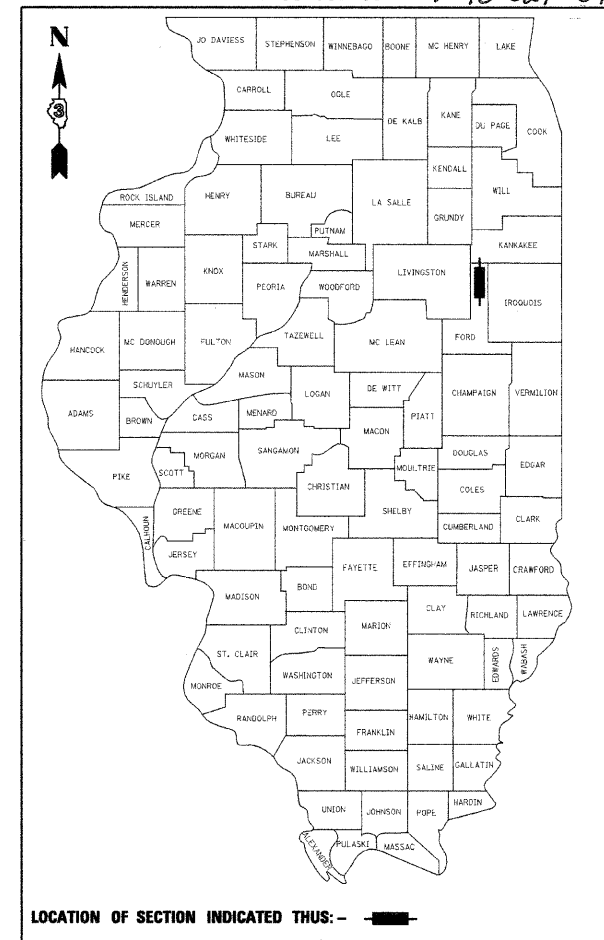


F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	104 I & 105 BR-1	FORD	51	1
FED. ROAD DIST. NO.		ILLINOIS	CONTRACT NO. 66848	
D-93-083-08		P-93-028-03		
D-93-007-09		P-93-029-07		



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS

F.A.P. ROUTE 796 (IL 115)
SECTION 104 I & 105 BR-1
PROJECT BRF-F-0796(014)
FORD COUNTY
C-93-125-08

REPLACEMENT OF THE EXISTING STRUCTURE OVER
KELLY CREEK DRAINAGE DITCH WITH A SINGLE SPAN BRIDGE
2.4 MILES N. OF IL 116 AND THE
REPLACEMENT OF AN EXISTING CULVERT OVER
A DRAINAGE DITCH WITH A PRECAST CONCRETE BOX
CULVERT
4.1 MILES N. OF IL 116

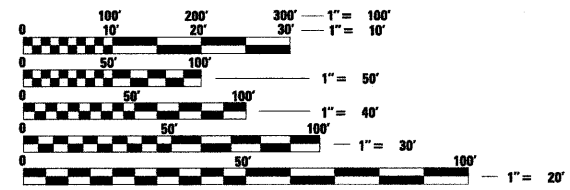
INDEX OF SHEETS

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- 3 SUMMARY OF QUANTITIES
- 4 TYPICAL SECTIONS
- 5 SCHEDULE OF QUANTITIES
- 6 TIE POINTS
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- 9-10 CULVERT PLAN AND PROFILE
- 11-12 IL 115 - DETOUR PLAN
- 13-14 RIGHT OF WAY PLAN
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- 45-51 CROSS SECTIONS

HIGHWAY STANDARDS

- 000001-05 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
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- 601101-01 CONCRETE HEADWALL FOR PIPE DRAIN
- 630001-08 STEEL PLATE BEAM GUARDRAIL
- 630201-06 PCC / HMA STABILIZATION AT STEEL PLATE BEAM GUARDRAIL
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- 631031-08 TRAFFIC BARRIER TERMINAL, TYPE 6
- 635006-03 REFLECTOR AND TERMINAL MARKER PLACEMENT
- 635011-02 REFLECTOR MARKER AND MOUNTING DETAILS
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- 667101-01 PERMANENT SURVEY MARKERS
- 701001-02 OFF-RD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5m) AWAY
- 701006-03 OFF-RD OPERATIONS, 2L, 2W, 15' (4.5m) TO 24' FROM PAVEMENT EDGE
- 701011-02 OFF-RD MOVING OPERATIONS, 2L, 2W, DAY ONLY
- 701201-03 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
- 701301-03 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701306-02 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY, FOR SPEEDS > 45 MPH
- 701901-01 TRAFFIC CONTROL DEVICES
- 781001-03 TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
- B.L.R. 21-8 TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION ON RURAL LOCAL HIGHWAYS

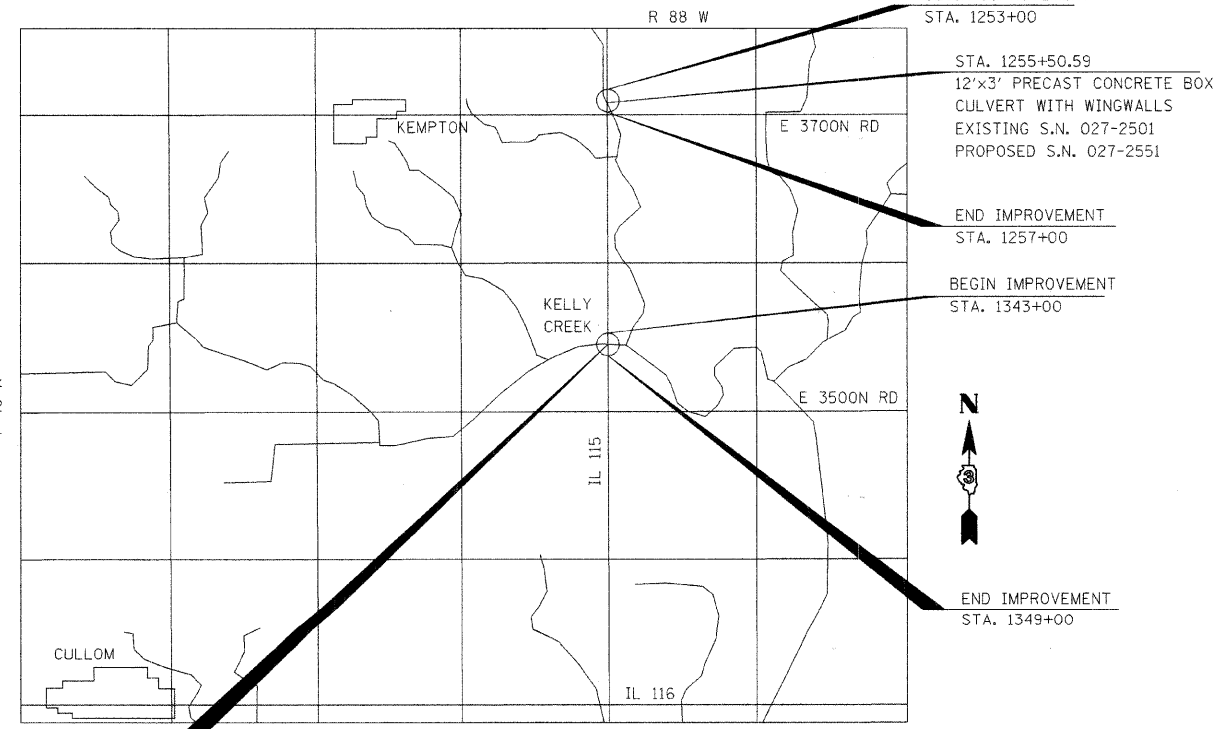
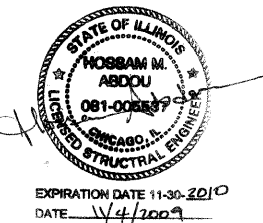
MICROFILMED _____
 REEL NUMBER _____
 AWARDED _____
 RESIDENT ENGINEER _____
 AS BUILT CHANGES WERE MADE ON THE FOLLOWING SHEETS _____



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

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

PROJECT ENGINEER: JOE KANNEL
UNIT CHIEF: MICHELE LINDEMANN
DISTRICT 3 NO. (815) 434-6131
CONTRACT NO. 66848



STA. 1345+92
 SINGLE SPAN (64') COMPOSITE
 WIDE FLANGE STEEL BEAM BRIDGE
 WITH INTEGRAL ABUTMENTS
 EXISTING S.N. 027-0033
 PROPOSED S.N. 027-0097

LOCATION MAP
SCALE: NOT TO SCALE
GROSS LENGTH = 1000 FT. = 0.189 MI.
NET LENGTH = 536 FT. = 0.102 MI.

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 312-566-0450
 Job # 3938.02

FUNCTIONAL CLASSIFICATION
MINOR ARTERIAL (RURAL)
F.A.P. ROUTE 796 (IL 115)

2010 ADT = 500
P.V. = 84.5% S.U. = 11.1% M.U. = 4.4%

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ 20 _____

Henry Deyan
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

January 29, 2010
Scott E. Still, P.E., P.D.
 ENGINEER OF DESIGN AND ENVIRONMENT

January 29, 2010
Christine M. Reed, P.D.
 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.

THE HMA SURFACE OF ALL MAILBOX TURNOUTS, PRIVATE ENTRANCES, COMMERCIAL ENTRANCES, AND SIDE ROADS SHALL BE MADE NEATLY, IN A WORKMANLIKE MANNER, AND SHALL ACCURATELY CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. IF REQUIRED BY THE ENGINEER, THE CONTRACTOR SHALL BE REQUIRED TO SAW CUT THE HMA SURFACE TO CONFORM TO THE SHAPES AND DIMENSIONS SHOWN ON THE PLAN DETAILS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HMA SURFACE.

THE BASE COURSE WIDENING SHALL BE CARRIED THROUGH ALL ENTRANCES, SIDE ROADS, AND MAILBOX TURNOUTS. EXCEPTIONS WILL BE SHOWN ON THE PLANS.

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 SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.

SEEDING SHALL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET, OR IN AN UNTILLABLE CONDITION. LOCATIONS TO BE SEEDDED 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 SEEDDED OR SODDED. THE VEGETATION SUSTAINING SOIL REQUIRED WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF FURNISHED EXCAVATION.

SHORT TERM PAVEMENT MARKING SHALL BE USED TO OUTLINE EXIT AND ENTRANCE RAMPS FOR THE PRIME COAT APPLICATION AND EACH RESURFACING LIFT.

FOR NEW CONSTRUCTION, PLACE CURB RAMPS FOR SIDEWALKS (STANDARD 424001) AT ALL LOCATIONS WHERE PROPOSED SIDEWALK ABUTS CURB AT STREET ENTRANCES.

ON EXISTING PAVEMENT WHICH MAY BE SUPERELEVATED, THE NEW HMA PAVEMENT SHALL BE BUILT WITH THE SAME SUPERELEVATION UNLESS NEW SUPERELEVATION RATES ARE GIVEN ON THE PLANS.

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

ADDITIONAL LEVELING BINDER, AT THE RATE GIVEN ON THE TYPICAL SECTIONS, HAS BEEN ADDED TO THE QUANTITIES TO CORRECT TO A 1.5% CROWN ON SECTIONS OF EXISTING ROADWAYS.

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 SHALL 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
BIT MATERIALS (PRIME COAT) ON AGGREGATE BASES	0.375	GAL / SQ YD
BITUMINOUS MATERIALS (PRIME COAT)	0.08	GAL / SQ YD
FOR ADDITIONAL HMA LIFTS "FOG COAT"	0.05	GAL / SQ YD
AGGREGATE PRIME COAT	0.002	TONS / SQ 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
TEMPORARY DITCH CHECKS	10	FOOT

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE PRESENCE OF DEPARTMENT-OWNED UNDERGROUND ELECTRICAL CABLE WITHIN THE LIMITS OF THE PROPOSED IMPROVEMENT. THE CONTRACTOR SHALL REQUEST THE ILLINOIS DEPARTMENT OF TRANSPORTATION IN OTTAWA (815-434-8417) TO LOCATE THE UNDERGROUND FACILITIES, PROVIDING A MINIMUM OF 72 HOURS NOTICE. THE DEPARTMENT IS NOT A MEMBER OF THE JOINT UTILITY LOCATING INFORMATION FOR EXCAVATORS (JULIE) SYSTEM.

ALL DAMAGE TO DEPARTMENT OWNED UNDERGROUND FACILITIES, CAUSED BY THE CONTRACTOR SHALL BE REPAIRED TO THE SATISFACTION OF THE DEPARTMENT AT THE CONTRACTOR'S EXPENSE. THIS SHALL INCLUDE ALL TEMPORARY REPAIRS REQUIRED TO KEEP THE FACILITY OPERATIONAL WHILE MATERIAL IS BEING OBTAINED TO MAKE PERMANENT REPAIRS. SPLICING OF ELECTRICAL CABLE SHALL NOT BE ALLOWED. ELECTRIC CABLE SHALL BE REPLACED FROM POLE TO POLE OR CONTROLLER.

THE WORK REQUIRED TO CONNECT ANY SEWER TO AN EXISTING DRAINAGE STRUCTURE OR PIPE WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS INCLUDED IN THE CONTRACT UNIT PRICE BID FOR THE SEWER ITEMS.

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

COMMITMENTS

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DISTRICT THREE

PREPARED BY: Dino Beonil
Acting DISTRICT STUDIES & PLANS ENGINEER

DATE: _____

EXAMINED BY: Michael D. ...
DISTRICT CONSTRUCTION ENGINEER

Wayne Challego
DISTRICT MATERIALS ENGINEER
James A. Wueker
DISTRICT OPERATIONS ENGINEER

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205 North Michigan Avenue, Suite 2400
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312-565-0450
Job # 3938.02

FILE NAME =	USER NAME = lndemannms	DESIGNED - HMA	REVISED - JDC	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & COMMITMENTS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw\work\PIDOT\LINDEMANMS\dms40153	0366848_sht_gennote.dgn	DRAWN - HMA	REVISED -			796	104 I & 105 BR-1	FORD	51	2	
	PLOT SCALE = 50.0000' / IN.	CHECKED - DJC	REVISED -			CONTRACT NO. 66848					
	PLOT DATE = Nov 25, 2009 - 08:23:54 AM	DATE - 10/24/09	REVISED -			SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

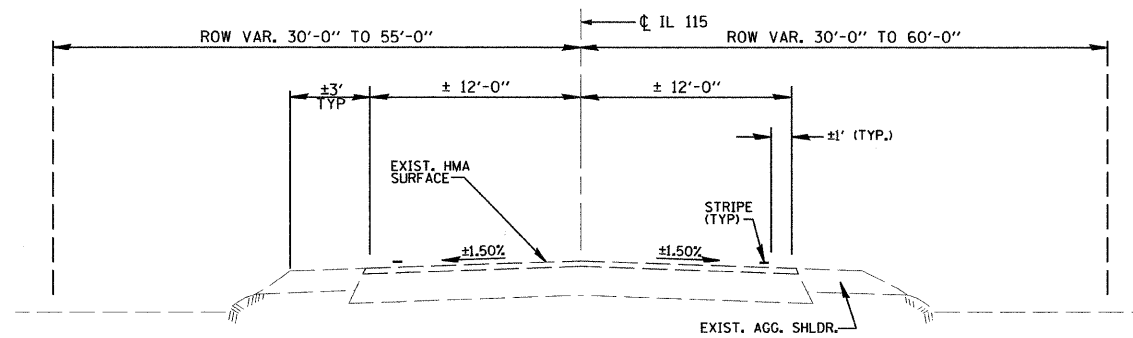
SUMMARY OF QUANTITIES

80% FEDERAL / 20% STATE				BRF LICE	F L25
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	S.N. 027-0097 X071-2A	S.N. 027-2551 Y007
20200100	EARTH EXCAVATION	CU YD	651	420	231
20400800	FURNISHED EXCAVATION	CU YD	382	288	94
20700220	POROUS GRANULAR EMBANKMENT	CU YD	95		95
20700400	POROUS GRANULAR EMBANKMENT, SPECIAL	CU YD	124	90	34
25000300	SEEDING, CLASS 3	ACRE	1	0.50	0.50
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	72	40	32
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	72	40	32
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	72	40	32
25100115	MULCH, METHOD 2	ACRE	1	0.50	0.50
28000305	TEMPORARY DITCH CHECKS	FOOT	140	80	60
28000400	PERIMETER EROSION BARRIER	FOOT	1,752	1,072	680
28100107	STONE RIPRAP, CLASS A4	SQ YD	611	523	88
28200200	FILTER FABRIC	SQ YD	611	523	88
31101200	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	206		206
35501302	HOT-MIX ASPHALT BASE COURSE, 4 1/2"	SQ YD	206		206
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	374	172	202
40600300	AGGREGATE (PRIME COAT)	TON	1		1
40600400	MIXTURE FOR CRACKS, JOINTS, AND FLANGEWAYS	TON	0.7		0.7
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	158	93	65
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	960	480	480
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	275	145	130
44000100	PAVEMENT REMOVAL	SQ YD	206		206
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	39	12	27
48203029	HOT-MIX ASPHALT SHOULDERS, 8"	SQ YD	633	633	
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2	1	1
50200100	STRUCTURE EXCAVATION	CU YD	388	189	199
50300100	FLOOR DRAINS	EACH	8	8	
50300225	CONCRETE STRUCTURES	CU YD	53.3	53.3	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	193.8	193.8	
50300260	BRIDGE DECK GROOVING	SQ YD	413	413	
50300280	CONCRETE ENCASEMENT	CU YD	4.2	4.2	
50300300	PROTECTIVE COAT	SQ YD	528	528	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1	
50500505	STUD SHEAR CONNECTORS	EACH	1,134	1,134	

* SPECIALTY ITEM

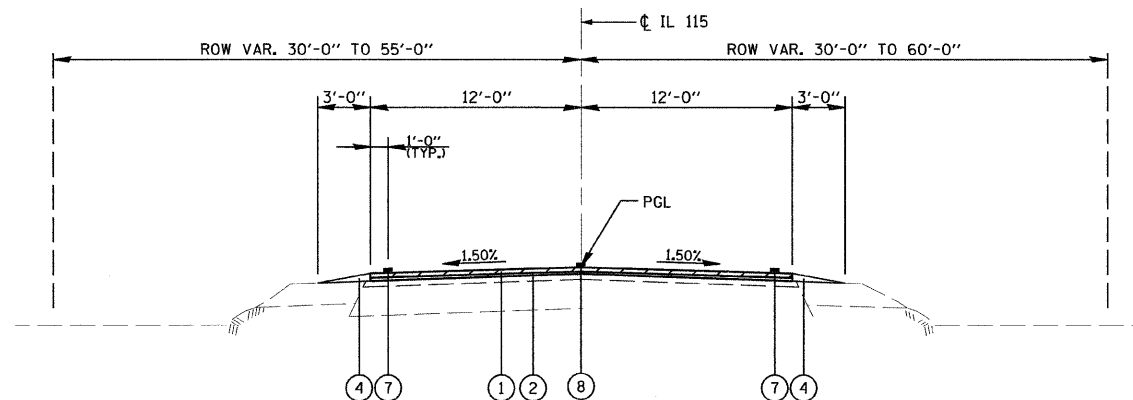
80% FEDERAL / 20% STATE				BRF LICE	F L25
CODE NO.	PAY ITEM	UNIT	TOTAL QUANTITY	S.N. 027-0097 X071-2A	S.N. 027-2551 Y007
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	49,580	49,580	
50800515	BAR SPLICERS	EACH	64	64	
51201600	FURNISHING STEEL PILES, HP12X53	FOOT	505	505	
51202305	DRIVING PILES	FOOT	505	505	
51203600	TEST PILE STEEL HP12X53	EACH	2	2	
51500100	NAME PLATES	EACH	2	1	1
52100520	ANCHOR BOLTS, 1"	EACH	24	24	
54001000	BOX CULVERT END SECTIONS	EACH	2		2
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	67	67	
60109580	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	118	118	
63000001	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6' ^{FOOT} POSTS	FOOT	250	250	
63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	4	4	
63100169	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) FLARED	EACH	4	4	
63200310	GUARDRAIL REMOVAL	FOOT	1,431	706	725
66600105	FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS	EACH	8		8
66700095	PERMANENT SURVEY MARKERS	EACH	4	2	2
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4		4
67100100	MOBILIZATION	L SUM	1	0.6	0.4
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	0.6	0.4
70100460	TRAFFIC CONTROL AND PROTECTION, STANDARD 701306	L SUM	1	0.6	0.4
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	0.6	0.4
70102550	TRAFFIC CONTROL AND PROTECTION FOR TEMPORARY DETOUR	EACH	2	1	1
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	140	80	60
70300625	TEMPORARY PAINT PAVEMENT MARKING LINE 4"	FOOT	2,720	1,560	1,160
70300635	TEMPORARY PAINT PAVEMENT MARKING LINE 6"	FOOT	340	195	145
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2,720	1,560	1,160
78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	340	195	145
78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	18	10	8
78200410	GUARDRAIL MARKERS, TYPE A	EACH	10	10	
78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4	4	
54021203	PRECAST CONCRETE BOX CULVERT 12' X 3' (M273)	FOOT	25		25
X0324043	GRATING FOR CONCRETE HEADWALL	EACH	2		2

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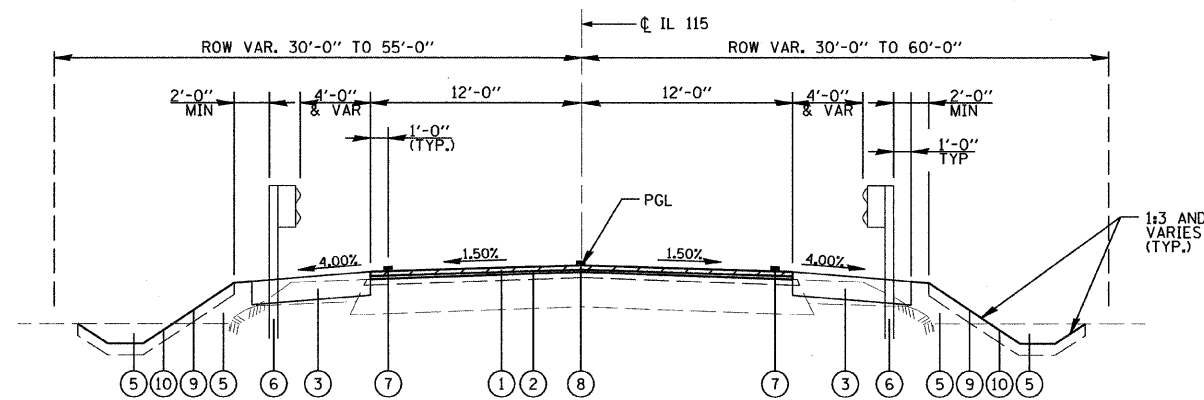
EXISTING TYPICAL SECTION

STA. 1343+00.00 TO STA. 1349+00.00



PROPOSED TYPICAL SECTION

STA. 1343+00.00 TO STA. 1343+44.00 (L.T.)
 STA. 1343+00.00 TO STA. 1343+06.25 (RT.)
 STA. 1348+77.75 TO STA. 1349+00.00 (L.T.)
 STA. 1347+52.75 TO STA. 1349+00.00 (RT.)
 STA. 1253+00.00 TO STA. 1255+11.98
 STA. 1255+89.19 TO STA. 1257+00.00



PROPOSED TYPICAL SECTION

STA. 1343+44.00 TO STA. 1345+60.00 (L.T.)
 STA. 1343+06.25 TO STA. 1345+60.00 (RT.)
 BRIDGE OMISSION STA. 1345+60.00 TO STA. 1346+24.00
 STA. 1346+24.00 TO STA. 1348+77.75 (L.T.)
 STA. 1346+24.00 TO STA. 1347+52.75 (RT.)

- ① HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 (1 1/2")
- ② LEVELING BINDER (MACHINE METHOD), N50 (3/4")
- ③ HOT-MIX ASPHALT SHOULDERS, 8"
- ④ AGGREGATE WEDGE SHOULDER, TYPE B
- ⑤ FURNISHED EXCAVATION
- ⑥ STEEL PLATE BEAM GUARDRAIL, TYPE A 6 FT POSTS
- ⑦ PAINT PAVEMENT MARKING - LINE, 4" SOLID WHITE
- ⑧ PAINT PAVEMENT MARKING - LINE, 4" SOLID YELLOW
- ⑨ SEEDING, CLASS 2
- ⑩ MULCH, METHOD 2

MIX DESIGN TABLE

	HMA BASE COURSE	HMA LEVEL BINDER	HMA SURFACE	HMA SHOULDERS
PG GRADE	PG64-22	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	4.0% @ N50	2.0% @ N30
MIXTURE COMPOSITION	IL 19.0	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0
FRICTION AGGREGATE			MIXTURE C	
DENSITY TEST METHOD	CORES	SATISFACTION OF ENGINEER	CORES	CORES

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 Chicago, Illinois 60601
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 Job # 3838.02

FILE NAME =	USER NAME = #USER#	DESIGNED - JRM	REVISED - JDC	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.		
#FILEL#		DRAWN - JRM	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	796	104 I & 105 BR-1	FORD	51	4
	PLOT SCALE = #SCALE#	CHECKED - DJC	REVISED -		CONTRACT NO. 66848								
	PLOT DATE = #DATE#	DATE - 10/24/09	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT								

SCHEDULE OF QUANTITIES

EARTHWORK				
LOCATION	EARTH EX.	EARTH EX. ADJ. FOR SHRINKAGE*	FURNISHED EXCAVATION	EARTHWORK BAL WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD
STA. 1253+00.00 TO STA. 1254+00.00	49	37	11	26
STA. 1254+00.00 TO STA. 1255+00.00	112	84	22	62
STA. 1255+00.00 TO STA. 1255+11.98	16	12	3	9
STA. 1255+89.19 TO STA. 1256+00.00	10	8	9	-1
STA. 1256+00.00 TO STA. 1257+00.00	44	33	49	-16
STA. 1343+00.00 TO STA. 1344+00.00	25	19	46	-27
STA. 1344+00.00 TO STA. 1345+00.00	65	49	197	-148
STA. 1345+00.00 TO STA. 1345+23.66	22	17	69	-52
STA. 1346+60.33 TO STA. 1347+00.00	82	62	104	-42
STA. 1347+00.00 TO STA. 1348+00.00	159	120	155	-35
STA. 1348+00.00 TO STA. 1349+00.00	67	51	32	19
TOTAL:	651	492	697	-205

* QUANTITY OF EARTH EXCAVATION ADJUSTED FOR A SHRINKAGE FACTOR OF 25%

SEEDING AND FERTILIZER					
LOCATION	SEEDING CLASS 3	MULCH METHOD 2	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
	ACRE	ACRE	POUND	POUND	POUND
STA. 1253+00.00 TO STA. 1254+00.00	0.11	0.11	7	7	7
STA. 1254+00.00 TO STA. 1255+00.00	0.17	0.17	13	13	13
STA. 1255+00.00 TO STA. 1255+11.98	0.05	0.05	2	2	2
STA. 1255+89.19 TO STA. 1256+00.00	0.05	0.05	2	2	2
STA. 1256+00.00 TO STA. 1257+00.00	0.12	0.12	8	8	8
STA. 1343+00.00 TO STA. 1344+00.00	0.06	0.06	5	5	5
STA. 1344+00.00 TO STA. 1345+00.00	0.12	0.12	10	10	10
STA. 1345+00.00 TO STA. 1345+23.66	0.04	0.04	3	3	3
STA. 1346+60.33 TO STA. 1347+00.00	0.07	0.07	6	6	6
STA. 1347+00.00 TO STA. 1348+00.00	0.14	0.14	11	11	11
STA. 1348+00.00 TO STA. 1349+00.00	0.07	0.07	5	5	5
TOTAL:	1	1	72	72	72

SURVEY & RIGHT OF WAY		
LOCATION	PERMANENT SURVEY MARKERS	FURNISHING AND ERECTING ROW MARKERS
	EACH	EACH
STA. 1253+00.00 TO STA. 1254+00.00	1	4
STA. 1254+50.00 TO STA. 1255+11.98		0
STA. 1255+89.19 TO STA. 1257+00.00	1	4
STA. 1343+00.00 TO STA. 1345+00.00	1	
STA. 1346+00.00 TO STA. 1349+00.00	1	
TOTAL:	4	8

PAVEMENT AND SHOULDERS											
LOCATION	SUB-BASE GRANULAR MATERIAL, TYPE B 4"	HMA BASE COURSE 4 1/2"	BIT. MAT. (PR. CT.)	AGGREGATE MATERIAL (PR. CT.)	MIXTURE FOR CRACKS, JOINTS, & FLANGEWAYS	LEVEL-BINDER (M.M.)	HMA SURF. REM. BUTT JT.	HMA SURF. CSE.	PAVEMENT REMOVAL	AGG. WEDGE SHLDR. TYPE B	HMA SHLDR. 8"
	SQ YD	SQ YD	GAL	TON	TON	TON	SQ YD	TON	SQ YD	TON	SQ YD
STA. 1252+10.00 TO STA. 1253+00.00			31			10	240	20			
STA. 1253+00.00 TO STA. 1255+11.98			74		0.2	24		48		9	
STA. 1255+11.98 TO STA. 1255+89.19	206	206	28	1	0.4	9		17	206	9	
STA. 1255+89.19 TO STA. 1257+00.00			38		0.1	12		25		9	
STA. 1257+00.00 TO STA. 1257+90.00			31			10	240	20			
STA. 1342+10.00 TO STA. 1345+23.67			84			45	240	71		6	312
STA. 1346+60.33 TO STA. 1349+90.00			88			48	240	74		6	321
TOTAL:	206	206	374	1	0.7	158	960	275	206	39	633

TEMPORARY EROSION CONTROL		
LOCATION	TEMP. DITCH CHECKS	PERIMETER EROSION BARRIER
	FOOT	FOOT
STA. 1253+00.00 TO STA. 1255+20.00	30	440
STA. 1255+80.00 TO STA. 1258+00.00	30	240
STA. 1343+00.00 TO STA. 1345+60.00	40	520
STA. 1346+24.00 TO STA. 1349+00.00	40	552
TOTAL:	140	1752

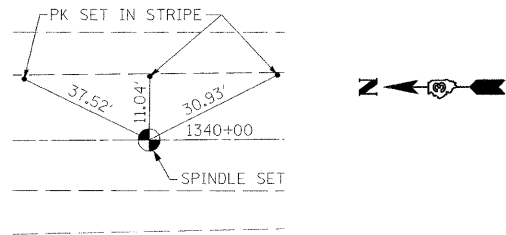
GUARDRAIL							
LOCATION	GUARDRAIL REMOVAL	SPBGR TYPE A 6 FT POSTS	TBT TYPE 6	TBT TYPE 1, SPECIAL (FLARED)	GUARDRAIL MARKERS	TERMINAL MARKER- DIR. APPLIED	
	FOOT	FOOT	EACH	EACH	EACH	EACH	
RIGHT SIDE							
STA. 1253+00.00 TO STA. 1256+65.00	365						
STA. 1343+41.25 TO STA. 1345+60.00	329	125	1	1	3	1	
STA. 1346+24.00 TO STA. 1347+17.54		-	1	1	2	1	
LEFT SIDE							
STA. 1254+40.00 TO STA. 1258+00.00	360						
STA. 1344+79.00 TO STA. 1345+60.00		-	1	1	2	1	
STA. 1346+24.00 TO STA. 1348+42.75	377	125	1	1	3	1	
TOTAL:	1431	250	4	4	10	4	

PAVEMENT MARKING							
LOCATION	LENGTH	SHORT-TERM PAVT. MKG.	TEMP PAVT. PAVT. MKG. 4"	TEMP PAVT. PAVT. MKG. 6"	PAINT PAVT. MKG., WHITE 4"	PAINT PAVT. MKG., YELLOW 6"	RAISED REFL. PAVT. MKR.
	FOOT	FOOT	FOOT	FOOT	FOOT	FOOT	EACH
STA. 1252+10.00 TO STA. 1257+90.00	580	60	1305	145	1160	145	8
STA. 1342+10.00 TO STA. 1349+90.00	780	80	1755	195	1560	195	10
TOTAL:	1360	140	3060	340	2720	340	18

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 312-565-0450
 Job # 9938.02

**CONTROL POINT
CENTERLINE TIE**

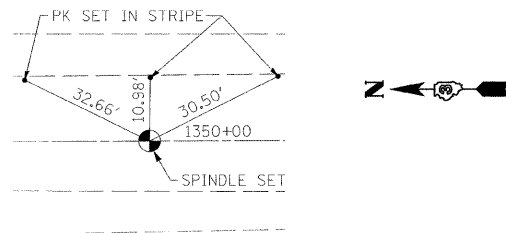


SPINDLE SET ON CL FAP 796 (IL 115)

STA. 1340 + 00

NORTHING 1547422.1700
EASTING 1019207.2960

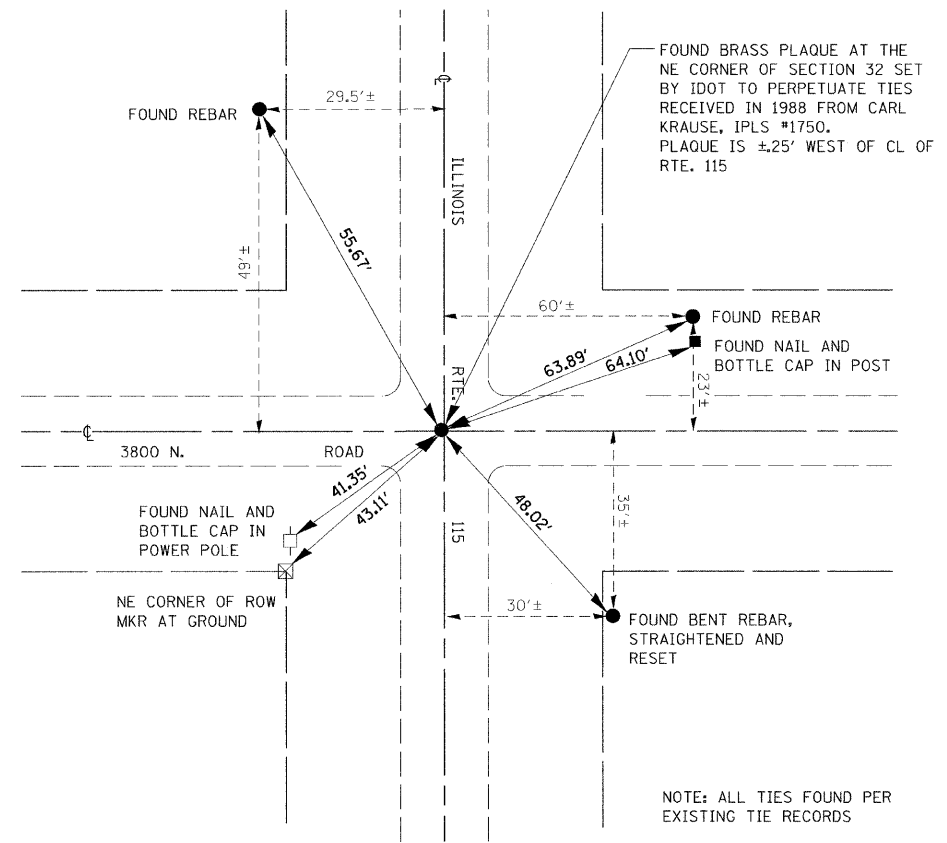
**CONTROL POINT
CENTERLINE TIE**



SPINDLE SET ON CL FAP 796 (IL 115)

STA. 1350 + 00

NORTHING 1546422.5550
EASTING 1019235.0280



REBAR ON CL FAP 796 (IL 115)

STA. 1260 + 27.90

NORTHING 1555398.9398
EASTING 1019016.4840

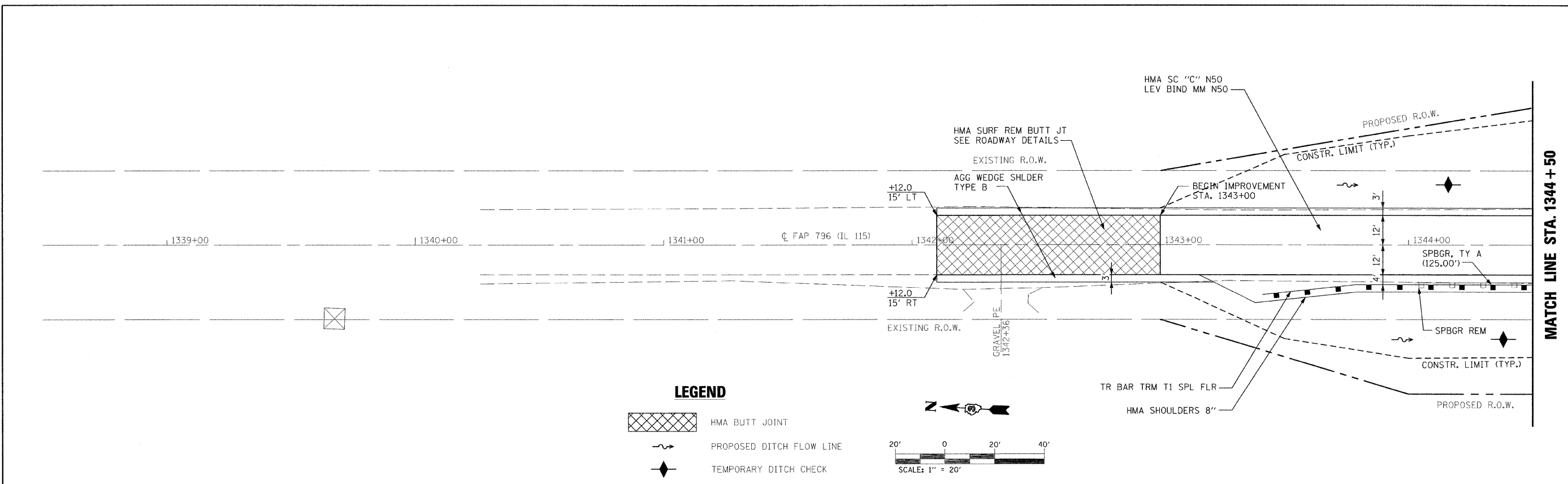
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Chicago, Illinois 60601
312-965-0450
Job # 3838.02

FILE NAME = \$FILEL#	USER NAME = #USER#	DESIGNED - HMA	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TIE POINTS		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	PLOT SCALE = \$SCALE#	CHECKED - DJC	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	796	104 I & 105 BR-1	FORD	51 6
	PLOT DATE = \$DATE#	DATE - 10/24/09	REVISED -						CONTRACT NO. 66848		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

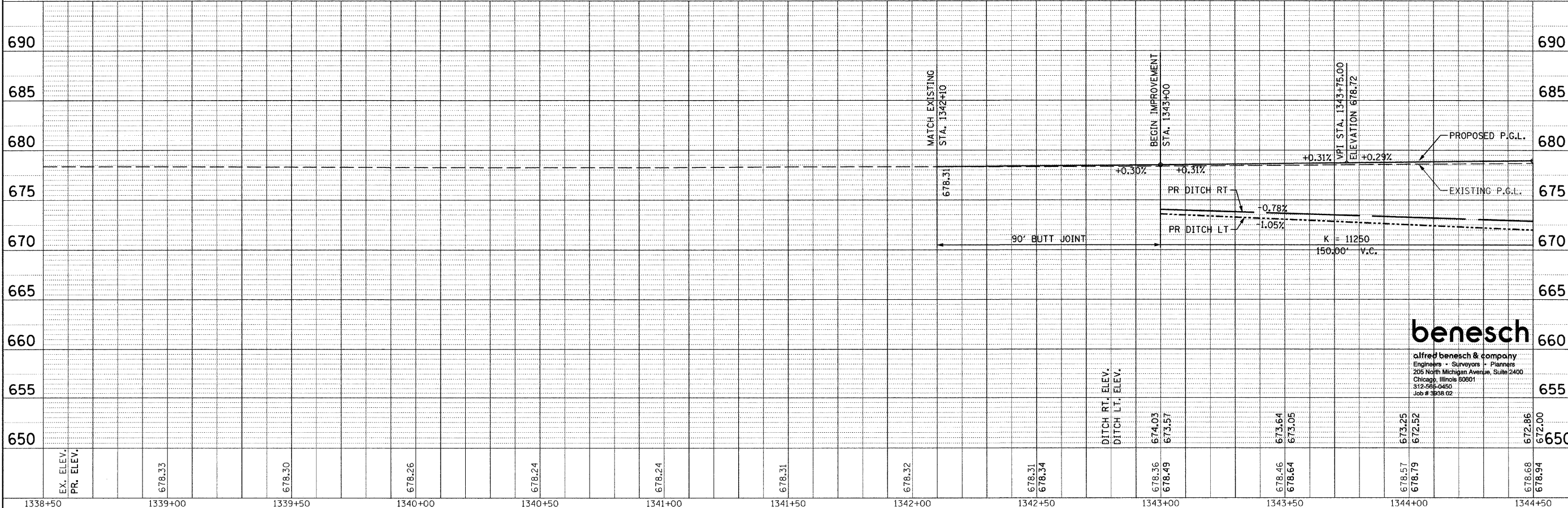
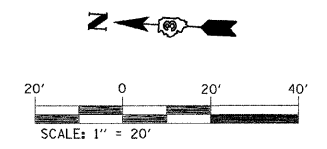
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NO.	
BY	
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PROFILE	DATE
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BY	
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LEGEND

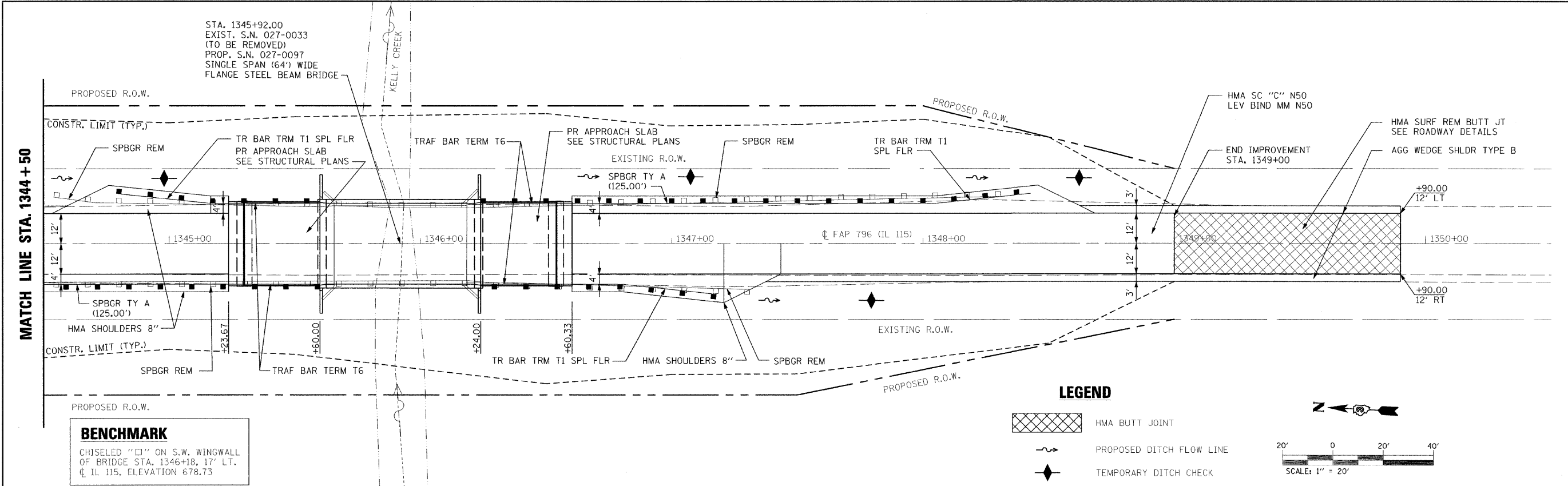
- HMA BUTT JOINT
- PROPOSED DITCH FLOW LINE
- TEMPORARY DITCH CHECK



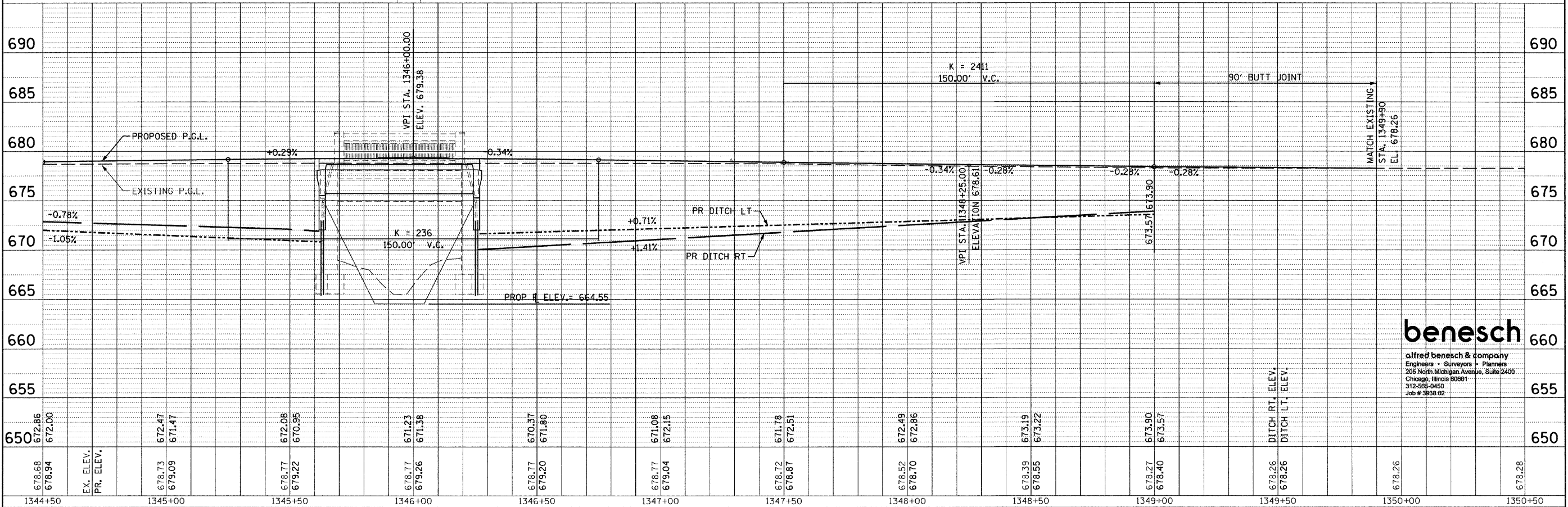
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 Engineers - Surveyors - Planners
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 Chicago, Illinois 60601
 312-565-0450
 Job # 3938 02

FILE NAME =	USER NAME = #USER#	DESIGNED - JDC	REVISED - JRM	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 7			
#FILEL\$	PLOT SCALE = #SCALE#	CHECKED - DJC	REVISED - JDC			SCALE: 1" = 20'		SHEET NO. 1 OF 4 SHEETS		STA. 1342+10 TO STA. 1344+50		CONTRACT NO. 66848	
	PLOT DATE = #DATE#	DATE - 10/24/09	REVISED -			FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT							

DATE	BY
REVISIONS	
NO.	DESCRIPTION
1	REVISED
2	ALIGNED
3	CHECKED
4	FILED
5	CAD FILE NAME
6	
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DATE	BY
REVISIONS	
NO.	DESCRIPTION
1	REVISED
2	ALIGNED
3	CHECKED
4	FILED
5	CAD FILE NAME
6	
7	
8	
9	
10	



678.68 678.94	EX. ELEV. PR. ELEV.	678.73 679.09	678.77 679.22	678.77 679.26	671.23 671.38	670.37 671.80	671.08 672.15	671.78 672.51	672.49 672.86	673.19 673.22	673.90 673.57	DITCH RT. ELEV. DITCH LT. ELEV.	678.26 678.26	678.26	678.28
1344+50		1345+00	1345+50	1346+00	1346+50	1347+00	1347+50	1348+00	1348+50	1349+00	1349+50		1350+00	1350+50	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	104 I & 105 BR-1	FORD	51	8
CONTRACT NO. 66848				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

SCALE: 1" = 20' SHEET NO. 2 OF 4 SHEETS STA. 1344+50 TO STA. 1349+00

DESIGNED - JDC	REVISED - JRM
DRAWN - JDC	REVISED - JDC
CHECKED - DJC	REVISED -
DATE - 10/24/09	REVISED - DATE

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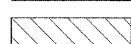


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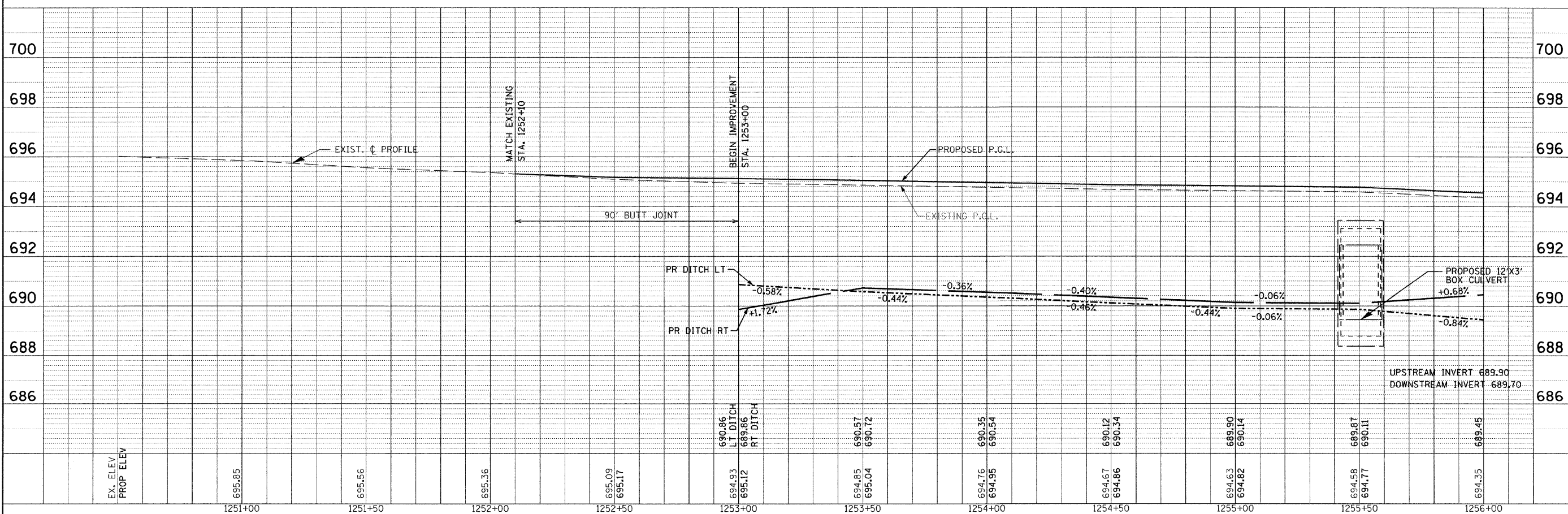
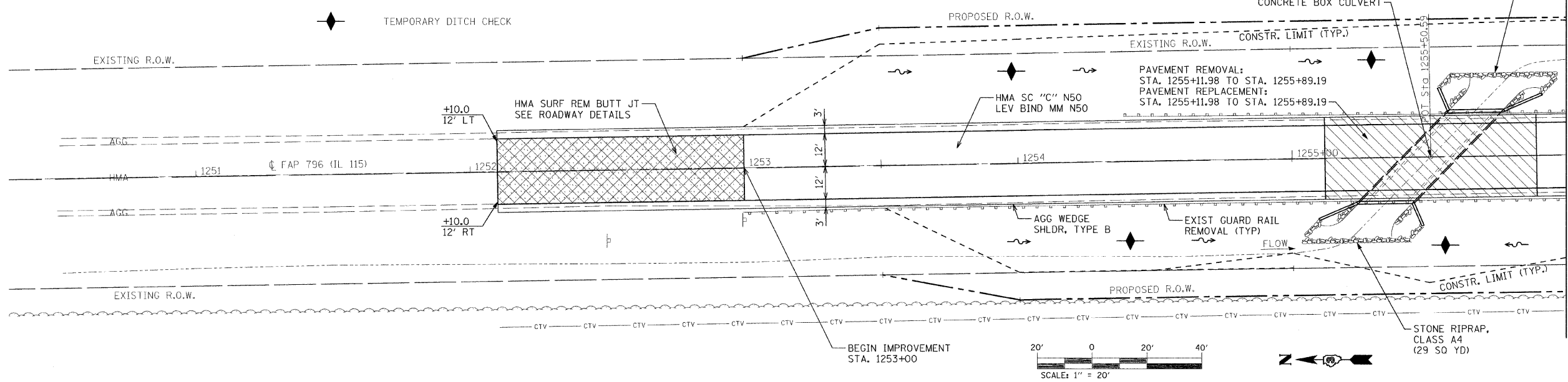
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312-585-0450
Job # 3938.02

PLAN
 NO. _____
 DATE _____
 BY _____
 CHECKED _____
 DATE _____

PROFILE
 NO. _____
 DATE _____
 BY _____
 CHECKED _____
 DATE _____

LEGEND

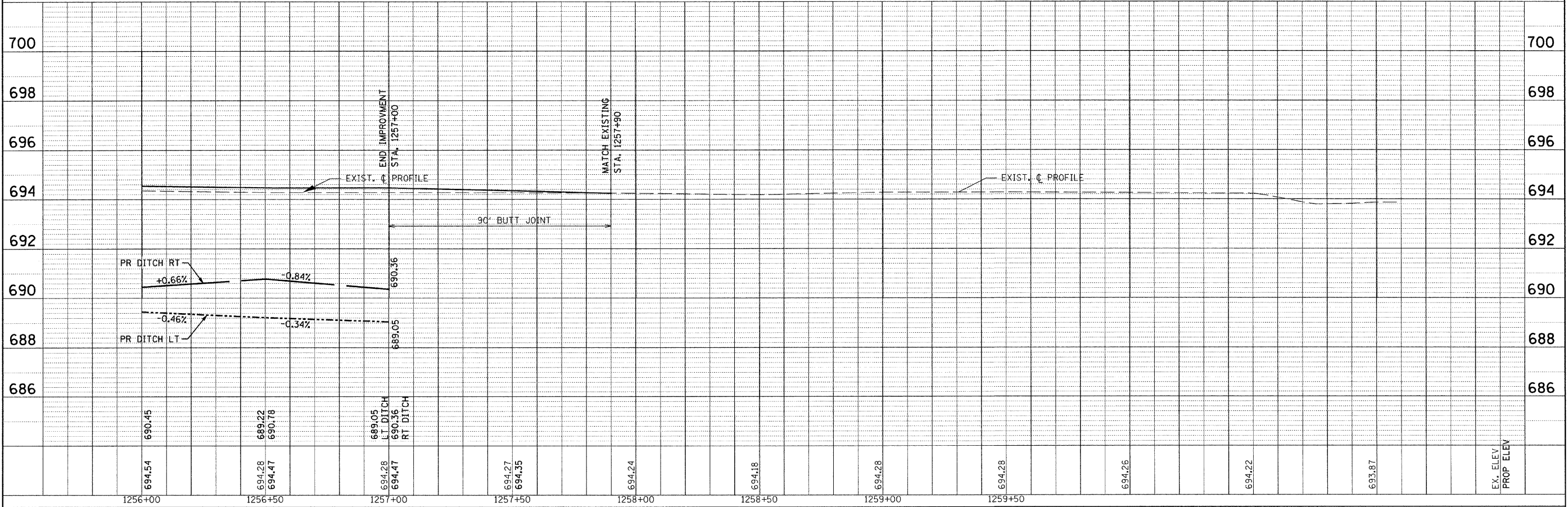
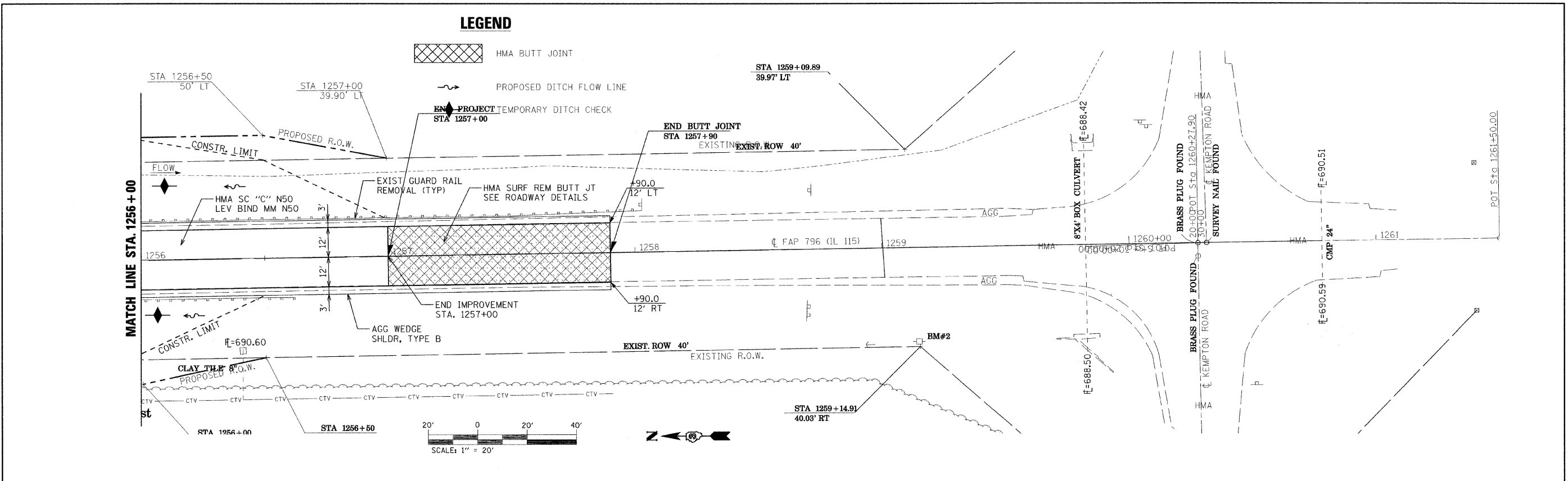
-  HMA BUTT JOINT
-  PAVEMENT REMOVAL AND REPLACEMENT
-  PROPOSED DITCH FLOW LINE
-  TEMPORARY DITCH CHECK



FILE NAME =	USER NAME = #USER#	DESIGNED - JDC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PLAN AND PROFILE	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 9	
#FILEL#	PLOT SCALE = #SCALE#	DRAWN - JDC	REVISED -			SCALE: 1" = 20' SHEET NO. 3 OF 4 SHEETS STA. 1252+10 TO STA. 1256+00			CONTRACT NO. 66848		
	PLOT DATE = #DATE#	CHECKED - DJC	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
		DATE - 10/24/09	REVISED -								

DATE	BY
REVISIONS	NO.
NO. 1	DATE
NO. 2	DATE
NO. 3	DATE
NO. 4	DATE
NO. 5	DATE
NO. 6	DATE
NO. 7	DATE
NO. 8	DATE
NO. 9	DATE
NO. 10	DATE

DATE	BY
REVISIONS	NO.
NO. 1	DATE
NO. 2	DATE
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NO. 9	DATE
NO. 10	DATE



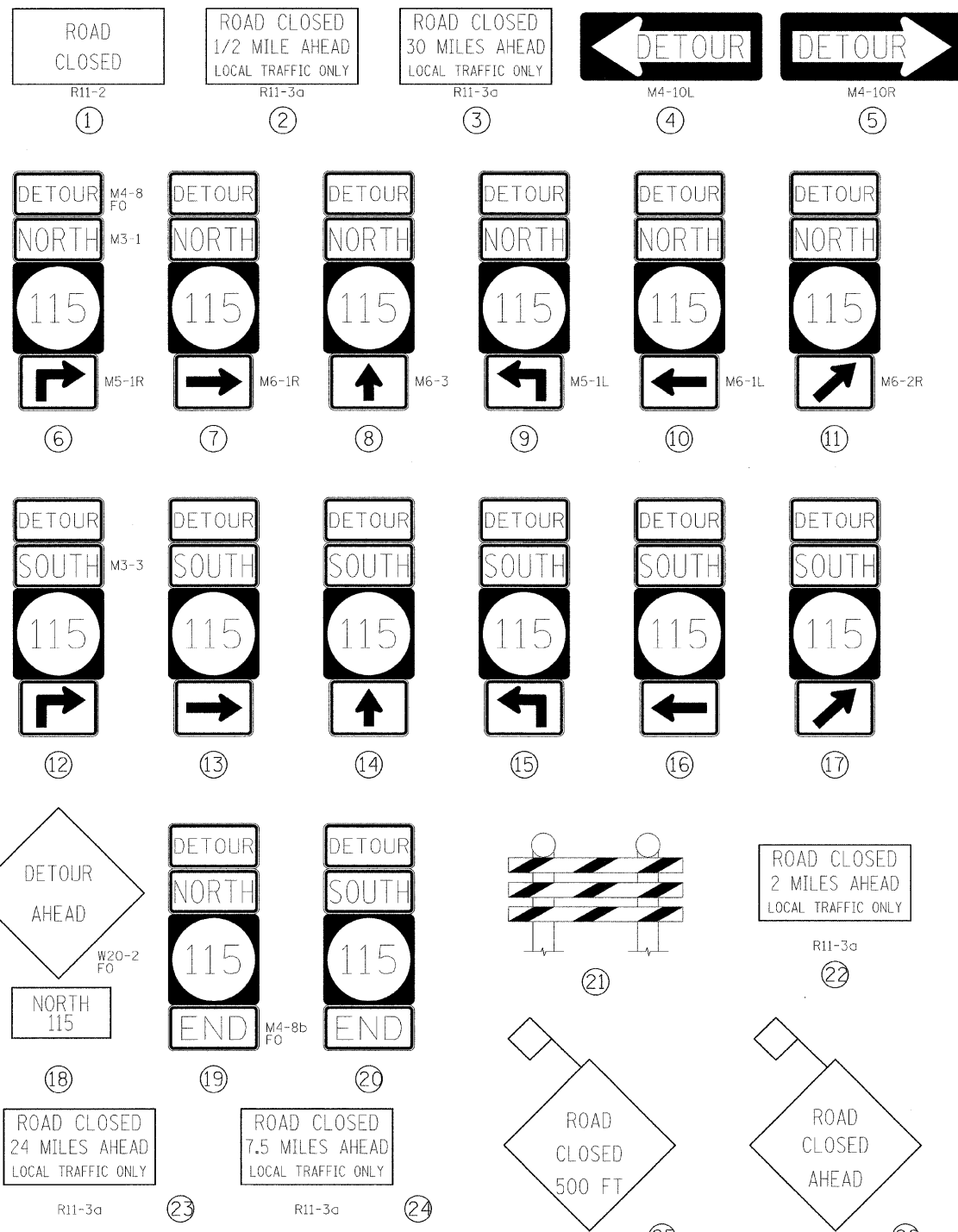
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

PLAN AND PROFILE

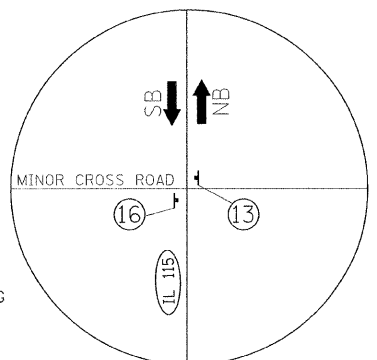
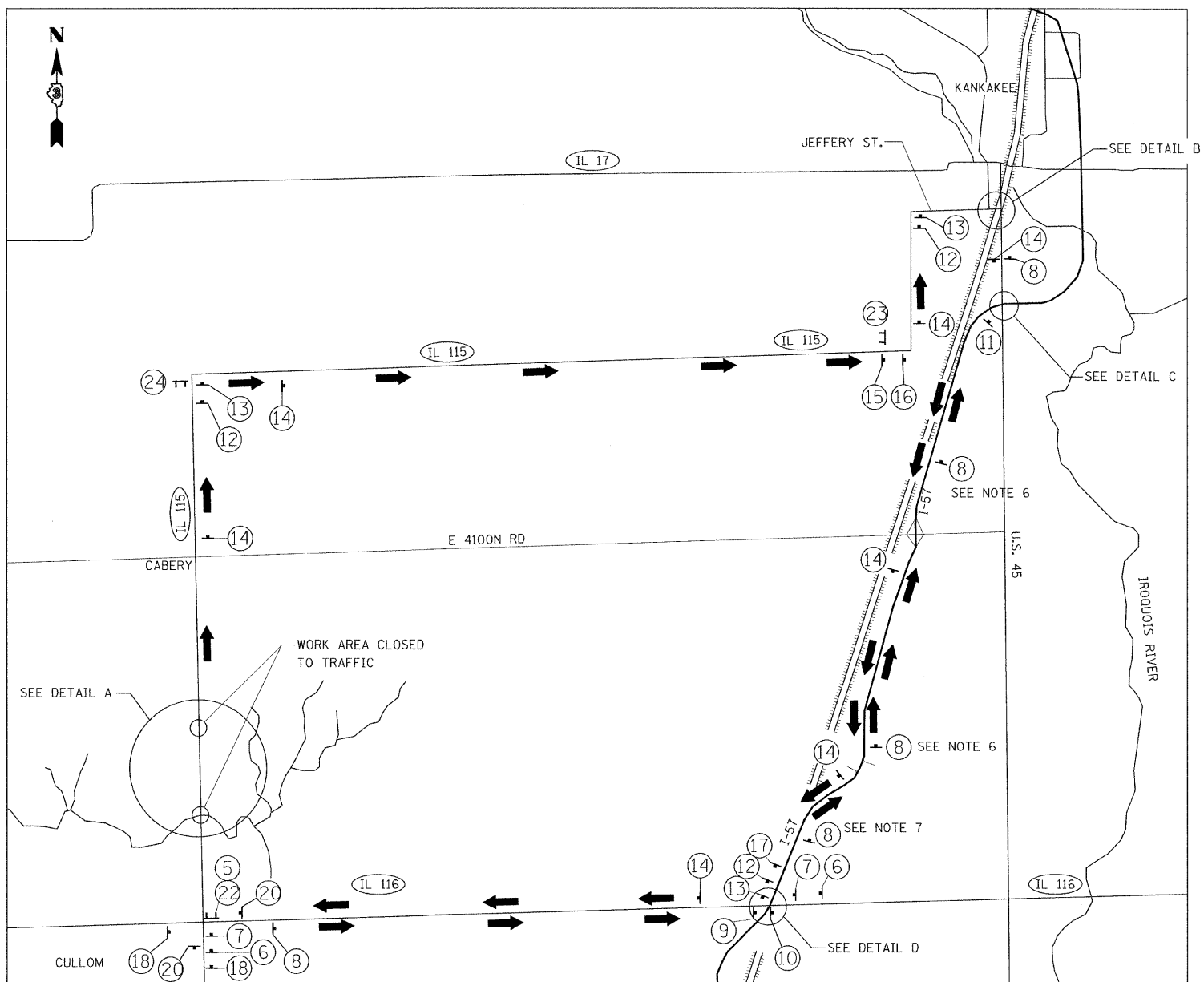
SCALE: 1" = 20' SHEET NO. 4 OF 4 SHEETS STA. 1256+00 TO STA. 1257+90

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	104 I & 105 BR-1	FORD	51	10
CONTRACT NO. 66848				
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

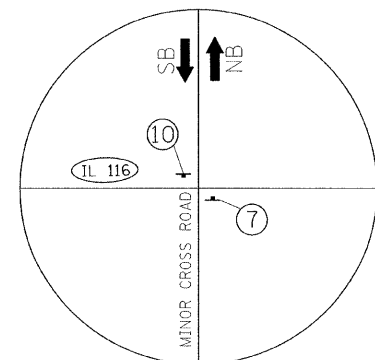


DETOUR NOTES:

1. THE CONTRACTOR MUST FURNISH, INSTALL, MAINTAIN AND REMOVE ALL TEMPORARY SIGNS AND SUPPORTS. AFTER REMOVING THE SUPPORTS, THE CONTRACTOR MUST FILL HOLES (IF ANY) AND RESTORE THE GROUND TO ITS ORIGINAL CONDITION AND ELEVATION. THE COST OF PLACING GRAVEL, SOD, OR SEED MUST BE INCLUDED IN THE TRAFFIC CONTROL AND PROTECTION REQUIRED UNDER STANDARD 701901 AND BLR 21 AND WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE.
2. SIGNING SHALL BE PLACED AT LOCATIONS THAT WILL BE COMPATIBLE WITH EXISTING SIGNING.
3. ALL EXISTING SIGNS OR OTHER DETOUR SIGNS THAT CONFLICT WITH THE DETOUR MUST BE COVERED.
4. IL-115 ROUTE MARKERS SHALL BE 24" X 24", BLACK AND WHITE TYPE AP SHEETING.
5. M4-8, M4-8b, AND W20-2 SIGNS SHALL BE BLACK LETTERING ON FLORESENT ORANGE BACKGROUND.
6. (8) SIGNS SHALL BE INSTALLED NEXT TO I-57 ROUTE MARKERS AT CLIFTON AND CHEBANSE INTERCHANGE.
7. (8) & (14) SIGNS SHALL BE INSTALLED ADJACENT TO I-57 ROUTE MARKER.



TYPICAL SIGNING AT CROSSROAD
KELLY CREEK NORTH TO KANKAKEE
(N-S LEG SHOWN, E-W LEG SIMILAR)



TYPICAL SIGNING AT CROSSROAD
IL-116 EAST TO I-57 WEST

- LEGEND**
- ➔ DETOUR TRAFFIC FLOW DIRECTION
 - ⊥ DETOUR GUIDE SIGN ASSEMBLY
 - ⊥ TYPE III BARRICADE WITH FLASHING LIGHTS AND ROAD CLOSED SIGN

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312-565-0450
Job # 3938.02

FILE NAME =	USER NAME = \$USER\$	DESIGNED - JRM	REVISED - JDC
\$FILEL\$		DRAWN - JRM	REVISED -
	PLOT SCALE = \$SCALE\$	CHECKED - DJC	REVISED -
	PLOT DATE = \$DATE\$	DATE - 10/24/09	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 115 - DETOUR PLAN

SCALE: NONE SHEET NO. 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	104 I & 105 BR-1	FORD	51	11
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 66848	

S.W. 1/4, SEC. 9, T. 28 N., R. 9 E., 3RD P.M.



E 3600 N. ROAD

E 3500 N. ROAD

243330 WD

PARCEL 3UW0001

J.A.S. FARMS, INC

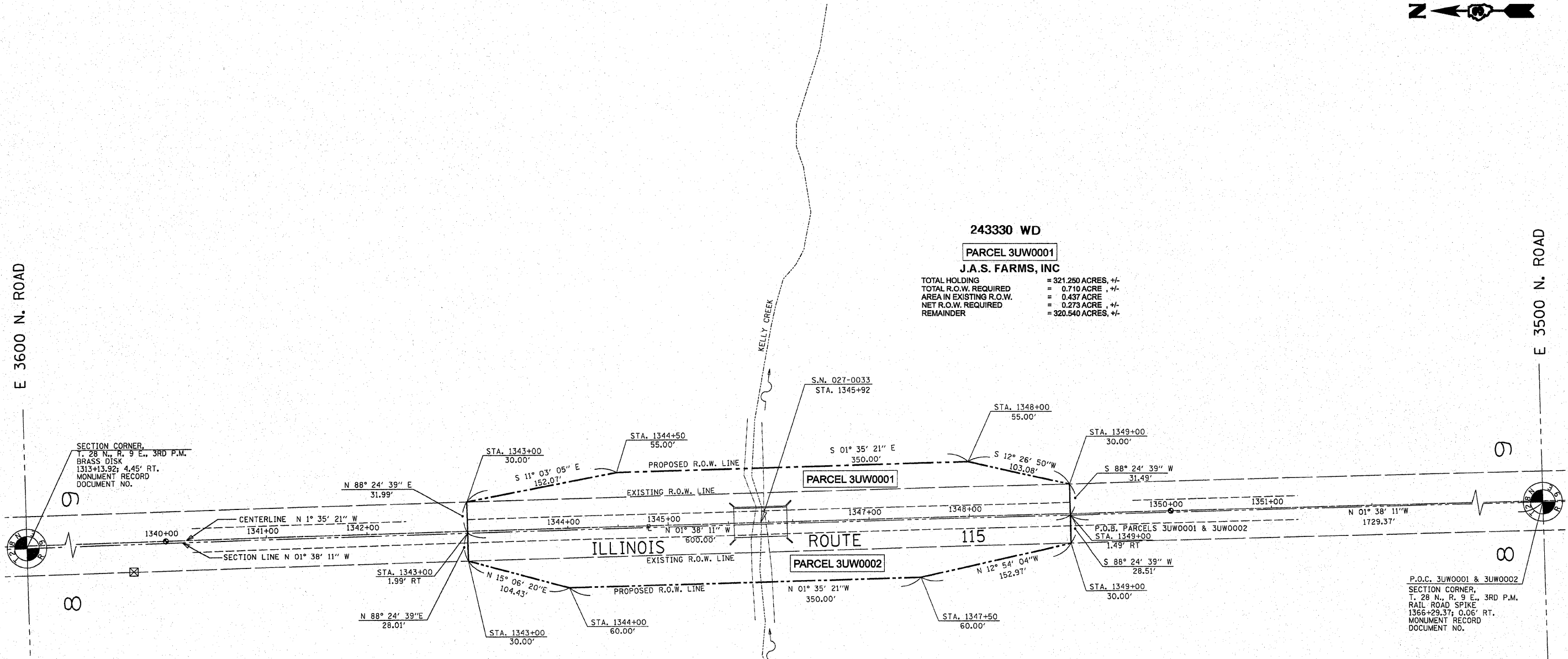
TOTAL HOLDING = 321.250 ACRES, +/-
 TOTAL R.O.W. REQUIRED = 0.710 ACRE, +/-
 AREA IN EXISTING R.O.W. = 0.437 ACRE
 NET R.O.W. REQUIRED = 0.273 ACRE, +/-
 REMAINDER = 320.540 ACRES, +/-

243894 TD

PARCEL 3UW0002

RICHARD K. DOWSE, TRUSTEE,

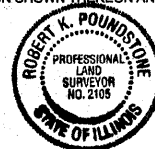
TOTAL HOLDING = 320.000 ACRES, +/-
 TOTAL R.O.W. REQUIRED = 0.717 ACRE, +/-
 AREA IN EXISTING R.O.W. = 0.389 ACRE
 NET R.O.W. REQUIRED = 0.328 ACRE, +/-
 REMAINDER = 319.283 ACRES, +/-



I, ROBERT K. POUNDSTONE, HEREBY CERTIFY THAT I AM A LICENSED PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, THAT THE SURVEY OF FAP 398 (IL ROUTE 115) WAS MADE UNDER MY DIRECTION, AND THAT THIS PLAN IS A CORRECT REPRESENTATION OF SAID SURVEY 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"

Robert K. Poundstone
 ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 2105
 EXPIRES: NOV. 30, 2008



DATE: Aug. 3, 2008

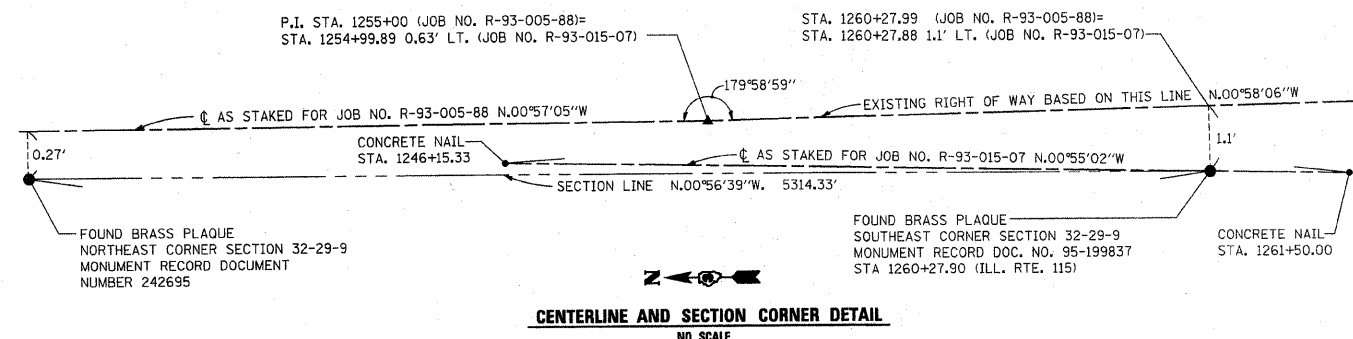
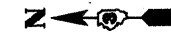
S.E. 1/4, SEC. 8, T. 28 N., R. 9 E., 3RD P.M.



BEARINGS SHOWN HEREON ARE REFERENCED TO THE ILLINOIS STATE PLANE COORDINATE SYSTEM, EAST ZONE (NAD 83).

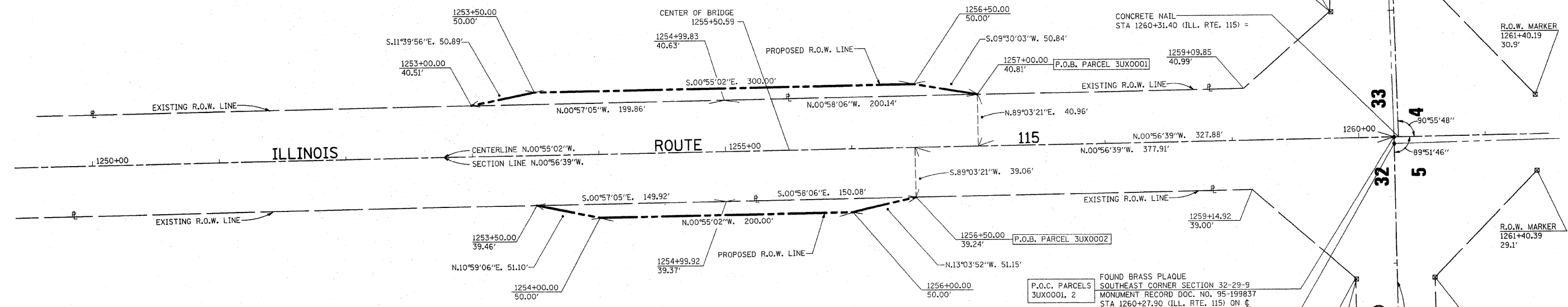
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	PLOT SCALE = 50.0000' / IN.	DRAWN - JJC	REVISED -		PROJECT	JOB NO.	796	105BR-1	FORD		
PLOT DATE = Jan 29, 2008 - 10:53:25 AM	CHECKED - RKP	DATE - 01-14-2008	REVISED -	SCALE: 1" = 50'	SHEET NO. 1 OF 1 SHEETS	STA. 1343+00 TO STA. 1349+00	CONTRACT NO.		ILLINOIS FED. AID PROJECT		

SW 1/4 SECTION 33, T. 29 N., R. 9 E., 3RD. P.M.



243635 WD
PARCEL NO. 3UX0001

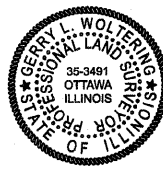
CARLENE W. ESSINGTON
TOTAL HOLDING = 157.296 AC.±
TOTAL R.O.W. REQUIRED = 0.075 AC. (3,276 SQ.FT.)±
REMAINDER = 157.221 AC.±



243638 TD
PARCEL NO. 3UX0002

DUANE WAKEMAN, et ux.
TOTAL HOLDING = 144.890 AC.±
TOTAL R.O.W. REQUIRED = 0.061 AC. (2,659 SQ.FT.)±
REMAINDER = 144.829 AC.±

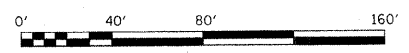
SURVEYOR'S CERTIFICATE



I, GERRY L. WOLTERING, HEREBY CERTIFY THAT I AM A PROFESSIONAL LAND SURVEYOR OF THE STATE OF ILLINOIS, AND THAT THIS SURVEY OF FAP 796 (ILL. RTE. 115) WAS MADE BY THE ILLINOIS DEPARTMENT OF TRANSPORTATION, 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.
DATED: **9-3-2008**
GERRY L. WOLTERING
ILLINOIS PROFESSIONAL LAND SURVEYOR NO. 35-3491
LICENSE RENEWAL DATE: 11-30-2008

SE 1/4 SECTION 32, T. 29 N., R. 9 E., 3RD. P.M.

NOTE: BEARINGS ARE BASED UPON THE ILLINOIS STATE PLANE COORDINATE SYSTEM EAST ZONE, NAD 83



SURVEY BOOK NUMBERS 824, 825, FAP 796-01-1, FAP 796-05-1

RIGHT OF WAY PLANS				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
796	(104) I	FORD		
ILLINOIS ROUTE 115			CONTRACT NO.	
FED. ROAD DIST. NO. [ILLINOIS] FED. AID PROJECT				

DESIGNED -	
DRAWN -	
CHECKED -	
DATE -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

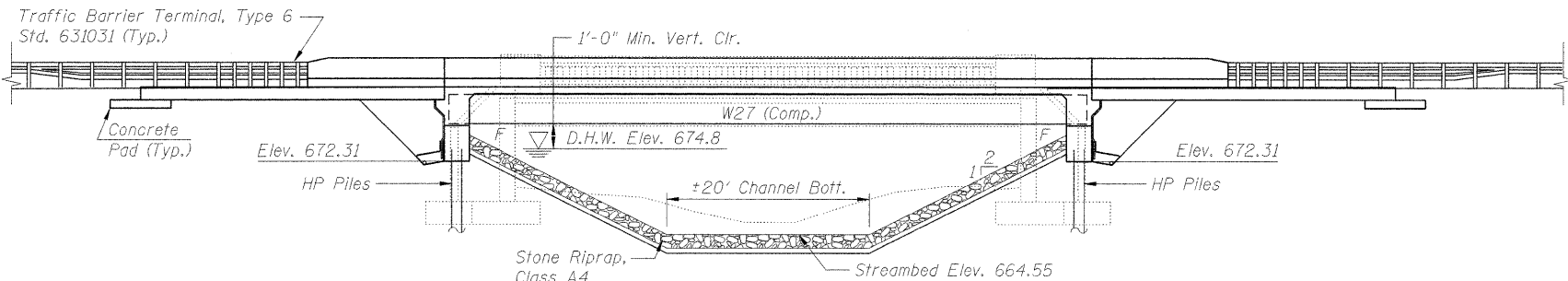
RIGHT OF WAY PLANS			
PROJECT	JOB NO. R-93-015-07	STA. 1253+00	TO STA. 1257+00
SCALE: 1" = 40'	SHEET NO. 1 OF 1 SHEETS		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

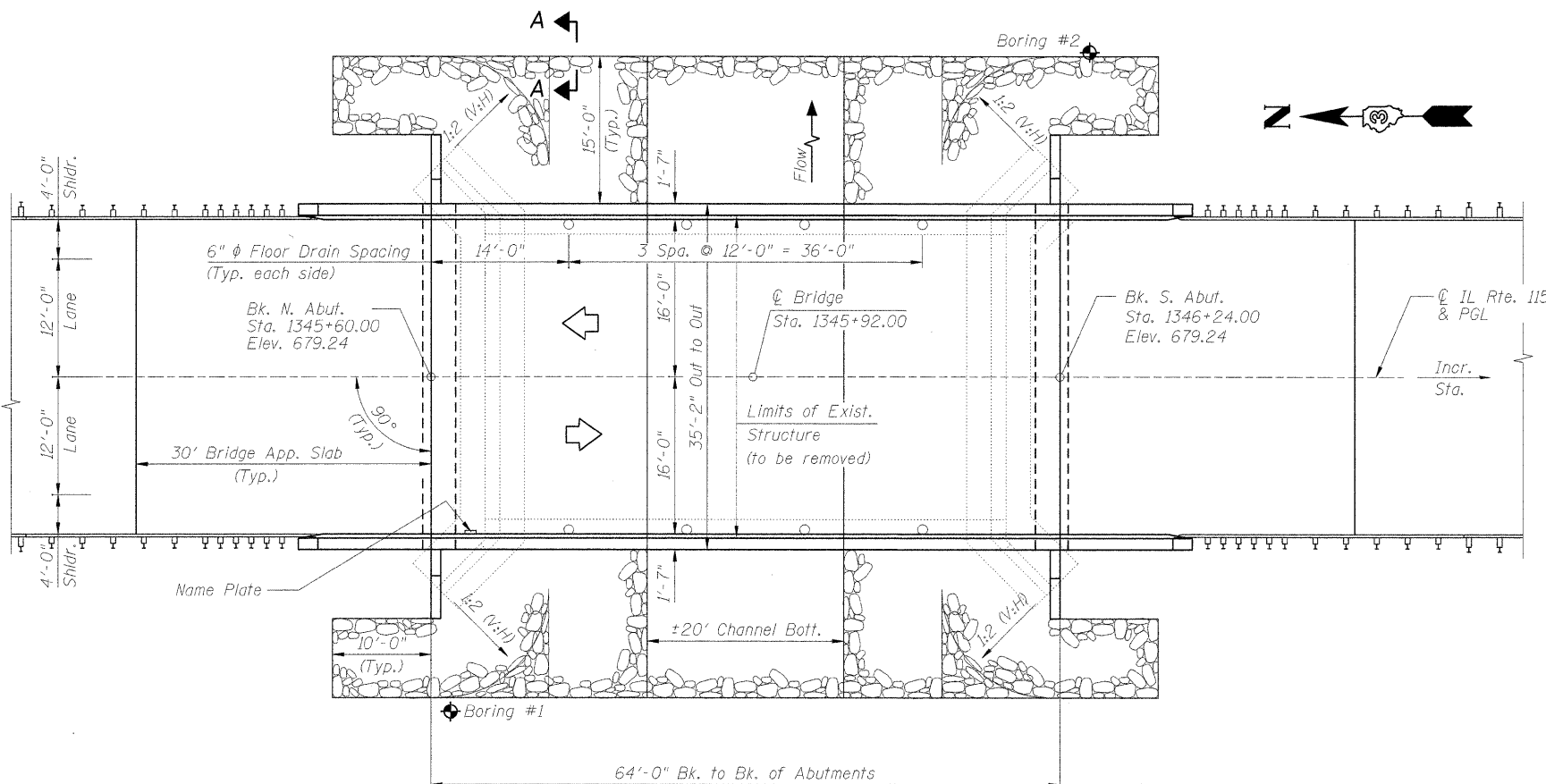
Bench Mark: Chiseled SQ. on S.W. wingwall of bridge. Sta. 1346+18, 17.0' LT, Elevation 678.73

Existing Structure: S.N. 027-0033, originally built in 1927 as F.A.P. Route 796, Section 105B. The existing structure consists of a single span, 53'-0" bk. to bk. abutments, 32'-8" out to out, cast-in-place concrete deck monolithic with concrete tee beams on closed abutments with spread footings. The contractor shall remove the existing structure and replaced it with a single span, steel wide flange beam superstructure on integral abutments. Road to be closed and traffic detoured during construction.

Salvage: None



ELEVATION



PLAN

NOTES:
1. Drains shall be located clear of all diaphragms.

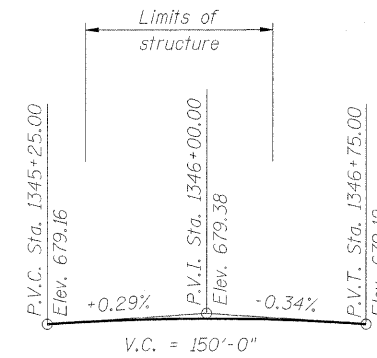
WATERWAY INFORMATION

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	50	2,097	305	384	674.2	0.3	0.2	674.5	674.4
Base	100	2,438	341	437	675.1	0.9	0.6	676.0	675.7
Max. Calc.	500	3,260	341	443	675.6	1.2	1.1	676.8	676.7

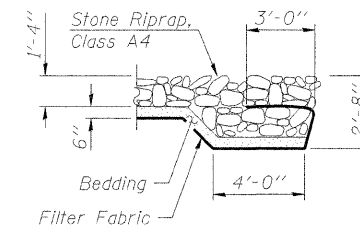
DESIGN SCOUR ELEVATION TABLE

Design Scour Elevation (ft.)	N. Abut.	S. Abut.
	672.02	672.02

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB



PROFILE GRADE
(along C IL Rte. 115)



SECTION A-A

LOADING HL-93
Allow 50#/sq. ft. for future wearing surface.
DESIGN SPECIFICATIONS
2007 AASHTO LRFD Bridge Design Specifications
with 2008 Interims

DESIGN STRESSES
FIELD UNITS

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = 0.115g
Design Spectral Acceleration at 0.2 sec. (SDS) = 0.184g
Soil Site Class (S) = D

STATION 1354+92
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 796 SEC. 105 BR-1
LOADING HL-93
STR. NO. 027-0097

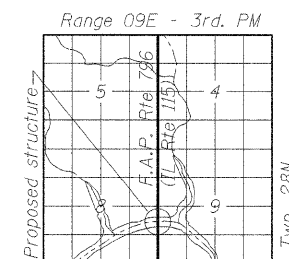
NAME PLATE
See Std. 515001

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson (TJD)
ENGINEER OF BRIDGES AND STRUCTURES



EXPIRATION DATE 11-30-2010
DATE 01/13/2010



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
ILLINOIS ROUTE 115 OVER
KELLY CREEK DRAINAGE DITCH
F.A.P. ROUTE 796 SEC. NO. 105 BR-1
FORD COUNTY
STATION 1345+92.00
STRUCTURE NO. 027-0097

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Chicago, Illinois 60601
312-565-0450
Job # 3938.02

SHEET NO.	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S1	796	104 I & 105 BR-1	FORD	51	15
S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

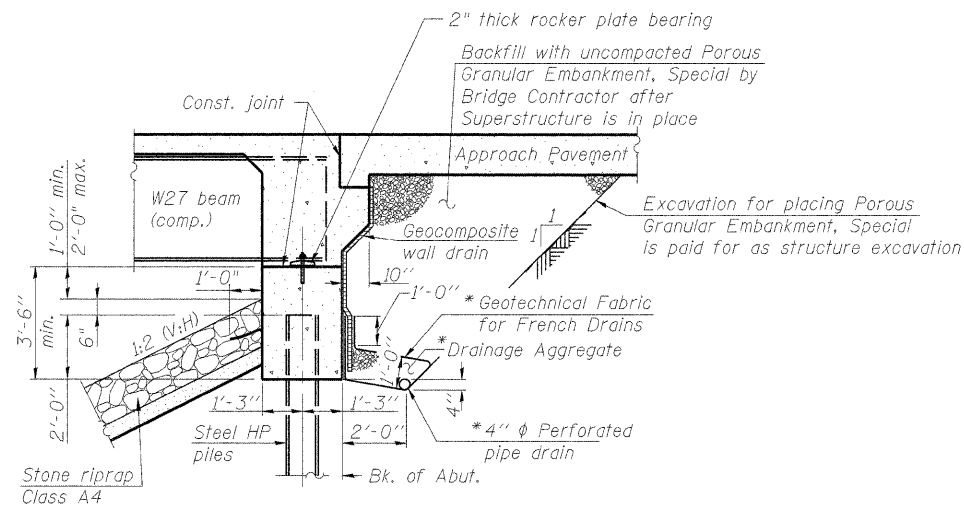
- Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts in painted areas and M164 Type 3 in unpainted areas. Bolts $\frac{3}{4}$ " ϕ , holes $\frac{15}{16}$ " ϕ , unless otherwise noted.
- Calculated weight of Structural Steel = 59,320 lbs.
- All structural steel shall be AASHTO M270 Grade 50W.
- No field welding is permitted except as specified in the contract documents.
- Reinforcement bars shall conform to the requirements of ASTM A706 Gr. 60. See Special Provision.
- Reinforcement Bars designated (E) shall be epoxy coated.
- Structural steel shall only be painted for a distance equal to the depth of embedment into the concrete cap plus 3". Those areas shall be primed in the shop with a Department approved zinc rich primer. No field painting shall be required. All structural steel shall be cleaned as specified in the Special Provision for "Surface Preparation and Painting Requirements for Weathering Steel".
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- The contractor shall drive test piles to 110% of the nominal required bearing specified in production locations at substructures specified or approved by the Engineer before ordering the remainder of piles.
- The contractor is advised that the existing superstructure is in a deteriorated condition with reduced load carrying capacity. It is the contractor's responsibility to account for the condition of the beams when developing construction procedures for removal and replacement of the superstructure.

INDEX OF SHEETS

- General Plan and Elevation
- General Notes, Index of Sheets and Total Bill of Material
- Foundation Layout
- Top of Slab Elevations 1 of 2
- Top of Slab Elevations 2 of 2
- Top of Approach Slab Elevations 1 of 2
- Top of Approach Slab Elevations 2 of 2
- Deck Plan and Cross Section
- Superstructure Details
- Integral Abutment Diaphragm Details
- Bridge Approach Slab Details 1 of 2
- Bridge Approach Slab Details 2 of 2
- Framing Plan and Steel Details
- Moment Table and Bearing Details
- North Abutment Details
- South Abutment Details
- HP Pile Details
- Bar Splicer Assembly Details
- Concrete Parapet Slipforming Option
- Cantilever Forming Brackets for Superstructures with W27 Beams and Smaller
- Soil Boring Logs 1 of 2
- Soil Boring Logs 2 of 2

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment, Special	Cu. Yd.		90	90
Stone Riprap, Class A4	Sq. Yd.		523	523
Filter Fabric	Sq. Yd.		523	523
Removal of Existing Structures	Each		1	1
Structure Excavation	Cu. Yd.		189	189
Floor Drains	Each	8		8
Concrete Structures	Cu. Yd.		53.3	53.3
Concrete Superstructure	Cu. Yd.	193.8		193.8
Bridge Deck Grooving	Sq. Yd.	413		413
Concrete Encasement	Cu. Yd.		4.2	4.2
Protective Coat	Sq. Yd.	528		528
Furnishing and Erecting Structural Steel	L. Sum	1		1
Stud Shear Connectors	Each	1134		1134
Reinforcement Bars, Epoxy Coated	Pound	44,440	5,140	49,580
Bar Splicers	Each	64		64
Furnishing Steel Piles, HP12x53	Ft.		505	505
Driving Piles	Ft.		505	505
Test Pile Steel, HP12x53	Each		2	2
Name Plates	Each	1		1
Anchor Bolts, 1"	Each		24	24
Geocomposite Wall Drain	Sq. Yd.		67	67
Pipe Underdrains For Structures, 4"	Ft.		118	118



SECTION THRU INTEGRAL ABUTMENT
(Horiz. dim. @ Rt. L's)

* Included in the cost of Pipe Underdrains for Structures.

Note:

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

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

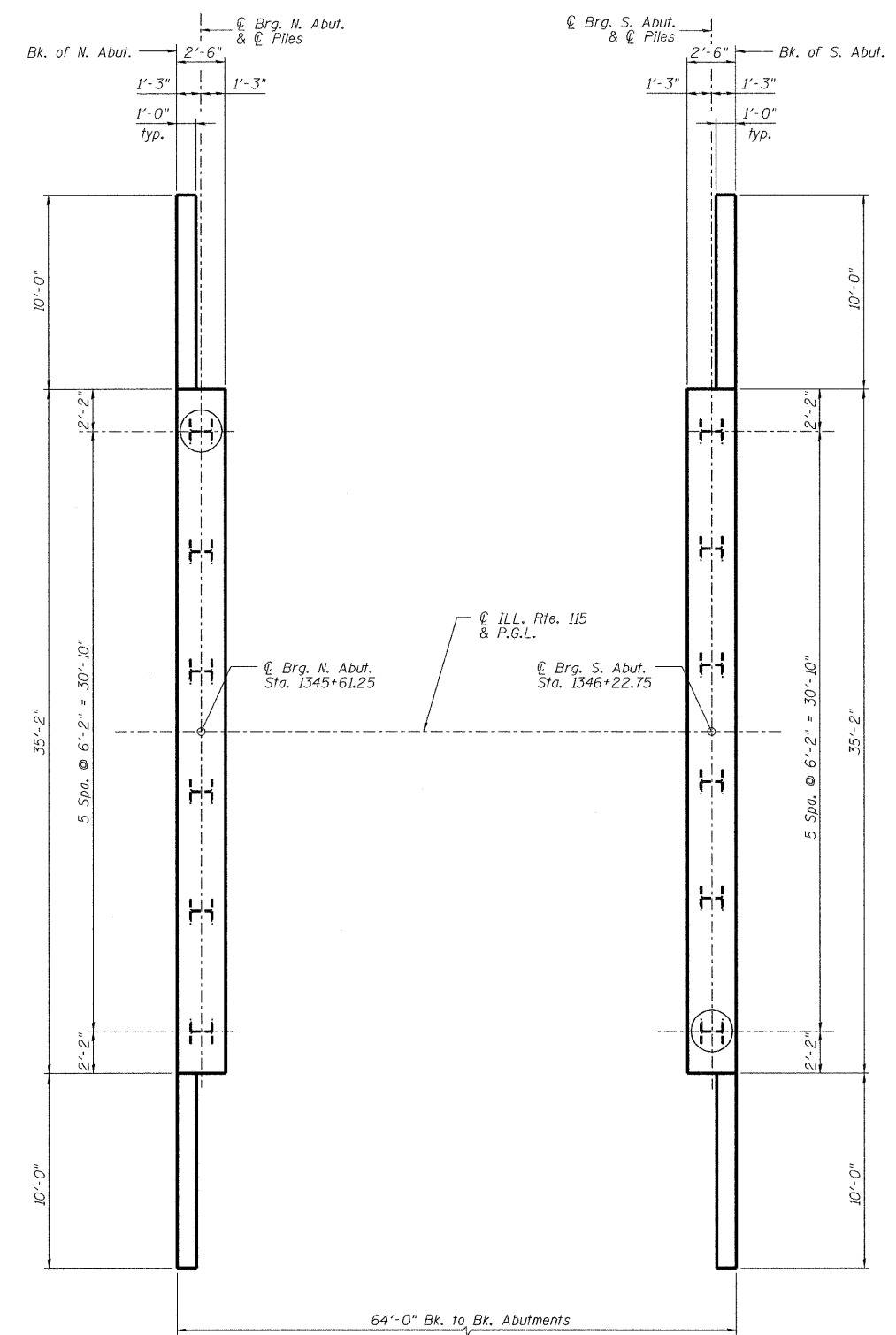
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**GENERAL NOTES, INDEX OF SHEETS
AND TOTAL BILL OF MATERIAL
STRUCTURE NO. 027-0097**

SHEET NO. S2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	16
SHEETS S22			CONTRACT NO. 66848		
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NORTH ABUTMENT PILE FOUNDATION

SOUTH ABUTMENT PILE FOUNDATION

FOUNDATION LAYOUT

indicates test pile

NOTES:
1. For Abutment details see sheets S15 and S16.

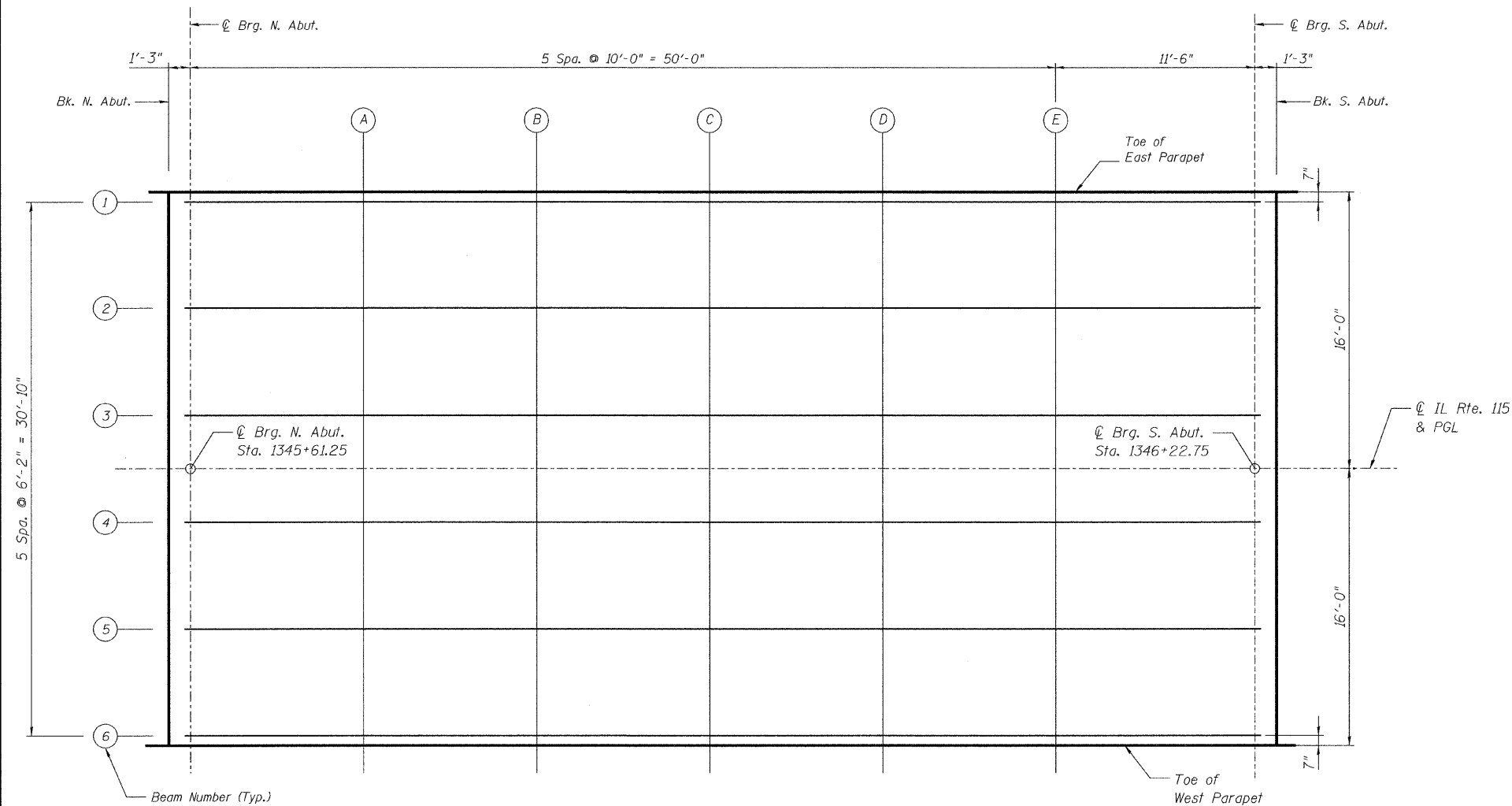
DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	YH
CHECKED -	MRB

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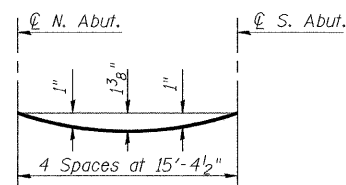
**FOUNDATION LAYOUT
STRUCTURE NO. 027-0097**

SHEET NO. S3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	17
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DEPARTMENT OF TRANSPORTATION

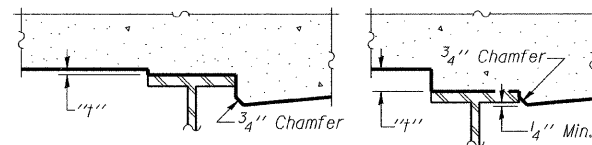


PLAN



DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only.)

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



At Minimum Fillet At Maximum Fillet

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

FILLET HEIGHTS

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

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BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	-15.417	678.98	678.98
☉ Brg. N. Abut.	1345+61.25	-15.417	678.98	678.98
A	1345+71.25	-15.417	678.99	679.05
B	1345+81.25	-15.417	679.00	679.09
C	1345+91.25	-15.417	679.00	679.11
D	1346+01.25	-15.417	679.00	679.10
E	1346+11.25	-15.417	679.00	679.06
☉ Brg. S. Abut.	1346+22.75	-15.417	678.98	678.98
Bk. S. Abut.	1346+24.00	-15.417	678.98	678.98

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	-9.250	679.09	679.09
☉ Brg. N. Abut.	1345+61.25	-9.250	679.09	679.09
A	1345+71.25	-9.250	679.11	679.16
B	1345+81.25	-9.250	679.11	679.21
C	1345+91.25	-9.250	679.12	679.23
D	1346+01.25	-9.250	679.12	679.22
E	1346+11.25	-9.250	679.11	679.18
☉ Brg. S. Abut.	1346+22.75	-9.250	679.10	679.10
Bk. S. Abut.	1346+24.00	-9.250	679.10	679.10

TOP OF SLAB ELEVATIONS 1 OF 2
STRUCTURE NO. 027-0097

SHEET NO. S4	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 18
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	-3.083	679.19	679.19
☉ Brg. N. Abut.	1345+61.25	-3.083	679.19	679.19
A	1345+71.25	-3.083	679.20	679.26
B	1345+81.25	-3.083	679.21	679.31
C	1345+91.25	-3.083	679.21	679.33
D	1346+01.25	-3.083	679.21	679.32
E	1346+11.25	-3.083	679.21	679.27
☉ Brg. S. Abut.	1346+22.75	-3.083	679.20	679.20
Bk. S. Abut.	1346+24.00	-3.083	679.19	679.19

☉ & P.G.L. IL 115

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	0.000	679.24	679.24
☉ Brg. N. Abut.	1345+61.25	0.000	679.24	679.24
A	1345+71.25	0.000	679.25	679.31
B	1345+81.25	0.000	679.26	679.36
C	1345+91.25	0.000	679.26	679.38
D	1346+01.25	0.000	679.26	679.36
E	1346+11.25	0.000	679.25	679.32
☉ Brg. S. Abut.	1346+22.75	0.000	679.24	679.24
Bk. S. Abut.	1346+24.00	0.000	679.24	679.24

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	3.083	679.19	679.19
☉ Brg. N. Abut.	1345+61.25	3.083	679.19	679.19
A	1345+71.25	3.083	679.20	679.26
B	1345+81.25	3.083	679.21	679.31
C	1345+91.25	3.083	679.21	679.33
D	1346+01.25	3.083	679.21	679.32
E	1346+11.25	3.083	679.21	679.27
☉ Brg. S. Abut.	1346+22.75	3.083	679.20	679.20
Bk. S. Abut.	1346+24.00	3.083	679.19	679.19

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	9.250	679.09	679.09
☉ Brg. N. Abut.	1345+61.25	9.250	679.09	679.09
A	1345+71.25	9.250	679.11	679.16
B	1345+81.25	9.250	679.11	679.21
C	1345+91.25	9.250	679.12	679.23
D	1346+01.25	9.250	679.12	679.22
E	1346+11.25	9.250	679.11	679.18
☉ Brg. S. Abut.	1346+22.75	9.250	679.10	679.10
Bk. S. Abut.	1346+24.00	9.250	679.10	679.10

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	1345+60.00	15.417	678.98	678.98
☉ Brg. N. Abut.	1345+61.25	15.417	678.98	678.98
A	1345+71.25	15.417	678.99	679.05
B	1345+81.25	15.417	679.00	679.09
C	1345+91.25	15.417	679.00	679.11
D	1346+01.25	15.417	679.00	679.10
E	1346+11.25	15.417	679.00	679.06
☉ Brg. S. Abut.	1346+22.75	15.417	678.98	678.98
Bk. S. Abut.	1346+24.00	15.417	678.98	678.98

NOTES:

1. Work this sheet with sheet S4.

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

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TOP OF SLAB ELEVATIONS 2 OF 2
STRUCTURE NO. 027-0097

SHEET NO. S5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	19
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Pav't.	1345+30.00	-16.000	678.90
A1	1345+40.00	-16.000	678.93
A2	1345+50.00	-16.000	678.95
S. End of North Appr. Pav't.	1345+60.00	-16.000	678.97

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Pav't.	1345+30.00	-12.000	678.99
A1	1345+40.00	-12.000	679.01
A2	1345+50.00	-12.000	679.03
S. End of North Appr. Pav't.	1345+60.00	-12.000	679.05

CL IL RTE. 115 & PGL

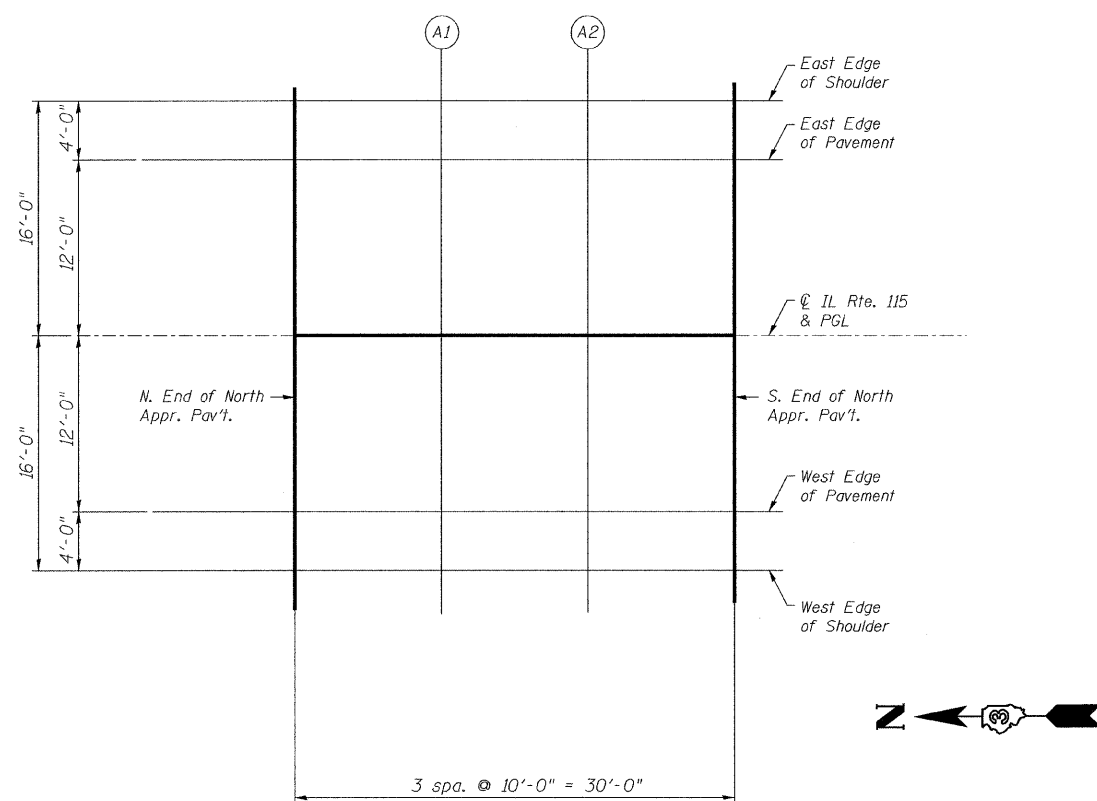
Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Pav't.	1345+30.00	0.000	679.17
A1	1345+40.00	0.000	679.20
A2	1345+50.00	0.000	679.22
S. End of North Appr. Pav't.	1345+60.00	0.000	679.24

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Pav't.	1345+30.00	12.000	678.99
A1	1345+40.00	12.000	679.01
A2	1345+50.00	12.000	679.03
S. End of North Appr. Pav't.	1345+60.00	12.000	679.05

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of North Appr. Pav't.	1345+30.00	16.000	678.90
A1	1345+40.00	16.000	678.93
A2	1345+50.00	16.000	678.95
S. End of North Appr. Pav't.	1345+60.00	16.000	678.97



NORTH APPROACH SLAB

PLAN

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	YH
CHECKED -	MRB

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Job # 3938.02

TOP OF APPROACH SLAB ELEVATIONS 1 OF 2
STRUCTURE NO. 027-0097

SHEET NO. S6	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	20
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 66848					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EAST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't.	1346+24.00	-16.000	678.97
B1	1346+34.00	-16.000	678.96
B2	1346+44.00	-16.000	678.94
S. End of South Appr. Pav't.	1346+54.00	-16.000	678.91

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't.	1346+24.00	-12.000	679.05
B1	1346+34.00	-12.000	679.04
B2	1346+44.00	-12.000	679.02
S. End of South Appr. Pav't.	1346+54.00	-12.000	679.00

IL RTE. 115 & PGL

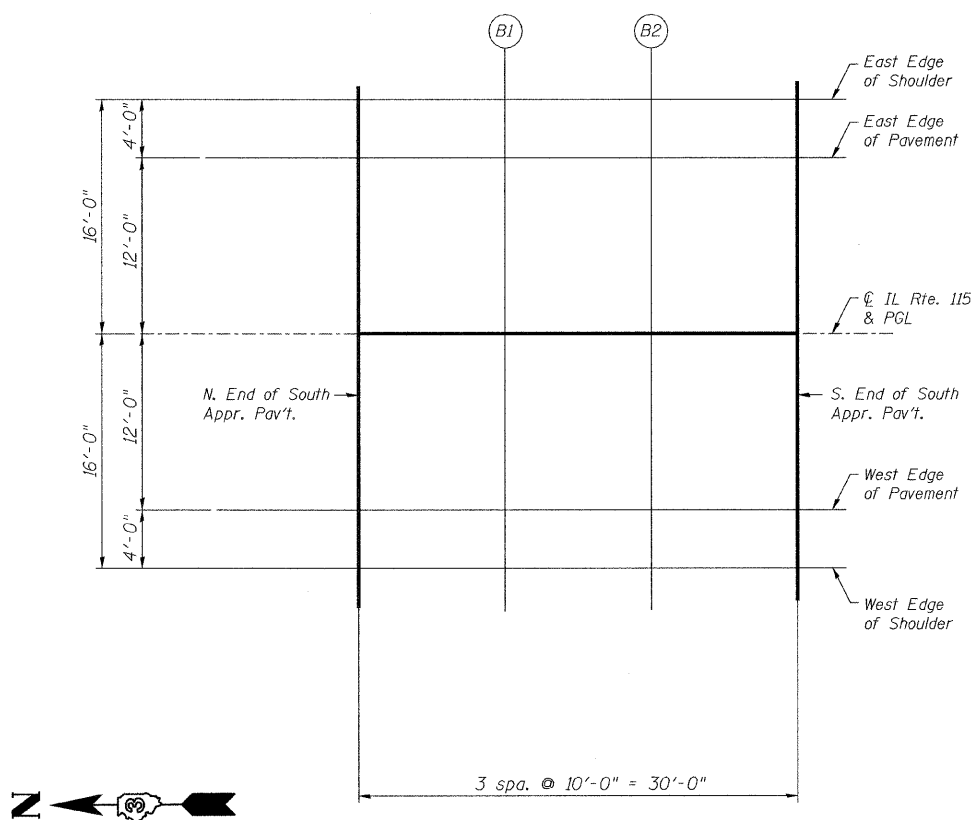
Location	Station	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't.	1346+24.00	0.000	679.24
B1	1346+34.00	0.000	679.23
B2	1346+44.00	0.000	679.21
S. End of South Appr. Pav't.	1346+54.00	0.000	679.18

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't.	1346+24.00	12.000	679.05
B1	1346+34.00	12.000	679.04
B2	1346+44.00	12.000	679.02
S. End of South Appr. Pav't.	1346+54.00	12.000	679.00

WEST EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
N. End of South Appr. Pav't.	1346+24.00	16.000	678.97
B1	1346+34.00	16.000	678.96
B2	1346+44.00	16.000	678.94
S. End of South Appr. Pav't.	1346+54.00	16.000	678.91



SOUTH APPROACH SLAB

PLAN

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

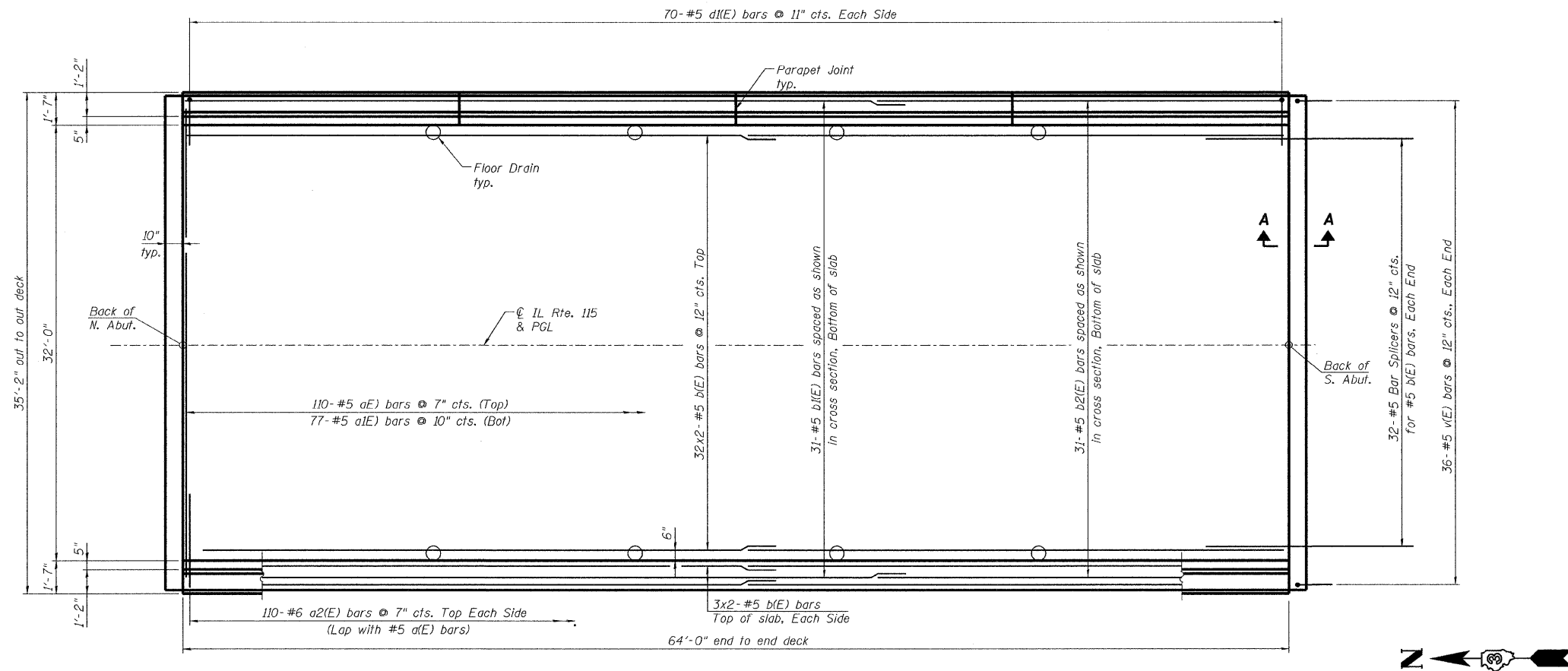
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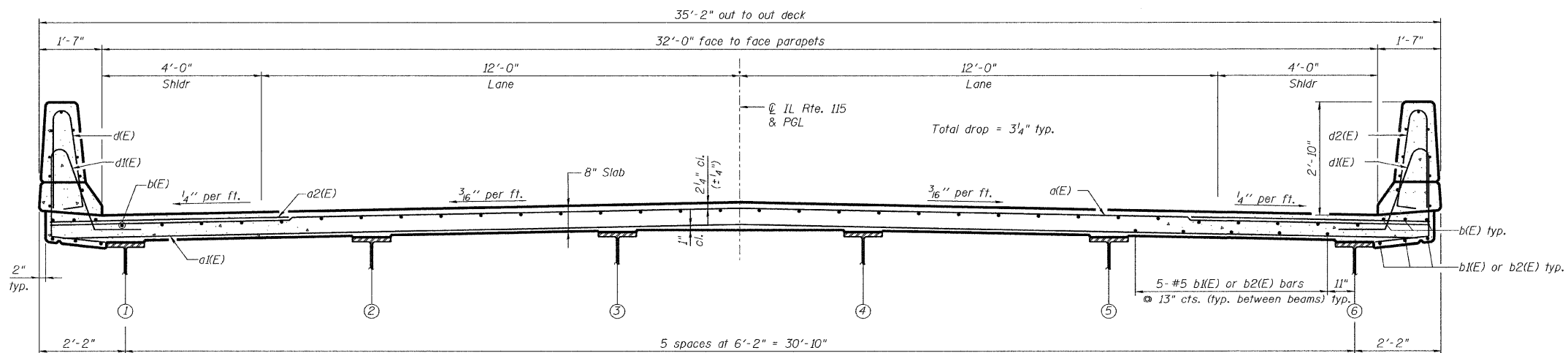
TOP OF APPROACH SLAB ELEVATIONS 2 of 2
STRUCTURE NO. 027-0097

SHEET NO. S7	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	21
			CONTRACT NO. 66848		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN



CROSS SECTION
(Looking Upstation)

- NOTES:**
1. See Sheets S9 and S10 for Section A-A, superstructure details and Bill of Material.
 2. Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.
 3. See Sheet S9 for parapet reinforcement.
 4. Minimum bar lap: #5 bar = 2'-2"
 5. For Floor Drain location, see sheet S1.

DECK PLAN AND CROSS SECTION
STRUCTURE NO. 027-0097

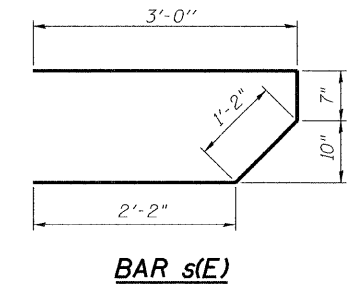
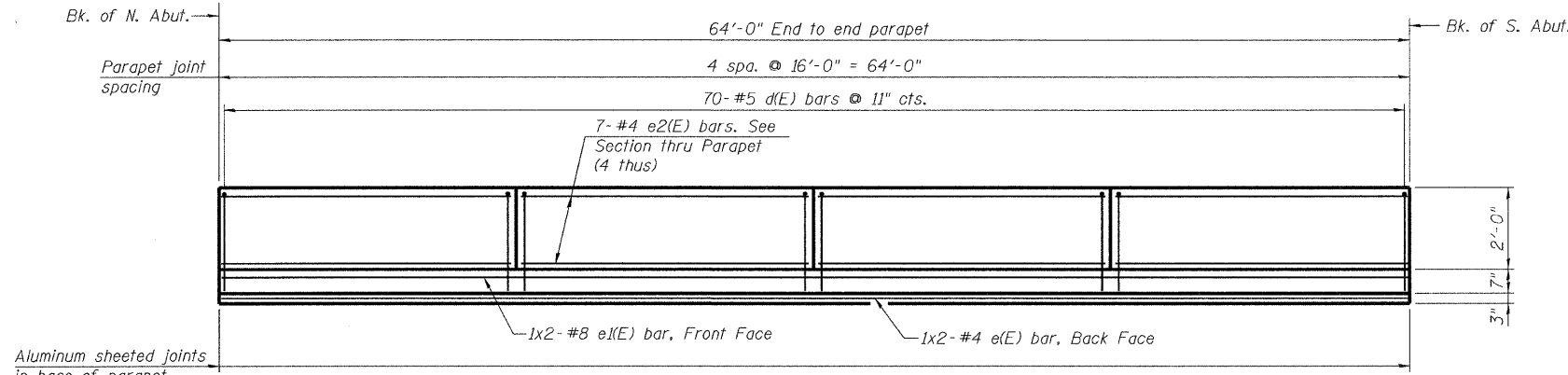
DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

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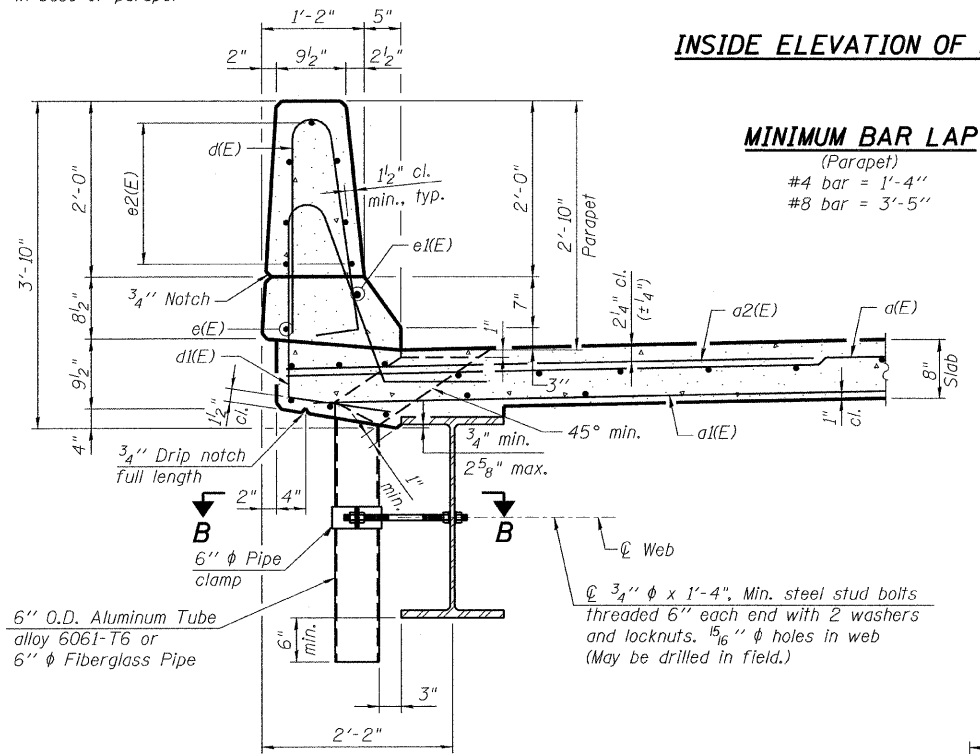
SHEET NO. S8	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 22
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

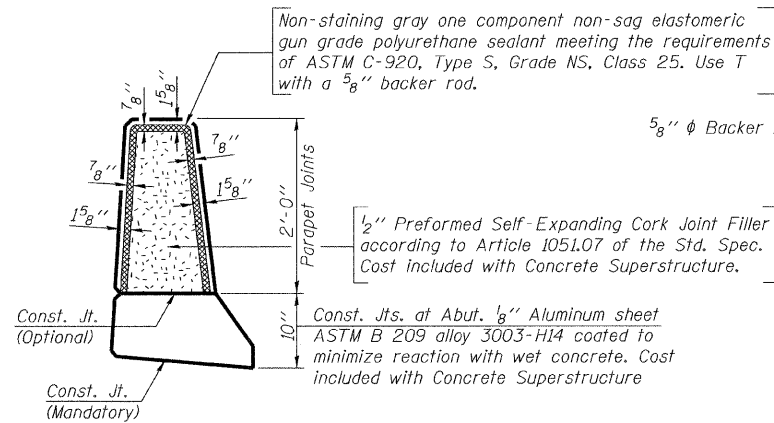


Aluminum sheeted joints in base of parapet

INSIDE ELEVATION OF PARAPET



MINIMUM BAR LAP
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"

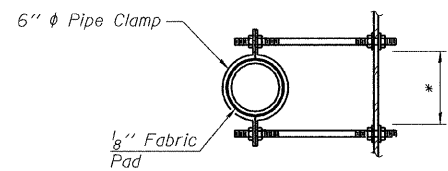


PARAPET JOINT DETAILS

NOTES:

1. Floor drains need not be painted.
2. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.
3. Galvanize clamping device according to AASHTO M232.
4. Drains shall be located clear of all diaphragms.
5. Work this sheet with sheets S8 and S10.

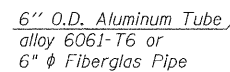
SECTION THRU PARAPET



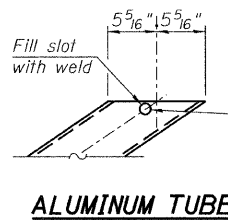
SECTION B-B
*Dimension as required by Pipe Clamp

TOP PLAN

(Showing Aluminum Tube)

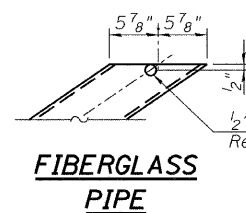


6" O.D. Aluminum Tube alloy 6061-T6 or 6" Fiberglass Pipe

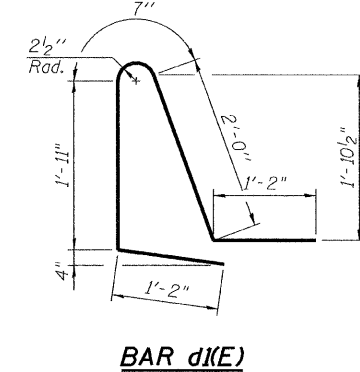
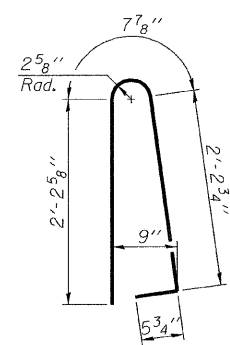


ALUMINUM TUBE

1/2" φ x 8" Alum. Bar ASTM B 211 alloy 6061-T6



FIBERGLASS PIPE



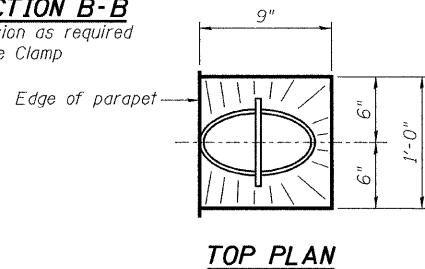
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	110	#5	34'-6"	—
a1(E)	77	#5	34'-3"	—
a2(E)	110	#6	6'-0"	—
b(E)	76	#5	33'-0"	—
b1(E)	31	#5	40'-0"	—
b2(E)	31	#5	26'-0"	—
d(E)	140	#5	5'-7"	⌒
d1(E)	140	#5	6'-10"	⌒
e(E)	4	#4	32'-6"	—
e1(E)	4	#8	33'-6"	—
e2(E)	56	#4	15'-8"	—
m(E)	20	#6	18'-10"	—
m1(E)	24	#6	8'-3"	—
m2(E)	10	#6	5'-10"	—
m3(E)	4	#6	1'-10"	—
s(E)	72	#5	6'-11"	⌒
s1(E)	72	#4	8'-2"	⌒
v(E)	72	#5	3'-4"	⌒
Reinforcement Bars, Epoxy Coated			Pound	17,340
Concrete Superstructure			Cu. Yd.	91.8

Bars indicated thus 1 x 2-#5 etc. indicates 1 line of bars with 2 lengths per line.

**SUPERSTRUCTURE DETAILS
STRUCTURE NO. 027-0097**

DESIGNED	MRB
CHECKED	KWS
DRAWN	YH
CHECKED	MRB

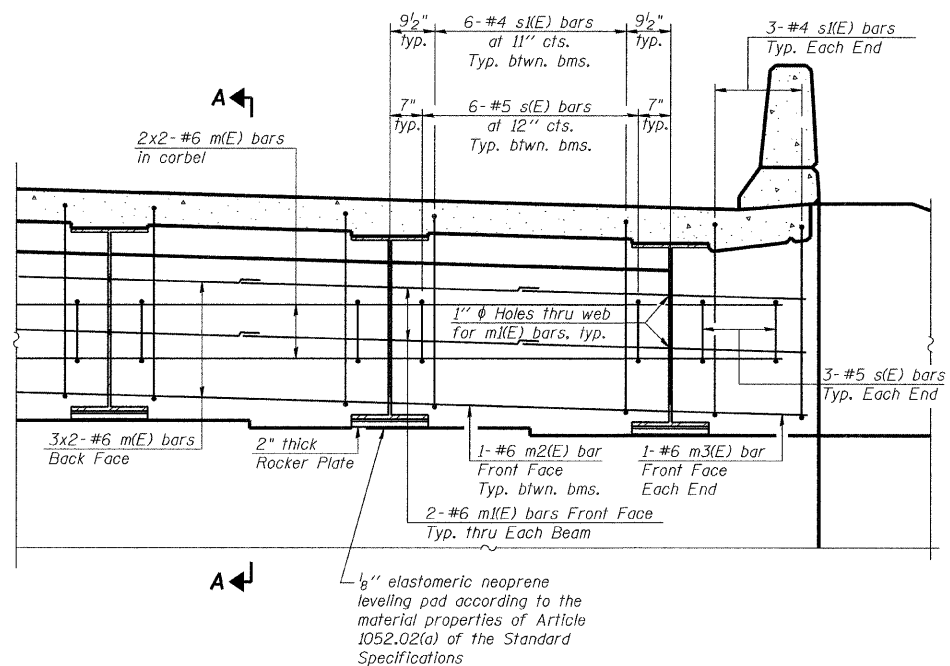
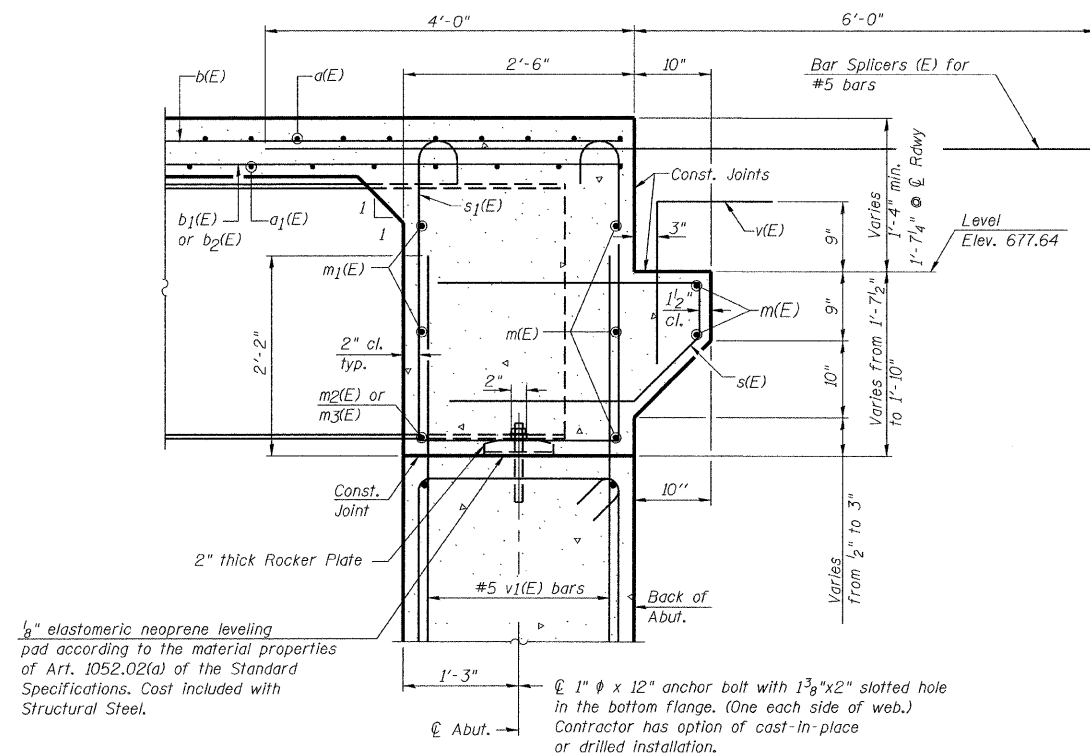


TOP PLAN

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SHEET NO. S9	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 23
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



NOTES:

1. Reinforcement bars in diaphragm are billed with superstructure on sheet S9.
2. Concrete in diaphragm is included with Concrete Superstructure on sheet S9.
3. For details of bars s(E) & s1(E) see sheet S9.
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. Minimum bar lap: #6 bar = 2'-9".
6. Work this sheet with sheets S8 and S9.

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

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**INTEGRAL ABUTMENT DIAPHRAGM DETAILS
STRUCTURE NO. 027-0097**

SHEET NO. S10	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	24
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

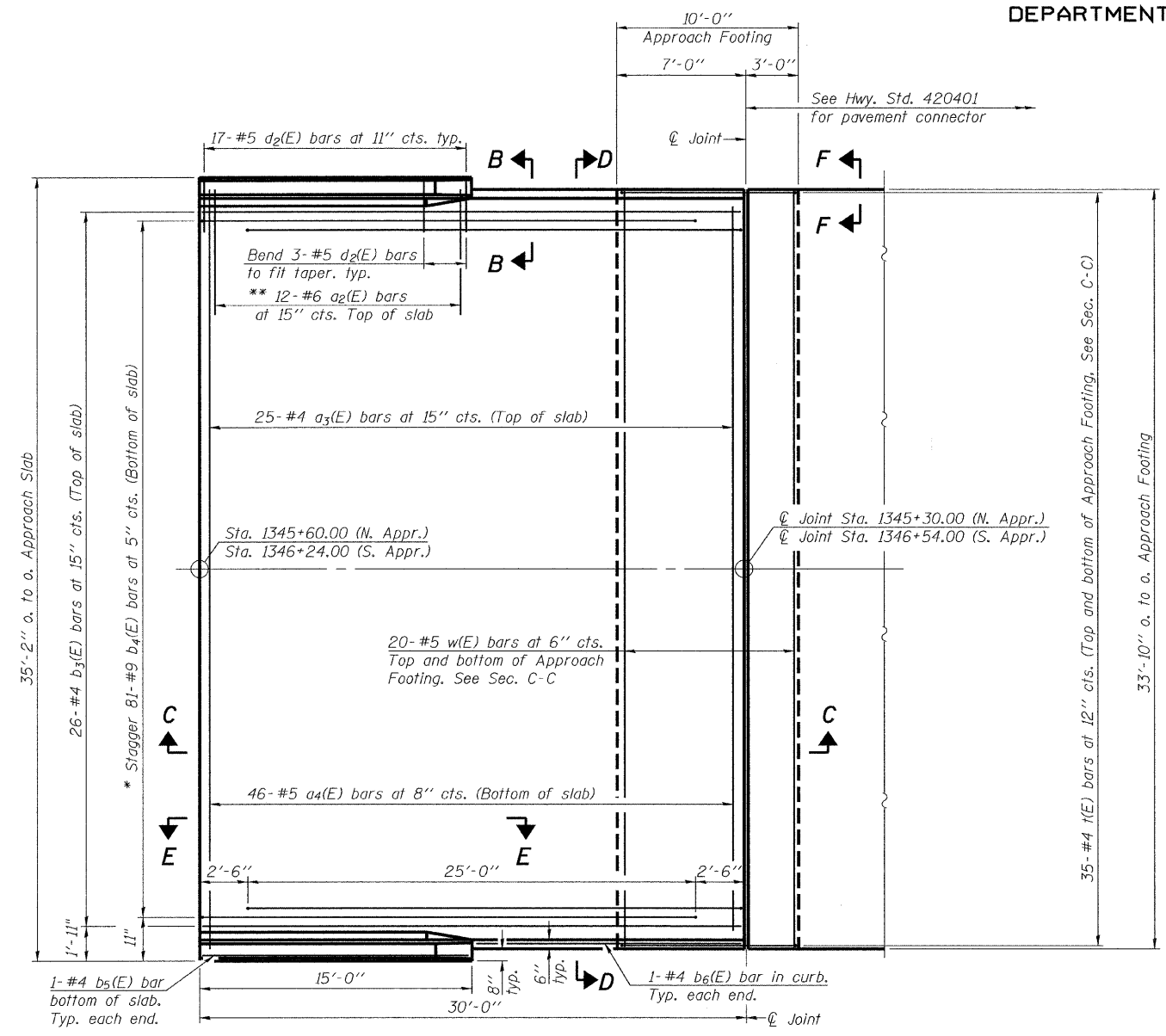
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15:55:40

11/03/2009

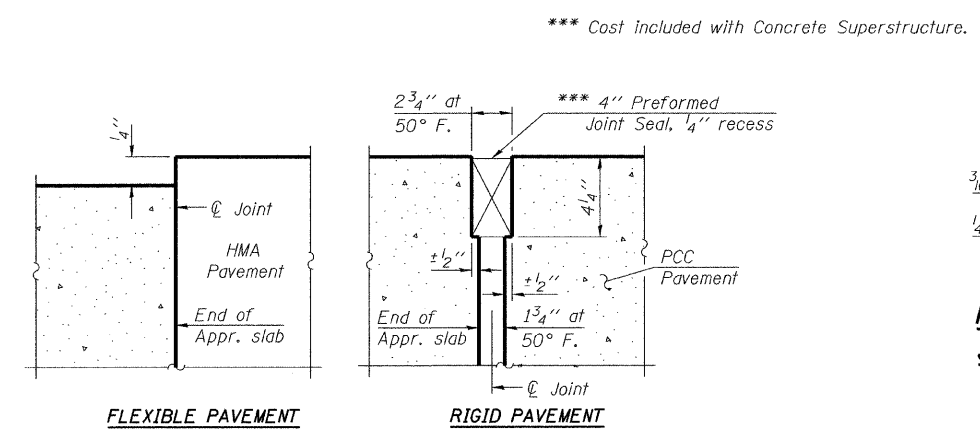
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

NOTES:
1. See sheet S12 for Sections C-C & D-D and View E-E.
2. $a_3(E)$, $a_4(E)$, and $w(E)$ bar spacings measured perpendicular to \perp Rdwy.

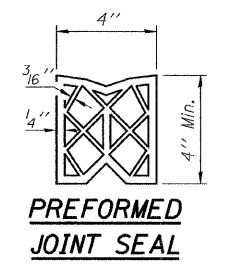


PLAN

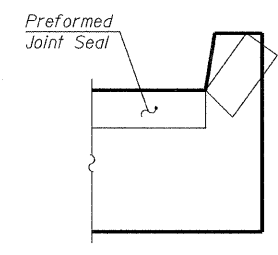
* Tilt #9 $b_4(E)$ bars as required to maintain clearance.
** Alternate with $a_3(E)$ bars, typ. ea. parapet.



DETAIL A

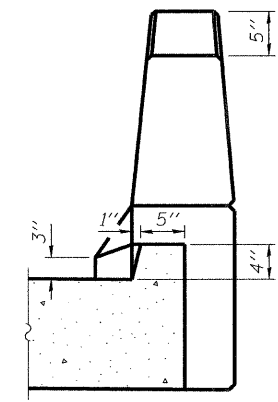


PREFORMED JOINT SEAL



VIEW F-F

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



VIEW B-B

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

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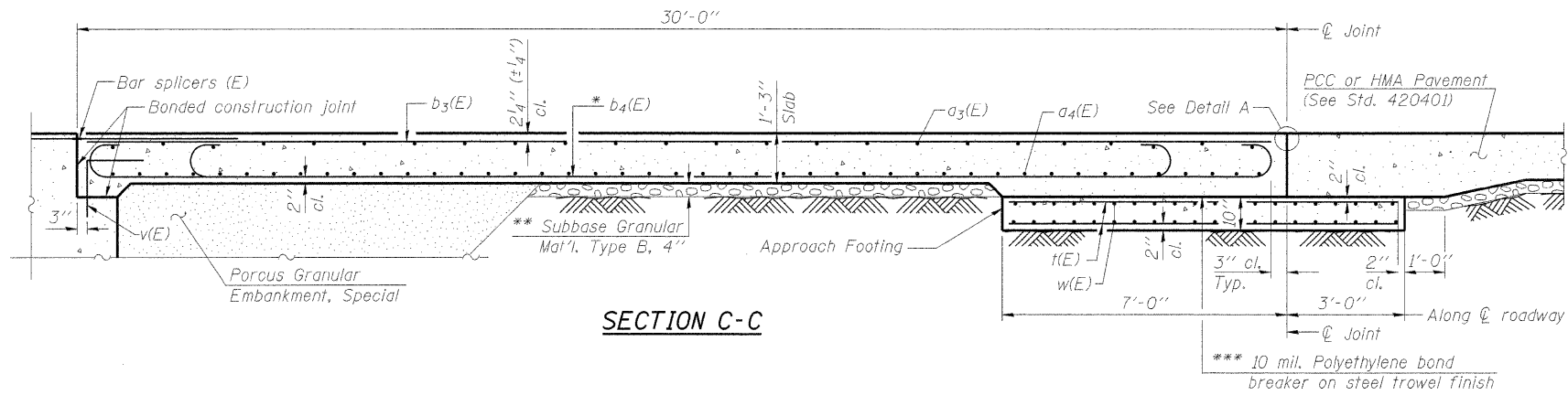
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**BRIDGE APPROACH SLAB DETAILS 1 OF 2
STRUCTURE NO. 027-0097**

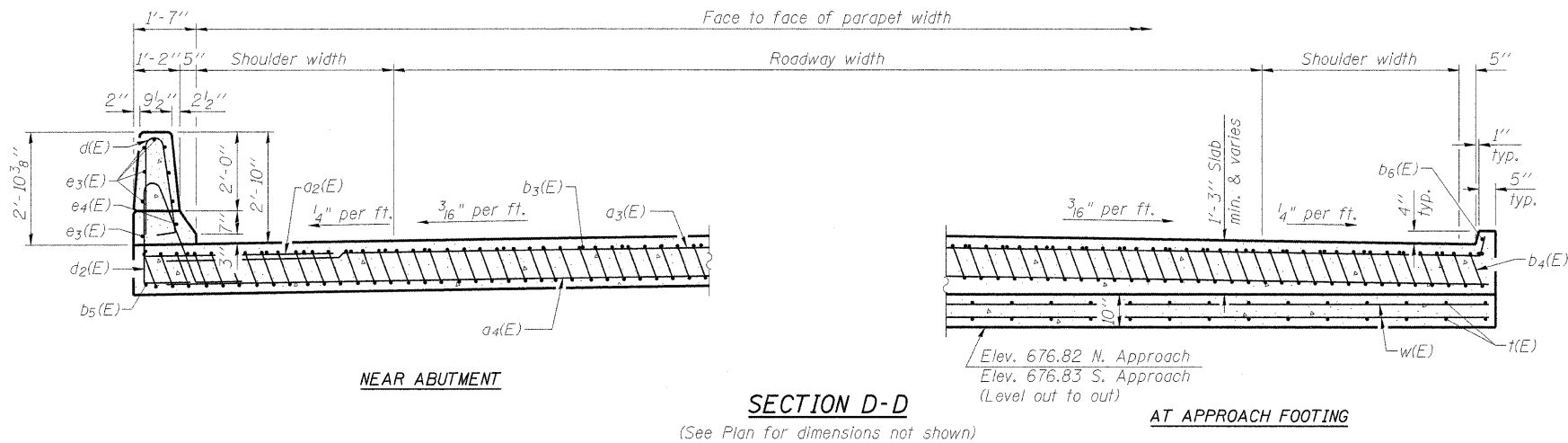
SHEET NO. S11	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 25
SHEETS S22	CONTRACT NO. 66848		ILLINOIS FED. AID PROJECT		

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SECTION C-C

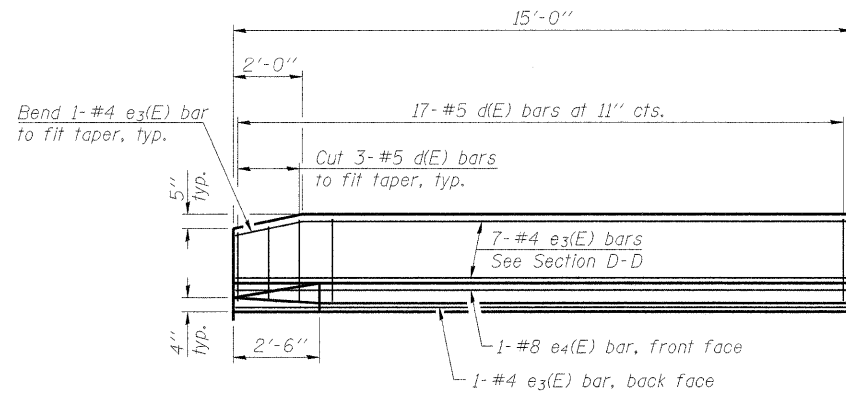


NEAR ABUTMENT

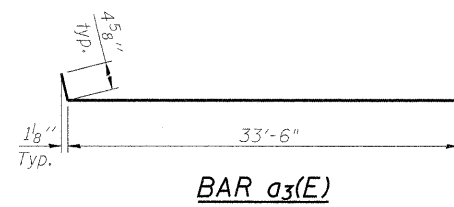
SECTION D-D

(See Plan for dimensions not shown)

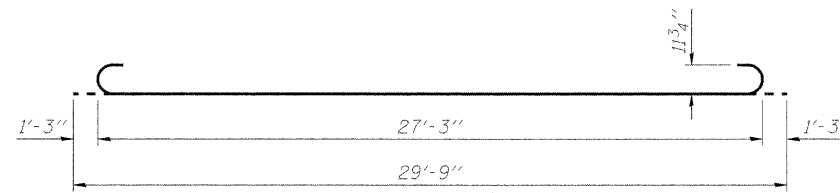
AT APPROACH FOOTING



VIEW E-E



BAR a3(E)

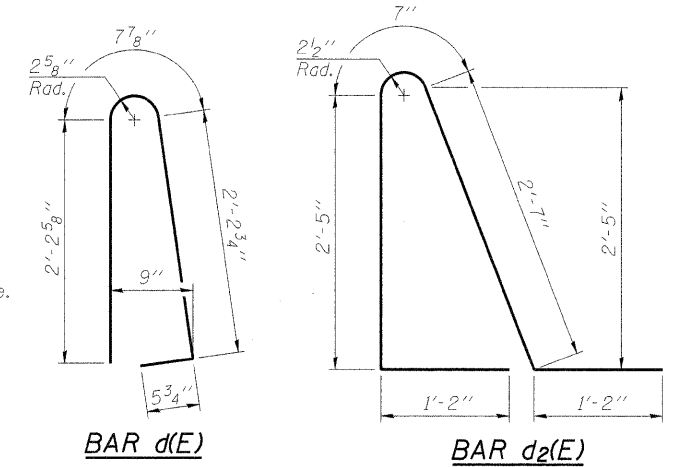


BAR b4(E)

NOTES:

1. See sheet S11 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 S9.
6. The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
7. For bar splicer details, see sheet S18.
8. Cost of excavation for approach footing included with Concrete Structures.
9. For Porous Granular Embankment, Special and drainage treatment details, see sheet of S2.

* Tilt #9 b4(E) bars as required to maintain clearance.
*** Cost included with Concrete Superstructure.



TWO APPROACHES
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2(E)	48	#6	6'-0"	—
a3(E)	50	#4	34'-3"	—
a4(E)	92	#5	33'-6"	—
b3(E)	52	#4	29'-8"	—
b4(E)	162	#9	29'-9"	—
b5(E)	4	#4	14'-8"	—
b6(E)	4	#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)	140	#4	9'-8"	—
w(E)	80	#5	33'-6"	—
Concrete Superstructure		Cu. Yd.	102.0	
Concrete Structures		Cu. Yd.	20.9	
Reinforcement Bars, Epoxy Coated		Pound	27,100	

BRIDGE APPROACH SLAB DETAILS 2 OF 2
STRUCTURE NO. 027-0097

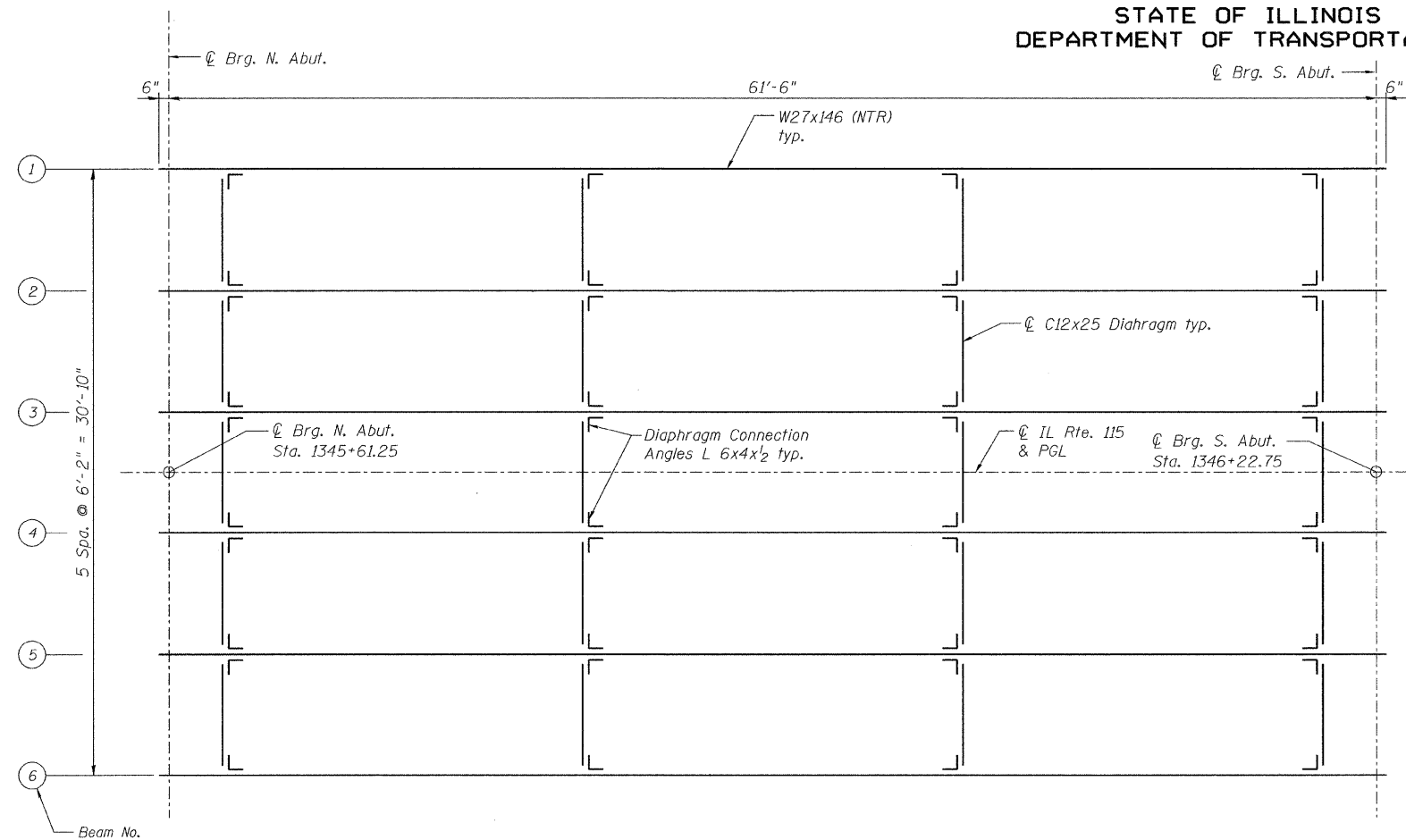
DESIGNED	MRB
CHECKED	KWS
DRAWN	VH
CHECKED	MRB

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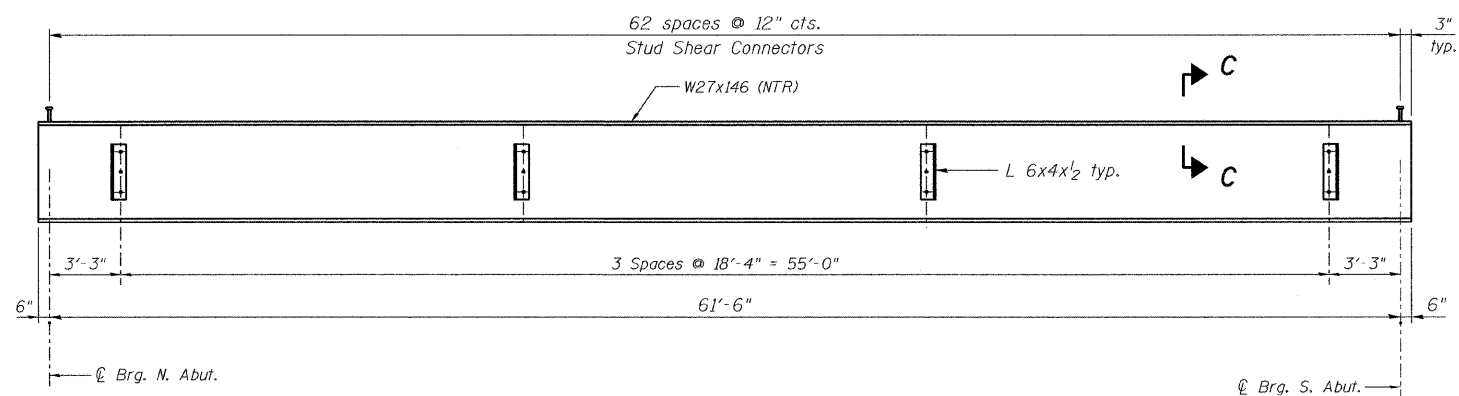
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Job # 3938.02

SHEET NO. S12	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	26
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

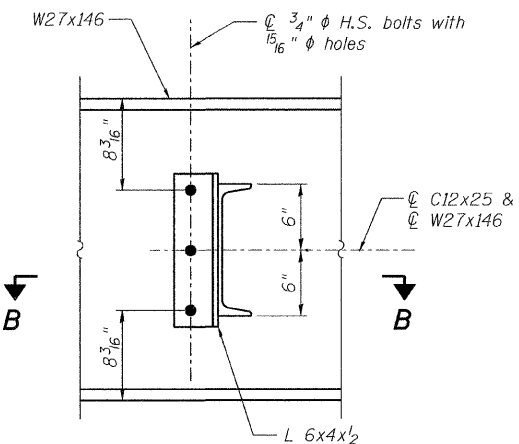
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



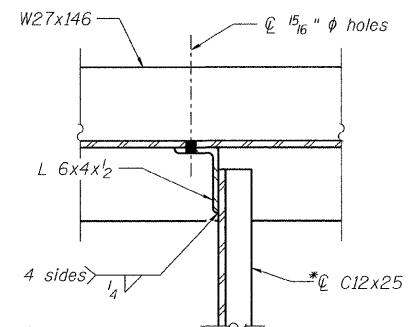
FRAMING PLAN



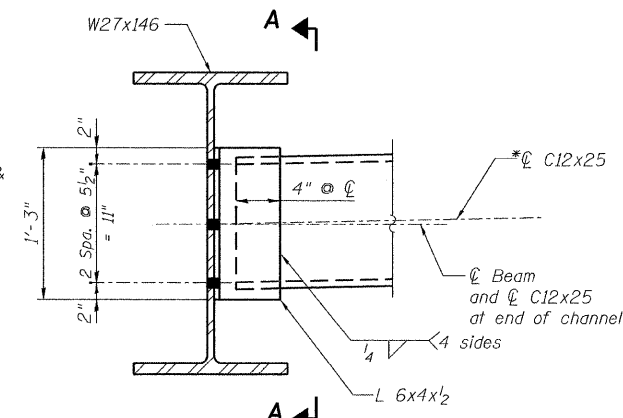
BEAM ELEVATION



SECTION A-A



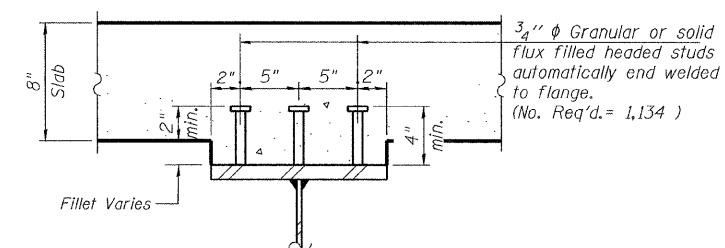
SECTION B-B



DIAPHRAGM DETAIL

NOTES:

- Two hardened washers required for each set of oversized holes.
- *Alternate channels (C12x30) are permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section.
- The alternate, if utilized, shall be provided at no additional cost to the Department.
- All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual diaphragms at supports may be temporarily disconnected to install bearing anchor rods.
- Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.
- Work this sheet with sheet S14.



SECTION C-C

DESIGNED	MRB
CHECKED	KWS
DRAWN	VH
CHECKED	MRB

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**FRAMING PLAN AND STEEL DETAILS
STRUCTURE NO. 027-0097**

SHEET NO. S13	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	27
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INTERIOR GIRDER MOMENT TABLE		
0.5 Span I		
I_s	(in ⁴)	5660
$I_c(n)$	(in ⁴)	16116
$I_c(3n)$	(in ⁴)	11417
S_s	(in ³)	414
$S_c(n)$	(in ³)	630
$S_c(3n)$	(in ³)	561
DC1	(k/')	0.807
M_{DC1}	(k)	382
DC2	(k/')	0.150
M_{DC2}	(k)	71
DW	(k/')	0.267
M_{DW}	(k)	126
$M_L \cdot IM$	(k)	802
M_u (Strength I)	(k)	2159
$\phi_r M_n, \phi_r M_{nc}$	(k)	2909
f_s DC1	(ksi)	11.1
f_s DC2	(ksi)	1.5
f_s DW	(ksi)	2.7
f_s 1.3(4+IM)	(ksi)	19.9
f_s (Service II)	(ksi)	35.2
f_s (Total)(Strength I)	(ksi)	---
V_r	(k)	21.7

* Compact sections
** Non-Compact and slender sections

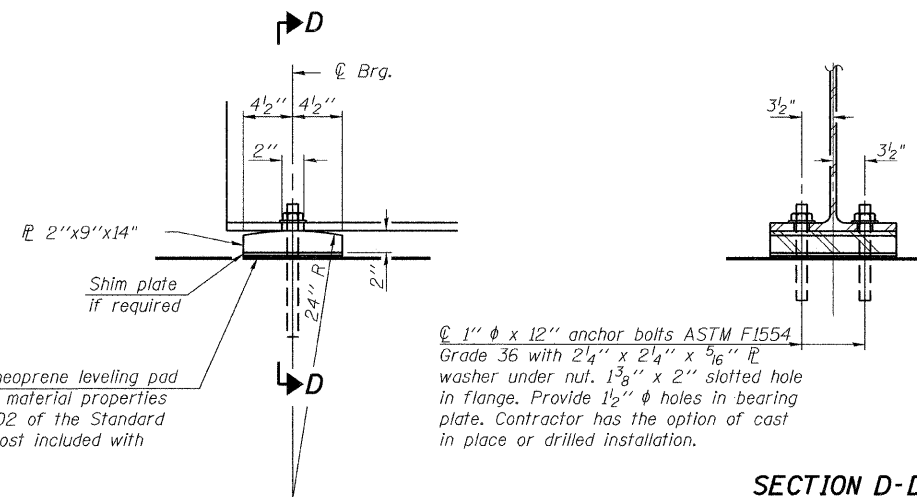
INTERIOR GIRDER REACTION TABLE	
	Abuts.
R_{DC1}	(k) 25.6
R_{DC2}	(k) 4.6
R_{DW}	(k) 8.2
$R_L \cdot IM$	(k) 68.9
R_{Total}	(k) 107.3

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) 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) due to long-term composite (superimposed) dead loads (in⁴ and in³).

DC1: Un-factored non-composite dead load (kips/ft.).
 M_{DC1} : Un-factored moment due to non-composite dead load (kip-ft.).
 DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
 M_{DC2} : Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
 DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
 M_{DW} : Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).
 $M_L \cdot IM$: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).
 M_u (Strength I): Factored design moment (kip-ft.).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L \cdot IM$
 $\phi_r M_n$: Compact composite positive moment capacity computed according to Article 6.10.7.1 (kip-ft.).
 $\phi_r M_{nc}$: Compact non-composite negative moment capacity computed according to Article A6.1.1 (kip-ft.).
 f_s (Service II): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $M_{DC1} + M_{DC2} + M_{DW} + 1.3 M_L \cdot IM$
 f_s (Total)(Strength I): Sum of stresses as computed from the moments below on non-compact section (ksi).
 $1.25 (M_{DC1} + M_{DC2}) + 1.5 M_{DW} + 1.75 M_L \cdot IM$
 V_r : Maximum factored shear range in composite portion of span computed according to Article 6.10.10.



ELEVATION AT ABUTMENT

FIXED BEARING

NOTES:

- Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
- Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
- Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
- Steel members required for the bearing assembly shall be included in the cost of Structural Steel.
- Work this sheet with sheet S13.

MOMENT TABLE AND BEARING DETAILS
STRUCTURE NO. 027-0097

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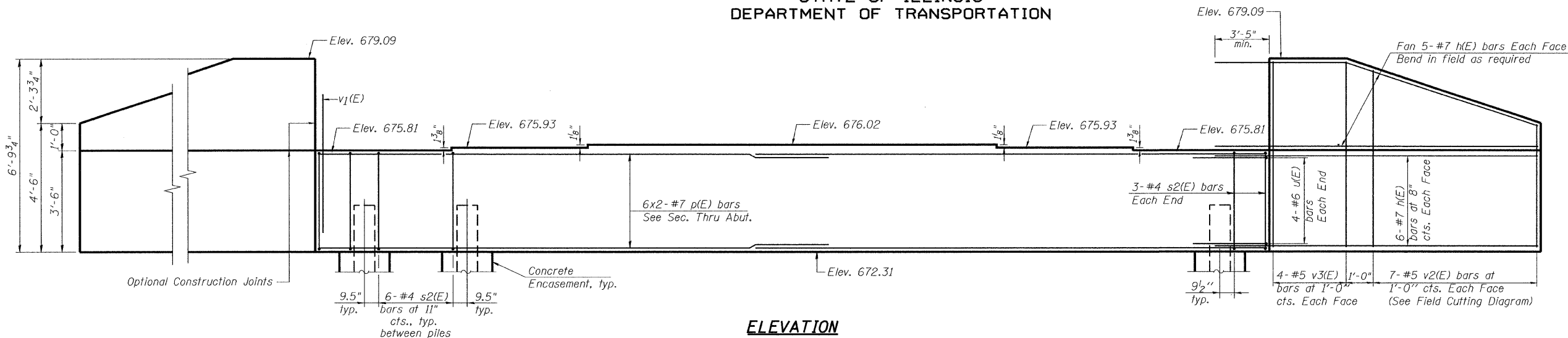
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Job # 3938.02

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

SHEET NO. S14	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	28
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 66848		

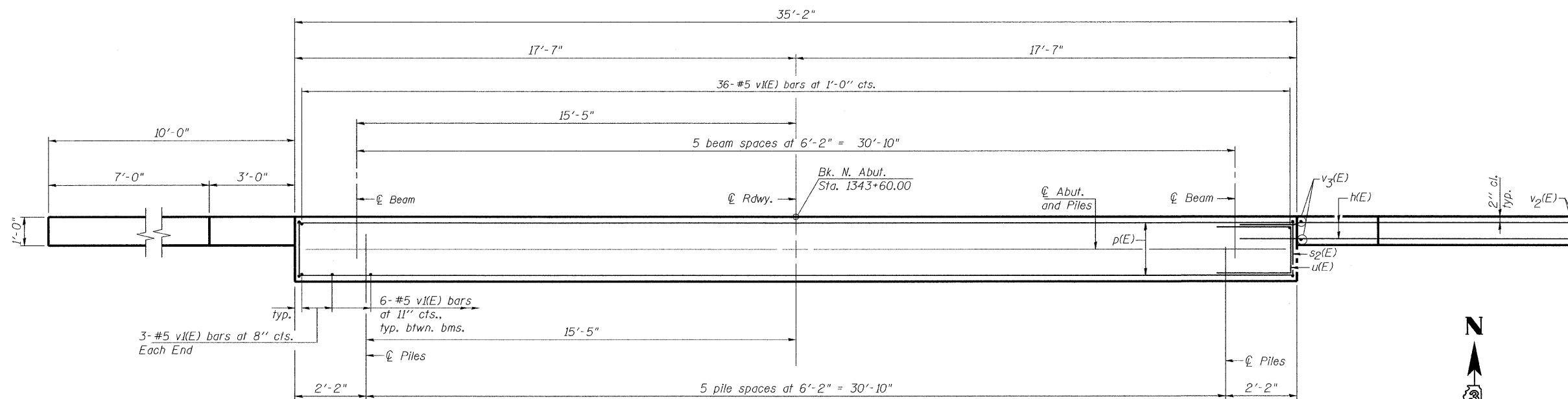
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note: Four steps monolithically with cap.



ELEVATION

SEC. THRU ABUT.



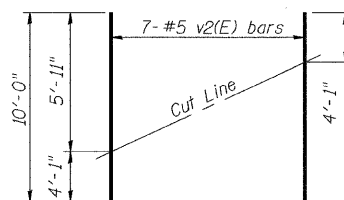
PLAN

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	44	#7	13'-5"	
p(E)	12	#7	19'-3"	
s2(E)	36	#4	11'-5"	□
u(E)	8	#6	7'-3"	U
v1(E)	72	#5	4'-4"	
v2(E)	14	#5	10'-0"	
v3(E)	8	#5	6'-5"	
Structure Excavation				Cu. Yd. 94.5
Concrete Structures				Cu. Yd. 16.2
Reinforcement Bars, Epoxy Coated				Pound 2,570
Furnishing Steel Piles, HP12x53				Foot 280
Driving Piles				Foot 280
Test Pile Steel, HP12x53				Each 1
Concrete Encasement				Cu. Yd. 2.1

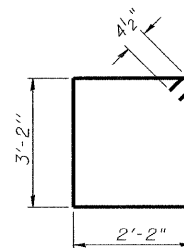
PILE DATA

Type: Steel HP12x53
Nominal Required Bearing: 257 kips
Factored Resistance Available: 128 kips
Est. Length: 56 ft.
No. Production Piles: 5
No. Test Piles: 1

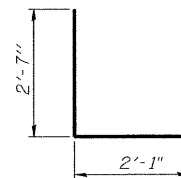


FIELD CUTTING DIAGRAM

Order v2(E) full length. Cut as shown and use remainder of bars in opposite face.



BAR s2(E)



BAR u(E)

NOTES:

- For details of Bar Splicers, see sheet S18.
- For details of piles and Concrete Encasement, see sheet S17.
- Minimum bar lap: #7 bar = 3'-5"
- For Foundation Layout, see sheet S3.

NORTH ABUTMENT DETAILS
STRUCTURE NO. 027-0097

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

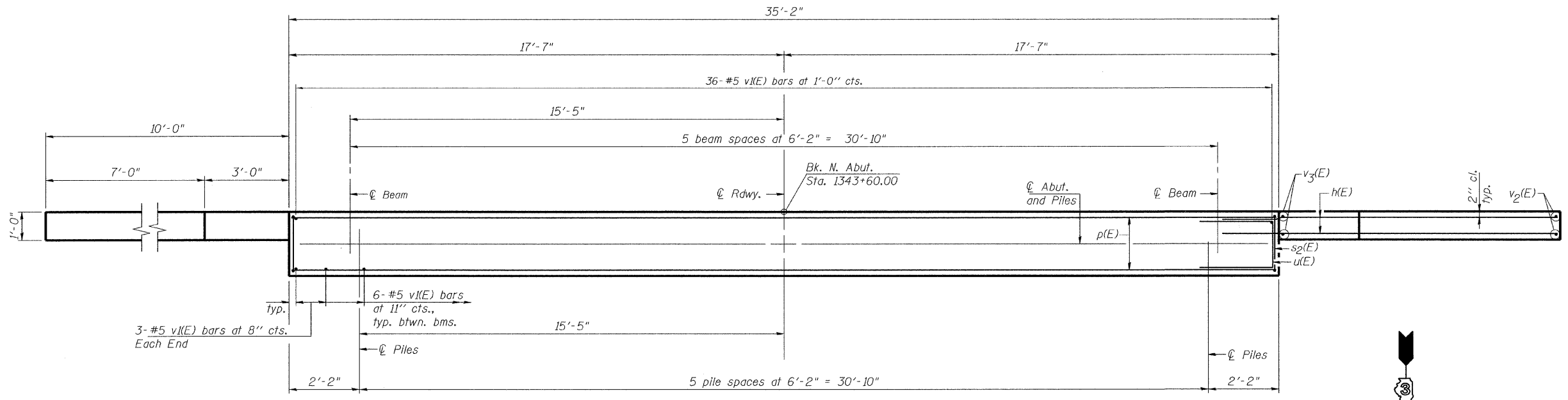
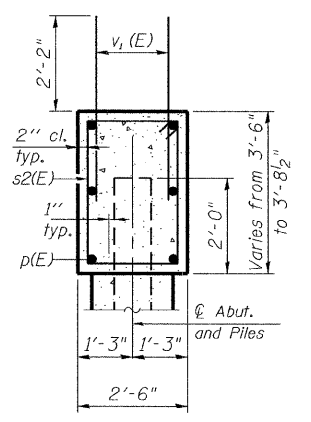
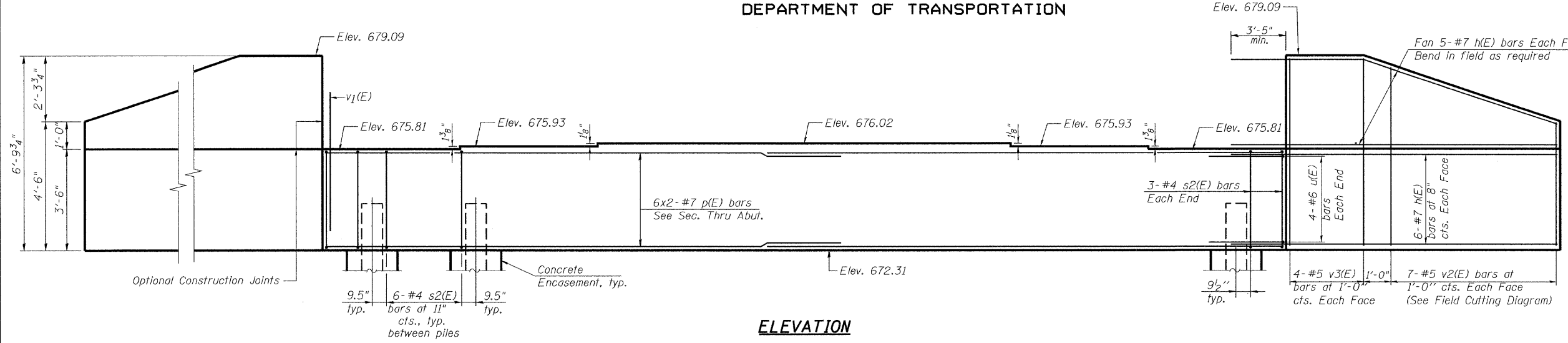
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SHEET NO. S15	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 29
SHEETS S22	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Note: Four steps monolithically with cap.

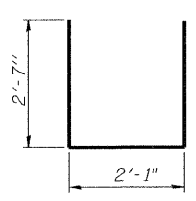
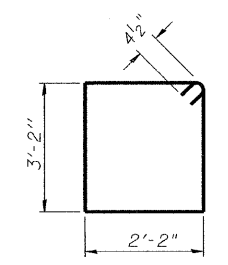
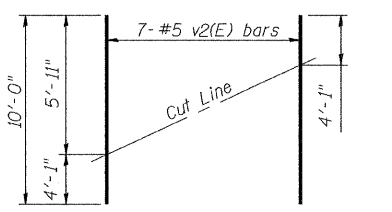


BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
h(E)	44	#7	13'-5"	—	
p(E)	12	#7	19'-3"	—	
s2(E)	36	#4	11'-5"	□	
u(E)	8	#6	7'-3"	□	
v1(E)	72	#5	4'-4"	—	
v2(E)	14	#5	10'-0"	—	
v3(E)	8	#5	6'-5"	—	
Structure Excavation				Cu. Yd.	94.5
Concrete Structures				Cu. Yd.	16.2
Reinforcement Bars, Epoxy Coated				Pound	2,570
Furnishing Steel Piles, HP12x53				Foot	225
Driving Piles				Foot	225
Test Pile Steel, HP12x53				Each	1
Concrete Encasement				Cu. Yd.	2.1

PILE DATA

Type: Steel HP12x53
 Nominal Required Bearing: 256 kips
 Factored Resistance Available: 128 kips
 Est. Length: 45 ft.
 No. Production Piles: 5
 No. Test Piles: 1



- NOTES:**
- For details of Bar Splicers, see sheet S18.
 - For details of piles and Concrete Encasement, see sheet S17.
 - Minimum bar lap: #7 bar = 3'-5"
 - For Foundation Layout, see sheet S3.

**SOUTH ABUTMENT DETAILS
STRUCTURE NO. 027-0097**

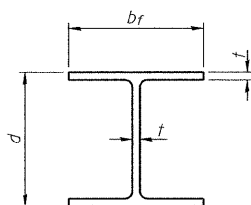
DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

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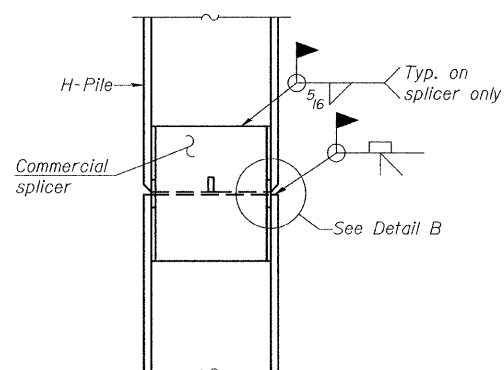
SHEET NO. S16	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 30
SHEETS S22	CONTRACT NO. 66848		ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

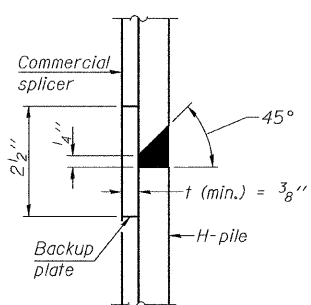


STEEL PILE TABLE

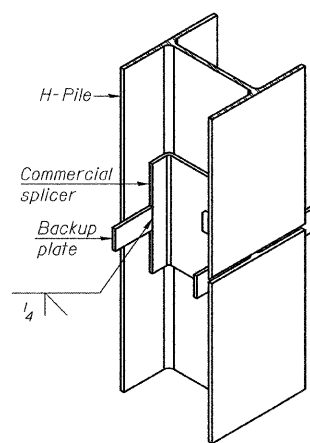
Designation	Depth d	Flange width b _f	Web and Flange thickness t	Encasement diameter A
HP 14x117	14 1/4"	14 7/8"	1 3/16"	30"
x102	14"	14 3/4"	1 1/16"	30"
x89	13 7/8"	14 3/4"	5/8"	30"
x73	13 5/8"	14 5/8"	1/2"	30"
HP 12x84	12 1/4"	12 1/4"	1 1/16"	24"
x74	12 1/8"	12 1/4"	5/8"	24"
x63	12"	12 1/8"	1/2"	24"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



ELEVATION

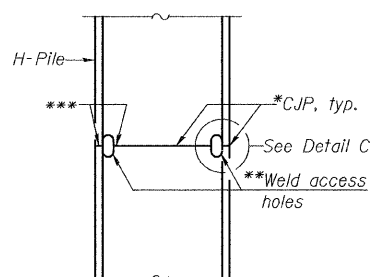


DETAIL "B"

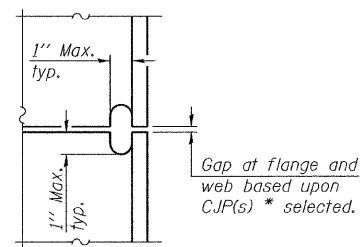


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



ELEVATION



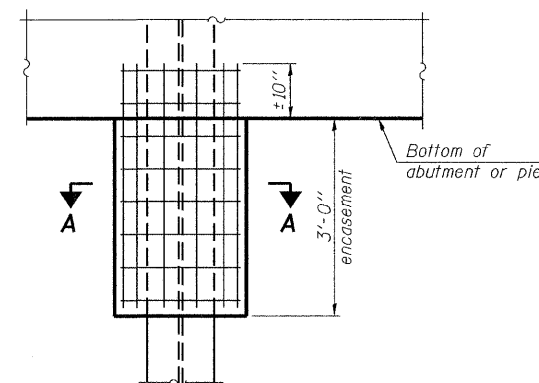
DETAIL C

COMPLETE PENETRATION WELD SPLICE

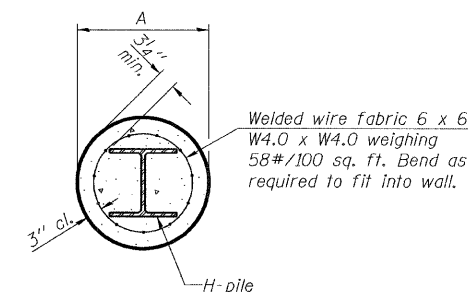
*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code-Steel.

**Preparation per Fig. 5.2 in AWS D1.1, Structure Welding Code-Steel.

***Interrupt welds 1/4" from end of each pile.



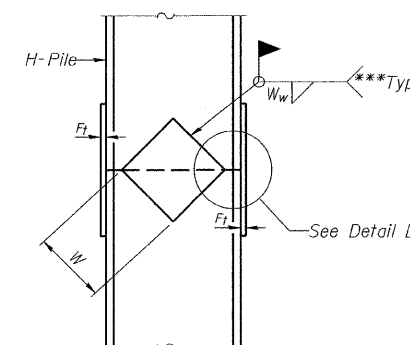
ELEVATION



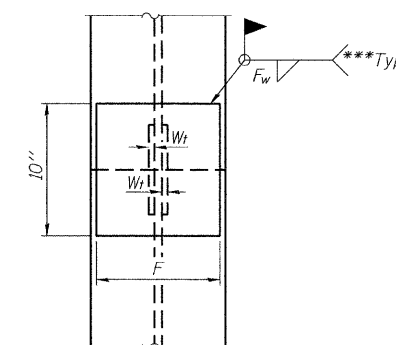
SECTION A-A

PILE ENCASEMENT

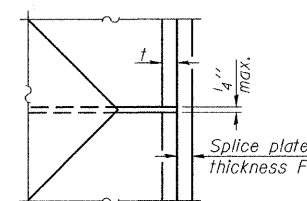
Note: Forms for encasement may be omitted when soil conditions permit.



ELEVATION



END VIEW



DETAIL D

WELDED PLATE FIELD SPLICE

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

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

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Job # 3938.02

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

F-HP

10-1-08

SHEET NO. S17	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	31
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 66848					

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DEPARTMENT OF TRANSPORTATION

The diameter of this part is equal or larger than the diameter of bar spliced.

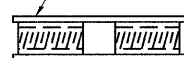
The diameter of this part is the same as the diameter of the bar spliced.

ROLLED THREAD DOWEL BAR



** ONE PIECE

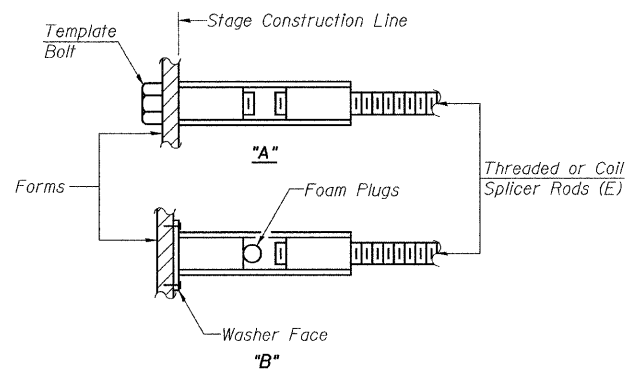
Wire Connector



WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

**Heavy Hex Nuts conforming to ASTM A 563, Grade C, D or DH may be used.



INSTALLATION AND SETTING METHODS

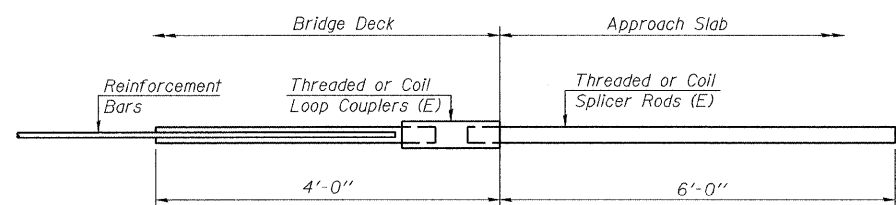
"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E): Indicates epoxy coating.

NOTES

Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars.
Splicer rods shall be of minimum 60 ksi yield strength, threaded or coiled full length.
All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars.
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

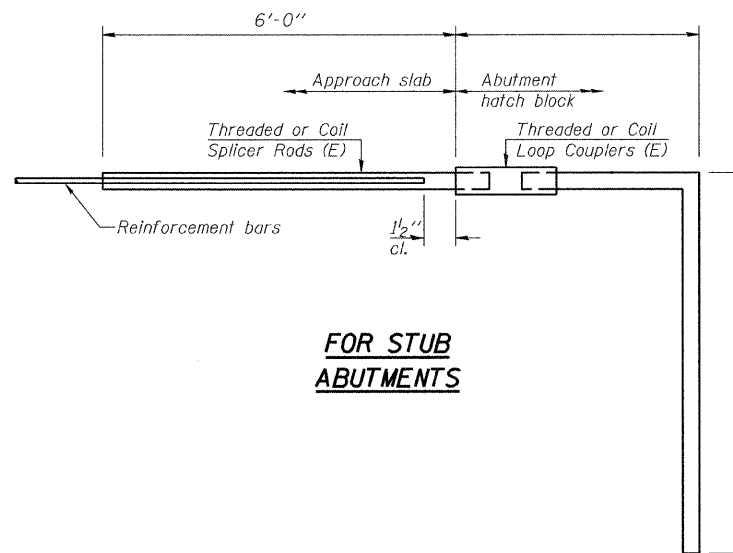
- ① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_s$
 - ② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_s$
- Where f_y = Yield strength of lapped reinforcement bars in ksi.
 A_s = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

BAR SPLICER ASSEMBLIES			
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kips - tension	Min. Pull-Out Strength kips - tension
#4	1'-8"	14.7	7.9
#5	2'-2"	23.0	12.3
#6	2'-7"	33.1	17.4
#7	3'-5"	45.1	23.8
#8	4'-6"	58.9	31.3
#9	5'-9"	75.0	39.6
#10	7'-3"	95.0	50.3
#11	9'-0"	117.4	61.8



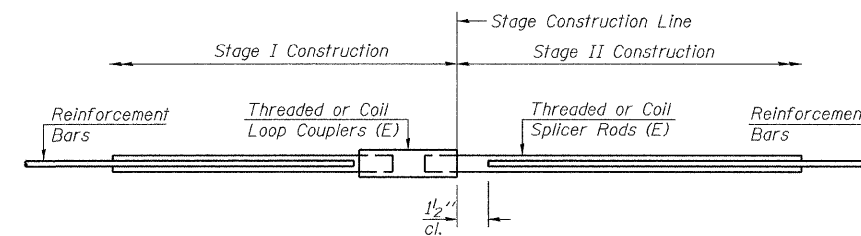
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	64



FOR STUB ABUTMENTS

Bar Splicer for #5 bar	
Min. Capacity =	23.0 kips - tension
Min. Pull-out Strength =	12.3 kips - tension
No. Required =	



STANDARD

Bar Size	No. Assemblies Required	Location

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

BSD-1 10-1-08

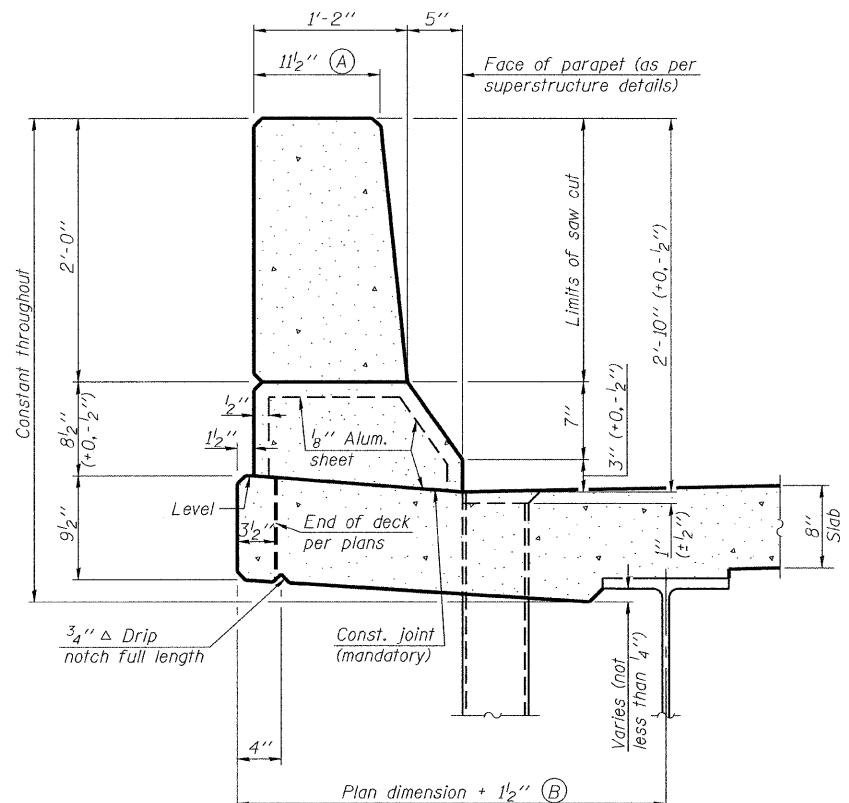
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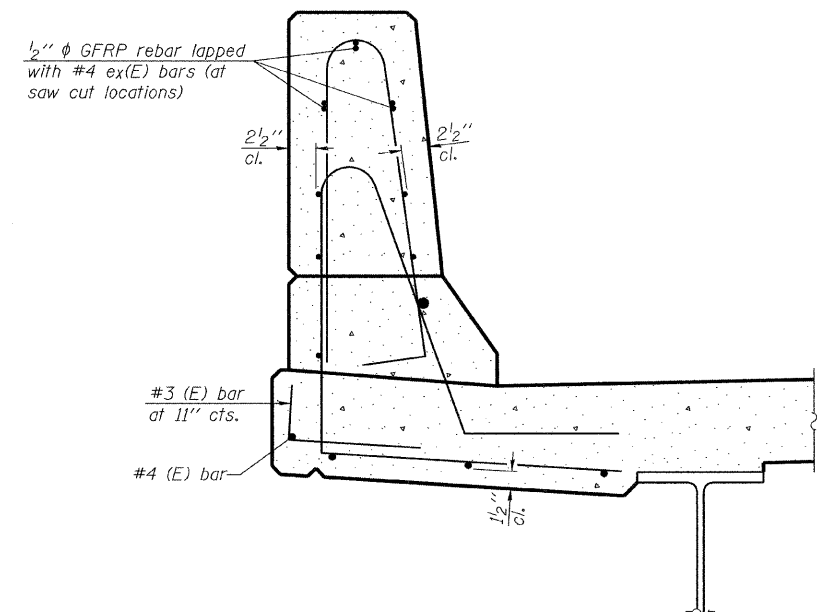
**BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 027-0097**

SHEET NO. S18	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 32
SHEETS S22	CONTRACT NO. 66848			ILLINOIS FED. AID PROJECT	

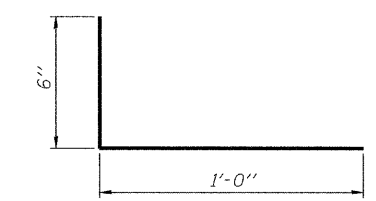
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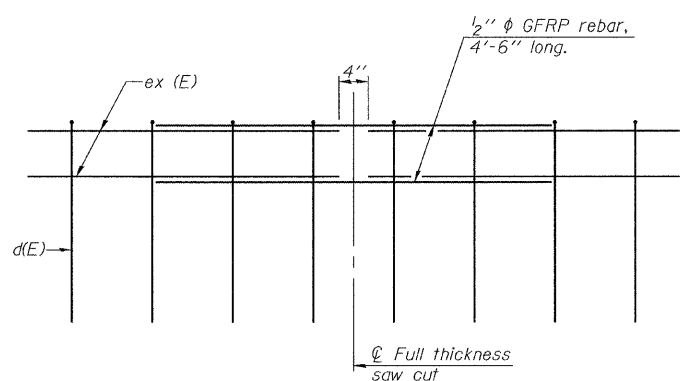
SECTION
(Showing dimensions)



SECTION
(Showing reinforcement clearances for slip forming and additional reinforcement bars)



#3 (E) BAR



GFRP REBAR STIFFENING DETAIL
(Place as shown in parapet section at each parapet joint location.)

GENERAL NOTES
All dimensions shall remain the same as shown on contract plans, except dimensions A and B which are to be revised as shown to provide additional clearance. Additional concrete needed to revise dimension A and B= 0.0165 cu. yds./ft. of parapet.
Place aluminum sheet in curb portion at and near piers. Full thickness saw cut at all joint locations in lieu of cork joint filler.

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

SFP-34 10-1-08

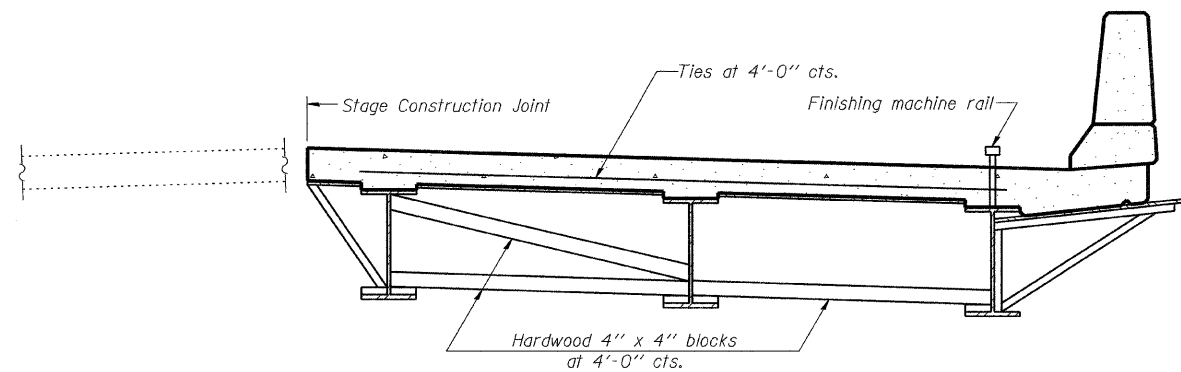
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Job # 3938.02

**CONCRETE PARAPET
SLIPFORMING OPTION
STRUCTURE NO. 027-0097**

SHEET NO. S19	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	33
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
CONTRACT NO. 66848					

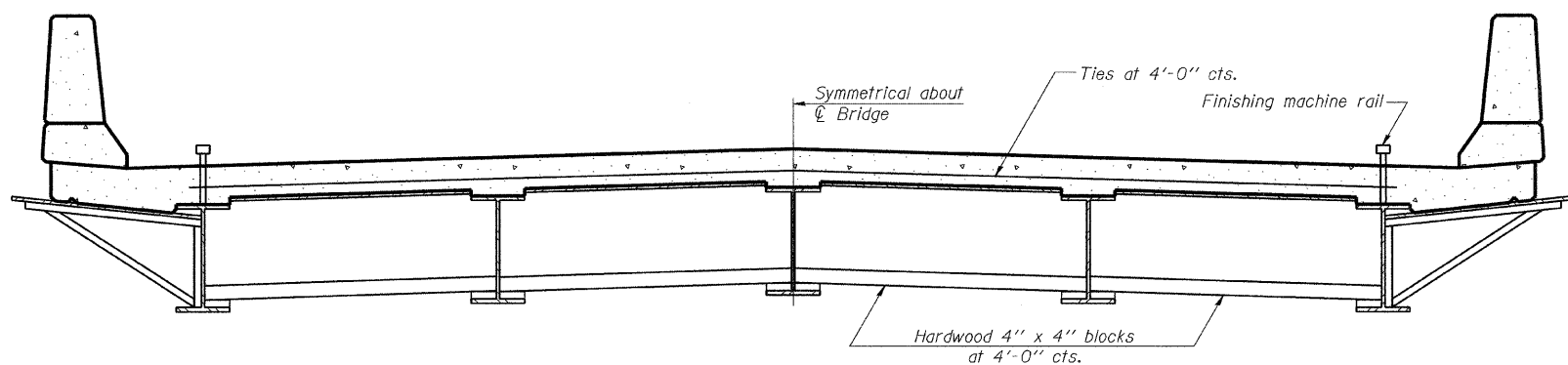
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11/03/2009

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**FORM BRACES FOR
STAGE CONSTRUCTION**

When cantilever forming brackets are used, the work shall be done according to Article 503.06(b) of the Standard Specifications, except as modified below and in the details shown on this sheet.
The finishing machine rails shall be placed on the top flange of the exterior beams.
The beams or girders, supporting cantilever forming brackets, shall be tied together at 4 foot intervals.
For Standard construction, or Stage Construction the Hardwood bracing materials shall be placed as shown between webs of beams in each bay.



**FORM BRACES FOR
STANDARD CONSTRUCTION**

**CANTILEVER FORMING BRACKETS
FOR SUPERSTRUCTURES WITH
W27 BEAMS AND SMALLER
STRUCTURE NO. 027-0097**

DESIGNED -	MRB
CHECKED -	KWS
DRAWN -	VH
CHECKED -	MRB

SB-1 10-1-08

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SHEET NO. S20	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	34
			CONTRACT NO. 66848		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SOIL BORING LOG

Page 1 of 3

Date 8/31/05

ROUTE SBI-115 (IL 115) DESCRIPTION IL 115 over Drainage Ditch LOGGED BY LM-IDOT

SECTION 105-B LOCATION SW 1/4, SEC. 9, TWP. 28N, R. 09E, 3rd PM

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station	DEPTHS				Surface Water Elev. Stream Bed Elev.	DEPTHS			
		(ft)	(/6")	(tsf)	(%)		(ft)	(/6")	(tsf)	(%)
027-0033 1345+92	#1: NW Quad 1345+62	Groundwater Elev.: First Encounter _____ ft Upon Completion <u>665.9</u> ft After _____ Hrs.				Groundwater Elev.: First Encounter _____ ft Upon Completion <u>665.9</u> ft After _____ Hrs.				
Augered, dark brown, Silty Clay Loam with Limestone pieces, oversized- fill										
669.89		4				6	1.4	15.5		
		3	1.5	23.3		7	B			
		3	P			4				
		2	1.5	24.2		5	1.7	17.8		
		2	P			7	B			
		2				4				
		2				6	1.9	20.7		
		2				10	S			
		3				4				
		6		13.1		5	2.1	23.6		
		7				5	B			
662.39		5				3				
		5		15.9		3				
		6				5				
		6				4				
		7		16.2		7	2.5	19.9		
		8				8	B			
657.89		4				6				
		5	2.5	16.9		6	2.5	15.8		
		6	B			6	B			
655.39		4				4				
		5	1.9	17.2		5	3.0	16.2		
		6	B			7	B			
		5				4				
		5				4				

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	MRB
CHECKED	KWS
DRAWN	VH
CHECKED	MRB



SOIL BORING LOG

Page 2 of 3

Date 8/31/05

ROUTE SBI-115 (IL 115) DESCRIPTION IL 115 over Drainage Ditch LOGGED BY LM-IDOT

SECTION 105-B LOCATION SW 1/4, SEC. 9, TWP. 28N, R. 09E, 3rd PM

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station	DEPTHS				Surface Water Elev. Stream Bed Elev.	DEPTHS			
		(ft)	(/6")	(tsf)	(%)		(ft)	(/6")	(tsf)	(%)
027-0033 1345+92	#1: NW Quad 1345+62	Groundwater Elev.: First Encounter _____ ft Upon Completion <u>665.9</u> ft After _____ Hrs.				Groundwater Elev.: First Encounter _____ ft Upon Completion <u>665.9</u> ft After _____ Hrs.				
Medium, gray, Silty Clay Loam Till (continued)										
		3	0.9	18.0		3				
		3	B			3				
		4	0.9	16.0		4				
		7	B			5	B			
		3				3				
		3				3				
		4	0.9	16.0		4				
		7	B			5	B			
		3				3				
		3				3				
		4	0.9	16.4		4				
		4	B			4				
		3				3				
		3	1.0	17.3		3	1.0	17.3		
		4	B			4	B			
		3				3				
		3				3				
		5	1.0	17.7		5	1.0	17.7		
		5	B			5	B			
		3				3				
		3	1.0	16.7		3	1.0	16.7		
		7	B			7	B			
617.89		4				4				
		4				4				
		7	2.0	20.4		7	2.0	20.4		
		10	B			10	B			
		5				5				
		6	1.4	17.8		6	1.4	17.8		
		7	B			7	B			
		2				2				

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 3 of 3

Date 8/31/05

ROUTE SBI-115 (IL 115) DESCRIPTION IL 115 over Drainage Ditch LOGGED BY LM-IDOT

SECTION 105-B LOCATION SW 1/4, SEC. 9, TWP. 28N, R. 09E, 3rd PM

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. Station	BORING NO. Station	DEPTHS				Surface Water Elev. Stream Bed Elev.	DEPTHS			
		(ft)	(/6")	(tsf)	(%)		(ft)	(/6")	(tsf)	(%)
027-0033 1345+92	#1: NW Quad 1345+62	Groundwater Elev.: First Encounter _____ ft Upon Completion <u>665.9</u> ft After _____ Hrs.				Groundwater Elev.: First Encounter _____ ft Upon Completion <u>665.9</u> ft After _____ Hrs.				
Hard, dark gray, Silty Clay Loam Till with 10" Silt to very fine, Sand layer at 80' + (continued)										
		8	5.0	16.3		8				
		28	S			28	S			
		7				7				
		10	4.0	11.9		10	4.0	11.9		
		22	S			22	S			
585.89		10				10				
		10				10				
		13				13				
		13	5.5	11.4		13	5.5	11.4		
		18	S			18	S			
		13				13				
		10				10				
		15	5.8	12.5		15	5.8	12.5		
		20	S			20	S			
		13				13				
		13				13				

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)

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Job # 3938.02

SOIL BORING LOGS 1 OF 2
STRUCTURE NO. 027-0097

SHEET NO. S21	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S22	796	104 I & 105 BR-1	FORD	51	35
		CONTRACT NO. 66848			
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		

xi:\3900s\3938\structures\115overkellycreek\Find\Plans\0270097-66848-021-logs1.dgn

15:56:07

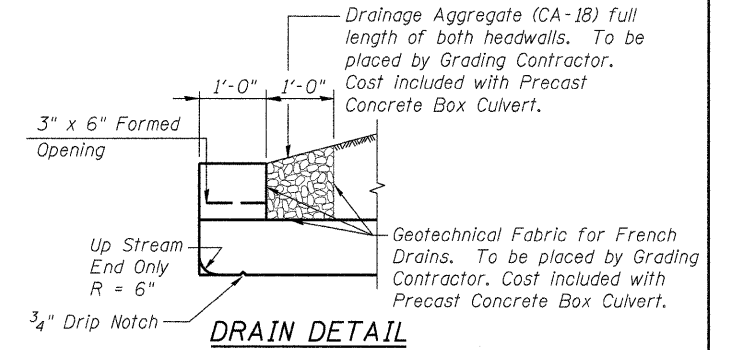
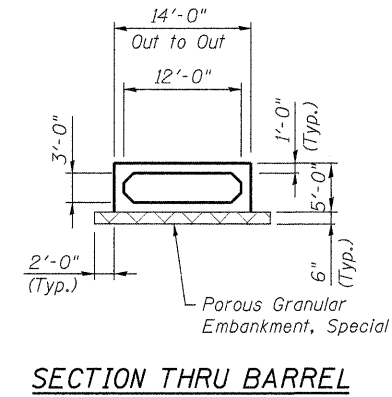
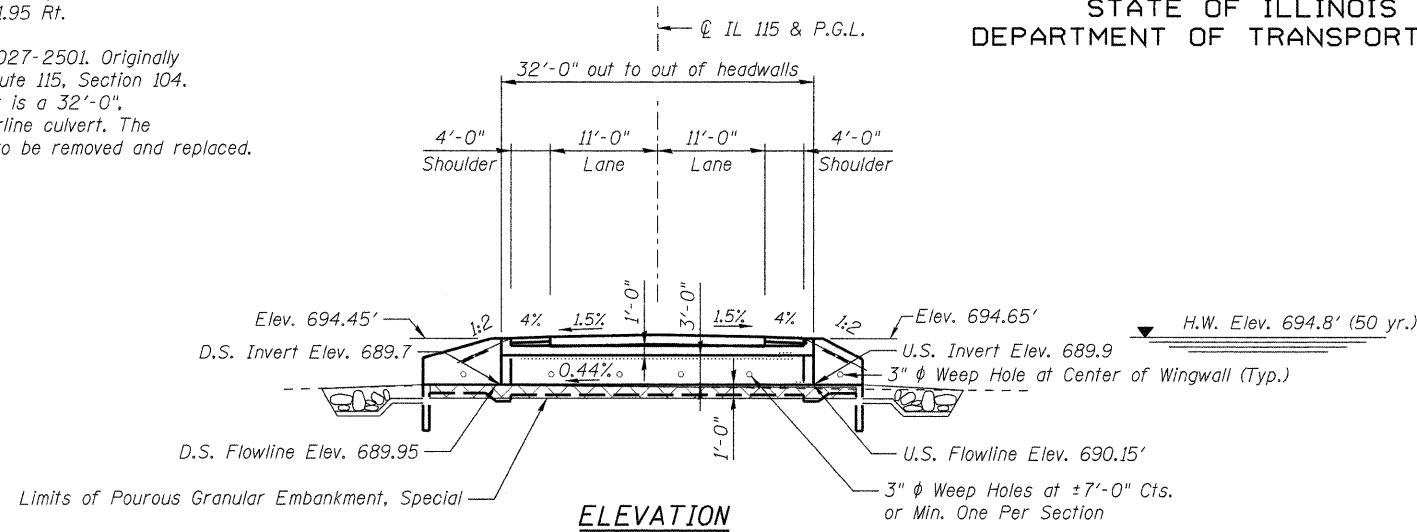
11/03/2009

Bench Mark: ROW marker NW quad IL 115 & CR 9
Sta. 1259+95.67 111.95 Rt.

Existing Structure: S.N. 027-2501. Originally built in 1926 as Route 115, Section 104. The existing culvert is a 32'-0", 45'-3" along centerline culvert. The existing culvert is to be removed and replaced.

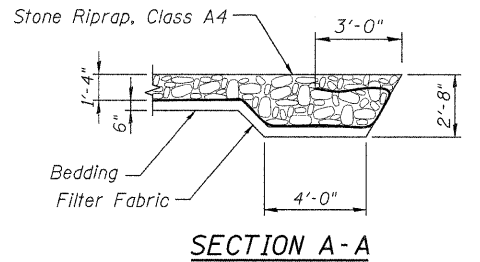
No salvage.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



TOTAL BILL OF MATERIAL

Item	Unit	Total
Porous Granular Embankment	Cu Yd	95
Porous Granular Embankment, Special	Cu Yd	34
Stone Riprap, Class A4	Sq Yd	88
Filter Fabric	Sq Yd	88
Removal of Existing Structures	Each	1
Structure Excavation	Cu Yd	199
Name Plates	Each	1
Box Culvert End Sections	Each	2
Precast Concrete Box Culvert 12' x 3' (M273)	Foot	25
Grating for Concrete Headwall	Each	2



DESIGN SPECIFICATIONS
2002 AASHTO 17th Edition

LOADING HS20-44 & ALT.
Allow 50#/sq. ft. for future wearing surface.
Design fill height < 2 ft.

DESIGN STRESSES

FIELD UNITS
 $f'_c = 3,500$ psi
 $f_y = 60,000$ psi (reinforcement)

PRECAST UNITS
 $f'_c = 5,000$ psi
 $f_y = 65,000$ psi (welded wire fabric)

Indicates Boring Logs

GENERAL NOTES

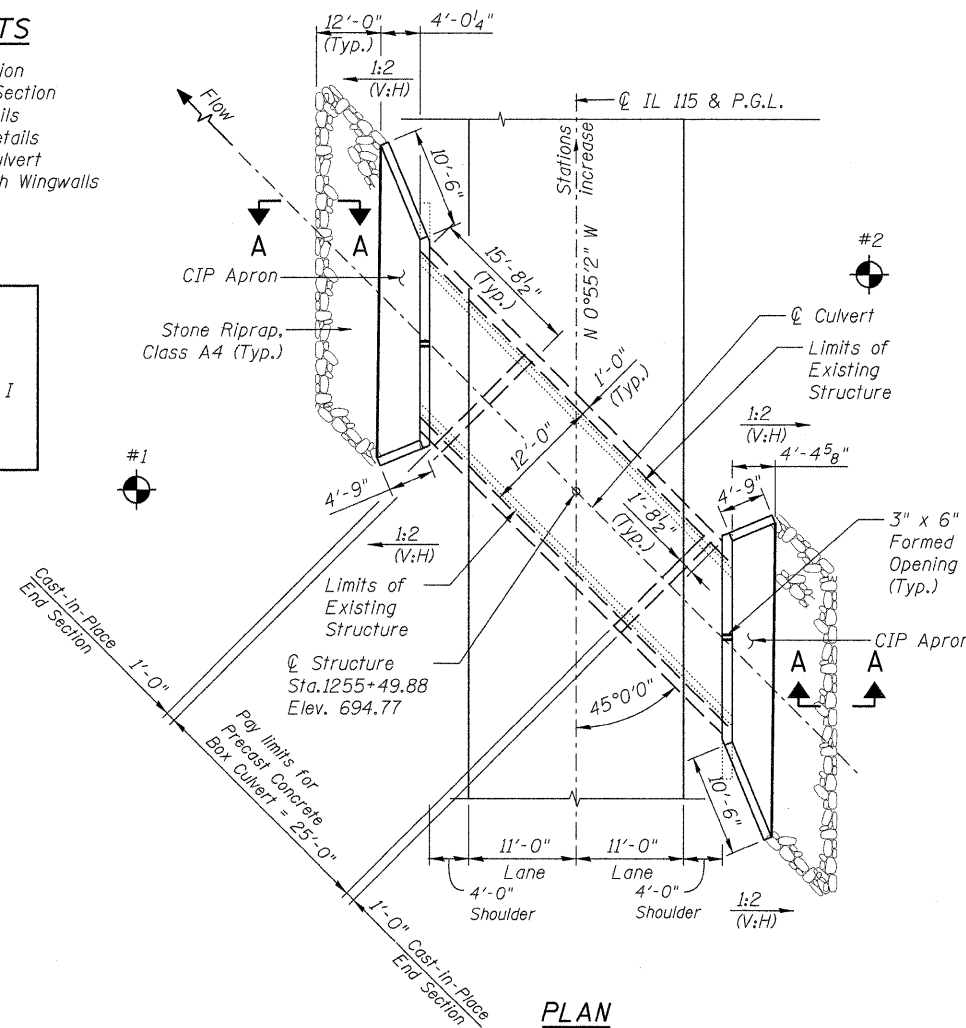
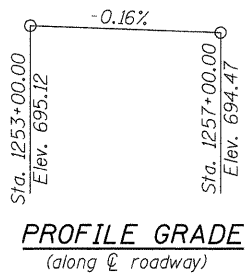
- Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See special provision.
- Reinforcement bars designated (E) shall be epoxy coated.
- Layout of the slope protection system may be varied to suit ground conditions in the field as directed by the Engineer.
- Precast Concrete Box Culvert sections shall conform to the requirements of Article 540.06 of the Standard Specifications and the applicable requirements of AASHTO M 273.
- Lifting holes shall be filled with concrete plugs and mastic after box sections are in place.
- Class SI Concrete shall be used for cast-in-place concrete.
- Exposed edges shall be beveled $\frac{3}{4}$ ".
- For backfilling and embankment see standard specifications.
- Precast End Sections are not allowed.
- All construction joints shall be bonded.
- The cast-in-place end section shall be poured monolithically with the wingwall.

INDEX OF SHEETS

- S1 General Plan and Elevation
- S2 Precast Concrete Box Section
- S3 Cast In Place Box Details
- S4 Cast In Place Apron Details
- S5 Section Through Box Culvert
- S6 Grating for Culverts with Wingwalls
- S7 Soil Boring Logs

STATION 1255+49.88
BUILT 20__ BY
STATE OF ILLINOIS
F.A.P. RT. 796 SEC. 104 I
LOADING HS20
STR. NO. 027-2551

NAME PLATE
See Std. 515001



WATERWAY INFORMATION - DISTRICT APPROVED

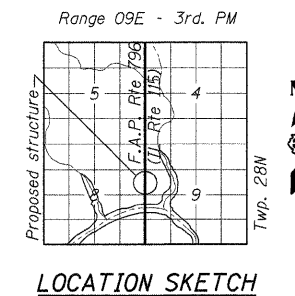
Drainage Area = 0.52 mi² (P) & (E) Low Grade Elev. 694.18 ft. @ Sta. 1258+49.88

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.	Head - Ft.		Headwater El.	
			Exist.	Prop.		Exist.	Prop.	Exist.	Prop.
Design	10	333	30	36	694.1	0.5	0.4	694.6	694.5
Base	50	573	30	36	694.8	0.2	0.1	695.0	694.9
Overtopping	100	685	30	36	695.0	0.2	0.1	695.2	695.1
Max. Calc.	500	966	30	36	695.2	0.1	0.1	695.3	695.3

Design Elev.	US	DS
Scour	686.9	686.7



EXPIRATION DATE 11-30-2010
DATE 01/13/2010



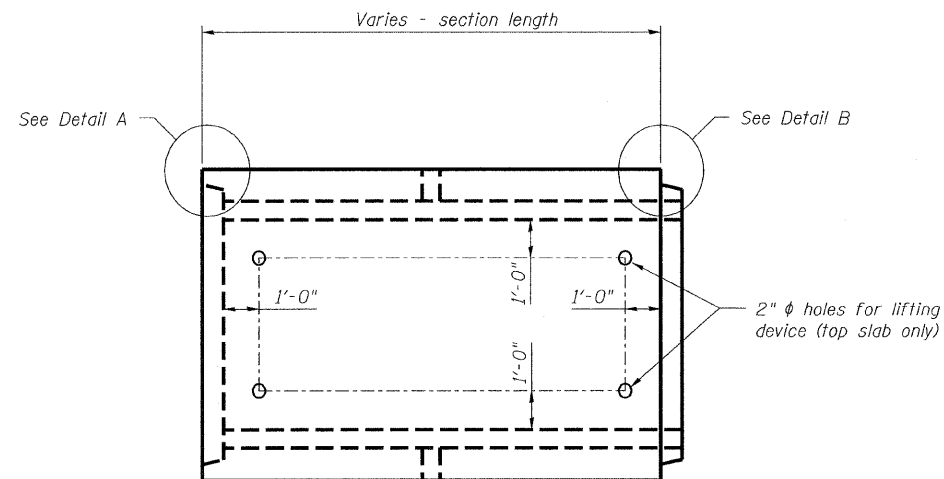
GENERAL PLAN AND ELEVATION
ILLINOIS 115 OVER DRAINAGE DITCH
F.A.P. ROUTE 796 SEC. NO. 104 I
FORD COUNTY
STATION 1255+49.88
STRUCTURE NO. 027-2551

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SHEET NO. S1	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 37
SHEETS S7	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

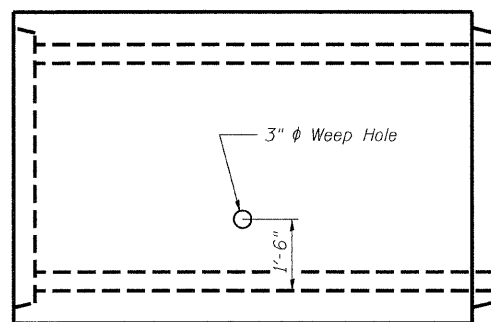
x:\3900s\3938\struc\ill15overkellycreek_culvert\final\plans\27-2501-66848-30-gpe.dgn 11/13/10

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

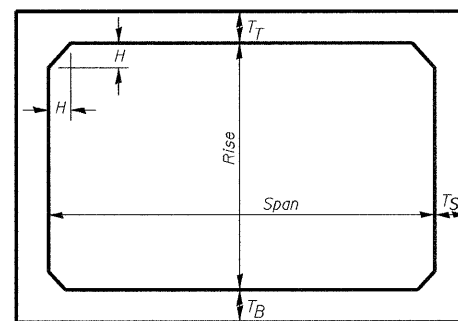


Note: Location of lifting holes may be varied as needed to clear reinforcement.

PLAN



ELEVATION

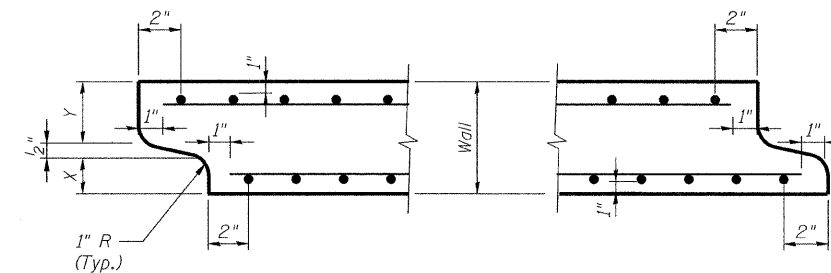


Note: The haunch dimension h , is equal to the wall thickness t_s .

TYPICAL BOX SECTION

Span, Feet	T_T , inches		T_B , inches		T_S , inches	
	M 259	M 273	M 259	M 273	M 259	M 273
3	4	7	4	6	4	4
4	5	7½	5	6	5	5
5	6	8	6	7	6	6
6	7	8	7	7	7	7
7	8	8	8	8	8	8
8	8	8	8	8	8	8
9	9	9	9	9	9	9
10	10	10	10	10	10	10
11	11	11	11	11	11	11
12	12	12	12	12	12	12

TYPICAL THICKNESSES



DETAIL A
(typ. inlet end)

DETAIL B
(typ. outlet end)

Note: Inlet and Outlet ends shall be compatible.

GENERAL NOTE:
Minimum cover for box culverts shall be 3".

DESIGNED -	MFB
CHECKED -	JDC
DRAWN -	JDC
CHECKED -	MFB

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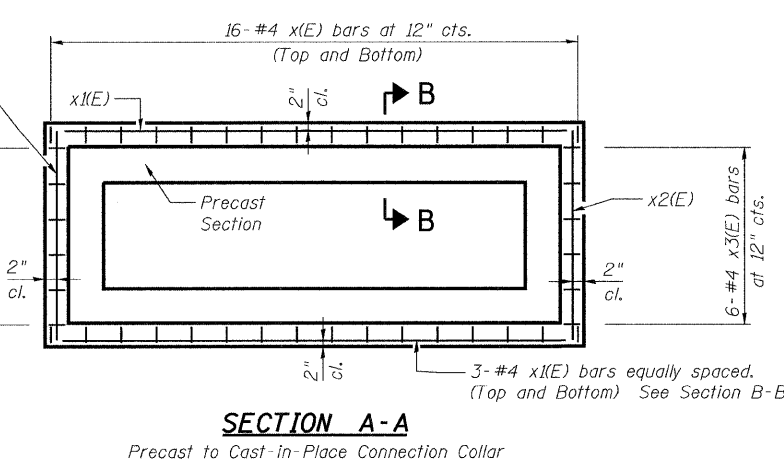
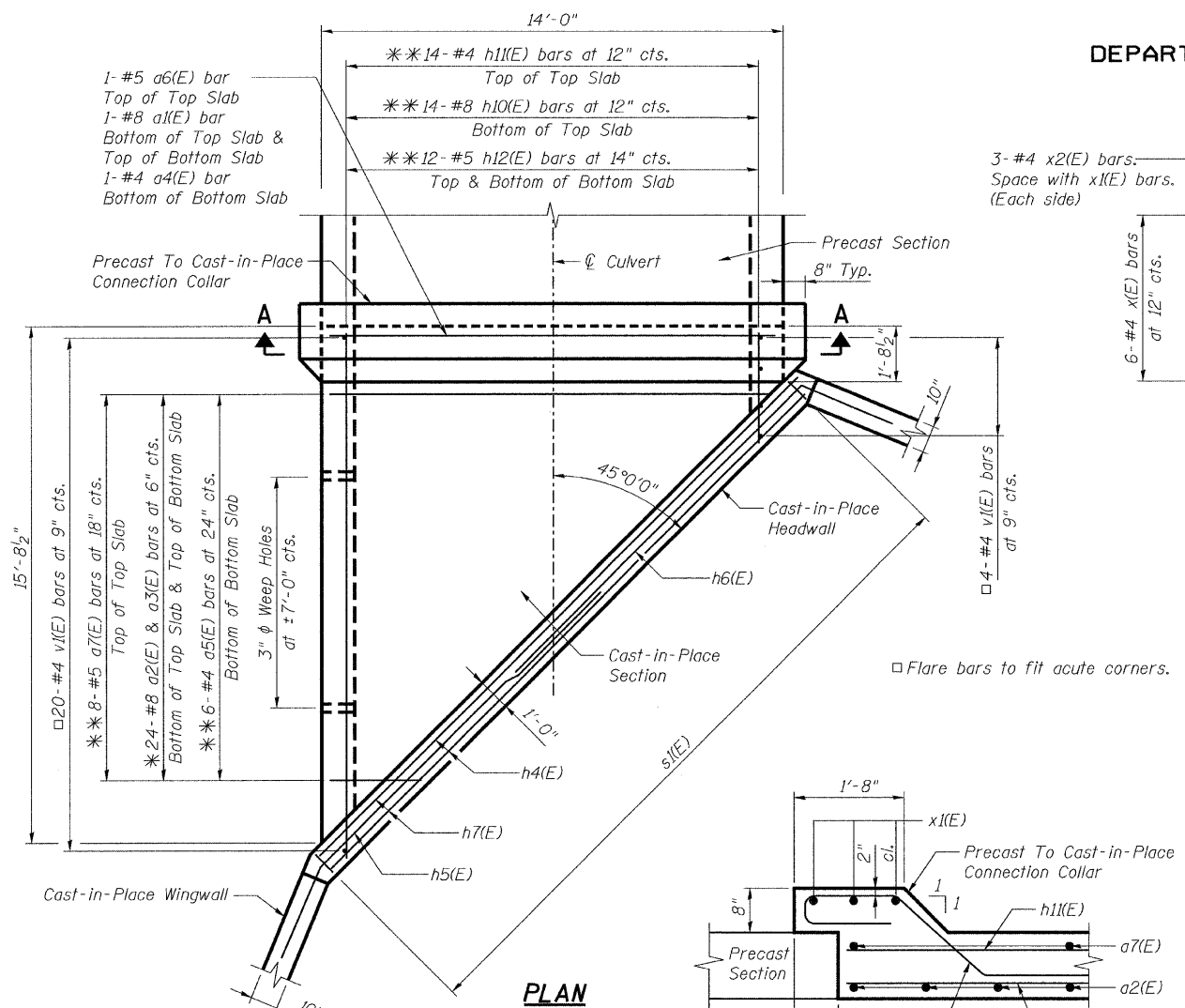
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Job # 3938.02

SHEET NO. S2	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	796	104 I & 105 BR-1	FORD	51	38
SHEETS S7	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

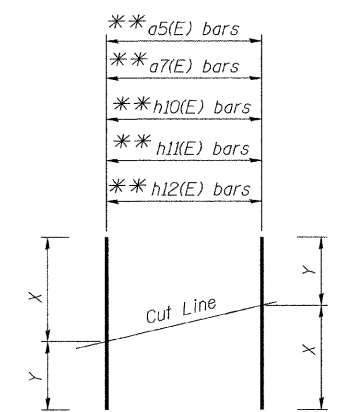
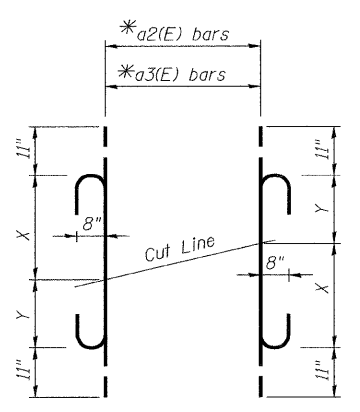
PRECAST CONCRETE BOX SECTION
STRUCTURE NO. 027-2551

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

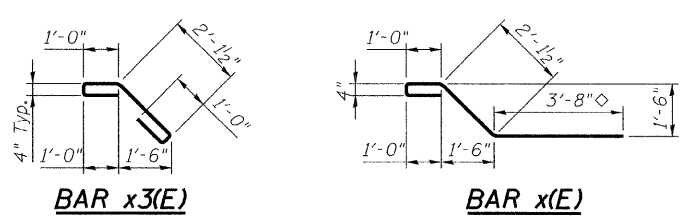
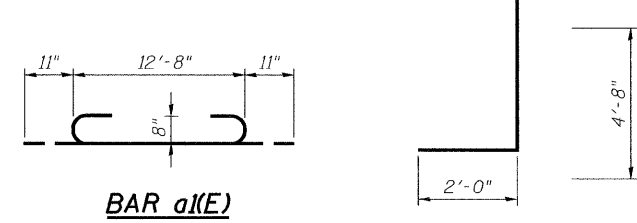
BILL OF MATERIAL ***



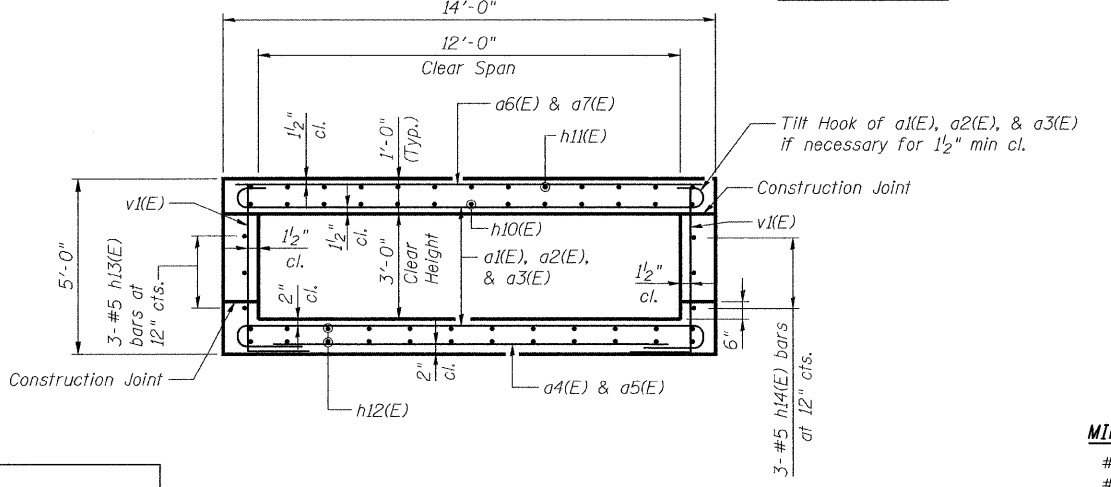
Bar	Size	No.	Length	Shape
a1(E)	#8	2	14'-6"	[U]
a2(E)	#8	24	7'-0"	[U]
a3(E)	#8	24	16'-4"	[U]
a4(E)	#4	2	12'-8"	[—]
a5(E)	#4	6	13'-0"	[—]
a6(E)	#5	2	12'-8"	[—]
a7(E)	#5	8	14'-6"	[—]
h10(E)	#8	14	18'-6"	[—]
h11(E)	#4	14	18'-6"	[—]
h12(E)	#5	24	18'-6"	[—]
h13(E)	#5	6	15'-6"	[—]
h14(E)	#5	6	3'-0"	[—]
x(E)	#4	76	8'-2"	[U]
x1(E)	#4	12	15'-0"	[—]
x2(E)	#4	12	6'-0"	[—]
x3(E)	#4	12	5'-10"	[U]
v(E)	#4	48	6'-8"	[L]
Item		Unit	Total	
Class SI Concrete		C.Y.	28	
Reinforcement Bars, Epoxy Coated		Lbs.	4,030	



*** For two end sections. The quantities shown are for information only.



◇ Cut bar in field to fit acute corner.



MIN. BAR LAP

#4	-	1'-4"
#5	-	1'-8"
#7	-	2'-9"
#8	-	3'-8"

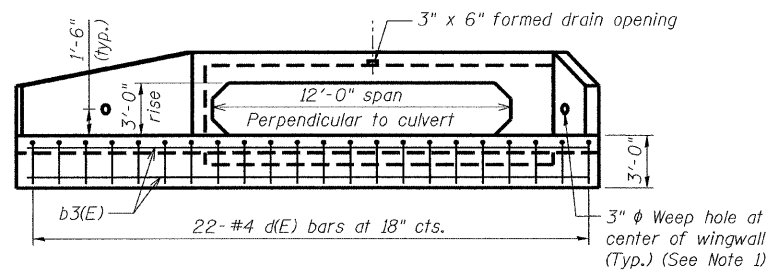
DESIGNED	-	MFB
CHECKED	-	MRB
DRAWN	-	PT
CHECKED	-	MFB

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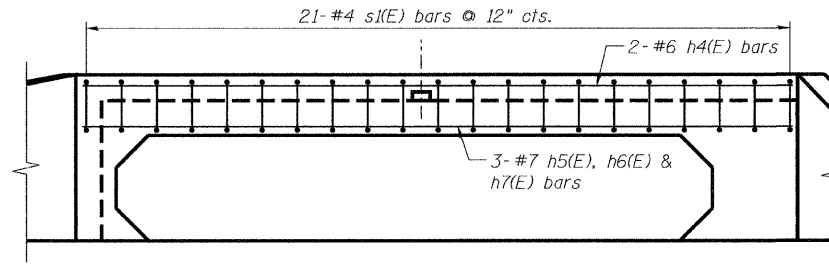
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SHEETS S7	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

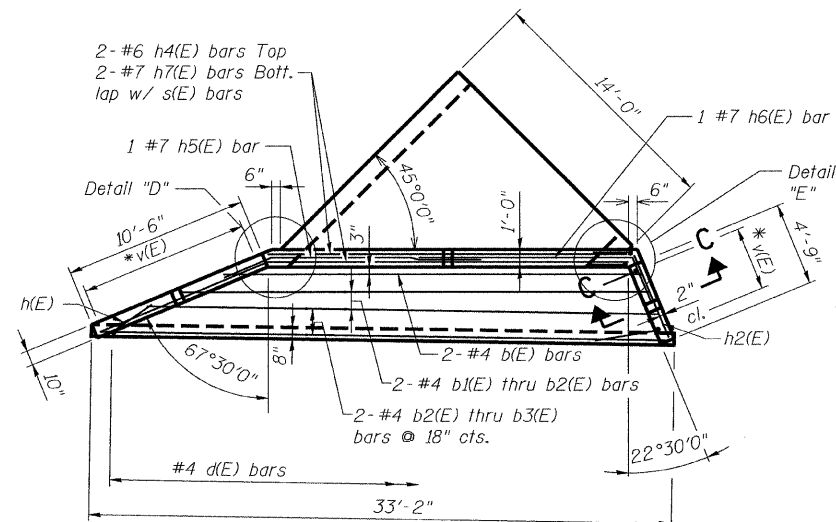
BILL OF MATERIAL **



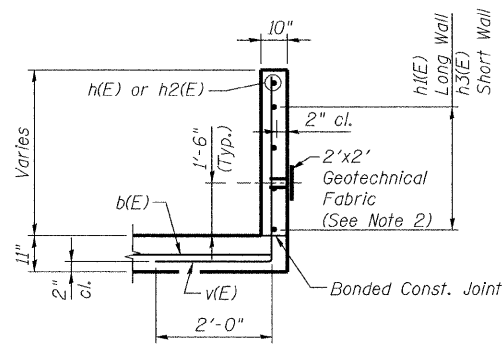
END ELEVATION



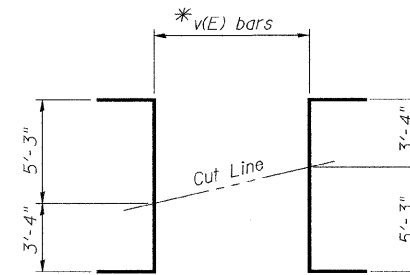
HEADWALL ELEVATION



PLAN



SECTION C-C
(Long Wall Similar)

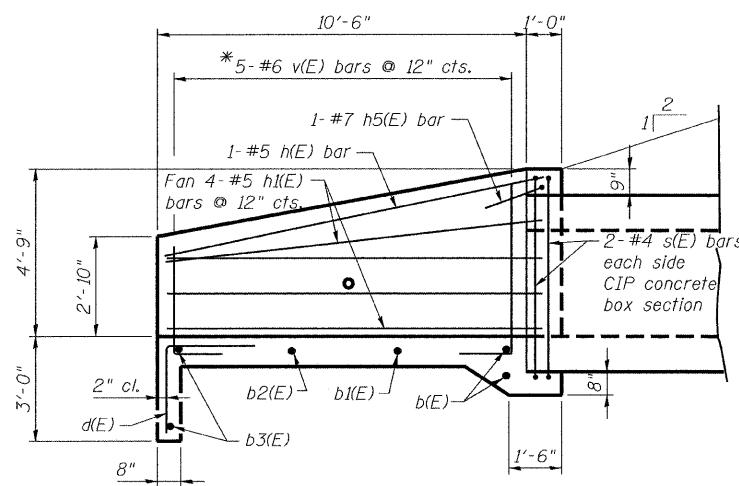


FIELD CUTTING DIAGRAM

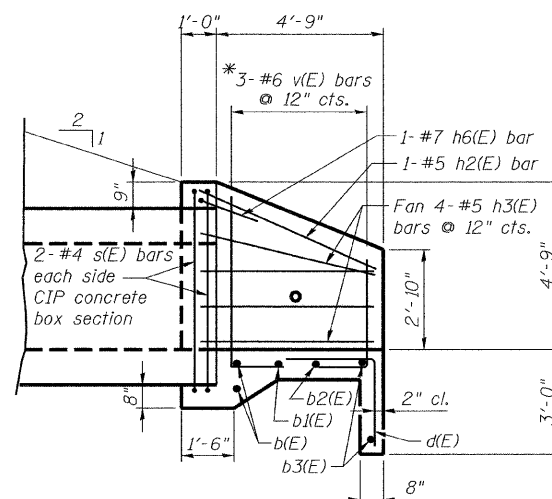
* Order v(E) bars full length.
Cut to fit as shown and use remainder of bars in other side of apron.

Bar	Size	No.	Length	Shape
b(E)	#4	4	23'-9"	—
b1(E)	#4	2	26'-7"	—
b2(E)	#4	2	29'-2"	—
b3(E)	#4	4	32'-2"	—
d(E)	#4	44	5'-4"	└
h(E)	#5	2	10'-6"	—
h1(E)	#5	8	10'-3"	—
h2(E)	#5	2	4'-9"	—
h3(E)	#5	8	4'-6"	—
h4(E)	#6	4	20'-6"	—
h5(E)	#7	2	15'-6"	—
h6(E)	#7	2	15'-6"	—
h7(E)	#7	4	20'-6"	—
s(E)	#4	8	44'-0"	□
s1(E)	#4	42	5'-3"	□
v(E)	#6	16	12'-7"	└
Item		Unit	Total	
Class SI Concrete		C.Y.	19	
Reinforcement Bars, Epoxy Coated		Lbs.	1,640	

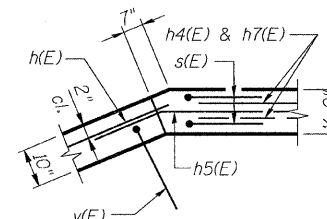
** For two aprons. The quantities shown are for information only.



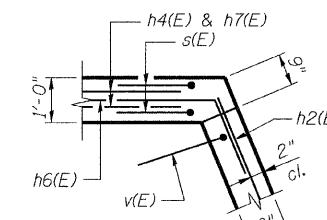
LONG WALL ELEVATION
(NW / SE Corner)



SHORT WALL ELEVATION
(NE / SW Corner)

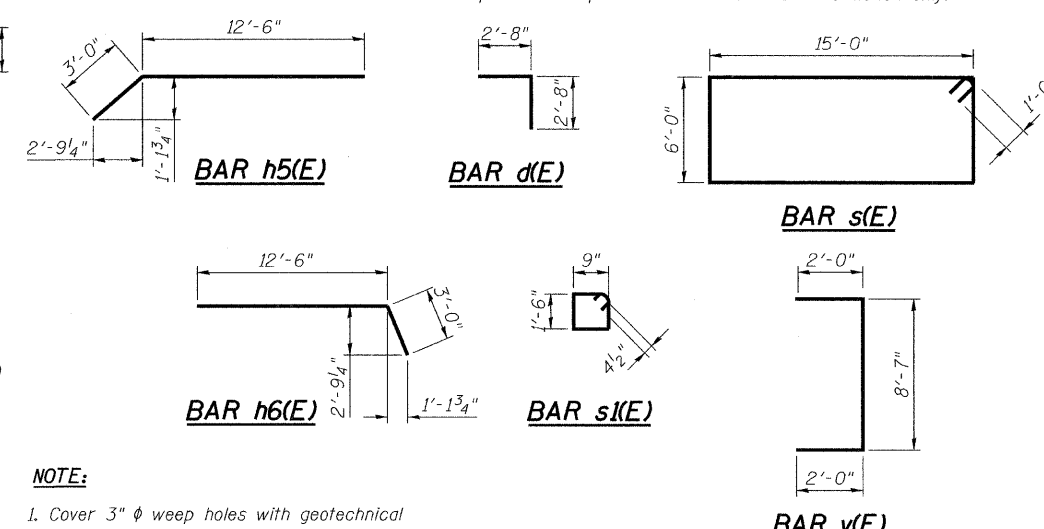


DETAIL "D"



DETAIL "E"

MIN. BAR LAP
#6 - 2'-0"
#7 - 2'-9"



CAST IN PLACE APRON DETAILS
STRUCTURE NO. 027-2551

NOTE:
1. Cover 3" ϕ weep holes with geotechnical fabric for box culvert end section and precast box culvert. Cost included with Precast Concrete Box Culvert.

DESIGNED -	MFB/JDC
CHECKED -	MRB
DRAWN -	PT
CHECKED -	MFB

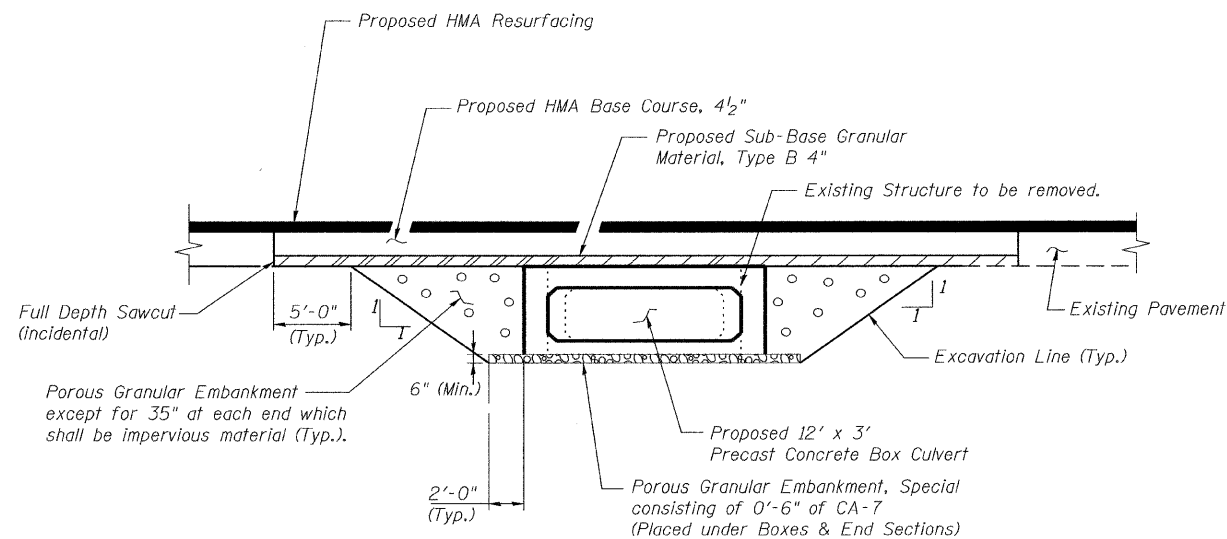
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SHEET NO. S4	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 40
SHEETS S7	CONTRACT NO. 66848		ILLINOIS FED. AID PROJECT		

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 11/03/2009

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION THROUGH PRECAST BOX CULVERT

SECTION THROUGH BOX CULVERT
STRUCTURE NO. 027-2551

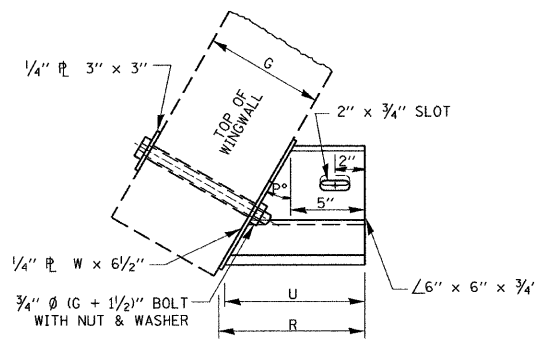
DESIGNED -	JDC
CHECKED -	MFB
DRAWN -	JDC
CHECKED -	MFB

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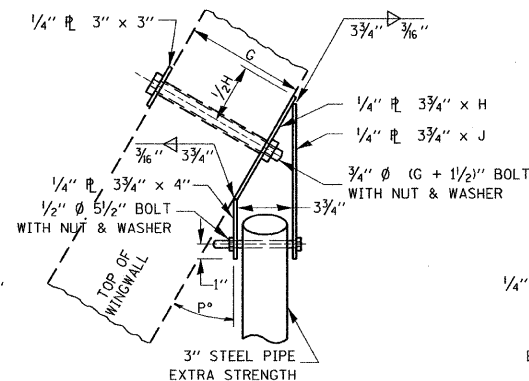
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Job # 3938.02

SHEET NO. S5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS S7	796	104 I & 105 BR-1	FORD	51	41
			CONTRACT NO. 66848		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

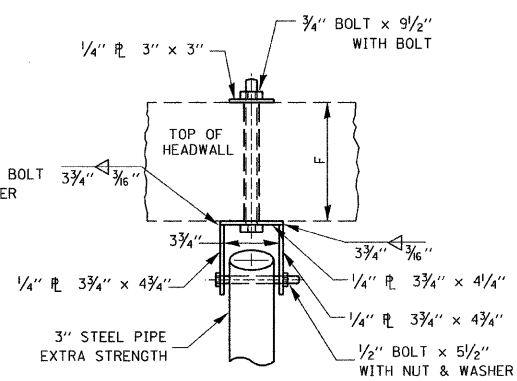
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



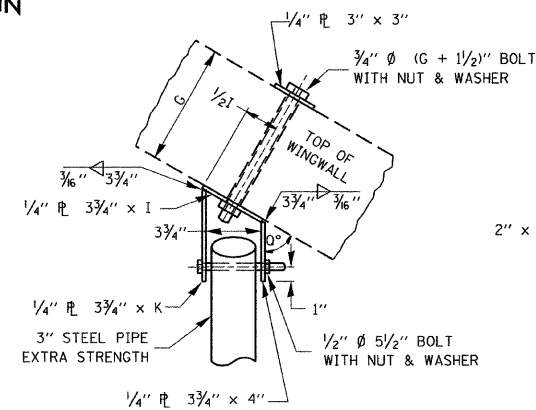
PLAN
END BRACKET ASSEMBLY - LEFT



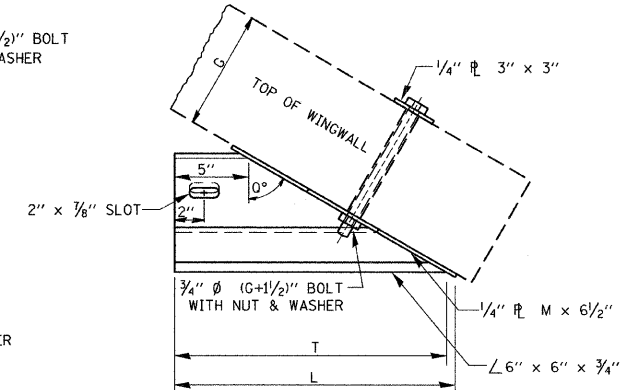
PLAN
WINGWALL BRACKET ASSEMBLY - LEFT



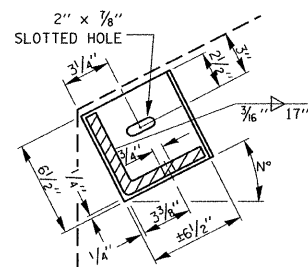
PLAN
HEADWALL BRACKET ASSEMBLY



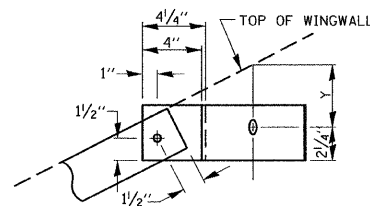
PLAN
WINGWALL BRACKET ASSEMBLY - RIGHT



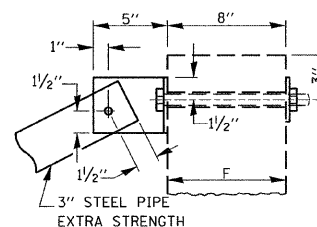
PLAN
END BRACKET ASSEMBLY - RIGHT



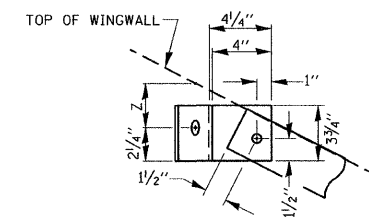
SECTION THRU
DETAIL A



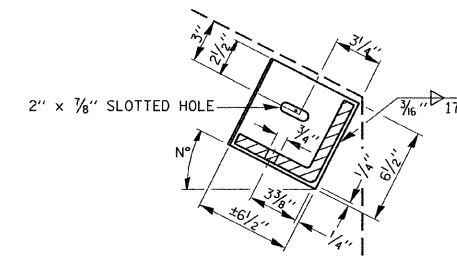
SECTION THRU
DETAIL B



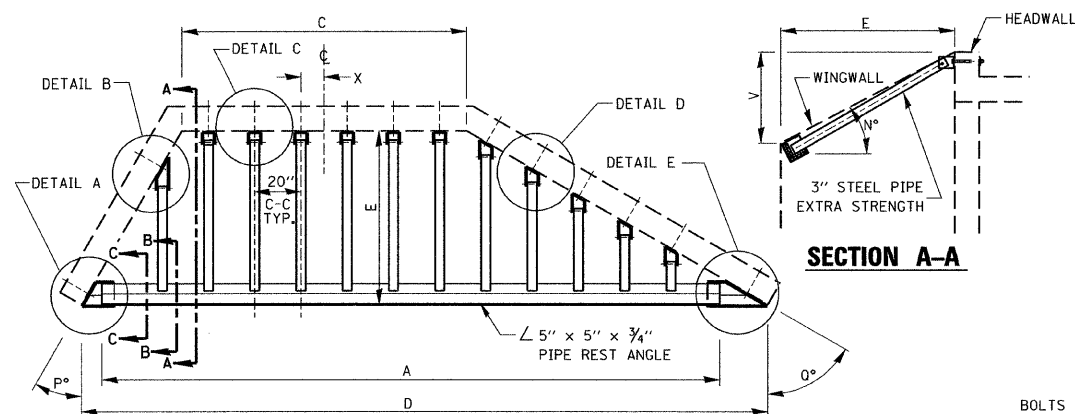
SECTION THRU
DETAIL C



SECTION THRU
DETAIL D

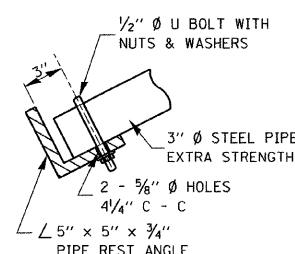


SECTION THRU
DETAIL E

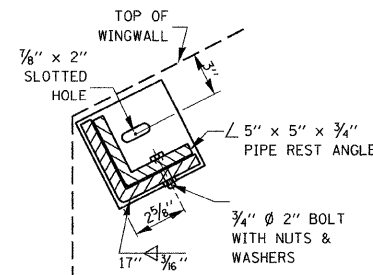


PLAN VIEW

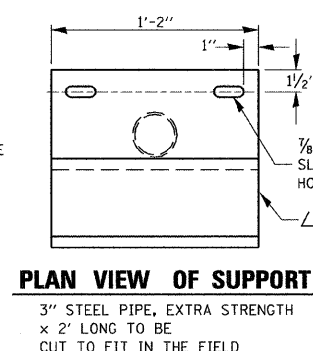
SECTION A-A



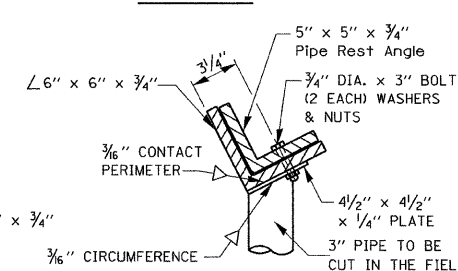
SECTION B-B



SECTION C-C



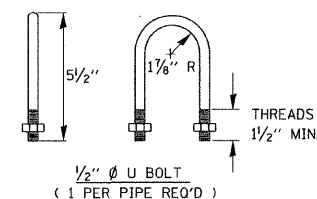
PLAN VIEW OF SUPPORT



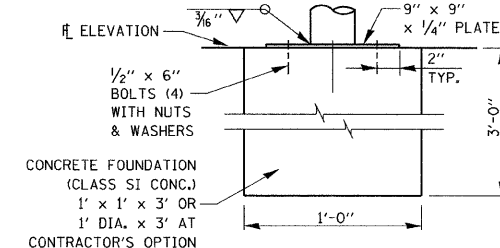
END VIEW OF SUPPORT

GENERAL NOTES

BOLTS AND NUTS SHALL CONFORM TO ASTM A 307. ALL BOLTS SHALL HAVE WASHERS AT EACH END. HOLES SHALL BE 1/16" OVERSIZE UNLESS OTHERWISE NOTED EXCEPT IN CONCRETE WHICH SHALL BE 1/8" OVERSIZE. ANGLES AND STEEL PLATES SHALL CONFORM TO AASHTO M183. STEEL PIPES SHALL CONFORM TO ASTM A53 GRADE B OR ASTM A 501. STEEL PIPES, ANGLES AND PLATES SHALL BE HOT DIPPED GALVANIZED CONFORMING TO THE REQUIREMENTS OF AASHTO M111. BOLTS, NUTS AND WASHERS SHALL BE HOT DIPPED GALVANIZED CONFORMING TO THE REQUIREMENTS OF AASHTO M232. THE APPROXIMATE WEIGHT OF STEEL GIVEN IN TABLES INCLUDES PLATES, ANGLES, AND PIPES. BOLTS, NUTS AND WASHERS ARE NOT INCLUDED. ALL DIMENSIONS ARE TO BE VERIFIED IN THE FIELD. CUTTING OF THE EXTRA STRENGTH PIPE AND ANGLES TO THE EXACT LENGTHS AND DRILLING HOLES IS TO BE DONE IN THE FIELD. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE "EACH" FOR GRATING FOR CONCRETE HEADWALLS, AND SHALL INCLUDE FABRICATION PAINTING, CENTER SUPPORTS WHEN REQUIRED, AND INSTALLATION OF THE GRATING AS DETAILED.



DETERMINING NEED OF CENTER SUPPORTS		
TIP TO TIP OF WINGWALLS (DIMENSION "D")	NUMBER OF SUPPORTS REQUIRED	LOCATION
0'-0" TO 12'-6"	0	--
12'-6" TO 18'-0"	1	CENTER OF SPAN
18'-0" TO 24'-0"	2	1/3 OF SPAN
24'-0" TO 30'-0"	3	1/4 OF SPAN



CENTER SUPPORT FOUNDATION

GRATING FOR CULVERTS WITH WINGWALLS

DESIGNED -	JDC
CHECKED -	MFB
DRAWN -	JDC
CHECKED -	MFB

540-19

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SHEET NO. S6	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 42
SHEETS S7	CONTRACT NO. 66848		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SOIL BORING LOG

Page 1 of 1

DATE 10/24/07

ROUTE FAP 796 (IL 115) DESCRIPTION IL 115 over stream LOGGED BY Larry Myers

SECTION 104 LOCATION SW 1/4, SEC. 33, TWP. 29, RNG. 9E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 027-2501 WEATHER COND. Sunny/Windy TEMP. 45°

BORING NO. #1: Station 1255+50 Offset 45.00ft Lt Longitude/Northing Latitude/Easting Ground Surface Elev. 694.24 ft	D E P T H H	B L O W S	U C S Qu	M O I S T T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs.	D E P T H H	B L O W S	U C S Qu	M O I S T T

Augered, black, Silty Clay Loam-topsoil, fill					Very stiff, gray, Silty Clay Loam Till with layers of gray, Silt and Silty Loam at 20'-22' (continued)	2				2			
						3	2.1			3	2.1		20.3
						4	S			4	S		
691.74													
Hard, black, Silty Clay Loam to Silty Clay-topsoil, fill		5				3				3			
		6	4.0	24.6		5	3.3			5	3.3		15.9
		6	P			6	S			6	S		
690.24													
Very stiff, gray brown, Silty Clay, Clay and Sand- backwater deposits													
		4				4				4			
		3	2.0	28.4		6	3.3			6	3.3		15.3
		3	P			7	S			7	S		
		2				4				4			
		3	2.0	33.6		5	3.1			5	3.1		15.8
		3	P			6	S			6	S		
684.24 -10													
Hard, brown, Silty Clay Loam Till		4				3				3			
		6	4.3	16.0		5	3.0			5	3.0		15.6
		8	S			6	S			6	S		
682.24													
Very stiff, gray, Silty Clay Loam Till with layers of gray, Silt and Silty Loam at 20'-22'		3											
		4	3.1	16.2									
		6	S										
		4				4				4			
		5	3.3	14.6		5	3.1			5	3.1		17.0
		6	S			7	S			7	S		
657.74					End of Boring								
		3											
		4	3.3	15.1									
		5	S										
-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)

Northing & Easting are in Illinois State Plan Coordinates (ISPC), East Zone.
Longitude & Latitude are in North American Datum (NAD) 83, Decimal Degree.

DESIGNED	JDC
CHECKED	MFB
DRAWN	JDC
CHECKED	MFB



SOIL BORING LOG

Page 1 of 1

DATE 10/24/07

ROUTE FAP 796 (IL 115) DESCRIPTION IL 115 over stream LOGGED BY Larry Myers

SECTION 104 LOCATION SE 1/4, SEC. 32, TWP. 29, RNG. 9E

COUNTY Ford DRILLING METHOD Hollow Stem Auger HAMMER TYPE CME Automatic

STRUCT. NO. 027-2501 WEATHER COND. Sunny/Windy TEMP. 45°

BORING NO. #2: Station 1255+72 Offset 30.00ft Rt Longitude/Northing Latitude/Easting Ground Surface Elev. 690.79 ft	D E P T H H	B L O W S	U C S Qu	M O I S T T	Surface Water Elev. _____ ft Stream Bed Elev. _____ ft Groundwater Elev.: First Encounter _____ ft Upon Completion _____ ft After _____ Hrs.	D E P T H H	B L O W S	U C S Qu	M O I S T T

Augered, black, Silty Clay Loam-topsoil					Very stiff, gray, Silty Clay Loam Till with minor pockets of Loam at 19'-20' (continued)	2	2.1			2	2.1		20.5
						4	B			4	B		
688.79													
Hard, brown, Silty Clay to Clay		4				2				2			
		5	4.0	24.8		3	2.1			3	2.1		17.0
		7	P			4	B			4	B		
		5				3				3			
		7	4.4	23.6		4	2.2			4	2.2		11.4
		8	S			5	B			5	B		
684.29													
Very stiff, brownish gray, Silty Clay Loam Till with Silty Loam layers		3				3				3			
		4	3.2	16.4		4	2.1			4	2.1		16.5
		5	S			5	B			5	B		
		3				3				3			
		4	3.2	16.6		4	2.1			4	2.1		16.6
		5	S			5	B			5	B		
679.29													
Very stiff, gray, Silty Clay Loam Till		3											
		4	3.2	18.7									
		5	S										
		3				3				3			
		4	3.0	14.3		4	2.2			4	2.2		15.1
		5	S			5	B			5	B		
676.79													
Very stiff, gray, Clay Loam to Loam with pockets of fine, Sand and Silt		3				3				3			
		4	3.0	14.3		4	2.2			4	2.2		15.1
		5	S			5	B			5	B		
654.79					End of Boring								
		1											
		4	2.7	15.1									
		5	S										
671.79													
		1											

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)

Northing & Easting are in Illinois State Plan Coordinates (ISPC), East Zone.
Longitude & Latitude are in North American Datum (NAD) 83, Decimal Degree.

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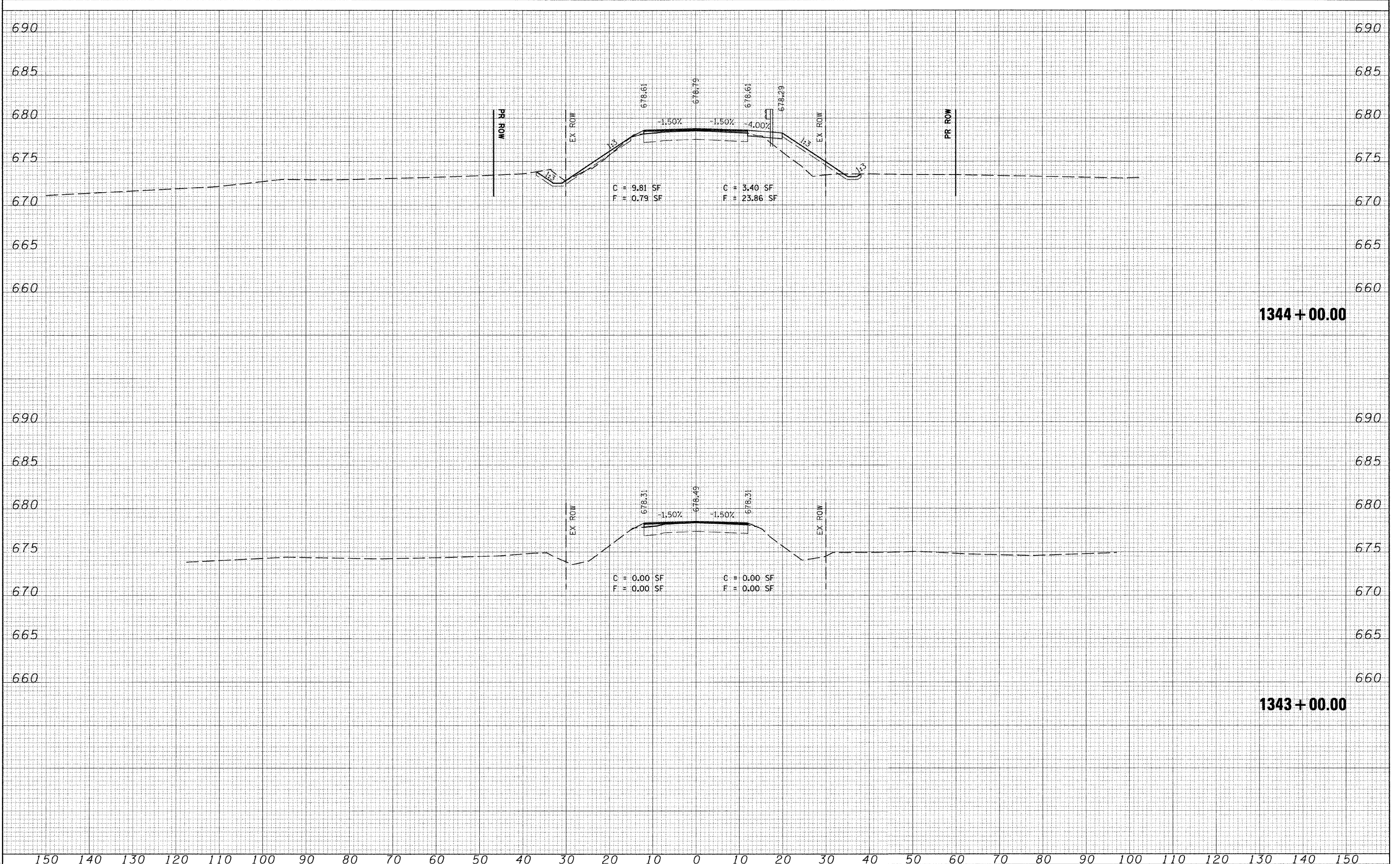
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Job # 3938.02

SHEET NO. S7	F.A.P. RTE. 796	SECTION 104 I & 105 BR-1	COUNTY FORD	TOTAL SHEETS 51	SHEET NO. 43
SHEETS S7	CONTRACT NO. 66848				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

SOIL BORING LOGS
STRUCTURE NO. 027-2551

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

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

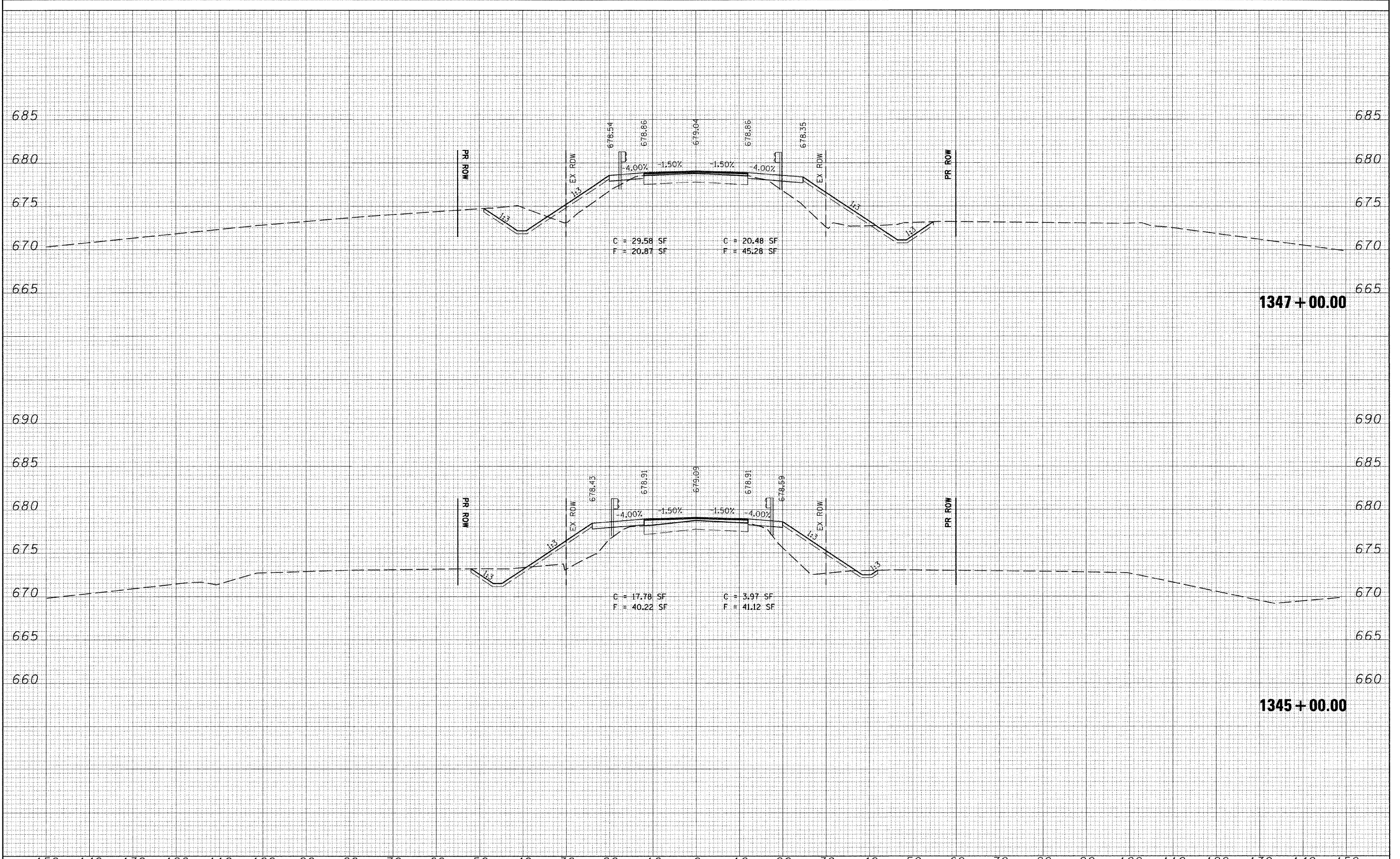


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PLOT DATE = #DATE#		DATE - 10/24/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

HORIZ. 1"=10' VERT. 1"=5' SHEET NO. 1 OF 7 SHEETS STA. 1343+00.00 TO STA. 1344+00.00

DATE _____
 BY _____
 SURVEYED _____
 SURVEY _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS CHECKED _____
 NO. _____

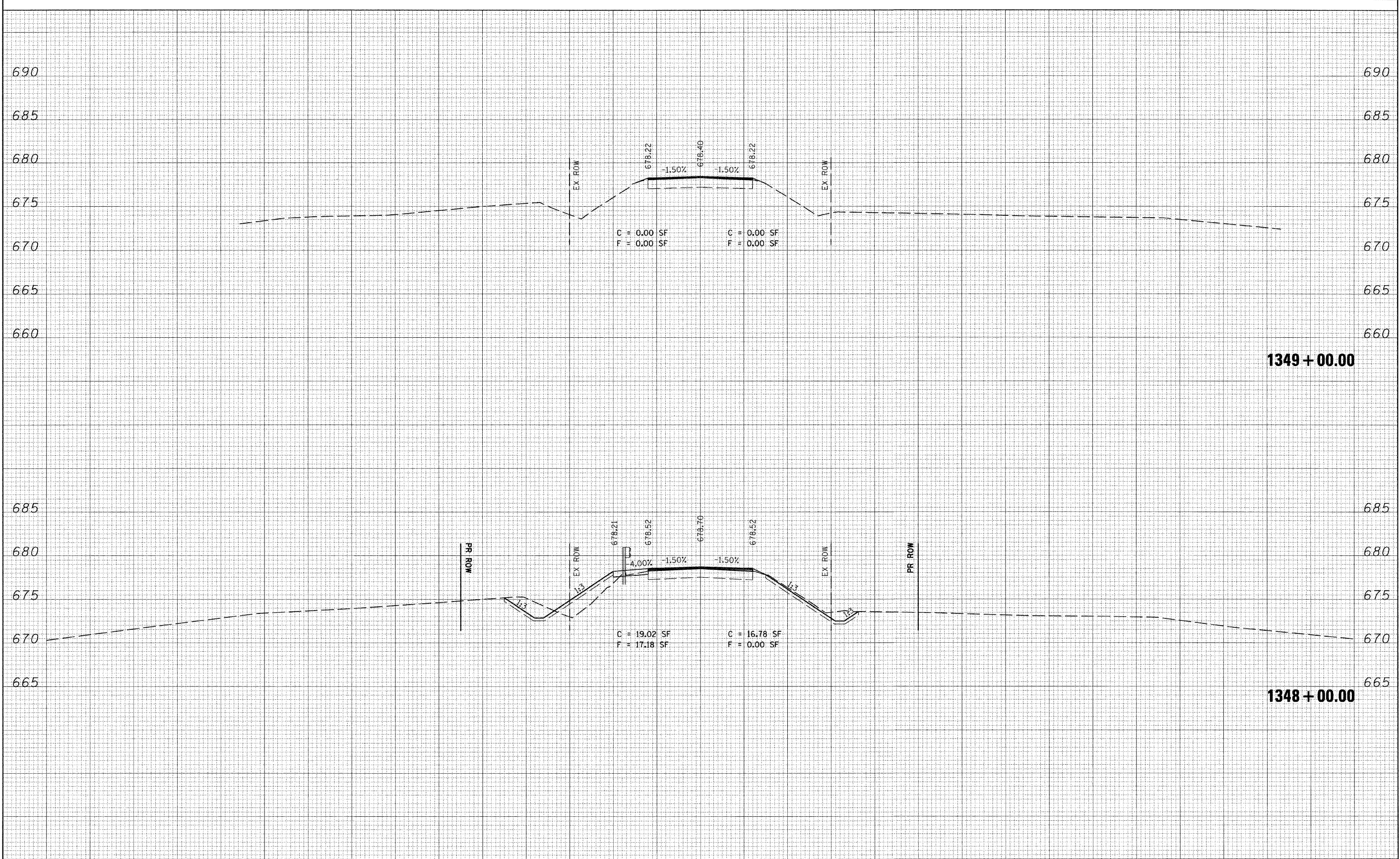
DATE _____
 BY _____
 ORIGINAL SURVEYED _____
 SURVEY _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS CHECKED _____
 NO. _____



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	PLOT DATE = #DATE#	CHECKED - DJC	REVISED -			CONTRACT NO. 66848		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			
		DATE - 10/24/09	REVISED -								

FINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS	
AREAS CHECKED	

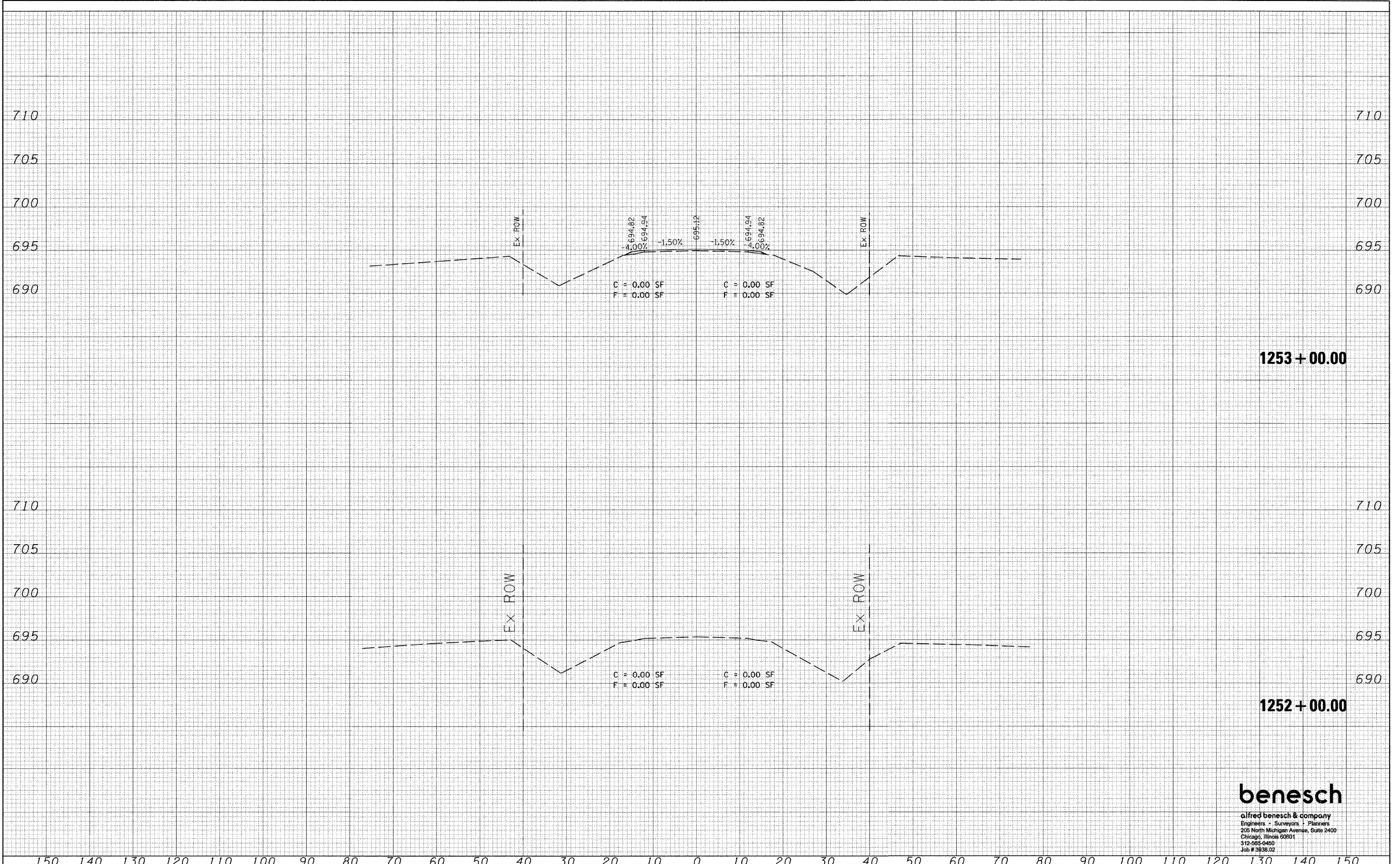
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AREAS CHECKED	



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PLT DATE = #DATE#		DATE - 10/24/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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

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



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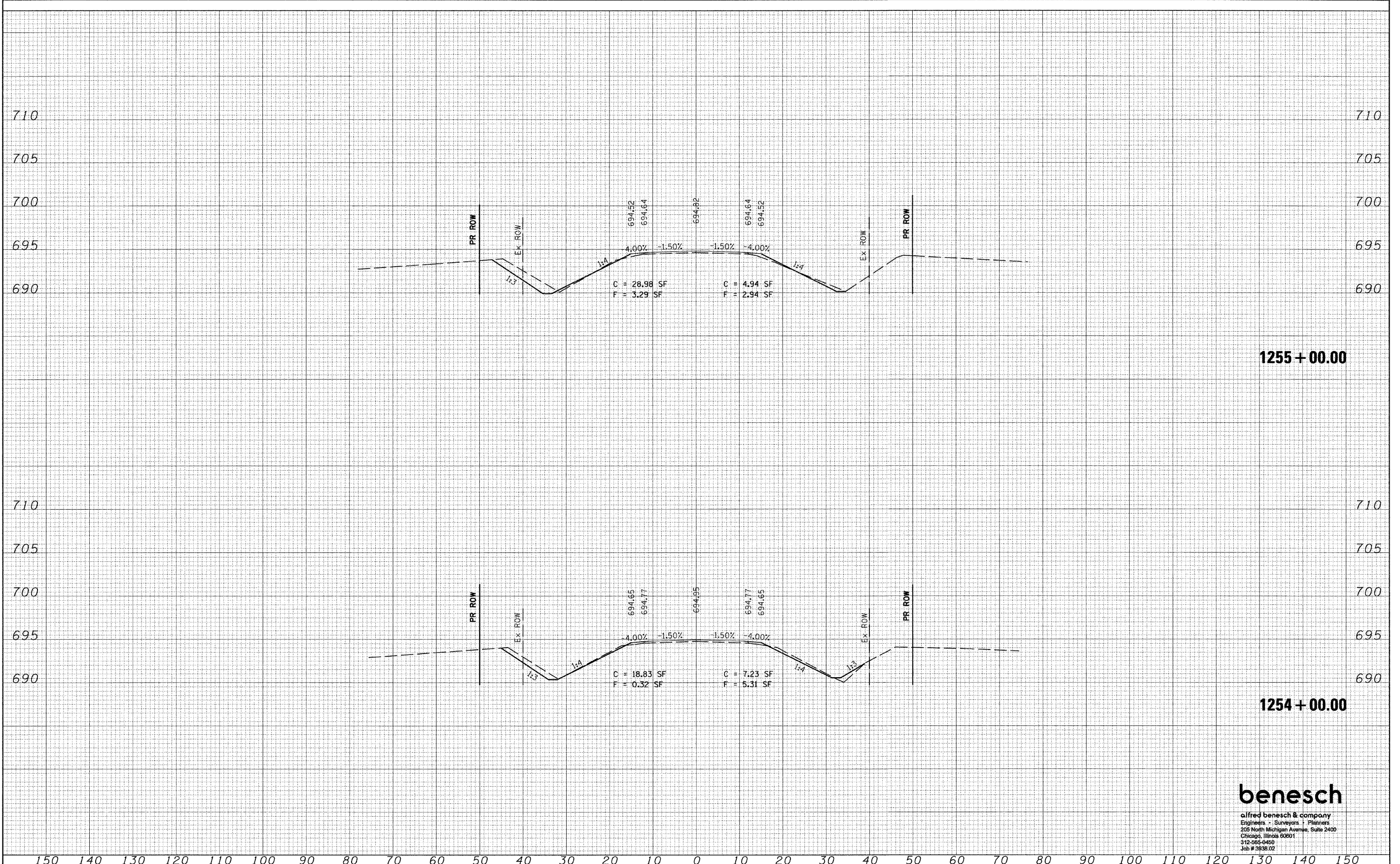
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SCALE: HORIZ. 1"=10' VERT. 1"=5'
 SHEET NO. 4 OF 7 SHEETS STA. 1252+00.00 TO STA. 1253+00.00

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

ORIGINAL SURVEY	DATE
SURVEYED	BY
NOTE BOOK	
TEMPLATE	
AREAS CHECKED	
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FILE NAME =	USER NAME = #USER#	DESIGNED - JDC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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		DATE - 10/24/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

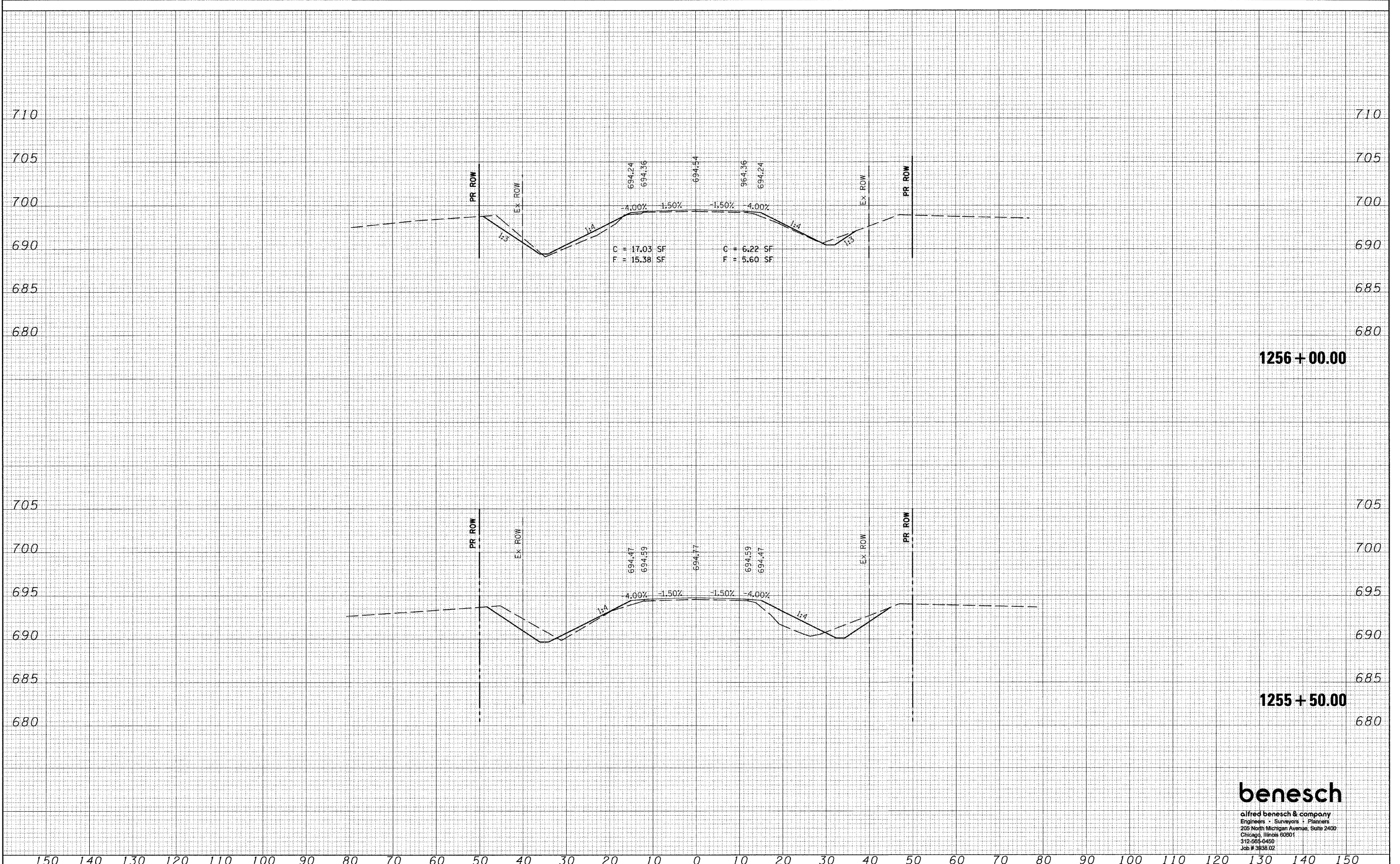
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SCALE: HORIZ. 1"=10' VERT. 1"=5' SHEET NO. 5 OF 7 SHEETS STA. 1254+00.0 TO STA. 1255+00.00

FINAL	SURVEYED	DATE
SURVEY	TEMPLATE	
NOTE BOOK	AREAS	CHECKED
NO.		

ORIGINAL	SURVEYED	DATE
SURVEY	TEMPLATE	
NOTE BOOK	AREAS	CHECKED
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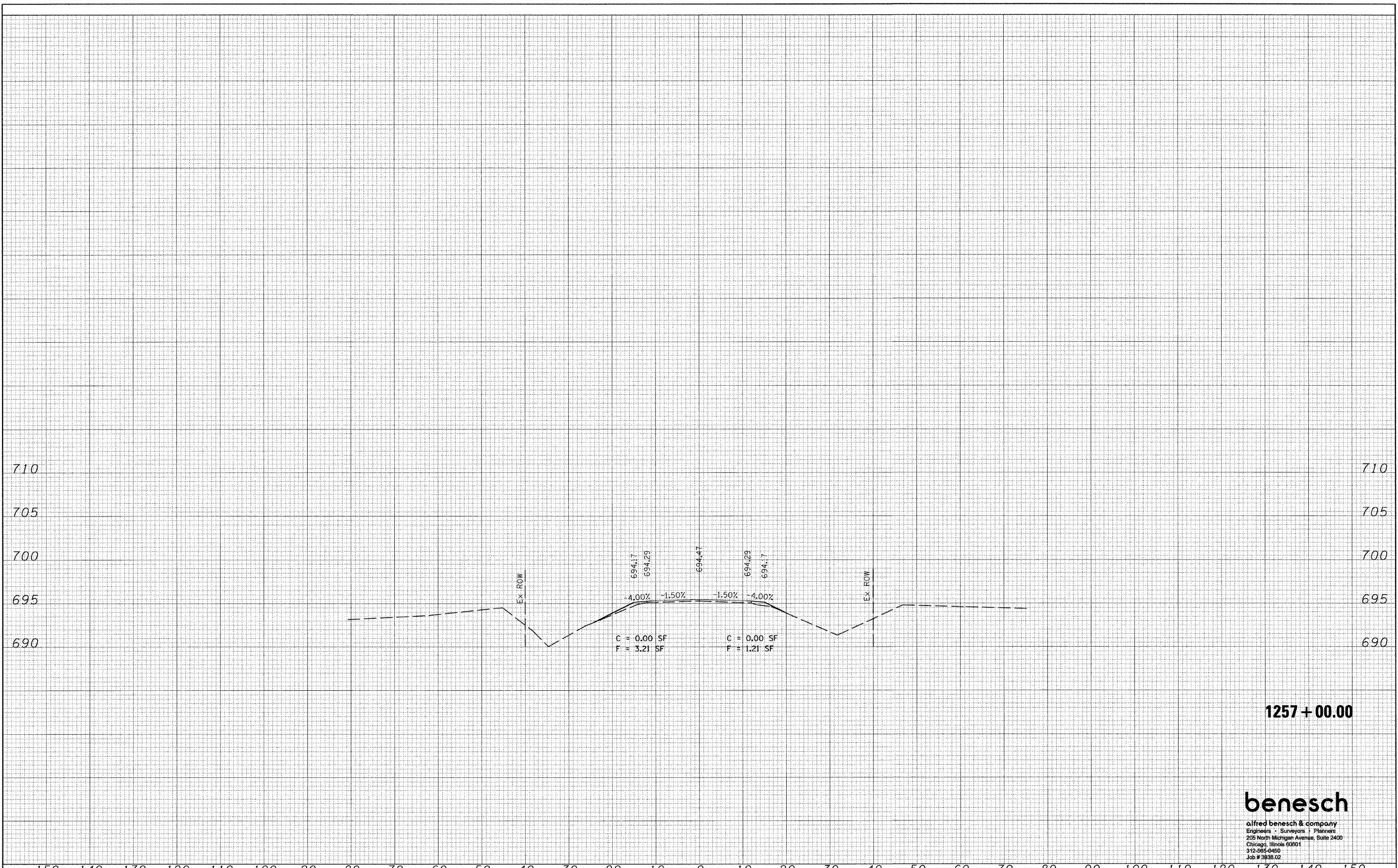
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	PLOT DATE = #DATE#	DATE - 10/24/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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FINAL SURVEY	DATE
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ORIGINAL SURVEY	DATE
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FILE NAME =	USER NAME = #USER#	DESIGNED - JDC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT DATE = #DATE#		DATE - 10/24/09	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
				SCALE: HORIZ. 1"=10' SHEET NO. 7 OF 7 SHEETS STA. 1257+00 TO STA. 1257+00							