1-17-14 LETTING ITEM 055

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	*53	1
	ILLINOIS	CONTRACT NO. 74220		

* 53 + 3 = 56

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

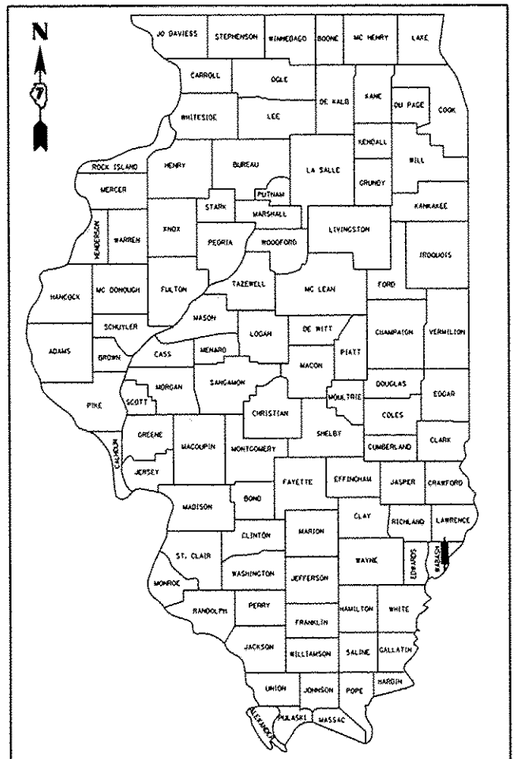
PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 332 (IL-1)
SECTION (103B)B-1
PROJECT ACNHPP-0332(118)
BRIDGE REPLACEMENT
WABASH COUNTY

C-97-008-07
IL. 1 OVER GREATHOUSE CREEK

SHEET NO.	INDEX OF SHEETS
1	COVER SHEET
2	GENERAL NOTES AND STANDARDS
3-4,4A,4B	SUMMARY OF QUANTITIES
5-9	TYPICAL SECTIONS
10-11, 11A	SCHEDULE OF QUANTITIES
12	ALIGNMENT TIES
13	PLAN & PROFILE SHEET
14	DRAINAGE PLAN
15	EROSION & SEDIMENT CONTROL PLAN
16-36	BRIDGE PLANS
37-40	EXISTING STRUCTURE PLANS
41-42	BOX CULVERT EXTENSION
43	PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS
44	ROAD CLOSURE DETAIL
45-46	DETAILS
47-53	CROSS-SECTIONS

D-97-007-07

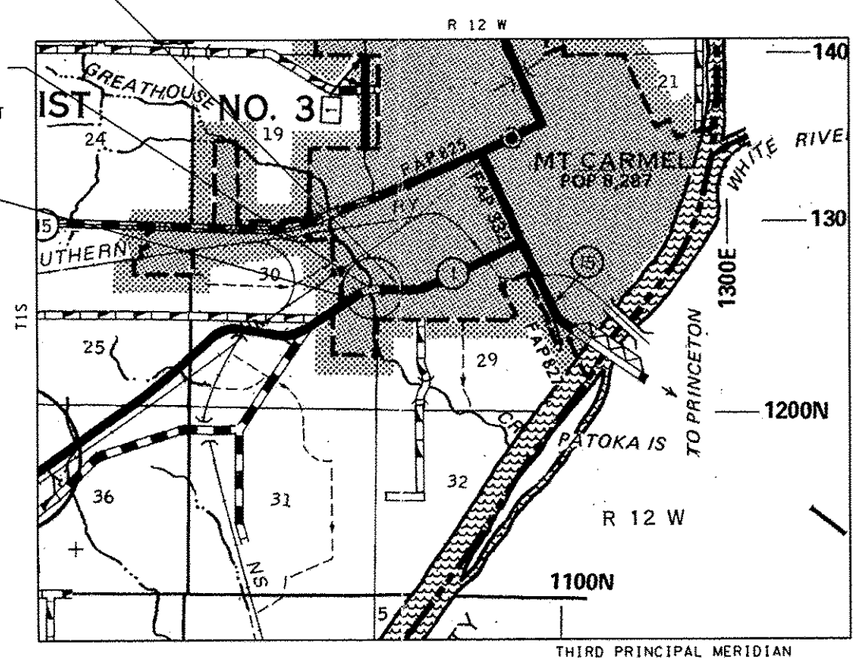


LOCATION OF SECTION INDICATED THUS: —

IMPROVEMENT ENDS
STA. 853+00.00

SECTION (103B)B-1
PROPOSED S.N. 093-0026
STATION 850+40.50
BRIDGE STRUCTURE REPLACEMENT
OVER GREATHOUSE CREEK

IMPROVEMENT BEGINS
STA. 847+50.00



LOCATION MAP

0 1 2 MILES
APPROXIMATE SCALE

GROSS LENGTH = 550 FT. = 0.1042 MI.
NET LENGTH = 550 FT. = 0.1042 MI.

FUNCTIONAL CLASSIFICATION:	OTHER PRINCIPAL ARTERIAL
DESIGN SPEED:	40 MPH
POSTED SPEED:	35 MPH
ADT:	4850 (2010)
PV:	91%
SU:	5%
MU:	4%

0 100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

PROJECT ENGINEER: TOM RONAN
217-342-8320
TOWNSHIP: MOUNT CARMEL
CONTRACT NO. 74220

DESIGN DESIGNATION
N.A.

LICENSED PROFESSIONAL ENGINEER
MICHAEL T. MATZKE
062-038471
STATE OF ILLINOIS

Michael T. Matzke
SIGNATURE
October 15, 2013
DATE
LIC. EXP. DATE : Nov. 30, 2015
QUIGG ENGINEERING, INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED Oct. 17 20 13
Roger L. Driskell /GG
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Dec 16 20 13
John D. Baranzelli, P.E. /GL
acting ENGINEER OF DESIGN AND ENVIRONMENT
Dec 16 20 13
Omer Osman, P.E. /GL
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

LIST OF ILLINOIS DOT HIGHWAY STANDARDS

STD. NO.	DESCRIPTION
000001-06	"STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS"
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
280001-07	TEMPORARY EROSION CONTROL SYSTEMS
420001-07	PAVEMENT JOINTS
420401-10	BRIDGE APPROACH PAVEMENT CONNECTOR
442201-03	CLASS C AND D PATCHES
515001-03	NAME PLATE FOR BRIDGES
542301-03	PRECAST REINFORCED CONCRETE FLARED END SECTION
542401-01	METAL END SECTION FOR PIPE CULVERTS
601101-01	CONCRETE HEADWALL FOR PIPE DRAINS
602306-03	"INLET, TYPE B"
602401-03	MANHOLE TYPE A
604006-04	FRAME & GRATE TYPE 3
606006-02	OUTLETS FOR CONCRETE CURB & GUTTER TYPE B-6.24
630001-10	STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-12	"TRAFFIC BARRIER TERMINAL, TYPE 6"
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
701001-02	"OFF-ROAD OPERATIONS, 2L, 2W, MORE THAT 15' AWAY"
701006-05	"OFF-RD OPERATIONS, 2L, 2W, 15' TO 24"" FROM PAVEMENT EDGE"
701301-04	"LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS"
701801-05	SIDEWALK CORNER OR CROSSWALK CLOSURE
701901-03	TRAFFIC CONTROL DEVICES
780001-04	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR21-9	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES - CONSTRUCTION ON RURAL LOCAL HIGHWAYS
BLR22-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES - CONSTRUCTION ON RURAL LOCAL HIGHWAYS (2L2W - ROAD CLOSED TO THRU TRAFFIC)

GENERAL NOTES

1. THE PROPOSED PROJECT IS LOCATED ON ILLINOIS ROUTE 1 IN MT. CARMEL IN WABASH COUNTY.

2. THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2012, THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2014, AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

3. THE WORK INCLUDED IN SECTION (103B)B-1 CONSISTS OF REPLACING AN EXISTING SINGLE-SPAN STRUCTURE CARRYING IL ROUTE 1 OVER CREATHOUSE CREEK AND 468 FT. OF APPROACH WORK WHICH INCLUDES; EXTENDING AN EXISTING REINFORCED CONCRETE BOX CULVERT, SHOULDER RECONSTRUCTION, STORM SEWERS/INLET, SIDEWALK, RESURFACING, GUARDRAIL, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

4. IN ADDITION TO SURVEYS, SOME OF THE PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING CONDITIONS HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

5. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HMA LIFTS.

6. EXCEPT AS NOTED ON THE PLANS, PAVEMENT GRADES SHOWN ARE AT THE TOP OF PAVEMENT SURFACES.

7. ALL SAWCUTTING OF EXISTING PAVEMENT SHALL BE CONSIDERED INCLUDED IN THE PAY ITEMS INVOLVED. THE SAW DEPTH IN THE PAVEMENT SHALL BE FULL DEPTH UNLESS OTHERWISE NOTED.

8. WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR REESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

9. THE THICKNESS OF HMA MIXTURES SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HMA MIXTURE IS PLACED.

10. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER LISTED ON THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

11. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT-MIX ASPHALT	112 LB/SQ YD/IN
ALL AGGREGATE	2.05 TONS/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.1 GAL/SQ YD
TEMPORARY EROSION CONTROL SEEDING	100 LB/ACRE

GENERAL NOTES

12. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT OF WAY ACCORDING TO ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS AND WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

13. ALL DISTURBED AREAS WITHIN THE CONSTRUCTION LIMITS SHALL BE FERTILIZED AND SEEDED. SEEDING SHALL BE CLASS 2A ACCORDING TO THE APPLICABLE ARTICLES OF SECTION 250 OF THE STANDARD SPECIFICATIONS. SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE JULIE NUMBER IS 800-892-0123. A MINIMUM OF 48 HOURS ADVANCE NOTICE IS REQUIRED.

15. ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

16. TREES SHALL BE PRESERVED THROUGHOUT THIS SECTION EXCEPT AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. GENERALLY, TREES OUTSIDE THE CLEAR ZONE, AND WHICH DO NOT INTERFERE WITH CONSTRUCTION, SHALL NOT BE DISTURBED.

17. FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.

18. THE CONTRACTOR SHALL PROVIDED INTERNET ACCESSIBILITY TO THE HMA PLANT QUALITY CONTROL LAB SO THAT HMA PLANT REPORTS CAN BE EMAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL HOT-MIX ASPHALT ITEMS.

19. THE CONTRACTOR SHALL USE EITHER RC-70, SS1H, OR SS1HP, APPLIED AT THE RATE DIRECTED BY THE ENGINEER, FOR THE PAY ITEM BITUMINOUS MATERIALS (PRIME COAT).

20. AGGREGATE SURFACE COURSE AND AGGREGATE SHOULDERS, TYPE B SHALL BE CRUSHED STONE OR CRUSHED CONCRETE.

21. ALL WORK NECESSARY TO ATTACH THE PIPE DRAIN TO THE ABUTMENT DRAIN PIPE, TRENCHING IN THE PIPE DRAINS AND INSTALLING THE PIPE DRAIN TO THE CONCRETE HEADWALLS IS INCLUDED IN THE PAY ITEM FOR PIPE DRAINS OF THE DIAMETER SPECIFIED.

22. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL ROUTE SIGNS SUCH AS STOP SIGNS, SPEED LIMIT SIGNS, ETC. AND THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL PAY ITEMS.

23. THE TREES LISTED IN THE TREE SCHEDULE SHALL BE APPROVED AND HAND PLANTED AT LOCATIONS AS DIRECTED BY THE DISTRICT ROADSIDE MAINTENANCE TECHNICIAN, (217)-342-8281. THE CONTRACTOR SHALL BE REQUIRED TO GIVE TWO WEEKS NOTICE TO SCHEDULE A TIME FOR THE LOCATIONS TO BE STAKED AND ON THE SAME DAY THE TREES SHALL BE DELIVERED TO THE JOBSITE FOR ACCEPTANCE OF THE PLANTING MATERIAL BY THE DISTRICT ROADSIDE MAINTENANCE TECHNICIAN.

24. BASED ON CURRENT INFORMATION, THE EXISTING PAVEMENT SECTION CONSISTS OF 9"-6"-9" PCC WITH APPROXIMATELY 4" OF HMA OVERLAYS. ASSUME A PAVEMENT REMOVAL THICKNESS OF 13" FOR THE PAY ITEM "PAVEMENT REMOVAL".

25. THE TOTAL QUANTITY OF PAINT PAVEMENT MARKING 4" CONSISTS OF 148 FEET OF YELLOW AND 962 FEET OF WHITE. THE TOTAL QUANTITY OF PAINT PAVEMENT MARKING 24" CONSISTS OF 23 FEET OF WHITE.

HMA MIXTURES REQUIREMENTS

APPLICATION(S):	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70	HOT-MIX ASPHALT SHOULDERS	HOT-MIX ASPHALT SHOULDERS	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N70
MIXTURE USE(S):	SURFACE COURSE, (1½")	LEVEL BINDER (MACHINE METHOD ¾")	BRIDGE APPROACH CONNECTOR (FLEXIBLE)	CLASS D PATCHING	HMA SHOULDERS (BOTTOM LIFT)	HMA SHOULDERS (TOP LIFT)	BASE COURSE WIDENING 10"
AC/PG:	PG64-22	PG64-22	PG64-22	PG64-22	PG64-22	PG64-22	PG64-22
RAP % (MAX.)	10	10	10	10	50	50	10
DESIGN AIR VOIDS:	4.0% AT N DESIGN =70	4.0% AT N DESIGN =70	4.0% AT N DESIGN =70	4.0% AT N DESIGN =70	4.0% AT N DESIGN =30	4.0% AT N DESIGN =30	4.0% AT N DESIGN =30
MIXTURE COMPOSITION:	IL-9.5	IL-9.5	IL-19.0	IL-19.0	IL-19.0L	IL-9.5L	IL-19.0
FRICTION AGGREGATE:	MIXTURE C	N/A	N/A	N/A	N/A	MIXTURE C	N/A

IF RAP OPTION IS SELECTED, THE ASPHALT CEMENT GRADE MAY NEED TO BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

COMMITMENTS

1. NONE AS OF DECEMBER 20, 2010. REFER TO COMMITMENT FILE FOR ANY COMMITMENTS AFTER THIS DATE

FILE NAME = c:\pw_work\pwidot\steffenmk\d0122333\D774220-sht-gennote.dgn	USER NAME = steffenmk	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 '/ in.	CHECKED - MTM	REVISED -
	PLOT DATE = 10/17/2013	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND STANDARDS

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	2
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
20100110	TREE REMOVAL (6 TO 15 UNITS DIAMETER)	UNIT	217	217		
20100210	TREE REMOVAL (OVER 15 UNITS DIAMETER)	UNIT	179	179		
20200100	EARTH EXCAVATION	CU YD	2065	2065		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	15.2	15.2		
20400800	FURNISHED EXCAVATION	CU YD	579	579		
20800150	TRENCH BACKFILL	CU YD	72	72		
* 25100630	EROSION CONTROL BLANKET	SQ YD	2029	2029		
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	126	126		
28000305	TEMPORARY DITCH CHECKS	FOOT	72	72		
28000400	PERIMETER EROSION BARRIER	FOOT	1363	1363		
28000500	INLET AND PIPE PROTECTION	EACH	9	9		
28001000	AGGREGATE (EROSION CONTROL)	TON	41	41		
28100107	STONE RIPRAP, CLASS A4	SQ YD	2188	1338	850	

13

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
28200200	FILTER FABRIC	SQ YD	2188	1338	850	
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	106	106		
35600716	HOT-MIX ASPHALT BASE COURSE WIDENING, 10"	SQ YD	31	31		
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	169	169		
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	95	95		
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	298	298		
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	141	141		
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	56	56		
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	1761	1761		
44000100	PAVEMENT REMOVAL	SQ YD	309	309		
44000400	GUTTER REMOVAL	FOOT	200	200		
44000600	SIDEWALK REMOVAL	SQ FT	1528	1528		

12

* SPECIALTY ITEM

FILE NAME = c:\pw_work\pwidot\staffenmk\d0122333\D774228-sht-500.dgn	USER NAME = staffenmk	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.2000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/17/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103BJB-1)	WABASH	53	3
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
44201789	CLASS D PATCHES, TYPE II, 12 INCH	SQ YD	15	15		
48101500	AGGREGATE SHOULDERS, TYPE B 6"	SQ YD	443	443		
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	208	208		
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1		1	
50105220	PIPE CULVERT REMOVAL	FOOT	79	79		
50200100	STRUCTURE EXCAVATION	CU YD	148		148	
50200300	COFFERDAM EXCAVATION	CU YD	98		98	
50201121	COFFERDAM (TYPE 2) (LOCATION - 1)	EACH	1		1	
50201122	COFFERDAM (TYPE 2) (LOCATION - 2)	EACH	1		1	
50300100	FLOOR DRAINS	EACH	4		4	
50300225	CONCRETE STRUCTURES	CU YD	200.9		200.9	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	337.4		337.4	
50300260	BRIDGE DECK GROOVING	SQ YD	522		522	
50300280	CONCRETE ENCASEMENT	CU YD	18.6		18.6	

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
50300300	PROTECTIVE COAT	SQ YD	730		730	
50800105	REINFORCEMENT BARS	POUND	6380	6380		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	87490	130	87360	
50800530	MECHANICAL SPLICERS	EACH	56		56	
50901750	PARAPET RAILING	FOOT	81		81	
51201800	FURNISHING STEEL PILES HP14X73	FOOT	2128		2128	
51202305	DRIVING PILES	FOOT	2128		2128	
51203800	TEST PILE STEEL HP14X73	EACH	4		4	
51500100	NAME PLATES	EACH	1		1	
54002020	EXPANSION BOLTS 3/4 INCH	EACH	26	26		
54003000	CONCRETE BOX CULVERTS	CU YD	40.4	40.4		
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	2	2		

14

* SPECIALTY ITEM

B

FILE NAME = c:\pw_work\pwidot\staffenmk\d0122333\D74220-sht-S00.dgn	USER NAME = staffenmk	DESIGNED -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	DRAWN -	REVISED -
Default	PLOT DATE = 10/17/2013	CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	4
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
54215559	METAL END SECTIONS 24"	EACH	2	2		
54248510	CONCRETE COLLAR	CU YD	1.7	1.7		
542D1069	PIPE CULVERTS, CLASS D, TYPE 2 24"	FOOT	60	60		
550A0360	STORM SEWERS, CLASS A, TYPE 2 15"	FOOT	321	321		
550A0410	STORM SEWERS, CLASS A, TYPE 2 24"	FOOT	35	35		
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	50		50	
60100905	PIPE DRAINS 4"	FOOT	26	26		
60218500	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 3 FRAME AND GRATE	EACH	2	2		
60240220	INLETS, TYPE B, TYPE 3 FRAME AND GRATE	EACH	6	6		
60500060	REMOVING INLETS	EACH	2	2		
60600095	CLASS SI CONCRETE (OUTLET)	CU YD	2.4	2.4		
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	325	325		

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
* 63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6 FOOT POSTS	FOOT	225	225		
* 63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4		
* 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4		
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	9	9		
67100100	MOBILIZATION	L SUM	1	0.5	0.5	
* 78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	23	23		
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1110	1110		
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	6	6		
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	1	1		
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8	8		
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4		
* A2006516	TREE, QUERCUS BICOLOR (SWAMP WHITE OAK), 2" CALIPER, BALLED AND BURLAPPED	EACH	4	4		

12

* SPECIALTY ITEM

12

FILE NAME = c:\pw_work\pwidot\staffenmk\d0122333\D74228-sht-SQQ.dgn	USER NAME = staffenmk	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
Default	PLOT DATE = 10/17/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103)B-1	WABASH	53	4A
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
*	B2001116	TREE, CERCIS CANADENSIS (EASTERN REDBUD), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	12	12		
*	B2006016	TREE, SYRINGA PEKINENSIS (PEKING LILAC), 2" CALIPER, TREE FORM, BALLED AND BURLAPPED	EACH	7	7		
*	D2002972	EVERGREEN, PINUS STROBUS (EASTERN WHITE PINE), 6' HEIGHT, BALLED AND BURLAPPED	EACH	6	6		
	X2070304	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	68	68		
*	X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.5	0.5		
	X4020500	AGGREGATE SURFACE COURSE, TYPE B 6"	SQ YD	133	133		
	X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	1340	1340		
*	X6330725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	50	50		
	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	1		
	X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
*	X7830090	GROOVING FOR RECESSED PAVEMENT MARKING 25"	FOOT	23	23		

SUMMARY OF QUANTITIES

	CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 80% FEDERAL 20% STATE ROADWAY 0004	STRUCTURES 0011	
	Z0005010	HOT-MIX ASPHALT FOR PATCHING POTHOLES (COLD MIX)	TON	3	3		
	Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	144		144	
*	Z0054505	ROCK FILL - REPLACEMENT	TON	31.1	31.1		
	~~Z0076600~~	~~TRAINEES~~	~~HOUR~~	~~500~~	~~250~~	~~250~~	

* SPECIALTY ITEM

FILE NAME = c:\pw_work\pwidot\staffenmk\d0122333\D74220-sht-SOO.dgn	USER NAME = staffenmk	DESIGNED -	REVISED -
Default		DRAWN -	REVISED -
	PLOT SCALE = 100.0200 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 10/17/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

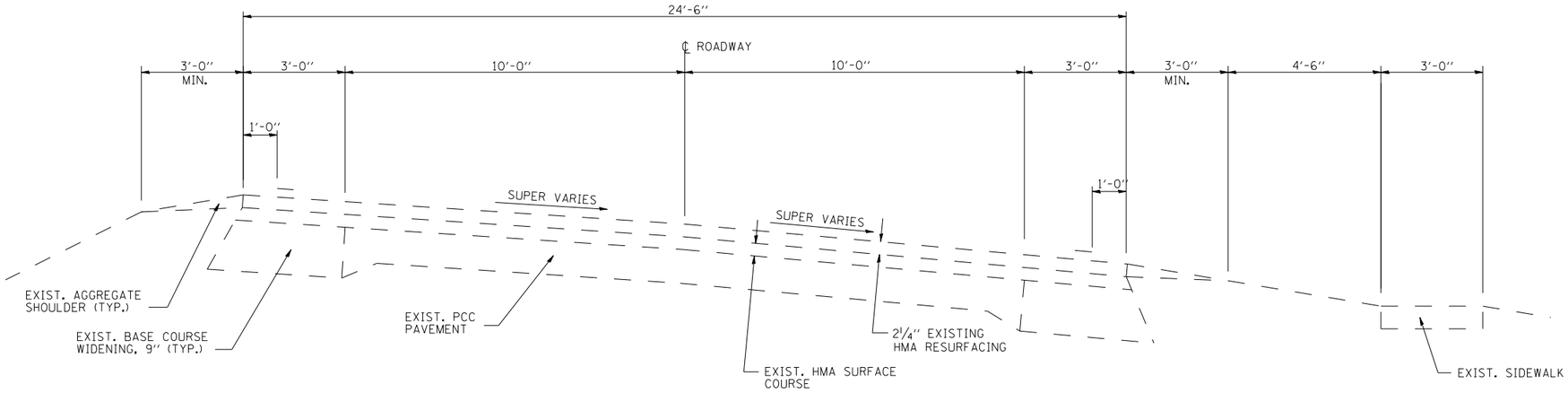
SUMMARY OF QUANTITIES

SCALE: N/A | SHEET 4 OF 4 SHEETS | STA. | TO STA.

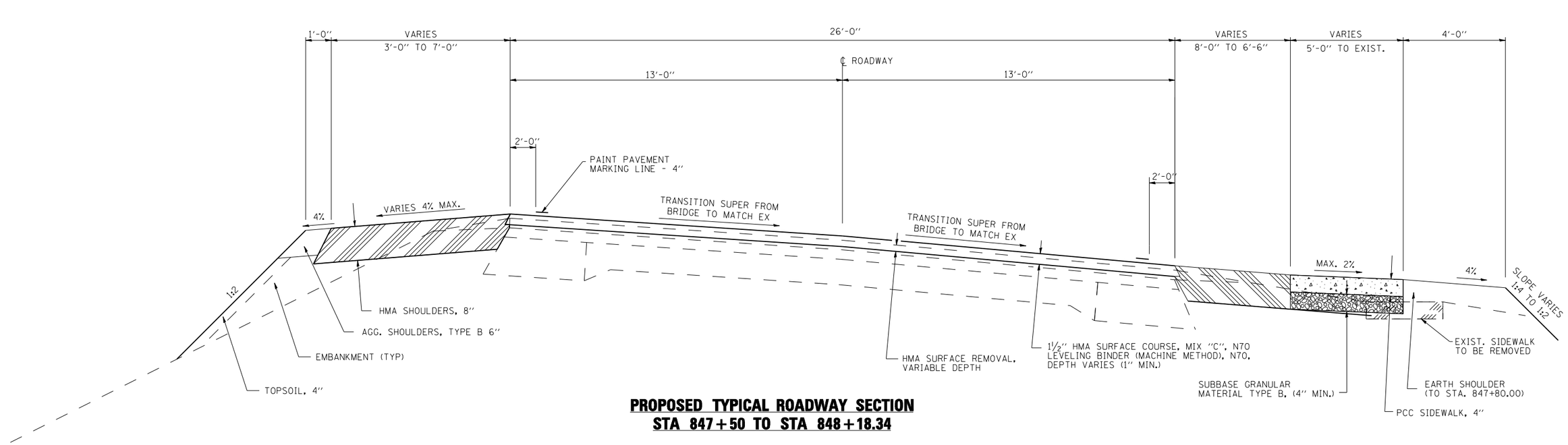
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	48

CONTRACT NO. 74220

ILLINOIS FED. AID PROJECT



EXISTING TYPICAL ROADWAY SECTION WEST OF STRUCTURE



PROPOSED TYPICAL ROADWAY SECTION STA 847+50 TO STA 848+18.34

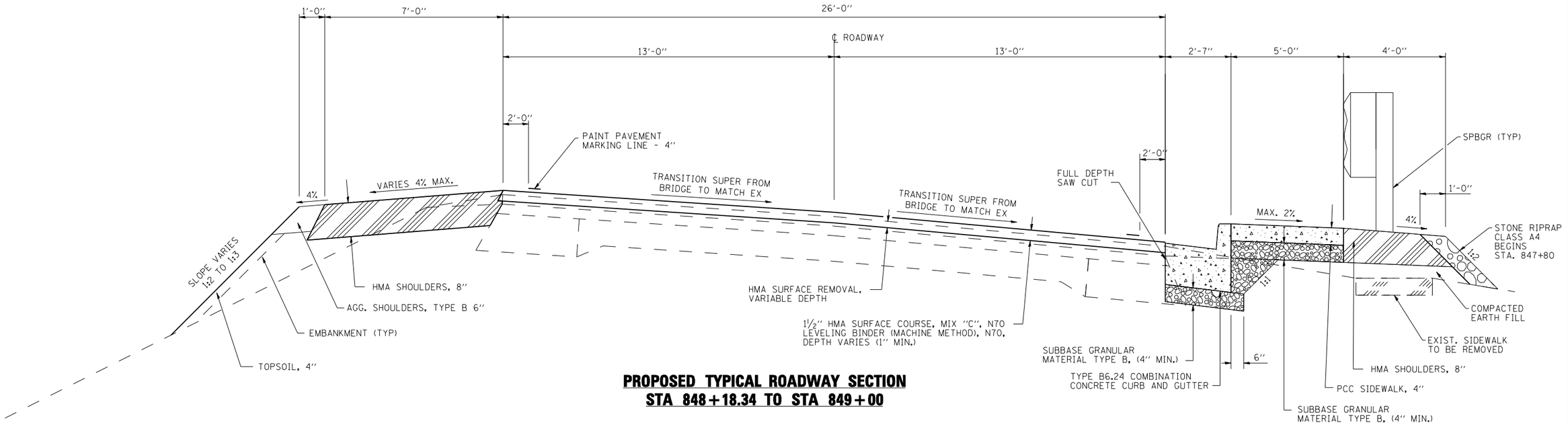
FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-typical.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

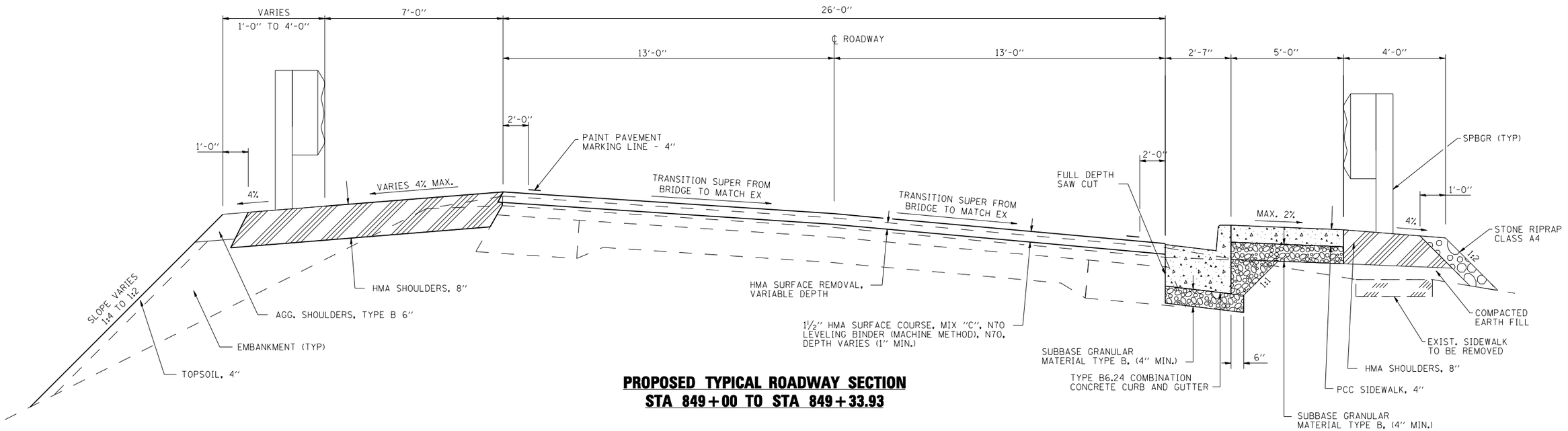
TYPICAL SECTIONS

SCALE: NTS | SHEET NO. 1 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	5
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL ROADWAY SECTION
STA 848+18.34 TO STA 849+00



PROPOSED TYPICAL ROADWAY SECTION
STA 849+00 TO STA 849+33.93

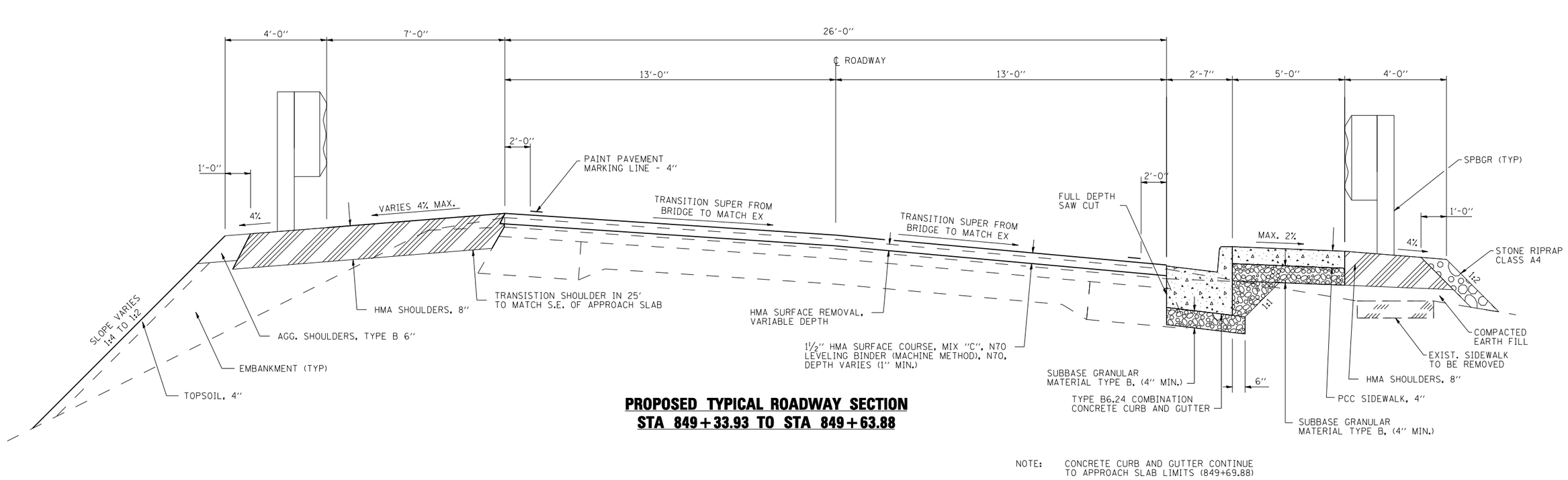
FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-typical.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	DRAWN - JJS	REVISED -
	PLOT DATE = 12/15/2011	CHECKED - MTM	REVISED -
		DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: NTS | SHEET NO. 2 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	6
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



PROPOSED TYPICAL ROADWAY SECTION
STA 849+33.93 TO STA 849+63.88

NOTE: CONCRETE CURB AND GUTTER CONTINUE TO APPROACH SLAB LIMITS (849+69.88)

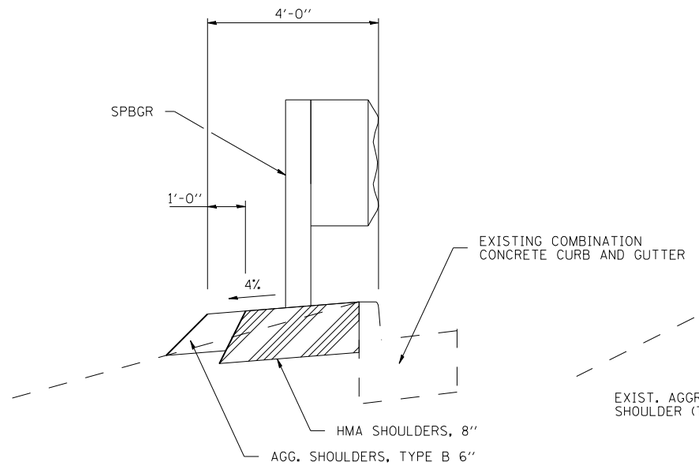
FILE NAME = Y:\IDOT\933-12_74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-typicals.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

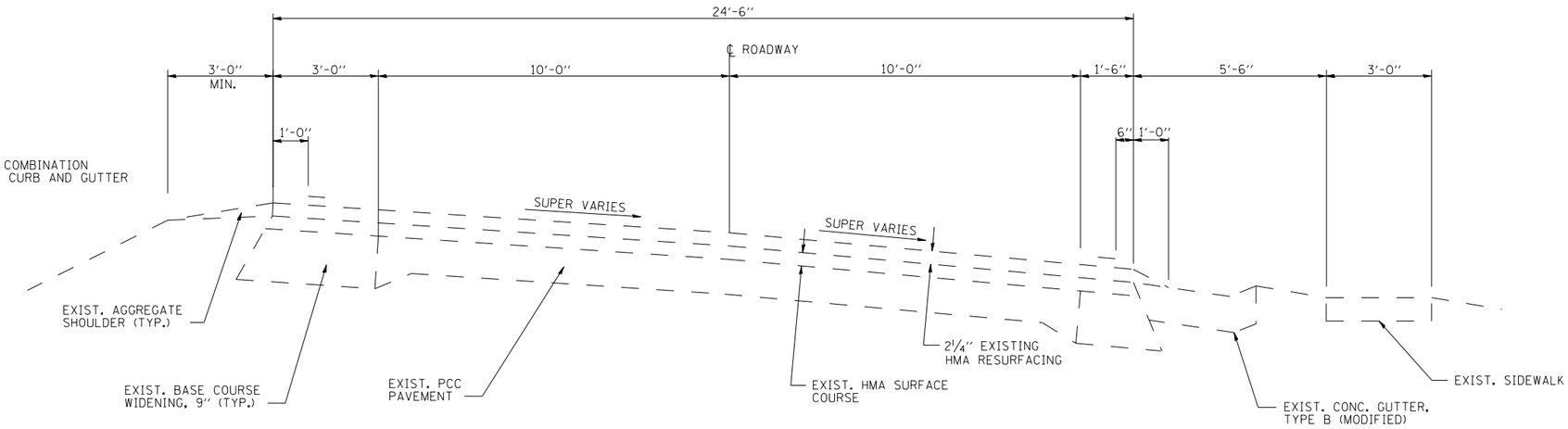
TYPICAL SECTIONS

SCALE: NTS | SHEET NO. 3 OF 5 SHEETS | STA. | TO STA.

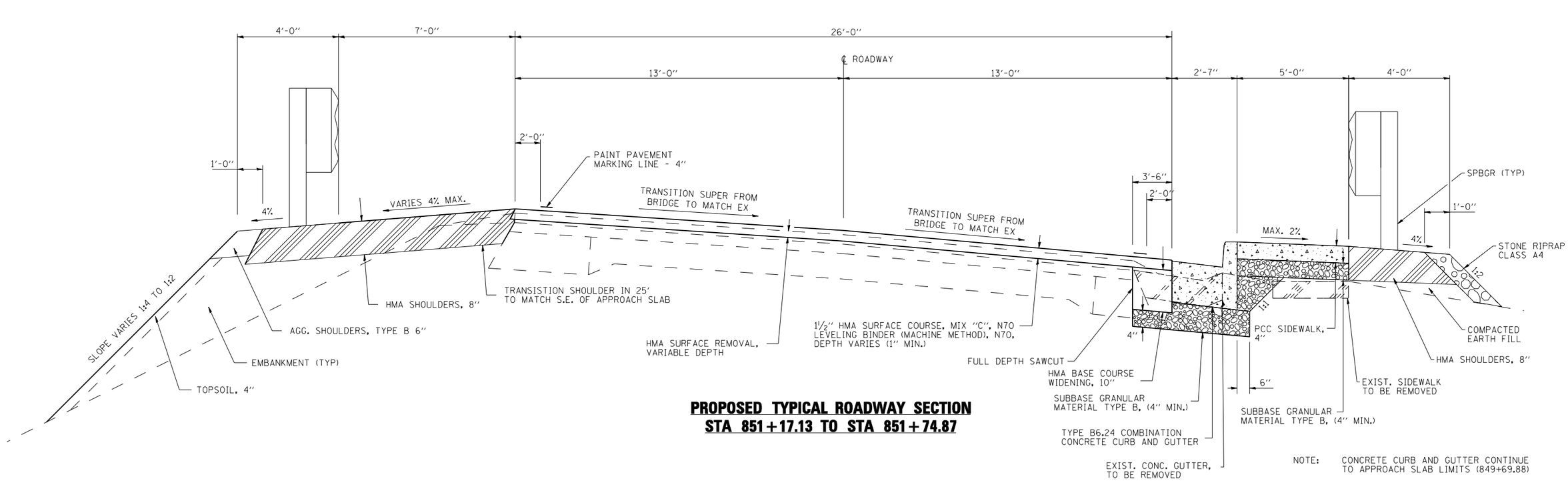
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	7
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



TYPICAL OAK STREET GUARDRAIL



EXISTING TYPICAL ROADWAY SECTION EAST OF STRUCTURE



PROPOSED TYPICAL ROADWAY SECTION
STA 851+17.13 TO STA 851+74.87

NOTE: CONCRETE CURB AND GUTTER CONTINUE TO APPROACH SLAB LIMITS (849+69.88)

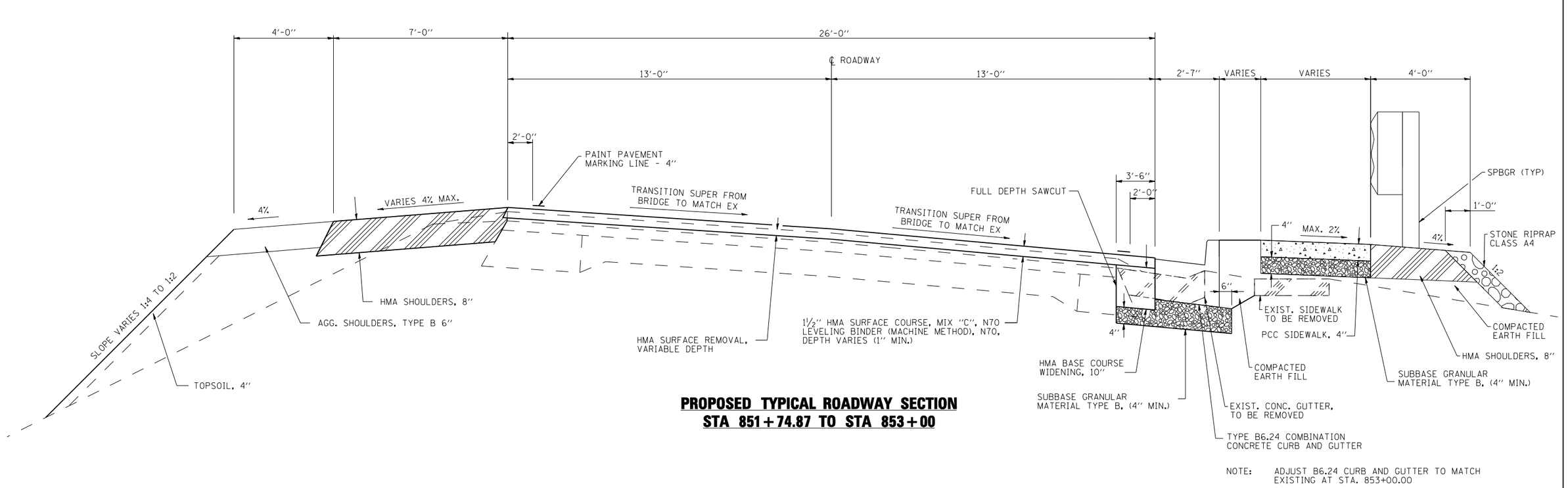
FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-typical.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: NTS | SHEET NO. 4 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	8
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		



PROPOSED TYPICAL ROADWAY SECTION
STA 851+74.87 TO STA 853+00

NOTE: ADJUST B6.24 CURB AND GUTTER TO MATCH EXISTING AT STA. 853+00.00

FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-typicals.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: NTS | SHEET NO. 5 OF 5 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	9
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

STEEL PLATE BEAM GUARDRAIL SCHEDULE

LOCATION	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6' POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TERMINAL MARKER-DIRECT APPLIED	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	GUARDRAIL MARKERS, TYPE A	GUARDRAIL MARKERS, TYPE B
	FOOT	EACH	EACH	EACH	FOOT	EACH	EACH
LT. STA. 849+20.03 TO STA. 849+57.53	37.5					2	
RT. STA. 848+58.74 TO STA. 849+46.24	87.5					2	
RT. STA. 851+34.22 TO STA. 851+71.72	37.5					1	
LT. STA. 10+14.36 TO STA. 10+64.00 (OAK ST.)	62.5					1	
ON BRIDGE							2
RT. STA. 849+46.24 TO STA. 849+94.85		1					
RT. STA. 850+86.16 TO STA. 851+34.22		1					
LT. STA. 849+57.53 TO STA. 850+02.74		1					
LT. STA. 850+78.26 TO STA. 851+23.85 (10+14.36)		1					
RT. STA. 848+08.74 TO STA. 848+58.74			1	1			
RT. STA. 851+71.72 TO STA. 852+21.72			1	1			
LT. STA. 848+70.03 TO STA. 849+20.03			1	1			
LT. STA. 10+55.64 TO STA. 11+14.00 (OAK ST.)			1	1			
LT. STA. 851+23.85 TO STA. 851+60.25					50		
TOTAL	225	4	4	4	50	6	2

SIDEWALK SCHEDULE

LOCATION	PCC SIDEWALK 4"	SIDEWALK REMOVAL
	SQ FT	SQ FT
RT. STA. 847+50.00 TO STA. 847+64.00	42	
RT. STA. 847+64.00 TO STA. 848+24.65	231	
RT. STA. 848+24.65 TO STA. 849+69.88	726	
RT. STA. 851+11.13 TO STA. 851+74.87	319	
RT. STA. 851+74.87 TO STA. 853+00.00	443	
RT. STA. 847+50.00 TO STA. 850+11.68		785
RT. STA. 850+52.24 TO STA. 853+00.00		743
TOTAL	1761	1528

CURB AND GUTTER SCHEDULE

LOCATION	COMBINATION CONC. CURB AND GUTTER, TYPE B-6.24	GUTTER REMOVAL	COMBINATION CONC. CURB AND GUTTER OUTLET (SPECIAL)
	FOOT	FOOT	EACH
RT. STA. 848+18.34 TO STA. 849+69.88	144		
RT. STA. 851+11.13 TO STA. 853+00.00	181		
RT. STA. 851+00.00 TO STA. 853+00.00		200	
RT. STA. 847+92.16			1
TOTAL	325	200	1

PAVEMENT REMOVAL SCHEDULE

LOCATION	HMA SURFACE REMOVAL, VARIABLE DEPTH	PAVEMENT REMOVAL	HMA SURFACE REMOVAL - BUTT JOINT
	SQ YD	SQ YD	SQ YD
STA. 847+80.00 TO STA. 849+63.88	501		
STA. 851+17.13 TO STA. 852+70.00	416		
OAK STREET			
STA. 10+13.21 TO STA. 10+54.00	423		
STA. 10+54.00 TO STA. 10+84.00			125
STA. 849+63.88 TO STA. 850+12.17		131	
STA. 850+51.83 TO STA. 851+17.13		178	
STA. 847+50.00 TO STA. 847+80.00			87
STA. 852+70.00 TO STA. 853+00.00			86
TOTAL	1340	309	298

DRAINAGE SCHEDULE

STRUCTURE NUMBER	LOCATION	STORM SEWER, CLASS A, TYPE 2 15"	STORM SEWER, CLASS A, TYPE 2 24"	INLET, TYPE B, TYPE 3 FRAME AND GRATE	PRECAST REINF. CONC. FLARED END SECTIONS 15"	MANHOLES, TYPE A, 4' DIAM., TYPE 3 FRAME AND GRATE	MANHOLES, TYPE A, 4' DIAM., TYPE 1 FRAME, CLOSED LID	REMOVING INLETS	PIPE CULVERT, CLASS D, TYPE 2, 24"	METAL END SECTIONS 24"	PIPE CULVERT REMOVAL	PIPE DRAINS 4"	TRENCH BACKFILL	CONC. COLLAR
		FOOT	FOOT	EACH	EACH	EACH	EACH	EACH	FOOT	EACH	FOOT	FOOT	CU YD	CU YD
A4 TO A3	RT. STA. 848+17.44 TO 848+67.90	47												
A3 TO 2	RT. STA. 848+67.90 TO 848+72.40	20												
A3 TO A2	RT. STA. 848+67.90 TO 849+18.30	47												
A2 TO A1	RT. STA. 849+18.30 TO 849+62.65	41												
B1 TO 3	RT. STA. 851+18.27 TO 850+93.62	33												
B1 TO B2	RT. STA. 851+18.27 TO 851+62.62	41												
B2 TO B3	RT. STA. 851+62.62 TO 852+13.01	47												
B3 TO B4	RT. STA. 852+13.01 TO 852+63.40	47												
	RT. STA. 851+01.55							1						
	RT. STA. 852+41.33							1						
	LT. 37.77', STA. 848+39.00								60					
	LT. 34.00', STA. 848+11.35									1				
	LT. 42.36' STA. 848+70.95									1				
	LT. 52.32' STA. 849+19.63										55			
	RT. 37.47' STA. 851+02.31										24			
	A1-A2, A2-A3, A3-A5												36	
	B1-B3, B3-B4, B4-B5												36	
	RT. STA. 851+39.00 STA. 851+67.00		35											
	RT. STA. 849+97.88											10		
	RT. STA. 850+83.13											16		
	RT. 35', STA. 851+63.60													1.7
A1	RT. 15', STA. 849+62.65			1										
A2	RT. 15', STA. 849+18.30			1										
A3	RT. 15', STA. 848+67.90					1								
A4	RT. 15', STA. 848+17.44			1										
B1	RT. 15', STA. 851+18.27					1								
B2	RT. 15', STA. 851+62.62			1										
B3	RT. 15', STA. 852+13.01			1										
B4	RT. 15', STA. 852+63.40			1										
2	RT. 35', STA. 848+77.40				1									
C1	RT. 42', STA. 850+93.62				1									
	RT. 35.81', STA. 851+64.25						1							
TOTAL		323	35	6	2	2	1	2	60	2	79	26	72	1.7

AGGREGATE SCHEDULE

LOCATION	SUBBASE GRANULAR MATERIAL, TYPE B	AGGREGATE SURFACE COURSE, TYPE B 6"
	TONS	SQ YD
RT. STA. 847+50.00 TO STA. 847+92.16	3	
RT. STA. 847+92.16 TO STA. 848+16.34	5	
RT. STA. 848+16.34 TO STA. 849+69.38	42	
RT. STA. 851+11.63 TO STA. 851+74.87	23	
RT. STA. 851+74.87 TO STA. 853+00.00	33	
LT. STA. 848+39.00		133
TOTAL	106	133

SEEDING SCHEDULE

LOCATION	SEEDING, CLASS 2 (SPECIAL)
	ACRE
LT. STA. 847+50.00 TO STA. 850+36.25	0.26
LT. STA. 850+61.43 TO STA. 851+70.66	0.05
LT. STA. 852+14.71 TO STA. 853+00.00	0.02
RT. STA. 847+50.00 TO STA. 849+89.21	0.03
RT. STA. 851+73.32 TO STA. 853+00.00	0.07
TOTAL	0.50

FILE NAME = c:\pw_work\pwidot\steffenmk\d0122333\D774220-sht-schedule.dgn

USER NAME = steffenmk | PLOT SCALE = 100.0000 ' / in. | PLOT DATE = 10/17/2013

DESIGNED - MTM | DRAWN - JJS | CHECKED - MTM | DATE - SEPTEMBER 2011

REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	10
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

EROSION AND SEDIMENT CONTROL SCHEDULE

LOCATION	PERIMETER EROSION BARRIER	TEMPORARY EROSION CONTROL SEEDING (3 APPLICATIONS)	EROSION CONTROL BLANKET	TEMP. DITCH CHECK	INLET AND PIPE PROTECTION	AGGREGATE (EROSION CONTROL)	STONE RIPRAP, CLASS A4	FILTER FABRIC
	FOOT	POUNDS	SQ YD	FOOT	EACH	TON	SQ YD	SQ YD
LT. STA. 847+50.00 TO STA. 850+36.25		76	1225					
LT. STA. 850+61.43 TO STA. 851+70.66		15	239					
LT. STA. 852+14.71 TO STA. 853+00.00		5	82					
RT. STA. 847+50.00 TO STA. 849+89.21		10	162					
RT. STA. 851+73.32 TO STA. 853+00.00		20	321					
LT. 48', STA. 848+82.00				15				
LT. 53', STA. 849+15.00				15				
LT. 61', STA. 849+48.00				12				
LT. 65', STA. 849+81.00				15				
LT. 75', STA. 850+14.00				15				
LT. STA. 847+30.42 TO STA. 850+36.78	482							
LT. STA. 850+61.43 TO STA. 851+62.98	177							
LT. STA. 852+14.71 TO STA. 853+19.72	122							
RT. STA. 847+29.52 TO STA. 850+32.51	339							
RT. STA. 850+84.29 TO STA. 853+20.53	243							
RT. STA. 848+17.40					1			
RT. STA. 848+68.00					1			
RT. STA. 849+18.30					1			
RT. STA. 849+68.70					1			
RT. STA. 851+12.20					1			
RT. STA. 851+62.20					1			
RT. STA. 852+13.00					1			
RT. STA. 852+63.30					1			
LT. STA. 848+16.31					1			
RT. 47', STA. 850+17.00						7.0		
LT. 71', STA. 850+27.00						7.0		
RT. 63', STA. 850+68.00						20.0		
LT. 51', STA. 850+70.00						7.0		
RT. STA. 847+80.00 TO STA. 850+15.00							522	522
RT. STA. 850+70.00 TO STA. 851+80.00							816	816
AT BRIDGE							850	850
TOTAL	1363	126	2029	72	9	41	2188	2188

PAVING SCHEDULE

LOCATION	LEVELING BINDER (MACHINE METHOD N70)	HMA SURFACE COURSE, MIX "C", N70	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	HMA BASE COURSE WIDENING 10"	HMA SHOULDERS, 8"	AGGREGATE SHOULDERS, TYPE B, 6"	BITUMINOUS MATERIALS (PRIME COAT)
	TON	TON	SQ YD	SQ YD	SQ YD	SQ YD	GALLON
STA. 847+50.00 TO STA. 849+63.88	35	52					62
STA. 851+17.13 TO STA. 853+00.00	30	44					53
OAK STREET							
STA. 10+13.21 TO STA. 10+84.00	30	45					54
STA. 849+63.88 TO STA. 849+69.88			28				
STA. 851+11.13 TO STA. 851+17.13			28				
RT. STA. 851+17.13 TO STA. 853+00.00				31			
LT. STA. 847+50.00 TO STA. 849+63.88					151		
LT. STA. 852+64.29 TO STA. 853+00.00					23		
RT. STA. 847+50.00 TO STA. 847+92.16					34		
LT. STA. 847+50.00 TO STA. 848+20.98						12	
LT. STA. 848+54.24 TO STA. 849+99.38						24	
LT. STA. 10+02.08 TO STA. 11+22.06						27	
UNDER GUARDRAIL							
RT. STA. 847+92.38 TO STA. 847+98.59					1		
RT. STA. 847+98.59 TO STA. 849+99.35					67		
LT. STA. 848+54.18 TO STA. 848+60.15					1		
LT. STA. 848+60.15 TO STA. 849+99.38					46		
RT. STA. 850+81.66 TO STA. 852+31.85					51		
RT. STA. 852+31.85 TO STA. 852+37.99					1		
LT. STA. 10+02.08 TO STA. 11+22.06					63		
TOTAL	95	141	56	31	437	63	169

PAVEMENT MARKING SCHEDULE

LOCATION	LOCATION	DESCRIPTION	PAINT PAVEMENT MARKING LINE - 4"	THERMOPLASTIC PAVEMENT MARKING LINE - 24"	GROOVING FOR RECESSED PAVEMENT MARKING 25"	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)
			FOOT	FOOT	FOOT	EACH	EACH
STA. 847+50.00 TO STA. 853+00.00	C.L.	YELLLOW SKIP DASH	138				
STA. 851+73.00 TO STA. 851+85.00	C.L.	YELLLOW SKIP DASH	10				
STA. 847+50.00 TO STA. 851+17.13	LT. EDGE	WHITE SOLID	367				
STA. 852+54.69 TO STA. 853+00.00	LT. EDGE	WHITE SOLID	45				
STA. 847+50.00 TO STA. 853+00.00	RT. EDGE	WHITE SOLID	550				
STA. 851+71.00	STOP BAR	WHITE SOLID		23	23		
STA. 847+50.00 TO STA. 853+00.00	C.L.					6	
AT BRIDGE	C.L.						1
TOTAL			1110	23	23	6	1

EARTHWORK SCHEDULE

LOCATION	EARTH EX. (CUT)	EARTH EX. ADJ. FOR SHRINKAGE	EMBANK-MENT (FILL)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
STA 847+50.00 TO STA 848+00.00	16	12	21	-9
STA 848+00.00 TO STA 848+39.00	12	9	149	-140
STA 848+39.00 TO STA 849+00.00	24	18	227	-209
STA 849+00.00 TO STA 849+26.00	88	66	11	55
STA 849+26.00 TO STA 849+50.00	79	59	9	50
STA 849+50.00 TO STA 849+99.38	21	16	36	-20
STA 849+99.38 TO STA 850+12.17	95	70	6	64
STA 850+12.17 TO STA 850+14.17	0	0	1043	-1043
STA 850+14.17 TO STA 850+51.83	914	686	0	686
STA 850+51.83 TO STA 850+81.63	485	364	11	353
STA 850+81.63 TO STA 851+00.00	27	20	13	7.25
STA 851+00.00 TO STA 851+36.44	57	42	172	-129
STA 851+36.44 TO STA 851+50.00	12	9	151	-142
STA 851+50.00 TO STA 851+70.65	6	5	86	-82
STA 851+70.65 TO STA 852+00.00	9	7	35	-28
STA 852+00.00 TO STA 852+50.00	10	8	9	-2
STA 852+50.00 TO STA 853+00.00	16	12	3	9
TOTAL	1871	1403	1982	-579

USED 25% SHRINKAGE

FILE NAME = c:\pw_work\pwidot\steffenmk\d0122333\D774220-sht-schedule.dgn	USER NAME = steffenmk	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MTM	REVISED -
	PLOT DATE = 10/17/2013	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

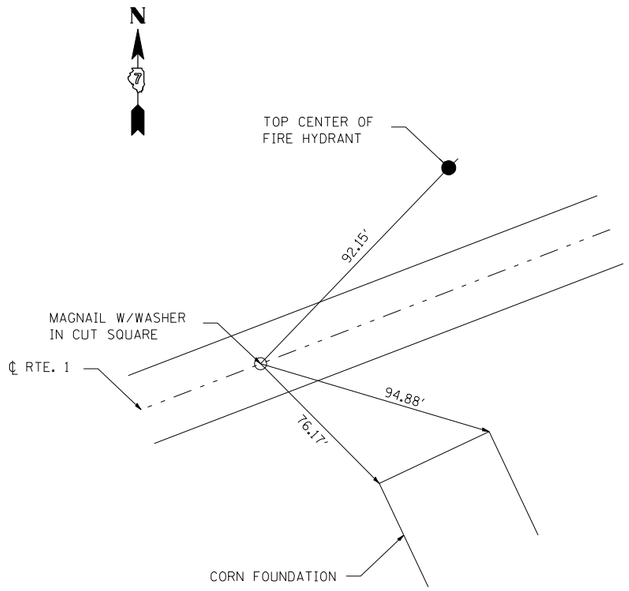
SCHEDULE OF QUANTITIES

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

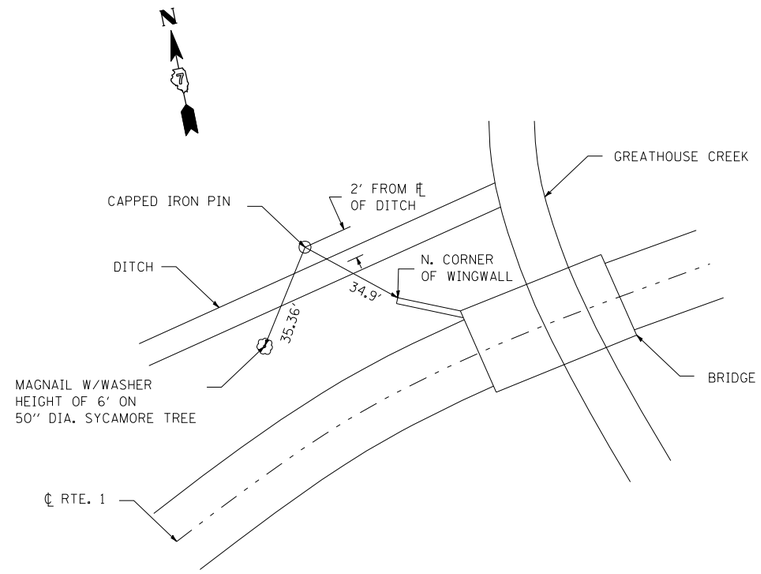
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	11
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

TREE REMOVAL SCHEDULE

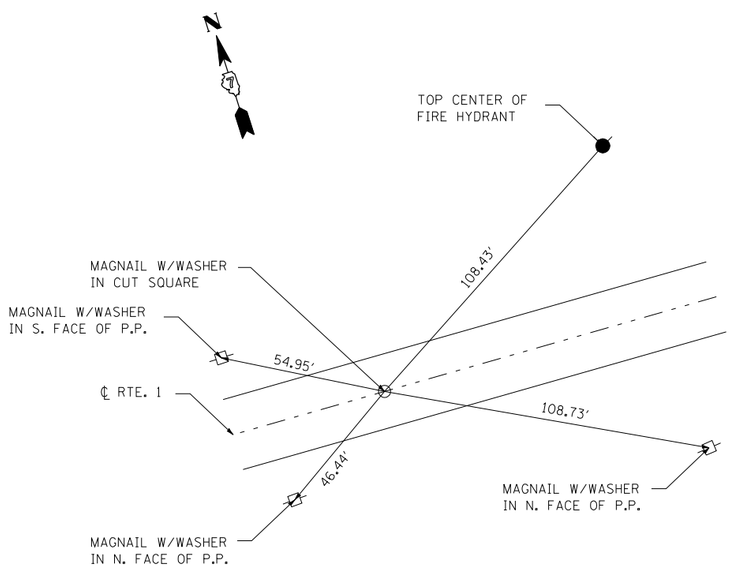
STATION	OFFSET FEET	TREE REMOVAL (6 TO 15 UNITS DIAMETER) UNIT	TREE REMOVAL (OVER 15 UNITS DIAMETER) UNIT	COMMENTS
848+25	45	10		
848+70	39	14		
848+80	41		17	
848+95	48.5	13		
848+97	48.5	8		
848+98	52	12		
848+99	43	8		5 FT TALL STUMP
849+03	44.5	10		
849+05	42	6		
849+05	55.5	11		
849+35	60	12		
849+35	58.5	9		
849+51	67	7		
849+52	63	7		
849+57	65	6		
849+59	52	7		
849+63	65	6		
849+65	58	10		
849+70	52.5	6		
849+70	64.5	7		
849+70	67.5	6		
849+69	68	7		
849+70	37		36	
849+87	67.5		32	
849+87	70		25	
850+04	73	7		
850+16	68	14		
850+27	64		18	
850+33	70	14		
850+60	82		31	
	64		20	LAYING IN STREAM
	TOTALS	217	179	



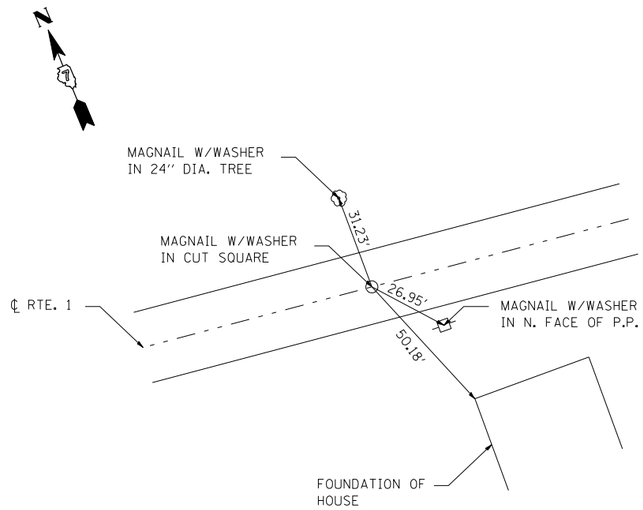
P.C. STA 844+87.55



P.I. STA 849+93.30

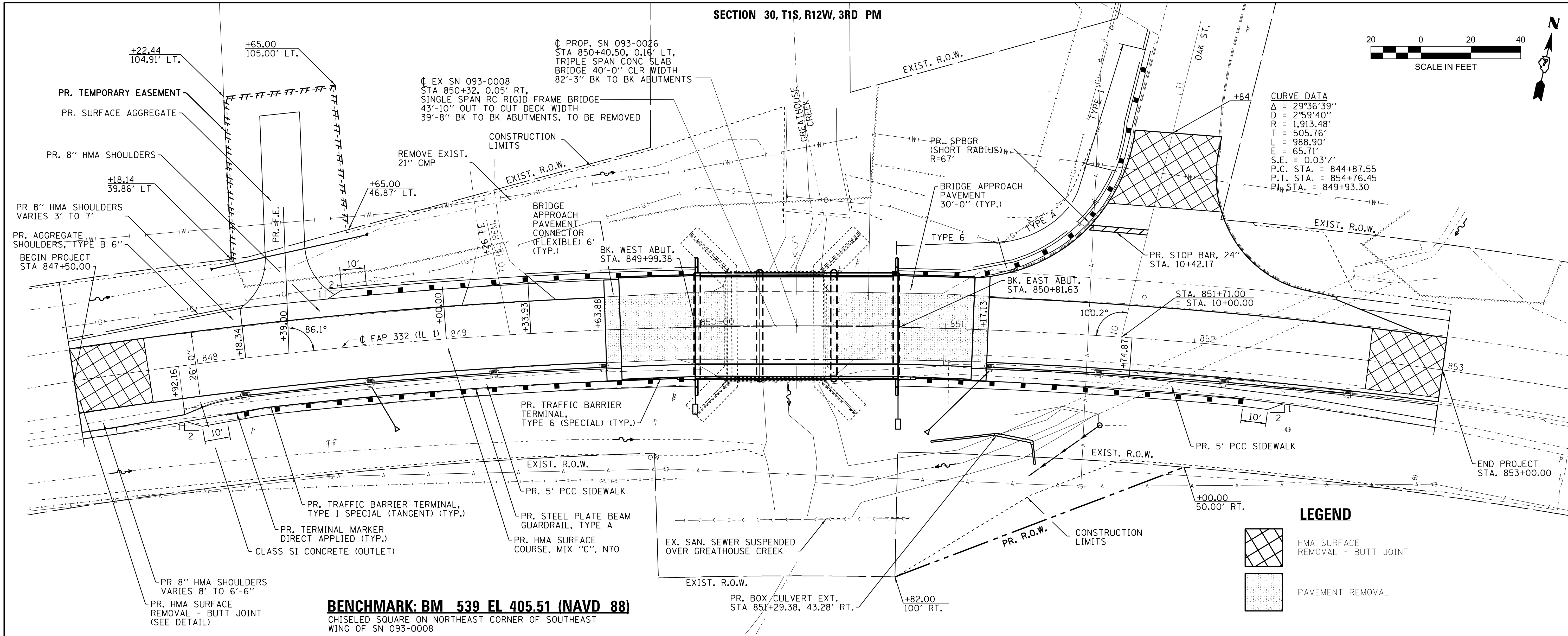


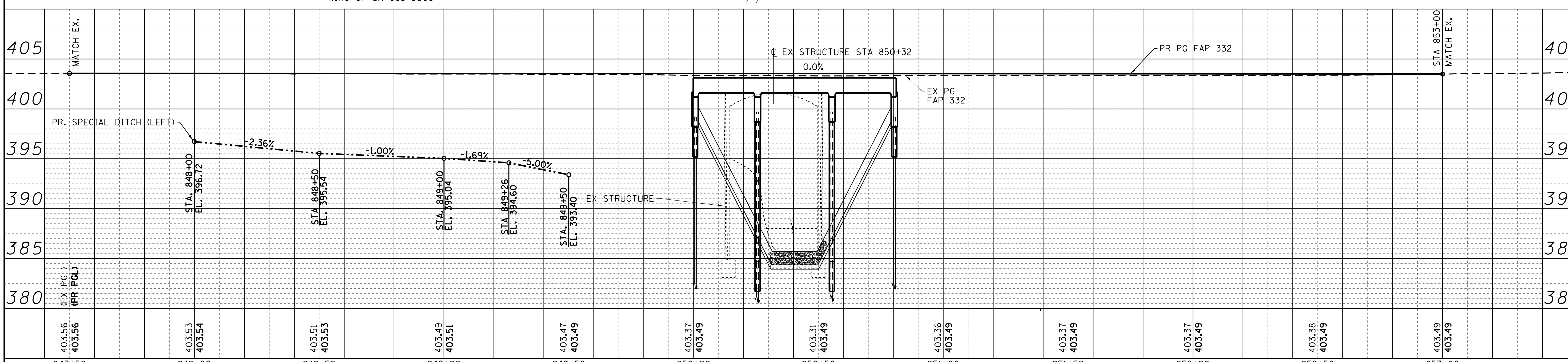
P.T. STA. 854+76.45



P.O.T. STA 857+00.00

FILE NAME =	USER NAME = RJT	DESIGNED - MTM	REVISED -	**STATE OF ILLINOIS**	**ALIGNMENT TIES**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Y:\IDOT\933-12_74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-ATB.dgn		DRAWN - JJS	REVISED -	**DEPARTMENT OF TRANSPORTATION**		332	(103B)B-1	WABASH	53	12
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - MTM	REVISED -					CONTRACT NO. 74220		
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -		SCALE: N.T.S. SHEET NO. 1 OF 1 SHEETS STA. TO STA.			ILLINOIS FED. AID PROJECT		


SECTION 30, T1S, R12W, 3RD PM
+22.44
104.91' LT.
+65.00
105.00' LT.
PR. TEMPORARY EASEMENT
PR. SURFACE AGGREGATE
PR. 8" HMA SHOULDERS
+18.14
39.86' LT
PR 8" HMA SHOULDERS
VARIES 3' TO 7'
PR. AGGREGATE
SHOULDERS, TYPE B 6"
BEGIN PROJECT
STA 847+50.00
℄ PROP. SN 093-0026
STA 850+40.50, 0.16' LT.
TRIPLE SPAN CONC SLAB
BRIDGE 40'-0" CLR WIDTH
82'-3" BK TO BK ABUTMENTS
℄ EX SN 093-0008
STA 850+32, 0.05' RT.
SINGLE SPAN RC RIGID FRAME BRIDGE
43'-10" OUT TO OUT DECK WIDTH
39'-8" BK TO BK ABUTMENTS, TO BE REMOVED
CONSTRUCTION
LIMITS
REMOVE EXIST.
21" CMP
+65.00
46.87' LT.
EXIST. R.O.W.
BRIDGE
APPROACH
PAVEMENT
CONNECTOR
(FLEXIBLE) 6'
(TYP.)
BK. WEST ABUT.
STA. 849+99.38
GREATHOUSE
CREEK
PR. SPBGR
(SHORT RADIUS)
R=67'
BRIDGE APPROACH
PAVEMENT
30'-0" (TYP.)
TYPE 6
TYPE A
OAK ST.
+84
CURVE DATA
Δ = 29°36'39"
D = 2°59'40"
R = 1,913.48'
T = 505.76'
L = 988.90'
E = 65.71'
S.E. = 0.03'/'
P.C. STA. = 844+87.55
P.T. STA. = 854+76.45
PI STA. = 849+93.30
20 0 20 40
SCALE IN FEET
N
EXIST. R.O.W.
PR. STOP BAR, 24"
STA. 10+42.17
BK. EAST ABUT.
STA. 850+81.63
STA. 851+71.00
= STA. 10+00.00
100.2°
+74.87
86.1°
℄ FAP 332 (IL 1)
848
849
850+00
851
852
853
+18.34
+39.00
+00.00
+26 FE
+33.93
+63.88
+17.13
+92.16
26'-0"
10'
PR. TRAFFIC BARRIER
TERMINAL,
TYPE 6 (SPECIAL) (TYP.)
PR. 5' PCC SIDEWALK
EXIST. R.O.W.
END PROJECT
STA. 853+00.00
+00.00
50.00' RT.
PR. TRAFFIC BARRIER TERMINAL,
TYPE 1 SPECIAL (TANGENT) (TYP.)
PR. TERMINAL MARKER
DIRECT APPLIED (TYP.)
CLASS SI CONCRETE (OUTLET)
PR. 5' PCC SIDEWALK
PR. STEEL PLATE BEAM
GUARDRAIL, TYPE A
PR. HMA SURFACE
COURSE, MIX "C", N70
EX. SAN. SEWER SUSPENDED
OVER GREATHOUSE CREEK
PR. R.O.W.
CONSTRUCTION
LIMITS
LEGEND
HMA SURFACE
REMOVAL - BUTT JOINT
PAVEMENT REMOVAL
PR 8" HMA SHOULDERS
VARIES 8' TO 6'-6"
PR. HMA SURFACE
REMOVAL - BUTT JOINT
(SEE DETAIL)
BENCHMARK: BM 539 EL 405.51 (NAVD 88)
CHISELED SQUARE ON NORTHEAST CORNER OF SOUTHEAST
WING OF SN 093-0008
EXIST. R.O.W.
PR. BOX CULVERT EXT.
STA 851+29.38, 43.28' RT.
+82.00
100' RT.


405
400
395
390
385
380
MATCH EX.
℄ EX STRUCTURE STA 850+32
0.0%
PR PG FAP 332
STA 853+00
MATCH EX.
EX PG
FAP 332
PR. SPECIAL DITCH (LEFT)
-2.36%
-1.00%
-1.69%
-5.00%
STA. 848+00
EL. 396.72
STA. 848+50
EL. 395.54
STA. 849+00
EL. 395.04
STA. 849+26
EL. 394.60
STA. 849+50
EL. 393.40
EX STRUCTURE
(EX PCL)
(PR PCL)
403.56 403.56
403.53 403.54
403.51 403.53
403.49 403.51
403.47 403.49
403.37 403.49
403.31 403.49
403.36 403.49
403.37 403.49
403.37 403.49
403.38 403.49
403.49 403.49
847+50
848+00
848+50
849+00
849+50
850+00
850+50
851+00
851+50
852+00
852+50
853+00

FILE NAME = pw:\\...\D74220-sht-plnprf.dgn	USER NAME = steffenmk	DESIGNED - MTM	REVISED -
	PLOT SCALE = 40.0000 ' / in.	DRAWN - CMM	REVISED -
	PLOT DATE = 10/22/2013 10:14:25 AM	CHECKED - MTM	REVISED -
SCALES: (HORIZ) 1"=20' (VERT) 1"=5'		DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE

SCALE: 1"=20'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 848+00 TO STA. 853+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	13

CONTRACT NO. 74220

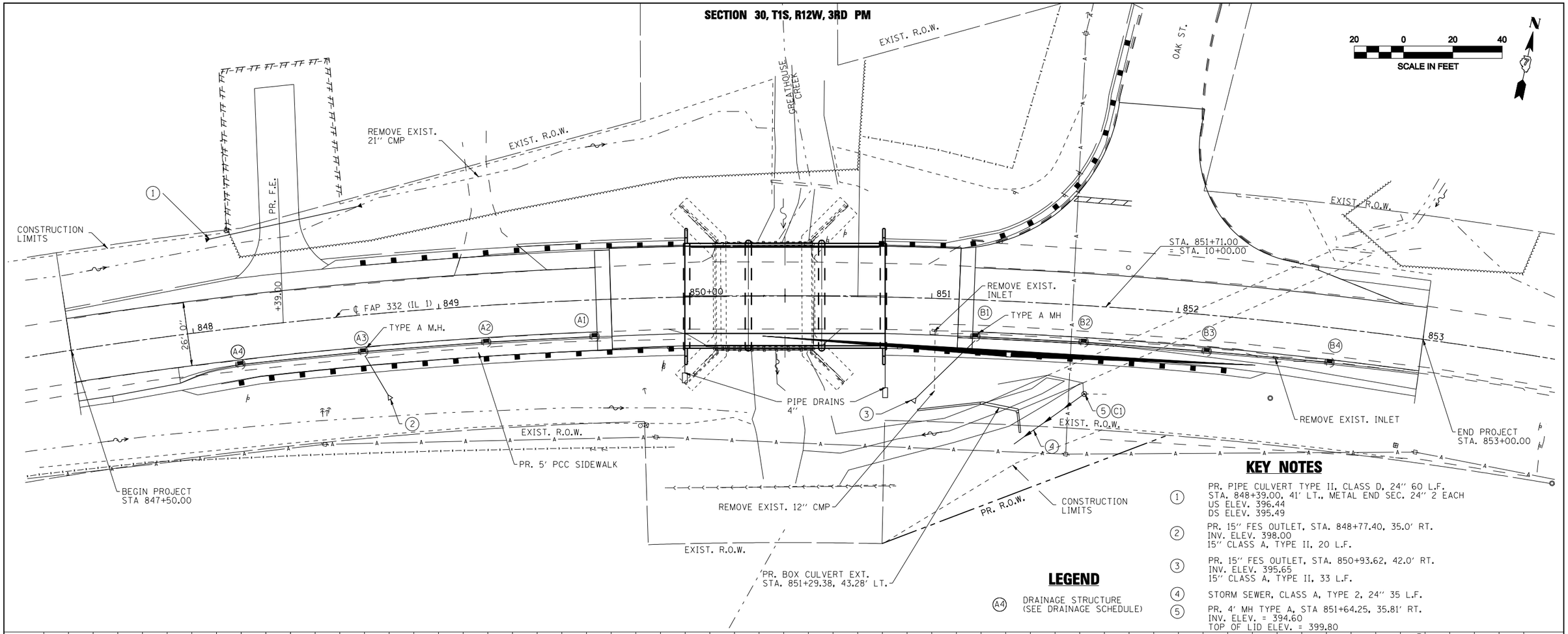
FED. ROAD DIST. NO. | ILLINOIS FED. AID PROJECT

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

PLAN	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	QUANTITY CHECKED		
	ALIGNMENT CHECKED		
	RT. OF WAY CHECKED		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	R.M. NOTED		
	STRUCTURE NOTATNS CHKD		

SECTION 30, T1S, R12W, 3RD PM

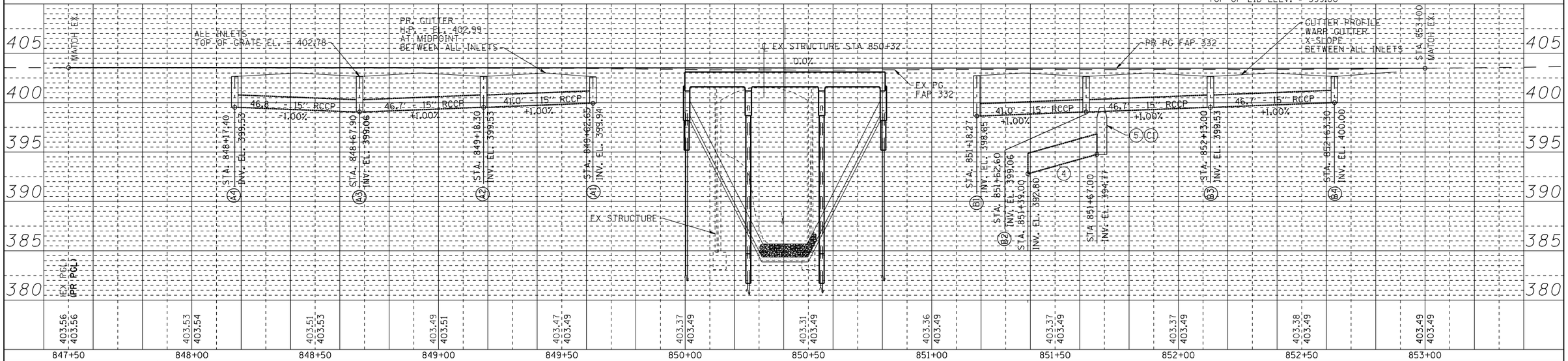


KEY NOTES

1. PR. PIPE CULVERT TYPE II, CLASS D, 24" 60 L.F.
   STA. 848+39.00, 41' LT., METAL END SEC. 24" 2 EACH
   US ELEV. 396.44
   DS ELEV. 395.49
2. PR. 15" FES OUTLET, STA. 848+77.40, 35.0' RT.
   INV. ELEV. 398.00
   15" CLASS A, TYPE II, 20 L.F.
3. PR. 15" FES OUTLET, STA. 850+93.62, 42.0' RT.
   INV. ELEV. 395.65
   15" CLASS A, TYPE II, 33 L.F.
4. STORM SEWER, CLASS A, TYPE 2, 24" 35 L.F.
5. PR. 4' MH TYPE A, STA 851+64.25, 35.81' RT.
   INV. ELEV. = 394.60
   TOP OF LID ELEV. = 399.80

LEGEND

(A4) DRAINAGE STRUCTURE (SEE DRAINAGE SCHEDULE)



FILE NAME = D774220-sht-drain.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MDS	REVISED -
	PLOT SCALE = 40.0000 ' / IN.	CHECKED - MTM	REVISED -
SCALES: (HORIZ) 1"=20' (VERT) 1"=5'	PLOT DATE = 12/15/2011 1:08:59 PM	DATE - SEPTEMBER 2011	REVISED -

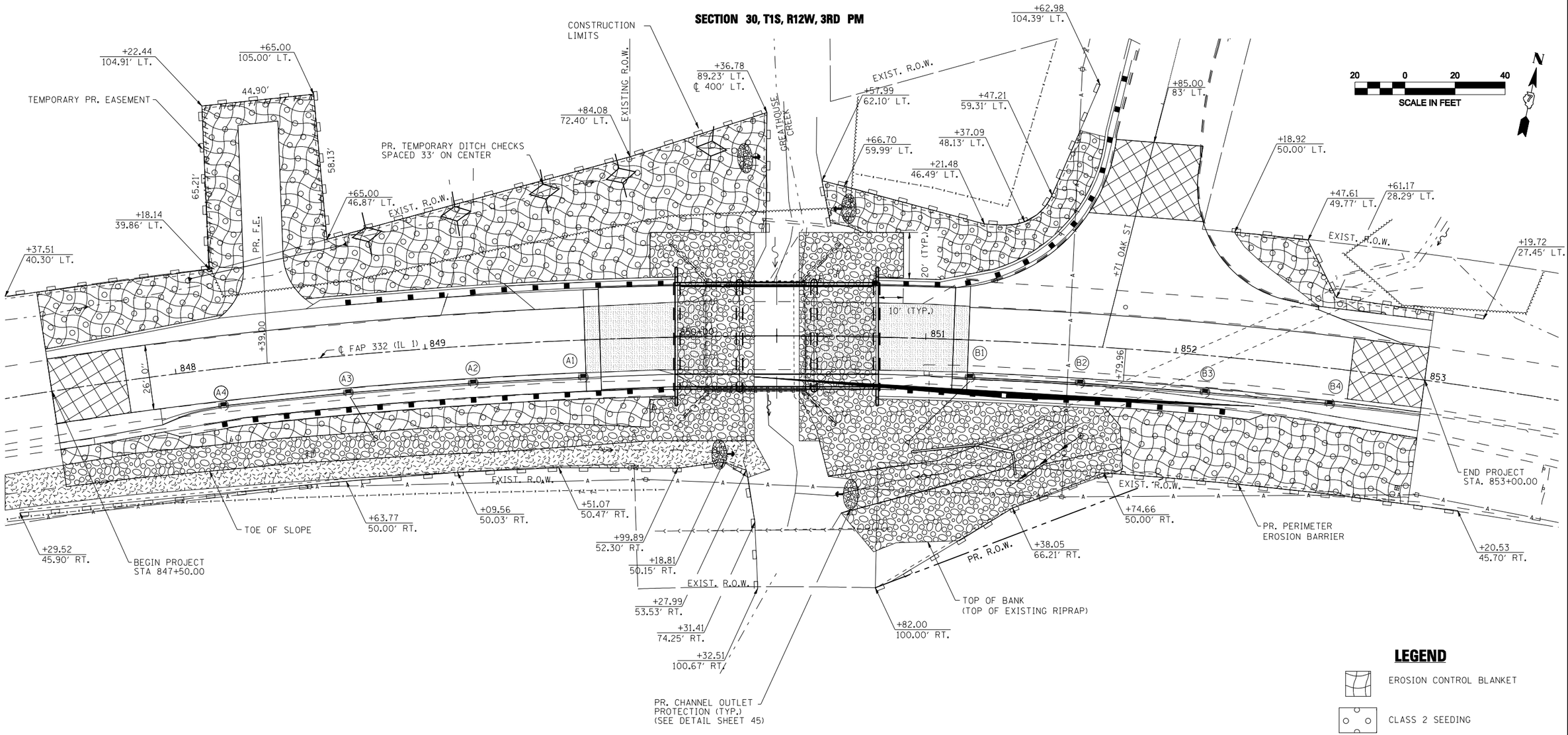
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DRAINAGE PLAN

SCALE: 1"=20'-0" | SHEET NO. 1 OF 1 SHEETS | STA. 848+00 | TO STA. 853+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	14
		CONTRACT NO. 74220		
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

SECTION 30, T1S, R12W, 3RD PM



LEGEND

- EROSION CONTROL BLANKET
- CLASS 2 SEEDING
- PROPOSED RIPRAP
- EXISTING RIPRAP

FILE NAME = D774220-sht-eros.dgn	USER NAME = mmann	DESIGNED - MTM	REVISED -
		DRAWN - CMM	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED - MTM	REVISED -
	PLOT DATE = 4/5/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL PLAN

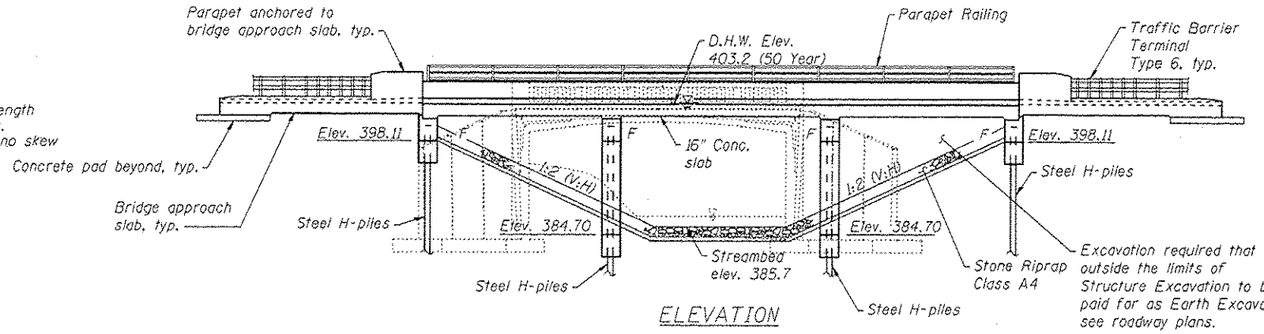
SCALE: 1" = 20' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(10381)8-1	WABASH	53	15
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

BENCHMARK: BM 539 -Chiseled square on northeast corner of southeast wing of SN 093-0008, Elev. 405.51 (NAVD 88)

EXISTING STRUCTURE:
SN 093-0008 was originally built as SBI 138, Section 103B, in 1935. It is a single span reinforced conc. rigid frame structure with closed abutments on untreated timber piles. The deck width is 43'-10" and the length is 35'-0" face to face of abutments. The structure was constructed with no skew and a 0.043 ft/ft superelevation. Traffic is to be detoured.

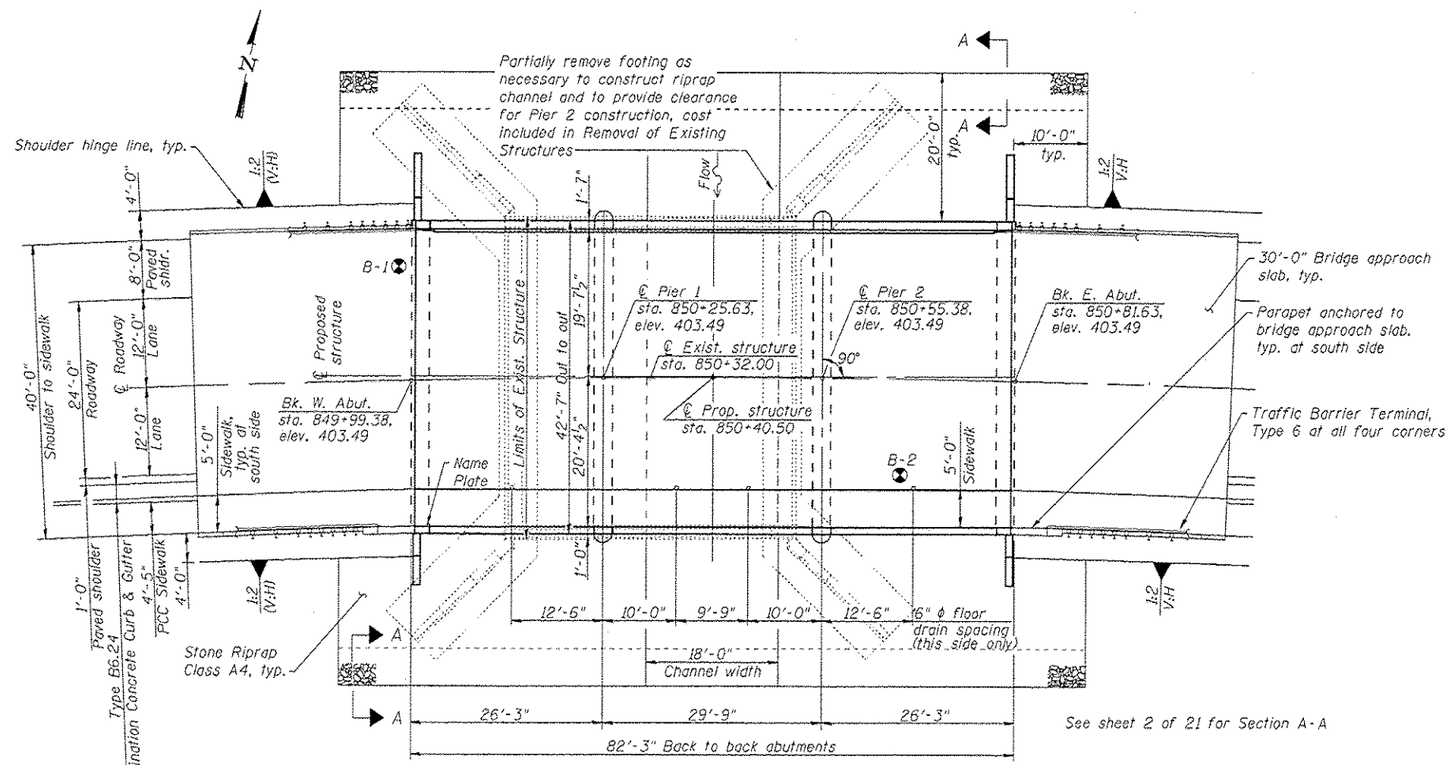
No salvage.



ELEVATION

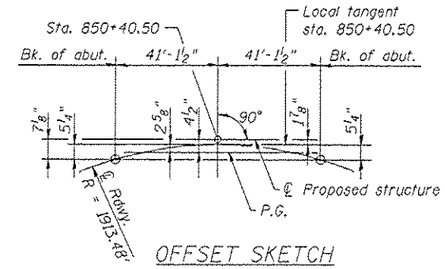
STRUCTURE INDEX OF SHEETS

Curve Data
Δ = 29° 36' 39"
D = 2° 59' 40"
R = 1,913.48'
T = 505.76'
L = 988.90'
E = 65.71'
S.E. = 0.03'/'
P.C. Sta. = 844+87.55
P.T. Sta. = 854+76.45
P.I. Sta. = 849+93.30

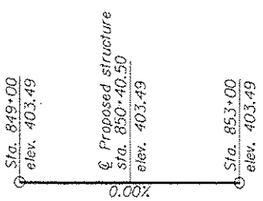


PLAN

See sheet 2 of 21 for Section A-A



OFFSET SKETCH



PROFILE GRADE
(Along ℄ roadway)

DESIGN SCOUR ELEVATION TABLE

	W. Abut.	Pier 1	Pier 2	E. Abut.
Design Scour Elevation (Ft.)	398.11	381.7	381.7	398.11

WATERWAY INFORMATION

Drainage Area = 7.6 Sq. Mi.
Exist. Low Grade Elev. = 403.77 Ft. @ Sta. 850+54
Prop. Low Grade Elev. = 404.09 Ft. @ Sta. 850+90

Flood	Freq. Yr.	Q C.F.S.	Opening-Sq. Ft. Exist.	Opening-Sq. Ft. Prop.	Nat. H.W.E.	Head-Ft. Exist.	Head-Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1500	410	664	400.3	0.2	0.2	400.4	400.5
Overtop.	45	2340	416	-	403.1	0.7	-	403.8	-
Design	50	2440	416	691	403.2	0.7	0.2	403.9	403.4
Base	100	2860	416	691	403.5	0.7	0.2	404.2	403.7
Overtop.	150	2960	-	691	403.6	-	0.2	-	403.8
Max. Calc.	500	3910	416	691	404.5	0.4	0.1	404.9	404.6

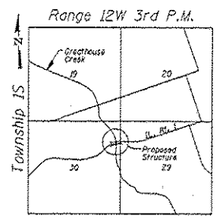
DESIGN SPECIFICATIONS
2007 AASHTO LRFD with 2008 & 2009 Interims

LOADING HL-93
Allow 50 psf for future wearing surface.

DESIGN STRESSES

FIELD UNITS
f'c = 3,500 psi
fy = 60,000 psi (Reinf.)

SEISMIC DATA
Seismic Performance Zone (SPZ) = 2
Design Spectral Acceleration at 1.0 sec (SD1) = 0.253g
Design Spectral Acceleration at 0.2 sec (SDs) = 0.596g
Soil Site Class = D



LOCATION SKETCH

STATION 850+40.50
BUILT 201_ BY
STATE OF ILLINOIS
F.A.P. RT. 332 SEC. (103B)B-1
LOADING HL-93
STR. NO. 093-0026

NAME PLATE
See Std. 515001

APPROVED
For Structural Adequacy Only
Engineer of Bridges & Structures

STATE OF ILLINOIS ERIC L. HENRY No. 6159 REGISTERED STRUCTURAL ENGINEER
EXPIRES 11-30-11
SIGNATURE
01/14/11
DATE

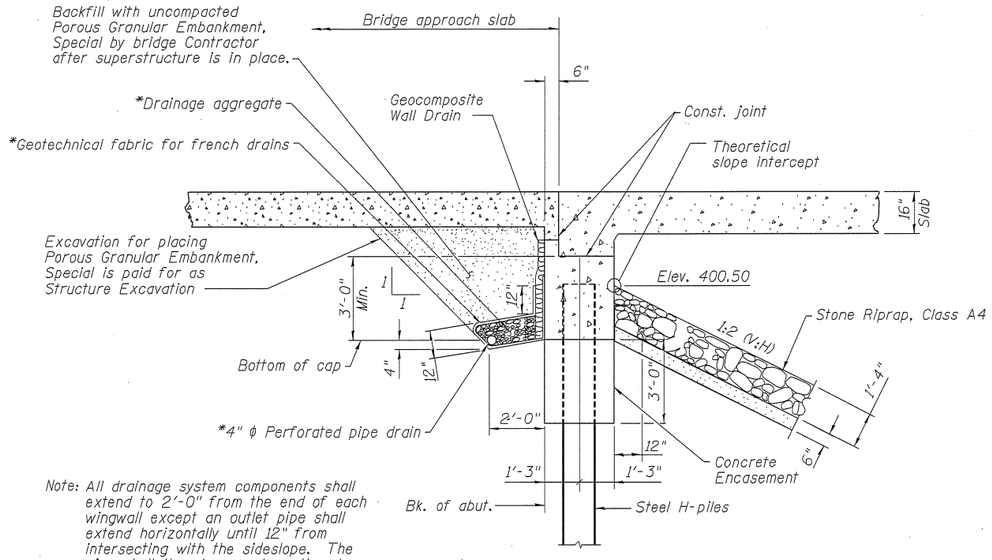
GENERAL PLAN & ELEVATION
IL 1 OVER GREATHOUSE CREEK
FAP ROUTE 332 - SECTION (103B)B-1
WABASH COUNTY
STATION 850+40.50
STRUCTURE NO. 093-0026

FILE NAME = 8938826-74220-01-GenPln.dgn	USER NAME = RJT	DESIGNED - ELH 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -
	PLOT SCALE = 0.1 '/' IN.	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = 12/15/2011 1:29:23 PM	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1 OF 21 SHEETS

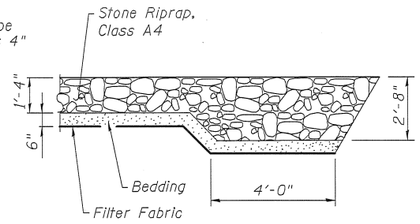
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	16
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		



SECTION THRU ABUTMENT

Note: All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend horizontally until 12" from intersecting with the sideslope. The pipe shall then be run down the slope to the toe of slope and drain into conc. headwalls (See Article 601.05 of the Std. Spec's. and Hwy. Std. 601101). The horizontal pipe will be paid for as Pipe Underdrains for Structures 4", and the sloped pipe will be paid for as Pipe Drains 4", see roadway plans.

*Included in the cost of Pipe Underdrains for Structures 4"



SECTION A-A

GENERAL NOTES

1. The Contractor shall make allowance for the deflection of forms, shrinkage and settlement of falsework, in addition to allowance for dead load deflection. Forms for deck slab shall be removed prior to placement of bridge approach pavement.
2. Reinforcement bars designated (E) shall be epoxy coated.
3. Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
4. The existing reinforced concrete structure is a rigid frame and may require a sequenced plan to prevent collapse during removal. Temporary bracing or excavating behind the existing abutments during the removal of the existing superstructure and substructure may be necessary. Cost included with Removal of Existing Structures.
5. If a portion of the concrete encasement is underwater, reinforcement may be placed underwater into forms. Concrete may be tremied according to Article 503.08 of the Standard Specifications to an elevation of 1'-0" above the water line at the time of construction.
6. The Contractor is advised that the existing reinforced concrete rigid frame structure is in a deteriorated condition with reduced load carrying capacity. It is the Contractor's responsibility to account for the condition when developing procedures for removal and replacement of the structure.
7. Slipforming of the parapets is not allowed.
8. The profile grade line follows the centerline of roadway outside of the limits of the proposed structure. Between the backs of abutments, the profile grade line shifts to a line that splits the distance between a tangent line to the centerline of roadway at Sta. 850+40.50 and a line connecting the intersections of the backs of abutments with the centerline of roadway. The intent of this project is to build a straight structure that is flat if sliced longitudinally along any line parallel to the centerline of proposed structure. The bridge approach slabs can then be constructed to match the bridge slab elevations.
9. Cofferdam design details shall be submitted to the Engineer for approval with the cofferdam design. See Special Provision.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		850	850
Filter Fabric	Sq. Yd.		850	850
Removal of Existing Structures	Each	0.5	0.5	1
Structure Excavation	Cu. Yd.		148	148
Floor Drains	Each	4		4
Concrete Structures	Cu. Yd.		200.9	200.9
Concrete Superstructure	Cu. Yd.	337.4		337.4
Bridge Deck Grooving	Sq. Yd.	522		522
Concrete Encasement	Cu. Yd.		18.6	18.6
Protective Coat	Sq. Yd.	730		730
Reinforcement Bars, Epoxy Coated	Pound	69000	18360	87360
Parapet Railing	Foot	81		81
Furnishing Steel Piles HP14x73	Foot		2128	2128
Driving Piles	Foot		2128	2128
Test Pile Steel HP14x73	Each		4	4
Name Plates	Each	1		1
Geocomposite Wall Drain	Sq. Yd.		50	50
Pipe Underdrains for Structures 4"	Foot		144	144
Porous Granular Embankment, Special	Cu. Yd.		68	68
Cofferdam (Type 2) (Location-1)	Each		1	1
Cofferdam (Type 2) (Location-2)	Each		1	1
Mechanical Splicers	Each		56	56
Cofferdam Excavation	Cu. Yd.		98	98

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 09/10	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -	GENERAL DATA STRUCTURE NO. 093-0026
	PLOT SCALE = $SCALE$	DRAWN - DWH/KAH 09/11	REVISED -	SHEET NO. 2 OF 21 SHEETS
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 09/11	REVISED -	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	17
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

INSIDE FACE OF NORTH PARAPET

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Slab	850+00.30	-20.21	404.09	404.09
℄ W. Abut.	850+01.05	-20.20	404.09	404.09
a	850+10.94	-20.01	404.09	404.10
b	850+20.83	-19.88	404.09	404.09
℄ Pier 1	850+25.78	-19.84	404.09	404.09
c	850+35.68	-19.79	404.09	404.09
d	850+45.58	-19.79	404.09	404.09
℄ Pier 2	850+55.23	-19.84	404.09	404.09
e	850+65.12	-19.94	404.09	404.09
f	850+75.02	-20.10	404.09	404.10
℄ E. Abut.	850+79.96	-20.20	404.09	404.09
E. End of Slab	850+80.71	-20.21	404.09	404.09

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Slab	850+00.13	-12.00	403.84	403.84
℄ W. Abut.	850+00.88	-12.00	403.84	403.84
a	850+10.82	-12.00	403.85	403.86
b	850+20.75	-12.00	403.85	403.85
℄ Pier 1	850+25.72	-12.00	403.85	403.85
c	850+35.66	-12.00	403.86	403.86
d	850+45.60	-12.00	403.86	403.86
℄ Pier 2	850+55.29	-12.00	403.85	403.85
e	850+65.23	-12.00	403.85	403.85
f	850+75.16	-12.00	403.85	403.86
℄ E. Abut.	850+80.13	-12.00	403.84	403.84
E. End of Slab	850+80.88	-12.00	403.84	403.84

PROFILE GRADE

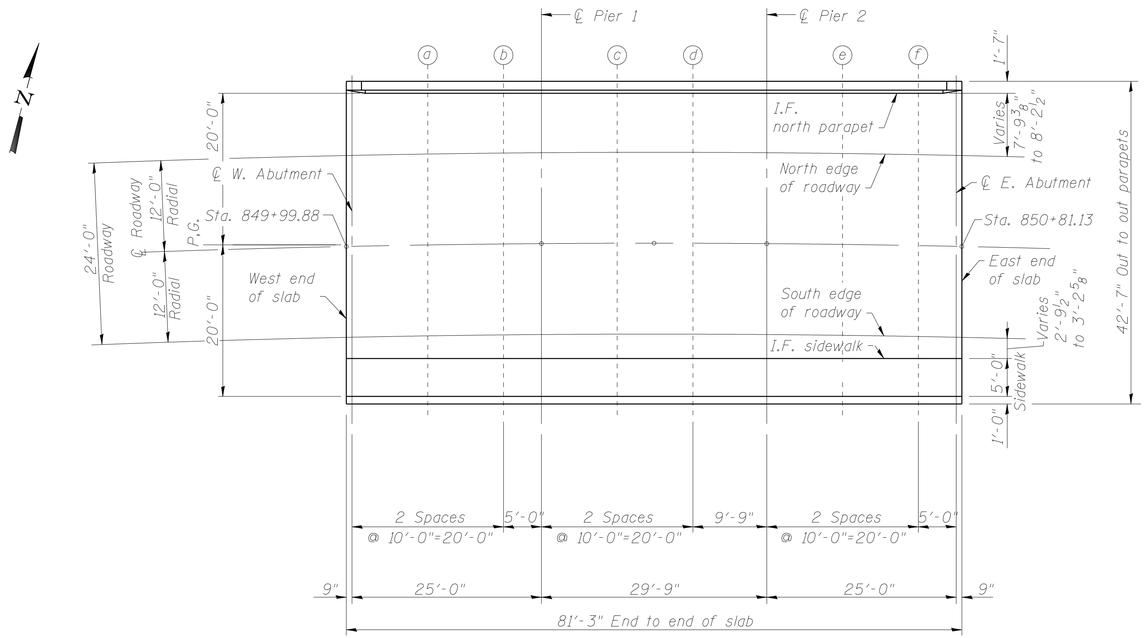
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Slab	849+99.88	-0.21	403.49	403.49
℄ W. Abut.	850+00.63	-0.20	403.49	403.49
a	850+10.63	-0.01	403.49	403.50
b	850+20.63	0.12	403.49	403.49
℄ Pier 1	850+25.63	0.16	403.49	403.49
c	850+35.63	0.21	403.49	403.49
d	850+45.63	0.21	403.49	403.49
℄ Pier 2	850+55.38	0.16	403.49	403.49
e	850+65.38	0.06	403.49	403.49
f	850+75.38	-0.10	403.49	403.50
℄ E. Abut.	850+80.38	-0.20	403.49	403.49
E. End of Slab	850+81.13	-0.21	403.49	403.49

SOUTH EDGE OF ROADWAY

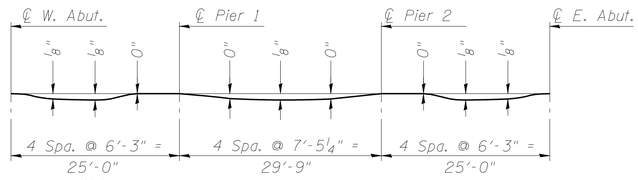
Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Slab	849+99.62	12.00	403.12	403.12
℄ W. Abut.	850+00.38	12.00	403.12	403.12
a	850+10.44	12.00	403.13	403.14
b	850+20.51	12.00	403.13	403.13
℄ Pier 1	850+25.54	12.00	403.13	403.13
c	850+35.60	12.00	403.14	403.14
d	850+45.66	12.00	403.14	403.14
℄ Pier 2	850+55.47	12.00	403.13	403.13
e	850+65.54	12.00	403.13	403.13
f	850+75.60	12.00	403.13	403.14
℄ E. Abut.	850+80.63	12.00	403.12	403.12
E. End of Slab	850+81.39	12.00	403.12	403.12

INSIDE FACE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
W. End of Slab	849+99.56	19.79	403.04	403.04
℄ W. Abut.	850+00.32	19.80	403.04	403.04
a	850+10.39	19.99	403.04	403.05
b	850+20.47	20.12	403.04	403.04
℄ Pier 1	850+25.51	20.16	403.04	403.04
c	850+35.59	20.21	403.04	403.04
d	850+45.67	20.21	403.04	403.04
℄ Pier 2	850+55.50	20.16	403.04	403.04
e	850+65.58	20.06	403.04	403.04
f	850+75.65	19.90	403.04	403.05
℄ E. Abut.	850+80.69	19.80	403.04	403.04
E. End of Slab	850+81.45	19.79	403.04	403.04



PLAN



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

DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only)

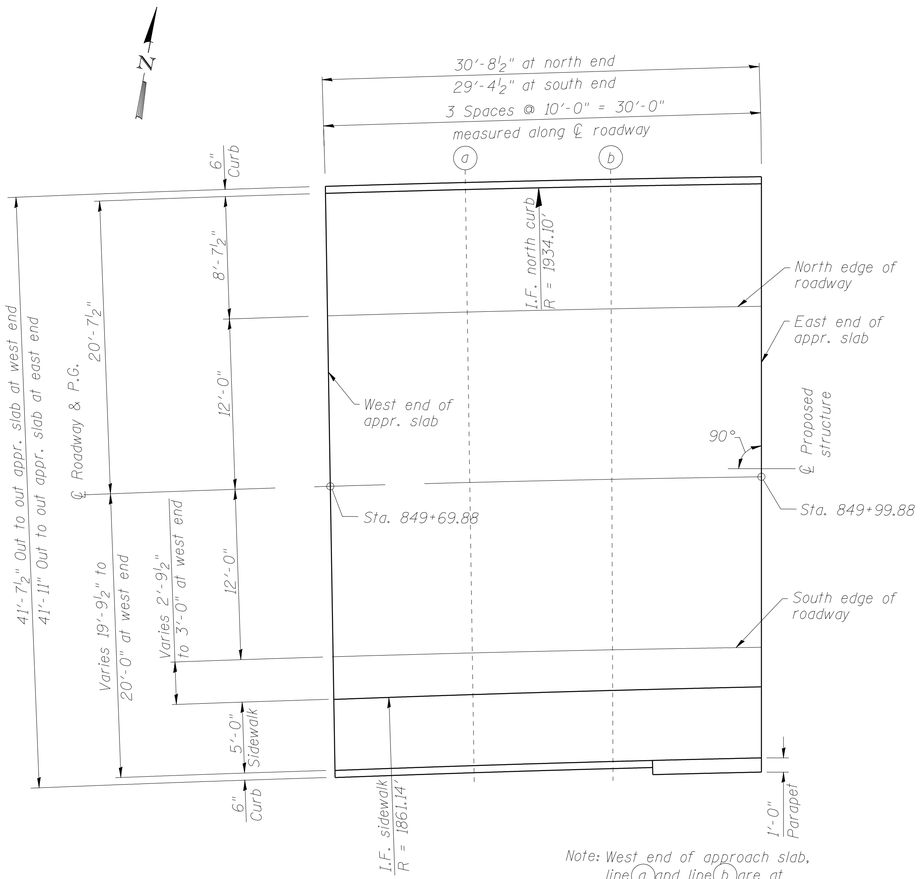
FILE NAME = 0930026-74220-03-TSlabElev.dgn	USER NAME = RJT	DESIGNED - DAJ 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/ELH 09/10	REVISED -
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = 12/15/2011 1:25:30 PM	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 093-0026

SHEET NO. 3 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	18
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



Note: West end of approach slab, line (a) and line (b) are at right angles to local tangent along ℄ roadway

PLAN

INSIDE FACE OF NORTH CURB

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	849+69.88	-20.63	404.11
a	849+79.88	-20.63	404.11
b	849+89.88	-20.63	404.11
E. end appr. slab	850+00.30	-20.63	404.11

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	849+69.88	12.00	403.13
a	849+79.88	12.00	403.13
b	849+89.88	12.00	403.13
E. end appr. slab	849+99.62	12.00	403.13

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	849+69.88	-12.00	403.85
a	849+79.88	-12.00	403.85
b	849+89.88	-12.00	403.85
E. end appr. slab	850+00.13	-12.00	403.85

INSIDE FACE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	849+69.88	15.00	403.04
a	849+79.88	14.93	403.04
b	849+89.88	14.86	403.04
E. end appr. slab	849+99.56	14.79	403.05

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	849+69.88	0.00	403.49
a	849+79.88	0.00	403.49
b	849+89.88	0.00	403.49
E. end appr. slab	849+99.88	0.00	403.49

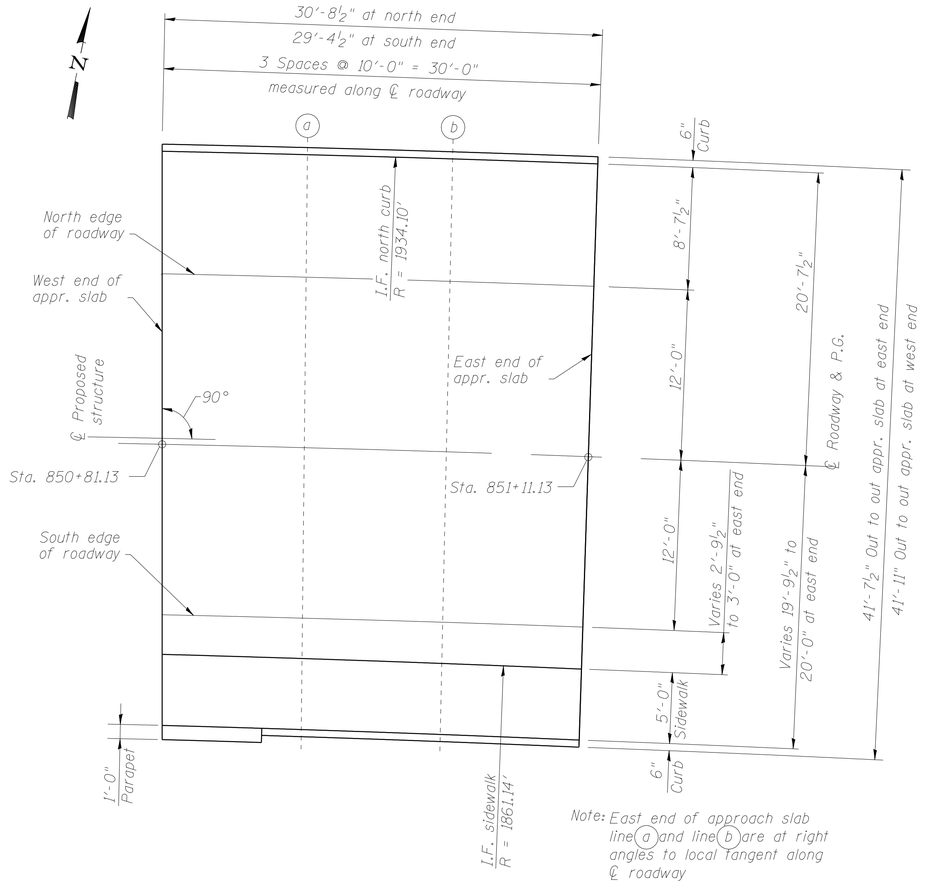
FILE NAME = 0930026-74220-04-TWAprSlab.dgn	USER NAME = RJT	DESIGNED - DAJ 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/ELH 09/10	REVISED -
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = 12/15/2011 1:26:23 PM	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF WEST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 093-0026

SHEET NO. 4 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	19
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



Note: East end of approach slab line (a) and line (b) are at right angles to local tangent along ℄ roadway

PLAN

INSIDE FACE OF NORTH CURB

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	850+80.71	-20.63	404.11
a	850+91.13	-20.63	404.11
b	851+01.13	-20.63	404.11
E. end appr. slab	851+11.13	-20.63	404.11

SOUTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	850+81.39	12.00	403.13
a	850+91.13	12.00	403.13
b	851+01.13	12.00	403.13
E. end appr. slab	851+11.13	12.00	403.13

NORTH EDGE OF ROADWAY

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	850+80.88	-12.00	403.85
a	850+91.13	-12.00	403.85
b	851+01.13	-12.00	403.85
E. end appr. slab	851+11.13	-12.00	403.85

INSIDE FACE OF SIDEWALK

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	850+81.45	14.79	403.05
a	850+91.13	14.86	403.04
b	851+01.13	14.93	403.04
E. end appr. slab	851+11.13	15.00	403.04

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
W. end appr. slab	850+81.13	0.00	403.49
a	850+91.13	0.00	403.49
b	851+01.13	0.00	403.49
E. end appr. slab	851+11.13	0.00	403.49

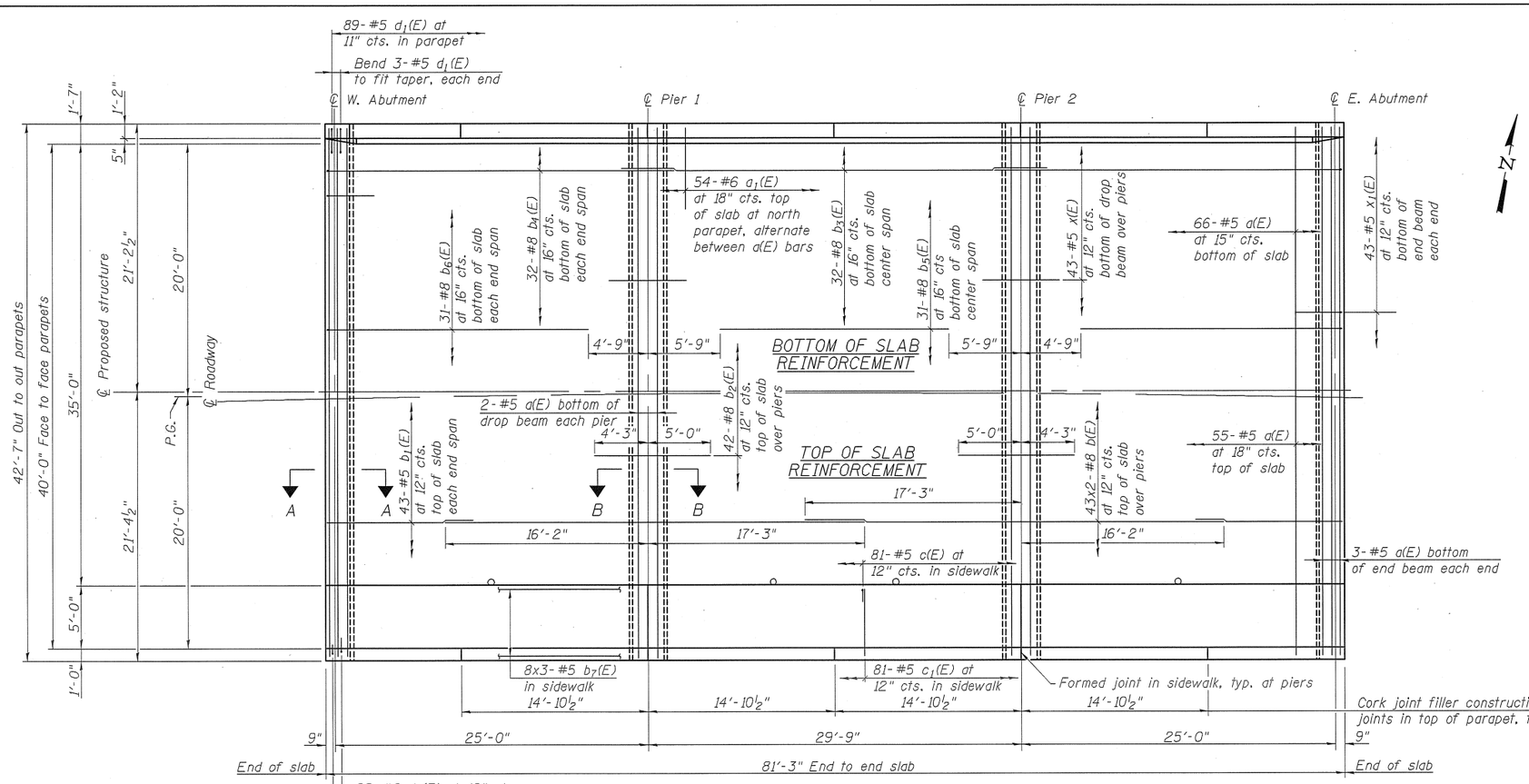
FILE NAME = 0930026-74220-05-TEApr Slab.dgn	USER NAME = RJT	DESIGNED - DAJ 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/ELH 09/10	REVISED -
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = 12/15/2011 1:27:05 PM	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

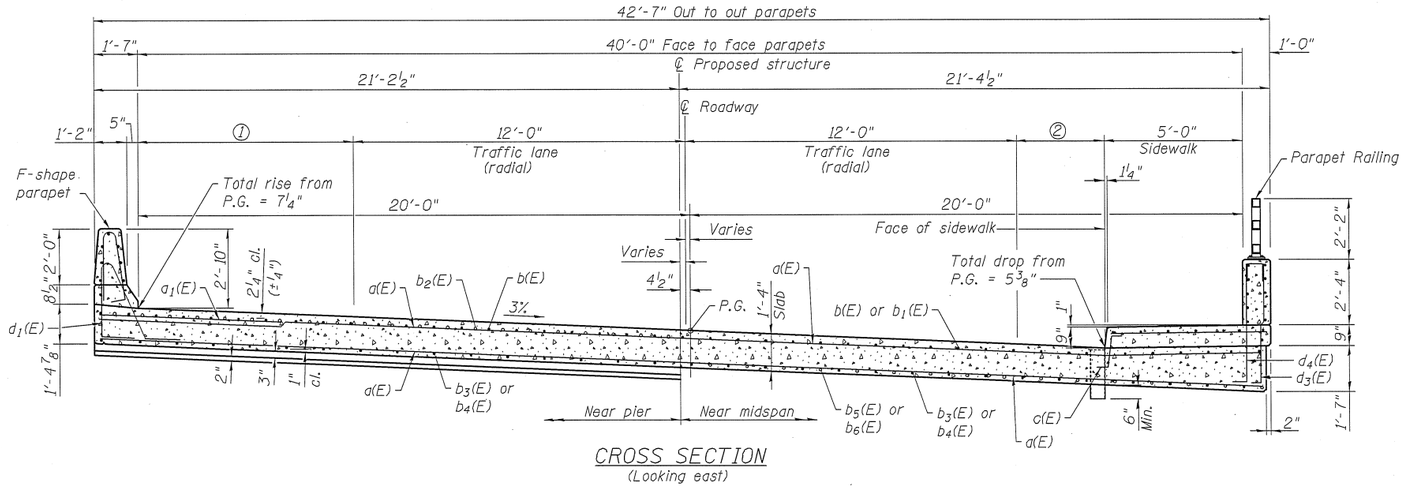
TOP OF EAST APPROACH SLAB ELEVATIONS
STRUCTURE NO. 093-0026

SHEET NO. 5 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	20
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		



PLAN



CROSS SECTION
(Looking east)

① Shoulder varies 7'-9⅜" min. to 8'-2½" max.

② Shoulder varies 2'-9½" min. to 3'-2⅝" max.

Notes:
See sheets 7 and 8 of 21 for Bill of Material and parapet details.
Bars indicated thus: 20x2-#8 etc. indicates 20 lines of bars with 2 lengths per line.
See sheet 9 of 21 for sections and additional superstructure details.

MINIMUM BAR LAP
(Slab)

#5 bar = 2'-3"
#8 bar = 4'-8" (top)
#8 bar = 4'-2" (bottom)

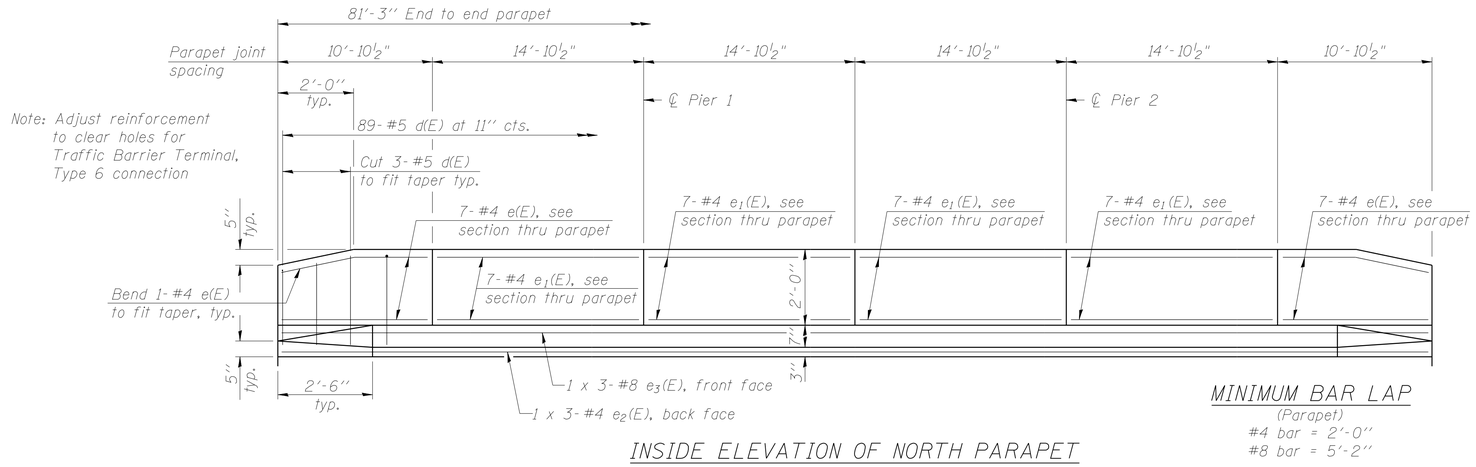
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 093-0026
SHEET NO. 6 OF 21 SHEETS

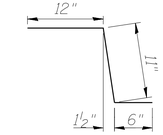
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	21
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
PEORIA, ILLINOIS

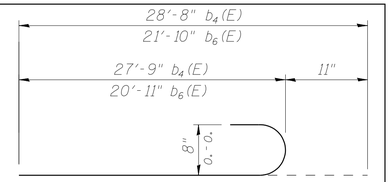


INSIDE ELEVATION OF NORTH PARAPET

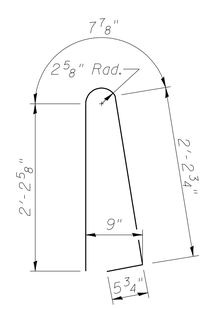
MINIMUM BAR LAP
(Parapet)
#4 bar = 2'-0"
#8 bar = 5'-2"



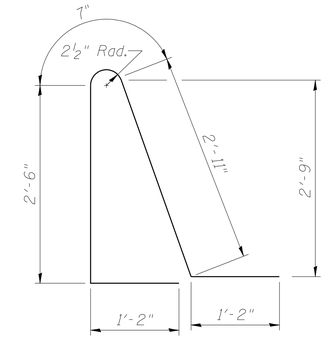
BAR c(E)



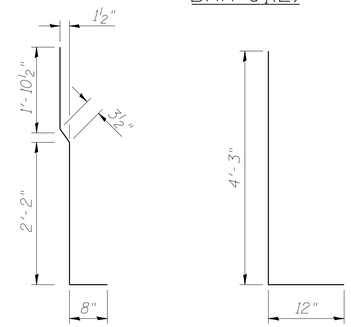
BARS b4(E) & b6(E)

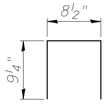


BAR d(E)



BAR d1(E)

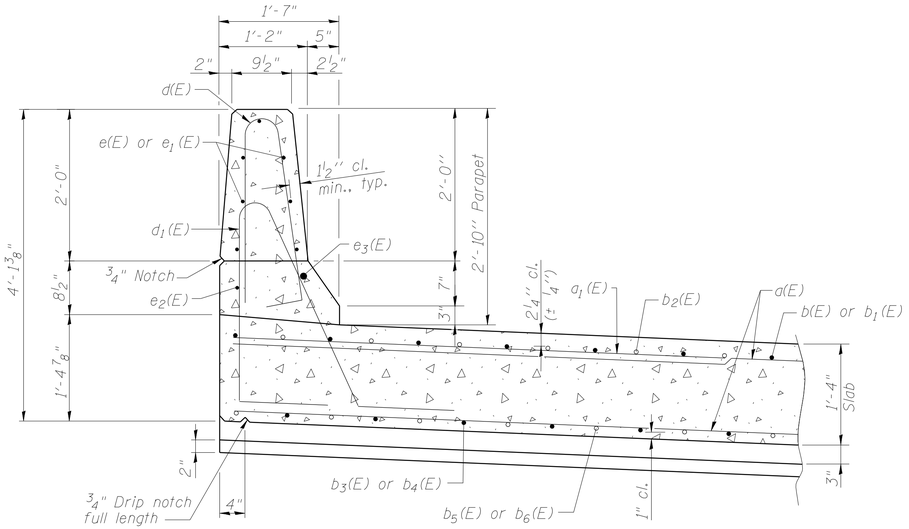




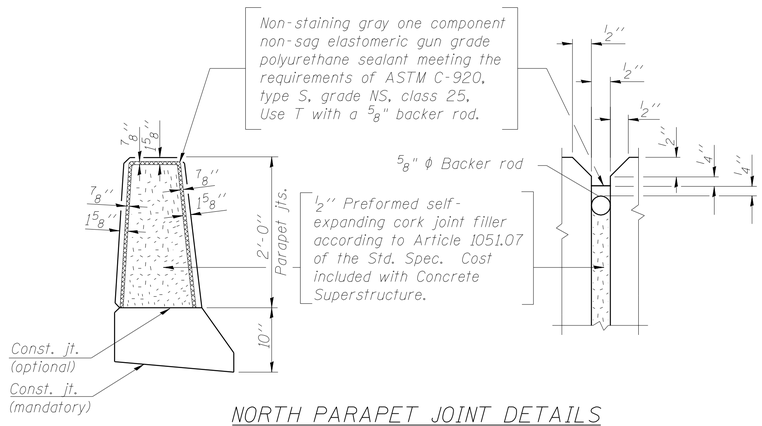
BAR d2(E)

BAR d3(E)

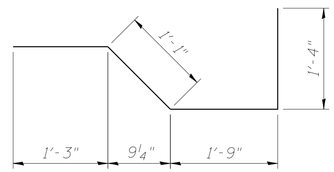
BAR d4(E)



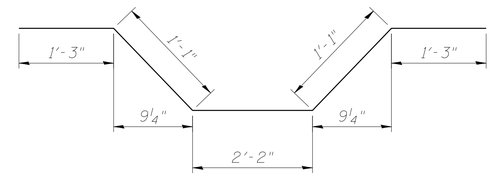
SECTION THRU NORTH PARAPET



NORTH PARAPET JOINT DETAILS



BAR x1(E)



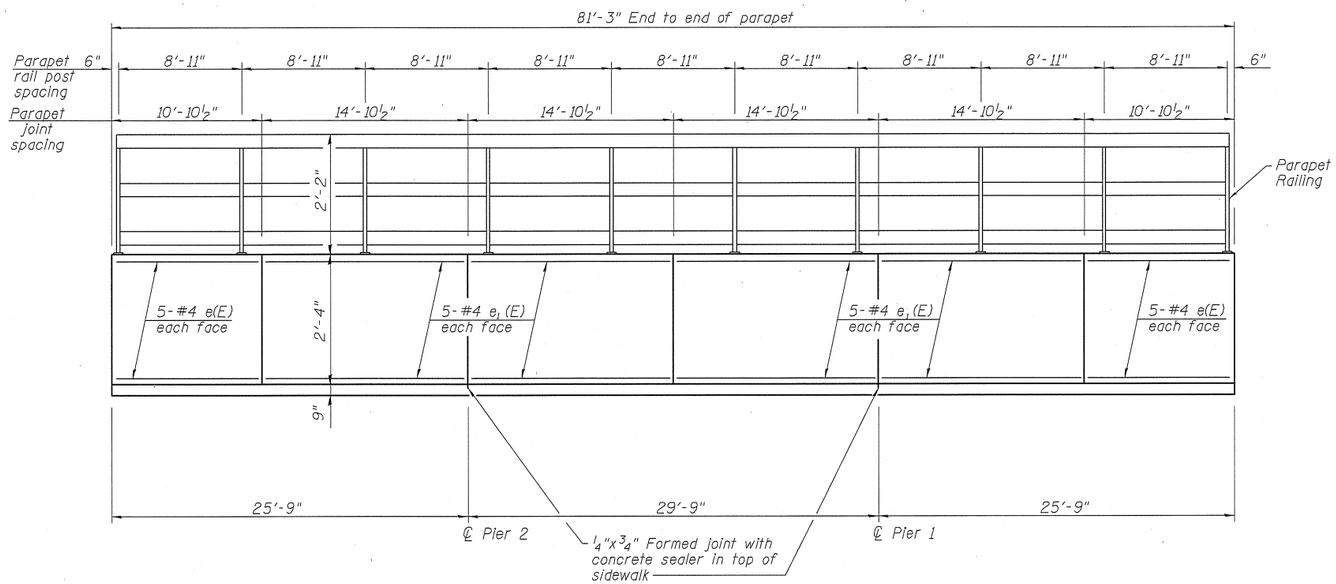
BAR x(E)

FILE NAME = 0930026-74220-07-SprDtl.dgn	USER NAME = RJT	DESIGNED - ELH 09/10	REVISED -	
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -	
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - DWH/KAH 08/11	REVISED -	
	PLOT DATE = 12/15/2011 1:29:58 PM	CHECKED - ELH 08/11	REVISED -	

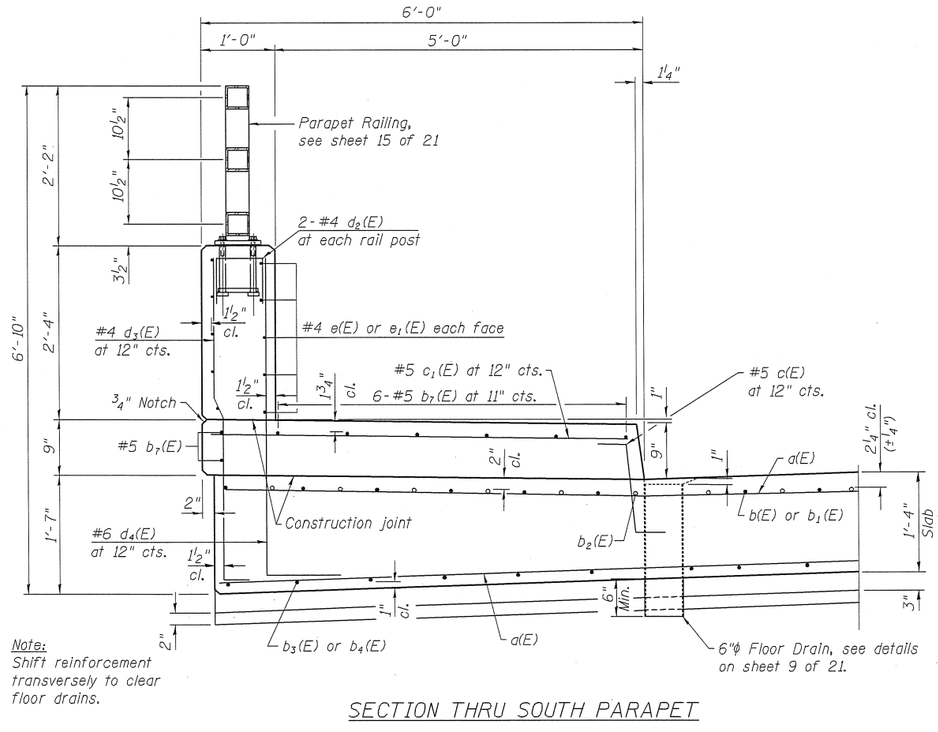
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 093-0026
SHEET NO. 7 OF 21 SHEETS

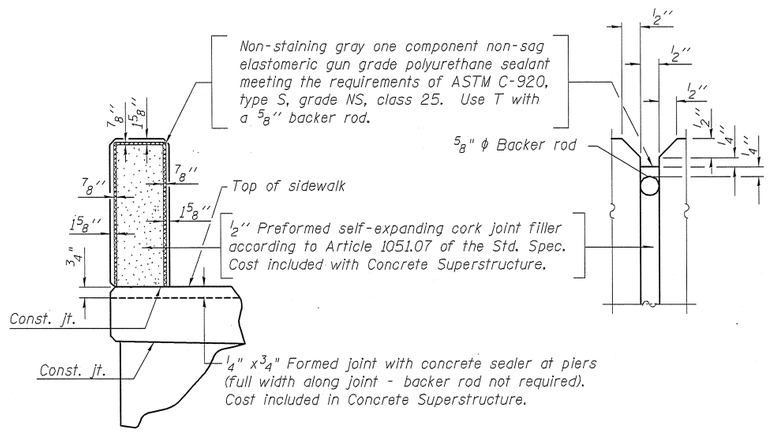
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	22
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



ELEVATION OF INSIDE FACE OF SOUTH PARAPET



SECTION THRU SOUTH PARAPET



SOUTH PARAPET JOINT DETAILS

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	131	#5	42'-0"	
d_1(E)	54	#6	6'-6"	
b(E)	86	#8	33'-5"	
b_1(E)	86	#5	11'-8"	
b_2(E)	84	#8	9'-3"	
b_3(E)	32	#8	33'-11"	
b_4(E)	64	#8	28'-8"	
b_5(E)	31	#8	18'-3"	
b_6(E)	62	#8	21'-10"	
b_7(E)	24	#5	28'-6"	
c(E)	81	#5	2'-5"	
c_1(E)	81	#5	5'-7"	
d(E)	89	#5	5'-7"	
d_1(E)	89	#5	8'-4"	
d_2(E)	20	#4	2'-3"	
d_3(E)	82	#4	5'-0"	
d_4(E)	82	#6	5'-3"	
e(E)	34	#4	10'-7"	
e_1(E)	68	#4	14'-7"	
e_2(E)	3	#4	28'-4"	
e_3(E)	3	#8	30'-5"	
x(E)	86	#5	6'-10"	
x_1(E)	86	#5	5'-5"	
Reinforcement Bars, Epoxy Coated			Pound	35,920
Concrete Superstructure			Cu. Yd.	208.0
Floor Drains			Each	4

Bars indicated thus: 1x3-#8 etc. indicates 1 line of bars with 3 lengths per line.

Name Plate to be mounted on inside face of parapet, see sheet 1 of 21.

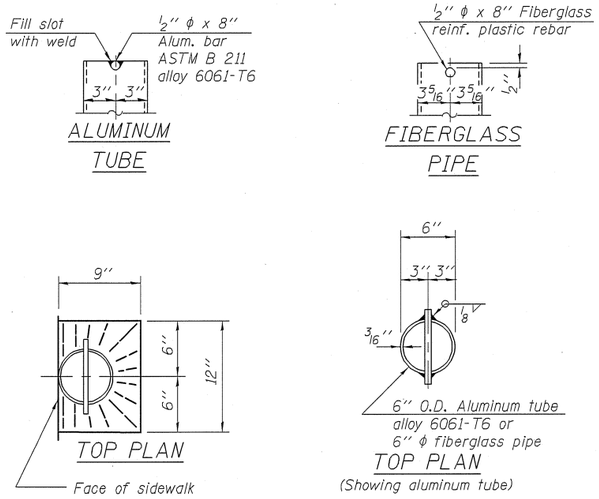
See sheet 7 of 21 for bar bending details.

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

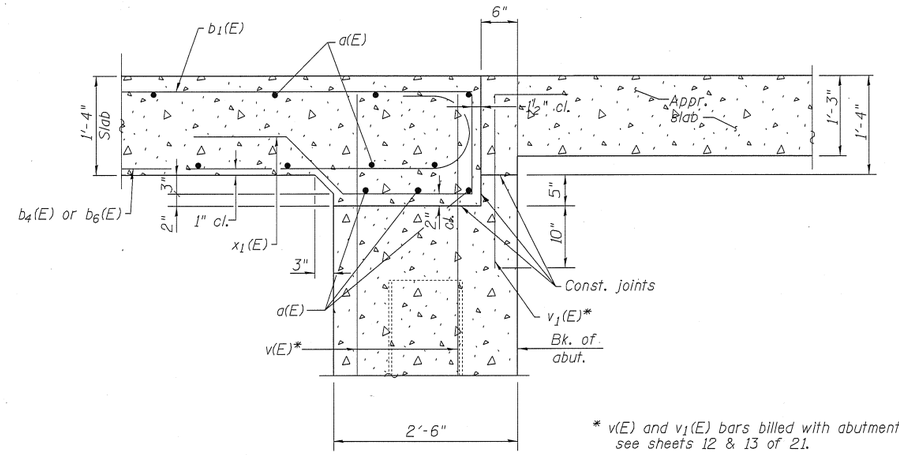
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 093-0026
SHEET NO. 8 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103BIB-1	WABASH	53	23
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		



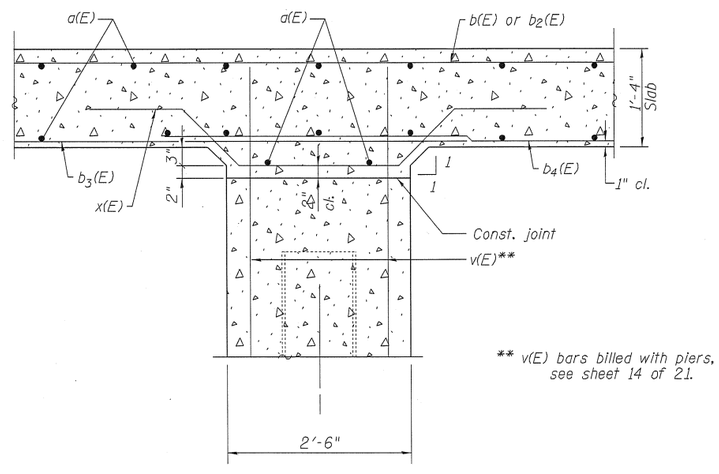
FLOOR DRAIN DETAILS

Notes:
Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
The exterior surfaces of the floor drains shall be coated or pigmented by the manufacturer with a color that matches the concrete.



* v(E) and v_1(E) bars billed with abutments, see sheets 12 & 13 of 21.

SECTION A-A



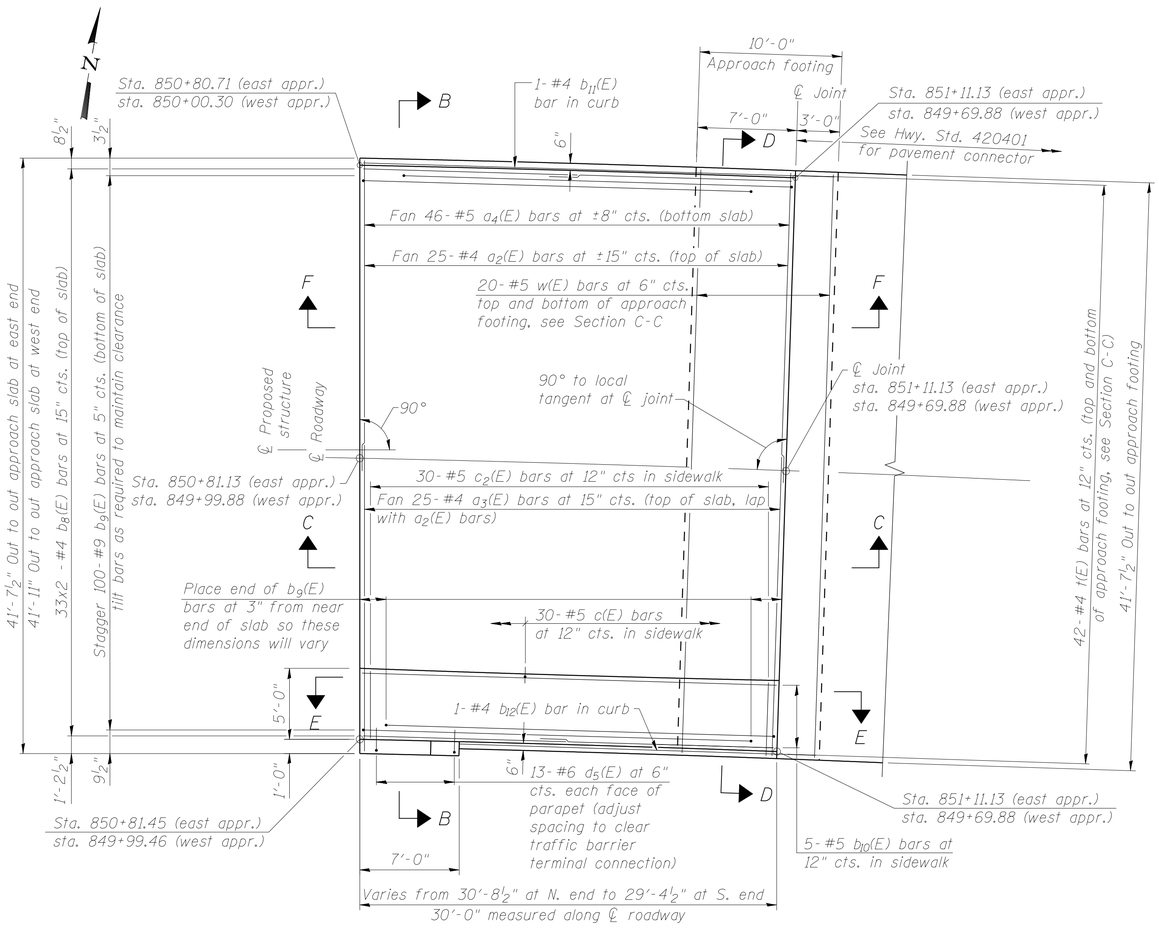
** v(E) bars billed with piers, see sheet 14 of 21.

SECTION B-B

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 09/10	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUPERSTRUCTURE DETAILS STRUCTURE NO. 093-0026	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -			332	(103B)B-1	WABASH	53	24
	PLOT SCALE = $SCALE$	DRAWN - DWH/KAH 08/11	REVISED -					CONTRACT NO. 74220		
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -		SHEET NO. 9 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		

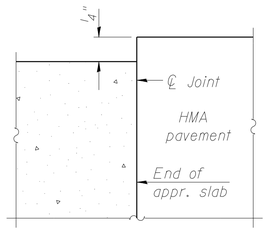
ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
ARBANA, ILLINOIS

Notes:
See sheet 11 of 21 for Section C-C and Views E-E & F-F.
$a_2(E)$, $a_3(E)$ and $a_4(E)$ bar spacings measured along ℄ Rdwy.



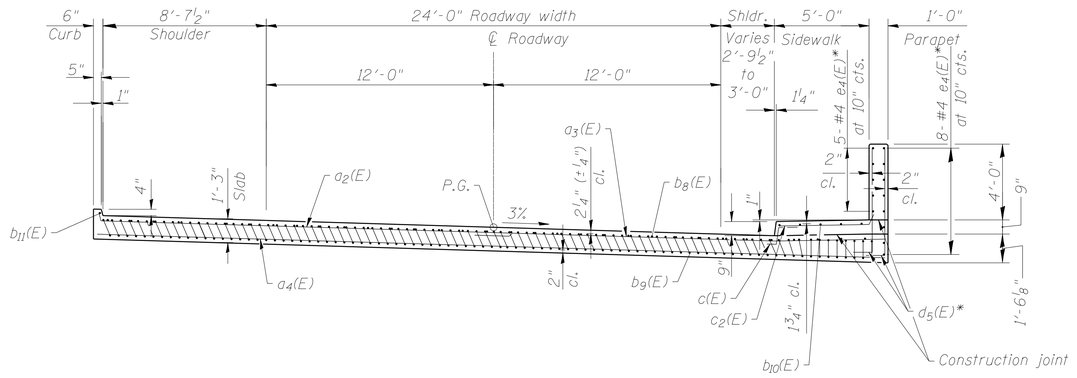
PLAN
(East approach slab shown; west approach slab similar)

MINIMUM BAR LAP
(Approach slab)
#4 bar = 2'-0"



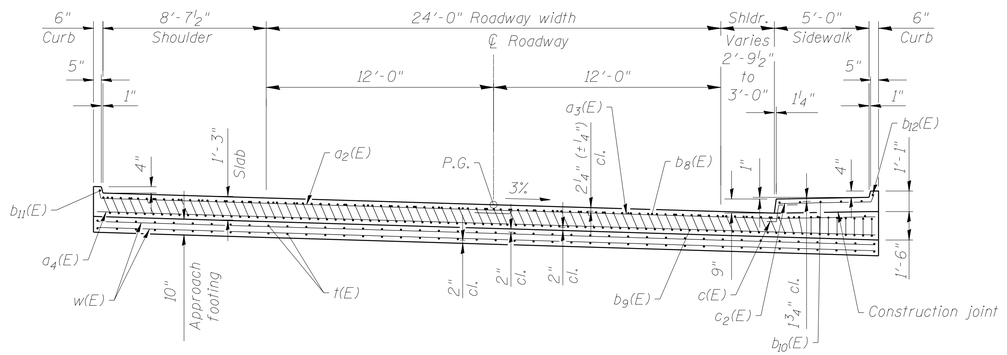
FLEXIBLE PAVEMENT

DETAIL A



SECTION B-B

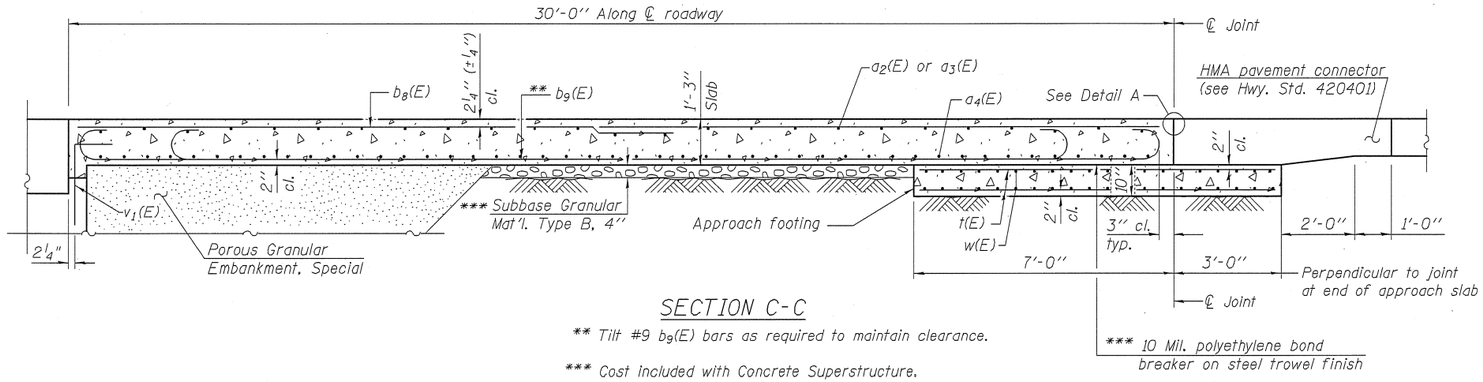
* Locate to clear traffic barrier terminal connection



SECTION D-D

FILE NAME = 0930026-74220-10-Apr-Dtl.dgn	USER NAME = RJT	DESIGNED - ELH 09/10	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**BRIDGE APPROACH SLAB DETAILS STRUCTURE NO. 093-0026**
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -		
	PLOT SCALE = 8:1 ' / IN.	DRAWN - DWH/KAH 08/11	REVISED -		
	PLOT DATE = 12/15/2011 1:33:07 PM	CHECKED - ELH 08/11	REVISED -		SHEET NO. 10 OF 21 SHEETS

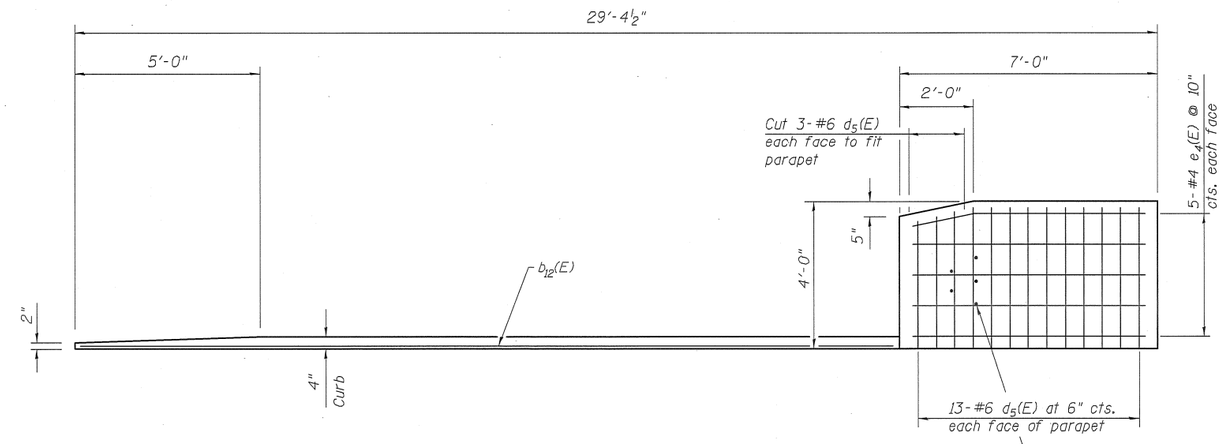
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	25
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



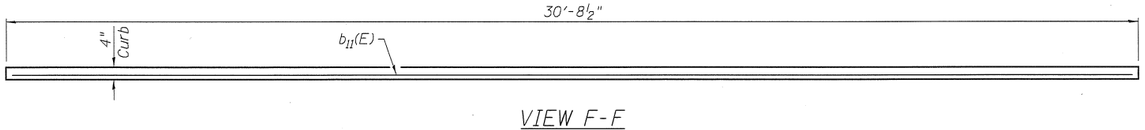
SECTION C-C

** Tilt #9 b_9(E) bars as required to maintain clearance.

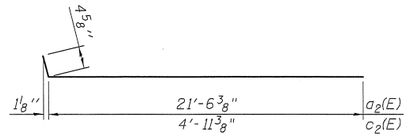
*** Cost included with Concrete Superstructure.



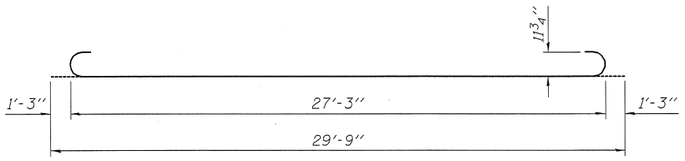
VIEW E-E



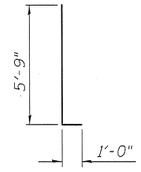
VIEW F-F



BARS a_2(E) & c_2(E)



BAR b_9(E)



BAR d_5(E)

Notes:

See sheet 10 of 21 for Detail A and Sections B-B & D-D.
Approach slab, sidewalk, and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
For v_1(E) bar details, see sheets 12 & 13 of 21.
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 21.

TWO APPROACHES
BILL OF MATERIAL

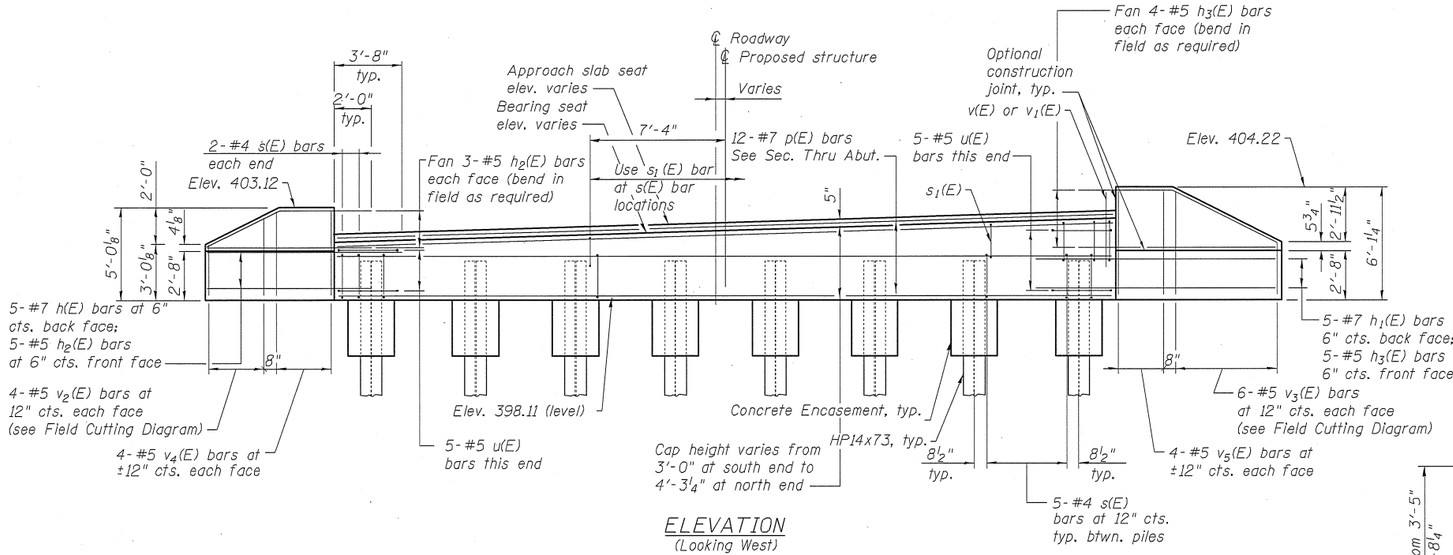
Bar	No.	Size	Length	Shape
a_2(E)	50	#4	21'-11"	
a_3(E)	50	#4	21'-8"	
a_4(E)	92	#5	41'-0"	
b_8(E)	132	#4	16'-2"	
b_9(E)	200	#9	29'-9"	
b_{10}(E)	10	#5	29'-1"	
b_{11}(E)	2	#4	30'-4"	
b_{12}(E)	2	#4	22'-0"	
c(E)	60	#5	2'-5"	
c_2(E)	60	#5	5'-4"	
d_5(E)	52	#6	6'-9"	
e_4(E)	26	#4	6'-8"	
t(E)	168	#4	9'-8"	
w(E)	80	#5	41'-3"	
Concrete Superstructure			Cu. Yd.	129.4
Concrete Structures			Cu. Yd.	25.7
Reinforcement Bars, Epoxy Coated			Pound	33080

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 09/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - DWH/KAH 08/11	REVISED -
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -

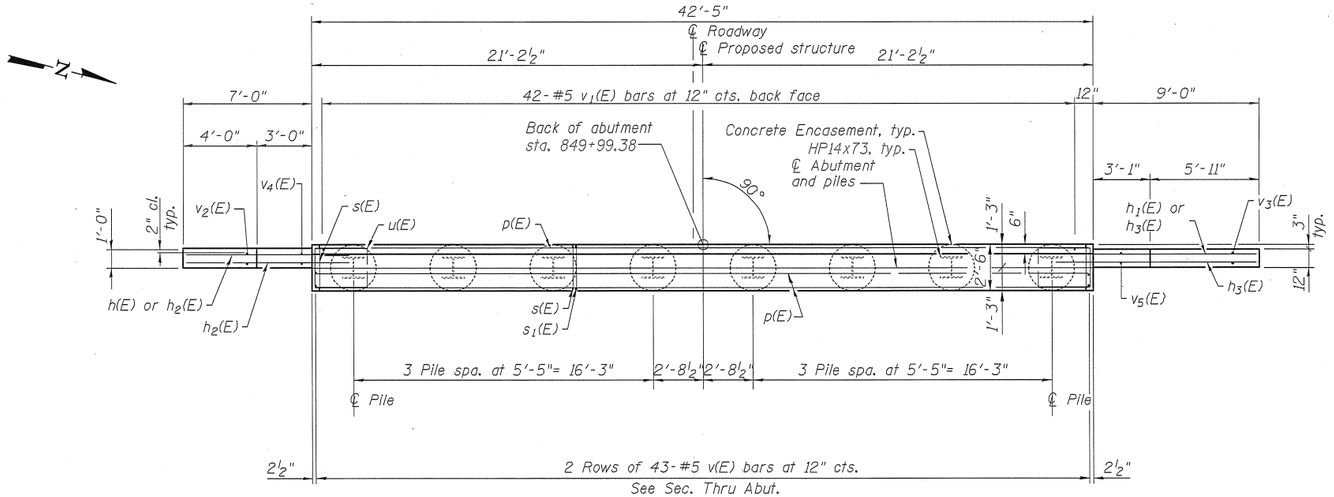
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPPROACH SLAB DETAILS
STRUCTURE NO. 093-0026
SHEET NO. 11 OF 21 SHEETS

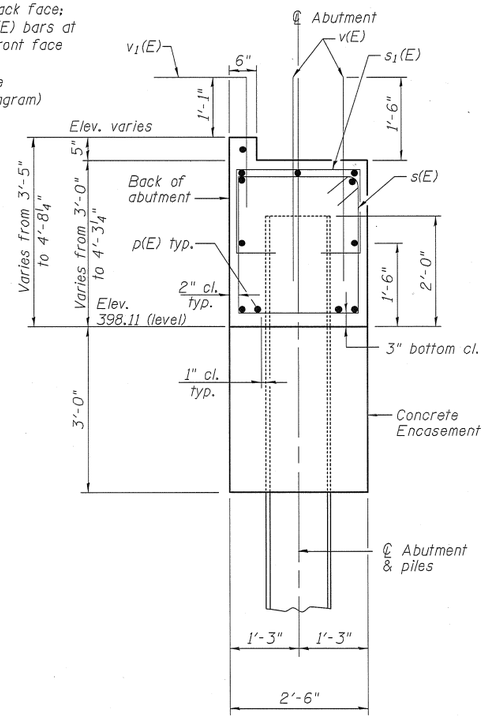
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	26
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



ELEVATION
(Looking West)



PLAN



SECTION THRU
WEST ABUTMENT

WEST ABUTMENT
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	5	#7	10'-6"	—
h_1(E)	5	#7	12'-6"	—
h_2(E)	11	#5	8'-10"	—
h_3(E)	13	#5	10'-10"	—
p(E)	12	#7	42'-1"	—
s(E)	39	#4	10'-1"	□
s_1(E)	27	#4	6'-6"	□
u(E)	10	#5	9'-5"	▭
v(E)	86	#5	3'-8"	—
v_1(E)	42	#5	4'-0"	⌐
v_2(E)	4	#5	6'-8"	—
v_3(E)	6	#5	7'-11"	—
v_4(E)	8	#5	4'-7"	—
v_5(E)	8	#5	5'-8"	—
Structure Excavation		Cu. Yd.		74
Concrete Structures		Cu. Yd.		17.5
Reinforcement Bars, Epoxy Coated		Pound		2670
Furnishing Steel Piles, HP14x73		Lin. Ft.		371
Driving Piles		Lin. Ft.		371
Test Pile, Steel HP14x73		Each		1
Concrete Encasement		Cu. Yd.		4.4
Porous Granular Embankment, Special		Cu. Yd.		34
Geocomposite Wall Drain		Sq. Yd.		25
Pipe Underdrains for Structures, 4"		Foot		72

For details of piles and Concrete Encasement, see Sheet 17 of 21.
For bar bending details, see Sheet 13 of 21.

PILE DATA

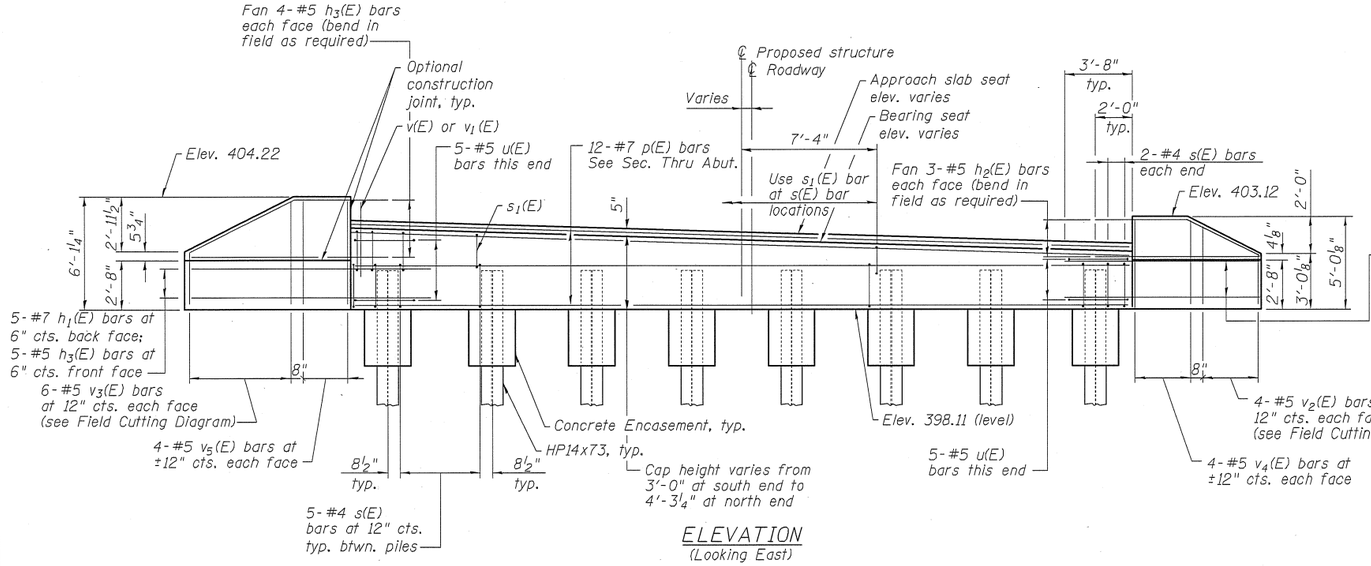
Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Estimated Length: 53'
No. of Production Piles: 7
No. of Test Piles: 1

FILE NAME = $FILES$	USER NAME = $USER$	DESIGNED - ELH 11/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 11/10	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - DWH/HAS 08/11	REVISED -
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -

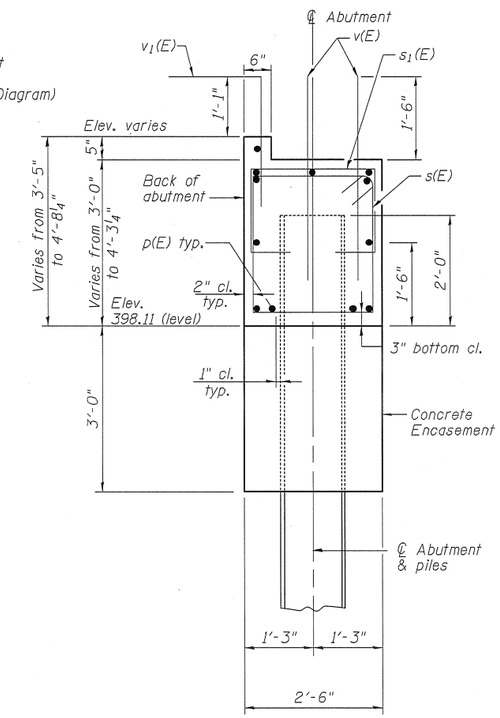
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

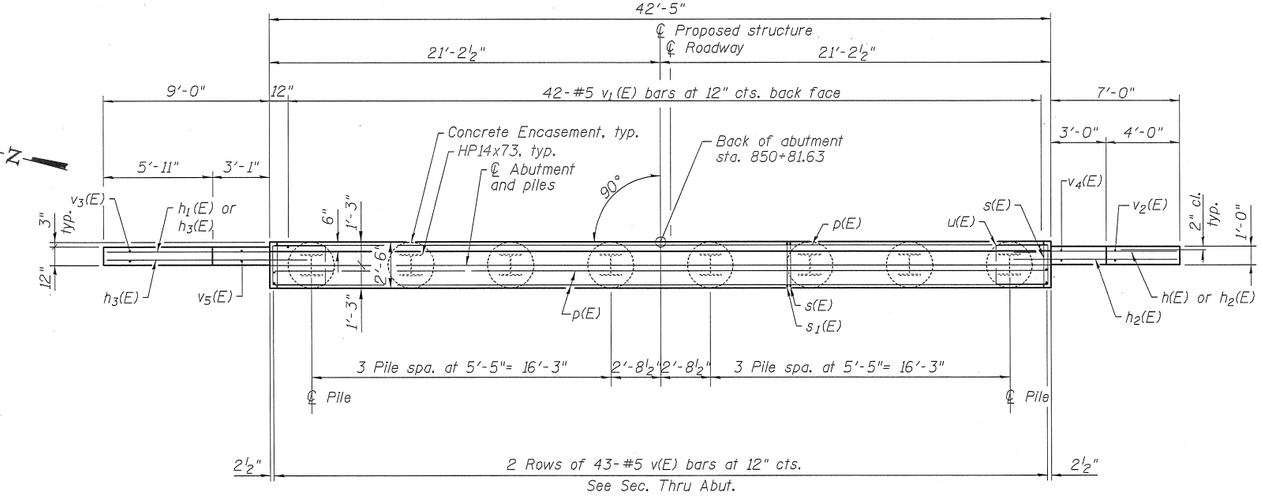
WEST ABUTMENT
STRUCTURE NO. 093-0026
SHEET NO. 12 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	27
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		

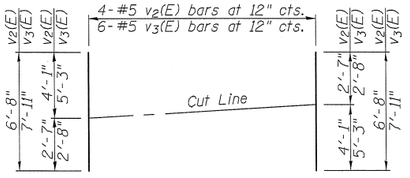


ELEVATION
(Looking East)





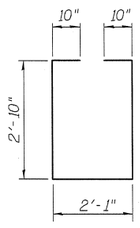
PLAN



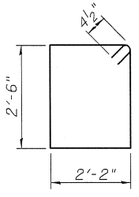
BARS $v_2(E)$ & $v_3(E)$

FIELD CUTTING DIAGRAM

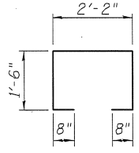
Order $v_2(E)$ and $v_3(E)$ full length. Cut as shown and use remainder of bars in opposite face.



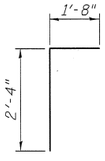
BAR u(E)



BAR s(E)



BAR $s_1(E)$



BAR $v_1(E)$

EAST ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	5	#7	10'-6"	——
$h_1(E)$	5	#7	12'-6"	——
$h_2(E)$	11	#5	8'-10"	——
$h_3(E)$	13	#5	10'-10"	——
p(E)	12	#7	42'-1"	——
s(E)	39	#4	10'-1"	□
$s_1(E)$	27	#4	6'-6"	□
u(E)	10	#5	9'-5"	⊐
v(E)	86	#5	3'-8"	——
$v_1(E)$	42	#5	4'-0"	⌐
$v_2(E)$	4	#5	6'-8"	——
$v_3(E)$	6	#5	7'-11"	——
$v_4(E)$	8	#5	4'-7"	——
$v_5(E)$	8	#5	5'-8"	——
Structure Excavation		Cu. Yd.		74
Concrete Structures		Cu. Yd.		17.5
Reinforcement Bars, Epoxy Coated		Pound		2670
Furnishing Steel Piles, HP14x73		Foot		525
Driving Piles		Foot		525
Test Pile, Steel HP14x73		Each		1
Concrete Encasement		Cu. Yd.		4.4
Porous Granular Embankment, Special		Cu. Yd.		34
Geocomposite Wall Drain		Sq. Yd.		25
Pipe Underdrains for Structures, 4"		Foot		72

For details of piles and Concrete Encasement, see Sheet 17 of 21.

PILE DATA

Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Estimated Length: 75'
No. of Production Piles: 7
No. of Test Piles: 1

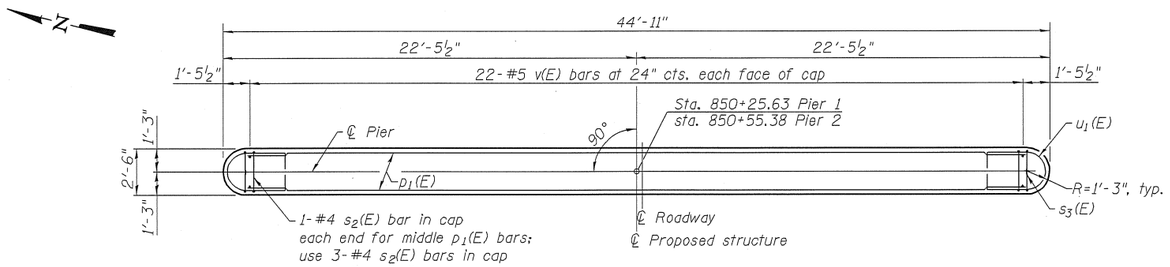
SECTION THRU EAST ABUTMENT

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 11/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 11/10	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - DWH/HAS 08/11	REVISED -
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -

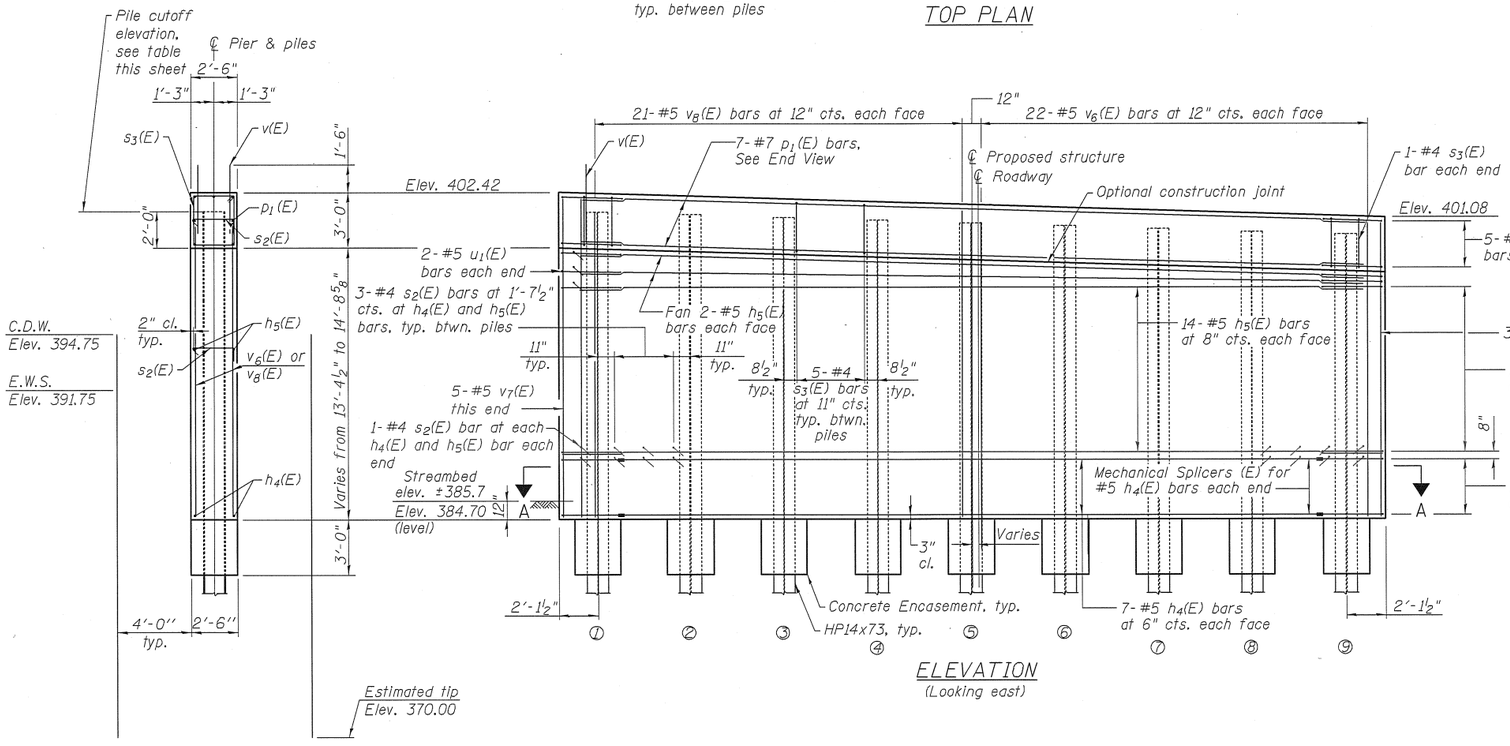
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST ABUTMENT
STRUCTURE NO. 093-0026
SHEET NO. 13 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	28
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		



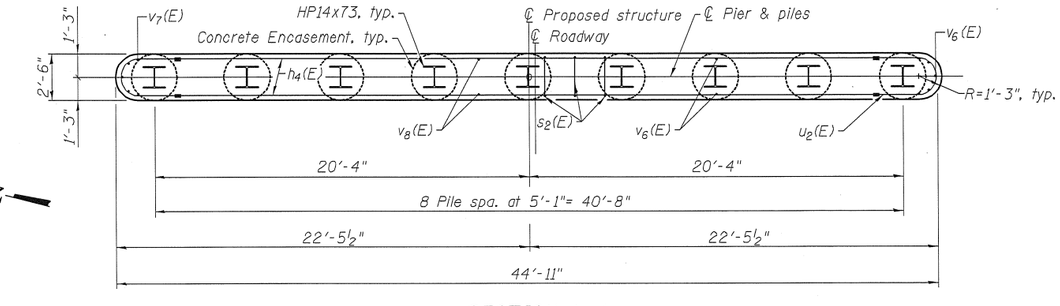
TOP PLAN



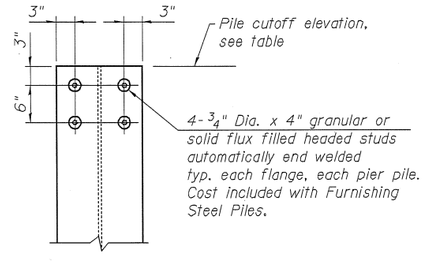
ELEVATION
(Looking east)

END VIEW

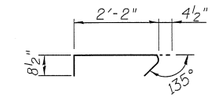
Notes:
C.D.W. is the cofferdam design water elevation.
E.W.S. is the estimated water surface elevation.



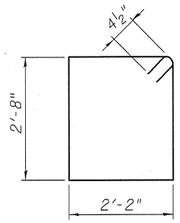
SECTION A-A



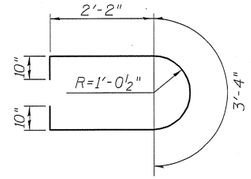
TOP OF PILE DETAIL



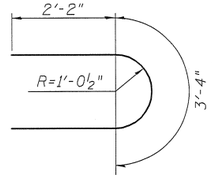
BAR $s_2(E)$



BAR $s_3(E)$



BAR $u_1(E)$



BAR $u_2(E)$

BILL OF MATERIAL
(For one pier unless noted otherwise)

Bar	No.	Size	Length	Shape
$h_4(E)$	14	#5	38'-2"	
$h_5(E)$	32	#5	42'-4"	
$p_1(E)$	7	#7	42'-4"	
$s_2(E)$	624	#4	3'-3"	
$s_3(E)$	42	#4	10'-5"	
$u_1(E)$	42	#5	9'-4"	
$u_2(E)$	14	#5	7'-8"	
v(E)	44	#5	3'-8"	
$v_6(E)$	47	#5	15'-11"	
$v_7(E)$	5	#5	17'-3"	
$v_8(E)$	42	#5	16'-7"	

		Pier 1	Pier 2
Cofferdam Excavation	Cu. Yd.	49	49
Concrete Structures	Cu. Yd.	70.1	70.1
Reinforcement Bars, Epoxy Coated	Pound	6510	6510
Furnishing Steel Piles, HP14x73	Foot	632	600
Driving Piles	Foot	632	600
Test Pile, Steel HP14x73	Each	1	1
Concrete Encasement	Cu. Yd.	4.9	4.9
Cofferdam (Type 2) (Location-1)	Each	1	
Cofferdam (Type 2) (Location-2)	Each		1

For details of piles and Concrete Encasement, see sheet 17 of 21.
For details of Mechanical Splicers, see sheet 16 of 21.

PILE DATA
Type: Steel HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Estimated Length: 79' (Pier 1)
75' (Pier 2)
No. of Production Piles: 8 each pier
No. of Test Piles: 1 each pier

PILE CUTOFF TABLE

Pile No.	Cutoff Elevation
①	401.36
②	401.21
③	401.05
④	400.90
⑤	400.75
⑥	400.60
⑦	400.45
⑧	400.29
⑨	400.14

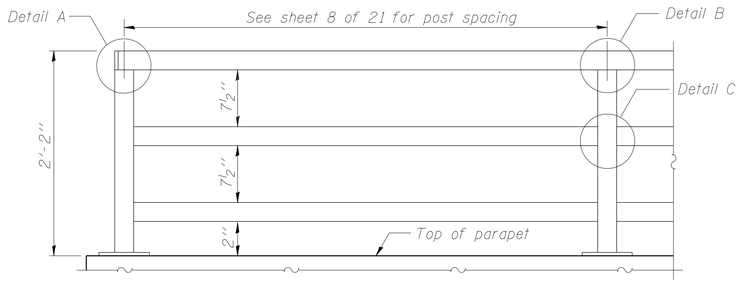
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 11/10	REVISED -
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 11/10	REVISED -
	PLOT SCALE = $SCALE$	DRAWN - DWH/HAS 08/11	REVISED -
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

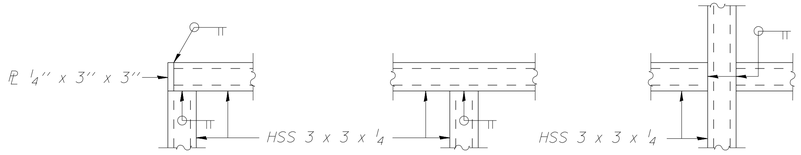
PIERS
STRUCTURE NO. 093-0026
SHEET NO. 14 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	29
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
BELLEVILLE, ILLINOIS



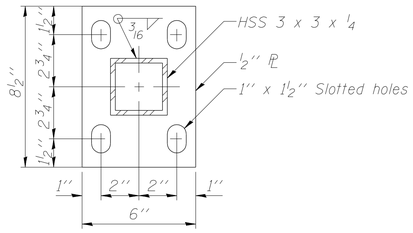
PARAPET RAILING ELEVATION



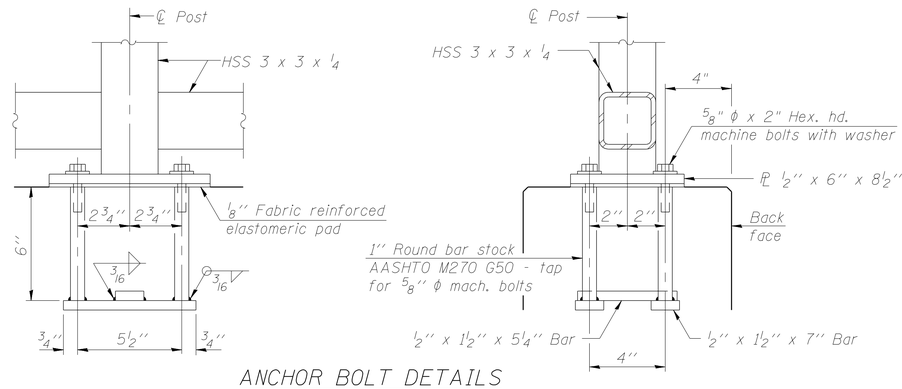
DETAIL A DETAIL B DETAIL C

NOTES

All steel rail elements shall be galvanized according to Article 509.05 of the Standard Specifications.

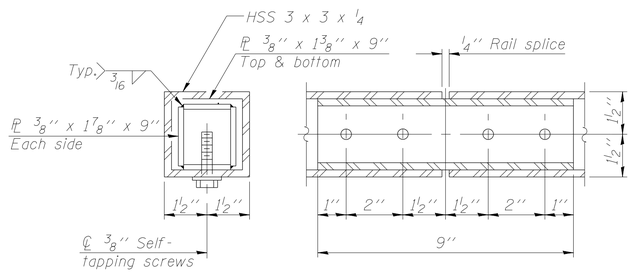


BASE ℄



ANCHOR BOLT DETAILS

In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting ⅝" ϕ anchor rods according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

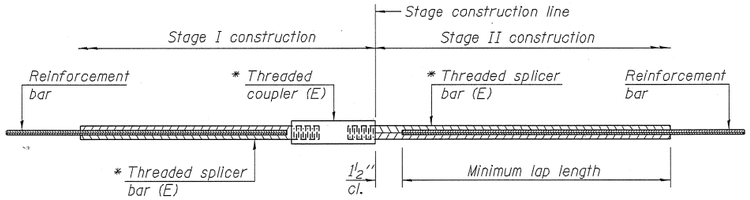


RAIL SPLICE

BILL OF MATERIAL

Item	Unit	Quantity
Parapet Railing	Foot	81

FILE NAME = 0930026-74220-15-PrptRail.dgn	USER NAME = RJT	DESIGNED - ELH	09/10	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**PARAPET RAILING STRUCTURE NO. 093-0026**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP	09/10	REVISED -			332	(103B)B-1	WABASH	53	30
	PLOT SCALE = 0:1 ' ' / IN.	DRAWN - DWH/KAH	08/11	REVISED -						CONTRACT NO. 74220	
	PLOT DATE = 12/15/2011 1:37:45 PM	CHECKED - ELH	08/11	REVISED -		SHEET NO. 15 OF 21 SHEETS	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



STANDARD BAR SPLICER ASSEMBLY

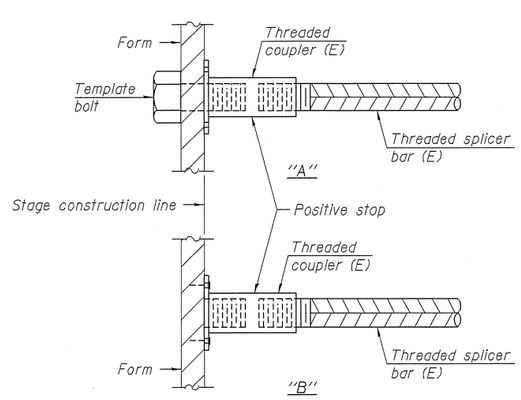
Minimum Lap Lengths					
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-3"
5	1'-9"	2'-5"	2'-7"	2'-11"	2'-10"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-4"
7	2'-9"	3'-10"	4'-2"	4'-8"	4'-6"
8	3'-8"	5'-1"	5'-5"	6'-2"	5'-10"
9	4'-7"	6'-5"	6'-10"	7'-9"	7'-5"

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

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

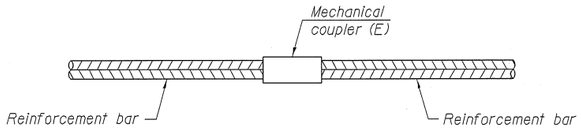
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



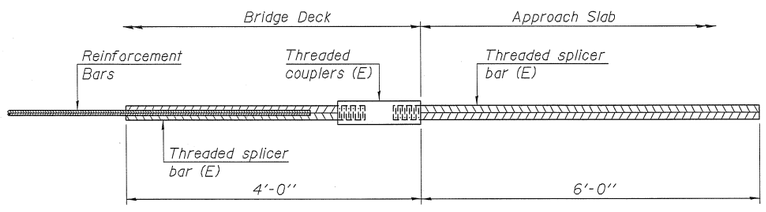
INSTALLATION AND SETTING METHODS

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



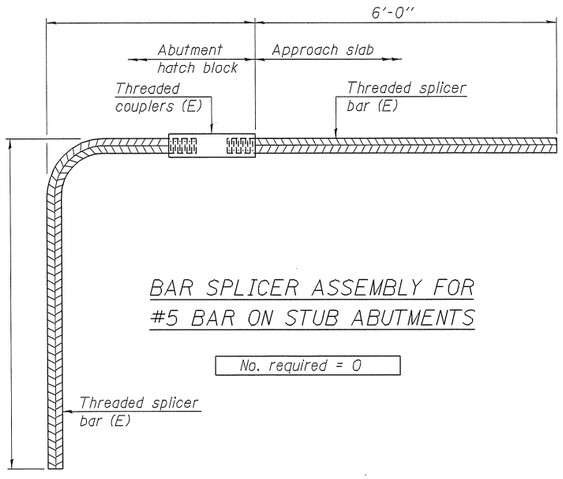
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Pier 1	#5	28
Pier 2	#5	28



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

No. required = 0



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required = 0

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

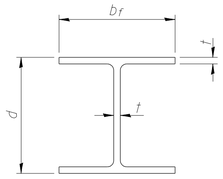
All reinforcement shall be lapped and tied to the splicer bars.

Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

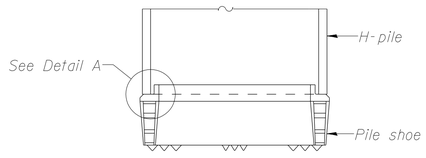
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED - ELH 09/10	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 093-0026
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -		SHEET NO. 16 OF 21 SHEETS
	PLOT SCALE = $SCALE$	DRAWN - DWH/KAH 08/11	REVISED -		
	PLOT DATE = $DATE$ $TIME$	CHECKED - ELH 08/11	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	31
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

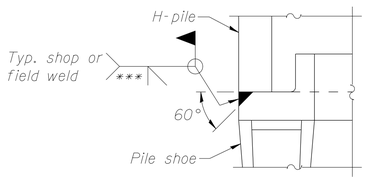


STEEL PILE TABLE

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

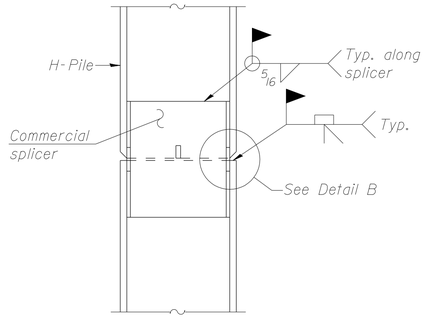


ELEVATION

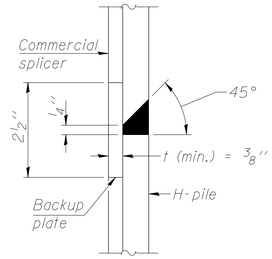


DETAIL A

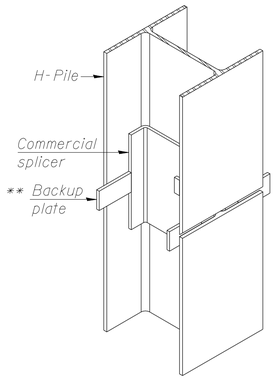
H-PILE SHOE ATTACHMENT



ELEVATION

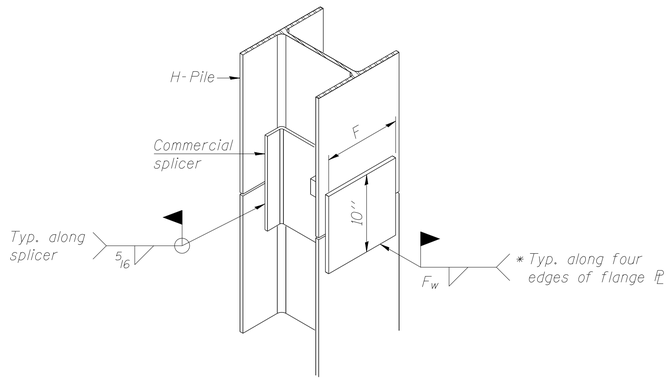


DETAIL "B"



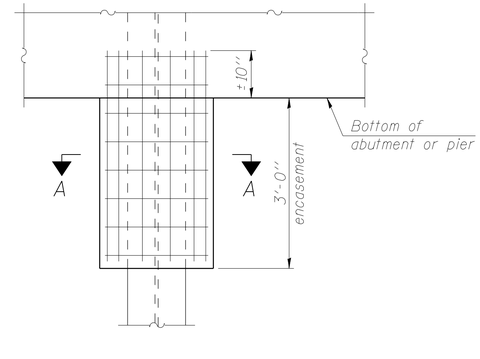
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE

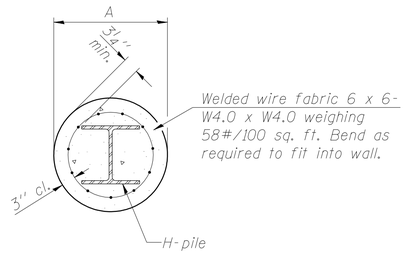


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE



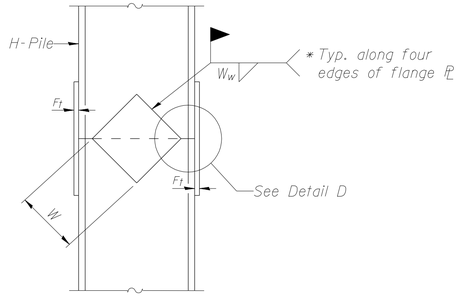
ELEVATION



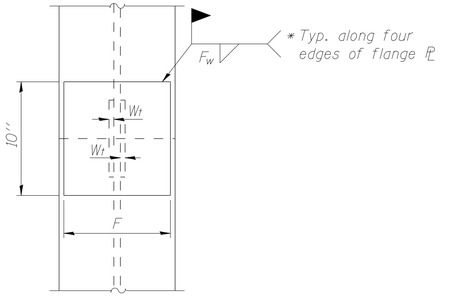
Note:
Forms for encasement may be omitted when soil conditions permit.

SECTION A-A

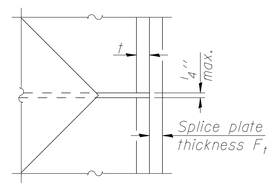
PILE ENCASEMENT



ELEVATION



END VIEW



DETAIL D

Designation	F	F_t	F_w	W	W_t	W_w
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"	11/16"	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"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	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"

WELDED PLATE FIELD SPLICE

* 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.).

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

F-HP 7-1-10

FILE NAME = 0930026-74220-17-HPDtl.dgn	USER NAME = RJT	DESIGNED - ELH 09/10	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**HP PILE DETAILS STRUCTURE NO. 093-0026**	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -			332	(103B)B-1	WABASH	53	32
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - DWH/KAH 08/11	REVISED -					CONTRACT NO. 74220		
	PLOT DATE = 12/15/2011 1:39:31 PM	CHECKED - ELH 08/11	REVISED -		SHEET NO. 17 OF 21 SHEETS			ILLINOIS FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
PEORIA, ILLINOIS

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/17/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 093-0008
Station 850+32

BORING NO. 1 S Abut
Station 850+52
Offset 15.50ft Lt
Ground Surface Elev. 403.94 ft

Surface Water Elev. 388.20 ft
Stream Bed Elev. 385.46 ft

Groundwater Elev.:
First Encounter 369.4 ft
Upon Completion 387.4 ft
After 72 Hrs. 391.9 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
403.44				6" mixtureof aggregate and Clay shoulder.
				Brown, SILTY LOAM.
401.94				
	24			Stiff, damp, brown, SILTY CLAY LOAM.
	45	1.1	14	
	15	S		
-5	4			
	7	2.0	19	
	6	S		
396.94				
	2			Stiff, damp, brown/red/gray, SILTY CLAY.
	4	1.2	19	
	5	B		
-10	3			
	4	1.2	21	
	5	B		
391.64				
	1			Soft, very damp, brown mottled gray, LOAM.
	2	0.3	23	
	1	B		
389.44				
-15	2			Hard, damp, red/gray/brown, SILTY CLAY.
	4	4.9	31	
	7	B		
	3			
	5	2.8	22	
	7	B		
383.94 -20	3			*10% passing #200 sieve.*
				Very stiff, damp, red/gray/brown, SILTY CLAY.
	5	2.8	25	
	7	B		
	3			
	7	3.7	26	
	8	B		
-25	6			
	9	3.3	25	
	11	B		
	5			
	6	3.0	24	
	8	S		
-30	3			
	3	2.7	28	
	5	B		
369.44				
-35	1			Medium, wet, gray, fine grained, SAND. *10% passing #200 sieve.*
	7		17	
	13			
363.94 -40	0			

Latitude W 87 deg 46 756 min. Longitude N 38 deg 24 190 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/17/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 093-0008
Station 850+32

BORING NO. 1 S Abut
Station 850+52
Offset 15.50ft Lt
Ground Surface Elev. 403.94 ft

Surface Water Elev. 388.20 ft
Stream Bed Elev. 385.46 ft

Groundwater Elev.:
First Encounter 369.4 ft
Upon Completion 387.4 ft
After 72 Hrs. 391.9 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Soil Description
	2	0.8	24	Medium, damp, gray, SANDY LOAM.
	4	B		
359.44				
-45	3			Medium, wet, gray, fine grained, SAND. *11% passing #200 sieve.*
	7		15	
	4			
354.44				
-50	6			Very stiff, damp, gray, SANDY CLAY.
	7	2.7	20	
	9	B		
-55				
344.44				
-60	20			
				Hard, damp, gray, CLAY LOAM TILL. *Very hard drilling. (continued)*
	31	7.7	12	
	36	BS		
-65				
-70	7			
	13	4.6	13	
	18	B		
-75				
324.44				
-80	19			

Latitude W 87 deg 46 756 min. Longitude N 38 deg 24 190 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

FILE NAME = 0930026-74220-18-Soil.dgn	USER NAME = RJT	DESIGNED - ELH 09/10	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 09/10	REVISED -	
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - DWH/KAH 08/11	REVISED -	
	PLOT DATE = 12/15/2011 1:40:13 PM	CHECKED - ELH 08/11	REVISED -	

BORING LOGS
STRUCTURE NO. 093-0026
SHEET NO. 18 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	33
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
PEORIA, ILLINOIS

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/17/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 093-0008
Station 850+32

BORING NO. 1 S Abut
Station 850+52
Offset 15.50ft Lt
Ground Surface Elev. 403.94 ft

Surface Water Elev. 388.20 ft
Stream Bed Elev. 385.46 ft

Groundwater Elev.:
First Encounter 369.4 ft
Upon Completion 387.4 ft
After 72 Hrs. 391.9 ft

	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Very stiff, damp, gray, SILTY CLAY SHALE. *(continued)*		14 13	3.1 S	16
	318.94 -85	50/4"		7
Borehole continued with rock coring.		50/2" 50/1"		
	-90			
	-95			
	-100			

Latitude W 87 deg 46.756 min, Longitude N 38 deg 24.150 min, Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

ROCK CORE LOG

Date 10/17/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash CORING METHOD Rotary, surf set diamond bit

STRUCT. NO. 093-0008
Station 850+32

CORING BARREL TYPE & SIZE NW, conv dbl bbl, split inner
Core Diameter 2.06 in
Top of Rock Elev. 324.44 ft
Begin Core Elev. 318.94 ft

BORING NO. 1 S Abut
Station 850+52
Offset 15.50ft Lt
Ground Surface Elev. 403.94 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Gray, slightly to moderately weathered, SILTY CLAY SHALE w/ several layers severely weathered. *Rock core B1C1 from 86.8' to 87.2' depth Qu = 30.6 tsf.* *Thin, black, Coal layer at 88.1' depth.*	318.94	B1C1	83	49	1.5	
	313.94 -90					
Gray, moderately weathered, SILTY CLAY SHALE. *Rock core B1C2 from 92.3' to 92.9' depth Qu = 54.2 tsf.* *Thin, Limestone layer at 93.9' depth.*		B1C2	94	67	1.6	
	308.94 -95					
Extent of exploration. Benchmark: BM 539 Chiseled square on NE corner of SE wingwall of existing structure, Sta 851+06, 22' Rt = 405.51' elevation. Provided by Program Development.						
	-100					
	-105					

Color pictures of the cores Available on request
Cores will be stored for examination until 10/17/09
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

FILE NAME = 0930026-74220-19-Soil.dgn	USER NAME = RJT	DESIGNED - ELH 01/11	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BORING LOGS STRUCTURE NO. 093-0026
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 01/11	REVISED -		
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - HAS 08/11	REVISED -		SHEET NO. 19 OF 21 SHEETS
	PLOT DATE = 12/15/2011 1:40:49 PM	CHECKED - ELH 08/11	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	34
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
BELLEVILLE, ILLINOIS

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/20/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 093-0008
Station 850+32

BORING NO. 2 N Abut
Station 851+20
Offset 13.00ft Rt
Ground Surface Elev. 402.78 ft

Surface Water Elev. 388.20 ft
Stream Bed Elev. 385.46 ft

Groundwater Elev.:
First Encounter 363.3 ft
Upon Completion 388.9 ft
After 96 Hrs. 396.8 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
401.98				3 1/2" asphalt on 6" concrete pavement.
	4			Medium to stiff, damp, gray, SILTY LOAM.
	5	1.4	19	
	6	B		
-5	3			
	4	1.0	20	
	3	B		
395.78				
	2			Stiff, damp, red marbled brown, SILTY CLAY.
	4	1.5	21	
	5	B		
-10	2			
	4	1.4	22	
	5	B		
390.78				
	2			Stiff, damp, red marbled gray, CLAY.
	3	1.2	24	
	4	B		
387.78				
-15	3			
	5	1.6	26	Stiff, damp, red w/ gray layers, SILTY CLAY.
	7	B		
385.28				
	3			
	3	0.1	23	Very soft, wet, red, fine grained, LOAM.
	4	B		
383.28				
-20	3			
	5	3.1	29	Very stiff, damp, brown, SILTY CLAY. *(continued)*
	7	S		
380.78				
	4			Very stiff, damp, brown to gray, CLAY.
	7	3.8	20	
	11	B		
-25	4			
	6	2.6	27	
	7	B		
	3			
	5	3.8	25	
	7	B		
-30	3			
	6	2.8	24	
	8	B		
368.28				
-35	0			Very soft, wet, gray, SANDY LOAM.
	0	0.1	16	
	1	S		
363.28				
-40	3			Gray, fine grained, SAND.

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude W 87 deg 46 742 min. Longitude N 38 deg 24 191 min. Map Datum WGS 84

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/20/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 093-0008
Station 850+32

BORING NO. 2 N Abut
Station 851+20
Offset 13.00ft Rt
Ground Surface Elev. 402.78 ft

Surface Water Elev. 388.20 ft
Stream Bed Elev. 385.46 ft

Groundwater Elev.:
First Encounter 363.3 ft
Upon Completion 388.9 ft
After 96 Hrs. 396.8 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Material
363.08				Medium, damp, gray, SANDY CLAY LOAM. *(continued)*
	4	0.7	23	
	9	S		
358.28				
-45	0			Loose, wet, gray, fine grained, SAND. *6% passing #200 sieve.*
	1		17	
	5			
-50				
348.28				
-55	18			Hard, damp, gray, CLAY LOAM TILL. Very hard drilling.
	28	6.4	10	
	38	S		
-60	18			
	30	6.9	10	Hard, damp, gray, CLAY LOAM TILL. Very hard drilling. *(continued)*
	48	S		
-65				
-70	5			
	12	2.5	24	
	10	B		
-75				
323.28				
-80	50/5"			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

Latitude W 87 deg 46 742 min. Longitude N 38 deg 24 191 min. Map Datum WGS 84

FILE NAME = 0930026-74220-20-Soil.dgn	USER NAME = RJT	DESIGNED - ELH 01/11	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 01/11	REVISED -	**BORING LOGS STRUCTURE NO. 093-0026**
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - HAS 08/11	REVISED -	SHEET NO. 20 OF 21 SHEETS
	PLOT DATE = 12/15/2011 1:41:33 PM	CHECKED - ELH 08/11	REVISED -	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	35
		CONTRACT NO. 74220		
		ILLINOIS FED. AID PROJECT		

ESCA CONSULTANTS, INC.
CIVIL & STRUCTURAL ENGINEERS
SPRINGFIELD, ILLINOIS

Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Date 10/20/08

ROUTE FAP 332 (IL 1) DESCRIPTION Greathouse Creek at SW edge of Mt. Carmel LOGGED BY E. Sandschafer

SECTION (103B)B-1 LOCATION NE 1/4, SEC. 30, TWP. 1 S, RNG. 12 W, 3 PM

COUNTY Wabash DRILLING METHOD Hollow stem auger & split spoon HAMMER TYPE Auto 140#

STRUCT. NO. 093-0008
Station 850+32

BORING NO. 2 N Abut
Station 851+20
Offset 13.00ft Rt
Ground Surface Elev. 402.78 ft

Surface Water Elev. 388.20 ft
Stream Bed Elev. 385.46 ft

Groundwater Elev.:
First Encounter 363.3 ft
Upon Completion 388.9 ft
After 96 Hrs. 396.8 ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	
322.68	50/2" 50/1"		6	Very dense, moist, gray, SILTY CLAY SHALE. Very hard drilling. *(continued)*
				Extent of exploration.
				Benchmark: BM 539 Chiseled square on NE corner of SE wingwall of existing structure, Sta 851+06, 22' Rt = 405.51' elevation. Provided by Program Development.
-85				
-90				
-95				
-100				

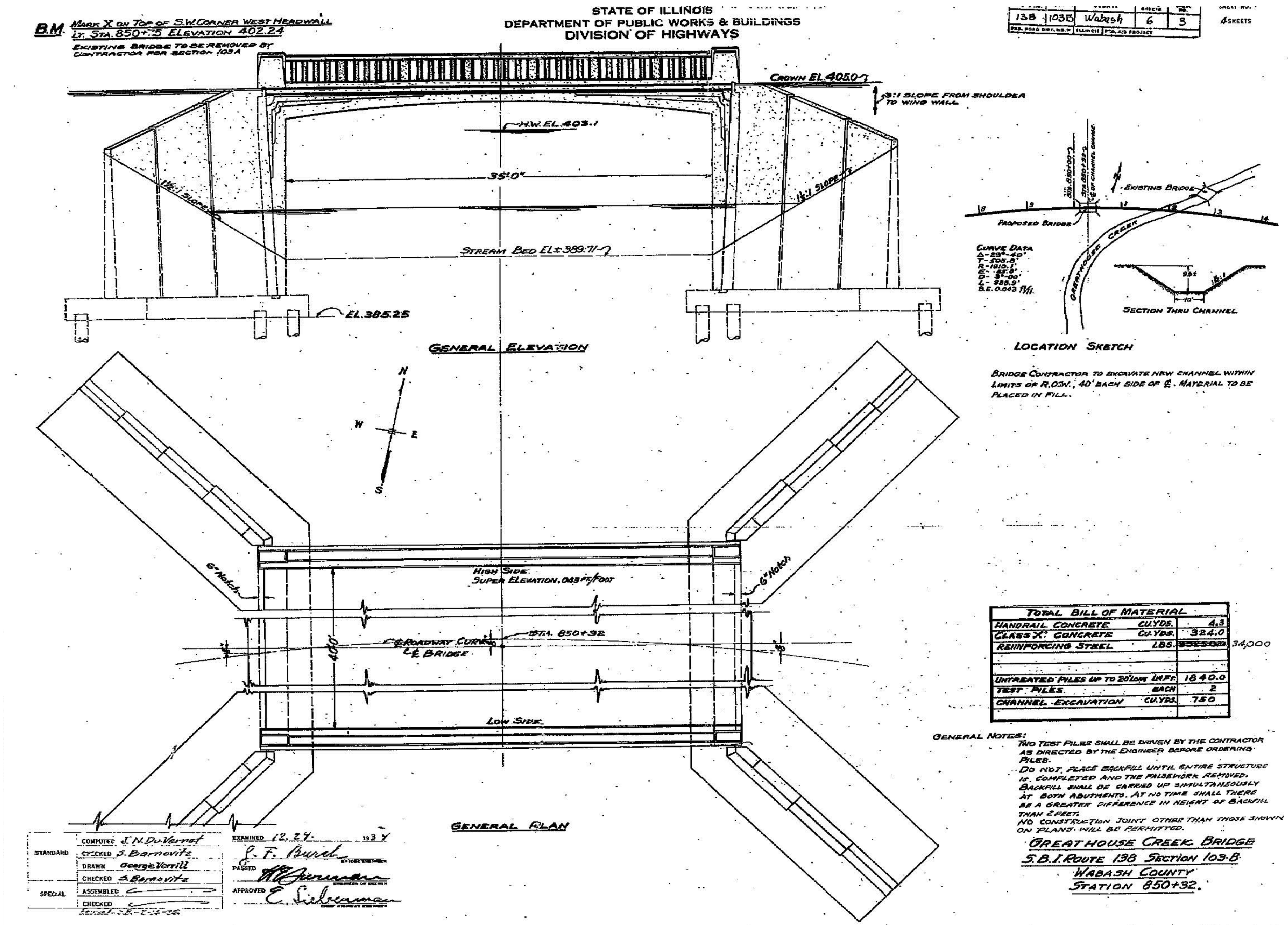
Latitude W 87 deg 46 742 min. Longitude N 38 deg 24 191 min. Map Datum WGS 84

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, from 137 (Rev. 8-99)

FILE NAME = 0930026-74220-21-Soil.dgn	USER NAME = RJT	DESIGNED - ELH 01/11	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	ESCA JOB NO. 933.12	CHECKED - MJW/RDP 01/11	REVISED -	**BORING LOGS STRUCTURE NO. 093–0026**
	PLOT SCALE = 0:1 ':' / IN.	DRAWN - HAS 08/11	REVISED -	SHEET NO. 21 OF 21 SHEETS
	PLOT DATE = 12/15/2011 1:42:12 PM	CHECKED - ELH 08/11	REVISED -	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	36
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		


STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
B.M. MARK X ON TOP OF S.W. CORNER WEST HEADWALL
LT. STA. 850+75 ELEVATION 402.24
EXISTING BRIDGE TO BE REMOVED BY CONTRACTOR FOR SECTION 103A
138
103B
Wabash
6
3
4 SHEETS
CROWN EL 405.0
3:1 SLOPE FROM SHOULDER TO WING WALL
H.W. EL 403.1
35'-0"
STREAM BED EL± 389.71
EL. 385.25
GENERAL ELEVATION
EXISTING BRIDGE
PROPOSED BRIDGE
GREATHOUSE CREEK
SECTION THRU CHANNEL
LOCATION SKETCH
BRIDGE CONTRACTOR TO EXCAVATE NEW CHANNEL WITHIN LIMITS OF R.O.W., 40' EACH SIDE OF ℄. MATERIAL TO BE PLACED IN FILL.
N
W
E
S
6" Notch
HIGH SIDE
SUPER ELEVATION .043 FT./FOOT
℄ ROADWAY CURVE
℄ BRIDGE
STA. 850+32
40.0'
LOW SIDE
GENERAL PLAN
TOTAL BILL OF MATERIAL
HANDRAIL CONCRETE CU.YDS. 4.3
CLASS "X" CONCRETE CU.YDS. 324.0
REINFORCING STEEL LBS. 34,000
UNTREATED PILES UP TO 20' LONG LIN.FT. 1840.0
TEST PILES EACH 2
CHANNEL EXCAVATION CU.YDS. 750
GENERAL NOTES:
TWO TEST PILES SHALL BE DRIVEN BY THE CONTRACTOR AS DIRECTED BY THE ENGINEER BEFORE ORDERING PILES.
DO NOT PLACE BACKFILL UNTIL ENTIRE STRUCTURE IS COMPLETED AND THE FALSEWORK REMOVED.
BACKFILL SHALL BE CARRIED UP SIMULTANEOUSLY AT BOTH ABUTMENTS. AT NO TIME SHALL THERE BE A GREATER DIFFERENCE IN HEIGHT OF BACKFILL THAN 2 FEET.
NO CONSTRUCTION JOINT OTHER THAN THOSE SHOWN ON PLANS WILL BE PERMITTED.
GREATHOUSE CREEK BRIDGE
S.B.I. ROUTE 138 SECTION 103-B
WABASH COUNTY
STATION 850+32.
STANDARD
COMPUTED J. N. DuVernet
CHECKED S. Barnovitz
DRAWN George Verrill
CHECKED S. Barnovitz
SPECIAL
ASSEMBLED
CHECKED
EXAMINED 12.27.
PASSED
APPROVED

FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-existing-plan.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

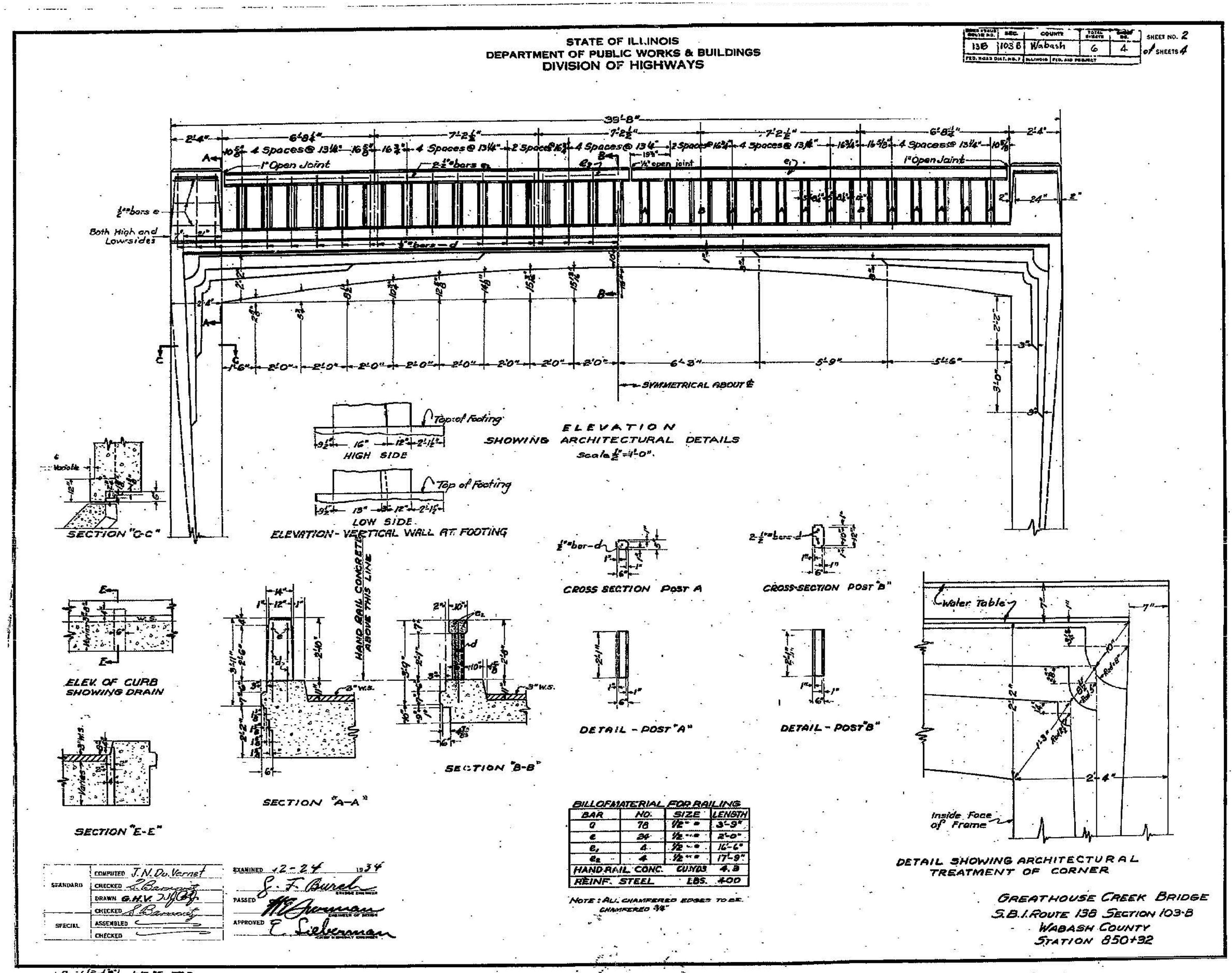
EXISTING BRIDGE PLANS

SCALE: N.T.S. | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	37

CONTRACT NO. 74220

ILLINOIS FED. AID PROJECT



BILL OF MATERIAL FOR RAILING

BAR	NO.	SIZE	LENGTH
a	78	1/2" ■	3'-9"
c	24	1/2" ■	2'-0"
e₁	4	1/2" ■	16'-6"
e₂	4	1/2" ■	17'-9"
HAND RAIL CONC.		CU. YDS.	4.8
REINF. STEEL		LBS.	400

FILE NAME = Y:\IDOT\933-12_74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-existingbridge.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SCALE: N.T.S. | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	38

CONTRACT NO. 74220

ILLINOIS | FED. AID PROJECT

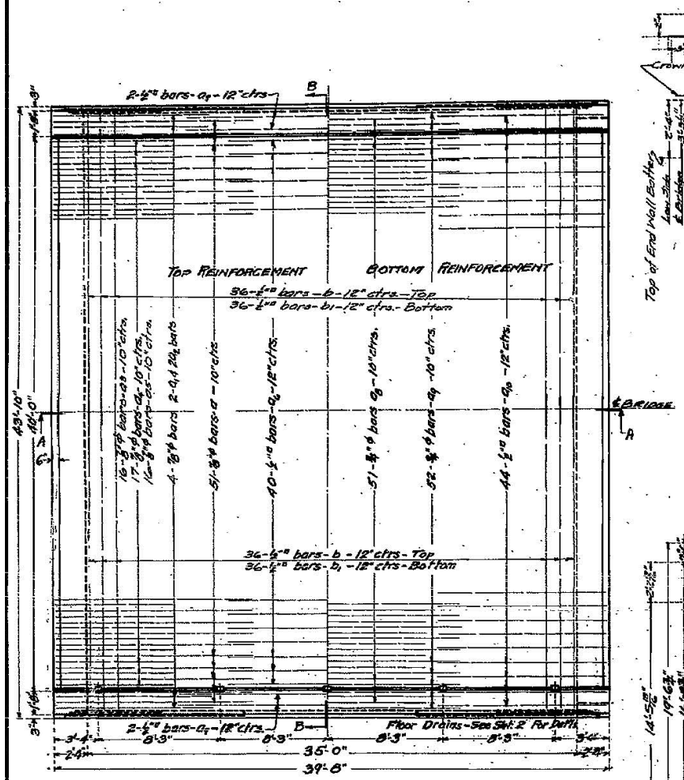
B.M.- Mark "X" on top of S.W. Corner of west Headwall
Lt. Sta. 850+75. Elev. 402.24
Existing Structure:- R.C. Slab, Span 28'-0" c/c, Rdwy. 24' to be removed by Contractor for Sect. 103-A.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

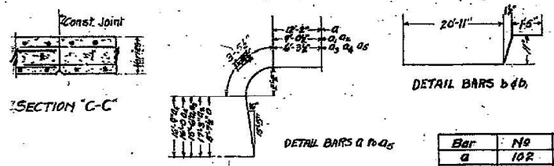
DIST.	ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
138	138	103B	Wabash	6	5

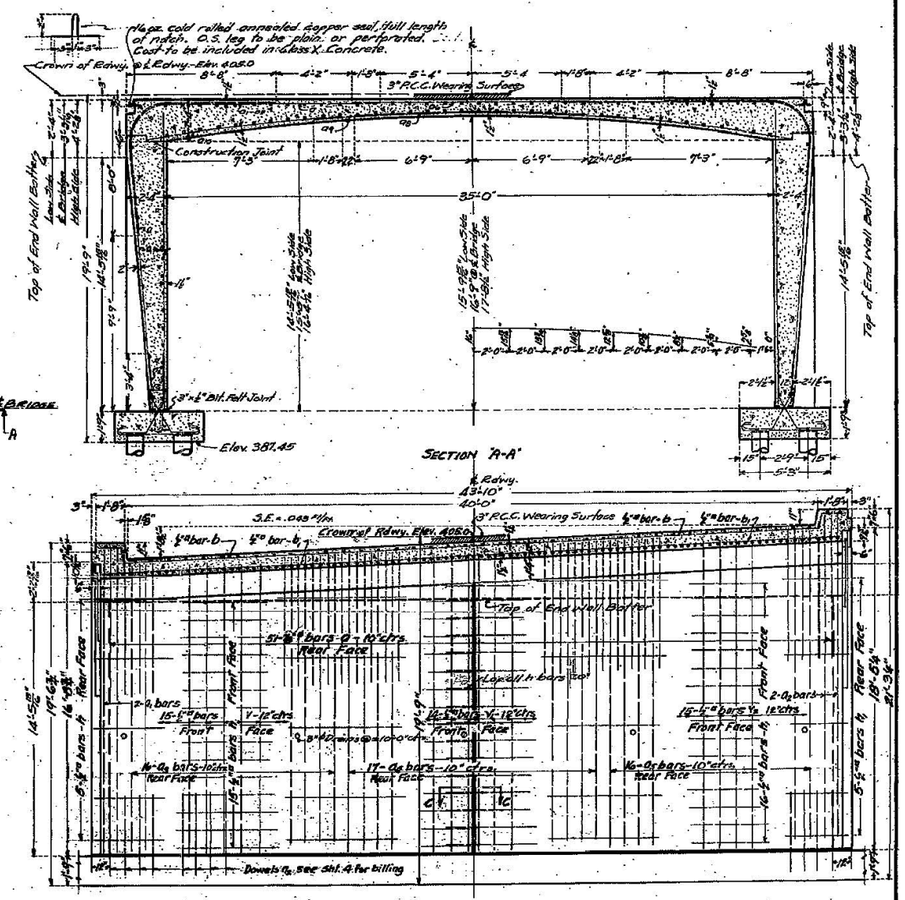
FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

SHEET NO. 3
4 SHEETS



PLAN





BILL OF MATERIAL

Bar	No	Size	Length
a	102	5/8"	21'-3"
a1	4	"	28'-0"
a4	4	"	29'-9"
a3	32	"	25'-3"
a4	34	"	23'-9"
a5	32	5/8"	26'-6"
a6	40	5/8"	14'-0"
a7	4	5/8"	20'-0"
a8	51	5/8"	13'-6"
a9	52	5/8"	20'-0"
a10	88	5/8"	10'-0"

Bar	No	Size	Length
b	72	5/8"	28'-5"
b1	72	"	22'-6"
V	30	"	16'-9"
V1	28	"	17'-3"
V2	30	"	17'-9"
n	40	5/8"	21'-9"
n1c	42	5/8"	28'-6"
Class "X" Concrete		Cu Yds	187.5
Reinforcing Steel		Lbs.	17,680

Notes:
Class "X" Concrete to be used throughout.
Reinforcing steel shall be wired securely in place before Concrete is poured.

STANDARD	COMPUTE	J.N. Du Vernet
	CHECKED	S Barnes
	DRAWN	S.B. - J.N.DuV.
	CHECKED	J.N.DuV. S.B.
SPECIAL	ASSEMBLED	
	CHECKED	

EXAMINED 12-27- 1938
P. F. Busch
PASSED
APPROVED E Siebenmann

S.B.I. ROUTE 138 SECTION 103-B
WABASH COUNTY
STA. 850+32

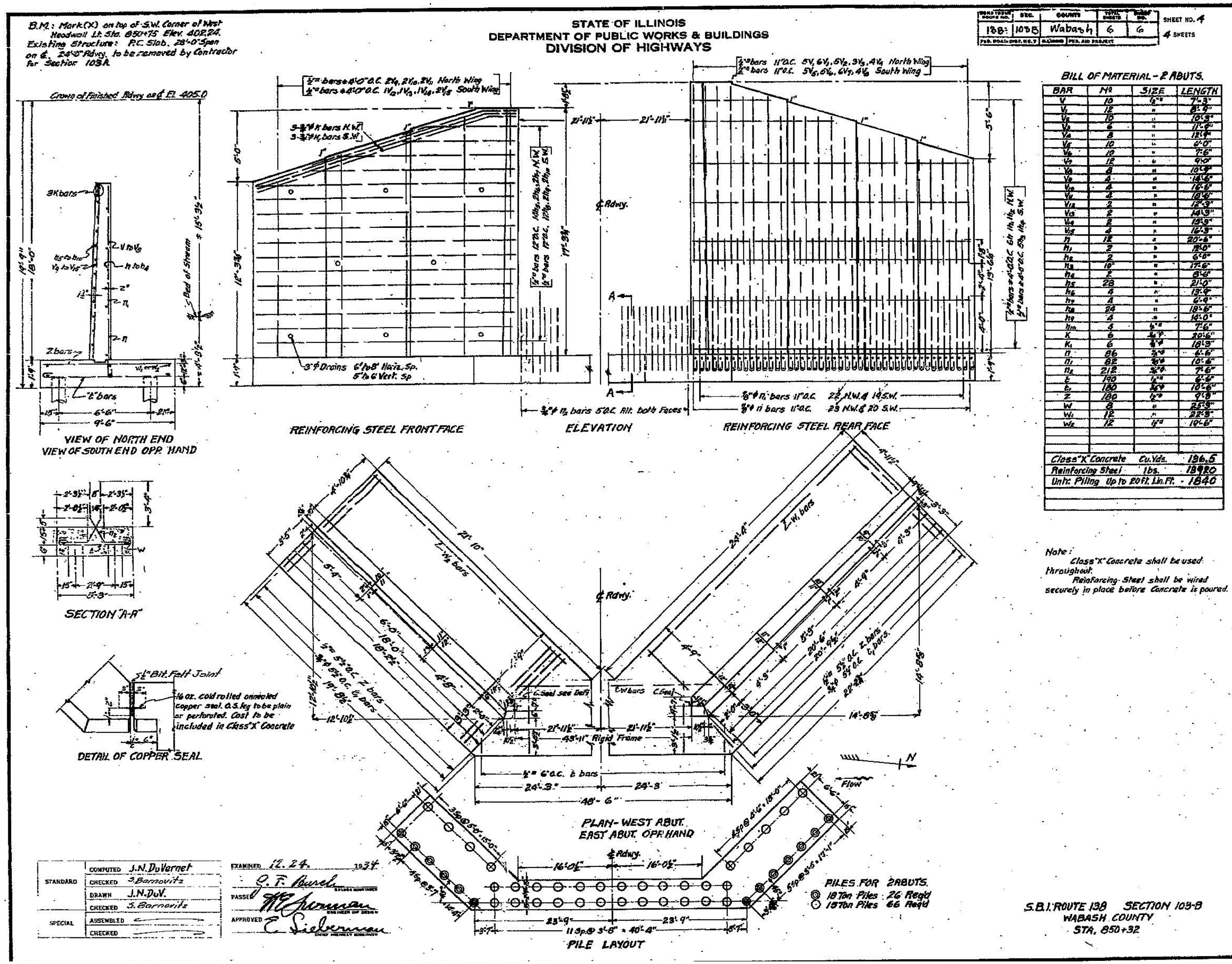
FILE NAME = Y:\IDOT\933-12_74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-existing-bridge.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE PLANS

SCALE: N.T.S. | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	39
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



B.M.: Mark(X) on top of S.W. Corner of West Headwall Lt. Sta. 850+75 Elev. 402.24.
Existing Structure: P.C. Slab. 28'-0" Span on ℄. 24'-0" Rdwy. to be removed by Contractor for Section 103A.
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
Wabash
SHEET NO. 4
4 SHEETS
VIEW OF NORTH END
VIEW OF SOUTH END OPP. HAND
REINFORCING STEEL FRONT FACE
ELEVATION
REINFORCING STEEL REAR FACE
SECTION "A-A"
DETAIL OF COPPER SEAL
PLAN - WEST ABUT.
EAST ABUT. OPP. HAND
PILE LAYOUT
PILES FOR 2 ABUTS.
18 Ton Piles 26 Req'd
15 Ton Piles 66 Req'd
Note:
Class "X" Concrete shall be used throughout.
Reinforcing Steel shall be wired securely in place before Concrete is poured.
S.B.I. ROUTE 138 SECTION 103-B
WABASH COUNTY
STA. 850+32
COMPUTED J.N. DuVarnet
CHECKED S. Barnovitz
DRAWN J.N. DuV.
CHECKED S. Barnovitz
EXAMINED 12.24. 1934

BILL OF MATERIAL - 2 ABUTS.

BAR	No.	SIZE	LENGTH
V	10	1/2"φ	7'-3"
V1	12	"	8'-9"
V2	10	"	10'-3"
V3	6	"	11'-6"
V4	8	"	12'-9"
V5	10	"	6'-0"
V6	10	"	7'-6"
V7	12	"	9'-0"
V8	8	"	10'-9"
V9	4	"	14'-6"
V10	4	"	16'-6"
V11	4	"	18'-6"
V12	2	"	12'-3"
V13	2	"	14'-9"
V14	2	"	15'-9"
V15	4	"	16'-3"
h	12	"	20'-6"
h1	2	"	12'-0"
h2	2	"	6'-0"
h3	10	"	17'-6"
h4	2	"	8'-6"
h5	28	"	21'-0"
h6	4	"	13'-9"
h7	4	"	6'-9"
h8	24	"	18'-6"
h9	4	"	14'-0"
h10	4	5/8"φ	7'-6"
K	6	3/4"φ	20'-6"
K1	6	3/4"φ	18'-3"
n	86	3/4"φ	6'-6"
n1	82	3/4"φ	10'-6"
n2	212	3/4"φ	7'-6"
t	190	1/2"φ	6'-6"
t1	180	3/4"φ	10'-6"
Z	180	1/2"φ	9'-3"
W	8	"	25'-9"
W1	12	"	22'-9"
W2	12	1/2"φ	19'-6"
Class "X" Concrete	Cu. Yds.		196.5
Reinforcing Steel	lbs.		18920
Untr. Piling Up to 20 ft.	Lin. Ft.		1840

FILE NAME =	USER NAME = RJT	DESIGNED - MTM	REVISED -
Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-existing-plans.dgn		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

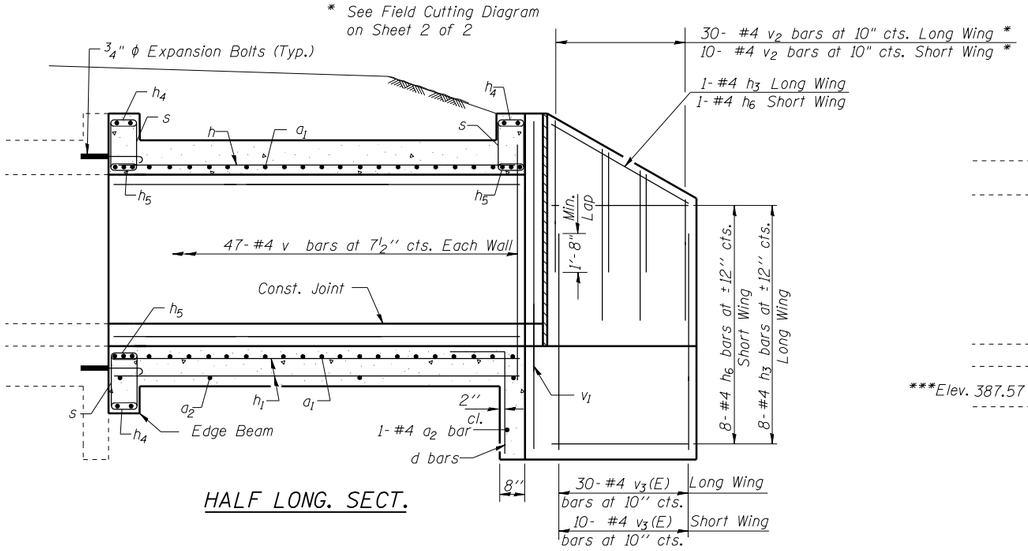
EXISTING BRIDGE PLANS

SCALE: N.T.S. | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

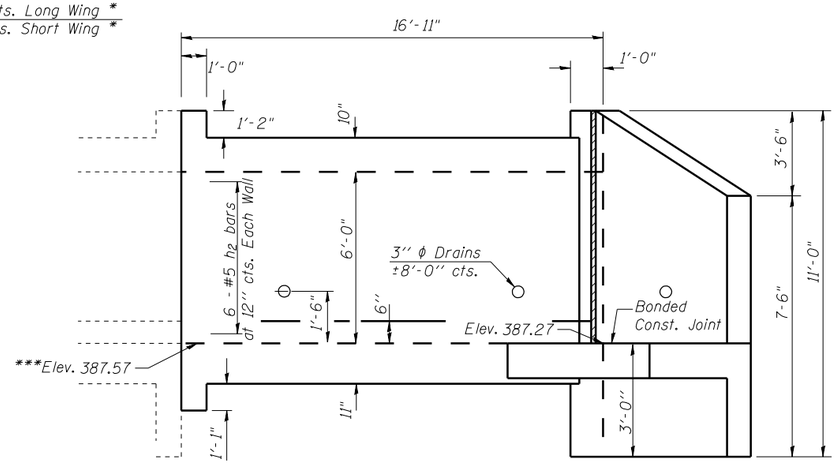
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	40

CONTRACT NO. 74220

ILLINOIS FED. AID PROJECT

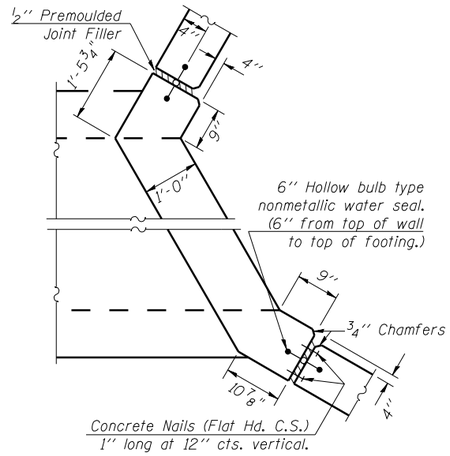


HALF LONG. SECT.

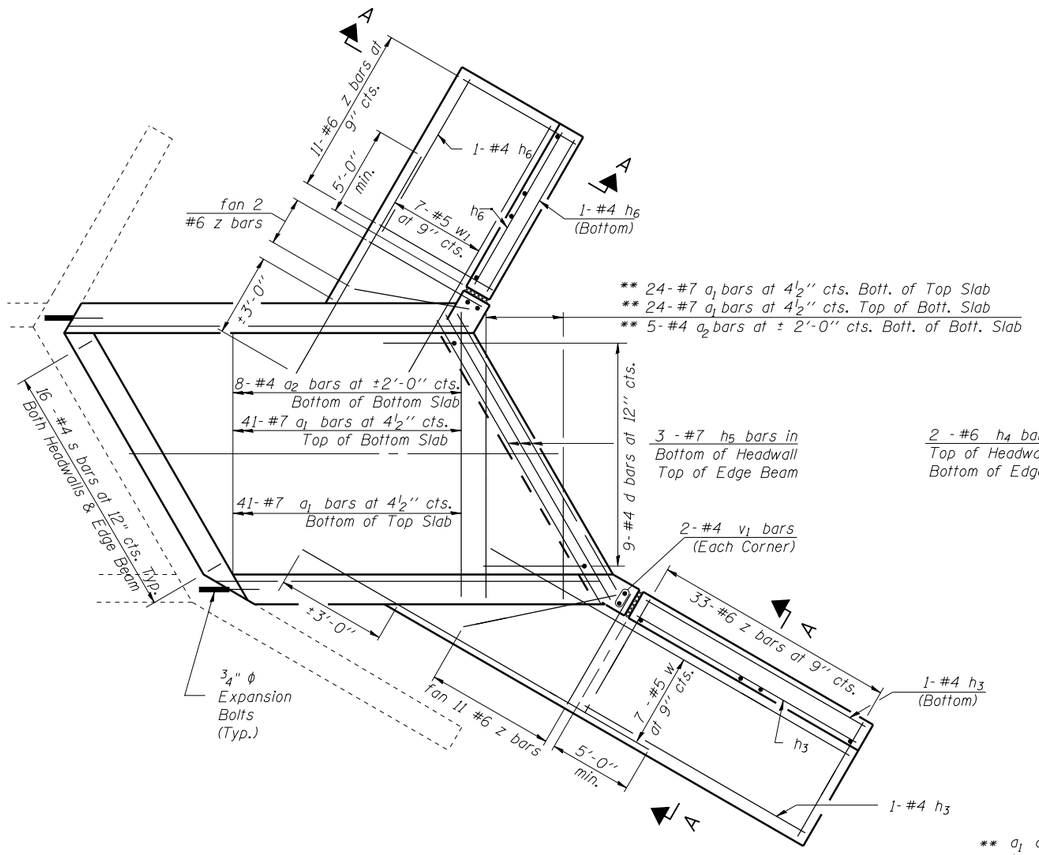


HALF ELEVATION

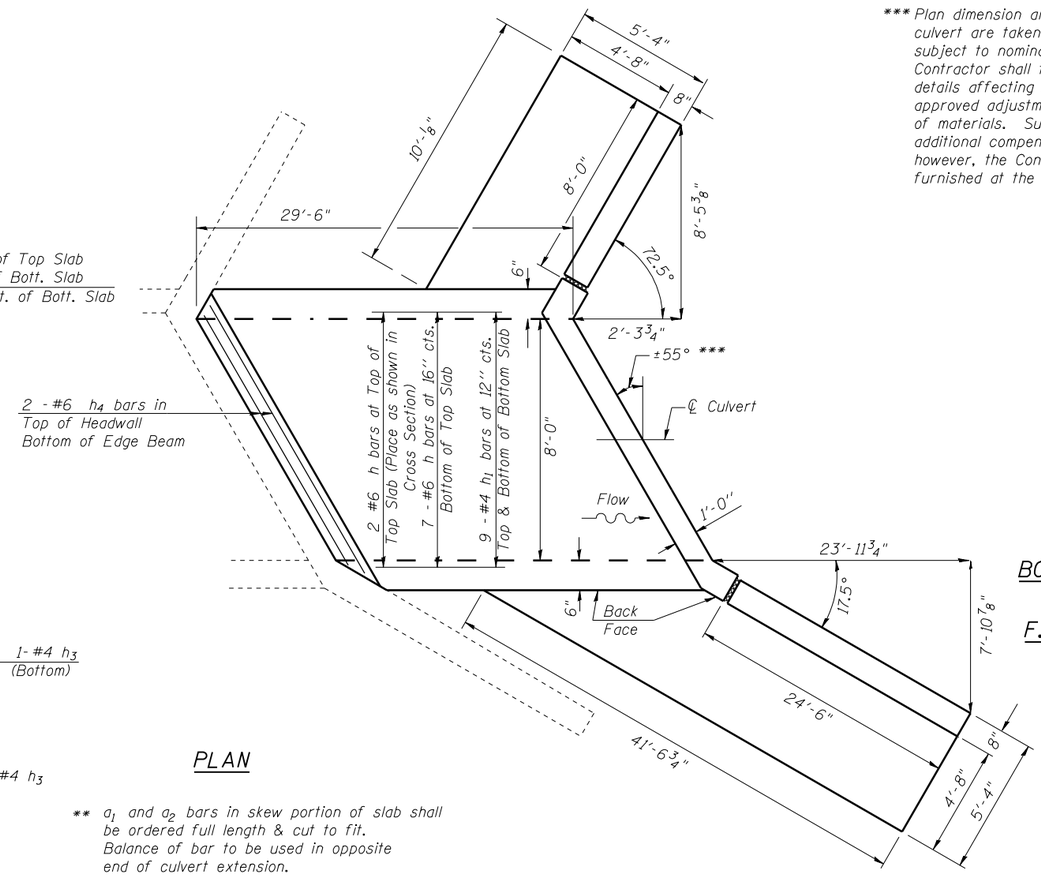
Dimensions at Rt. L's to ℄ Roadway



CORNER DETAIL



PLAN



2 - #6 h4 bars in Top of Headwall Bottom of Edge Beam

** a1 and a2 bars in skew portion of slab shall be ordered full length & cut to fit. Balance of bar to be used in opposite end of culvert extension.

*** Plan dimension and details relative to existing box culvert are taken from field measurements and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

DESIGN STRESSES

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

Max. Soil Pressure under footing = 2799 psf

LOADING HS 20-44

BOX CULVERT EXTENSION DETAILS
IL RTE 1
F.A.P. RTE. 332 - SEC. (103B)B-1
WABASH COUNTY
STATION 851 +29.38
STRUCTURE NO. 093-7012

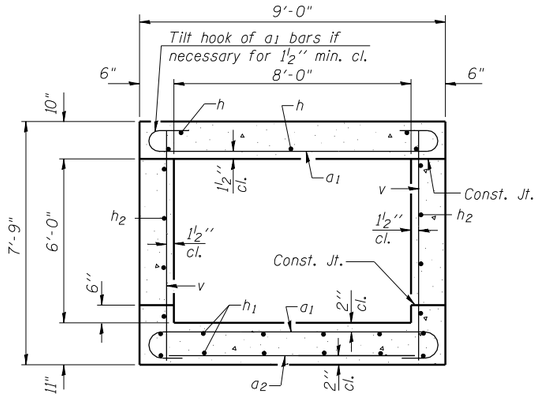
FILE NAME =	USER NAME =	DESIGNED - MJT	REVISED -
		DRAWN - CMM	REVISED -
	PLOT SCALE =	CHECKED - MJT	REVISED -
	PLOT DATE =	DATE - APRIL 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

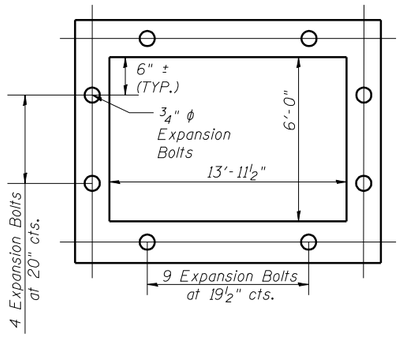
BOX CULVERT EXTENSION

SHEET NO. 1 OF 2 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	41
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

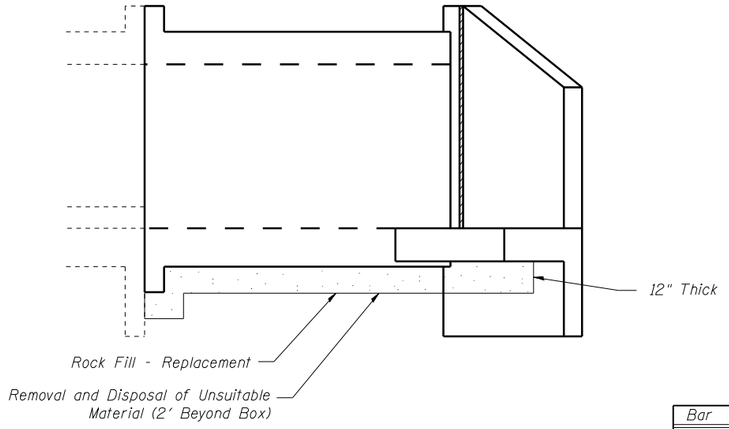


SECTION THRU BARREL



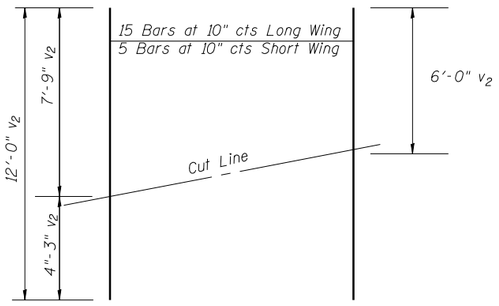
EXPANSION BOLT PLACEMENT DETAIL

Note:
Expansion Bolts shall be $\frac{3}{4}$" ϕ hooked bolts.
Hooked bolts shall extend a minimum of 9" into new concrete



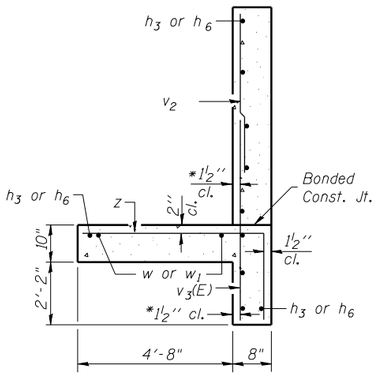
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_1	130	#7	10'-4"	
a_2	14	#4	8'-3"	
d	9	#4	4'-6"	
h	9	#6	29'-3"	
h_1	18	#4	29'-3"	
h_2	12	#5	29'-3"	
h_3	11	#4	24'-3"	
h_4	6	#6	15'-0"	
h_5	9	#7	15'-0"	
h_6	11	#4	7'-9"	
s	48	#4	5'-9"	
v	94	#4	6'-11"	
v_1	4	#4	10'-9"	
v_2	20	#4	12'-0"	
$v_3(E)$	40	#4	4'-9"	
w	7	#5	28'-6"	
w_1	7	#5	12'-0"	
z	57	#6	7'-9"	
Concrete Box Culverts		Cu. Yd.	40.4	
Reinforcement Bars, Epoxy Coated		Pound	130	
Reinforcement Bars		Pound	6380	
Rockfill-Replacement		Ton	31.1	
Removal & Disposal of Unsuitable Material		Cu. Yd.	15.2	
Expansion Bolts, $\frac{3}{4}$"		Each	26	



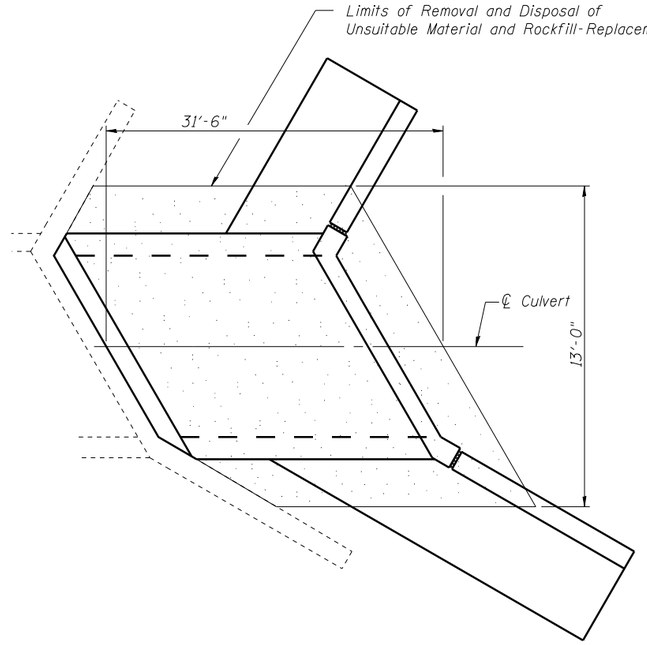
FIELD CUTTING DIAGRAM

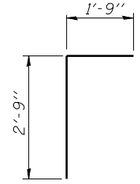
Order v_2 full length. Cut as shown and use remainder of bars in opposite end of wing



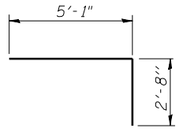
SECTION A-A

* v_2 & v_3 bars shall not be placed more than $1\frac{1}{2}$" cl. from back face of wingwall.

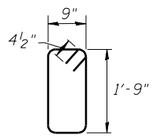




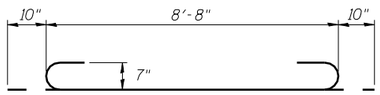
BAR d



BAR z



BAR s



BAR a_1

NOTES

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.
Reinforcement bars designated (E) shall be epoxy coated.

BOX CULVERT EXTENSION DETAILS
IL RTE 1
F.A.P. RTE. 332 - SEC. (103B)B-1
WABASH COUNTY
STATION 851 +29.38
STRUCTURE NO. 093-7012

FILE NAME =	USER NAME =	DESIGNED - MJT	REVISED -
		DRAWN - CMM	REVISED -
	PLOT SCALE =	CHECKED - MJT	REVISED -
	PLOT DATE =	DATE - APRIL 2011	REVISED -

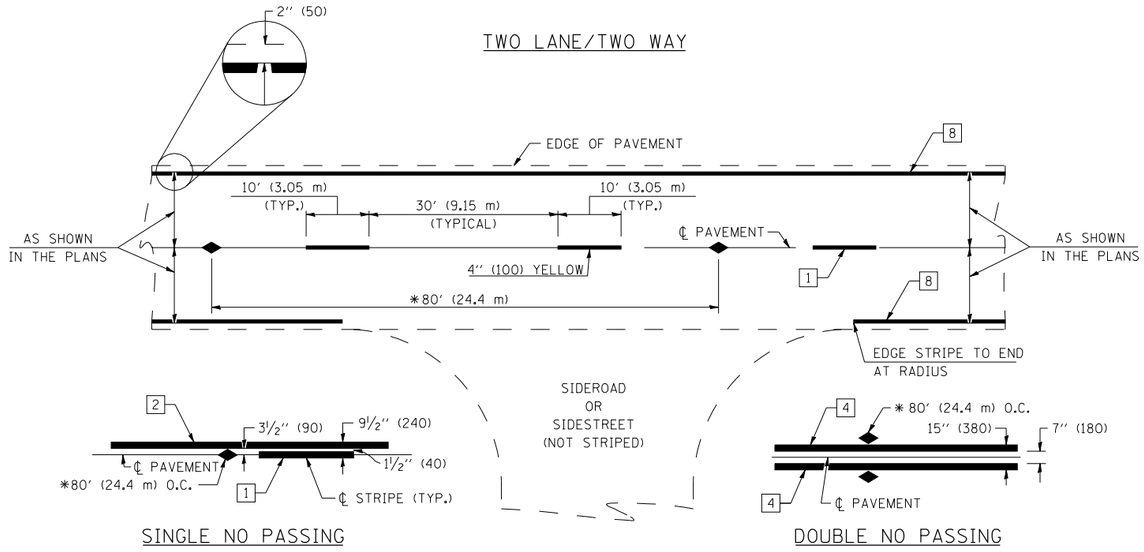
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BOX CULVERT EXTENSION

SHEET NO. 2 OF 2 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	42
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

TWO LANE/TWO WAY

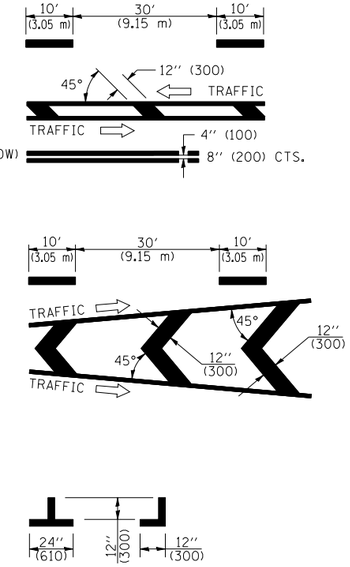


SINGLE NO PASSING

DOUBLE NO PASSING

* REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

PAVEMENT MARKING LEGEND

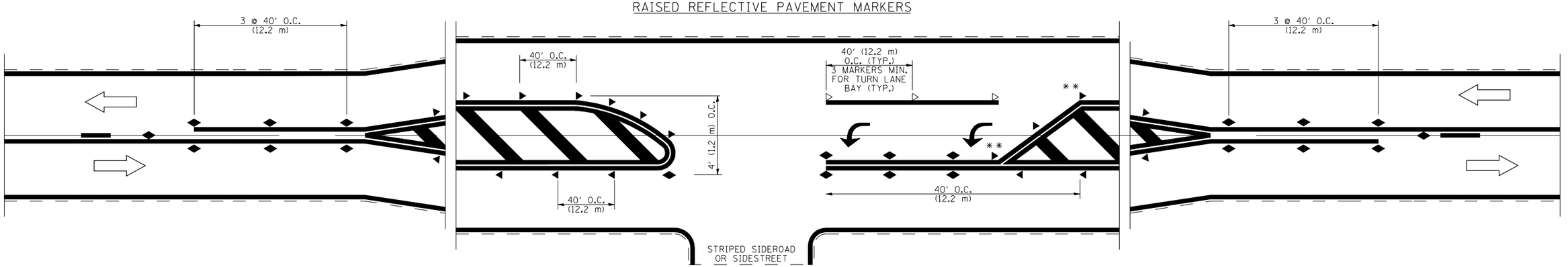


1. 4" (100) SKIP-DASH (YELLOW)
2. 4" (100) SOLID (YELLOW)
3. 12" (300) DIAGONAL (YELLOW)
4. 4" (100) DOUBLE YELLOW (NARROW)
5. RESERVED
6. RESERVED
7. 6" (150) SKIP-DASH (WHITE)
8. 4" (100) SOLID (WHITE)
9. 12" (300) DIAGONAL (WHITE)
10. 6" (150) SOLID (WHITE)
11. 24" (600) STOP BAR (WHITE)
12. 8" (200) SOLID (WHITE)
13. 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

RAISED REFLECTIVE PAVEMENT MARKERS



** REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. 78000001

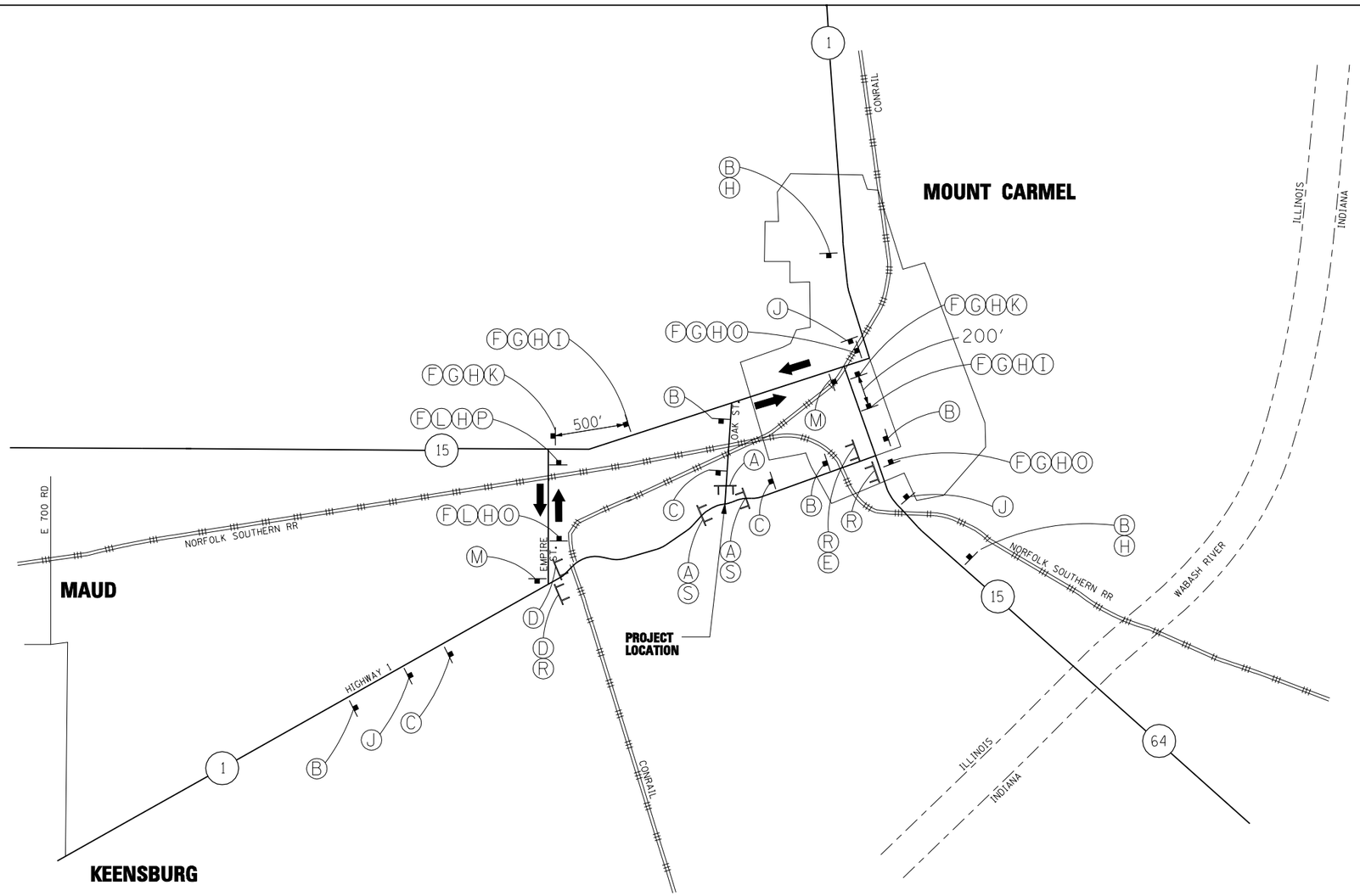
FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-pmk.dgn	USER NAME = RJT	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 12/15/2011	DATE JUNE 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS)

SCALE: | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	43
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



R11-2-48x30

Ⓐ

W20-3-48x48 (D)

Ⓑ

W20-3-48x48

Ⓒ

M4-10-48x18

Ⓓ

M4-10-4818

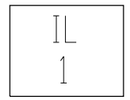
Ⓔ

M4-B-24x12 (D)

Ⓕ

M3-2-24x12

Ⓖ

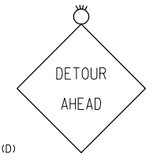


M1-24x24

Ⓗ - 10 EACH

M5-1-21x15 (LEFT) (D)

Ⓘ



W20-2-48x48 (D)

Ⓙ

M6-1-21x15 (LEFT) (D)

Ⓚ

M3-4-24x12

Ⓛ

M4-80-24x18

Ⓜ

M5-1-21x15 (RIGHT) (D)

Ⓝ

M6-3-21x15 (D)

Ⓞ

M6-1-21x15 (RIGHT) (D)

Ⓟ

R11-3-60x30

Ⓡ

R11-1102-2430

Ⓢ

LEGEND

- TYPE III BARRICADES CONFORMING TO STD. 709101 W/2 FLASHING LIGHTS
- SIGNS ON POST MOUNTED SUPPORTS
- FLASHING LIGHT ABOVE SIGN
- BEGIN STATE MARKED ROUTE TEMPORARY DETOUR

* 2 EA MESSAGE BOARDS FOR ADVANCE NOTICE (THE R.E. WILL DETERMINE LOCATION AND MESSAGE)

GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR.
2. ALL SIGNS NOT ATTACHED TO BARRICADES SHALL BE POST MOUNTED UNLESS NOTED OTHERWISE.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR PER LUMP SUM FOR TRAFFIC CONTROL AND PROTECTION, (SPECIAL). OTHER ITEMS REQUIRED BY THE ENGINEER AND NOT SHOWN ON THIS DRAWING SHALL BE INCLUDED IN THE PAY ITEM AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

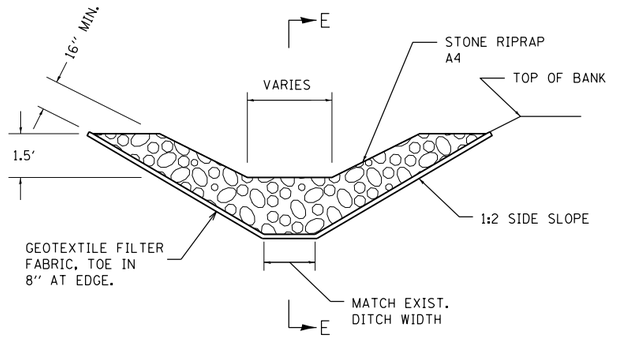
FILE NAME = D17422B-sht-staging.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED - ___
		DRAWN - JWS	REVISED - ___
	PLOT SCALE = 200.0000 ' / IN.	CHECKED - MTM	REVISED - ___
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED - ___

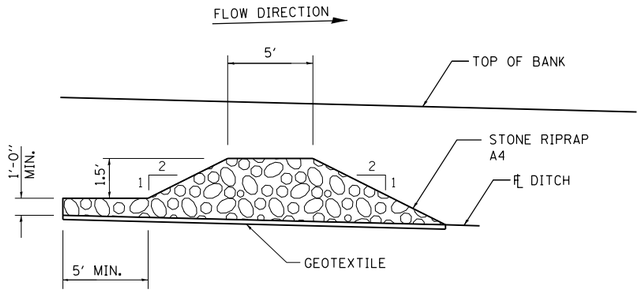
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROAD CLOSURE DETAIL

SCALE: 1" = 1 MI. | SHEET NO. 1 OF 1 SHEETS | STA. _____ TO STA. _____

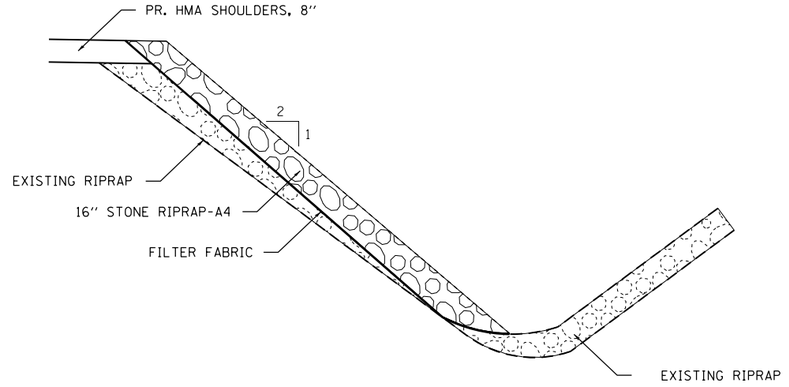
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	44
		CONTRACT NO. 74220		
FED. ROAD DIST. NO. _	ILLINOIS	FED. AID PROJECT		





SECTION E-E

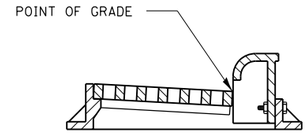
CHANNEL OUTLET PROTECTION DETAIL



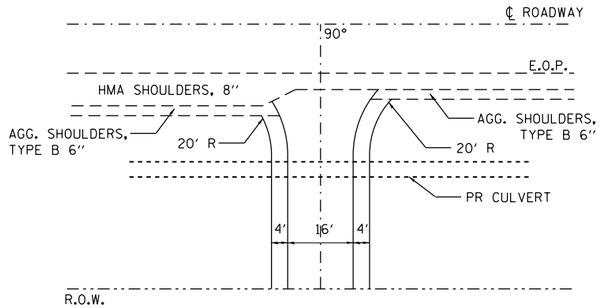
RIPRAP DETAIL

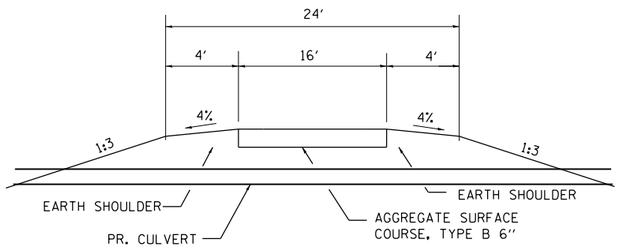
NOTES:

1. USE IN EXISTING, PROPOSED AND TEMPORARY DITCHES OF ALL TYPES AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
2. THE CHANNEL OUTLET PROTECTION SHALL BE REPLACED DUE TO WASHOUT, CONSTRUCTION TRAFFIC DAMAGE OR SILT ACCUMULATION.
3. CHANNEL OUTLET PROTECTION AND ANY SEDIMENT SHALL BE REMOVED WHEN CONSTRUCTION IS COMPLETE SO AS NOT TO IMPEDE STORM FLOW OR DRAINAGE. AREA SHALL BE GRADED TO FINISH GRADES.
4. THE CONSTRUCTION, MAINTENANCE, AND REMOVAL OF CHANNEL OUTLET PROTECTION WILL BE PAID FOR AS AGGREGATE (EROSION CONTROL), TONS.



INLET POINT OF GRADE DETAIL





TYPICAL FIELD ENTRANCE DETAIL
STA. 848+39.00 LT.

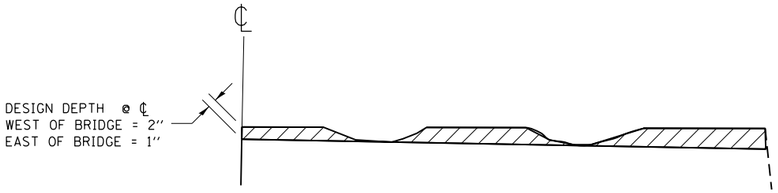
FILE NAME = c:\pw_work\pwidot\steffenmk\d0122333\D774220-sht-details.dgn	USER NAME = steffenmk	DESIGNED - MTM	REVISED -
		DRAWN - JJS	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED - MTM	REVISED -
	PLOT DATE = 10/17/2013	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAILS

SCALE: N.T.S. | SHEET NO. 1 OF 2 SHEETS | STA. | TO STA.

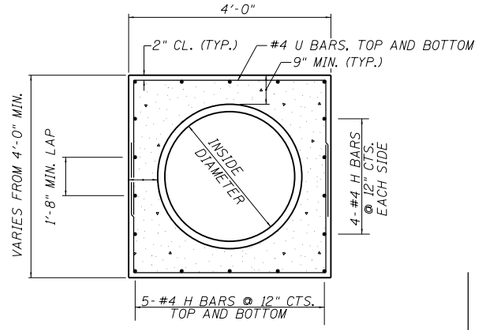
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	45
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			



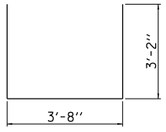
HOT-MIX ASPHALT SURFACE REMOVAL (VARIABLE DEPTH) DETAIL

NOTES:

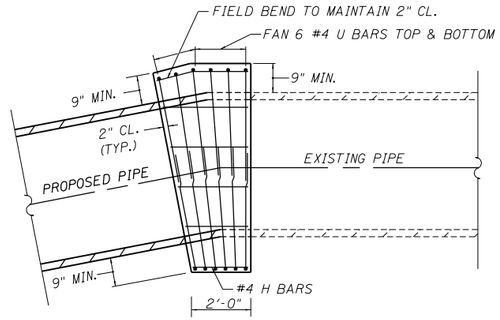
1. MILLING SHALL BE DONE TO MAINTAIN THE EXISITNG S.E.
2. MILLING TO THE BOTTOM OF WHEEL RUTS SHALL NOT BE NECESSARY UNLESS REQUIRED TO OBTAIN SLOPE OR THE DESIGN DEPTH AT CENTERLINE.
4. THE AVERAGE DEPTH OF MILLING IS ESTIMATED AS SHOWN ABOVE BUT MAY VARY IN ISOLATED LOCATIONS.



SECTION VIEW



U BAR



ELEVATION VIEW

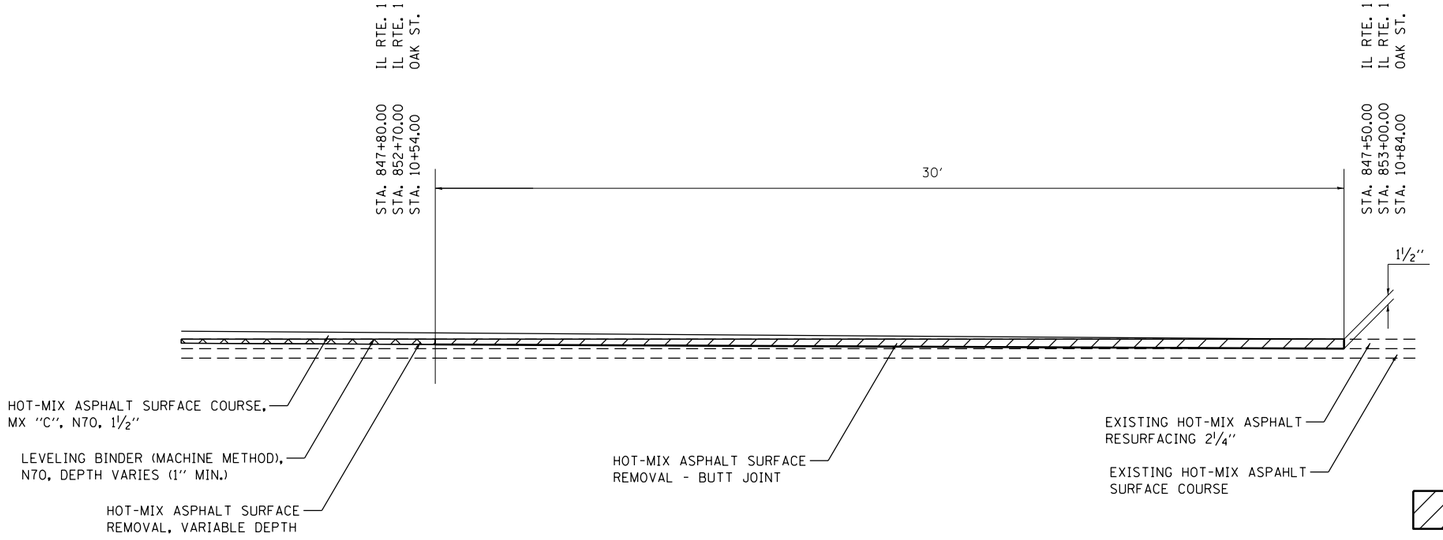
BILL OF MATERIAL
ONE CONCRETE COLLAR

Bar	No.	Size	Length	Shape
H	18	#4	4'-6"	——
U	12	#4	10'-0"	⊔
Concrete Collar			Cu Yd	1.7
Reinforcement Bars			Pound	130

CONCRETE COLLAR FOR PIPE CONNECTION DETAIL

NOTES:

1. COST FOR STRUCTURE EXCAVATION WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE UNIT BID PRICE FOR CONCRETE COLLAR.
2. FIELD CUT H BARS TO LENGTH
3. THE CONCRETE COLLAR SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD FOR CONCRETE COLLAR, AS SHOWN ON THE PLANS, WHICH PRICE SHALL INCLUDE THE CUTTING OF EXISTING AND NEW PIPE AS MAY BE REQUIRED.



BUTT JOINT DETAIL

FILE NAME = c:\pw_work\pwidot\steffenmk\d0122333\D774220-sht-details.dgn	USER NAME = steffenmk	DESIGNED - MTM	REVISED -
	PLOT SCALE = 100.0000 ' / in.	DRAWN - JJS	REVISED -
	PLOT DATE = 10/17/2013	CHECKED - MTM	REVISED -
		DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

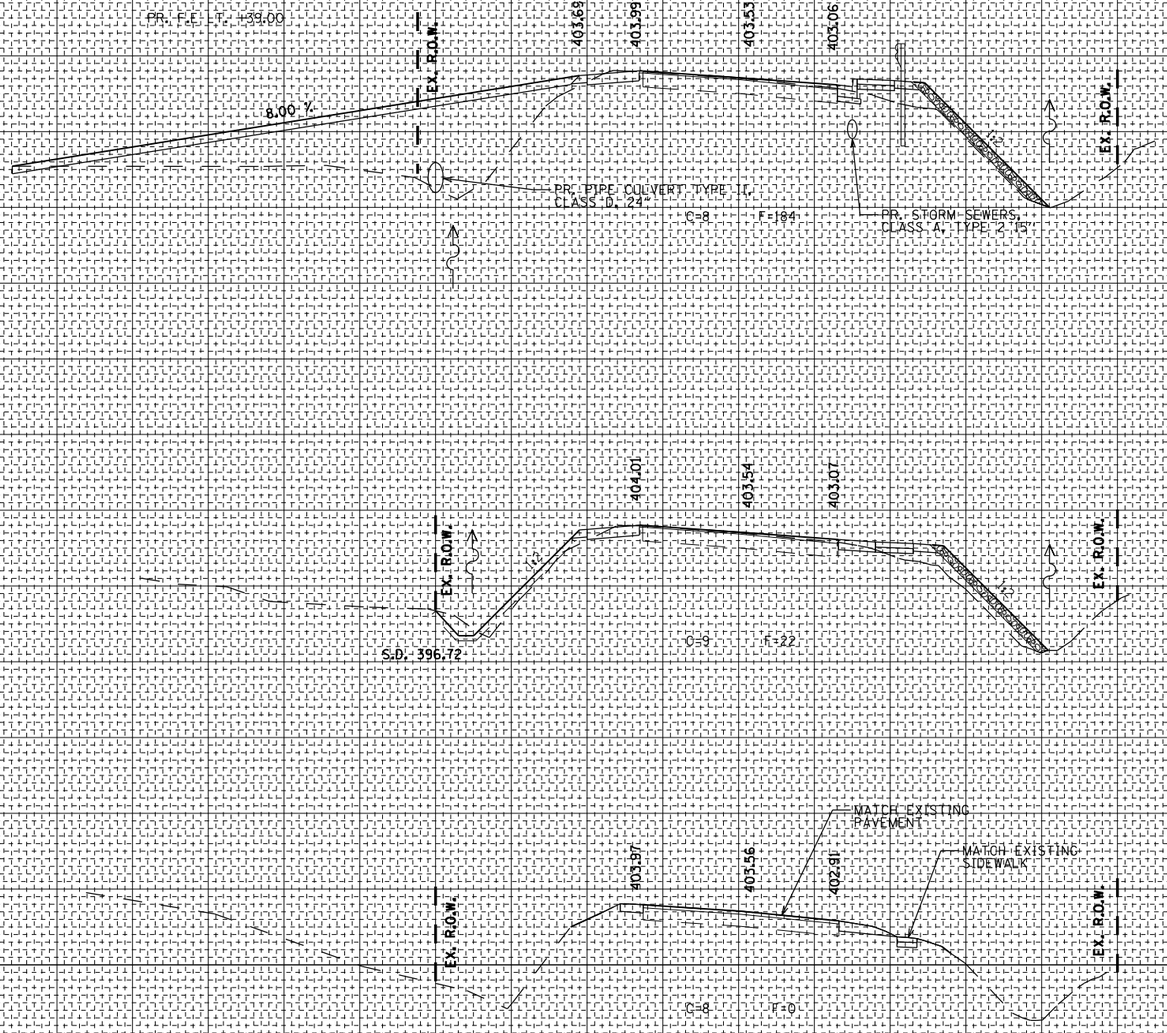
DETAILS

SCALE: N.T.S. | SHEET NO. 2 OF 2 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	46
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	



FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

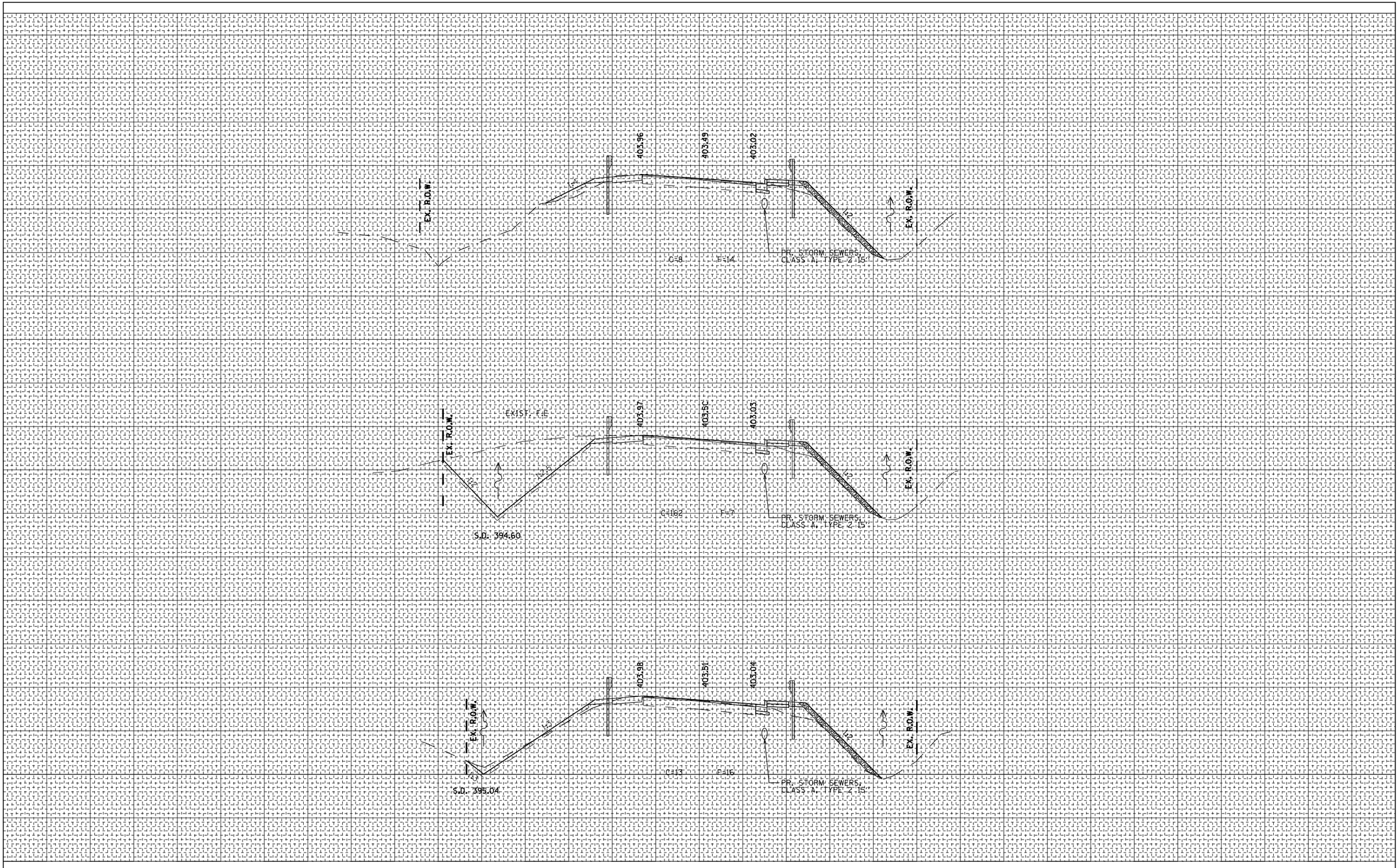
CROSS SECTIONS

SCALE: H: 1"=10'
V: 1"=5'

SHEET NO. 1 OF 7 SHEETS | STA. 847+50.00 TO STA. 848+39.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	47
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

FILE NAME =	USER NAME = RJT	DESIGNED - MTM	REVISED -
Y:\IDOT\933-12_74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

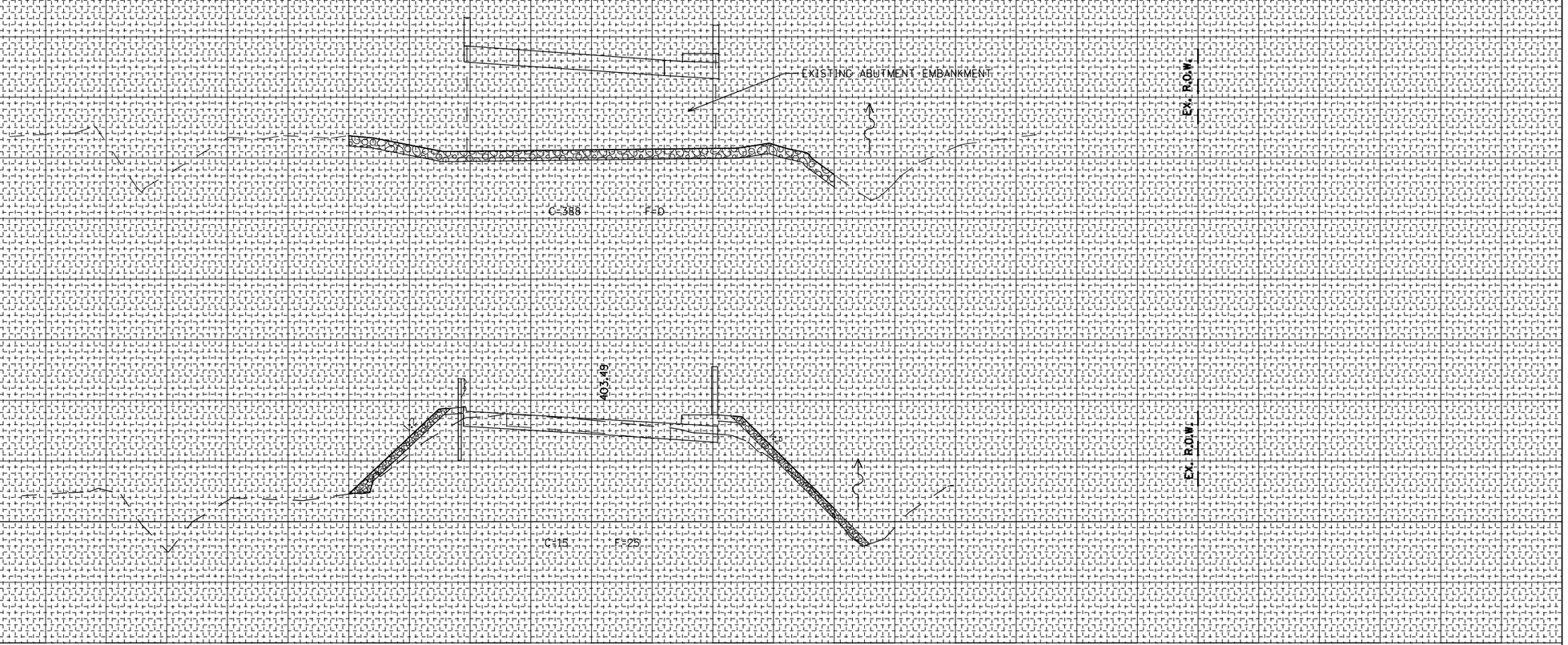
CROSS SECTIONS

SCALE: H: 1"=10'
V: 1"=5'

SHEET NO. 2 OF 7 SHEETS | STA. 849+00.00 TO STA. 849+50.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	48
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		



ORIGINAL SURVEY		BY	DATE
	SURVEYED		
	PLOTTED		
NOTE BOOK	TEMPLATE		
	AREAS		
NO.	AREAS CHECKED		

FILE NAME = Y:\IDOT\933-12_74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

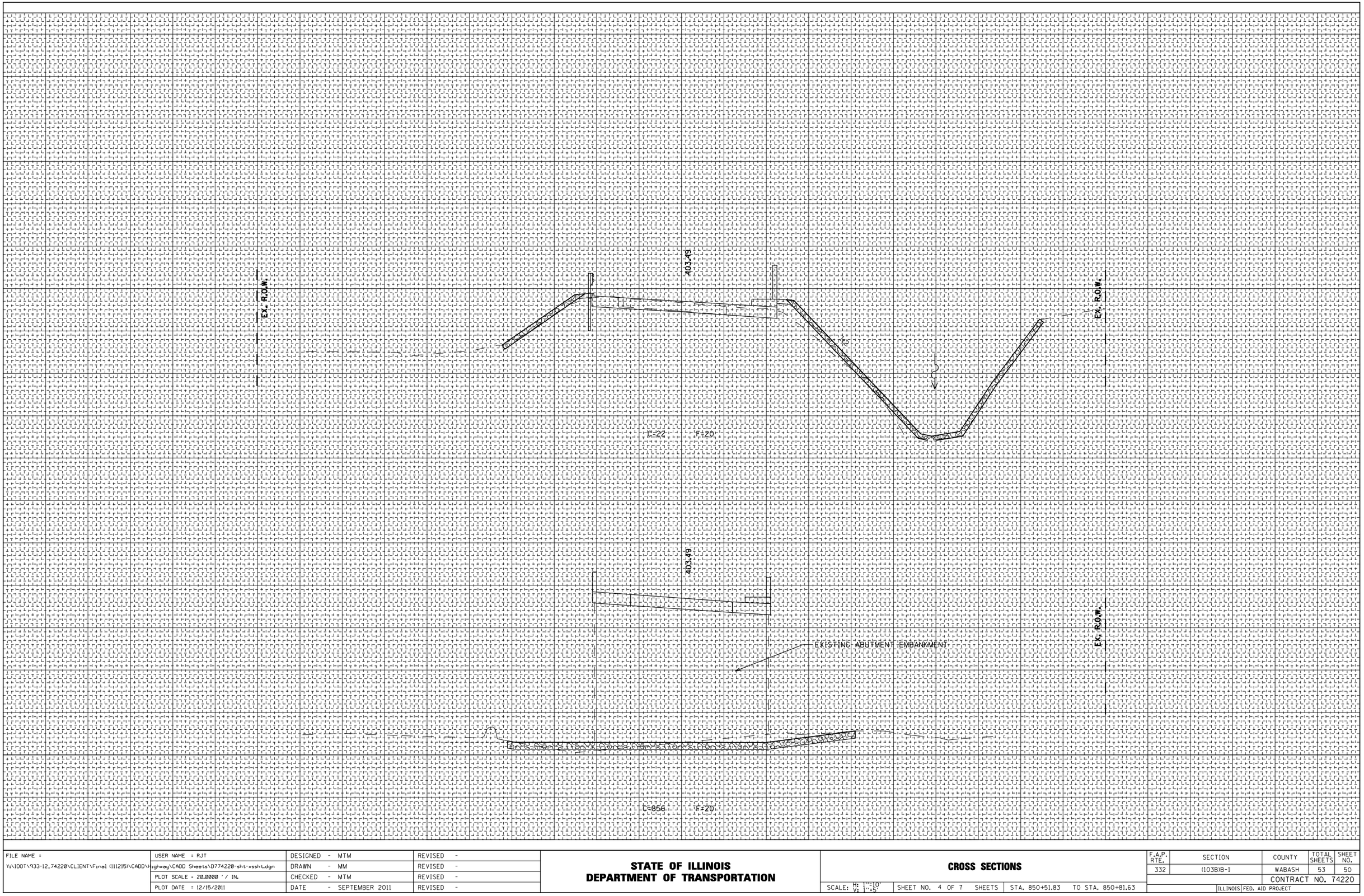
CROSS SECTIONS

SCALE: H: 1"=10' V: 1"=5' | SHEET NO. 3 OF 7 SHEETS | STA. 849+99.38 TO STA. 850+12.17

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	49
		CONTRACT NO. 74220		
	ILLINOIS FED. AID PROJECT			

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

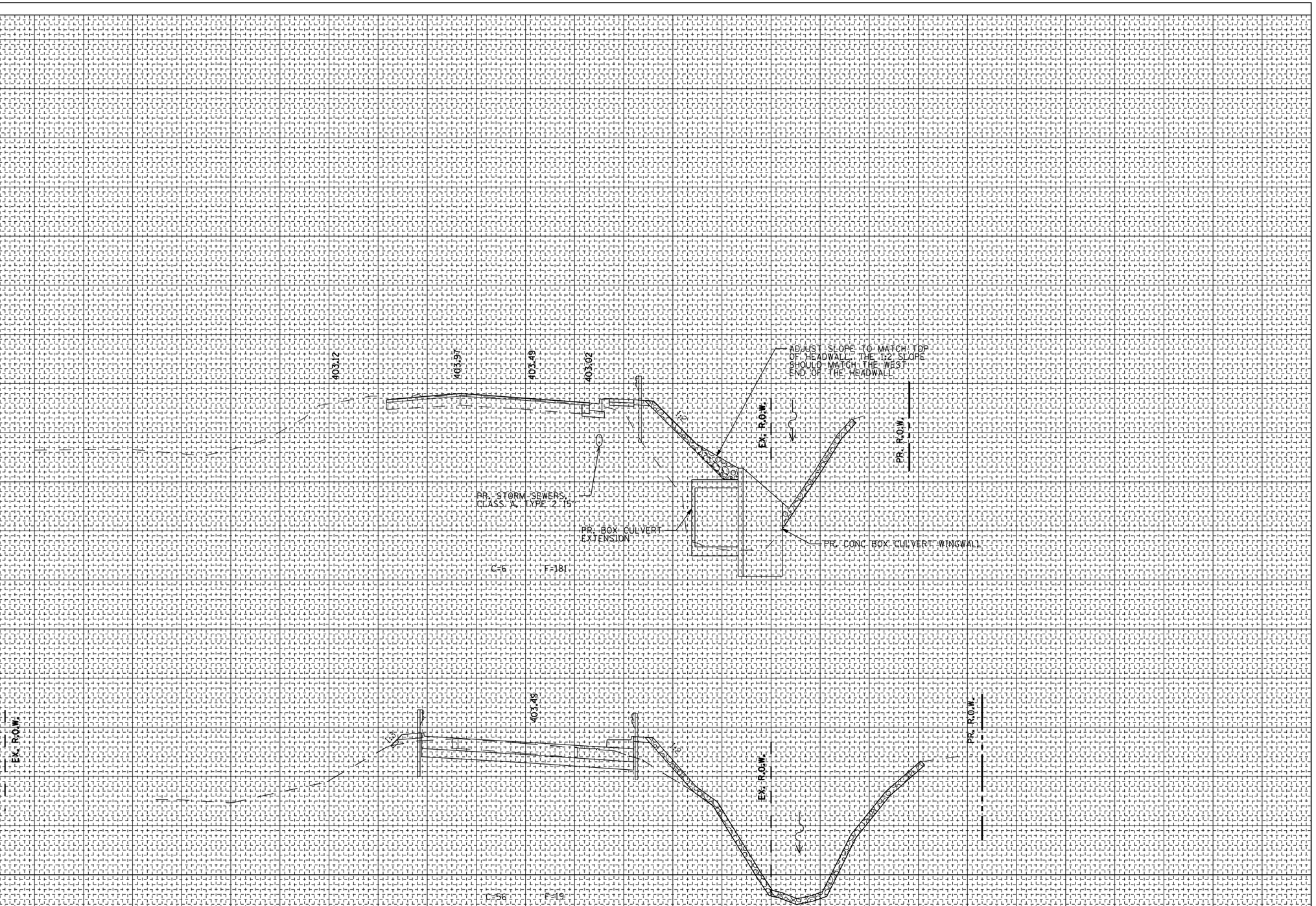
CROSS SECTIONS

SCALE: H: 1"=10' V: 1"=5' | SHEET NO. 4 OF 7 SHEETS | STA. 850+51.83 TO STA. 850+81.63

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	50
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		

ORIGINAL SURVEY		BY	DATE
NOTE BOOK	SURVEYED		
NO.	PLOTTED		
	TEMPLATE		
	AREAS		
	AREAS CHECKED		



FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

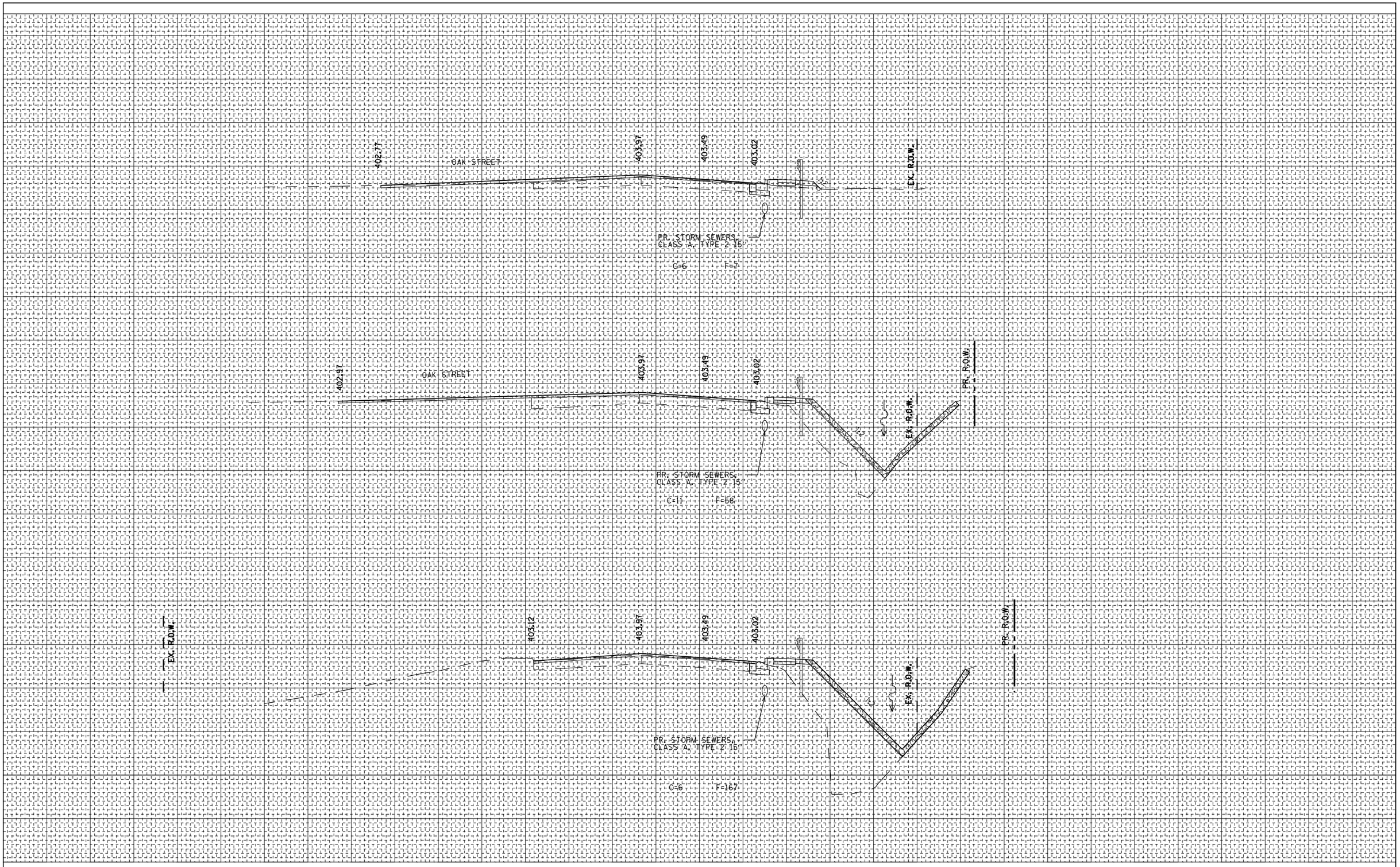
CROSS SECTIONS

SCALE: H: 1"=10' V: 1"=5' | SHEET NO. 5 OF 7 SHEETS | STA. 851+00.00 TO STA. 851+36.44

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	51
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	



FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

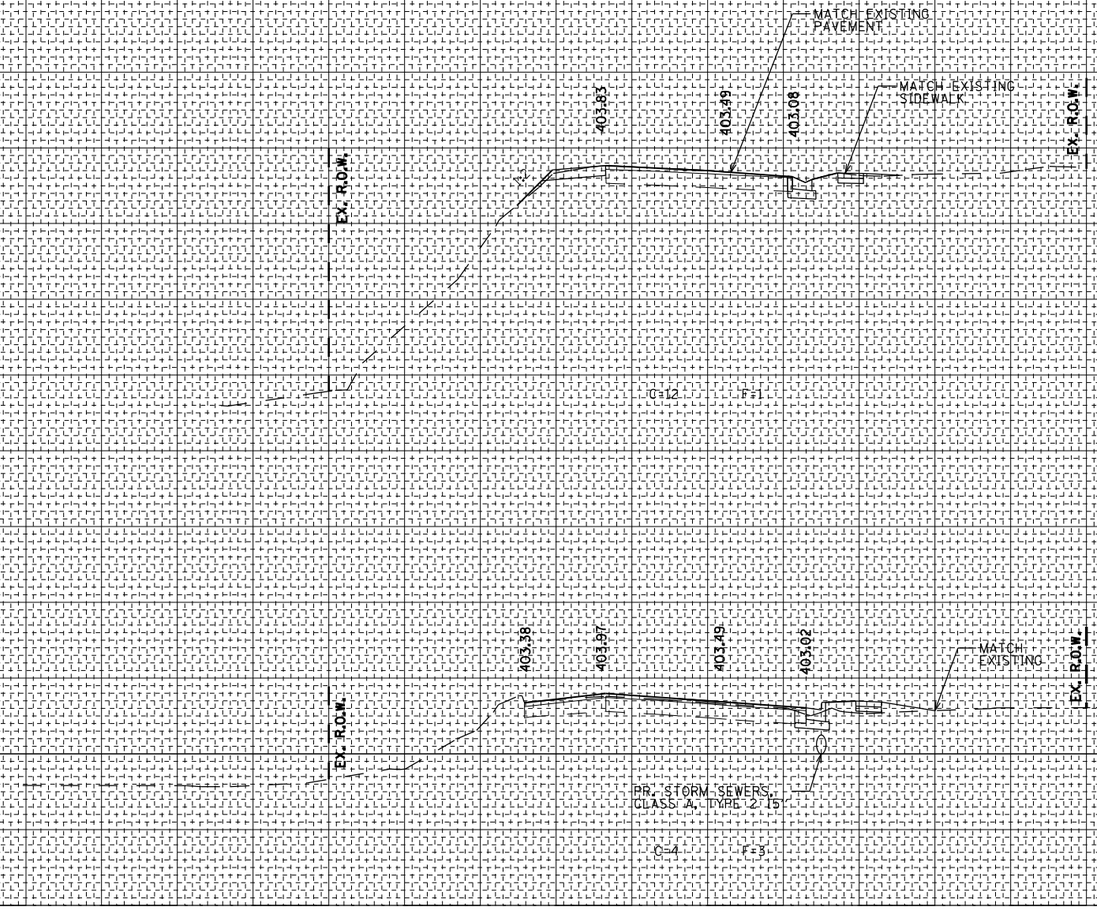
SCALE: H: 1"=10'
V: 1"=5'

SHEET NO. 6 OF 7 SHEETS | STA. 851+50.00 TO STA. 852+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	52
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		

FINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	

ORIGINAL SURVEY	BY	DATE
SURVEYED		
PLOTTED		
TEMPLATE		
NOTE BOOK		
AREAS		
NO.	AREAS CHECKED	



FILE NAME = Y:\IDOT\933-12.74220\CLIENT\Final (111215)\CADD\Highway\CADD Sheets\D774220-sht-xssht.dgn	USER NAME = RJT	DESIGNED - MTM	REVISED -
		DRAWN - MM	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - MTM	REVISED -
	PLOT DATE = 12/15/2011	DATE - SEPTEMBER 2011	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS

SCALE: H: 1"=10' V: 1"=5' | SHEET NO. 7 OF 7 SHEETS | STA. 852+50.00 TO STA. 853+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
332	(103B)B-1	WABASH	53	53
		CONTRACT NO. 74220		
	ILLINOIS	FED. AID PROJECT		