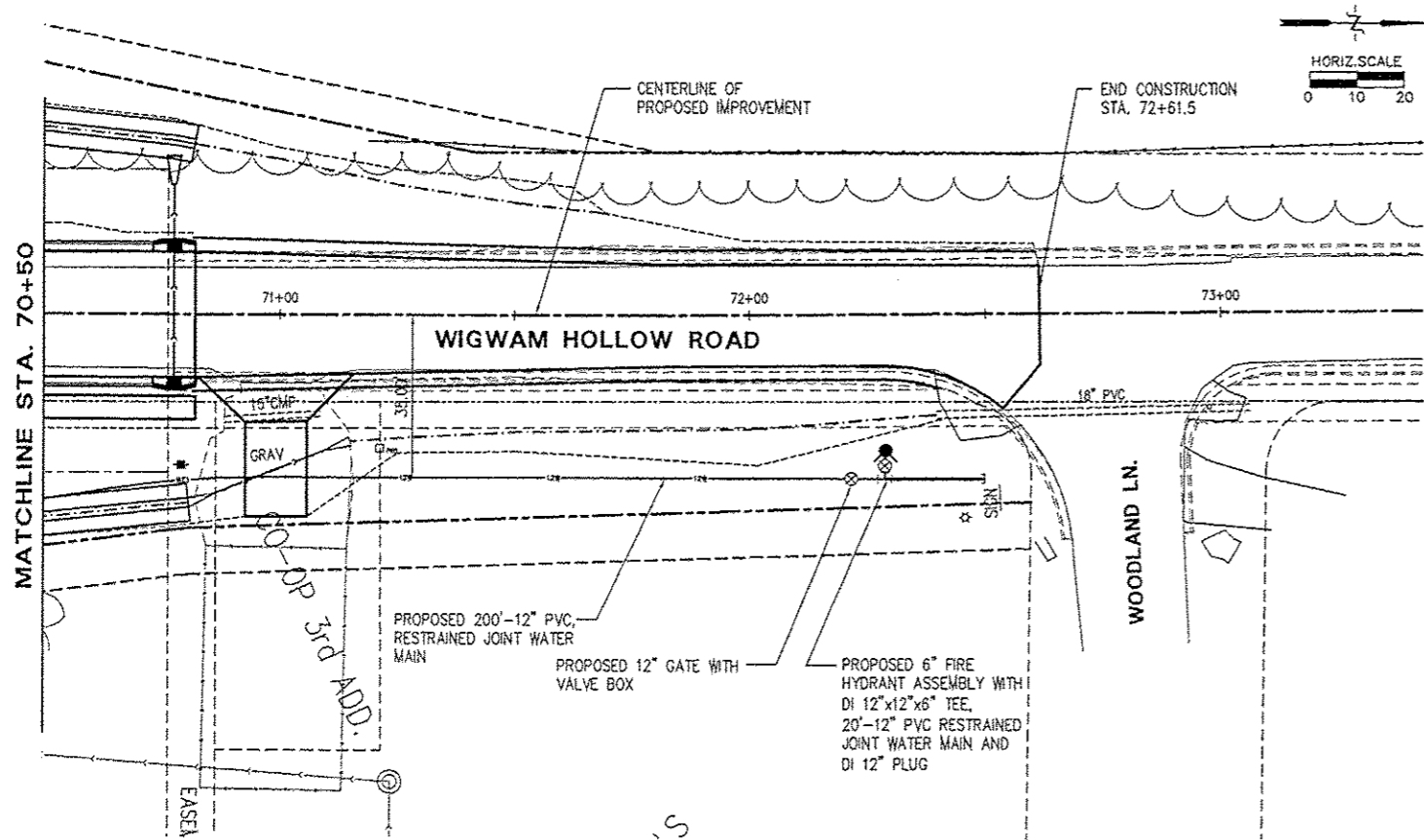
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 CHECKED BY: ECM  
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**WIGWAM HOLLOW BRIDGE REPLACEMENT**  
**WATER MAIN PLAN AND PROFILE**  
 CITY OF MACOMB  
 232 EAST JACKSON ST.      McDONOUGH COUNTY, ILLINOIS  
 FILE NAME: WIGWAM\_HOLLOW\_BRIDGE\_2007.DWG      FIELD BOOK No: 2262  
 JOB NUMBER: 03-26-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	11

CONTRACT NO. 89356



M:\WORKSPACE\CAD\DWG\BRIDGE TO WIGWAM BRIDGE 2007.dwg, 1/22/2013 11:57:15 AM, 93-DWG, MR. WILSON/PLK

:40

NO.	ITEM	DATE

REVISIONS		
NO.	ITEM	DATE

PLOTTING SCALE: 1" = 20'
DRAWN BY: TAB
CHECKED BY: ECM
DATE: JANUARY 2013

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Engineering Associates, Inc.

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Macomb, Illinois 61455  
(309) 833-4594

Macomb, Illinois 61455  
FAX (309) 837-4909

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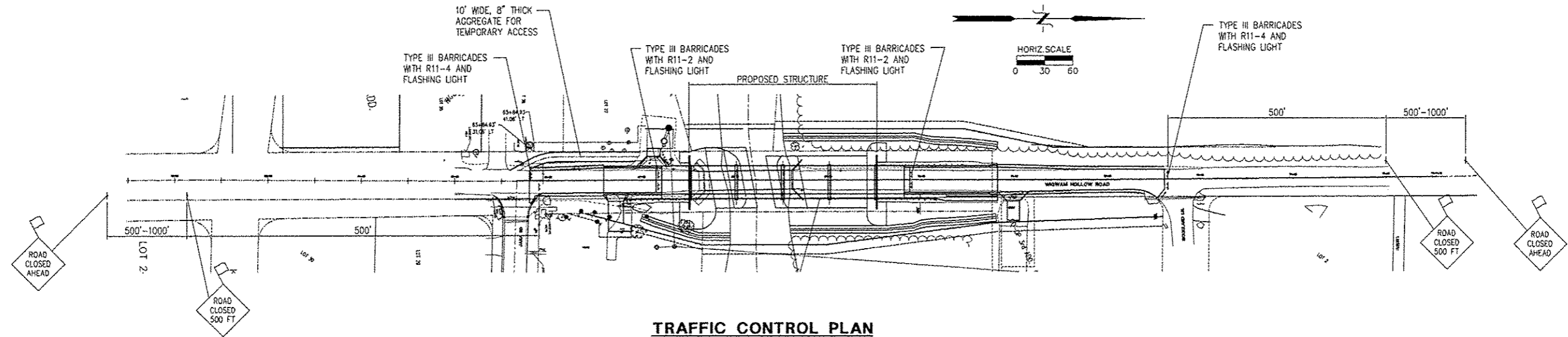
**WIGWAM HOLLOW BRIDGE REPLACEMENT  
WATER MAIN PLAN AND PROFILE**  
CITY OF MACOMB

292 EAST JACKSON ST.      MCDONOUGH COUNTY, ILLINOIS

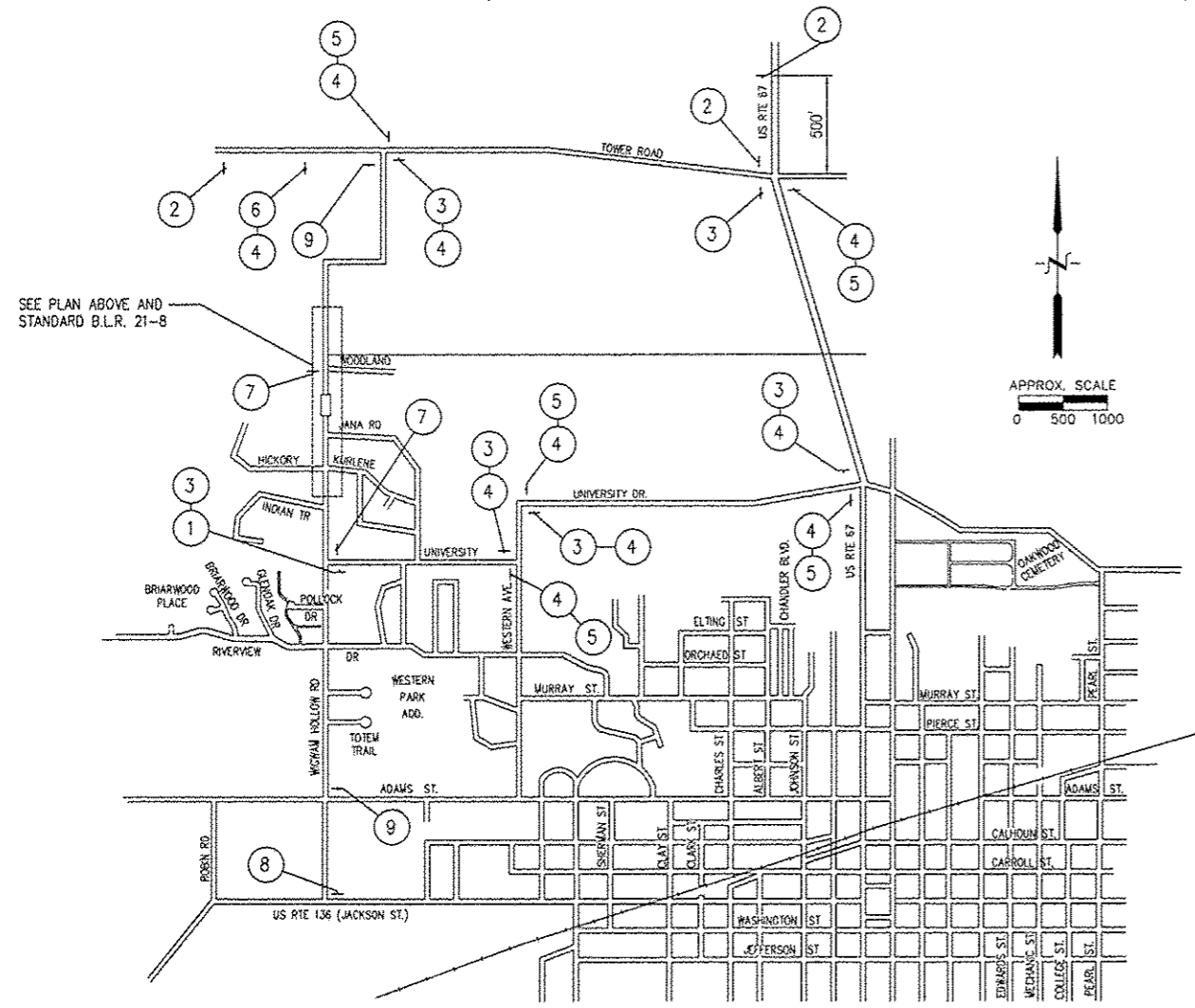
FILE NAME: \\clark\h\proj\brs-2007\mcclure-brs-2007.dwg      FIELD BOOK No: 2262  
JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	MCDONOUGH	43	12

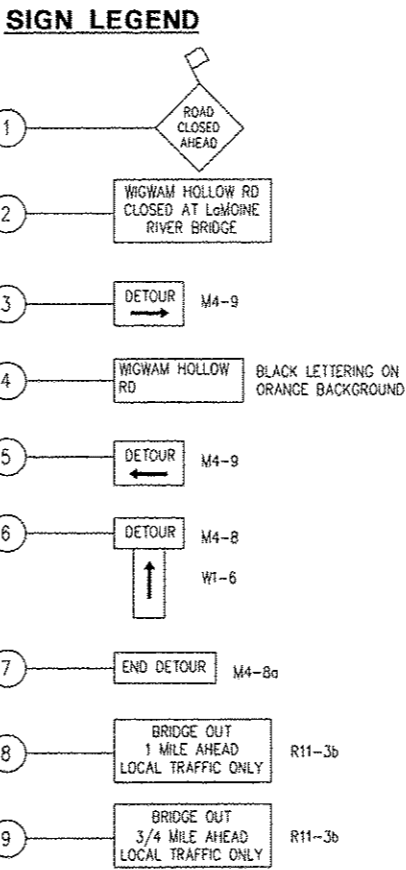
CONTRACT NO. 89356



**TRAFFIC CONTROL PLAN**

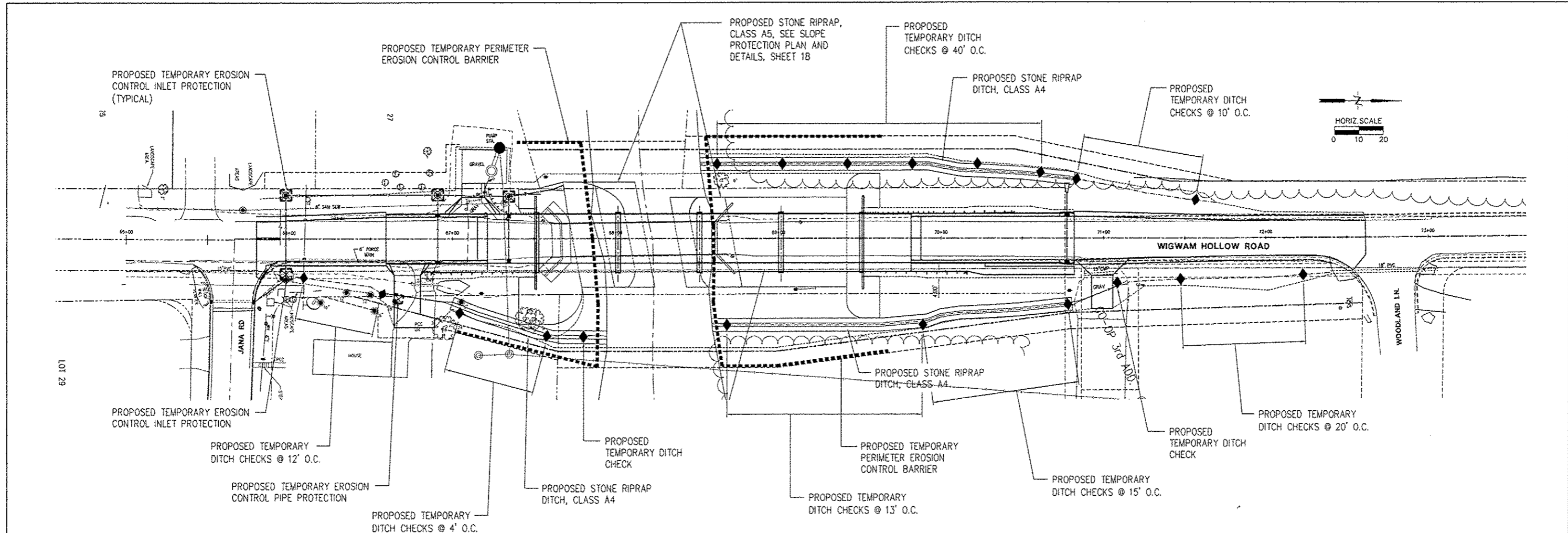


**TRAFFIC CONTROL AREA PLAN**

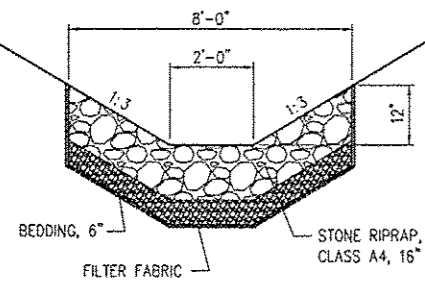


- NOTES**
1. WIGWAM HOLLOW ROAD SHALL BE CLOSED TO THROUGH TRAFFIC THROUGHOUT THE DURATION OF THE PROJECT.
  2. TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND APPLICABLE GUIDELINES CONTAINED IN THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, HIGHWAY STANDARDS B.L.R. 21-8 AND 701901, ANY SPECIAL PROVISIONS FOR THIS PROJECT AND THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.
  3. LOCAL TRAFFIC TO THE LIFT STATION ENTRANCE LEFT OF STA. 67+12, PRIVATE ENTRANCE RIGHT OF STA. 65+83 AND ENTRANCE TO THE SUBSTATION AT RIGHT OF STA. 71+00 TO BE MAINTAINED AT ALL TIMES UNLESS PRIOR ARRANGEMENTS OR ALTERNATE ACCESS HAVE BEEN MADE WITH THE OWNER AND WITH APPROVAL OF THE ENGINEER.
  4. TEMPORARY AGGREGATE SURFACE AS REQUIRED TO MAINTAIN TRAFFIC TO ENTRANCES WITHIN THE CONSTRUCTION SITE SHALL BE PLACED AND MAINTAINED AS REQUIRED DURING CONSTRUCTION. TEMPORARY AGGREGATE WILL BE PAID AT THE CONTRACT UNIT PRICE FOR AGGREGATE FOR TEMPORARY ACCESS.
  5. TRAFFIC CONTROL AND PROTECTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT THE TIME THE CONTRACTOR BEGINS HIS/HER CONSTRUCTION OPERATIONS. THIS RESPONSIBILITY SHALL REMAIN UNTIL THE CONTRACTORS WORK IS COMPLETE.
  6. ALL TRAFFIC CONTROL AND SIGNING REQUIRED FOR SAFETY PROTECTION WILL BE MEASURED AT THE CONTRACT LUMP SUM PRICE FOR TRAFFIC CONTROL AND PROTECTION.
  7. STREET NAME GOES ABOVE DETOUR SIGN, WHEN PAIRED.

<b>REVISIONS</b> NO.    ITEM    DATE			PLOTTING SCALE: 1" = 50' DRAWN BY: TAD CHECKED BY: ECM DATE: JANUARY 2013		McClure Engineering Associates, Inc. 714 East Jackson Street Macomb, Illinois 61455 (309) 833-4504    Fax (309) 837-4909 Design Firm License #184-008816 Copyright 2011 by McClure Engineering Associates, Inc.			<b>WIGWAM HOLLOW BRIDGE REPLACEMENT</b> <b>TRAFFIC CONTROL PLAN AND NOTES</b> CITY OF MACOMB 292 EAST JACKSON ST.    MOONDOUGH COUNTY, ILLINOIS FILE NAME: MACOMB\WIGWAMBRIDGE-2007\WIGWAM-BRIDGE-2007.DWG    FIELD BOOK NO: 2203 JOB NUMBER: 03-20-07-104			F.A.U. R.T.E.    SECTION    COUNTY    TOTAL SHEETS    SHEET NO. 6923    03-00128-00-BR    McDONOUGH    43    13	
CONTRACT NO. 89356												



**NOTE:**  
 1. STONE RIPRAP SHALL BE FURNISHED AND PLACED IN ACCORDANCE WITH SECTION 281 AND FILTER FABRIC SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH SECTION 282 OF THE STANDARD SPECIFICATIONS  
 2. REFER TO EROSION CONTROL PLAN FOR LIMITS OF PLACEMENT



**STONE RIPRAP DITCH DETAIL**

TEMP EROSION CONTROL SEEDING		
LOCATION		TEMPORARY EROSION CONTROL SEEDING POUND
LT.	STA. 65+85 TO 67+04	7
RT.	STA. 65+86 TO 66+77	5
LT.	STA. 67+20 TO 67+86	4
RT.	STA. 68+90 TO 67+92	11
LT.	STA. 68+51 TO 72+66	30
RT.	STA. 68+64 TO 72+66	38
<b>TOTAL</b>		<b>95</b>

EROSION CONTROL SUMMARY							
LOCATION	STONE RIPRAP DITCH, CL A4	STONE RIPRAP, CL A5	FILTER FABRIC	PIPE PROTECTION	INLET PROTECTION	TEMP DITCH CHECKS	PERIMETER EROSION CONTROL
STA. TO STA.	SQ. YD.	SQ. YD.	SQ. YD.	EACH	EACH	FOOT	FOOT
RT. 65+98					1		
LT. 65+98					1		
RT. 65+98 TO 66+60						50	
RT. 66+66				1			
LT. 66+91					1		
RT. 67+00 TO 67+95	90.5		90.5			160	
LT. 67+34.5					1		
SOUTH ABUTMENT		628	628				267
PROPOSED STRUCTURE -- STA. 13+03.56 TO STA. 16+00.44							
NORTH ABUTMENT		830	830				353
LT. 68+52 TO 70+82	215.5		215.5			60	
RT. 68+59 TO 70+81	208		208			170	
LT. 70+82 TO 71+60						90	
RT. 70+81 TO 72+25						60	
<b>TOTAL</b>		<b>514</b>	<b>1458</b>	<b>1</b>	<b>4</b>	<b>590</b>	<b>620</b>

REVISIONS		
NO.	ITEM	DATE

PLOTTING SCALE: 1" = 20'
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DATE: JANUARY 2013

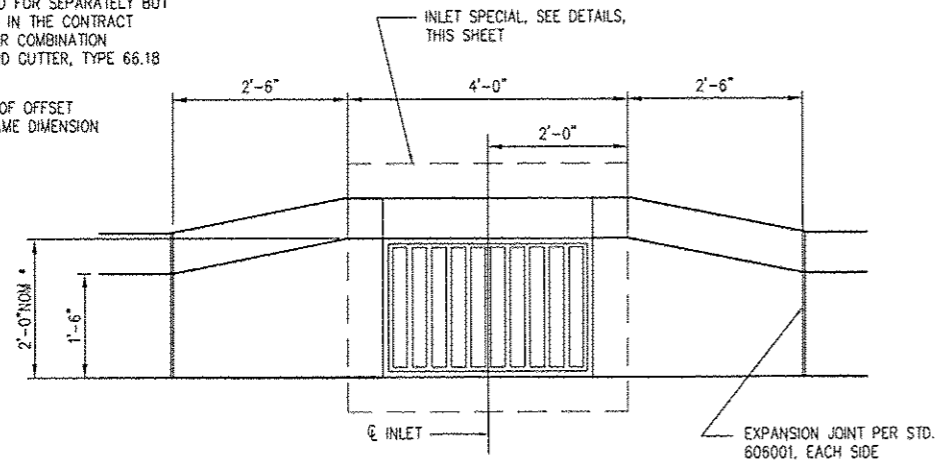
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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
 EROSION CONTROL PLAN**  
 CITY OF MACOMB  
 232 EAST JACKSON ST. McDONOUGH COUNTY, ILLINOIS  
 FILE NAME: MACOMB\WIGWAMBRIDGE-2011\03-28-10-002-2012.DWG FIELD BOOK No: 2203 JOB NUMBER: 03-28-07-104

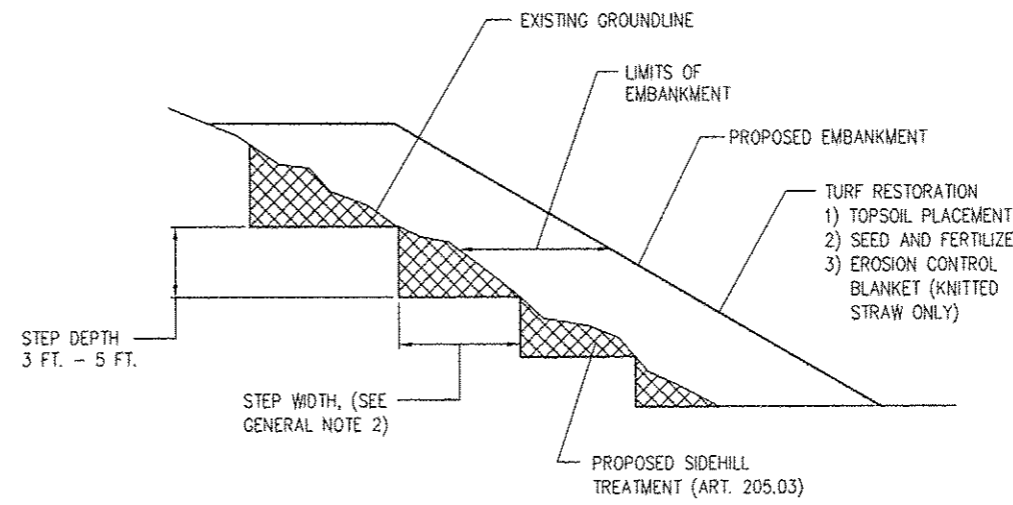
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03--00128--00--BR	McDONOUGH	43	14
CONTRACT NO. 89356				

**NOTE:**  
CURB TRANSITION SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS AND STANDARD 606001. CURB TRANSITION WILL NOT BE MEASURED AND PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE CONTRACT PRICE PER FOOT FOR COMBINATION CONCRETE CURB AND CUTTER, TYPE 66.18

\* EXACT DISTANCE OF OFFSET DETERMINED BY FRAME DIMENSION



**CURB TRANSITION TO INLET**



**GENERAL NOTES**

1. SLOPE STEPS WILL BE REQUIRED FOR ALL 12" MINIMUM THICKNESS "SLIVER FILLS" AND ON FILLS WITH A HEIGHT OF 10 FT.
2. THE STEP WIDTH SHALL BE TWICE THE STEP DEPTH BUT NOT LESS THAN 6 FT.
3. REFER TO ARTICLE 205.03 FOR EMBANKMENT TO BE CONSTRUCTED ON HILLSIDE OR SLOPES, OR IF EXISTING EMBANKMENTS ARE TO BE WIDENED.
4. EXACT LIMITS TO BE DETERMINED IN THE FIELD.
5. EXCAVATION FOR SIDEHILL TREATMENT SHALL BE MEASURED AND PAID FOR AT THE CONTRACT PRICE FOR EARTH EXCAVATION. EMBANKMENT FOR SIDEHILL TREATMENT WILL NOT BE MEASURED AND PAID FOR IN ACCORDANCE WITH SECTION 205 OF THE STANDARD SPECS.

**SLOPE STEPS DETAIL**

STANDARD EMBANKMENT (IN ACCORDANCE WITH 205 OF THE STANDARD SPECIFICATIONS)  
TYPICAL CROSS SECTION EMBANKMENT CONSTRUCTION ON SIDEHILL

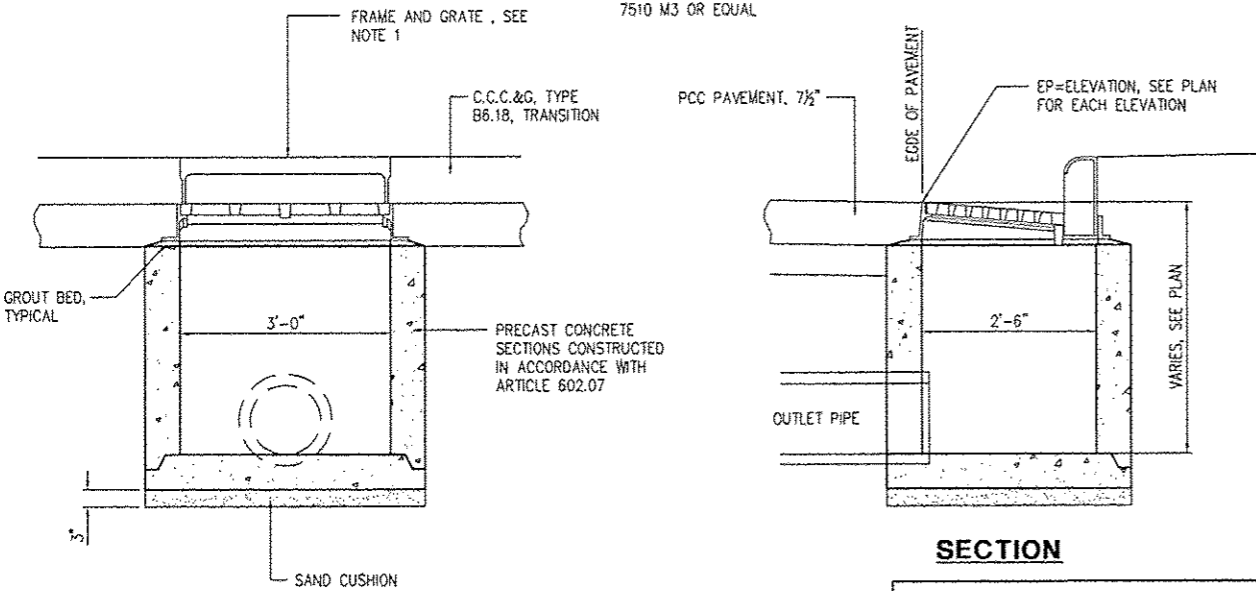
**SLOPE STEPS DETAIL**

**NOTE:**  
1. FRAME AND GRATE FOR INLETS SPECIAL No. 1 SHALL BE AS FOLLOWS:  
**INLET SPECIAL** - NEENAH R-3246-A OR EAST JORDAN 7510 M4 OR EQUAL.

2. INLET SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS AND THE SPECIAL PROVISIONS FOR THIS PROJECT.

3. REINFORCEMENT SHALL BE IN ACCORDANCE WITH IDOT STANDARD DRAWING 602101-02, DRAINAGE STRUCTURES TYPE 1, 2 & 3.

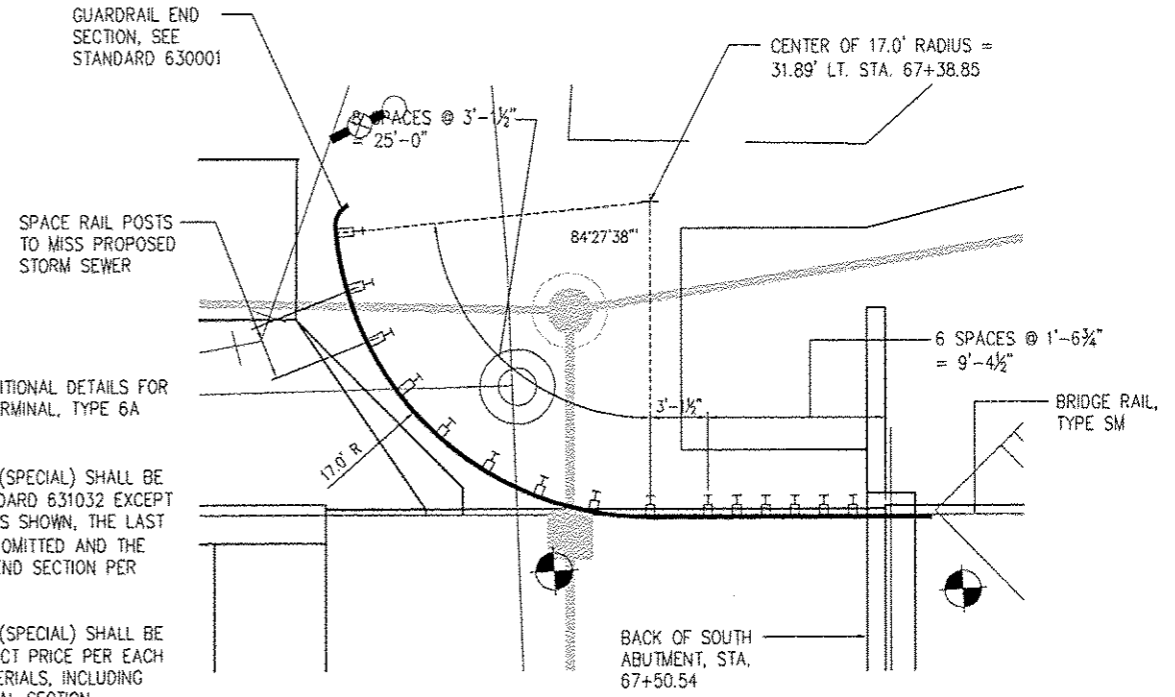
FRAME AND GRATE, NEENAH R-3246-AL, EAST JORDAN 7510 M3 OR EQUAL



**SECTION INLET SPECIAL DETAIL**

**NOTES:**

1. REFER TO STANDARD 631032 FOR ADDITIONAL DETAILS FOR THE INSTALLATION OF TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL)
2. TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL) SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD 631032 EXCEPT RAILING SHALL BE INSTALLED ON CURVE AS SHOWN, THE LAST TWO POST SPACES OF 3'-1 1/2" SHALL BE OMITTED AND THE SECTION SHALL BE TERMINATED WITH AN END SECTION PER STANDARD 630001.
3. TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL) SHALL BE MEASURED AND PAID FOR AT THE CONTRACT PRICE PER EACH AND SHALL INCLUDE ALL LABOR AND MATERIALS, INCLUDING THE END SECTION TO INSTALL THE TERMINAL SECTION COMPLETE AS SHOWN.



**TRAFFIC BARRIER TERMINAL, TYPE 6A (SPECIAL)**

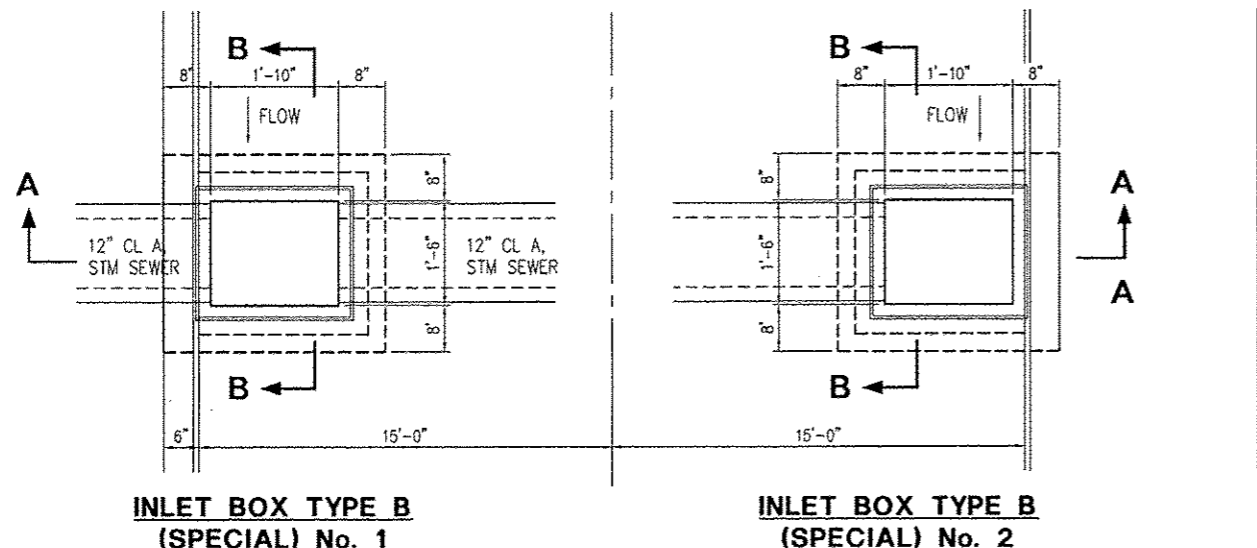
REVISIONS		
NO.	ITEM	DATE

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**WIGWAM HOLLOW BRIDGE REPLACEMENT**  
**TYPICAL DETAILS**  
**CITY OF MACOMB**  
232 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS  
FILE NAME: WIGWAM\_HOLLOW\_BRIDGE-2011\WIGWAM-BRIDGE-2011.DWG FIELD BOOK NO: 2283 JOB NUMBER: 03-28-07-104  
2283  
2282  
2287

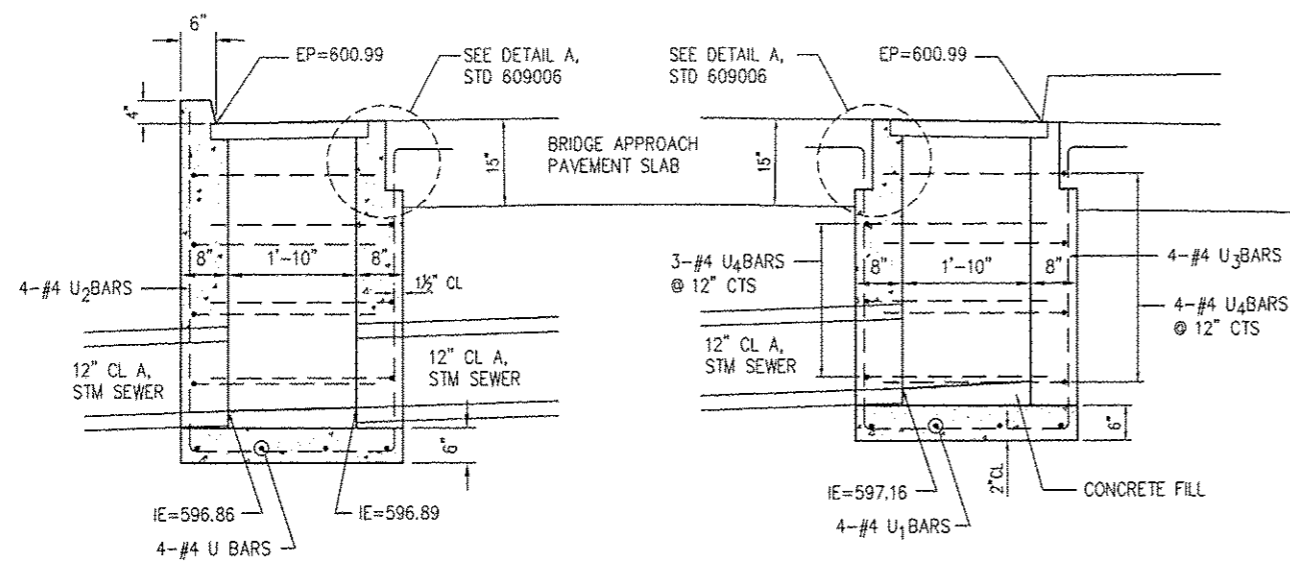
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	15
CONTRACT NO. 89356				



**INLET BOX TYPE B (SPECIAL) No. 1**

**INLET BOX TYPE B (SPECIAL) No. 2**

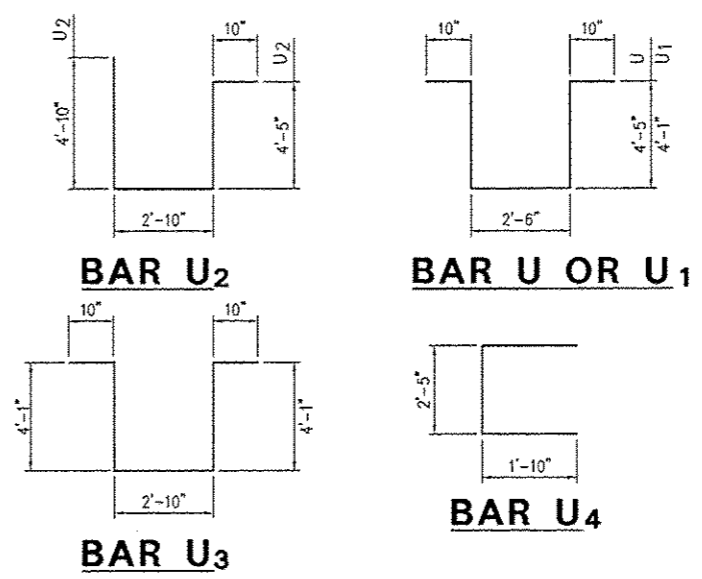
**PLAN**



**INLET BOX TYPE B (SPECIAL) No. 1**

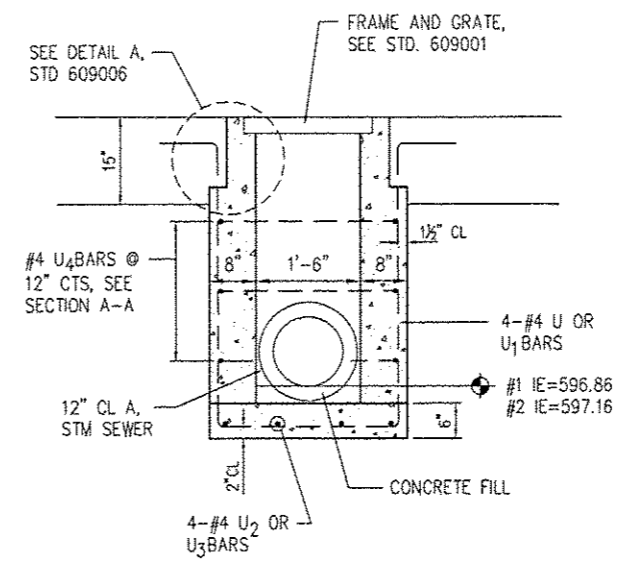
**INLET BOX TYPE B (SPECIAL) No. 2**

**SECTION A-A**



REQUIRED MATERIAL			
INLET BOX TYPE B (SPECIAL) #1			
BAR	QTY.	SIZE	LENGTH
U	4	#4	13'-0"
U <sub>2</sub>	4	#4	13'-3"
U <sub>4</sub>	7	#4	6'-1"
CONCRETE	CU. YD.	0.XX	
REINF. BARS	POUND	99	
GRATING	SQ. FT.	3.6	

REQUIRED MATERIAL			
INLET BOX TYPE B (SPECIAL) #2			
BAR	QTY.	SIZE	LENGTH
U <sub>1</sub>	4	#4	12'-4"
U <sub>3</sub>	4	#4	12'-8"
U <sub>4</sub>	7	#4	6'-1"
CONCRETE	CU. YD.	0.XX	
REINF. BARS	POUND	95	
GRATING	SQ. FT.	3.6	



**SECTION B-B**

**NOTES**

- CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 609 OF THE STANDARD SPECIFICATIONS.
- SEE STANDARD 609006 FOR GRATE DETAILS AND ADDITIONAL DETAILS NOT SHOWN ON THIS SHEET.

REVISIONS		
NO.	ITEM	DATE

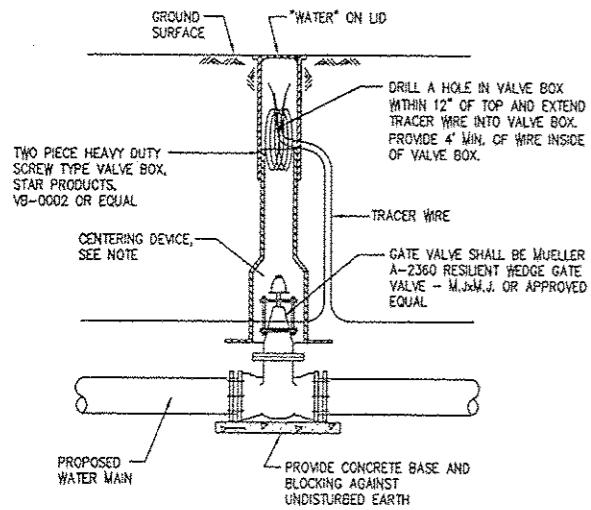
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CHECKED BY: ECM
DATE: JANUARY 2013

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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
 TYPE B INLET BOX STD 609006 (SPL) DETAIL  
 CITY OF MACOMB**  
 232 EAST JACKSON ST. McDONOUGH COUNTY, ILLINOIS  
 FILE NAME: MACOMB\WIGWAMBRIDGE-2011\WIGWAM-2011-0002-2011.DWG FIELD BOOK No. 2203 JOB NUMBER: 03-28-07-104  
 2203  
 2202  
 2207

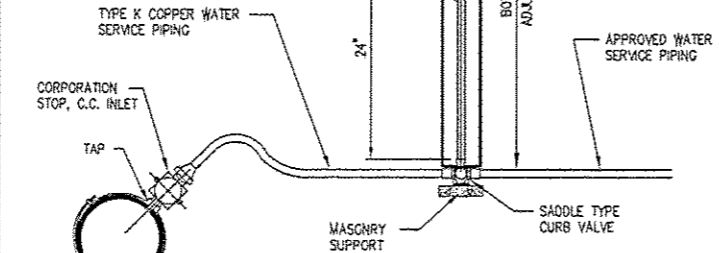
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	16
CONTRACT NO. 89356				





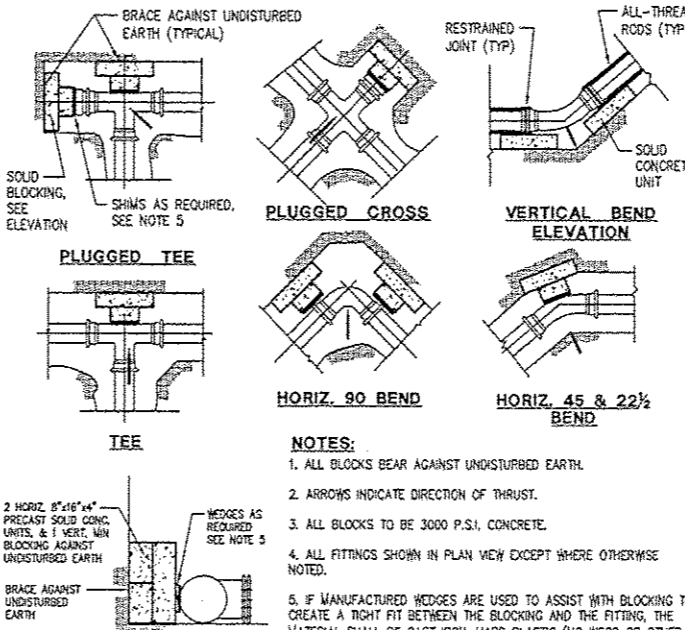
**NOTE:**  
A VALVE BOX ADAPTER/ CENTERING DEVICE OF THE APPROPRIATE SIZE AND TYPE MANUFACTURED BY ADAPTER INC. SHALL BE UTILIZED WITH ALL VALVE BOX INSTALLATIONS. SEE WRITTEN SPECIFICATION FOR APPROVED PRODUCT

STAINLESS STEEL STATIONARY ROD AS MANUFACTURED BY FUSION TECH AND SUPPLIED BY HD SUPPLY. CONTRACTOR TO FURNISH AND INSTALL. INCLUDED IN COST FOR CURB STOP OF THE SIZE INSTALLED

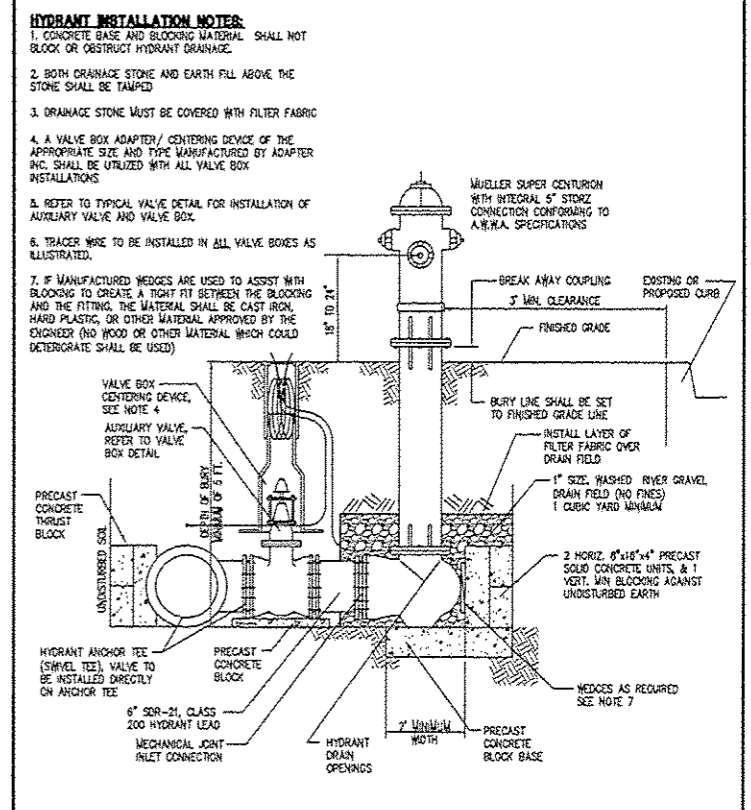


LIST OF APPROVED MATERIALS				
SIZE	SERVICE SADDLE MODEL	CORPORATION STOP MODEL	CURB VALVE MODEL	CURB BOX MODEL
1/2"	H-13000 OR S-13000	H-1500BN	H-1504-2N	H-10314
1"	H-13000 OR S-13000	H-1500BN	H-1504-2N	H-10314
1 1/2"	H-13000 OR S-13000	H-1500BN	B-25209N	H-10386
2"	H-13000 OR S-13000	H-1500BN	B-25209N	H-10386

SERVICE ITEMS AS MANUFACTURED BY MUELLER. SEE SPECIAL PROVISION FOR OTHER ACCEPTABLE MANUFACTURERS



**NOTES:**  
1. ALL BLOCKS BEAR AGAINST UNDISTURBED EARTH.  
2. ARROWS INDICATE DIRECTION OF THRUST.  
3. ALL BLOCKS TO BE 3000 P.S.I. CONCRETE.  
4. ALL FITTINGS SHOWN IN PLAN VIEW EXCEPT WHERE OTHERWISE NOTED.  
5. IF MANUFACTURED WEDGES ARE USED TO ASSIST WITH BLOCKING TO CREATE A TIGHT FIT BETWEEN THE BLOCKING AND THE FITTING, THE MATERIAL SHALL BE CAST IRON, HARD PLASTIC (NO WOOD OR OTHER MATERIAL WHICH COULD DETERIORATE) OR OTHER MATERIAL APPROVED BY THE ENGINEER.  
6. IF UNSTABLE MATERIAL IS ENCOUNTERED DURING CONSTRUCTION IT MAY BE NECESSARY TO PROVIDE A LARGER AREA OF BEARING AGAINST UNDISTURBED SOIL FOR BLOCKING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SOIL CONDITIONS AND PROVIDE THE SQUARE FOOT OF BEARING AREA REQUIRED FOR EACH FITTING.  
7. CONCRETE THRUST BLOCKING SHALL BE PRECAST UNLESS OTHERWISE APPROVED BY CITY OF ENGINEER.



CITY OF MACOMB, ILLINOIS  
PUBLIC WORKS DEPARTMENT  
233 CENTER STREET  
MACOMB, ILLINOIS 61455  
(309) 833-2821

**TYPICAL WATER VALVE  
INSTALLATION  
DETAIL**

DATE: 6/19/2011  
CHECKED: KJ/LB  
SHEET NO. **1**  
of **1**

CITY OF MACOMB, ILLINOIS  
PUBLIC WORKS DEPARTMENT  
233 CENTER STREET  
MACOMB, ILLINOIS 61455  
(309) 833-2821

**TYPICAL WATER  
SERVICE  
INSTALLATION  
DETAIL**

DATE: 6/19/2011  
CHECKED: KJ/LB  
SHEET NO. **1**  
of **1**

CITY OF MACOMB, ILLINOIS  
PUBLIC WORKS DEPARTMENT  
233 CENTER STREET  
MACOMB, ILLINOIS 61455  
(309) 833-2821

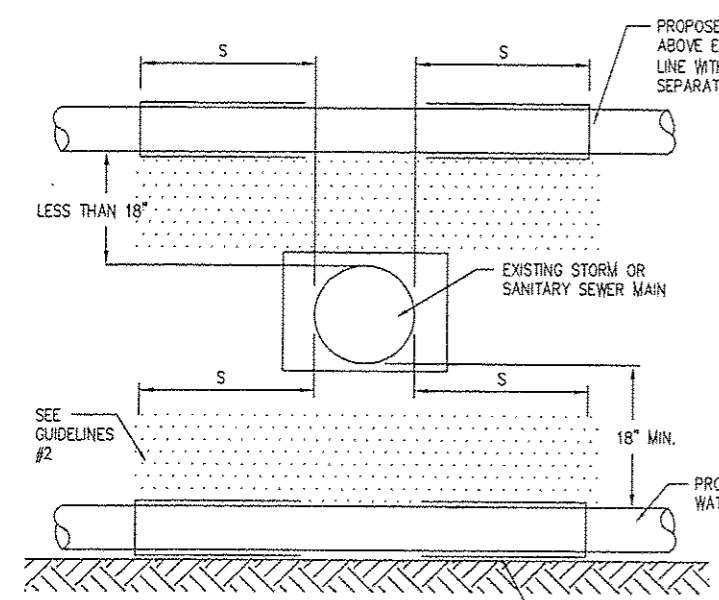
**TYPICAL THRUST  
BLOCKING  
DETAIL  
4\", 6\" & 8\" WATER MAIN**

DATE: 10-27-12  
CHECKED: JG/BN  
SHEET NO. **1**  
of **1**

CITY OF MACOMB, ILLINOIS  
PUBLIC WORKS DEPARTMENT  
233 CENTER STREET  
MACOMB, ILLINOIS 61455  
(309) 833-2821

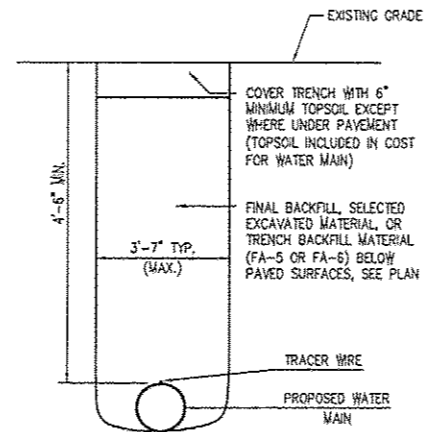
**TYPICAL FIRE HYDRANT  
INSTALLATION  
DETAIL**

DATE: 6/19/2011  
CHECKED: KJ/LB  
SHEET NO. **1**  
of **1**

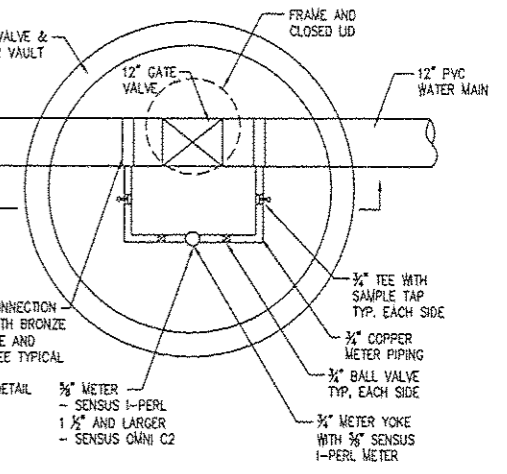
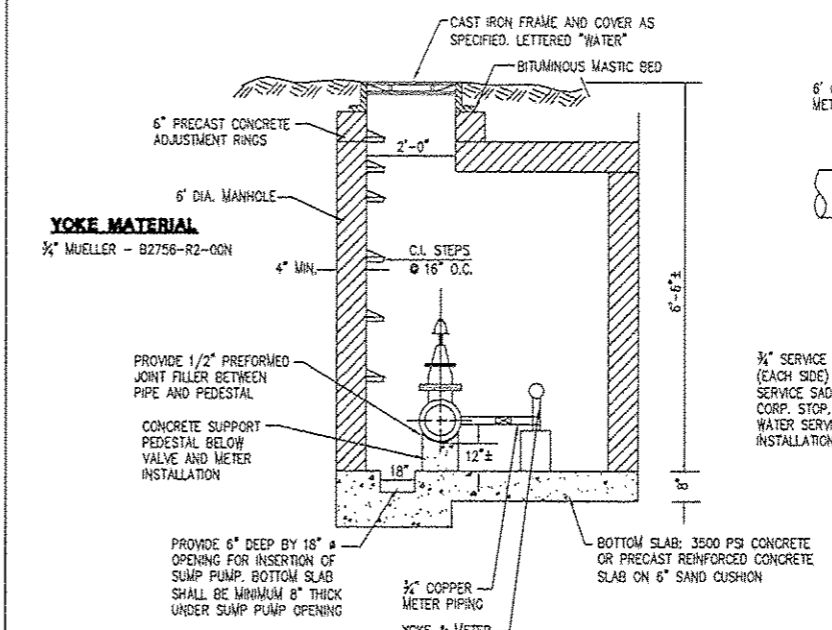


**NOTES:**  
1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATER MAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF CASING.  
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.  
3. PROVIDE ADEQUATE SUPPORT FOR SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.  
4. WHEN WATER MAIN IS ABOVE SEWER, POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN CASING AND SEWER.

**WATER AND SEWER  
SEPARATION  
REQUIREMENTS**



**WATER MAIN TRENCH  
AND BACKFILL  
DETAIL**



**VALVE & METER  
VAULT  
DETAIL**

M:\DRAWINGS\MACOMB\WIGWAM\BRIDGE 2007.dwg, 1/22/2013, 4:45 PM, S-ASP, MS, MARSHI, PCL

REVISIONS		
NO.	ITEM	DATE

PLOTTING SCALE: 1" = 4"

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DATE: JANUARY 2013

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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
TYPICAL WATER MAIN DETAILS**  
CITY OF MACOMB

232 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS

FILE NAME: Macomb\184\000816\2011\WIGWAM-0002-2011.dwg FIELD BOOK No: 2203  
JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	17

CONTRACT NO. 89356

**BENCH MARKS:**

WEST CAPBOLT ON FIRE HYDRANT AT NW COR. HICKORY BOY AND WIGWAM HOLLOW ROAD INTERSECTION ELEVATION 611.71

TOP SPINDLE ON FIRE HYDRANT AT NE COR. JANA ROAD AND WIGWAM HOLLOW ROAD INTERSECTION ELEVATION 605.51

**EXISTING STRUCTURE (SN 055-4602)**

2 SPAN STEEL REINFORCED CONCRETE APPROACH SPANS, 2@ 46.5', STEEL REINFORCED CONCRETE SUBSTRUCTURE WITH STEEL REINFORCED CONCRETE BEAM AND DECK SUPERSTRUCTURE. TOTAL LENGTH=93' OUT TO OUT. NO SALVAGE EXISTING STRUCTURE NO. 55-4602

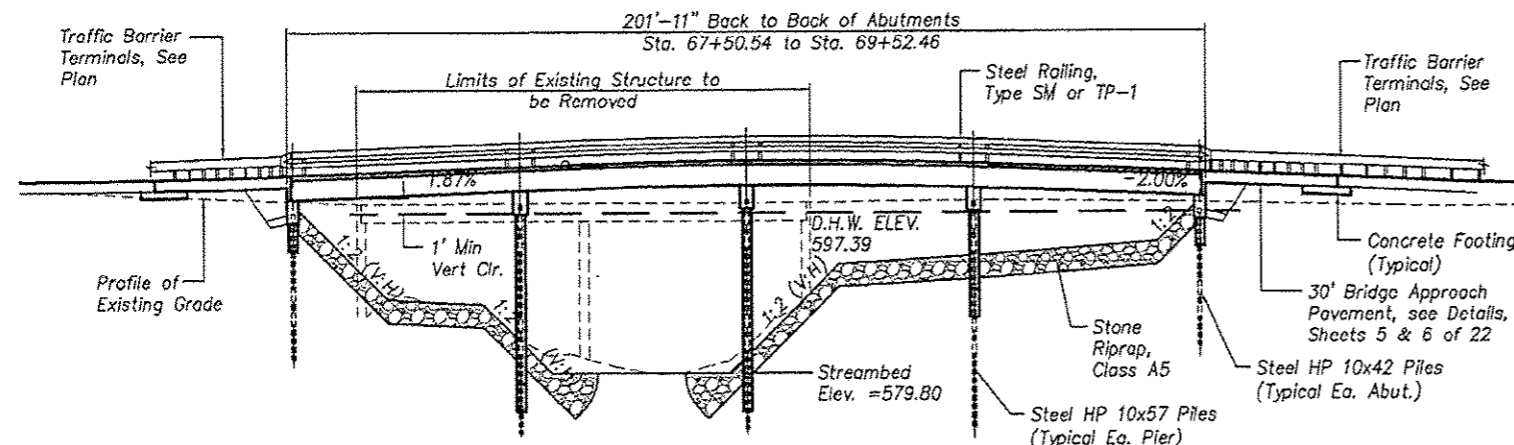
**NOTES:**

Reinforcement bars designated (E) shall be epoxy coated  
The Contractor shall drive test piles to 110% of the nominal required bearing specified in the production locations at substructures specified or approved by the Engineer before ordering the remainder of the piles

**TOTAL BILL OF MATERIAL**

Item	Unit	Super	Sub.		Total
			Piers	Abuts.	
Channel Excavation	Cu. Yd.				2391
Stone Riprap, Class A-5	Sq. Yd.				1458
Filter Fabric	Sq. Yd.				1458
Removal of Existing Structures	Each	1			1
Structure Excavation	Cu. Yd.		35.1	48.0	83.1
Concrete Superstructures	Cu. Yd.	145.1			145.1
Concrete Structures	Cu. Yd.		152.4	*55.6	208.0
Concrete Encasement	Cu. Yd.		7.5	3.6	11.1
Concrete Wearing Surface, 5"	Sq. Yd.	800			800
Protective Coat	Sq. Yd.	1069			1069
Precast Prestressed Concrete Deck Beams (27" Depth)	Sq. Ft.	7188			7188
Reinforcement Bars	Pound		6820		6820
Reinforcement Bars, Epoxy Coated	Pound	42580	3555	4360	50495
Steel Railing, Type SM	Foot	200			200
Steel Railing, Type TP-1	Foot	200			200
Furnishing Steel Piles, HP 10x42	Foot			240	240
Furnishing Steel Piles, HP 10x57	Foot		570		570
Driving Piles	Foot		570	240	810
Test Pile, Steel HP 10x42	Each			2	2
Test Pile, Steel HP 10x57	Each		3		3
Name Plates	Each	1			1
Porous Granular Embankment (Special)	Cu. Yd.			71.2	71.2
Pipe Underdrains for Structures, 6"	Foot			122	122
Concrete Headwall for Pipe Drains	Each			2	2
Monodirectional Prismatic Barrier Reflector	Each	4			4
Prismatic Curb Reflector	Each	5			5

\* Includes 22.2 Cu. Yds. for Approach Footings at Abutments



**LOADING HS 20-44**

ALLOW 50 PSF FOR FUTURE WEARING SURFACE

**DESIGN SPECIFICATIONS**

STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ADOPTED JANUARY 1, 2012 BY THE STATE OF ILLINOIS, DEPARTMENT OF TRANSPORTATION, AND SUPPLEMENTS

STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES AASHTO 2002.

**DESIGN STRESSES**

**PRECAST UNITS**

$f_c = 5,000$  psi  
 $f_d = 4,000$  psi  
 $f_t = 270,000$  psi (1/2 Dia Low Lax Strand)  
 $f_r = 201,960$  psi (1/2 Dia Low Lax Strand)

**FIELD UNITS**

$f_c = 3,500$  psi  
 $f_r = 60,000$  psi (Reinforcement)

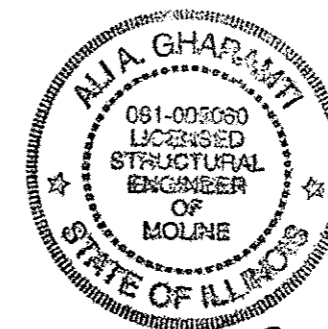
**INDEX OF BRIDGE PLANS**

- General Plan and Elevation
- Slope Protection Plan and Details
- Superstructure Plan and Section
- Superstructure Details
- 6. Bridge Approach Slab Details
- Steel Railing, Type SM Details
- Steel Railing, Type TP-1 Details
- Spans 1 and 4 Deck Beam Details
- Spans 2 and 3 Deck Beam Details
- 27"x48" PPC Deck Beam Details
- South Abutment Details
- North Abutment Details
- Pier #1 Details
- Pier #2 Details
- Pier #3 Details
- HP Pile Details
- 21-22. Soil Borings

**SEISMIC DATA**

SEISMIC PERFORMANCE CATEGORY (S.P.C.) = A  
ACCELERATION COEFFICIENT (A) = 0.045g  
SITE COEFFICIENT (S) = 1.0

I certify that to the best of my knowledge, information and belief, this bridge/box culvert 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'.



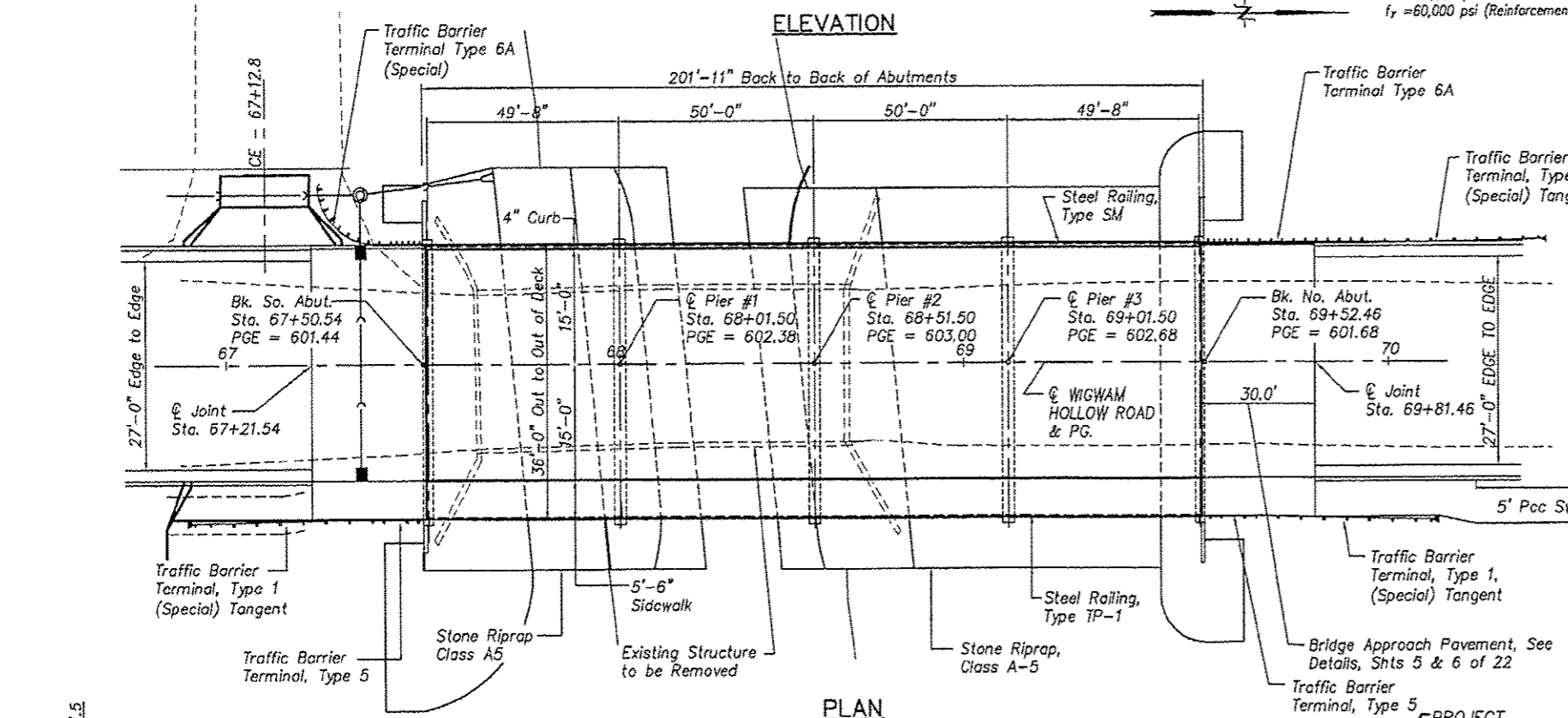
WIGWAM HOLLOW ROAD OVER EAST FORK LAMOINE RIVER  
SEC 08-00128-00-BR BUILT 20...  
CITY OF MACOMB  
McDONOUGH COUNTY  
LOADING HS 20-44  
STA. 68+51.50 STR. NO. 055-6002

**LETTERING FOR NAME PLATE**

Locate name plate at the Southeast corner of bridge (See Std. 515001)

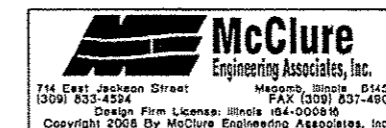
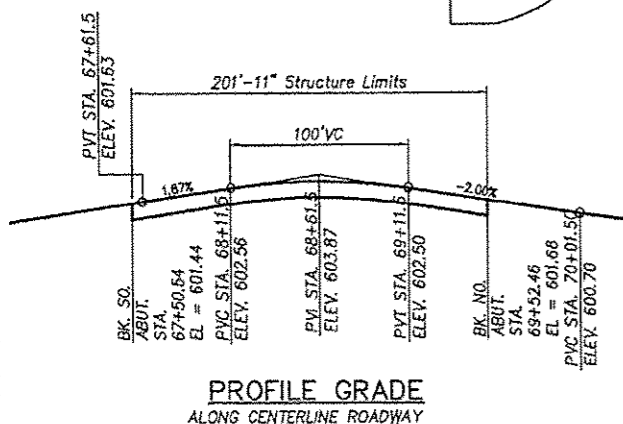
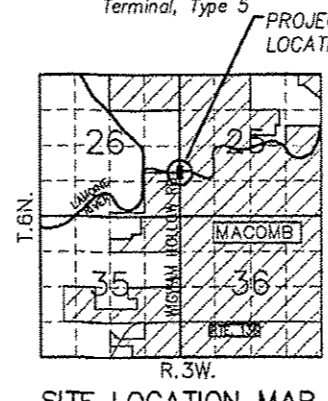
**GENERAL PLAN AND ELEVATION**  
WIGWAM HOLLOW RD OVER EAST FORK LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

SHEET 1 OF 22



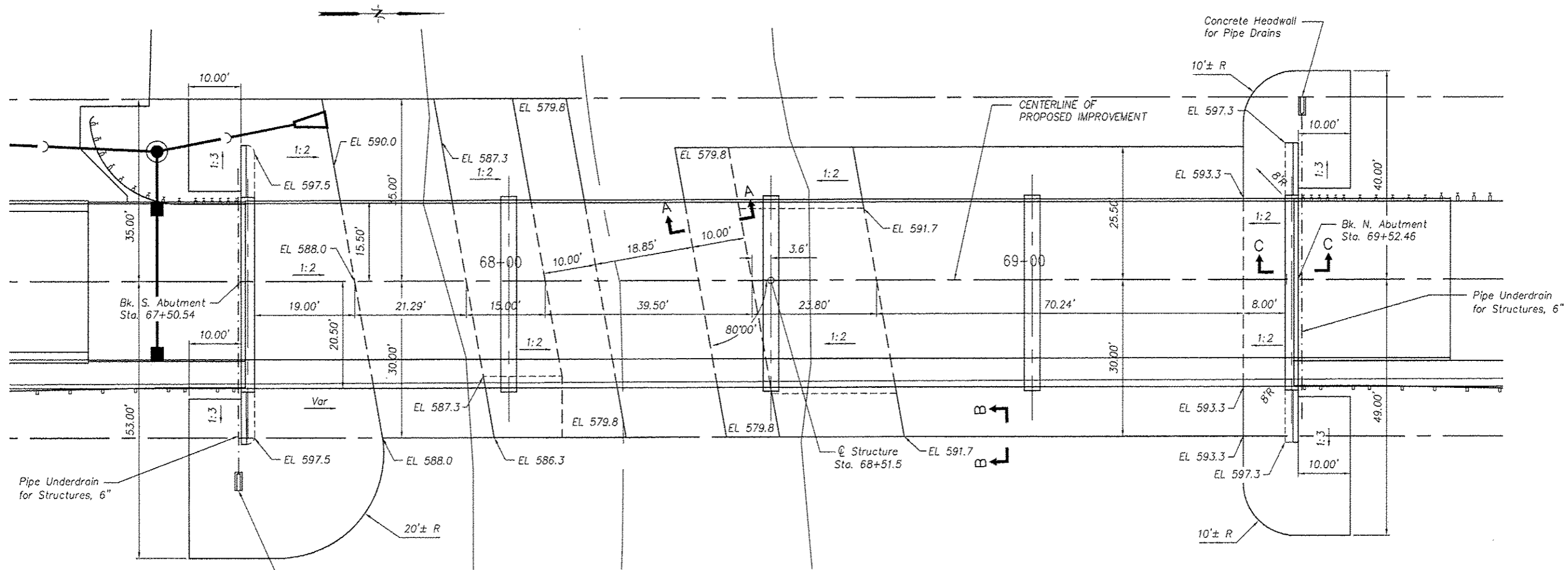
**WATERWAY INFORMATION**

FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT.		NAT. H.W.E.		HEAD - FT.		HEADWATER EL.	
			EXIST.	PROP.	EXIST.	PROP.	EXIST.	PROP.	EXIST.	PROP.
DESIGN	30	10,078	1025	1821	597.03	598.31	597.39	1.28	0.36	
BASE	100	13,009	1025	2065	598.02	599.64	598.64	1.62	0.62	
OVERTOPPING										
MAX. CALC.	100	13,009	1025	2065	598.02	599.64	598.64	1.62	0.62	

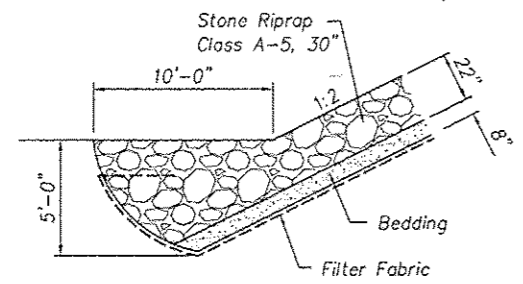


F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	18

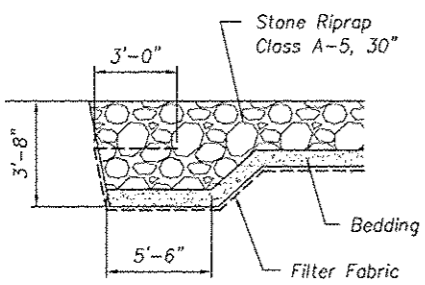
CONTRACT NO. 89356



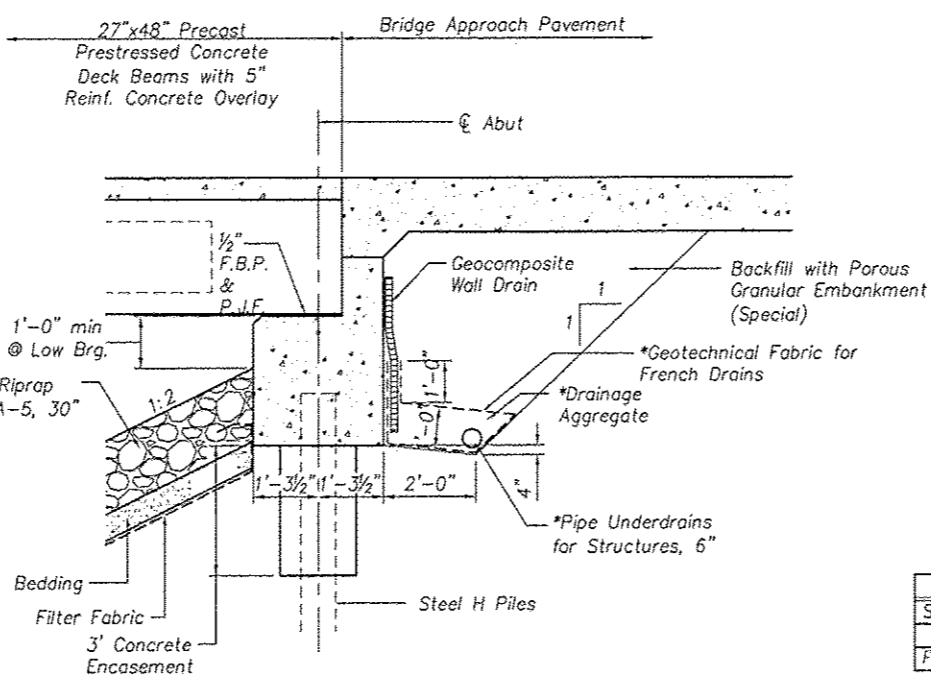
**SLOPE PROTECTION PLAN**



SECTION A-A



SECTION B-B



SECTION C-C

**NOTES:**

Layout of the Slope Protection System may be varied to suit ground conditions in the field as directed by the Engineer.

The work shall be done in accordance with Section 281 of the Standard Specifications

\*Included in the cost for Pipe Underdrains for Structures, 6"

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 sideslopes.

**SLOPE PROTECTION PLAN AND DETAILS**  
**WIGWAM HOLLOW RD OVER EAST FORK**  
**LAMOINE RIVER**  
**CITY OF MACOMB**  
**SECTION 08-00128-00-BR**  
**MCDONOUGH COUNTY**  
**STATION 68+51.50**  
**STRUCTURE NO. 055-6002**

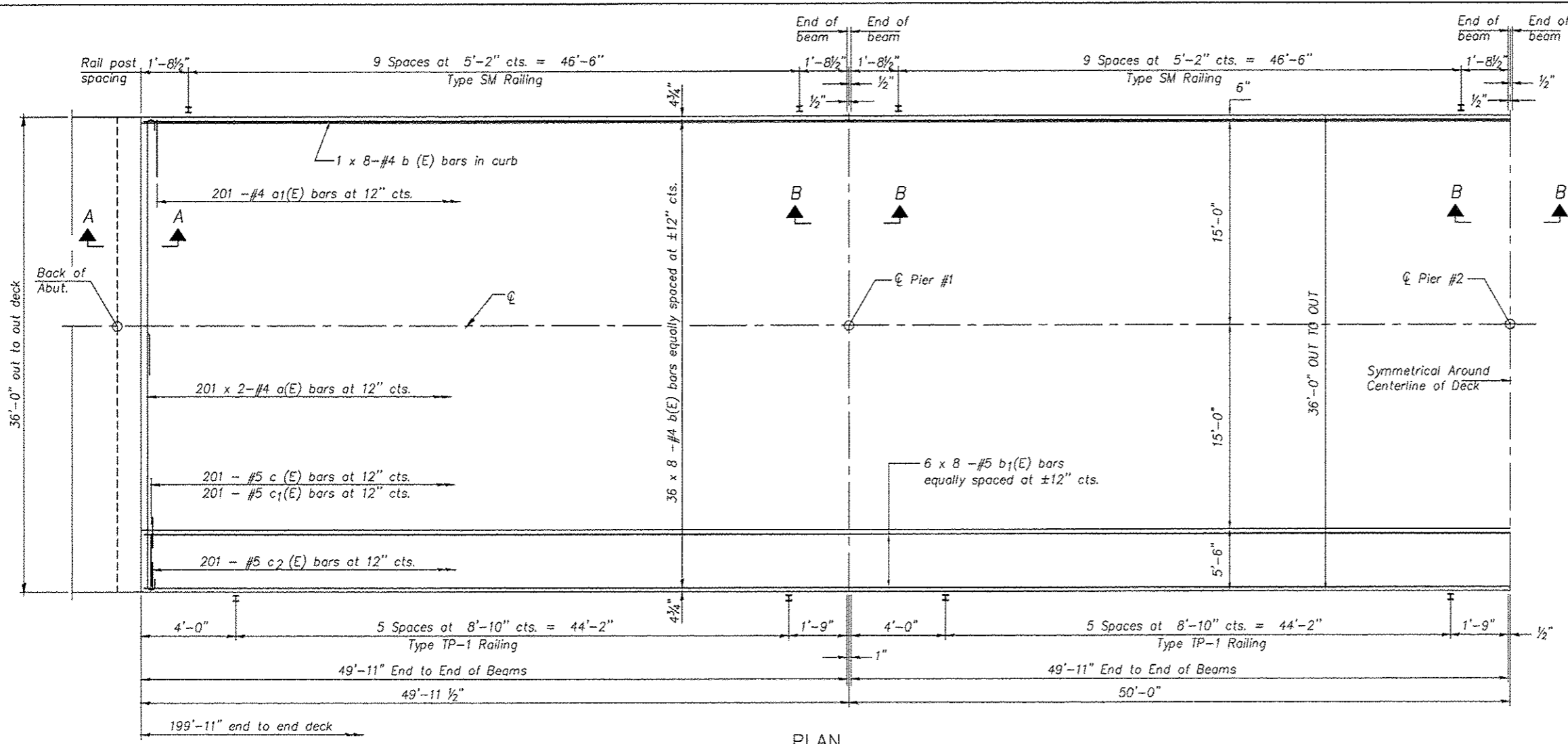
**BILL OF MATERIAL**

Item	Unit	Quantity
Stone Riprap, Class A5	Sq. Yd.	1458
Filter Fabric	Sq. Yd.	1458

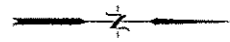
SHEET 2 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	MCDONOUGH	43	19

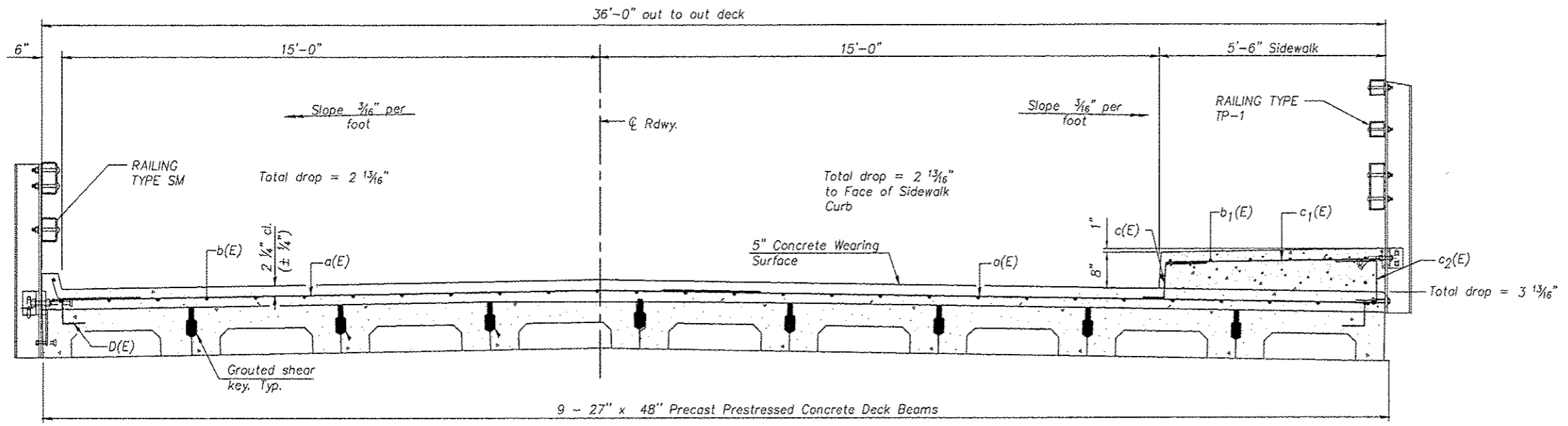
CONTRACT NO. 89356



PLAN



Notes:  
 See sheet 4 of 22 for Superstructure Details and Bill of Material.  
 See sheet 9 of 22 for Sections A-A & B-B.  
 Bars indicated thus 36 x 8-#4 etc. indicates 36 lines of bars with 8 lengths per line.



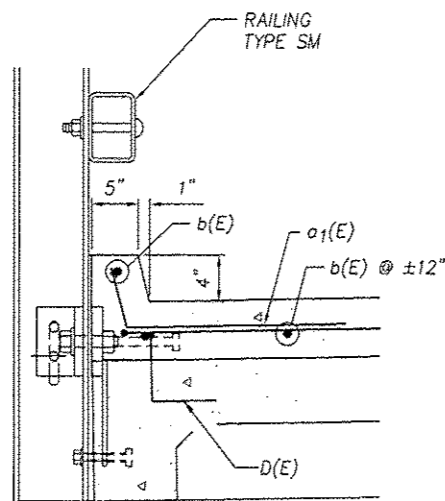
CROSS SECTION  
(Looking North)

**MINIMUM BAR LAP**  
 #4 bar = 2'-1"  
 #5 bar = 2'-7"

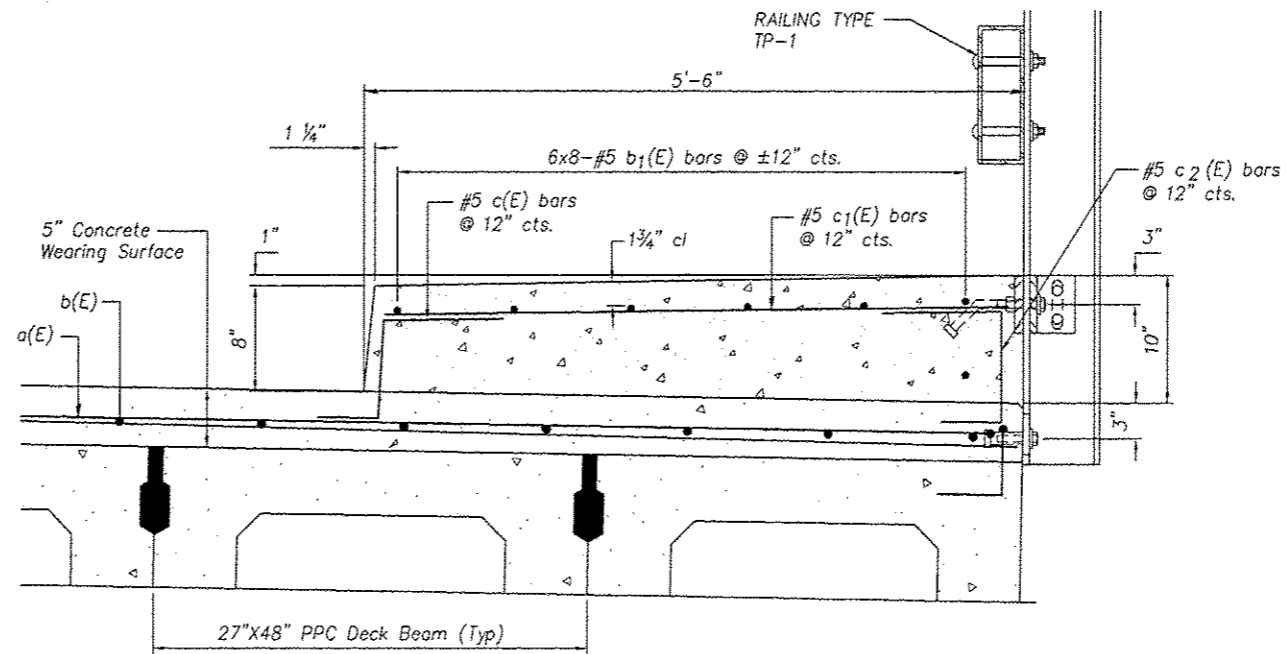
**SUPERSTRUCTURE PLAN AND SECTION**  
**WIGWAM HOLLOW RD OVER EAST FORK**  
**LAMOINE RIVER**  
**CITY OF MACOMB**  
**SECTION 08-00128-00-BR**  
**McDONOUGH COUNTY**  
**STATION 68+51.50**  
**STRUCTURE NO. 055-6002**

SHEET 3 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	20
CONTRACT NO. 89356				

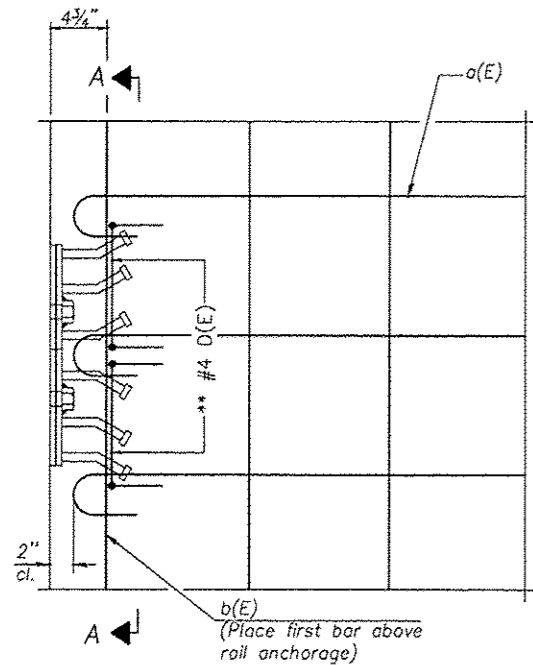


SECTION THRU CURB



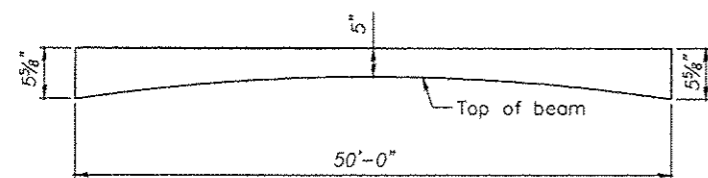
SECTION THRU SIDEWALK

\* In lieu of the bottom leg, c(E) & c2(E) bars may be cored and set in accordance to Article 509.06 of the Standard Specifications. Cored holes shall be roughened or scored per manufacturer's recommendations. Maximum depth of cored hole shall not exceed 4".

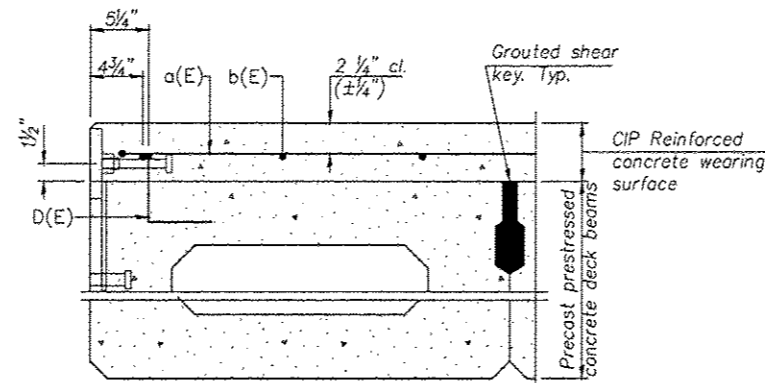


PLAN

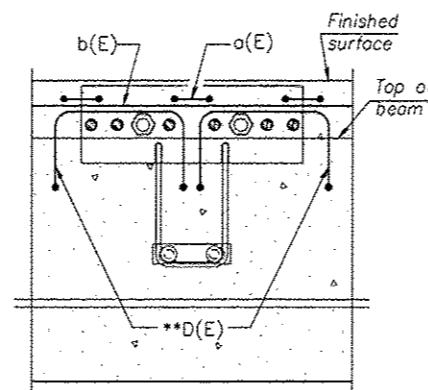
Notes:  
Formwork necessary for the wearing surface may be secured utilizing the bottom rail anchorage inserts and/or additional inserts cast into the beam.



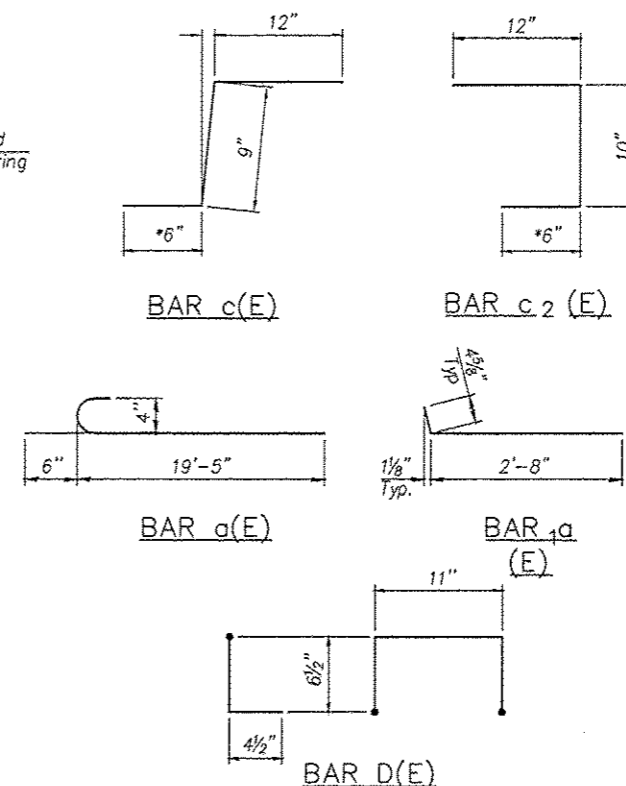
ANTICIPATED CONCRETE WEARING SURFACE PROFILE  
(For information only)



SECTION THRU FASCIA BEAM



SECTION A-A



\*\* Place 2-#4 D(E) bars in beam at each post location as shown. D(E) bar included in cost of beam.

MINIMUM BAR LAP

#4 bar = 2'-1"  
#5 bar = 2'-7"

SUPERSTRUCTURE  
BILL OF MATERIAL

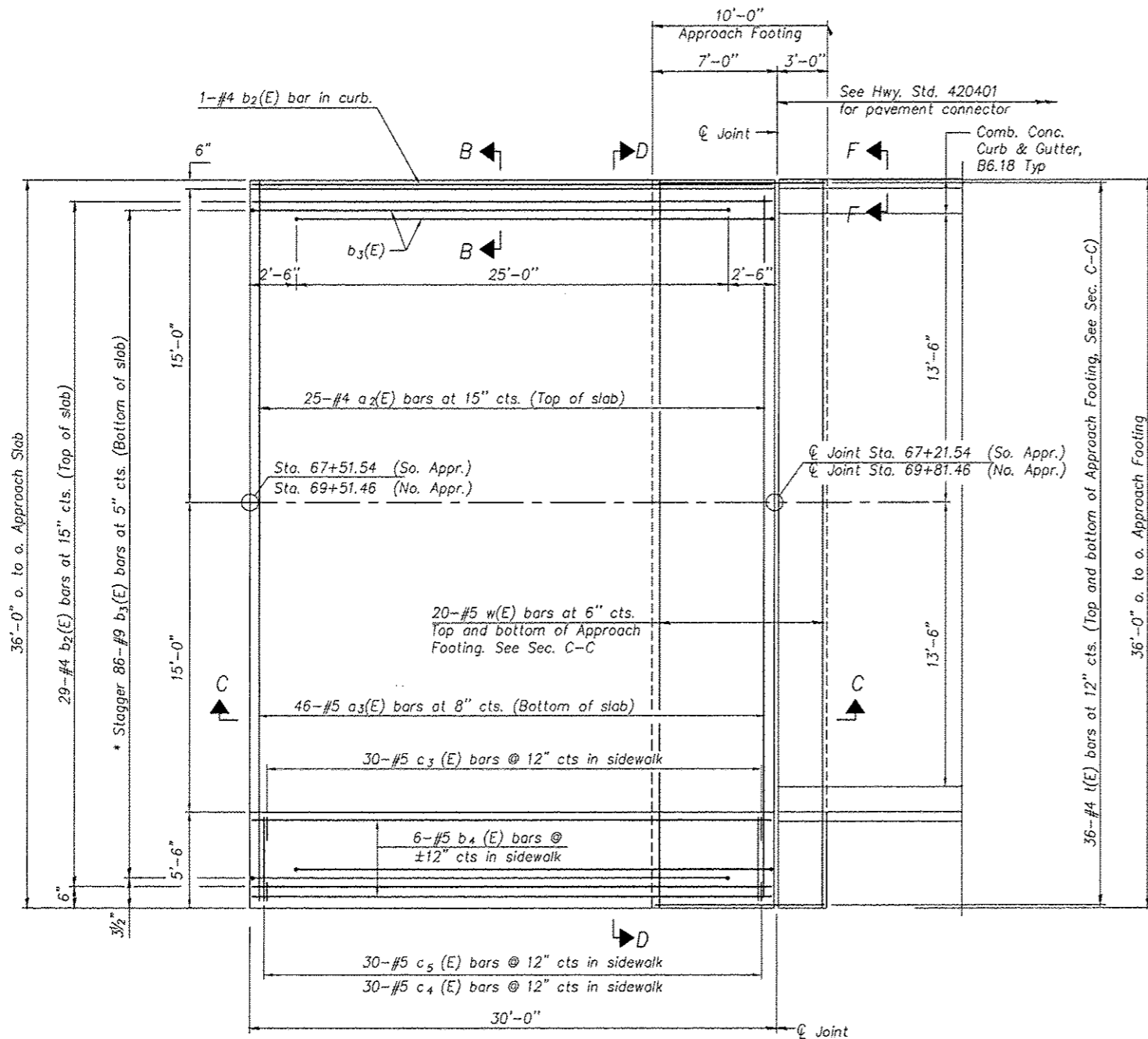
Bar	No.	Size	Length	Shape
a(E)	402	#4	19'-11"	C
a1(E)	201	#4	3'-1"	U
b(E)	296	#4	26'-10"	—
b1(E)	48	#5	27'-3"	—
c(E)	201	#5	2'-3"	J
c1(E)	201	#5	5'-1"	—
c2(E)	201	#5	2'-4"	J
Reinforcement Bars, Epoxy Coated			Pound	14,460
Concrete Wearing Surface, 5"			Sq. Yd.	800
Concrete Superstructure			Cu. Yd.	31.7

Bars indicated thus 6 x 8-#4 etc. indicates 6 lines of bars with 8 lengths per line.

SUPERSTRUCTURE DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

SHEET 4 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	21
CONTRACT NO. 89356				

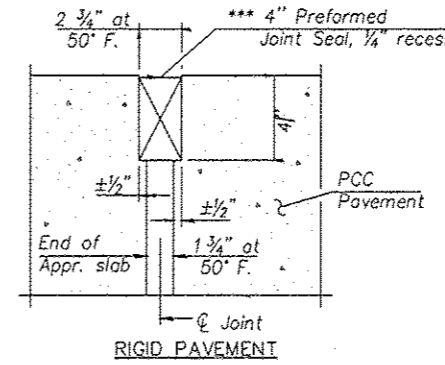


PLAN

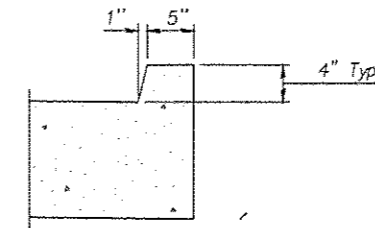
\* Tilt #9 b<sub>3</sub>(E) bars as required to maintain clearance.

Notes:  
See sheet 6 of 22 for Sections C-C & D-D.  
a<sub>2</sub>(E) and a<sub>3</sub>(E) bar spacings measured along  $\phi$  Rdwy.

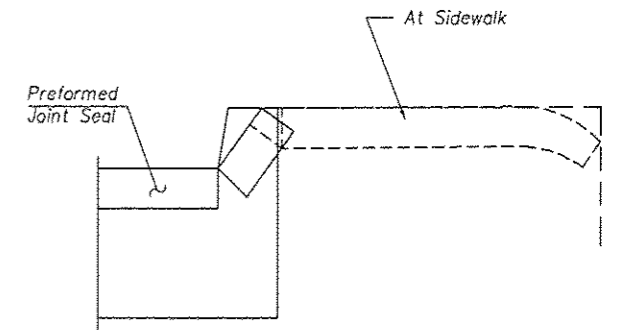
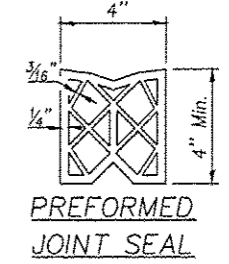
\*\*\* Cost included with Concrete Superstructure.



DETAIL A



VIEW B-B



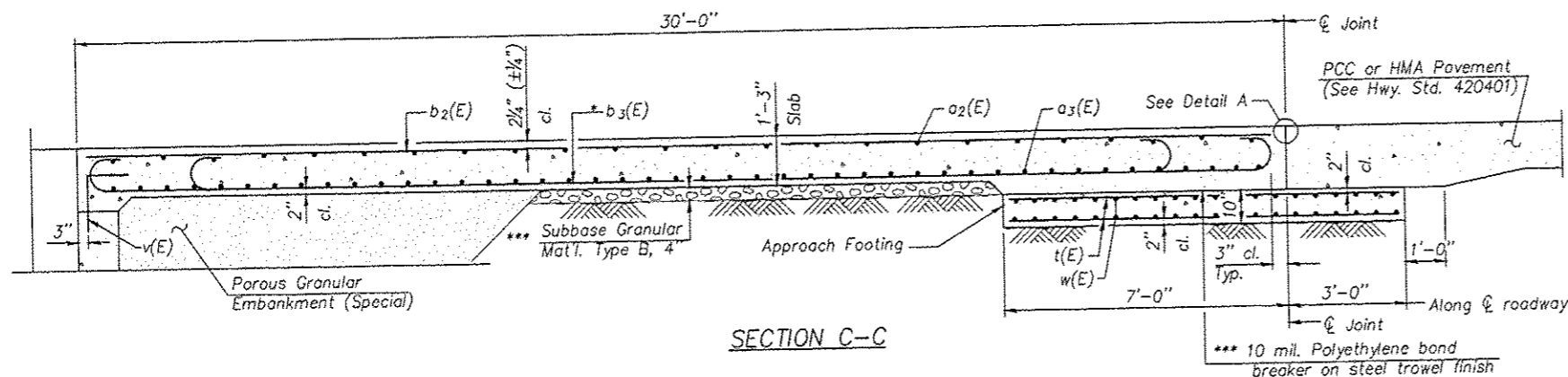
VIEW F-F

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

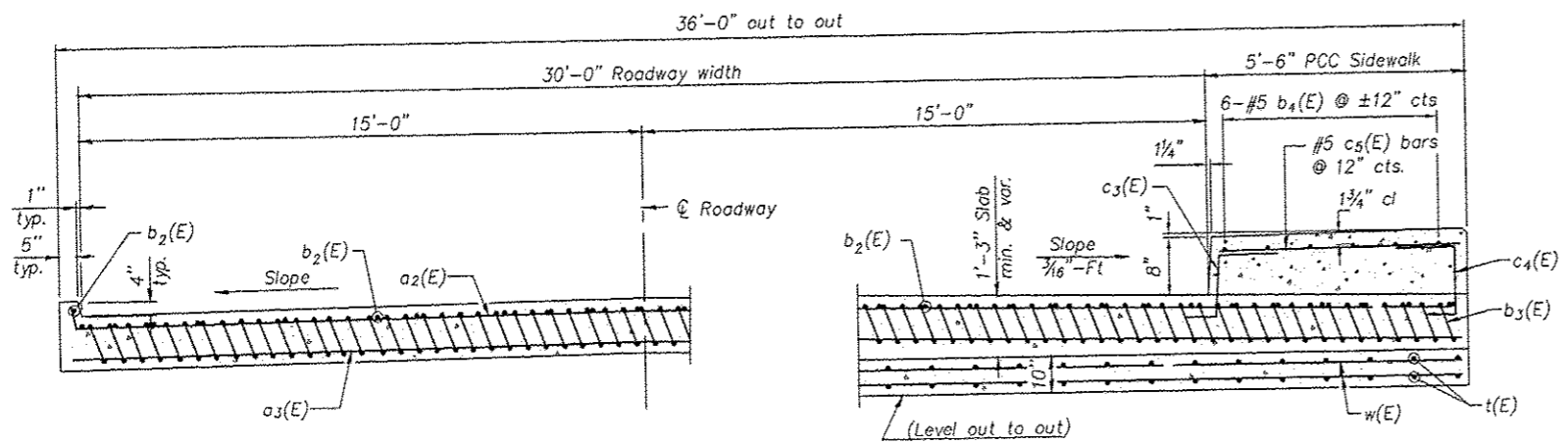
BRIDGE APPROACH SLAB PLAN  
AND DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

SHEET 5 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	22
CONTRACT NO. 89356				



Notes:  
 See sheet 5 of 22 for Detail A and View B-B.  
 Approach slab 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 13 & 14 of 22.  
 The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.  
 Cost of excavation for approach footing included with Concrete Structures.  
 For Porous Granular Embankment (Special) and drainage treatment details, see sheet 2 of 22.



\* Tilt #9 b3(E) bars as required to maintain clearance.  
 \*\*\* Cost included with Concrete Superstructure.

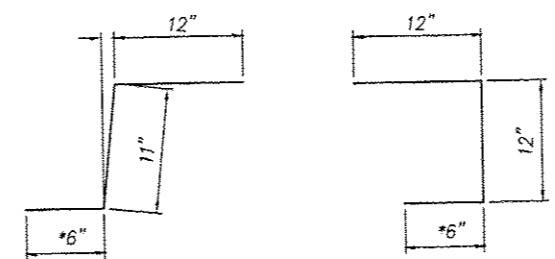
**TWO APPROACHES  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a2(E)	50	#4	35'-11"	—
a3(E)	92	#5	35'-8"	—
b2(E)	60	#4	29'-8"	—
b3(E)	172	#9	29'-9"	—
b4(E)	12	#5	29'-8"	—
c3(E)	60	#5	2'-5"	J
c4(E)	60	#5	2'-6"	J
c5(E)	60	#5	5'-2"	—
t(E)	144	#4	9'-8"	—
w(E)	80	#5	35'-8"	—
Concrete Superstructure		Cu. Yd.	113.4	
Concrete Structures		Cu. Yd.	22.2	
Reinforcement Bars, Epoxy Coated		Pound	28,120	

NEAR ABUTMENT

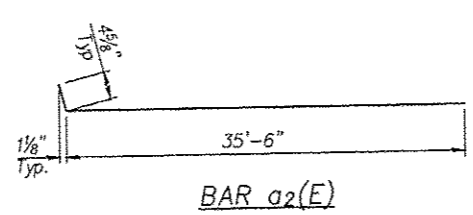
AT APPROACH FOOTING

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

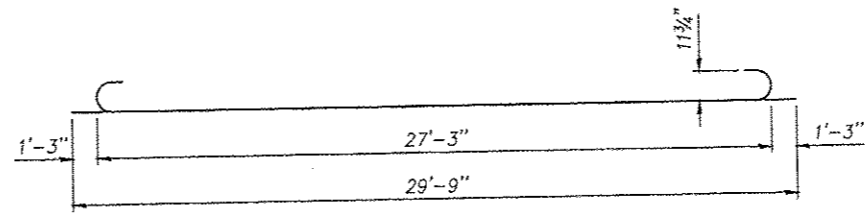


BAR c3(E)

BAR c4(E)



BAR a2(E)



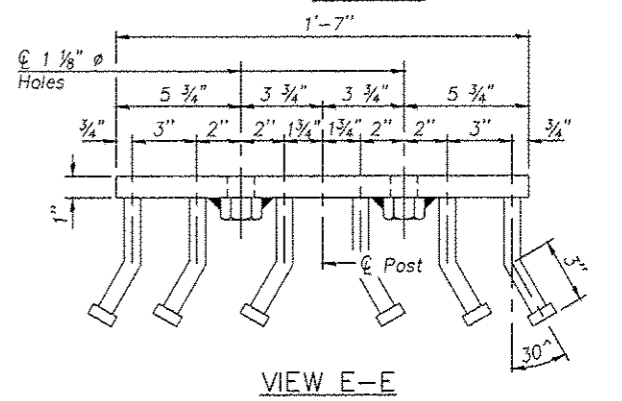
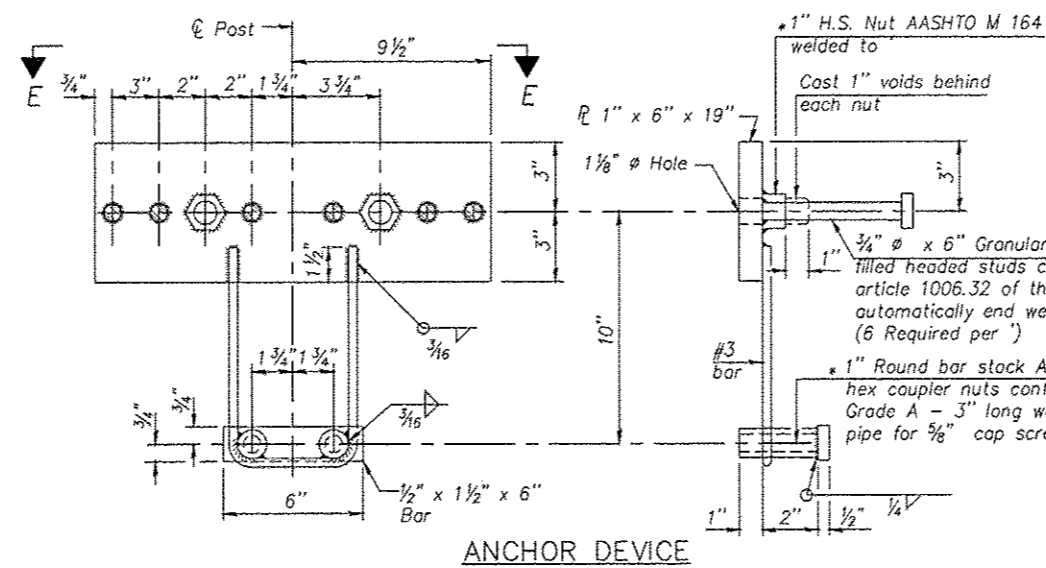
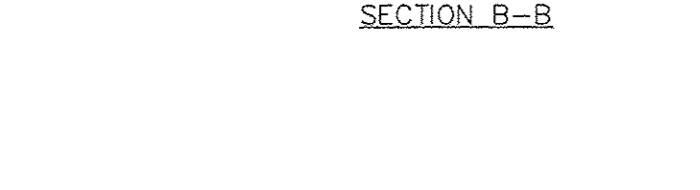
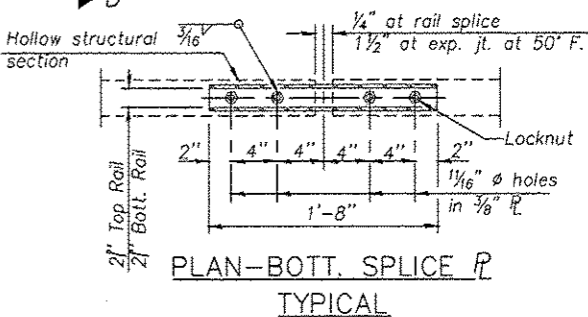
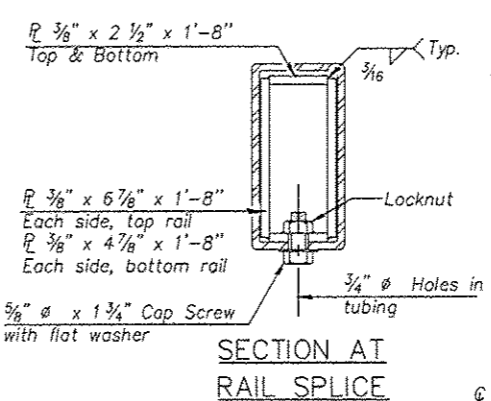
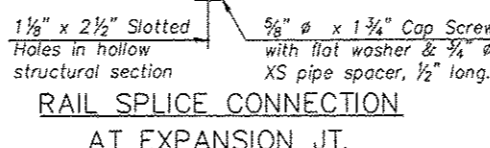
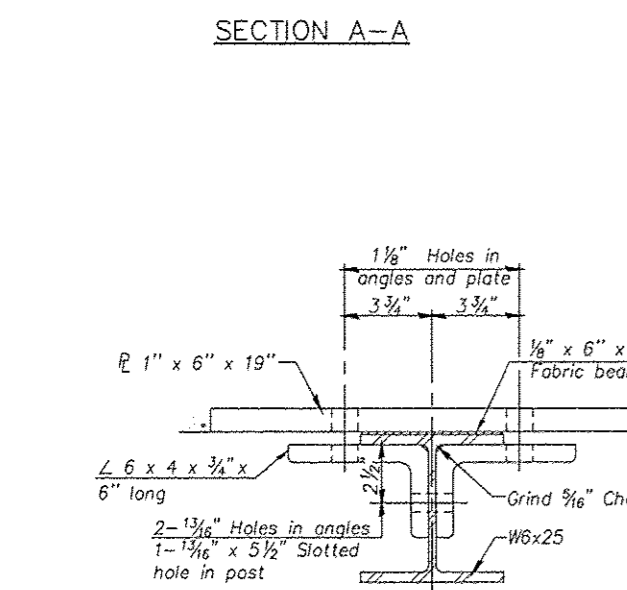
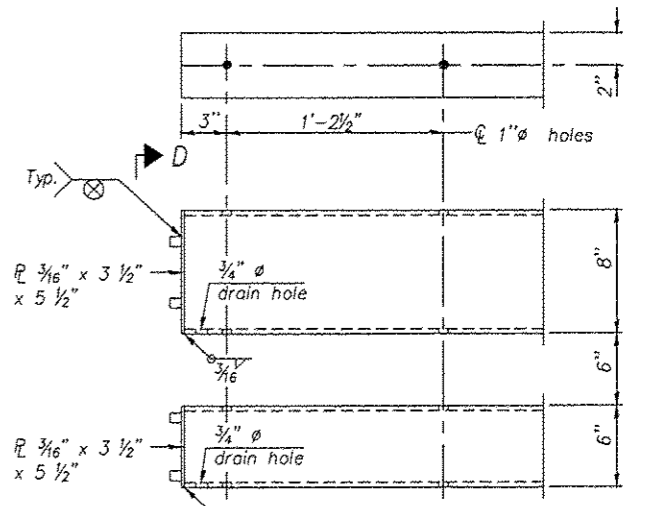
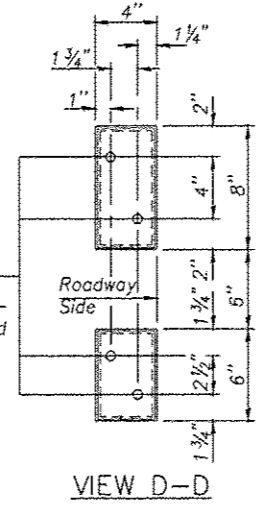
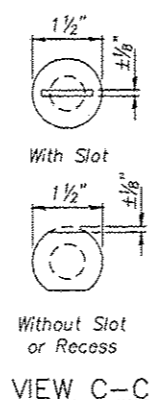
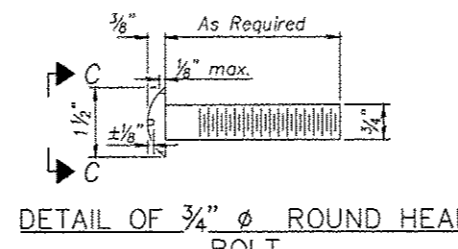
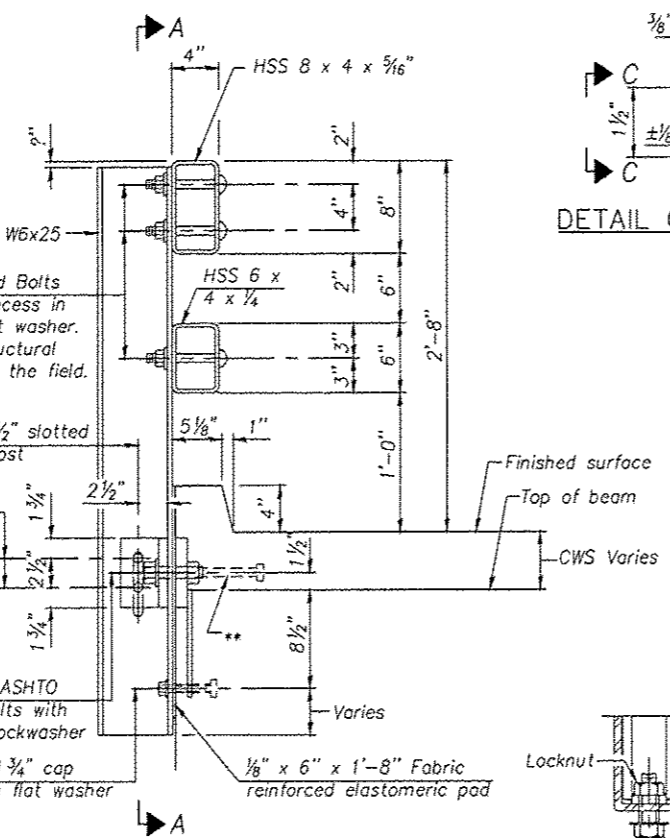
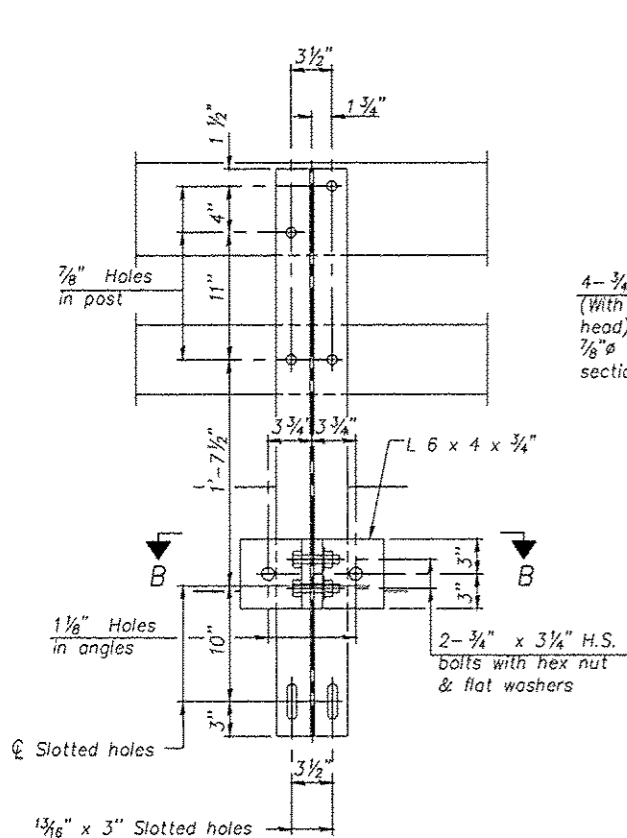
BAR b3(E)

**BRIDGE APPROACH SLAB DETAILS**  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

SHEET 6 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	23

CONTRACT NO. 89356



Notes:  
 All field drilled holes shall be coated with an approved zinc rich point before erection.  
 For multi-span bridges, sufficient 1/4" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.  
 All steel railing elements shall be galvanized according to Article 509.05 of the Standard Specifications.  
 \*\* The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type SM	Foot	200

R-34CWSC 7-1-10 (6'-3" Maximum Post Spacing) (5" minimum to 7 7/8" maximum CWS thickness)

**STEEL RAILING, TYPE SM DETAILS**  
**WIGWAM HOLLOW RD OVER EAST FORK**  
**LAMOINE RIVER**  
**CITY OF MACOMB**  
**SECTION 08-00128-00-BR**  
**McDONOUGH COUNTY**  
**STATION 68+51.50**  
**STRUCTURE NO. 055-6002**

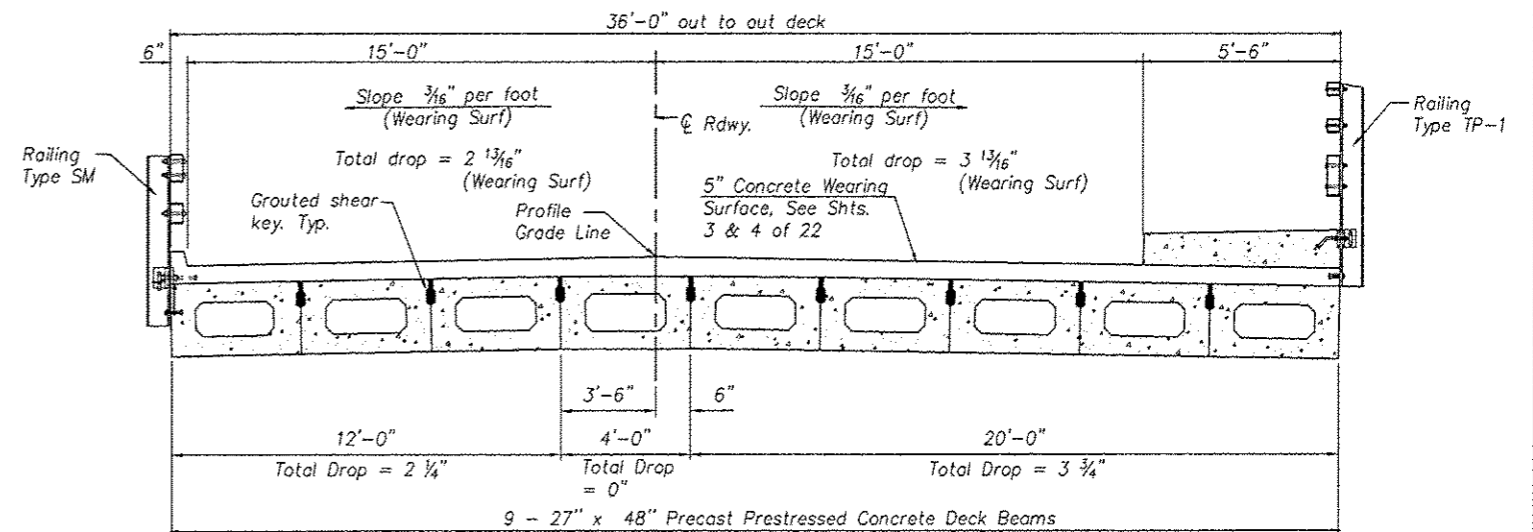
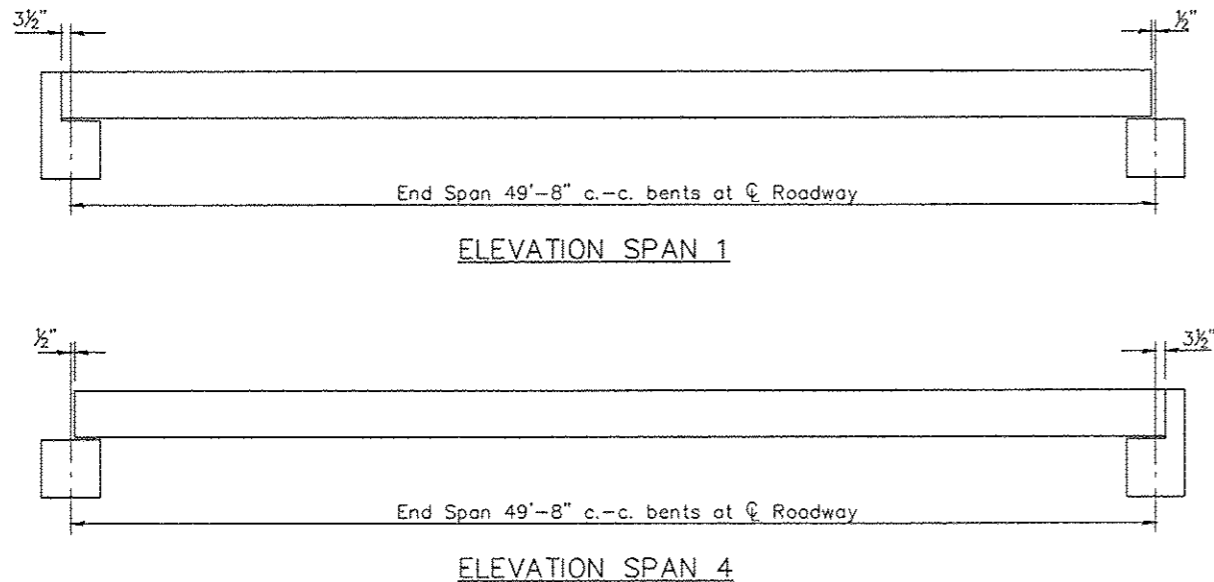
SHEET 7 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	24

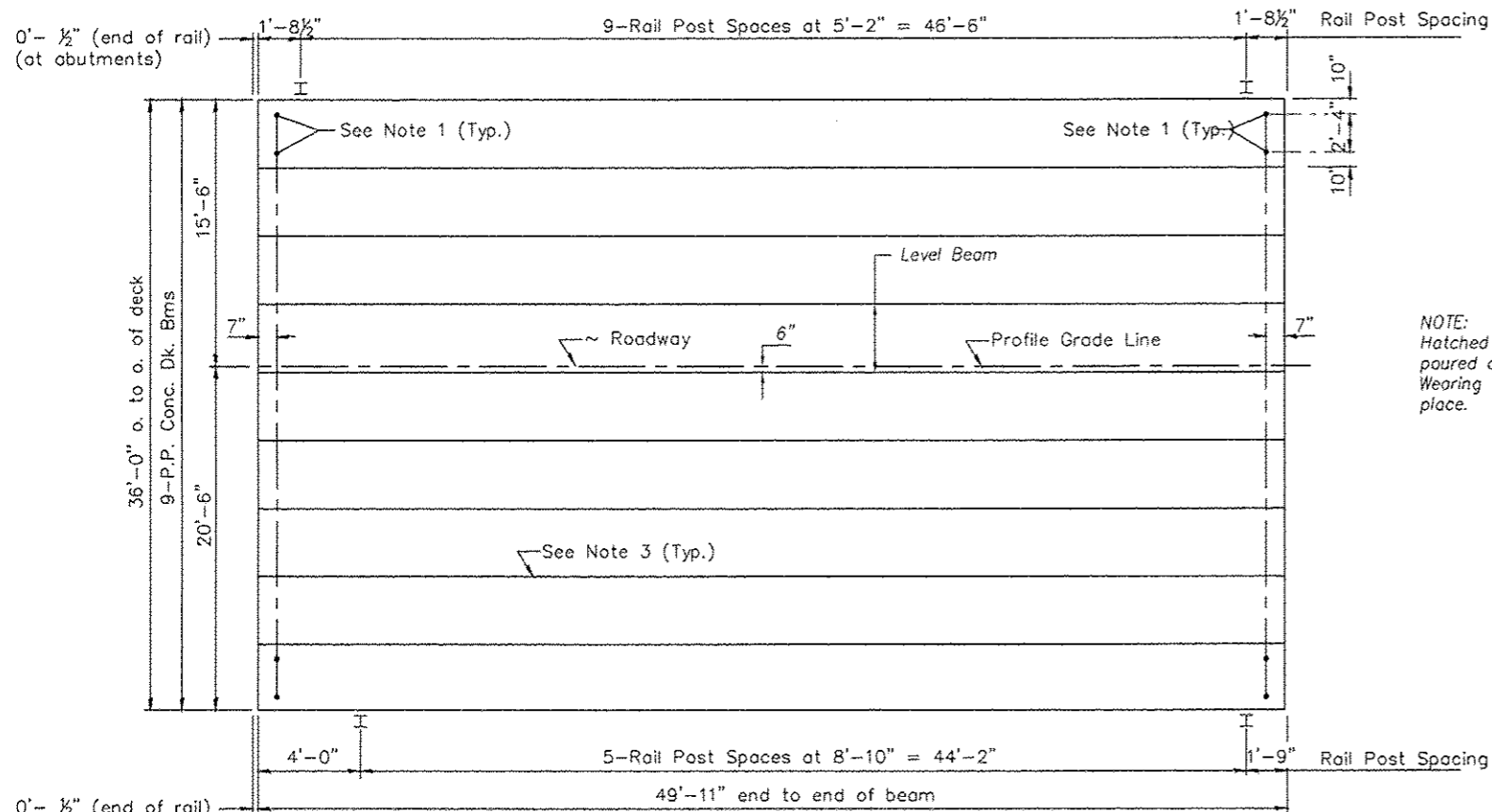
CONTRACT NO. 89356







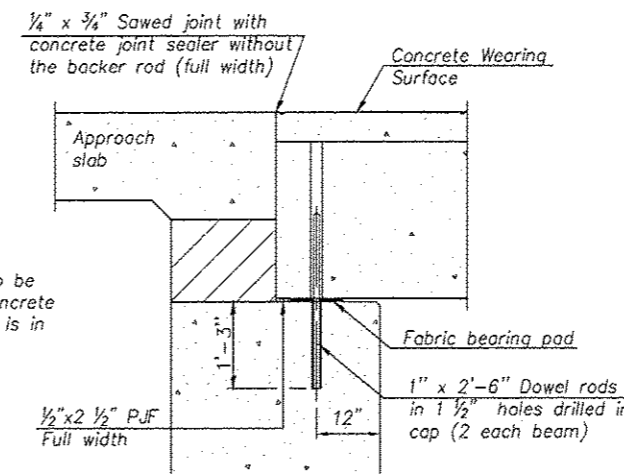
CROSS SECTION  
(Looking North)



PLAN - (Showing Span 1)

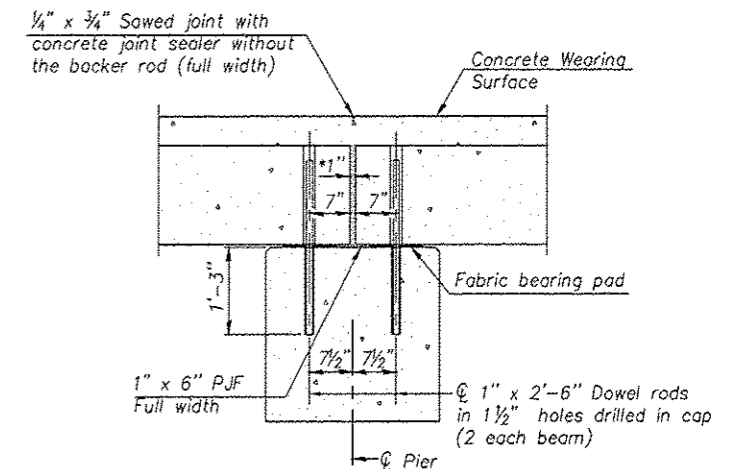
NOTES

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
2. Nominal 1" joint at  $\phi$  Pier shall be filled with non-shrink grout.
3. Longitudinal keys shall be grouted.
4. All horizontal dimensions are at right angles to beam ends.
5. See sheet 12 of 22 for bearing pad details.



SECTION A-A  
(Along  $\phi$  Beams)

NOTE:  
Hatched area to be  
poured after Concrete  
Wearing Surface is in  
place.



SECTION B-B

\*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

QUANTITIES FOR ONE SPAN

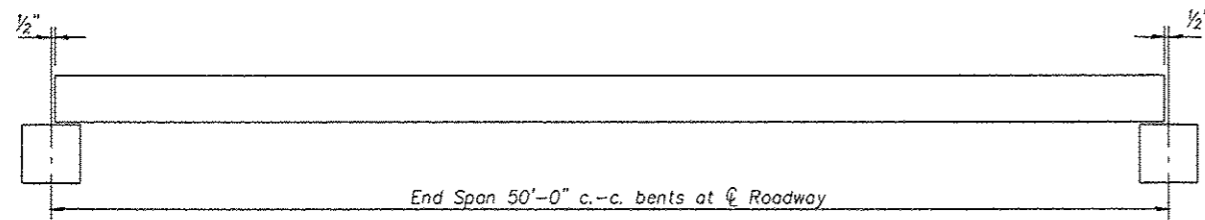
P.P. Conc. Dk. Bm. 27" Dp.	1797 Sq. Ft.
Steel Railing, Type SM See Sheet 7 of 22	50 Ft.
Steel Railing, Type TP-1 See Sheet 8 of 22	50 Ft.

SPANS 1 AND 4  
DECK BEAM DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

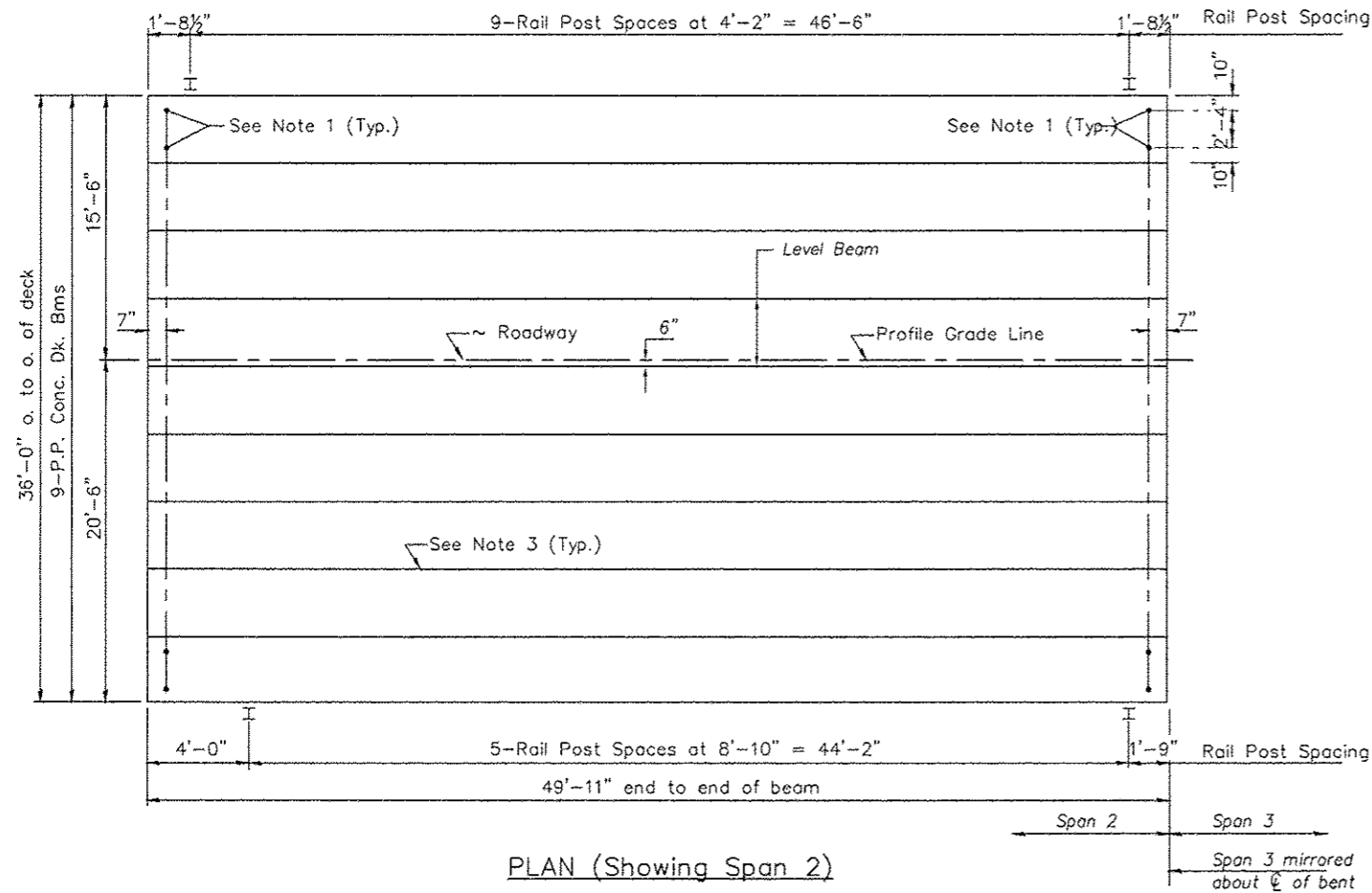
SHEET 9 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	26

CONTRACT NO. 89356



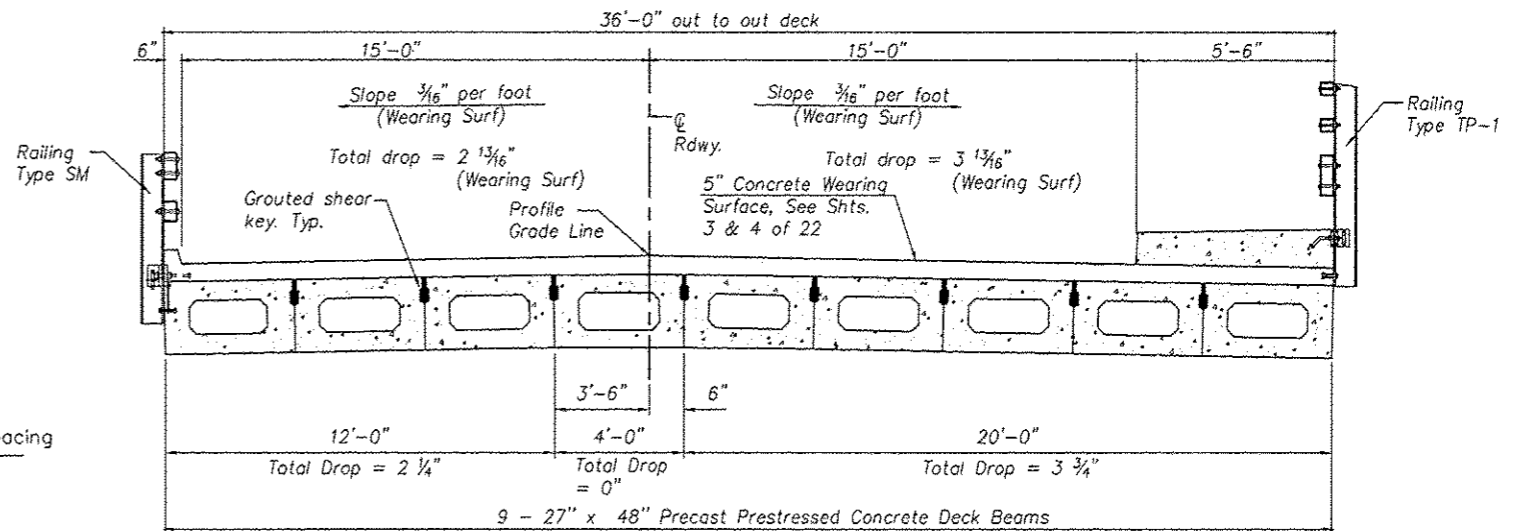
ELEVATION SPANS 2 & 3



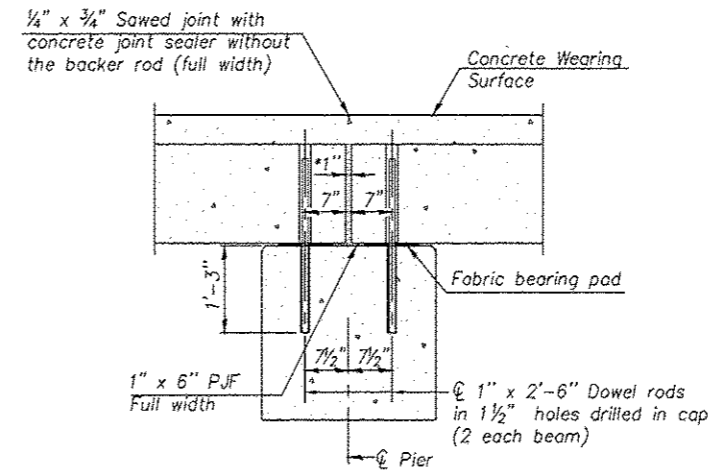
PLAN (Showing Span 2)

NOTES

1. After beams have been erected, holes shall be drilled into substructure and anchor dowels placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure min. 24 hrs. prior to grouting the shear keys.
2. Nominal 1" joint at centerline Pier shall be filled with non-shrink grout.
3. Longitudinal keys shall be grouted.
4. All horizontal dimensions are at right angles to beam ends.
5. See sheet 12 of 22 for bearing pad details.



CROSS SECTION  
(Looking North)



SECTION B-B

\*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

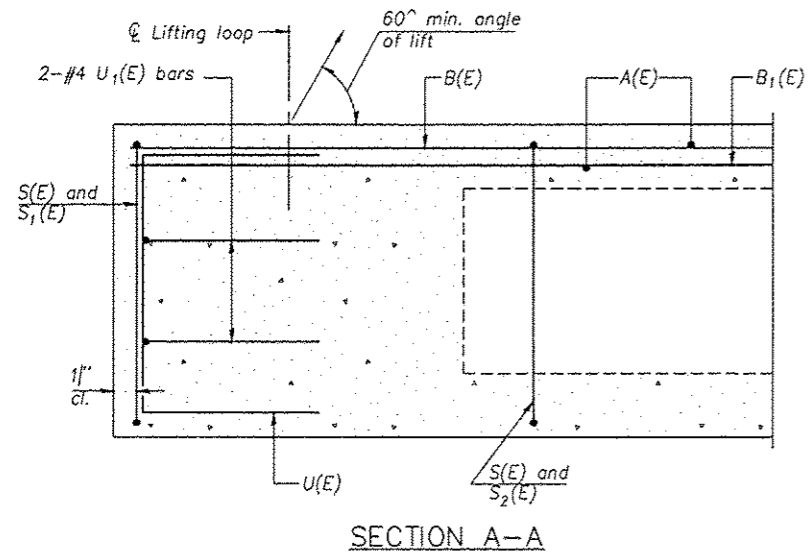
QUANTITIES FOR ONE SPAN

P.P. Conc. Dk. Bm. 27" Dp.	1797 Sq. Ft.
Steel Railing, Type SM See Sheet 7 of 22	50 Ft.
Steel Railing, Type TP-1 See Sheet 8 of 22	50 Ft.

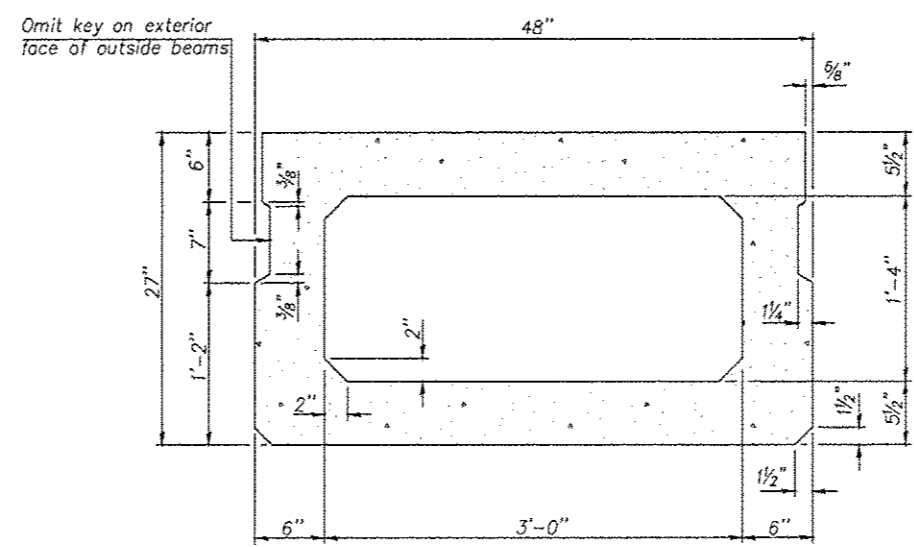
SPANS 2 AND 3  
DECK BEAM DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

SHEET 10 OF 22

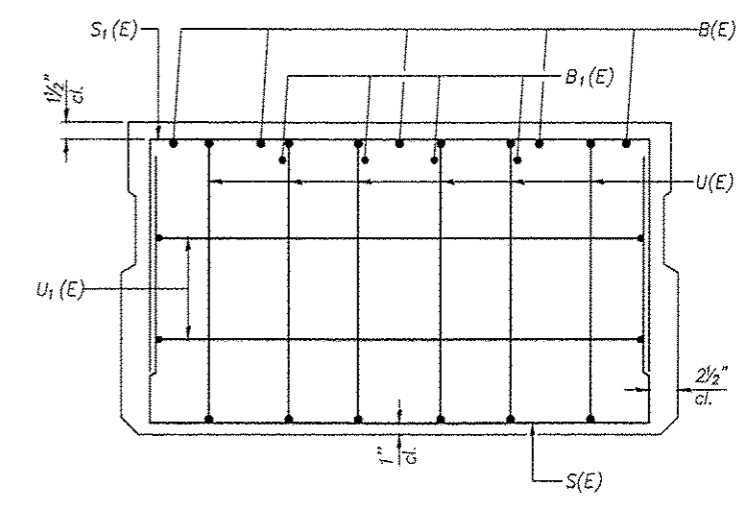
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	27
CONTRACT NO. 89356				



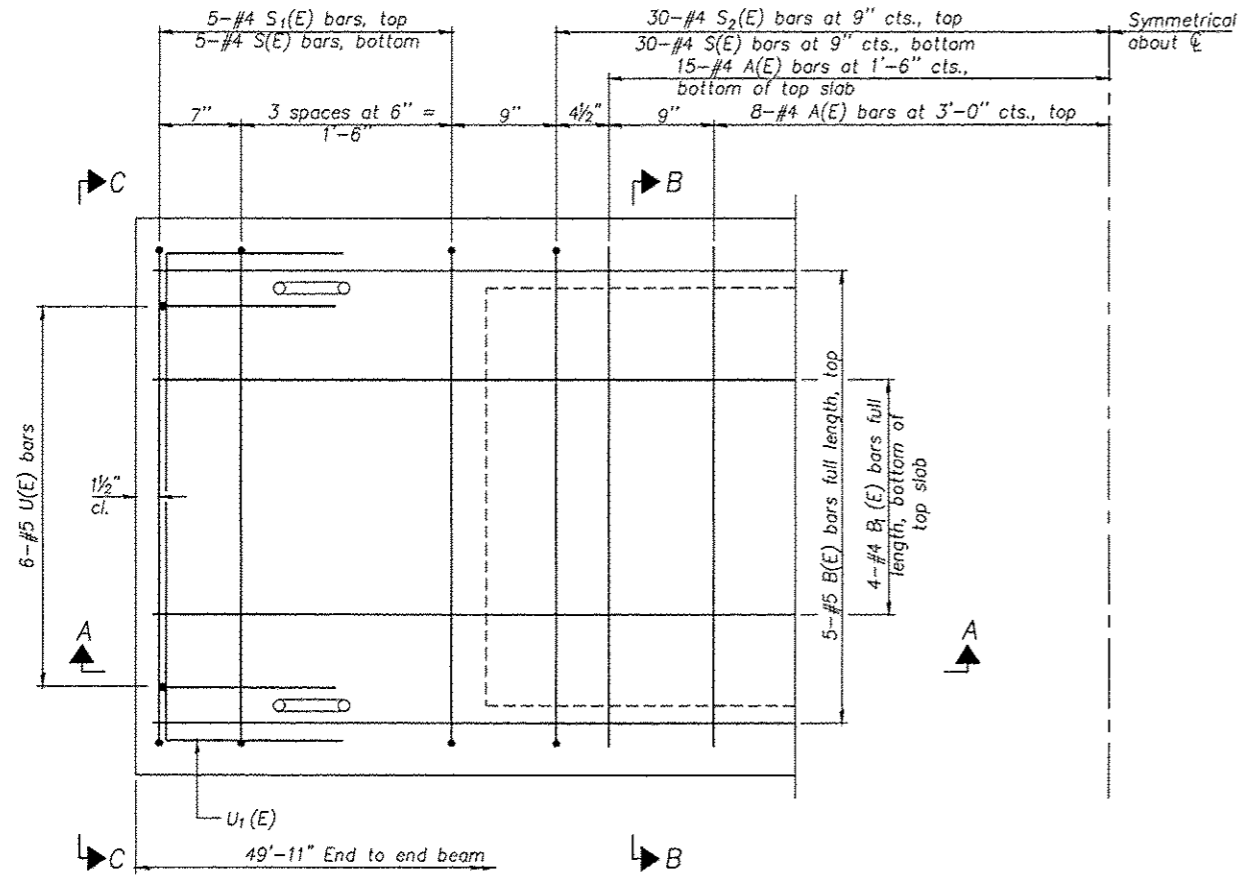
SECTION A-A



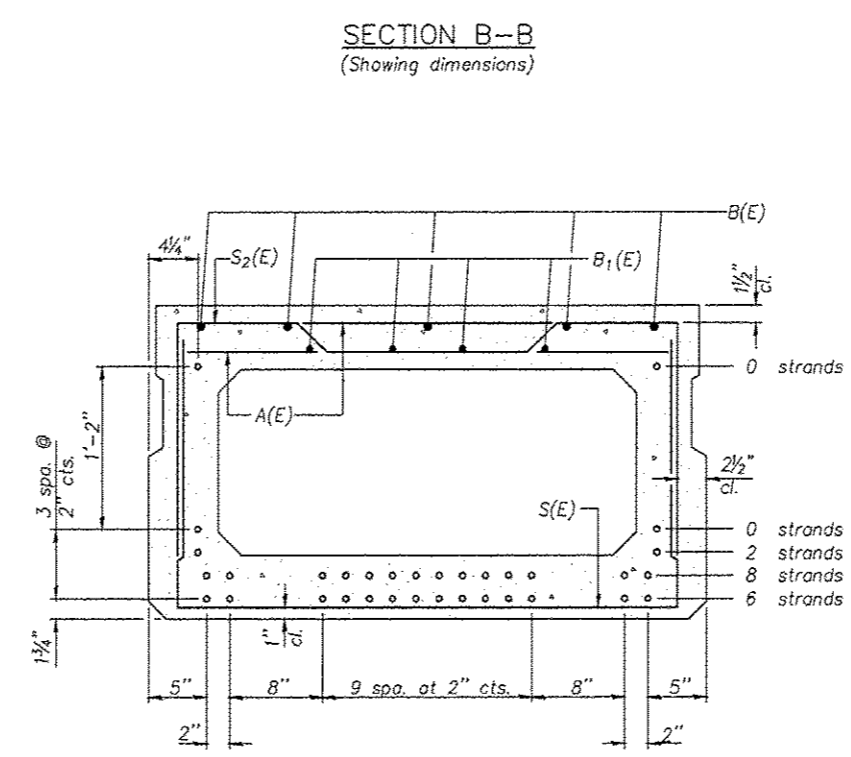
SECTION B-B  
(Showing dimensions)



VIEW C-C



PLAN VIEW



SECTION B-B  
(Showing reinforcement and permissible strand locations)  
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST  
ONE BEAM ONLY  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	46	#4	3'-7"	—
B(E)	5	#5	49'-8"	—
B1(E)	4	#4	49'-8"	—
S(E)	70	#4	7'-5"	U
S1(E)	10	#4	6'-11"	U
S2(E)	70	#4	7'-2"	U
U(E)	12	#5	4'-6"	U
U1(E)	4	#4	6'-0"	U

Note: See sheet 12 of 22 for additional details and Bill of Material.

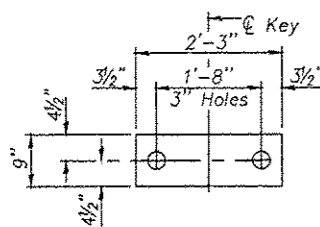
27"x48" PPC DECK BEAM DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

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

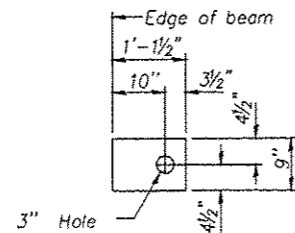
Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	28

CONTRACT NO. 89356



FABRIC BEARING PAD  
(Interior)

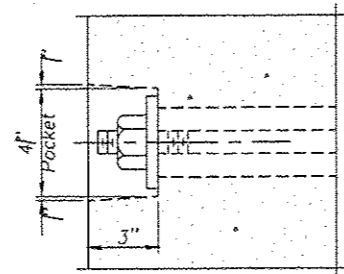


FABRIC BEARING PAD  
(Exterior)

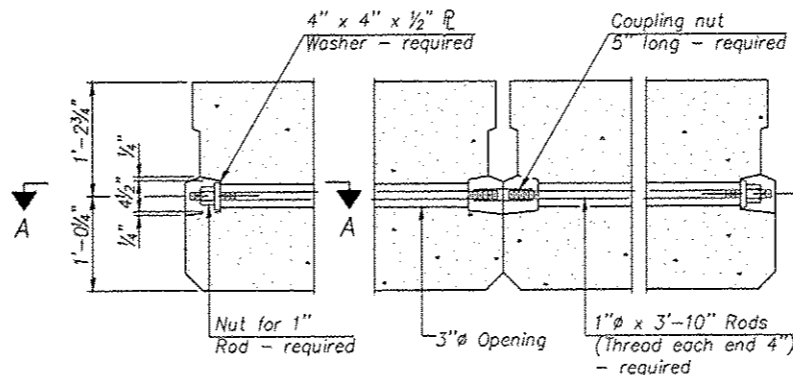
FIXED

Notes:

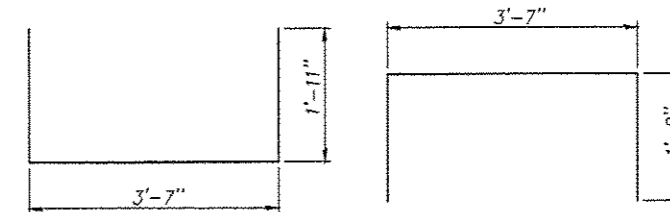
All bearing pads shall be 1" thick.  
Omit holes when using expansion bearings.  
Expansion bearing pad shall be bonded to the substructure.



SECTION A-A

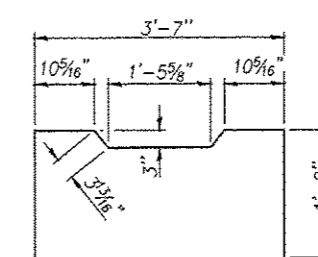


TYPICAL TRANSVERSE TIE ASSEMBLY

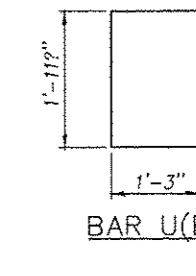


BAR S(E)

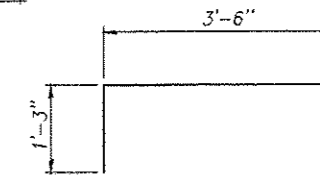
BAR S<sub>1</sub>(E)



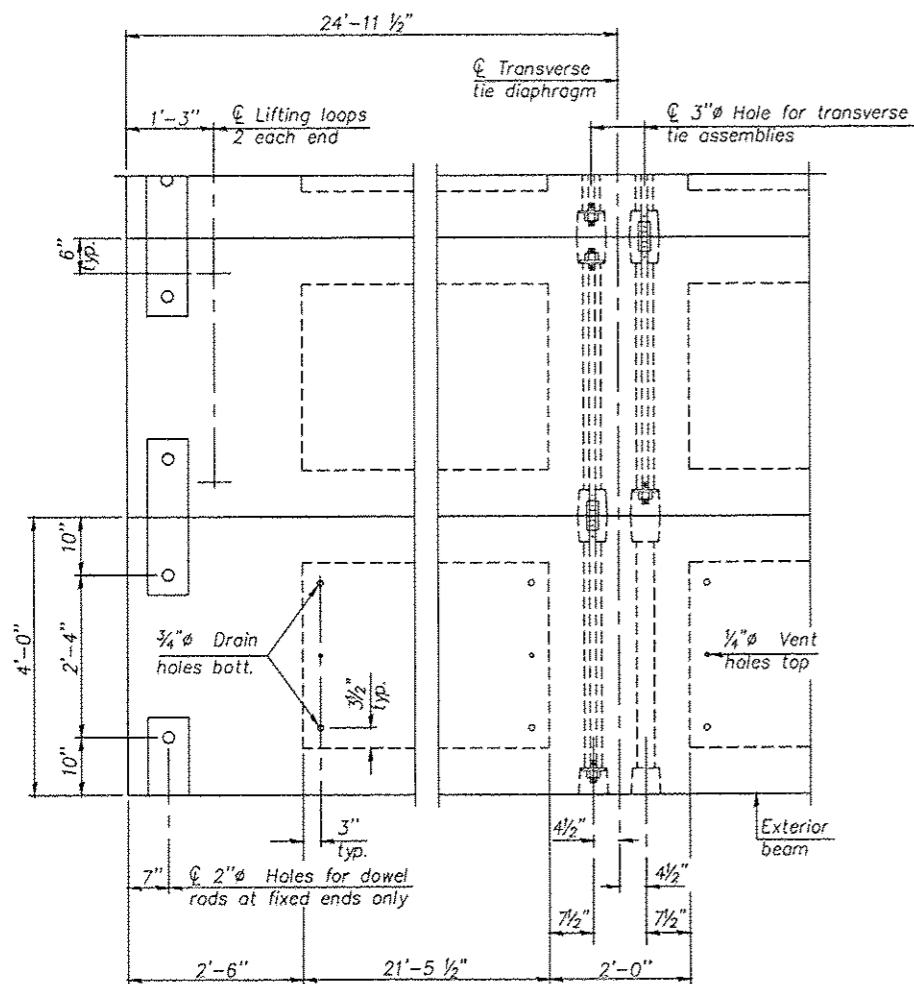
BAR S<sub>2</sub>(E)



BAR U(E)

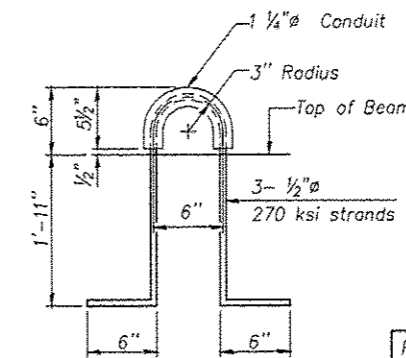


BAR U<sub>1</sub>(E)



PLAN VIEW

Note: Connect beams in pairs with the transverse tie configuration shown.



LIFTING LOOP DETAIL

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (27" depth)	Sq. Ft.	7188

27"x48" PPC DECK BEAM DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

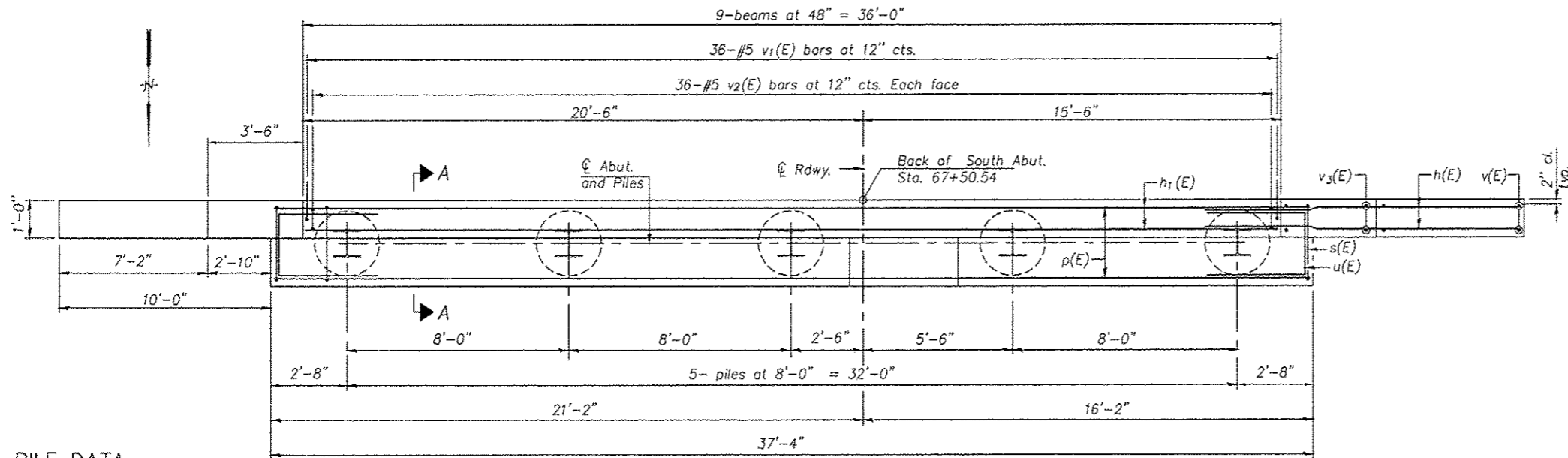
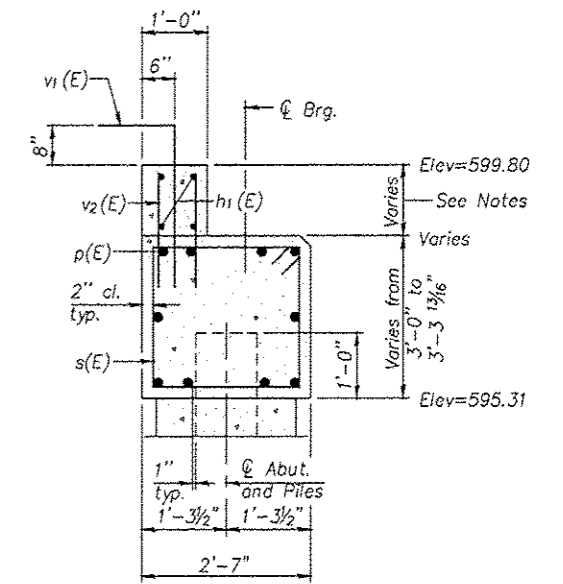
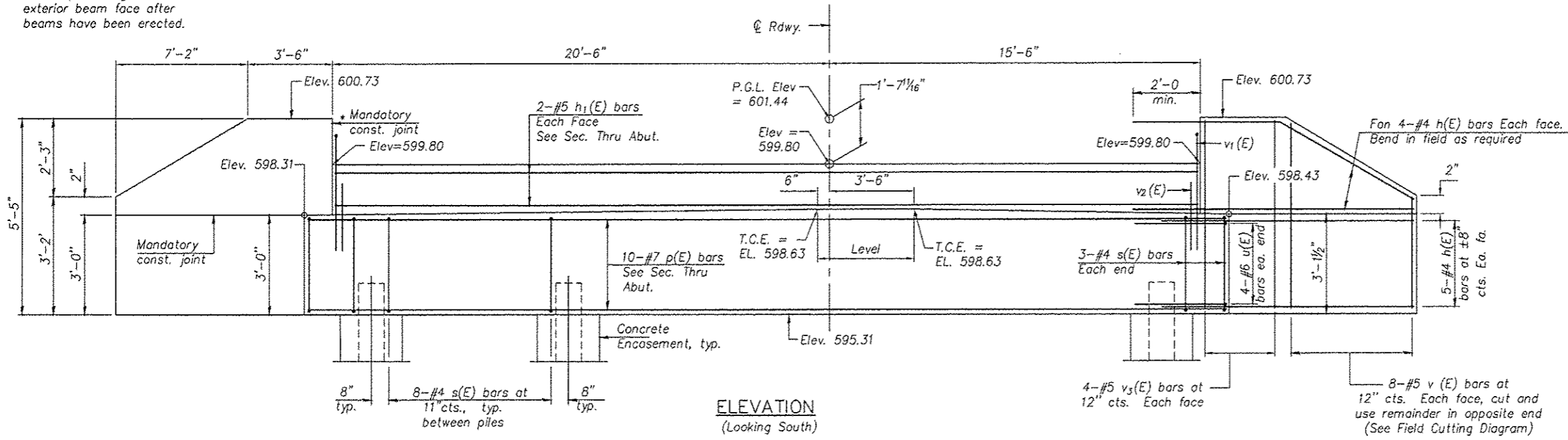
SHEET 12 OF 22

NOTES

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.  
The 1" rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.  
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).  
Two 1/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.  
A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.  
Corrosion inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.  
Compressive strength of prestressed concrete, f'c, shall be 6000 psi.  
Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

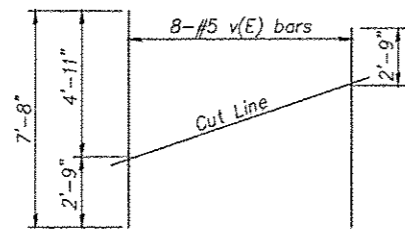
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	29
CONTRACT NO. 89356				

\* Cast top of wingwall flush with exterior beam face after beams have been erected.



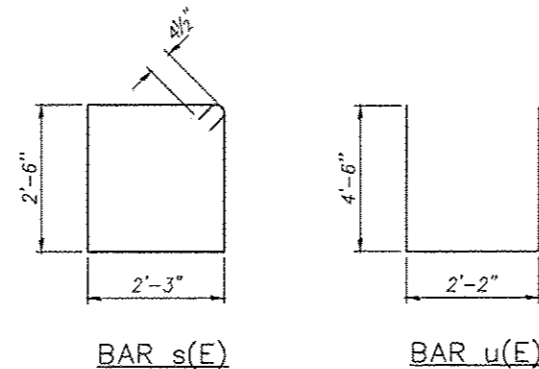
**PILE DATA**

Type: Steel HP10x42  
 Nominal Required Bearing: 335 kips  
 Factored Resistance Available: 112 kips  
 Est. Length: 24'  
 Total No. Production Piles: 5 Each  
 No. Test Piles: 1 Each



**FIELD CUTTING DIAGRAM**

Order v(E) bars full length. Cut as shown and use remainder of bars in opposite end.



**BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	36	#4	12'-8"	—
h1(E)	4	#5	35'-8"	—
p(E)	10	#7	37'-0"	—
s(E)	38	#4	10'-3"	□
u(E)	8	#6	11'-2"	—
v(E)	16	#5	7'-8"	—
v1(E)	36	#5	4'-8"	┌
v2(E)	72	#5	2'-6"	—
v3(E)	16	#5	5'-0"	—
Structure Excavation		Cu. Yd.	29.0	
Concrete Structures		Cu. Yd.	16.7	
Reinforcement Bars, Epoxy Coated		Pound	2180	
Furnishing Steel Piles, HP 10x42		Foot	96	
Driving Piles		Foot	96	
Test Pile, HP 10x42		Each	1	
Concrete Encasement		Cu. Yd.	1.8	
Porous Granular Backfill (Special)		Cu. Yd.	35.6	

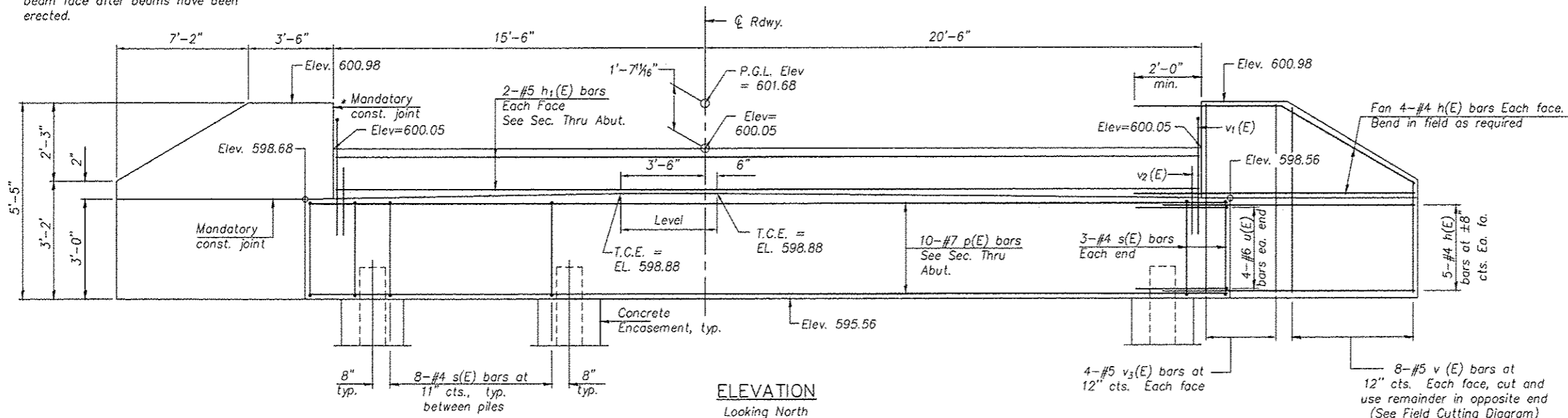
Notes:  
 For details of piles and Concrete Encasement, see sheet 18 of 22.  
 Cast backwall after beams and concrete wearing surface, if applicable, have been erected.

**SOUTH ABUTMENT DETAILS**  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

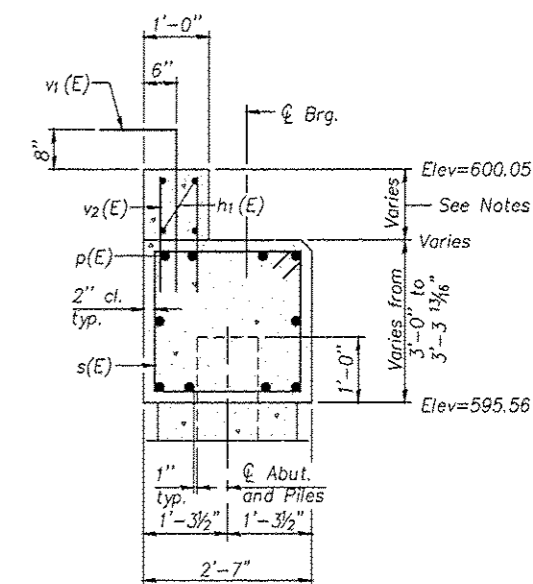
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	30

CONTRACT NO. 89356

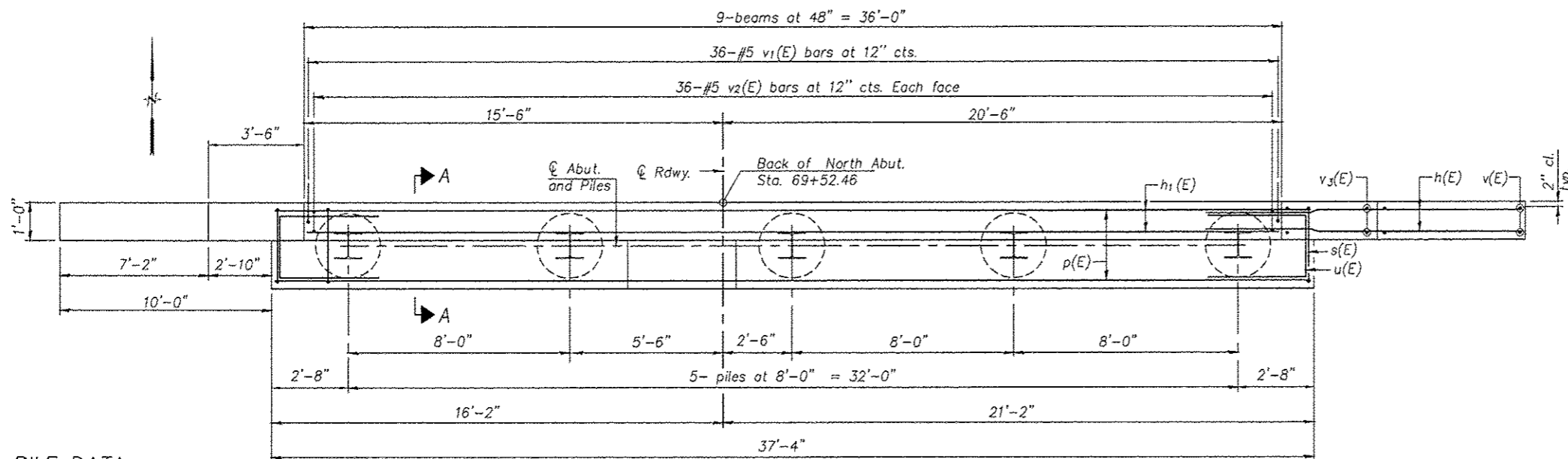
\* Cast top of wingwall flush with exterior beam face after beams have been erected.



**ELEVATION**  
Looking North



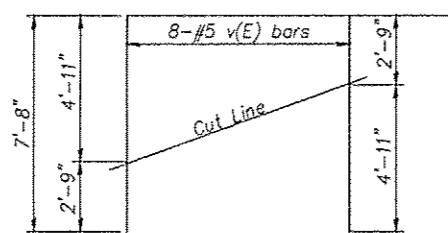
**SECTION A-A**



**PLAN**

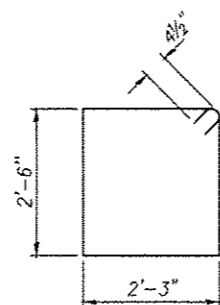
**PILE DATA**

Type: Steel HP10x42  
Nominal Required Bearing: 335 kips  
Factored Resistance Available: 112 kips  
Est. Length: 36'  
Total No. Production Piles: 5 Each  
No. Test Piles: 1 Each

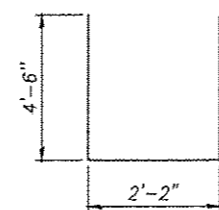


**FIELD CUTTING DIAGRAM**

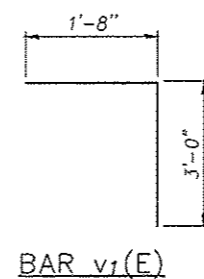
Order v(E) bars full length. Cut as shown and use remainder of bars in opposite end.



**BAR s(E)**



**BAR u(E)**



**BAR v1(E)**

**NORTH ABUTMENT DETAILS**  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

**BILL OF MATERIAL**

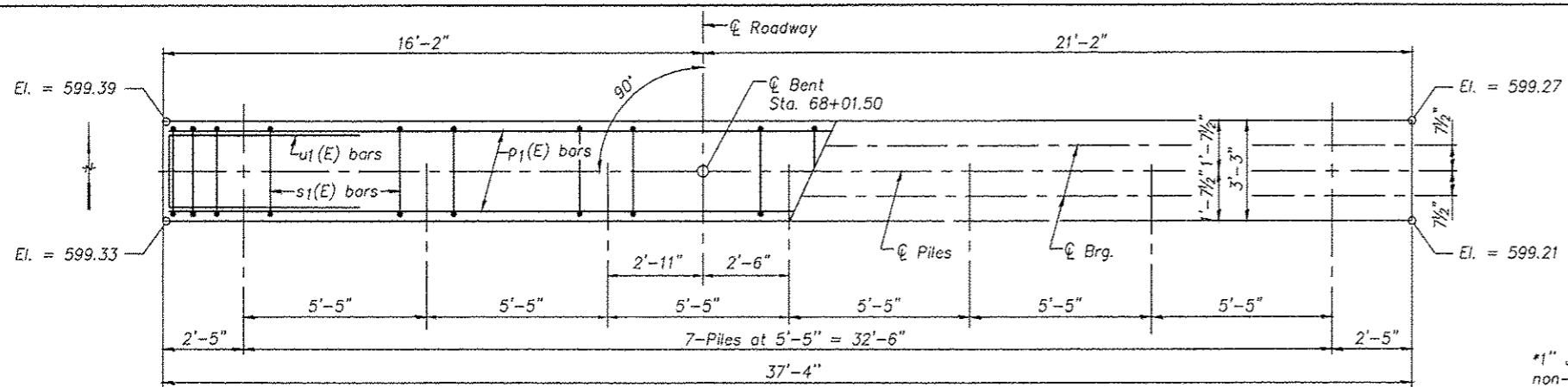
Bar	No.	Size	Length	Shape
h(E)	36	#4	12'-8"	—
h1(E)	4	#5	35'-8"	—
p(E)	10	#7	37'-0"	—
s(E)	38	#4	10'-3"	□
u(E)	8	#6	11'-2"	—
v(E)	16	#5	7'-8"	—
v1(E)	36	#5	4'-8"	┌
v2(E)	72	#5	2'-6"	—
v3(E)	16	#5	5'-0"	—
Structure Excavation			Cu. Yd.	19.0
Concrete Structures			Cu. Yd.	16.7
Reinforcement Bars, Epoxy Coated			Pound	2180
Furnishing Steel Piles, HP 10x42			Foot	144
Driving Piles			Foot	144
Test Pile, HP 10x42			Each	1
Concrete Encasement			Cu. Yd.	1.8
Porous Granular Backfill (Special)			Cu. Yd.	35.6

Notes:  
For details of piles and Concrete Encasement, see sheet 18 of 22.  
Cast backwall after beams and concrete wearing surface, if applicable, have been erected.

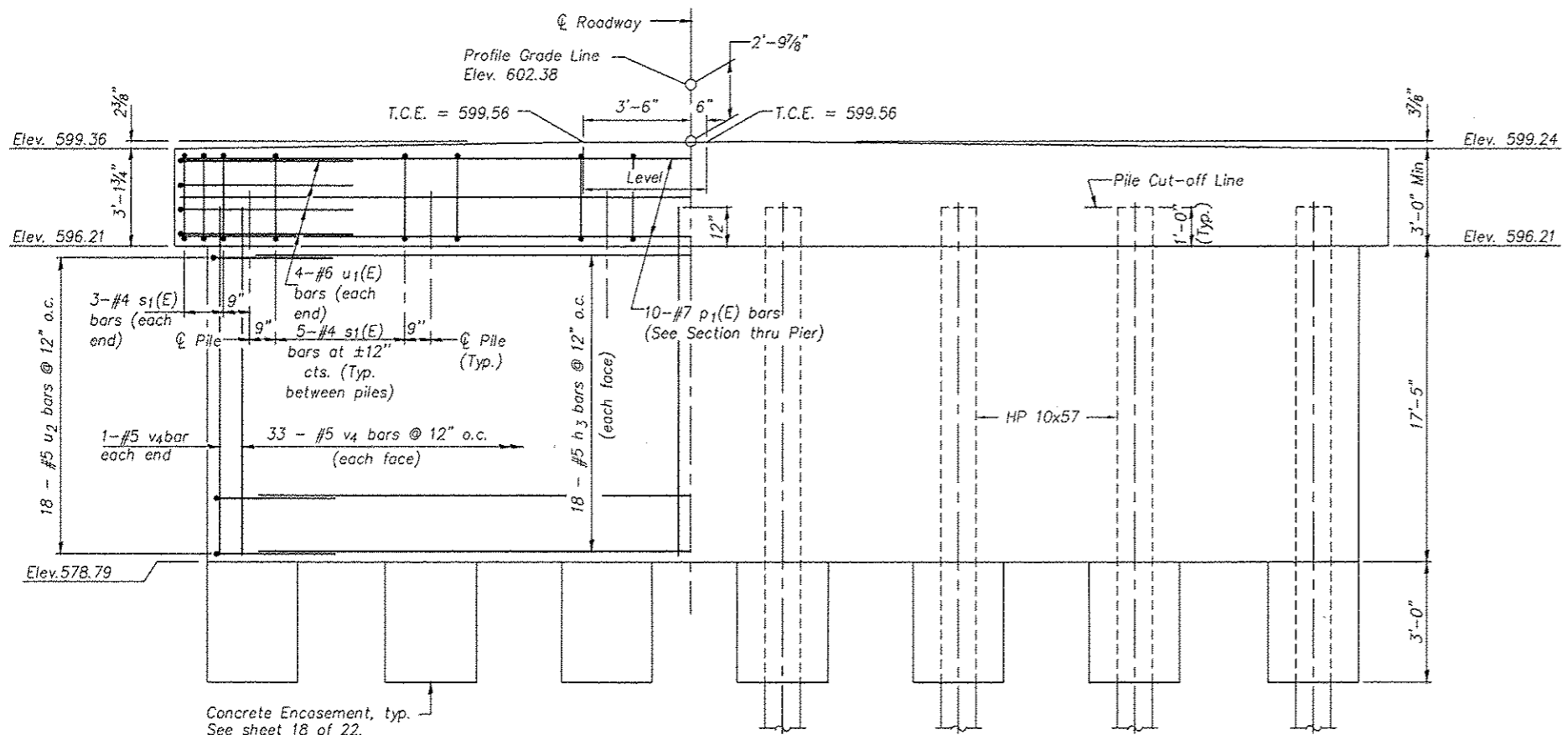
SHEET 14 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	31

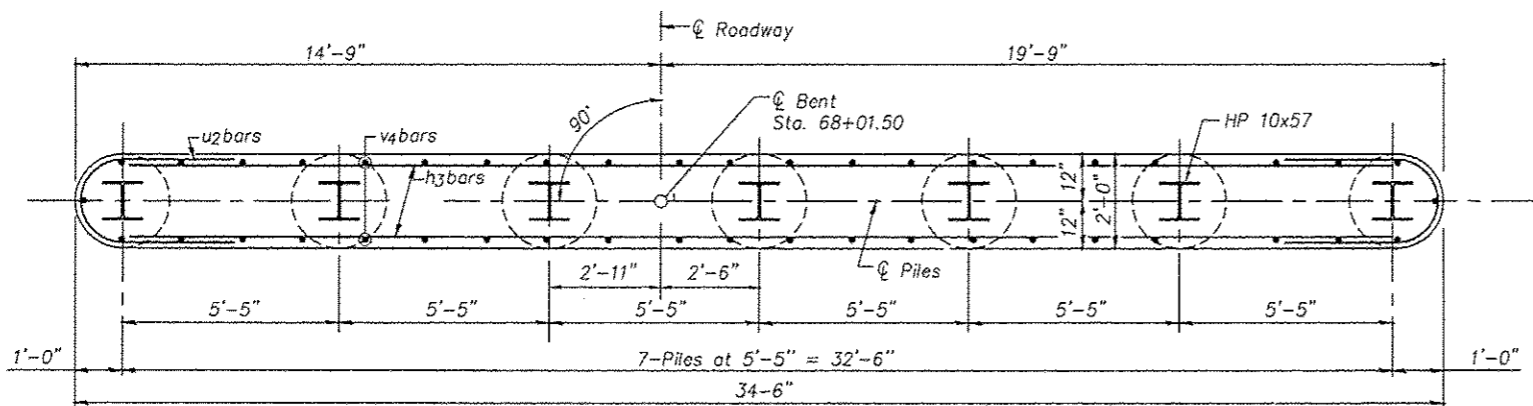
CONTRACT NO. 89356



PLAN



ELEVATION  
(Looking North)

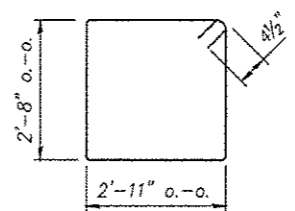


SECTION THROUGH STEM

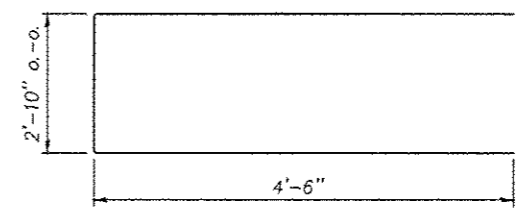
\*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

PILE DATA

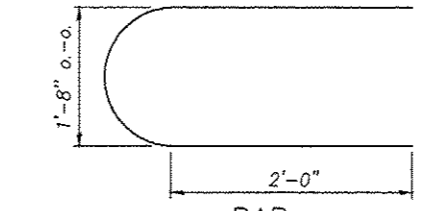
Type: Steel HP 10x57  
 Nominal Required Bearing: 454 kips  
 Allowable Resistance Available: 151 kips  
 Estimated Length: 28 ft  
 Total Number Required: 7  
 Test Piles: 1



BAR s1



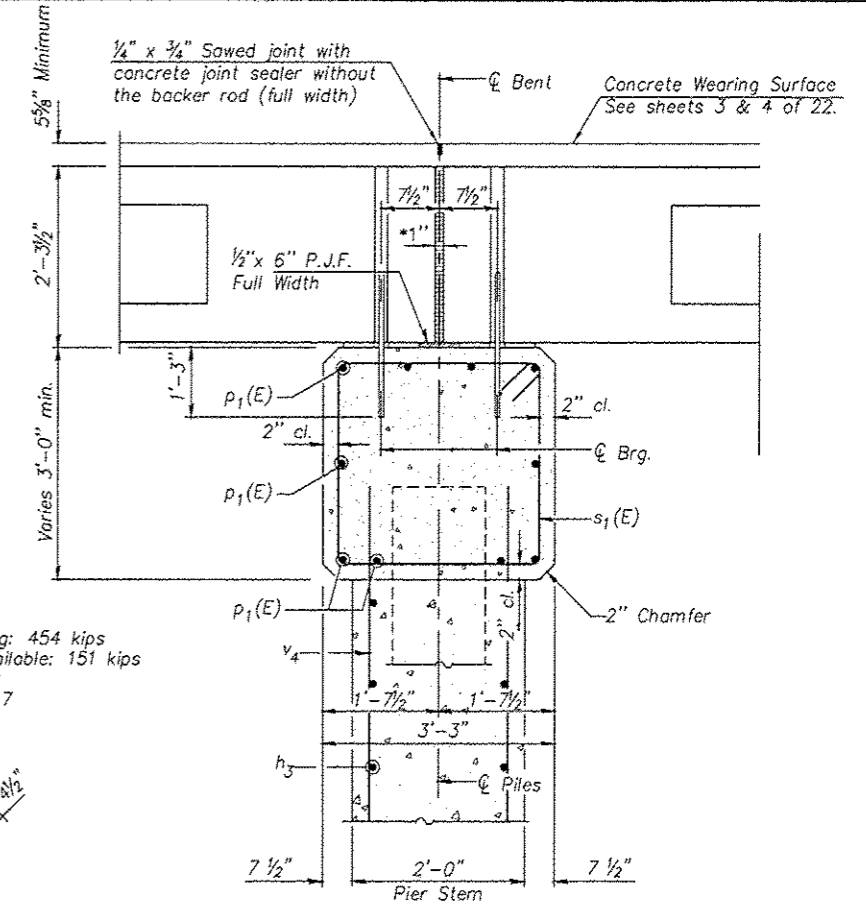
BAR u1(E)



BAR u2

DESIGN STRESSES

f'c = 3,500 psi  
 fy = 60,000 psi



SECTION THRU PIER  
(At Right Angles)

BILL OF MATERIALS - PIER #1

Bar	No.	Size	Length	Shape
h3	36	#5	32'-6"	—
p1(E)	10	#7	37'-0"	—
s1(E)	36	#4	11'-11"	□
u1(E)	8	#6	11'-10"	—
u2	36	#5	6'-8"	U
v4	68	#5	18'-2"	—
Structure Excavation			Cu. Yds.	21.3
Concrete Structures			Cu. Yds.	58.5
Concrete Encasement			Cu. Yds.	2.5
Reinforcement Bars			Pound	2760
Reinforcement Bars (Epoxy Coated)			Pound	1185
Furnishing Steel Piles, HP 10x57			Foot	168
Driving Piles			Foot	168
Test Pile, Steel HP 10x57			Each	1

NOTE

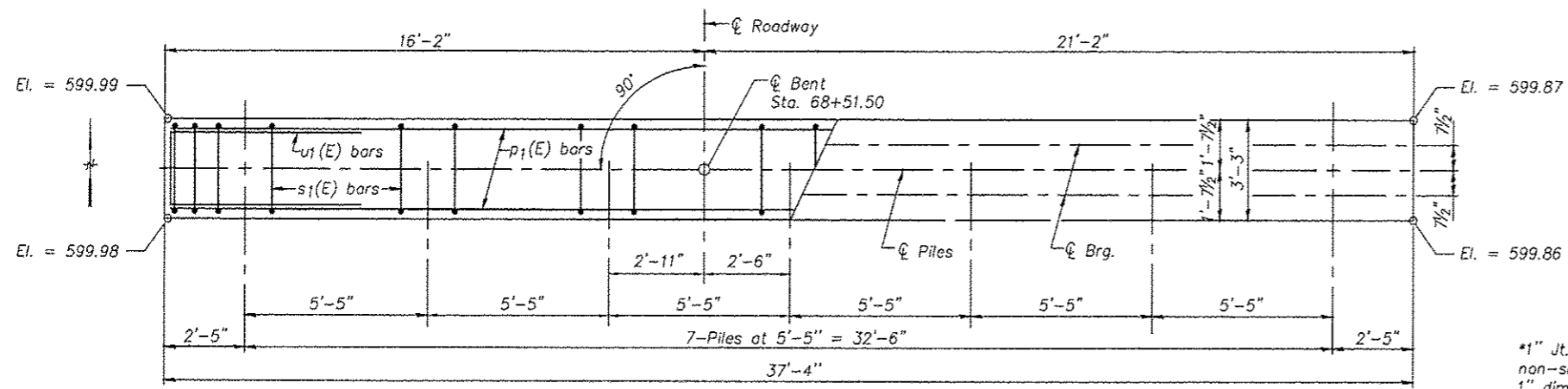
Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.

PIER #1 DETAILS  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

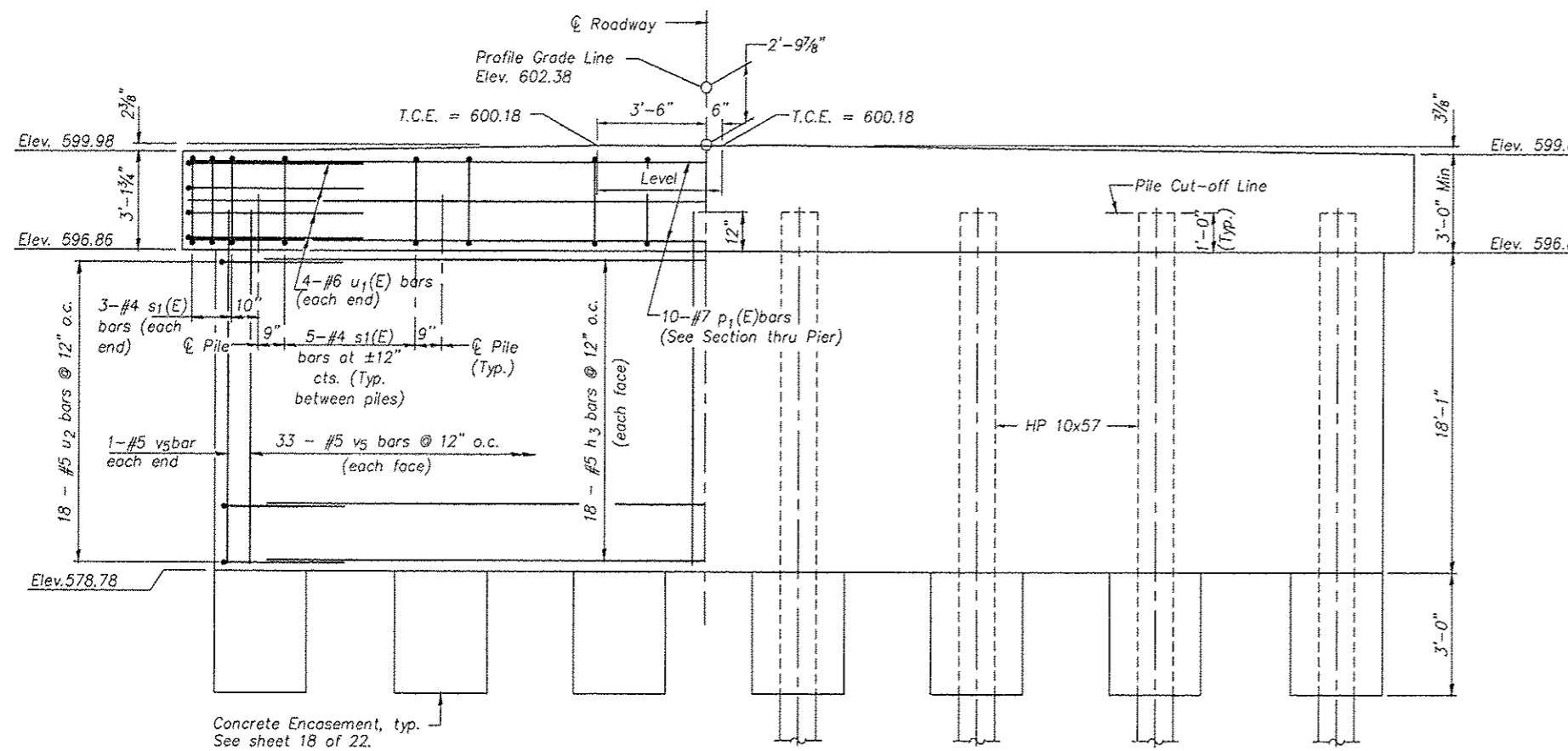
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	32

CONTRACT NO. 89356

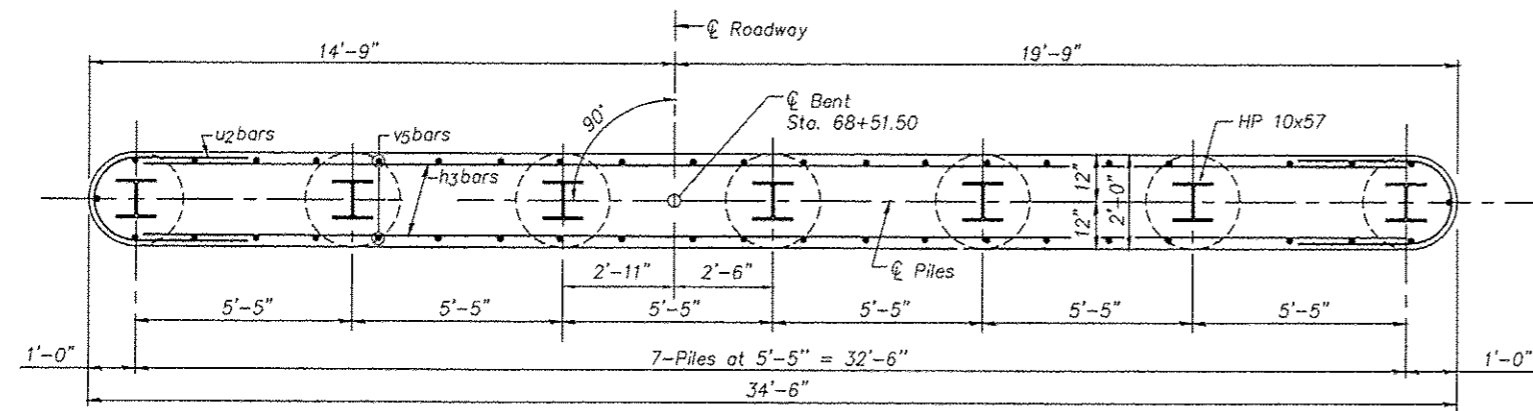




PLAN



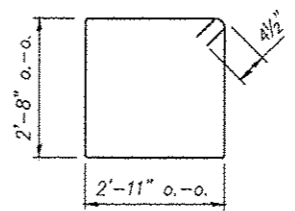
ELEVATION  
(Looking North)



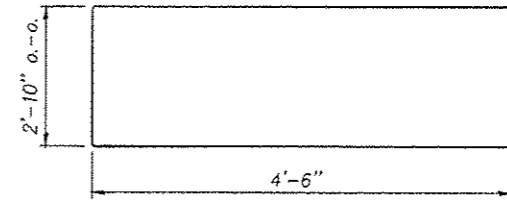
SECTION THROUGH STEM

\*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

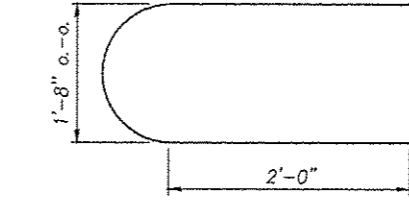
**PILE DATA**  
 Type: Steel HP 10x57  
 Nominal Required Bearing: 454 kips  
 Allowable Resistance Available: 151 kips  
 Estimated Length: 32 ft  
 Total Number Required: 7  
 Test Piles: 1



BAR s1

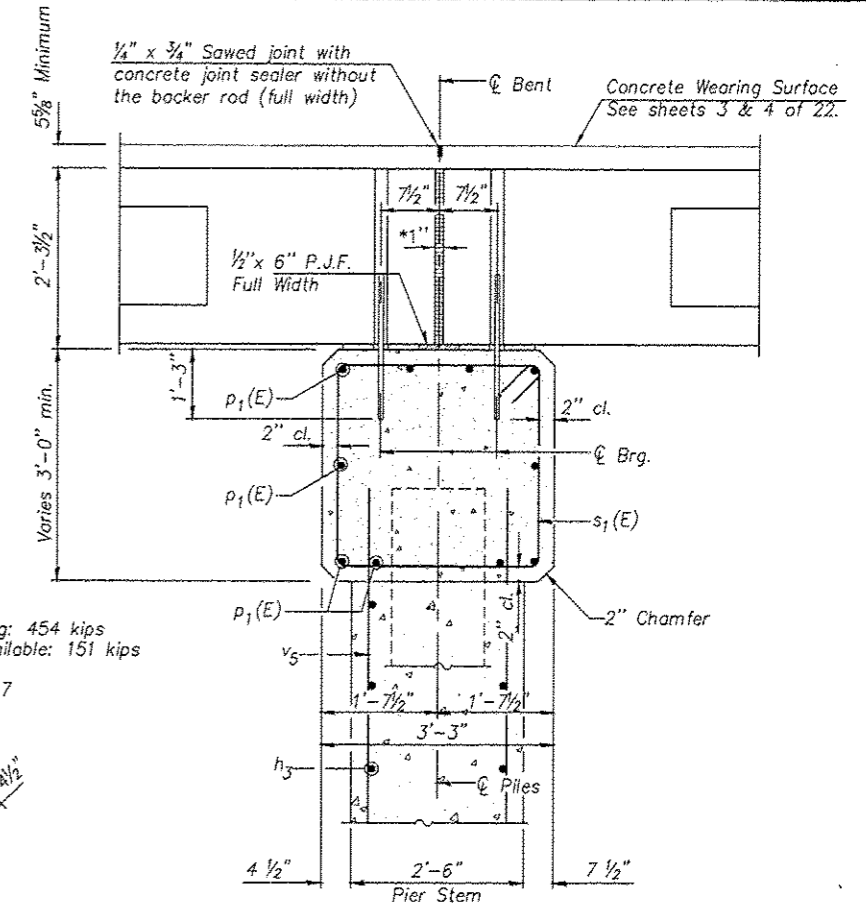


BAR u1(E)



BAR u2

**NOTE**  
 Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.



SECTION THRU PIER  
(At Right Angles)

**DESIGN STRESSES**  
 f'c = 3,500 psi  
 fy = 60,000 psi

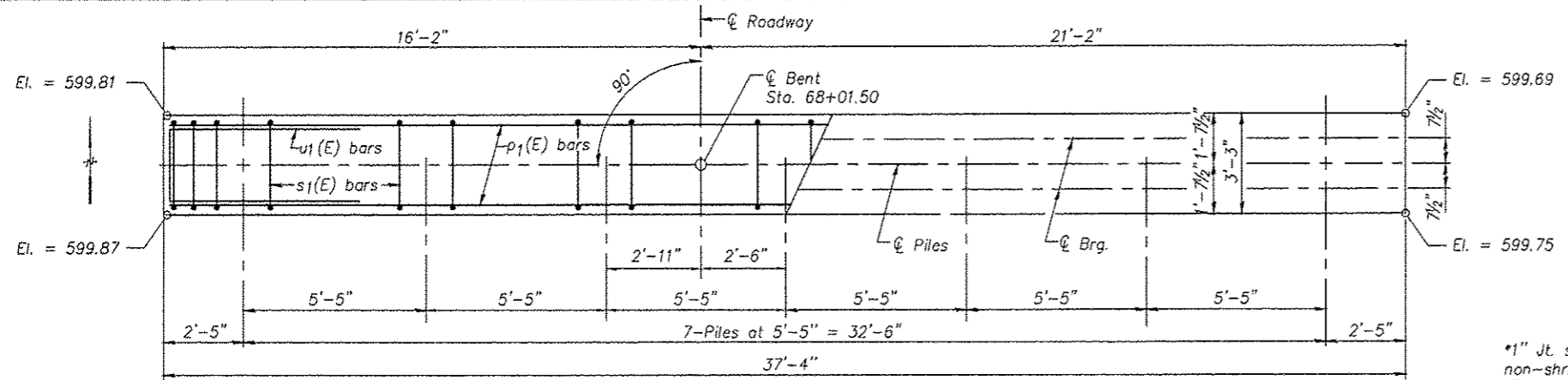
**BILL OF MATERIALS - PIER #2**

Bar	No.	Size	Length	Shape
h3	36	#5	32'-6"	—
p1(E)	10	#7	37'-0"	—
s1(E)	36	#4	11'-11"	□
u1(E)	8	#6	11'-10"	U
u2	36	#5	6'-8"	U
v5	68	#5	18'-10"	—
Structure Excavation			Cu. Yds.	6.3
Concrete Structures			Cu. Yds.	60.0
Concrete Encasement			Cu. Yds.	2.5
Reinforcement Bars			Pound	2810
Reinforcement Bars (Epoxy Coated)			Pound	1185
Furnishing Steel Piles, HP 10x57			Foot	192
Driving Piles			Foot	192
Test Pile, Steel HP 10x57			Each	1

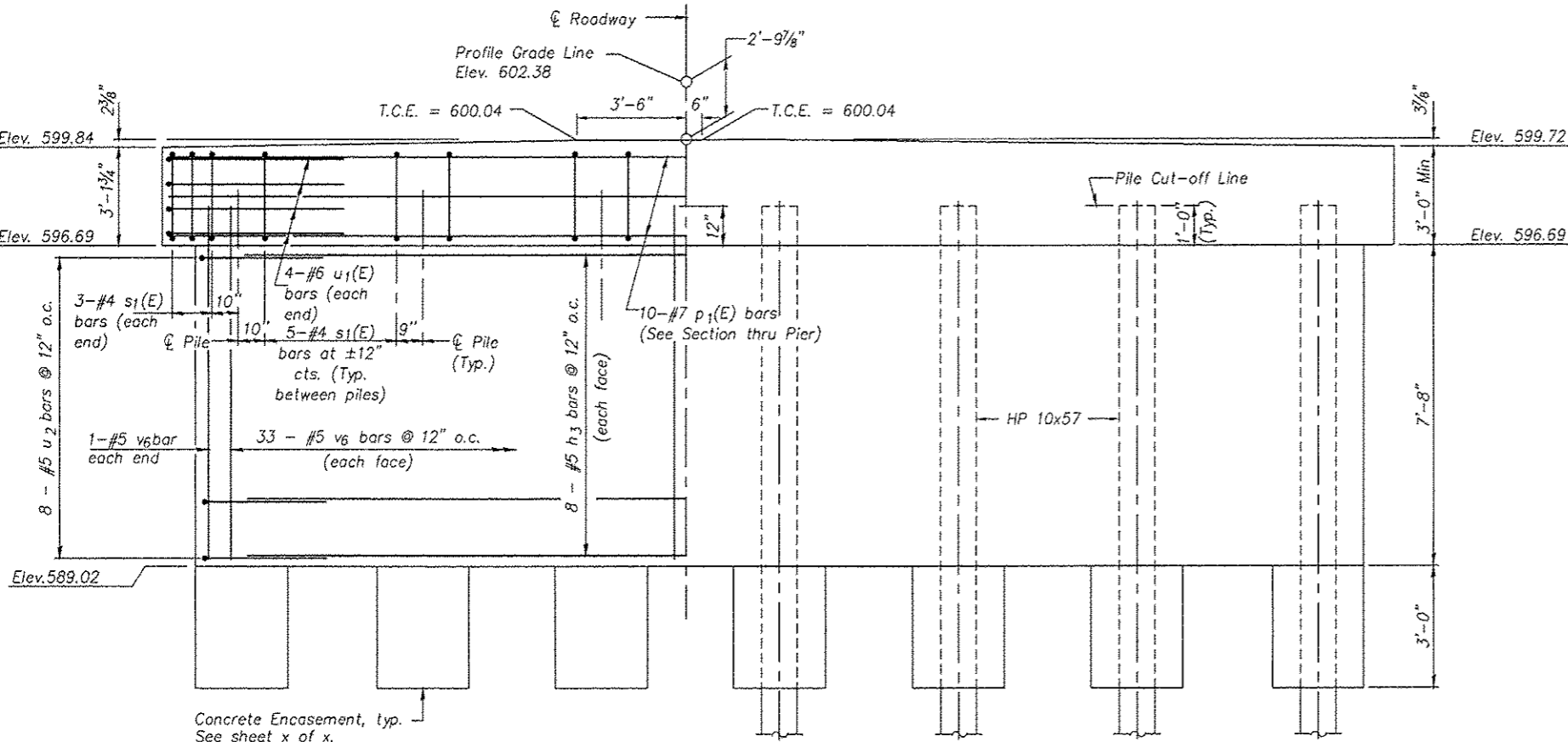
**PIER #2 DETAILS**  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	33

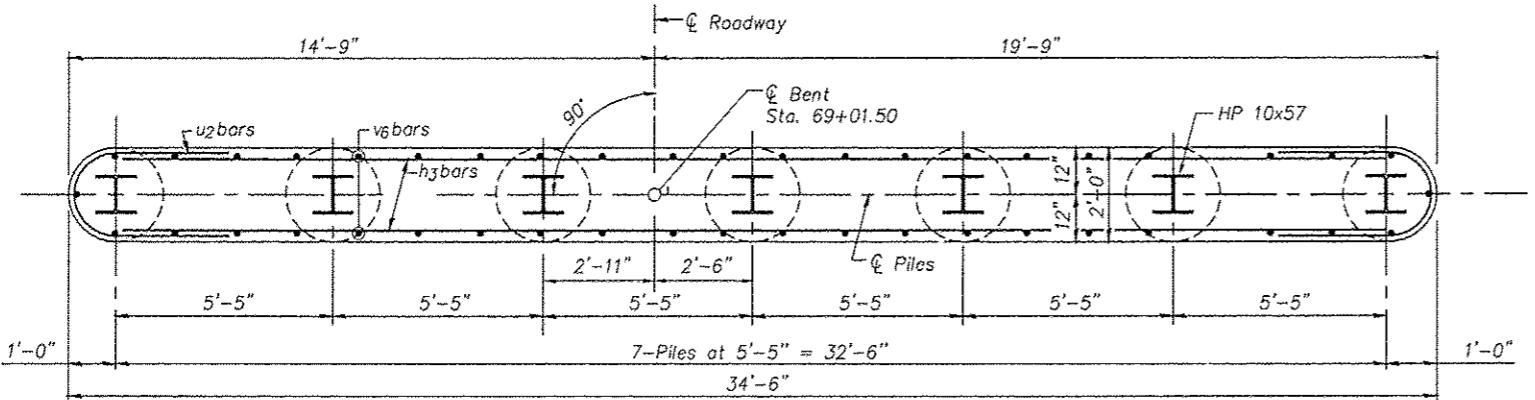
CONTRACT NO. 89356



PLAN



ELEVATION  
(Looking North)

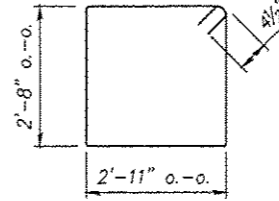


SECTION THROUGH STEM

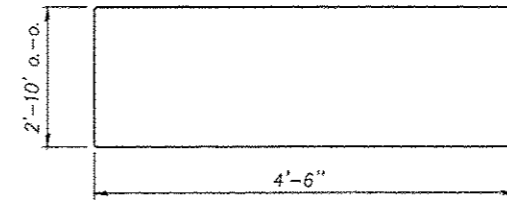
\*1" Jt. shall be filled with non-shrink grout. 1" dimension may vary to accommodate tolerance in beam lengths.

PILE DATA

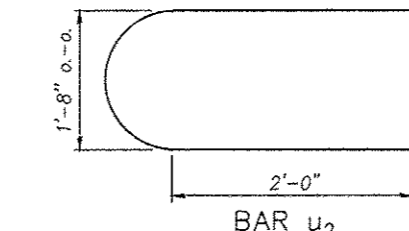
Type: Steel HP 10x57  
 Nominal Required Bearing: 454 kips  
 Allowable Resistance Available: 151 kips  
 Estimated Length: 35 ft  
 Total Number Required: 7  
 Test Piles: 1



BAR s1



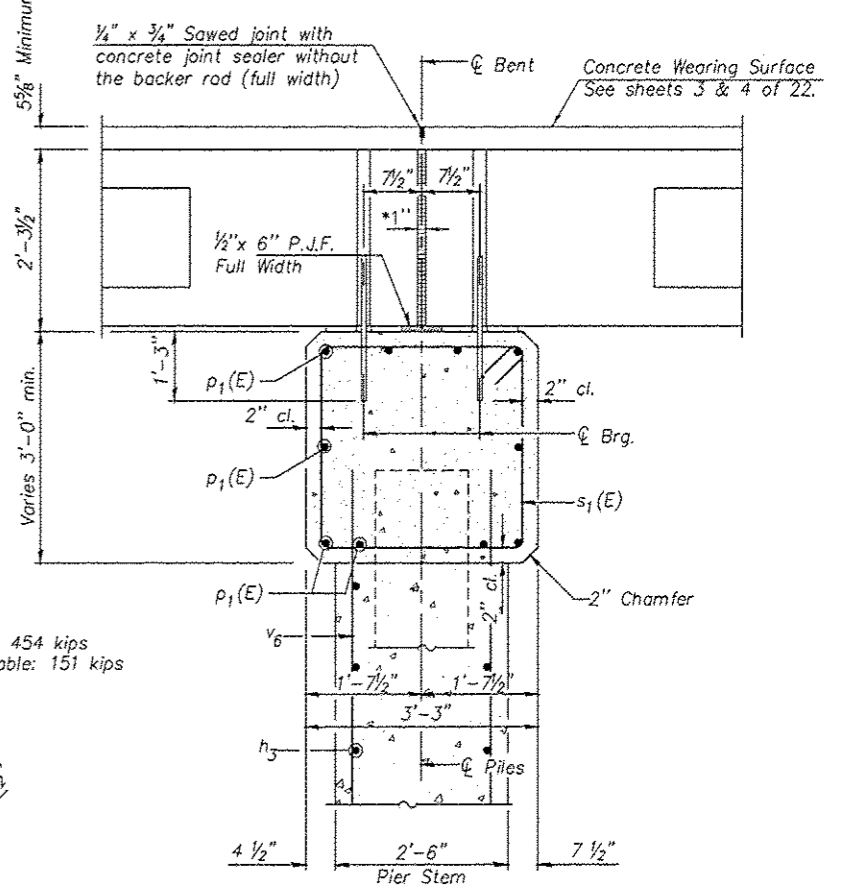
BAR u1(E)



BAR u2

DESIGN STRESSES

f'c = 3,500 psi  
 fy = 60,000 psi



SECTION THRU PIER  
(At Right Angles)

BILL OF MATERIALS - PIER #3

Bar	No.	Size	Length	Shape
h3	16	#5	32'-6"	—
p1(E)	10	#7	37'-0"	—
s1(E)	36	#4	11'-11"	□
u1(E)	8	#6	11'-10"	—
u2	16	#5	6'-8"	U
v6	68	#5	8'-5"	—
Structure Excavation		Cu. Yds.	7.5	
Concrete Structures		Cu. Yds.	33.9	
Concrete Encasement		Cu. Yds.	2.5	
Reinforcement Bars		Pound	1250	
Reinforcement Bars (Epoxy Coated)		Pound	1185	
Furnishing Steel Piles, HP 10x57		Foot	210	
Driving Piles		Foot	210	
Test Pile, Steel HP 10x57		Each	1	

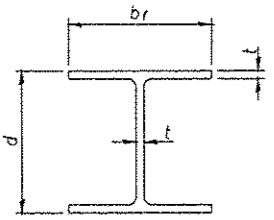
NOTE

Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.

PIER #3 DETAILS  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

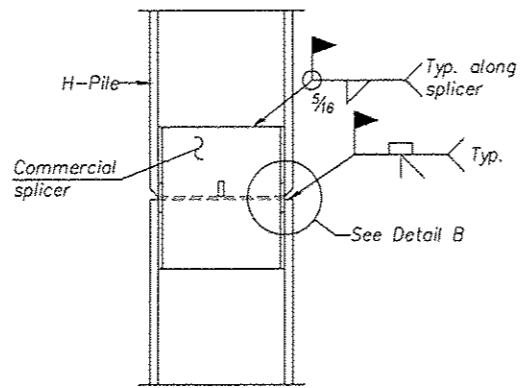
F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	34

CONTRACT NO. 89356

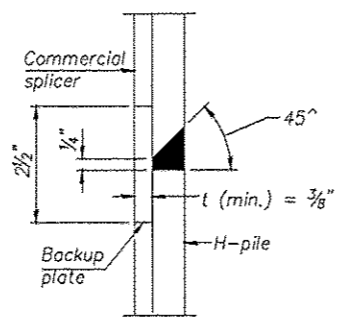


STEEL PILE TABLE

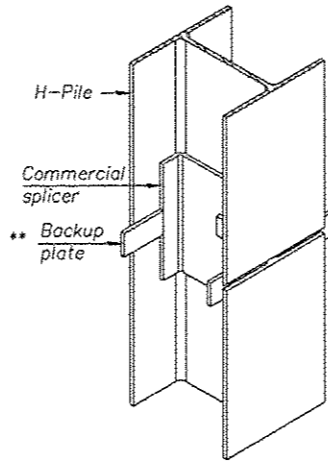
Designation	Depth d	Flange width br	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 3/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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

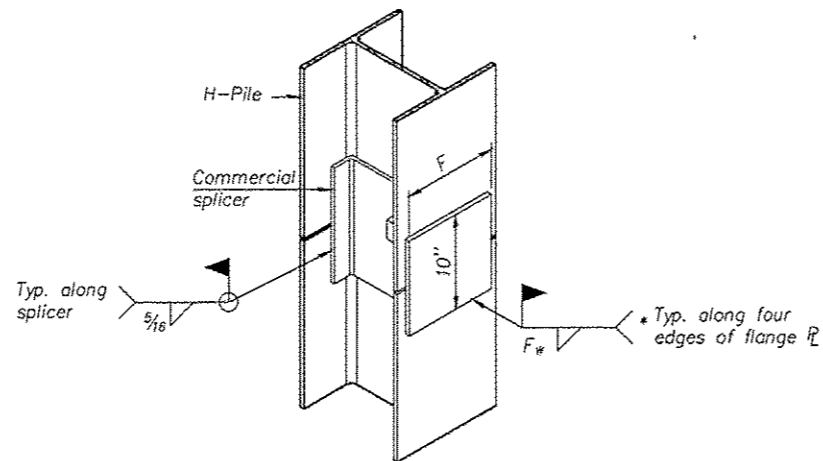


DETAIL "B"



ISOMETRIC VIEW

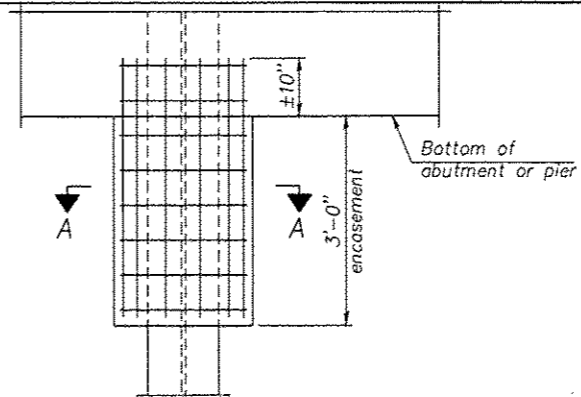
WELDED COMMERCIAL SPLICE



ISOMETRIC VIEW

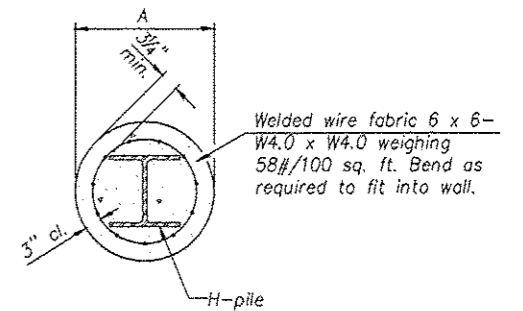
WELDED COMMERCIAL SPLICE ALTERNATE

- \* 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.).



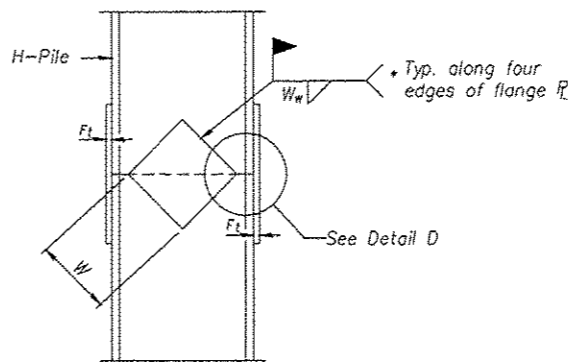
ELEVATION

PILE ENCASEMENT

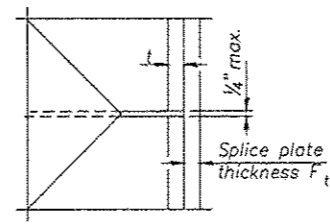


SECTION A-A

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

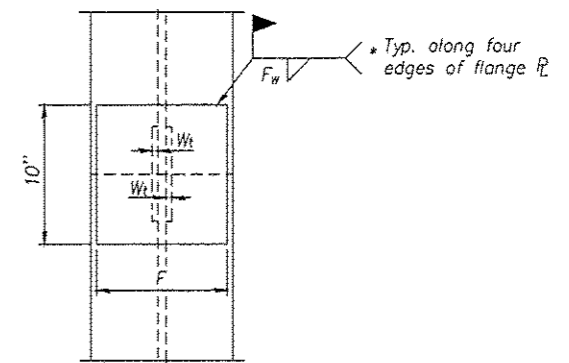


ELEVATION



DETAIL D

WELDED PLATE FIELD SPLICE



END VIEW

Designation	F	F <sub>t</sub>	F <sub>w</sub>	W	W <sub>t</sub>	W <sub>w</sub>
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 1/16"	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 1/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	1 1/16"	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"

HP PILE DETAILS  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

SHEET 18 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	35

CONTRACT NO. 89356

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

BORING NO. S-01  
 DATE 2-04-93  
 W. & A. FILE NO. 5589  
 SHEET 1 OF 8



**WHITNEY & ASSOCIATES**  
 INCORPORATED  
 2408 West Nebraska Avenue  
 PEORIA, ILLINOIS 61604

**BORING LOG**

PROJECT WIGWAM HOLLOW BRIDGE REPLACEMENT LOCATION Macomb, Illinois  
 BORING LOCATION Station 12+03; 12' Left Centerline DRILLED BY Winslow  
 BORING TYPE Hollow-Stem Auger WEATHER CONDITIONS Partly Cloudy & Cool  
 SOIL CLASSIFICATION SYSTEM U. S. B. S. C. SEEPAGE WATER ENCOUNTERED AT ELEVATION 584.9  
 GROUND SURFACE ELEVATION 598.5 GROUND WATER ELEVATION AT            HRS.             
 BORING DISCONTINUED AT ELEVATION 567.5 GROUND WATER ELEVATION AT COMPLETION 587.5

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
<b>Brown, Fine- To Medium-Grained GRAVEL</b>							
<b>Stiff To Medium, Brown SILTY CLAY (Fill)</b>	10*						
	04	SS	4 4 6(10)	1.5	1.2	-	20
			3 3 4(7)	1.2	0.8	-	15
<b>Medium, Gray And Brown SANDY CLAY (Fill)</b>							
	08	SS	2 3 4(7)	0.9	0.5	-	22
<b>Loose, Brown, Fine- To Medium-Grained SAND With Considerable Clay (Fill)</b>							
		SS	1 1 3(4)	-	-	-	18
<b>Very Loose, Gray, Fine-Grained SAND (Fill)</b>	12	SS	1 1(2)	-	-	-	-
<b>Very Loose, Gray, Fine- To Medium-Grained SAND With Some Clay (Fill)</b>							
	16	SS	1 1 1(2)	-	-	-	18
<b>Stiff, Gray And Brown SANDY CLAY (Fill)</b>							
		SS	5 4 7(11)	1.6	1.2	-	20
<b>Hard, Gray SHALE</b>	20	SS	15 78	4.5*	5.2	-	10
		SS	111/4*	4.5*	-	-	8
	24	SS	117/3.5*4.5*	-	-	-	7

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
 PEORIA, ILLINOIS

BORING NO. S-01

**BORING LOG**  
 (CONTINUATION)

DATE 02-04-93

PROJECT Wigwam Hollow Bridge Replacement  
 LOCATION Macomb, Illinois

SHEET 2 OF 8  
 W. & A. FILE NO. 5589

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
See Sheet 1 Of 8		SS	135/5*	4.5*	-	-	6
	30	SS	111/1/5*4.5*	-	-	-	8
EXPLORATORY BORING DISCONTINUED							
	34						
	38						
	42						
	46						
	50						
	54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %


WHITNEY & ASSOCIATES  
 PEORIA, ILLINOIS

**BORING 1**  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

SHEET 19 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	36
CONTRACT NO. 89356				

BORING NO S-02  
DATE 2-04-93  
W. & A. FILE NO. 5589  
SHEET 3 OF 8



**WHITNEY & ASSOCIATES**  
INCORPORATED  
2406 West Nebraska Avenue  
PEORIA, ILLINOIS 61604

**BORING LOG**

PROJECT WIGWAM HOLLOW BRIDGE REPLACEMENT LOCATION Macomb, Illinois  
BORING LOCATION Station 12+25; 11' Left Centerline DRILLED BY Winslow  
BORING TYPE Hollow-Stem Auger WEATHER CONDITIONS Partly Cloudy & Cool  
SOIL CLASSIFICATION SYSTEM U. S. B. S. C. SEEPAGE WATER ENCOUNTERED AT ELEVATION 585.6  
GROUND SURFACE ELEVATION 598.5 GROUND WATER ELEVATION AT            HRS.             
BORING DISCONTINUED AT ELEVATION 567.5 GROUND WATER ELEVATION AT COMPLETION 586.3

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
Brown, Fine- To Medium-Grained GRAVEL	9"						
Medium, Brown SILTY CLAY With Some Fine-Grained Gravel (Fill)		SS	2 3 5(8)	0.9	0.5	-	14
Medium, Brown SILTY CLAY (Fill)	04	SS	2 2 4(6)	1.2	0.9	-	24
	08	SS	2 3 4(7)	0.8	0.6	-	17
Medium, Gray-Brown SANDY CLAY (Fill)		SS	2 2 4(6)	0.7	0.6	-	22
	12	SS	2 3 3(6)	-	-	-	22
Very Loose To Loose, Dark Gray, Fine- To Medium-Grained SAND With Considerable Clay (Fill)		SS	1 1 1(2)	-	-	-	21
	16	SS	2 2 3(5)	-	-	-	19
Medium-Density, Brown, Fine- To Medium-Grained GRAVEL With Some Sandy Clay	20	SS	3 9 13(21)	-	-	-	25
Hard, Gray SHALE		SS	34 60 79(139)	4.5*	4.2	-	10
	24	SS	79 114/3*	4.5*	-	-	8

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
PEORIA, ILLINOIS

BORING NO. S-02  
PROJECT Wigwam Hollow Bridge Replacement  
LOCATION Macomb, Illinois

**BORING LOG**  
(CONTINUATION)

DATE 02-04-93  
SHEET 4 OF 8  
W. & A. FILE NO. 5589

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
See Sheet 3 Of 8		SS	109/3*	4.5*	-	-	9
	30	SS	18 118/1/5*4.5*	-	-	-	8
EXPLORATORY BORING DISCONTINUED							
	34						
	38						
	42						
	46						
	50						
	54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
PEORIA, ILLINOIS

BORING 2  
WIGWAM HOLLOW RD OVER EAST FORK  
LAMOINE RIVER  
CITY OF MACOMB  
SECTION 08-00128-00-BR  
McDONOUGH COUNTY  
STATION 68+51.50  
STRUCTURE NO. 055-6002

SHEET 20 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	37

CONTRACT NO. 89356

BORING NO. S-03  
 DATE 2-03-93  
 W. & A. FILE NO. 5589  
 SHEET 5 OF 8



**WHITNEY & ASSOCIATES**  
 INCORPORATED  
 2406 West Nebraska Avenue  
 PEORIA, ILLINOIS 61604

**BORING LOG**

PROJECT WIGWAM HOLLOW BRIDGE REPLACEMENT LOCATION Macomb, Illinois  
 BORING LOCATION Station 13+44; 11' Right Centerline DRILLED BY Winslow  
 BORING TYPE Hollow-Stem Auger WEATHER CONDITIONS Partly Cloudy & Cool  
 SOIL CLASSIFICATION SYSTEM U.S.B.S.C. SEEPAGE WATER ENCOUNTERED AT ELEVATION 379.5  
 GROUND SURFACE ELEVATION 598.3 GROUND WATER ELEVATION AT 585.9  
 BORING DISCONTINUED AT ELEVATION 557.3 GROUND WATER ELEVATION AT COMPLETION

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
<u>OIL And CHIPS</u>	<u>1*</u>						
<u>Dark Brown, Fine- To Medium-Grained GRAVEL And CRUSHED LIMESTONE</u>	<u>12*</u>	<u>SS</u>	<u>2</u>	<u>1.2</u>	<u>0.9</u>	<u>-</u>	<u>20</u>
<u>Medium To Stiff, Brown And Dark Brown SILTY CLAY</u>			<u>3(5)</u>				
	<u>04</u>	<u>SS</u>	<u>2</u>	<u>1.5</u>	<u>1.2</u>	<u>-</u>	<u>20</u>
			<u>3</u>				
			<u>4(7)</u>				
	<u>08</u>	<u>SS</u>	<u>2</u>	<u>1.0</u>	<u>0.9</u>	<u>-</u>	<u>22</u>
			<u>3</u>				
			<u>4(7)</u>				
<u>Stiff, Brown And Dark Brown Mottled Gray SILTY CLAY LOAM</u>		<u>SS</u>	<u>5</u>	<u>1.3</u>	<u>1.1</u>	<u>-</u>	<u>19</u>
			<u>6</u>				
			<u>8(14)</u>				
	<u>12</u>	<u>SS</u>	<u>5</u>	<u>1.2</u>	<u>1.1</u>	<u>-</u>	<u>19</u>
			<u>4</u>				
			<u>6(10)</u>				
<u>Medium To Stiff, Dark Gray And Gray SILTY CLAY LOAM</u>		<u>SS</u>	<u>5</u>	<u>1.0</u>	<u>0.6</u>	<u>-</u>	<u>20</u>
	<u>16</u>	<u>SS</u>	<u>6</u>	<u>1.5</u>	<u>1.3</u>	<u>-</u>	<u>20</u>
			<u>3</u>				
			<u>4(7)</u>				
<u>Medium, Gray Mottled Brown SILTY CLAY With Occasional Seams Of Fine-Grained Sand</u>	<u>20</u>	<u>SS</u>	<u>3</u>	<u>1.1</u>	<u>0.9</u>	<u>-</u>	<u>14</u>
			<u>4</u>				
			<u>4(8)</u>				
			<u>3</u>				
<u>Medium, Gray Mottled Brown SANDY CLAY With Occasional Seams Of Fine-Grained Sand</u>		<u>SS</u>	<u>3</u>	<u>1.2</u>	<u>0.7</u>	<u>-</u>	<u>23</u>
			<u>8(11)</u>				
			<u>9</u>				
<u>Medium-Density, Gray-Brown, Fine- To Medium-Grained SAND With Fine-Grained Gravel</u>	<u>24</u>	<u>SS</u>	<u>14</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>14</u>
			<u>15(29)</u>				

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
 PEORIA, ILLINOIS

BORING NO. S-03 (CONTINUATION) DATE 02-03-93  
 PROJECT Wigwam Hollow Bridge Replacement SHEET 6 OF 8  
 LOCATION Macomb, Illinois W. & A. FILE NO. 5589

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
<u>See Sheet 5 Of 8</u>			<u>30</u>				
<u>Hard, Gray, Unweathered GLACIAL SANDY CLAY TILL</u>		<u>SS</u>	<u>61</u>	<u>4.5*</u>	<u>5.2</u>	<u>-</u>	<u>10</u>
			<u>52/3*</u>				
<u>Hard, Gray SHALE</u>	<u>30</u>	<u>SS</u>	<u>21</u>	<u>4.5*</u>	<u>-</u>	<u>-</u>	<u>10</u>
			<u>102</u>				
			<u>110/4*</u>	<u>4.5*</u>	<u>-</u>	<u>-</u>	<u>12</u>
	<u>34</u>	<u>SS</u>	<u>104/1*</u>	<u>4.5*</u>	<u>-</u>	<u>-</u>	<u>8</u>
			<u>112/1.5*</u>	<u>4.5*</u>	<u>-</u>	<u>-</u>	<u>9</u>
	<u>38</u>	<u>SS</u>	<u>149/2*</u>	<u>4.5*</u>	<u>-</u>	<u>-</u>	<u>6</u>
<u>EXPLORATORY BORING DISCONTINUED</u>	<u>42</u>						
	<u>46</u>						
	<u>50</u>						
	<u>54</u>						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
 PEORIA, ILLINOIS

**BORING 3**  
 WIGWAM HOLLOW RD OVER EAST FORK  
 LAMOINE RIVER  
 CITY OF MACOMB  
 SECTION 08-00128-00-BR  
 McDONOUGH COUNTY  
 STATION 68+51.50  
 STRUCTURE NO. 055-6002

SHEET 21 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	38
CONTRACT NO. 89356				

BORING NO. S-04  
 DATE 2-03-93  
 W. & A. FILE NO. 5589  
 SHEET 7 OF 8



**WHITNEY & ASSOCIATES**  
 INCORPORATED  
 2406 West Nebraska Avenue  
 PEORIA, ILLINOIS 61604

**BORING LOG**

PROJECT **WIGWAM HOLLOW BRIDGE REPLACEMENT** LOCATION **Macomb, Illinois**  
 BORING LOCATION **Station 13+87; 10' Left Centerline** DRILLED BY **Winslow**  
 BORING TYPE **Hollow-Stem Auger** WEATHER CONDITIONS **Partly Cloudy & Cool**  
 SOIL CLASSIFICATION SYSTEM **U. S. B. S. C.** SEEPAGE WATER ENCOUNTERED AT ELEVATION **581.3**  
 GROUND SURFACE ELEVATION **598.4** GROUND WATER ELEVATION AT \_\_\_\_\_ HRS. \_\_\_\_\_  
 BORING DISCONTINUED AT ELEVATION **557.4** GROUND WATER ELEVATION AT COMPLETION **586.1**

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
<b>OIL And CHIPS</b>	1*						
<b>Brown, Fine- To Medium-Grained GRAVEL</b>	8*	SS	2 3 4(7)	1.1	0.9	-	18
<b>Medium, Brown SILTY CLAY With Some Fine- To Medium-Grained Gravel</b>	04	SS	4 5 7(12)	3.3	3.0	-	11
<b>Very Stiff To Stiff, Brown SILTY CLAY LOAM</b>	08	SS	3 2 3(5)	1.2	1.0	-	19
<b>Medium, Brown SANDY CLAY</b>	12	SS	2 3 4(7) 5 6(11)	0.7	0.5	-	14
	16	SS	2 3 4(7)	0.8	0.6	-	19
<b>Medium, Gray And Brown SILTY CLAY LOAM</b>	20	SS	2 3 4(7)	1.0	0.8	-	23
<b>Medium-Density, Brown, Fine- To Medium-Grained SAND</b>	24	SS	4 7 11(18) 3	-	-	-	17
<b>Medium-Density To Dense, Brown And Gray, Fine- To Medium-Grained SAND And Medium- To Coarse-Grained GRAVEL</b>		SS	11 17(28)	-	-	-	-
		SS	17 21 28(49)	-	-	-	-

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
 PEORIA, ILLINOIS

BORING NO. S-04

**BORING LOG**  
 (CONTINUATION)

DATE 02-03-93

PROJECT **Wigwam Hollow Bridge Replacement** SHEET **8** OF **8**  
 LOCATION **Macomb, Illinois** W. & A. FILE NO. **5589**

DESCRIPTION	DEPTH IN FEET	SAMPLE TYPE	N	Qp	Qu	Dd	Mc
<b>See Sheet 7 Of 8</b>		SS	17 22 29(51)	-	-	-	-
	30	SS	68	-	-	-	15
<b>Hard, Gray SANDY SHALE</b>		SS	75 85	4.5*	-	-	9
	34	SS	149/3*	4.5*	-	-	10
	38	SS	122/2*	4.5*	-	-	11
		SS	139/1*	4.5*	-	-	9
<b>EXPLORATORY BORING DISCONTINUED</b>	42						
	46						
	50						
	54						

N - BLOWS DELIVERED PER FOOT BY A 140 LB. HAMMER FALLING 30 INCHES  
 SS - SPLIT SPOON SAMPLE  
 ST - SHELBY TUBE SAMPLE

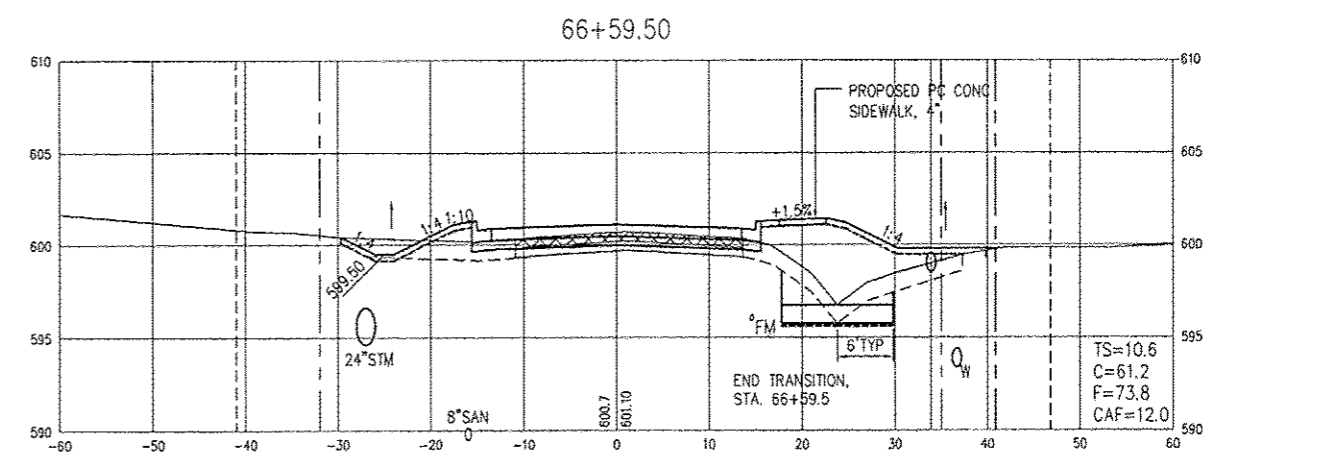
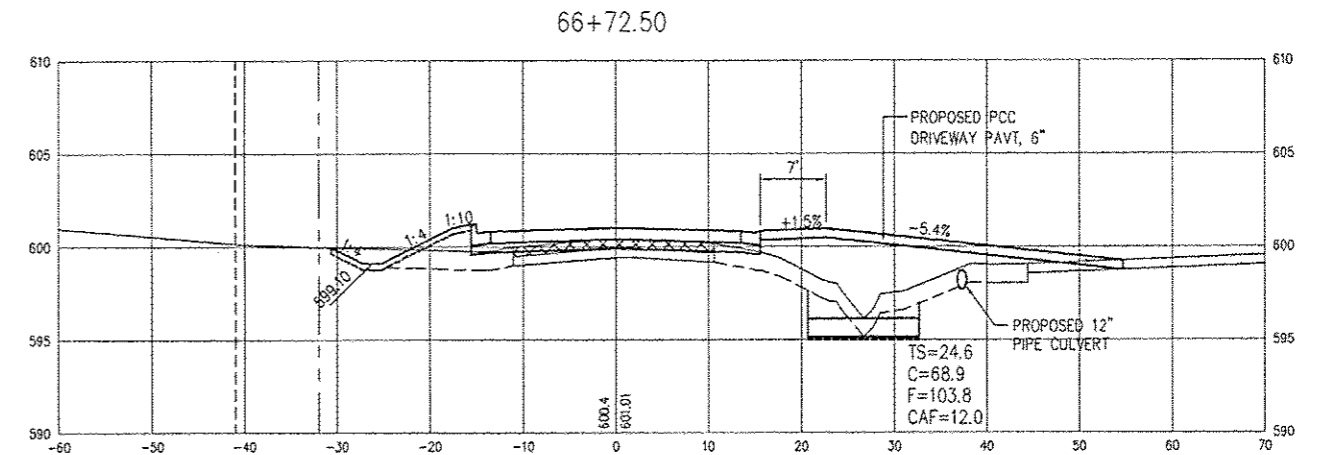
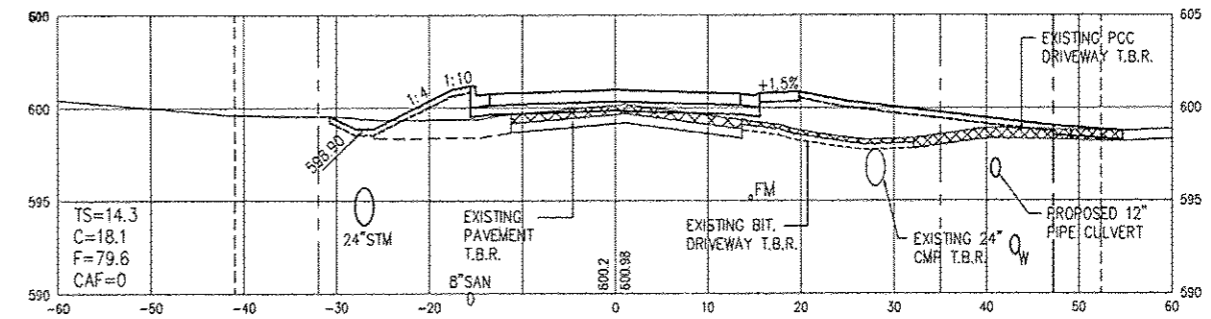
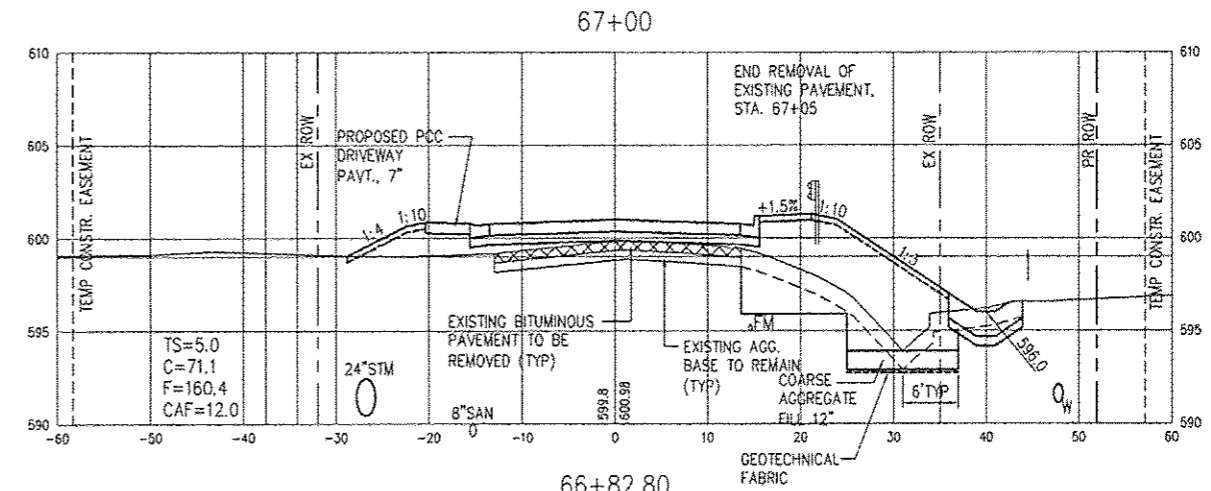
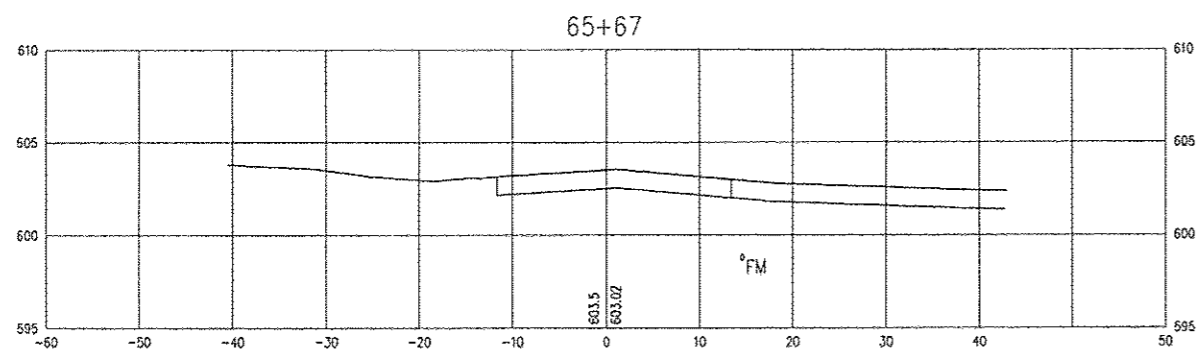
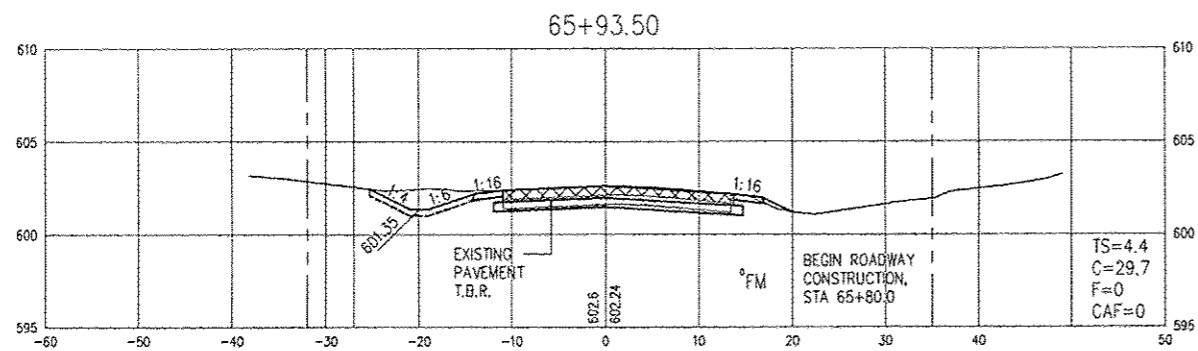
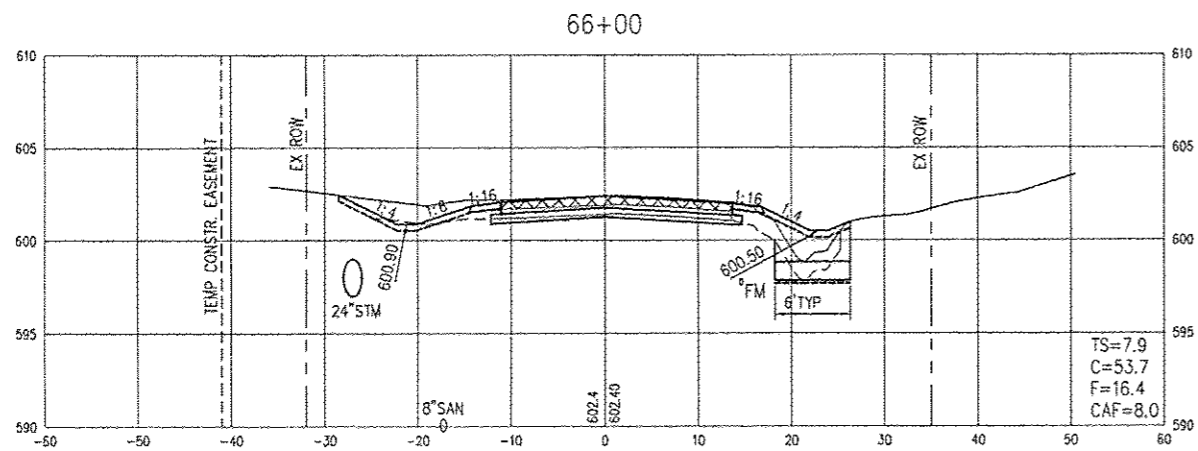
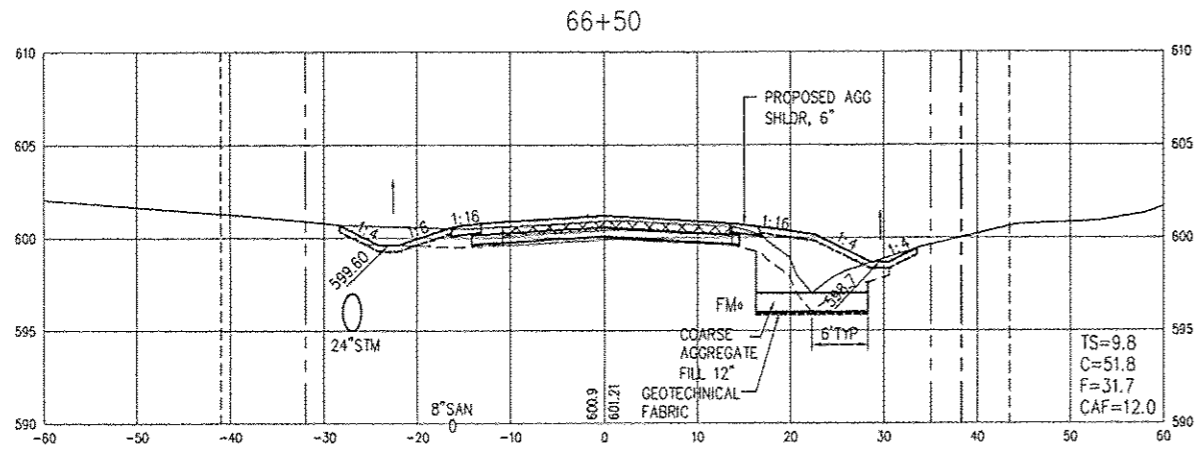
Qp - CALIBRATED PENETROMETER READING - T.S.F.  
 Qu - UNCONFINED COMPRESSIVE STRENGTH - T.S.F.  
 Dd - NATURAL DRY DENSITY - P.C.F.  
 Mc - NATURAL MOISTURE CONTENT - %

WHITNEY & ASSOCIATES  
 PEORIA, ILLINOIS

**BORING 4**  
**WIGWAM HOLLOW RD OVER EAST FORK**  
**LAMOINE RIVER**  
**CITY OF MACOMB**  
**SECTION 08-00128-00-BR**  
**McDONOUGH COUNTY**  
**STATION 68+51.50**  
**STRUCTURE NO. 055-6002**

SHEET 22 OF 22

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	39
CONTRACT NO. 89356				



REVISIONS		
NO.	ITEM	DATE

PLOTTING SCALE:	1" = 10'
DRAWN BY:	TAB
CHECKED BY:	EDM
DATE:	JANUARY 2013

**McClure**  
Engineering Associates, Inc.

714 East Jackson Street  
Macomb, Illinois 61455  
(309) 833-4594  
FAX (309) 837-4909

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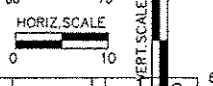
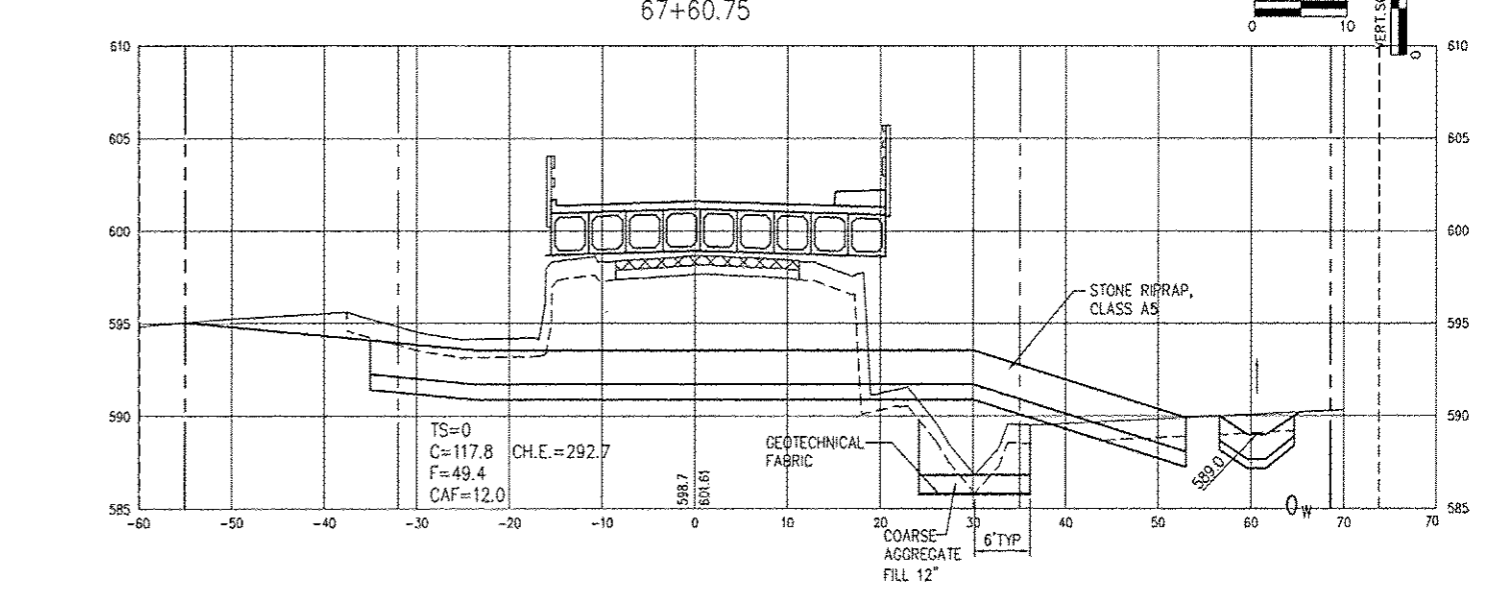
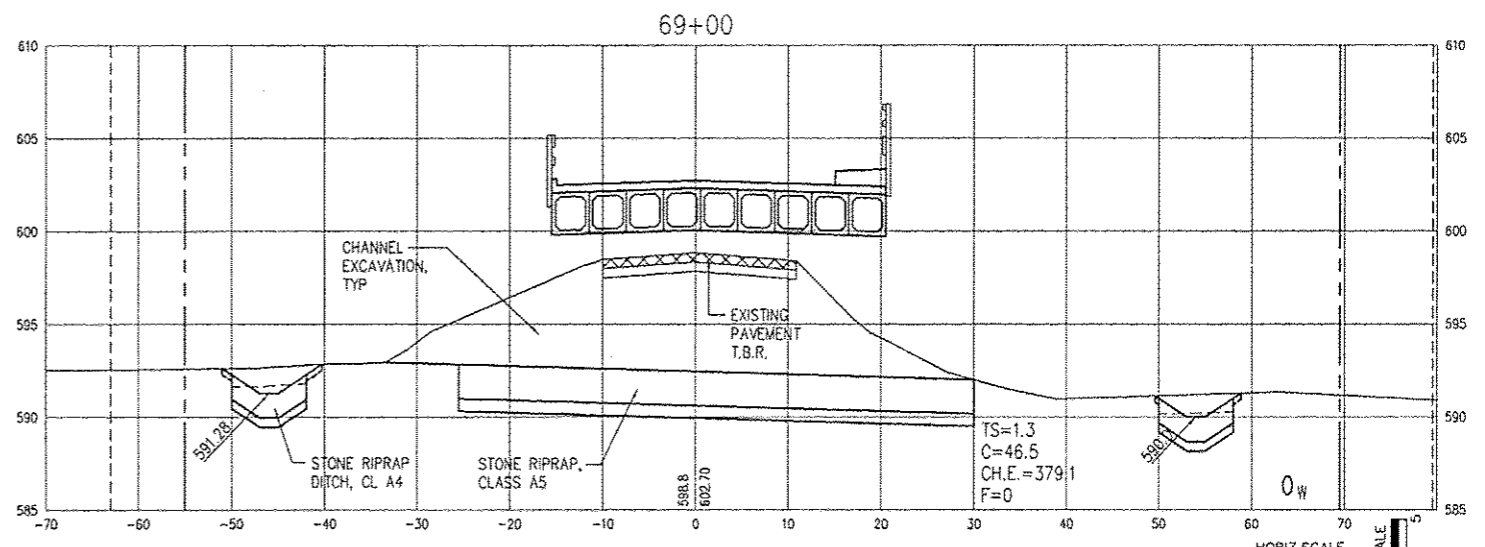
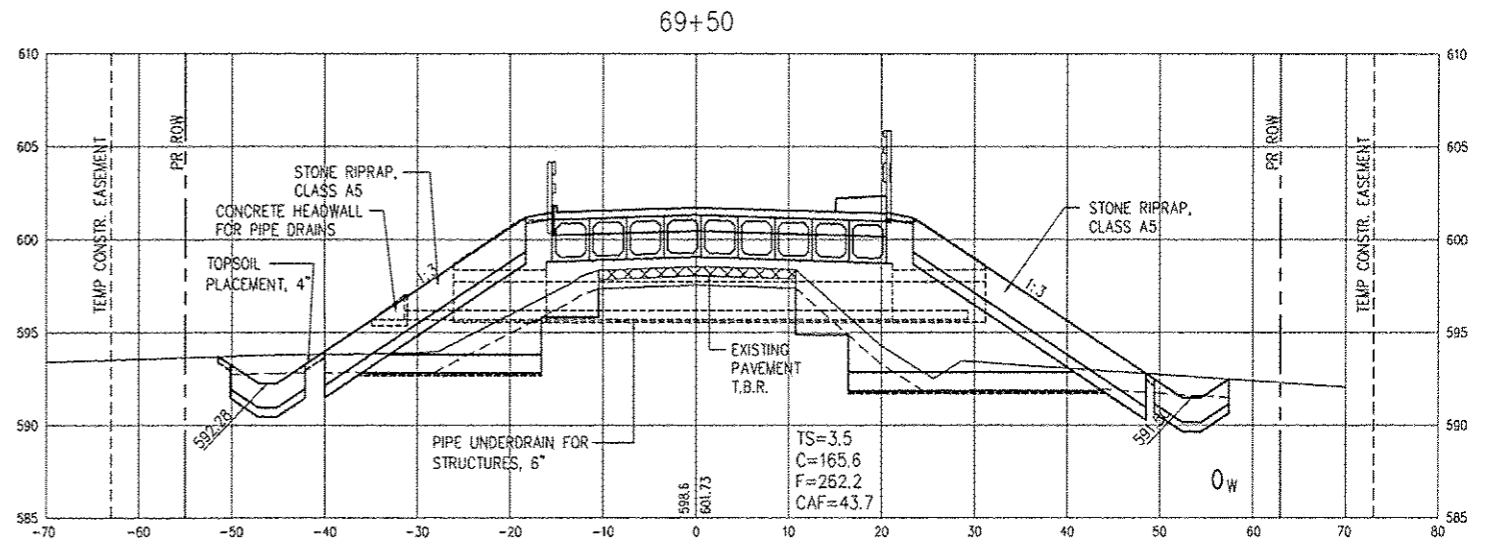
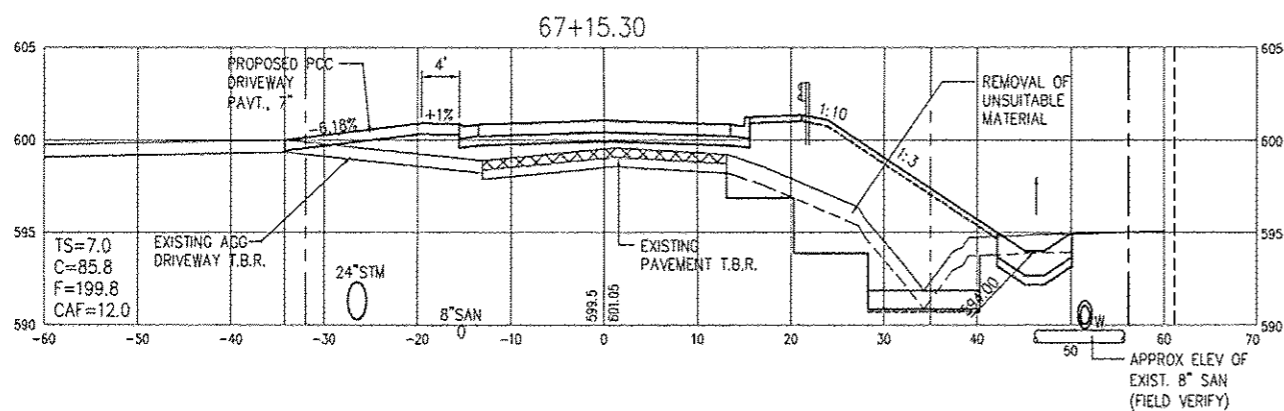
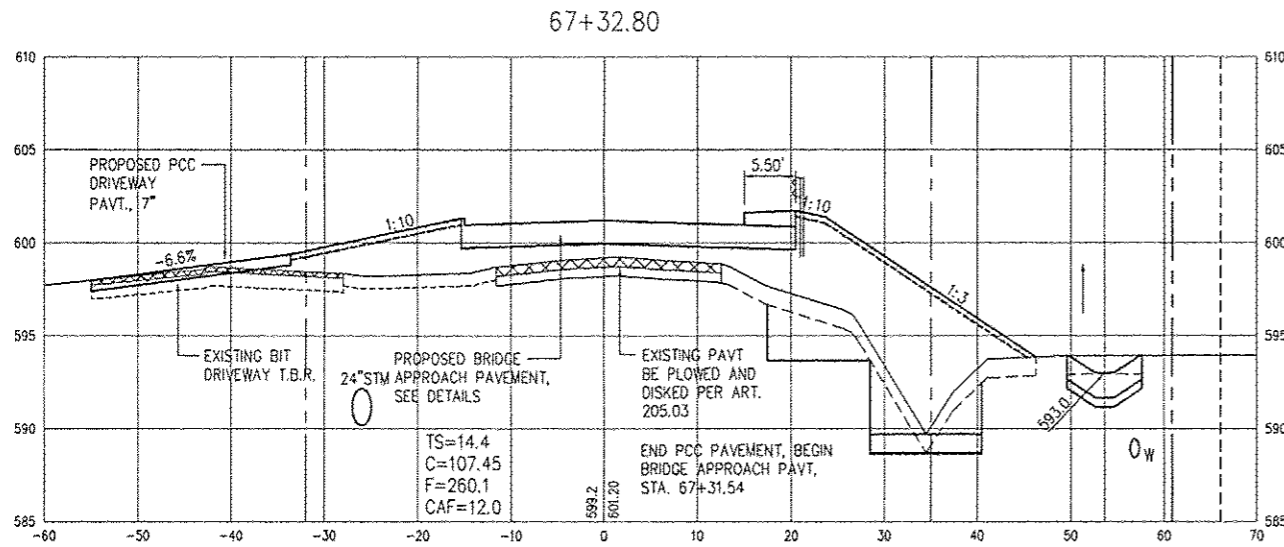
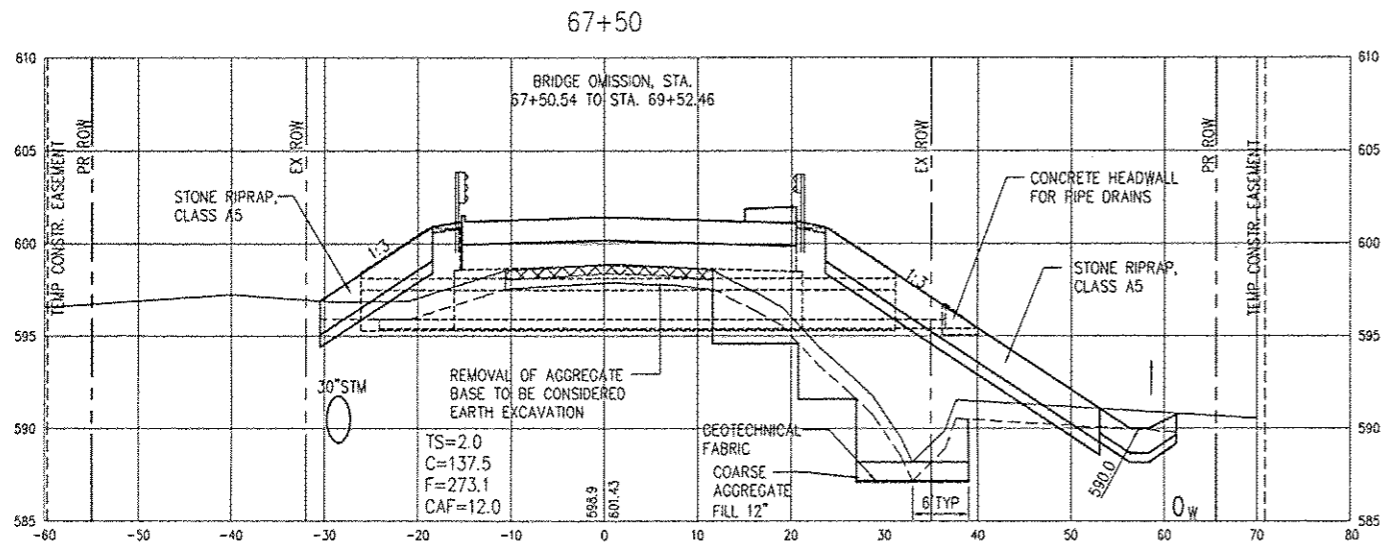
**WIGWAM HOLLOW BRIDGE REPLACEMENT  
ROADWAY CROSS SECTIONS**  
CITY OF MACOMB

232 EAST JACKSON ST. MACOMB, ILLINOIS 61455  
McDONOUGH COUNTY, ILLINOIS

FILE NAME: MACOMB\WIGWAMBRIDGE-2007\WIGWAM-09002-2007.DWG FIELD BOOK NO: 2203  
JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	40
CONTRACT NO. 89356				





REVISIONS		
NO.	ITEM	DATE

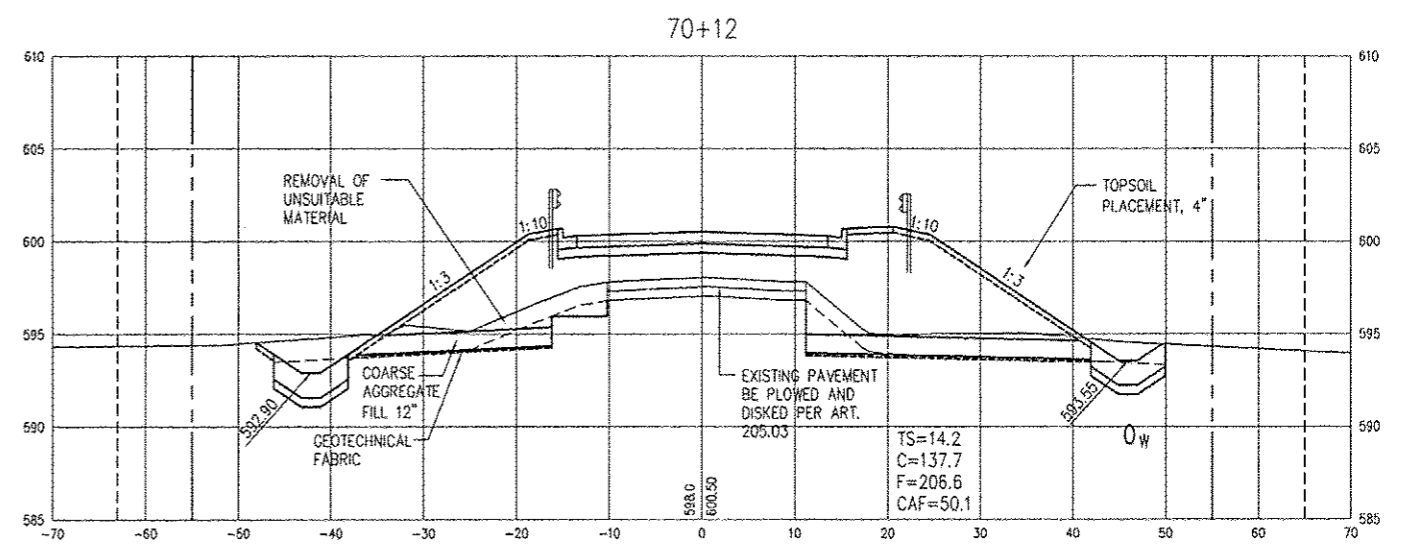
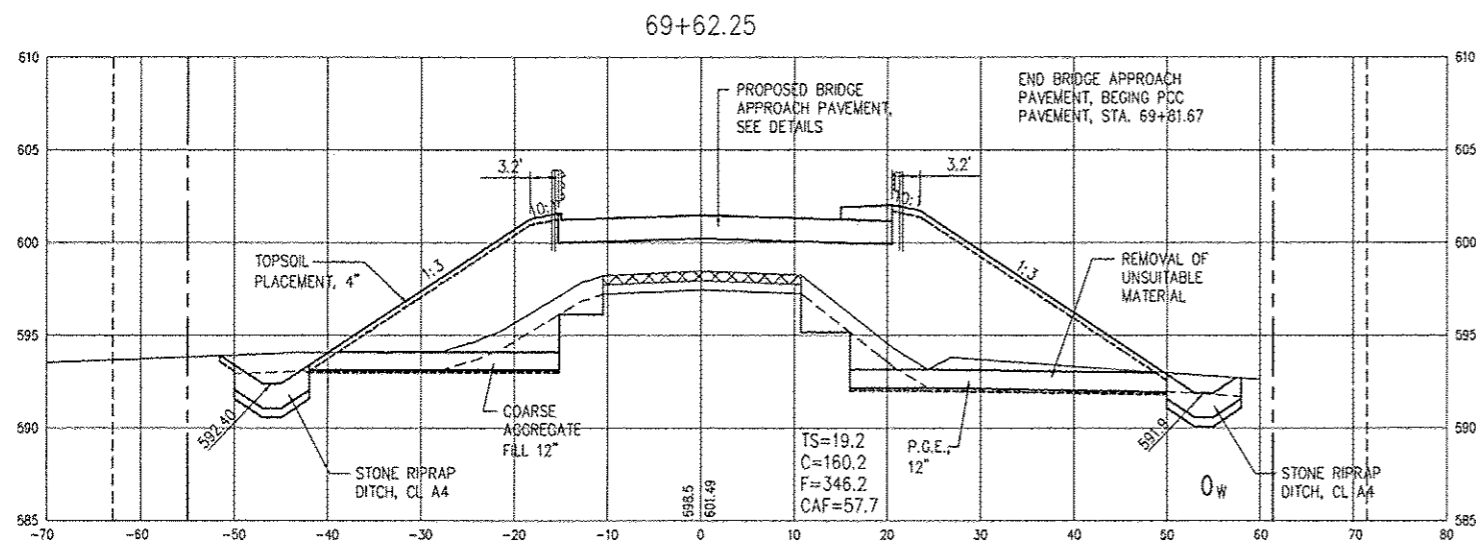
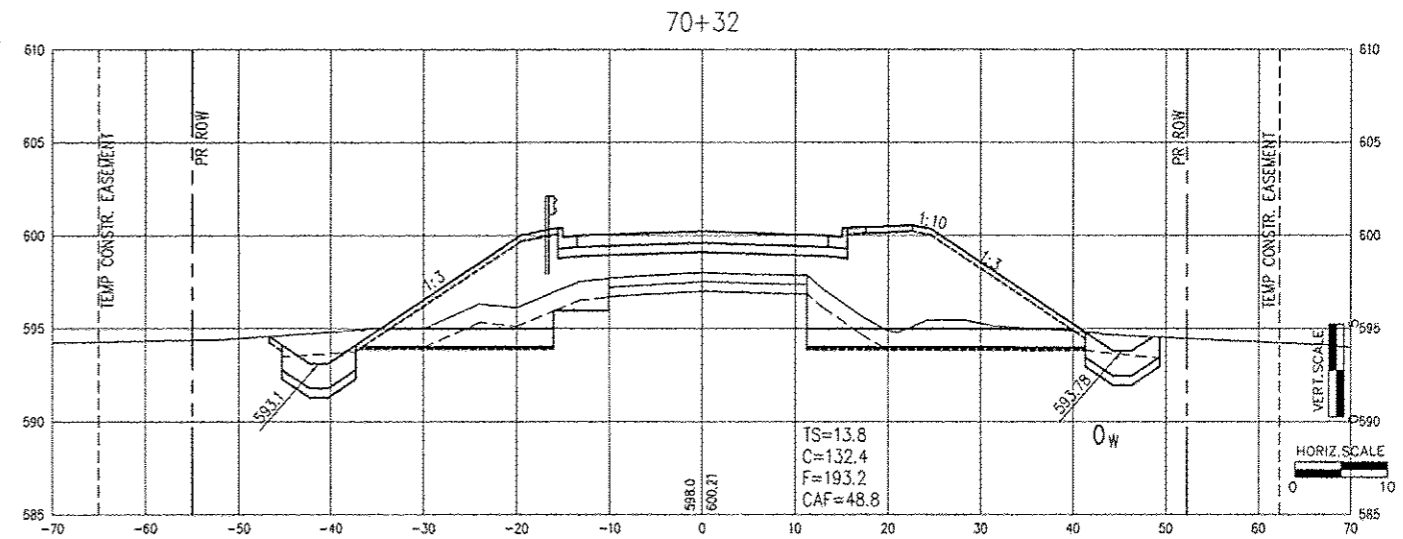
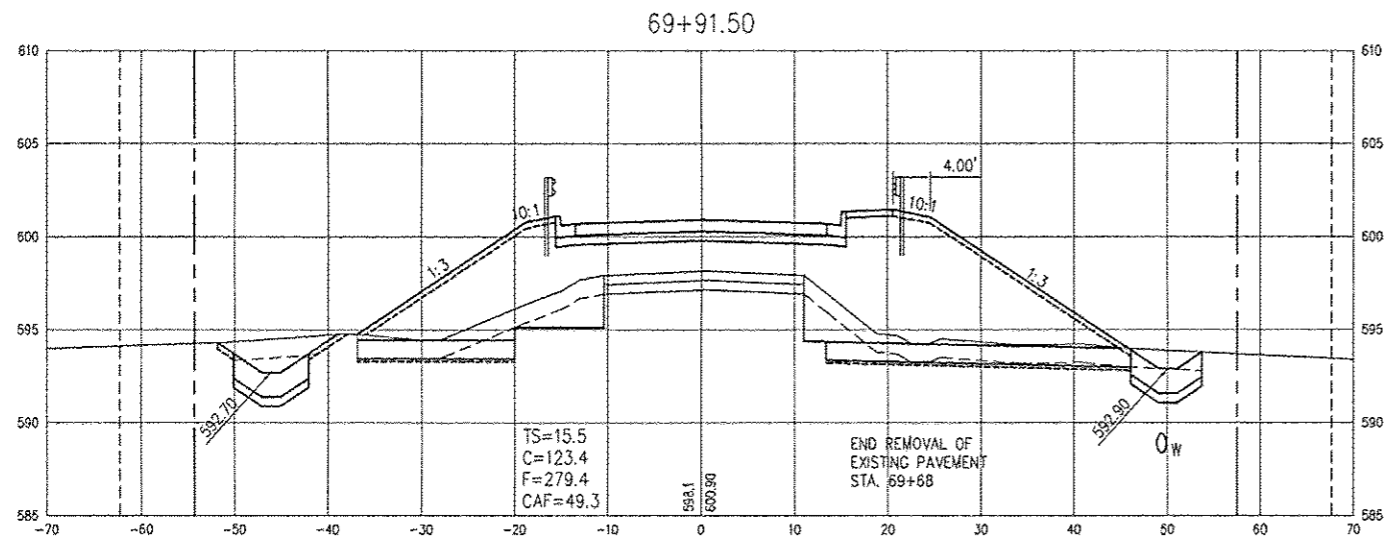
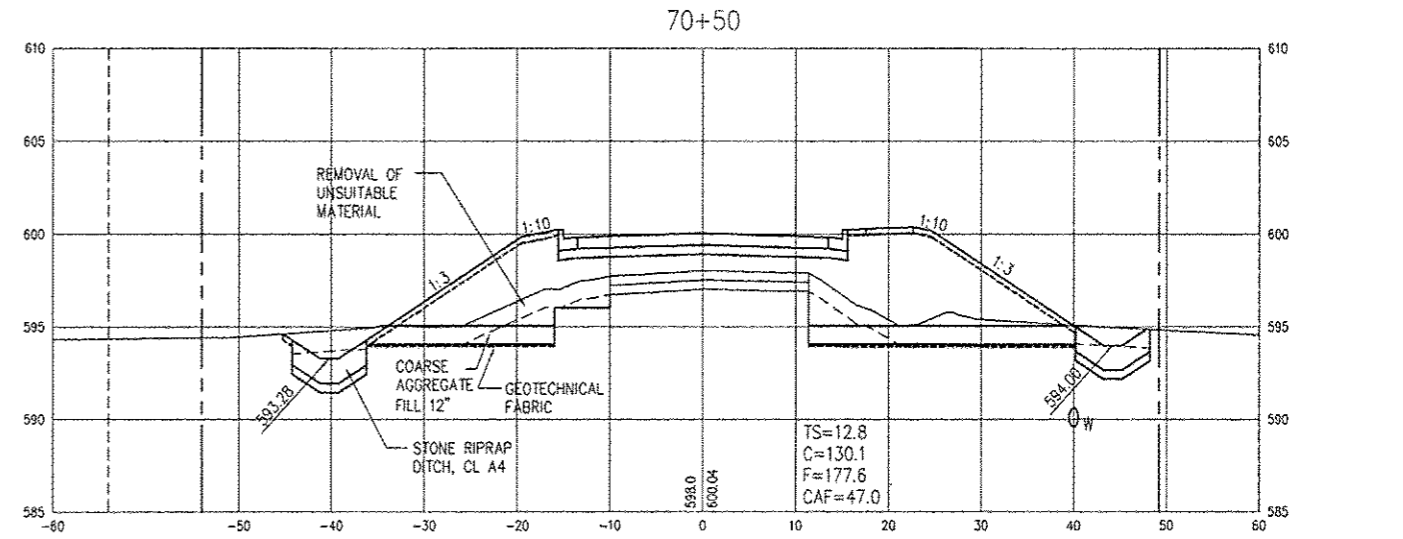
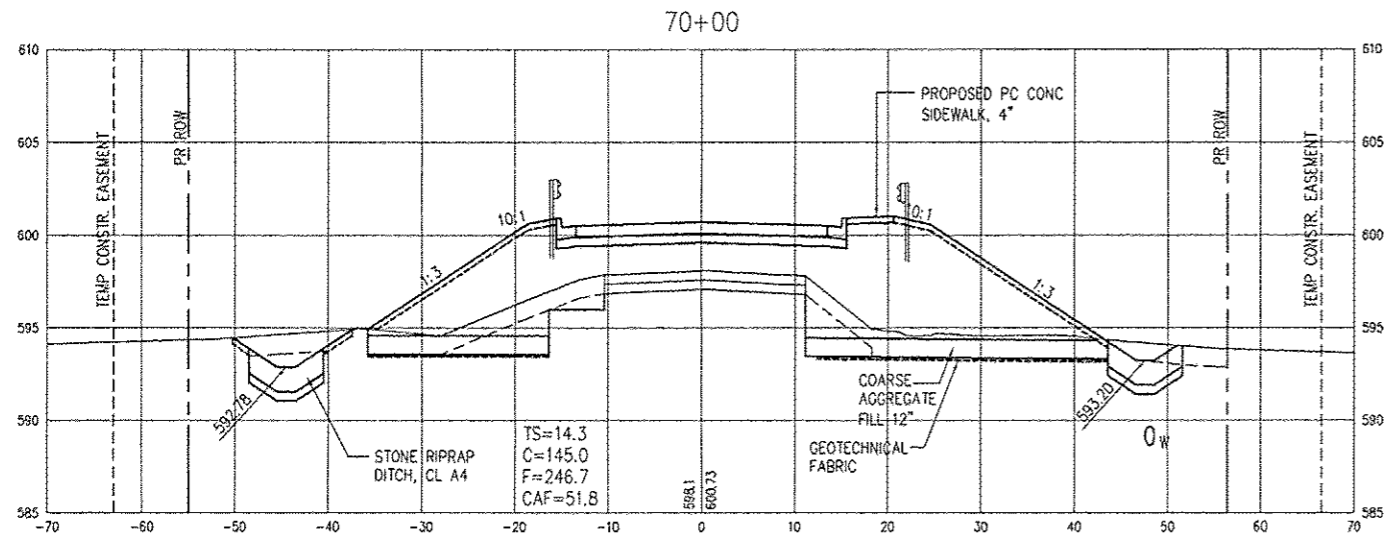
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 ROADWAY CROSS SECTIONS**  
 CITY OF MACOMB  
 232 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS  
 FILE NAME: MACOMB\WIGWAM\BRIDGE-2011\MCDON-0002-2001.DWG FIELD BOOK No: 2262 JOB NUMBER: 03-20-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	MCDONOUGH	43	41

CONTRACT NO. 89356



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NO.	ITEM	DATE

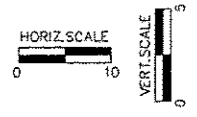
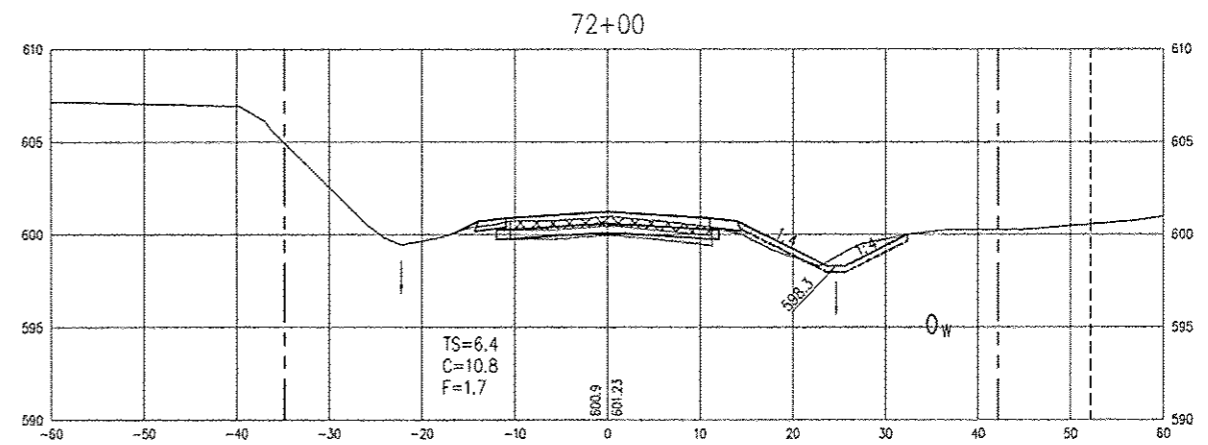
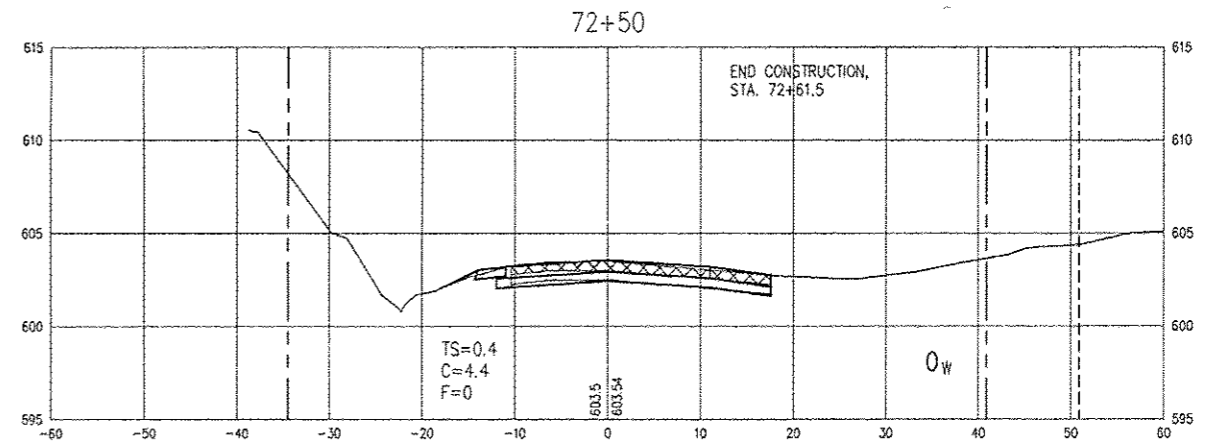
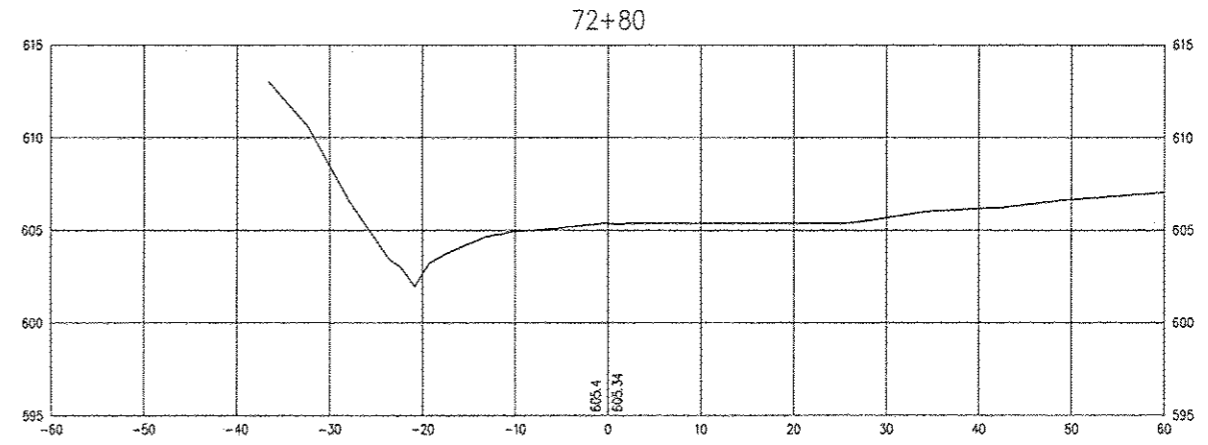
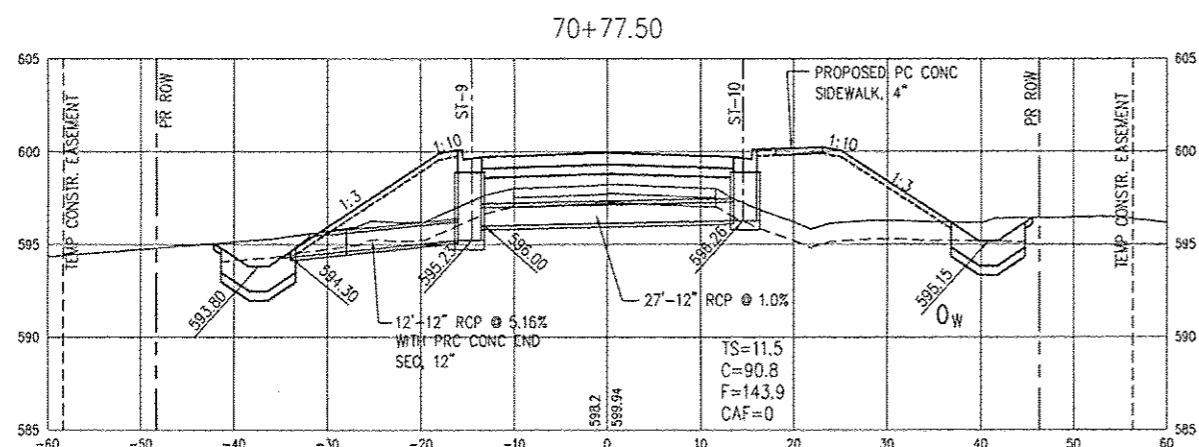
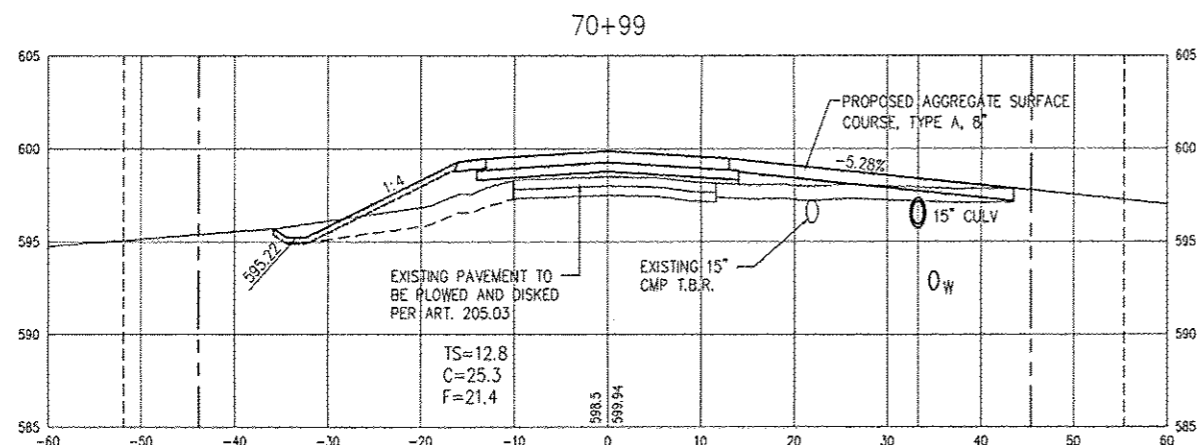
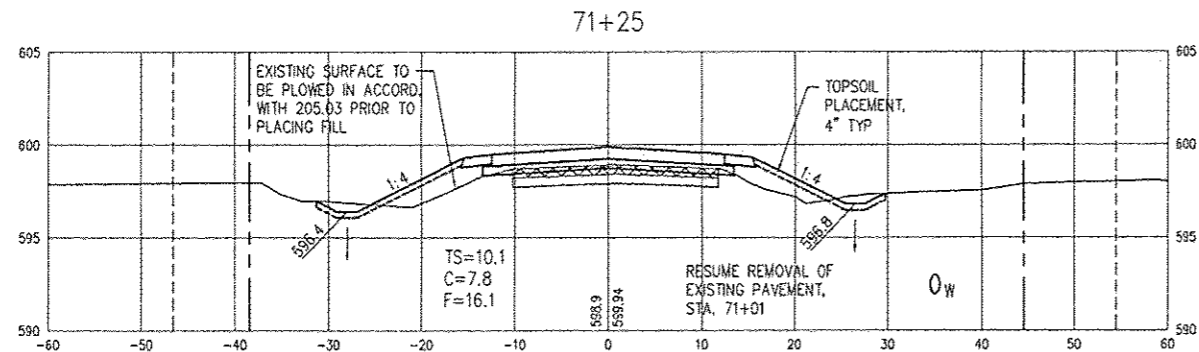
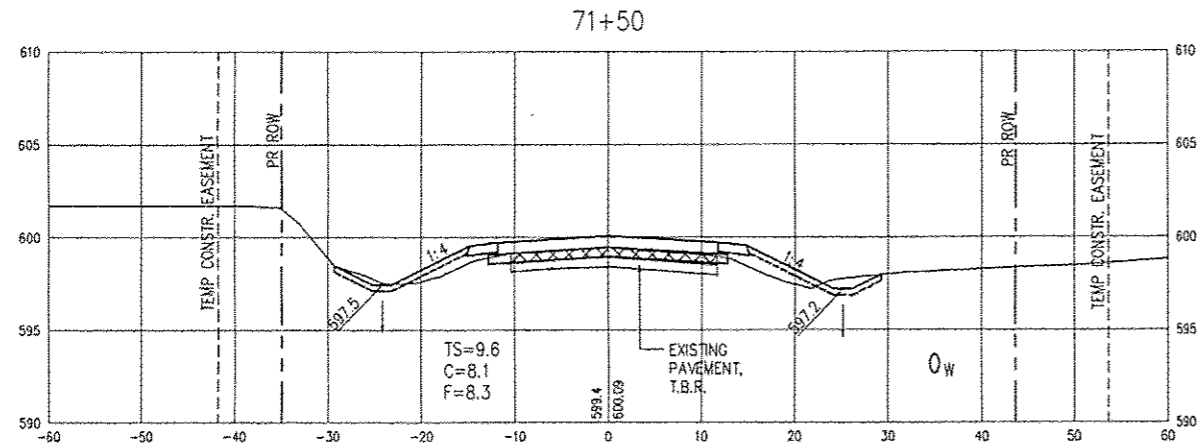
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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
 ROADWAY CROSS SECTIONS**  
 CITY OF MACOMB  
 292 EAST JACKSON ST. McDONOUGH COUNTY, ILLINOIS  
 FILE NAME: MACOMB\WIGWAM\BRIDGE-2007\WIGWAM-BRIDGE-2007.DWG FIELD BOOK No. 2262  
 JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	42

CONTRACT NO. 89356



REVISIONS		
NO.	ITEM	DATE

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**WIGWAM HOLLOW BRIDGE REPLACEMENT  
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 CITY OF MACOMB  
 292 EAST JACKSON ST. MACDONOUGH COUNTY, ILLINOIS  
 FILE NAME: MACOMB\WIGWAMBRIDGE-2007\WIGWAM-BRIDGE-2007.DWG FIELD BOOK No: 2262 JOB NUMBER: 03-28-07-104

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6923	03-00128-00-BR	McDONOUGH	43	43

CONTRACT NO. 89356