

PROPOSED HIGHWAY PLANS

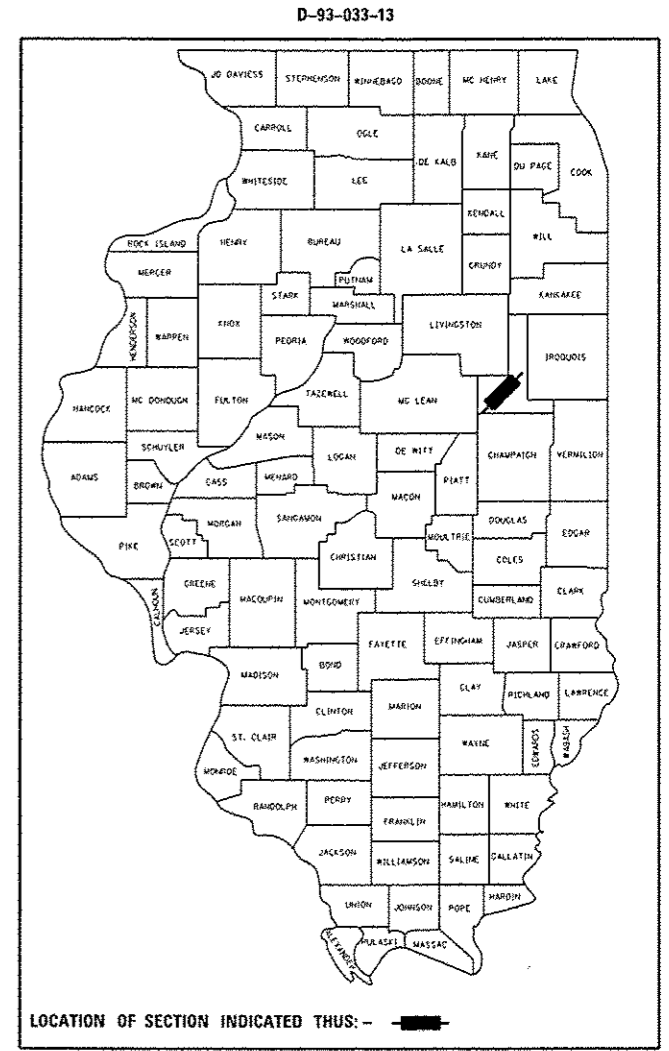
FAP ROUTE 71 (IL 54)
SECTION (115)BR, BR-1C, BR-4
PROJECT: ACF-0071 (06B)
BRIDGE REPLACEMENTS
FORD COUNTY

C-93-038-13

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	1
ILLINOIS			CONTRACT NO. 66994	

INDEX OF SHEETS

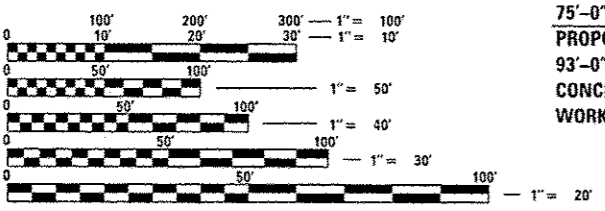
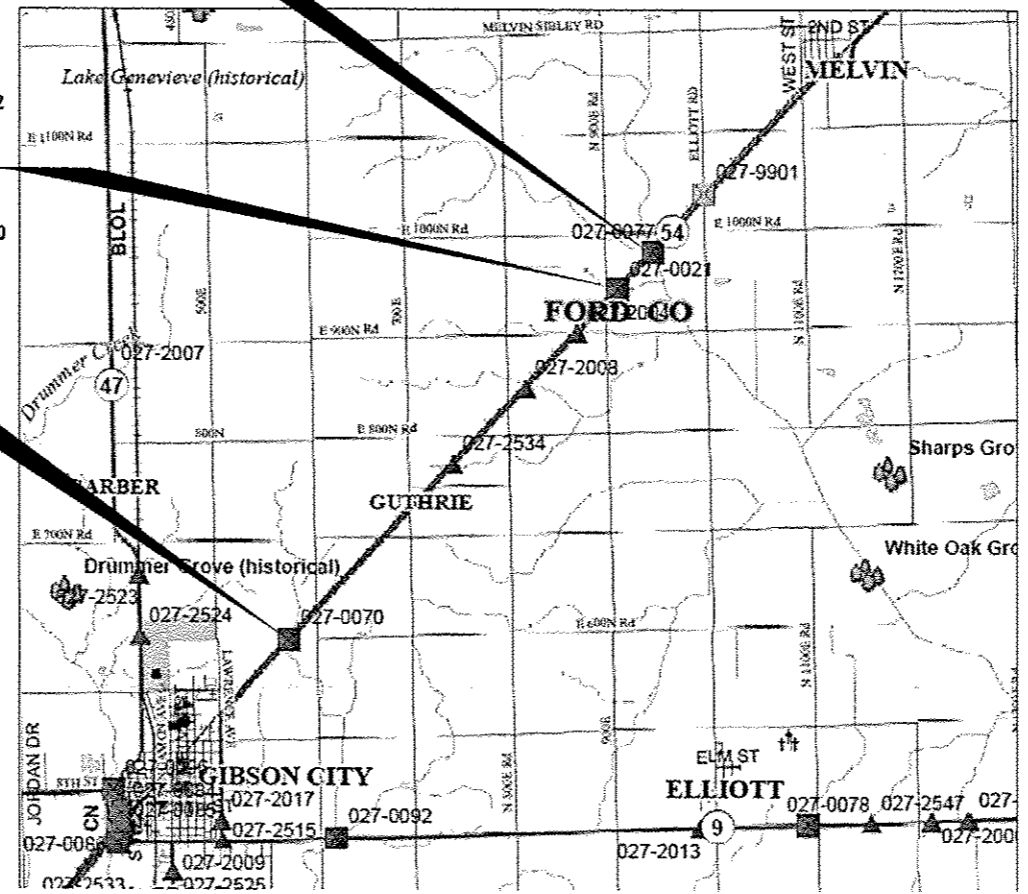
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- 153-158 CROSS SECTION SHEETS FOR PR. S.N. 027-0102 / EX. S.N. 027-0070



STA. 399+01 EXISTING STRUCTURE NO. 1
S.N. 027-0077 SECTION (115)BR
84'-4" SINGLE SPAN PPC DECK BEAMS
PROPOSED S.N. 027-0103
91'-7" SINGLE SPAN REINF.
CONCRETE DECK WITH 38" WEB
PLATE GIRDERS
WORK LOCATION=STA. 394+10 TO 403+90

STA. 425+94.68 EXISTING STRUCTURE NO. 2
S.N. 027-0021 SECTION (115)BR-1C
28'-4" SINGLE SPAN REINF. CONC. SLAB
PROPOSED S.N. 027-2020
9'X 6' PRECAST DOUBLE BOX CULVERT
WORK LOCATION=STA. 423+50 TO 424+50

STA. 682+04 EXISTING STRUCTURE NO. 3
S.N. 027-0070 SECTION (115)BR-4
75'-0" SINGLE SPAN PPC DECK BEAMS
PROPOSED S.N. 027-0102
93'-0" SINGLE SPAN REINF.
CONCRETE DECK WITH 36" WEB PLATE GIRDERS
WORK LOCATION=STA. 678+00 TO 685+50



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

PROJECT ENGINEER: DAVE ALEXANDER, P.E.
UNIT CHIEF: DUANE LUKKARI, P.E.

CONTRACT NO. 66994

GROSS AND NET LENGTHS = 2180 FT. = 0.41 MILE

FUNCTIONAL CLASSIFICATION:
RURAL MINOR ARTERIAL

2011 ADT = 1950
P.V. = 84% S.U. = 6% M.U. = 10%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 14 2015
Paul Lotte DIB
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
Dec 4 2015
John D. Baranzelli PE
ENGINEER OF DESIGN AND ENVIRONMENT
Dec 4 2015
Omer Osman PE
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

GENERAL NOTES:

THE THICKNESS OF HMA 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 IS PLACED.

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

BEFORE ORDERING PIPE CULVERTS OR PIPE DRAINS, THE CONTRACTOR SHALL CONSULT THE ENGINEER FOR EXACT LENGTHS.

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

FOR STABILIZATION, ALL TYPE III BARRICADES WILL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDED WILL BE DETERMINED BY THE ENGINEER.

ONLY THOSE TREES DESIGNATED BY THE ENGINEER OR LISTED IN THE TREE REMOVAL SCHEDULE SHALL BE REMOVED. THE CONTRACTOR SHALL PROTECT ALL REMAINING TREES FROM DAMAGE DUE TO HIS OPERATIONS.

THE FINISHED EARTHWORK SHALL HAVE A VEGETATION SUSTAINING SOIL COVERING THE TOP FOUR INCHES IN AREAS TO BE SEEDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT WILL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

ALL ELEVATIONS REFERRING TO U.S.G.S. MEAN SEA LEVEL DATUM.

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 AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE INCLUDED IN THE COST OF EARTH EXCAVATION.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUBNUMBER SHOWN IN THE LIST OF STANDARDS OR THE COPY INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN CALCULATING PLAN QUANTITIES:

GRANULAR MATERIALS	2.05	TONS / CU YD
HMA RESURFACING	112	LBS / SQ YD / IN
SHORT TERM PAVEMENT MARKING	10	FT / 100 FT OF APPLICATION
MIX FOR CRACKS, JTS & FLGWYS	0.0003	TONS / SQ YD
LEVEL BINDER (HAND METHOD)	0.0005	TONS / SQ YD
SUPPLEMENTAL WATERING	3	GAL / SQ YD / APPLICATION
CALCIUM CHLORIDE	2	LB / SQ YD / APPLICATION
AGGREGATE DITCH CHECKS	5	TONS AGGREGATE

MEMBERS OF JULIE KNOWN TO BE WITHIN THE LIMITS OF THE IMPROVEMENT ARE:

- AMEREN CIPS
- NICOR
- AT&T
- MEDIACOM

THE CONTRACTOR SHALL CONTACT JULIE AT LEAST 48 HOURS PRIOR TO EXCAVATION TO DETERMINE WHICH UTILITIES ARE IN THE AREA.

COMMITMENTS:

SN 027-0070:

THERE IS A PRAIRIE REMNANT LOCATED ON THE WEST SIDE, BETWEEN THE RAILROAD AND THE STATE R.O.W. THE CONTRACTOR SHOULD LIMIT THEIR OPERATIONS ALONG THIS SIDE OF THE ROAD. THIS AREA WILL ALSO BE PLANTED WITH A NATIVE MIX, CLASS 4A.

STRUCTURE NO. 027-0070 IS RESTRICTED TO (LESS THAN) LEGAL LOADS ONLY. IT IS POSTED FOR THE FOLLOWING LIMITS: SINGLE VEHICLE 22 TONS; COMBINATIONS 3 OR 4 AXLE 29 TONS; AND 5 OR MORE AXELS IS 35 TONS MAXIMUM.

NOTE: Structure No. 027-0021 is restricted to legal loads only. It is posted for the following limits: 10 tons per axle / 40 tons gross.

HIGHWAY STANDARDS

000001-08	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
420401-11	BRIDGE APPROACH PAVEMENT CONNECTOR
482011-03	HMA SHOULDER STRIPS/SHOULDERS WITH RESURFACING OR WIDENING & RESURFACING PROJECTS
515001-03	NAME PLATE FOR BRIDGES
542401-01	METAL END SECTION FOR PIPE CULVERTS
630001-10	STEEL PLATE BEAM GUARDRAIL
630101-09	GUARDRAIL MOUNTED ON EXISTING CULVERTS
630201-06	PCC/HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
630301-06	SHOULDER WIDENING FOR TYPE 1 (SPECIAL) GUARDRAIL TERMINALS
631031-13	TRAFFIC BARRIER TERMINAL, TYPE 6
635006-03	REFLECTOR AND TERMINAL MARKER PLACEMENT
635011-02	REFLECTOR MARKER AND MOUNTING DETAILS
666001-01	RIGHT-OF-WAY MARKERS
701001-02	OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 15' AWAY
701006-05	OFF-ROAD OPERATIONS 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
701011-04	OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY
701201-04	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH
701301-04	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701306-03	LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS ≥ 45 MPH
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701901-04	TRAFFIC CONTROL DEVICES
780001-05	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
BLR 21-9	TYPICAL APPLICATIONS OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

	HMA SURFACE CSE.	HMA LEVEL BINDER	HMA BASE CSE. AND HMA BINDER	HMA SHOULDERS TOP LIFT	HMA SHOULDERS BOTTOM LIFT
PG GRADE	PG 64-22	PG 64-22	PG 64-22	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50	4.0% @ N50
MIXTURE COMPOSITION	IL-9.5	IL-9.5FG	IL-19.0	IL-9.5	IL-19.0
FRICTION AGGREGATE	MIXTURE C			MIXTURE C	
DENSITY TEST METHOD	CORES	GROWTH CURVE	CORES	CORES	CORES
MIXTURE WEIGHT	112 LB/SY/IN	112 LB/SY/IN	112 LB/SY/IN	112 LB/SY/IN	112 LB/SY/IN
QUALITY MANAGEMENT PROGRAM	OC/OA	OC/OA	OC/OA	OC/OA	OC/OA
SUBLOT SIZE	N/A	N/A	N/A	N/A	N/A

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: *Tom Beaulieu*
DISTRICT STUDIES & PLANS ENGINEER

DATE: *August 14, 2015*

EXAMINED BY: *Wayne L. Phillips*
DISTRICT CONSTRUCTION ENGINEER

Bruce A. Ancker
DISTRICT MATERIALS ENGINEER

Bruce A. Ancker
DISTRICT OPERATIONS ENGINEER

Rev.

SUMMARY OF QUANTITIES				CONSTRUCTION CODE		
				1	2	3
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	BOX CULVERT	BRIDGE
				0011	0011	0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
20200100	EARTH EXCAVATION	CU YD	1885	689	515	681
20300100	CHANNEL EXCAVATION	CU YD	700	250	150	300
20400800	FURNISHED EXCAVATION	CU YD	1938	697	0	1241
20700220	POROUS GRANULAR EMBANKMENT	CU YD	262	0	262	0
*25000210	SEEDING, CLASS 2A	ACRE	2.8	1.4	0.5	0.9
*25000312	SEEDING, CLASS 4A	ACRE	0.6	0	0	0.6
*25000400	NITROGEN FERTILIZER NUTRIENT	POUND	312	126	48	138
*25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	312	126	48	138
*25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	312	126	48	138
*25100630	EROSION CONTROL BLANKET	SQ YD	16785	6776	2598	7411
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	1040	420	161	459
28000305	TEMPORARY DITCH CHECKS	FOOT	126	52	40	34
28000400	PERIMETER EROSION BARRIER	FOOT	1176	355	0	821
28000500	INLET AND PIPE PROTECTION	EACH	2	1	1	0

* SPECIALTY ITEMS

FILE NAME =	USER NAME = Schwaberg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBID\INTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\036-DRAWING\DATA\ROADS\2366994-ht-2003	PLDT SCALE = 1/2" = 100'	CHECKED -	REVISED -					71	(115)BR, BR-1C, BR-4	FORD	158	3
PLDT DATE = 8/14/2015	DATE -	REVISED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 66994				
								ILLINOIS FED. AID PROJECT				

SUMMARY OF QUANTITIES				CONSTRUCTION CODE		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	BOX CULVERT	BRIDGE
				0011	0011	0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
28001100	TEMPORARY EROSION CONTROL BLANKET	SQ YD	50353	20327	7793	22233
28100107	STONE RIPRAP, CLASS A4	SQ YD	2118	1000	203	915
28200200	FILTER FABRIC	SQ YD	2118	1000	203	915
31100300	SUBBASE GRANULAR MATERIAL, TYPE A 4"	SQ YD	330	0	330	0
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	3541	1545	844	1152
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	1.6	0.7	0.4	0.5
40600527	LEVELING BINDER (HAND METHOD), IL-9.5FG, N50	TON	2.6	1.1	0.6	0.9
40600627	LEVELING BINDER (MACHINE METHOD), IL-9.5FG, N50	TON	186	79	53	54
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1000	500	0	500
40600990	TEMPORARY RAMP	SQ YD	85	24	37	24
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	1125	945	12	168
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	440	192	105	143
42001420	BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)	SQ YD	136	68	0	68
44000100	PAVEMENT REMOVAL	SQ YD	364	148	167	49

* SPECIALTY ITEMS

FILE NAME =	USER NAME = Schwenberg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
g:\NLS\84EBID\TEG\Illinois.gov\PI007\04	Documents\DOT Office\District 3\Projects\036	OR	REVISED -		71	(1)5BR, BR-1C, BR-4	FORD	158	4			
PLOT SCALE = 1/8" = 100'	CHECKED -	REVIS	REVISED -		CONTRACT NO. 66994							
PLOT DATE = 8/14/2015	DATE -	REVIS	REVISED -		ILLINOIS FED. AID PROJECT							

Rev.

SUMMARY OF QUANTITIES				CONSTRUCTION CODE		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	BOX CULVERT	BRIDGE
				0011	0011	0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
44000158	HOT-MIX ASPHALT SURFACE REMOVAL, 2 1/4"	SO YD	718	0	718	0
48101200	AGGREGATE SHOULDERS, TYPE B	TON	306	158	46	102
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SO YD	1199	389	421	389
50100300	REMOVAL OF EXISTING STRUCTURES NO. 1	EACH	1	1	0	0
50100400	REMOVAL OF EXISTING STRUCTURES NO. 2	EACH	1	0	1	0
50100500	REMOVAL OF EXISTING STRUCTURES NO. 3	EACH	1	0	0	1
50105220	PIPE CULVERT REMOVAL	FOOT	159	85	74	0
50200100	STRUCTURE EXCAVATION	CU YD	380	248	0	132
50300100	FLOOR DRAINS	EACH	8	0	0	8
50300225	CONCRETE STRUCTURES	CU YD	144.1	60.6	0	83.5
50300255	CONCRETE SUPERSTRUCTURE	CU YD	484.1	237.1	0	247
50300260	BRIDGE DECK GROOVING	SO YD	1004	500	0	504
50300300	PROTECTIVE COAT	SO YD	1284	641	0	643
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	0.5	0	0.5

* SPECIALTY ITEMS

FILE NAME :	USER NAME : Schvanberg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pu:\IL04EBIDINTEG\Illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0236	ORAWG Data\ER04sheets\436694-sht.sog.dgn	CHECKED -	REVISED -		TI	(1)51BR, BR-1C, BR-4	FORD	158	5			
PLOT SCALE = 100,0000 / / in.		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.			CONTRACT NO. 66994				
PLOT DATE = 8/14/2015		DATE -	REVISED -					ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				BRIDGE 0011	BOX CULVERT 0011	BRIDGE 0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
50500505	STUD SHEAR CONNECTORS	EACH	3006	1620	0	1386
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	135320	58790	8690	67840
51200959	FURNISHING METAL SHELL PILES 14" X 0.312"	FOOT	953	515	0	438
51202305	DRIVING PILES	FOOT	953	515	0	438
51203200	TEST PILE METAL SHELLS	EACH	4	2	0	2
51500100	NAME PLATES	EACH	3	1	1	1
52100520	ANCHOR BOLTS, 1"	EACH	48	24	0	24
54003000	CONCRETE BOX CULVERTS	CU YD	75	0	75	0
54010906	PRECAST CONCRETE BOX CULVERTS 9' X 6'	FOOT	109.5	0	109.5	0
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	64	64	0	0
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18"	FOOT	46	0	46	0
54200229	PIPE CULVERTS, CLASS D, TYPE 1 24"	FOOT	36	0	36	0
54213450	END SECTIONS 15"	EACH	2	2	0	0
54213453	END SECTIONS 18"	EACH	2	0	2	0

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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	BOX CULVERT	BRIDGE
				0011	0011	0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
54213459	END SECTIONS 24"	EACH	1	0	1	0
59100100	GEOCOMPOSITE WALL DRAIN	50 YD	158	64	0	94
60801024	FLAP GATE 24"	EACH	1	0	1	0
61100500	EXPLORATION TRENCH 52" DEPTH	FOOT	3100	1500	500	1100
*63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	377	88	202	87
*63000025	STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	75	0	75	0
*63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	8	4	0	4
*63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	12	4	4	4
63200310	GUARDRAIL REMOVAL	FOOT	1598	338	820	440
66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	14	4	4	6
*66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	910	800	0	110
*66900450	SPECIAL WASTE PLANS AND REPORTS	L SUM	1	0.5	0	0.5
*66900530	SOIL DISPOSAL ANALYSIS	EACH	3	2	0	1
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	6	2	2	2

*SPECIALTY ITEMS

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pw\11884EB10\FEG.11\inois.gov\PWIDOT\Documents\DOT Offices\District 3\Projects\036\DRAWING\DATA\END\sheds\0366994-shr-nod.D	ORAW\036\DATA\END\sheds\0366994-shr-nod.D	CHECKED -	REVISED -			71	(1)518R, BR-1C, BR-4	FORD	158	7	
PLOT SCALE = 100.0000 1/ in.	CHECKED -	REVISED -				SCALE: SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 66994			
PLOT DATE = 8/14/2015	DATE -	REVISED -				ILLINOIS FED. AID PROJECT					

Rev.

SUMMARY OF QUANTITIES				CONSTRUCTION CODE		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	BOX CULVERT	BRIDGE
				0011	0011	0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
67100100	MOBILIZATION	L SUM	1	0.34	0.33	0.33
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.34	0.33	0.33
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	0.34	0.33	0.33
70300100	SHORT TERM PAVEMENT MARKING	FOOT	460	200	100	160
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	4360	1960	900	1500
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	580	260	120	200
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	50 FT	460	200	100	160
* 78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	4360	1960	900	1500
* 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	580	260	120	200
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	25	11	6	8
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	4	2	0	2
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	24	8	8	8
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	12	4	4	4
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	29	13	6	10

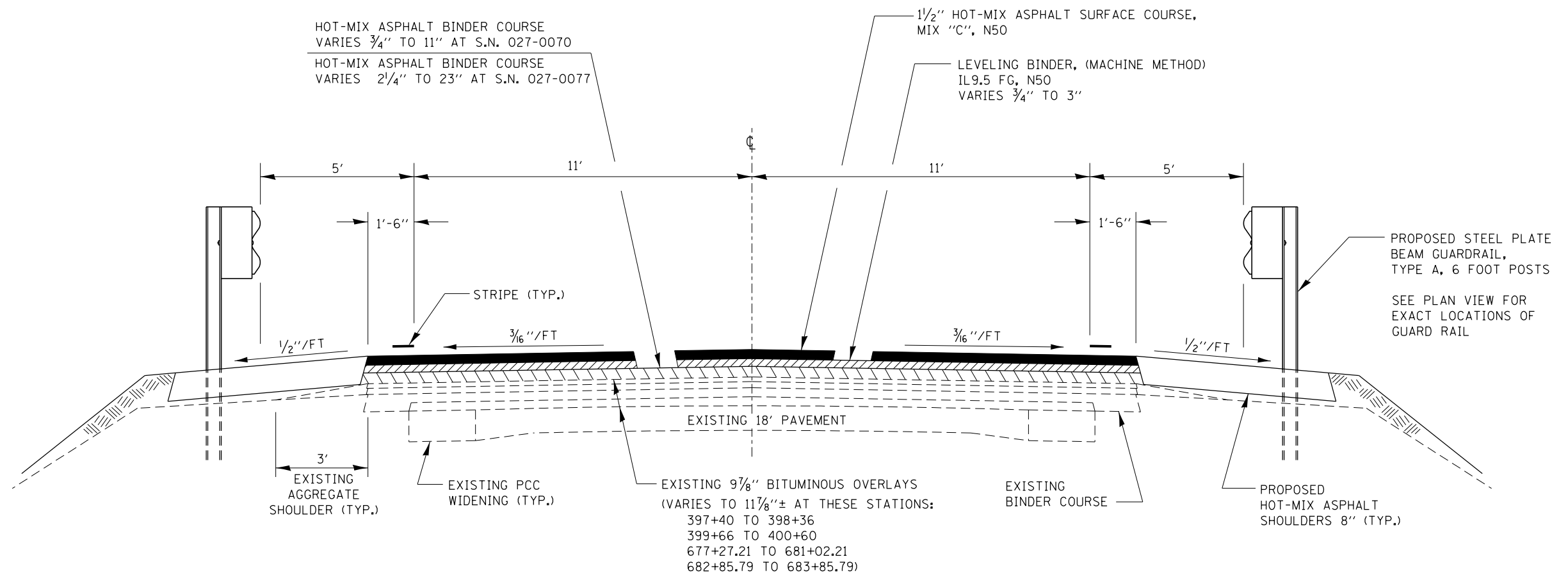
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p:\N\284EBID\INTEG\Illinois.gov\FKIDOT\Documents\DOT Offices\District 3\Projects\038\01\Drawings\040\Sheets\66994-shr-a04.dwg		CHECKED -	REVISED -			71	1151R, BR-1C, BR-4	FORD	158	8
PLOT SCALE = 1/8" = 1'-0"		DATE -	REVISED -			SCALE: SHEET NO. OF SHEETS STA. TO STA.		CONTRACT NO. 66994		ILLINOIS FED. AID PROJECT
PLOT DATE = 8/14/2015										

SUMMARY OF QUANTITIES				CONSTRUCTION CODE		
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE	BOX CULVERT	BRIDGE
				0011	0011	0011
				PR. 027-0103	PR. 027-2020	PR. 027-0102
X0327762	RAILROAD FLAGGER	L SUM	1	0	1	0
X5860110	GRANULAR BACKFILL FOR STRUCTURES	CU YD	249	114	0	135
X6660410	REMOVE RIGHT-OF-WAY MARKERS	EACH	6	2	2	2
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.34	0.33	0.33
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	22	0	0	22
Z0004552	APPROACH SLAB REMOVAL	SO YD	453	111	73	269
Z0030850	TEMPORARY INFORMATION SIGNING	SO FT	84	42	21	21
Z0046304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	346	172	0	174
Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1	0.5	0.5	0

* SPECIALTY ITEMS

Rev.



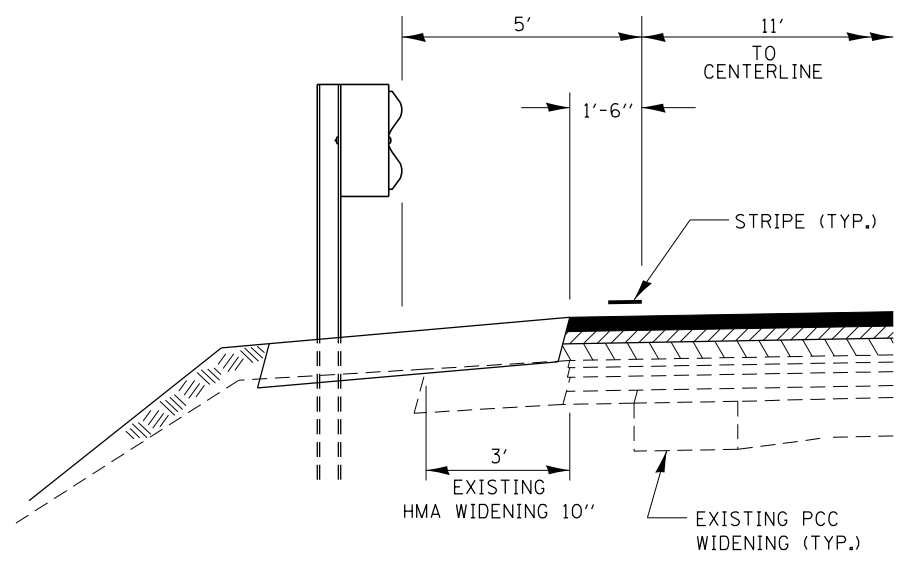
TYPICAL SECTION NO. 1 (PROPOSED)

AT EXISTING S.N. 027-0077 / PROPOSED S.N. 027-0103
 STA. 395+00 TO STA. 398+20.25
 STA. 399+81.75 TO STA. 403+05.50

SEE S.N. 027-0103 STRUCTURE PLANS FOR STA. 398+20.25 TO STA. 399+81.75

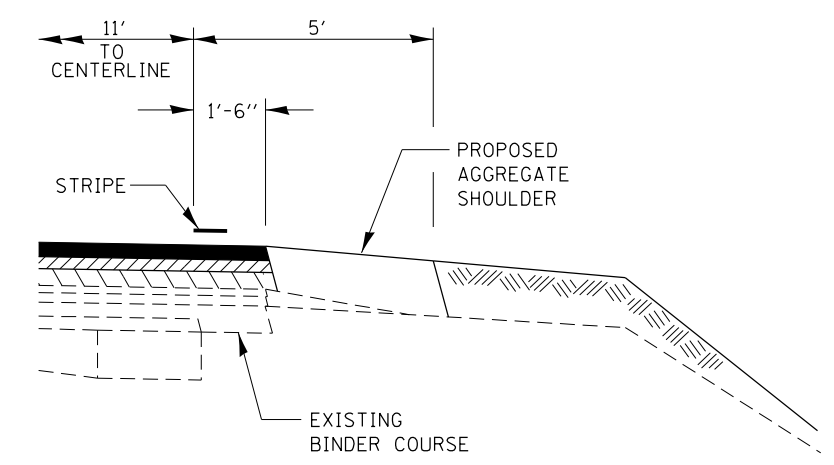
AT EXISTING S.N. 027-0070 / PROPOSED S.N. 027-0102
 STA. 678+90 TO STA. 681+22.91
 STA. 682+85.09 TO STA. 684+86.50

SEE S.N. 027-0102 STRUCTURE PLANS FOR STA. 681+22.91 TO STA. 682+85.09



SHOULDER DETAIL AT S.N. 027-0077

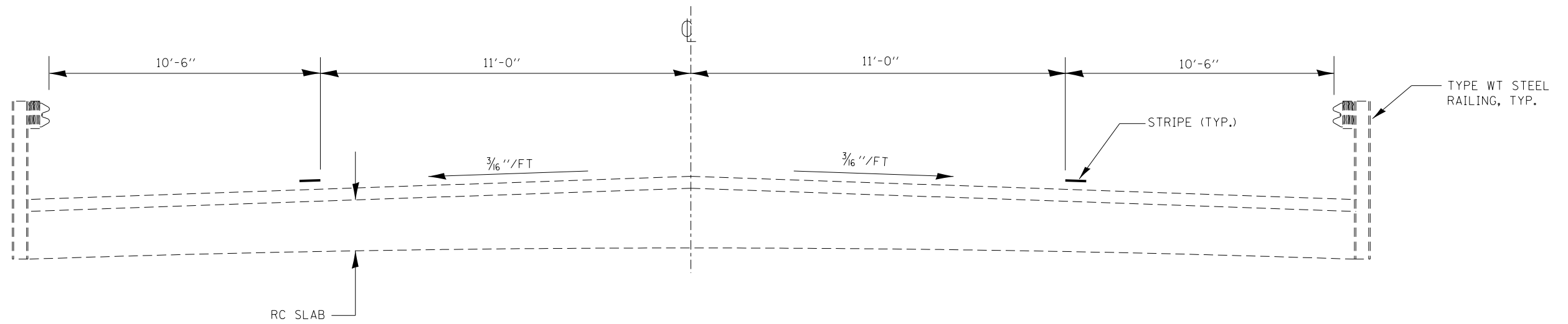
STA. 395+98 TO STA. 398+58
 STA. 399+43 TO STA. 401+60



DETAIL AT AGGREGATE SHOULDER

SEE PLAN VIEW FOR LOCATIONS

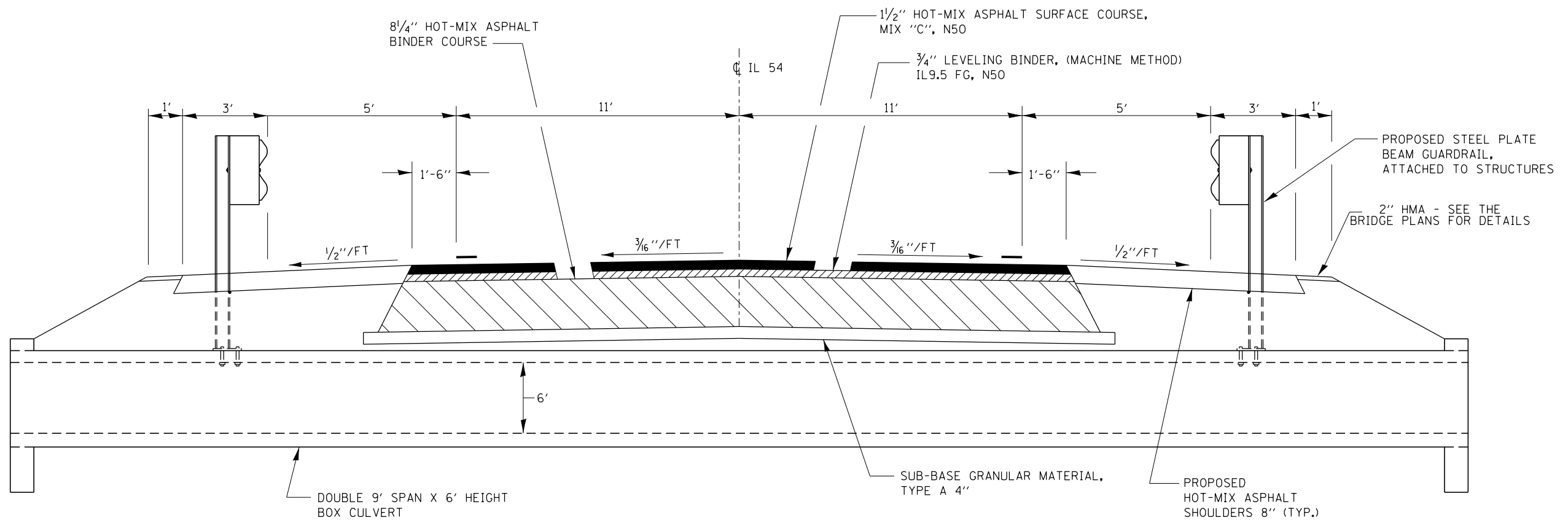
FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBID\INTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0366\Drawings\EA0\Drawings\0366994-sh-typical	PLotted SCALE = 40.0000' / in.	CHECKED -	REVISED -					71	(115)BR, BR-1C, BR-4	FORD	158	10
Default	PLOT DATE = 8/10/2015	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT												



TYPICAL SECTION 4

EXISTING S.N. 027-0021

STA. 425+95



TYPICAL SECTION 5

PROPOSED S.N. 027-2020

STA. 425+37 TO STA. 426+52

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS				F.A.P. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\IL\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0366994\Drawings\0366994-shr-typical		CHECKED -	REVISED -		71	(115)BR, BR-1C, BR-4	FORD	158	12				
Default	PLOT SCALE = 40.0000' / in.	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 66994				
	PLOT DATE = 8/14/2015				ILLINOIS FED. AID PROJECT								

PAVEMENT SCHEDULE															
STA TO STA	LENGTH	PAVEMENT WIDTH	PAVEMENT AREA	AGGREGATE SHOULDER WIDTH		BITUMINOUS MATERIALS (PRIME COAT)	MIXTURE FOR CRACKS JOINTS & FLANGEWAYS	HMA LEVELING BINDER N50 (HAND METH)	HMA LEVELING BINDER N50 (MACH METH) 3/4"	HMA SURFACE REMOVAL BUTT JOINT	HMA BINDER COURSE IL-19.0 N50	HMA SURFACE COURSE MIX. "C" N50 1 1/2"	HMA SURFACE REMOVAL 2 1/4"	AGGREGATE SHOULDERS, TYPE B	HMA SHOULDERS 8"
				LEFT FOOT	RIGHT FOOT										
	FOOT	FOOT	SQ YD	FOOT	FOOT	POUND	TON	TON	TON	SQ YD	TON	TON	SQ YD	TON	SQ YD
EXISTING S.N. 027-0077 / PROPOSED S.N. 027-0103 / STATIONS 394+10 TO 403+95.50															
394+10.00 TO 395+00.00	90.00	25.0	250.0	3.5	3.5	168.8	0.1	0.1	2	250		21		23.9	
395+00.00 TO 396+82.02	182.02	25.0	505.6	3.5	3.5	341.3	0.2	0.3	21		114	42		48.4	
396+82.02 TO 397+28.09	46.07	25.0	128.0	3.5		86.4	0.0	0.1	5		82	11		6.1	
397+28.09 TO 398+20.25	92.16	25.0	256.0			172.8	0.1	0.1	11		255	22			
HMA Stabilization - Rt 396+82.02 TO 398+21.72	139.70														111.0
HMA Stabilization - Lt 397+28.09 TO 398+30.78	102.69														83.5
Br App Pvmt Connector 398+20.25 TO 398+26.25	6.00	33.8	22.5												
Bridge Approach 398+26.25 TO 398+56.25	30.00														
Bridge 398+56.25 TO 399+45.75	89.50														
Bridge Approach 399+45.75 TO 399+75.75	30.00														
Br App Pvmt Connector 399+75.75 TO 399+81.75	6.00	33.8	22.5												
HMA Stabilization - Rt 399+71.22 TO 400+73.79	102.57														83.5
HMA Stabilization - Lt 399+80.28 TO 401+19.98	139.70														111.0
399+81.75 TO 400+73.79	92.04	25.0	255.7			172.6	0.1	0.1	11		267	21			
400+73.79 TO 401+19.98	46.19	25.0	128.3		3.5	86.6	0.0	0.1	5		89	11		6.1	
401+19.98 TO 403+05.50	185.52	25.0	515.3	3.5	3.5	347.8	0.2	0.3	22		139	43		49.3	
403+05.50 TO 403+95.50	90.00	25.0	250.0	3.5	3.5	168.8	0.1	0.1	2	250		21		23.9	
SUBTOTALS	986		2334			1545	0.7	1.1	79	500	945	192	0	158	389
EXISTING S.N. 027-0021 / PROPOSED S.N. 027-2020 / STATIONS 423+50 TO 428+00															
423+50.00 TO 424+50.00	100.00	25.0	277.8	3.5	3.5	187.5	0.1	0.1	12			23	278	26.6	
424+50.00 TO 424+62.00	12.00	25.0	33.3	0.0	3.5	22.5	0.0	0.0	1			3	33	1.6	
424+62.00 TO 425+37.00	75.00	25.0	208.3	0.0	0.0	140.6	0.1	0.1	9			18	208	0.0	
425+37.00 TO 426+52.00	115.00	25.0	319.4	0.0	0.0	215.6	0.1	0.2	13		12	27		0.0	
426+52.00 TO 427+28.67	76.67	25.0	213.0	0.0	0.0	143.8	0.1	0.1	9			18		0.0	
427+28.67 TO 427+39.44	10.77	25.0	29.9	3.5	0.0	20.2	0.0	0.0	1			3	30	1.4	
427+39.44 TO 428+00.00	60.56	25.0	168.2	3.5	3.5	113.5	0.1	0.1	7			14	168	16.1	
HMA Stabilization - Rt 424+57.49 TO 427+21.13															210.6
HMA Stabilization - Lt 424+68.24 TO 427+31.62															210.4
SUBTOTALS	450		1250			844	0.4	0.6	53	0	12	105	718	46	421

PAVEMENT SCHEDULE																
STA	TO STA	LENGTH	PAVEMENT WIDTH	PAVEMENT AREA	AGGREGATE SHOULDER WIDTH		BITUMINOUS MATERIALS (PRIME COAT)	MIXTURE FOR CRACKS JOINTS & FLANGEWAYS	HMA LEVELING BINDER N50 (HAND METH)	HMA LEVELING BINDER N50 (MACH METH) 3/4"	HMA SURFACE REMOVAL BUTT JOINT	HMA BINDER COURSE IL-19.0 N50	HMA SURFACE COURSE MIX. "C" N50 1 1/2"	HMA SURFACE REMOVAL 2 1/4"	AGGREGATE SHOULDERS, TYPE B	HMA SHOULDERS 8"
					LEFT	RIGHT										
					FOOT	FOOT										
EXISTING S.N. 027-0070 / PROPOSED S.N. 027-0102 / STATIONS 678+00 TO 685+76.50																
678+00.00	TO 678+90.00	90.00	25.0	250.0	3.5	3.5	168.8	0.1	0.1	2	250		21		23.9	
678+90.00	TO 679+73.00	83.00	25.0	230.6	3.5	3.5	155.6	0.1	0.1	10			19		22.1	
679+73.00	TO 680+42.56	69.56	25.0	193.2	3.5		130.4	0.1	0.1	8		22	16		9.2	
680+42.56	TO 681+22.91	80.35	25.0	223.2			150.7	0.1	0.1	9		70	19			
HMA Stabilization - Rt 679+72.97 TO 681+12.00		139.03														111.3
HMA Stabilization - Lt 680+42.47 TO 681+45.83		103.36														83.4
Br App Pvmt Connector 681+22.91 TO 681+28.91		6.00	33.8	22.6												
Bridge Approach 681+28.91 TO 681+58.91		30.00														
Bridge 681+58.91 TO 682+49.09		90.18														
Bridge Approach 682+49.09 TO 682+79.09		30.00														
Br App Pvmt Connector 682+79.09 TO 682+85.09		6.00	33.8	22.6												
HMA Stabilization - Rt 682+62.17 TO 683+65.53		103.36														83.4
HMA Stabilization - Lt 682+96.01 TO 684+35.03		139.02														111.3
682+85.09	TO 683+65.53	80.44	25.0	223.4			150.8	0.1	0.1	9		72	19			
683+65.53	TO 684+35.03	69.50	25.0	193.1		3.5	130.3	0.1	0.1	8		3	16		9.2	
684+35.03	TO 684+86.50	51.47	25.0	143.0	3.5	3.5	96.5	0.0	0.1	6			12		13.7	
684+86.50	TO 685+76.50	90.00	25.0	250.0	3.5	3.5	168.8	0.1	0.1	2	250		21		23.9	
SUBTOTALS		777		1752			1152	0.5	0.9	54	500	168	143	0	102	389
TOTALS							3541	1.6	2.6	185	1000	1125	441	718	305	1199

ROW MARKERS		
STA	OFFSET	EACH
S.N. 027-0077		
394+50	40' LT.	1
395+50	60' LT.	1
403+00	60' LT.	1
404+00	40' LT.	1
S.N. 027-0021		
423+50	40' LT.	1
424+50	50' LT.	1
427+50	50' LT.	1
428+00	40' LT.	1
S.N. 027-0070		
677+00	60' LT.	1
678+00	85' LT.	1
683+50	85' LT.	1
684+00	65' LT.	1
685+50	65' LT.	1
686+50	38.06' LT	1
TOTAL		14

SEEDING SCHEDULE											
STA	TO STA	SIDE	AREA	SEEDING CL 4A	SEEDING CL 2A	TEMP. EROSION CTL. SEED.	NITROGEN FERT NUTR	PHOSPHORUS FERT NUTR	POTASSIUM FERT NUTR	TEMP. EROSION CTL. BLNKT.	EROSION CONTROL BLANKET
			SQ FT	ACRE	ACRE	POUND	POUND	POUND	POUND	SQ YD	SQ YD
S.N. 027-0077											
394+10	TO 398+52	LT	15,920		0.37	110	32.9	32.9	32.9	5307	1769
394+10	TO 398+50	RT	13,920		0.32	96	28.8	28.8	28.8	4640	1547
399+70	TO 404+00	LT	17,380		0.40	120	35.9	35.9	35.9	5793	1931
399+43	TO 403+95	RT	13,760		0.32	95	28.4	28.4	28.4	4587	1529
SUBTOTALS			60,980	0	1.4	420	126	126	126	20,327	6776
S.N. 027-0021											
423+50	TO 425+55	LT	4,760		0.11	33	9.8	9.8	9.8	1587	529
423+50	TO 426+02	RT	7,710		0.18	53	15.9	15.9	15.9	2570	857
425+72	TO 428+00	LT	6,530		0.15	45	13.5	13.5	13.5	2177	726
426+33	TO 428+00	RT	4,380		0.10	30	9.0	9.0	9.0	1460	487
SUBTOTALS			23,380	0	0.5	161	48	48	48	7793	2598
S.N. 027-0070											
678+00	TO 682+04	LT	26,550		0.61	183	54.9	54.9	54.9	8850	2950
678+00	TO 681+27	RT	12,520	0.29		86	25.9	25.9	25.9	4173	1391
682+90	TO 685+76.50	LT	13,670		0.31	94	28.2	28.2	28.2	4557	1519
682+38	TO 685+76.50	RT	13,960	0.32		96	28.8	28.8	28.8	4653	1551
SUBTOTALS			66,700	0.6	0.9	459	138	138	138	22,233	7411
TOTALS			151,060	0.6	2.8	1040	312	312	312	50,353	16,784

PIPE CULVERTS					
STA	PIPE CULVERT REMOVAL	PIPE CULVERT CL D, TY 1, 15"	PIPE CULVERT CL D, TY 1, 18"	PIPE CULVERT CL D, TY 1, 24"	FLAP GATE 24"
	FOOT	FOOT	FOOT	FOOT	EACH
AT S.N. 027-0077					
397+80 LT	45				
400+40 LT	40				
396+00 LT		64			
SUBTOTALS	85	64	0	0	0
AT S.N. 027-0021					
424+10 LT (15")	38				
425+60 LT (24")	36			36	1
423+91 LT			46		
SUBTOTALS	74	0	46	36	1
TOTALS	159	64	46	36	1

PAVEMENT MARKING SCHEDULE									
STA TO STA	LENGTH	MODIFIED URETHANE PAVT. MARKINGS		TEMPORARY PAVEMENT MARKING		RAISED REFL. PAVT. MARKER	RAISED REFL. PAVT. MARKER (BRIDGE)	RAISED REFL. PAVT. MARKER REMOVAL	
		4"	6"	4"	6"				
		WHITE	YELLOW	WHITE	YELLOW				
		FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH	
S.N. 027-0077									
394+10.00 TO 398+26.25	416	833	110	833	110	5		5	
398+26.25 TO 399+75.75	150	299	40	299	40		2	2	
399+75.75 TO 403+90.00	414	829	110	829	110	6		6	
SUBTOTALS	980	1960	260	1960	260	11	2	13	
S.N. 027-0070									
678+00.00 TO 681+28.91	329	658	90	658	90	4		4	
681+28.91 TO 682+79.09	150	300	40	300	40		2	2	
682+79.09 TO 685+50.00	271	542	70	542	70	4		4	
SUBTOTALS	750	1500	200	1500	200	8	2	10	
S.N. 027-0021									
423+50.00 TO 428+00.00	450	900	120	900	120	6		6	
SUBTOTALS	450	900	120	900	120	6	0	6	
TOTAL	2180	4360	580	4360	580	25	4	29	

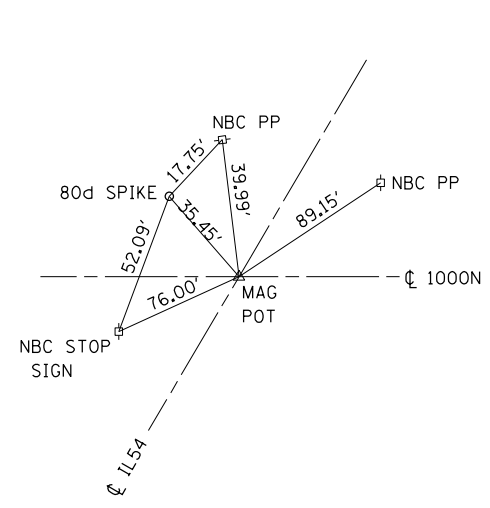
PAVEMENT REMOVAL AND APPROACH SLAB REMOVAL SCHEDULE			
STA TO STA	PAVEMENT REMOVAL	APPROACH SLAB REMOVAL	
		SQ YD	SQ YD
EXISTING S.N. 027-0077 / PROPOSED S.N. 027-0103 STATIONS 394+10 TO 403+95.60			
398+16.94 TO 398+63.22	73		
398+36.45 TO 398+62.27			56
399+38.81 TO 399+86.28	74		
399+40.24 TO 399+65.64			55
SUBTOTALS	148		111
EXISTING S.N. 027-0021 / PROPOSED S.N. 027-2020 STATIONS 423+50 TO 428+00			
425+37.23 TO 425+93.03	84		
425+53.46 TO 425+89.57			37
425+96.37 TO 426+52.22	84		
425+99.85 TO 426+36.07			37
SUBTOTALS	167		73
EXISTING S.N. 027-0070 / PROPOSED S.N. 027-0102 STATIONS 678+00 TO 685+76.50			
681+03.37 TO 681+79.36			159
682+28.52 TO 682+84.53			110
682+84.53 TO 683+02.01	49		
SUBTOTALS	49		269
TOTALS	364		453

GUARDRAIL SCHEDULE									
STA TO STA	SIDE	TRAFFIC BARRIER TERMINAL, TYPE 1, (SPECIAL) FLARED	STEEL PLATE BEAM GUARDRAIL TYPE A, 6' POSTS	STEEL PLATE BEAM GUARDRAIL ATTACHED TO STRUCTURES	TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL MARKERS TYPE A	TERMINAL MARKER DIRECT APPLIED	GUARDRAIL REMOVAL	
		EACH	FOOT	FOOT	EACH	EACH	EACH	FOOT	
S.N. 027-0077									
397+03.4 TO 398+36.9	RT	1	40.6		1	2	1	111	
397+49.5 TO 398+45.5	LT	1	3.1		1	2	1	60	
399+56.4 TO 400+52.5	RT	1	3.1		1	2	1	85	
399+65.0 TO 400+98.5	LT	1	40.6		1	2	1	82	
S.N. 027-0070									
679+94.4 TO 681+27.9	RT	1	40.3		1	2	1	106	
680+63.9 TO 681+59.9	LT	1	3.1		1	2	1	114	
682+48.1 TO 683+44.1	RT	1	3.1		1	2	1	106	
682+80.1 TO 684+13.6	LT	1	40.6		1	2	1	114	
S.N. 027-0021									
424+74 TO 425+24	RT	1				1	1		
425+24 TO 425+95	RT		71.0			1			
425+95 TO 426+25	RT			37.5		1		428	
426+25 TO 426+53	RT		28.0			1			
426+53 TO 427+03	RT	1				1	1		
424+85 TO 425+35	LT	1				1	1		
425+35 TO 424+66	LT		31.0			1			
425+66 TO 425+96	LT			37.5		1		392	
425+96 TO 426+68	LT		72.0			1			
426+68 TO 427+18	LT	1				1	1		
TOTAL		12	377	75	8	24	12	1598	

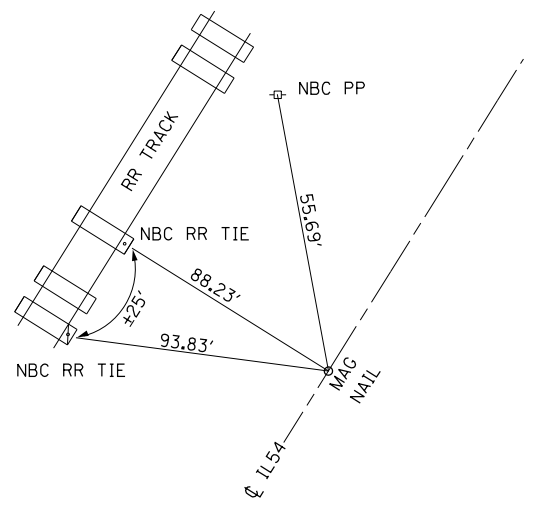
EARTHWORK SCHEDULE				
STA TO STA	EARTH EXCAVATION	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE (NOTE 1)	EMBANKMENT	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
S.N. 027-0077				
394+00 TO 404+00	689	517	1213	-697
S.N. 027-0021				
423+50 TO 428+00	515	387	140	247
S.N. 027-0070				
677+00 TO 685+50	681	511	1999	-1489
TOTAL	1885	1414	3352	-1938

NOTE 1. ESTIMATED SHRINKAGE FACTOR IS 25%.
NOTE 2. INSTEAD OF PLACING A NEGATIVE NUMBER IN THE SUMMARY OF QUANTITIES, THE 247 CYDS OF WASTE AT SN 027-0021 WAS MOVED TO SN 027-0070 IN THE S.O.O.

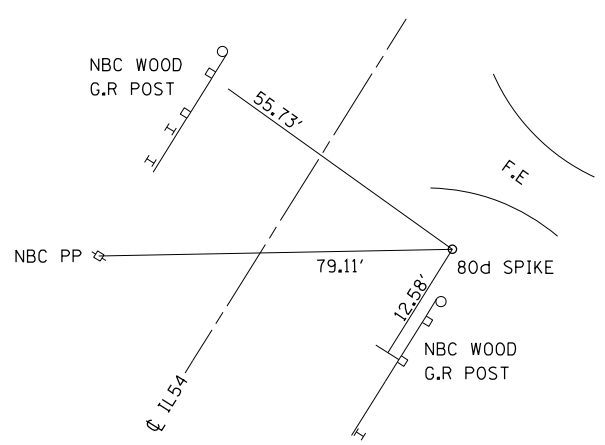
TEMPORARY DITCH CHECKS		
STA	LEFT FOOT	RIGHT FOOT
AT S.N. 027-0077		
395+26	8	
396+74		6
398+41		6
398+47	8	
399+48		8
399+71	6	
401+24		4
402+25	6	
SUBTOTALS	28	24
AT S.N. 027-0021		
424+75		8
425+30	8	
425+88	8	
425+98		8
426+71		8
SUBTOTALS	16	24
AT S.N. 027-0070		
681+23		6
681+69	8	
682+50		6
683+00	6	
683+50		8
SUBTOTALS	14	20
TOTAL	58	68



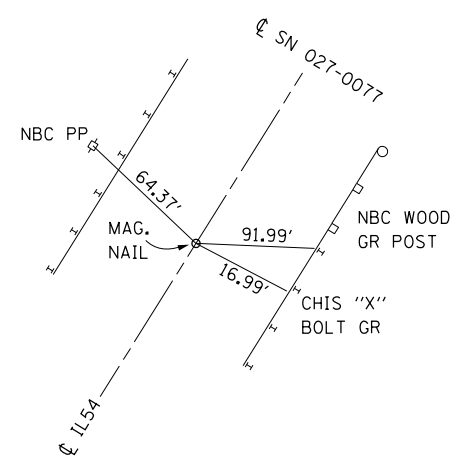
POT 383+53.83



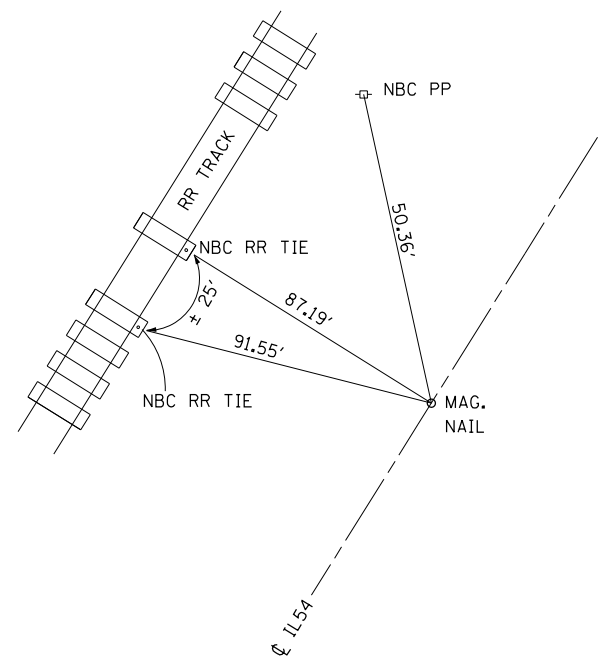
POT 394+00.00



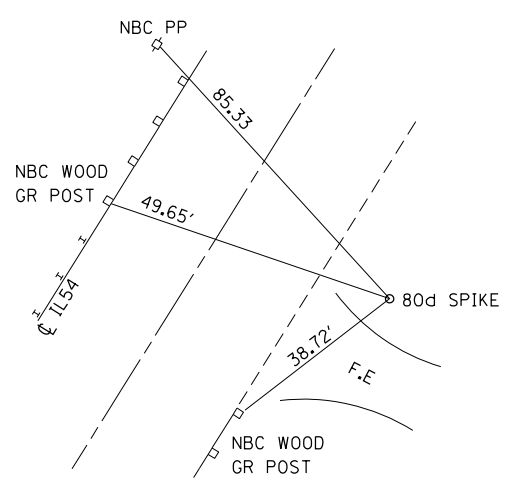
CP 54501 397+92.09



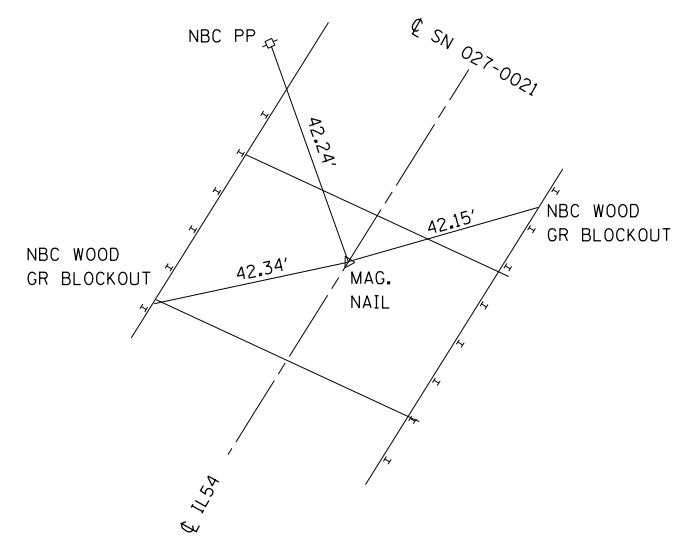
POT 399+01.00



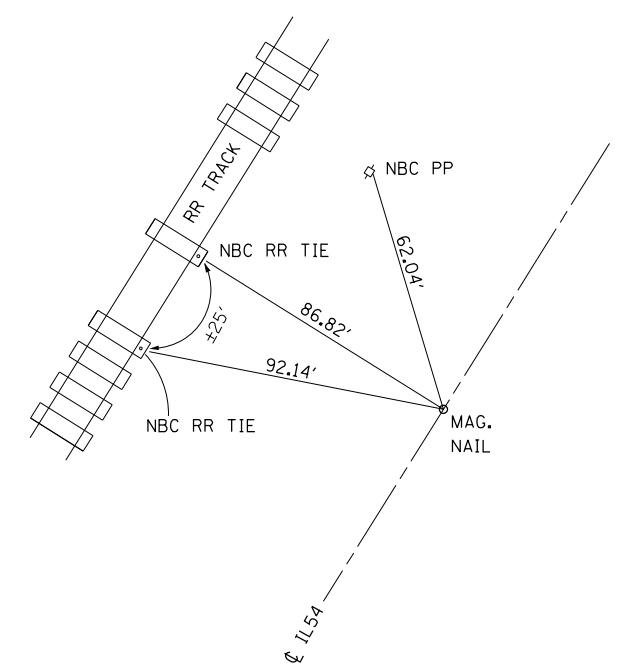
POT 404+00.00



CP 54502 423+96.71 25.80'LT



PI 425+94.68



POT 431+00.00

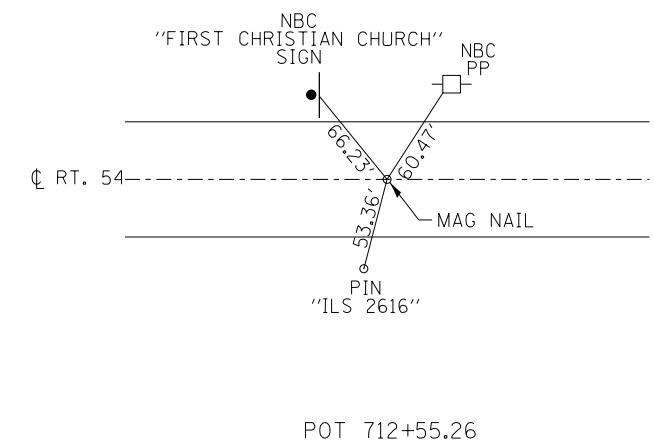
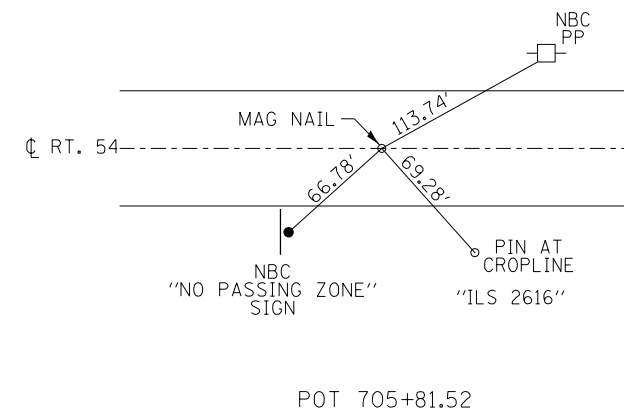
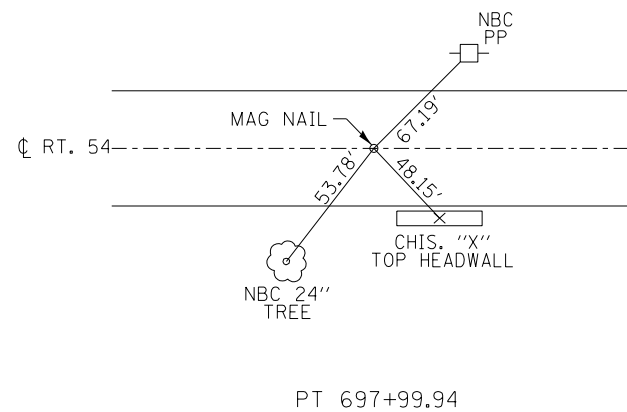
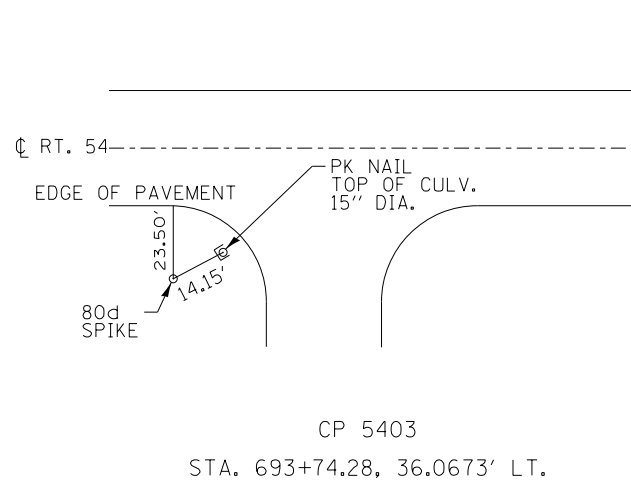
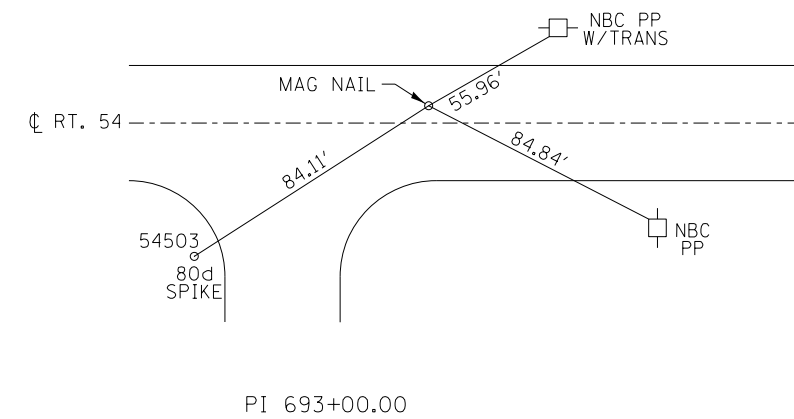
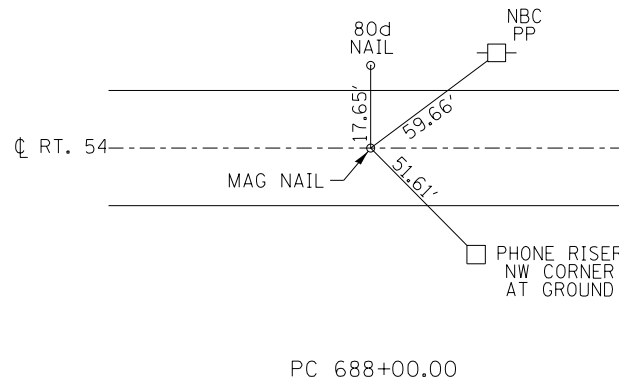
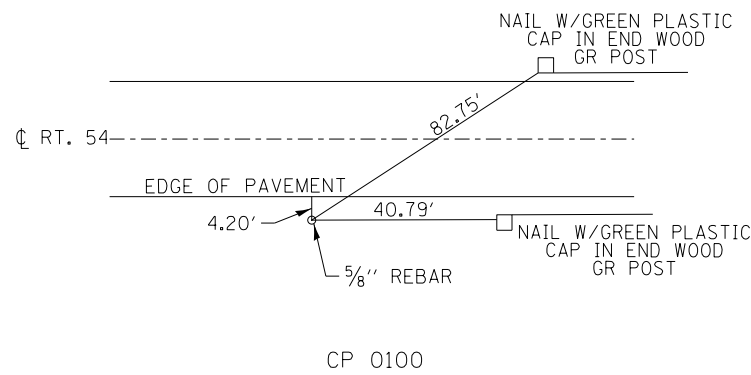
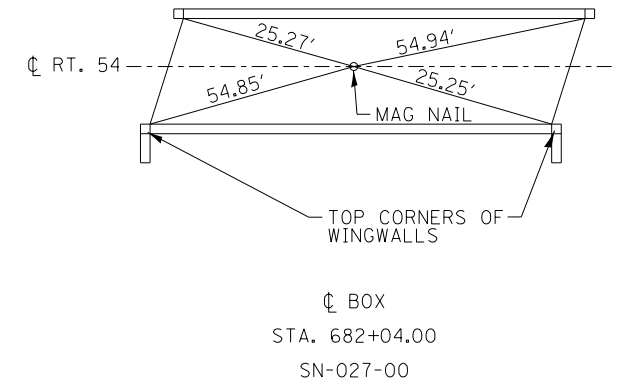
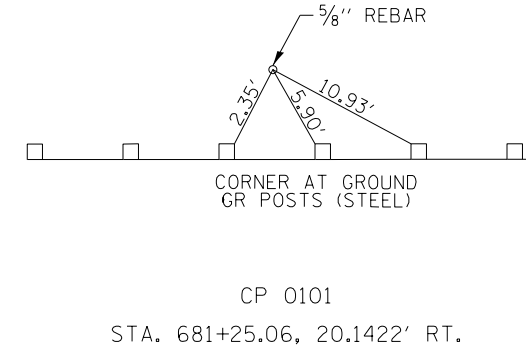
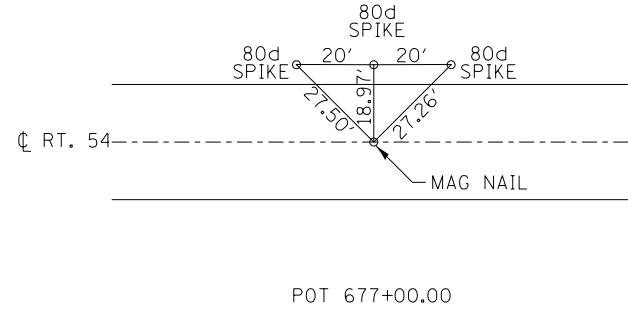
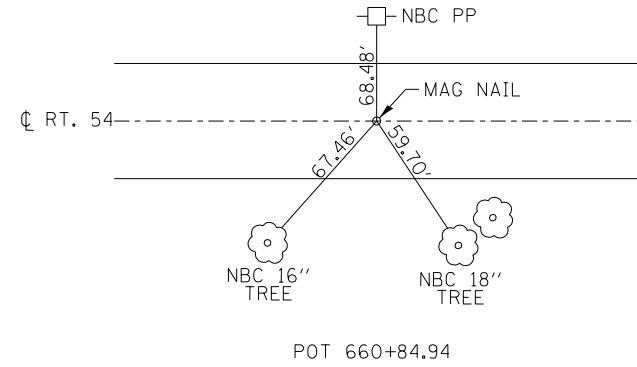
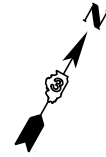
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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -	
PLOT DATE = 8/10/2015	DATE -	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TIE POINTS
SN 027-0077 AND SN 027-0021**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	17
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
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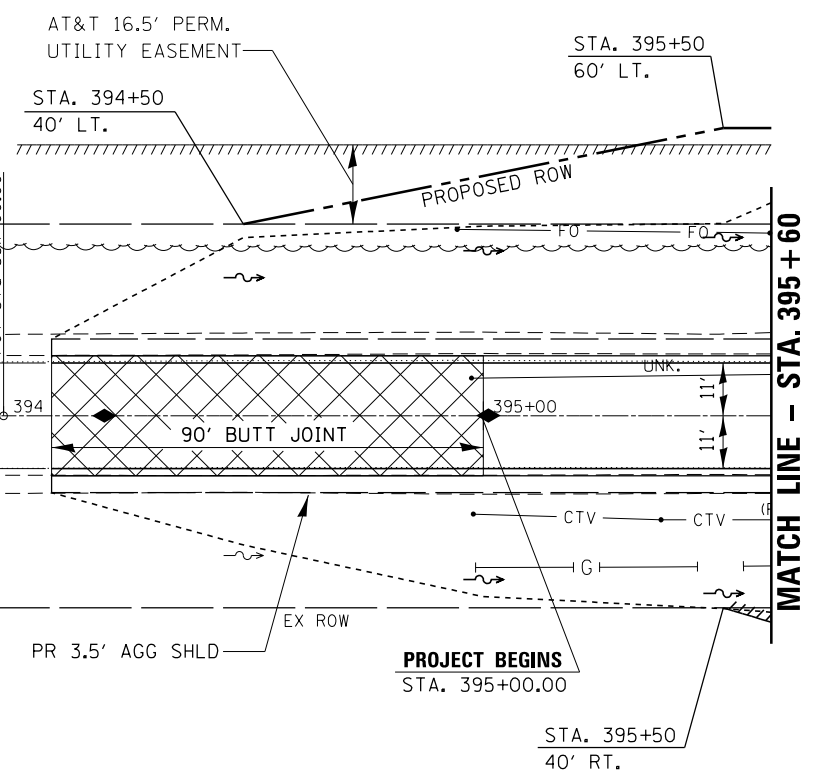
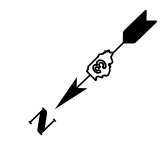
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

TIE POINTS S.N. 027-0070		
SCALE:	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	18
CONTRACT NO. 66994			ILLINOIS FED. AID PROJECT	

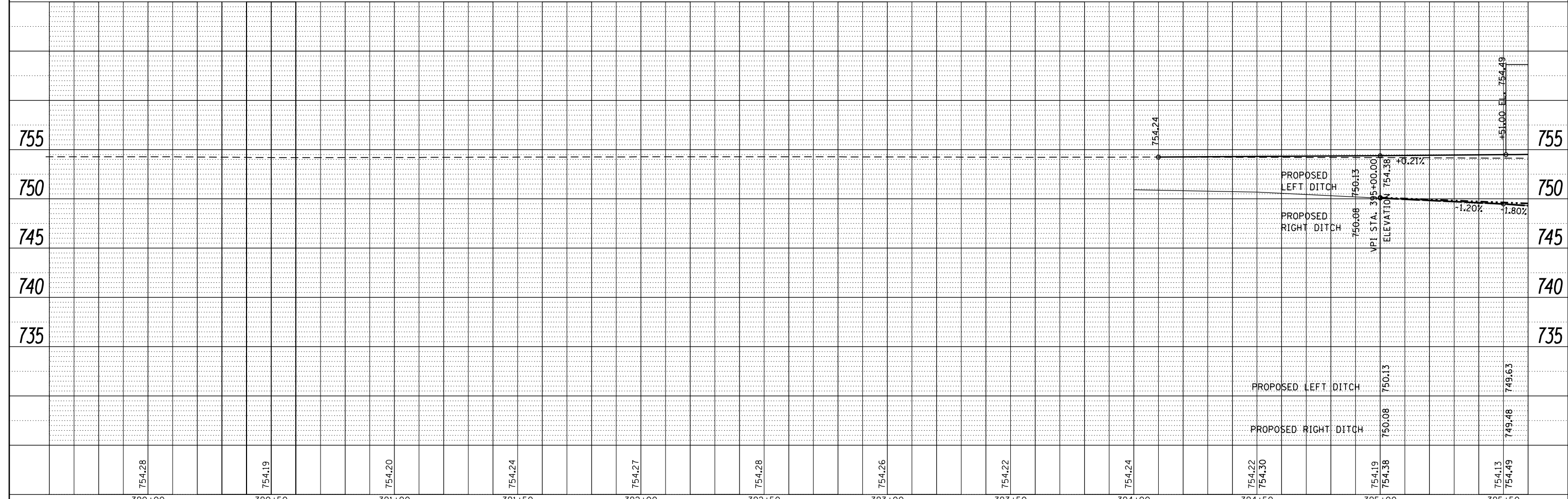
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	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	



LEGEND
◆ RAISED REFLECTIVE PAVEMENT MARKER

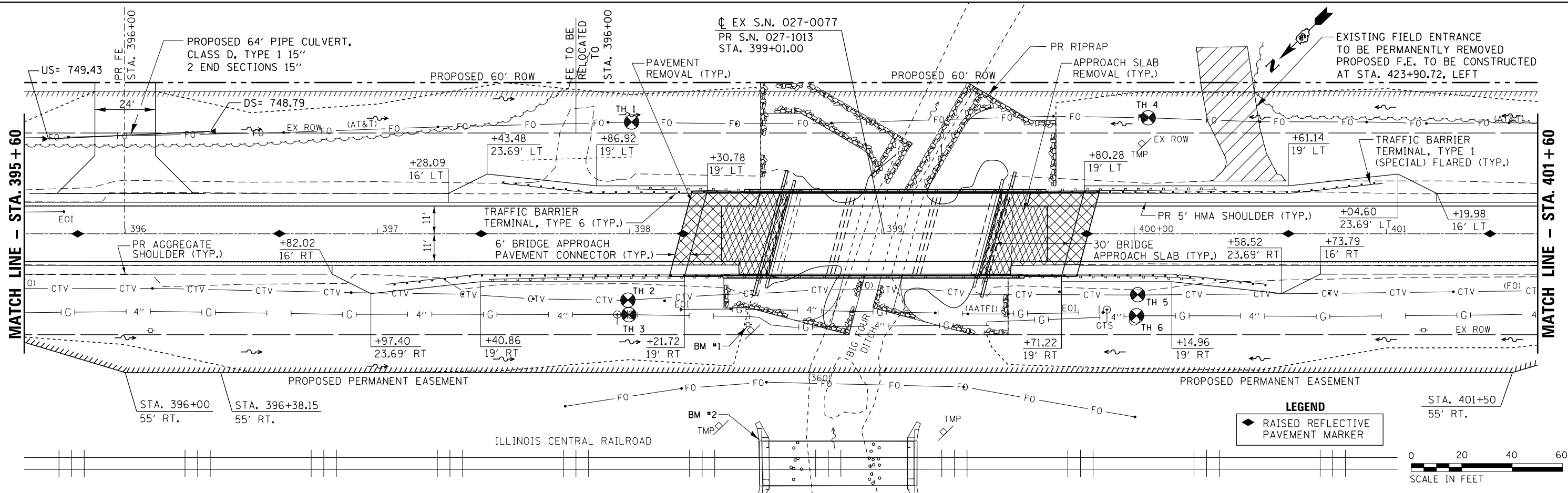
ILLINOIS CENTRAL RAILROAD



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	<p align="center">STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p align="center">PLAN AND PROFILE PR S.N. 027-0103 / EX S.N. 027-0077</p>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default		CHECKED -	REVISED -		71	(115)BR, BR-1C, BR-4	FORD	158	19
		DATE -	REVISED -		CONTRACT NO. 66994				
					ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	

PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	ALIGNMENT CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	CARD FILE NAME	

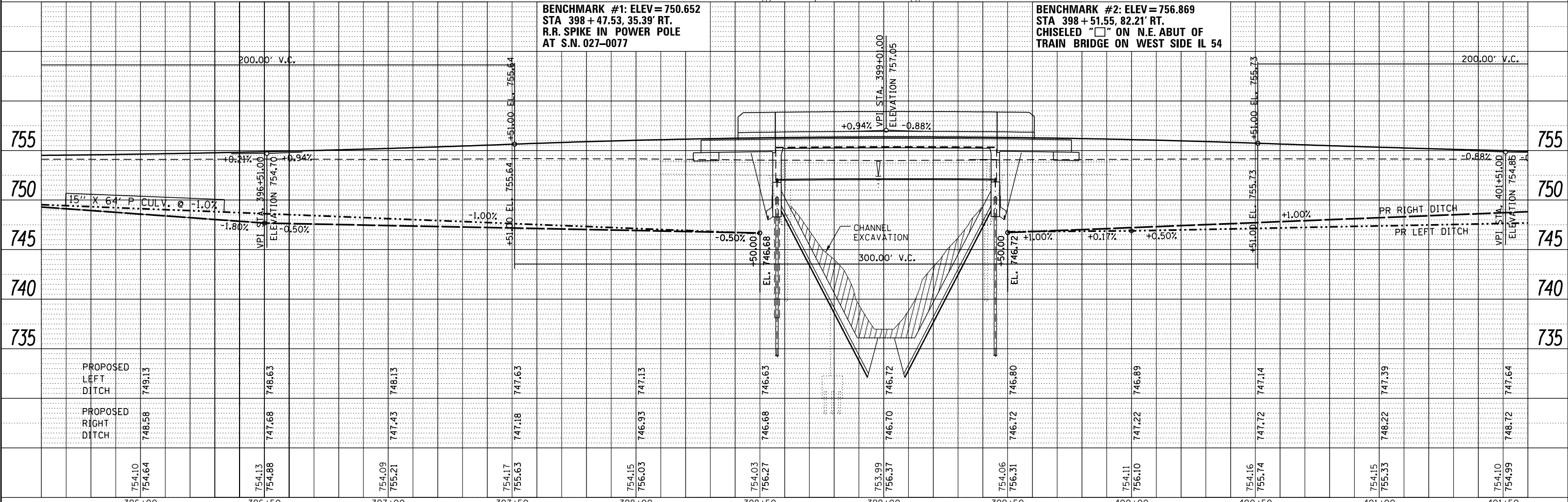


LEGEND
 ◆ RAISED REFLECTIVE PAVEMENT MARKER



BENCHMARK #1: ELEV = 750.652
 STA 398 + 47.53, 35.39' RT.
 R.R. SPIKE IN POWER POLE
 AT S.N. 027-0077

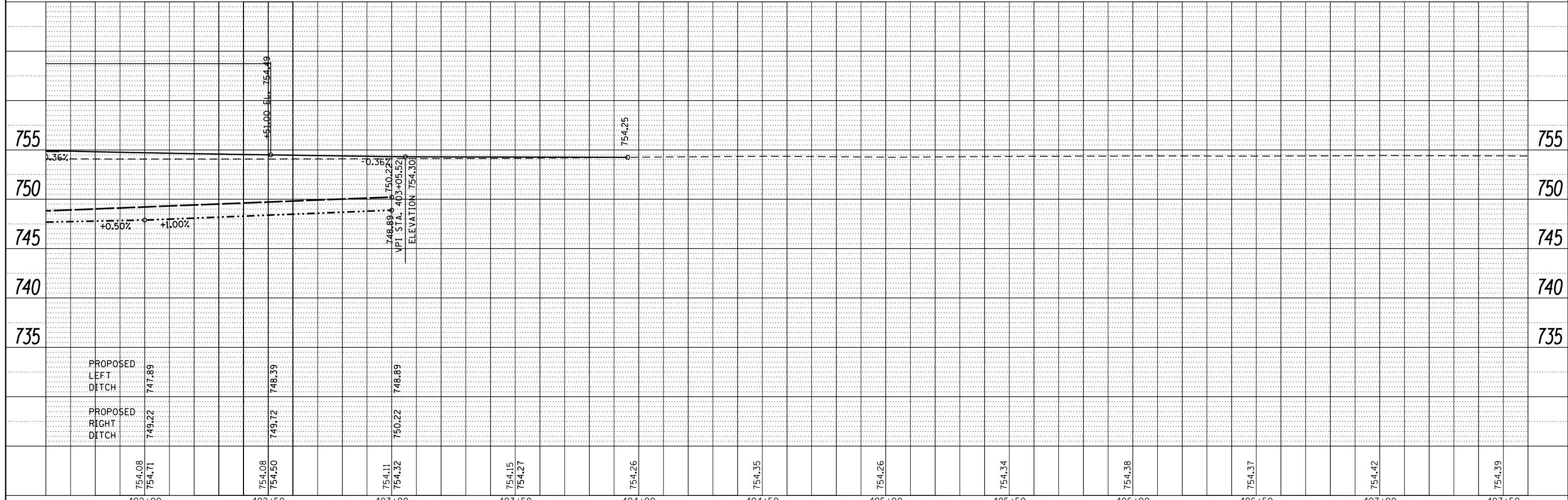
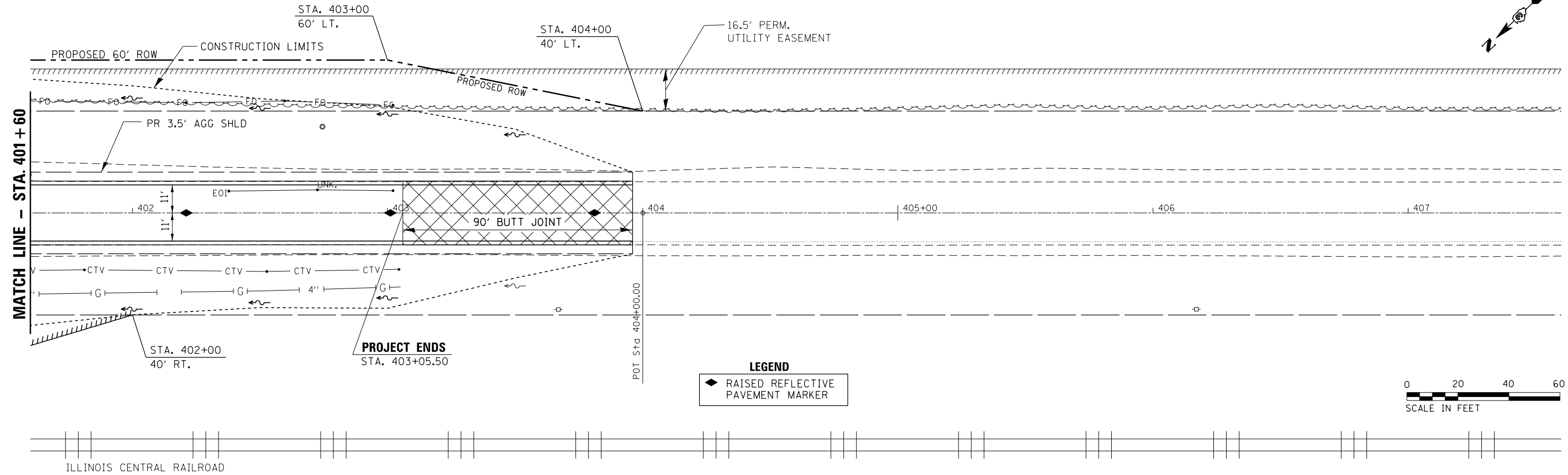
BENCHMARK #2: ELEV = 756.869
 STA 398 + 51.55, 82.21' RT.
 CHISELED " " ON N.E. ABUT OF
 TRAIN BRIDGE ON WEST SIDE IL 54



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		PLAN AND PROFILE PR S.N. 027-0103 / EX S.N. 027-0077		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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	PLOT SCALE = 40.0000' / in.	DATE -	REVISED -					CONTRACT NO. 66994				
	PLOT DATE = 8/10/2015							ILLINOIS FED. AID PROJECT				

PLAN	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
	STRUCTURE NOTATIONS CHECKED		
	NOTE BOOK NO.		
	CADD FILE NAME		

PROFILE	SURVEYED	BY	DATE
	PLOTTED		
	GRADES CHECKED		
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	NOTE BOOK NO.		
	CADD FILE NAME		



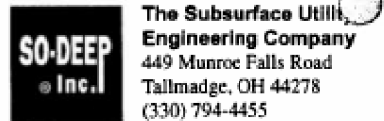
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Default		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PLAN AND PROFILE
PR S.N. 027-0103 / EX S.N. 027-0077**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	21
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				



The Subsurface Utility Engineering Company
449 Munroe Falls Road
Tallmadge, OH 44278
(330) 794-4455

So-Deep Test Hole Certification Form

© So-Deep, Inc. 1988, 1994

Corporate Headquarters:
8397 Euclid Avenue
Manassas Park, VA 20111
(703) 361-6005

Control # SILD127
Test Hole # 1
Plan Scale 1" = 50'
Sheet # 1 OF 1
Proposed Date GRADE CHANGE
Date SEPTEMBER 28, 2011

City, County, State FORD CO., IL
Gen. Loc. IL 54 JUST NE OF BIG FOUR CREEK BRIDGE
Recorded Size/Material/Type UNK. SIZE AT&T (FO) CABLE
Foreman/Truck#/Form By S. ERICKSON / 219 / P. REYNOLDS

Condition of paving prior to work
NO PAVING

B.M. 1 Elev. = 756.87'
is GIVEN

Description: (BM #2) CHIS "I" FOUND, NE ABUTMENT OF TRAIN BRIDGE, 82.21' RT OF CL STA 398+51.55, IL 54

B.M. 2 Elev. = 753.29'
is GIVEN

Description: TOP OF I.P. FOUND, FOR TRAV. #54501, 21'± LT OF CL STA 397+92±, IL 54

Benchmarks check BY 0.01'
Elevations are referenced to B.M.#2

Recorded Size/Type of utility **WAS FOUND**

There **WERE NOT** additional utilities in the test hole

The utility **WAS** in good condition.

Paving Thickness and type **NO PAVING**

Color of ribbon installed **ORANGE**

Soil Type **HARD CLAY**

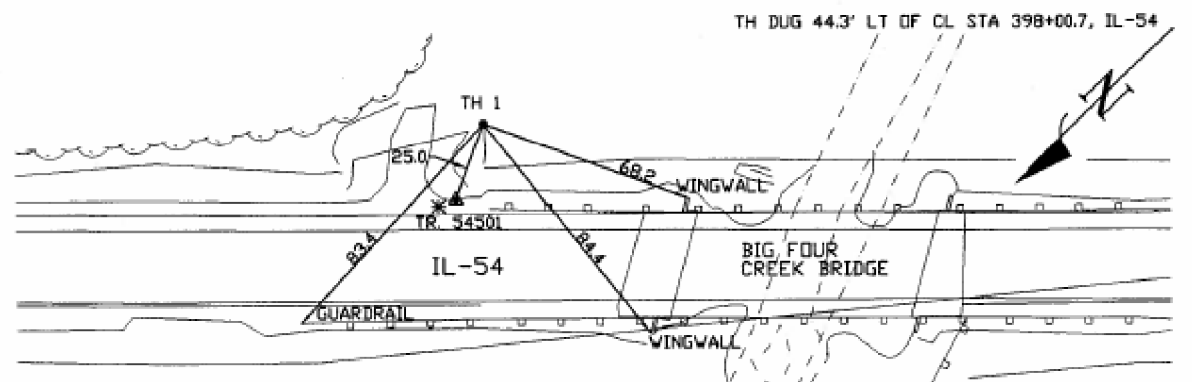
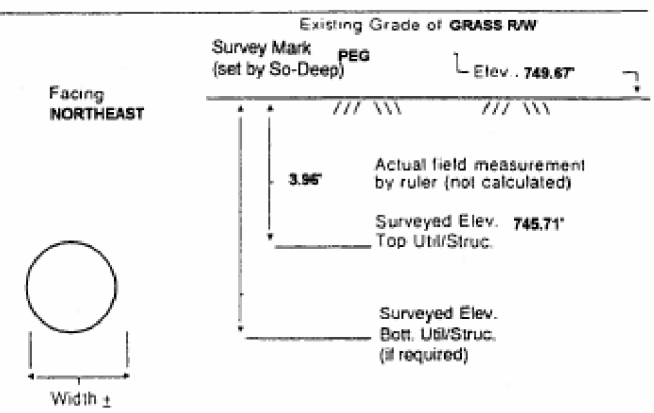
Field Condition **GRASS R/W**

T.H. tied to **PEG**

3/4" AT&T (FO) CABLE
Size/Material/Type
Portion of pipe exposed for O.D. measurement:
FULL

Remarks: **NONE**

So-Deep will attempt to use the BM/HI most applicable to your design. If however, BMs differ by more than .05', resulting differences could cause design conflicts.

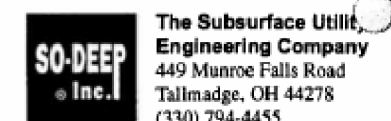


David R. Cole

- R/W = Rights of Way
- N.T.S. = Not to Scale
- PLAS. = Plastic
- BL = Base Line
- PCC = Precast Concrete
- COND. = Conduit
- CONC. = Concrete
- O.D. = Outside Diameter
- C.I. = Cast Iron
- D.I. = Ductile Iron
- RPC = Rough Pour Concrete
- CL = Centerline
- T.C. = Terra Cotta
- PLAS. = Plastic
- BL = Base Line
- ELEC. = Electric
- TELE = Telephone
- T.H. = Test Hole
- SW = Sidewalk
- DW = Driveway
- BM = Benchmark
- C.B. = Catch Basin
- GV = Gas Valve

Performing out-of-sight work...with vision!
Note: To eliminate mistakes and check this work, So-Deep suggests you scale and plot all dimensions onto the plans and review all elevations carefully. So-Deep is responsible only for information shown on our forms.

- 08" = 1"
- 16" = 2"
- 25" = 3"
- 33" = 4"
- 42" = 5"
- 50" = 6"
- 58" = 7"
- 67" = 8"
- 75" = 9"
- 83" = 10"
- 92" = 11"
- = Sewer Manhole
- = Test Hole
- ⊕ = Fire Hydrant
- = Pole
- = Fence Line
- ⊕ = Electric Manhole
- ⊕ = T.S. = Traverse Station
- ⊕ = Valve
- ⊕ = Water Meter
- ⊕ = Telephone Manhole
- ⊕ = Telephone Pedestal



So-Deep Test Hole Certification Form

© So-Deep, Inc. 1988, 1994

Corporate Headquarters:
8397 Euclid Avenue
Manassas Park, VA 20111
(703) 361-6005

Control # SILD127
Test Hole # 2
Plan Scale 1" = 50'
Sheet # 1 OF 1
Proposed Date GRADE CHANGE
Date SEPTEMBER 27, 2011

City, County, State FORD CO., IL
Gen. Loc. IL 54 JUST NE OF BIG FOUR CREEK BRIDGE
Recorded Size/Material/Type UNK. SIZE CATV (FO) CABLE
Foreman/Truck#/Form By S. ERICKSON / 219 / P. REYNOLDS

Condition of paving prior to work
NO PAVING

B.M. 1 Elev. = 756.87'
is GIVEN

Description: (BM #2) CHIS "I" FOUND, NE ABUTMENT OF TRAIN BRIDGE, 82.21' RT OF CL STA 398+51.55, IL 54

B.M. 2 Elev. = 753.29'
is GIVEN

Description: TOP OF I.P. FOUND, FOR TRAV. #54501, 21'± LT OF CL STA 397+92±, IL 54

Benchmarks check BY 0.02'
Elevations are referenced to B.M.#2

Recorded Size/Type of utility **WAS FOUND**

There **WERE NOT** additional utilities in the test hole

The utility **WAS** in good condition.

Paving Thickness and type **NO PAVING**

Color of ribbon installed **ORANGE & RED**

Soil Type **MOIST BROWN**

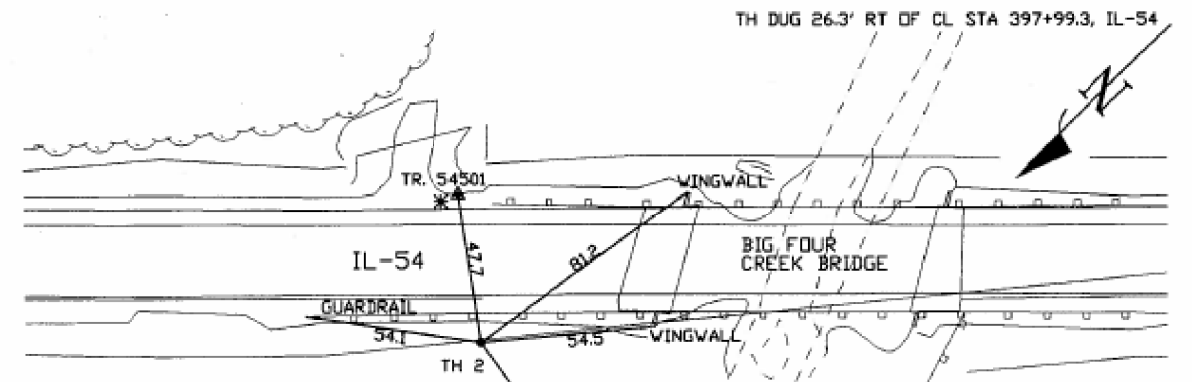
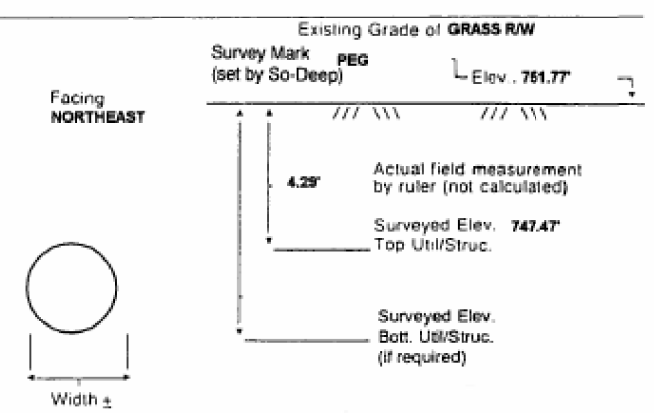
Field Condition **GRASS R/W**

T.H. tied to **PEG**

2 3/4" PLASTIC CATV CONDUIT *
Size/Material/Type
Portion of pipe exposed for O.D. measurement:
FULL

Remarks: * THE 2 3/4" PLASTIC CONDUIT SERVES AS CASING FOR THE 3/4" CATV (FO) CABLE. CREW ALSO FOUND THE 2 3/4" PLASTIC CONDUIT MAKING A NOTICEABLE VERTICAL GRADE CHANGE DOWNWARD TOWARD THE SOUTHWEST AT THIS LOCATION.

So-Deep will attempt to use the BM/HI most applicable to your design. If however, BMs differ by more than .05', resulting differences could cause design conflicts.

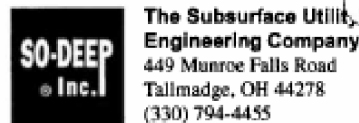


David R. Cole

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- PCC = Precast Concrete
- COND. = Conduit
- CONC. = Concrete
- O.D. = Outside Diameter
- C.I. = Cast Iron
- D.I. = Ductile Iron
- RPC = Rough Pour Concrete
- CL = Centerline
- T.C. = Terra Cotta
- PLAS. = Plastic
- BL = Base Line
- ELEC. = Electric
- TELE = Telephone
- T.H. = Test Hole
- SW = Sidewalk
- DW = Driveway
- BM = Benchmark
- C.B. = Catch Basin
- GV = Gas Valve

Performing out-of-sight work...with vision!
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- 50" = 6"
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- 75" = 9"
- 83" = 10"
- 92" = 11"
- = Sewer Manhole
- = Test Hole
- ⊕ = Fire Hydrant
- = Pole
- = Fence Line
- ⊕ = Electric Manhole
- ⊕ = T.S. = Traverse Station
- ⊕ = Valve
- ⊕ = Water Meter
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- ⊕ = Telephone Pedestal



The Subsurface Utility Engineering Company
449 Munroe Falls Road
Tallmadge, OH 44278
(330) 794-4455

So-Deep Test Hole Certification Form

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Corporate Headquarters:
8397 Euclid Avenue
Manassas Park, VA 20111
(703) 361-6005

Control # **SILD127**
Test Hole # **3**
Plan Scale **1" = 50'**
Sheet # **1 OF 1**
Proposed **GRADE CHANGE**
Date **SEPTEMBER 27, 2011**

City, County, State **FORD CO., IL**
Gen. Loc. **IL 54 JUST NE OF BIG FOUR CREEK BRIDGE**
Recorded Size/Material/Type **4" STEEL GAS LINE**
Foreman/Truck#/Form By **S. ERICKSON / 219 / P. REYNOLDS**

Condition of paving prior to work
NO PAVING

B.M. 1 Elev. = **756.87'**
is **GIVEN**

Description: **(BM #2) CHIS "I" FOUND, NE ABUTMENT OF TRAIN BRIDGE, 82.21' RT OF CL STA 398+81.66, IL 64**

B.M. 2 Elev. = **753.29'**
is **GIVEN**

Description: **TOP OF I.P. FOUND, FOR TRAV. #64501, 21'± LT OF CL STA 397+92±, IL 54**

Benchmarks check **BY 0.02'**
Elevations are referenced to **B.M.#2**

Recorded Size/Type of utility **WAS FOUND**

There **WERE NOT** additional utilities in the test hole

The utility **WAS** in good condition.

Paving Thickness and type **NO PAVING**

Color of ribbon installed **YELLOW**

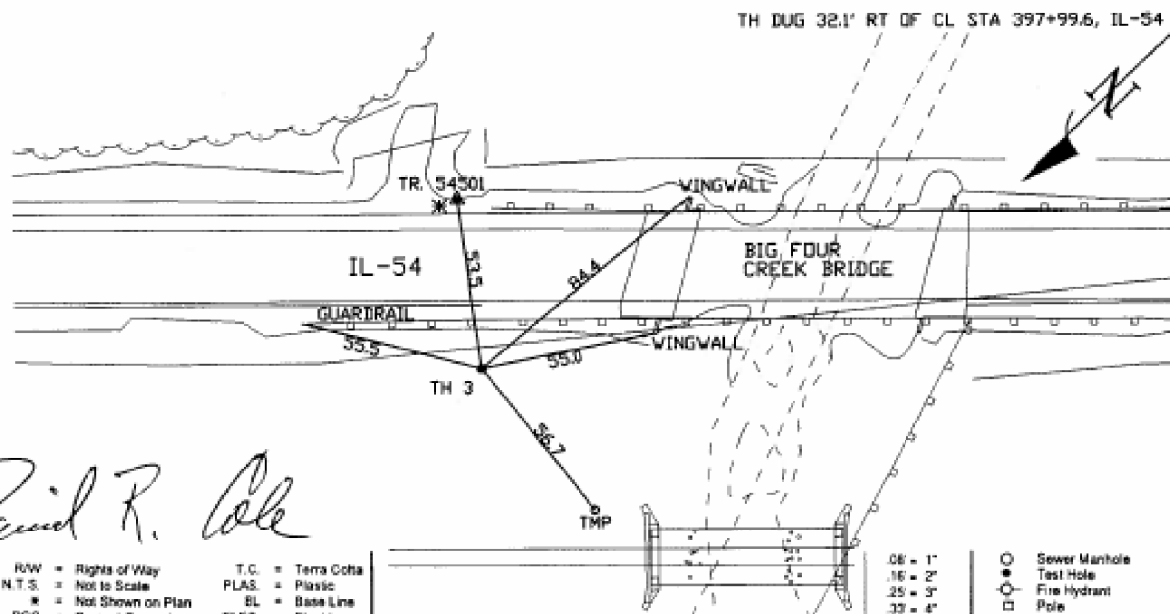
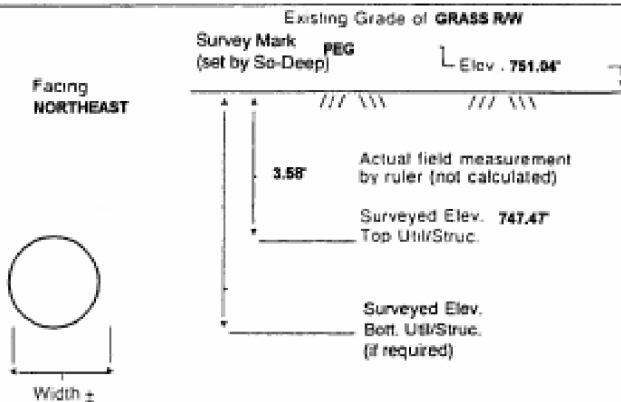
Soil Type **MOIST BROWN**

Field Condition **GRASS R/W**

T.H. tied to **PEG**

4 1/2" COATED STEEL GAS LINE
Size/Material/Type
Portion of pipe exposed for O.D. measurement:
FULL

Remarks: **NONE**



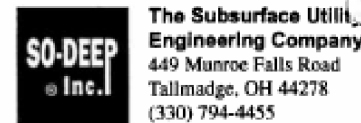
David R. Cole

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- CONC = Concrete
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- C.I. = Cast Iron
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- GV = Gas Valve

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- ⊕ = Water Meter
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- ⊕ = Telephone Pedestal



So-Deep Test Hole Certification Form

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Corporate Headquarters:
8397 Euclid Avenue
Manassas Park, VA 20111
(703) 361-6005

Control # **SILD127**
Test Hole # **4**
Plan Scale **1" = 50'**
Sheet # **1 OF 1**
Proposed **GRADE CHANGE**
Date **SEPTEMBER 28, 2011**

City, County, State **FORD CO., IL**
Gen. Loc. **IL 54 JUST SW OF BIG FOUR CREEK BRIDGE**
Recorded Size/Material/Type **UNK. SIZE AT&T (FO) CABLE**
Foreman/Truck#/Form By **S. ERICKSON / 219 / P. REYNOLDS**

Condition of paving prior to work
NO PAVING

B.M. 1 Elev. = **756.87'**
is **GIVEN**

Description: **(BM #2) CHIS "I" FOUND, NE ABUTMENT OF TRAIN BRIDGE, 82.21' RT OF CL STA 398+81.66, IL 64**

B.M. 2 Elev. = **753.29'**
is **GIVEN**

Description: **TOP OF I.P. FOUND, FOR TRAV. #64501, 21'± LT OF CL STA 397+92±, IL 54**

Benchmarks check **BY 0.01'**
Elevations are referenced to **B.M.#2**

Recorded Size/Type of utility **WAS FOUND**

There **WERE NOT** additional utilities in the test hole

The utility **WAS** in good condition.

Paving Thickness and type **NO PAVING**

Color of ribbon installed **ORANGE**

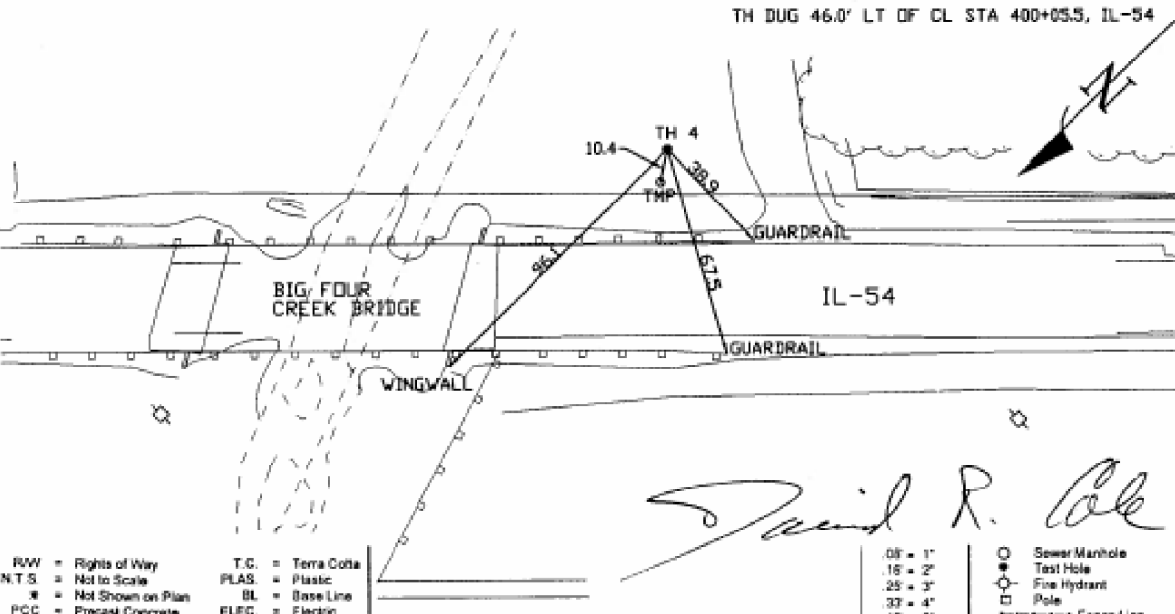
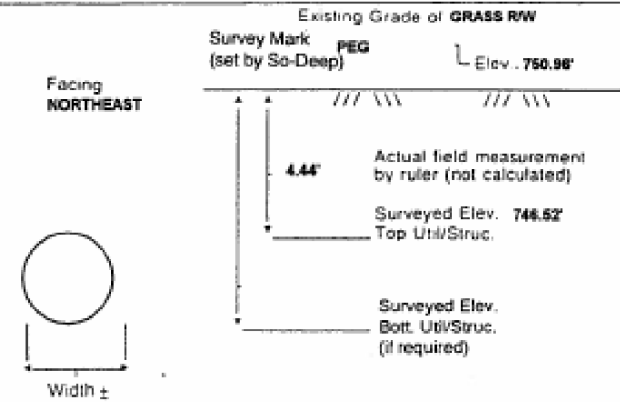
Soil Type **HARD CLAY**

Field Condition **GRASS R/W**

T.H. tied to **PEG**

1 1/2" PLASTIC AT&T CONDUIT *
Size/Material/Type
Portion of pipe exposed for O.D. measurement:
FULL

Remarks: *** THE 1 1/2" PLASTIC CONDUIT SERVES AS A CASING FOR THE 3/4" AT&T (FO) CABLE.**



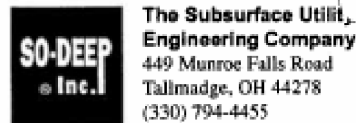
David R. Cole

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- COND = Conduit
- CONC = Concrete
- O.D. = Outside Diameter
- C.I. = Cast Iron
- D.I. = Ductile Iron
- RPC = Rough Pour Concrete
- CL = Centerline
- T.C. = Terra Cotta
- PLAS = Plastic
- BL = Base Line
- ELEC = Electric
- TELE = Telephone
- T.H. = Test Hole
- SW = Sidewalk
- DW = Driveway
- BM = Benchmark
- C.B. = Catch Basin
- GV = Gas Valve

Performing out-of-sight work...with vision!

Note: To eliminate mistakes and check this work, So-Deep suggests you scale and plot all dimensions onto the plans and review all elevations carefully. So-Deep is responsible only for information shown on our forms.

- 08" = 1"
- 16" = 2"
- 25" = 3"
- 33" = 4"
- 42" = 5"
- 50" = 6"
- 58" = 7"
- 67" = 8"
- 75" = 9"
- 83" = 10"
- 92" = 11"
- = Sewer Manhole
- = Test Hole
- ⊕ = Fire Hydrant
- ⊙ = Pole
- ⊖ = Fence Line
- ⊕ = Electric Manhole
- ⊕ = T.S. = Traverse Station
- ⊕ = Valve
- ⊕ = Water Meter
- ⊕ = Telephone Manhole
- ⊕ = Telephone Pedestal



So-Deep Test Hole Certification Form

© So-Deep, Inc. 1988, 1994

Corporate Headquarters:
8397 Euclid Avenue
Manassas Park, VA 20111
(703) 361-6005

Control # **SILD127**
Test Hole # **6**
Plan Scale **1" = 50'**
Sheet # **1 OF 1**
Proposed **GRADE CHANGE**
Date **SEPTEMBER 27, 2011**

City, County, State **FORD CO., IL**
Gen. Loc. **IL 54 JUST SW OF BIG FOUR CREEK BRIDGE**
Recorded Size/Material/Type **UNK. SIZE CATV (FO) CABLE**
Foreman/Truck#/Form By **S. ERICKSON / 219 / P. REYNOLDS**

Condition of paving prior to work
NO PAVING

B.M. 1 Elev. = **756.87'**
is **GIVEN**

Description: **(BM #2) CHIS "I" FOUND, NE ABUTMENT OF TRAIN BRIDGE, 82.21' RT OF CL STA 398+51.55, IL 54**

B.M. 2 Elev. = **753.29'**
is **GIVEN**

Description: **TOP OF I.P. FOUND, FOR TRAV. #54501, 21'± LT OF CL STA 397+92±, IL 54**

Benchmarks check **BY 0.02'**
Elevations are referenced to **B.M.#2**

Recorded Size/Type of utility **WAS FOUND**

There **WERE NOT** additional utilities in the test hole

The utility **WAS** in good condition.

Paving Thickness and type **NO PAVING**

Color of ribbon installed **ORANGE & RED**

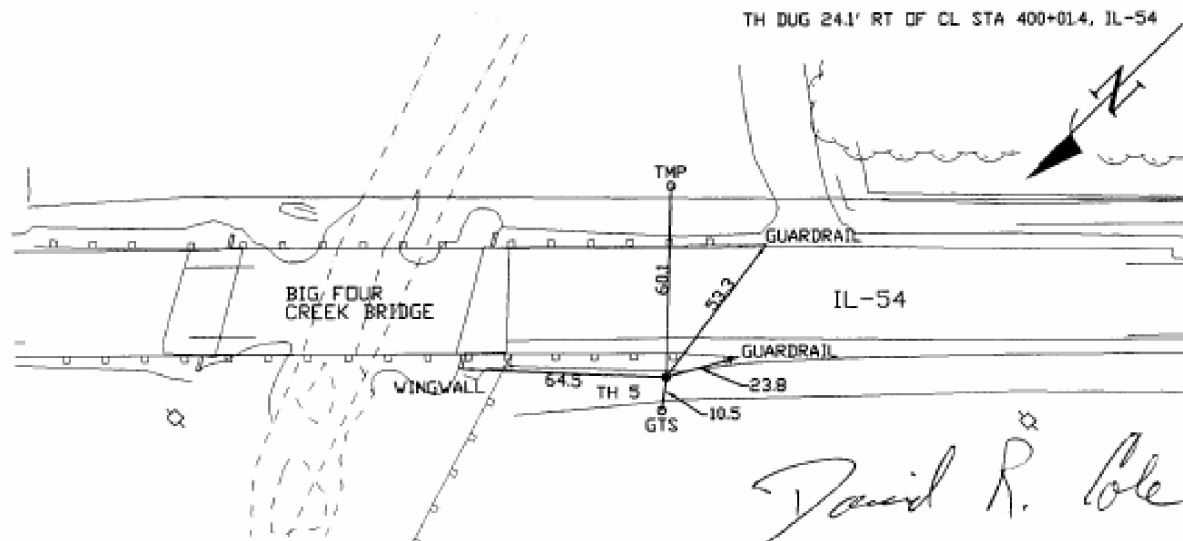
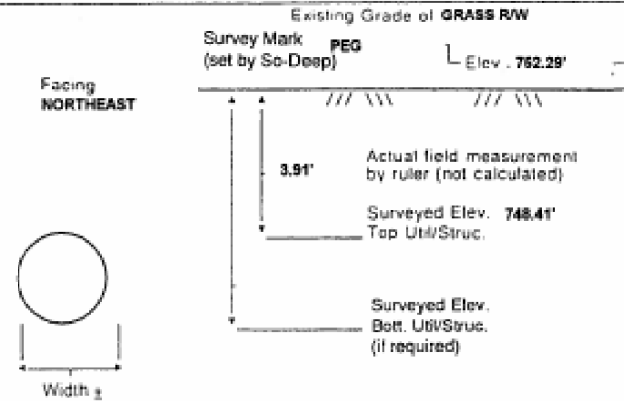
Soil Type **MOIST BROWN**

Field Condition **GRASS R/W**

T.H. tied to **PEG**

3/4" CATV (FO) CABLE
Size/Material/Type
Portion of pipe exposed for O.D. measurement:
FULL

Remarks: **NONE**

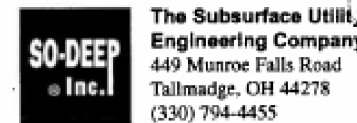


- R/W = Rights of Way
- N.T.S. = Not to Scale
- = Not Shown on Plan
- PCC = Precast Concrete
- COND. = Conduit
- CONC. = Concrete
- O.D. = Outside Diameter
- C.I. = Cast Iron
- D.I. = Ductile Iron
- RPC = Rough Four Concrete
- CL = Centerline
- T.C. = Terra Cotta
- PLAS. = Plastic
- BL = Base Line
- ELEC. = Electric
- TELE = Telephone
- T.H. = Test Hole
- SW = Sidewalk
- D/W = Driveway
- BM = Benchmark
- C.B. = Catch Basin
- CV = Gas Valve

Performing out-of-sight work...with vision!SM

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- ⊕ = Valve
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- ⊖ = Telephone Pedestal



So-Deep Test Hole Certification Form

© So-Deep, Inc. 1988, 1994

Corporate Headquarters:
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Manassas Park, VA 20111
(703) 361-6005

Control # **SILD127**
Test Hole # **6**
Plan Scale **1" = 50'**
Sheet # **1 OF 1**
Proposed **GRADE CHANGE**
Date **SEPTEMBER 27, 2011**

City, County, State **FORD CO., IL**
Gen. Loc. **IL 54 JUST SW OF BIG FOUR CREEK BRIDGE**
Recorded Size/Material/Type **4" STEEL GAS LINE**
Foreman/Truck#/Form By **S. ERICKSON / 219 / P. REYNOLDS**

Condition of paving prior to work
NO PAVING

B.M. 1 Elev. = **756.87'**
is **GIVEN**

Description: **(BM #2) CHIS "I" FOUND, NE ABUTMENT OF TRAIN BRIDGE, 82.21' RT OF CL STA 398+51.55, IL 54**

B.M. 2 Elev. = **753.29'**
is **GIVEN**

Description: **TOP OF I.P. FOUND, FOR TRAV. #54501, 21'± LT OF CL STA 397+92±, IL 54**

Benchmarks check **BY 0.02'**
Elevations are referenced to **B.M.#2**

Recorded Size/Type of utility **WAS FOUND**

There **WERE NOT** additional utilities in the test hole

The utility **WAS** in good condition.

Paving Thickness and type **NO PAVING**

Color of ribbon installed **YELLOW**

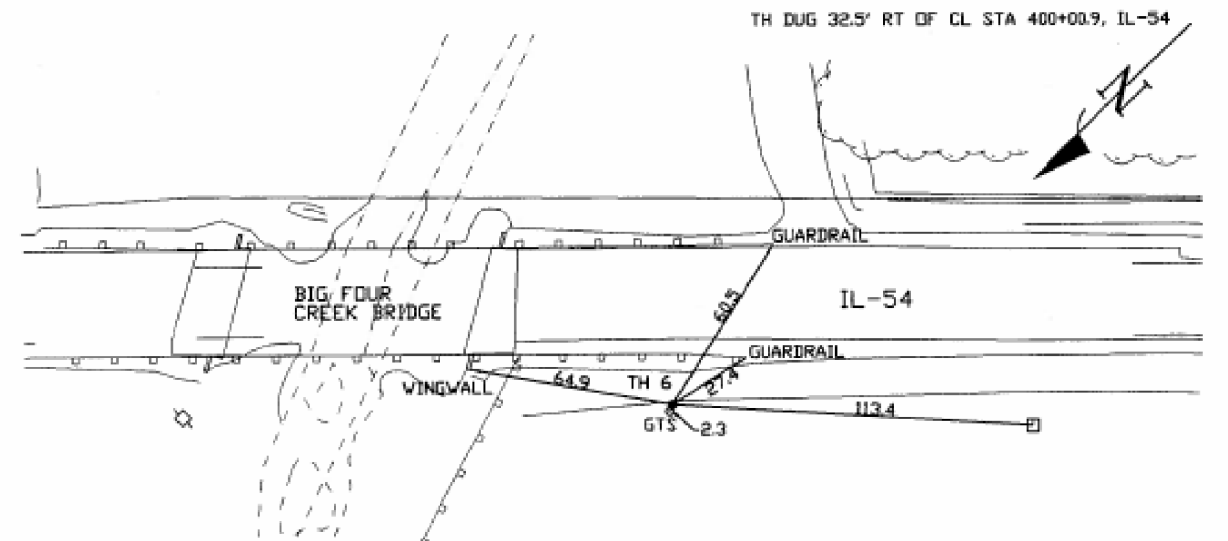
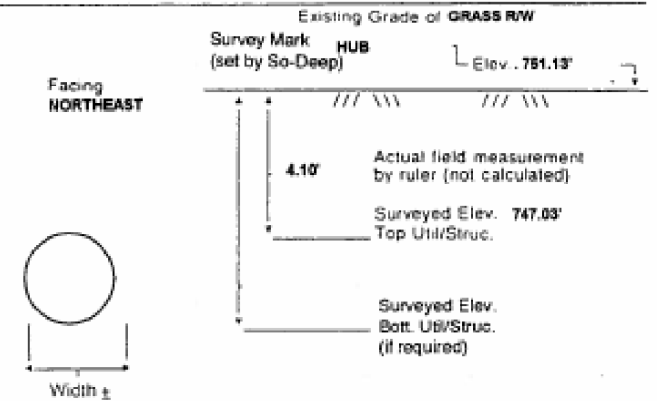
Soil Type **MOIST BROWN**

Field Condition **GRASS R/W**

T.H. tied to **HUB**

4 1/2" COATED STEEL GAS LINE
Size/Material/Type
Portion of pipe exposed for O.D. measurement:
FULL

Remarks: **NONE**



- R/W = Rights of Way
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- = Not Shown on Plan
- PCC = Precast Concrete
- COND. = Conduit
- CONC. = Concrete
- O.D. = Outside Diameter
- C.I. = Cast Iron
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- BM = Benchmark
- C.B. = Catch Basin
- CV = Gas Valve

Performing out-of-sight work...with vision!SM

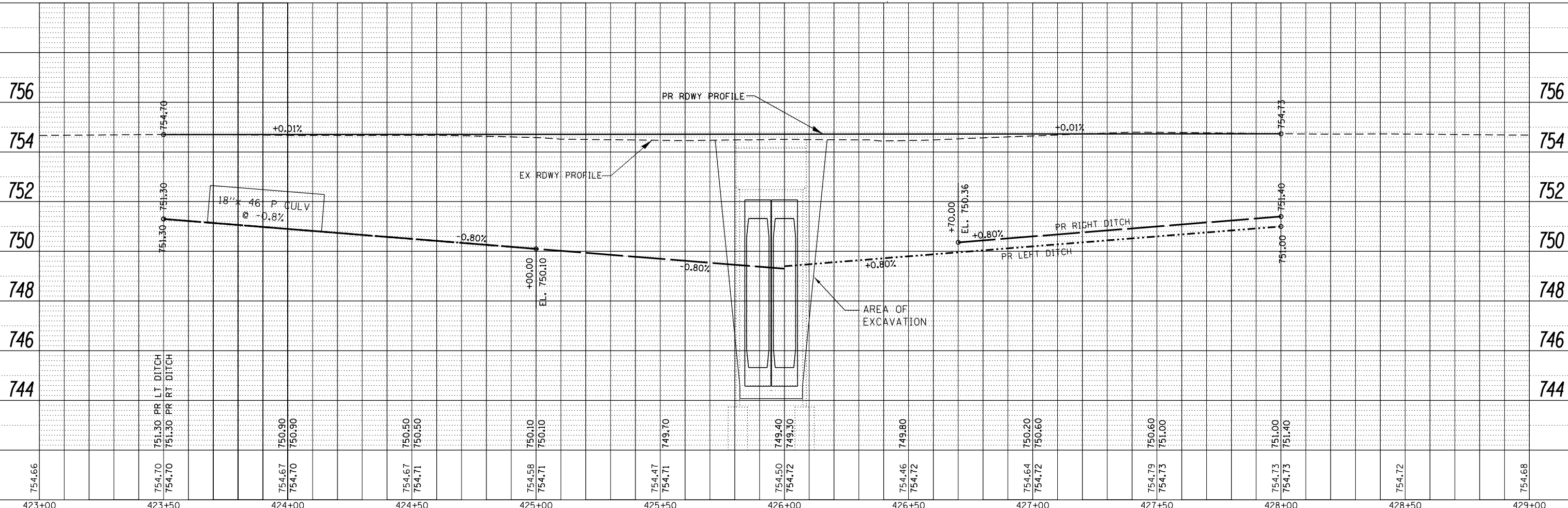
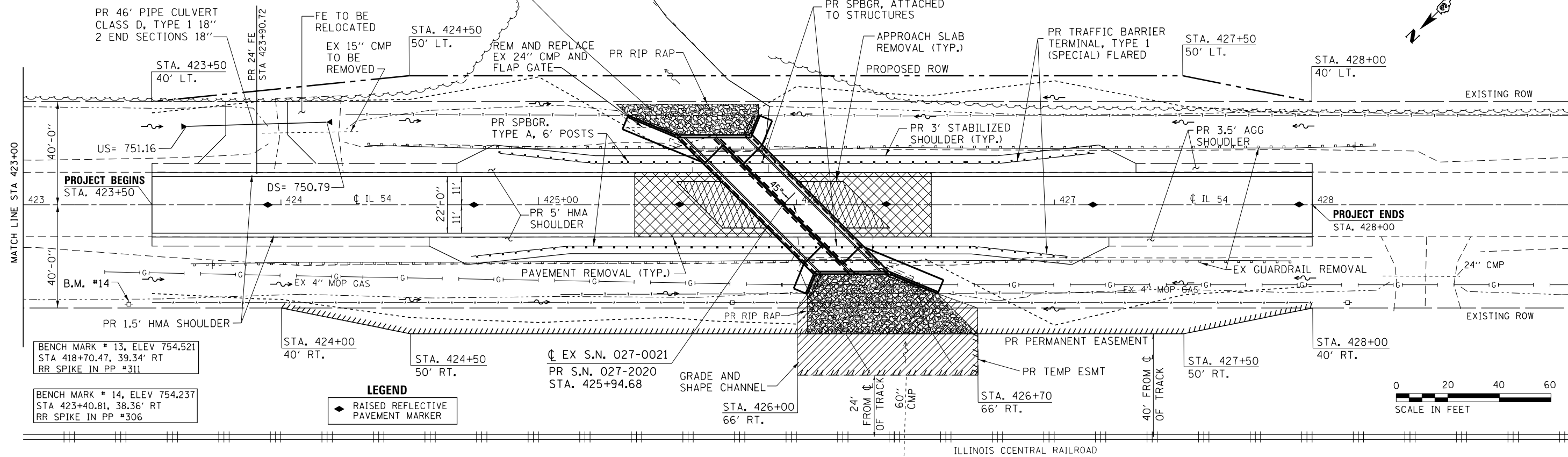
Note: To eliminate mistakes and check this work, So-Deep suggests you scale and plot all dimensions onto the plans and review all elevations carefully. So-Deep is responsible only for information shown on our forms.

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- ⊕ = Valve
- ⊖ = Water Meter
- ⊕ = Telephone Manhole
- ⊖ = Telephone Pedestal

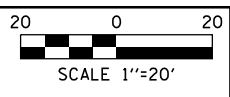
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pw\11084EBIDINTEG.11inois.gov\PIW001Documents\100T Offices\District 3\Projects\0366\DRAWINGData\6A0sheets\0366994-sht-SUE.d	DESIGNED -	REVISED -	71			(115)BR, BR-1C, BR-4	FORD	158	24	
Default	PLOT SCALE = 48.0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 66994			ILLINOIS FED. AID PROJECT	
	PLOT DATE = 8/10/2015	DATE -	REVISED -	SCALE:	SHEET OF SHEETS	STA. TO STA.				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
NOTE BOOK	
NO.	
FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
NOTE BOOK	
NO.	
FILE NAME	

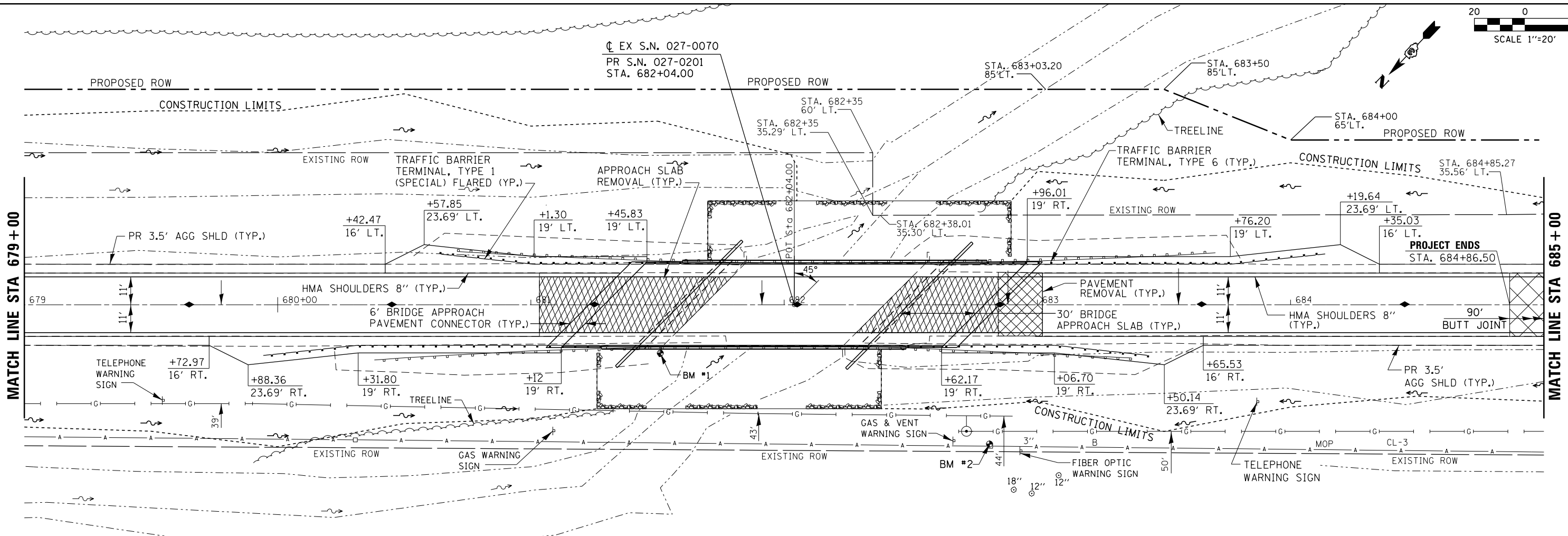


FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION PLAN AND PROFILE SHEET PR S.N. 027-2020 / EX S.N. 027-0021				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default		CHECKED -	REVISED -					71	(115)BR, BR-1C, BR-4	FORD	158	25
		DATE -	REVISED -					CONTRACT NO. 66994		ILLINOIS FED. AID PROJECT		



PLAN	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	

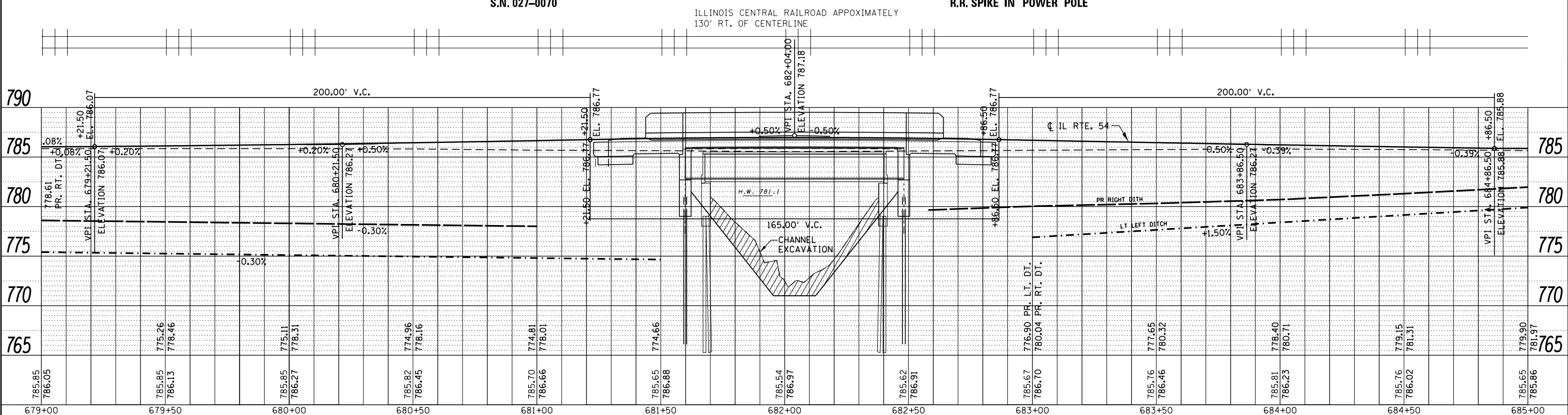
PROFILE	SURVEYED	DATE
	PLOTTED	BY
	GRADES CHECKED	
	STRUCTURE NOTATIONS CHECKED	
	NOTE BOOK NO.	
	FILE NAME	



BENCHMARK #1: ELEV=785.68
STA. 681 + 50.71, 17.61' RT.
CHISELED "□" TOP N.E. WINGWALL
S.N. 027-0070

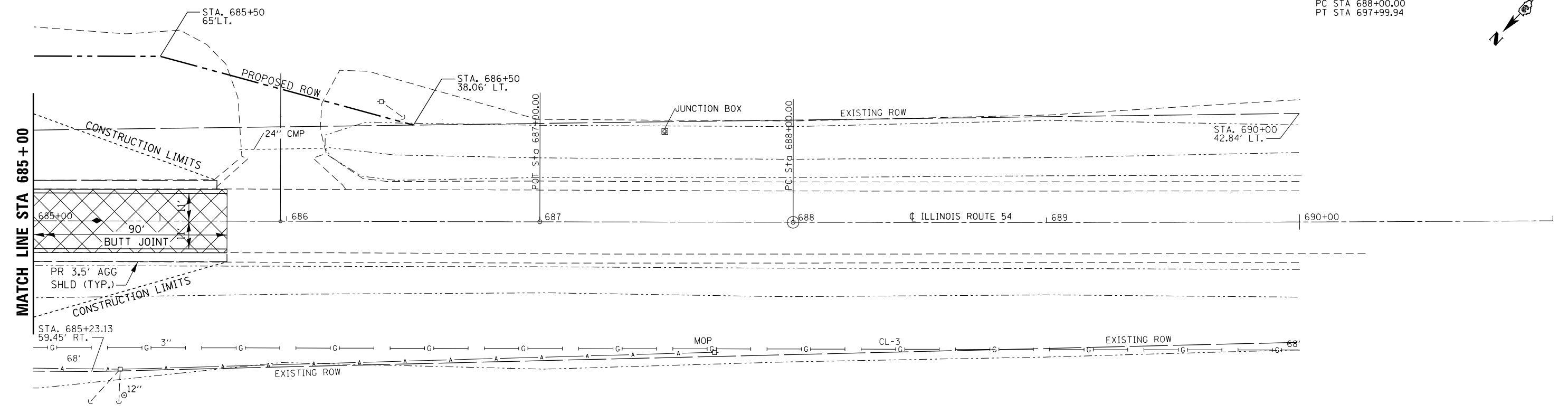
BENCHMARK #2: ELEV=782.54
STA. 682 + 81.12, 54.94' RT.
R.R. SPIKE IN POWER POLE

LEGEND
 ◆ RAISED REFLECTIVE PAVEMENT MARKER



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION		PLAN AND PROFILE PR S.N. 027-0102 / EX S.N. 027-0070		F.A.P. RT. SECTION COUNTY TOTAL SHEETS SHEET NO.	
		CHECKED -	REVISED -					71 (115)BR, BR-1C, BR-4 FORD 158 27	
		DATE -	REVISED -					CONTRACT NO. 66994	
								ILLINOIS FED. AID PROJECT	

CURVE R54-0070-1
 $\Delta = 01^{\circ}-32'-00''$ LT
T = 500.00'
L = 999.94'
R = 37,364.58'
E = 3.35'
PI STA 693+00.00
PC STA 688+00.00
PT STA 697+99.94



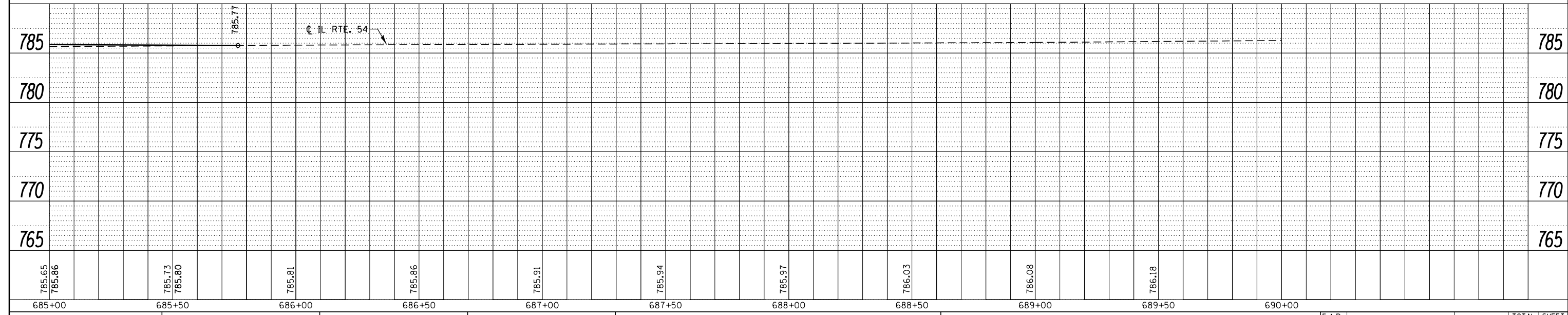
LEGEND
 RAISED REFLECTIVE PAVEMENT MARKER

PLAN

DATE
BY
SURVEYED
PLOTTED
CHECKED
FILE NAME
NO.

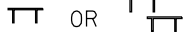



PROFILE

DATE
BY
SURVEYED
PLOTTED
CHECKED
NOT AT THIS OFFICE
NO.


























FILE NAME =	USER NAME = Schwenkerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE PR S.N. 027-0102 / EX S.N. 027-0070	F.A.P. RTE. 71	SECTION (115)BR, BR-1C, BR-4	COUNTY FORD	TOTAL SHEETS 158	SHEET NO. 28
CONTRACT NO. 66994	PLT SCALE = 40.0000' / in.	CHECKED -	REVISED -			FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
CONTRACT NO. 66994	SCALE: SHEET NO. OF SHEETS STA. TO STA.	DATE -	REVISED -							
CONTRACT NO. 66994	SCALE: (HORIZ) 1"=20' (VERT) 1"=5'	DATE = 8/10/2015 4:06:50 PM	REVISED -							

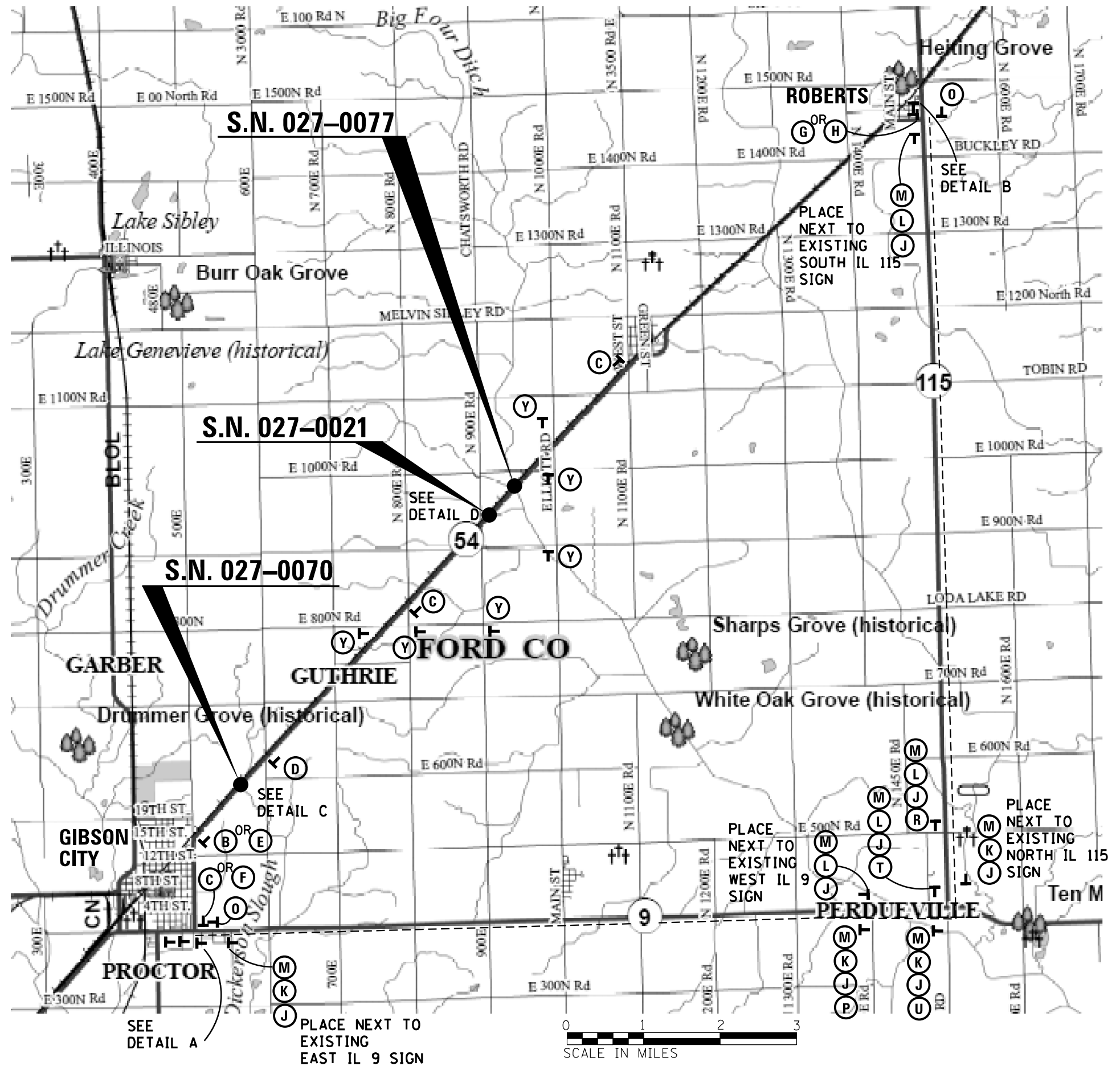
LEGEND

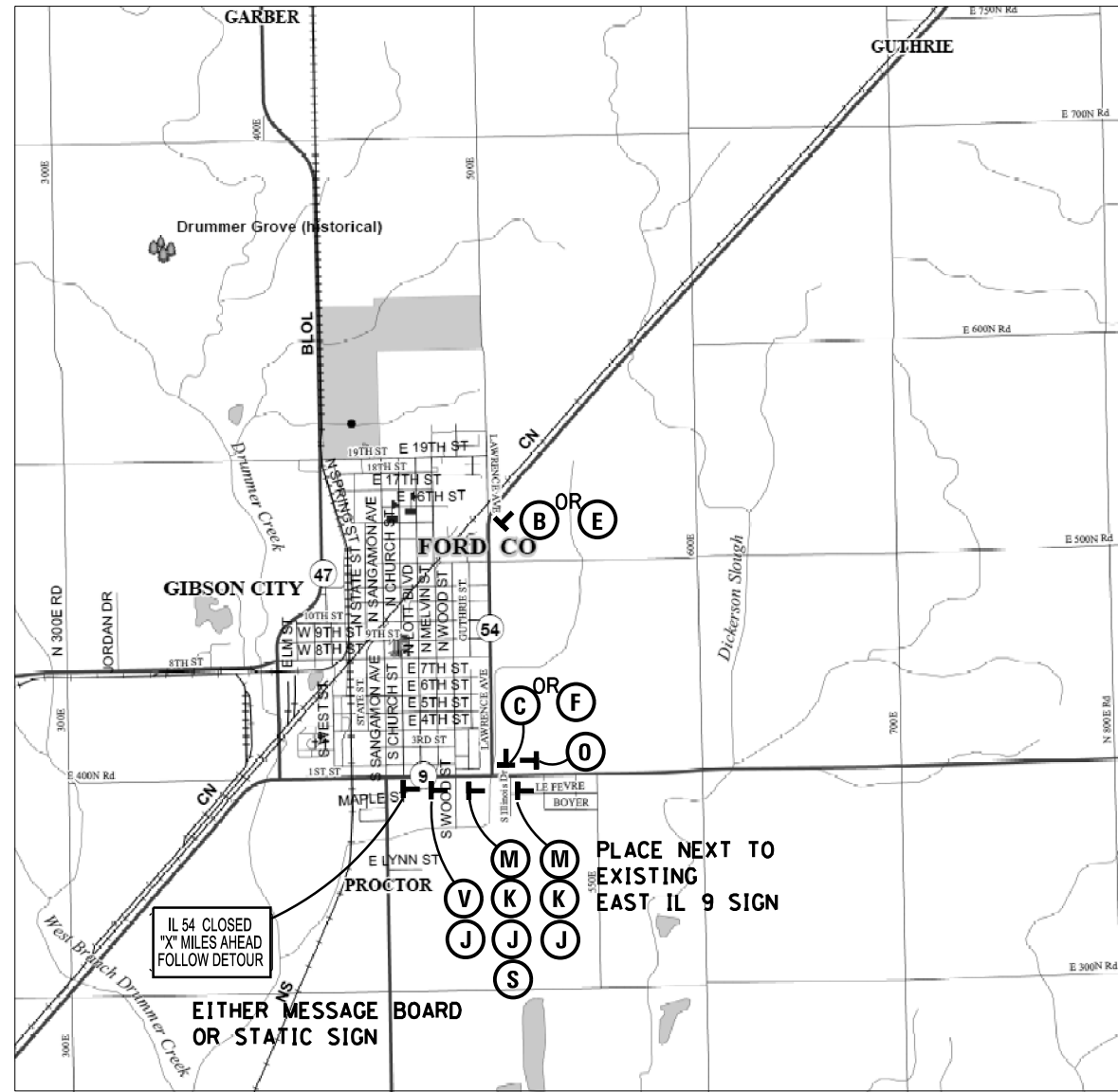
-  OR  TYPE III BARRICADES CONFORMING TO STD. 701901 "TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS" WITH 2 FLASHING LIGHTS PER BARRICADE.
-  SIGNS ON PERMANENT SUPPORTS
-  DETOUR ROUTE

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 OTHERWISE NOTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. SIGNS M,O,P,R,S,T,U,V,W, AND X NEED TO BE BLACK LETTERS ON FLOURESCENT ORANGE BACKGROUND.
5. COVER ANY CONFLICTING DIRECTIONAL SIGNS (NOTE: DO NOT PLACE TAPE OR SCREW HOLES INTO EXISTING SIGNS)
6. CONFIRMATION DETOUR SIGNS SHALL BE INSTALLED ADJACENT TO EXISTING ROUTE MARKER SIGNS.
7. THE TRAFFIC CONTROL FOR THE DETOUR WILL BE PAID FOR AS TRAFFIC CONTROL, SPECIAL (LUMP SUM).

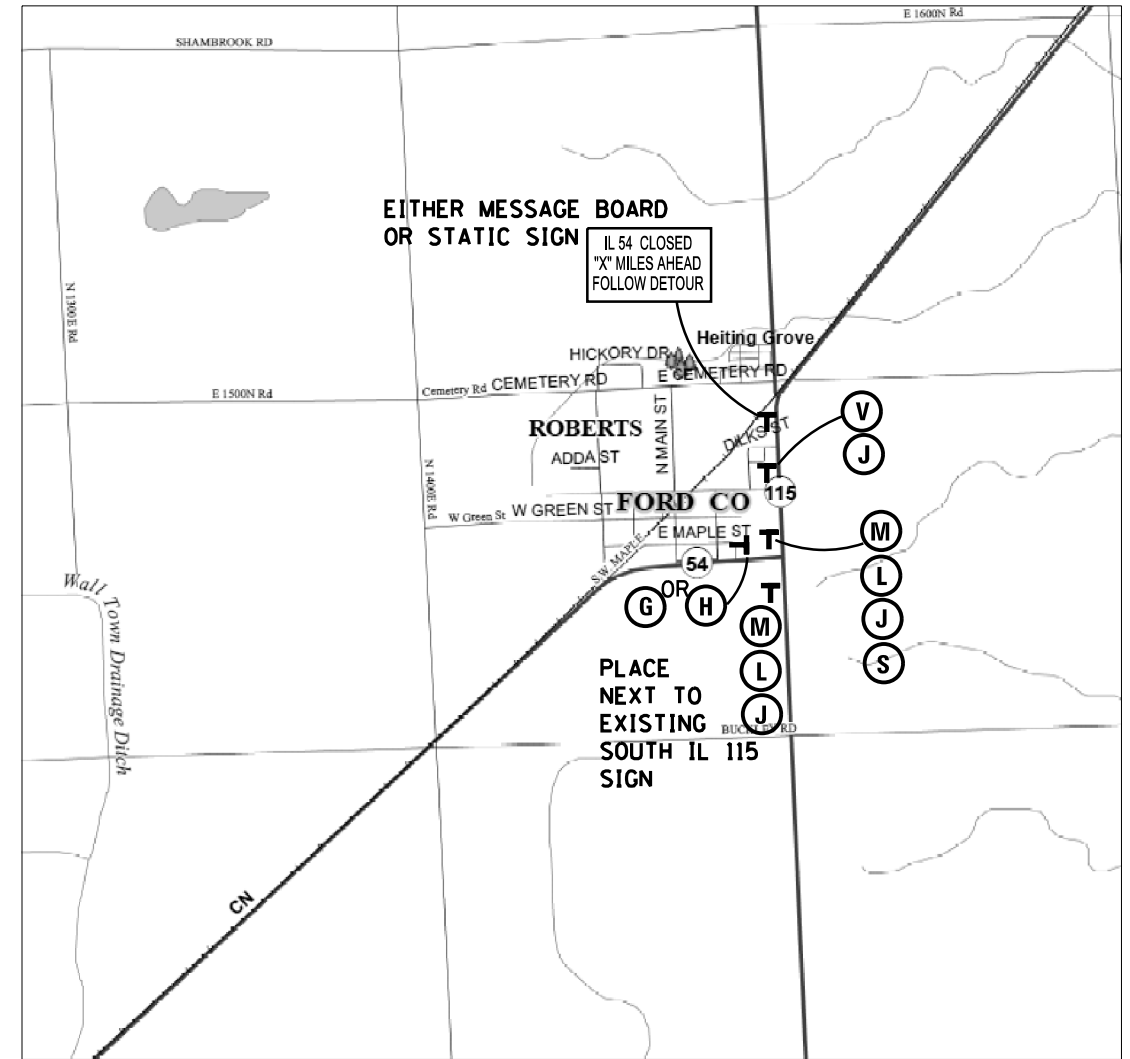
 R11-2-4830 (A)	 R11-3b-6030 (B)	 R11-3b-6030 (C)	 R11-3b-6030 (D)	 R11-3b-6030 (E)	
 R11-3b-6030 (F)	 R11-3b-6030 (G)	 R11-3b-6030 (H)	 R11-4-4830 (I)	 M1-1100-2424 (J)	 M3-1-2412 (K)
 M3-3-2412 (L)	 M4-8-2412 (M)	 M4-8A-2418 (O)	 M5-1-2115 (P)	 M5-1-2115 (R)	 M6-3-2115 (S)
 M6-1-2115 (T)	 M6-1-2115 (U)	 W20-2-4848 (V)	 W20-3-4848 (W)	 W20-3-4848 (X)	 (Y)





DETAIL A

NOT TO SCALE



DETAIL B

NOT TO SCALE

LEGEND

TYPE III BARRICADES CONFORMING TO STD. 701901 "TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS" WITH 2 FLASHING LIGHTS PER BARRICADE.

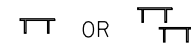



TT OR TT







T SIGNS ON PERMANENT SUPPORTS

--- DETOUR ROUTE

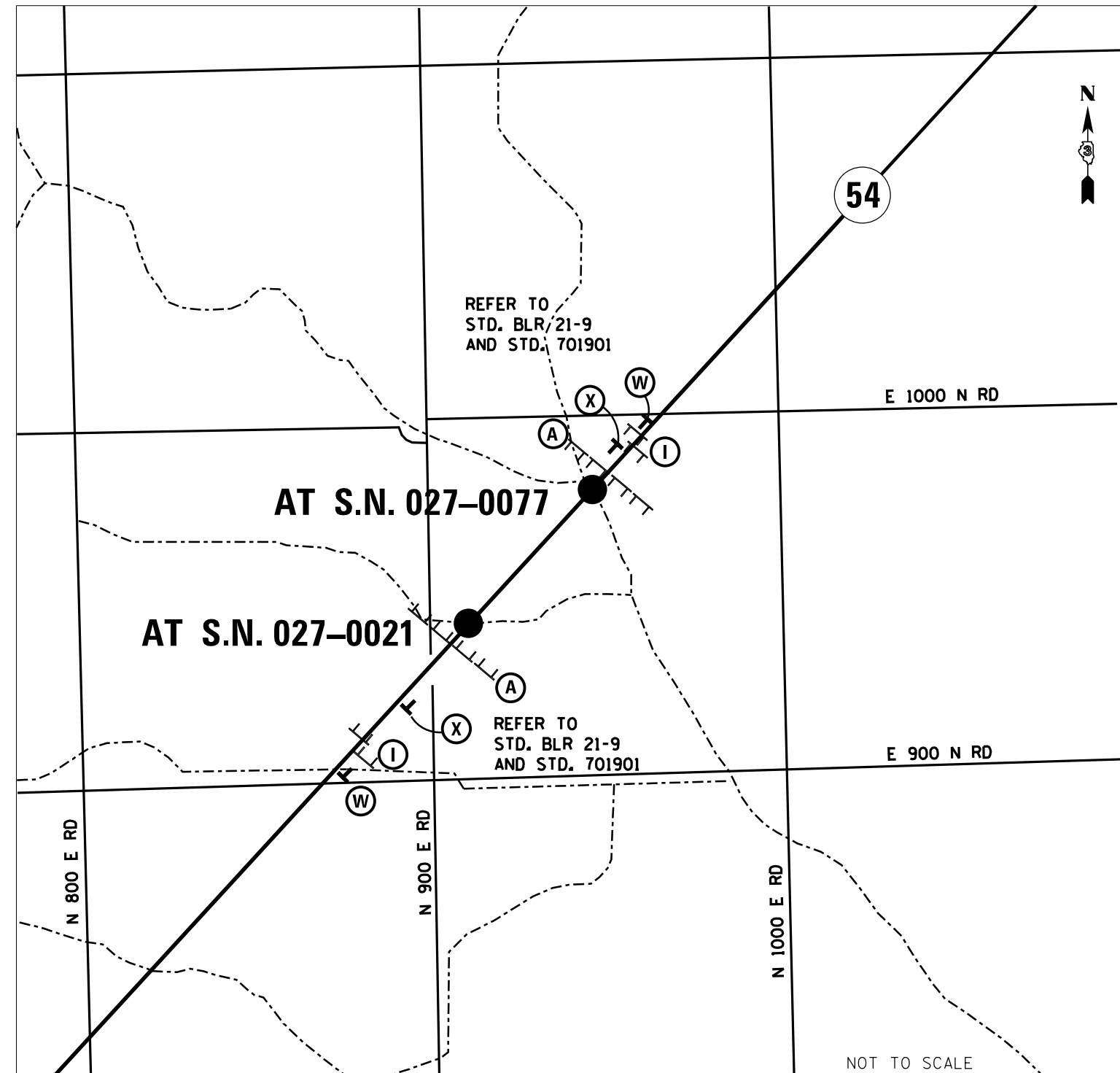
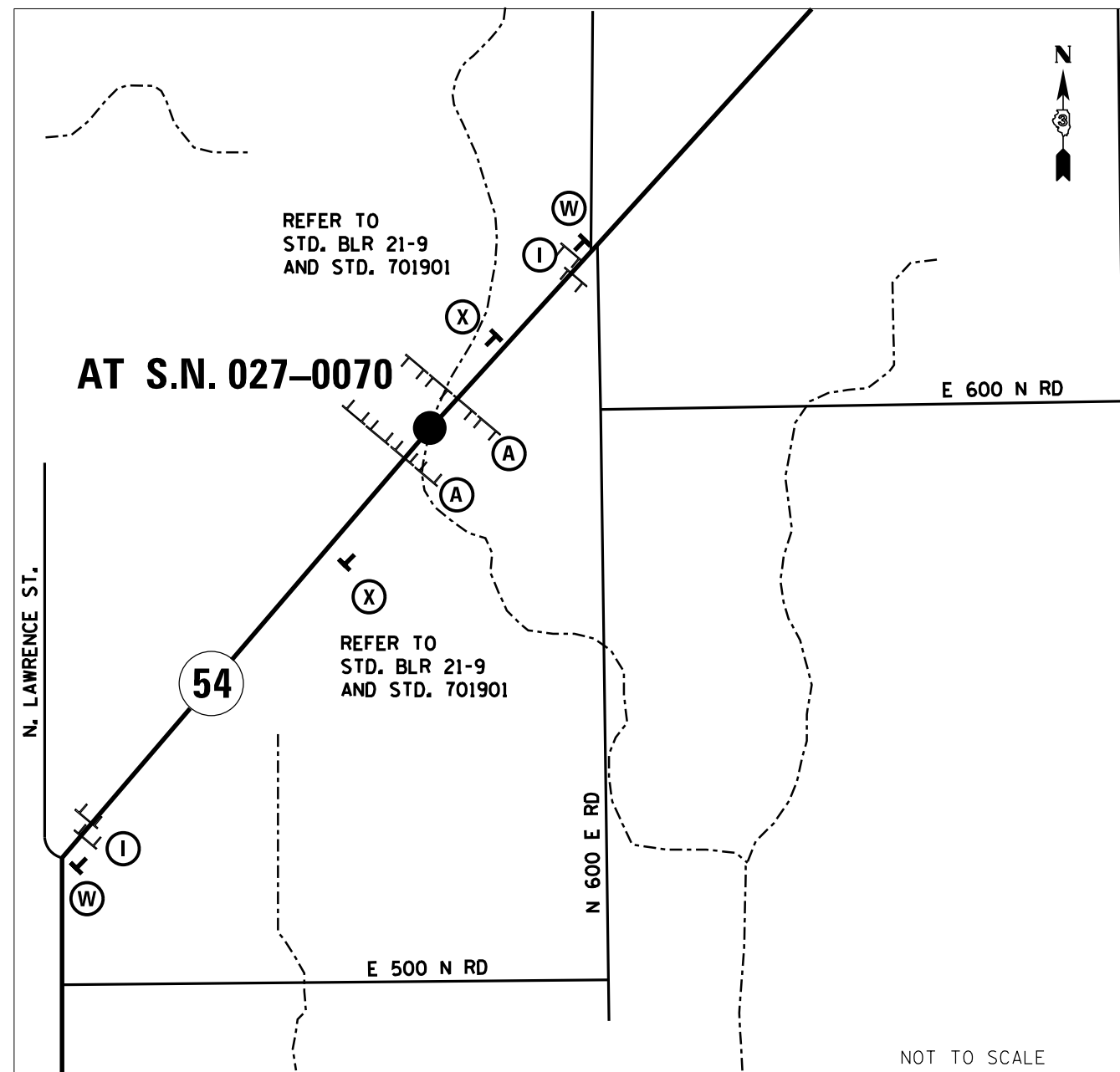
BRIDGE OUT 1 MILE AHEAD LOCAL TRAFFIC ONLY	BRIDGE OUT 2.2 MILES AHEAD LOCAL TRAFFIC ONLY	BRIDGE OUT 5.7 MILES AHEAD LOCAL TRAFFIC ONLY	BRIDGE OUT 6.9 MILES AHEAD LOCAL TRAFFIC ONLY	BRIDGE OUT 7.5 MILES AHEAD LOCAL TRAFFIC ONLY	BRIDGE OUT 12.8 MILES AHEAD LOCAL TRAFFIC ONLY
R11-3b-6030	R11-3b-6030	R11-3b-6030	R11-3b-6030	R11-3b-6030	R11-3b-6030
(B)	(C)	(E)	(F)	(G)	(H)
ILLINOIS 54	EAST	WEST	DETOUR	END DETOUR	↑ DETOUR AHEAD
M1-I100-2424	M3-1-2412	M3-3-2412	M4-8-2412	M4-8A-2418	M6-3-2115
(J)	(K)	(L)	(M)	(O)	(S)
					(V)

LEGEND

 OR  TYPE III BARRICADES CONFORMING TO STD. 701901 "TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS" WITH 2 FLASHING LIGHTS PER BARRICADE.
 SIGNS ON PERMANENT SUPPORTS
 DETOUR ROUTE

	
R11-2-4830	R11-4-4830
	
W20-3-4848	W20-3-4848
	

DETAIL C



DETAIL D

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
pw:\IL\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 3\Projects\0366994\Drawings\0366994-sht-Detour\0366994-sht-Detour.dwg		DRAWN -	REVISION -
	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/10/2015	DATE -	REVISED -







**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

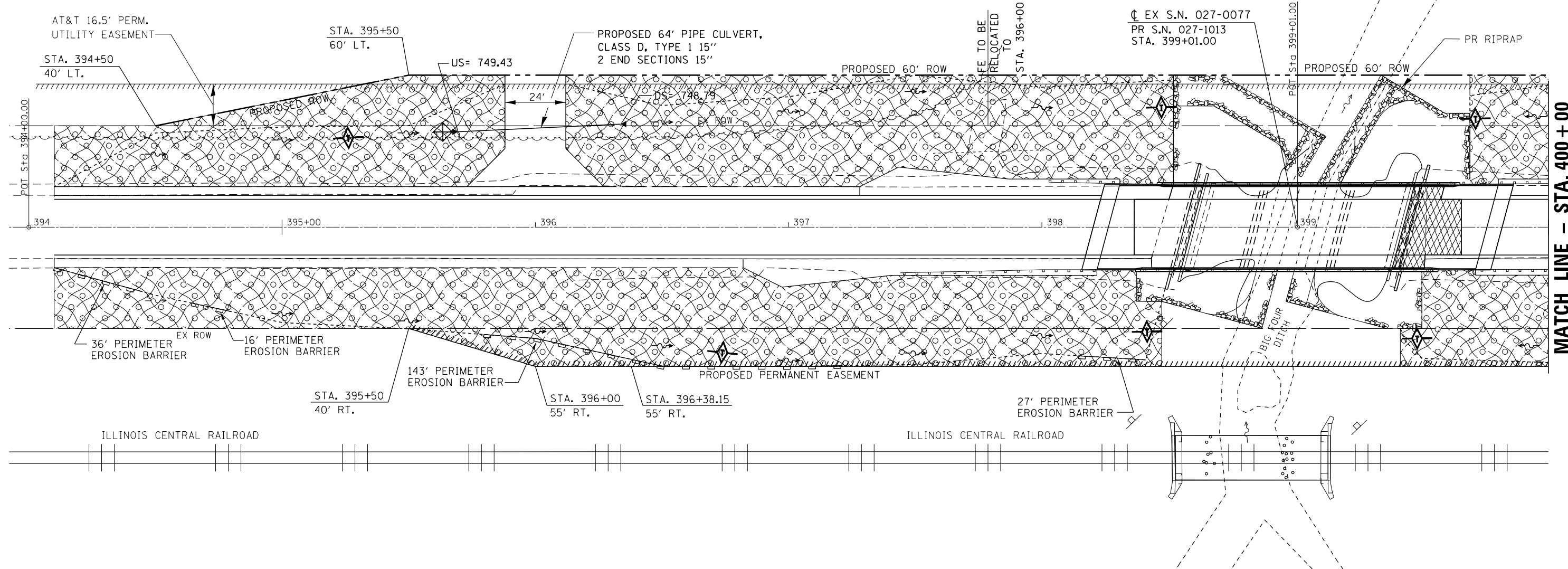
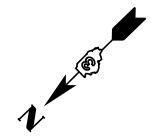
DETOUR

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	31
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				

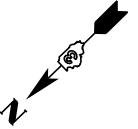
LEGEND

	EROSION CONTROL BLANKET
	SEEDING, CLASS 2A
	RIPRAP
	PERIMETER EROSION BARRIER
	TEMPORARY DITCH CHECK
	TEMPORARY INLET AND PIPE PROTECTION



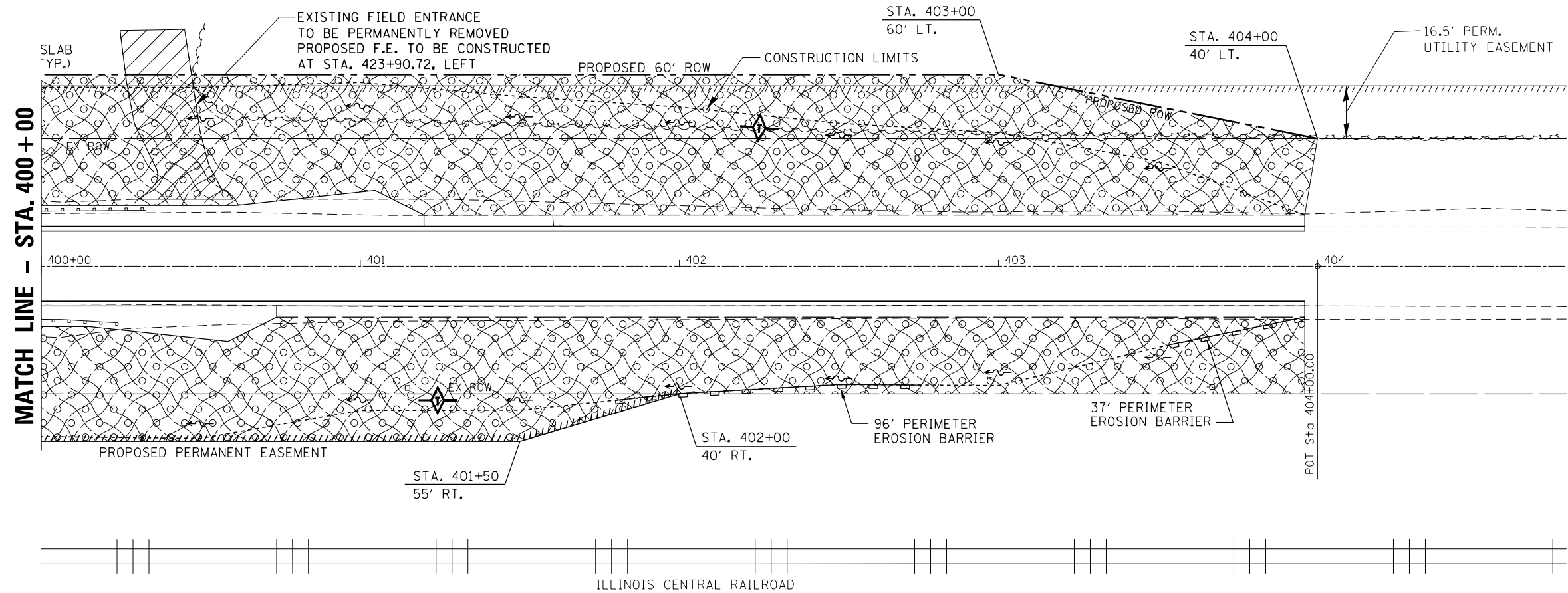
MATCH LINE - STA. 400+00

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL S.N. 070-0077			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default		CHECKED -	REVISED -					71	(115)BR, BR-1C, BR-4	FORD	158	32
	PLOT SCALE = 40.0000' / in.	DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.			CONTRACT NO. 66994				
	PLOT DATE = 8/10/2015				ILLINOIS FED. AID PROJECT							



LEGEND

	EROSION CONTROL BLANKET
	SEEDING, CLASS 2A
	RIPRAP
	PERIMETER EROSION BARRIER
	TEMPORARY DITCH CHECK
	TEMPORARY INLET AND PIPE PROTECTION



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
pw:\IL\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0366994\Drawings\0366994-sht-Erosion		DRAWN	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/10/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

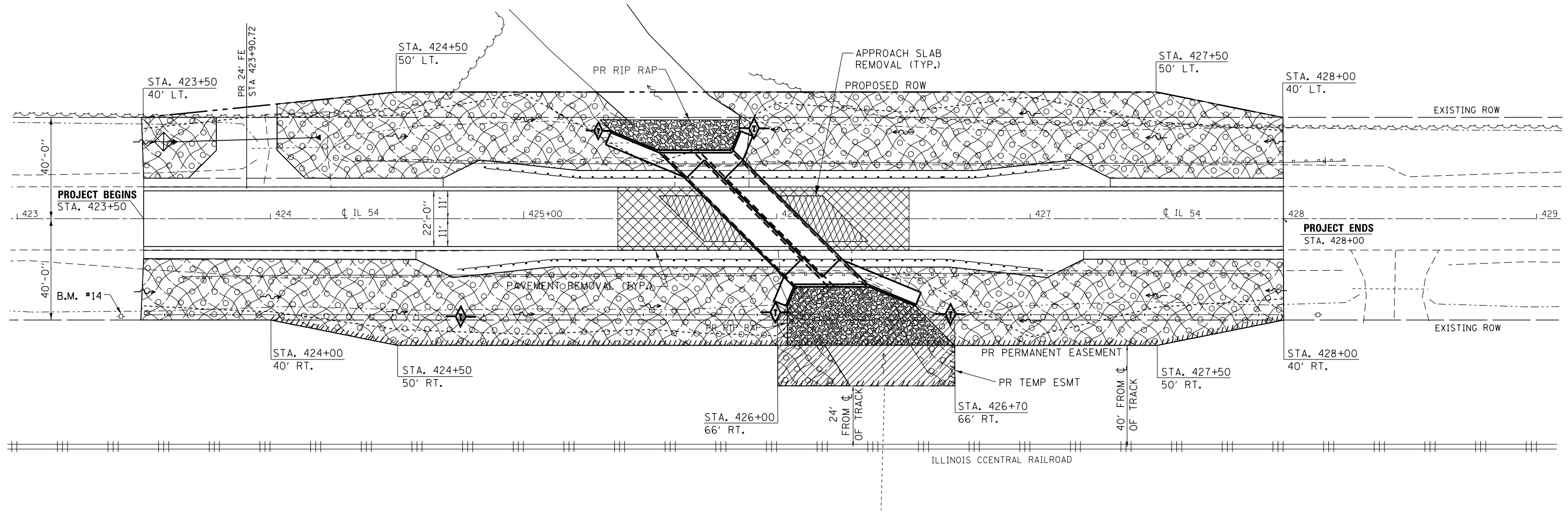
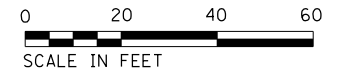
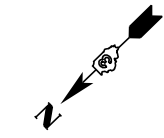
EROSION CONTROL
S.N. 070-0077

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	33
				CONTRACT NO. 66994
ILLINOIS FED. AID PROJECT				

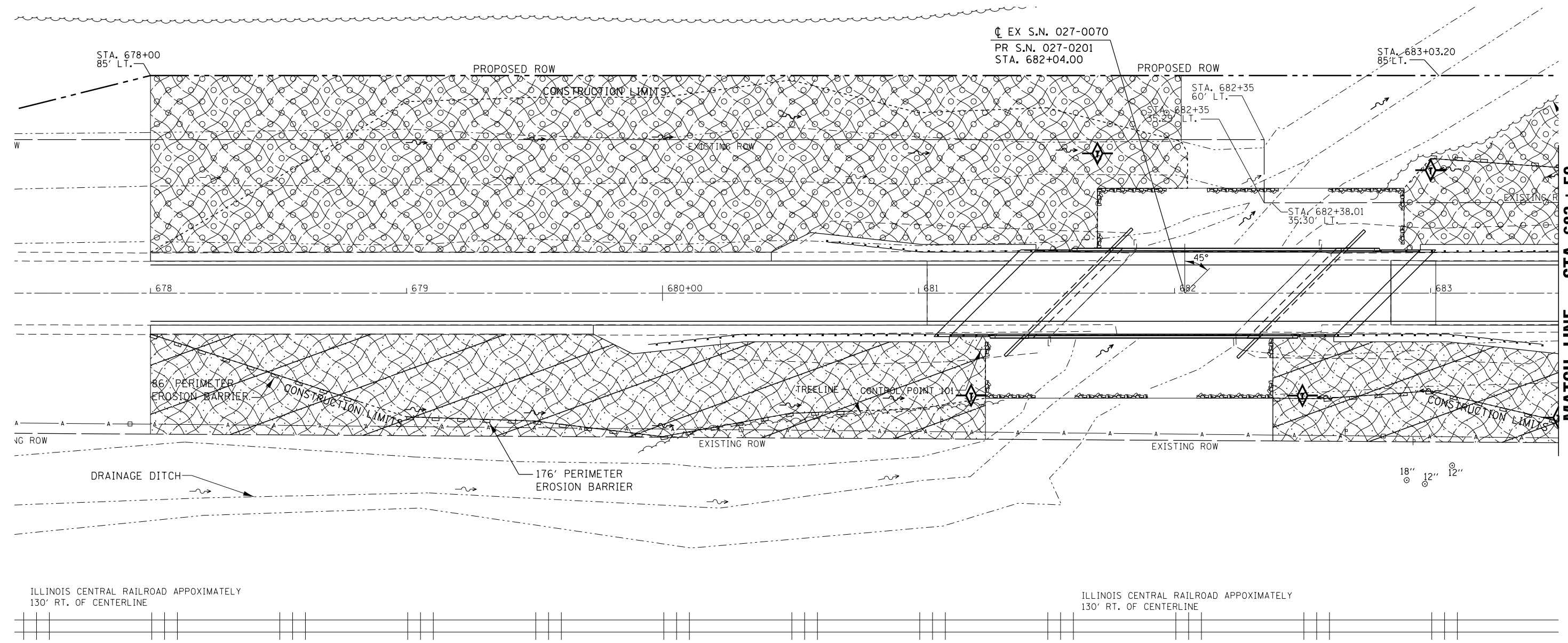
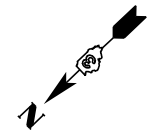
LEGEND

	EROSION CONTROL BLANKET
	SEEDING, CLASS 2A
	RIPRAP
	PERIMETER EROSION BARRIER
	TEMPORARY DITCH CHECK
	TEMPORARY INLET AND PIPE PROTECTION



LEGEND



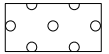

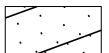

	EROSION CONTROL BLANKET		RIPRAP
	SEEDING, CLASS 2A		PERIMETER EROSION BARRIER
	SEEDING, CLASS 4A		TEMPORARY DITCH CHECK

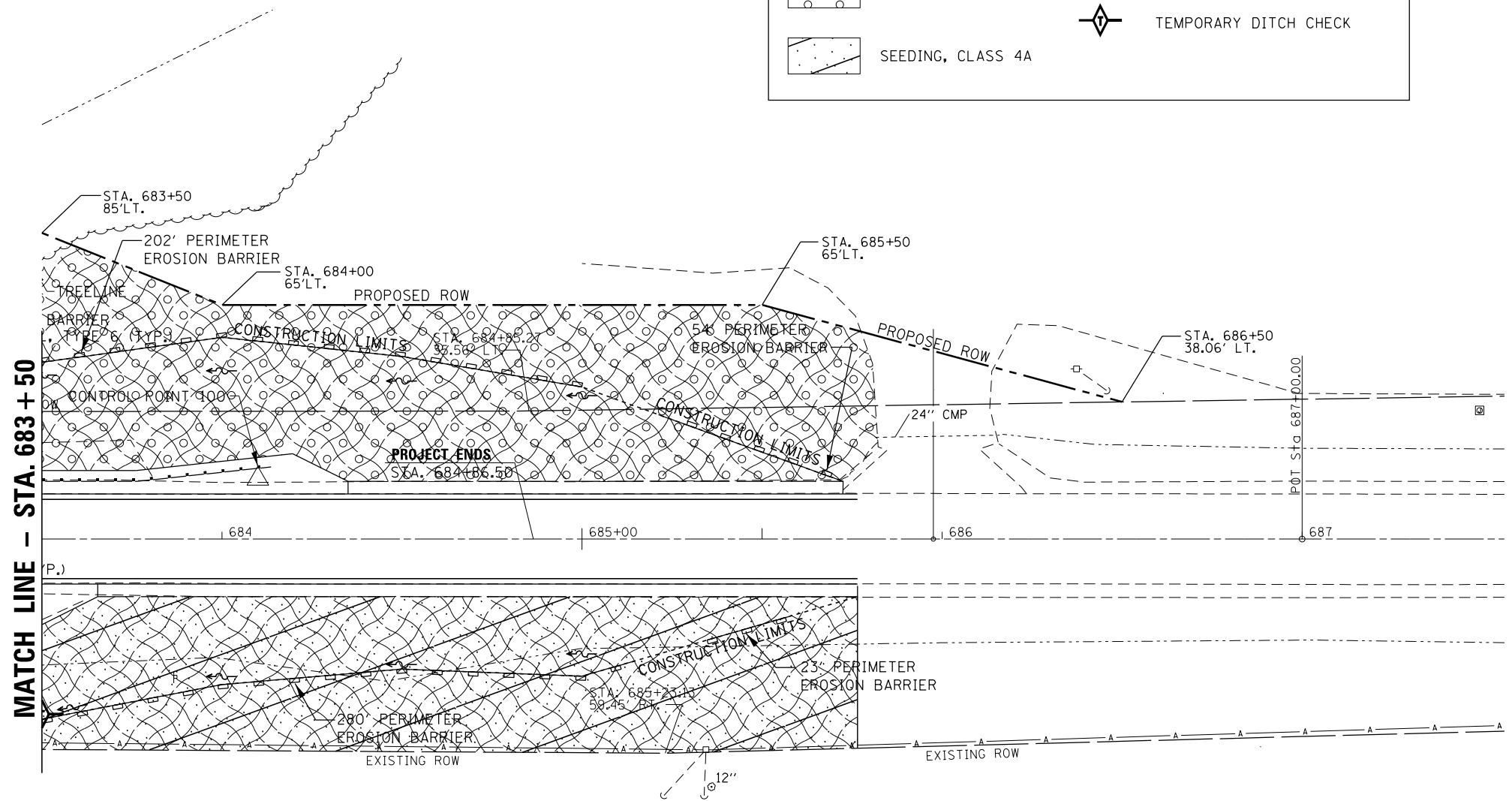


MATCH LINE - STA. 683 + 50

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EROSION CONTROL S.N. 070-0070	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			71	(115)BR, BR-1C, BR-4	FORD	158	35	
	PLOT DATE = 8/10/2015	DATE -	REVISED -			CONTRACT NO. 66994					
						ILLINOIS FED. AID PROJECT					

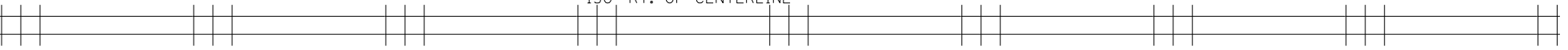
LEGEND

	EROSION CONTROL BLANKET		RIPRAP
	SEEDING, CLASS 2A		PERIMETER EROSION BARRIER
	SEEDING, CLASS 4A		TEMPORARY DITCH CHECK



MATCH LINE - STA. 683 + 50

ILLINOIS CENTRAL RAILROAD APPROXIMATELY
130' RT. OF CENTERLINE



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
pw:\IL\084EBIDINTEG.illinois.gov\PIDOT\Documents\DOT Offices\District 3\Projects\0366994\Drawings\0366994-sht-Erosion Control.dwg		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/10/2015	DATE -	REVISED -

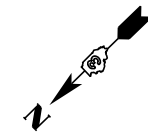
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION CONTROL
S.N. 070-0070

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	36
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				

SEC. 15, T. 24 N., R. 8 E., 3RD P.M.



FND. 5/8" I.P.
MON. REC. 250948 RECORDED 3-09-2011
SW COR., SE 1/4, SEC. 15-24-8
N 1407040.9682
E 998677.3207

PARCEL 3WJ0001

GREG A. POOL, ET AL.

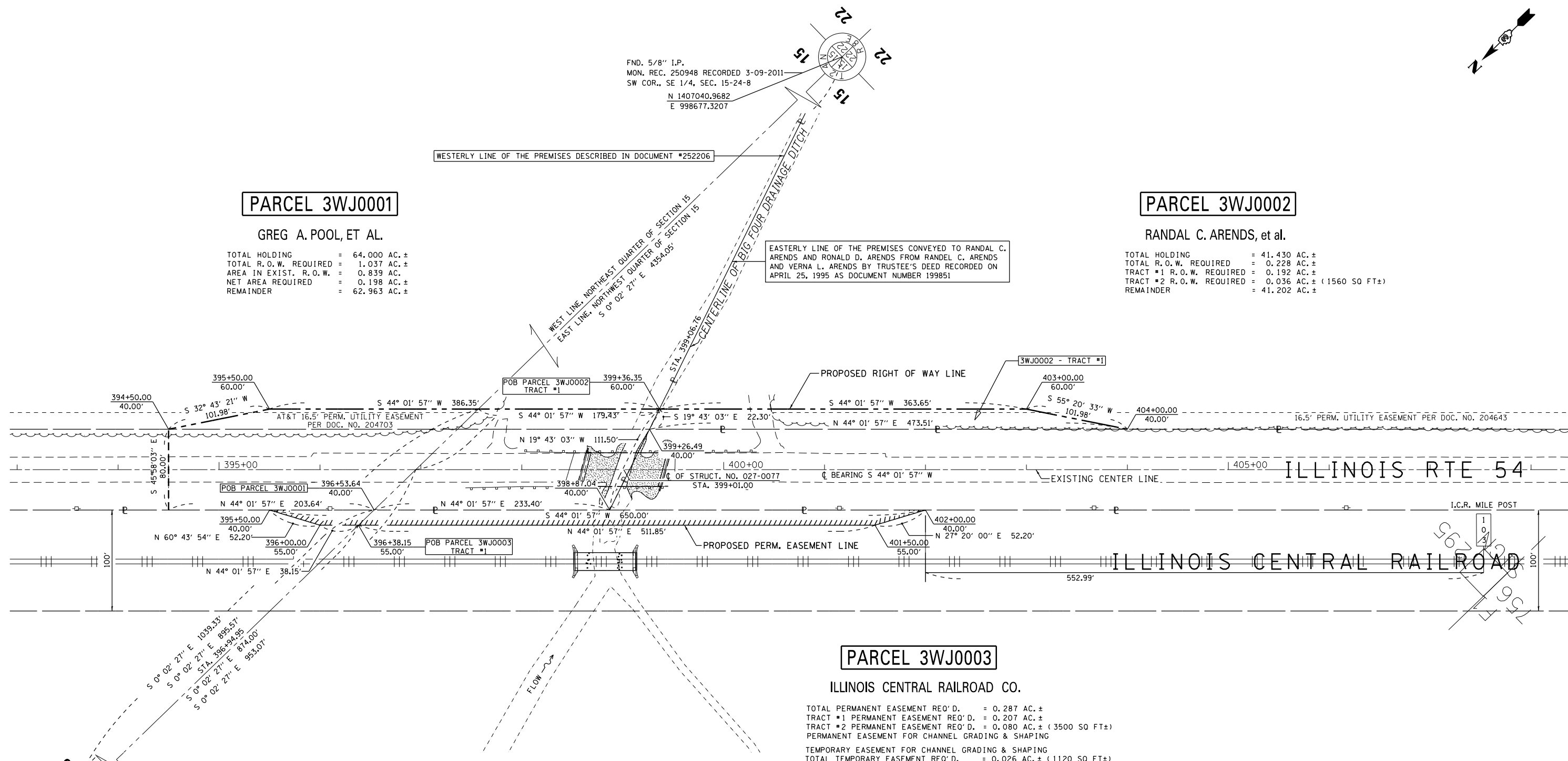
TOTAL HOLDING = 64.000 AC.±
TOTAL R.O.W. REQUIRED = 1.037 AC.±
AREA IN EXIST. R.O.W. = 0.839 AC.±
NET AREA REQUIRED = 0.198 AC.±
REMAINDER = 62.963 AC.±

PARCEL 3WJ0002

RANDAL C. ARENDS, et al.

TOTAL HOLDING = 41.430 AC.±
TOTAL R.O.W. REQUIRED = 0.228 AC.±
TRACT #1 R.O.W. REQUIRED = 0.192 AC.±
TRACT #2 R.O.W. REQUIRED = 0.036 AC.± (1560 SQ FT±)
REMAINDER = 41.202 AC.±

EASTERLY LINE OF THE PREMISES CONVEYED TO RANDAL C. ARENDS AND RONALD D. ARENDS FROM RANDAL C. ARENDS AND VERA L. ARENDS BY TRUSTEE'S DEED RECORDED ON APRIL 25, 1995 AS DOCUMENT NUMBER 199851



PARCEL 3WJ0003

ILLINOIS CENTRAL RAILROAD CO.

TOTAL PERMANENT EASEMENT REQ'D. = 0.287 AC.±
TRACT #1 PERMANENT EASEMENT REQ'D. = 0.207 AC.±
TRACT #2 PERMANENT EASEMENT REQ'D. = 0.080 AC.± (3500 SQ FT±)
PERMANENT EASEMENT FOR CHANNEL GRADING & SHAPING
TEMPORARY EASEMENT FOR CHANNEL GRADING & SHAPING
TOTAL TEMPORARY EASEMENT REQ'D. = 0.026 AC.± (1120 SQ FT±)

SURVEYOR'S STATEMENT

I, CURT A. BENDER, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.P. 71 (ILLINOIS RTE 54) WAS MADE BY WILLETT, HOFMANN & ASSOCIATES, INC. UNDER MY DIRECTION, AT THE REQUEST OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

CURT A. BENDER, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3688 (EXPIRES NOVEMBER 2012)
WILLETT, HOFMANN & ASSOCIATES, INC. - DESIGN FIRM NO. 184-000918

FOUND STONE
RESET 5/8" IRON PIN 0.20' WEST OF STONE
MON. REC. 250948 RECORDED 3-09-2011
NE COR., NW 1/4, SEC. 15-24-8
N 1412348.0834
E 998673.5296

POC PARCEL 3WJ0001
POC PARCEL 3WJ0002
POC PARCEL 3WJ0003 - TRACT#1

WILLETT, HOFMANN & ASSOCIATES, INC.
CONSULTING ENGINEERS
Land Surveying - Transportation - Structural
Environmental - Architecture
809 East Second Street Dixon, Illinois 61021
Phone 815.284.3381 Fax 815.284.3385
Design Firm #184-000918
www.willett-hofmann.com



NOTE: GRID BEARINGS AND DISTANCES SHOWN HEREON ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, (NAD-83, 2007 ADJ.). ALL AREAS ARE BASED ON GROUND DISTANCES. GRID TO GROUND COMBINED FACTOR = 1.000060833. TOTAL HOLDINGS TAKEN FROM TAX ASSESSOR OFFICE.

DESIGNED -	REVISED JJC 2/6/15 ADDED SHEET #2
DRAWN -	REVISED JJC 2/17/15 3WJ0001
CHECKED -	REVISED JJC 4/21/15 ICR MILE POST
DATE -	REVISED GW 5/11/15 CORRECTED RR NAME
	REVISED JJC 6/10/15 UNCORRECTED RR NAME

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLANS

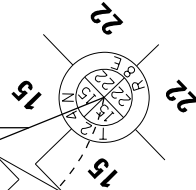
PROJECT	JOB NO. R-93-015-10
SHEET NO. 1 OF 2 SHEET	STA. 394+50.00 TO STA. 404+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	37
ILLINOIS ROUTE 54			CONTRACT NO. 66994	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

S:\PROJECTS\2010\1179D010W04 0-3\SURVEY\366943\366943-SHT-ROWPLANDON calculations by J.R. drawn by B.F.



FND. 5/8" I.P.
 MON. REC. 250948 RECORDED 3-09-2011
 SW COR., SE 1/4, SEC. 15-24-8
 N 1407040.9682
 E 998677.3207



PARCEL 3WJ0004

VERA E. BUNTING

TOTAL HOLDING = 60.295 AC. ±
 TOTAL ROW REQUIRED = 0.050 AC. ± (2190 SOFT ±)
 REMAINDER = 60.245 AC. ±

PARCEL 3WJ0002

RANDAL C. ARENDS, et al.
 SEE SHEET # 1

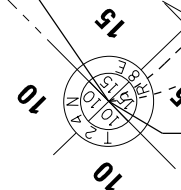
QUARTER SECTION LINE
 STA. 396+94.95

SOUTH LINE OF PROPERTY DESCRIBED IN DOCUMENT #199851

STA. 426+02.36
 @ BIG FOUR DRAINAGE DITCH

POC PARCEL 3WJ0002 - TRACT #2
 POC PARCEL 3WJ0003 - P.E. TRACT #2 AND T.E.
 POC PARCEL 3WJ0004

FOUND STONE
 RESET 5/8" IRON PIN 0.20' WEST OF STONE
 MON. REC. 250948 RECORDED 3-09-2011
 NE COR., NW 1/4, SEC. 15-24-8
 N 1412348.0834
 E 998673.5296



SURVEYOR'S STATEMENT

I, JEFFERY J. CIMEI, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.P. 71 (IL 54) WAS MADE BY ME OR UNDER MY DIRECTION, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

BY: JEFFERY J. CIMEI, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3733 (EXPIRES NOV. 2016) DATED _____

ILLINOIS RTE 54

ILLINOIS CENTRAL RAILROAD

PARCEL 3WJ0003

ILLINOIS CENTRAL RAILROAD COMPANY
 SEE SHEET # 1

SEC. 15, T. 24 N., R. 8 E., 3RD P.M.



NOTE: GRID BEARINGS AND DISTANCES SHOWN HEREON ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE, (NAD-83, 2007 ADJ.). ALL AREAS ARE BASED ON GROUND DISTANCES. GRID TO GROUND COMBINED FACTOR = 1.000060833. TOTAL HOLDINGS TAKEN FROM TAX ASSESSOR OFFICE.

DESIGNED - JJC	REVISED 4-30-15 JJC 3WJ0003 POC LABEL
DRAWN - JJC	REVISED 5-1-15 CORRECTED RR NAME
CHECKED -	REVISED 6-10-15 JJC 3WJ0003 UNDONE NAME CHG
DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

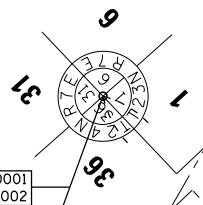
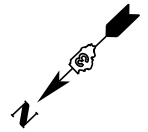
RIGHT OF WAY PLANS

PROJECT: ILLINOIS ROUTE 54
 SHEET NO. 2 OF 2 SHEET
 JOB NO. R-93-015-10
 STA. 423+50.00 TO STA 428+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	38
ILLINOIS ROUTE 54			CONTRACT NO. 66994	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

SEC. 1, T. 23 N., R. 7 E., 3RD P.M.

EXIST. CURVE DATA
 PI STA. 693+00.00
 $\Delta = 1^\circ 32' 00''$ (LT)
 $D = 0^\circ 09' 12''$
 $R = 37,364.58'$
 $T = 500.00'$
 $L = 999.94'$
 $E = 3.35'$
 P.C. STA. 688+00.00
 P.T. STA. 697+99.94



N 1,390,959.8006 NE COR., NE 1/4, SEC. 1-23-7
 E 980,442.0242 FOUND IRON PIN WITH CAP PER
 MONUMENT RECORD NO. 237178
 RECORDED OCTOBER 5, 2006

POC PARCEL 3XP0001
 POC PARCEL 3XP0002

PARCEL 3XP0001

LARRY D. CREWS, et ux.

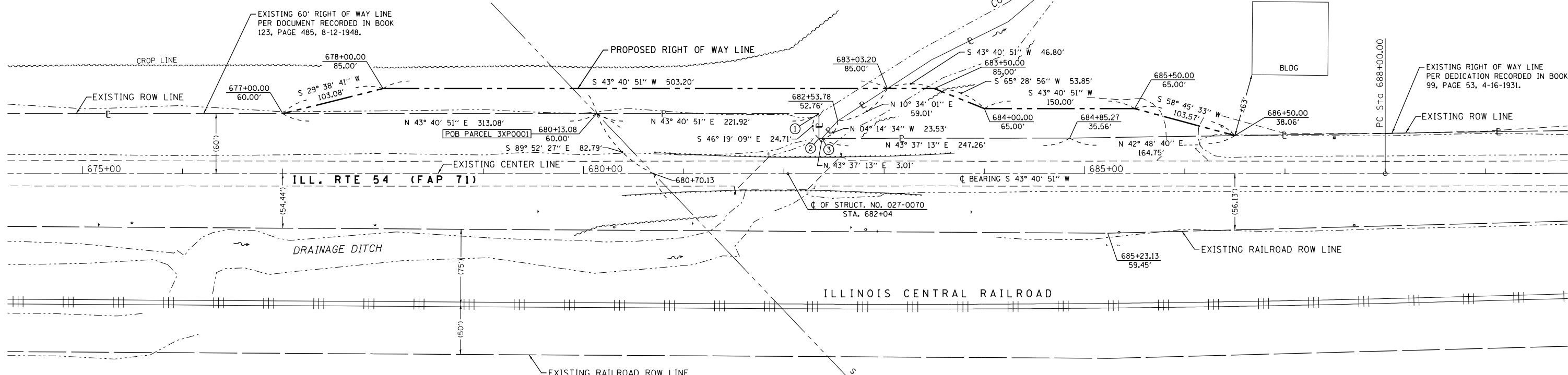
TOTAL HOLDING = 64.270 AC. ±
 TOTAL R. O. W. REQUIRED = 0.315 AC. ±
 REMAINDER = 63.955 AC. ±

- LEGEND
 ① = 682+35.00 60.00' LT
 ② = 682+35.00 35.29' LT
 ③ = 682+38.01 35.30' LT POB PARCEL 3XP0002

PARCEL 3XP0002

LEE FARMS EXCAVATING, INC.

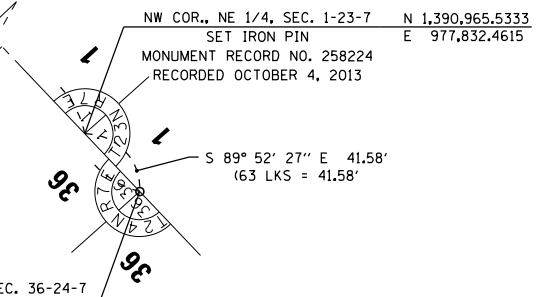
TOTAL HOLDING = 12.470 AC. ±
 TOTAL R. O. W. REQUIRED = 0.273 AC. ±
 REMAINDER = 12.197 AC. ±



SURVEYOR'S STATEMENT

I, CURT A. BENDER, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF F.A.P. 71 (ILL. RTE 54) WAS MADE BY WILLETT HOFMANN & ASSOCIATES, INC. UNDER MY DIRECTION, AT THE REQUEST OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION, DISTRICT 3, AND THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT ALL MONUMENTS AND MARKS ARE OF THE CHARACTER AND OCCUPY THE POSITION SHOWN THEREON, AND ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED. THIS PROFESSIONAL SERVICE CONFORMS TO THE CURRENT ILLINOIS MINIMUM STANDARDS FOR A BOUNDARY SURVEY.

CURT A. BENDER, ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 3688 (EXPIRES NOVEMBER 2014)



NOTE: FOR THE PURPOSE OF THIS PLAT, BEARINGS AND DISTANCES ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM, (GRID) EAST ZONE, (NAD-83, 2007 ADJ.). ALL AREAS ARE BASED ON GROUND MEASUREMENTS GRID TO GROUND COMBINED FACTOR = 1.00002496 (INVERSE OF COMBINED FACTOR)

SEC. 36, T. 24 N., R. 7 E., 3RD P.M.

N 1,390,965.6246 SW COR., SE 1/4, SEC. 36-24-7
 E 977,790.8816 FND. IRON PIN
 MONUMENT RECORD NO. 258223
 RECORDED OCTOBER 4, 2013

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY PLANS

PROJECT: ILL. ROUTE 54
 SHEET NO. 1 OF 1 SHEET
 JOB NO. R-93-009-13
 STA. 677+00 TO STA. 686+50
 SCALE: 1" = 50'

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	39
ILL. ROUTE 54			CONTRACT NO. 66994	
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

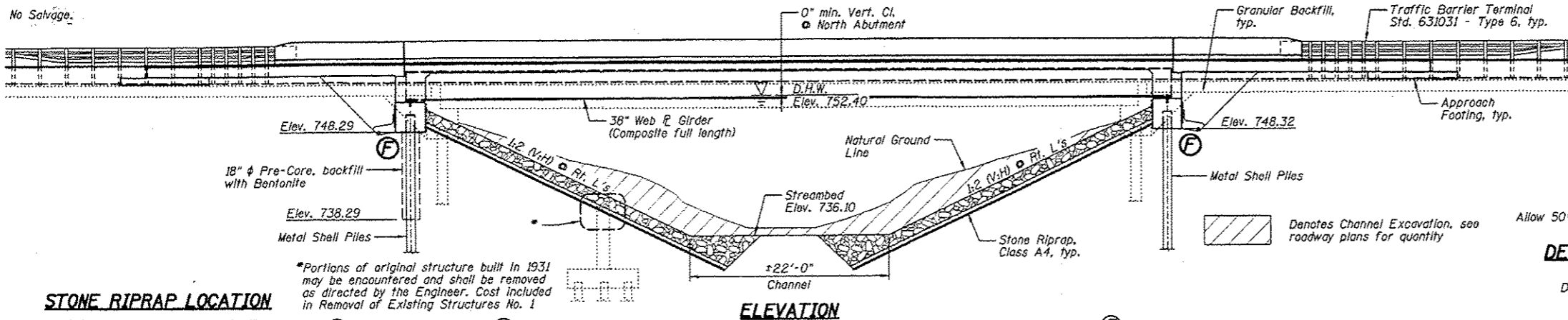


DESIGNED -	REVISSED -
DRAWN -	REVISSED -
CHECKED -	REVISSED -
DATE -	REVISSED -

Benchmark: Chiseled "□" on Northeast Abutment of Railroad Bridge, West of IL Route 54 S.N. 027-0077, Sta. 398+51.55, 82.21' Rt. Elev = 756.87

Existing Structure: Structure No. 027-0077 was constructed in 1988 as FAP 71, Section 115 BR. In 2008, the two western-most beams were replaced as FAP 71, Section 115-BR1. The Superstructure consists of a single-span precast, prestressed concrete deck beam with 4" asphalt wearing surface plus waterproofing membrane. The Substructure consists of open, concrete abutments supported by precast concrete piles. The back-to-back of abutment length is 84'-4 1/2", and the out-to-out width is 33'-0". The span length is 80'-0 1/2" (center-to-center of bearing) with a 15°00'00" left-forward skew. Traffic will be detoured during construction.

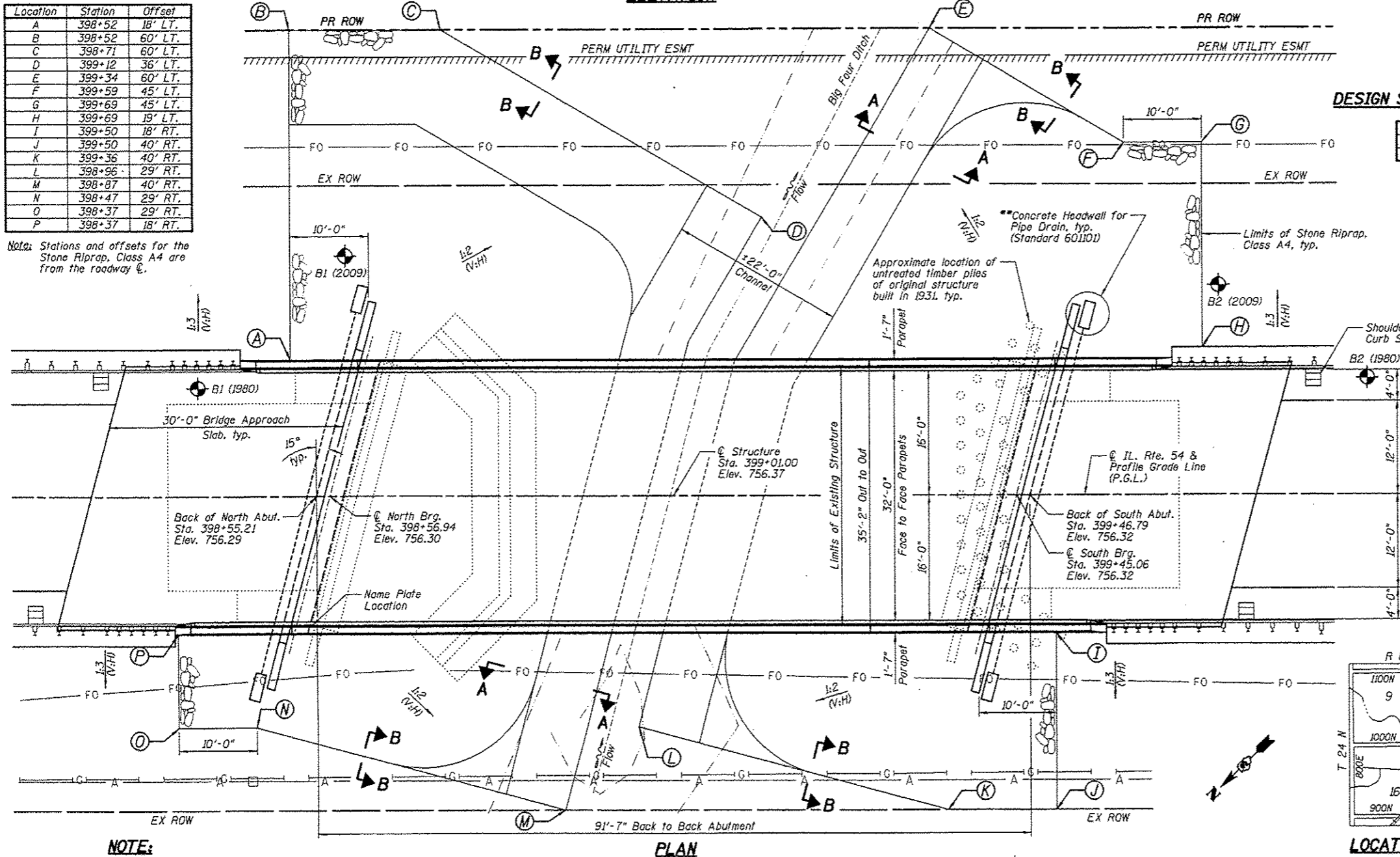
No Salvage.



STONE RIPRAP LOCATION

Location	Station	Offset
A	398+52	18' LT.
B	398+52	60' LT.
C	398+71	60' LT.
D	399+12	36' LT.
E	399+34	60' LT.
F	399+59	45' LT.
G	399+69	45' LT.
H	399+69	19' RT.
I	399+50	18' RT.
J	399+50	40' RT.
K	399+36	40' RT.
L	398+96	29' RT.
M	398+87	40' RT.
N	398+47	29' RT.
O	398+37	29' RT.
P	398+37	18' RT.

Note: Stations and offsets for the Stone Riprap, Class A4 are from the roadway E.



NOTE:

See Sheet B2 for Section A-A and B-B.

**Included in the cost of pipe underdrains for Structures 4.

WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. Head - Ft.		Headwater El.		
			Exst.	Prop.	Exst.	Prop.	Exst.	Prop.	
Drainage Area = 33.0 Sq. Mi.			Existing Low Grade Elev. 753.99 @ Sta. 399+01 Proposed Low Grade Elev. 754.13 @ Sta. 403+29						
Design	50	3620	598	667	749.4	0.1	0.1	749.5	749.5
Base	100	4190	691	888	752.4	0.3	0.2	752.7	752.5
Ex. Overtopping	186	4733	691	888	753.3	0.5	0.2	753.8	753.5
Pr. Overtopping	235	4929	691	888	753.9	0.8	0.3	754.7	754.2
Max. Calc.	500	5580	691	888	754.1	1.0	0.4	755.0	754.5

10 Yr. Velocity = 4.0 ft/sec. (Existing)
10 Yr. Velocity = 3.4 ft/sec. (Proposed)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 6th Edition

DESIGN STRESSES

FIELD UNITS:

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (AASHTO M270 Grade 50W)

SEISMIC DATA

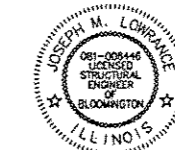
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.084
Design Spectral Acceleration at 0.2 sec. (SD2) = 0.146
Soil Site Class = C

DESIGN SCOUR ELEVATION TABLE

Design Scour Elevations (ft.)	
N. Abut.	S. Abut.
748.29	748.32

INDEX OF SHEETS

SHEET NO.	TITLE
B1	GENERAL PLAN AND ELEVATION
B2	GENERAL DATA
B3	TOP OF DECK ELEVATION LOCATIONS
B4	TOP OF DECK ELEVATIONS
B5	TOP OF APPROACH SLAB ELEVATIONS
B6	SUPERSTRUCTURE
B7	SUPERSTRUCTURE DETAILS
B8	DIAPHRAGM DETAILS
B9-B10	BRIDGE APPROACH SLAB DETAILS
B11-B12	STRUCTURAL STEEL
B13	FIXED BEARING DETAILS
B14	NORTH ABUTMENT
B15	SOUTH ABUTMENT
B16	METAL SHELL PILE DETAILS
B17-B20	SOIL BORING LOGS

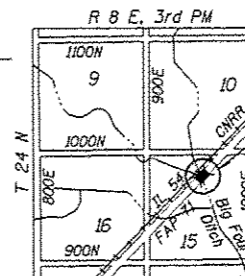


Joseph M. Lowrance Date 8-11-15
JOSEPH M. LOWRANCE
ILLINOIS STRUCTURAL ENGINEER
NO. 081-006446
Exp. Date 11/30/16

APPROVED
For Structural Adequacy Only

Joseph M. Lowrance
Engineer of Bridges & Structures

GENERAL PLAN AND ELEVATION
IL. ROUTE 54 OVER
BIG FOUR DITCH
F.A.P. 71 - SECTION (115)BR
FORD COUNTY
STATION 399+01.00
STRUCTURE NO. 027-0103



LOCATION SKETCH

Farnsworth GROUP, INC.
2708 McGraw Drive
Bloomington, Illinois 61704
309.605-8433, 309.603-1871 fax

DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - JWK	REVISED
DATE - 08/11/15	CHECKED - MSW
	REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

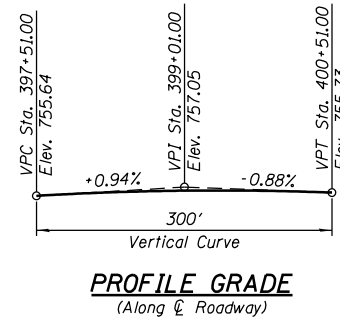
GENERAL PLAN AND ELEVATION
STRUCTURE NO. 027-0103

SHEET NO. B1 OF B20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	40
				CONTRACT NO. 66994
ILLINOIS FED. AID PROJECT				

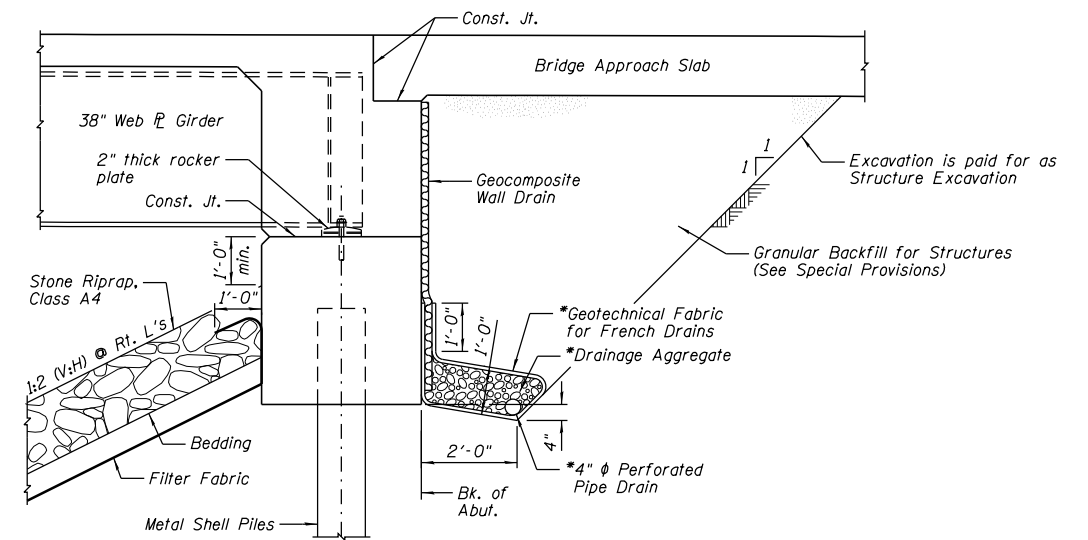
TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Stone Riprap, Class A4	Sq. Yd.		1,000	1,000
Filter Fabric	Sq. Yd.		1,000	1,000
Removal of Existing Structures No. 1	Each	1		1
Structure Excavation	Cu. Yd.		248	248
Concrete Structures	Cu. Yd.		60.6	60.6
Concrete Superstructure	Cu. Yd.	237.1		237.1
Bridge Deck Grooving	Sq. Yd.	500		500
Protective Coat	Sq. Yd.	641		641
Furnishing and Erecting Structural Steel	L Sum	0.5		0.5
Stud Shear Connectors	Each	1,620		1,620
Reinforcement Bars, Epoxy Coated	Pound	49,130	9,660	58,790
Furnishing Metal Shell Piles 14" x 0.312"	Foot		515	515
Driving Piles	Foot		515	515
Test Pile Metal Shells	Each		2	2
Name Plates	Each	1		1
Anchor Bolts, 1"	Each	24		24
Geocomposite Wall Drain	Sq. Yd.		64	64
Pipe Underdrains for Structures 4"	Foot		172	172
Granular Backfill for Structures	Cu. Yd.		114	114



STATION 399+01.00
 BUILT 20__ BY
 STATE OF ILLINOIS
 F.A.P. RT. 71 SEC. (115)BR
 LOADING HL-93
 STRUCTURE NO. 027-0103

NAME PLATE
 See Std. 515001

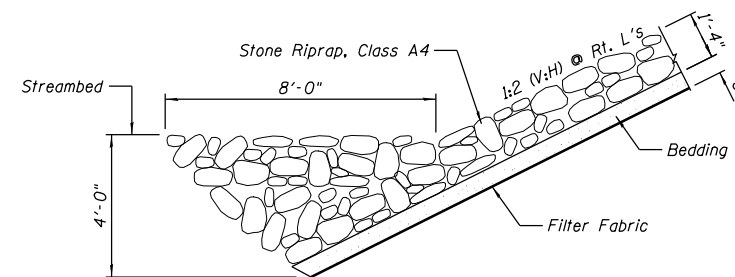


SECTION THRU SOUTH ABUTMENT
 (Similar for North Abutment)

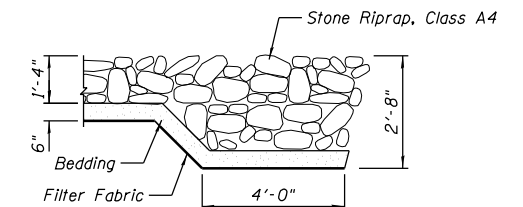
- NOTES:**
- 1.) Horizontal Dimensions @ Rt. L's to Abutment.
 - 2.) *Included in the cost of Pipe Underdrains for Structures (see Special Provisions).
 - 3.) All drainage system components shall extend to 2'-0" from the end of each wingwall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101)

GENERAL NOTES:

- 1.) Fasteners shall be ASTM A325 Type 1, mechanically galvanized bolts in painted areas and ASTM A325 Type 3 in unpainted areas. Bolts $\frac{3}{4}$ in. dia., holes $\frac{13}{16}$ in. dia., unless otherwise noted.
- 2.) Calculated weight of Structural Steel = 99,860 lbs.
- 3.) All structural steel shall be AASHTO M270 Grade 50W.
- 4.) No field welding is permitted except as specified in the contract documents.
- 5.) Reinforcement bars designated (E) shall be epoxy coated.
- 6.) If the Contractor elects to use cantilever forming brackets on the exterior girders, the brackets shall be placed at the same locations as required for the hardwood blocks in Article 503.06(b) of the Standard Specifications. If additional cantilever forming brackets are required, hardwood blocking shall be wedged between the exterior and first interior beam at each of these additional bracket locations.
- 7.) Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete diaphragm plus 1'-6". Painted areas shall be primed in the shop with a Department approved zinc rich primer. Field painting will not be required.
- 8.) Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- 9.) The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.
- 10.) Slip forming of parapets is not allowed.



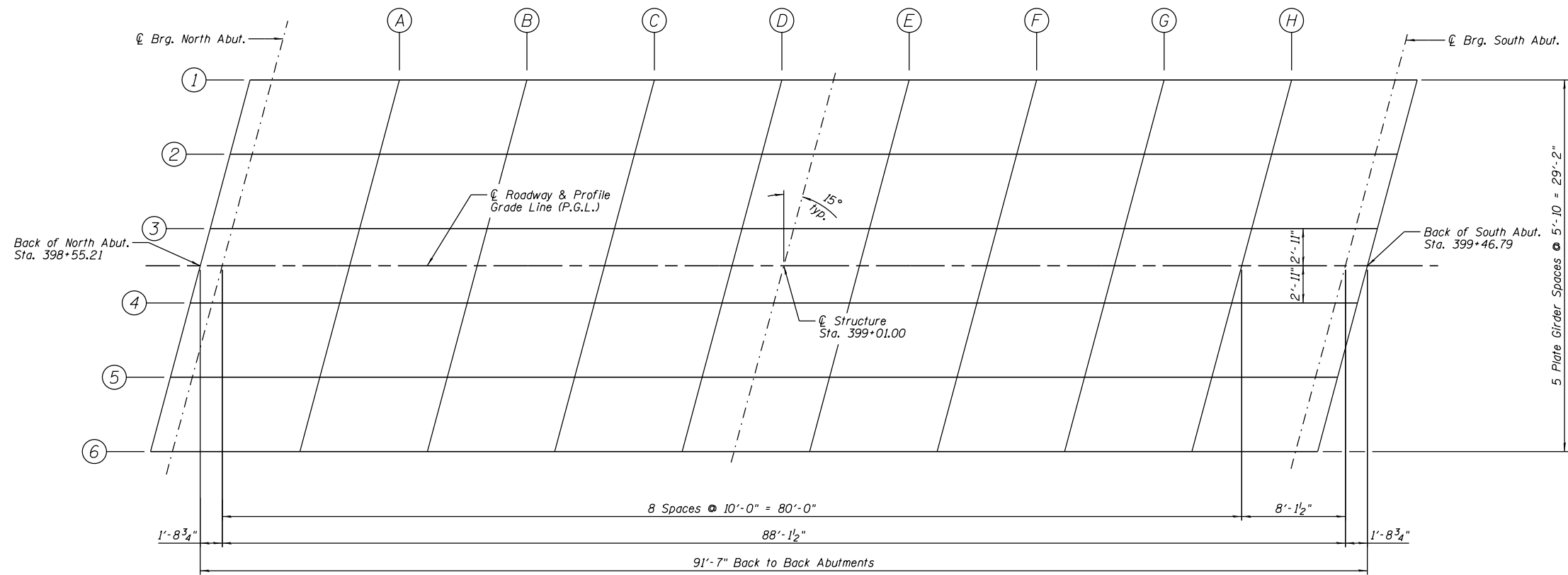
SECTION A-A



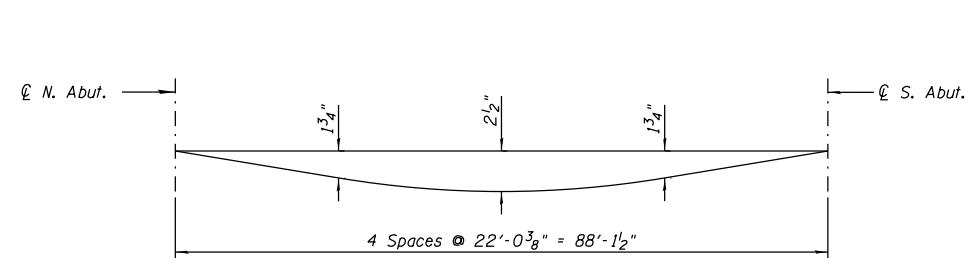
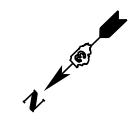
SECTION B-B

DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - JWK	REVISED
DATE - 08/11/15	CHECKED - MSW
	REVISED

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	41
			CONTRACT NO. 66994	
ILLINOIS FED. AID PROJECT				



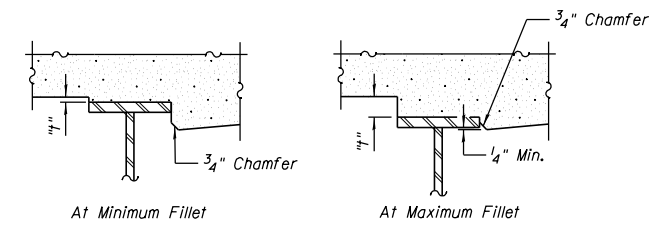
PLAN



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete only.)

Note:
The above deflections are not for use in the field if the Engineer is working from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection".



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheet B4, minus slab thickness, equals the fillet heights "t" above top flange of beams.

FILLET HEIGHTS

DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - JWK	REVISED
CHECKED - MSW	REVISED
DATE - 08/11/15	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	42
CONTRACT NO. 66994				

GIRDER 1

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+59.12	-14.58	756.06	756.06
☉ North Abut.	398+60.84	-14.58	756.07	756.07
A	398+70.84	-14.58	756.09	756.16
B	398+80.84	-14.58	756.11	756.24
C	398+90.84	-14.58	756.12	756.30
D	399+00.84	-14.58	756.13	756.33
E	399+10.84	-14.58	756.13	756.33
F	399+20.84	-14.58	756.12	756.30
G	399+30.84	-14.58	756.11	756.23
H	399+40.84	-14.58	756.09	756.15
☉ South Abut.	399+48.97	-14.58	756.07	756.07
Bk. of South Abut.	399+50.70	-14.58	756.07	756.07

GIRDER 2

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+57.55	-8.75	756.16	756.16
☉ North Abut.	398+59.28	-8.75	756.17	756.17
A	398+69.28	-8.75	756.19	756.26
B	398+79.28	-8.75	756.21	756.35
C	398+89.28	-8.75	756.22	756.41
D	398+99.28	-8.75	756.23	756.43
E	399+09.28	-8.75	756.23	756.43
F	399+19.28	-8.75	756.23	756.40
G	399+29.28	-8.75	756.22	756.34
H	399+39.28	-8.75	756.20	756.26
☉ South Abut.	399+47.41	-8.75	756.18	756.18
Bk. of South Abut.	399+49.13	-8.75	756.17	756.17

GIRDER 3

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+55.99	-2.92	756.25	756.25
☉ North Abut.	398+57.72	-2.92	756.25	756.25
A	398+67.72	-2.92	756.28	756.35
B	398+77.72	-2.92	756.30	756.43
C	398+87.72	-2.92	756.31	756.49
D	398+97.72	-2.92	756.32	756.53
E	399+07.72	-2.92	756.32	756.52
F	399+17.72	-2.92	756.32	756.49
G	399+27.72	-2.92	756.31	756.43
H	399+37.72	-2.92	756.29	756.35
☉ South Abut.	399+45.85	-2.92	756.27	756.27
Bk. of South Abut.	399+47.57	-2.92	756.27	756.27

☉ ROADWAY & PROFILE GRADE LINE (P.G.L.)

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+55.21	0.00	756.29	756.29
☉ North Abut.	398+56.94	0.00	756.30	756.30
A	398+66.94	0.00	756.32	756.40
B	398+76.94	0.00	756.34	756.48
C	398+86.94	0.00	756.36	756.54
D	398+96.94	0.00	756.37	756.57
E	399+06.94	0.00	756.37	756.57
F	399+16.94	0.00	756.36	756.54
G	399+26.94	0.00	756.35	756.48
H	399+36.94	0.00	756.34	756.40
☉ South Abut.	399+45.06	0.00	756.32	756.32
Bk. of South Abut.	399+46.79	0.00	756.32	756.32

GIRDER 4

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+54.43	2.92	756.24	756.24
☉ North Abut.	398+56.15	2.92	756.25	756.25
A	398+66.15	2.92	756.27	756.35
B	398+76.15	2.92	756.30	756.43
C	398+86.15	2.92	756.31	756.49
D	398+96.15	2.92	756.32	756.52
E	399+06.15	2.92	756.32	756.52
F	399+16.15	2.92	756.32	756.49
G	399+26.15	2.92	756.31	756.44
H	399+36.15	2.92	756.29	756.36
☉ South Abut.	399+44.28	2.92	756.28	756.28
Bk. of South Abut.	399+46.01	2.92	756.27	756.27

GIRDER 5

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+52.87	8.75	756.15	756.15
☉ North Abut.	398+54.59	8.75	756.15	756.15
A	398+64.59	8.75	756.18	756.25
B	398+74.59	8.75	756.20	756.34
C	398+84.59	8.75	756.22	756.40
D	398+94.59	8.75	756.23	756.43
E	399+04.59	8.75	756.23	756.43
F	399+14.59	8.75	756.23	756.40
G	399+24.59	8.75	756.22	756.35
H	399+34.59	8.75	756.21	756.27
☉ South Abut.	399+42.72	8.75	756.19	756.19
Bk. of South Abut.	399+44.45	8.75	756.19	756.19

GIRDER 6

Location	Station	Offset	Theoretical Grade Elevation	Theoretical Grade Elevation Adjusted for Dead Load Deflection
Bk. of North Abut.	398+51.30	14.58	756.04	756.04
☉ North Abut.	398+53.03	14.58	756.04	756.04
A	398+63.03	14.58	756.07	756.14
B	398+73.03	14.58	756.09	756.23
C	398+83.03	14.58	756.11	756.29
D	398+93.03	14.58	756.12	756.33
E	399+03.03	14.58	756.13	756.33
F	399+13.03	14.58	756.13	756.30
G	399+23.03	14.58	756.12	756.24
H	399+33.03	14.58	756.10	756.16
☉ South Abut.	399+41.16	14.58	756.09	756.09
Bk. of South Abut.	399+42.88	14.58	756.09	756.09



DESIGNED - TCR	REVISED
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DRAWN - JWK	REVISED
DATE - 08/11/15	CHECKED - MSW
	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**TOP OF DECK ELEVATIONS
STRUCTURE NO. 027-0103**

SHEET NO. B4 OF B20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	43
CONTRACT NO. 66994			ILLINOIS FED. AID PROJECT	

EAST CURB LINE/EAST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation
N. End of North Appr.	398+30.64	-16.42	755.92
A	398+40.64	-16.42	755.96
B	398+50.53	-16.00	756.00
Back of North Abut.	398+59.50	-16.00	756.03
S. End of North Appr.	398+60.53	-16.00	756.03

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevation
N. End of North Appr.	398+29.46	-12.00	756.00
A	398+39.46	-12.00	756.05
B	398+49.46	-12.00	756.08
Back of North Abut.	398+58.43	-12.00	756.11
S. End of North Appr.	398+59.46	-12.00	756.12

☉ ROADWAY & PROFILE GRADE LINE (P.G.L.)

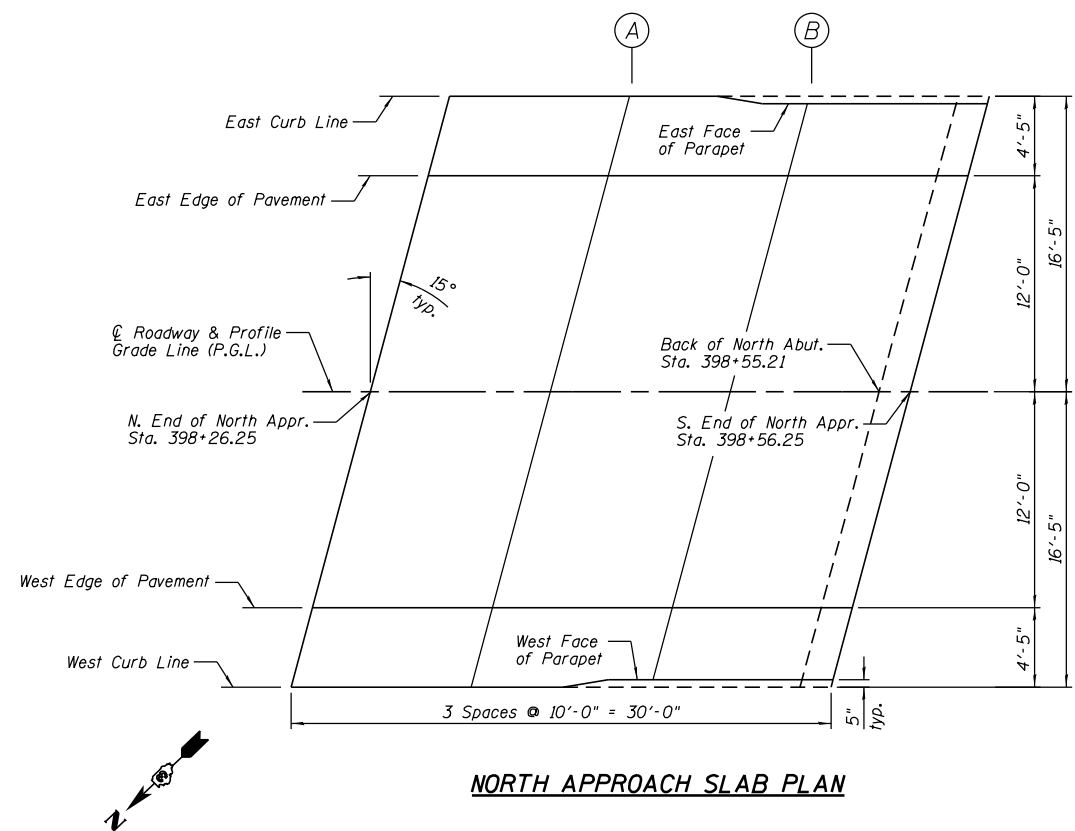
Location	Station	Offset	Theoretical Grade Elevation
N. End of North Appr.	398+26.25	0.00	756.18
A	398+36.25	0.00	756.22
B	398+46.25	0.00	756.26
Back of North Abut.	398+55.21	0.00	756.29
S. End of North Appr.	398+56.25	0.00	756.29

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevation
N. End of North Appr.	398+23.03	12.00	755.97
A	398+33.03	12.00	756.02
B	398+43.03	12.00	756.06
Back of North Abut.	398+51.99	12.00	756.09
S. End of North Appr.	398+53.03	12.00	756.10

WEST CURB LINE/WEST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation
N. End of North Appr.	398+21.85	16.42	755.87
A	398+31.85	16.42	755.92
B	398+41.96	16.00	755.97
Back of North Abut.	398+50.92	16.00	756.01
S. End of North Appr.	398+51.96	16.00	756.01



NORTH APPROACH SLAB PLAN

EAST CURB LINE/EAST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation
N. End of South Appr.	399+50.04	-16.00	756.04
Back of South Abut.	399+51.08	-16.00	756.04
A	399+60.04	-16.00	756.01
B	399+70.15	-16.42	755.96
S. End of South Appr.	399+80.15	-16.42	755.92

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevation
N. End of South Appr.	399+48.97	-12.00	756.12
Back of South Abut.	399+50.01	-12.00	756.12
A	399+58.97	-12.00	756.10
B	399+68.97	-12.00	756.06
S. End of South Appr.	399+78.97	-12.00	756.02

☉ ROADWAY & PROFILE GRADE LINE (P.G.L.)

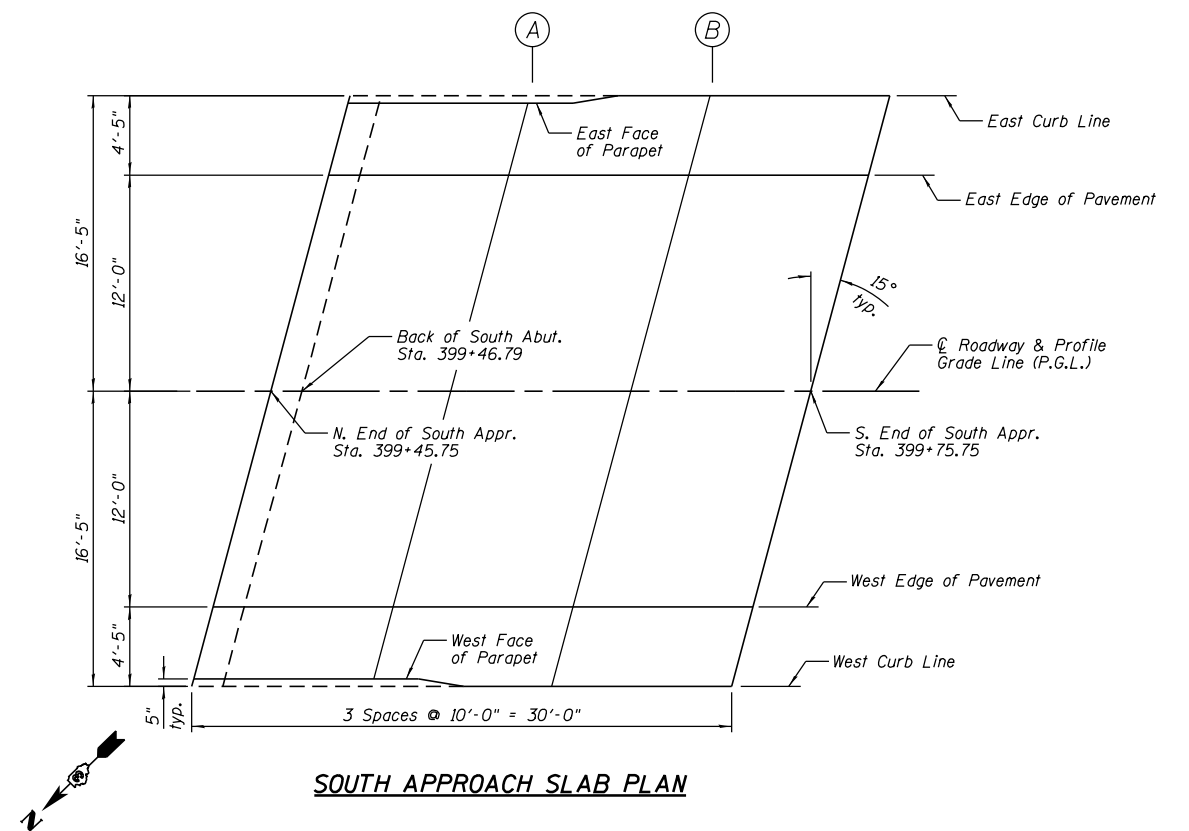
Location	Station	Offset	Theoretical Grade Elevation
N. End of South Appr.	399+45.75	0.00	756.32
Back of South Abut.	399+46.79	0.00	756.32
A	399+55.75	0.00	756.29
B	399+65.75	0.00	756.26
S. End of South Appr.	399+75.75	0.00	756.22

WEST EDGE OF PAVEMENT

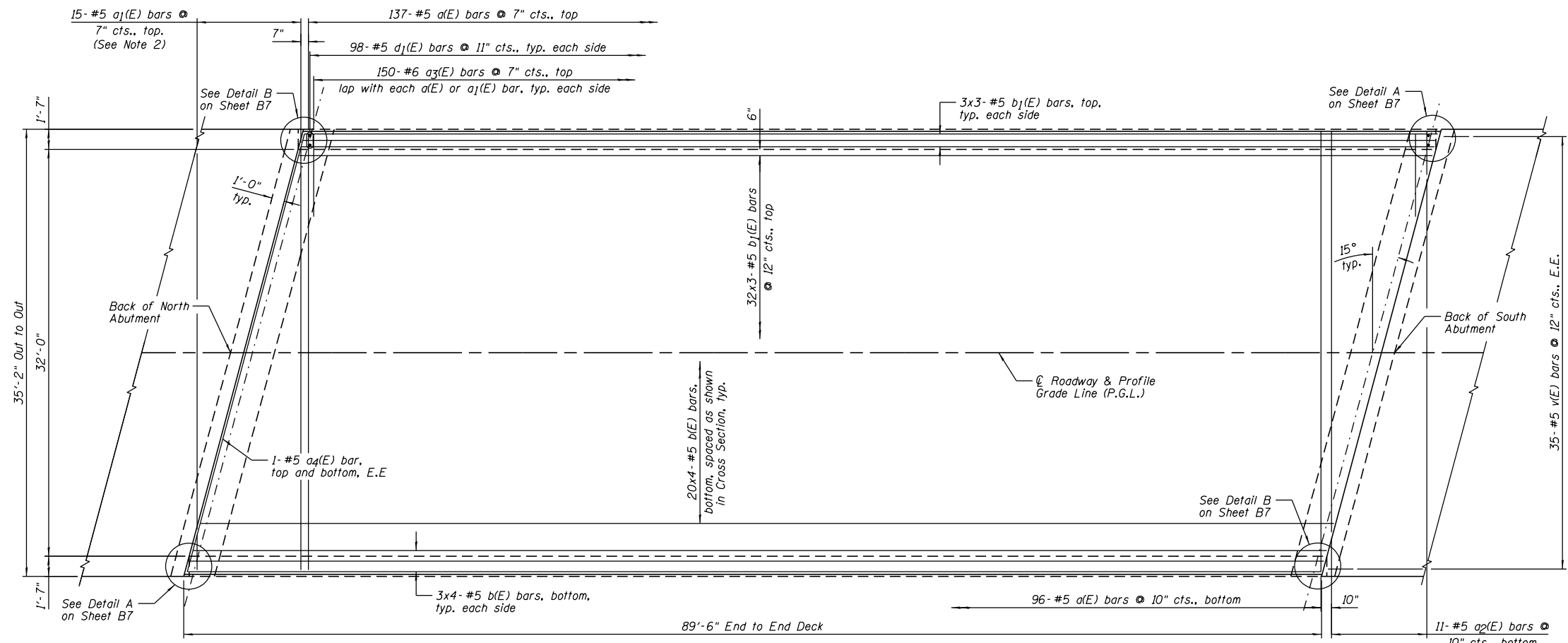
Location	Station	Offset	Theoretical Grade Elevation
N. End of South Appr.	399+42.54	12.00	756.14
Back of South Abut.	399+43.57	12.00	756.14
A	399+52.54	12.00	756.11
B	399+62.54	12.00	756.08
S. End of South Appr.	399+72.54	12.00	756.05

WEST CURB LINE/WEST FACE OF PARAPET

Location	Station	Offset	Theoretical Grade Elevation
N. End of South Appr.	399+41.47	16.00	756.06
Back of South Abut.	399+42.50	16.00	756.06
A	399+51.47	16.00	756.03
B	399+61.36	16.42	756.00
S. End of South Appr.	399+71.36	16.42	755.96

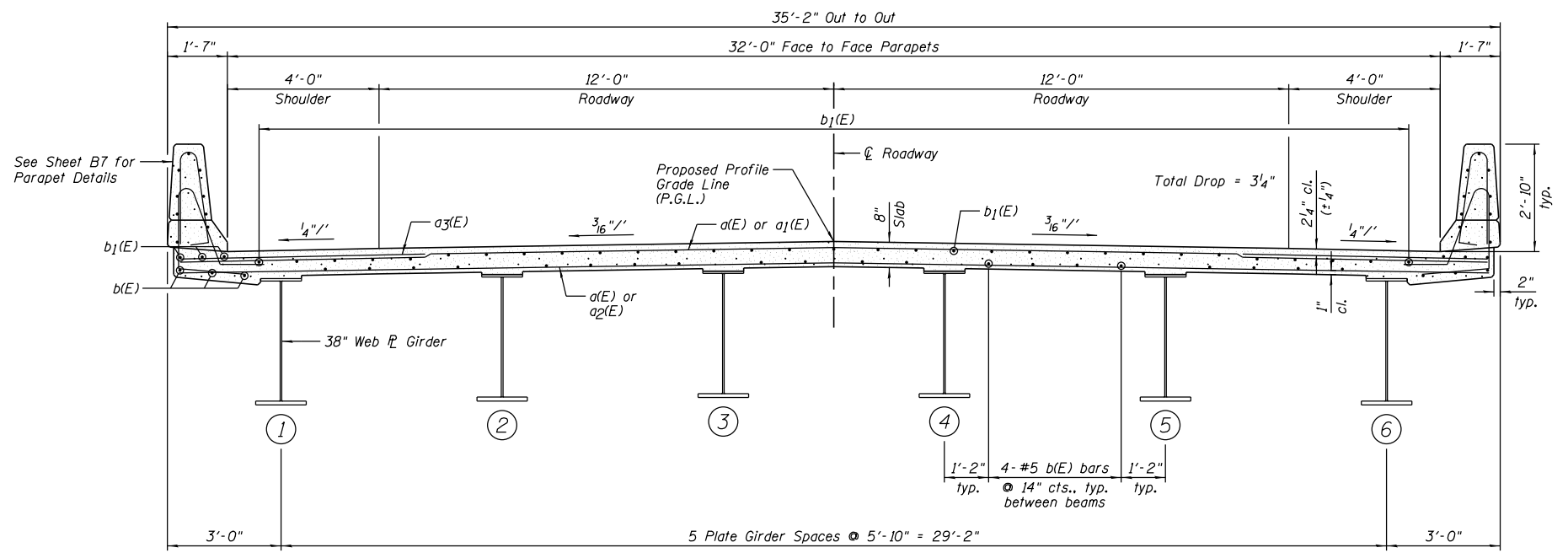


SOUTH APPROACH SLAB PLAN



PLAN

MINIMUM BAR LAP
#5 - 2'-7"



CROSS SECTION
(Looking South @ \bar{C} of Bridge)

NOTES:

- 1.) See Sheet B7 for Superstructure Details and Bill of Material.
- 2.) Order a1(E) and a2(E) bars full length. Cut according to Bar Cutting Diagram on Sheet B7. Use remainder of bars in opposite end of deck.
- 3.) Bars indicated thus 3x4-#5 etc. indicates 3 lines of bars with 4 lengths per line.
- 4.) E.E. denotes each end.



DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - JWK	REVISED
CHECKED - MSW	REVISED
DATE - 08/11/15	

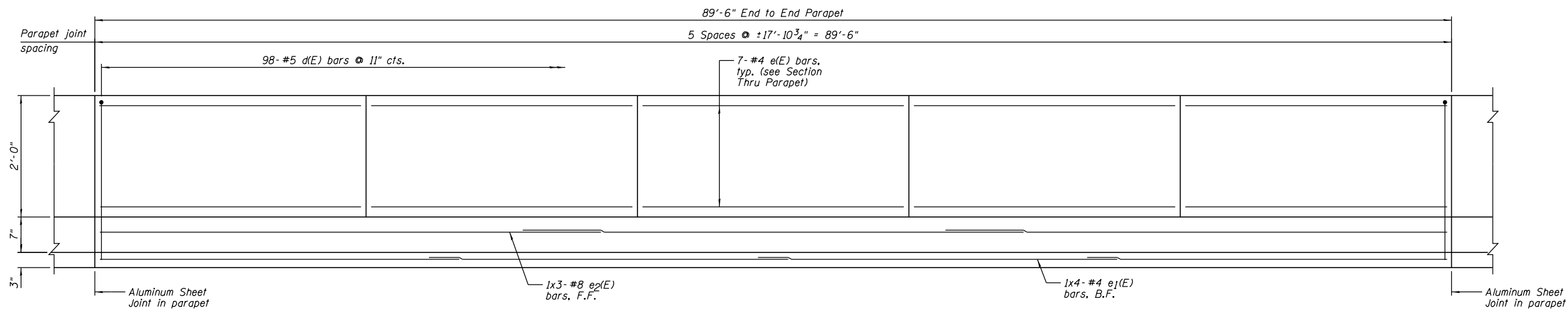
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 027-0103

SHEET NO. B6 OF B20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	45
CONTRACT NO. 66994				

ILLINOIS FED. AID PROJECT



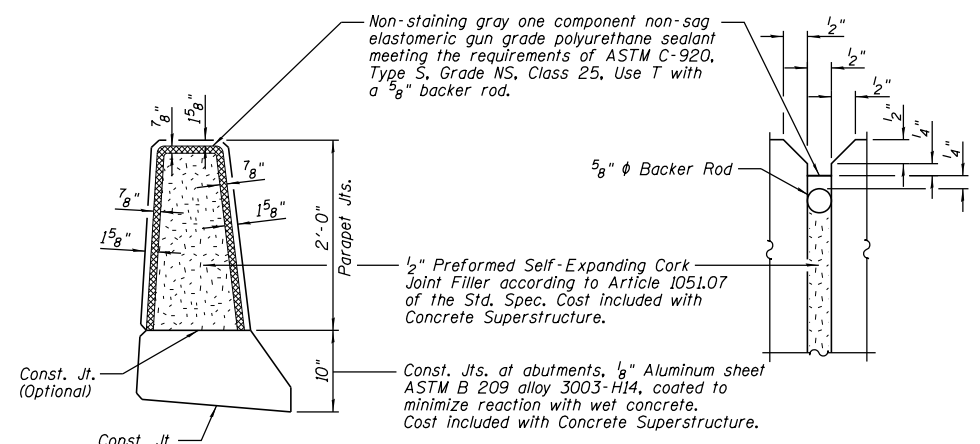
INSIDE ELEVATION OF PARAPET

MINIMUM BAR LAP

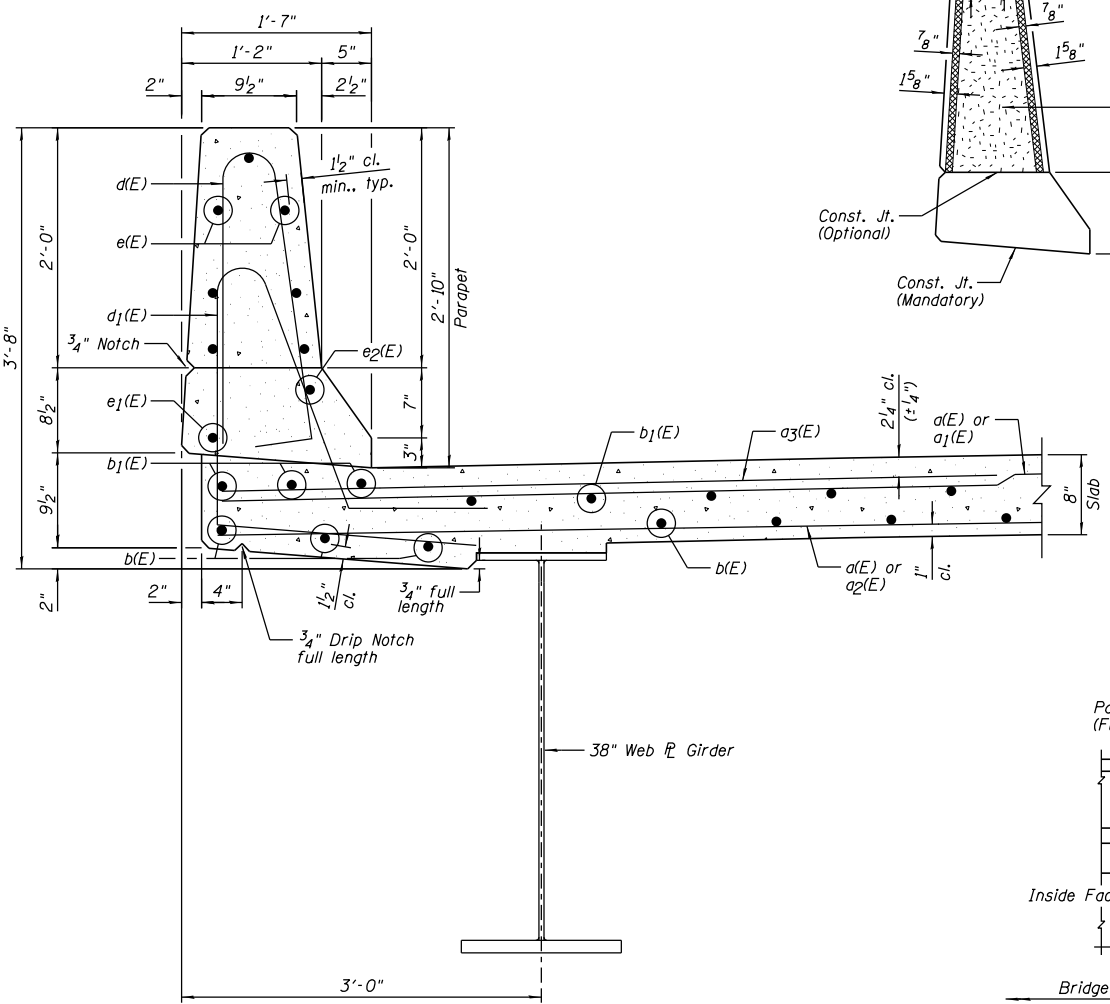
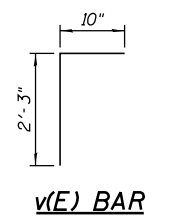
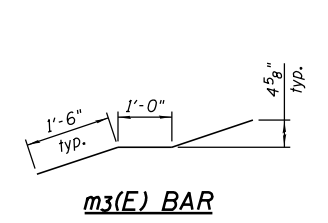
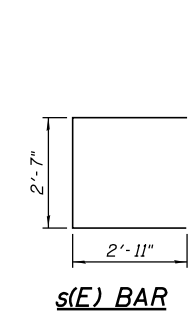
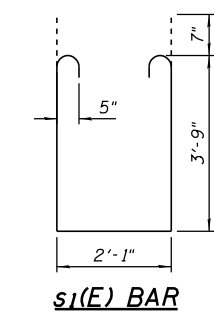
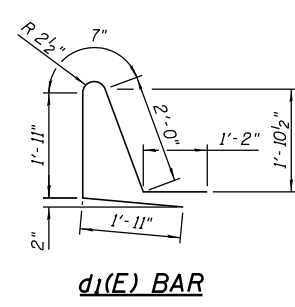
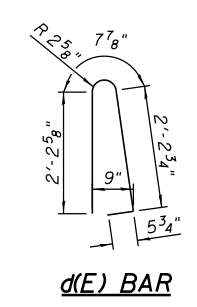
#4	- 2'-0"
#8	- 5'-2"

**SUPERSTRUCTURE
BILL OF MATERIAL**

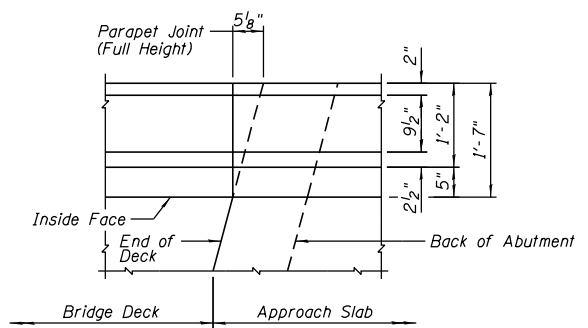
Bar	No.	Size	Length	Shape
d(E)	233	#5	34'-6"	—
a1(E)	15	#5	36'-4"	—
a2(E)	11	#5	37'-7"	—
a3(E)	300	#6	6'-6"	—
a4(E)	4	#5	35'-9"	—
b(E)	104	#5	24'-3"	—
b1(E)	114	#5	31'-6"	—
d(E)	196	#5	5'-7"	⏏
d1(E)	196	#5	7'-7"	⏏
e(E)	70	#4	17'-7"	—
e1(E)	8	#4	23'-10"	—
e2(E)	6	#8	33'-2"	—
m(E)	8	#6	36'-1"	—
m1(E)	30	#6	5'-8"	—
m2(E)	12	#6	2'-9"	—
m3(E)	36	#5	4'-0"	—
s(E)	62	#5	8'-5"	⏏
s1(E)	62	#5	10'-9"	⏏
v(E)	70	#5	3'-1"	⏏
Item		Unit	Quantity	
Concrete Superstructure		Cu. Yd.	131.2	
Reinforcement Bars, Epoxy Coated		Pound	25,360	



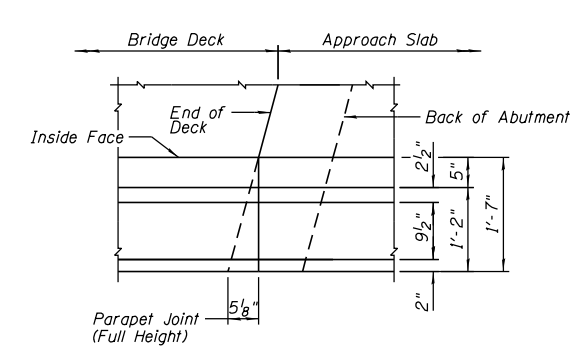
PARAPET JOINT DETAILS



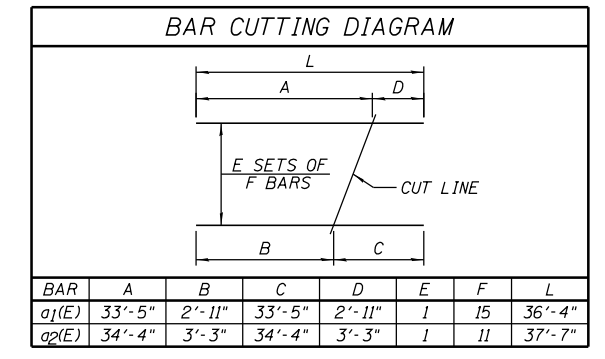
SECTION THRU PARAPET



DETAIL A



DETAIL B



NOTES:

- 1.) B.F. denotes Back Face and F.F. denotes Front Face.
- 2.) Inside Elevation of Parapet view is exaggerated vertically to show reinforcement.
- 3.) Bars indicated thus 1x4-#4 etc. indicates 1 line of bars with 4 lengths per line.
- 4.) For location of Detail A and Detail B, see Sheet B6.

Farnsworth GROUP, INC.
2709 McGraw Drive
Bloomington, Illinois 61704
309/663-8435, 309/663-1571 fax

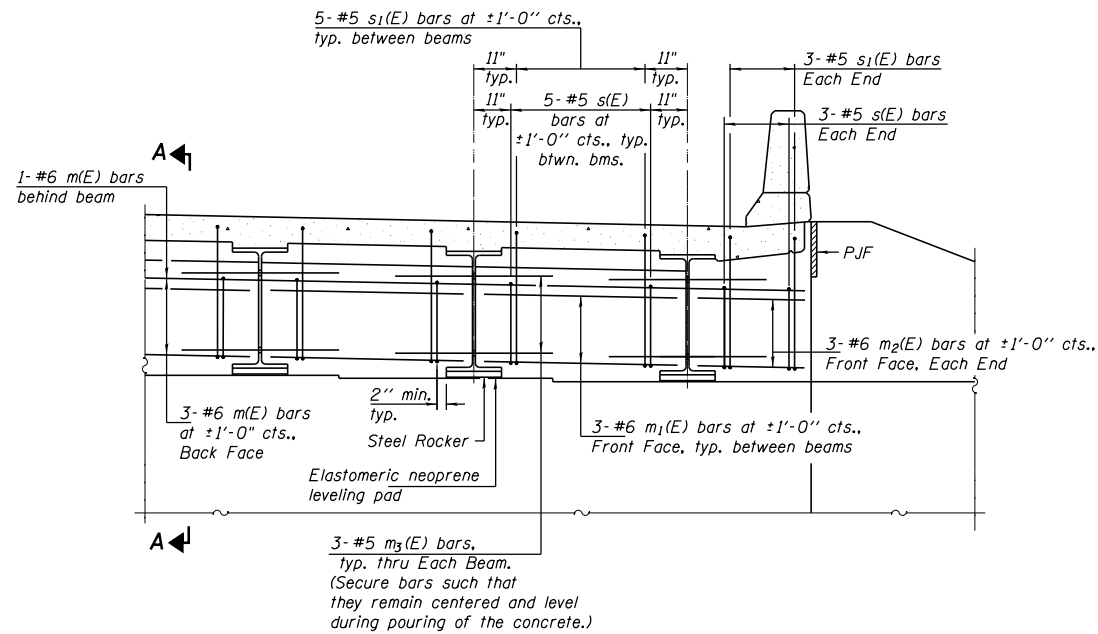
DESIGNED - TCR	REVISION
CHECKED - JML	REVISION
DRAWN - JWK	REVISION
CHECKED - MSW	REVISION

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

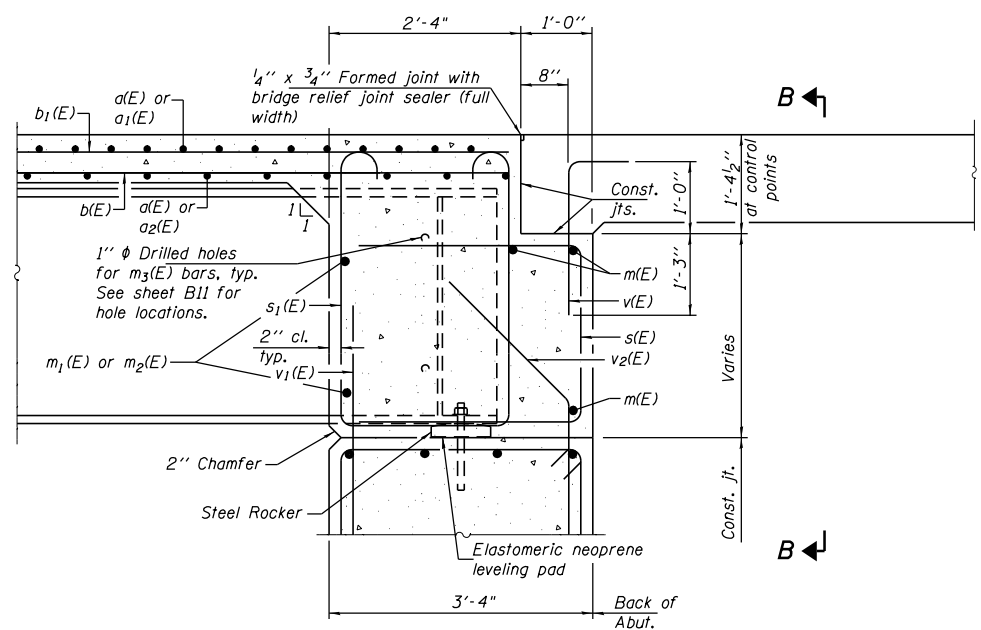
**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 027-0103**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	46
CONTRACT NO. 66994			ILLINOIS FED. AID PROJECT	

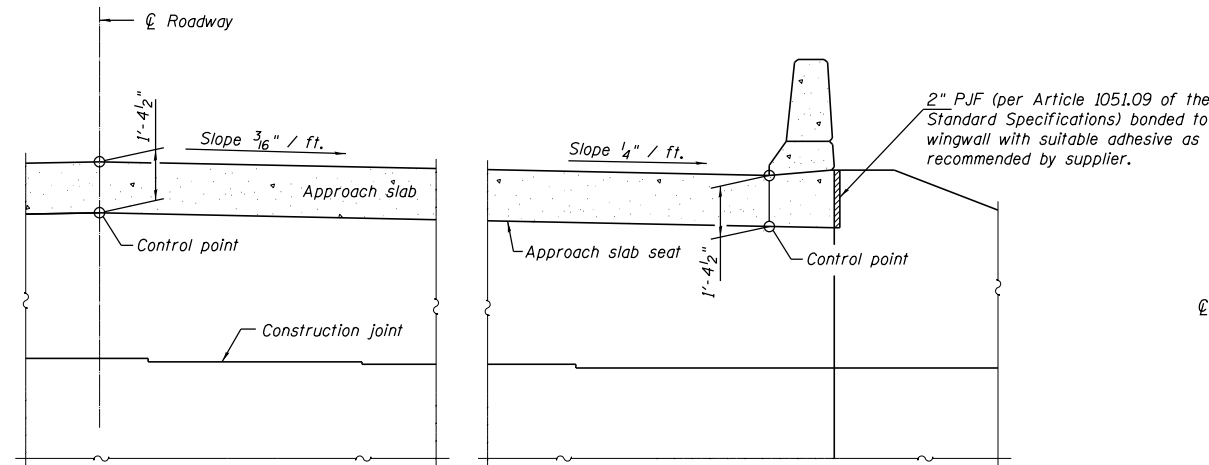
SHEET NO. B7 OF B20 SHEETS



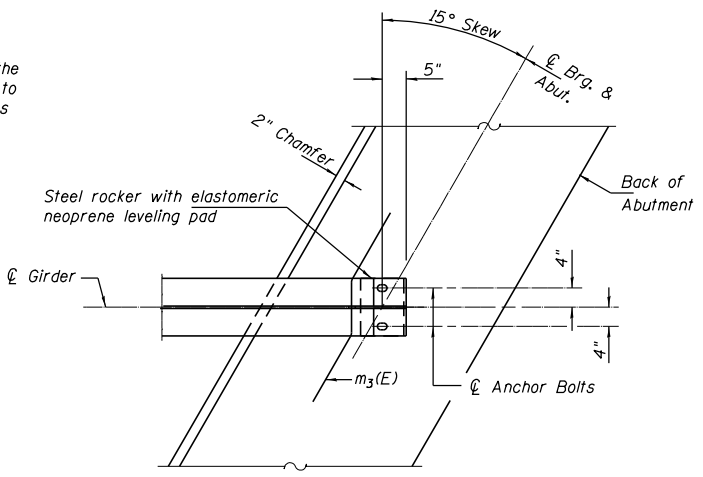
DIAPHRAGM ELEVATION AT ABUTMENT



SECTION A-A
(at Rt. L's)



SECTION B-B



PARTIAL PLAN AT ABUTMENT
(Showing bottom flange of beam)

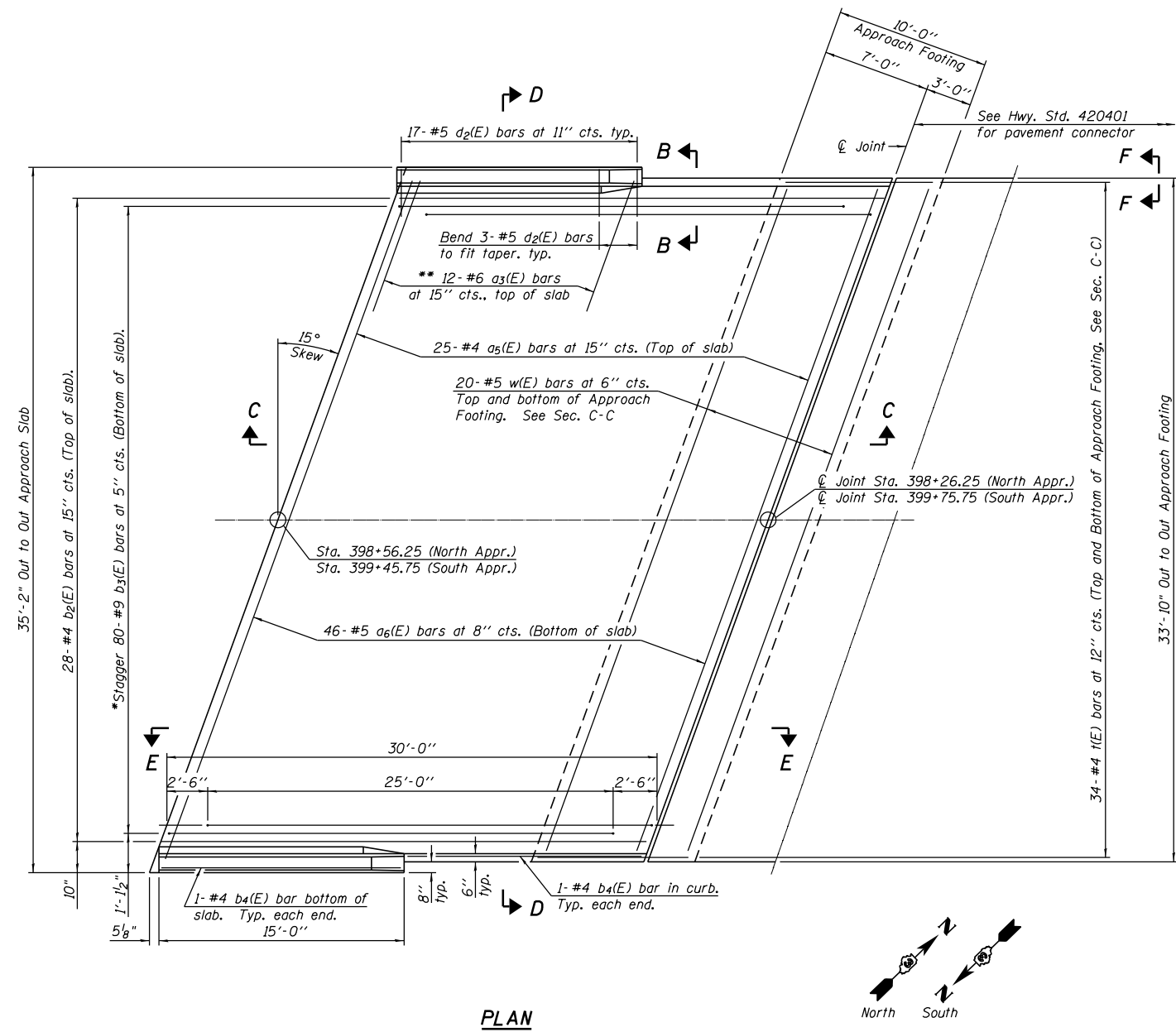
- Notes:
- 1.) Reinforcement bars in diaphragm are billed with superstructure on sheet B7.
 - 2.) Concrete in diaphragm is included with Concrete Superstructure on sheet B7.
 - 3.) For details of bars s(E), s1(E) and v(E) see sheet B7.
 - 4.) The s(E) and s1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.
 - 5.) The approach slab seat shall have a constant slope determined from the control points shown.
 - 6.) For bearing details see sheet B13.

DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - JWK	REVISED
CHECKED - MSW	REVISED
DATE - 08/11/15	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	47
				CONTRACT NO. 66994

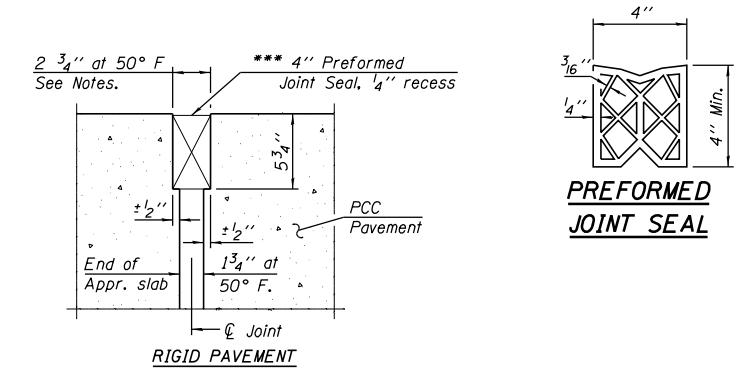
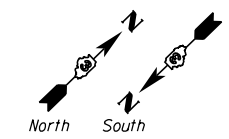
- Notes:
- 1.) See sheet B10 for Sections C-C & D-D and View E-E.
 - 2.) $a_5(E)$ and $a_6(E)$ bar spacings measured along ϕ Rdwy.
 - 3.) The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be $1\frac{1}{2}$ " for installation purposes.

*** Cost included with Concrete Superstructure.

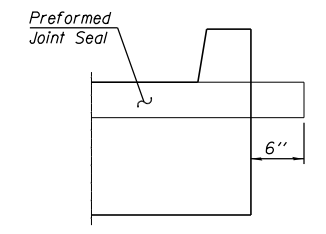


PLAN

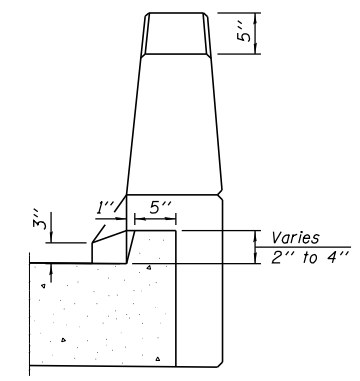
- * Tilt #9 $b_3(E)$ bars as required to maintain clearance.
- ** Space between $a_5(E)$ bars, typ. each parapet.



DETAIL A



VIEW F-F



VIEW B-B

BA-L 12-12-12

(Sheet 1 of 2)



DESIGNED - TCR	REVISION
CHECKED - JML	REVISION
DRAWN - JWK	REVISION
DATE - 08/11/15	REVISION
CHECKED - MSW	REVISION

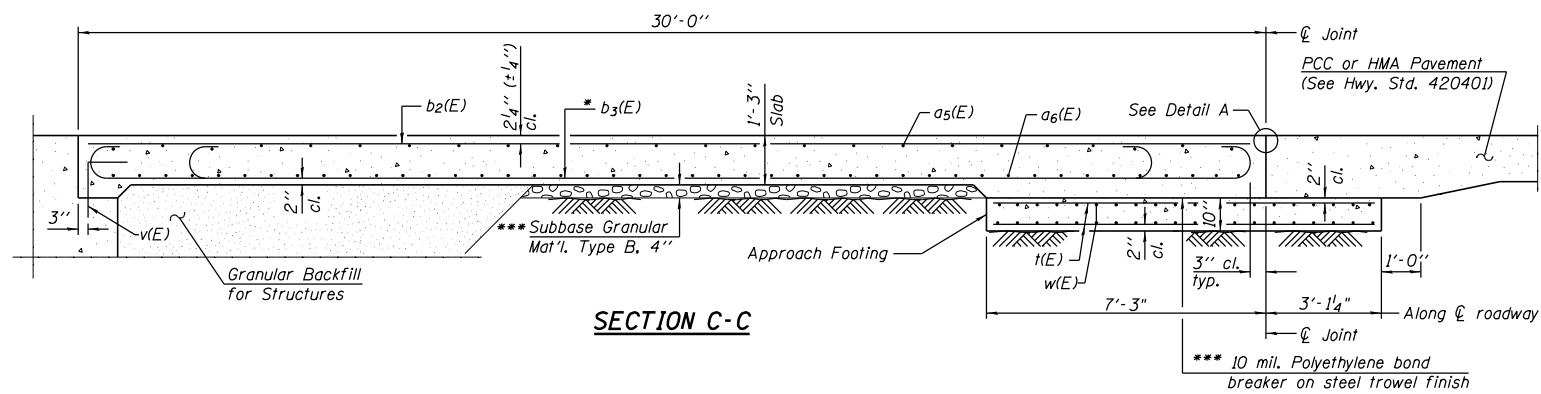
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 027-0103

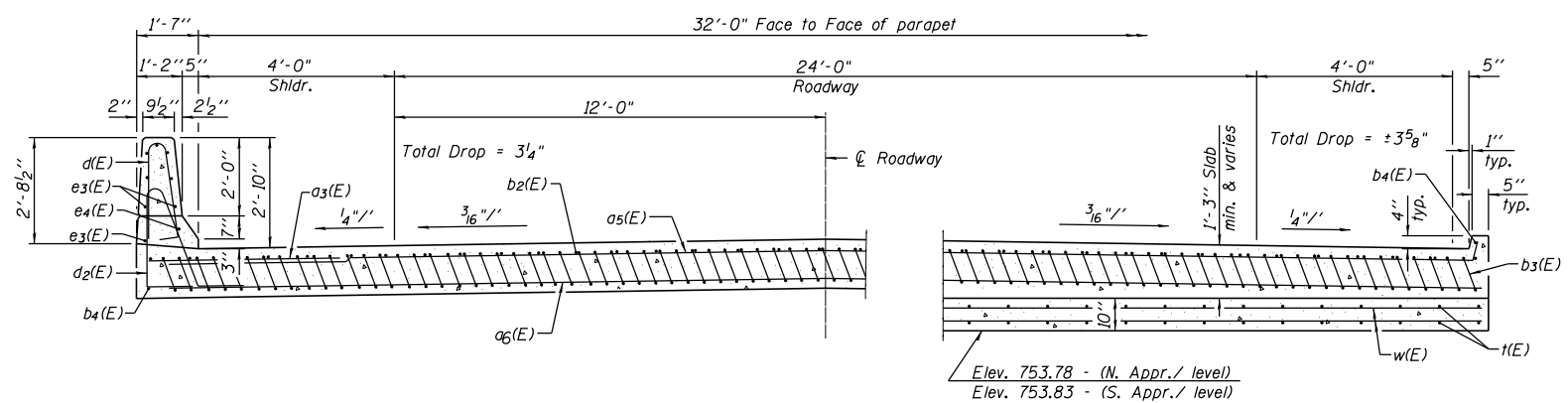
SHEET NO. B9 OF B20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	48
CONTRACT NO. 66994				

ILLINOIS FED. AID PROJECT



SECTION C-C

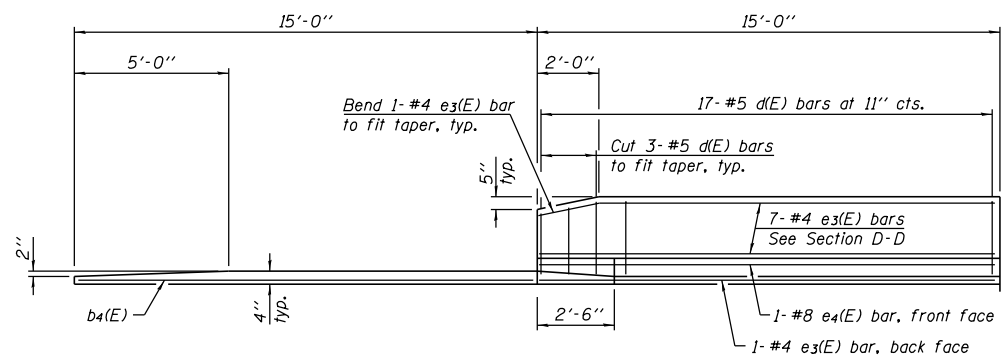


NEAR ABUTMENT

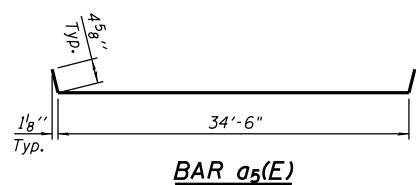
AT APPROACH FOOTING

SECTION D-D

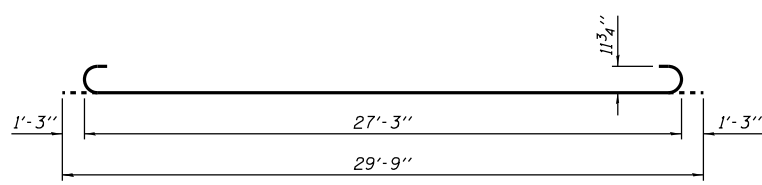
(See Plan for dimensions not shown)



VIEW E-E



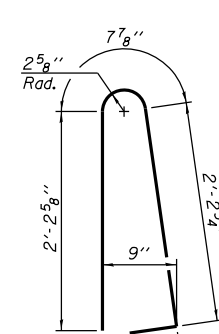
BAR a5(E)



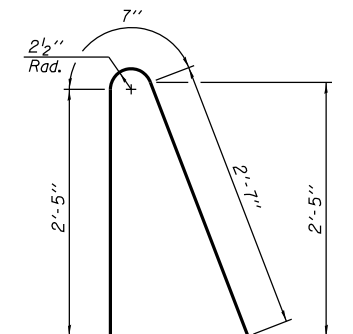
BAR b3(E)

Notes:

- 1.) See sheet B9 for Detail A and View B-B.
- 2.) Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
- 3.) Approach footing concrete shall be paid for as Concrete Structures.
- 4.) Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
- 5.) For v(E) bar details, see sheet B7 and B8.
- 6.) The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
- 7.) Cost of excavation for approach footing included with Concrete Structures.
- 8.) For Granular Backfill for Structures and drainage treatment details, see sheet B2.
- 9.) For additional parapet details, see sheet B7.



BAR d(E)



BAR d2(E)

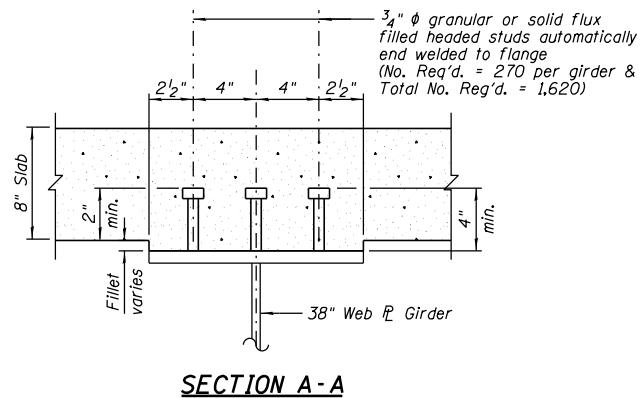
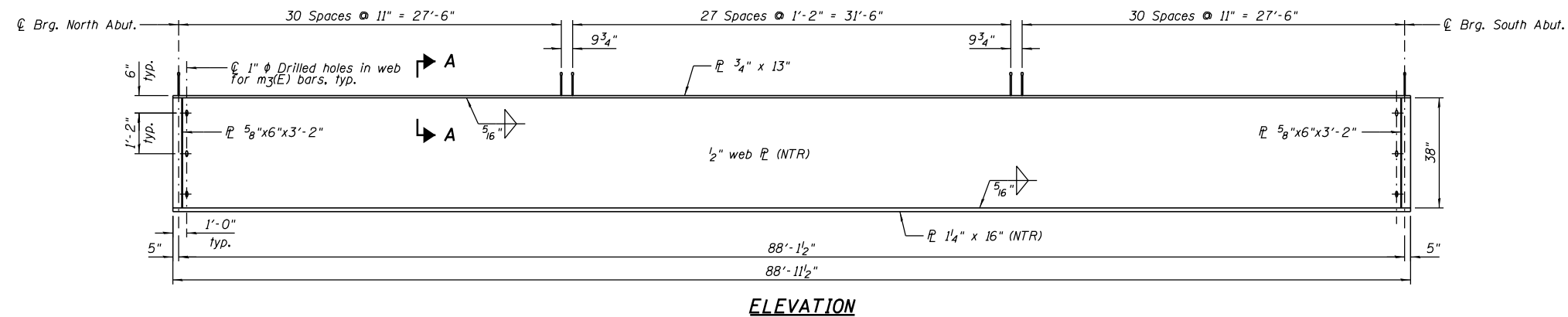
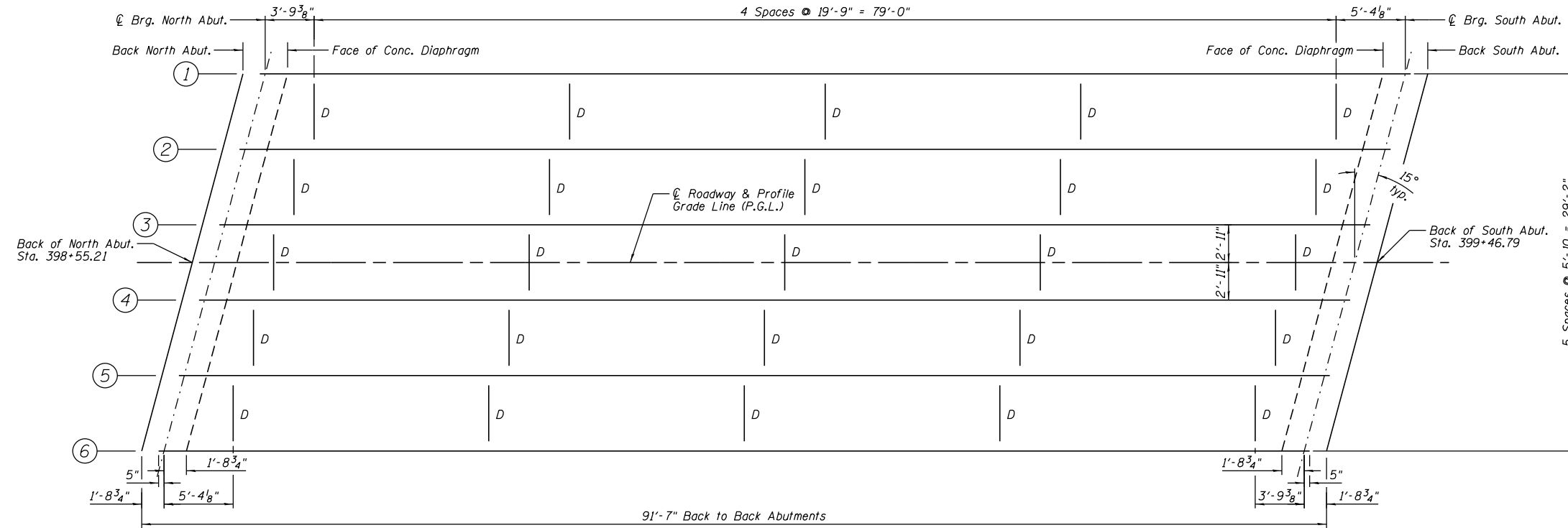
* Tilt #9 b3(E) bars as required to maintain clearance.

*** Cost included with Concrete Superstructure.

**TWO APPROACHES
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a3(E)	48	#6	6'-6"	—
a5(E)	50	#4	35'-3"	—
a6(E)	92	#5	34'-8"	—
b2(E)	56	#4	29'-6"	—
b3(E)	160	#9	29'-9"	—
b4(E)	8	#4	14'-8"	—
d(E)	68	#5	5'-7"	—
d2(E)	68	#5	7'-11"	—
e3(E)	32	#4	14'-8"	—
e4(E)	4	#8	14'-8"	—
t(E)	136	#4	10'-0"	—
w(E)	80	#5	34'-8"	—
Concrete Structures			Cu. Yd.	21.6
Concrete Superstructures			Cu. Yd.	105.9
Reinforcement Bars, Epoxy Coated			Pound	27,570

(Sheet 2 of 2)



FABRICATED TOP OF WEB ELEVATION TABLE						
Location	Girder No. 1	Girder No. 2	Girder No. 3	Girder No. 4	Girder No. 5	Girder No. 6
@ Brg. N. Abut.	755.26	755.36	755.45	755.44	755.35	755.24
@ Brg. S. Abut.	755.27	755.38	755.47	755.48	755.39	755.29

For fabrication use only.

NOTES:

- 1.) See Sheet B12 for Diaphragm and Bearing Stiffener Details.
- 2.) All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- 3.) Load carrying components designated "NTR" shall conform to the Impact Testing Requirements, Zone 2.
- 4.) All structural steel shall be AASHTO M270, Grade 50W.

INTERIOR GIRDER MOMENT TABLE		
0.5 Sp. 1		
I_s	(in ⁴)	12,802
$I_c(n)$	(in ⁴)	35,756
$I_c(3n)$	(in ⁴)	24,999
$I_c(cr)$	(in ⁴)	-
S_s	(in ³)	796
$S_c(n)$	(in ³)	1,109
$S_c(3n)$	(in ³)	1,011
$S_c(cr)$	(in ³)	-
DC1	(k/')	0.793
MDC1	('k)	770
DC2	(k/')	0.150
MDC2	('k)	146
DW	(k/')	0.267
MDW	('k)	259
$M\ddot{L} \cdot IM$	('k)	1,220
M_u (Strength I)	('k)	3,669
$\phi_r M_n$	('k)	5,159
f_s DC1	(ksi)	11.6
f_s DC2	(ksi)	1.7
f_s DW	(ksi)	3.1
f_s ($\ddot{L} \cdot IM$)	(ksi)	13.2
f_s (Service II)	(ksi)	33.6
$0.95R_n F_y$	(ksi)	47.5
f_s (Total/Strength I)	(ksi)	44.4
$\phi_r F_n$	(ksi)	-
V_f	(k)	25.3

INTERIOR GIRDER REACTION TABLE		
		Abut.
RDC1	(k)	35.7
RDC2	(k)	6.6
RDW	(k)	11.8
$R\ddot{L} \cdot IM$	(k)	78.9
RTotal	(k)	133

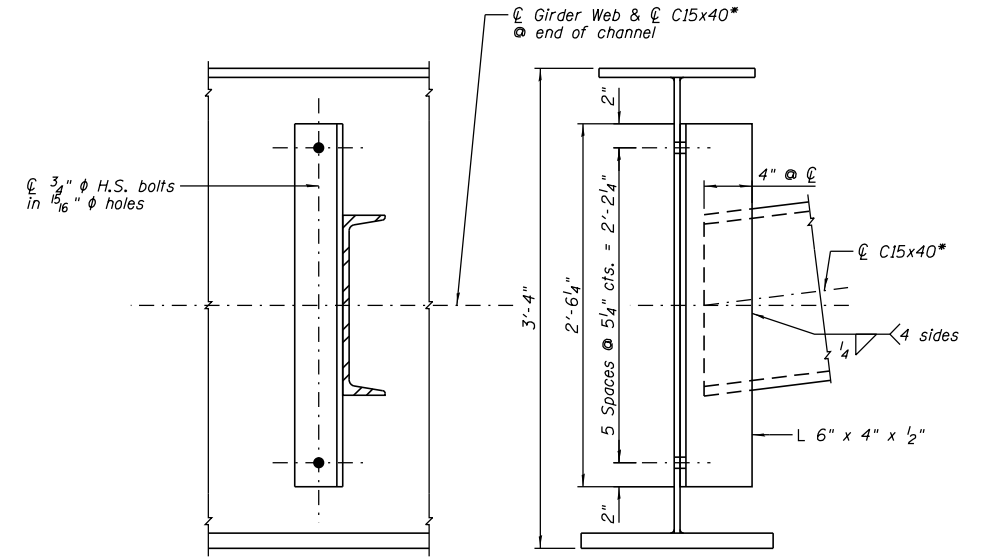
I_s, S_s : Non-composite moment of inertia and section modulus of the steel section used for computing f_s (Total-Strength I, and Service II) due to non-composite dead loads (in⁴ and in³).

$I_c(n), S_c(n)$: Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to short-term composite live loads (in⁴ and in³).

$I_c(3n), S_c(3n)$: Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing f_s (Total-Strength I, and Service II) in uncracked sections, due to long-term composite dead loads (in⁴ and in³).

$I_c(cr), S_c(cr)$: Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing f_s (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads (in⁴ and in³).

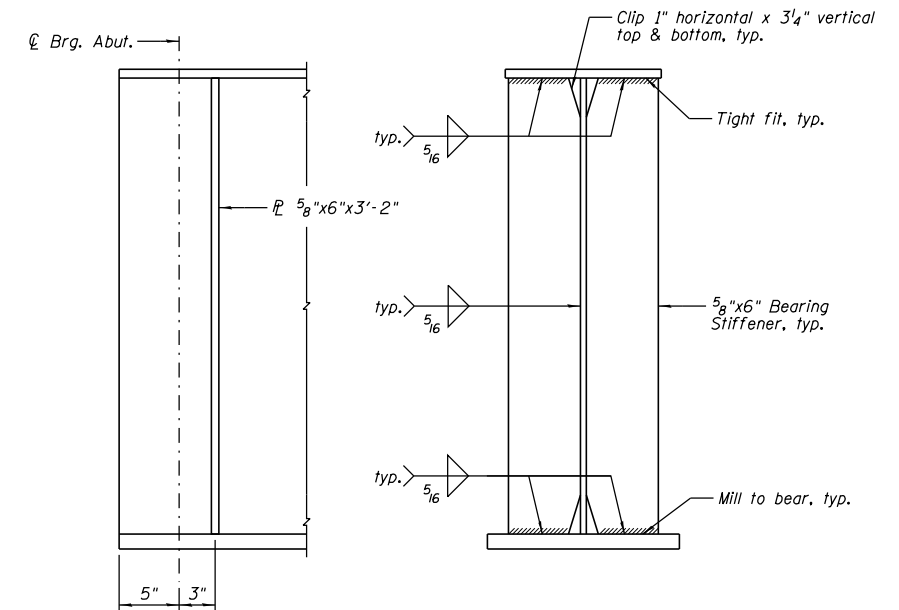
DC1: Un-factored non-composite dead load (kips/ft.).
MDC1: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 $M\ddot{L} \cdot IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_{\ddot{L} \cdot IM}$
 $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft.).
 f_s DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
 M_{DC1} / S_{nc}
 f_s DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
 $M_{DC2} / S_c(3n)$ or $M_{DC2} / S_c(cr)$ as applicable.
 f_s DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
 $M_{DW} / S_c(3n)$ or $M_{DW} / S_c(cr)$ as applicable.
 f_s ($\ddot{L} \cdot IM$): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live plus impact loads as calculated below (ksi).
 $M_{\ddot{L} \cdot IM} / S_c(n)$ or $M_{\ddot{L} \cdot IM} / S_c(cr)$ as applicable.
 f_s (Service II): Sum of stresses as computed below (ksi).
 $f_{sDC1} + f_{sDC2} + f_{sDW} + 1.3 f_s(\ddot{L} \cdot IM)$
 $0.95R_n F_y$: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).
 f_s (Total/Strength I): Sum of stresses as computed below on non-compact section (ksi).
 $1.25 (f_{sDC1} + f_{sDC2}) + 1.5 f_{sDW} + 1.75 f_s(\ddot{L} \cdot IM)$
 $\phi_r F_n$: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7.2 or 6.10.8 (ksi).
 V_f : Maximum factored shear range in span computed according to Article 6.10.10.



DIAPHRAGM D
(25 - Required)

NOTES:

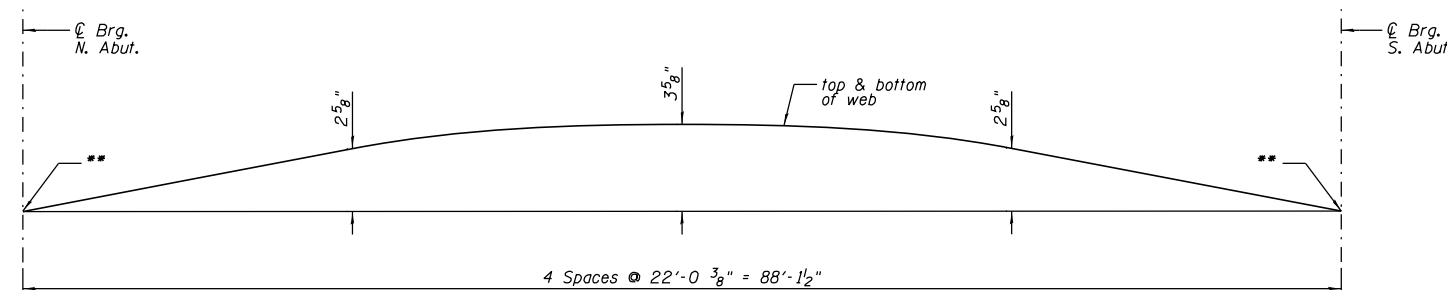
Two hardened washers required for each set of oversized holes.
*Alternate channels, C15x50, are permitted to facilitate material acquisition. Calculated weight of structural steel is based on C15x40 section. The C15x50, if utilized, shall be provided at no extra cost to the department.



SECTION AT ABUTMENT

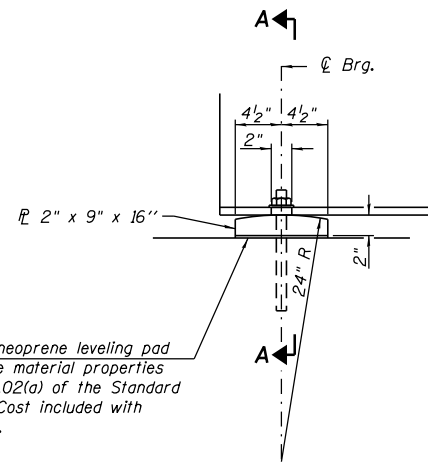
NOTES:

- See Sheet B11 for Diaphragm Locations.
- All diaphragms shall be installed as steel is erected and secured with erection pins and bolts. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Load carrying components designated "N.T.R." shall conform to the Impact Testing Requirements, Zone 2.
- All structural steel shall be AASHTO M270, Grade 50W.



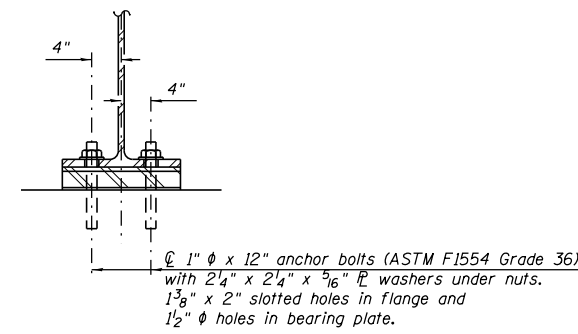
CAMBER DIAGRAM

**Final top of web elevations at abutment



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

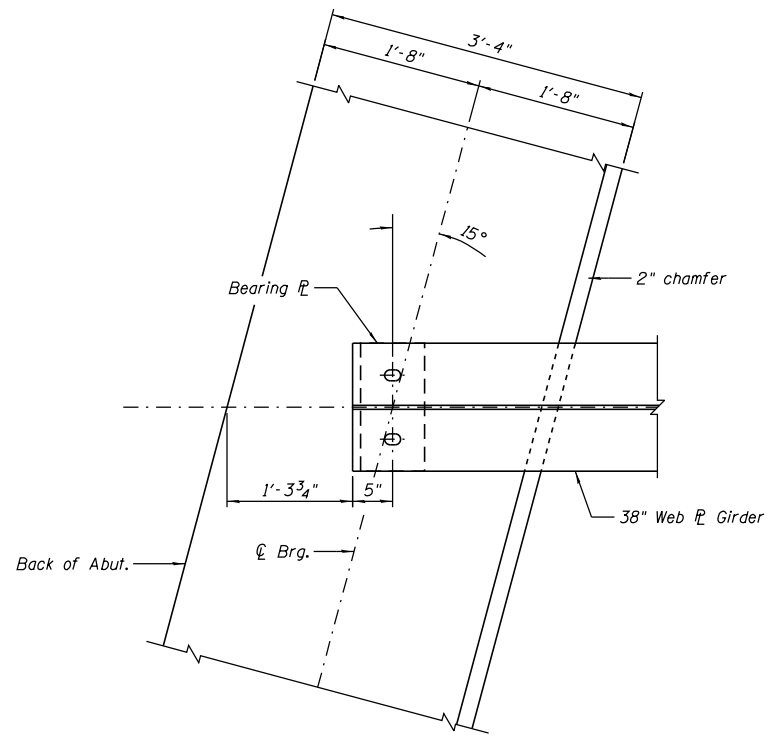
ELEVATION AT ABUTMENTS



SECTION A-A

FIXED BEARING

(At North Abutment - 6 Required)
(At South Abutment - 6 Required)



BEARING PLAN AT ABUTMENTS

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

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

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

All structural steel shall be AASHTO M270, Grade 50W.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	24

DESIGNED - TCR	REVISION
CHECKED - JML	REVISION
DRAWN - JWK	REVISION
CHECKED - MSW	REVISION
DATE - 08/11/15	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	52
				CONTRACT NO. 66994
ILLINOIS FED. AID PROJECT				

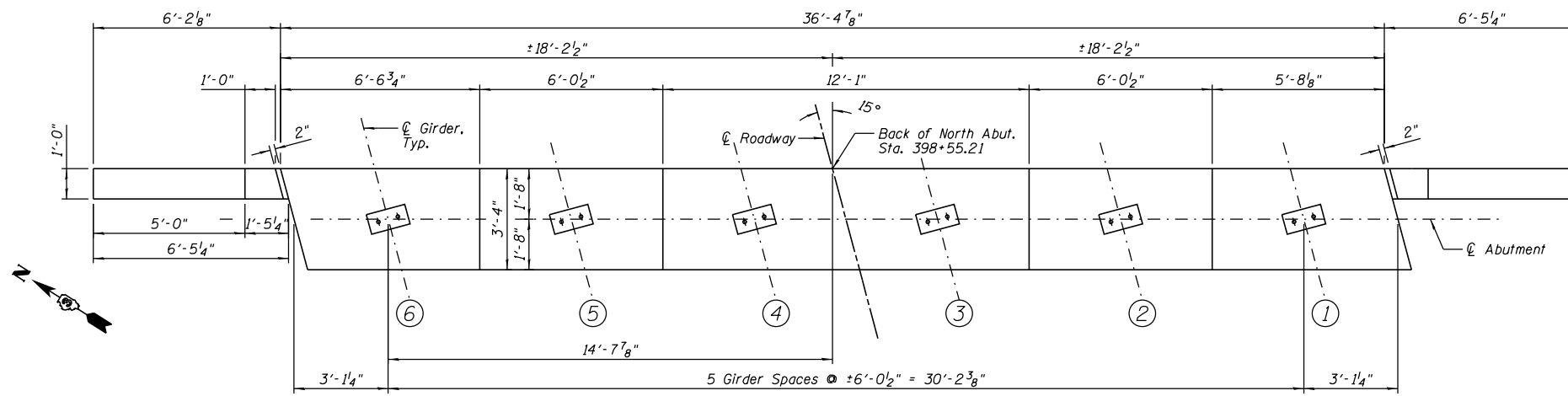
**NORTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	#5	7'-9"	—
h1(E)	4	#5	3'-2"	—
h2(E)	4	#5	5'-11"	—
p(E)	10	#7	35'-11'	—
sp2(E)	29	#5	13'-3"	□
s3(E)	12	#5	4'-0"	□
s4(E)	2	#5	13'-5"	□
u(E)	8	#6	10'-7"	—
u1(E)	4	#5	9'-2"	—
v1(E)	34	#8	5'-11"	—
v2(E)	34	#8	6'-2"	—
v3(E)	8	#5	7'-4"	—
v4(E)	10	#5	12'-7"	—

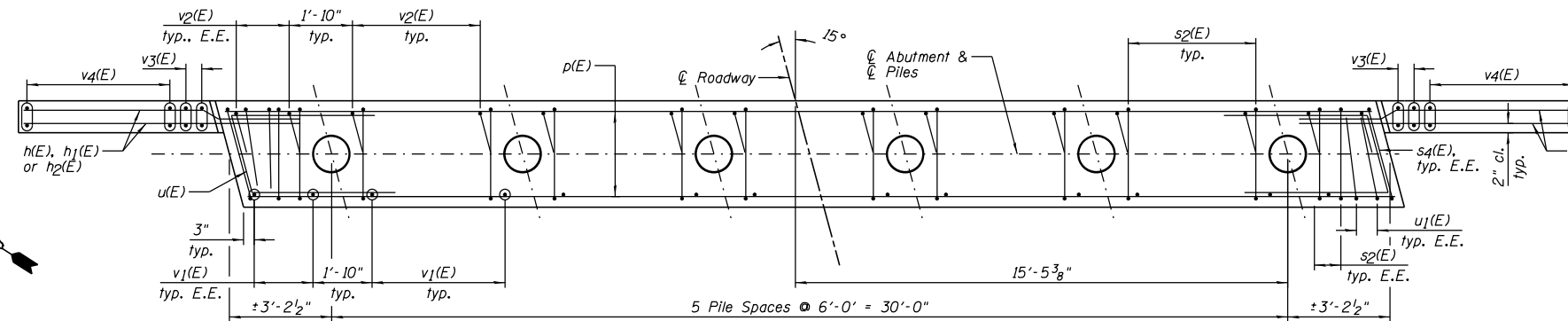
PILE DATA:

Pile Type and Size	Metal Shell - 14 in. dia. x 0.312 in. walls
Nominal Required Bearing	513 kips
Factored Resistance Available	282 kips
Estimated Pile Length	56 Feet
Number of Production Piles	5
Number of Test Piles	1

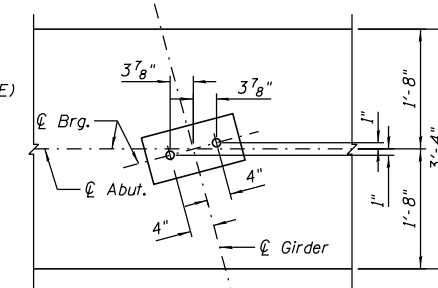
Item	Unit	Quantity
Structure Excavation	Cu. Yd.	124
Concrete Structures	Cu. Yd.	19.5
Reinforcement Bars, Epoxy Coated	Pound	2930
Furnishing Metal Shell Piles 14" x 0.312"	Foot	280
Driving Piles	Foot	280
Test Pile Metal Shells	Each	1
Geocomposite Wall Drain	Sq. Yd.	32
Pipe Underdrains for Structures 4"	Foot	86
Granular Backfill for Structures	Cu. Yd.	57



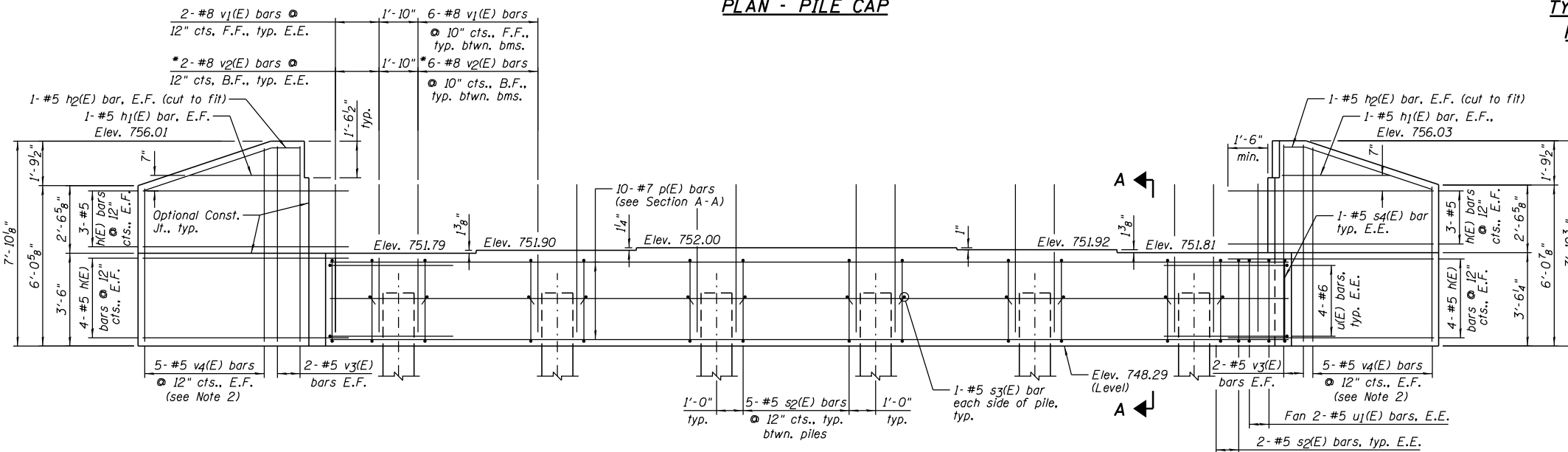
TOP VIEW ABUTMENT (SHOWING BEARING SEAT)



PLAN - PILE CAP

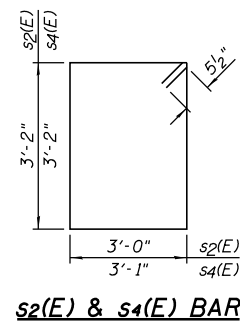


TYPICAL ANCHOR BOLT PLACEMENT DETAIL

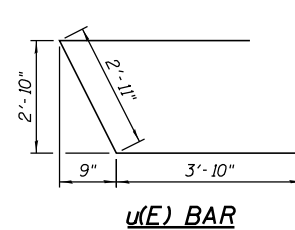


ELEVATION

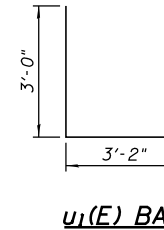
(Looking North)
*Place parallel to Girder



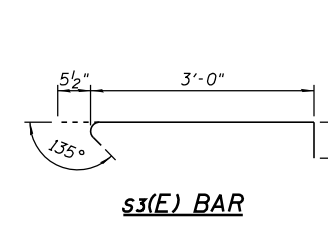
s2(E) & s4(E) BAR



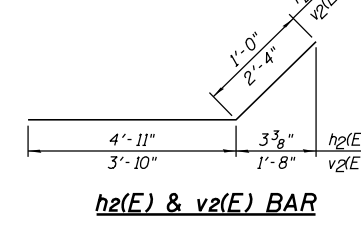
u(E) BAR



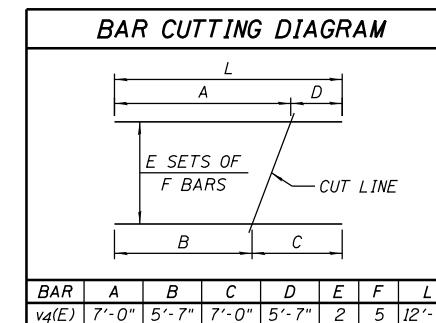
u1(E) BAR



s3(E) BAR



h2(E) & v2(E) BAR



BAR	A	B	C	D	E	F	L
v4(E)	7'-0"	5'-7"	7'-0"	5'-7"	2	5	12'-7"

NOTES:

- 1.) Pour steps monolithically with cap.
- 2.) Order v4(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of bars in opposite face of wingwall.
- 3.) Bend or cut h(E) bars to miss piles.
- 4.) E.E. denotes Each End, F.F. denotes Front Face, B.F. denotes Back Face and E.F. denotes Each Face.
- 5.) Piles shall be driven through 18" diameter precored holes extending to elevation 738.29 and backfilled with bentonite according to Article 512.09(c) of the Standard Specifications. Cost included in driving piles.
- 6.) For Details of Piles, See Sheet B16.

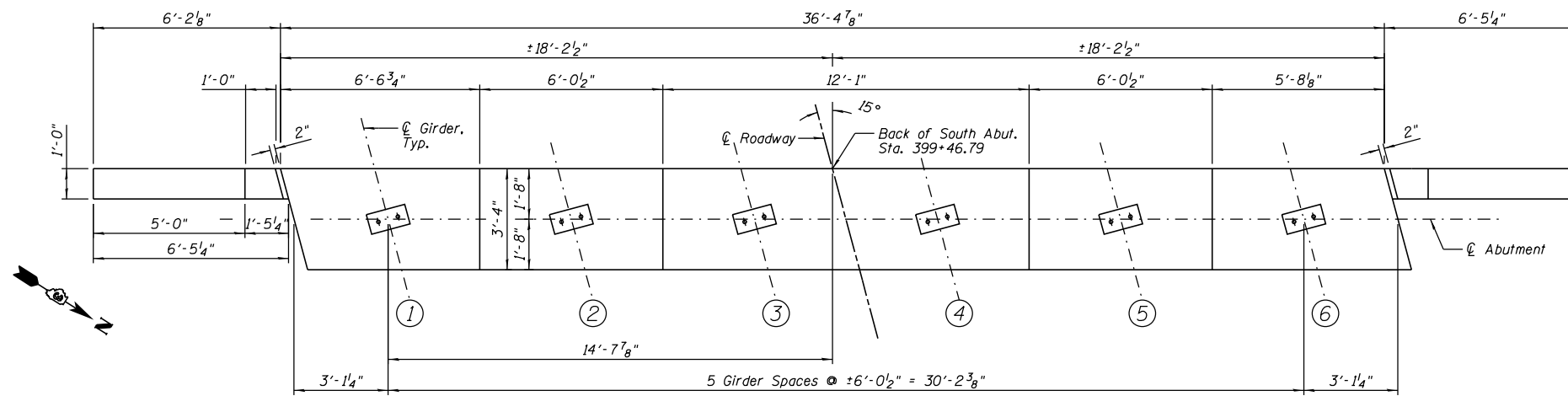
**SOUTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
h(E)	28	#5	7'-9"	—
h1(E)	4	#5	3'-2"	—
h2(E)	4	#5	5'-11"	—
p(E)	10	#7	35'-11"	—
sp2(E)	29	#5	13'-3"	—
s3(E)	12	#5	4'-0"	—
s4(E)	2	#5	13'-5"	—
u(E)	8	#6	10'-7"	—
u1(E)	4	#5	9'-2"	—
v1(E)	34	#8	5'-11"	—
v2(E)	34	#8	6'-2"	—
v3(E)	8	#5	7'-4"	—
v4(E)	10	#5	12'-7"	—

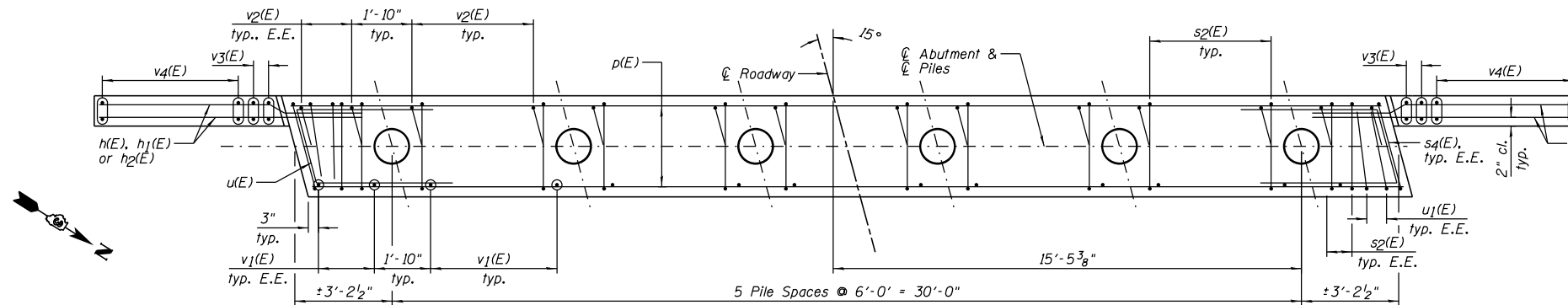
Item	Unit	Quantity
Structure Excavation	Cu. Yd.	124
Concrete Structures	Cu. Yd.	19.5
Reinforcement Bars, Epoxy Coated	Pound	2930
Furnishing Metal Shell Piles 14" x 0.312"	Foot	235
Driving Piles	Foot	235
Test Pile Metal Shells	Each	1
Geocomposite Wall Drain	Sq. Yd.	32
Pipe Underdrains for Structures 4"	Foot	86
Granular Backfill for Structures	Cu. Yd.	57

PILE DATA:

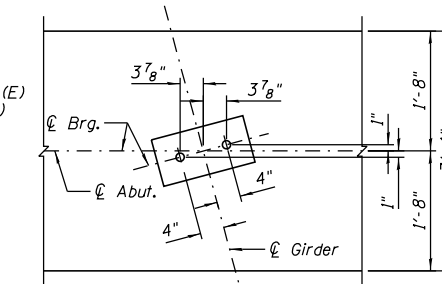
Pile Type and Size	Metal Shell - 14 in. dia. x 0.312 in. walls
Nominal Required Bearing	513 kips
Factored Resistance Available	283 kips
Estimated Pile Length	47 Feet
Number of Production Piles	5
Number of Test Piles	1



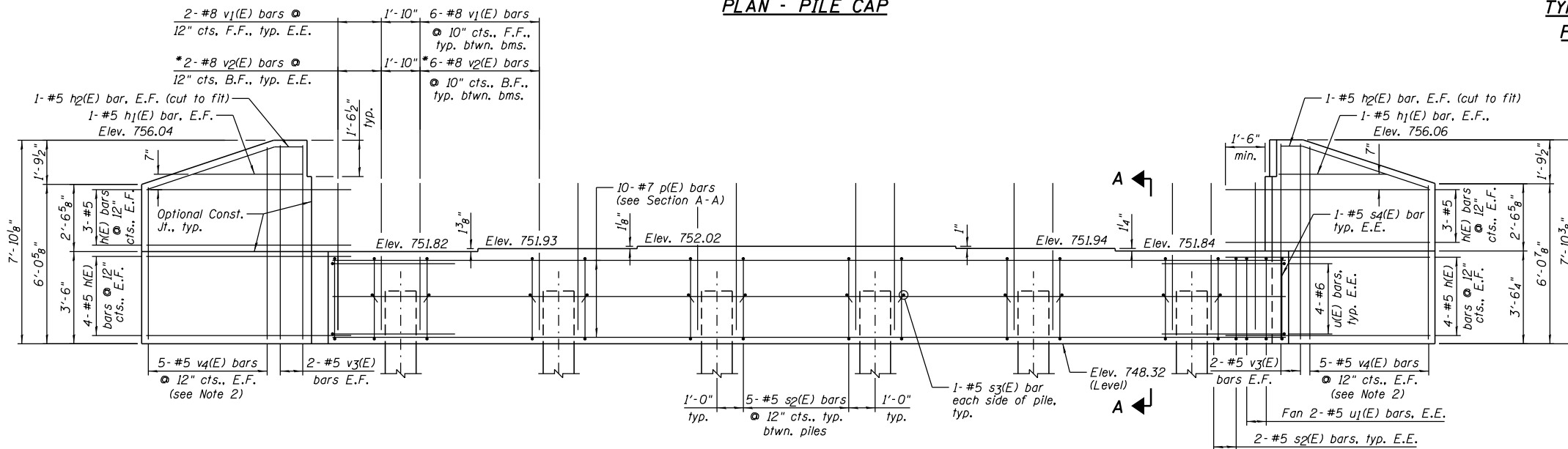
TOP VIEW ABUTMENT (SHOWING BEARING SEAT)



PLAN - PILE CAP

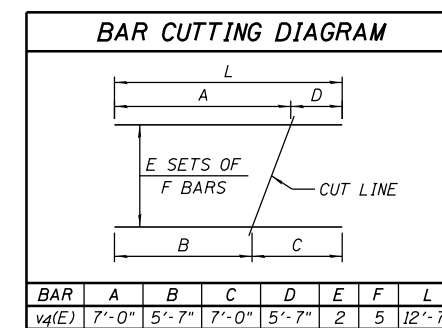
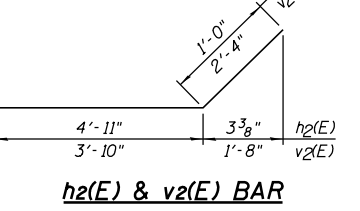
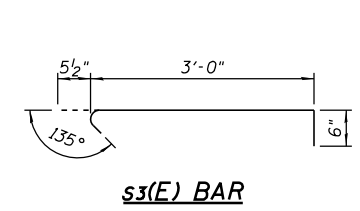
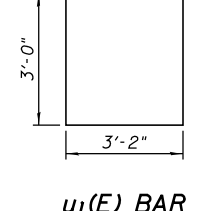
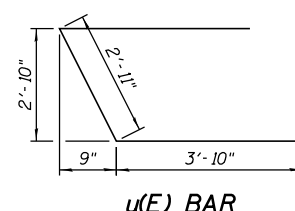
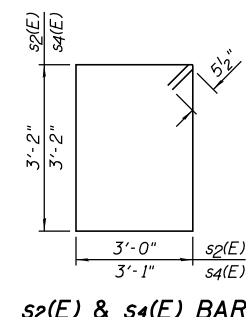


**TYPICAL ANCHOR BOLT
PLACEMENT DETAIL**



ELEVATION

(Looking South)
*Place parallel to Girder



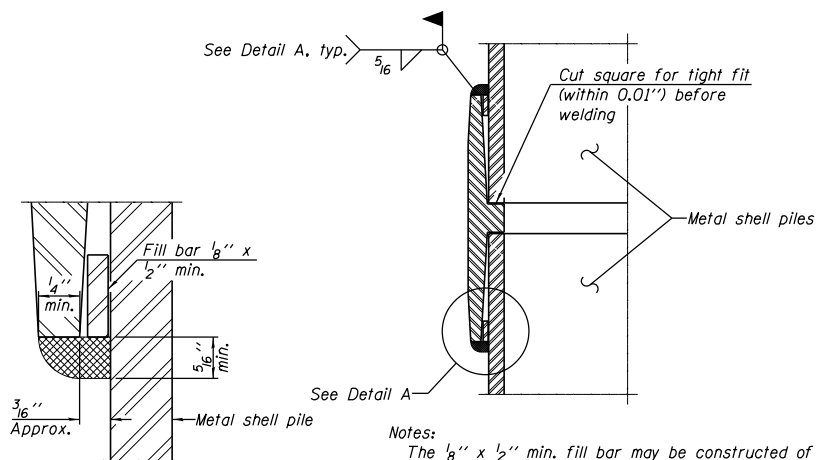
NOTES:

- 1.) Pour steps monolithically with cap.
- 2.) Order v4(E) bars full length. Cut according to Bar Cutting Diagram. Use remainder of bars in opposite face of wingwall.
- 3.) Bend or cut h(E) bars to miss piles.
- 4.) E.E. denotes Each End, F.F. denotes Front Face, B.F. denotes Back Face and E.F. denotes Each Face.
- 5.) For Details of Piles, see Sheet B16.



METAL SHELL PILE TABLE

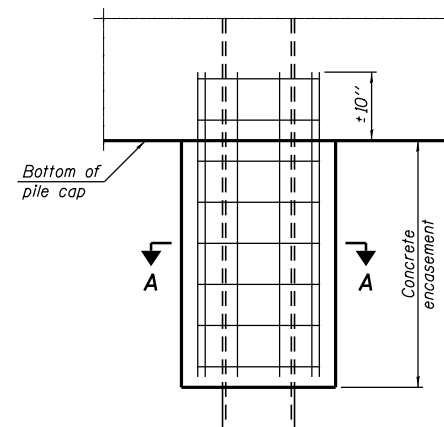
Designation and outside diameter	Wall thickness t	Weight per foot (Lbs./ft.)	Inside volume (yd. ³ /ft.)
PP12	0.179"	22.60	0.0274
PP12	0.250"	31.37	0.0267
PP14	0.250"	36.71	0.0368
PP14	0.312"	45.61	0.0361



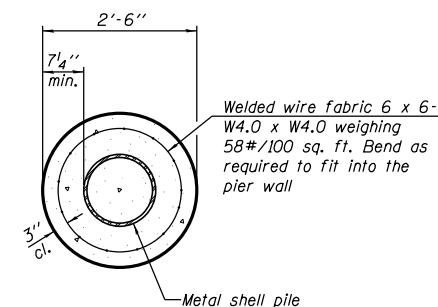
DETAIL A

WELDED COMMERCIAL SPLICE

Notes:
 The 1/8" x 1/2" min. fill bar may be constructed of 2 bars with a 1/8" max. gap between them.
 Pile segments shall be driven to solid contact with splicer before welding.



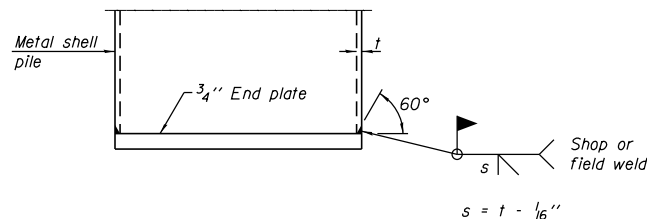
ELEVATION



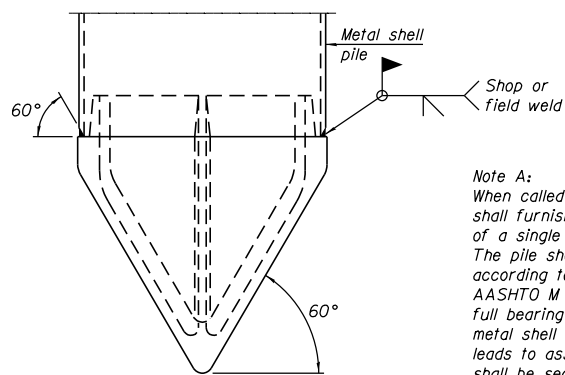
SECTION A-A

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

CONCRETE ENCASEMENT AT PIERS



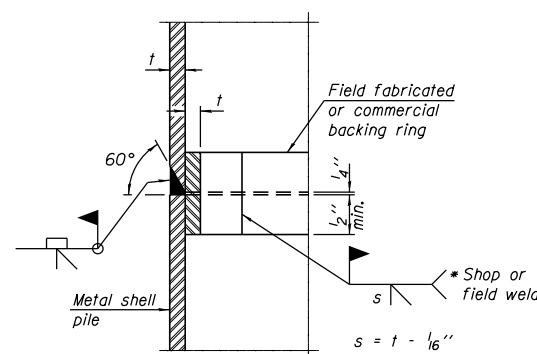
END PLATE ATTACHMENT



METAL SHELL PILE SHOE ATTACHMENT

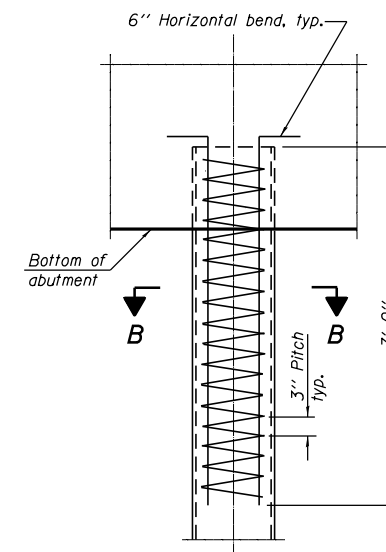
(See Note A)

Note A:
 When called for on the plans, the Contractor shall furnish metal shell pile shoes consisting of a single piece conical pile point as shown. The pile shoes shall be cast in one piece steel according to either ASTM A 148 Grade 90-60 or AASHTO M 103 Grade 65-35 and shall provide full bearing over the full circumference of the metal shell pile. The pile shoe shall have tapered leads to assure proper alignment and fitting and shall be secured to the pile with a circumferential weld.



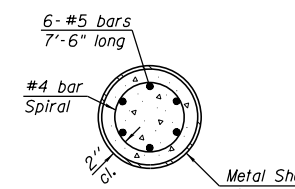
COMPLETE PENETRATION WELD SPLICE

* Field fabricated backing ring may be made from pile shell by removing segment to allow reducing circumference and vertically rejoin with partial joint penetration weld.



ELEVATION

METAL SHELL REINFORCEMENT AT ABUTMENTS



SECTION B-B

Note:
 The metal shell piles shall be according to ASTM A 252 Grade 3.

F-MS

1-27-12

DESIGNED - TCR	REVISED
CHECKED - JML	REVISED
DRAWN - JWK	REVISED
CHECKED - MSW	REVISED
DATE - 08/11/15	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	55
CONTRACT NO. 66994				



SOIL BORING LOG

Page 1 of 2

Date 8/25/09

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY L. Myers

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station	Offset	Ground Surface Elev.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. Stream Bed Elev.	Groundwater Elev.: First Encounter Upon Completion After Hrs.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Description		
														ft	ft	ft
027-0077 (Exist.) 399+10	1 (N.E. Quad.) 398+59	31.00ft Lt.	748.97					736.81 736.21	709.0 729.0							Augered Black & Brown Silty Clay Loam & Silty Loam Fill
				2						5	5.6	13.6				Hard Gray Silty Clay Loam Till
			746.47							7	S					
				2						5						
				3	3.0	18.2				5	5.0	13.5				Very Stiff Light Brown Silty Clay Loam Till
				3	P					7	S					
				-5						-25						
				3						5						
				4	3.9	16.2				7	6.8	15.3				
				6	B					9	S					
			741.97													
				4						9						
				5	4.0	15.9				11	7.0	15.1				
				6	B					14	S					Hard Gray Silty Clay Loam Till with Layers of Silty Loam/Silt @8'
				-10						-30						
				5						5						
				6	5.8	12.9				9	5.8	19.5				
				7	S					13	S					
			736.97													
				2						5						
				3	2.0	21.4				7	4.0	21.6				
				4	B					9	S					Stiff to Very Stiff Gray Clay Till
				-15						-35						
				2						4						
				3	2.1	21.0				6	4.0	23.4				
				4	B					9	S					
			731.97													
				1						6						
				1	1.0	21.6				7						
				3	P					10						
			728.97													
				-20						-40						

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)



SOIL BORING LOG

Page 2 of 2

Date 8/25/09

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY L. Myers

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station	Offset	Ground Surface Elev.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Surface Water Elev. Stream Bed Elev.	Groundwater Elev.: First Encounter Upon Completion After Hrs.	D E P T H (ft)	B L O W S (/6")	U C S Qu (tsf)	M O I S T (%)	Description		
														ft	ft	ft
027-0077 (Exist.) 399+10	1 (N.E. Quad.) 398+59	31.00ft Lt.	748.97					736.81 736.21	709.0 729.0							Medium Gray Fine Silty Sand and Silt with minor Clay (unconsolidated) (continued)
				4						10						Dense Gray Fine Sand/Coarse Gravel with free water (continued)
				5						17						
				7						22.7						
				5						687.47						End of Boring
			706.47													
				5						5						
				6	3.5	16.4				6	3.5	16.4				
				8	P					8	3.9	12.8				Very Stiff Gray Silty Clay Loam Till with Silt & Sand pockets
				6						11	S					
				-45						-65						
				6						8	3.9	12.8				
				8						11	S					
			701.97													
				6						6						
				9	7.4	12.2				9	7.4	12.2				Hard Gray Silty Clay Loam Till
				15	S					15	S					
				-50						-70						
				6						6						
				9	7.2	13.3				9	7.2	13.3				
				15	S					15	S					
			736.97													
				8						8						
				10	7.2	12.5				10	7.2	12.5				
				14	S					14	S					
				-55						-75						
				9						9						
				11	7.4	12.6				11	7.4	12.6				
				15	S					15	S					
			731.97													
				10						10						
				11	7.4	9.2				11	7.4	9.2				
				17	S					17	S					
			689.97													
				-60						-80						

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)



DESIGNED - TCR	REVISOR
CHECKED - JML	REVISOR
DRAWN - JWK	REVISOR
DATE - 08/11/15	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 027-0103

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	56
CONTRACT NO. 66994				

SHEET NO. B17 OF B20 SHEETS

ILLINOIS FED. AID PROJECT



Illinois Department of Transportation
Division of Highways
Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 2

Date 8/31/09

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY L. Myers

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 027-0077 (Exist.) Station 399+10	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOIST (%)	Surface Water Elev.	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOIST (%)
					736.81 ft				
Augered Black Silty Clay Loam Fill					Stiff to Very Stiff Gray Clay, Silt & Silty Clay with Fine Sand layers @ 23.5' with free water (continued)				
						wh			
748.57						2	1.5	21.5	
						3	P		
Stiff to Very Stiff Black Silty Clay Loam Fill						1			
						3	2.0	19.4	
						4	P		
-5									
					726.07				
744.57					Hard Gray Silty Clay Loam Till				
						3			
						6	4.6	13.8	
Stiff Gray & Brown Silty Clay Loam Till with layers of Silt						9	S		
						11	5.8	14.1	
						14	S		
-10									
					739.07				
Hard Gray Clay Till with minor Silt layers						10			
						11	6.6	13.2	
						15	S		
-15									
					716.57				
Hard Gray Clay Till with minor Silt layers						6			
						7	4.5	22.3	
						10	S		
-20									
					734.07				
Stiff to Very Stiff Gray Clay, Silt & Silty Clay with Fine Sand layers @ 23.5' with free water						6			
						8	4.6	19.1	
						11	S		

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

Page 2 of 2

Date 8/31/09

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY L. Myers

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 027-0077 (Exist.) Station 399+10	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOIST (%)	Surface Water Elev.	DEPTH (ft)	BLOW (/6")	UCS (tsf)	MOIST (%)
					736.81 ft				
Hard Gray Clay Till with Silt & Fine Sand layers @ 46' (continued)					Dense Gray Coarse Sand to Coarse Gravel				
						12			
689.57						21		14.1	
						33			
End of Boring									
-45									
					704.07				
Hard Gray Silty Clay Loam/Silty Loam Till						6			
						9	4.5	23.1	
						9	S		
-50									
					704.07				
Hard Gray Silty Clay Loam/Silty Loam Till						8			
						9	5.1	17.0	
						11	S		
-55									
					691.07				
Hard Gray Silty Clay Loam/Silty Loam Till						9			
						10	5.7	13.0	
						12	S		
-70									
					704.07				
Hard Gray Silty Clay Loam/Silty Loam Till						10			
						12	7.1	14.5	
						14	S		
-75									
					691.07				
Hard Gray Silty Clay Loam/Silty Loam Till						10			
						12	7.1	14.5	
						14	S		
-80									
					691.07				

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)



DESIGNED - TCR	REVISOR
CHECKED - JML	REVISOR
DRAWN - JWK	REVISOR
DATE - 08/11/15	REVISOR
CHECKED - MSW	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 027-0103

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	57
CONTRACT NO. 66994				

SHEET NO. B18 OF B20 SHEETS

ILLINOIS FED. AID PROJECT



SOIL BORING LOG

Date 3/6/80

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY W. Beck

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E, 3rd PM, Latitude, Longitude

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO.	Station	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev.	Stream Bed Elev.	D E P T H	B L O W S	U C S Qu	M O I S T
027-0077	399+10	(ft)	(/6")	(tsf)	(%)	744.57	ft	(ft)	(/6")	(tsf)	(%)
BORING NO. 01 (1980) (N.E. Quad.)						Groundwater Elev.:					
Station 398+40						First Encounter					
Offset 14.0 ft Lt.						Upon Completion					
Ground Surface Elev. 753.45 ft						After Hrs.					
Not Recorded						Very Stiff Gray Silty Clay Till (continued)					
751.45						731.95					
Very Stiff Yellow / Brown to Black Silty Clay Loam (Organic Material)						Loose Light Brown Coarse Sand (Water)					
749.45						730.45					
Stiff Yellow Brown to Black Silty Clay Loam						Stiff Gray Silty Clay Loam					
746.95						729.45					
Stiff Yellow Brown Sandy Clay (some Fine Gravel)						Hard Gray Silty Clay Till					
744.45						726.95					
Very Stiff Yellow / Brown Silty Clay Till						Very Stiff Gray Silty Clay Till					
739.45						724.45					
Note: Hit rock between 11.0' to 12.0' and auger angled off. Pulled auger up and moved rig. Augered back to sample depth.						Medium Gray Silty Clay Till					
736.95						721.95					
Stiff Light Olive Gray Silty Clay Till						Hard Gray Silty Clay Till					
736.95						719.45					
Very Stiff Gray Silty Clay Till						Very Stiff Gray Silty Clay Till					
714.45						714.45					
						Stiff Gray Silty Clay Till					

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, form 137 (Rev. 8-99)



SOIL BORING LOG

Date 3/6/80

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY W. Beck

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E, 3rd PM, Latitude, Longitude

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO.	Station	D E P T H	B L O W S	U C S Qu	M O I S T	Surface Water Elev.	Stream Bed Elev.	D E P T H	B L O W S	U C S Qu	M O I S T
027-0077	399+10	(ft)	(/6")	(tsf)	(%)	744.57	ft	(ft)	(/6")	(tsf)	(%)
BORING NO. 01 (1980) (N.E. Quad.)						Groundwater Elev.:					
Station 398+40						First Encounter					
Offset 14.0 ft Lt.						Upon Completion					
Ground Surface Elev. 753.45 ft						After Hrs.					
Stiff Gray Silty Clay Till (continued)						Stiff Gray Silty Loam					
711.95						709.45					
Very Stiff Gray Silty Clay						Very Stiff Olive / Gray Silty Clay Loam Till					
706.95						704.45					
Very Stiff Gray Silty Clay Till						End of Boring					
702.45											

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, form 137 (Rev. 8-99)



DESIGNED - TCR	REVISOR
CHECKED - JML	REVISOR
DRAWN - JWK	REVISOR
DATE - 08/11/15	REVISOR

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 027-0103

SHEET NO. B19 OF B20 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	58
CONTRACT NO. 66994			ILLINOIS FED. AID PROJECT	



SOIL BORING LOG

Date 3/7/80

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY W. Beck

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E, 3rd PM, Latitude, Longitude

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 027-0077 Station 399+10

BORING NO. 02 (1980) (S.E. Quad.) Station 399+90 Offset 15.0 ft Lt. Ground Surface Elev. 753.53 ft

Table with columns for Soil Description, Depth (ft), Blows (B), Unconfined Compressive Strength (UCS), and Moisture Content (M). Includes soil layers like 'Very Stiff Gray Silty Clay Loam' and 'Hard Gray Silty Clay Till'.

SOIL BORING 027-0077.GPJ_IL_DOT.GDT 7/6/15

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, form 137 (Rev. 8-99)



SOIL BORING LOG

Date 3/7/80

ROUTE FAP 71 (IL 54) DESCRIPTION IL 54 over Big Four Ditch, 7.6 miles North of IL 9 LOGGED BY W. Beck

SECTION 115 BR LOCATION N 1/2, SEC. 15, TWP. 24N, RNG. 8E, 3rd PM, Latitude, Longitude

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE

STRUCT. NO. 027-0077 Station 399+10

BORING NO. 02 (1980) (S.E. Quad.) Station 399+90 Offset 15.0 ft Lt. Ground Surface Elev. 753.53 ft

Table with columns for Soil Description, Depth (ft), Blows (B), Unconfined Compressive Strength (UCS), and Moisture Content (M). Includes soil layers like 'Very Stiff Gray Silty Clay' and 'Medium Gray Silty Loam'.

SOIL BORING 027-0077.GPJ_IL_DOT.GDT 7/6/15

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, form 137 (Rev. 8-99)



Table with columns for Designation (DESIGNED, CHECKED, DRAWN, DATE) and Name (TCR, JML, JWK, MSW).

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS STRUCTURE NO. 027-0103

SHEET NO. B20 OF B20 SHEETS

Table with columns for F.A.P. RTE., SECTION, COUNTY, TOTAL SHEETS, SHEET NO., and CONTRACT NO.

ILLINOIS FED. AID PROJECT

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

FOR
INFORMATION
ONLY

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES & TYPICAL SECTIONS
3. MISCELLANEOUS DETAILS
4. SUMMARY OF QUANTITIES
5. SA. SCHEDULE OF QUANTITIES
6. PLAN & PROFILE (114 BR)
7. PLAN & PROFILE (115 BR)
8. PLAN & PROFILE (115 BR-1)
- 9A. DETOUR DETAILS
9. CHANNEL RELOCATION (114 BR)
- 10-23. BRIDGE PLANS (114 BR)
- 24-29. BRIDGE PLANS (115 BR)
- 30-33. CULVERT PLANS (115 BR-1)
- 34-41. CROSS SECTIONS

STANDARDS

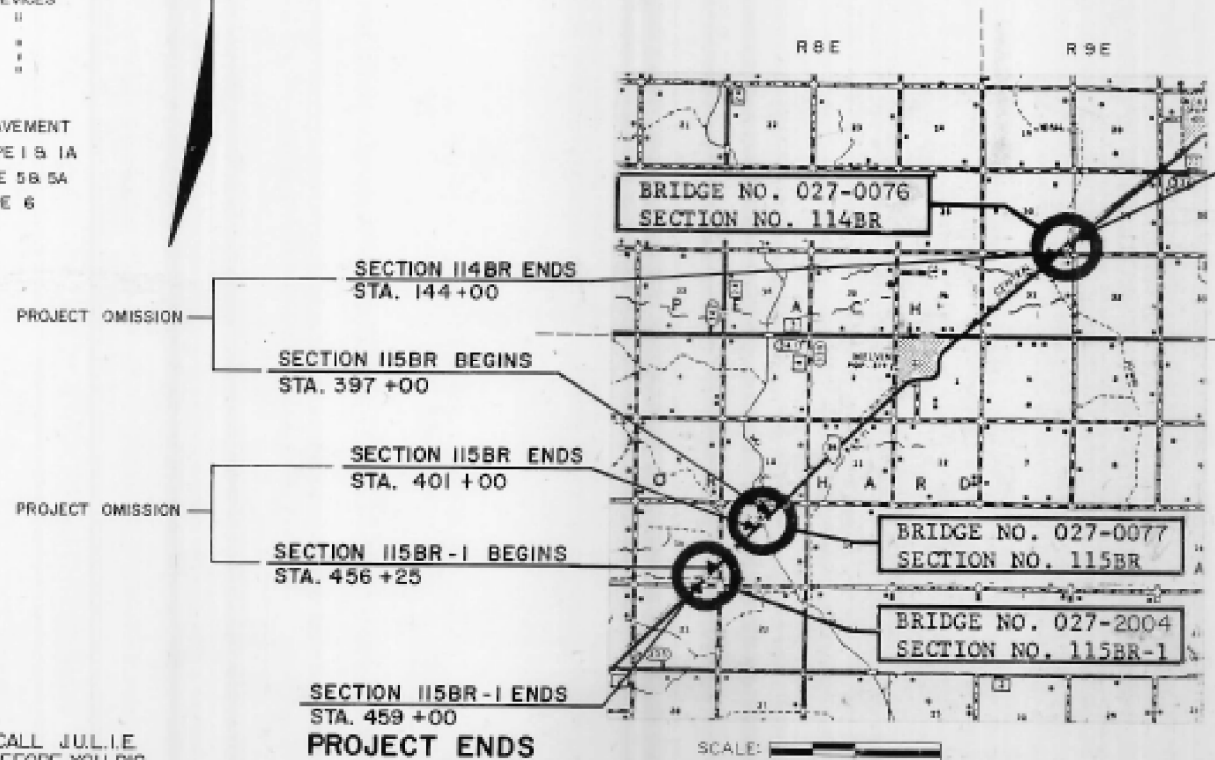
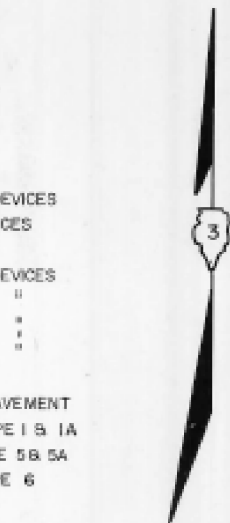
- | | |
|---------|---|
| 1696-4 | SYMBOLS AND ABBREVIATIONS |
| 1744-4 | RIGHT-OF-WAY MARKERS |
| 2113-2 | NAME PLATE |
| | |
| 2230-14 | STEEL PLATE BEAM GUARDRAIL |
| 2298-7 | TYP. APPL. OF TRAFFIC CONTROL DEVICES |
| 2299-10 | DESIGN OF TRAFFIC CONTROL DEVICES |
| 2300-3 | FLAGMAN TRAFFIC CONTROL SIGN |
| 2301-5 | TYP. APPL. OF TRAFFIC CONTROL DEVICES |
| 2302-5 | " " " " " " |
| 2303-5 | " " " " " " |
| 2304-5 | " " " " " " |
| 2305-5 | " " " " " " |
| 2306-5 | " " " " " " |
| 2307-5 | " " " " " " |
| | |
| 2323-8 | PAVEMENT JOINTS |
| 2324-6 | BRIDGE APPROACH SHOULDER PAVEMENT |
| 2336-4 | TRAFFIC BARRIER TERMINAL - TYPE I & IA |
| 2340-4 | TRAFFIC BARRIER TERMINAL - TYPE 5B & 5A |
| 2341-1 | TRAFFIC BARRIER TERMINAL - TYPE 6 |
| 2360-3 | BRIDGE APPROACH PAVEMENT |
| 2382-2 | BRIDGE APPROACH PAVEMENT |

AS BUILT PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

SCALES
PLAN 1 in. = 50 feet
PROFILE HOR. 1 in. = 50 feet
PROFILE VERT. 1 in. = 5 feet
CROSS-SECTIONS HOR. 1 in. = 10 feet
VERT. 1 in. = 5 feet

FAP ROUTE 71 (ILL. 54)
SECTION 114BR, 115BR & 115BR-1
PROJECT ACBRF-71 (26)
FORD COUNTY

C-93-054-87



PROJECT BEGINS
SECTION 114BR BEGINS
STA. 139+00

SECTION 114BR
INCLUDES REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A 91'-0" BK-BK SINGLE SPAN WIDE FLANGE BEAM STRUCTURE WITH REINFORCED CONCRETE DECK AND R.C. PILE BENT ABUTMENTS. ROUTE 54 OVER E. BR. VERMILION RIVER AT STA. 141+03.

SECTION 115BR
INCLUDES REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A 84'-4 1/2" BK-BK SINGLE SPAN PRECAST PRESTRESSED CONCRETE DECK BEAM STRUCTURE WITH R.C. PILE BENT ABUTMENTS. ROUTE 54 OVER TRIBUTARY OF WEST BRANCH VERMILION RIVER AT STA. 399+01.

SECTION 115BR-1
INCLUDES REMOVAL OF EXISTING STRUCTURE AND REPLACEMENT WITH A DOUBLE 9'-0" x 8'-0" CONCRETE BOX CULVERT, ROUTE 54 OVER W. BR. VERMILION RIVER AT STATION 457+70.

SCALE: 0 5 2 MILES

NET LENGTH OF SECTIONS = 114BR 500 FT. = 0.095 MILES
115BR 400 FT. = 0.076 MILES
115BR-1 275 FT. = 0.052 MILES
NET LENGTH OF PROJECT = 1175 FT. = 0.223 MILES

CALL JULIE BEFORE YOU DIG
800-892-0123

42952

SQUAD CHIEF: F MAURY

FORD COUNTY SECTION 114BR 115BR 115BR-1 ROUTE FAP 71 (ILL 54)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED: 9/23/97 BY: [Signature] DISTRICT ENGINEER

DESIGNED: 9/27/97 BY: [Signature] DISTRICT ENGINEER

CHECKED: 10/27/97 BY: [Signature] DISTRICT ENGINEER

APPROVED: 11/27/97 BY: [Signature] DISTRICT ENGINEER

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED: [Signature] DIVISION ENGINEER DATE: [Date]

FILE NAME: pw\11084EBIDINTEG.illinois.gov\PIW001\Documents\DOT Offices\District 3\Projects\0366\Drawings\0366\0366994-sht-Exist\REVISED	USER NAME: Schwankerg	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS S.N. 027-0077	F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:	
	PLOT SCALE: 100.0000' / in.	CHECKED: -	REVISED: -			71	(115BR, BR-1C, BR-4)	FORD	158	60	
	PLOT DATE: 8/11/2015	DATE: -	REVISED: -			CONTRACT NO. 66994					
						SCALE:	SHEET OF SHEETS:	STA. TO STA.:	ILLINOIS FED. AID PROJECT		

FOR INFORMATION ONLY

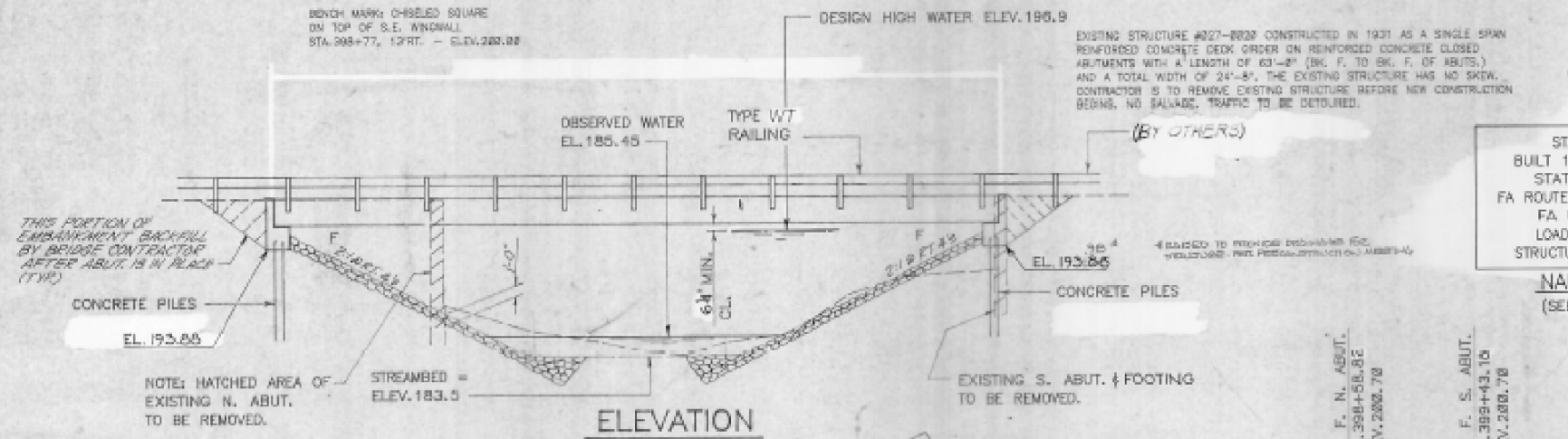
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FA 71	115BR	FORD	41	24
FED. AID PROJ. NO.	ILLINOIS	FED. AID PROJECT		

P-93-048-79 SHEET NO. 1
OF 6 SHEETS

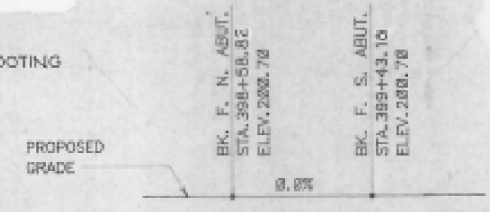
GENERAL NOTES

SEE PROPOSAL FOR BORING DATA.
REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. M-31, M-42 OR M-53, GRADE 60.
PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD 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 THE SCOPE OF THE WORK, HOWEVER THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
THE TOP SURFACE OF THE BEAMS SHALL BE FINISHED IN ACCORDANCE WITH ARTICLE 505.06 OF THE STANDARD SPECIFICATIONS EXCEPT THAT THE SURFACE SHALL NOT BE ROUGHENED BY BROOMING. THE FINISHED SURFACE SHALL BE FREE OF DEPRESSIONS OR HIGH SPOTS WITH SHARP CORNERS.
A CALCIUM NITRITE CORROSION INHIBITOR, AS COVERED IN THE PROVISIONS, SHALL BE USED IN THE CONCRETE FOR PRECAST PRESTRESSED CONCRETE DECK BEAMS.
LAYOUT OF RIPRAP MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER.
THE CONTRACTOR SHALL DRIVE ONE CONCRETE TEST PILE IN A PERMANENT LOCATION AT EACH ABUTMENT AS DIRECTED BY THE ENGINEER BEFORE ORDERING THE REMAINDER OF THE PILES.



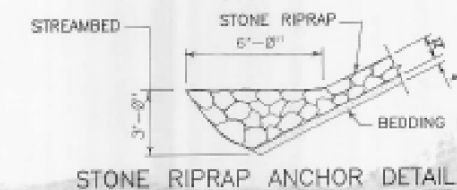
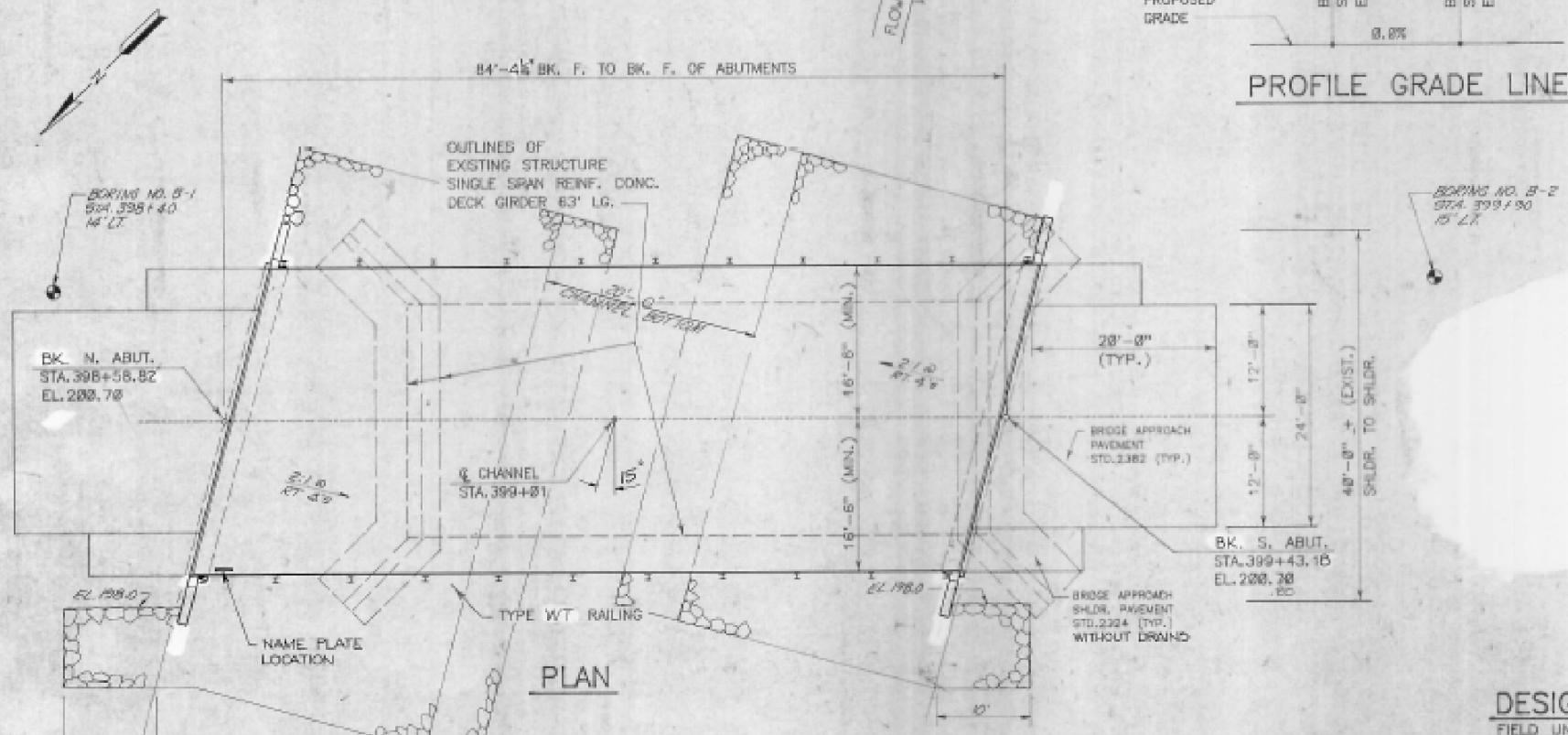
STA. 399+01.00
BUILT 1988 BY
STATE OF ILLINOIS
FA ROUTE 71 SECTION 115BR
FA PROJECT #27-002
LOADING HS 20
STRUCTURE NO. #27-0077
NAME PLATE
(SEE STD. 2113)

PROFILE GRADE LINE



TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
REMOVAL OF EXISTING STRUCTURES 110 2	EA.	1	-	1
PRECAST PRESTRESSED CONCRETE DECK BEAMS - 33 INCH	S.F.	2682	-	2682
CLASS X CONCRETE	C.Y.	-	36.4	36.4
STEEL RAILING TYPE WT	L.F.	162	-	162
REINFORCEMENT BARS	LBS.	-	4,395	4,395
CONCRETE PILES	L.F.	-	510	510
TEST PILES (CONCRETE)	EA.	-	2	2
NAME PLATES	EA.	1	-	1
BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TONS	36	-	36
FORTLAND CEMENT RIPRAP FINISH COURSE	L.F.	813	-	813
WATERPROOFING MEMBRANE SYSTEM	S.Y.	298	-	298
STONE RIPRAP	S.Y.	-	490	490
STRUCTURE EXCAVATION	C.Y.	-	635	635
CLASS X CONCRETE SUPERSTRUCTURE	C.Y.	9	-	9



I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF, THIS BRIDGE DESIGN IS STRUCTURALLY ADEQUATE FOR THE DESIGN LOADING SHOWN ON THE PLANS. THE DESIGN IS AN ECONOMICAL ONE FOR THE STYLE OF STRUCTURE AND COMPLIES WITH REQUIREMENTS OF THE CURRENT A.A.S.H.T.O. STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES. FOR BARRIENTOS & ASSOC. INC.

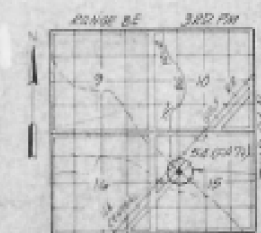


WATERWAY INFORMATION

DRAINAGE AREA 32.9 SQ. MI.		LOW GRADE ELEV. 200.46 @ STA. 397+88		HEAD - FT.		HEADWATER EL.	
FLOOD	FREQ. YR.	Q C.F.S.	OPENING SQ. FT. EXIST. PROP.	NAT. H.W.E.	EXIST.	PROP.	EXIST. PROP.
DESIGN	50	2690	485 629	196.9	0.00	0.00	196.90 196.90
BASE	100	3067	486 653	197.2	0.00	0.00	197.20 197.20
OVERTOPPING							
MAX. CALC.	500	3924	676	197.5	0.00	0.00	197.50

DESIGN STRESSES

FIELD UNITS
f_c = 3,500 P.S.I.
f_y = 60,000 P.S.I. (REINFORCEMENT)
PRECAST PRESTRESSED UNITS
f_c = 5,000 P.S.I.
f_{ci} = 4,000 P.S.I.
f_a = 278,000 P.S.I. (1/2" DIA. STRANDS)
f_{ai} = 189,000 P.S.I. (1/2" DIA. STRANDS)
LOADING HS 20-44
ALLOW 25 P.S.F. FOR FUTURE WEARING SURFACE
DESIGN SPECIFICATIONS: 1983 A.A.S.H.T.O. AND 1984 & 1985 INTERIM SPECIFICATIONS



LOCATION SKETCH
GENERAL PLAN AND ELEVATION
ILLINOIS RTE. 54 OVER BIG FOUR
DRAINAGE DITCH (W. BRANCH VERMILION R.)
FA ROUTE 71
SECTION 115 BR
FORD COUNTY
STATION 399+01
STRUCTURE NO. 027-0077 (NEW)

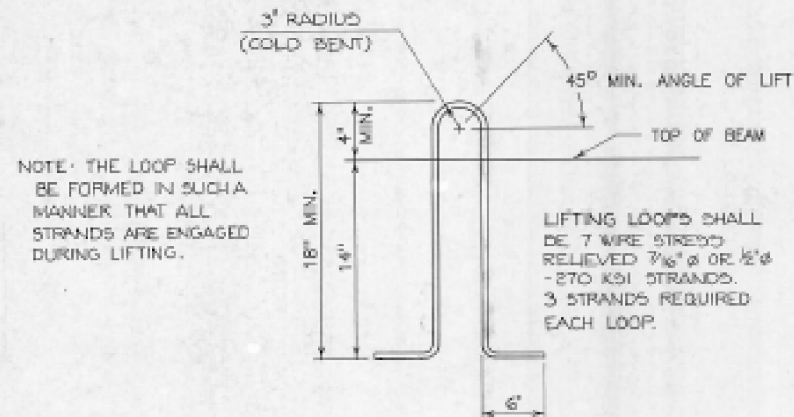
APPROVED
James J. Rayburn

FOR INFORMATION ONLY

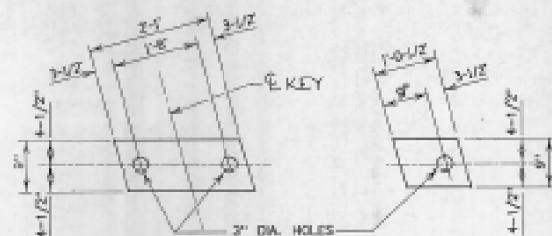
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOTE NO.	SECTION	DATE	TOTAL SHEETS	SHEET NO.
FA 71	115BR	FORD	41	25

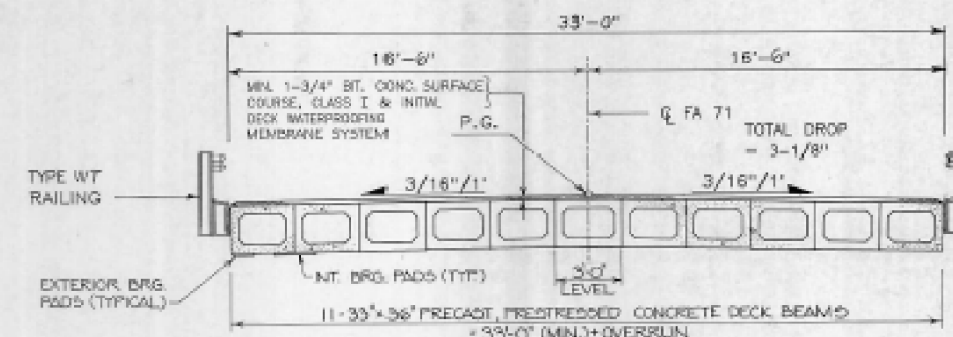
SHEET NO. 2
OF SHEETS



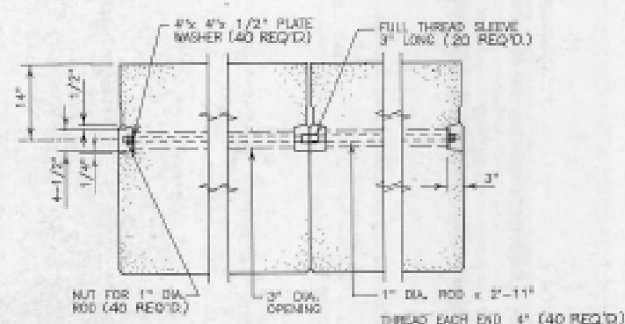
DETAIL OF LIFTING LOOP



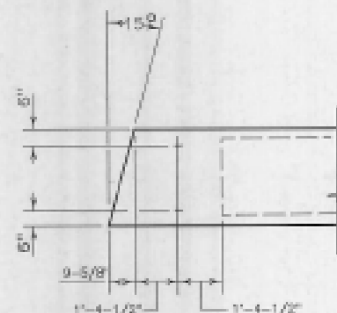
INTERIOR EXTERIOR
1/2" FABRIC BEARING PAD



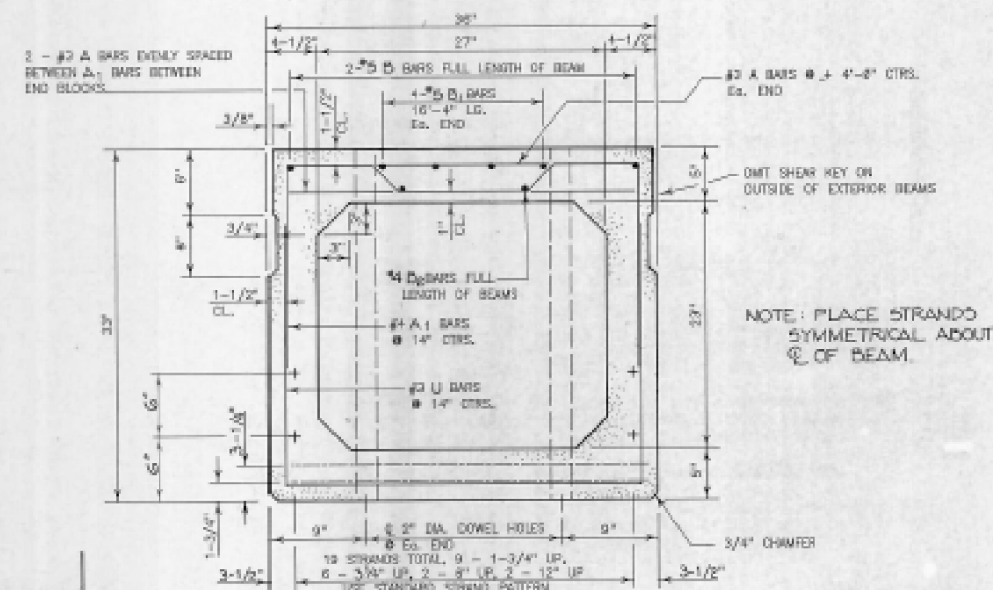
CROSS SECTION



TYPICAL TRANSVERSE TIE ASSEMBLY

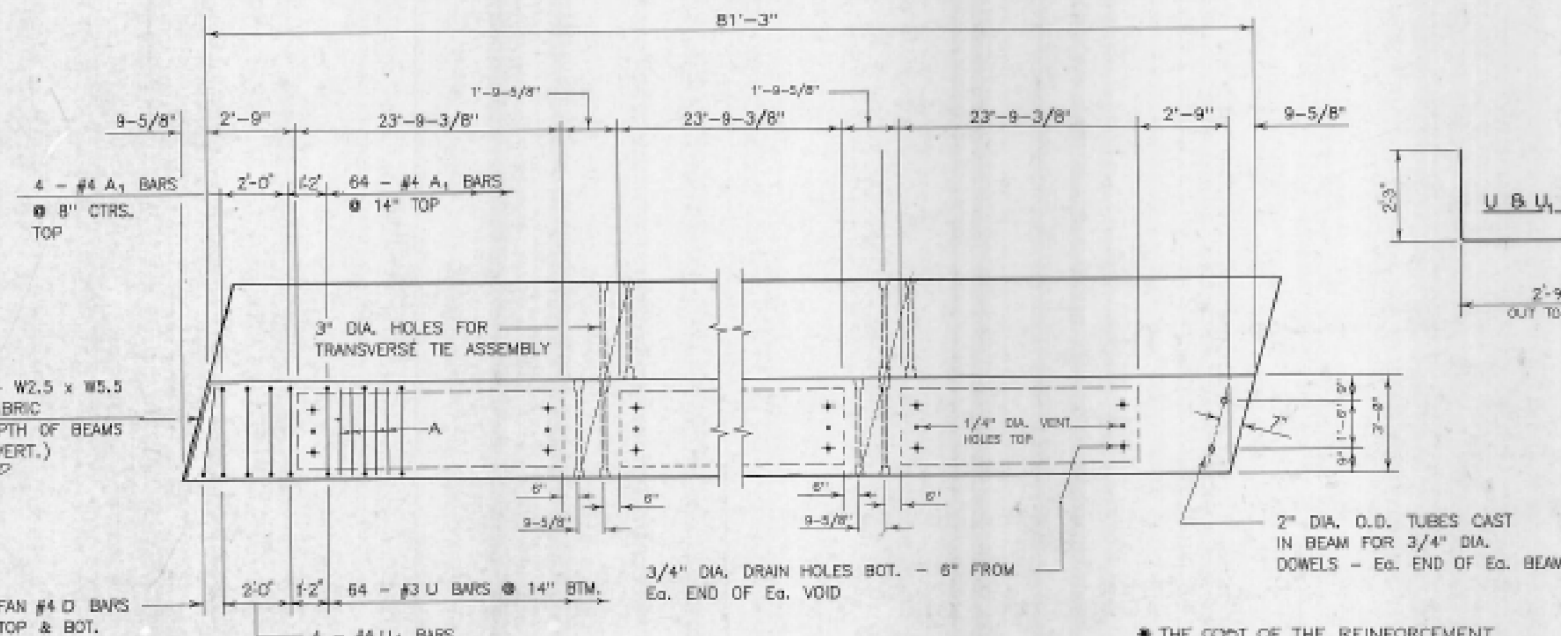


PLAN OF END OF BEAM SHOWING LOCATION OF LIFTING LOOPS



TYPICAL SECTION THRU 33" x 36" BEAM

1/2" DIA. STRANDS - EACH STRAND STRESSED TO 28,900 LBS.

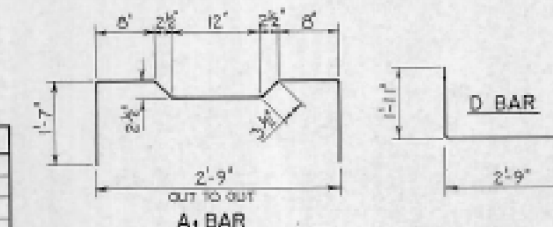


PLAN

*** BILL OF MATERIAL**

BAR	NO	SIZE	LENGTH	SHAPE
A	1,386	#3	2'-9"	U
A1	792	#4	6'-1"	U
B	44	#5	4'-7"	U
B1	88	#5	16'-4"	U
B2	44	#4	4'-4"	U
D	88	#4	4'-8"	U
U	704	#3	7'-3"	U
U1	88	#4	7'-3"	U
PRECAST, PRESTRESSED CONC. DECK BEAMS (33")			SQ. FT.	2,682
CLASS "X" CONCRETE SUPERSTRUCTURE			CU. YD.	9

* THE COST OF THE REINFORCEMENT BARS IS TO BE INCLUDED IN THE LIMIT PRICE BID FOR "PRECAST PRESTRESSED CONCRETE DECK BEAMS"



SUPERSTRUCTURE ILLINOIS ROUTE 54 FA ROUTE 71 OVER BIG FOUR DRAINAGE DITCH SECTION 115 BR FORD COUNTY

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
pw\11084EBIDINTEG\illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0366\Drawings\0366\0366994-sht-Exist\0366994-01.dwg		CHECKED -	REVISED -
		DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
S.N. 027-0077

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	63
				CONTRACT NO. 66994
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIST. NO.	SECTION	COUNTY	SHEET NO.	TOTAL SHEETS
FA 71	115BR	FORD	41	26
FED. ROAD DIST. NO.	ILLINOIS	FED. PROJ. NO.		

SHEET NO. 3
OF 6 SHEETS

GENERAL NOTES

PRESTRESSING STEEL SHALL BE NON-GALVANIZED HIGH STRENGTH, STRESS-RELIEVED 7-WIRE STRAND, GRADE 270.

THE NOMINAL DIAMETER SHALL BE 1/2" AND THE NOMINAL CROSS-SECTIONAL AREA SHALL BE 0.153 SQ. IN.

LIFTING LOOPS SHALL BE 7 WIRE STRESS RELIEVED STRANDS 3/16" OR 1/8" - 270 KSI STRANDS. 3 STRANDS REQ'D. EACH LOOP

REINFORCEMENT BARS SHALL CONFORM TO AASHTO M-31, M-42 OR M-53, GRADE 60.

THE BEARING SEAT SURFACES SHALL BE ADJUSTED BY SHIMMING TO ASSURE FIRM AND EVEN BEARING, TWO 1/8" FABRIC ADJUSTING SHIMS OF THE DIMENSIONS OF THE EXTERIOR BEARING PAD SHALL BE PROVIDED FOR EACH BEARING.

ALL TRANSVERSE TIE-ASSEMBLIES (NUTS, BOLTS AND WASHERS) FOR THE CONCRETE DECK SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH AASHTO DESIGNATION M232.

THE 1" DIA. RODS IN THE TRANSVERSE TIE ASSEMBLY SHALL BE TIGHTENED TO A SNUG FIT AND THE THREADS SET. POCKETS THAT RECEIVE TRANSVERSE TIE BARS ON OUTSIDE GIRDERS SHALL BE FILLED W/ GROUT AFTER TRANSVERSE TIE ASSEMBLY IS IN PLACE.

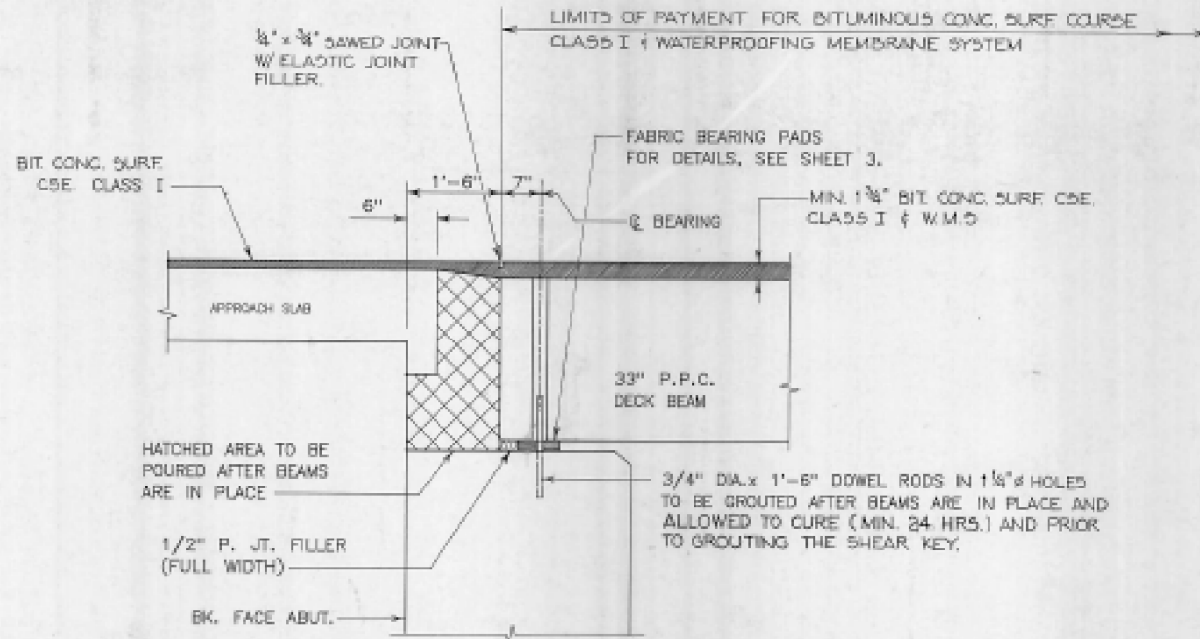
COST OF REINFORCEMENT AND ACCESSORIES CAST INTO THE BEAM, OF BEARING PADS, OF DOWEL RODS, AND OF GROUTING LONGITUDINAL SHEAR KEYS IS INCLUDED IN UNIT PRICE BID FOR "PRECAST PRESTRESSED CONCRETE DECK BEAMS."

KEYWAY SURFACES SHALL BE CLEANED TO REMOVE FORM OIL OR OTHER BOND BREAKING MATERIAL PRIOR TO SHIPMENT OF BEAMS. CLEANING SHALL BE DONE BY SANDBLASTING THE KEYWAY AREAS BETWEEN THE TOP OF BEAM AND THE BOTTOM EDGE OF THE KEY.

A CALCIUM NITRITE CORROSION INHIBITOR, AS COVERED IN THE SPECIAL PROVISIONS, SHALL BE USED IN THE CONCRETE FOR PRECAST PRESTRESSED CONCRETE DECK BEAMS.

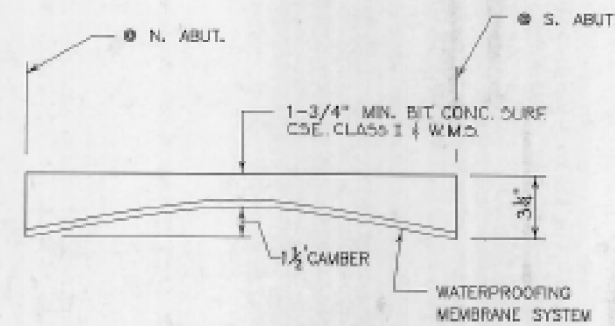
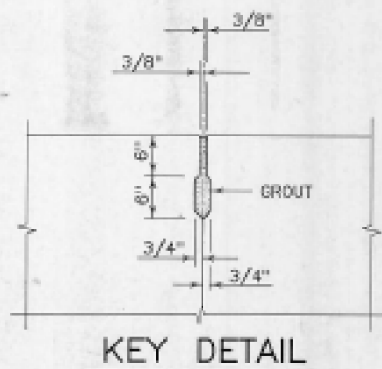
REQUIRED RELEASE STRENGTH, f_{cr} , SHALL BE 4,000 PSI.

AN EQUAL SUBSTITUTION OF THE LOW-RILAXATION STRANDS FOR THE STRESS-RELIEVED WILL BE PERMITTED.



TYPICAL SECTION AT ABUTMENTS

AT RT. 49 TO ABUTMENT



CLASS I PROFILE

*SUPERSTRUCTURE
ILLINOIS ROUTE 54
FA ROUTE 71
OVER BIG FOUR DRAINAGE DITCH
SECTION 115 BR
FORD COUNTY*

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
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	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/11/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
S.N. 027-0077

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	64
			CONTRACT NO. 66994	
ILLINOIS FED. AID PROJECT				

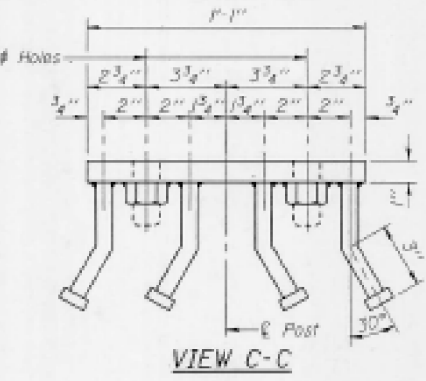
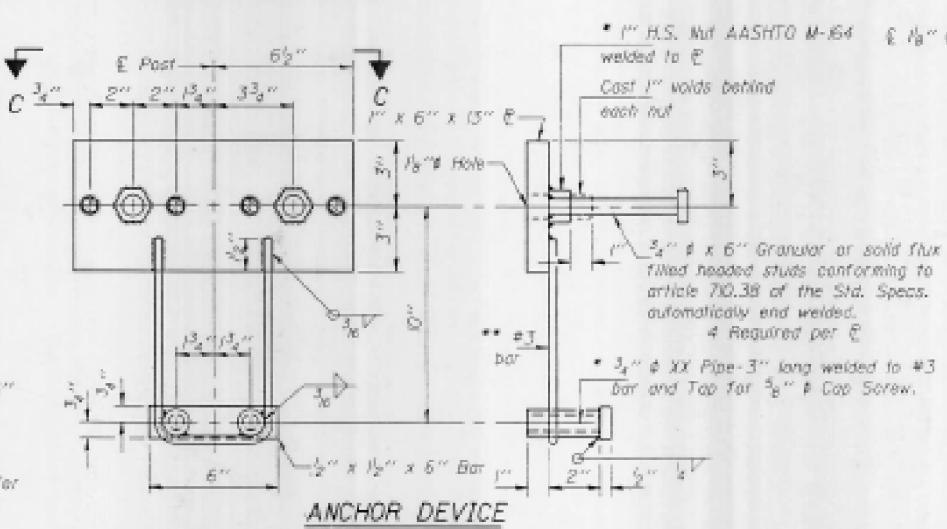
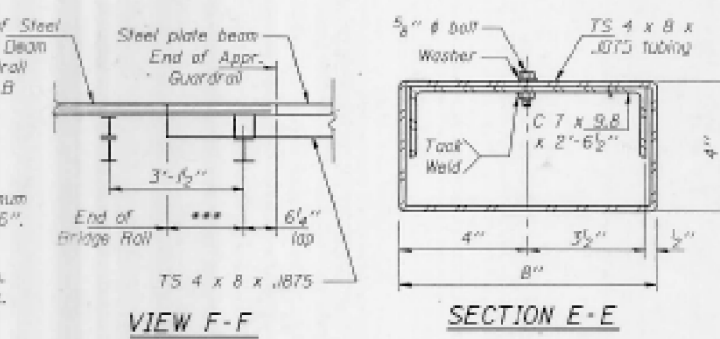
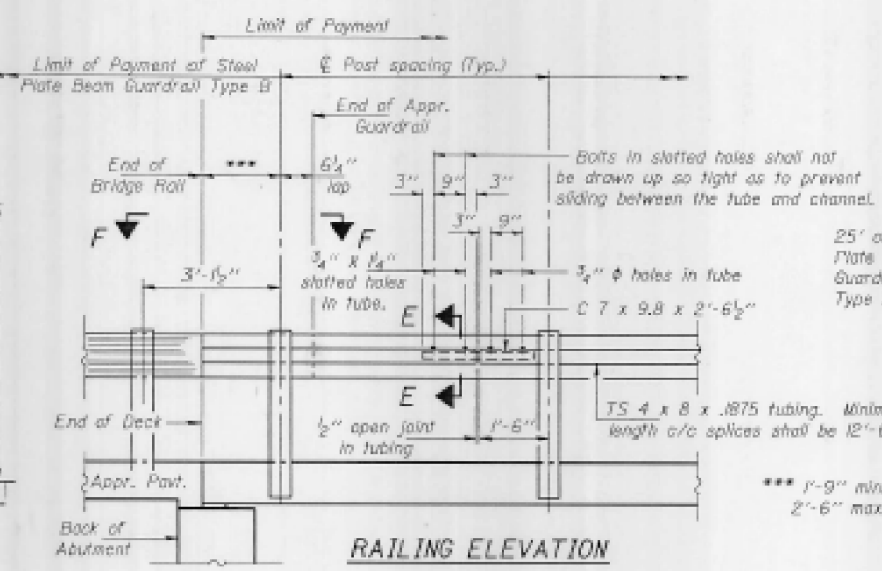
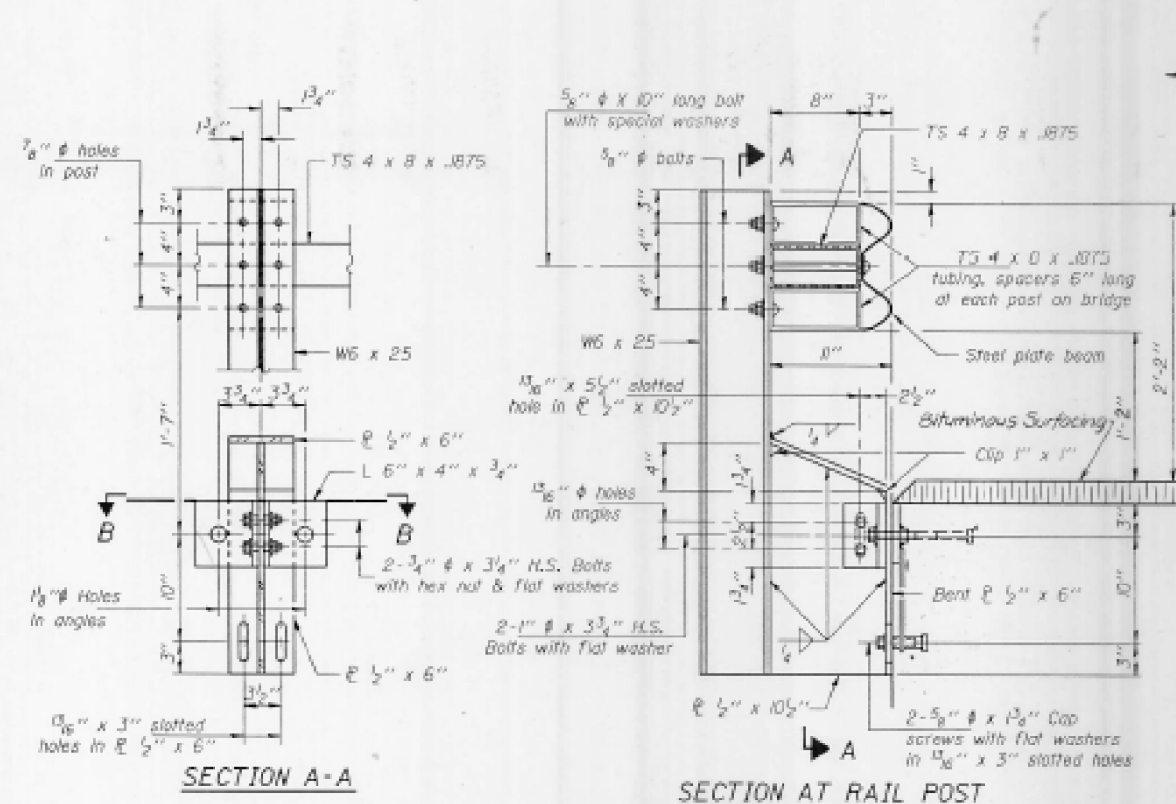
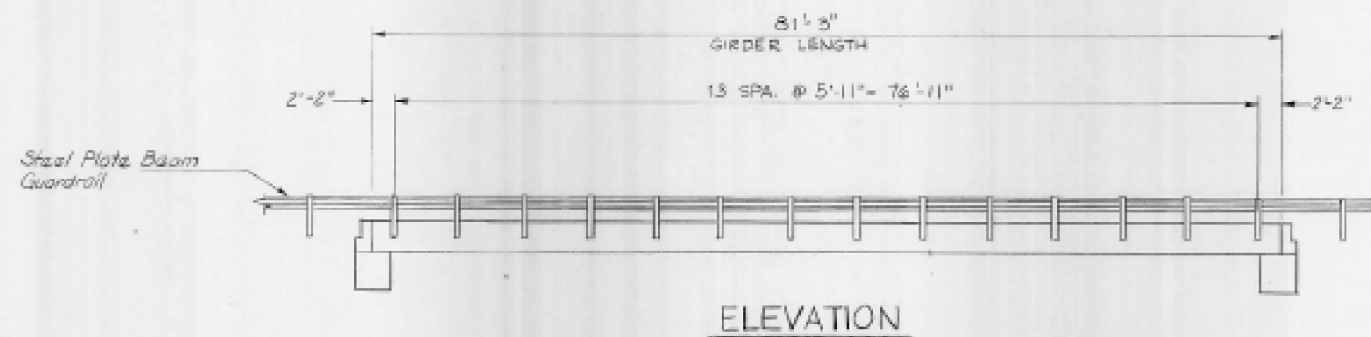
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DATE	BY	CHECKED	DATE	BY	SHEET NO.
11/5/88	FORD	41	27		6 SHEETS

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing.
All other steel shapes and plates shall conform to the requirements of AASHTO M-183 except posts and angles shall conform to AASHTO M-223, Grade 50.
Bolts, cap screws and nuts shall conform to the requirements of ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M-154.
All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO M-232.
All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with AASHTO M-11 and ASTM A-385. Galvanized rail shall not be painted.
Rolling shall be in accordance with Section 508 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per lineal foot for STEEL RAILING, TYPE WT.
All field drilled holes shall be coated with an approved zinc rich paint before erection.
The 1/2" x 6" plates that come in contact with concrete shall receive two coats of asphalt paint conforming to Section 714.08 Type R or place 1/2" fabric bearing pads between the plates and concrete.
The 3/4" high strength bolts used to connect the 6" x 4" x 3/4" angles to the post shall be tightened in accordance with Article 507.04(g)(3) of the Standard Specifications. The 1" # high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/2 turn. The 5/8" # cap screws in bottom of posts shall be tightened to a snug fit only.
For multi-span bridges, sufficient 1/2" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing.



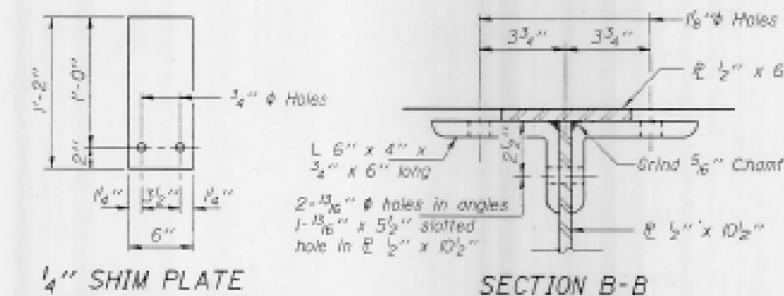
BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type WT	Lin. Ft.	170

**TYPE WT
STEEL RAILING**
ILLINOIS ROUTE 54 FA ROUTE 71
OVER BIG FOUR DRAINAGE DITCH
SECTION 115 BR FORD COUNTY

DESIGNED	EXAMINED	BY
CHECKED	PASSED	ENGINEER OF BRIDGE DESIGN
DRAWN	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED		DIRECTOR OF HIGHWAYS

R-30 9/30/87 6'-3" Maximum Post Spacing



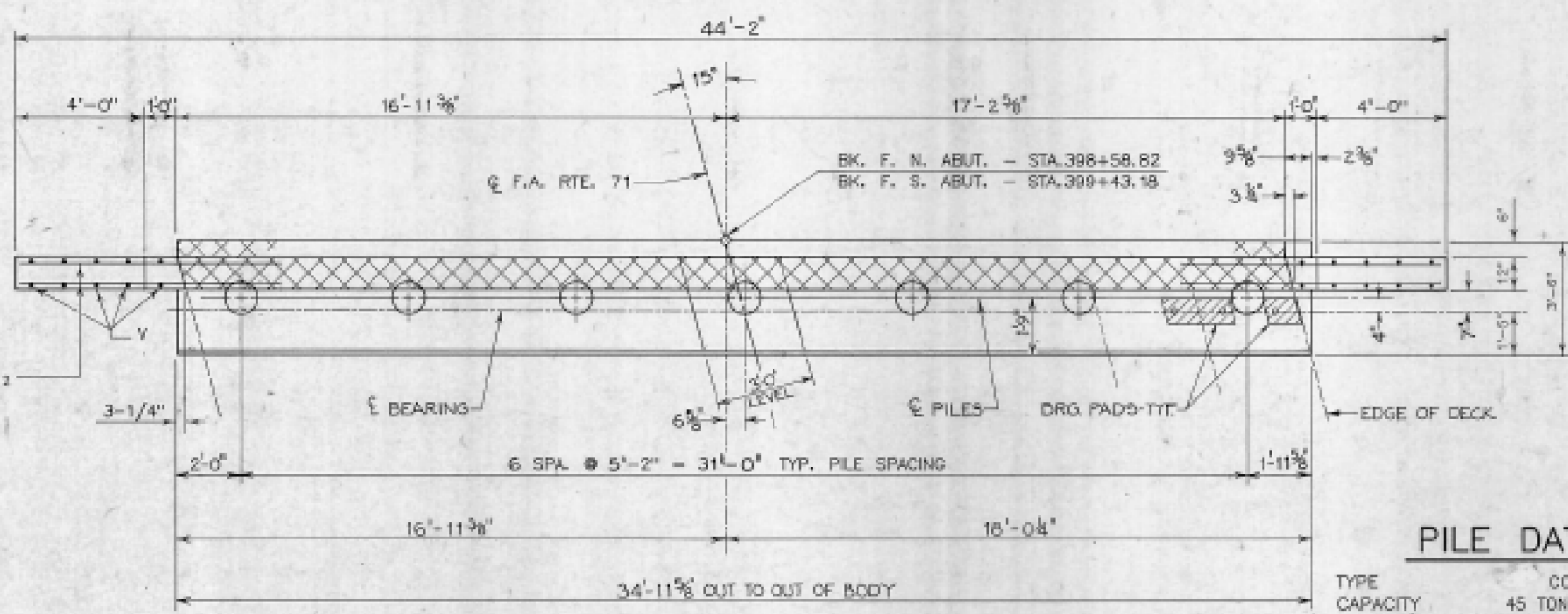
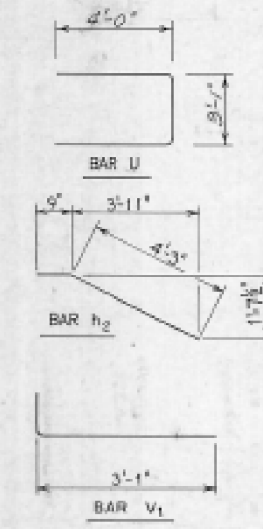
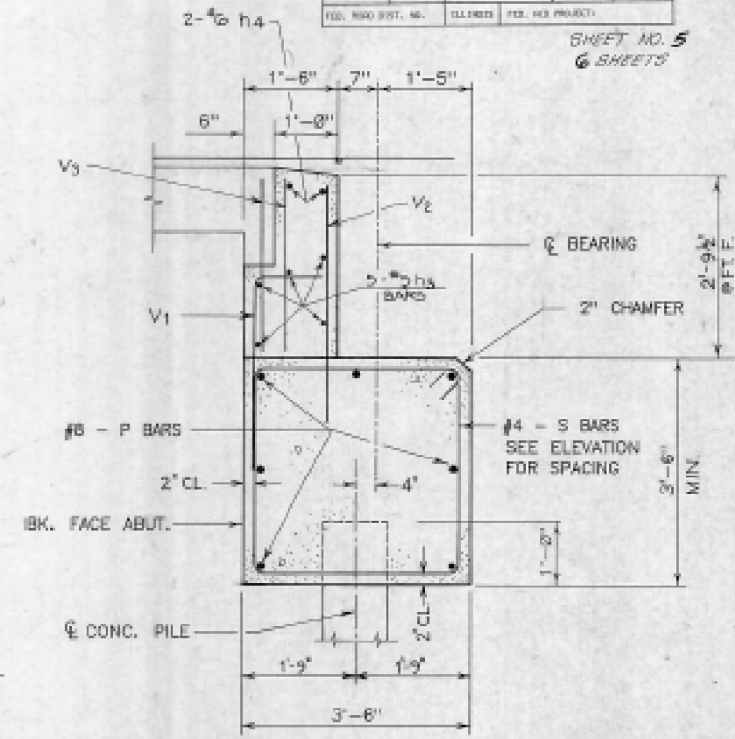
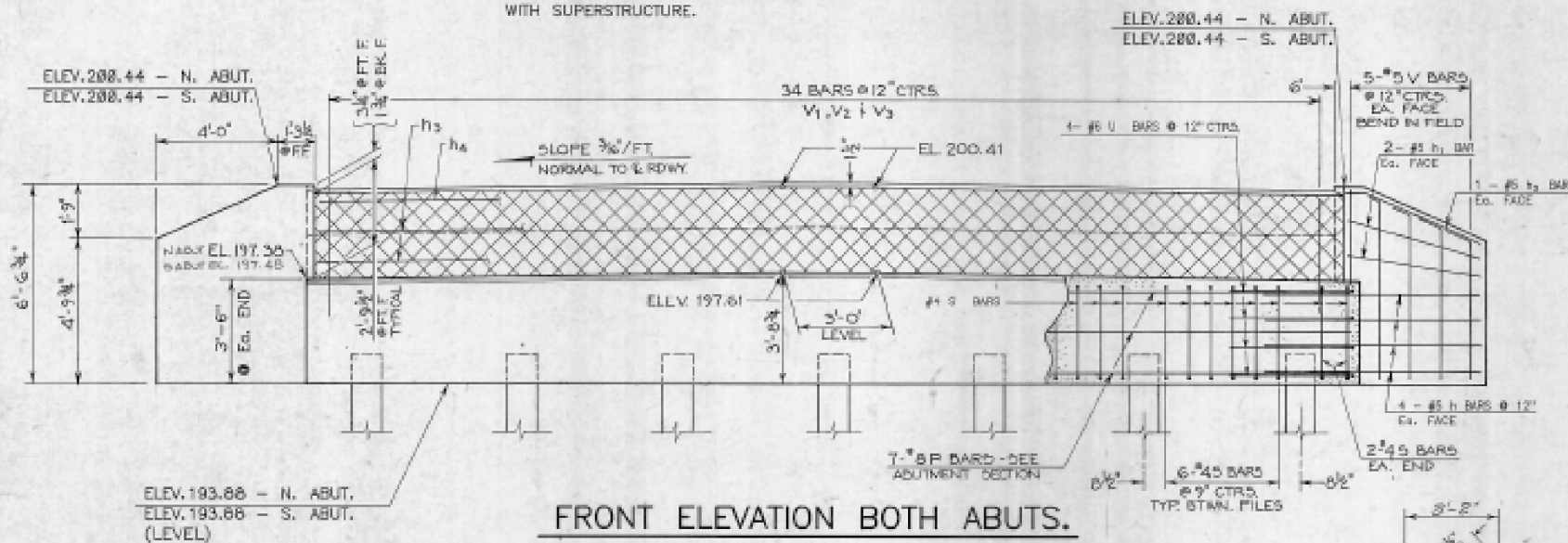
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TYP. SHEET	SHEET NO.
F.A. 71	115BR	FORD	41	25
FED. AID DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5
6 SHEETS

NOTE: CROSS HATCHED AREA TO BE POURED AFTER SUPERSTRUCTURE FORMS HAVE BEEN REMOVED. QUANTITY OF CLASS X CONCRETE INCLUDED WITH SUPERSTRUCTURE.



PILE DATA

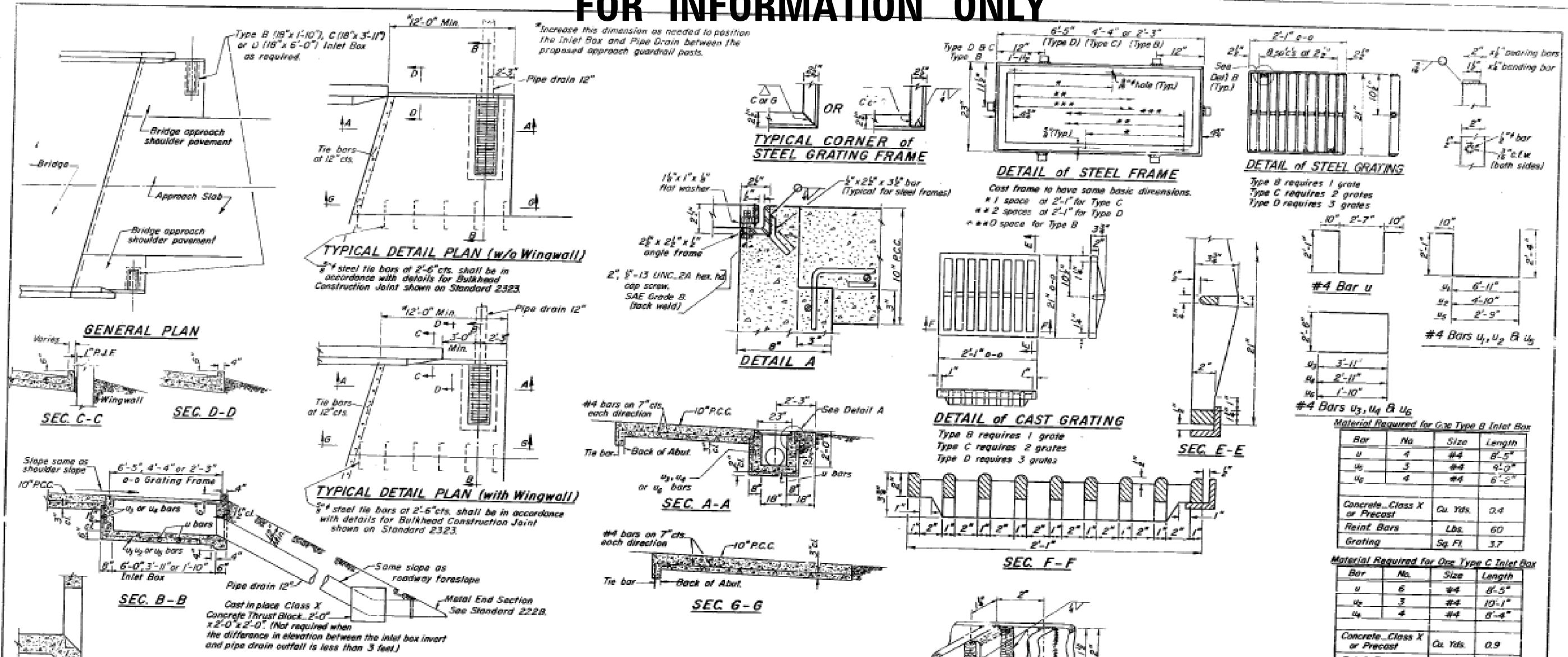
TYPE	CONC. PILES
CAPACITY	45 TONS
NO. REQ'D.	6 + 1 TEST PILE (@ Ea. ABUT.)
EST. LENGTH	44' N. ABUT. & 41' S. ABUT.

BILL OF MATERIALS 2 ABUTS.

BAR NO.	SIZE	LENGTH	SHAPE
P 14	#6	34'-7"	
S 80	#4	13'-5"	□
h 32	#5	8'-0"	
h ₁ 16	#5	4'-9"	
h ₂ 8	#5	5'-0"	
h ₃ 10	#5	33'-10"	
h ₄ 4	#6	33'-10"	
U 16	#6	11'-1"	
V 40	#5	6'-2"	
V ₁ 68	#5	4'-0"	
V ₂ 88	#5	3'-7"	
V ₃ 136	#5	2'-8"	
CLASS X CONCRETE			C.Y. 36.4
REINFORCEMENT BARS			LB5 4,395
FURN. CONC. PILES			LF 510
DRIVE CONC. PILES			LF 510
TEST PILES, CONC.			EA 2

ABUTMENTS
ILLINOIS ROUTE 5A
FA ROUTE 71
OVER BIG FOUR DRAINAGE DITCH
SECTION 115 BR
FORD COUNTY

FOR INFORMATION ONLY



GENERAL NOTES

When Inlet Box or Boxes are not required, surface of the shoulder pavement shall be finished to provide a smooth transition from back of the abutment to normal approach roadway shoulder.

See plans for location of bridge approach shoulder pavement.

Use Type C Inlet Box for 5' and 6' shoulder widths, use Type D Inlet Box for 7' and wider shoulder widths, use Type B Inlet Box for shoulders less than 5' wide.

For placement of approach shoulder pavement on existing construction substitute expansion anchor ties for tie bars. For non-right approaches, shoulder pavement will be as shown except omit tie bars in approach pavement.

The material for 12" Pipe Drains shall be either corrugated steel, aluminum alloy or polyethylene (PE) pipe with UV protection.

Corrugated steel and aluminum alloy pipe shall have 2" coupling bands. All pipe connections shall be water tight.

The P.C. Concrete used in the shoulder slab shall meet the requirements of Section 408 of the Standard Specifications.

The lengths of #4 bars used in the approach shoulder pavement shall be as required to accommodate the length, width and skew of the slab.

Class X concrete or precast concrete shall be used for the inlet. Precast concrete shall be in accordance with Sections 505.01 thru 505.05 of the Standard Specifications except that the concrete strength shall be 4000 p.s.i. after 28 days.

All exposed edges of the inlet, except the upper perimeter, shall be beveled $\frac{1}{4}$ ".

Shop drawings will not be required for precast Inlet Boxes.

A 3" deep CA-12 bedding conforming to Article 704.0, D Quality or better shall be provided under full length and width of precast units, and all voids around the pipe drain entrance, both inside and outside, shall be sealed with mortar.

The grating shall seat firmly in the frame and steel grates shall be secured to the frame with a locking device as shown. Cast grates will not require the locking device.

Steel grating and frames shall conform to Article 710.04 of the Standard Specifications and shall be galvanized to AASHTO Specification M III after fabrication.

Cast grating and frames shall conform to Article 70.17 of the Standard Specifications. Cast grating and frames shall not be galvanized.

Pipe drains shall be installed, measured and paid for in accordance with Section 607 of the Standard Specifications, except sand bedding will not be required.

Metal End Sections shall be installed, measured and paid for in accordance with Section 511 of the Standard Specifications.

Bridge approach shoulder pavement will be measured in place and paid for in square yards as P.C. CONCRETE BRIDGE APPROACH SHOULDER PAVEMENT which shall include the cost of subgrade preparation, expansion anchor ties, reinforcement and joint fillers. In computing the area for payment, a deduction will be made for the area displaced by the inlet. (1.2 Sq. Yds. Type C; 1.7 Sq. Yds. Type D; 0.6 Sq. Yds. Type B.)

The contract unit price "Each" for TYPE (B, C or D) INLET BOX STANDARD 2324, in place, shall include the frame and grating, class X or P.C. concrete, reinforcement bars, excavation, bedding when required, and compacted backfill.

The contract unit price "Each" for CONCRETE THRUST BLOCKS, in place, shall include excavation and compacted backfilling.

Material Required for One Type B Inlet Box

Bar	No.	Size	Length
u	4	#4	8'-5"
u ₂	3	#4	9'-0"
u ₆	4	#4	6'-2"

Concrete - Class X or Precast	Cu. Yds.	0.4
Reinf. Bars	Lbs.	60
Grating	Sq. Ft.	3.7

Material Required for One Type C Inlet Box

Bar	No.	Size	Length
u	6	#4	8'-5"
u ₂	3	#4	10'-1"
u ₄	4	#4	6'-4"

Concrete - Class X or Precast	Cu. Yds.	0.9
Reinf. Bars	Lbs.	80
Grating	Sq. Ft.	7.5

Material Required for One Type D Inlet Box

Bar	No.	Size	Length
u	8	#4	8'-5"
u ₂	3	#4	12'-2"
u ₄	4	#4	10'-4"

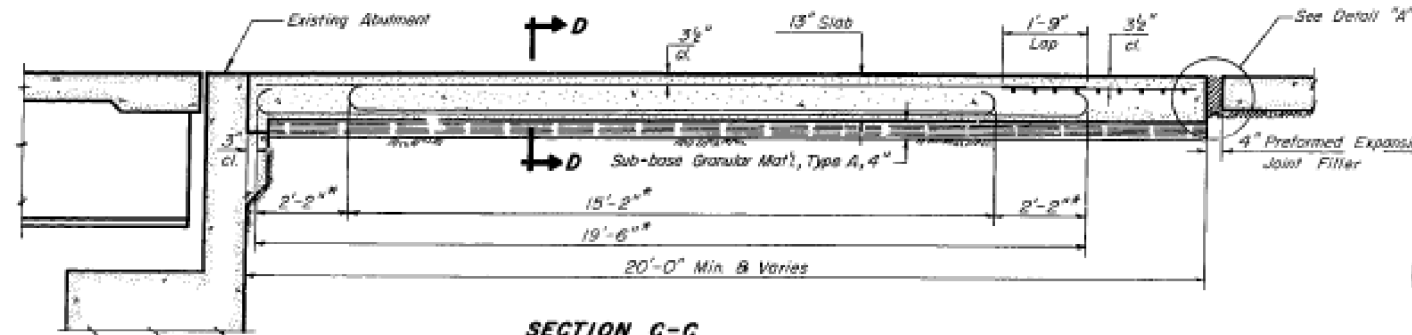
Concrete - Class X or Precast	Cu. Yds.	1.2
Reinf. Bars	Lbs.	100
Grating	Sq. Ft.	11.0

BRIDGE APPROACH SHOULDER PAVEMENT

STANDARD 2324 - 6 (Full Size)

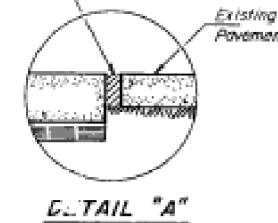
H-125

FOR INFORMATION ONLY



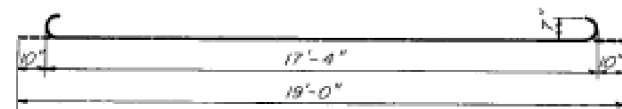
SECTION C-C

*Stagger alternate #7 bars as shown on plan - full width.

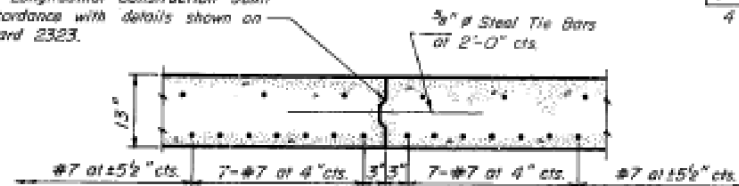


DETAIL "A"

Keyed Longitudinal Construction Joint in accordance with details shown on Standard 2323.

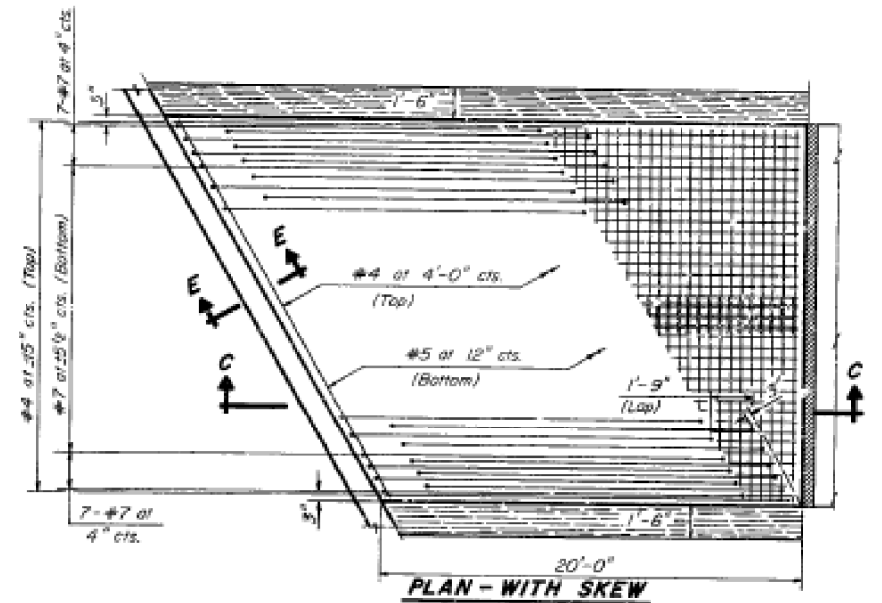


#7 BARS

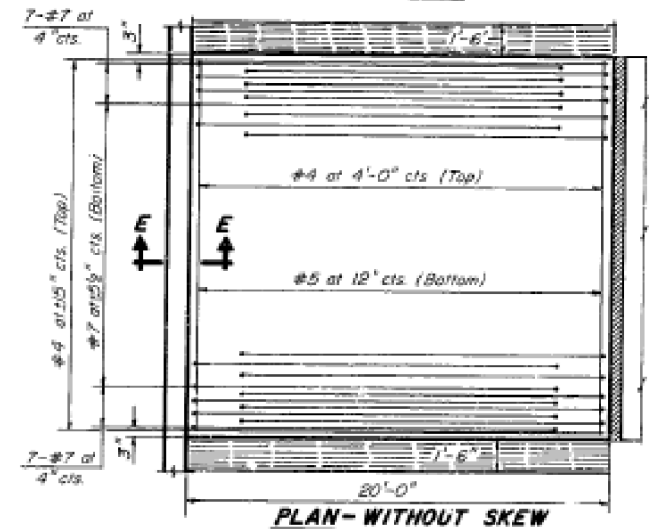


OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

As approved by the Engineer, the Contractor may elect to reduce the widths of pour by use of the Optional Longitudinal Construction Joint shown. Joints shall be located at the edge of a traffic lane.

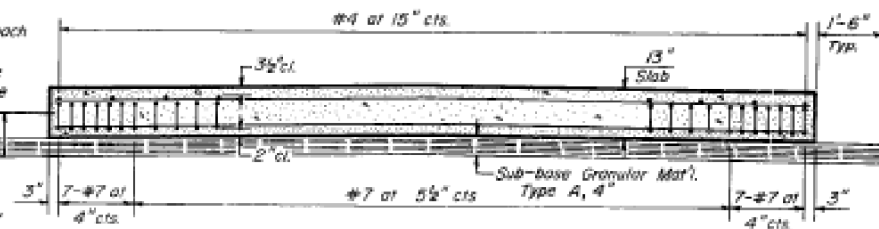


PLAN - WITH SKEW

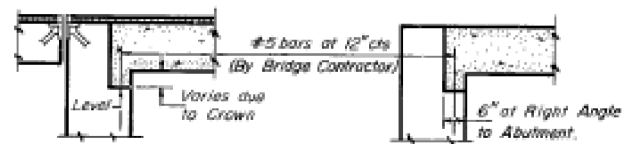


PLAN - WITHOUT SKEW

When the road plans show curb and gutter, gutter, or bridge approach shoulder pavement adjacent to approach slabs, place $\frac{1}{2}$ " # steel tie bars at 2'-6" centers in accordance with the detail for Bulkhead Longitudinal Construction Joint shown on Standard 2323. Cost of the tie bars will be included in the contract unit price for the adjacent item. Transitions for curb and gutter or gutter shall be as shown on the plans.



SECTION D-D



SECTION E-E

Notes:

For skew of less than 10° omit wire fabric. For skew of 10° or more use Welded Wire Fabric, 6" x 6" - W5.5 x W5.5, placed 3 1/2" below top of slab. Expanded Metal weighing not less than 78 Pounds per 100 Sq. Ft. or a welded bar mat weighing not less than 78 Pounds per 100 Sq. Ft. having members of equal size in both directions and spaced r-t over B-t apart may be used instead of the Welded Wire Fabric, 6" x 6" - W5.5 x W5.5, provided the expanded metal or bar mat is furnished at no additional cost to the State. Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M 31 or M 53, Grade 60.

DESIGN STRESSES

$f_y = 60,000$ p.s.i.
 $f_c = 3500$ p.s.i.
 $n = 8.5$

GENERAL NOTES

The cost of tie bars, expansion joint filler, sub-base, welded wire fabric and bituminous prime when required shall be considered as included in the unit cost of the Bridge Approach Pavement.

Preformed Expansion Joint Filler shall conform to Section 715 of the Standard Specifications. Width of Bridge Approach Slab shall be determined before the reinforcement bars are fabricated.

Illinois Department of Transportation

PASSED: Mar. 9, 1979
 APPROVED: Mar. 9, 1979

BRIDGE APPROACH PAVEMENT

Sheet 1 of 2

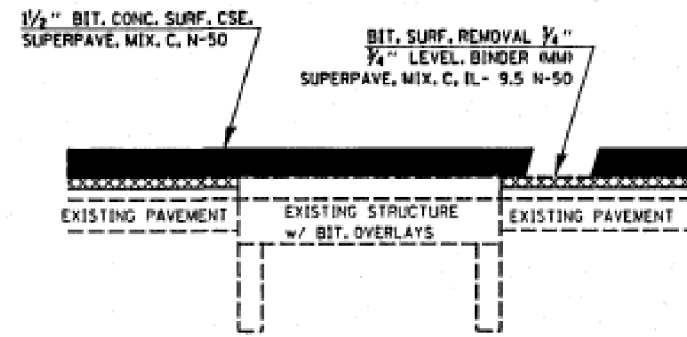
STANDARD 2382

H-530

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PLOT SCALE: 100.0000' / in.	CHECKED: [Signature]	REVISIONS: [Signature]	SCALE: [Signature]			SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 66994		ILLINOIS FED. AID PROJECT
PLOT DATE: 8/11/2015	DATE: [Signature]	REVISIONS: [Signature]	SCALE: [Signature]			SHEET OF SHEETS	STA. TO STA.	CONTRACT NO. 66994		ILLINOIS FED. AID PROJECT

FOR INFORMATION ONLY

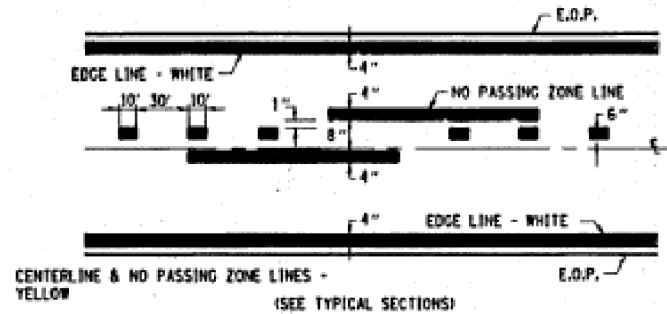
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71	(114,115)RS-3	FORD	13	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		



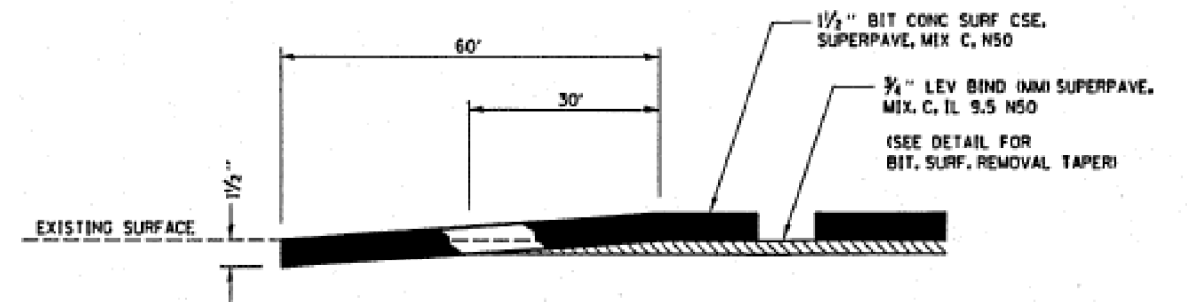
BITUMINOUS SURFACE REMOVAL AND OVERLAY AT STRUCTURES

S.N. 027-0077
S.N. 027-0070

NO BIT. SURF. REMOVAL ON THESE STRUCTURES

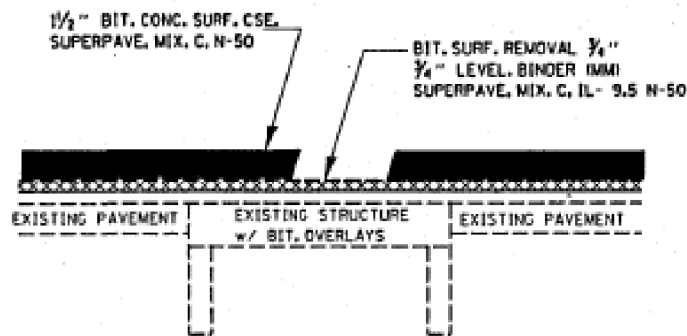


PAVEMENT MARKING



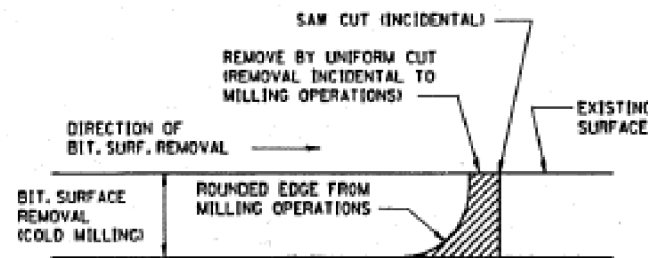
BITUMINOUS TAPER DETAIL (TYP.)

STA. 0+70 - STA. 1+30
STA. 139+40 - STA. 140+00
STA. 142+00 - STA. 142+60
STA. 551+80 - STA. 552+40
STA. 552+60 - STA. 553+20
STA. 796+15 - STA. 796+75



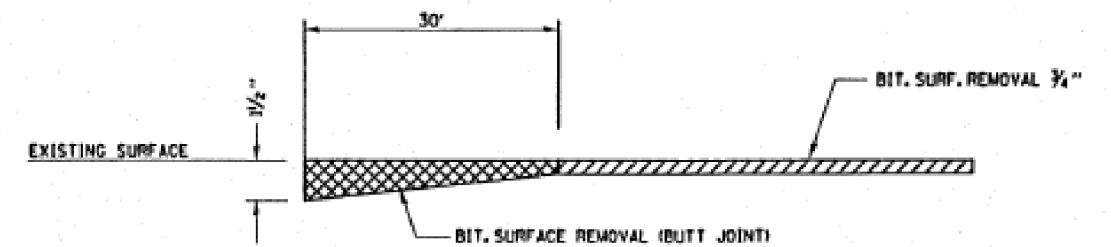
BITUMINOUS SURFACE REMOVAL AND OVERLAY AT STRUCTURES

S.N. 027-0021
S.N. 027-2004
S.N. 027-2008



NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL.

BITUMINOUS DETAIL AT BUTT JOINTS



BITUMINOUS SURFACE REMOVAL TAPER DETAIL (TYPICAL)

STA. 0+70 - STA. 1+30
STA. 139+40 - STA. 140+00
STA. 142+00 - STA. 142+60
STA. 551+80 - STA. 552+40
STA. 552+60 - STA. 553+20
STA. 796+15 - STA. 796+75

MAR. 15, 2001
1E0092001DETAILS.DGN

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
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PLOT SCALE = 100.0000' / in.	CHECKED -	REVISOR -	
PLOT DATE = 8/11/2015	DATE -	REVISIONS -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
S.N. 027-0077

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	72
CONTRACT NO. 66994			ILLINOIS FED. AID PROJECT	

DETAILS

6-13-08 Letting, Item 089 STATE OF ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115-BR1)	FORD	11	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 66801	

INDEX OF SHEETS

1. COVER SHEET
2. GENERAL NOTES
3. SUMMARY OF QUANTITIES
4. TYPICAL SECTIONS
5. STAGING DETAILS
6. TEMPORARY CONCRETE BARRIER
7. TYPICAL PAVEMENT MARKING
8. PLAN AND ELEVATION
9. BEAM DETAILS
10. REPAIR DETAILS
11. RAIL DETAILS

STANDARDS

- | | |
|-----------|--|
| 000001-05 | STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS |
| 001006 | DECIMAL OF AN INCH AND OF A FOOT |
| 482011-03 | HMA SHOULDER STRIPS/SHOULDERS WITH RS OR WIDENING & RS PROJECTS |
| 701001-01 | OFF-ROAD OPERATIONS 2L, 2W, MORE THAN 4.5 m (15') AWAY |
| 701006-02 | OFF-ROAD OPERATIONS 2L, 2W, 4.5 m (15') TO 600 mm (24") FROM PAVEMENT EDGE |
| 701011-01 | OFF-ROAD MOVING OPERATIONS 2L, 2W, DAY ONLY |
| 701201-02 | LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS ≥ 45 MPH |
| 701206-01 | LANE CLOSURE, 2L, 2W, NIGHT ONLY, FOR SPEEDS ≥ 45 MPH |
| 701301-02 | LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS |
| 701311-02 | LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY |
| 701321-09 | LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER |
| 701326-02 | LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH |
| 701901 | TRAFFIC CONTROL DEVICES |
| 704001-04 | TEMPORARY CONCRETE BARRIER |

MICROFILMED _____
 REEL NUMBER _____
 AWARDED _____
 RESIDENT ENGINEER _____
 AS BUILT CHANGES WERE MADE
 ON THE FOLLOWING SHEETS _____

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

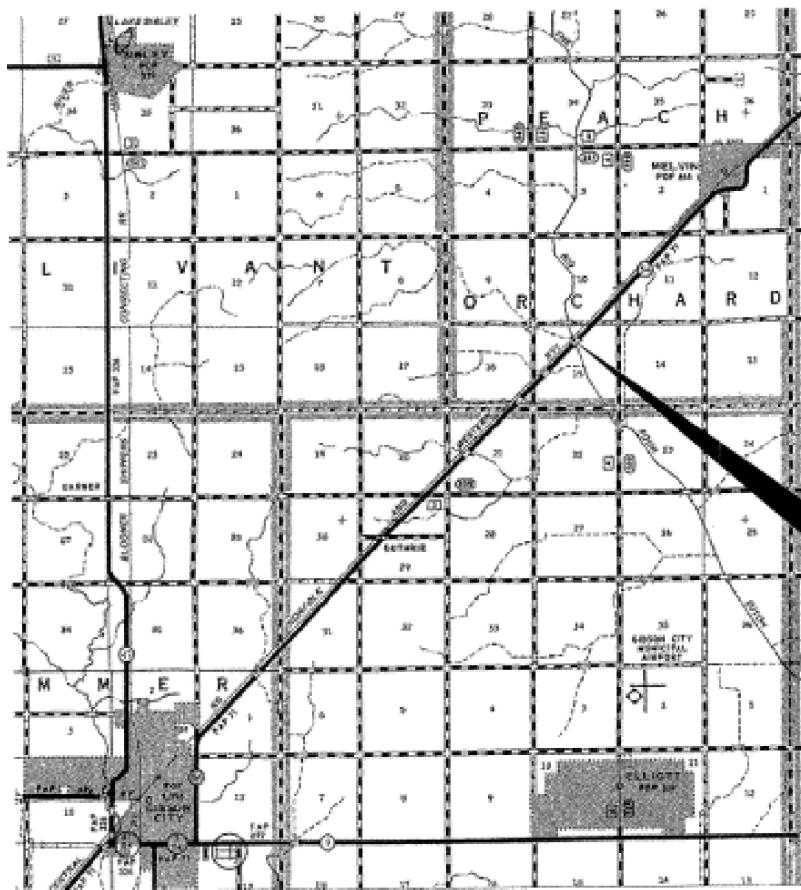
DISTRICT 3 NO. (815) 434-6131
 PROJECT ENGINEER: JOE KANNEL
 UNIT CHIEF: RON WOODSHANK

CONTRACT NO. 66801

DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
PROPOSED HIGHWAY PLANS

FAP ROUTE 71 (IL 54)
 SECTION (115-BR)I

FORD COUNTY
 C-93-078-08
BRIDGE REPAIR



LOCATION MAP
 NOT TO SCALE
 POINT LOCATION

FOR INFORMATION ONLY



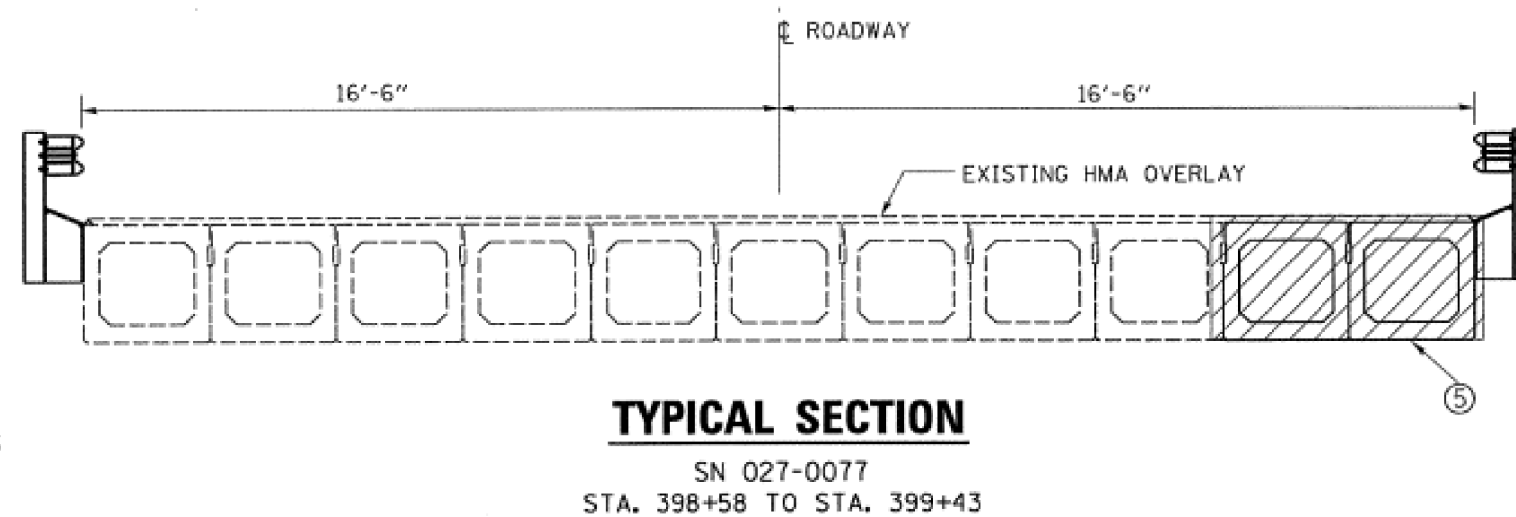
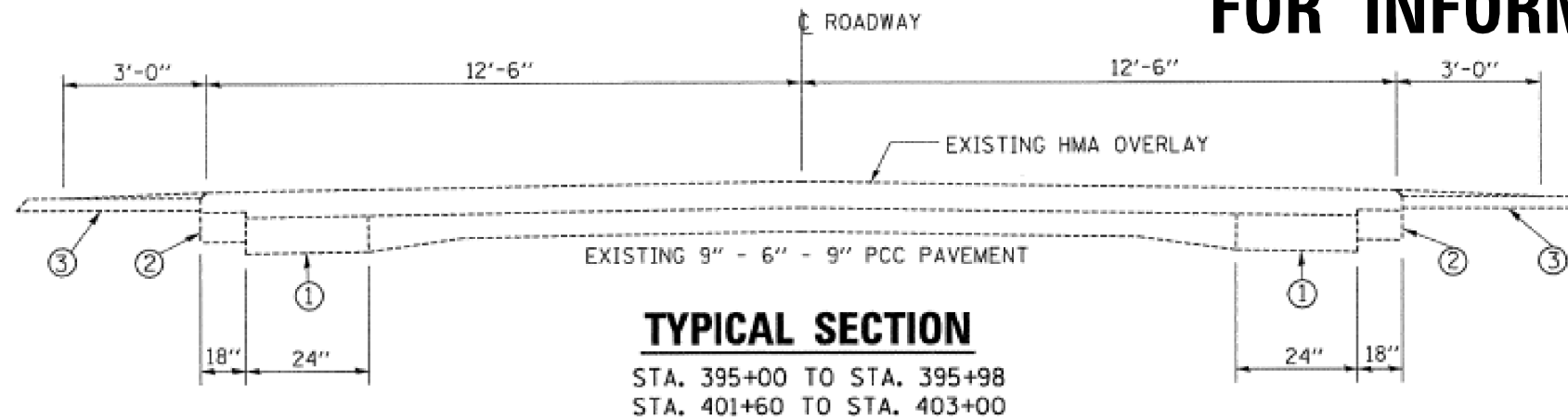
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 RURAL - MINOR ARTERIAL
 F.A.P. ROUTE 71 (IL 54)
 2005 ADT = 1550
 P.V = 83.5% M.U. = 11.3% S.U. = 5.2%

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS

SUBMITTED 3/25/08
[Signature]
 DEPUTY DIRECTOR OF HIGHWAYS REGION ENGINEER
 May 9, 2008
[Signature]
 ENGINEER OF DESIGN AND ENVIRONMENT
 May 9, 2008
[Signature]
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

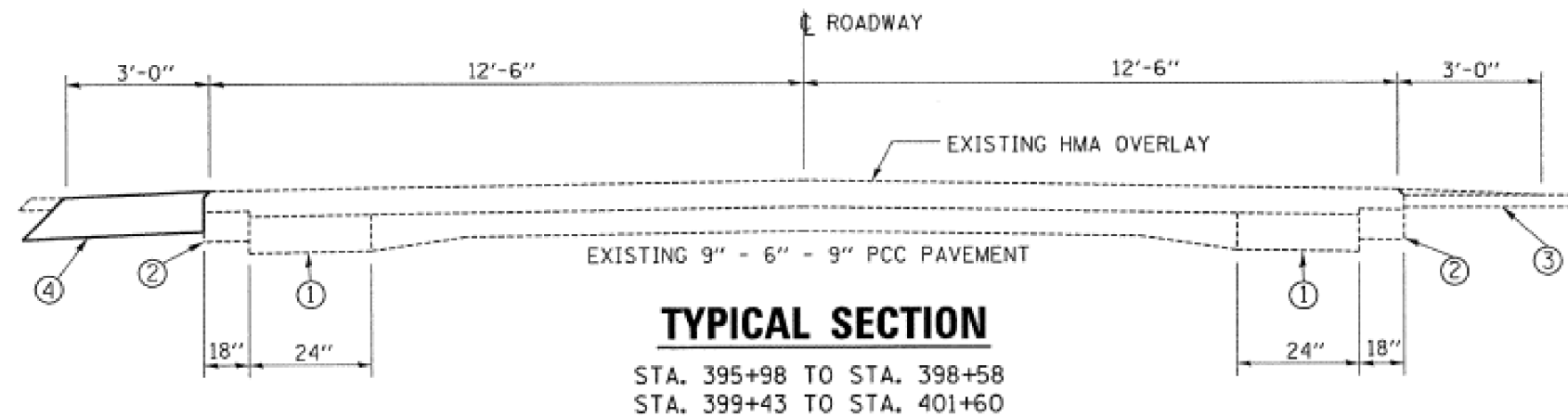
**PRINTED BY THE AUTHORITY
 OF THE STATE OF ILLINOIS**

FOR INFORMATION ONLY



LEGEND

- ① PCC WIDENING
- ② HOT-MIX ASPHALT WIDENING
- ③ AGGREGATE SHOULDER
- ④ HOT-MIX ASPHALT WIDENING 10"
- ⑤ BEAM REPLACEMENT



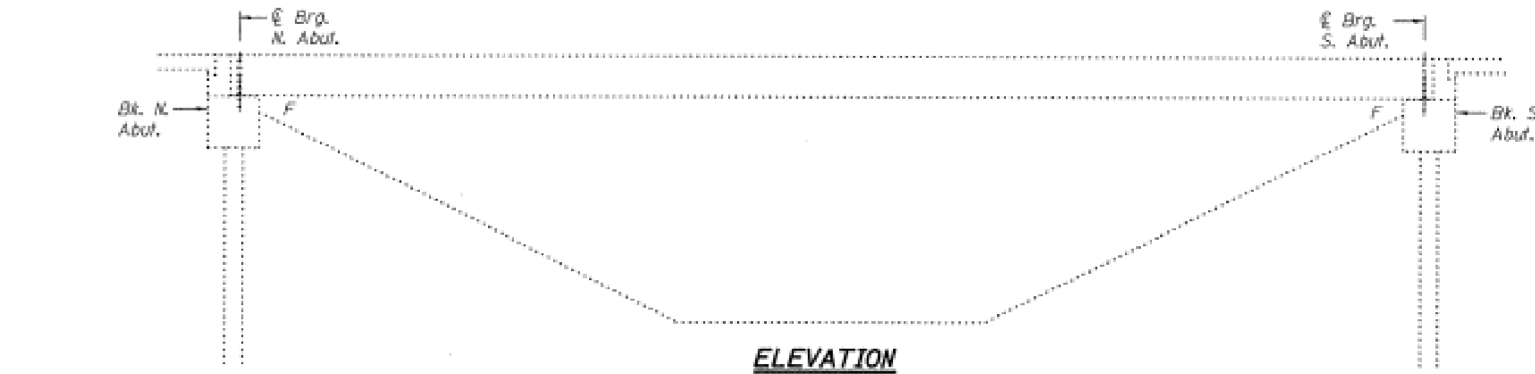
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PLOT SCALE : 1/8" = 1'-0"	CHECKED - ---	REVISED - ---	SCALE: _____			SHEET NO. 1 OF 1 SHEETS	STA. 395+00 TO STA. 403+00	CONTRACT NO. 66801			
PLOT DATE : Mar 30, 2008 - 11:08:53 AM	DATE - -----	REVISED - ---	FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT								

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PLOT DATE : 8/11/2015	DATE - ---	REVISED - ---	ILLINOIS FED. AID PROJECT								

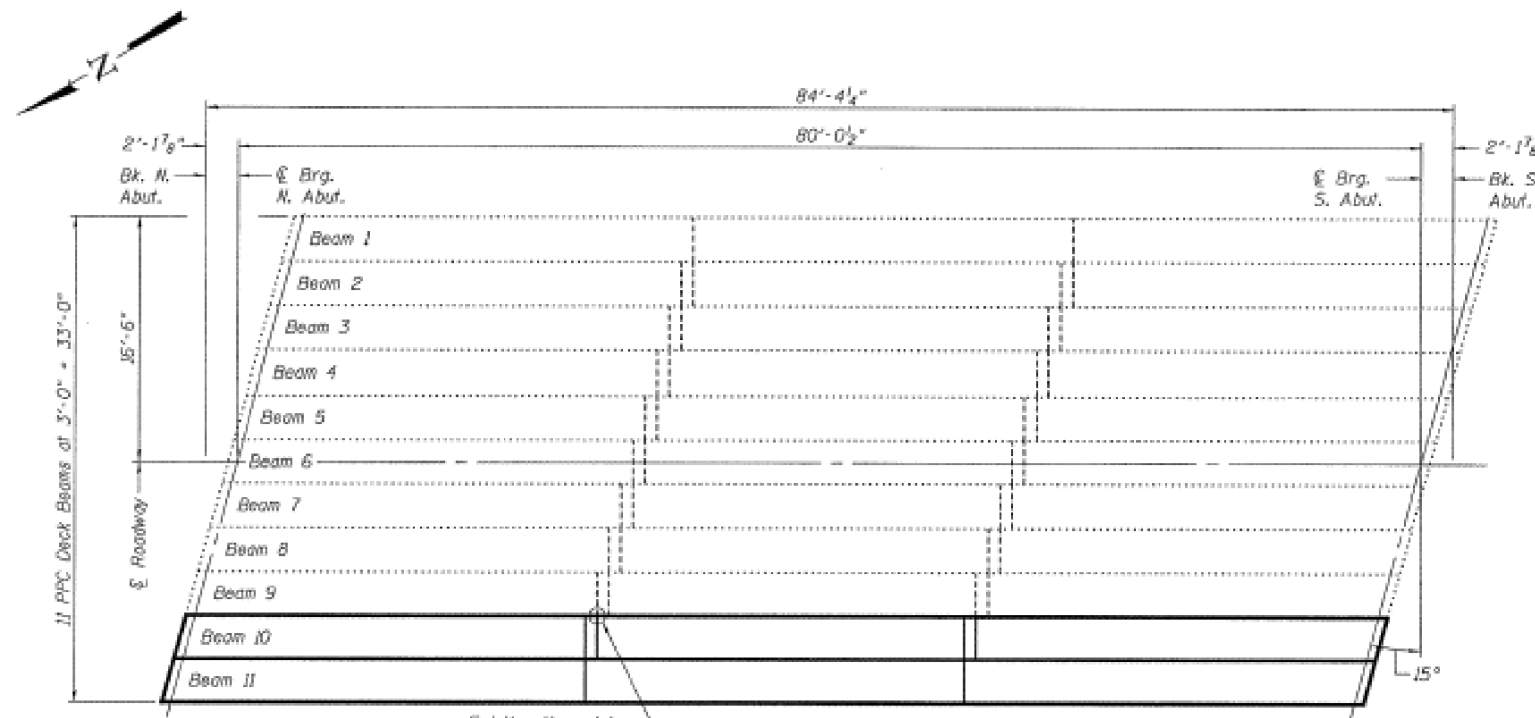
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	DATE	SHEET NO.
FAP 71	#	Ford	11	8
SHEET NO. 1 4 SHEETS				
Contract Number: 66801 * (115-BR)				



ELEVATION



PLAN

**DESIGN STRESSES
PRECAST UNITS**

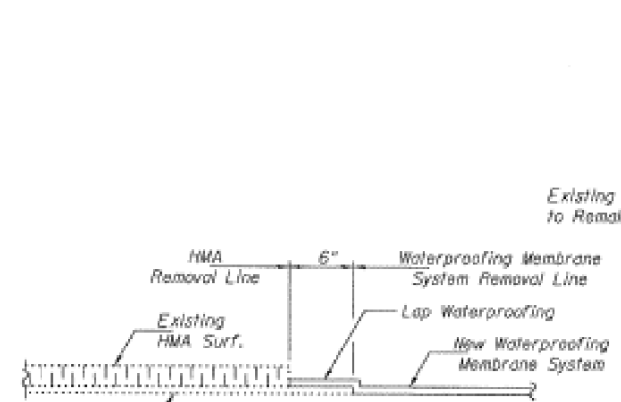
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 $f'_ci = 5,000 \text{ psi}$
 $f'_s = 270,000 \text{ psi } (\frac{1}{2} \# \text{ low lax strands})$
 $f'_si = 201,960 \text{ psi } (\frac{1}{2} \# \text{ low lax strands})$

DESIGNED: *[Signature]*
 CHECKED: *[Signature]*
 DRAWN: Drew Christopher
 CHECKED: A.J.B. A.T.H.

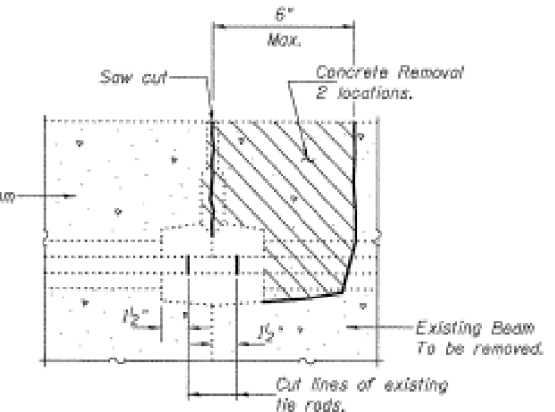
MAY 8, 2008
 EXAMINED: *[Signature]*
 PASSED: *[Signature]*



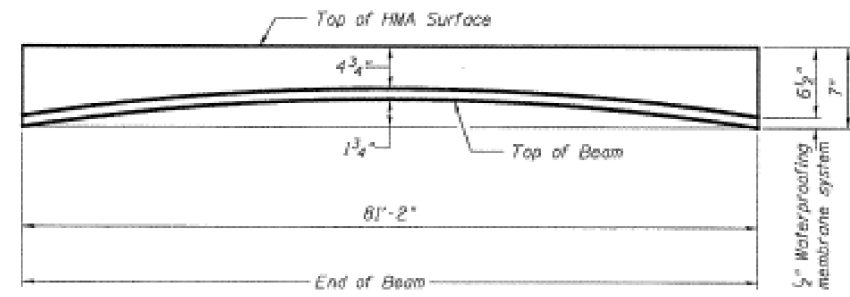
Expires: November 30, 2008



WATERPROOFING TREATMENT



**BEAM REMOVAL DETAIL
AT TRANSVERSE TIES**



ANTICIPATED INITIAL CAMBER DIAGRAM

TOTAL BILL OF MATERIAL

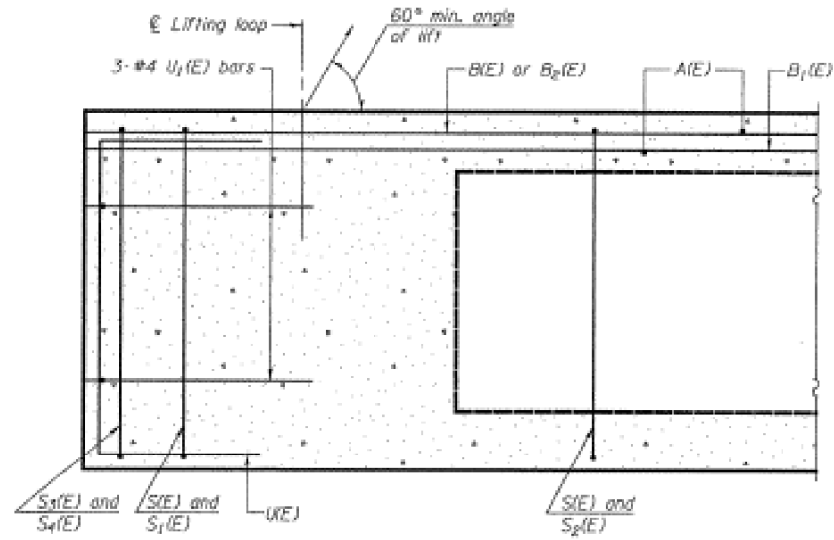
ITEM	UNIT	QUANTITY
HMA Surface Removal	Sq. Yd.	5.3
HMA Surface Course Mix D, N50	Tons	19.8
Removal of Existing PPC Deck Beams	Sq. Ft.	487
PPC Deck Beams (33" Depth)	Sq. Ft.	487
Waterproofing Membrane System	Sq. Yd.	59.4
PC Mortar Fairing Course	Foot	152
Removing and Re-erecting Existing Railing	Foot	81

PLAN AND ELEVATION
 F.A.P. RT. 71
 FORD COUNTY
 SN 027-0077

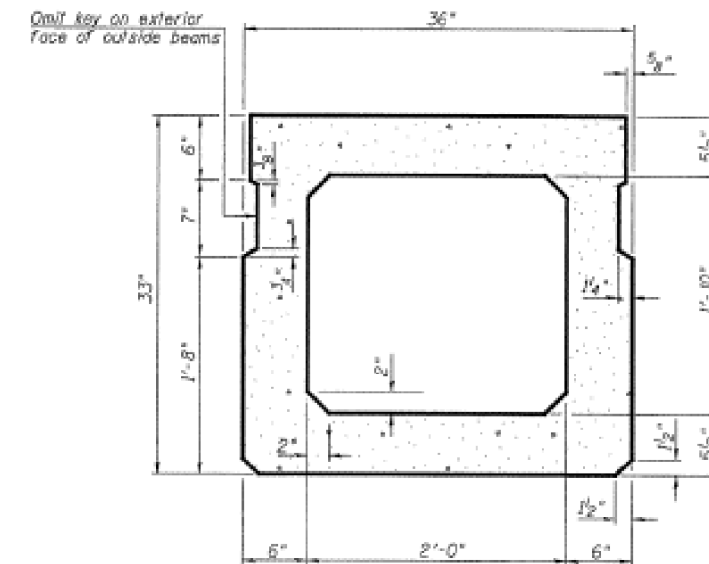
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

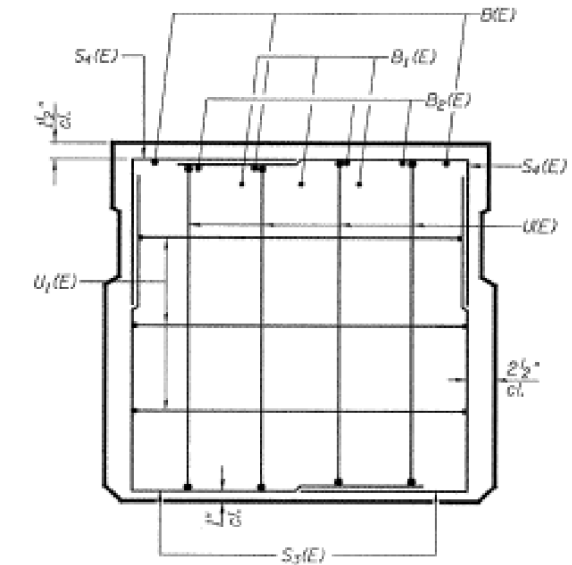
DATE	SECTION	CHART	DATE	NO.	SHEET NO. 2
FAP 71	*	Ford	11	9	4 SHEETS
FED. AID PROJ. NO. 115-BR-4				CONTRACT NO. 66994	



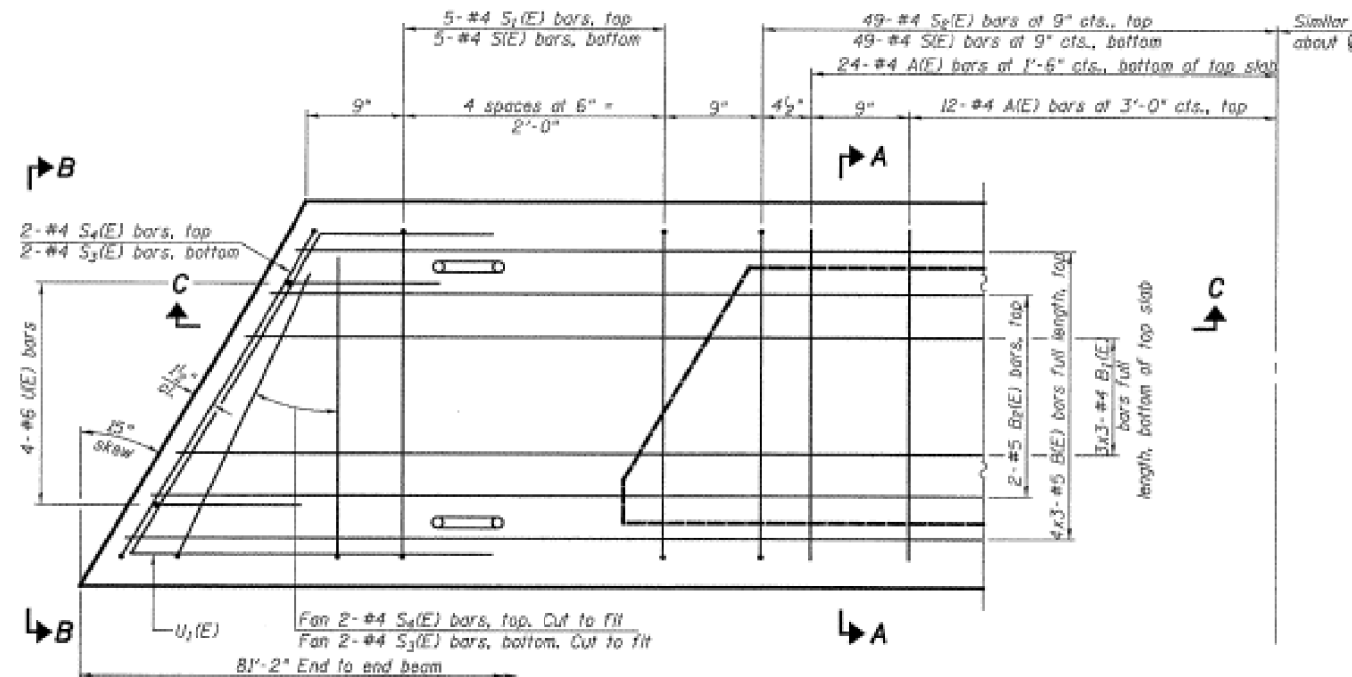
SECTION C-C



SECTION A-A
(Showing dimensions)

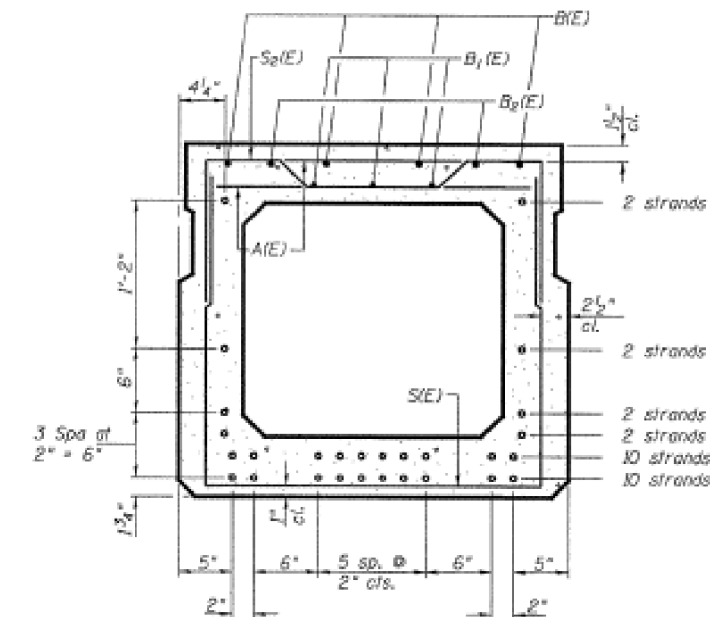


VIEW B-B



PLAN VIEW

Note: Spacing of S1E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.



SECTION A-A

(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

BAR LIST ONE BEAM ONLY (For information only)

Bar	No.	Size	Length	Shape
A1E)	72	#4	2'-7"	—
B1E)	12	#5	28'-5"	—
B2E)	9	#4	28'-1"	—
S1E)	4	#5	15'-3"	—
S2E)	108	#4	7'-5"	—
S3E)	10	#4	6'-3"	—
S4E)	98	#4	6'-6"	—
U1E)	4	#4	5'-1"	—
S4(E)	4	#4	5'-6"	—
U1E)	8	#6	5'-0"	—
U1E)	6	#4	5'-9"	—

Notes:
See sheet 3 of 4 for additional details and B.M.I. of Material.
Bars indicated thus 4 x 3-#5 etc. indicates 4 lines of bars with 3 lengths per line.

MINIMUM BAR LAPS

#4 bar = 1'-8"
#5 bar = 2'-2"

BEAM DETAILS
F.A.P. RT. 71
FORD COUNTY
SN 027-0077

DESIGNED	A.J.B.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	A.J.B. A.T.H.

MAY 8, 2008
EXAMINED *Carl P. ...*
PASSED *Ralph E. Anderson*

SLT-93-001-08

FILE NAME	USER NAME	DESIGNED	REVISED
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		CHECKED	REVISED
		-	-
		DATE	REVISED
		-	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

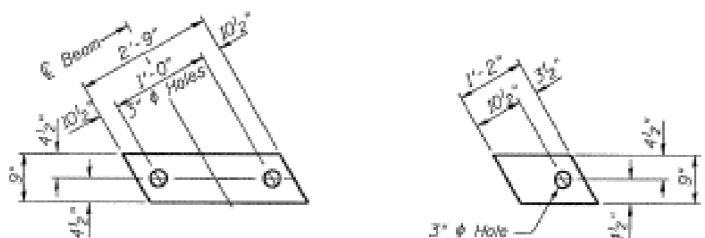
EXISTING PLANS
S.N. 027-0077

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	76
			CONTRACT NO. 66994	
ILLINOIS FED. AID PROJECT				

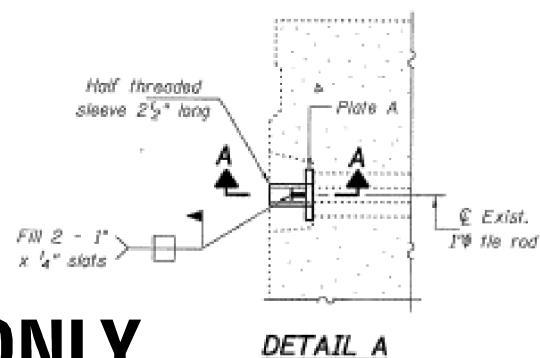
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	PROJECT	SHEET NO.	SHEET	SHEET NO. 3
FAP 71	*	Ford	11	10	4 SHEETS
FED. ROAD DIST. NO. 7		ILLINOIS	FORD COUNTY PROJECT		
		Contract Number: 66801		* (115-BR1)	

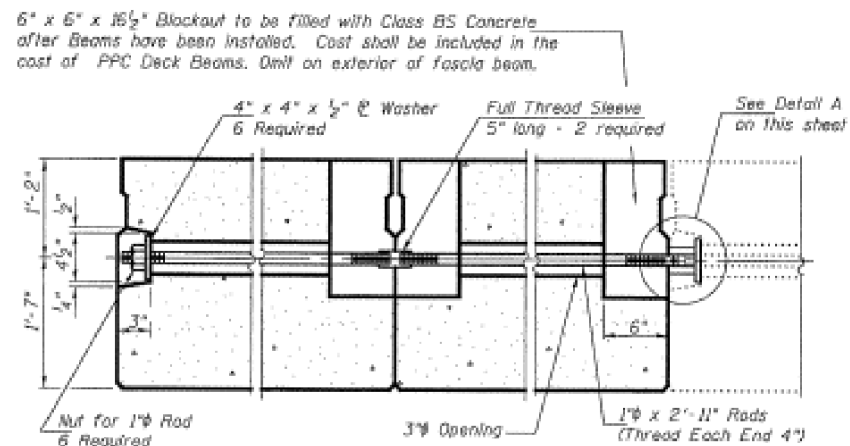


FIXED FABRIC BEARING PAD

FABRIC ADJUSTING SHIM

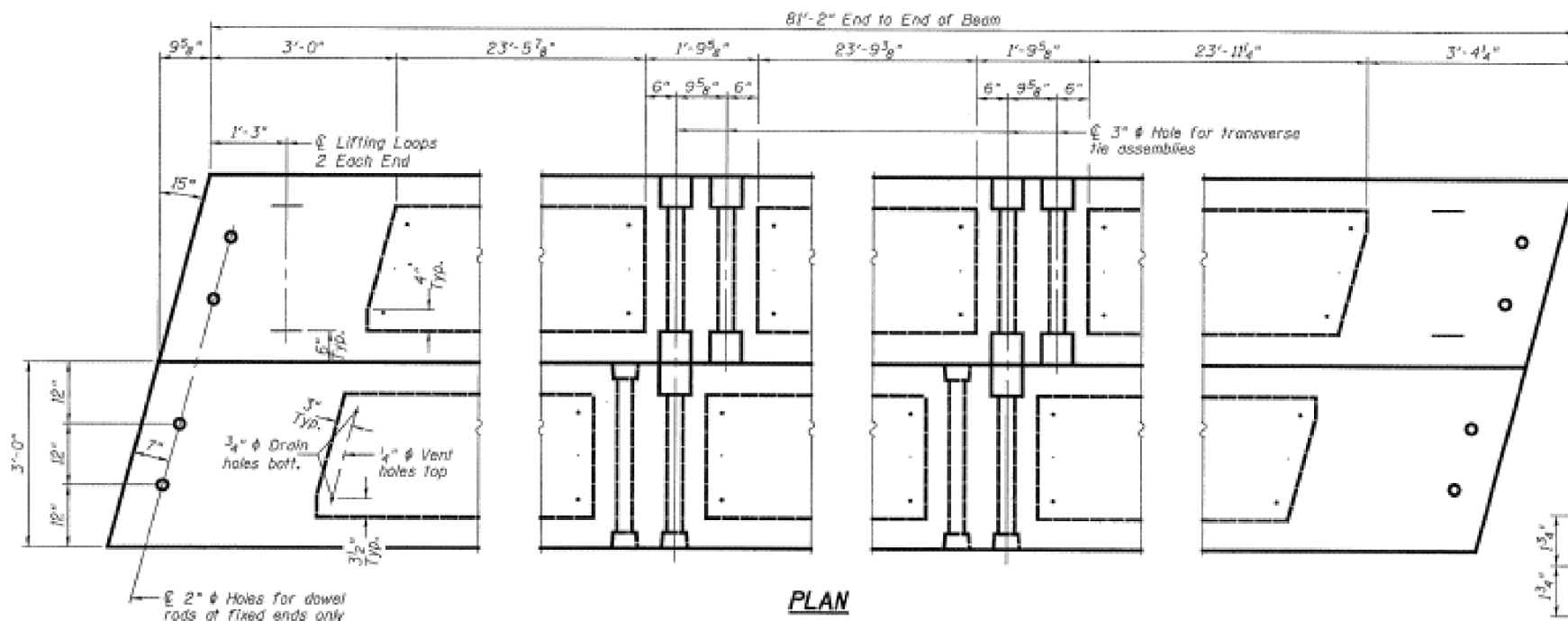


DETAIL A

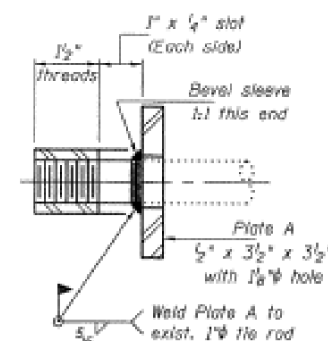


TYPICAL TRANSVERSE TIE ASSEMBLY

FOR INFORMATION ONLY



PLAN



SECTION A-A
(2 Required)

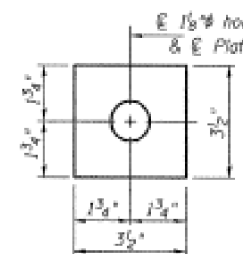
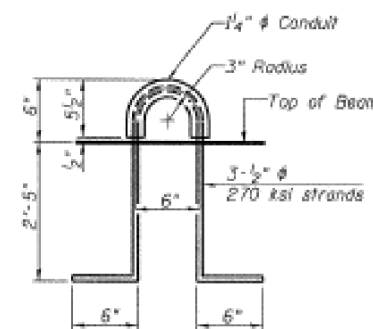
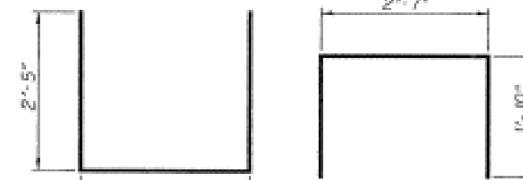


PLATE A
(2 Required)

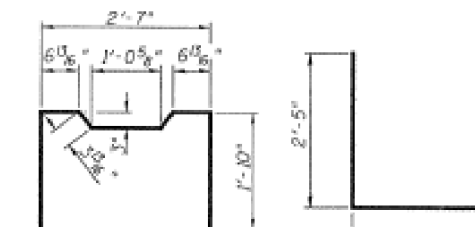


LIFTING LOOP DETAIL



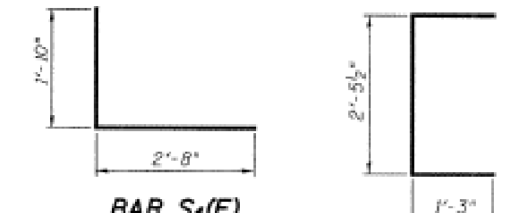
BAR S₁(E)

BAR S(E)



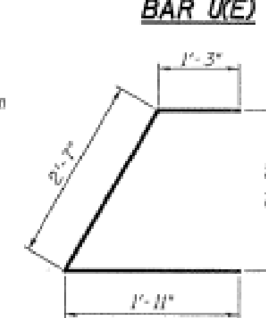
BAR S₂(E)

BAR S₃(E)



BAR S₄(E)

BAR U(E)



BAR U₁(E)

NOTES

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

BILL OF MATERIAL

Precast Prestressed Conc. Deck Bms. (33" depth)	Sq. Ft.	487
---	---------	-----

BEAM DETAILS

F.A.P. RT. 71
FORD COUNTY
SN 027-0077

DESIGNED	A.J.B.
CHECKED	A.T.H.
DRAWN	Drew Christopher
CHECKED	A.J.B. A.T.H.

EXAMINED	<i>R. Carl Perry</i>	MAY 8, 2008
PASSED	<i>Ralph E. Anderson</i>	

SLT-93-001-08

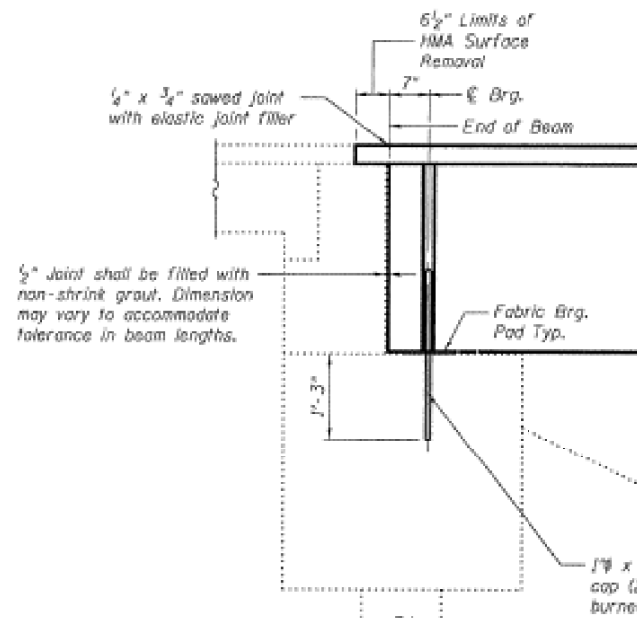
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PLOT DATE = 8/11/2015		DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FOR INFORMATION ONLY

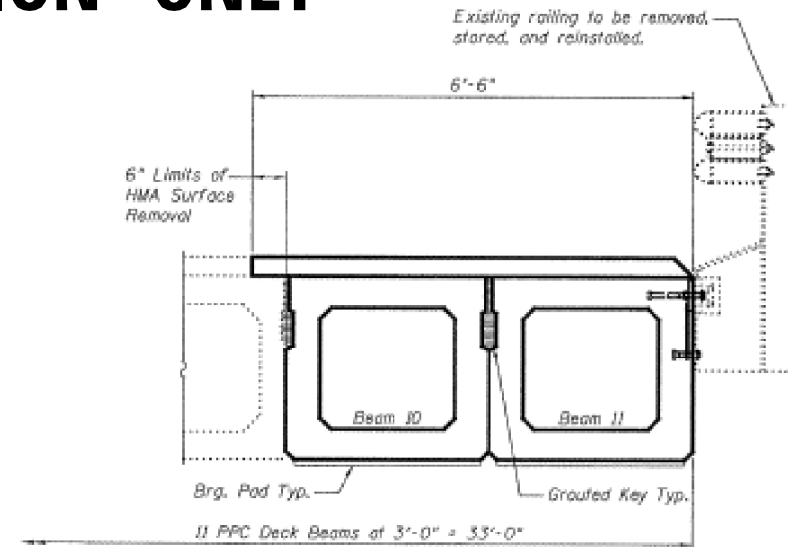
ROUTE NO.	SECTION	COUNTY	JOB	SHEET	SHEET NO. 4
FAP 71		Ford	11	11	4 SHEETS
PROJ. NO.	DATE	DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED BY

Contract Number: 6680J * (115-BR1)

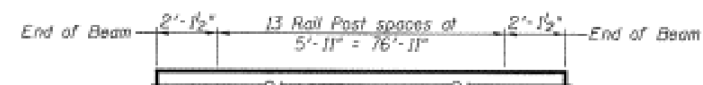
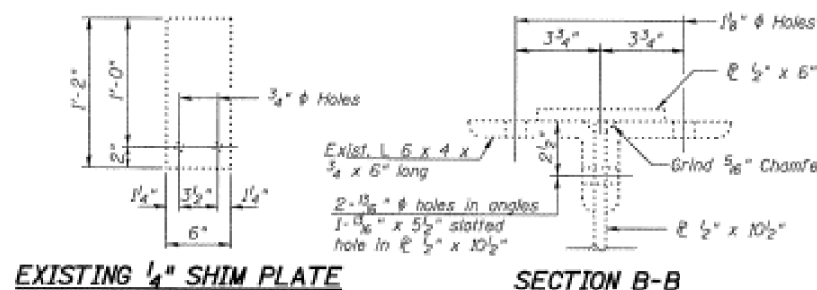
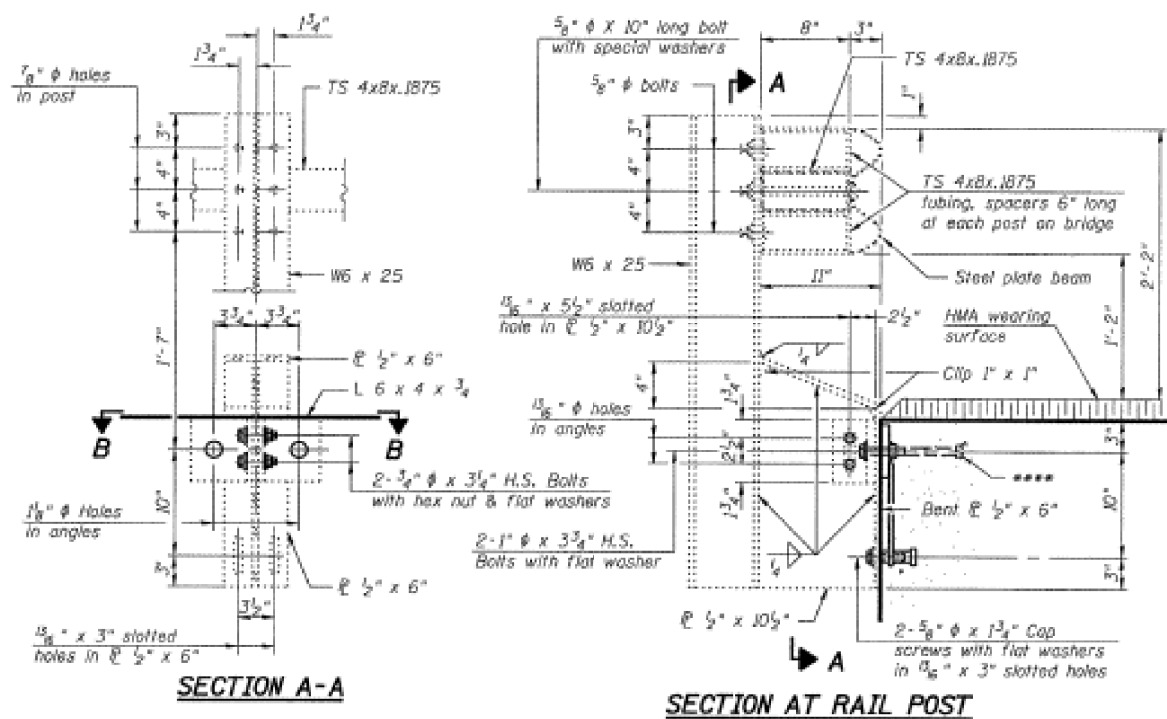


TYPICAL ABUTMENT SECTION

1" x 2'-6" dowel rods in 1 1/2" \emptyset holes drilled in cap (2 Each Beam. Existing dowel rods are to be burned off, ground flush, and sealed with epoxy prior to placement of new beams. Cast included in Removal of Existing PPC Deck Beams. After beams have been erected holes shall be drilled into cap and dowel rods placed. Dowel holes shall be filled with non-shrink grout to top of beam and allowed to cure a minimum of 24 hours prior to grouting the shear keys.

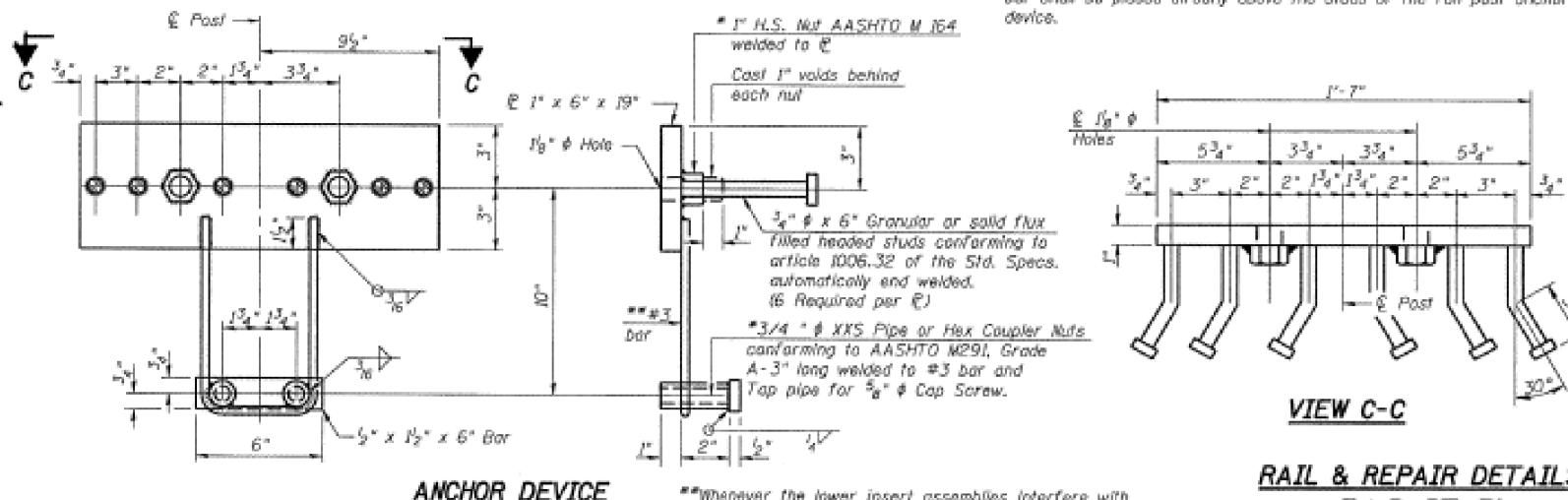


PARTIAL DECK CROSS SECTION



RAIL POST SPACING

Notes:
All field drilled holes shall be coated with an approved zinc rich paint before erection.
Cast included with Steel Railing, Type WT.
All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.
**** The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.



RAIL & REPAIR DETAILS
F.A.P. RT. 71
FORD COUNTY
SN 027-0077

*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

**Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed 1/2".

DESIGNED	A.J.B.	MAY 8, 2008
CHECKED	A.T.H.	
DRAWN	Drew Christopher	
CHECKED	A.J.B. A.T.H.	

SLT-93-001-08

FILE NAME :	USER NAME : Schwankerg	DESIGNED :	REVISED :	STATE OF ILLINOIS	EXISTING PLANS	F.A.P. RT. 71	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\11084EBIDINTEG\11\inois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0366994\0366994-shr-Exis\DWG\0366994-01.dwg		DESIGNED :	REVISED :	DEPARTMENT OF TRANSPORTATION	S.N. 027-0077	71	(115)BR, BR-1C, BR-4	FORD	158	78
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PLOT DATE = 8/11/2015		DATE :	REVISED :							ILLINOIS FED. AID PROJECT

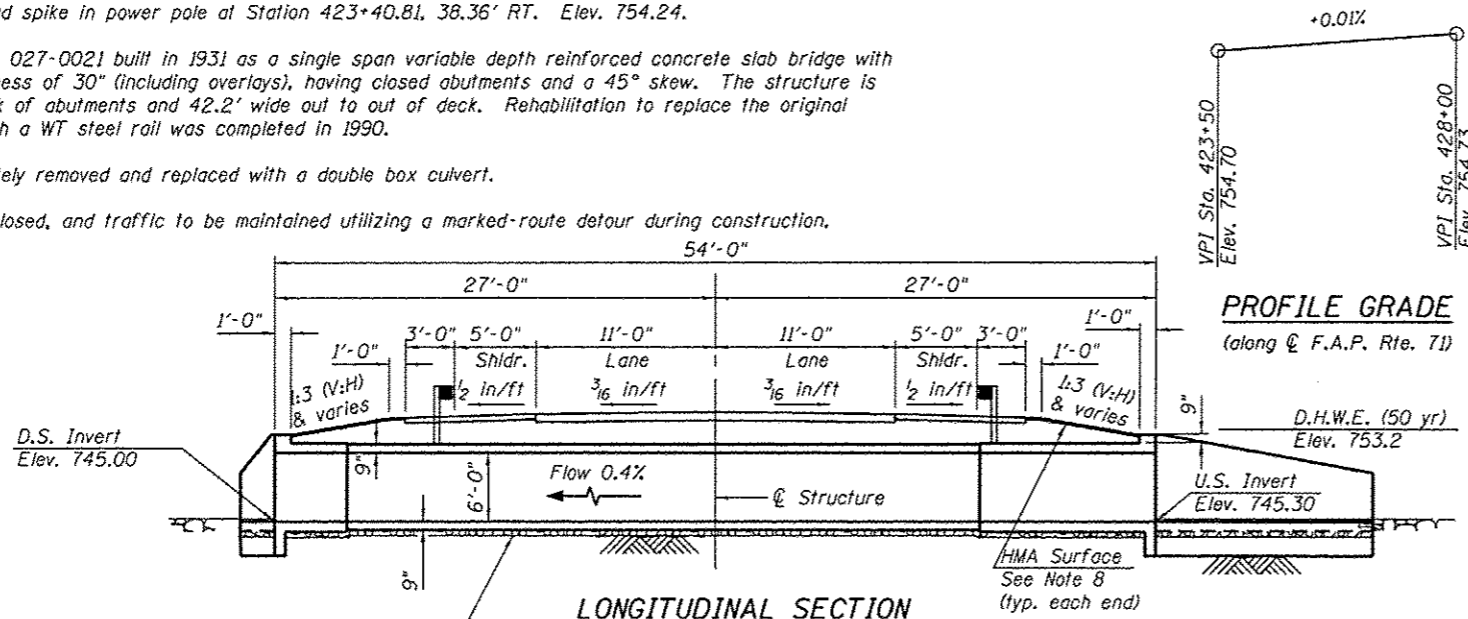
Benchmark #14, Railroad spike in power pole at Station 423+40.81, 38.36' RT. Elev. 754.24.

Existing Structure: S.N. 027-0021 built in 1931 as a single span variable depth reinforced concrete slab bridge with approximate total thickness of 30" (including overlays), having closed abutments and a 45° skew. The structure is 28.3' long back to back of abutments and 42.2' wide out to out of deck. Rehabilitation to replace the original concrete bridge rail with a WT steel rail was completed in 1990.

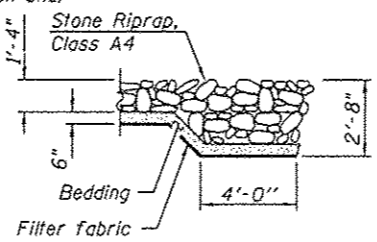
Structure to be completely removed and replaced with a double box culvert.

The roadway is to be closed, and traffic to be maintained utilizing a marked-route detour during construction.

No Salvage.



LONGITUDINAL SECTION
All dimensions shown are perpendicular to the roadway at the centerline of the structure.



TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Stone Riprap, Class A4	Sq. Yd.	203
Filter Fabric	Sq. Yd.	203
Removal of Existing Structures No. 2	Each	1
Reinforcement Bars, Epoxy Coated	Pound	8,690
Name Plates	Each	1
Concrete Box Culverts	Cu. Yd.	75.0
Precast Concrete Box Culverts 9' x 6'	Foot	109.5
Steel Plate Beam Guardrail, Attached to Structures	Foot	75

GENERAL NOTES

- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Reinforcement bars designated (E) shall be epoxy coated.
- All cast-in-place concrete dimensions controlled by the dimensions of the precast structure shall be adjusted to match the finalized dimensions of the precast structure as required. All other dimensions shall remain as shown.
- Design of the proposed Precast Concrete Box Culverts shall be according to the requirements of ASTM C1577 and the Special Provisions. Cost included in Precast Concrete Box Culverts 9'x6'. The seal on these plans does not apply to the design of the Precast Concrete Box Culverts. Stagger the joints in the precast sections of each adjacent cell where practical.
- It shall be the responsibility of the Contractor to divert the stream flow during construction in order to keep the construction area free of water. The method of water diversion shall be subject to the approval of the Engineer and the cost shall be included with the cost of Concrete Box Culverts.
- The provisions of Article 205.05 of the Standard Specifications and applicable Special Provisions shall apply in regards to drain holes.
- Approx. 2" HMA (typical on each side of box culvert). Cost is included in HMA Shoulders 8". Compact with rubber tires or a plate compactor.

DESIGN SPECIFICATIONS

2014 AASHTO LRFD Bridge Design Specifications, Customary U.S. Units, 7th Edition

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN STRESSES

FIELD UNITS

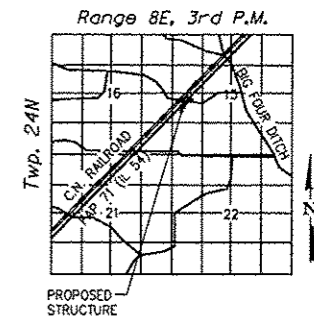
$f'_c = 3,500$ psi @ 28 days (Cast-In-Place Concrete)
 $f_y = 60,000$ psi (Reinforcement)

PRECAST UNITS

$f'_c = 5,000$ psi @ 28 days (Concrete)
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 65,000$ psi (Welded Wire Fabric)

INDEX OF SHEETS

- General Plan and Elevation
- Precast Box Section and Elevations
- Cast-in-Place Box Section and Elevations
- Cast-in-Place Top Slab
- Cast-in-Place Bottom Slab
- Wingwalls
- Soil Boring Logs



LOCATION SKETCH

Precast Box Culvert Schedule (ASTM C 1577)

Station	Size (Span x Height)	Skew	Design Fill (ft.)		PGE backfill required
			Edge of shldr. (minimum)	Maximum	
425+94.68	9 x 6 (2)	45°	2.0'	2.5'	Y

See BDE Special Provisions

WATERWAY INFORMATION

Drainage Area = 1.6 Sq. Mi. Exist. Low Grade Elev. 754.18 @ Sta. 426+29.00
Prop. Low Grade Elev. 754.45 @ Sta. 424+07.00

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Head - Ft.		Headwater EL.		
			Exist.	Prop.	Exist.	Prop.	Exist.	Prop.	
Ex. Overtopping	10	485	96	108	752.6	0.4	0.2	753.0	752.8
Design	34	745	96	108	753.1	1.4	0.8	754.5	753.9
Pr. Overtopping	50	811	96	108	753.2	1.4	1.0	754.6	754.2
Base/Scour Design	63	876	96	108	753.3	1.4	1.2	754.7	754.5
Scour Check	100	961	96	108	753.4	1.3	1.3	754.8	754.7
	200	1114	96	108	753.6	1.4	1.2	755.0	754.8

10-year velocity exist 5.3 fps 10-year velocity prop 4.7 fps

GENERAL PLAN AND ELEVATION

F.A.P. ROUTE 71 (IL 54)

OVER TRIBUTARY TO

BIG FOUR DITCH

SECTION (115)BR-1C

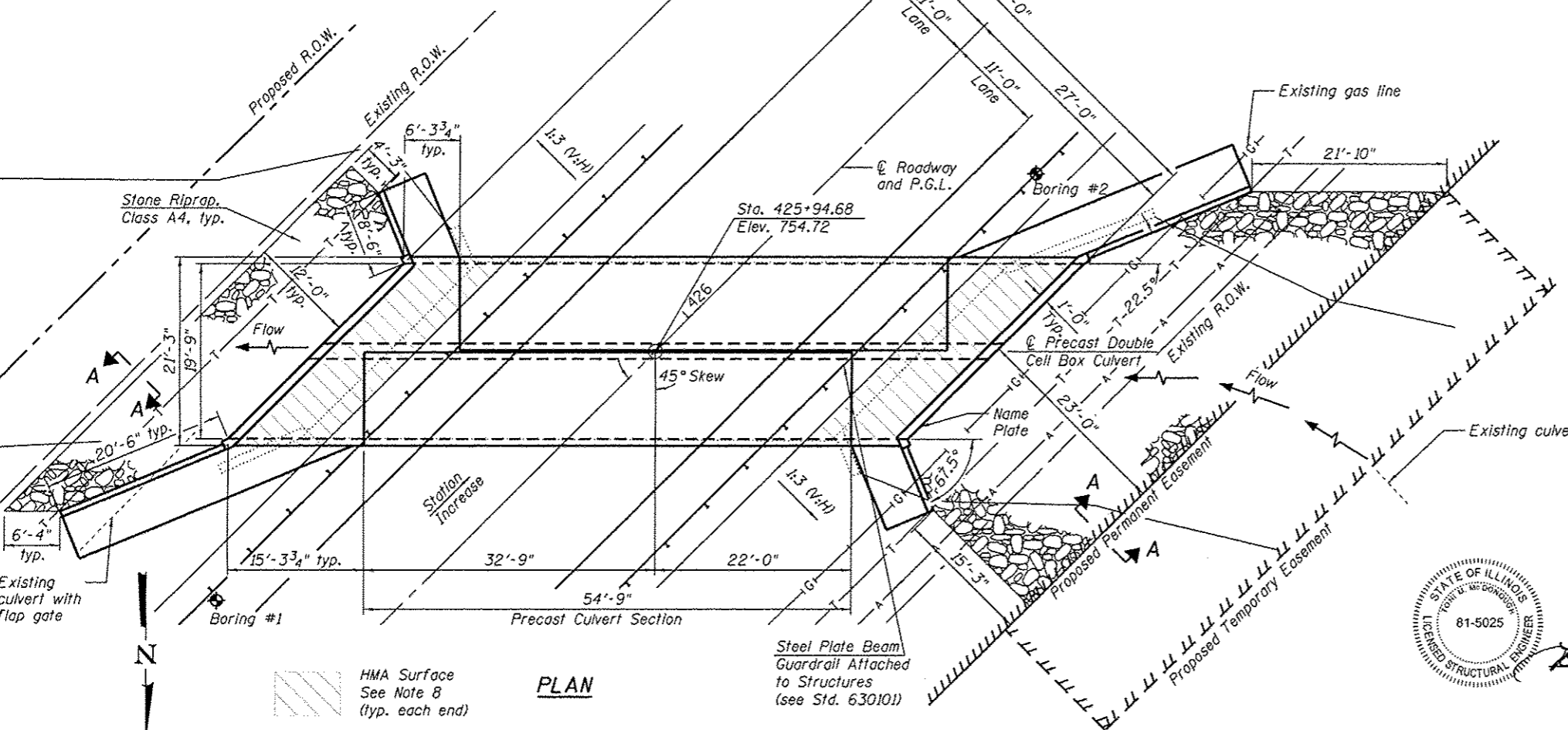
FORD COUNTY

STA. 425+94.68

S.N. 027-2020

STATION 425+94.68
BUILT BY
STATE OF ILLINOIS
F.A.P. RT. 71
SEC. (115)BR-1C
LOADING HL-93
STRUCTURE NO. 027-2020

NAME PLATE
See Std. 515001



PLAN



Toni M. McDonough
Illinois Structural Engineer
No. 81-5025
Exp. Date 11/30/2016

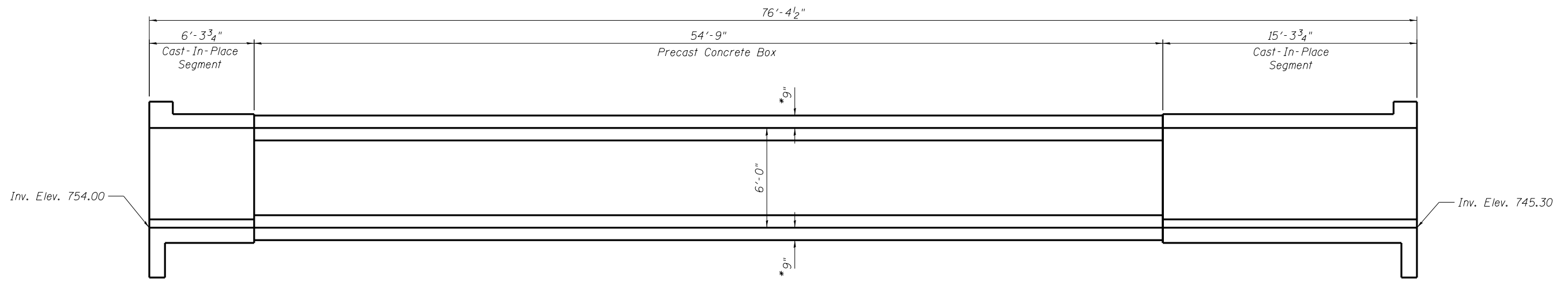
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

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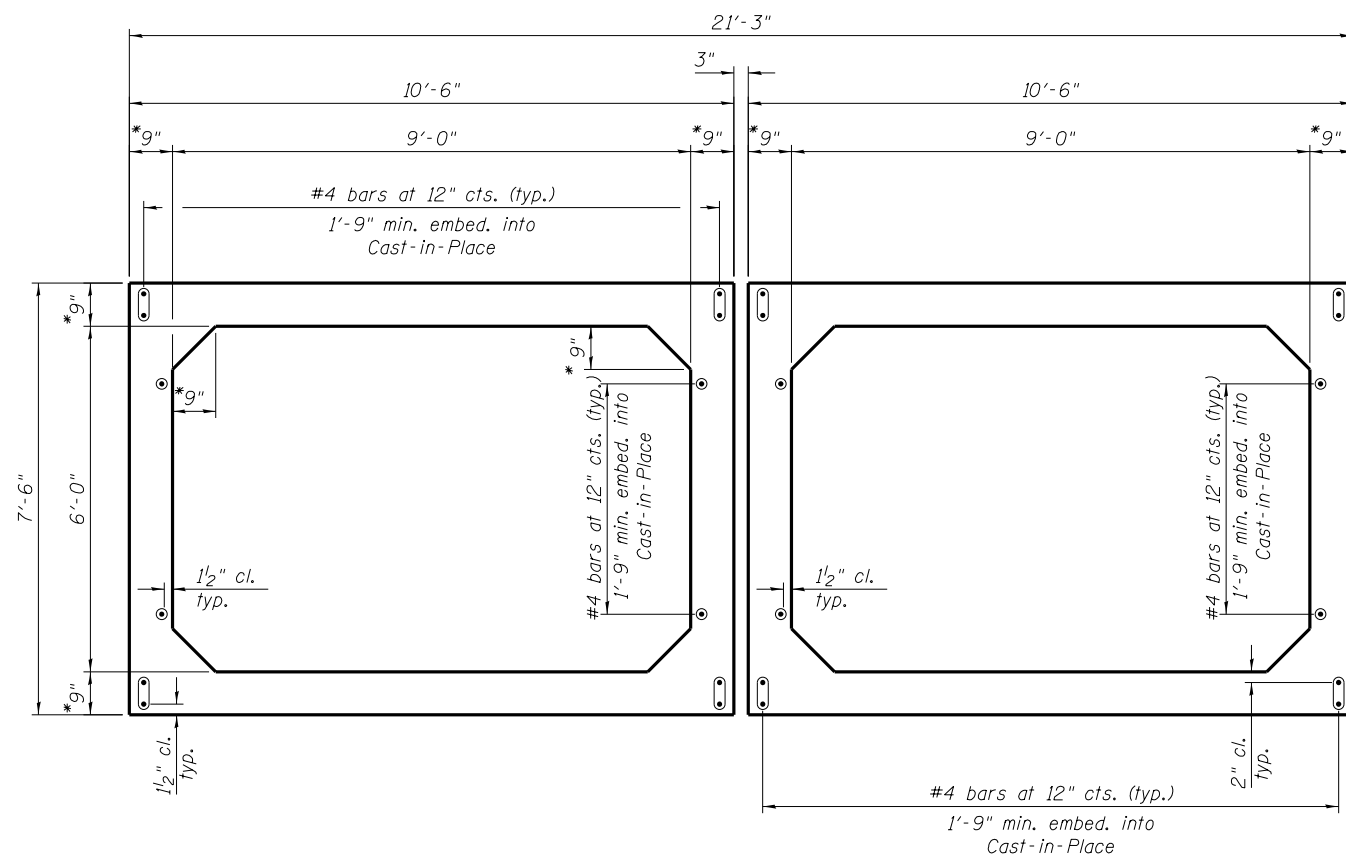
SHEET NO. 1 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	79

CONTRACT NO. 66994
ILLINOIS FED. AID PROJECT



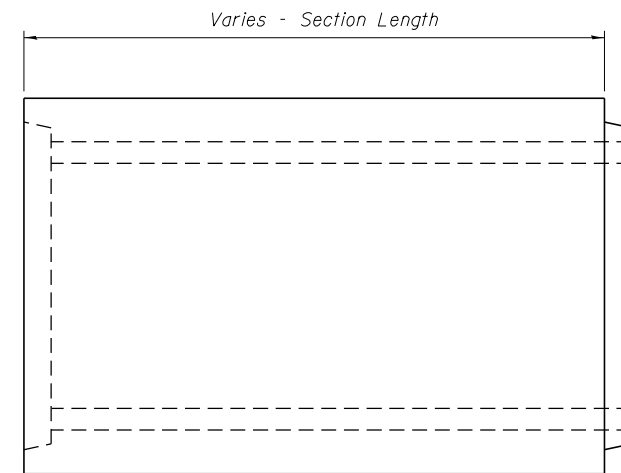
LONGITUDINAL SECTION
(Looking South @ South Cell of Culvert)



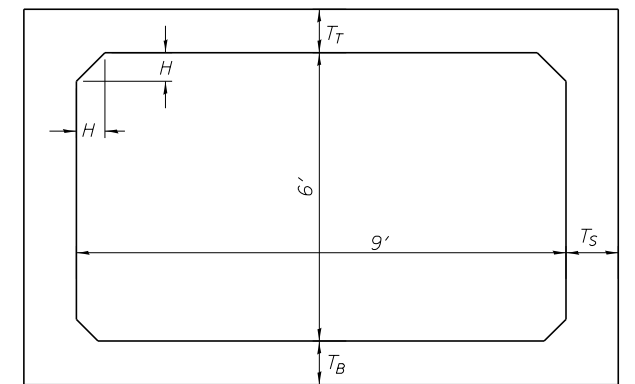
PRECAST CONCRETE CULVERT END ELEVATION

Bars shown shall be cast into each precast section adjoining a cast-in-place section and shall be embedded a minimum of 2'-0" into each precast section.

* Confirm slab, haunch, and wall thickness with Precaster.

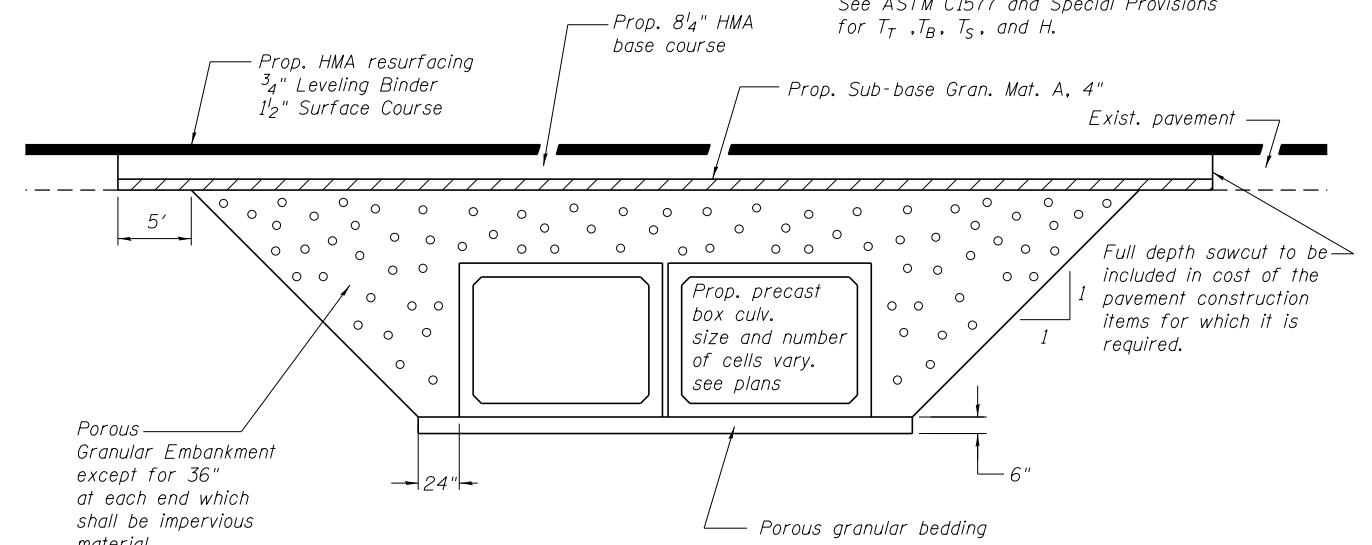


ELEVATION



TYPICAL BOX SECTION

See ASTM C1577 and Special Provisions for T_T , T_B , T_S , and H .



SECTION THROUGH PRECAST BOX CULVERT

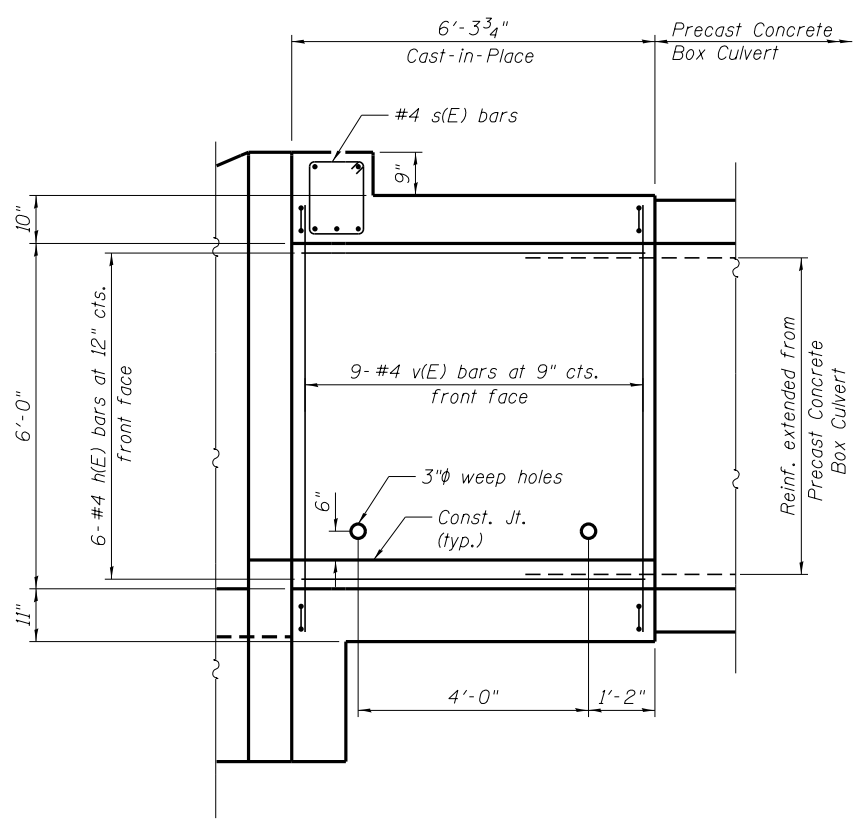
Notes:
For cast-in-place concrete segments of culvert, see sheets 3-5 of 8.
Cost of reinforcing bars extending from precast barrels included with the cost of Precast Concrete Box Culverts.

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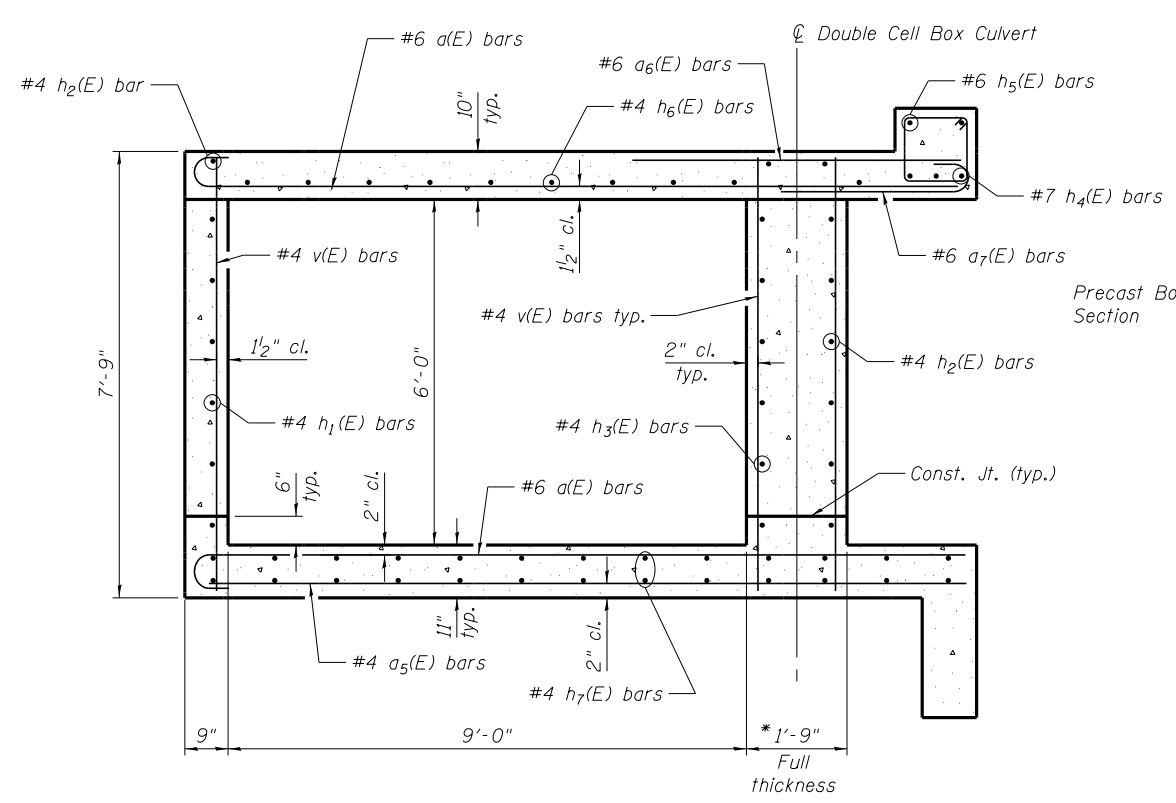
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PLOT DATE =	8/12/2015	CHECKED -	TMM	REVISED -	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	80
CONTRACT NO. 66994				

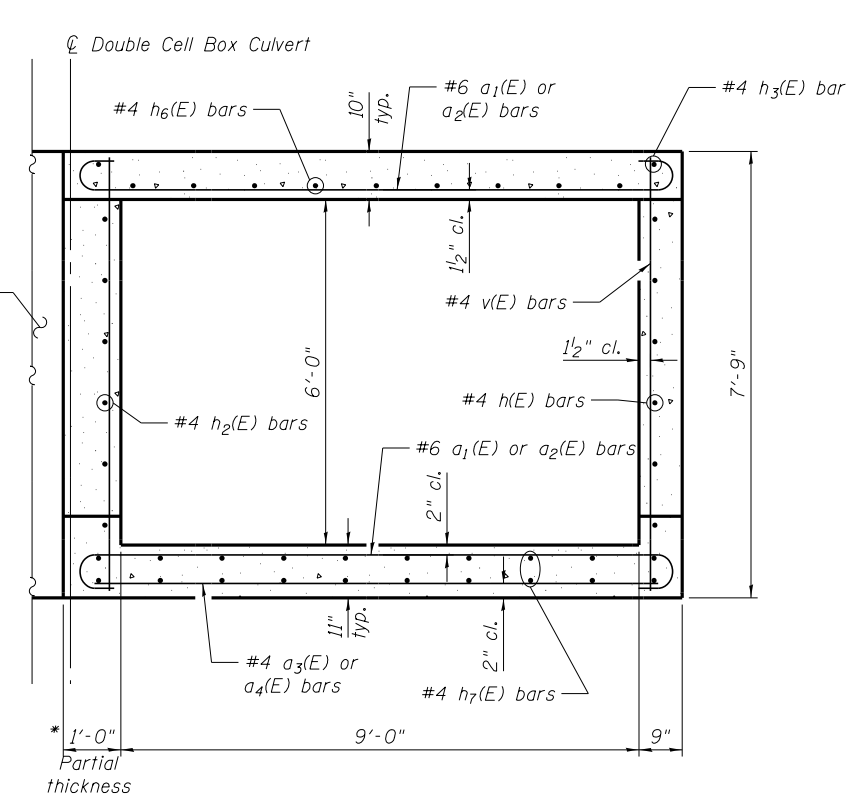
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NW AND SE WALL ELEVATION (INTERIOR FACE)
(Downstream end shown)



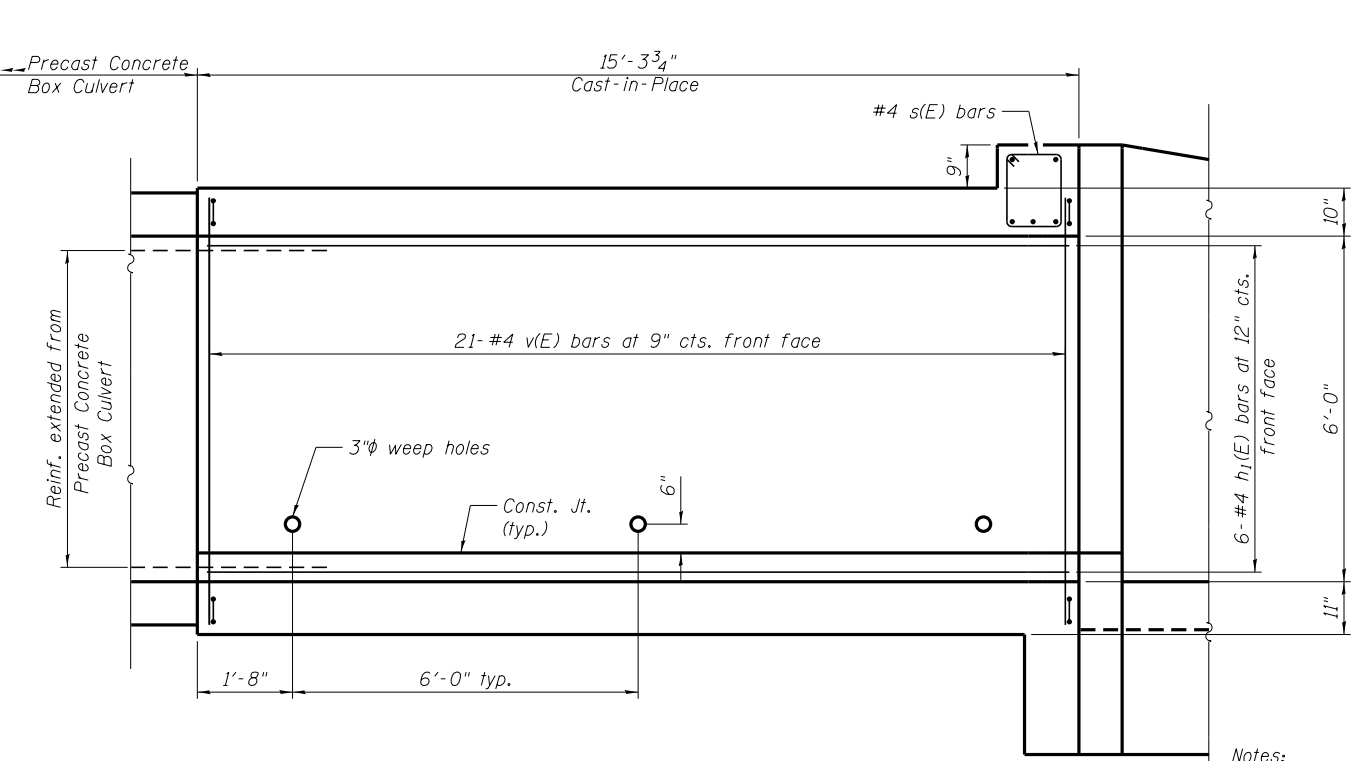
HALF-SECTION BEYOND PRECAST BOX SECTION
(Downstream end shown)



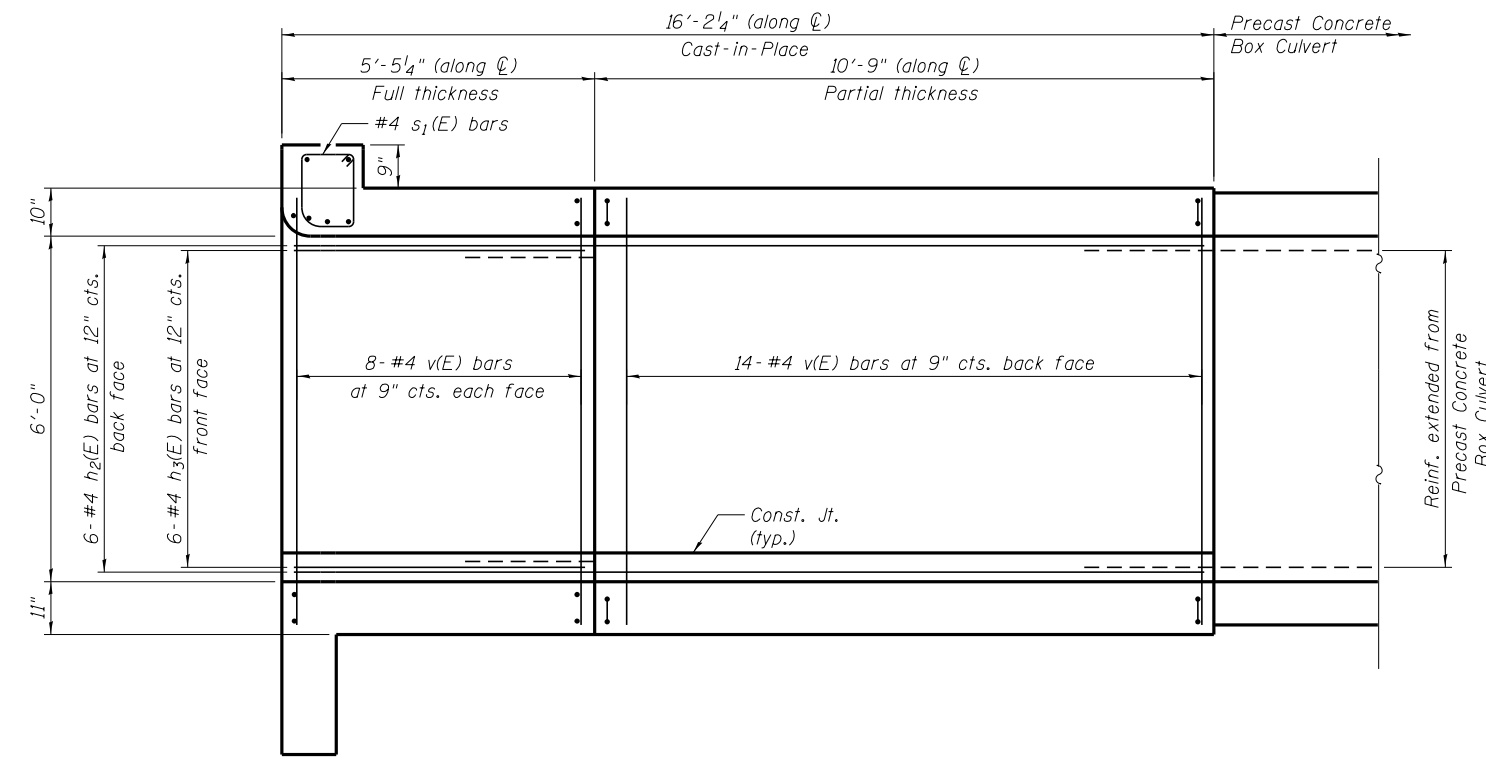
HALF-SECTION ADJACENT TO PRECAST BOX SECTION

SECTION THRU CAST-IN-PLACE CONCRETE BOX CULVERT
(Looking East)

* Confirm slab, haunch, and wall thickness with Precaster.



NE AND SW WALL ELEVATION (INTERIOR FACE)
(Downstream end shown)



CENTER WALL ELEVATION
Dimensions shown along centerline of full thickness wall.
(Upstream end shown)

Notes:
For precast concrete portions, see sheet 2 of 8.
Not all slab reinf. shown in elevation views. See cast-in-place top and bottom slabs sheets 4 & 5 of 8.
See details sheet 4 of 8 for exact headwall configurations and drain details.
See sheet 5 of 8 for Bill of Material and sheet 4 of 8 for bar details.

McDonough-Whitlow, P.C.
Consulting Engineers & Land Surveyors
PROFESSIONAL DESIGN NO. 184-002754

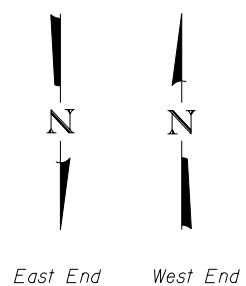
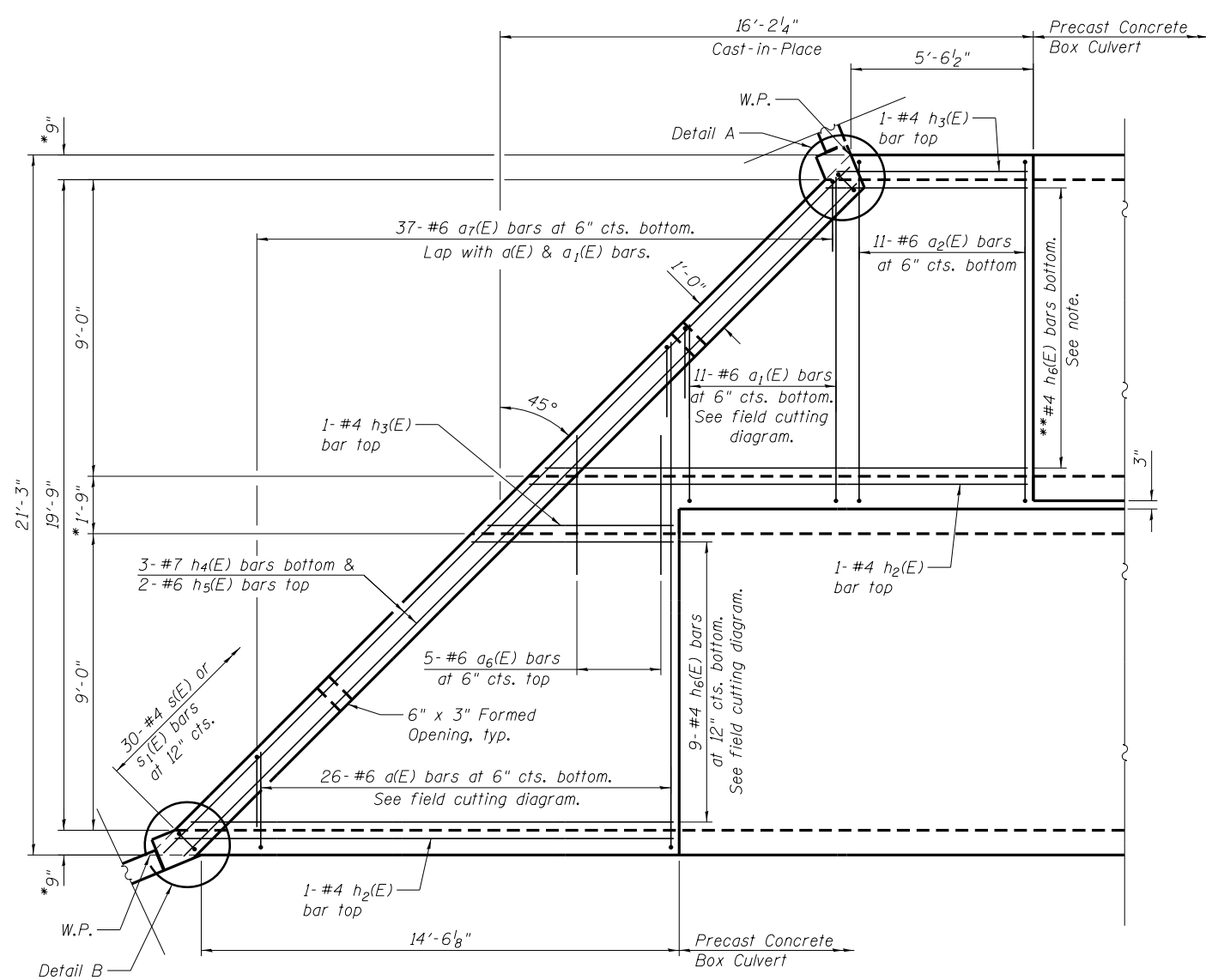
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PLOT DATE =	8/12/2015	CHECKED -	TMM	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CAST-IN-PLACE BOX SECTION AND ELEVATIONS
STRUCTURE NO. 027-2020

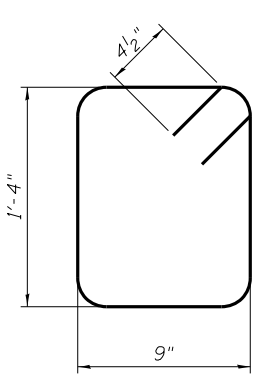
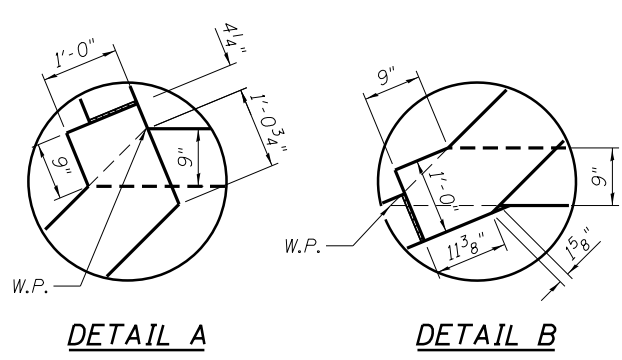
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	81
CONTRACT NO. 66994				

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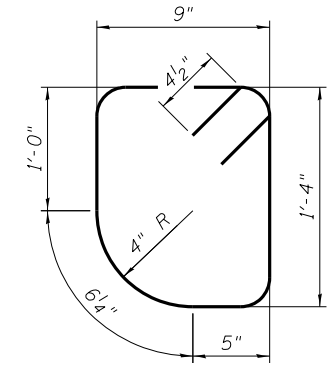


TYPICAL TOP SLAB PLAN

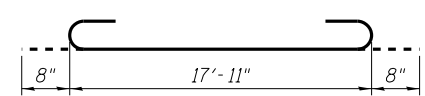
* Confirm slab, haunch, and wall thickness with Precaster.



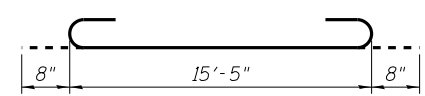
BAR s(E)



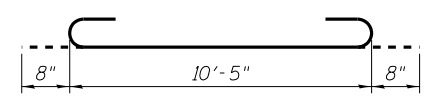
BAR s1(E)



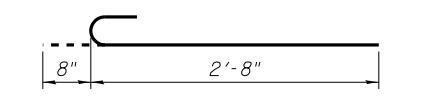
BAR a(E)



BAR a1(E)



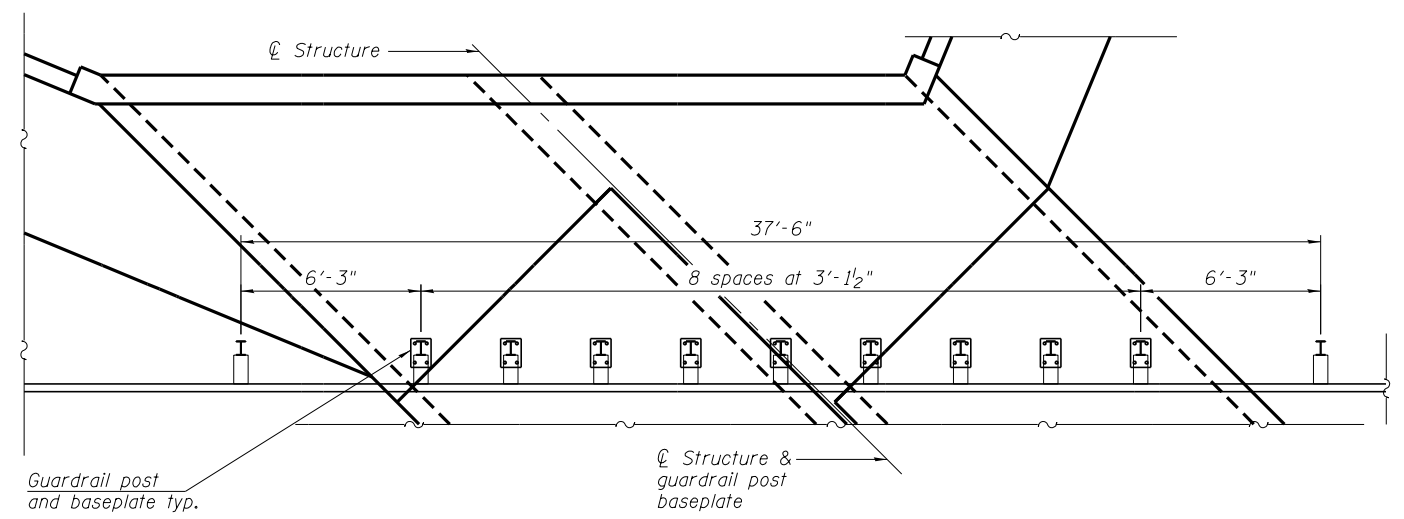
BAR a2(E)



BAR a7(E)

MINIMUM BAR LAP

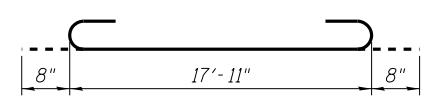
#6 bar = 2'-5"



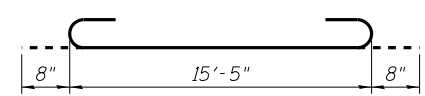
TYPICAL GUARDRAIL POST LAYOUT DETAIL

(See Highway Standard 630.101)

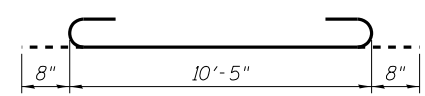
For all locations where the standard anchor is to be placed in a wall or haunch of the box culvert, a hole shall be drilled and each anchor set in grout in lieu of the typical attachment. Cost of the attachment of all guardrail posts attached to structure to be included in the cost of Steel Plate Beam Guardrail, Attached to Structures.



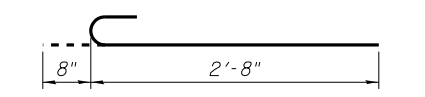
BAR a(E)



BAR a1(E)



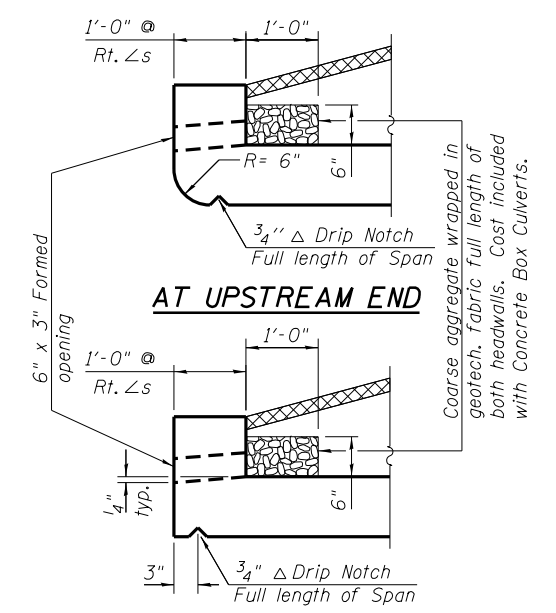
BAR a2(E)



BAR a7(E)

MINIMUM BAR LAP

#6 bar = 2'-5"



AT UPSTREAM END

AT DOWNSTREAM END

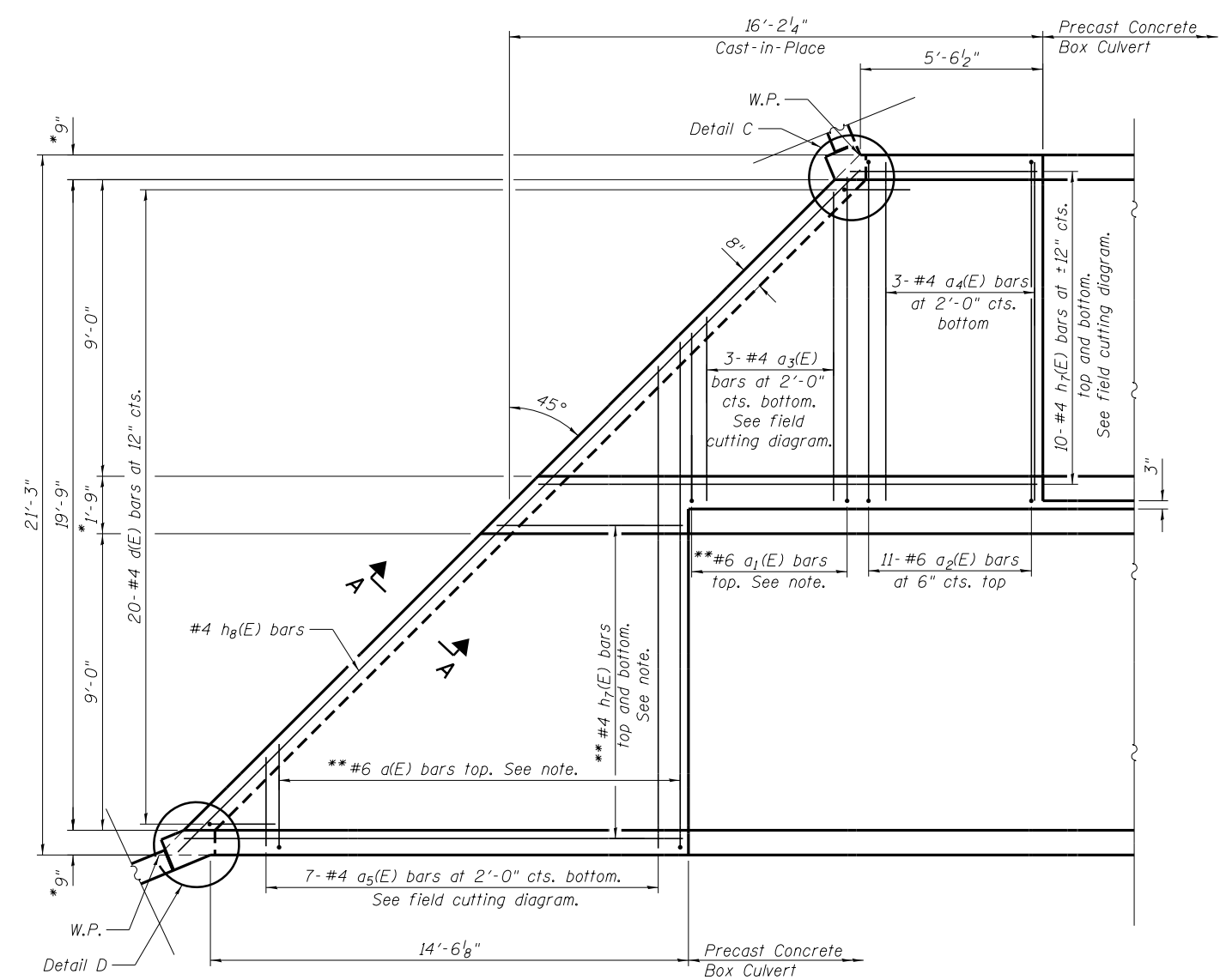
DRAIN DETAIL

Notes:
W.P. denotes Working Point.
The bar lengths as shown for bars denoted with ** are the remaining portions of field cut bars used elsewhere. See field cutting diagrams.
See sheet 5 of 8 for field cutting diagrams, Bill of Material, and bottom slab details.

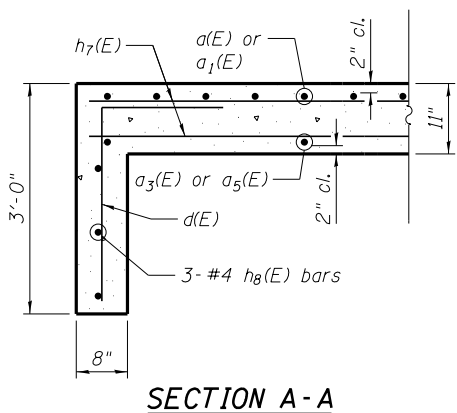
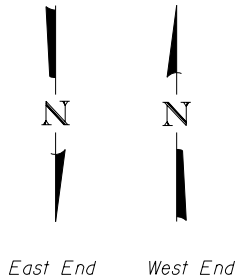
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CHECKED -		REVISOR -		REVISED -	
PLOT SCALE =	0:2.0000 "1" / in.	DRAWN -	RNH	REVISED -	
PLOT DATE =	8/12/2015	CHECKED -	TMM	REVISED -	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	82
CONTRACT NO. 66994				

FILE NAME = p:\11084EBID\INTEG\all\in\p\m\11084EBID\Documents\11084EBID\027-2020 - PROPOSED--DD NOT REVISE\0272020-66994.dgn

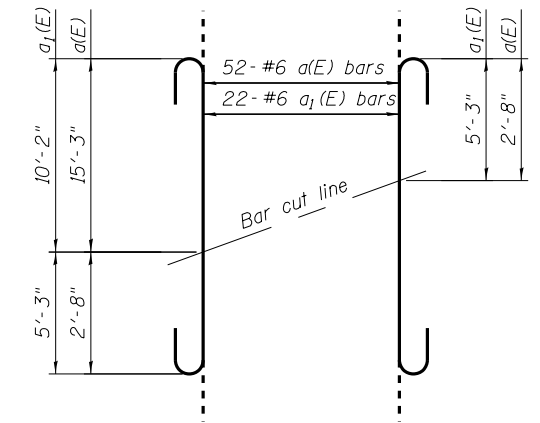


TYPICAL BOTTOM SLAB PLAN



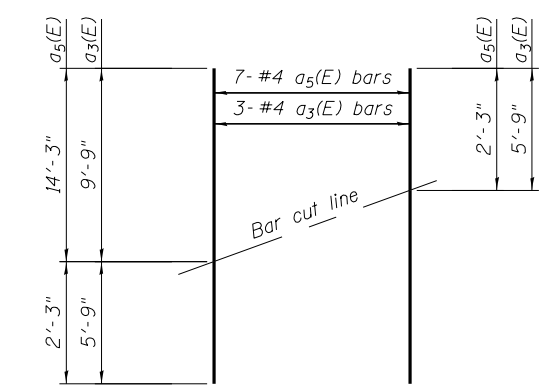
SECTION A-A

* Confirm slab, haunch, and wall thickness with Precaster.



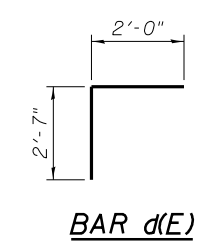
FIELD CUTTING DIAGRAM

Order a(E) and a1(E) bars full length. Cut as shown and use remainder of bars in bottom slab.

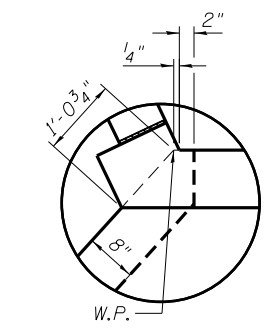


FIELD CUTTING DIAGRAM

Order a3(E) and a5(E) bars full length. Cut as shown and use remainder of bars in opposite end of culvert.

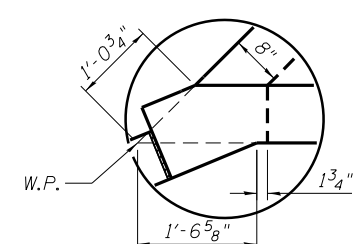


BAR d(E)

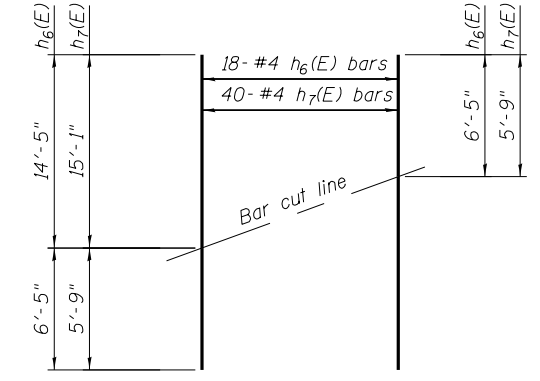


DETAIL C

This detail exaggerated for clarity.



DETAIL D



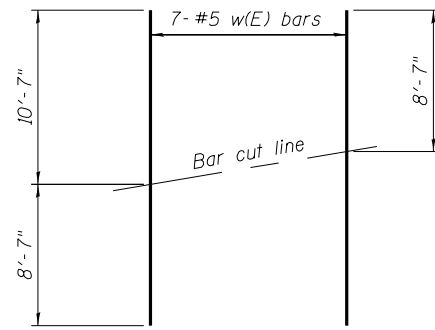
FIELD CUTTING DIAGRAM

Order h6(E) and h7(E) bars full length. Cut as shown and use remainder of bars in adjacent cell on same end of culvert.

BILL OF MATERIAL

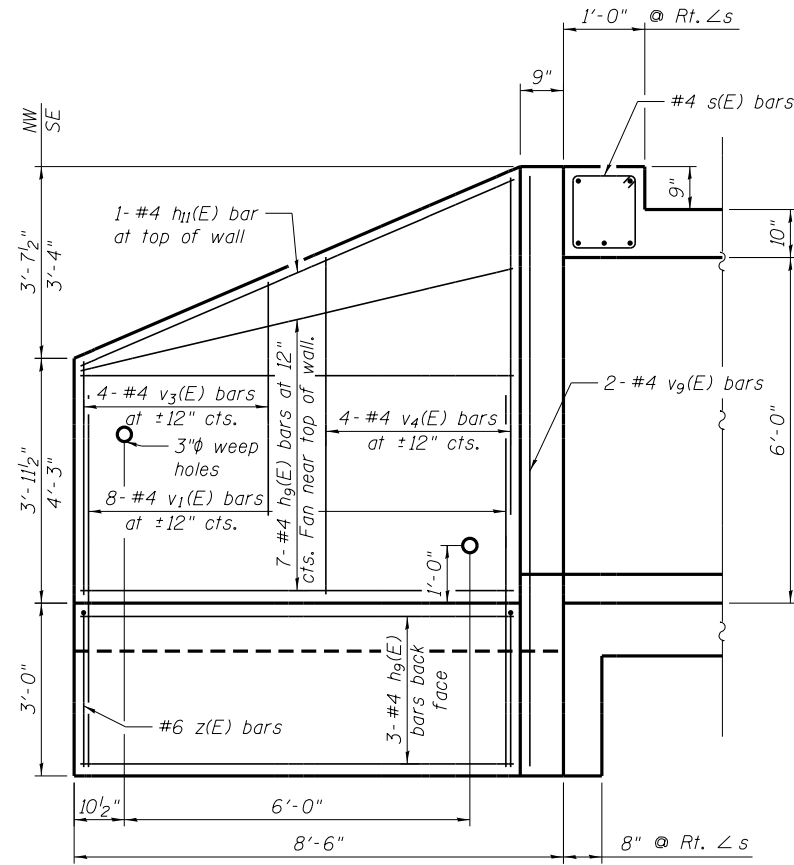
Bar	No.	Size	Length	Shape
a(E)	52	#6	19'-3"	U
a1(E)	22	#6	16'-9"	U
a2(E)	44	#6	11'-9"	U
a3(E)	3	#4	15'-6"	—
a4(E)	6	#4	10'-6"	—
a5(E)	7	#4	16'-6"	—
a6(E)	10	#6	6'-0"	—
a7(E)	74	#6	3'-4"	U
d(E)	40	#4	4'-7"	L
h(E)	12	#4	6'-0"	—
h1(E)	12	#4	15'-3"	—
h2(E)	16	#4	15'-0"	—
h3(E)	16	#4	5'-9"	—
h4(E)	6	#7	29'-0"	—
h5(E)	4	#6	29'-0"	—
h6(E)	18	#4	20'-10"	—
h7(E)	40	#4	20'-10"	—
h8(E)	6	#4	29'-3"	—
s(E)	30	#4	4'-11"	U
s1(E)	30	#4	4'-9"	U
v(E)	120	#4	7'-5"	—
Reinforcement Bars, Epoxy Coated			Pound	6,200
Concrete Box Culverts			Cu. Yd.	50.9

Notes:
W.P. denotes Working Point.
The bar lengths as shown for bars denoted with ** are the remaining portions of field cut bars used elsewhere. See field cutting diagrams.
See sheet 4 of 8 for bar details and top slab details.

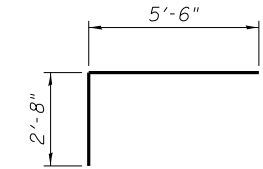


FIELD CUTTING DIAGRAM

Order w(E) bars full length. Cut as shown and use remainder of bars in wingwall at diagonal end of structure.



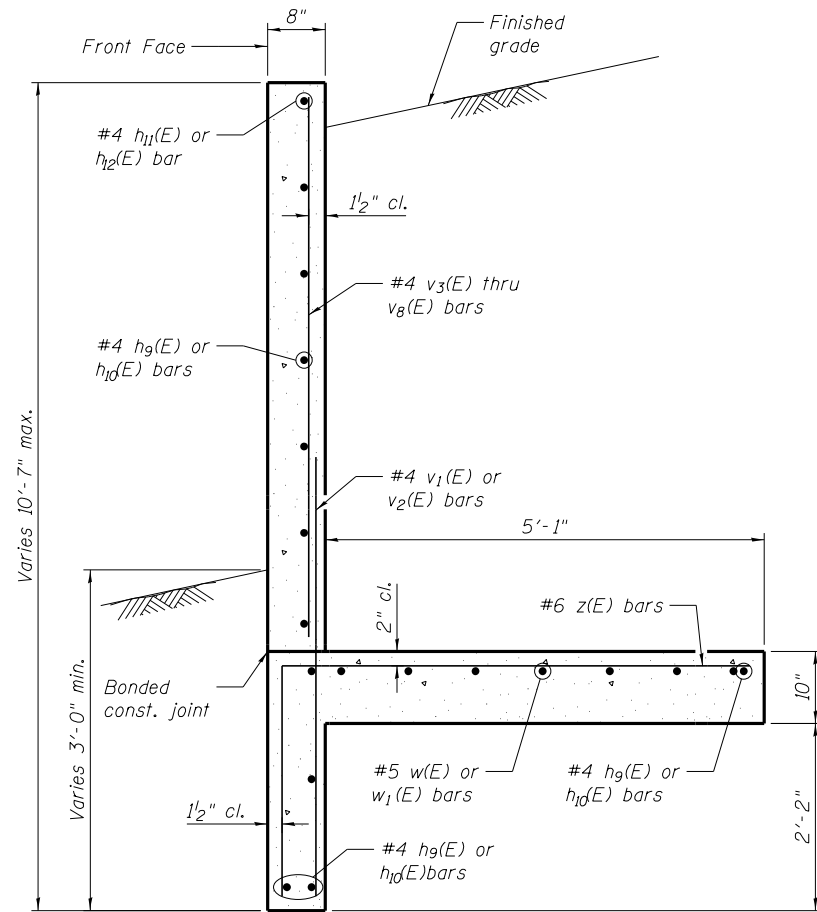
NW AND SE WINGWALL ELEVATION
(Downstream end shown)



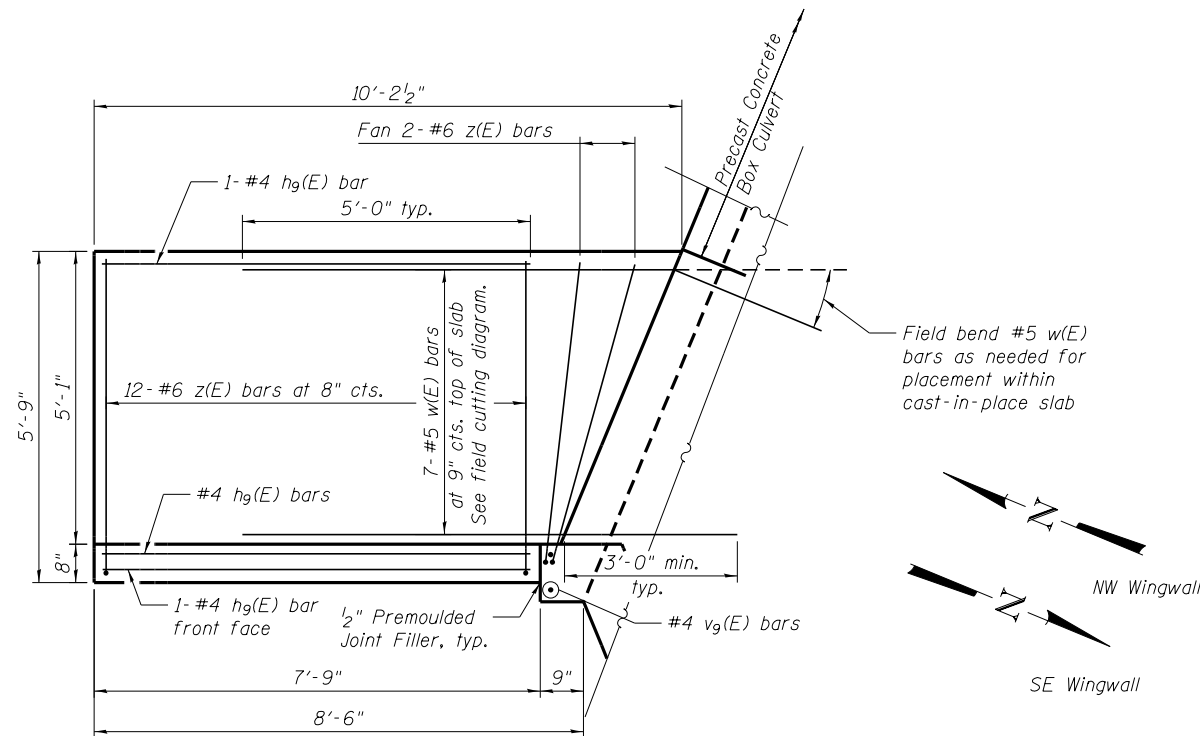
BAR z(E)

MINIMUM BAR LAP

#4 bar = 2'-1"



WINGWALL CROSS SECTION



NW AND SE WINGWALL PLAN

Notes:
See sheet 7 of 8 for additional wingwall details and Bill of Material.

FILE NAME = p:\11084EBID\INTEG\all\mns\p\11084EBID\Documents\DDOT\DDOT\Projects\027-2020 - PROPOSED--DO NOT REVISE\0272020-66994.dgn

McDonough-Whitlow, P.C.
Consulting Engineers & Land Surveyors
PROFESSIONAL DESIGN No. 184-002754

USER NAME =	Schwankerg	DESIGNED -	CMF	REVISED -	
CHECKED -		CHECKED -		REVISED -	
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PLOT DATE =	8/12/2015	CHECKED -	TMM	REVISED -	

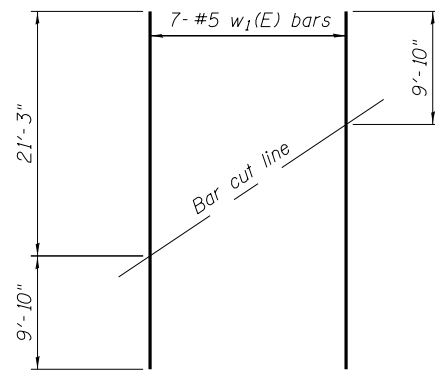
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WINGWALLS
STRUCTURE NO. 027-2020

SHEET NO. 6 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	84
CONTRACT NO. 66994				

ILLINOIS FED. AID PROJECT

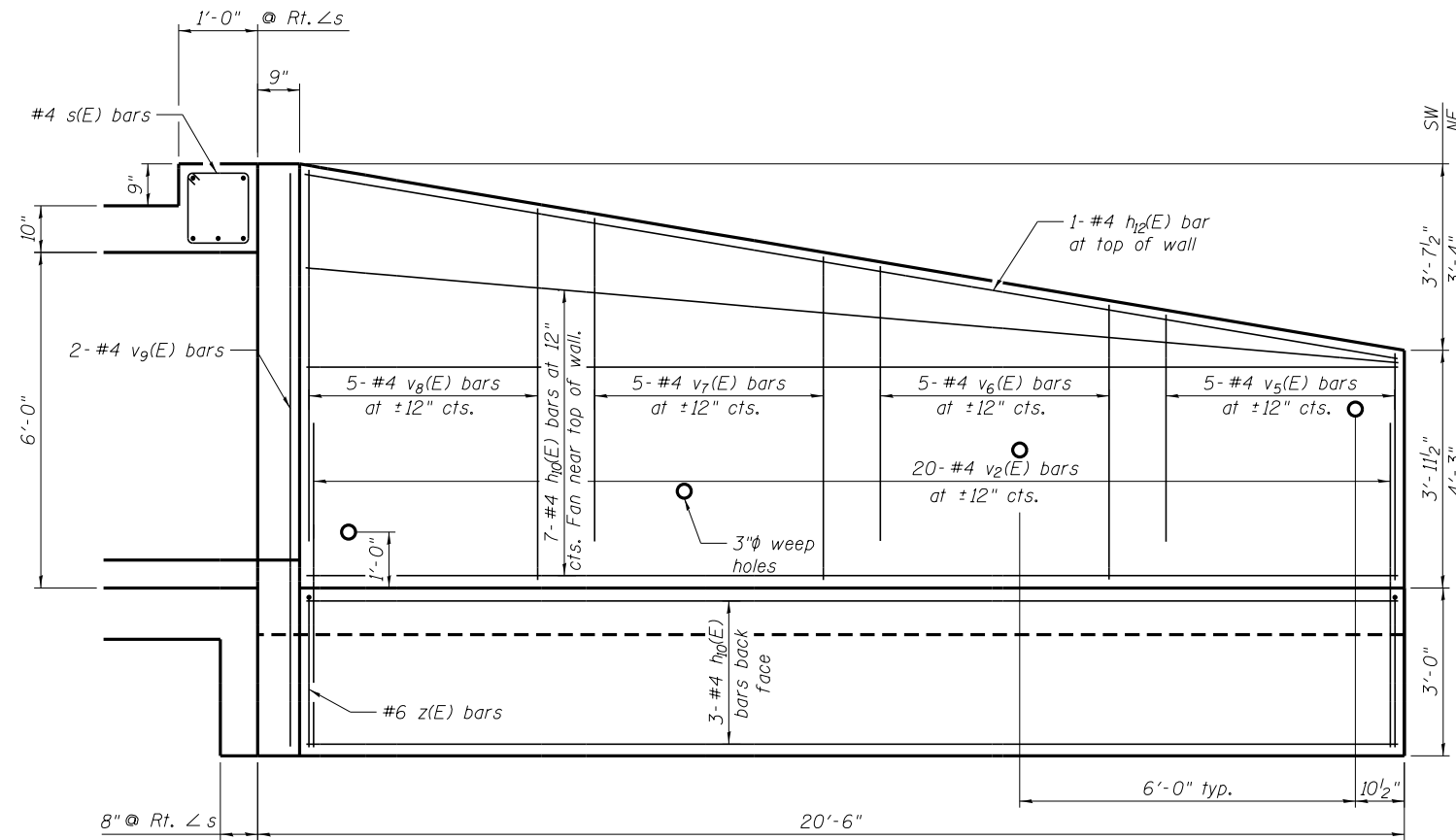


FIELD CUTTING DIAGRAM

Order $w_1(E)$ bars full length. Cut as shown and use remainder of bars in wingwall at diagonal end of structure.

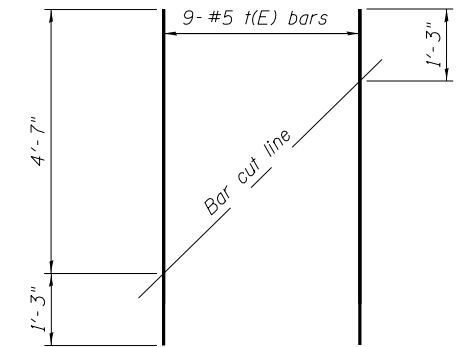
MINIMUM BAR LAP

#4 bar = 2'-1"



SW AND NE WINGWALL ELEVATION

(Downstream end shown)

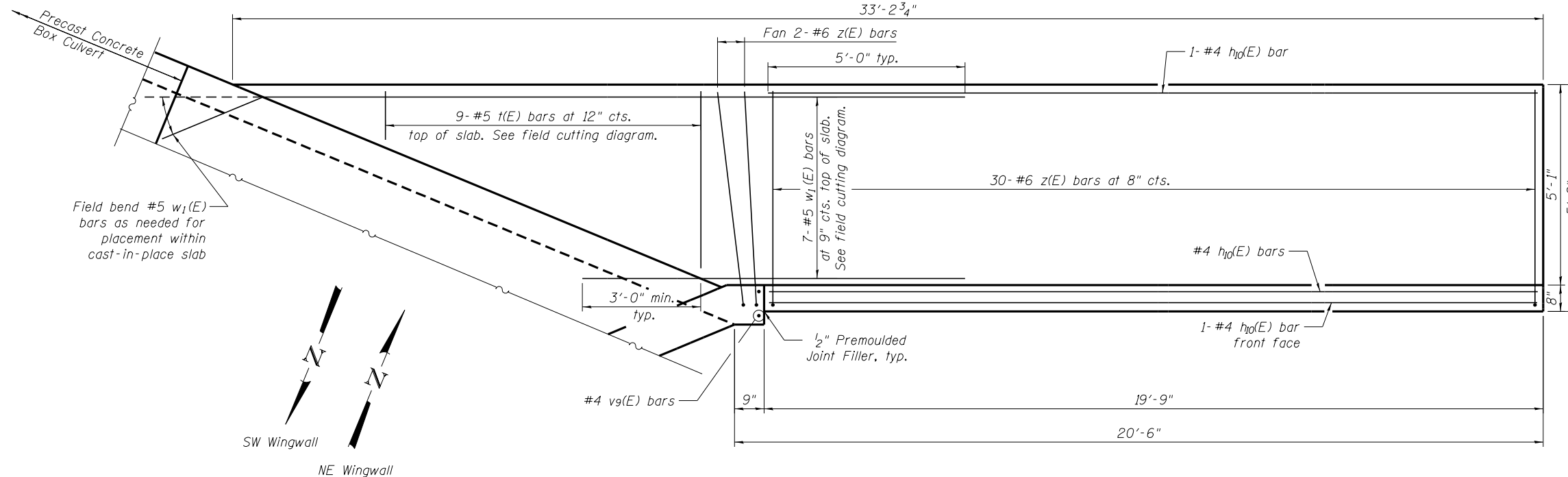


FIELD CUTTING DIAGRAM

Order $t(E)$ bars full length. Cut as shown and use remainder of bars in wingwall at diagonal end of structure.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
$h_9(E)$	24	#4	7'-5"	—
$h_{10}(E)$	24	#4	19'-5"	—
$h_{11}(E)$	2	#4	8'-3"	—
$h_{12}(E)$	2	#4	19'-9"	—
$t(E)$	9	#5	5'-10"	—
$v_1(E)$	16	#4	6'-5"	—
$v_2(E)$	40	#4	5'-9"	—
$v_3(E)$	8	#4	4'-0"	—
$v_4(E)$	8	#4	5'-10"	—
$v_5(E)$	10	#4	3'-11"	—
$v_6(E)$	10	#4	4'-10"	—
$v_7(E)$	10	#4	5'-8"	—
$v_8(E)$	10	#4	6'-6"	—
$v_9(E)$	8	#4	10'-3"	—
$w(E)$	7	#5	19'-2"	—
$w_1(E)$	7	#5	31'-1"	—
$z(E)$	92	#6	8'-2"	└
Reinforcement Bars, Epoxy Coated		Pound	2,490	
Concrete Box Culverts		Cu. Yd.	24.1	



SW AND NE WINGWALL PLAN

Notes:
See sheet 6 of 8 for wingwall cross section and bar details.

FILE NAME = p:\11084EBID\INTEG\all\mains\p\11084EBID\Documents\DDOT\Drawings\District 3\Projects\027-2020 - PROPOSED--DD NOT REVISED\0272020-66994.dgn

SOIL BORING LOG

Date 6/18/14

ROUTE IL 54 (SBI-48) DESCRIPTION IL 54 over Drainage Ditch, 7.06 miles North of IL 9 LOGGED BY Larry Myers

SECTION 115-B LOCATION SW 1/4, SEC. 15, TWP. 24N, RNG. 8E, 3rd PM,
Latitude 40.536447, Longitude -88.28854

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 027-0021 (Exist.)
Station 425+87

BORING NO. 01 (E. Quad.)
Station 425+40
Offset 15.0 ft Lt.
Ground Surface Elev. 754.04 ft

Surface Water Elev. 746.23 ft
Stream Bed Elev. 745.99 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion 724.0 ft
After Hrs. ft

DEPTH (ft)	SOIL DESCRIPTION	DEPTH (ft)	BLOW COUNT (/6")	UCS (tsf)	MOISTURE (%)
0	Augered Shoulder Gravel, Black & Gray Silty Clay Loam Fill	0	3		
751.54		5	4.5	14	
		6	S		
		2			
	Stiff to Very Stiff Black & Gray Silty Clay Loam Fill	5	4.5	14	
749.54		7	S		
		3			
	Soft Gray & Brown Sandy Loam with Sand/Gravel layers	5			
747.04		8	5.3	15	
		10	S		
		1			
	Very Stiff to Hard Olive Green and Gray Silty Clay Loam Till	6			
744.54		9	5.1	19	
		10	S		
		4			
	Hard Gray Silty Clay Till with Sand and Silt seams	6			
		10	5.6	18	
		10	S		
		5			
		8	4.6	16	
		9	S		
		4			
	Very Stiff Gray Silt with Minor Clay	5	4.2	18	
736.54		7	S		
		3			
		5	3.5	22	
734.54		7	P		
		20			

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, form 137 (Rev. 8-99)

SOIL BORING LOG

Date 6/18/14

ROUTE IL 54 (SBI-48) DESCRIPTION IL 54 over Drainage Ditch, 7.06 miles North of IL 9 LOGGED BY Larry Myers

SECTION 115-B LOCATION SW 1/4, SEC. 15, TWP. 24N, RNG. 8E, 3rd PM,
Latitude 40.53631, Longitude -88.28872

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 027-0021 (Exist.)
Station 425+87

BORING NO. 02 (W. Quad.)
Station 426+39
Offset 16.0 ft Rt.
Ground Surface Elev. 753.94 ft


Surface Water Elev. 746.23 ft
Stream Bed Elev. 746.50 ft

Groundwater Elev.:
First Encounter Dry ft
Upon Completion Dry ft
After Hrs. ft

DEPTH (ft)	SOIL DESCRIPTION	DEPTH (ft)	BLOW COUNT (/6")	UCS (tsf)	MOISTURE (%)
0	Augered Shoulder Gravel, Black Silty Clay Loam Fill	2			
751.44		4	3.5	14	
		5	B		
		2			
	Stiff Black Silty Clay Loam Fill	6	4.3	13	
749.94		8	S		
		3			
	Soft Black & Brown Silty Clay Loam & Sand / Gravel Fill	4			
746.94		1	0.5	24	
		1	P		
		1			
	Hard Olive Silty Clay Loam Till	4			
744.44		5	4.1	15	
		7	S		
		3			
	Hard Gray Silty Clay Till	4			
		5	4.8	16	
		8	S		
		3			
		5	4.0	13	
		6	S		
		5			
		6	5.4	17	
		8	S		
		5			
	Hard Gray Silt with Minor Clay	4			
738.94		6	4.3	15	
		8	P		
		10	S		
		4			
		5	4.0	20	
734.44		6	P		
		20			

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, form 137 (Rev. 8-99)

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 <p>McDonough-Whitlow, P.C. Consulting Engineers & Land Surveyors PROFESSIONAL DESIGN NO. 184-002754</p>	USER NAME = <u>Schwankerg</u>	DESIGNED - <u>CMF</u>	REVISED -
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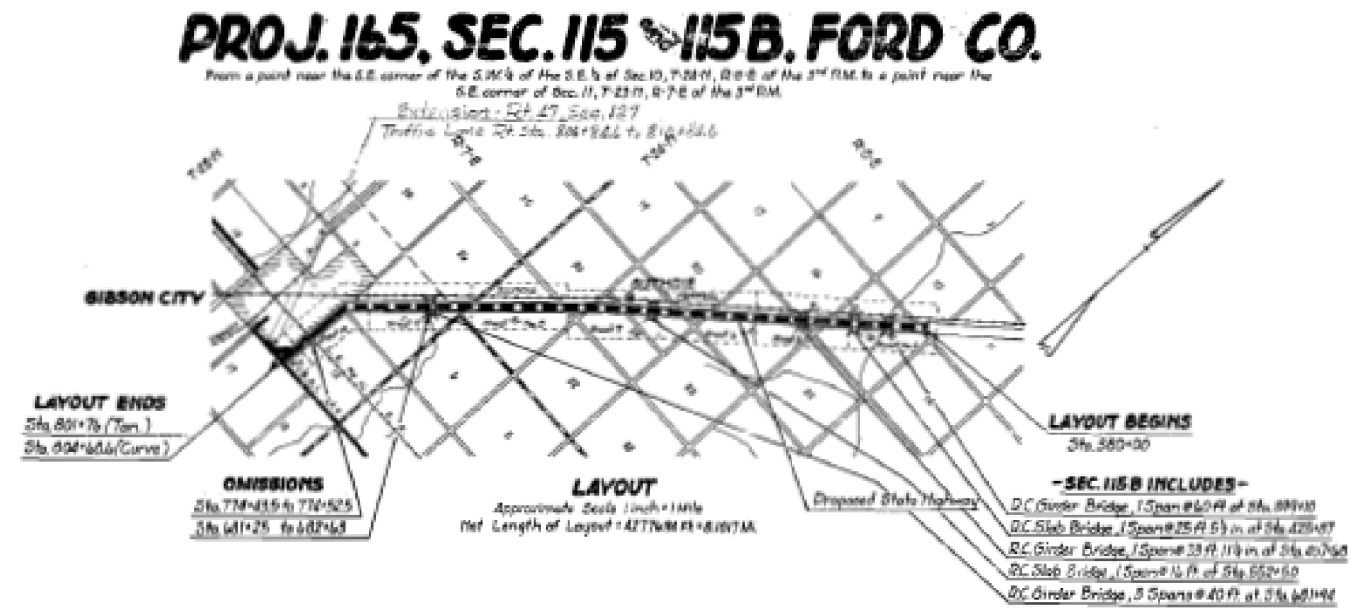
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING LOGS
STRUCTURE NO. 027-2020
SHEET NO. 8 OF 8 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	86
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

INDEX TO SHEETS	
Sheet No. 1 Title Page	
2 Standard Cross Sections No. 156A, 156B	
3 Detail of Information, Sheets 43-44	
4 Plan View Profile Sta. 800+00 to Sta. 430+00	
5	480+00 - 490+00
6	490+00 - 500+00
7	500+00 - 600+00
8	600+00 - 670+00
9	670+00 - 700+00
10	700+00 - 750+00
11	750+00 - 801+74.42(Station)
12 Inclusive Cross Sections	
13 Standard Culvert Design No. 625-1, 1118, 1204	
14 Special	Sta. 801+74.42 to 430+00, 552+50(4)
	Sta. 430+00 to 457+65(1)
	Sta. 457+65(1) to 552+50(4)
	Sta. 552+50(4) to 601+00, 677+50(1)
	Sta. 601+00 to 677+50(1)
	Sta. 677+50(1) to 801+74.42
15	801+74.42
16 Special Bridge Design Sta. 841+00 (Sheets 1 & 2 of 2 Sheets)	
17	425+07 (1 of 2)
18	457+65 (1 of 2 Sheets)
19	457+65 (2 of 2)
20	552+50 (1 of 2)
21	552+50 (2 of 2)
22	601+00 (1 of 2)
23	601+00 (2 of 2)
24	677+50 (1 of 2)
25	677+50 (2 of 2)
26	801+74.42 (1 of 4)
27	801+74.42 (2 of 4)
28	801+74.42 (3 of 4)
29	801+74.42 (4 of 4)
30 Standard No. 1127, 1283	
31 Detail of Equipment Adjacent to Bridges	
32 Standard No. 1163, 1181	



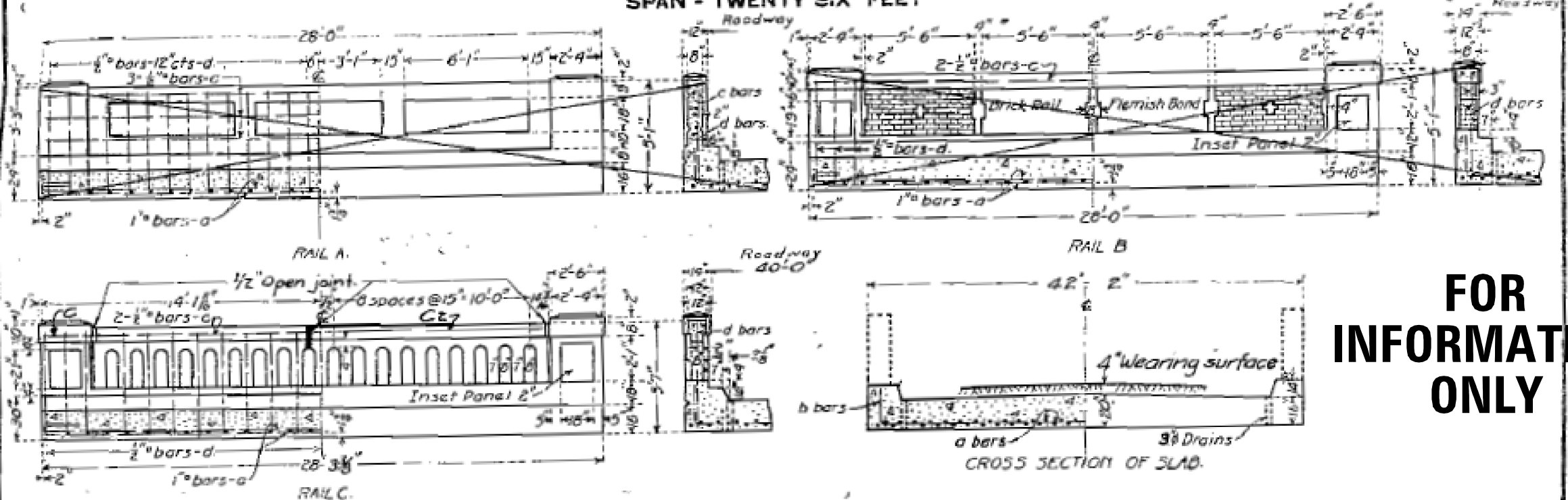
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 DEPARTMENT OF TRANSPORTATION
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 SHEET NO. 87
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 CHECKED BY: [Signature]
 DESIGNED BY: [Signature]
 REVISIONS: [Signature]

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PLOT DATE = 8/13/2015	DATE -	REVISED -	REVISED -			CONTRACT NO. 66994		ILLINOIS FED. AID PROJECT		
SCALE:		SHEET NO. OF SHEETS		STA. TO STA.						

B.M. 49 N & W in P.P. Rt.
Sta 427+15 Elev. 75.91
No Existing Structure.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
REINFORCED CONCRETE SLAB
SPAN - TWENTY SIX FEET

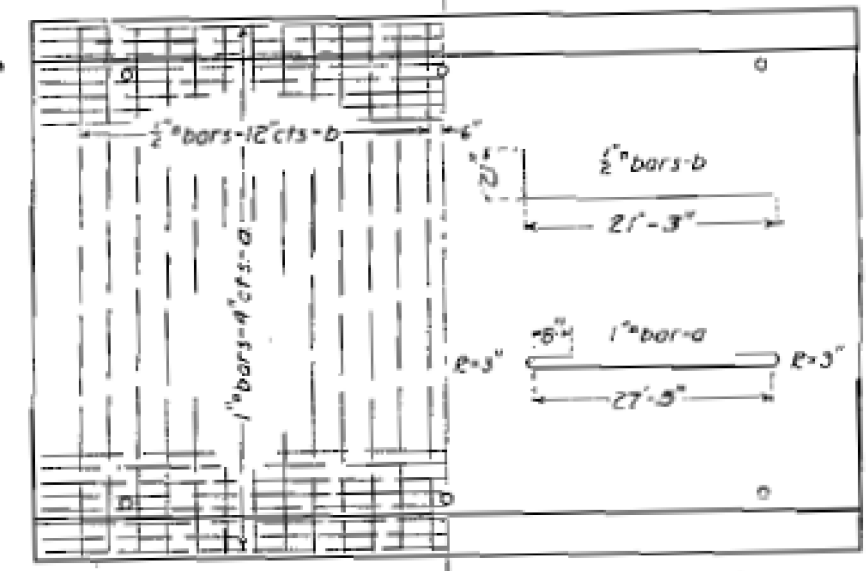
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48	C-115B	Ford	49	40	
Fed. Road Dist. No. 7 ILLINOIS Fed. Aid Project 365					



**FOR
INFORMATION
ONLY**

BILL OF MATERIAL

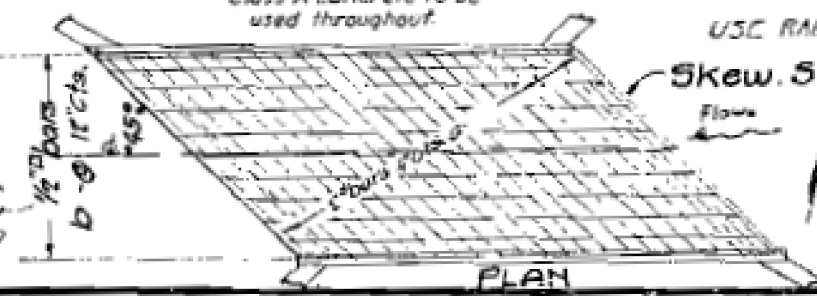
	16 FT. ROADWAY			18 FT. ROADWAY			20 FT. ROADWAY			24 FT. ROADWAY			40 FT. ROADWAY							
	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length				
RAIL A	a	54	1"	30'-0"	a	60	1"	30'-0"	a	66	1"	30'-0"	a	78	1"	30'-0"				
	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"				
	c	6	1/2"	27'-6"	c	6	1/2"	27'-6"	c	6	1/2"	27'-6"	c	6	1/2"	27'-6"				
	d	56	1/2"	4'-9"	d	56	1/2"	4'-9"	d	56	1/2"	4'-9"	d	56	1/2"	4'-9"				
	Steel-Lbs	6330			Steel-Lbs	3900			Steel-Lbs	7640			Steel-Lbs	8950			Steel-Lbs	10980		
	Concrete-Cu Yds	33.3			Concrete-Cu Yds	36.3			Concrete-Cu Yds	38.7			Concrete-Cu Yds	43.2			Concrete-Cu Yds	54.1		
RAIL B	a	54	1"	30'-0"	a	60	1"	30'-0"	a	66	1"	30'-0"	a	78	1"	30'-0"	a	96	1"	30'-0"
	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	52	1/2"	18'-6"
	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"
	d	16	1/2"	4'-9"	d	16	1/2"	4'-9"	d	16	1/2"	4'-9"	d	16	1/2"	4'-9"	d	12	1/2"	4'-9"
	Steel-Lbs	6260			Steel-Lbs	6160			Steel-Lbs	7420			Steel-Lbs	8730			Steel-Lbs	10750		
	Concrete-Cu Yds	31.7			Concrete-Cu Yds	34.7			Concrete-Cu Yds	37.7			Concrete-Cu Yds	43.7			Concrete-Cu Yds	52.6		
	Brick Rail-Cu Yds	2.2			Brick Rail-Cu Yds	2.2			Brick Rail-Cu Yds	2.2			Brick Rail-Cu Yds	2.2			Brick Rail-Cu Yds	2.2		
RAIL C	a	60	1"	30'-0"	a	60	1"	30'-0"	a	66	1"	30'-0"	a	78	1"	30'-0"	a	126	1"	30'-0"
	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	26	1/2"	20'-6"	b	52	1/2"	18'-6"
	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"	c	4	1/2"	27'-6"	c	8	1/2"	27'-6"
	d	46	1/2"	4'-9"	d	46	1/2"	4'-9"	d	46	1/2"	4'-9"	d	46	1/2"	4'-9"	d	56	1/2"	4'-9"
	Steel-Lbs	6290			Steel-Lbs	6300			Steel-Lbs	7650			Steel-Lbs	8870			Steel-Lbs	14240		
	Concrete-Cu Yds	32.5			Concrete-Cu Yds	33.6			Concrete-Cu Yds	38.0			Concrete-Cu Yds	44.5			Concrete-Cu Yds	64.3		



Class A concrete to be used throughout.

USE RAIL C, 40 FT. ROADWAY.

Skew Sketch



3.D.I. ROUTE 48 SEC. 115-B
FORD COUNTY
STA. 425+87

DESIGNED	Walter J. Feld
CHECKED	Walter J. Feld
DRAWN	J.B. Haberman
CHECKED	J.B. Haberman
SPECIAL	H. J. Klein
CHECKED	E. L. Stiles

APPROVED
JUL 29 '31
J. F. Burch
CHIEF HIGHWAY ENGINEER

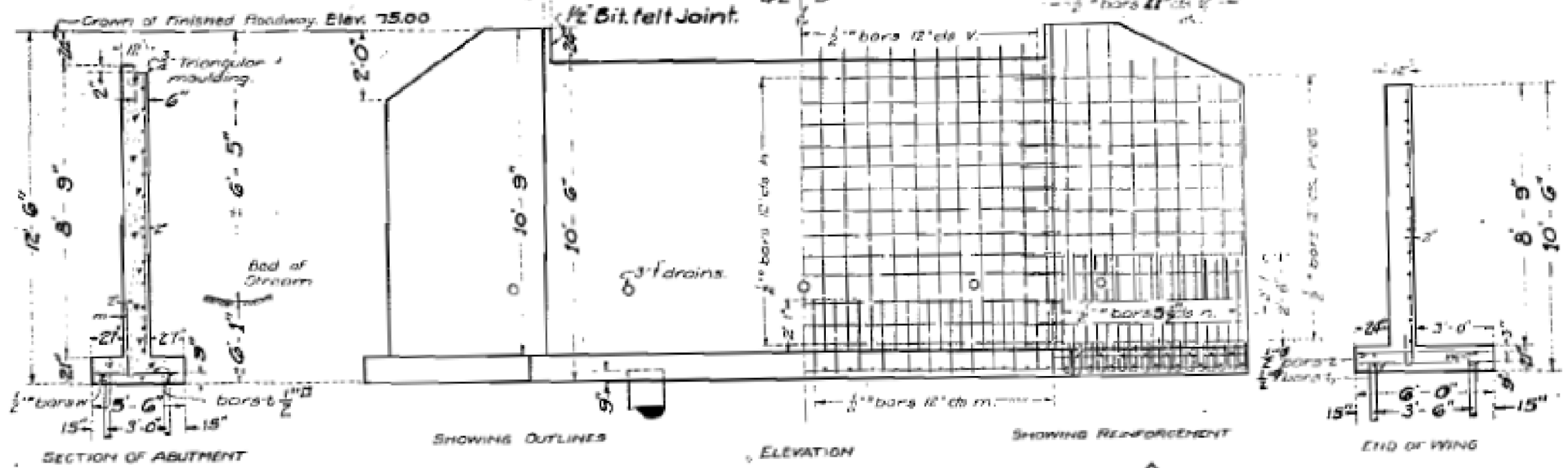
FOR INFORMATION ONLY

Sheet No. 2
of 2 Sheets.

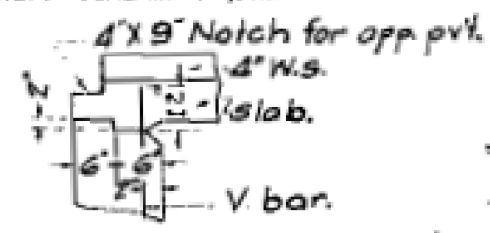
B.M. N.W. in power pole Rt.
Sta. 427+15 Elev 75.91.
No Existing Structure.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
R.C. ABUTMENTS FOR SLAB BRIDGE
HEIGHT OVER ALL 12 FEET

ROAD DISTRICT NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
48	015B	Ford	49	40
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 165				



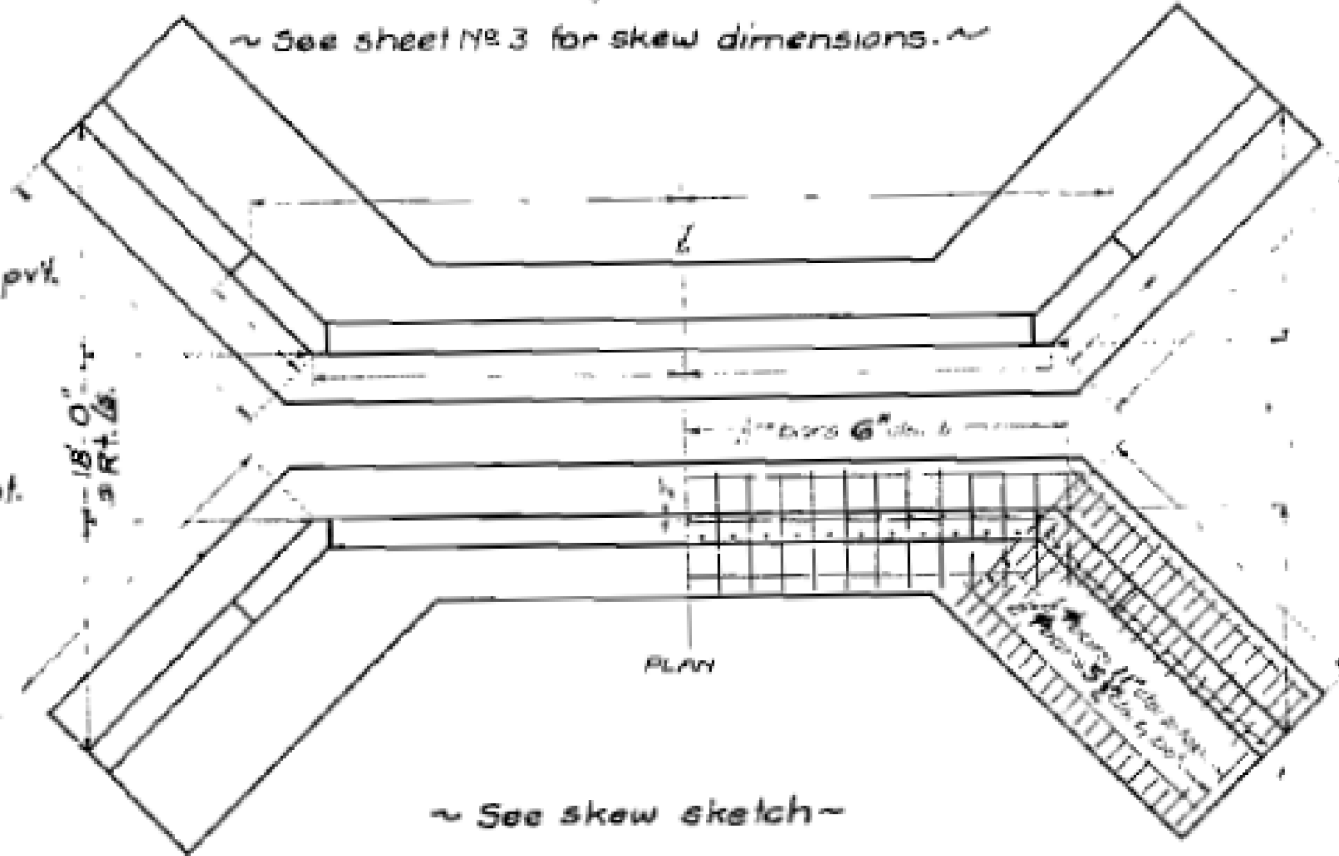
Glass X concrete shall be used throughout.
All reinforcing steel shall be securely wired in place before concrete is poured.



Detail Notch on Bridge Seat.

DESIGNED	11/17/15
CHECKED	11/17/15
APPROVED	H.L. EKIS
DATE	11/17/15

Jan 29 2016
S. F. Bruch
District Engineer



Bill of Material

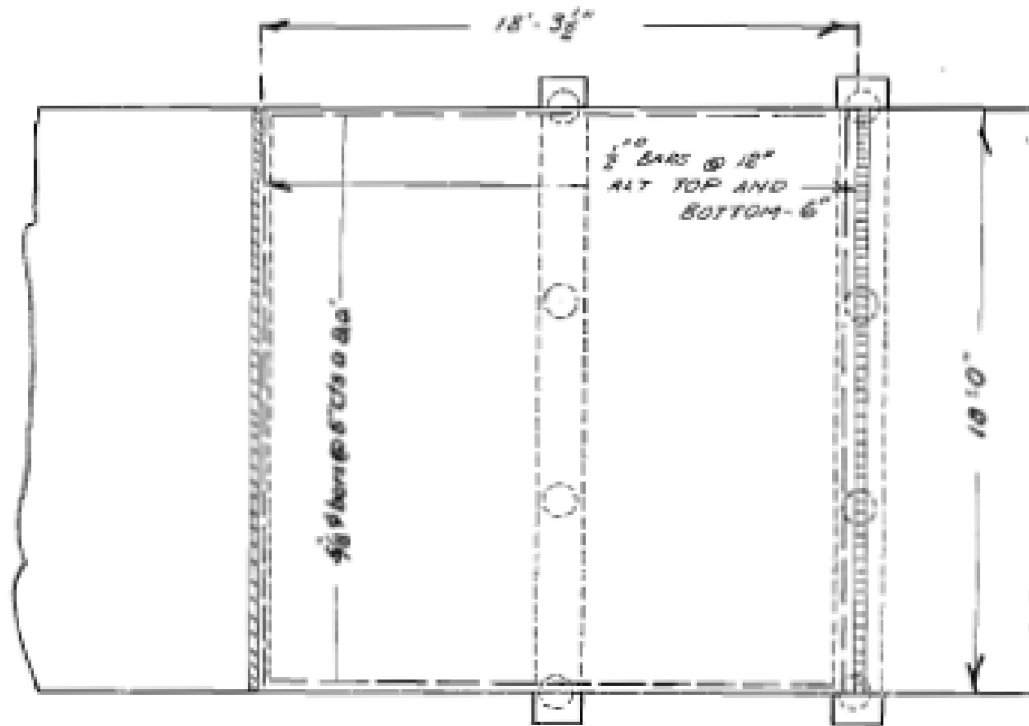
Bar	No.	Size	Length
v	120	1/2"	9'-9"
v	12	1/2"	9'-9"
v	20	1/2"	8'-3"
v			
m	56	1/2"	21'-0"
m	18	1/2"	12'-0"
m	18	1/2"	6'-3"
m	64	1/2"	2'-0"
l	246	1/2"	5'-3"
l	86	1/2"	5'-9"
l	38	1/2"	5'-8"
w	12	1/2"	22'-0"
w	8	1/2"	13'-6"
w	120	1/2"	3'-0"
w	8	1/2"	6'-6"
Reinforcing Steel Wt.			4550
Concrete (cu. yds.)			107.8

S.D. RTE. 48 SEC. 15-B.
FORD COUNTY
STA. 425+87

PAVEMENT ADJACENT BRIDGES

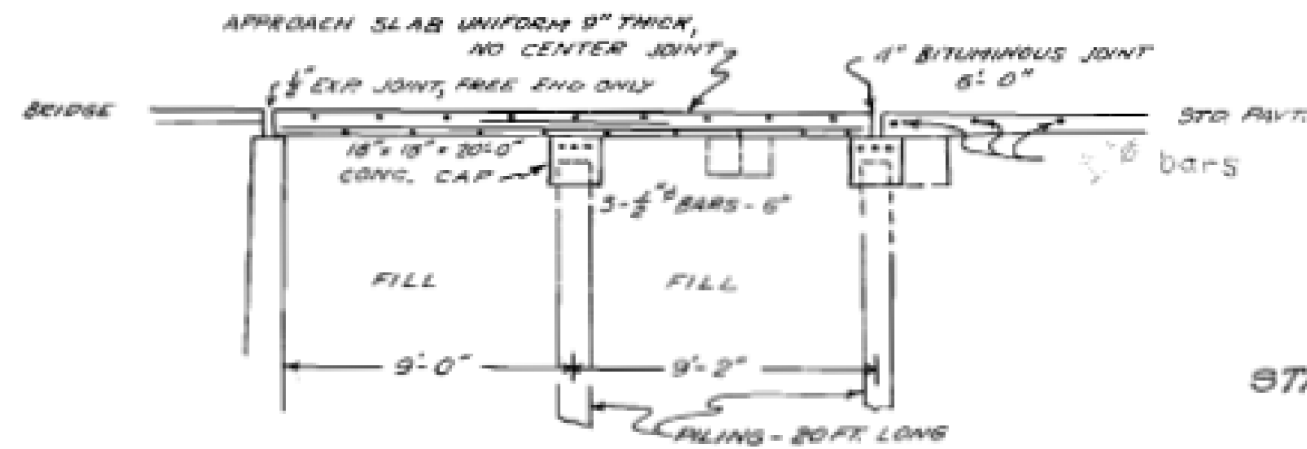
BOND ISSUE ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
48	C-115	Ford	49	48
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT 165				

FOR INFORMATION ONLY



BAR	NO.	SIZE	LENGTH
a	84	3/8\"/>	
a	48	5/8\"/>	
b	21	3/4\"/>	
c	6	1/2\"/>	
STEEL LBS. - 1480			
CONC. CURBS, SLAB 12.5			
PILING - 12T - 160			
CONC. CLY CURBS 17			

Note: The cost of piling in place of constructing the pavement in accordance with this design at such points as are designated on the detail plans including all extra materials except Reinforcement Bars shall be included in the unit price bid for Pavement. No extra compensation will be allowed except for Reinforcement Bars which will be paid for at the contract unit price for 'Reinforcement Bars'.



399+10
 STA. 425+87
 457+68
 552+50
 681+84
 FORD COUNTY

RT48 - Sec 115

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
pw:\11084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 3\Projects\0366\Drawings\EA0\Drawings\0366994-sht-Existing		DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISOR -	REVISED -
PLOT DATE = 8/13/2015	DATE -	REVISOR -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

EXISTING PLANS
 S.N. 027-0021

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	91
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				

CORRECTED

FOR INFORMATION ONLY

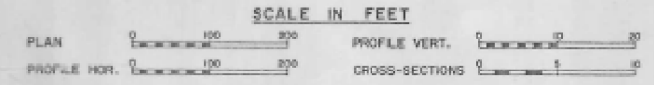
STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
 STATE BOND ISSUE HIGHWAY**

SECTION	114, 115	COUNTY	Ford
ROUTE	48	SECTION	28

INDEX OF SHEETS

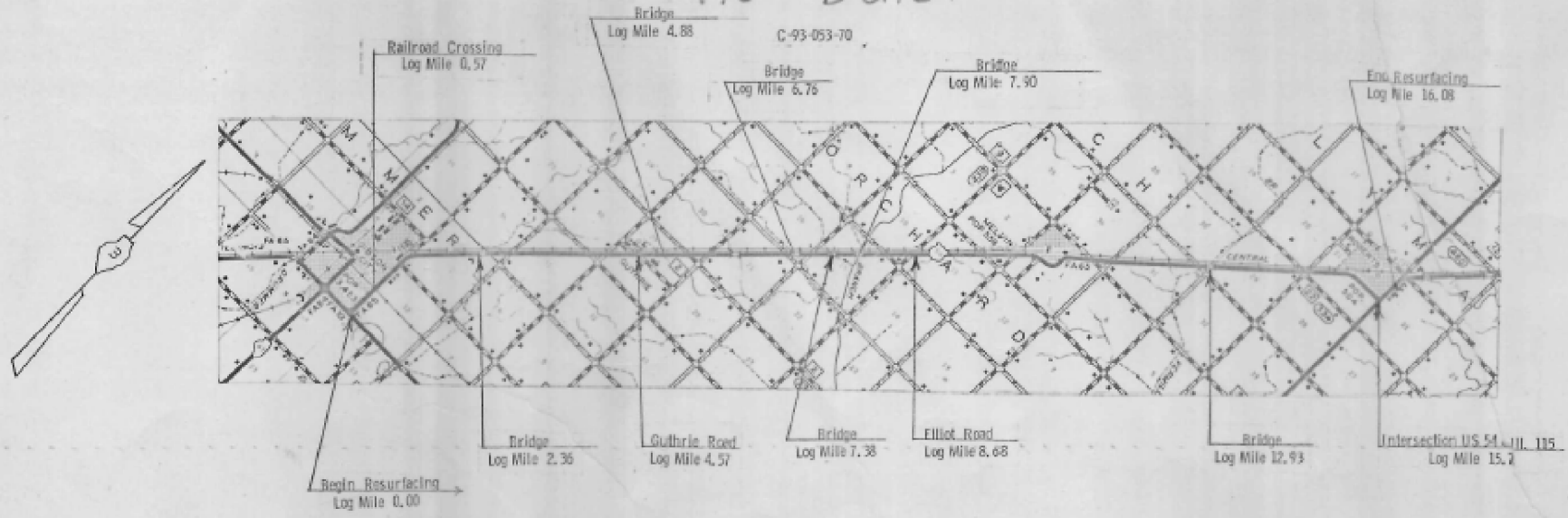
Sheet No.	Description
1	Cover Sheet
2	Typical Sections
3	Details
4	Tables & Summary of Quantities
5	Resurfacing Quantities
6 - 17	Sign Tabulation Sheets
Standards	
18	2117-1 Patching
18A	2171 Mailbox Turnouts
18B	2239-3 Bituminous Shoulder
19	2149-7 Delineators
20	2298-1 Typical Applications of Traffic Control Devices
21	2299-1 Design of Traffic Control Devices
22	2300 Flagman Sign
23	2302-1 Standard For Traffic Protection
24	2303-1 Standard For Traffic Protection
25	2304-1 Standard For Traffic Protection
26	2305-1 Standard For Traffic Protection
27	2305-1 Standard For Traffic Protection
28	2307-1 Standard For Traffic Protection
28A	2319 Sign Panel Mounting Details
28B	2380 Sign Panel Erecting Details

Any reference to a standard in these plans shall be interpreted to mean the edition as indicated by the sub-number listed in the Index of Sheets or the copy of the standard included in these plans.



SBI ROUTE 48
 SECTION (114,115) RS-1
 FORD COUNTY
 "AS BUILT"

"AS BUILT"



SCALE: 1 inch = 1 Mile
 Length of Improvement 16.08 Miles



1970 ADT 2090

DESIGNED	5-1-70 <i>John A. Gorman</i>
CHECKED	5-18-70 <i>Wm. P. Collins</i>
APPROVED	5-18-70 <i>John A. Gorman</i>
APPROVED	5-18-70 <i>Wm. P. Collins</i>

CONTRACT NO. 26924

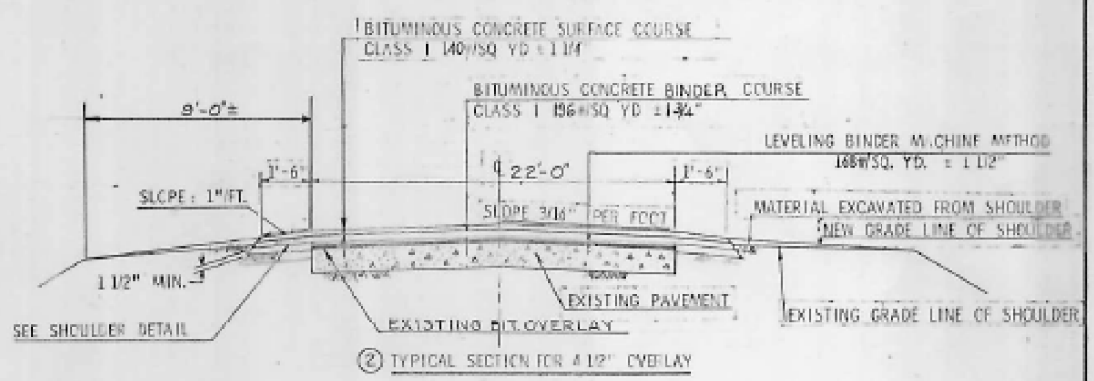
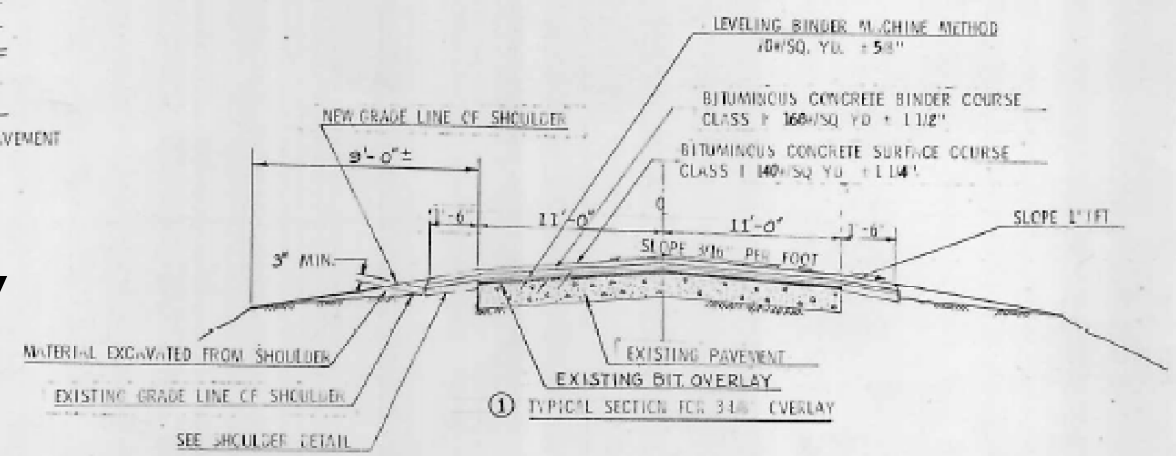
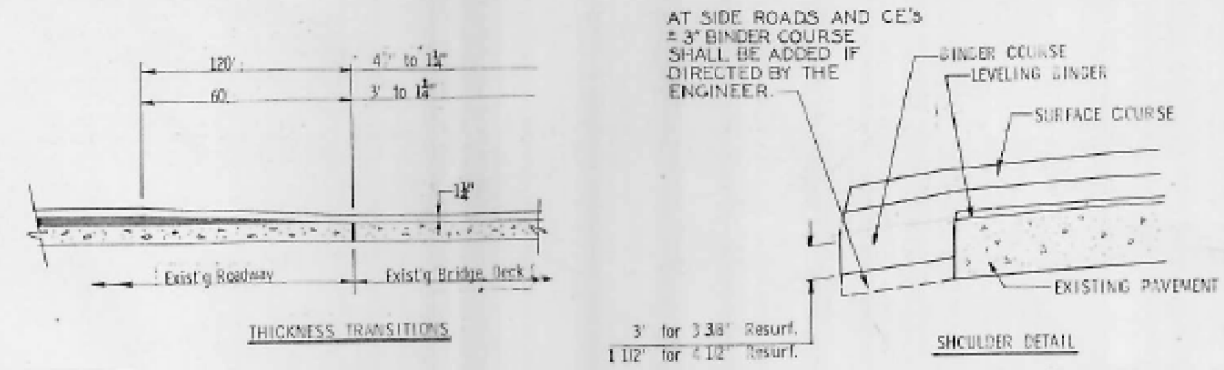
PLANS

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS S.N. 027-0021	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -			71	(115)BR, BR-1C, BR-4	FORD	158	92
	PLOT DATE = 8/13/2015	DATE -	REVISED -			CONTRACT NO. 66994		ILLINOIS FED. AID PROJECT		

PROJECT NO.	48	SECTION	FORD	TOTAL SHEETS	28	SHEET NO.	2
-------------	----	---------	------	--------------	----	-----------	---

Note: The thickness of bituminous mixture 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 bituminous mixture is placed.

The bituminous shoulder shall be carried through all entrances and side roads not constructed of concrete or I-I-I.



State of Illinois
Department of Public Works & Bldgs.
Division of Highways
District Three

Prepared By: *Ralph A. Chas.*
District Engineer of Design

Date: 5-6-70

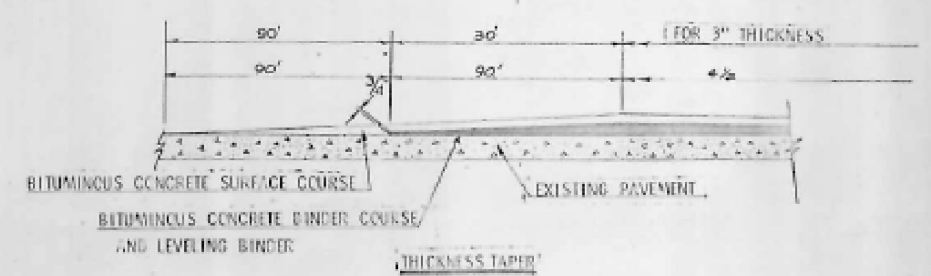
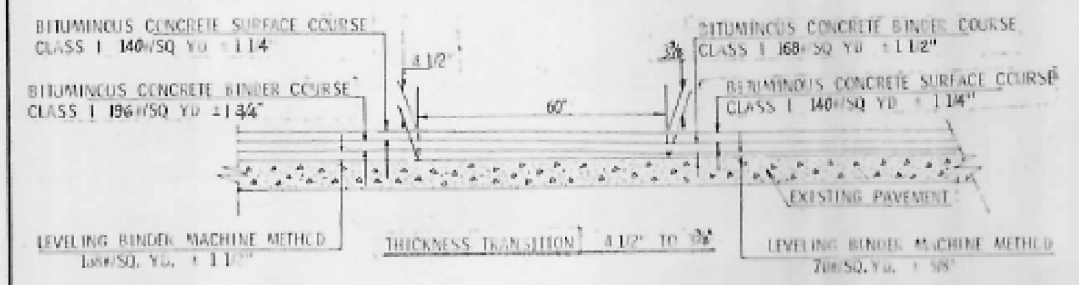
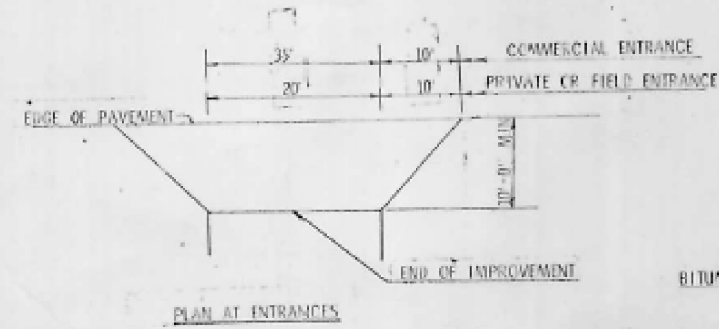
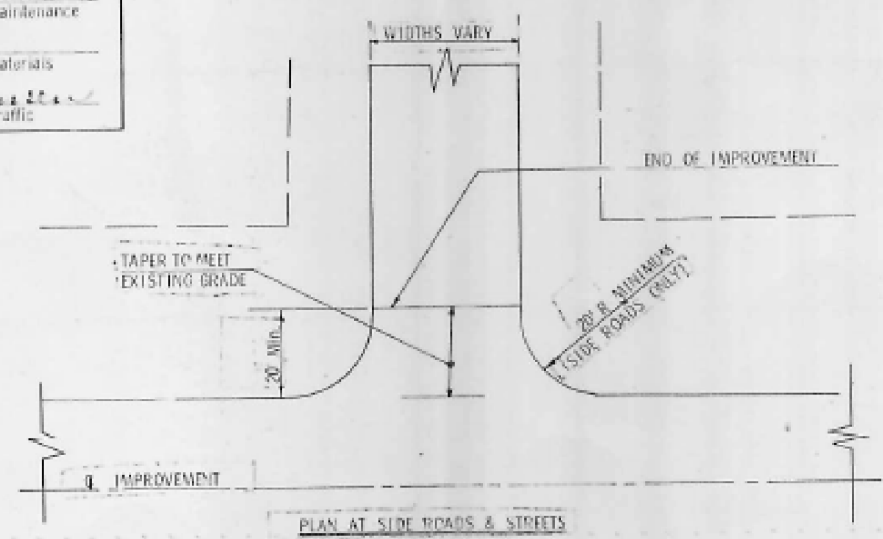
Examined By: *Claude Idershey*
District Engineer of Construction

Philip M. Hunter
District Engineer - Maintenance

John H. Hale
District Engineer of Materials

Alvin C. Coe
District Engineer of Traffic

FOR INFORMATION ONLY



FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
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Default	PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/13/2015	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING PLANS		S.N. 027-0021	
SCALE:	SHEET	OF	SHEETS
	STA.	TO	STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	93
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAY
**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

F.A. 71 (IL. RTE. 54)
SECTION (114,115) RS - 2
FORD COUNTY
C-93-056-90

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(114,115)RS-2	FORD	59	1

INDEX OF SHEETS

1	TITLE SHEET
2	TYPICAL SECTIONS
3	GENERAL NOTES
4-5	SUMMARY OF QUANTITIES
6-7	SCHEDULE OF QUANTITIES
8-10	CULVERT SCHEDULE
11-41	AERIAL VIEWS
42	EXISTING INTERSECTION DETAIL RTE'S 115 & 54
43	INTERSECTION DETAIL
44	STRIPING DETAIL
45-47	MISCELLANEOUS DETAILS
48	GUARDRAIL DETAILS STA 187+50
49-50	BRIDGE RAIL RENOVATION 027-0021
51	GUARDRAIL DETAIL BOX CULVERT 027-2003
52	GUARDRAIL ATTACHED TO EXISTING BRIDGE RAIL 027-0066
53	BRIDGE RAIL REPLACEMENT 027-0070
54	TRAFFIC CONTROL AND PROTECTION, STANDARD 2303 (MOD)
55-59	CROSS-SECTIONS ROUTES 115 & 54

STANDARDS

1686-4	SYMBOLS AND ABBREVIATIONS
2122-12	CONCRETE MEDIANS
2130-9	CONCRETE CURB & COMBINATION CONCRETE CURB & GUTTER
2171	MAILBOX TURNOUT
2228-4	METAL END SECTION FOR PIPE CULVERTS
2229-5	METAL END SECTION FOR PIPE ARCHES
2230-15	STEEL PLATE BEAM GUARDRAIL
2262-4	REINFORCED CONCRETE ELBOW AND PRECAST REINFORCED CONCRETE FLARED END SECTION
2298-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES
2299-10	DESIGN OF TRAFFIC CONTROL DEVICES
2300-3	FLAGMAN TRAFFIC CONTROL SIGN
2302-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY OR NIGHT
2305-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, DAY
2304-7	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, NIGHT
2305-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES RURAL, MOVING OPERATION, DAY
2306-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES RURAL, MOVING OPERATION, DAY
2307-6	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES SHORT-TIME OPERATION, DAY OR NIGHT
2308-5	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (CASE VIII), RURAL, MOVING OPERATION, MULTILANE DIV., DAY
2311-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, WIDENING, DAY OR NIGHT
2312-8	TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES TWO-LANE, TWO-WAY, RURAL, WORK IN SERIES, DAY OR NIGHT
2325-5	GUARD RAIL MOUNTED ON EXISTING CULVERTS
2336-4	TRAFFIC BARRIER TERMINAL, TYPE 1 AND 1A
2379	GRATING FOR CONCRETE FLARED END SECTION (42", 48", & 54" PIPE)
2383-1	TEMPORARY CONCRETE BARRIER
2396	TYPICAL PAVEMENT MARKINGS
2427	CLASS C AND D PATCHES
2301	TEMPORARY EROSION CONTROL

MICROFILMED _____
REEL NUMBER _____
AWARDED _____
RESIDENT ENGINEER _____
AS BUILT CHANGES WERE MADE
ON THE FOLLOWING SHEETS _____

J.U.L.I.E. 1-800-892-0123
PROJECT ENGINEER: GREGG MOUNTS
SQUAD LEADER: MARK JONES
TOWNSHIP: LYMAN, PEACH ORCHARD, DIX, DRUMMER

CONTRACT NO. 86146

FORD COUNTY SECTION: (114,115) RS-2 ROUTE: FAP 71

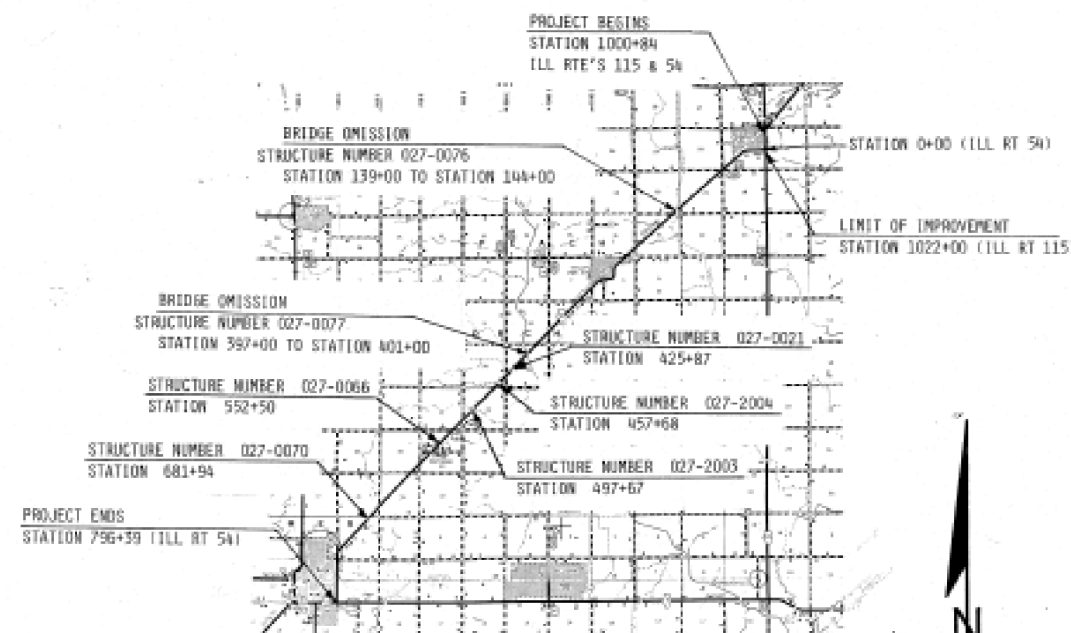


LOCATION OF SECTION INDICATED THIS: [shaded area]

ADT = 1600 (1990)

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 3-2 1990
R. P. Blain
DISTRICT ENGINEER
EXAMINED 3-14 1990
Ray D. Gould
ENGINEER OF PLANS AND CONTRACTS
PASSED 3-14 1990
[Signature]
ENGINEER OF DESIGN
APPROVED 3-14 1990
DIRECTOR, DIVISION OF HIGHWAYS

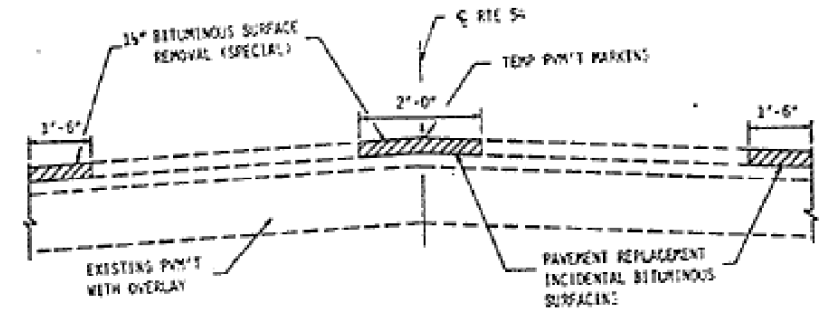


STATION EQUATIONS

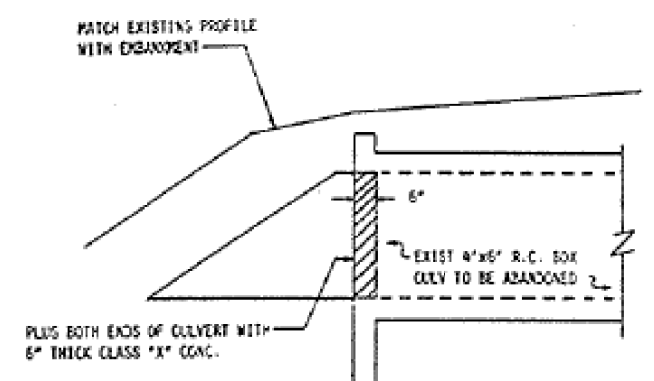
STA. 29+44.2 BK = STA. 29+97.6 AH
STA. 244+47.64 BK = STA. 245+09.36 AH
STA. 262+00.58 BK = STA. 265+30.41 AH
STA. 281+00.43 BK = STA. 276+45.97 AH
STA. 740+03.43 BK = STA. 740+38.39 AH

GROSS LENGTH OF IMPROVEMENT (RT 54) = 79,613.55 FEET = 15.078 MILES
NET LENGTH OF IMPROVEMENT (RT 54) = 78,713.55 = 14.908 MILES
GROSS LENGTH OF IMPROVEMENT (RT 115) = 2,116.00 FEET = 0.40 MILES
NET LENGTH OF IMPROVEMENT (RT 115) = 2,116.00 FEET = 0.40 MILES

FILE NAME: pw\11084EBIDINTEG.illinois.gov\PIWDDT\Documents\DOT Offices\District 3\Projects\0366\Drawings\60\Sheets\0366994-shr-Exist\REVISED	USER NAME: Schwankerg	DESIGNED: -	REVISED: -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING PLANS S.N. 027-0021	F.A.P. RTE.: 71	SECTION: (115)BR, BR-1C, BR-4	COUNTY: FORD	TOTAL SHEETS: 158	SHEET NO.: 94
PLOT SCALE: 100.0000' / in.	CHECKED: -	REVISOR: -	SCALE: SHEET OF SHEETS	STA. TO STA.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 66994				
PLOT DATE: 8/13/2015	DATE: -	REVISOR: -								



BITUMINOUS SURFACE REMOVAL (SPECIAL)
(SEE SCHEDULE OF QUANTITIES)

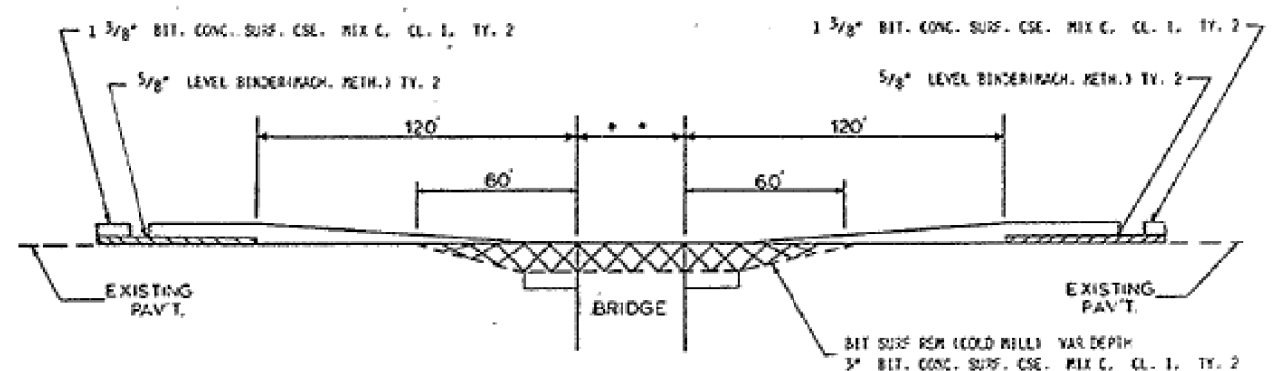


CULVERT DETAIL

616+06 LT & RT

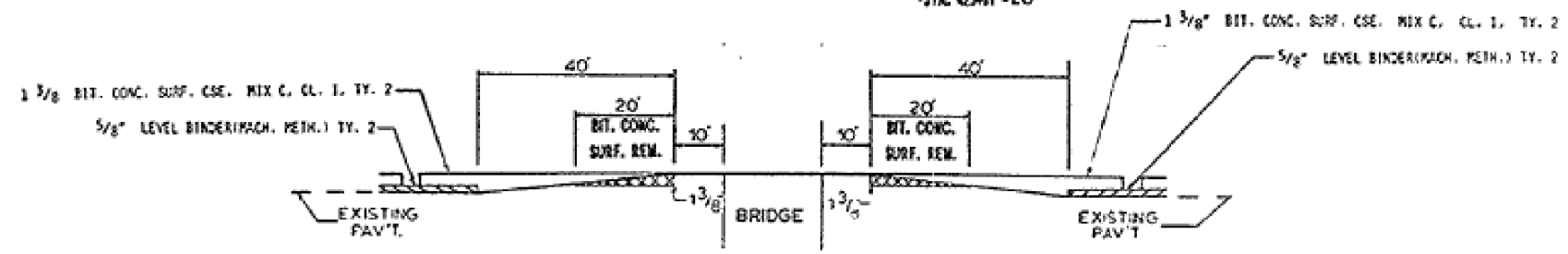
BILL OF MATERIALS			
BAR	NUMBER	SIZE	LENGTH
W	10	#4	3'-6"
V	6	#4	5'-6"
REINFORCEMENT BARS			POUNDS 45
CLASS X CONCRETE			CU YD 0.90
EXPANSION BOLTS 3/8"			EACH 20

NOTE: REBARS TO BE INSTALLED AT 12" CENTERS
QUANTITIES INCLUDE BOTH ENDS OF CULVERT



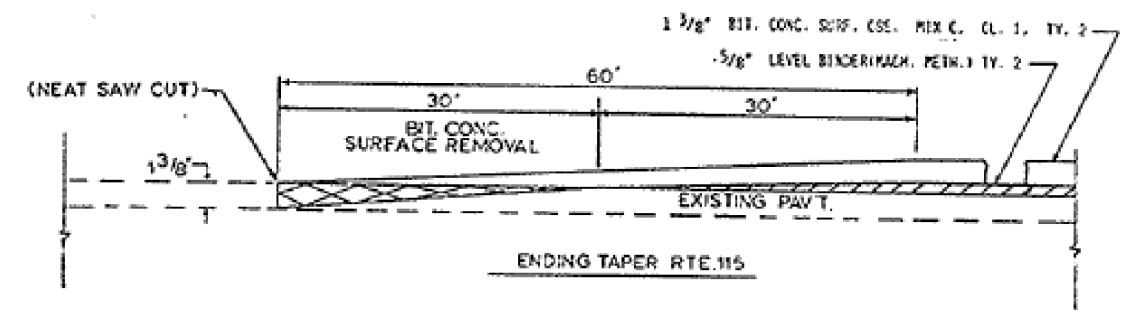
TYPICAL TAPER AT STR.

STA. 532+58 +18'
STA. 425+47 +28'

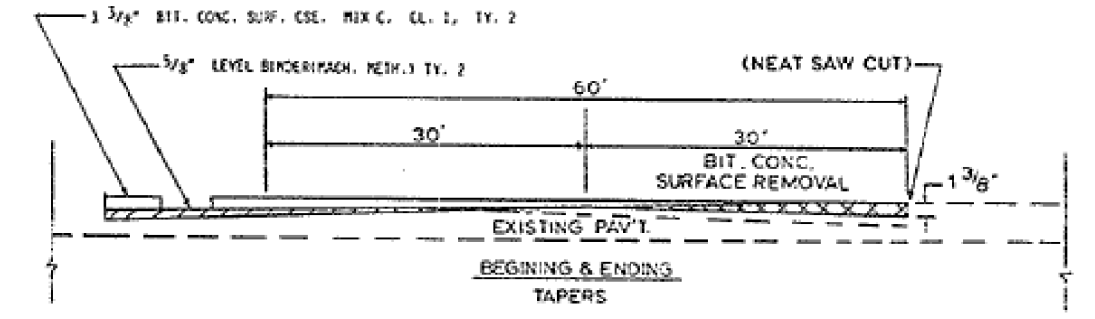


TAPER AT OMISSION

BRIDGE OMISSION STR. NO.
827-8173
827-8175
827-8177



ENDING TAPER RTE. 115



BEGINNING & ENDING TAPERS

DETAILS

FILE NAME =	USER NAME = Schwankerg	DESIGNED -	REVISED -
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PLOT SCALE = 100.0000' / in.		DATE -	REVISED -
Default	PLOT DATE = 8/13/2015		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

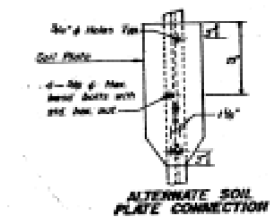
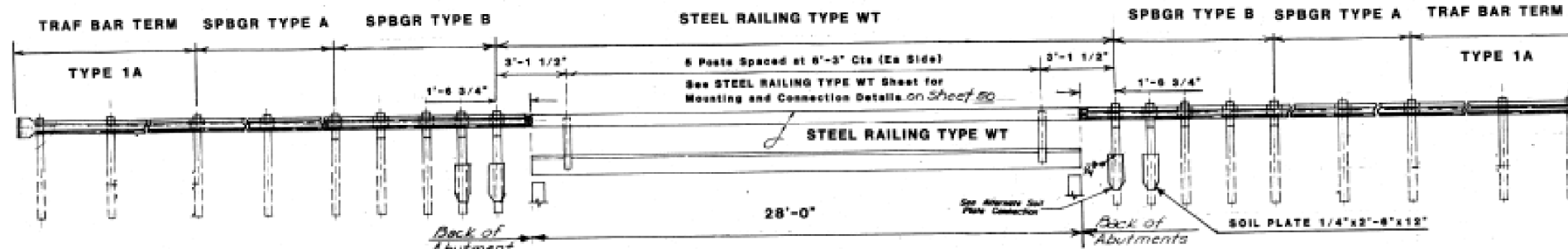
EXISTING PLANS			
S.N. 027-0021			
SCALE:	SHEET	OF SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	95
CONTRACT NO. 66994				
ILLINOIS FED. AID PROJECT				

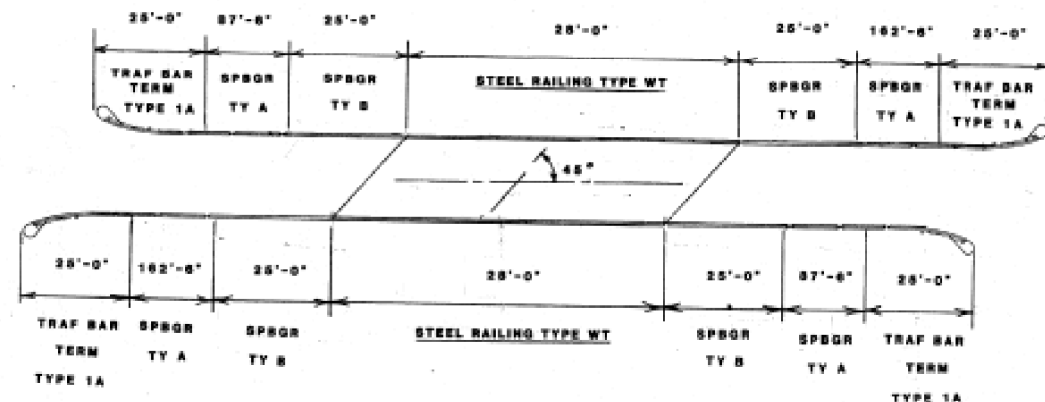
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
71	(14,115) RS-2	FORD	59	49
F.I.W.A. REG. 9 ILLINOIS PROJECT				



ELEVATION
STRUCTURE NO 027-0021
STATION 425+87



GENERAL NOTES

PLAN DIMENSIONS AND DETAILS RELATIVE TO EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS AND DETAILS IN THE FIELD 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 THE SCOPE OF THE WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

THE SOIL PLATE CONSISTS OF A 1/4" X 12" X 2'-6" GALVANIZED STEEL PLATE EITHER WELDED OR BOLTED TO THE GUARDRAIL POSTS. SOIL PLATES SHALL BE INSTALLED ON THE FIRST TWO GUARDRAIL POSTS DRIVEN ON EACH CORNER OF THE BRIDGE.

EXISTING TRANSVERSE REINFORCEMENT BARS SHALL BE CLEANED AND INCORPORATED INTO THE NEW CONCRETE WIDENING. THE BARS WILL BE CUT AS REQUIRED TO FIT INTO THE SAME SLAB.

VARIABLE DEPTH BITUMINOUS CONCRETE SURFACE REMOVAL SHALL BEGIN 15' FROM THE CENTER OF THE BRIDGE AND INCREASE AT THE RATE OF 1" PER EVERY 40' UNTIL REACHING A MAXIMUM CUT OF 3".

REMOVE 3" OF EXISTING BITUMINOUS CONCRETE SURFACE OVER THE BRIDGE DECK AND APPROACH SLABS AND RESURFACE WITH 3" OF BITUMINOUS CONCRETE.

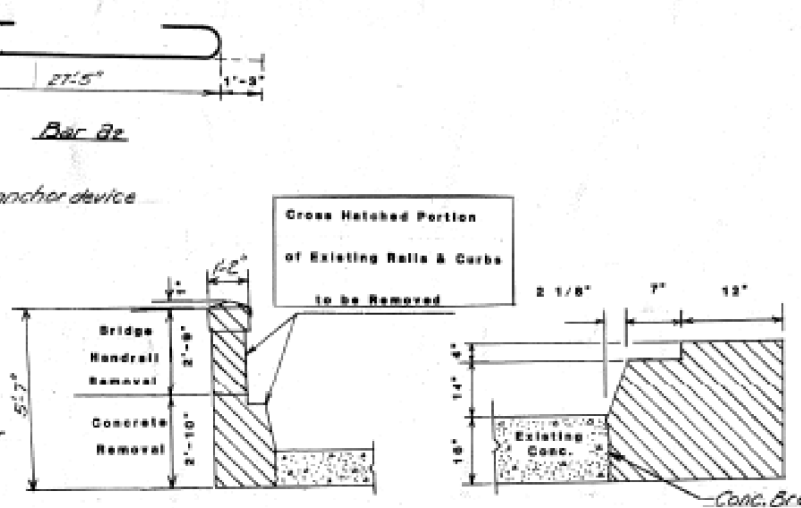
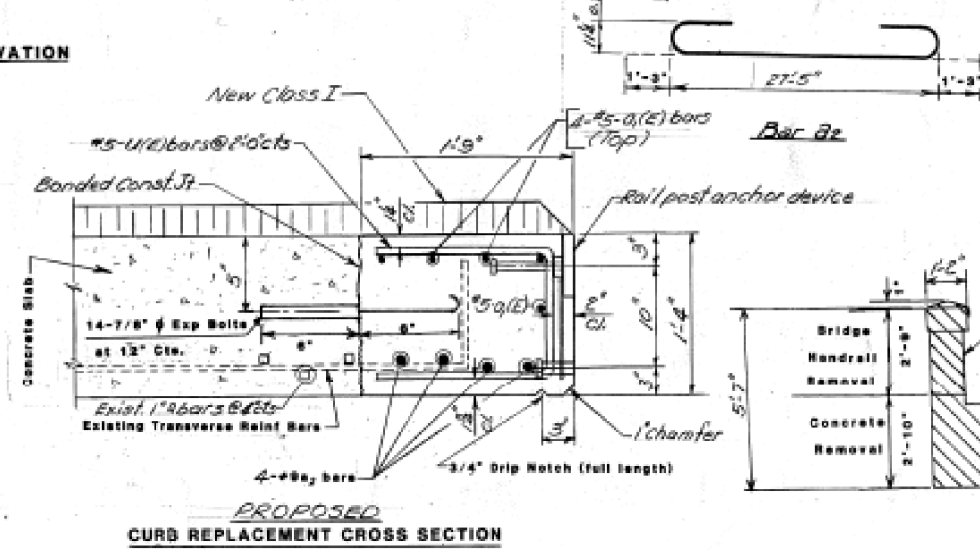
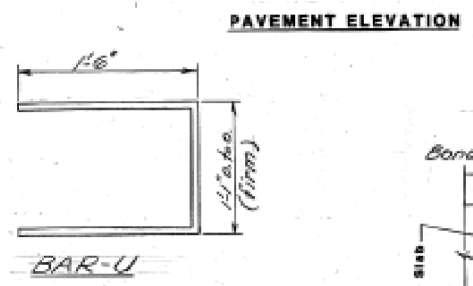
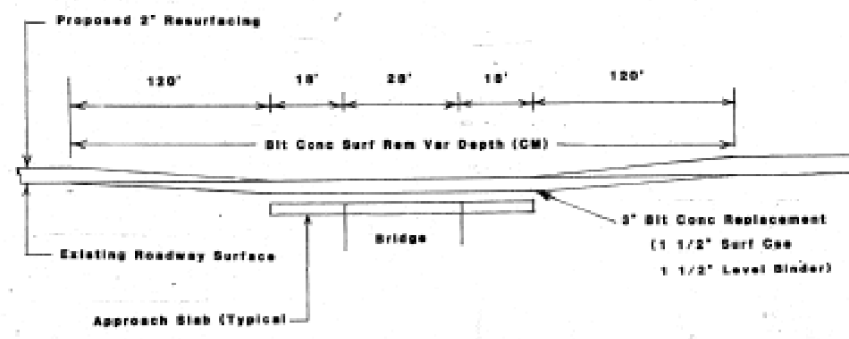
THE EXISTING DIRT SHOULDER OVER THE BRIDGE DECK WILL BE REMOVED INCIDENTAL TO CONSTRUCTION.

THE ENGINEER SHALL DETERMINE THE LOCATION OF THE STEEL PLATE BEAM GUARDRAIL. NO S.P.B.G.R. ELEMENT SHALL BE BUILT BELOW THE MINIMUM HEIGHTS SHOWN IN STANDARD 2250.

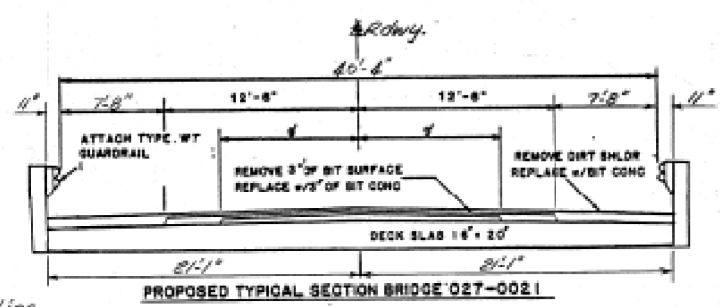
BILL OF BARS

Bar No.	Size	Length	Shape
#1	#5	27'-5"	—
#2	#8	83'-11"	U
#3	#5	4'-1"	U

* All new reinforcement bars shall be epoxy coated



Code No	Item	Unit	Quantity
50102400	Conc Rem	Cu Yd	9.8
50103800	Expan Bolt 7/8	Each	80
50104100	Br Hdrl Rem	Lin Ft	56
50200300	Class X Conc	Cu Yd	4.8
50500450	Steel Railing TY WT	Lin Ft	56
51200200	Reinforcement Bars (Epoxy Coated)	Pound	1,330
51400300	Reloc Name Plate	Each	1
51700070	Bit Surf Rem (CM) Var D	Sq Yd	840
52000000	SPBGR TY A	Lin Ft	500
52000000	SPBGR TY B	Lin Ft	100
52000040	Traf Bar Term TY1A	Each	4



SN 027-0021 BRIDGE RAIL REHABILITATION

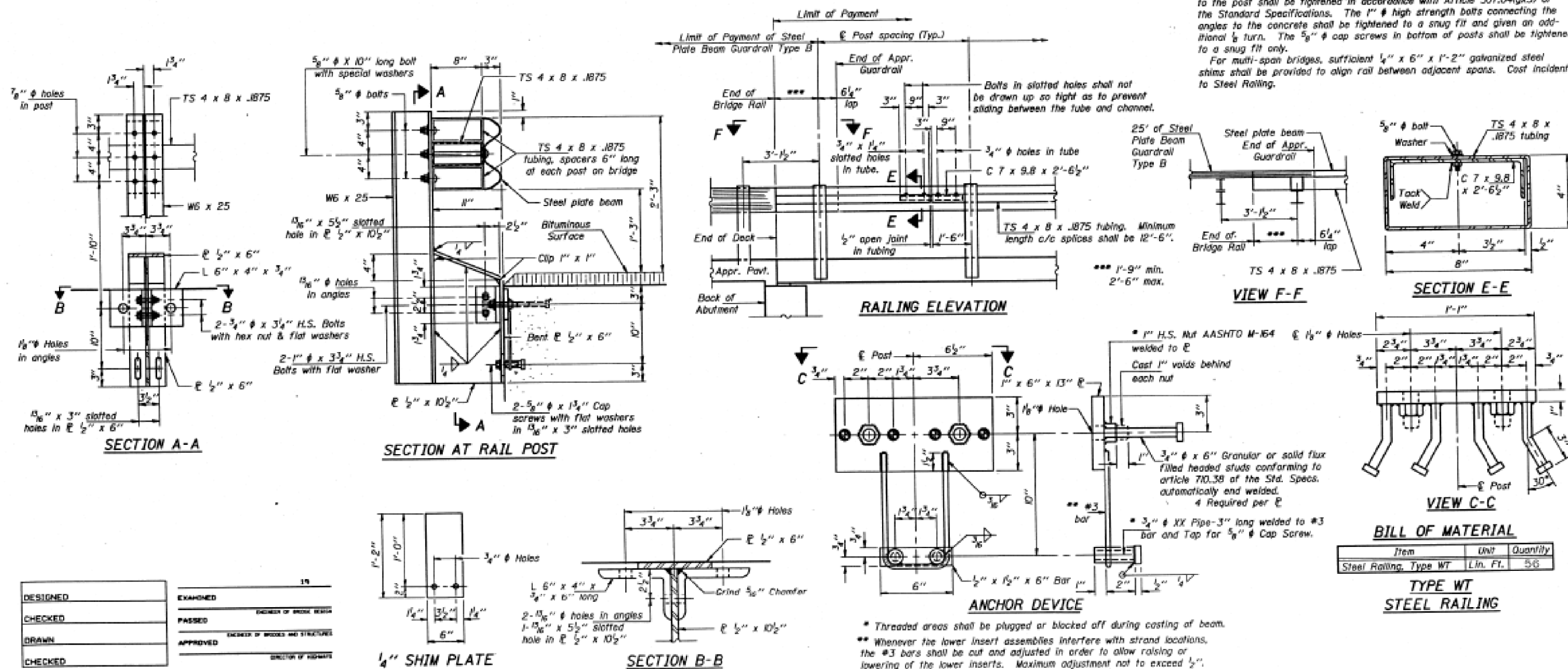
Revised: Proposed curb cross section, Bar List & Quantities - Class X Conc. & Reinf Bars. 3-10-90 ENR

DATE	DESIGN	PROJECT	SHEET	OF	SHEET NO.
71	RS-2	FORD	59	50	5-SHETS

FOR INFORMATION ONLY

NOTES

Hollow structural steel tubing shall conform to the requirements of ASTM designation A-500 Grade B Structural Steel Tubing.
All other steel shapes and plates shall conform to the requirements of AASHTO M-183 except posts and angles shall conform to AASHTO M-223, Grade 50.
Bolts, cap screws and nuts shall conform to the requirements of ASTM designation A-307 except for high strength bolts, nuts and washers noted which shall conform to AASHTO M-164.
All bolts, nuts, cap screws, washers and lock washers shall be galvanized in accordance with AASHTO M-232.
All posts, railing, rail splices, anchor devices and angles shall be galvanized after shop fabrication in accordance with AASHTO M-11 and ASTM A-385. Galvanized rail shall not be painted.
Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and will be paid for at the contract unit price per linear foot for STEEL RAILING, TYPE WT.
All field drilled holes shall be coated with an approved zinc rich paint before erection.
The 1/2" x 6" plates that come in contact with concrete shall receive two coats of asphalt paint conforming to Section 74.08 Type B or place 1/2" fabric bearing pads between the plates and concrete.
The 3/4" high strength bolts used to connect the 5" x 4" x 3/4" angles to the post shall be tightened in accordance with Article 507.04(g)(3) of the Standard Specifications. The 1" # high strength bolts connecting the angles to the concrete shall be tightened to a snug fit and given an additional 1/2 turn. The 5/8" # cap screws in bottom of posts shall be tightened to a snug fit only.
For multi-span bridges, sufficient 1/2" x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost incidental to Steel Railing.



BILL OF MATERIAL

Item	Unit	Quantity
Steel Railing, Type WT	Lm. Ft.	56

TYPE WT STEEL RAILING

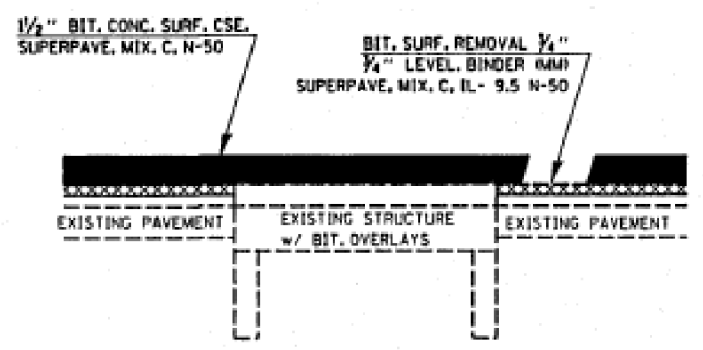
DESIGNED	EXAMINED	IN
CHECKED	PASSED	ENGINEER OF BRIDGE WORK
DRAWN	APPROVED	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED		DIRECTOR OF HIGHWAYS

R-30 9/30/87 6'-3" Maximum Post Spacing

SN 027-0021 BRIDGE RAIL REPLACEMENT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(114,115)RS-3	FORD	13	11
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

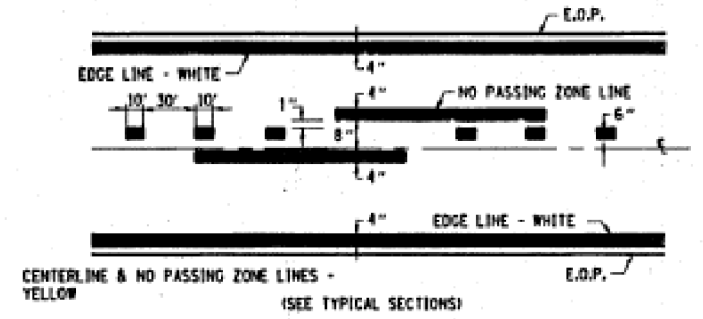
FOR INFORMATION ONLY



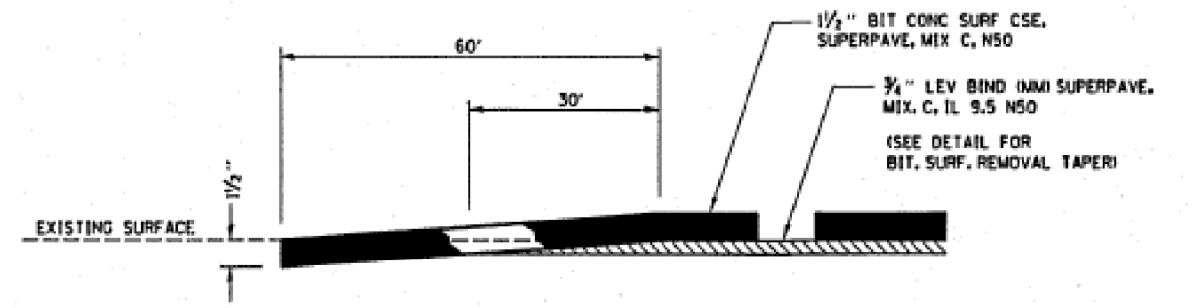
BITUMINOUS SURFACE REMOVAL AND OVERLAY AT STRUCTURES

S.N. 027-0077
S.N. 027-0070

NO BIT. SURF. REMOVAL ON THESE STRUCTURES

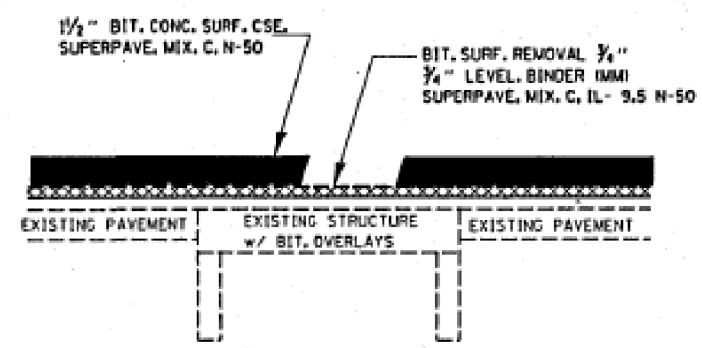


PAVEMENT MARKING



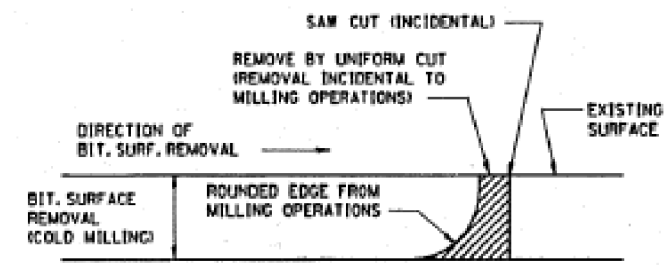
BITUMINOUS TAPER DETAIL (TYP.)

STA. 0+70 - STA. 1+30
STA. 139+40 - STA. 140+00
STA. 142+00 - STA. 142+60
STA. 551+80 - STA. 552+40
STA. 552+60 - STA. 553+20
STA. 796+15 - STA. 796+75



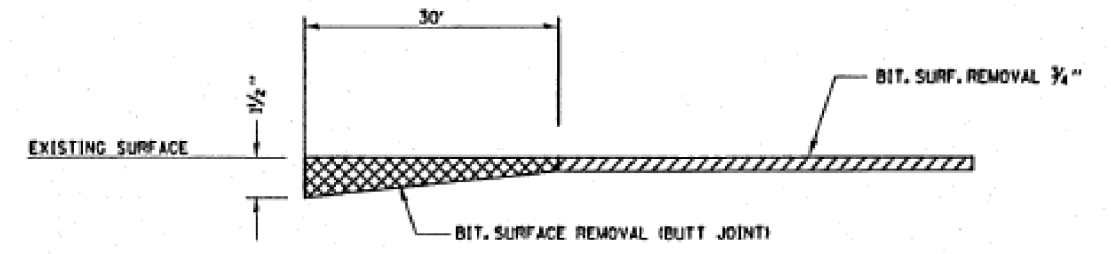
BITUMINOUS SURFACE REMOVAL AND OVERLAY AT STRUCTURES

S.N. 027-0021
S.N. 027-2004
S.N. 027-2008



NOTE: WHEN MILLING OPERATIONS PRODUCE A ROUNDED EDGE, THEN A SAW CUT SHALL BE USED TO MANUFACTURE A PERPENDICULAR EDGE AS SHOWN IN THE DETAIL. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING THE USE OF THIS DETAIL

BITUMINOUS DETAIL AT BUTT JOINTS



BITUMINOUS SURFACE REMOVAL TAPER DETAIL (TYPICAL)

STA. 0+70 - STA. 1+30
STA. 139+40 - STA. 140+00
STA. 142+00 - STA. 142+60
STA. 551+80 - STA. 552+40
STA. 552+60 - STA. 553+20
STA. 796+15 - STA. 796+75

MAR. 15, 2001
1E0092001DETAILS.DGN

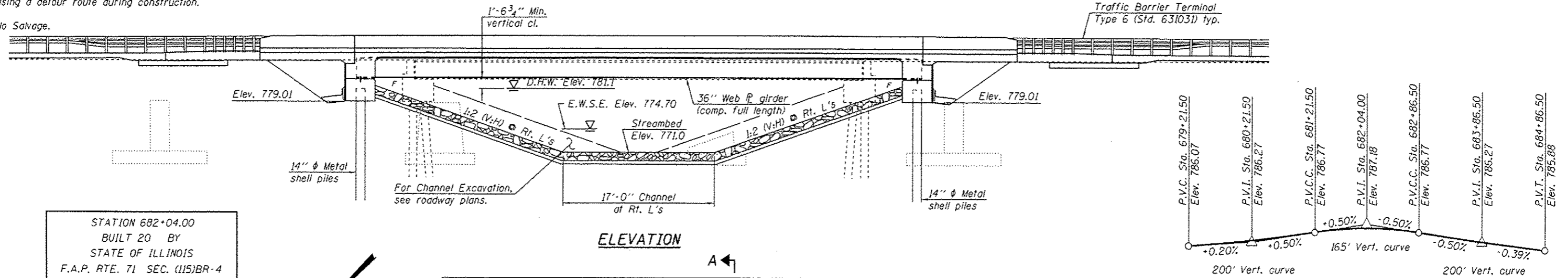
DETAILS

Benchmark: Chiseled "a" on Northeast wingwall of SN 027-0070; Sta. 681+50.71, 17.61' Rt. Elev. 785.68

Note: For Section A-A, see sheet 2 of 21.

Existing Structure: SN 027-0070 built in 1979 as F.A. Route 71, Section 115BR at Sta. 682+04.00. A one span P.C.C. deck beam bridge 75'-0" back-to-back abutments and 33'-8" out-to-out on pile bent abutments. The existing structure is to be removed and replaced. Traffic will be maintained using a detour route during construction.

No Salvage.



STATION 682+04.00
BUILT 20 BY
STATE OF ILLINOIS
F.A.P. RTE. 71 SEC. (115)BR-4
LOADING HL-93
STRUCTURE NO. 027-0102

NAME PLATE
See Std. 515001

PROFILE GRADE
(Along C/L Rte. 54)

Note A:
Portions of original structure built in 1931 may be encountered and require removal prior to driving piles. See sheet 2 of 21 for details. If concrete removal is required, it shall be paid for according to Article 109.04 of the Standard Specifications.

DESIGN SPECIFICATIONS

2012 AASHTO LRFD Bridge Design Specifications, 6th Edition

DESIGN STRESSES

FIELD UNITS

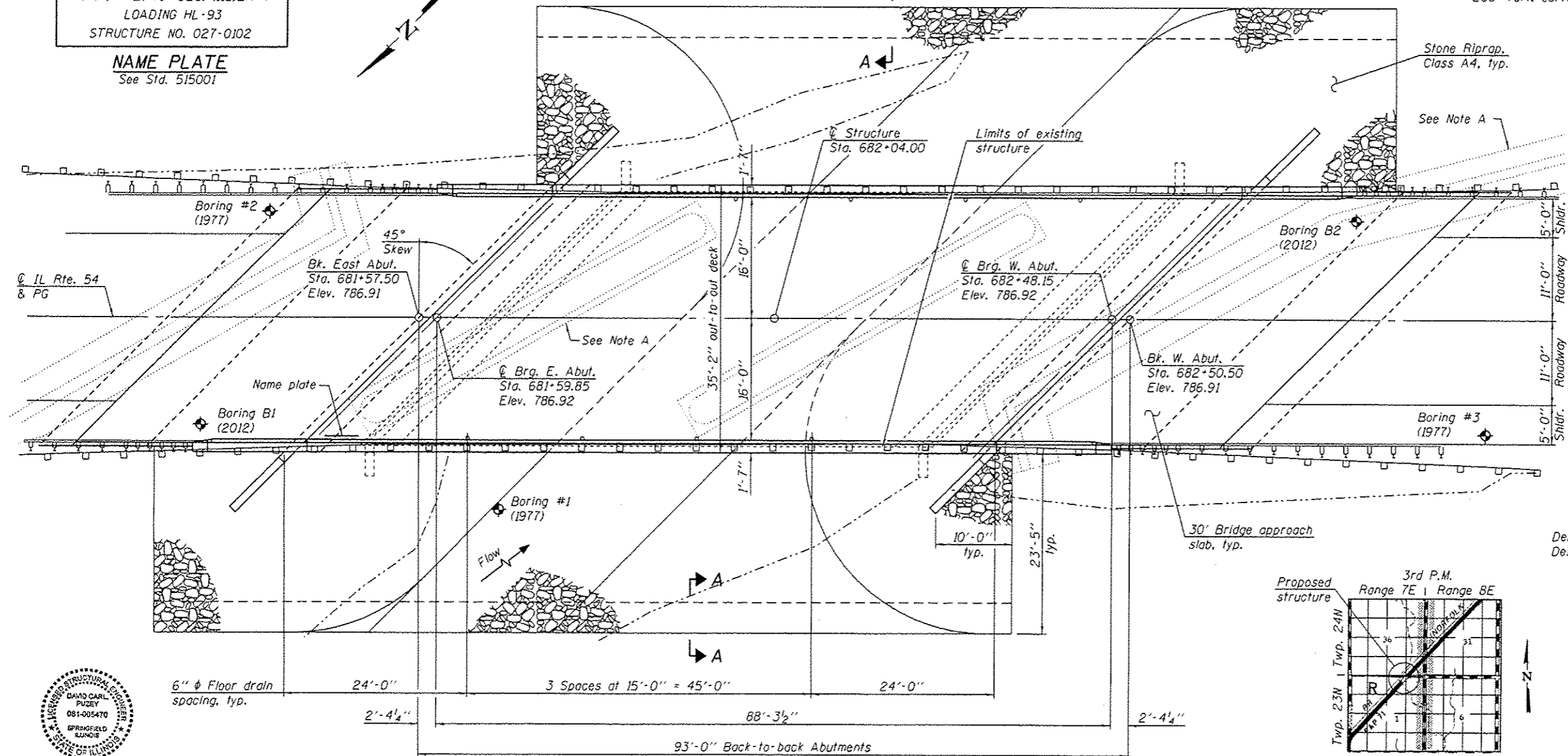
$f'_c = 3,500$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $f_y = 50,000$ psi (M270 Grade 50W)

LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (S_{D1}) = 0.086 g
Design Spectral Acceleration at 0.2 sec. ($S_{D0.2}$) = 0.150 g
Soil Site Class = C



PLAN

LOCATION SKETCH

GENERAL PLAN & ELEVATION
ILLINOIS ROUTE 54 OVER
DRAINAGE DITCH
F.A.P. RTE. 71 - SEC. (115)BR-4
FORD COUNTY
STATION 682+04.00
STRUCTURE NO. 027-0102



EXPIRES 11-30-2016

DESIGNED	EXAMINED	DATE
CHECKED	PASSED	9-23-2015
DRAWN		REVISED
CHECKED		REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 027-0102

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
71	(115)BR, BR-1C, BR-4	FORD	158	100
CONTRACT NO. 66994				

SHEET NO. 1 OF 21 SHEETS

ILLINOIS FED. AID PROJECT