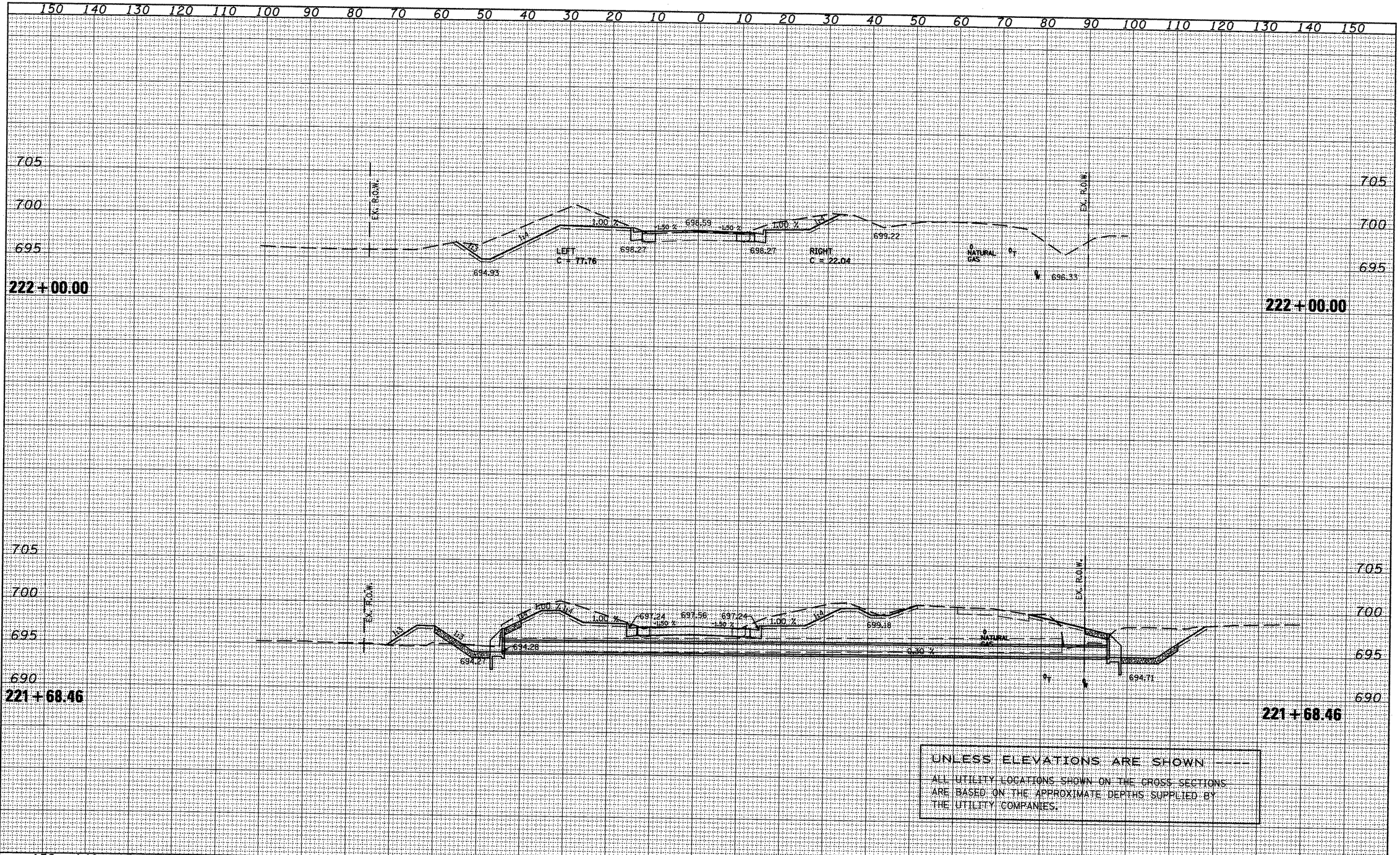

UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

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

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

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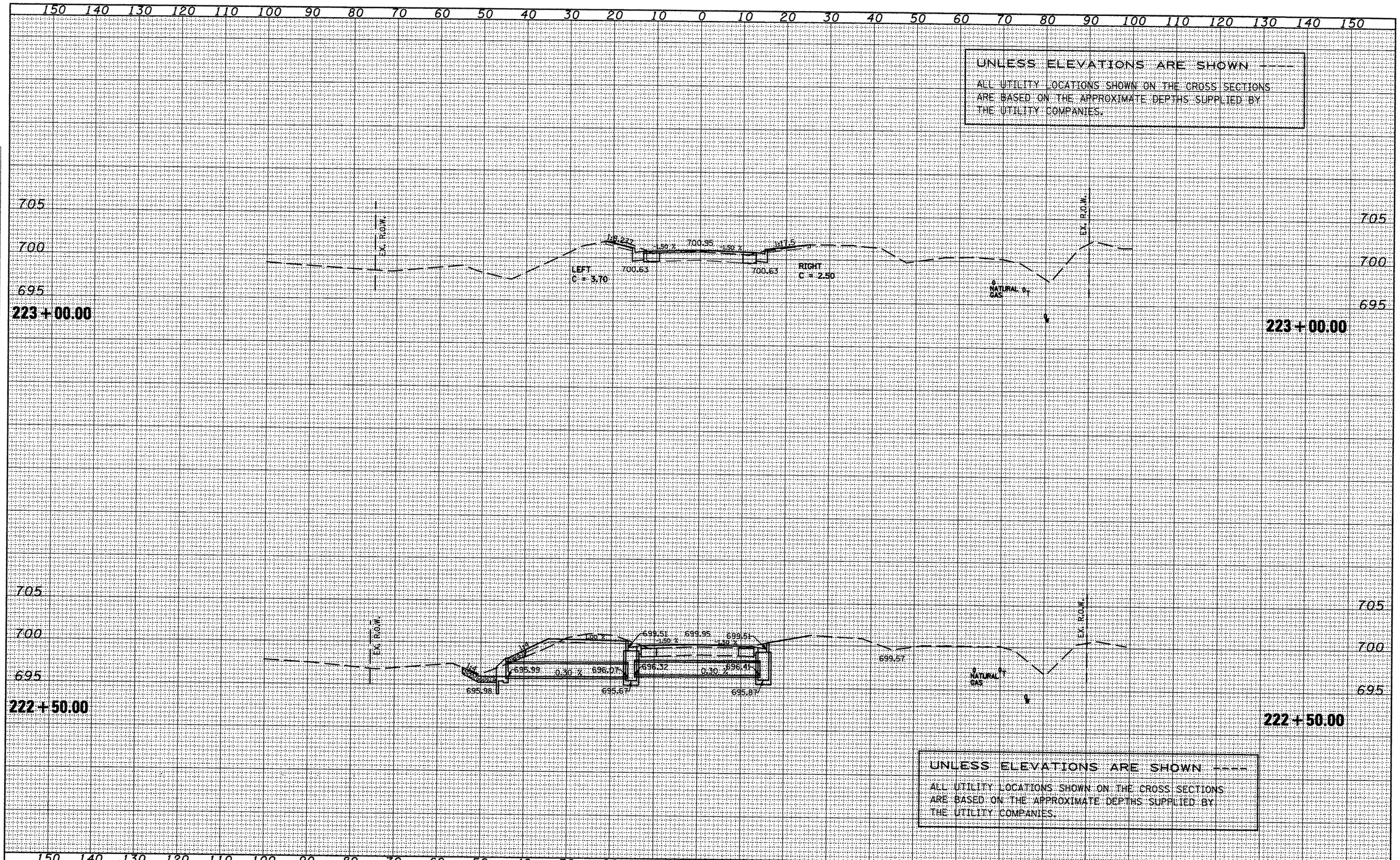
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 116-VIADUCT

SCALE: | SHEET NO. OF SHEETS | STA. 221+68.46 TO STA. 222+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3\109BR-2	HENDERSON		401
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			



FINAL SURVEY / ORIGINAL SURVEY

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

FILE NAME = xsectsheet.dgn	USER NAME = ghidnaam	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IL 116-VIADUCT

SCALE: | SHEET NO. OF SHEETS | STA. 222+50.00 TO STA. 223+00.00

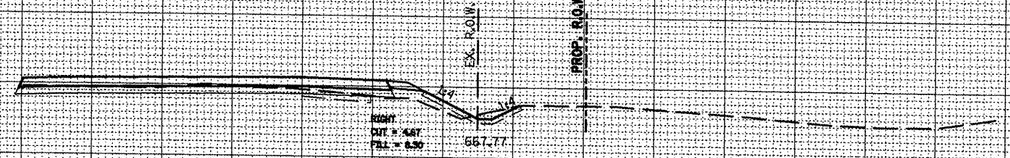
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		407
		CONTRACT NO. 88773		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

675

670

10+40.00



675

670

10+40.00

UNLESS ELEVATIONS ARE SHOWN ----

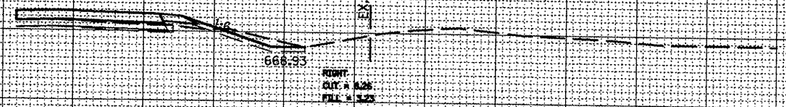
ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

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

675

670

~~10+20.00~~



675

670

10+20.00

665

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

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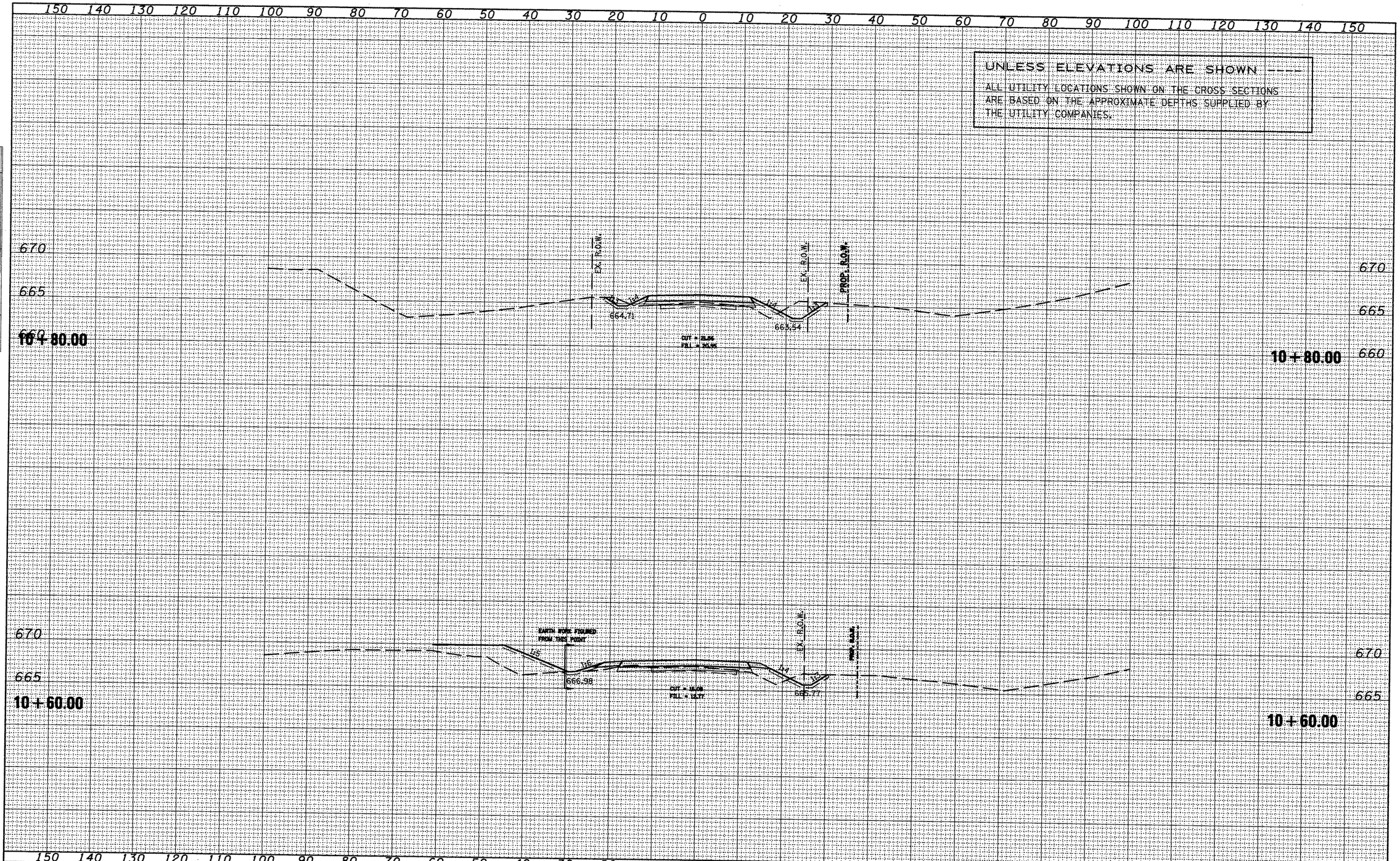
		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD NORTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 10+20.00 | TO STA. 10+40.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		403
		CONTRACT NO. 88773		
		ILLINOIS FED. AID PROJECT		



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

ST: UATE | SURVEYED | PLOTTED | TEMPLATE | AREAS | AREAS CHECKED

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		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

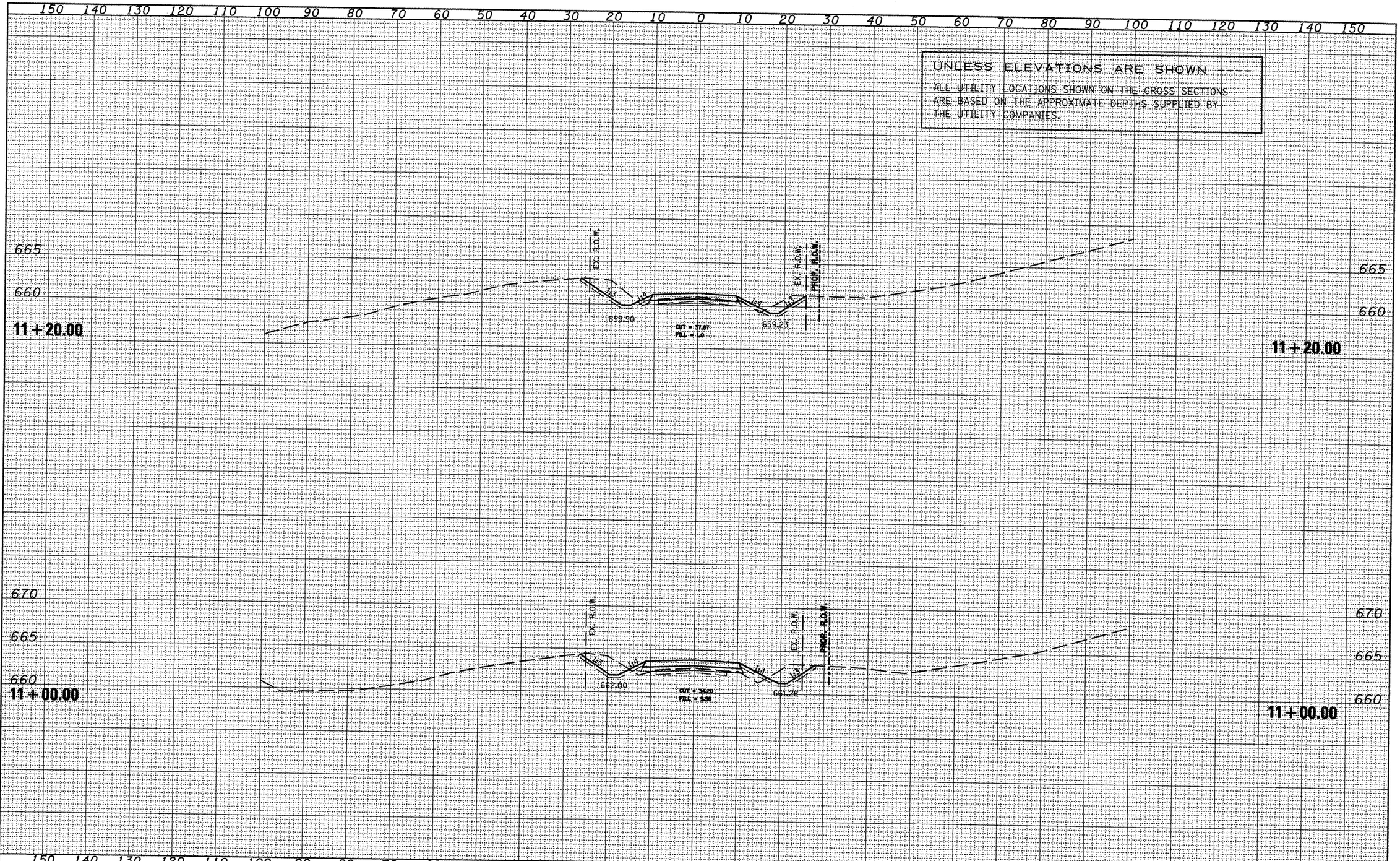
SIDEROAD NORTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 10+60.00 TO STA. 10+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		404
		CONTRACT NO. 88773		
	ILLINOIS	FED. AID PROJECT		

UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.



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

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

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	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD NORTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 11+00.00 TO STA. 11+20.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		405
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

UNLESS ELEVATIONS ARE SHOWN ----

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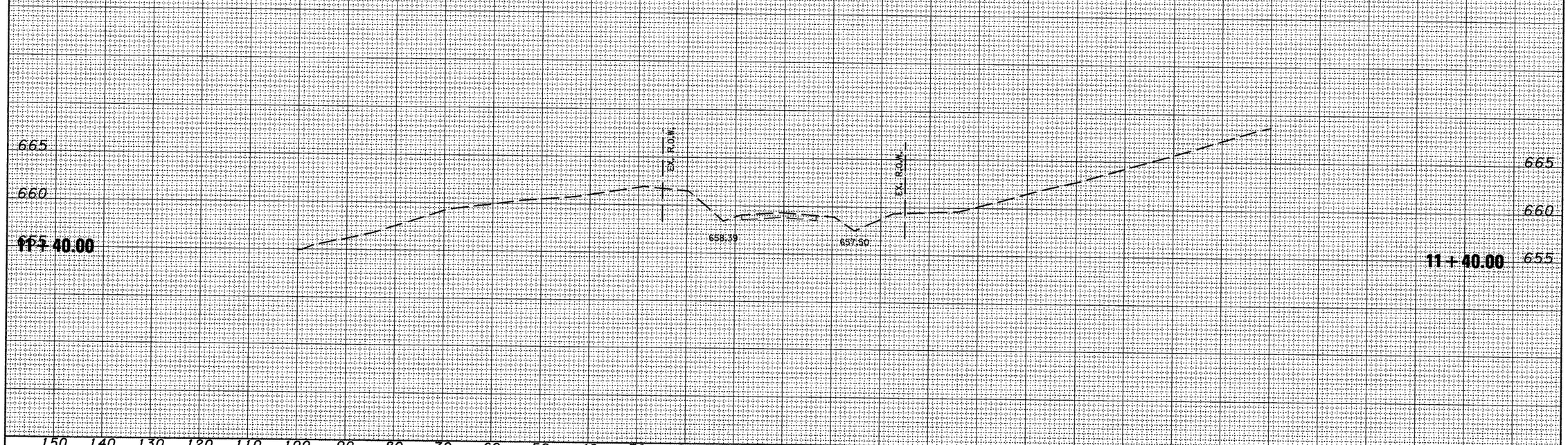
FINAL SURVEY	NOTE BOOK	NO.
SURVEYED	BY	DATE
PLOTTED		
TEMPLATE		
AREAS		
AREAS CHECKED		

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



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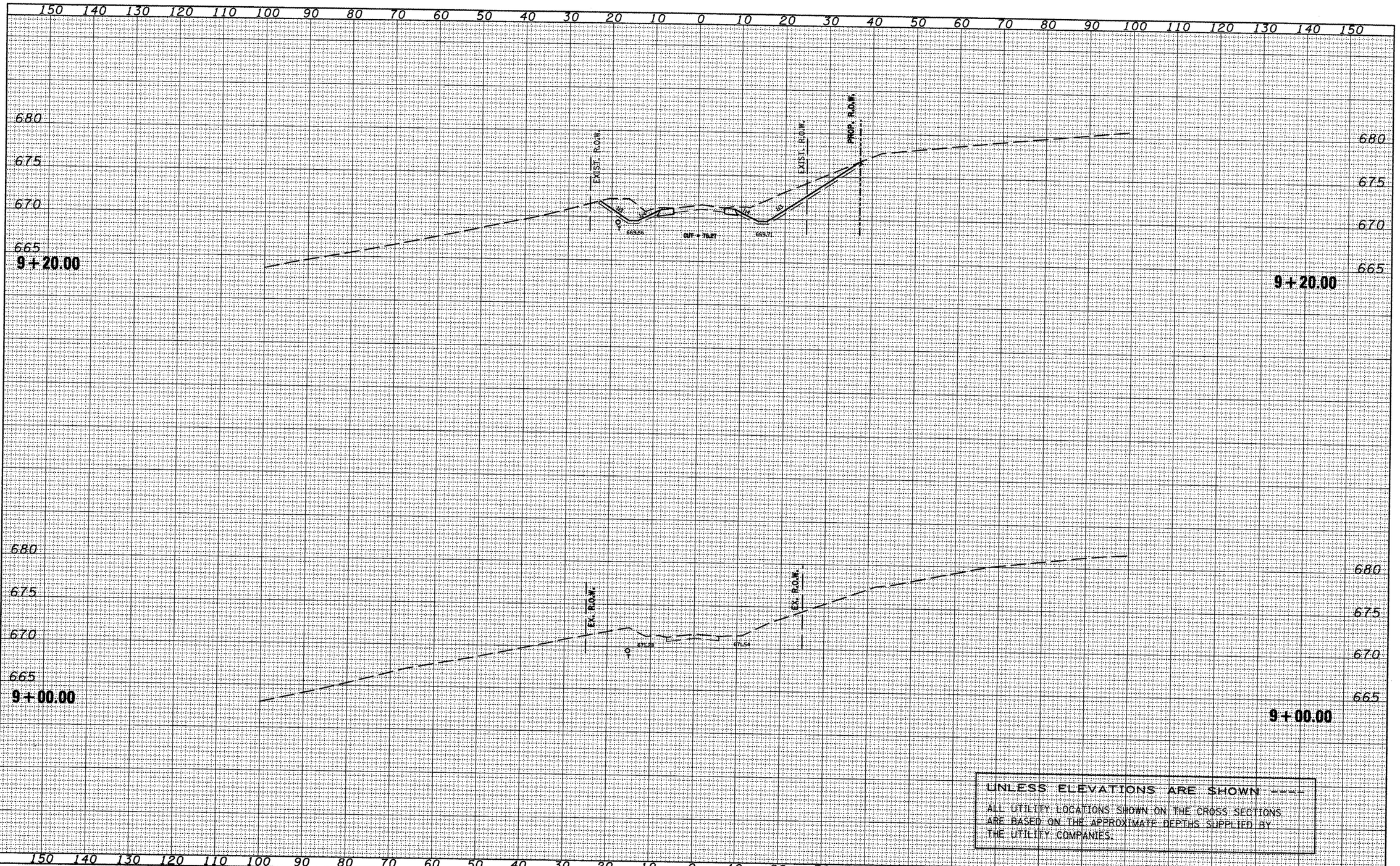
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD NORTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 11+40.00 | TO STA. 11+40.00

F.A.AP. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		406
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			



UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

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

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

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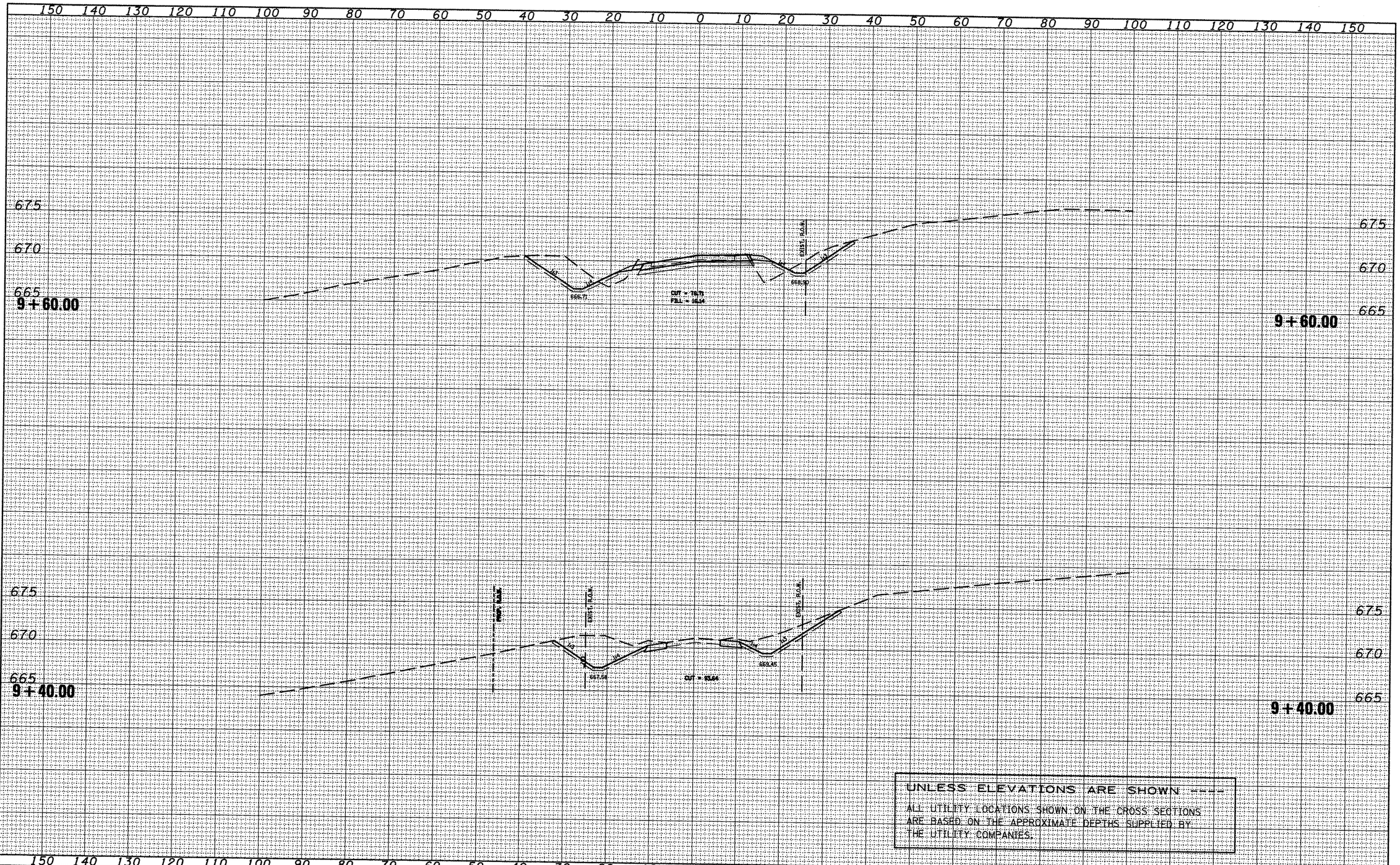
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD SOUTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 9+00.00 TO STA. 9+20.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		917
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			



UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

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

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	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

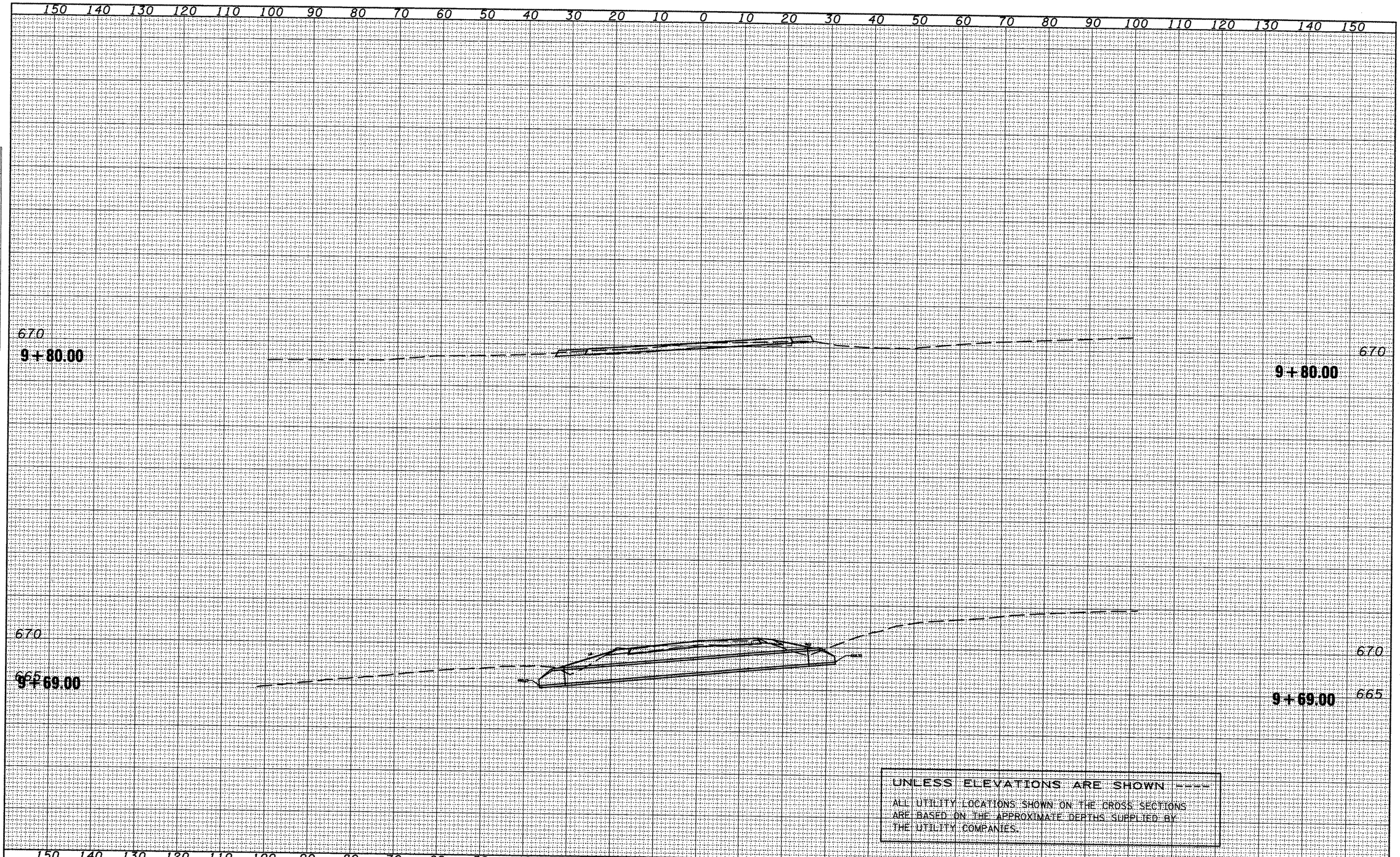
SIDEROAD SOUTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 9+40.00 | TO STA. 9+60.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		40R
		CONTRACT NO. 88773		
		ILLINOIS FED. AID PROJECT		

FINAL SURVEY	NOTE BOOK	NO.

BY	DATE
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	



ORIGINAL SURVEY	NOTE BOOK	NO.

SURVEYED	BY
PLOTTED	
TEMPLATE	
AREAS	
AREAS CHECKED	

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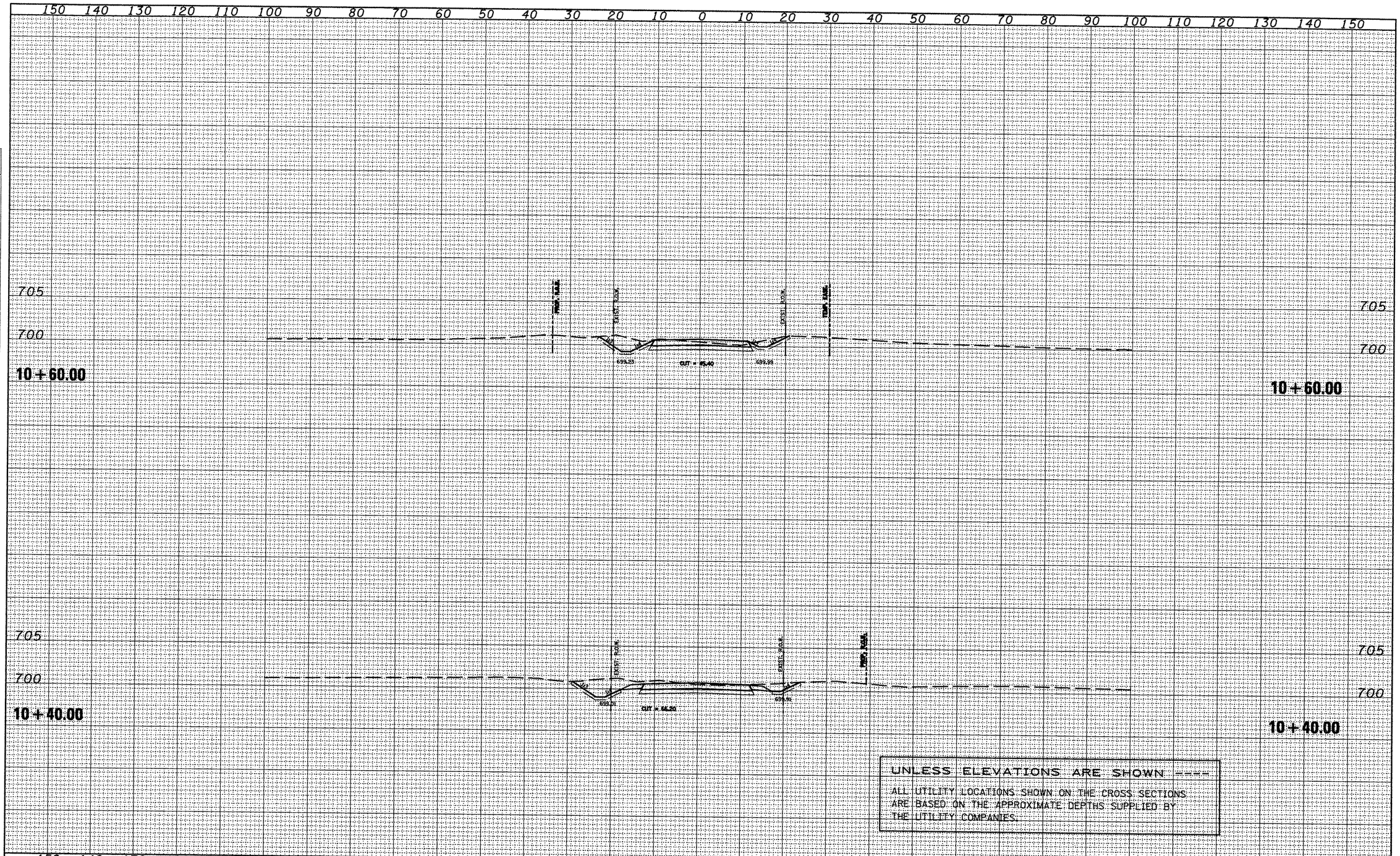
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD SOUTH 1700E

SCALE: | SHEET NO. OF SHEETS | STA. 9+69.00 | TO STA. 9+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		409
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			



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

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

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	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

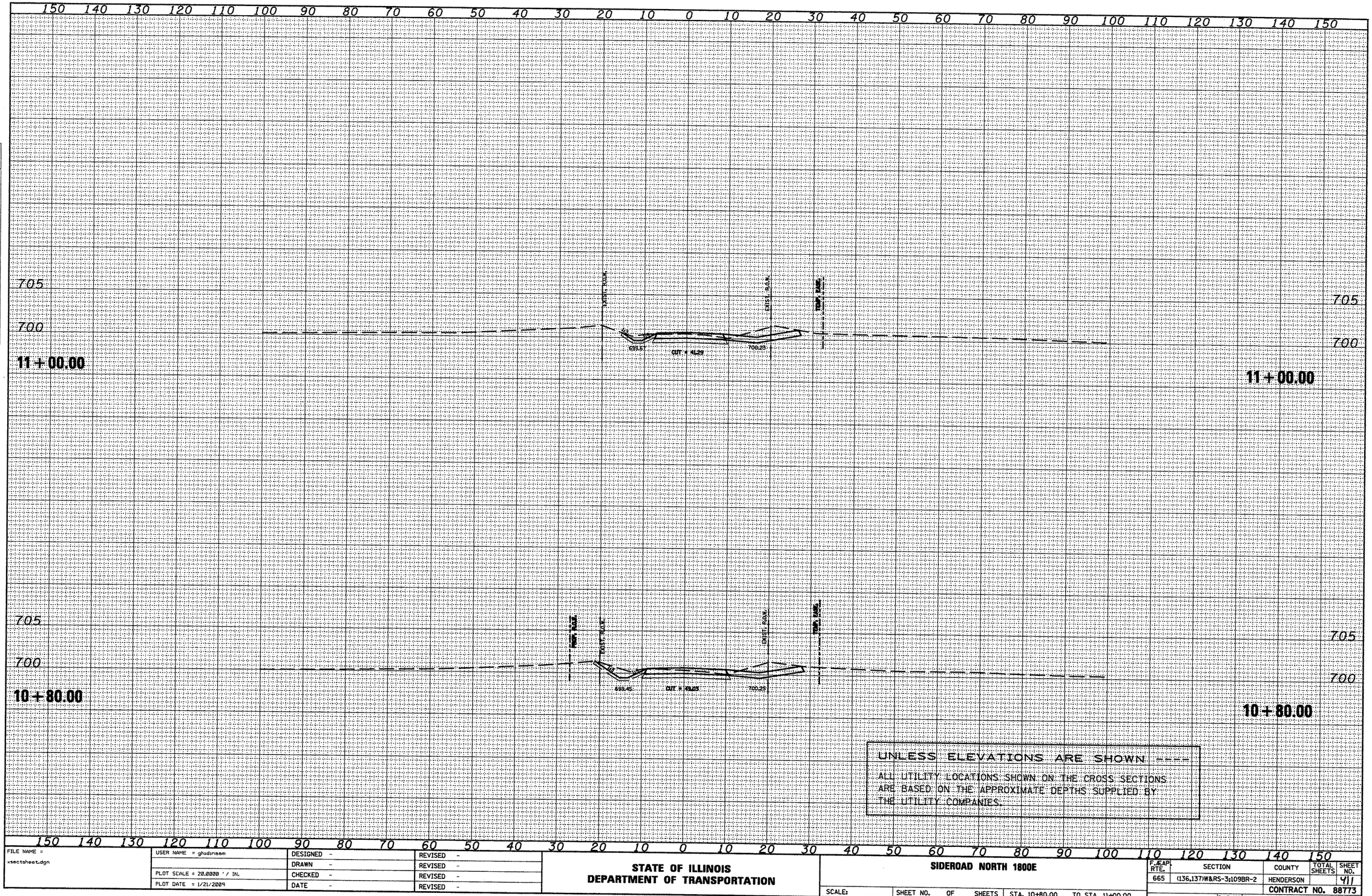
SIDEROAD NORTH 1800E

SCALE: | SHEET NO. OF SHEETS | STA. 10+40.00 TO STA. 10+60.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		9/0
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			

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

BY	DATE



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

BY	DATE

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	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD NORTH 1800E

SCALE: | SHEET NO. OF SHEETS | STA. 10+80.00 TO STA. 11+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		411
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			

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

BY	DATE

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

700

11 + 30.03

700.00

599.88

700

11 + 30.03

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

SURVEY	NOTE BOOK	NO.
	SURVEYED	
	PLOTTED	
	TEMPLATE	
	AREAS	
	AREAS CHECKED	

FILE NAME = xsectsheet.dgn	USER NAME = ghudnaam	DESIGNED -	REVISED -
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	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD NORTH 1800E

SCALE: | SHEET NO. OF SHEETS | STA. 11+30.03 | TO STA. 11+30.03

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		9/2

CONTRACT NO. 88773

ILLINOIS | FED. AID PROJECT

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

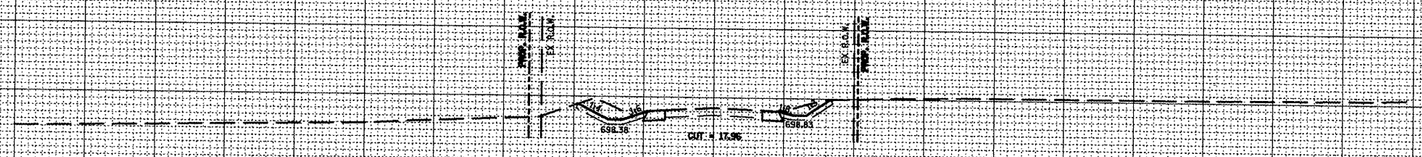
UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

705

700

9+20.00



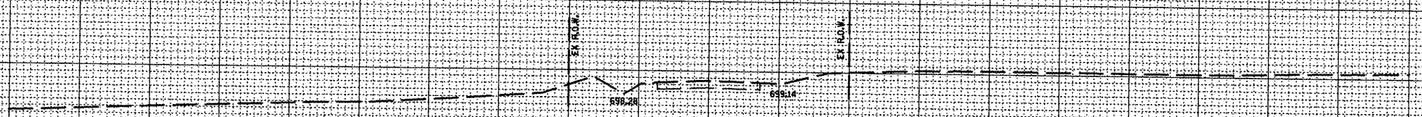
705

700

9+20.00

700

9+00.00



700

9+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

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

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		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD SOUTH 1800E

SCALE: | SHEET NO. OF SHEETS | STA. 9+00.00 | TO STA. 9+20.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		413
		CONTRACT NO. 88773		
		ILLINOIS FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

705

700

9+60.00

UNLESS ELEVATIONS ARE SHOWN ----

ALL UTILITY LOCATIONS SHOWN ON THE CROSS SECTIONS ARE BASED ON THE APPROXIMATE DEPTHS SUPPLIED BY THE UTILITY COMPANIES.

705

700

9+60.00

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

705

700

695

9+40.00

705

700

695

9+40.00

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

FILE NAME = xsectsheet.dgn	USER NAME = ghidnaam	DESIGNED -	REVISED -
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	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD SOUTH 1800E

SCALE: | SHEET NO. OF SHEETS | STA. 9+40.00 | TO STA. 9+60.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		44
		CONTRACT NO. 88773		
	ILLINOIS FED. AID PROJECT			

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

700

9+80.00

9+80.00 700

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

ORIGINAL SURVEY — NOTE BOOK — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED

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		DRAWN -	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 1/21/2009	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SIDEROAD SOUTH 1800E

SCALE: | SHEET NO. OF SHEETS | STA. 9+80.00 | TO STA. 9+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;109BR-2	HENDERSON		915

CONTRACT NO. 88773

ILLINOIS FED. AID PROJECT

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	416
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 88773		

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

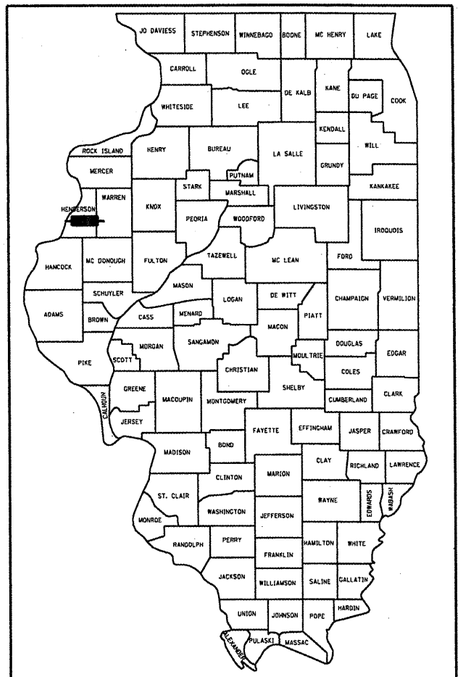
PROPOSED HIGHWAY PLANS

VOLUME II

FAP ROUTES 665 & 534 (IL 116 & IL 94)
SECTION (136,137) W&RS-3;136R;109BR-2
PROJECT
TYPE OF IMPROVEMENT 3R
HENDERSON COUNTY

C-94-347-96

D-94-068-96

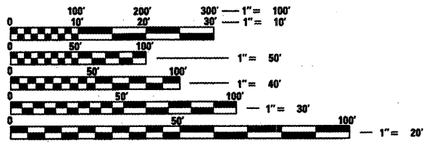


LOCATION OF SECTION INDICATED THUS: –

DESIGN DESIGNATION

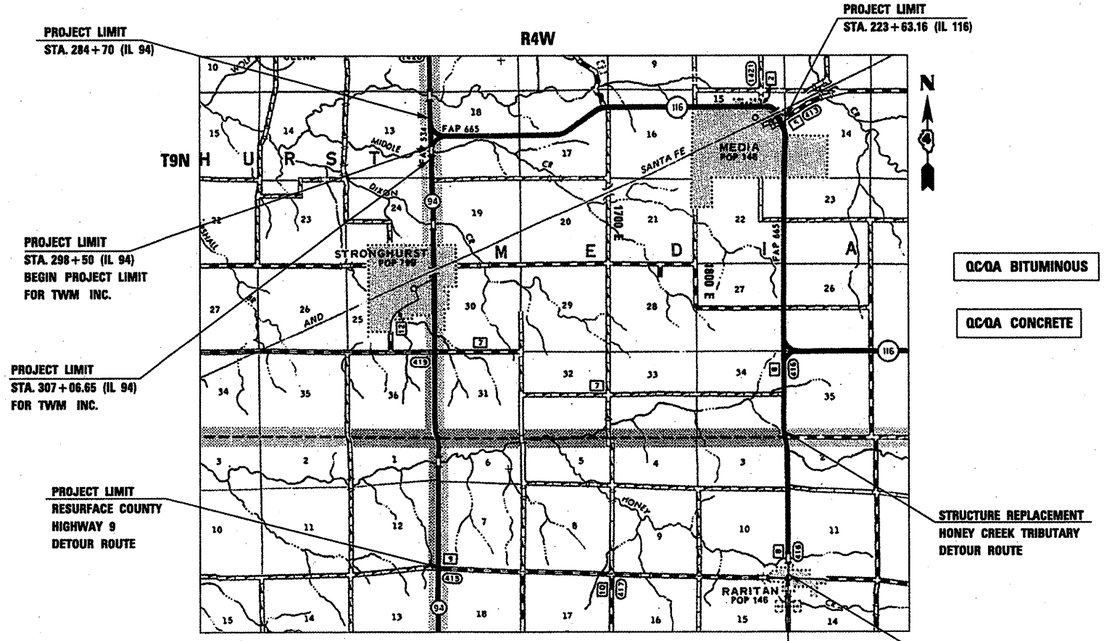
FAP ROUTE 665 (IL 116)
MINOR ARTERIAL
AADT (2006) = 800 (ACTUAL) 1,000 (DESIGN)
MU = 8%
SU = 5%

FAP ROUTE 534 (IL 94)
MINOR ARTERIAL
TRUCK ROUTE CLASS III
AADT (2006) = 1,750
MU = 5%
SU = 4%



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



GROSS LENGTH = 43,532 FT. = 8.2 MILES
NET LENGTH = 22,176 FT. = 4.2 MILES

NPDES PERMIT REQUIRED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ 20 ____

_____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

_____ 20 ____

_____
ENGINEER OF DESIGN AND ENVIRONMENT

_____ 20 ____

_____
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT ENGINEER: RICH DOTSON (309)671-3455
PROJECT MANAGER: RON NOLTE (309)671-3470

CATALOG NO. 031267-00D
CONTRACT NO. 88773

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

UTILITIES - LOCATIONS/INFORMATION ON PLANS

UNLESS NOTED OTHERWISE, THE LOCATIONS OF EXISTING WATER MAINS, GAS MAINS, SEWERS, ELECTRIC POWER LINES, TELEPHONE LINES AND OTHER UTILITIES AS SHOWN ON THE PLANS ARE BASED ON CAREFUL FIELD INVESTIGATION AND THE BEST INFORMATION AVAILABLE, BUT THEY ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ASCERTAIN THEIR EXACT LOCATION FROM THE UTILITY COMPANIES AND BY FIELD INSPECTION.

PLAN ELEVATIONS - U.S.G.S. MEAN SEA LEVEL DATUM

1. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM NGVD29.

PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURE.

TEMPORARY MATERIAL REQUIREMENTS - UTILITY AND DRIVEWAY CROSSING

INCIDENTAL BITUMINOUS SURFACE SHALL BE USED FOR ALL TEMPORARY SIDE ROAD CROSSINGS. AGGREGATE SURFACE COURSE MAY BE USED FOR ALL DRIVEWAY CROSSINGS EXCEPT DURING WINTER SHUTDOWN IN ACCORDANCE WITH ARTICLE 107.09.

ENVIRONMENTAL REVIEWS

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

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

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

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

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

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

AGGREGATE FOR DRIVEWAY REPLACEMENT

THE MATERIAL USED FOR CONSTRUCTION OF PERMANENT AGGREGATE DRIVEWAYS SHALL BE GRAVEL OR CRUSHED STONE, AS DIRECTED BY THE ENGINEER, TO REPLACE IN KIND THE EXISTING AGGREGATE DRIVEWAYS.

NO ADDITIONAL COMPENSATION SHALL BE PROVIDED FOR THIS REQUIREMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF THE PAY ITEM FOR THE AGGREGATE AS SPECIFIED ON THE PLANS.

EMBANKMENT

THE EMBANKMENT SHALL BE PLACED AS SOON AS POSSIBLE TO ALLOW FOR AS MUCH SETTLEMENT AS POSSIBLE BEFORE THE APPROACH PAVEMENT IS CONSTRUCTED.

BITUMINOUS MATERIALS PRIME COAT

AN APPLICATION RATE OF 0.0015646 TONS PER SQUARE YARD SHALL BE USED FOR THIS PROJECT.

PAVING SURFACE COURSE, CONTINUOUS

CONTINUOUS PAVING OPERATIONS ON THE MAIN ROADWAY SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION OF THE BITUMINOUS SURFACE. NO INTERRUPTIONS FOR SIDE ROADS, ENTRANCES, TURN LANES, ETC. WILL BE ALLOWED.

PAVEMENT STATION & PLACEMENT

THE CONTRACTOR SHALL PROVIDE LABOR AND MATERIALS REQUIRED TO IMPRINT PAVEMENT STATION NUMBERS IN THE FINISHED SURFACE OF THE PAVEMENT AND/OR OVERLAY. THE NUMBERS SHALL BE APPROXIMATELY 3/4 INCH WIDE, 5 INCHES HIGH AND 5/8 INCH DEEP.

THE PAVEMENT NUMBER SHALL BE INSTALLED AS SPECIFIED HEREIN:

INTERVAL 200 FEET

BOTTOM OF NUMBERS - 6 INCHES FROM THE INSIDE EDGE OF THE PAVEMENT MARKING .

LOCATION:

- 2, 3 & 5 LANE PAVEMENTS - RIGHT EDGE OF PAVEMENT IN DIRECTION OF INCREASING STATIONS
- MULTI - LANE DIVIDED ROADWAYS - OUTSIDE EDGE OF PAVEMENT IN BOTH DIRECTIONS
- RAMPS - ALONG BASELINE EDGE OF PAVEMENT
- POSITION - STATIONS SHALL BE PLACED SO THEY CAN BE READ FROM THE ADJACENT SHOULDER
- FORMAT - XX+XX WHERE X REPRESENTS THE PAVEMENT STATION

THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT WILL BE CONSIDERED INCLUDED IN THE COST OF THE ASSOCIATED PAVEMENT AND/OR OVERLAY PAY ITEMS

ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

SEEDING

ALL EARTH SURFACES DISTURBED BY CONSTRUCTION OR AS DIRECTED BY THE ENGINEER SHALL BE SEEDED. THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

1.6	ACRES	SEEDING CLASS 2A
7749	SQ YD	EROSION CONTROL BLANKET
150	POUNDS	NITROGEN FERTILIZER NUTRIENT (@ 90 LBS. PER ACRE)
150	POUNDS	PHOSPHORUS FERTILIZER NUTRIENT (@ 90 LBS. PER ACRE)
150	POUNDS	POTASSIUM FERTILIZER NUTRIENT (@ 90 LBS. PER ACRE)

SEEDING CL 7 WILL BE USED FOR TEMPORARY EROSION CONTROL.

COMMITMENTS

- ALL DISTURBED AREAS OF EXISTING VEGETATION AND/OR TREE REMOVAL SHALL BE RE-ESTABLISHED IN ACCORDANCE WITH DISTRICT 4 RE-VEGETATION PLAN OR BRIDGE REPLACEMENT POLICY.
- THE ELEVEN (11) EXISTING STEEL "CARRIER" BEAMS (W24X90) SHALL BE DELIVERED TO THE HENDERSON COUNTY ENGINEER AT THE STRONGHURST, ILLINOIS YARD BY THE CONTRACTOR WHO PERFORMS THE BRIDGE REPLACEMENT.

SHEILA J. KIMLINGER
49175
REGISTERED PROFESSIONAL ENGINEER OF ILLINOIS

SHEILA KIMLINGER P.E. — DATE: 1/22/09
LICENSE NO. 062-049175 — EXPIRES: 11-30-2009

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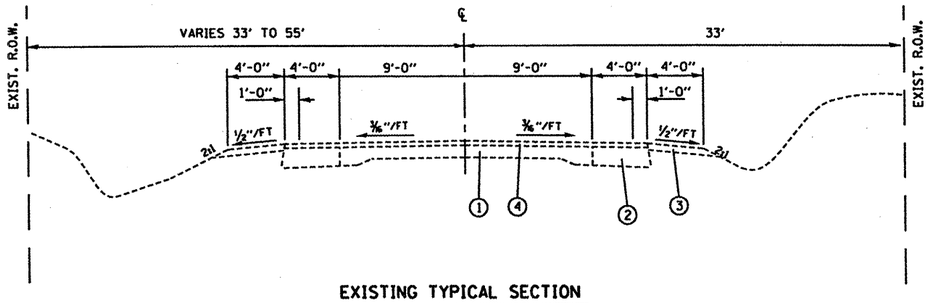
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	417
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



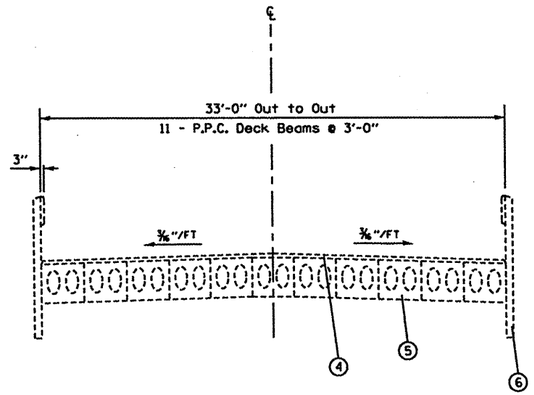
EXISTING TYPICAL SECTION

IL 94

STA. 298+50.00 TO STA. 301+46.45
STA. 301+83.99 TO STA. 307+06.65

LEGEND

1. EXISTING 9"-6"-9" PCC PAVEMENT
2. EXISTING BASE COURSE WIDENING
3. EXISTING 6" AGGREGATE SHOULDERS
4. EXISTING HOT MIX ASPHALT OVERLAY
5. EXISTING 17" P.P.C. DECK BEAMS
6. EXISTING STEEL RAILING, TYPE S



EXISTING TYPICAL SECTION

IL 94

STA. 301+46.45 TO STA. 301+83.99

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		DRAWN - JWS	REVISED -
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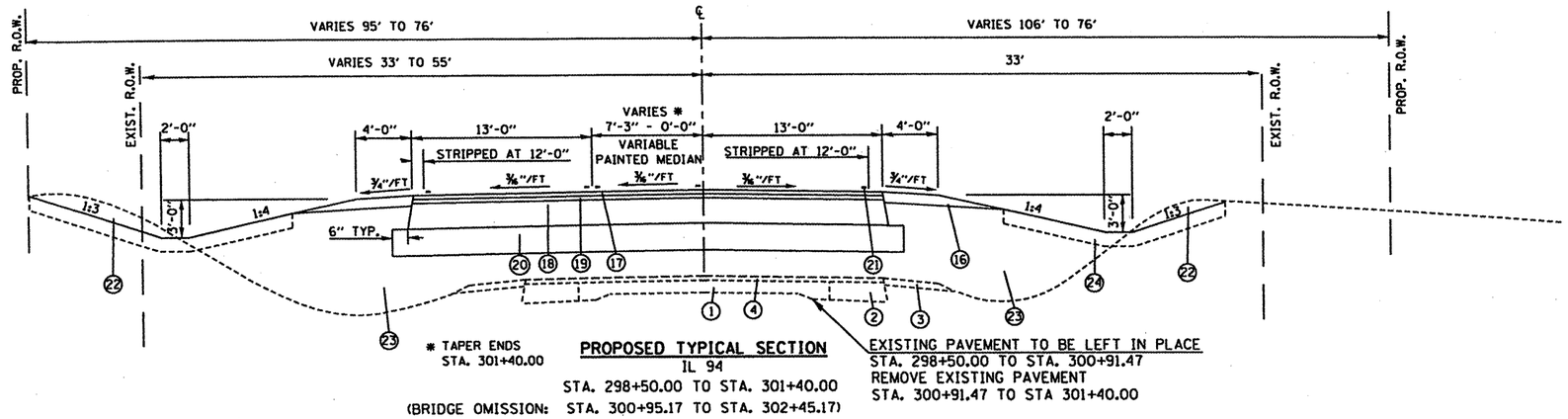
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING TYPICAL SECTION

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 298+50.00 TO STA. 307+06.65

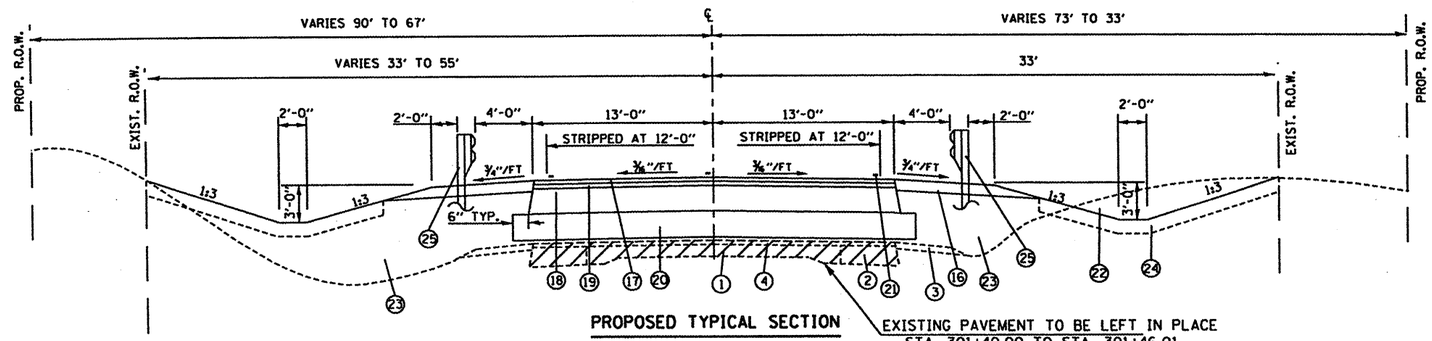
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;1098R-2	HENDERSON	490	418
		CONTRACT NO. 66113		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



* TAPER ENDS
STA. 301+40.00

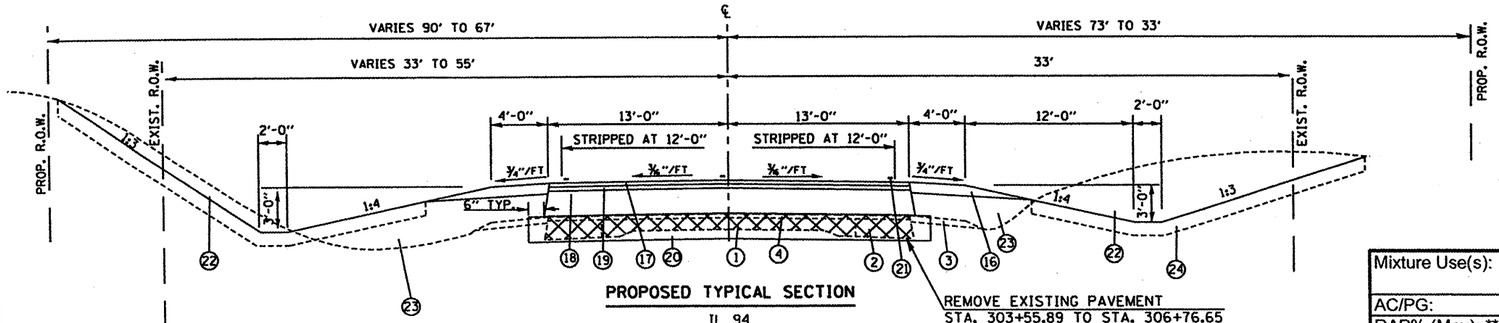
PROPOSED TYPICAL SECTION
IL 94
STA. 298+50.00 TO STA. 301+40.00
(BRIDGE OMISSION: STA. 300+95.17 TO STA. 302+45.17)

EXISTING PAVEMENT TO BE LEFT IN PLACE
STA. 298+50.00 TO STA. 300+91.47
REMOVE EXISTING PAVEMENT
STA. 300+91.47 TO STA 301+40.00



PROPOSED TYPICAL SECTION
IL 94
STA. 301+40.00 TO STA. 303+55.89
(BRIDGE OMISSION: STA. 300+95.17 TO STA. 302+45.17)

EXISTING PAVEMENT TO BE LEFT IN PLACE
STA. 301+40.00 TO STA. 301+46.01
REMOVE EXISTING PAVEMENT
STA. 301+46.01 TO STA. 301+29.90
STA. 301+84.19 TO STA. 302+30.00
BREAK UP EXISTING PAVEMENT AND LEAVE IN PLACE
STA. 302+30.00 TO STA. 303+55.89



PROPOSED TYPICAL SECTION
IL 94
STA. 303+55.89 TO STA. 306+76.65

REMOVE EXISTING PAVEMENT
STA. 303+55.89 TO STA. 306+76.65

NOTE:
STA. 306+76.65 TO STA. 307+06.65
HMA SURFACE REMOVAL - BUTT JOINT

LEGEND

1. EXISTING 9"-6"-9" PCC PAVEMENT
2. EXISTING BASE COURSE WIDENING
3. EXISTING 6" AGGREGATE SHOULDERS
4. EXISTING HOT MIX ASPHALT OVERLAY
16. AGGREGATE SHOULDERS, TY-B, 6"
17. HMA SURFACE, (IL 9.5 MIX), (SBS OR SBR 64-28), 2"
18. HMA BINDER, LOWER LIFTS, 8 3/4"
19. HMA BINDER, TOP LIFT, 2 1/4"
20. SUB-BASE GRANULAR MAT. - TY-B, 12"
21. EPOXY PAVEMENT MARKING
22. EARTH EXCAVATION
23. EMBANKMENT
24. TOPSOIL, 4"
25. STEEL PLATE BEAM GUARDRAIL (SEE SCHEDULES FOR STATIONS)

NOTE:
ITEMS 17, 18, AND 19 ARE PAID FOR AS HMA PAVEMENT, "FULL DPTH", 13".

NOTES:
PER ARTICLE 205.03 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION THE EXISTING PAVEMENT WILL BE TREATED AS FOLLOWS:

- LEFT IN PLACE FROM STA. 298+50.00 TO STA. 300+91.47
- BROKEN UP FROM STA. 302+30.00 TO STA. 303+55.89
- REMOVED FROM STA. 300+91.47 TO STA. 301+46.01, STA. 301+84.19 TO STA. 302+30.00 AND STA. 303+55.89 TO STA. 306+76.65

STRUCTURAL DESIGN INFORMATION
ROAD CLASSIFICATION: MINOR ARTERIAL (NON-URBAN)
STRUCTURAL DESIGN TRAFFIC
PV = 1,592 SU = 88 MU = 70
PERCENT OF STRUCTURAL DESIGN TRAFFIC IN DESIGN LANE
PV = 50% SU = 50% MU = 50%
MINIMUM SUBGRADE SUPPORT RATING:
FLEXIBLE PAVEMENT DESIGN:
13" FULL DEPTH HMA
12" SUBBASE

Mixture Use(s):	Full Depth Bituminous (Lower Lifts)	Full Depth Bituminous (Top Binder Lift)	Full Depth Bituminous (Surface Lift)
AC/PG:	PG 64-22	SBS or SBR 64-28	SBS or SBR 64-28
RAP% (Max): **	25%	10%	10%
Design Air Voids:	4.0% @ N=50	4.0% @ N=50	4.0% @ N=50
Mixture Composition: (Gradation Mixture)	IL 19.0	IL 19.0	IL 9.5 or IL12.5
Friction Aggregate:	N.A.	N.A.	Mixture D (Dolomite Only)

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		DRAWN - JWS	REVISED -
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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED TYPICAL SECTIONS

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 298+50.00 TO STA. 307+06.65

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	419
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

EARTHWORK SCHEDULE

LOCATION (STATION TO STATION)			CHANNEL EXCAVATION (CU YD)	EARTH EXCAVATION (CU YD)	EARTH EXCAVATION ADJUSTED FOR SHRINKAGE FACTOR (CU YD)	EMBANKMENT (CU YD)	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) (CU YD)	TOPSOIL FURNISH AND PLACE, 4" (SQ YD)
ILLINOIS RT. 94								
298+50.00	TO	300+91.47		372	279.0	4,413	-4,134	3,384
300+91.47	TO	302+30.00		169	126.8	946	-819	927
SN: 036-0069			378					
302+30.00	TO	303+55.89		229	171.8	612	-440	990
303+55.89	TO	306+76.65		1,539	1,154.3	377	777	2,448
309+20.00	TO	309+80.00		2	1.5	44	-43	0
TOTAL:			**378**	**2,311**	**1,733**	**6,392**	**-4,659**	**7,749**

TEMPORARY FENCE SCHEDULE

LOCATION (STATION TO STATION)				TEMPORARY FENCE (FOOT)
ILLINOIS RT. 94				
298+50.00	TO	305+87.98	RT	759.00
299+80.86	TO	307+47.53	LT	758.00
TOTAL:				**1,517**

SEEDING SCHEDULE

LOCATION (STATION TO STATION)			SEEDING CLASS 2A (ACRE)	NITROGEN FERTILIZER NUTRIENT (POUND)	PHOSPHORUS FERTILIZER NUTRIENT (POUND)	POTASSIUM FERTILIZER NUTRIENT (POUND)	TEMP. EROSION CONTROL SEEDING (ACRE) (6 APPL.)
ILLINOIS ROUTE 94							
298+50.00	TO	300+91.47	0.7	63.0	63.0	63.0	4.2
300+91.47	TO	302+30.00	0.2	17.1	17.1	17.1	1.1
302+30.00	TO	303+55.89	0.2	18.0	18.0	18.0	1.2
303+55.89	TO	306+76.65	0.5	45.9	45.9	45.9	3.1
309+20.00	TO	309+80.00	0.0	0.0	0.0	0.0	0.0
TOTAL:			**1.6**	**144.0**	**144.0**	**144.0**	**9.6**
PAY TOTAL:			**1.6**	**150.0**	**150.0**	**150.0**	**9.6**

GEOTECHNICAL FABRIC-MIDDLE CREEK

LOCATION	GEOTECH. FABRIC FOR GRND. STAB.
IL 94	SQ. YD.
STA. 298+50 TO 301.01.17	930
STA. 302+39.17 TO 306+76.65	1418
TOTAL	**2348**

ROW MARKER SCHEDULE

LOCATION (STATION TO STATION)			FURNISHING AND ERECTING RIGHT-OF-WAY MARKERS (EACH)
ILLINOIS ROUTE 94			
299+00.00	93.00	RT	1
300+00.00	81.00	RT	1
300+95.00	95.00	LT	1
301+00.00	81.00	RT	1
302+00.00	68.00	LT	1
302+00.00	70.00	RT	1
302+50.00	90.00	LT	1
303+00.00	65.00	RT	1
303+25.00	90.00	LT	1
303+50.00	70.00	LT	1
303+50.00	73.00	RT	1
304+15.00	73.00	RT	1
304+35.00	50.00	RT	1
305+00.00	50.00	RT	1
305+85.00	33.00	RT	1
307+00.00	70.00	LT	1
307+50.00	55.00	LT	1
TOTAL:			**17**

PERMANENT SURVEY MARKERS SCHEDULE

LOCATION		PERMANENT SURVEY MARKERS, TYPE I (EACH)
ILLINOIS ROUTE 94		
301+70.17	CL	1
303+00.00	CL	1
TOTAL:		**2**

FENCE REMOVAL SCHEDULE

LOCATION (STATION TO STATION)						FENCE REMOVAL (FOOT)
ILLINOIS RT. 94						
298+50.00	35.27	TO	299+54.26	35.66	RT	104.26
299+54.26	35.66	TO	299+90.17	33.23	RT	35.99
299+90.17	33.23	TO	300+73.30	56.23	RT	86.25
300+73.30	56.23	TO	301+21.32	72.36	RT	50.66
301+21.32	72.36	TO	301+17.56	44.94	RT	27.68
301+17.56	44.94	TO	301+66.23	44.76	RT	48.67
302+20.18	69.10	TO	302+16.09	38.00	RT	31.37
302+16.09	38.00	TO	305+87.98	40.00	RT	371.90
299+80.86	111.37	TO	299+85.22	73.92	LT	37.70
299+85.22	73.92	TO	300+00.35	60.17	LT	20.44
300+00.35	60.17	TO	300+31.00	61.72	LT	30.69
300+31.00	61.72	TO	301+36.20	54.02	LT	105.48
301+36.20	54.02	TO	301+48.18	54.96	LT	12.02
301+94.63	54.07	TO	303+74.61	58.59	LT	180.04
303+74.61	58.59	TO	307+47.53	57.85	LT	372.92
TOTAL:						1,517

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	PLOT SCALE = 333.3333 ' / IN.	DRAWN - JWS	REVISED -	
	PLOT DATE = 1/21/2009	CHECKED - SJK	REVISED -	SCHEDULE OF QUANTITIES
		DATE - 1/21/2009	REVISED -	SCALE: 1" = 50' | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	420
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

PIPE CULVERT SCHEDULE

LOCATION (STATION TO STATION)							PIPE CULVERTS, TYPE 2, CORRUGATED STEEL OR ALUMINUM CULVERT PIPE 15" (FOOT)	METAL END SECTIONS, 15" (EACH)	PIPE CULVERT REMOVAL (FOOT)
ILLINOIS ROUTE 94									
299+94.40	28.28	RT	TO	300+21.54	28.44	RT			28
302+91.75	27.45	LT	TO	303+13.77	23.87	LT			23
303+63.33	44.88	RT	TO	304+02.86	36.37	RT	37	2	
303+68.00	21.68	RT	TO	303+85.01	21.03	RT			18
309+35.35	30.47	LT	TO	309+75.84	32.22	LT	37	2	
TOTAL:							**74**	**4**	**69**

RIPRAP SCHEDULE

LOCATION (STATION TO STATION)			STONE RIPRAP, CLASS B4 (SQ YD)	STONE RIPRAP, CLASS A5 (SQ YD)	FILTER FABRIC (SQ YD)
ILLINOIS ROUTE 94					
303+53.81	46.31	RT	14		14
309+75.84	32.22	LT	15		15
SN: 036-0069				699	699
TOTAL:			**29**	**699**	**728**

INLET AND PIPE PROTECTION SCHEDULE

LOCATION (STATION TO STATION)			INLET AND PIPE PROTECTION (EACH)
ILLINOIS RT. 94			
304+02.86	36.37	RT	1
309+35.35	30.47	LT	1
TOTAL:			**2**

PERIMETER EROSION BARRIER SCHEDULE

LOCATION (STATION TO STATION)							PERIMETER EROSION BARRIER (FOOT)
ILLINOIS RT. 94							
298+50.00	83.50	RT	TO	299+00.00	74.20	RT	50.9
299+00.00	74.20	RT	TO	300+00.00	73.90	RT	99.8
300+00.00	73.90	RT	TO	301+00.00	72.60	RT	100.0
301+00.00	72.60	RT	TO	301+25.00	66.40	RT	25.8
306+43.00	26.60	RT	TO	307+06.00	20.00	RT	100.0
298+50.00	92.80	LT	TO	299+50.00	90.00	LT	100.0
299+50.00	90.00	LT	TO	300+00.00	78.30	LT	51.2
300+00.00	78.30	LT	TO	300+50.00	73.90	LT	50.2
TOTAL:							**578**

TEMPORARY DITCH CHECK SCHEDULE

LOCATION (STATION TO STATION)		TEMPORARY DITCH CHECK (EACH)
ILLINOIS RT. 94		
299+00.00	LT	1
299+25.00	RT	1
299+56.00	LT	1
300+30.00	RT	1
300+40.00	LT	1
302+10.00	RT	1
302+20.00	LT	1
302+25.00	RT	1
302+45.00	RT	1
302+66.00	LT	1
302+82.00	LT	1
302+85.00	RT	1
302+96.00	LT	1
303+15.00	RT	1
303+21.00	LT	1
303+35.00	RT	1
303+45.00	LT	1
303+95.00	LT	1
304+25.00	RT	1
305+15.00	RT	1
305+55.00	RT	1
305+70.00	LT	1
306+05.00	RT	1
306+25.00	LT	1
TOTAL:		**24**

EROSION CONTROL BLANKET SCHEDULE

LOCATION (STATION TO STATION)							EROSION CONTROL BLANKET (SQ YD)	HEAVY DUTY EROSION CONTROL BLANKET (SQ YD)
ILLINOIS RT. 94								
298+50.00			TO	300+91.47			3,384	
300+91.47			TO	302+30.00			927	
302+30.00			TO	303+55.89			990	
302+40.18	22.25	LT	TO	302+40.18	45.14	LT		25
302+43.16	22.32	RT	TO	302+43.16	51.11	RT		32
303+55.89			TO	306+76.65			2,448	
TOTAL:							**7,749**	**57**

FILE NAME = P:\050301\dgn\CADD SHEETS\D488773-sht-304.006-schedule.dgn

USER NAME = jstein | PLOT SCALE = 333.3333 ' / IN. | PLOT DATE = 1/21/2009

DESIGNED - JWS | DRAWN - JWS | CHECKED - SJK | DATE - 1/21/2009

REVISED - | REVISED - | REVISED - | REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: 1" = 50' | SHEET NO. 2 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;(136R,109BR-2	HENDERSON	490	421
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

GUARDRAIL SCHEDULE

LOCATION (STATION TO STATION)				TRAFFIC BARRIER TERMINAL TYPE 6 (EACH)	TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT) (EACH)	STEEL PLATE BEAM GUARDRAIL, TYPE A (FOOT)	GUARDRAIL REFLECTORS (EACH)	TERMINAL MARKER - DIRECT APPLIED (EACH)	GUARDRAIL REMOVAL (FOOT)	GUARDRAIL AGGREGATE EROSION CONTROL (TON)
ILLINOIS RT. 94										
298+55.51	TO	301+02.94	RT							53
298+89.51	TO	299+39.51	RT		1			1		
298+89.51	TO	303+66.31	RT				7			
299+39.51	TO	300+89.51	RT			150.0				
299+40.00	TO	300+99.31	LT							34
299+74.01	TO	300+24.01	LT		1			1		
299+74.01	TO	304+50.83	LT				7			
300+24.01	TO	300+86.51	LT			62.5				
300+40.00	TO	301+29.00	LT						89	
300+40.00	TO	301+29.00	RT						89	
300+86.51	TO	301+29.66	LT	1						
300+89.51	TO	301+32.66	RT	1						
302+01.00	TO	302+90.00	LT						89	
302+01.00	TO	302+90.00	RT						89	
302+07.68	TO	302+50.83	LT	1						
302+10.66	TO	302+53.81	RT	1						
302+37.40	TO	304+84.83	LT							53
302+40.95	TO	303+71.48	RT							29
302+50.83	TO	304+00.83	LT			150.0				
302+53.81	TO	303+16.31	RT			62.5				
303+16.31	TO	303+66.31	RT		1			1		
304+00.83	TO	304+50.83	LT		1			1		
TOTAL:				4	4	425	14	4	356	169

EPOXY PAVEMENT MARKING SCHEDULE

LOCATION (STATION TO STATION)			SHORT-TERM PAVEMENT MARKING (FOOT)	WORK ZONE PAVEMENT MARKING REMOVAL (SQ FT)	12" MARKINGS SOLID YELLOW (FOOT)	4" MARKINGS SOLID WHITE (FOOT)	4" MARKINGS SOLID YELLOW (FOOT)
ILLINOIS RT. 94							
298+50.00	TO	301+40.00	116	39	54	580	1160
301+40.00	TO	303+40.00	40	13		400	400
303+40.00	TO	307+06.65	73	24		734	92
TOTAL:			229	76	54	1,714	1,652
PAY TOTAL:			229	76	54	3,366	

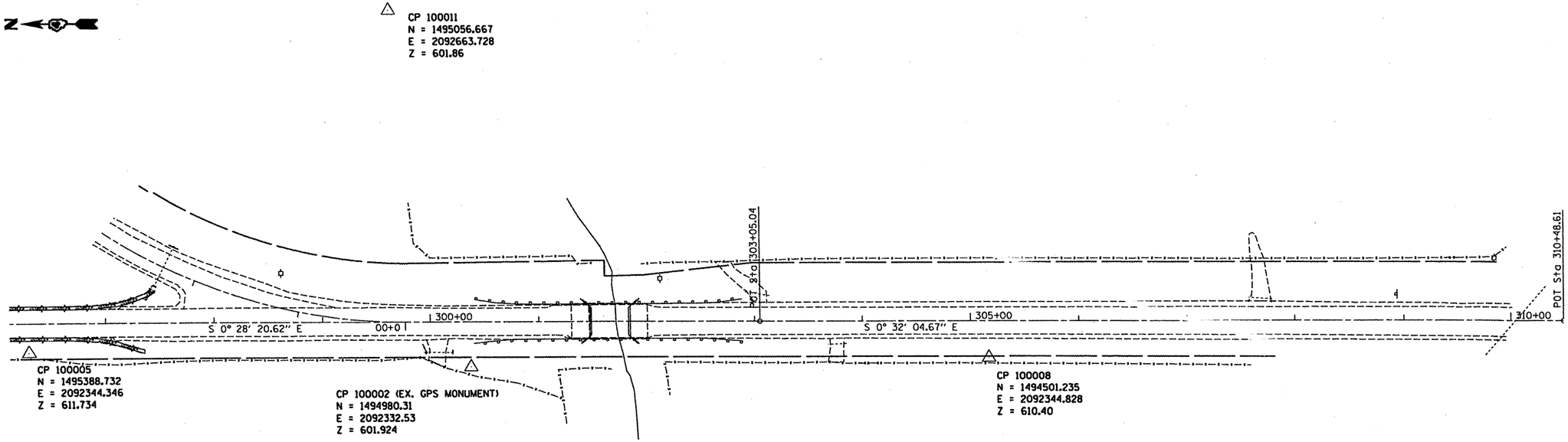
ENTRANCE SCHEDULE

LOCATION (STATION, DIRECTION)			INCIDENTAL HOT-MIX ASPHALT SURFACING (TON)	AGGREGATE SURFACE COURSE, TYPE B (TON)
ILLINOIS RT. 94				
303+81.48	RT	F.E.	10	43
309+52.50	LT	F.E.	10	22
TOTAL:			20	65

PAVING SCHEDULE

LOCATION (STATION TO STATION)			HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT (SQ YD)	PAVEMENT REMOVAL (SQ YD)	PAVEMENT BREAKING (SQ YD)	SUB-BASE GRANULAR MATERIAL, TYPE B 12" (SQ YD)	POLYMERIZED BITUMINOUS MATERIALS (PRIME COAT) (TON)	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50 (TON)	HOT MIX ASPHALT PAVEMENT (FULL DEPTH), 13" (SQ YD)	MATERIAL TRANSFER DEVISE (TON)	BRIDGE APPROACH PAVEMENT (SQ YD)	BRIDGE APPROACH PAVEMENT (SPECIAL) (SQ YD)	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) (SQ YD)	AGGREGATE SHOULDERS TYPE B, 6" (SQ YD)
ILLINOIS RT. 94														
298+50.00	TO	300+95.13					1.4		821	198				
298+50.00	TO	301+01.17				930								224
300+91.47	TO	301+46.01		172										
300+95.17	TO	301+01.17					0.04						24	
301+01.17	TO	301+31.17										116		
301+84.19	TO	302+30.00		144										
302+09.17	TO	302+39.17									114			
302+39.17	TO	302+45.17					0.04						23	
302+39.17	TO	306+76.65				1418								
302+39.17	TO	307+06.65												416
302+45.17	TO	307+06.65					2.2		1247	301				
303+30.00	TO	303+55.89			359									
303+55.89	TO	306+76.65		911										
306+76.65	TO	307+06.65	87					10		10				
TOTAL:			87	1227	359	2,348	3.7	10	2,068	509	114	116	47	640

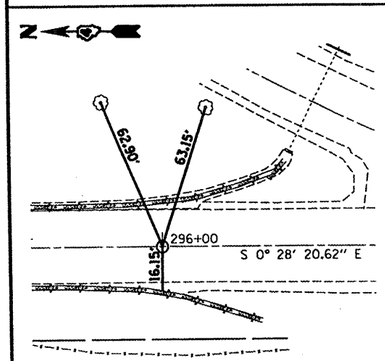
FILE NAME = P:\050301\dgn\CADD SHEETS\D488773-sht-604.006-schedule.dgn	USER NAME = jstein	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SCHEDULE OF QUANTITIES	F.A.P. RTE. 534	SECTION (136,137)W&RS-3;136R;109BR-2	COUNTY HENDERSON	TOTAL SHEETS 490 / SHEET NO. 422
	PLOT SCALE = 333.3333 ' / IN.	DRAWN - JWS	REVISED -						CONTRACT NO. 88773
	PLOT DATE = 1/21/2009	CHECKED - SJK	REVISED -		SCALE: 1" = 50' SHEET NO. 3 OF 3 SHEETS STA. TO STA.		FED. ROAD DIST. NO. 7 ILLINOIS	FED. AID PROJECT	
		DATE - 1/21/2009	REVISED -						



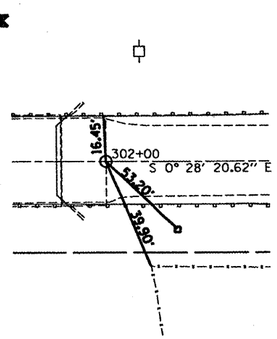
ALIGNMENT TIES

0' 50' 100'

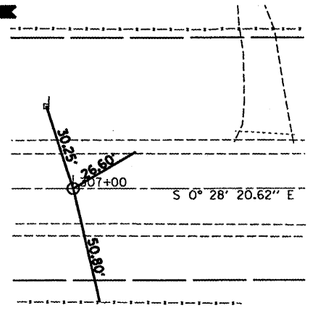
SCALE 1" = 50'



STA. 296+00.00



STA. 302+00.00



STA. 307+00.00

BENCHMARKS

B.M.(CB-1)- Railroad spike in powerpole at South entrance to rest area +/- 500' North of existing structure (036-0012) on East side of IL RT 94.

Elev. 609.424

B.M.(CB-2)- Chiseled "□" on NE corner of bridge approach deck of existing structure (036-0012).

Elev. 605.42

B.M.(CB-3)- Railroad spike in powerpole +/- 600' south of existing structure (036-0012) on East side of IL RT 94.

Elev. 619.28

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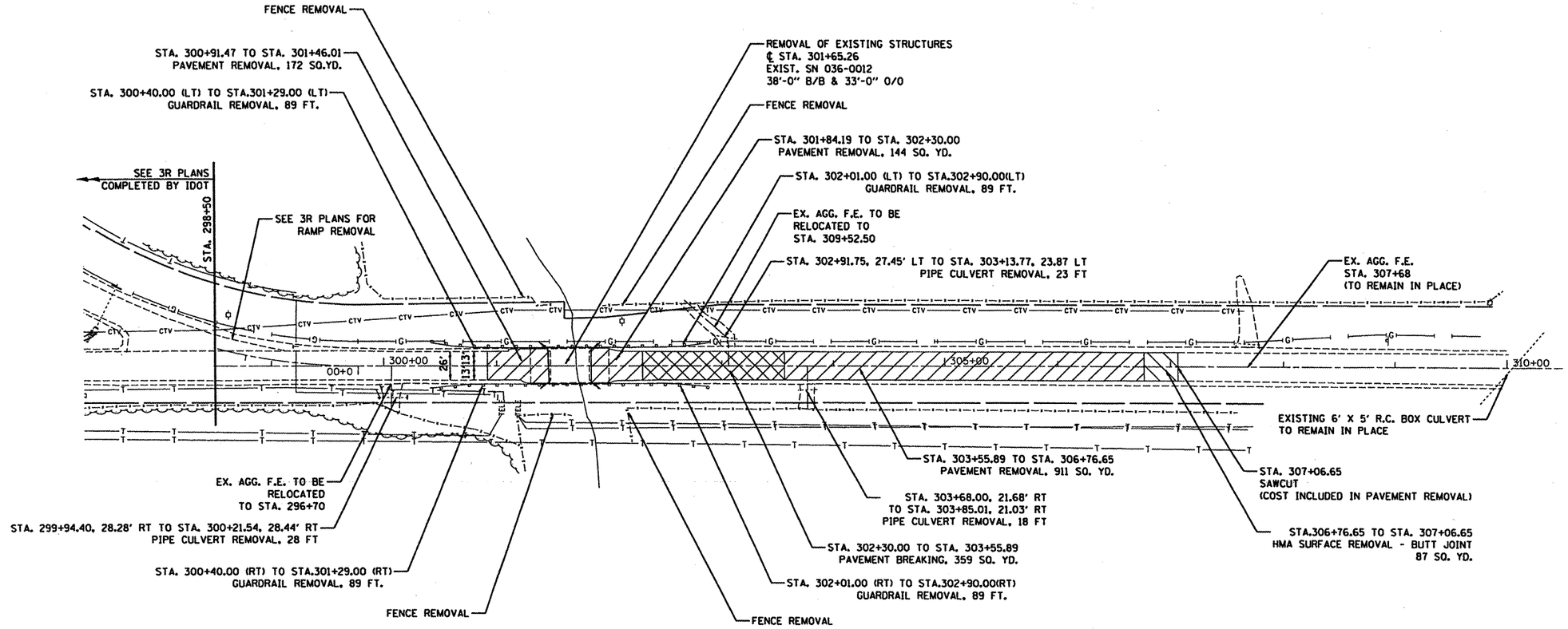
	PLOT DATE = 1/21/2009	CHECKED - SJK	REVISED -
		DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT, TIES AND BENCHMARKS

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 296+00.00 TO STA. 309+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3(136R,109BR-2	HENDERSON	490	423
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



0' 50' 100'

SCALE 1" = 50'

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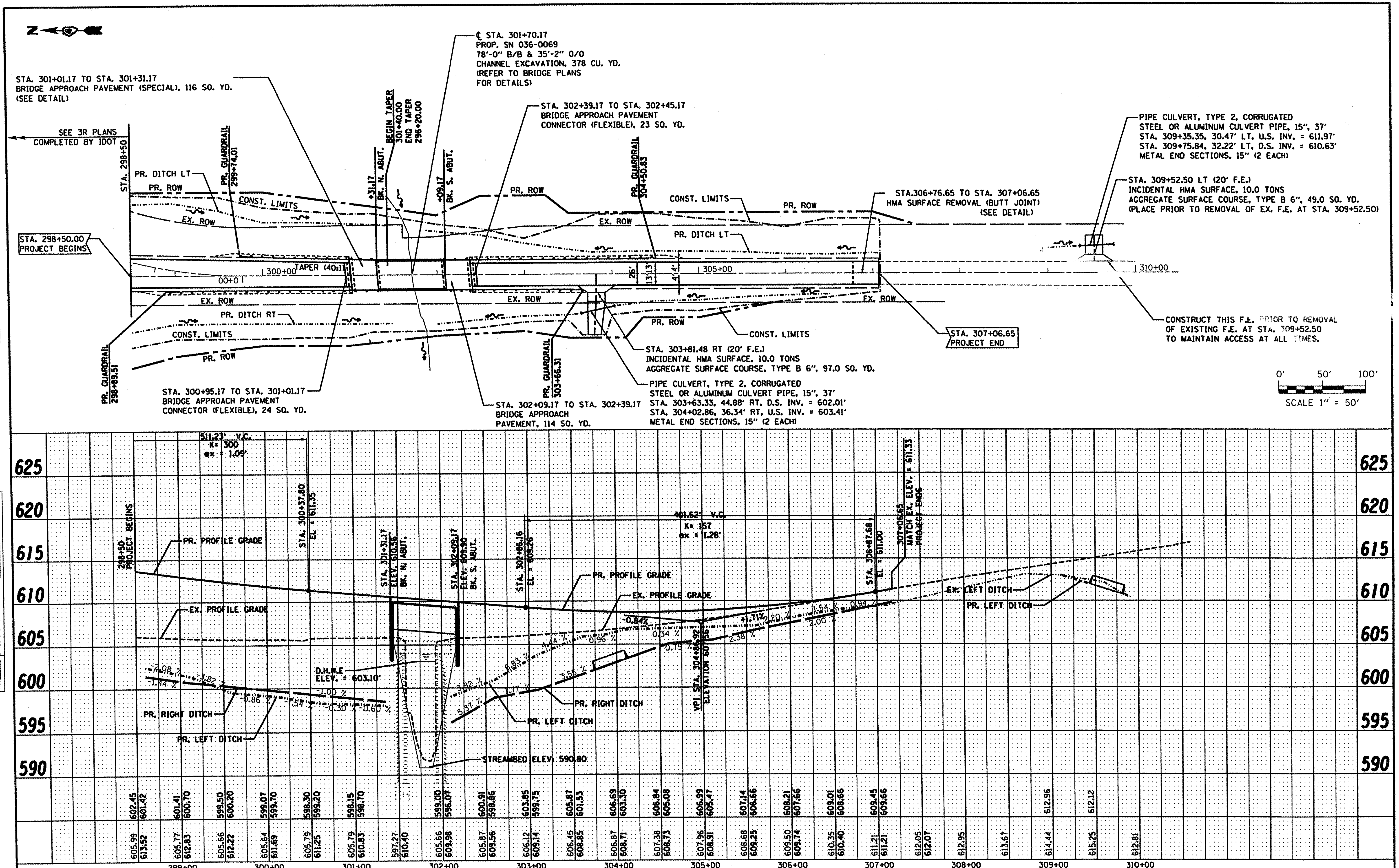
		DRAWN - JWS	REVISED -
	PLOT SCALE = 100.0000 ' / IN.	CHECKED - SJK	REVISED -
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING UTILITY INFORMATION AND REMOVAL ITEMS

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 296+00.00 TO STA. 307+06.65

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	424
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



℄ STA. 301+70.17
PROP. SN 036-0069
78'-0" B/B & 35'-2" O/O
CHANNEL EXCAVATION, 378 CU. YD.
(REFER TO BRIDGE PLANS FOR DETAILS)
STA. 301+01.17 TO STA. 301+31.17
BRIDGE APPROACH PAVEMENT (SPECIAL), 116 SQ. YD.
(SEE DETAIL)
STA. 302+39.17 TO STA. 302+45.17
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE), 23 SQ. YD.
SEE 3R PLANS COMPLETED BY IDOT
STA. 298+50
PR. GUARDRAIL 299+74.01
BEGIN TAPER 301+40.00
END TAPER 296+20.00
+31.17 BK. N. ABUT.
+09.17 BK. S. ABUT.
PR. GUARDRAIL 304+50.83
PIPE CULVERT, TYPE 2, CORRUGATED STEEL OR ALUMINUM CULVERT PIPE, 15", 37'
STA. 309+35.35, 30.47' LT, U.S. INV. = 611.97'
STA. 309+75.84, 32.22' LT, D.S. INV. = 610.63'
METAL END SECTIONS, 15" (2 EACH)
STA. 309+52.50 LT (20' F.E.)
INCIDENTAL HMA SURFACE, 10.0 TONS
AGGREGATE SURFACE COURSE, TYPE B 6", 49.0 SQ. YD.
(PLACE PRIOR TO REMOVAL OF EX. F.E. AT STA. 309+52.50)
STA.306+76.65 TO STA. 307+06.65
HMA SURFACE REMOVAL (BUTT JOINT)
(SEE DETAIL)
PR. DITCH LT
PR. ROW
CONST. LIMITS
EX. ROW
STA. 298+50.00 PROJECT BEGINS
TAPER (40:1)
300+00
305+00
310+00
EX. ROW
PR. DITCH RT
CONST. LIMITS
PR. ROW
STA. 307+06.65 PROJECT END
CONSTRUCT THIS F.E. PRIOR TO REMOVAL OF EXISTING F.E. AT STA. 309+52.50 TO MAINTAIN ACCESS AT ALL TIMES.
PR. GUARDRAIL 298+89.51
PR. GUARDRAIL 303+66.31
STA. 303+81.48 RT (20' F.E.)
INCIDENTAL HMA SURFACE, 10.0 TONS
AGGREGATE SURFACE COURSE, TYPE B 6", 97.0 SQ. YD.
PIPE CULVERT, TYPE 2, CORRUGATED STEEL OR ALUMINUM CULVERT PIPE, 15", 37'
STA. 303+63.33, 44.88' RT, D.S. INV. = 602.01'
STA. 304+02.86, 36.34' RT, U.S. INV. = 603.41'
METAL END SECTIONS, 15" (2 EACH)
STA. 300+95.17 TO STA. 301+01.17
BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE), 24 SQ. YD.
STA. 302+09.17 TO STA. 302+39.17
BRIDGE APPROACH PAVEMENT, 114 SQ. YD.
0' 50' 100'
SCALE 1" = 50'
511.23' V.C.
K= 300
ex = 1.09'
298+50 PROJECT BEGINS
STA. 300+37.80 EL = 611.35
STA. 301+31.17 ELEV. 610.36 BK. N. ABUT.
STA. 302+09.17 ELEV. 609.90 BK. S. ABUT.
STA. 302+86.16 EL = 609.26
401.52' V.C.
K= 157
ex = 1.28'
STA. 306+87.68 EL = 611.00
307+06.65 MATCH EX. ELEV. = 611.33 PROJECT ENDS
PR. PROFILE GRADE
EX. PROFILE GRADE
EX. LEFT DITCH
PR. LEFT DITCH
PR. RIGHT DITCH
D.H.W.E. ELEV. = 603.10'
STREAMBED ELEV. 590.80
VPI STA. 304+86.92 ELEVATION 607.58
625
620
615
610
605
600
595
590
299+00
300+00
301+00
302+00
303+00
304+00
305+00
306+00
307+00
308+00
309+00
310+00

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DESIGNED - JWS	REVISED -
DRAWN - JWS	REVISED -
CHECKED - SJK	REVISED -
DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

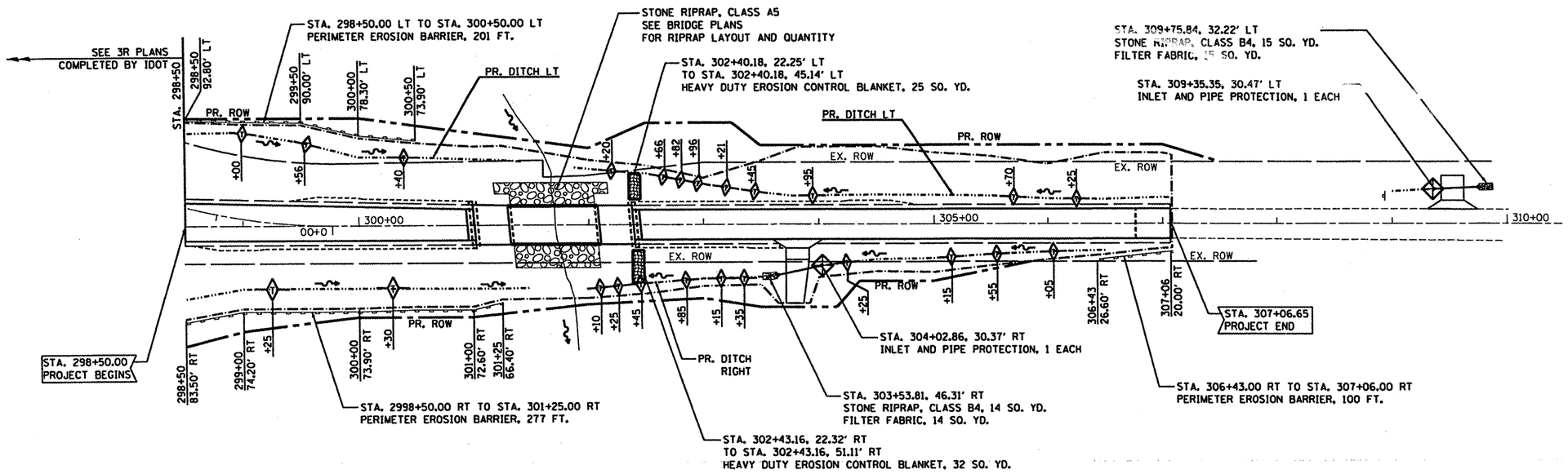
ILLINOIS ROUTE 94 PLAN AND PROFILE

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 298+50.00 TO STA. 309+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	425

CONTRACT NO. 88773

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



LEGEND

- PERIMETER EROSION BARRIER
- TEMPORARY DITCH CHECK
- INLET AND PIPE PROTECTION
- PROPOSED DITCH FLOWLINE
- CONSTRUCTION LIMITS
- HEAVY DUTY EROSION CONTROL BLANKET
- PROPOSED RIPRAP

0' 50' 100'

SCALE 1" = 50'

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		DRAWN - JWS	REVISED -
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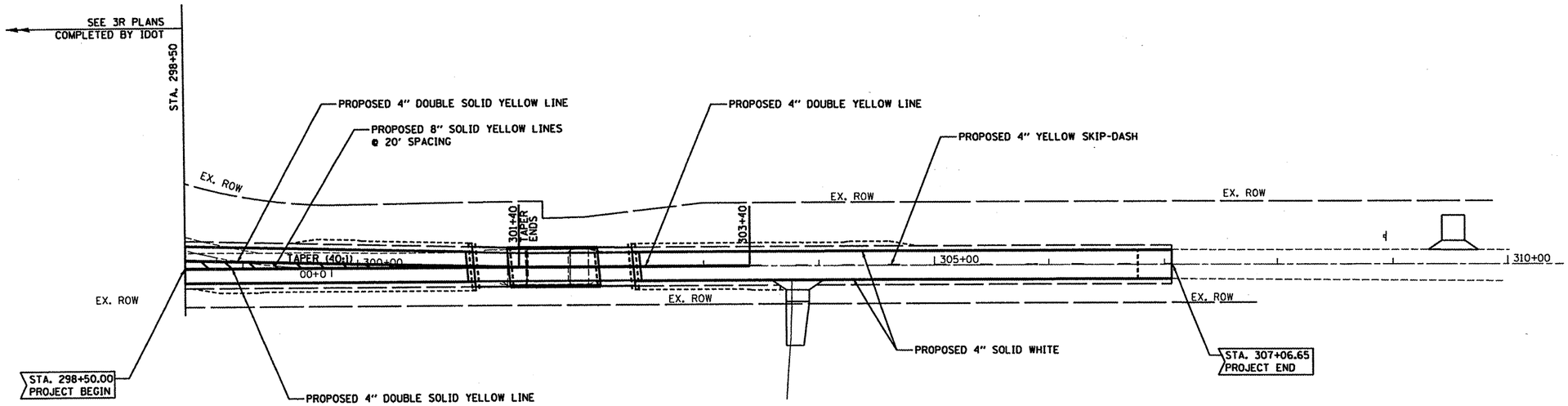
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EROSION AND SEDIMENT CONTROL DETAILS

SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 298+50.00 TO STA. 309+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3(136)109BR-2	HENDERSON	490	426
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



0' 50' 100'

SCALE 1" = 50'

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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING DETAILS

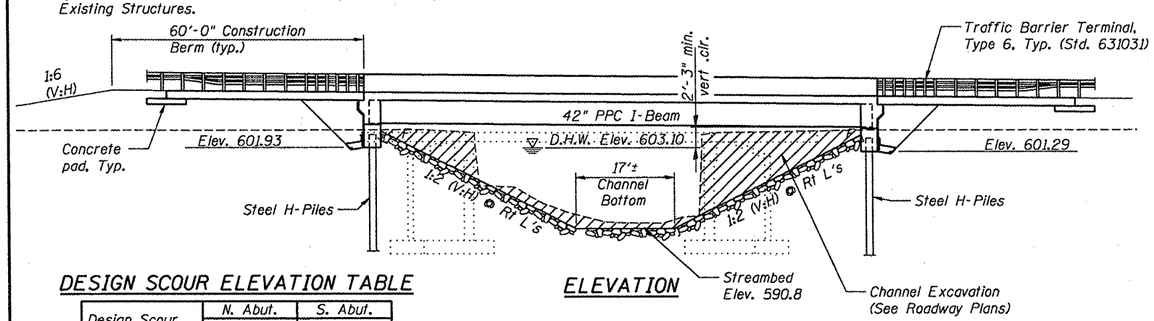
SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 298+50.00 TO STA. 309+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	491	427
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

B.M.- Chiseled "□" on NE corner of bridge approach deck of existing structure.
Elev. 605.42

Existing Structure - S.N. 036-0012 is a single span, 17" PPC Deck Beam superstructure on closed, reinforced concrete abutments. Structure is 38'-0" back to back and 33'-0" out to out. The Structure was rebuilt as F.A. Rte 534, Section 109-BR-1, Sta. 301+61.00 in 1977. Traffic shall be detoured.

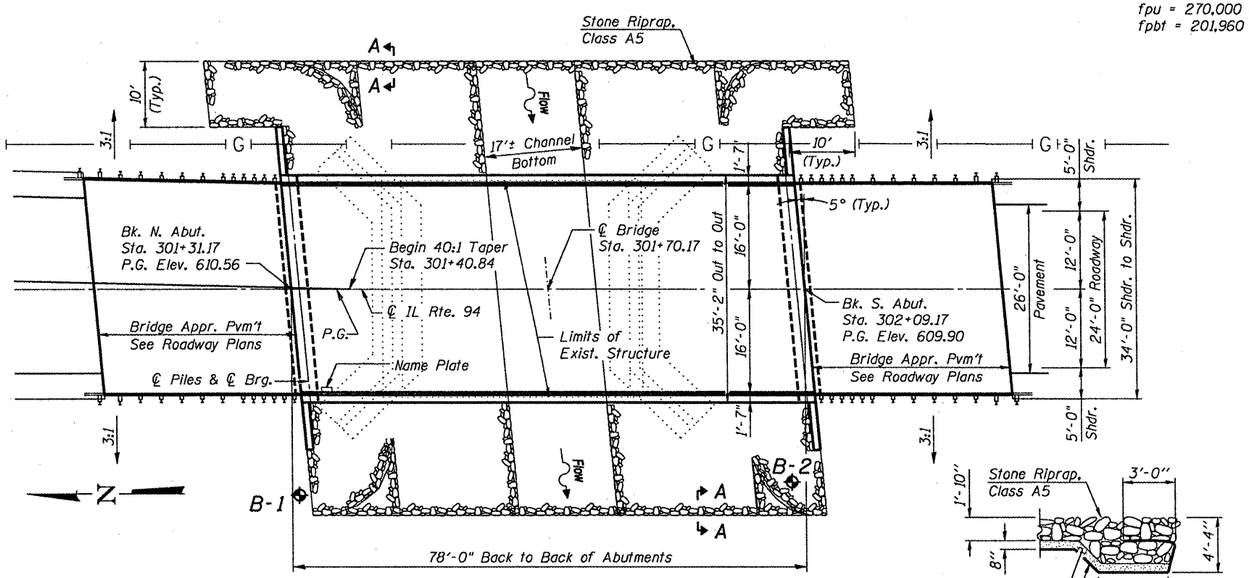
Salvage - All structural steel supports under the existing deck beams shall be salvaged and delivered by the contractor to the Henderson Co. yard in Stronghurst. Cost shall be included in Removal of Existing Structures.



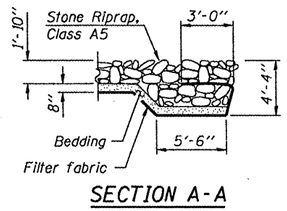
ELEVATION

DESIGN SCOUR ELEVATION TABLE

	N. Abut.	S. Abut.
Design Scour Elevation (Ft.)	601.93	601.29



PLAN



SECTION A-A

DESIGN SPECIFICATIONS

2007 AASHTO LRFD Bridge Design Specifications

LOADING HL-93

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

SEISMIC DATA

Seismic Performance Zone (SPZ) = 1
Bedrock Acceleration Coefficient (A) = 0.038g
Site Coefficient (S) = 1.5

DESIGN STRESSES FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi (reinforcement)

PRECAST PRESTRESSED UNITS

f'c = 7,000 psi
f'ci = 6,000 psi
fpu = 270,000 psi (½"ϕ low lax. strands)
fpbt = 201,960 psi (½"ϕ low lax. strands)

GENERAL NOTES

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

Reinforcement bars designated (E) shall be epoxy coated.

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.

Layout of slope protection system may be varied in the field to suit ground conditions as directed by the Engineer.

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

Slipforming of the parapets is not allowed.

TOTAL BILL OF MATERIAL

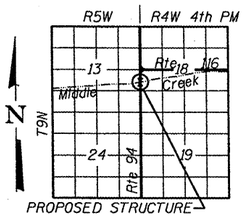
ITEM	UNIT	SUPER	SUB	TOTAL
Porous Granular Embankment (Special)	Cu. Yd.	-	163	163
Stone Riprap, Class A5	Sq. Yd.	-	-	699
Filter Fabric	Sq. Yd.	-	-	699
Removal of Existing Structures	Each	-	-	1
Structure Excavation	Cu. Yd.	-	194	194
Concrete Structures	Cu. Yd.	-	37.4	37.4
Concrete Superstructure	Cu. Yd.	114.9	-	114.9
Bridge Deck Grooving	Sq. Yd.	260	-	260
Concrete Encasement	Cu. Yd.	-	4.2	4.2
Protective Coat	Sq. Yd.	343	-	343
Furnishing and Erecting Precast Prestressed Concrete I Beams, 42"	Foot	462	-	462
Reinforcement Bars, Epoxy Coated	Pound	21300	5040	26340
Bar Splicers	Each	64	-	64
Furnishing Steel Piles HP 12x53	Foot	-	906	906
Driving Piles	Foot	-	906	906
Test Pile Steel HP 12x53	Each	-	1	1
Name Plates	Each	1	-	1
Geocomposite Wall Drain	Sq. Yd.	-	77	77
Pipe Underdrains for Structures, 4"	Foot	-	180	180
Asbestos Bearing Pad Removal	Each			22

INDEX OF SHEETS

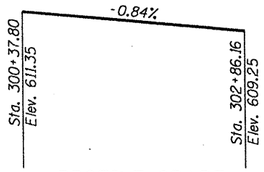
STATION 301+70.17
BUILT 200 BY
STATE OF ILLINOIS
F.A.P. RT. 534 SECTION 109BR-2
LOADING HL93
STR. NO. 036-0069

NAME PLATE

See Std. 515001



LOCATION SKETCH



PROFILE GRADE

ANGELA L. NEMSKY
081-005503
LICENSED STRUCTURAL ENGINEER OF ILLINOIS

1/22/2009

Angela L. Nemsky

EXPIRES 11-30-2010

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

Ralph E. Anderson

ENGINEER OF BRIDGES AND STRUCTURES

GENERAL PLAN & ELEVATION
IL RTE. 94 OVER MIDDLE CREEK
STATION 301+70.17
STRUCTURE NO. 036-0069

WATERWAY INFORMATION

Drainage Area = 7.17 sq. mi.
Ex. Low Grade Elev. = 605.8 @ Sta. 300+10.97
Pr. Low Grade Elev. = 608.7 @ Sta. 304+18.62

Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft. Exist.	Opening Sq. Ft. Prop.	Nat. H.W.E.	Head - Ft. Exist.	Head - Ft. Prop.	Headwater El. Exist.	Headwater El. Prop.
	10	1696	287	449	602.2	0.5	0.3	602.7	602.5
Design	50	2755	319	507	603.1	2.6	0.7	605.7	603.8
Base	100	3248	333	534	603.5	2.9	0.9	606.4	604.4
Overtopping	70	2900	322	-	603.2	2.6	-	605.8	-
Max. Calc.	500	4452	-	582	604.2	-	1.5	-	605.7

DESIGNED	ALN
CHECKED	MJJ
DRAWN	MJJ
CHECKED	ALN

Plotted by: tstein 1/22/2009 10:13:42 AM

P:\050300\dgn\Bridge Sheets & Drawings\0360069-88773-001-GPE.dgn

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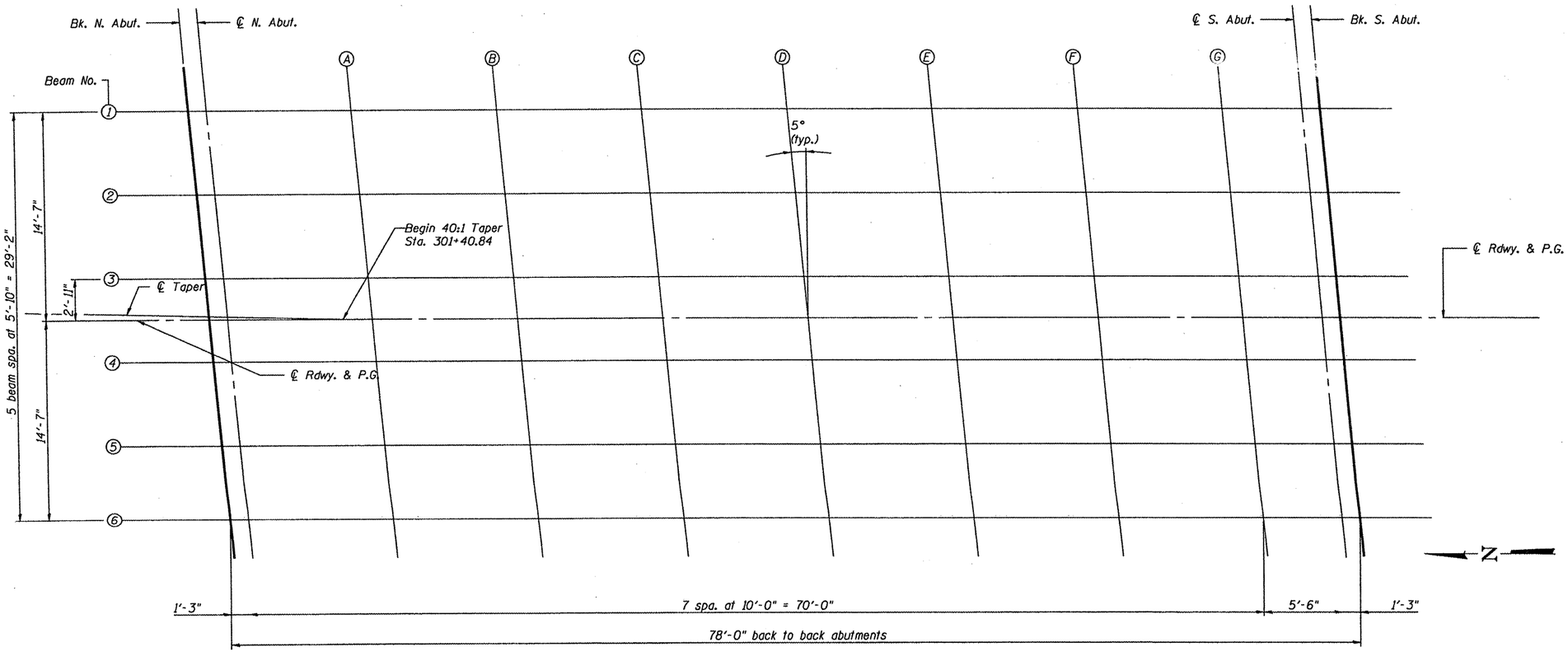
SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS 17	534	109BR-2	HENDERSON	490	428
			CONTRACT NO. 88773		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 036-0069

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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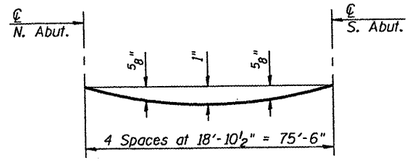
SHEET NO. 2
SHEETS 17

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	429
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

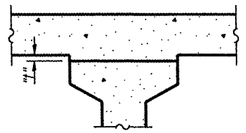
Plotted by: jstein 1/21/2009 8:08:27 AM



DEAD LOAD DEFLECTION DIAGRAM

(Includes weight of concrete, excluding beams).

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



To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown on Sheet 2 of 17. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown below, minus slab thickness, equals the fillet heights "t" above top flanges of beams.

FILLET HEIGHTS

BEAM 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+29.89	-14.58	610.33	610.33
℄ N. Abut.	301+31.15	-14.58	610.32	610.32
A	301+41.15	-14.58	610.24	610.27
B	301+51.15	-14.58	610.15	610.21
C	301+61.15	-14.58	610.07	610.14
D	301+71.15	-14.58	609.98	610.06
E	301+81.15	-14.58	609.90	609.96
F	301+91.15	-14.58	609.82	609.86
G	302+01.15	-14.58	609.73	609.75
℄ S. Abut.	302+06.64	-14.58	609.68	609.68
Bk. S. Abut.	302+07.89	-14.58	609.67	609.67

BEAM 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+30.40	-8.75	610.43	610.43
℄ N. Abut.	301+31.66	-8.75	610.42	610.42
A	301+41.66	-8.75	610.34	610.37
B	301+51.66	-8.75	610.25	610.31
C	301+61.66	-8.75	610.17	610.24
D	301+71.66	-8.75	610.08	610.16
E	301+81.66	-8.75	610.00	610.07
F	301+91.66	-8.75	609.92	609.96
G	302+01.66	-8.75	609.83	609.85
℄ S. Abut.	302+07.15	-8.75	609.79	609.79
Bk. S. Abut.	302+08.40	-8.75	609.77	609.77

BEAM 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+30.91	-2.92	610.52	610.52
℄ N. Abut.	301+32.17	-2.92	610.51	610.51
A	301+42.17	-2.92	610.42	610.45
B	301+52.17	-2.92	610.34	610.40
C	301+62.17	-2.92	610.26	610.33
D	301+72.17	-2.92	610.17	610.25
E	301+82.17	-2.92	610.09	610.15
F	301+92.17	-2.92	610.00	610.05
G	302+02.17	-2.92	609.92	609.93
℄ S. Abut.	302+07.66	-2.92	609.87	609.87
Bk. S. Abut.	302+08.91	-2.92	609.86	609.86

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+31.17	0.00	610.56	610.56
℄ N. Abut.	301+32.42	0.00	610.55	610.55
A	301+42.42	0.00	610.47	610.50
B	301+52.42	0.00	610.38	610.44
C	301+62.42	0.00	610.30	610.37
D	301+72.42	0.00	610.21	610.29
E	301+82.42	0.00	610.13	610.20
F	301+92.42	0.00	610.05	610.09
G	302+02.42	0.00	609.96	609.98
℄ S. Abut.	302+07.91	0.00	609.92	609.92
Bk. S. Abut.	302+09.17	0.00	609.90	609.90

BEAM 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+31.43	2.92	610.52	610.52
℄ N. Abut.	301+32.68	2.92	610.50	610.50
A	301+42.68	2.92	610.42	610.45
B	301+52.68	2.92	610.34	610.39
C	301+62.68	2.92	610.25	610.32
D	301+72.68	2.92	610.17	610.24
E	301+82.68	2.92	610.08	610.15
F	301+92.68	2.92	610.00	610.05
G	302+02.68	2.92	609.91	609.93
℄ S. Abut.	302+08.17	2.92	609.87	609.87
Bk. S. Abut.	302+09.42	2.92	609.86	609.86

BEAM 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+31.94	8.75	610.42	610.42
℄ N. Abut.	301+33.19	8.75	610.41	610.41
A	301+43.19	8.75	610.32	610.35
B	301+53.19	8.75	610.24	610.30
C	301+63.19	8.75	610.16	610.23
D	301+73.19	8.75	610.07	610.15
E	301+83.19	8.75	609.99	610.05
F	301+93.19	8.75	609.90	609.95
G	302+03.19	8.75	609.82	609.83
℄ S. Abut.	302+08.68	8.75	609.77	609.77
Bk. S. Abut.	302+09.94	8.75	609.76	609.76

BEAM 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elevations Adjusted For Dead Load Deflection
Bk. N. Abut.	301+32.45	14.58	610.31	610.31
℄ N. Abut.	301+33.70	14.58	610.30	610.30
A	301+43.70	14.58	610.22	610.25
B	301+53.70	14.58	610.13	610.19
C	301+63.70	14.58	610.05	610.12
D	301+73.70	14.58	609.96	610.04
E	301+83.70	14.58	609.88	609.94
F	301+93.70	14.58	609.79	609.84
G	302+03.70	14.58	609.71	609.73
℄ S. Abut.	302+09.19	14.58	609.66	609.66
Bk. S. Abut.	302+10.45	14.58	609.65	609.65

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DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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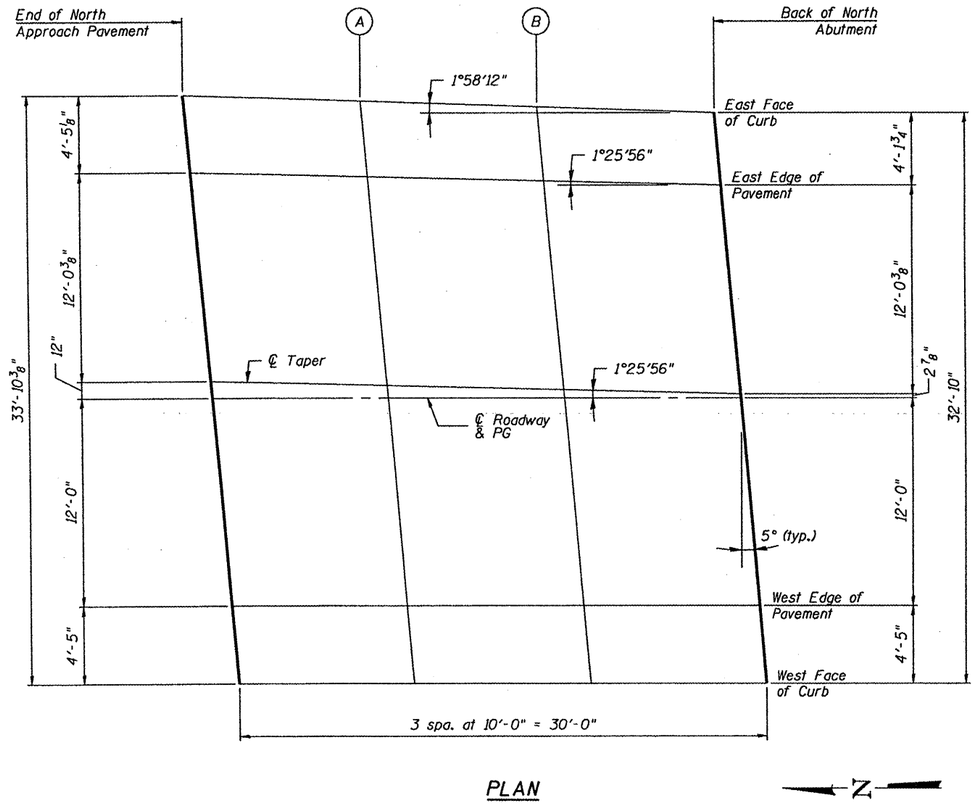
TOP OF SLAB ELEVATIONS
STRUCTURE NO. 036-0069

SHEET NO. 3	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS 17	534	109BR-2	HENDERSON	490	430
			CONTRACT NO.	88773	
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN

EAST FACE OF CURB

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	300+99.64	-17.45	610.53
A	301+09.67	-17.11	610.45
B	301+19.70	-16.76	610.37
Bk. N. Abut.	301+29.73	-16.42	610.30

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	301+00.03	-13.02	610.62
A	301+10.05	-12.77	610.54
B	301+20.07	-12.52	610.46
Bk. N. Abut.	301+30.10	-12.27	610.38

℄ TAPER

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	301+01.08	-0.99	610.80
A	301+11.11	-0.74	610.72
B	301+21.13	-0.49	610.64
Bk. N. Abut.	301+31.15	-0.24	610.56

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	301+01.17	0.00	610.82
A	301+11.17	0.00	610.73
B	301+21.17	0.00	610.65
Bk. N. Abut.	301+31.17	0.00	610.56

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	301+02.22	12.00	610.62
A	301+12.22	12.00	610.54
B	301+22.22	12.00	610.45
Bk. N. Abut.	301+32.22	12.00	610.37

WEST FACE OF CURB

Location	Station	Offset	Theoretical Grade Elevations
End N. Appr. Pav't	301+02.61	16.42	610.52
A	301+12.61	16.42	610.44
B	301+22.61	16.42	610.36
Bk. N. Abut.	301+32.61	16.42	610.27

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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TOP OF NORTH APPROACH SLAB
STRUCTURE NO. 036-0069

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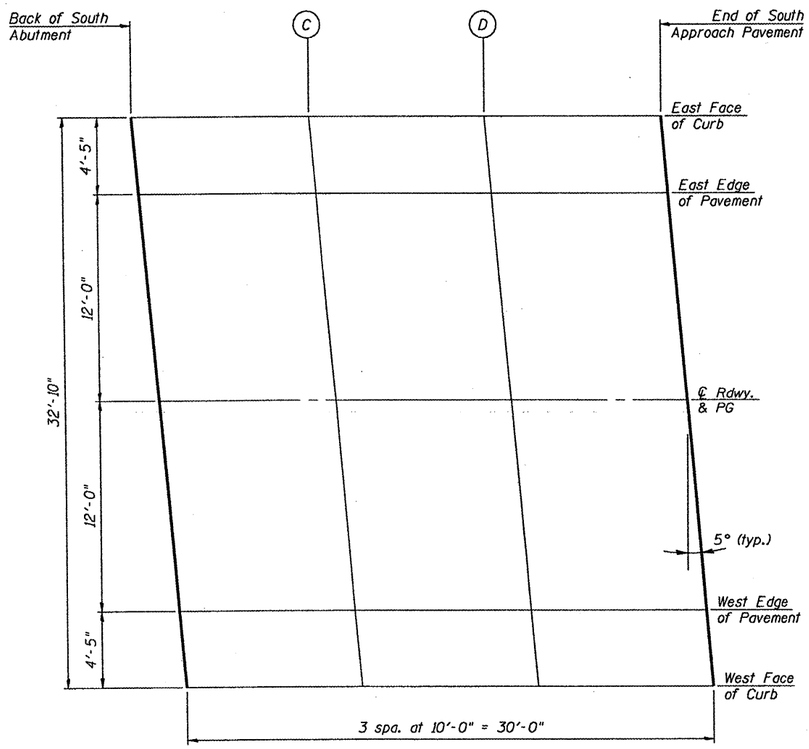
SHEET NO. 4	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS 17	534	109BR-2	HENDERSON	490	431
			CONTRACT NO. 88773		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



PLAN

N

EAST FACE OF CURB

Location	Station	Offset	Theoretical Grade Elevations
Bk. S. Abut.	302+07.73	-16.42	609.64
C	302+17.73	-16.42	609.55
D	302+27.73	-16.42	609.47
End of S. Appr. Pav't.	302+37.73	-16.42	609.38

EAST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. S. Abut.	302+08.12	-12.00	609.73
C	302+18.12	-12.00	609.64
D	302+28.12	-12.00	609.56
End of S. Appr. Pav't.	302+38.12	-12.00	609.47

℄ ROADWAY & PROFILE GRADE

Location	Station	Offset	Theoretical Grade Elevations
Bk. S. Abut.	302+09.17	0.00	609.90
C	302+19.17	0.00	609.82
D	302+29.17	0.00	609.74
End of S. Appr. Pav't.	302+39.17	0.00	609.65

WEST EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
Bk. S. Abut.	302+10.22	12.00	609.71
C	302+20.22	12.00	609.62
D	302+30.22	12.00	609.54
End of S. Appr. Pav't.	302+40.22	12.00	609.46

WEST FACE OF CURB

Location	Station	Offset	Theoretical Grade Elevations
Bk. S. Abut.	302+10.61	16.42	609.61
C	302+20.61	16.42	609.53
D	302+30.61	16.42	609.44
End of S. Appr. Pav't.	302+40.61	16.42	609.36

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

TOP OF SOUTH APPROACH SLAB
STRUCTURE NO. 036-0069

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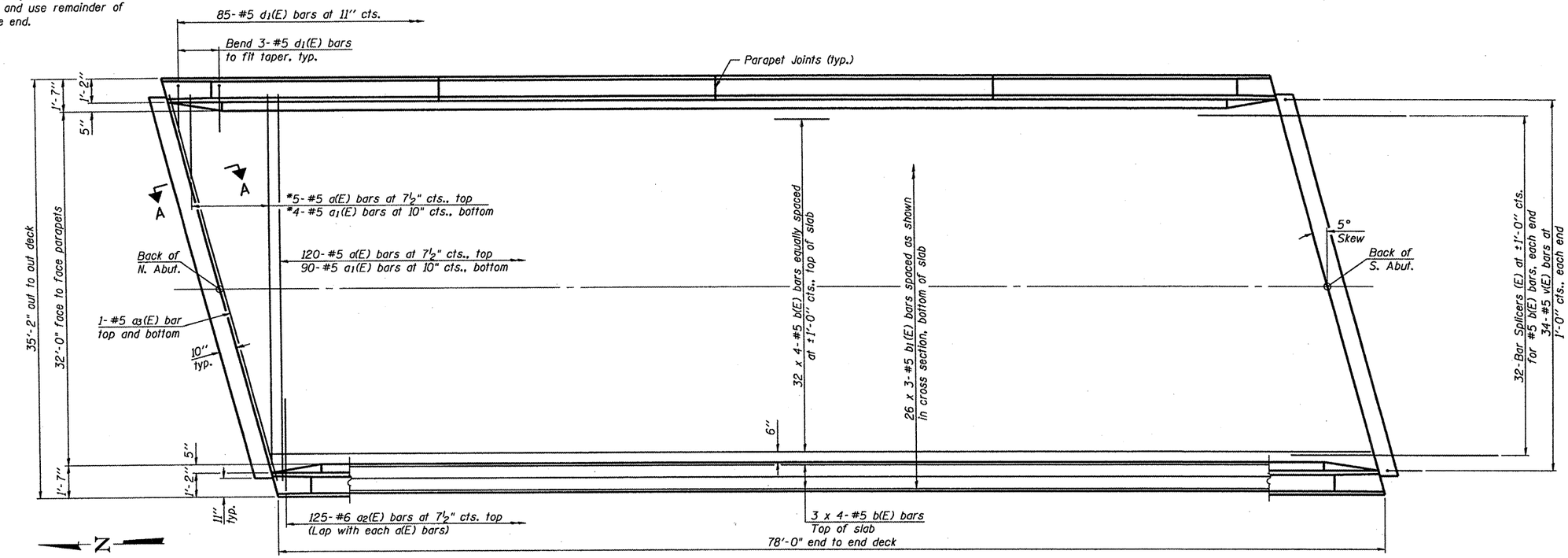
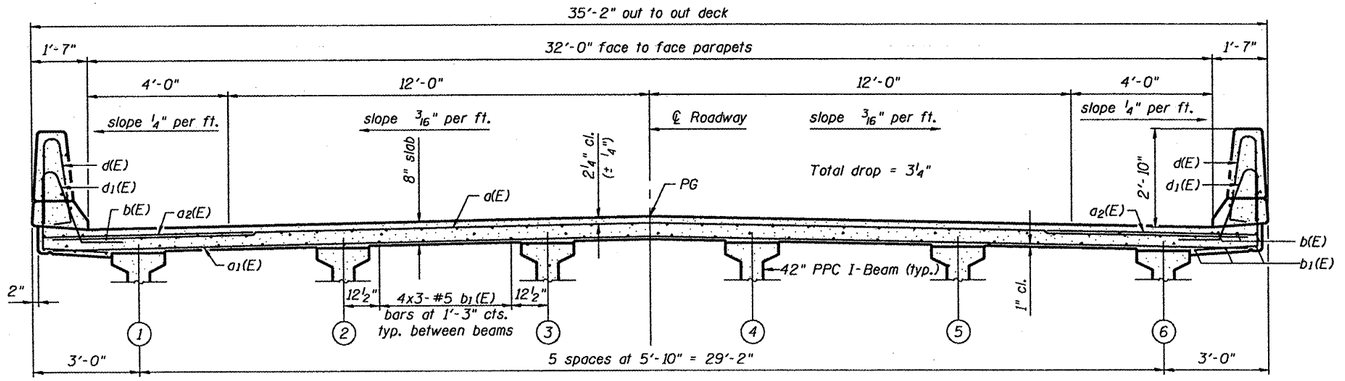
SHEET NO. 5	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS 17	534	109BR-2	HENDERSON	490	432
			CONTRACT NO. 88773		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Plotted by: Isteln 1/21/2009 10:01:44 AM

* Order a(E) and a_1(E) bars full length. Cut to fit skew and use remainder of bars in opposite end.



PLAN



CROSS SECTION

(Looking South)

Notes:

See Sheet 7 of 17 for superstructure details and Bill of Material.

Bars indicated thus 32 x 2-#5 etc. indicates 32 lines of bars with 2 lengths per line.

See Sheet 7 of 17 for parapet reinforcement.

MINIMUM BAR LAP

(Slab)

#5 bar = 1'-8"

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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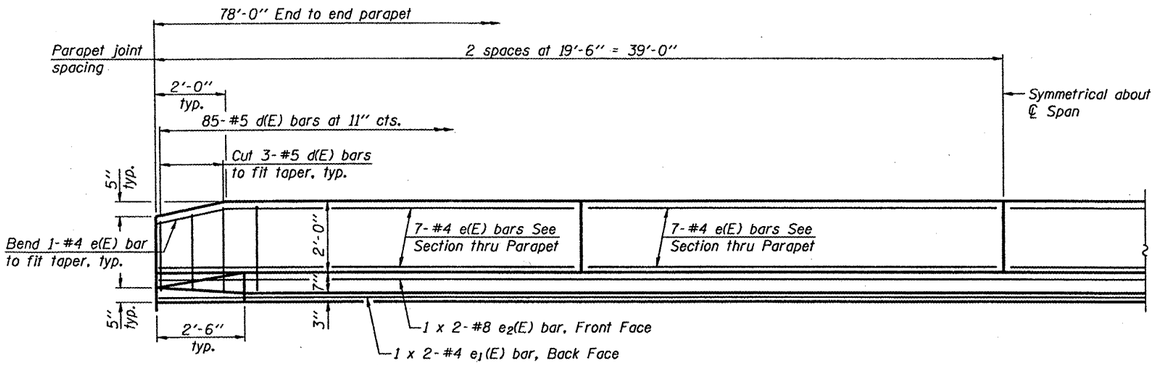
SHEET NO. 6
SHEETS 17

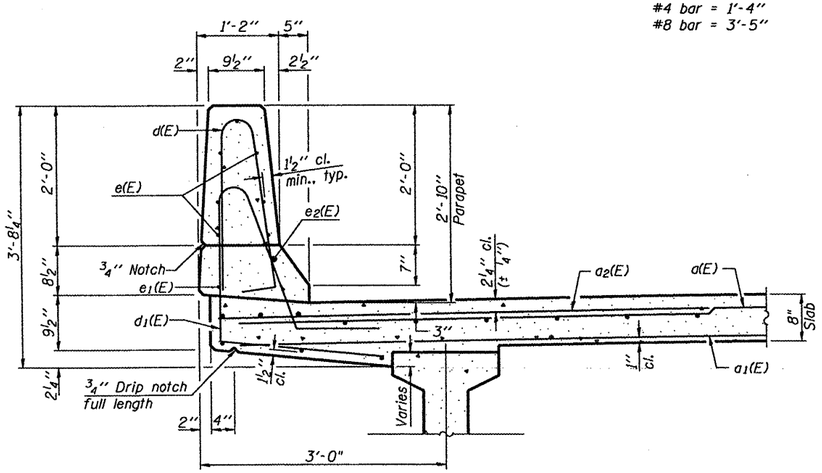
SUPERSTRUCTURE
STRUCTURE NO. 036-0069

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	433
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

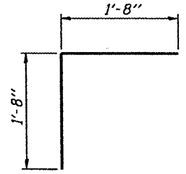


INSIDE ELEVATION OF PARAPET

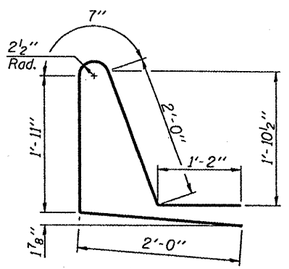
MINIMUM BAR LAP
(Parapet)
#4 bar = 1'-4"
#8 bar = 3'-5"



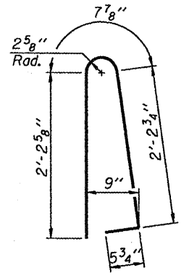
SECTION THRU PARAPET



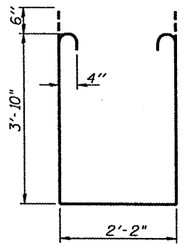
BAR v(E)



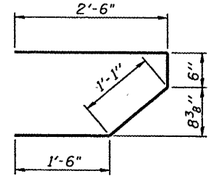
BAR d1(E)



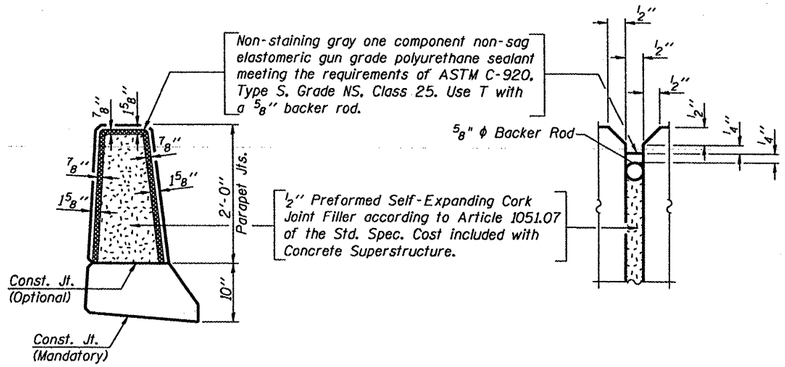
BAR d(E)



BAR s1(E)



BAR s(E)



PARAPET JOINT DETAILS

SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	125	#5	34'-6"	
a1(E)	94	#5	34'-2"	
a2(E)	250	#6	6'-0"	
a3(E)	4	#5	34'-10"	
b(E)	152	#5	20'-8"	
b1(E)	78	#5	27'-0"	
d(E)	170	#5	5'-7"	
d1(E)	170	#5	7'-8"	
e(E)	56	#4	19'-2"	
e1(E)	4	#4	39'-6"	
e2(E)	4	#8	40'-7"	
m(E)	4	#6	33'-1"	
m1(E)	6	#6	34'-11"	
m2(E)	24	#6	8'-2"	
m3(E)	10	#6	3'-8"	
m4(E)	4	#6	1'-9"	
s(E)	72	#5	5'-7"	
s1(E)	62	#4	10'-10"	
v(E)	68	#5	3'-4"	
Reinforcement Bars, Epoxy Coated		Lbs.	21,300	
Concrete Superstructure		Cu. Yds.	114.9	
Bar Splicers		Each	64	

Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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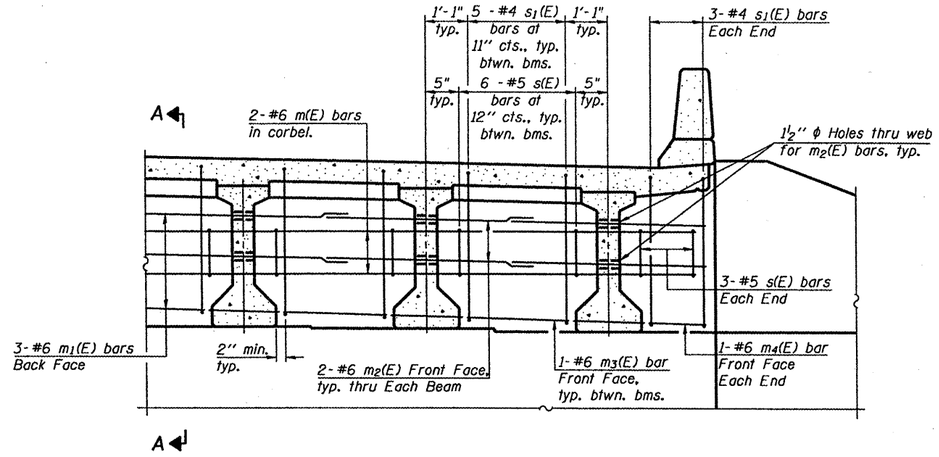
TWM EXCEPTIONAL SERVICE. NOTHING LESS.

SHEET NO. 7
SHEETS 17

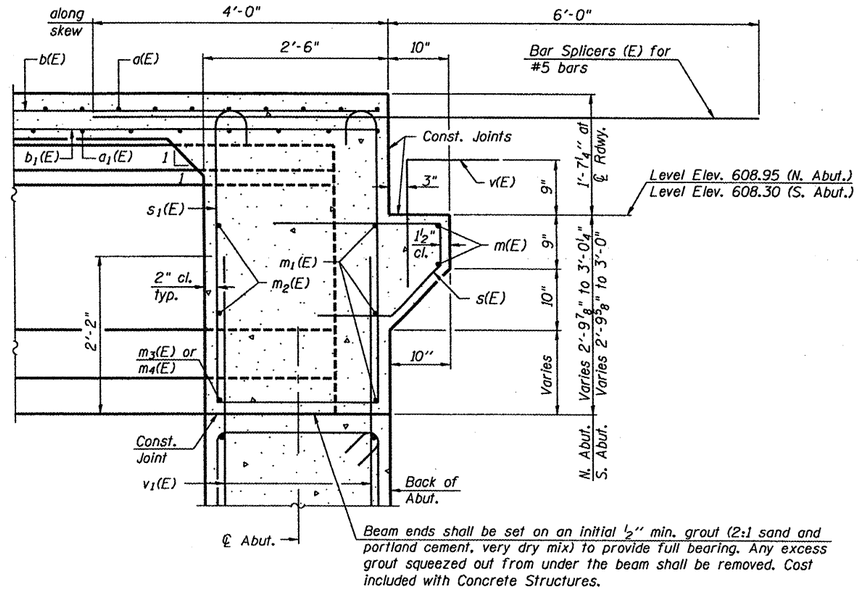
SUPERSTRUCTURE DETAILS
STRUCTURE NO. 036-0069

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	434
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

P:\060701.dgn\Bridge Sheets & Drawings\0360069-88773-007-Superstructure Dtls.dgn



DIAPHRAGM ELEVATION AT ABUTMENT



SECTION A-A

Dimensions at right angles to abutment, except as shown.

MIN. BAR LAP

#6 bar = 2'-9"

Notes:

Reinforcement bars in diaphragm are billed with superstructure on sheet 7 of 17.

Concrete in diaphragm is included with Concrete Superstructure on sheet 7 of 17.

For details of bars s(E) and s_1(E) see sheet 7 of 17.

The s(E) and s_1(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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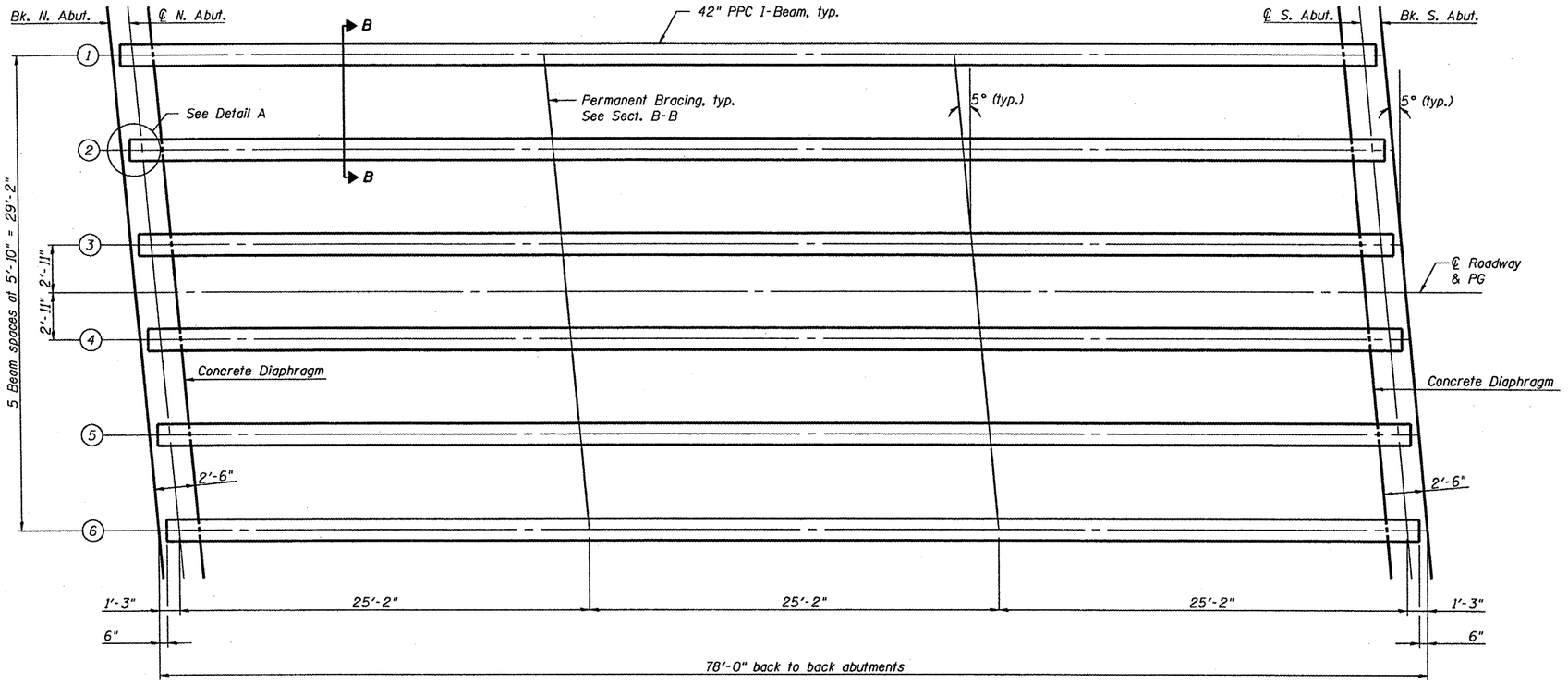
SHEET NO. 8
SHEETS 17

DIAPHRAGM DETAILS
STRUCTURE NO. 036-0069

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	435
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

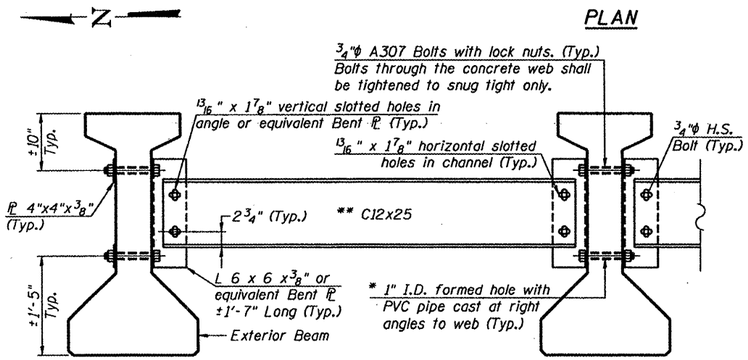


INTERIOR BEAM REACTION TABLE			
		N. Abut.	S. Abut.
R_{DC1}	(k)	41.1	41.1
R_{DC2}	(k)	5.6	5.6
R_{DW}	(k)	11.0	11.0
R_{L+Imp}	(k)	72.2	72.2
R_{Total}	(k)	129.9	129.9

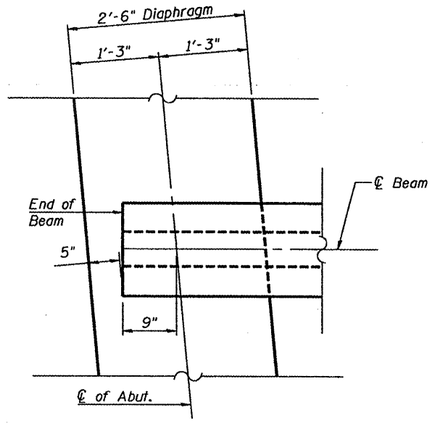
INTERIOR BEAM MOMENT TABLE		
		0.5 Sp. 1
I	(in^4)	90,956
I'	(in^4)	265,256
S_b	(in^3)	5,152.7
S_b'	(in^3)	8633
S_t	(in^3)	3,735.6
S_t'	(in^3)	23,526
DC1	(k/')	1.089
M_{DC1}	('k)	776
DC2	(k/')	0.150
M_{DC2}	('k)	107
DW	(k/')	0.292
M_{DW}	('k)	208
M_{L+Imp}	('k)	1,076

I: Non-composite moment of inertia of beam section ($in.^4$).
I': Composite moment of inertia of beam section ($in.^4$).
S_b: Non-composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_b': Composite section modulus for the bottom fiber of the prestressed beam ($in.^3$).
S_t: Non-composite section modulus for the top fiber of the prestressed beam ($in.^3$).
S_t': Composite section modulus for the top fiber of the prestressed beam ($in.^3$).
DC1: Un-factored non-composite dead load (kips/ft.).
M_{DC1}: Un-factored moment due to non-composite dead load (kip-ft.).
DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).
M_{DC2}: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).
DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).
M_{DW}: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft).
M_{L+Imp}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

PLAN



SECTION B-B



DETAIL A

NOTES:
All materials for bracing shall be hot dip galvanized according to AASHTO M111 unless otherwise noted.
Two hardened washers are required for each set of oversized holes.
All holes shall be 15/16"ϕ unless otherwise noted.
5/16" x 3" x 3" plate washers are required over all slotted holes.
All bolts shall be galvanized according to AASHTO M232.
Bracing shall be installed as beams are erected and tightened as soon as possible during erection.
Permanent bracing shall not be paid for separately, but shall be included in the cost of furnishing and erecting prestressed beams.
Calculated weight of structural steel = 1920 lbs

* Fabricator shall locate to miss strands within permissible tolerances.

** Alternate C12x30 channels are permitted to facilitate material acquisition. Calculated weight of structural steel is based on lighter section. The alternate, if utilized, shall be provided at no extra cost to the Department.

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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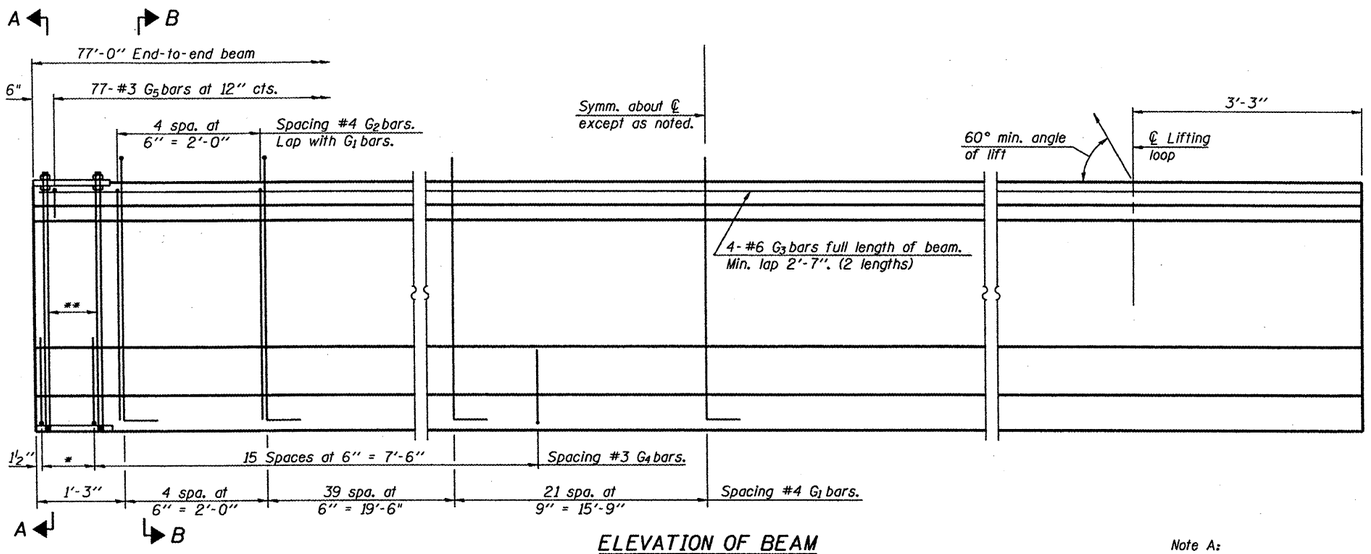
SHEET NO. 9
SHEETS 17

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	436
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

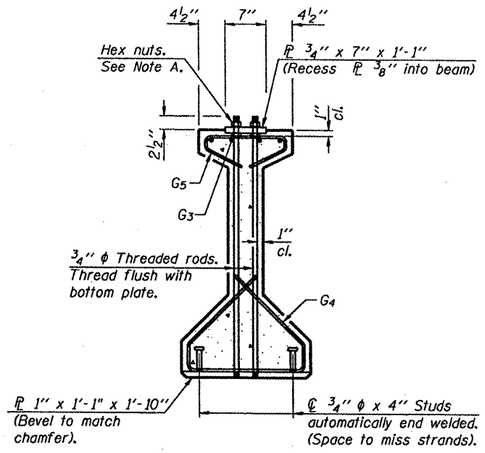
FRAMING PLAN
STRUCTURE NO. 036-0069



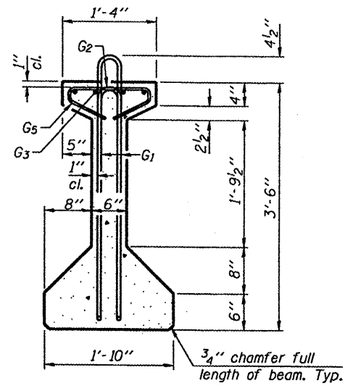
*3 spaces at 3" = 9".
**4-$\frac{3}{4}$" ϕ threaded dowel rods at 3" cts., Each Face.

ELEVATION OF BEAM
(Showing reinforcement & dimensions)

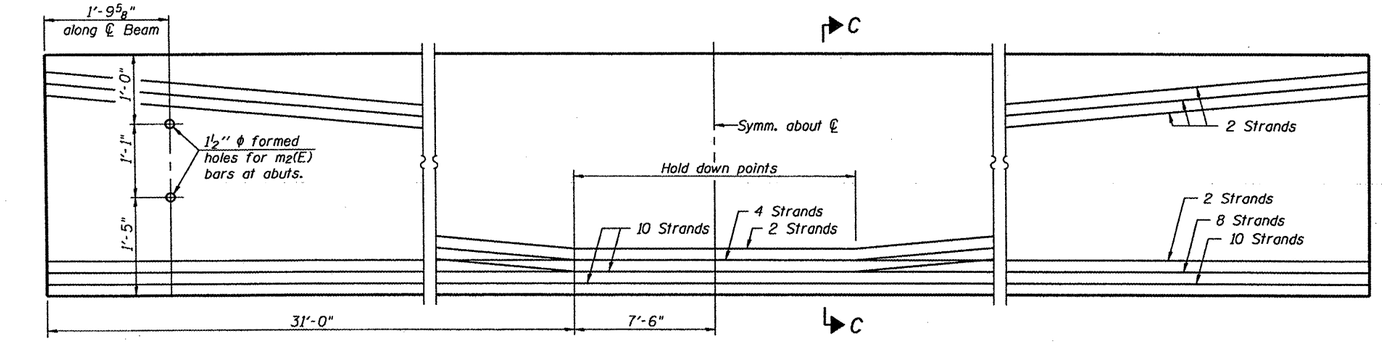
Note A:
Hex nuts (top and bottom) with lock washers (top). Only tighten sufficiently to compress lock washers.



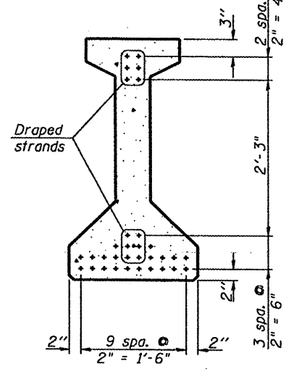
SECTION A-A



SECTION B-B



ELEVATION OF BEAM
(Showing prestressing steel)



SECTION C-C

***BAR LIST
ONE BEAM ONLY

Bar	No.	Size	Length	Shape
G_1	129	#4	8'-5"	
G_2	10	#4	6'-8"	
G_3	8	#6	39'-6"	
G_4	38	#3	4'-11"	
G_5	77	#3	2'-6"	

***For information only

Notes:
See sheet 11 of 17 for additional details and Bill of Material.
Required release strength, f'ci, shall be 6,000 psi.

DESIGNED	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

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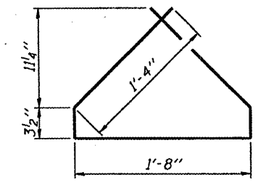
SHEET NO. 10
SHEETS 17

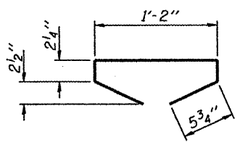
42" PPC I-BEAM
STRUCTURE NO. 036-0069

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	437
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

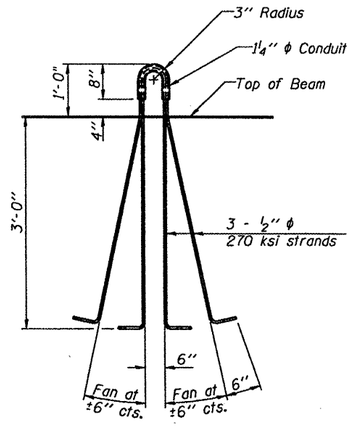
Plotted by: jstein 1/21/2009 10:02:05 AM
P:\050300\dgn\Bridge Sheets & Drawings\0360069-88773-010-Beam.dgn



BAR G4



BAR G5



LIFTING LOOP DETAIL

NOTES

Inserts for ¾" ϕ threaded dowel rods, when specified, are to be two strut, ferrule type for interior beams and single ferrule, flared loop type for exterior beams.

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

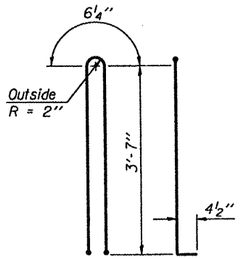
Reinforcement bars shall conform to ASTM A 706, Grade 60. (See Special Provisions).

A minimum 2½" ϕ lifting pin shall be used to engage the lifting loops during handling.

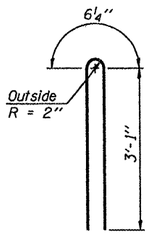
The top and bottom plates shall be AASHTO M270 Grade 50.

The bottom plates and studs shall be galvanized according to AASHTO M111.

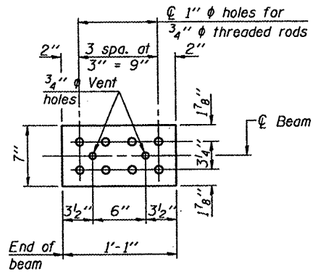
Threaded rods shall be ASTM F 1554 Grade 55.



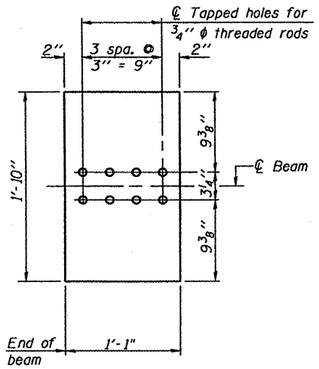
BAR G1



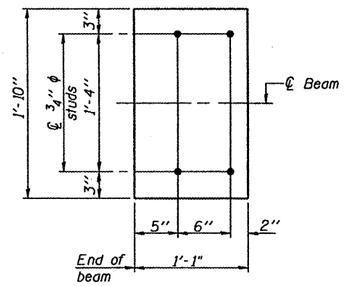
BAR G2



TOP PLATE



BOTTOM PLATE
(Showing threaded rods)



BOTTOM PLATE
(Showing studs)

See bearing details for pintle hole locations when required.

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Precast Prestressed Concrete I-Beams, 42"	Ft.	462

DESIGNED	ASW
CHECKED	ALN
DRAWN	ASW
CHECKED	ALN

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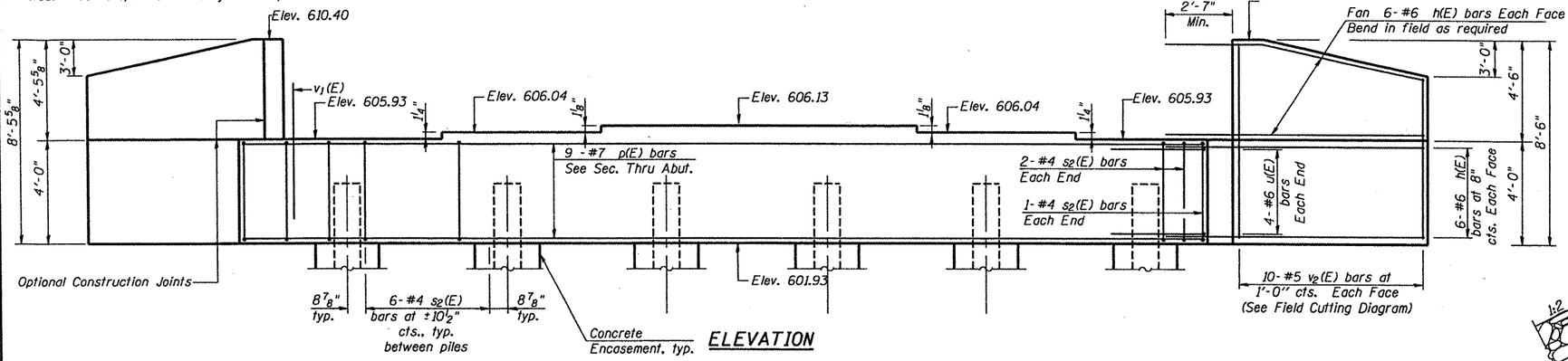
SHEET NO. 11
SHEETS 17

42" PPC I-BEAM DETAILS
STRUCTURE NO. 036-0069

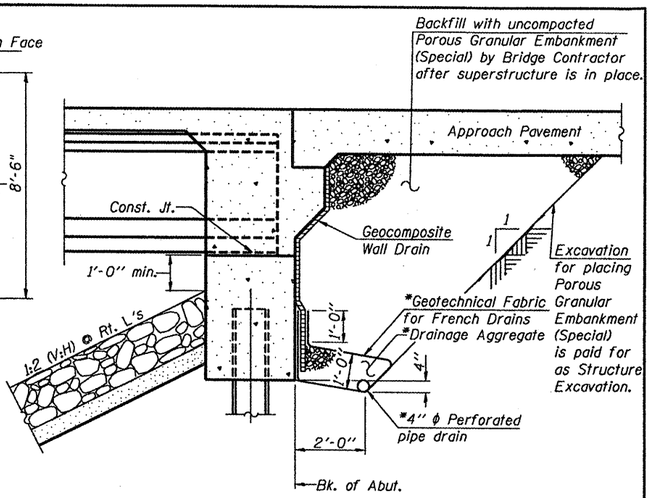
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	438
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Plotted by: jstein 1/21/2009 10:02:11 AM

Notes: Pour steps monolithically with cap.



ELEVATION

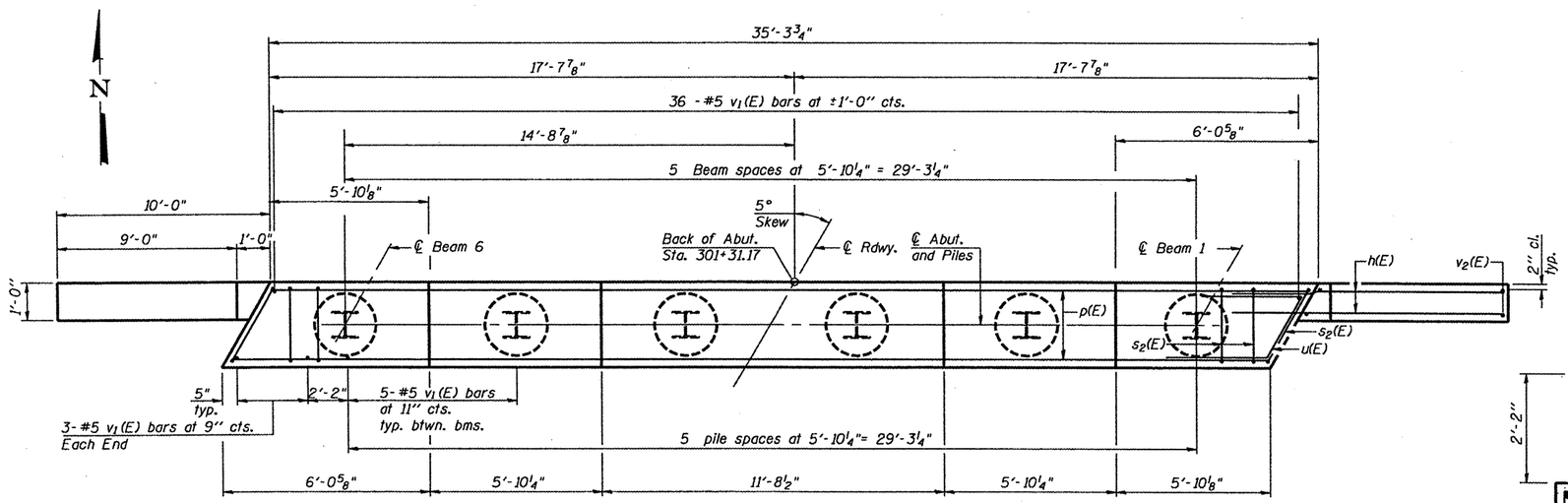


SECTION THRU INTEGRAL ABUTMENT

(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).

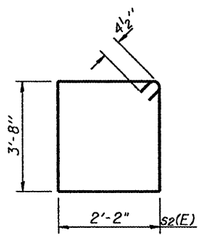


PLAN

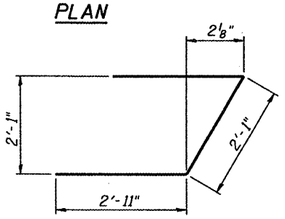
PILE DATA

Type: HP12x53
Nominal Required Bearing: 375 kips
Factored Resistance Available: 187.5 kips
Est. Length: 84 feet
No. Production Piles: 5
No. Test Piles: 1

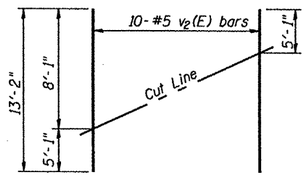
Piles shall be driven through 18" diameter precored holes extending to elevation 593.5 according to Article 512.09(c) of the Standard Specifications. Piles shall be driven as soon as possible after precoring is completed. Cost included in driving piles.



BARS s2(E)

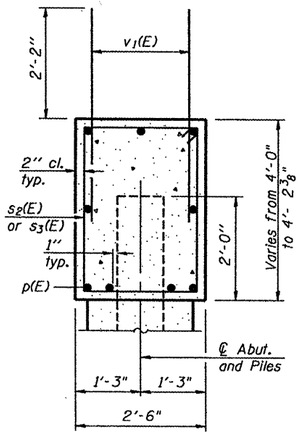


BAR u(E)



FIELD CUTTING DIAGRAM

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



SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	48	#6	12'-7"	——
p(E)	9	#7	34'-11"	——
s2(E)	36	#4	12'-5"	□
u(E)	8	#6	7'-11"	⌐
v1(E)	67	#5	4'-4"	——
v2(E)	20	#5	13'-2"	——
Structure Excavation		Cu. Yd.	97	
Concrete Structures		Cu. Yd.	18.7	
Reinforcement Bars, Epoxy Coated		Pound	2520	
Furnishing Steel Piles, HP12x53		Foot	420	
Driving Piles		Foot	420	
Test Pile, Steel HP12x53		Each	1	
Concrete Encasement		Cu. Yd.	2.1	

For details of piles and Concrete Encasement, see sheet 14 of 17.

NORTH ABUTMENT DETAILS
STRUCTURE NO. 036-0069

DESIGNED	MJJ
CHECKED	ALN
DRAWN	ASW
CHECKED	ALN

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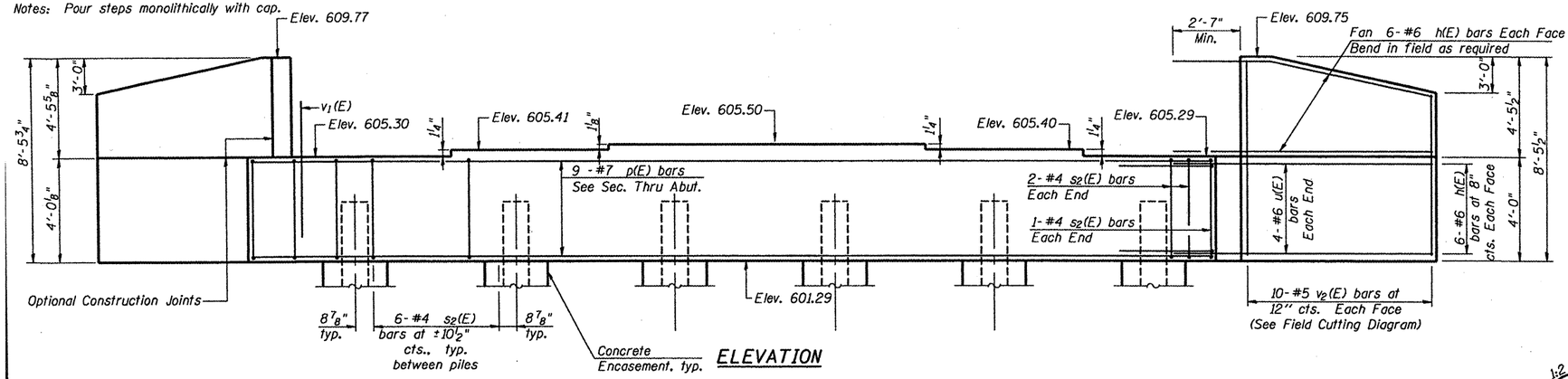
SHEET NO. 12
SHEETS 17

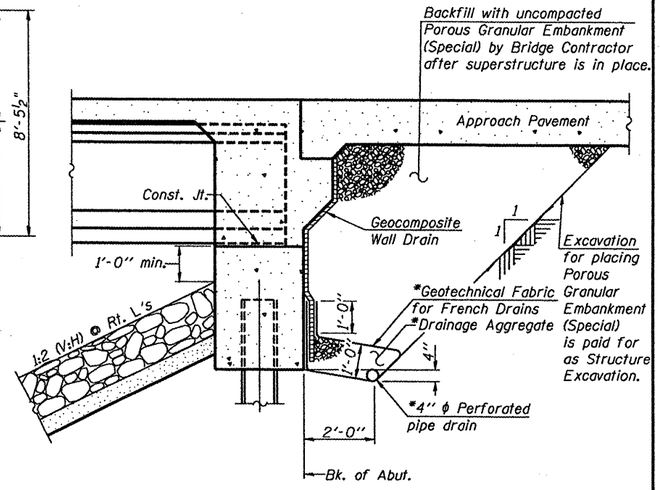
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	439
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Plotted by: jstein 1/21/2009 10:02:14 AM

Notes: Pour steps monolithically with cap.



ELEVATION

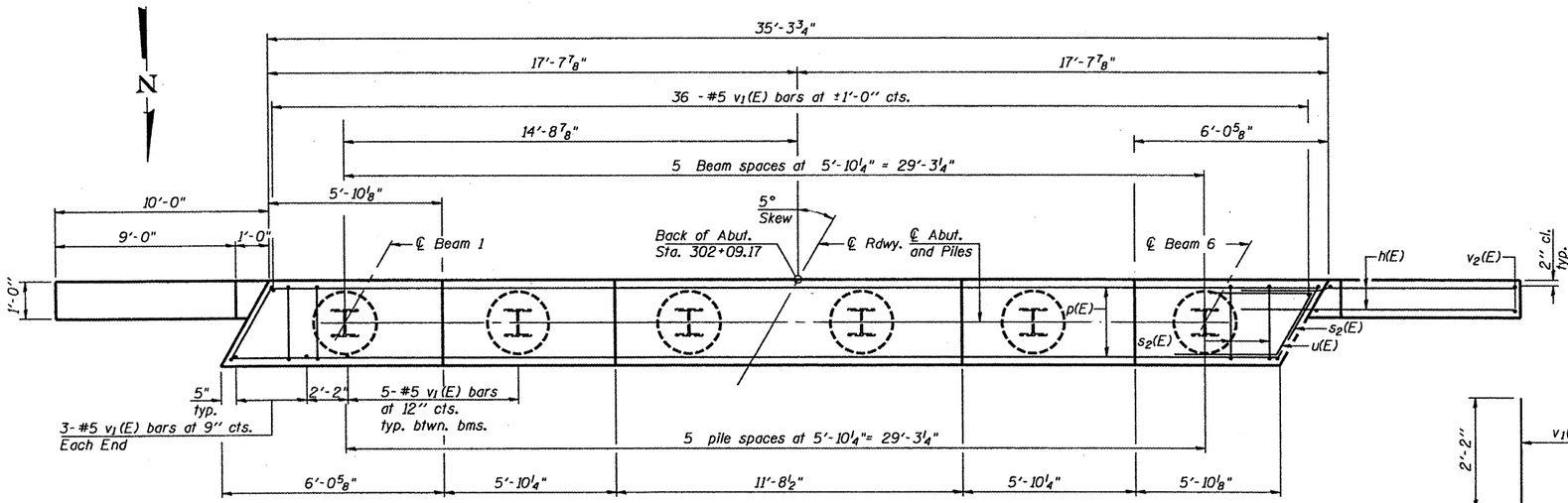


SECTION THRU INTEGRAL ABUTMENT

(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).



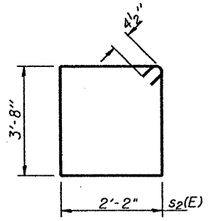
PLAN

PILE DATA

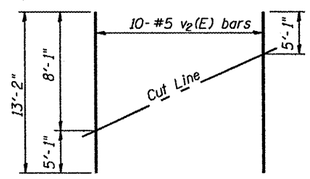
Type: HP12x53
Nominal Required Bearing: 375 kips
Factored Resistance Available: 187.5 kips
Est. Length: 81 feet
No. Production Piles: 6
No. Test Piles: 0

Piles shall be driven through 18" diameter precored holes extending to elevation 595.5 according to Article 512.09(c) of the Standard Specifications. Piles shall be driven as soon as possible after precoring is completed. Cost included in driving piles.

DESIGNED	MJJ
CHECKED	ALN
DRAWN	ASW
CHECKED	ALN

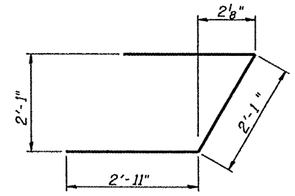


BARS s2(E)

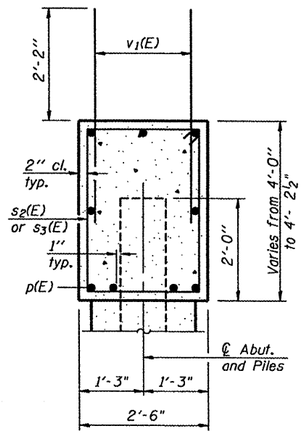


FIELD CUTTING DIAGRAM

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



BAR u(E)



SEC. THRU ABUT.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	48	#6	12'-7"	——
p(E)	9	#7	34'-11"	——
s2(E)	36	#4	12'-5"	□
u(E)	8	#6	7'-11"	⅂
v1(E)	67	#5	4'-4"	——
v2(E)	20	#5	13'-2"	——
Structure Excavation			Cu. Yd.	97
Concrete Structures			Cu. Yd.	18.7
Reinforcement Bars, Epoxy Coated			Pound	2520
Furnishing Steel Piles, HP12x53			Foot	486
Driving Piles			Foot	486
Concrete Encasement			Cu. Yd.	2.1

For details of piles and Concrete Encasement, see sheet 14 of 17.

SOUTH ABUTMENT DETAILS
STRUCTURE NO. 036-0069

THOUVENOT, WADE & MOERCHEN, INC.
CORPORATE OFFICE
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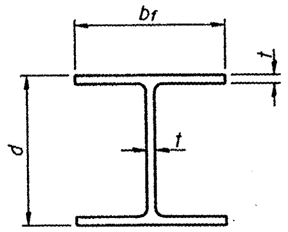
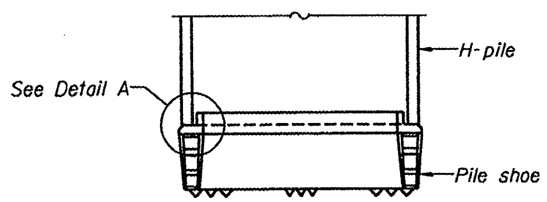
SHEET NO. 13	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SHEETS 17	534	109BR-2	HENDERSON	490	440
			CONTRACT NO. 88773		
	FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Plotted by: jstein 1/21/2009 10:02:18 AM

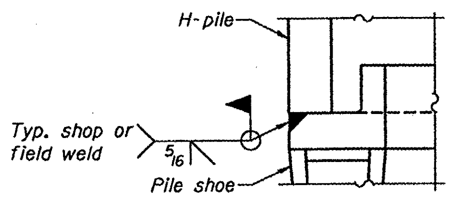


STEEL PILE TABLE

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

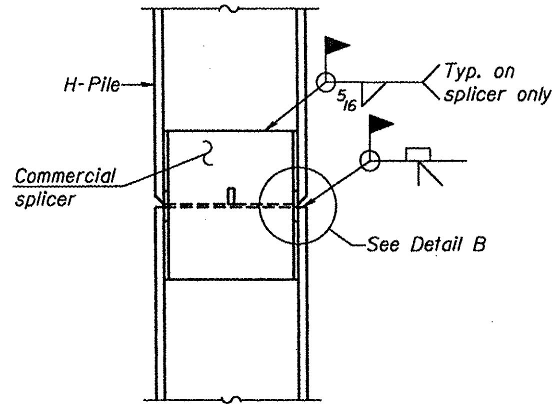


ELEVATION



DETAIL A

H-PILE SHOE ATTACHMENT



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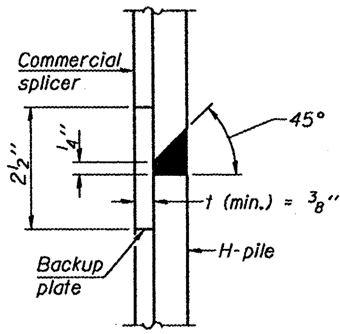
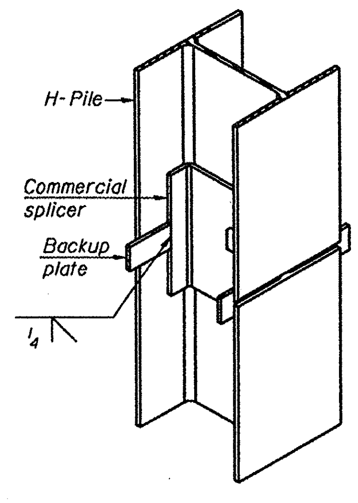
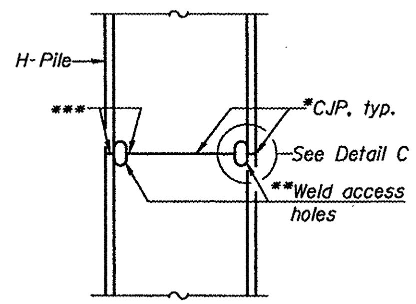


DETAIL "B"

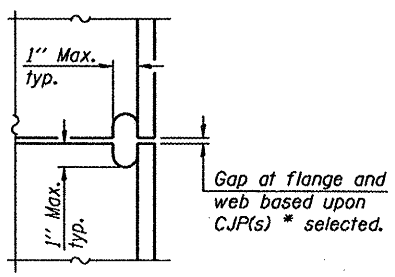


ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE



ELEVATION



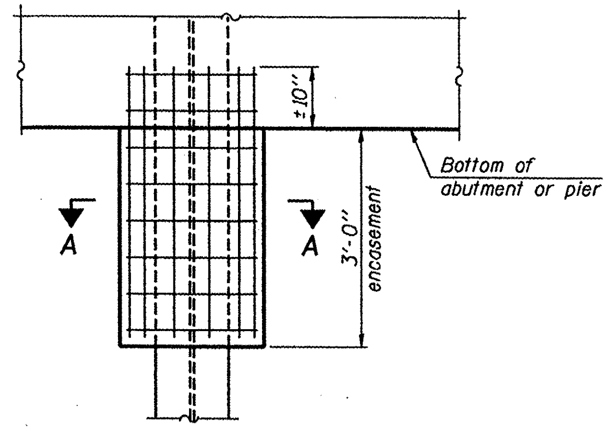
DETAIL C

COMPLETE PENETRATION WELD SPLICE

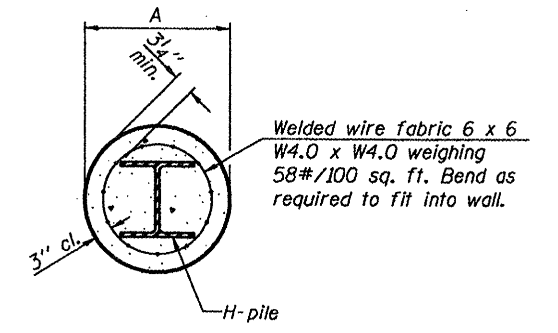
*Use joint conforming to Figure 3.4 in AWS D1.1, Structure Welding Code-Steel.

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

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



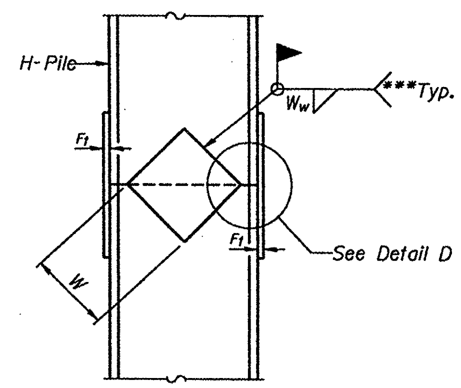
ELEVATION



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

SECTION A-A

PILE ENCASEMENT



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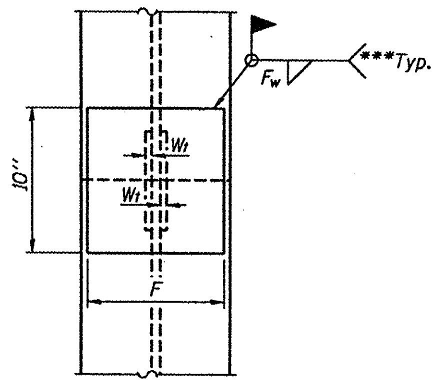
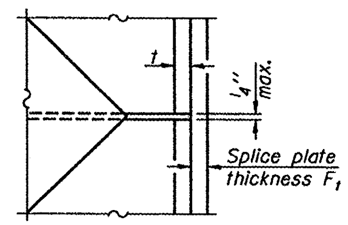


END VIEW

Designation	F	F_t	F_w	W	W_t	W_w
HP 14x117	12 1/2"	1"	7/8"	7 3/4"	5/8"	1/2"
x102	12 1/2"	7/8"	3/4"	7 3/4"	5/8"	1/2"
x89	12 1/2"	3/4"	11/16"	7 3/4"	5/8"	1/2"
x73	12 1/2"	5/8"	9/16"	7 3/4"	5/8"	1/2"
HP 12x84	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x74	10"	7/8"	11/16"	6 1/2"	5/8"	1/2"
x63	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
x53	10"	5/8"	1/2"	6 1/2"	1/2"	3/8"
HP 10x57	8"	3/4"	9/16"	5 1/4"	1/2"	3/8"
x42	8"	5/8"	9/16"	5 1/4"	1/2"	3/8"
HP 8x36	7"	5/8"	7/16"	4 1/4"	1/2"	3/8"



DETAIL D

WELDED PLATE FIELD SPLICE

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

FOUNDATION DETAILS
STRUCTURE NO. 036-0069

DESIGNED	ASW
CHECKED	ALN
DRAWN	ASW
CHECKED	ALN

F-HP 5-16-08

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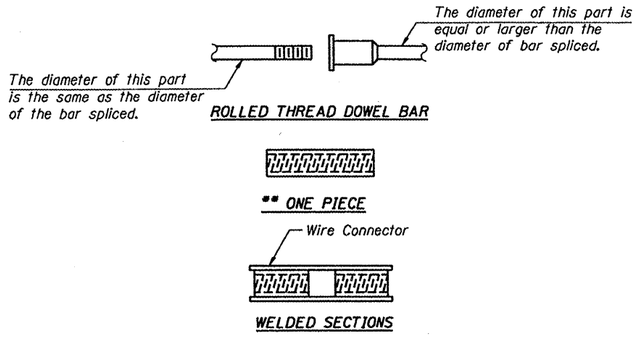
SHEET NO. 14
SHEETS 17

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	441
		CONTRACT NO. 88773		

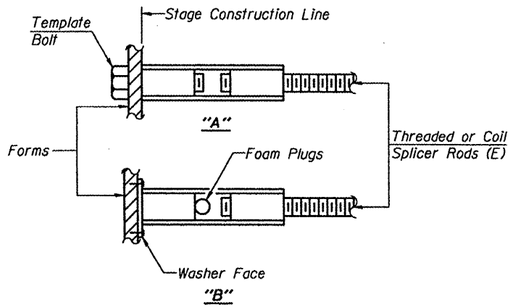
FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

Plotted by: jstein 1/21/2009 10:02:22 AM



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.

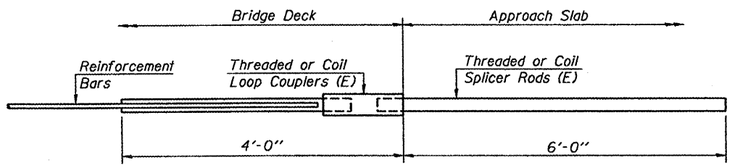
Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

① Minimum Capacity (Tension in kips) = $1.25 \times f_y \times A_t$

② Minimum *Pull-out Strength (Tension in kips) = $0.66 \times f_y \times A_t$

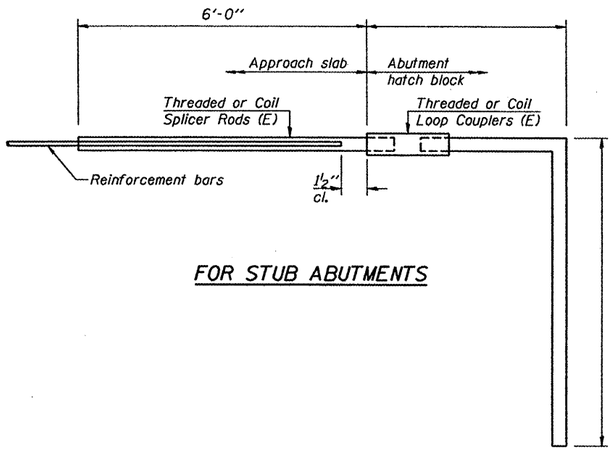
Where f_y = Yield strength of lapped reinforcement bars in ksi.
A_t = Tensile stress area of lapped reinforcement bars.
* = 28 day concrete

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'-0"	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



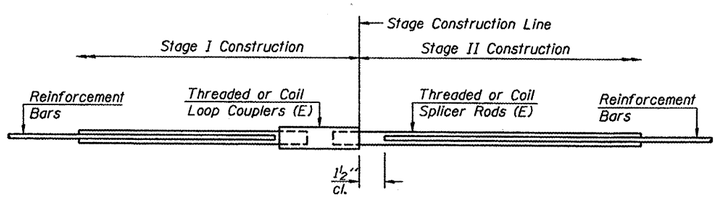
FOR INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

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	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

BSD-1 5-16-08

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SHEET NO. 15
SHEETS 17

BAR SPLICER ASSEMBLY DETAILS
STRUCTURE NO. 036-0069

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	442
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways IDOT

Page 1 of 3 Date 11/15/06

ROUTE F.A. 87 (IL Rt 94) DESCRIPTION IL 94 Over Middle Creek, 1mi. N. of Stronghurst LOGGED BY SCI (BCR)

SECTION 109 BR-2 LOCATION SEC. 13, TWP. 9N, RNG. 5W

COUNTY Henderson DRILLING METHOD CME 850 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0012(Exist) 036-0069(Prop)
Station 301+61.00

BORING NO. 1 (N. Abut)
Station 301+26
Offset 30.00ft Rt
Ground Surface Elev. 601.72 ft

Surface Water Elev. 590.74 ft
Stream Bed Elev. 589.95 ft

Groundwater Elev.:
First Encounter 587.2 ft ▼
Upon Completion 596.2 ft ▽
After 48 Hrs. 596.7 ft ▽

Description	Elev. (ft)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
FILL: Brown, low plastic silty clay loam, trace gravel, root (A-6)			0		
			3	1.0	22.2
			4	P	
Poor recovery			0		
			2	-	
		▽ -5	3		
CLAY LOAM: Dark brown, high plastic (A-7)	596.22 ▽		0		
			1	0.2	47.7
			2	B	
Grades to trace sand deposits			0		
			2	0.5	32.7
		-10	3	B	
SANDY CLAY LOAM: Gray, low plastic, trace roots (A-6)	591.22		0		
			1	0.8	23.6
			3	P	
			0		
	587.22 ▼		3	0.3	36.8
SAND: Gray, fine to medium, some clay lumps (A-2)		-15	6	B	
			3		
	584.97		2	0.2	28.8
CLAY LOAM: Gray, high plastic (A-7)	584.47		2	B	
SILTY CLAY LOAM: Gray, low plastic (A-6)	583.22				
SAND: Brown, fine to medium, some clay lumps, gravel (A-2)			0		
	582.22		1	0.0	22.8
		-20	1	P	
SANDY CLAY LOAM: Gray, low plastic (A-6) *(continued)*			1		
	579.72		6	0.0	27.8
SAND: Brown, fine to medium, some clay lumps, trace organics (A-2)			12	P	
SANDY CLAY LOAM: Gray and brown, low plastic, with deposits of fine to coarse sand (A-6)	578.22		3		
			7	0.0	19.5
		-25	7	P	
			12		
			22	0.0	22.4
Gravel in middle of SPT spoon			13	P	
No recovery - catcher not present in SPT spoon			5		
			4	-	
		-30	3		
	567.72		10		
CLAY LOAM: Gray, high plastic, trace gravel (A-7)			7	3.8	15.9
		-35	13	B	
			12		
			10	3.3	14.2
		-40	16	B	

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways IDOT

Page 2 of 3 Date 11/15/06

ROUTE F.A. 87 (IL Rt 94) DESCRIPTION IL 94 Over Middle Creek, 1mi. N. of Stronghurst LOGGED BY SCI (BCR)

SECTION 109 BR-2 LOCATION SEC. 13, TWP. 9N, RNG. 5W

COUNTY Henderson DRILLING METHOD CME 850 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0012(Exist) 036-0069(Prop)
Station 301+61.00

BORING NO. 1 (N. Abut)
Station 301+26
Offset 30.00ft Rt
Ground Surface Elev. 601.72 ft

Surface Water Elev. 590.74 ft
Stream Bed Elev. 589.95 ft

Groundwater Elev.:
First Encounter 587.2 ft ▼
Upon Completion 596.2 ft ▽
After 48 Hrs. 596.7 ft ▽

Description	Elev. (ft)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM: Gray, high plastic, trace gravel (A-7) *(continued)*			12		
			7	2.9	16.4
		-45	10	B	
Poor recovery - possible large piece of gravel blocking recovery of sample.			18		
			21	-	
		-50	28		
CLAY: Brown, high plastic, trace sand, gravel (A-7)	549.72		6		
			9	2.6	20.3
		-55	13	B	
			2		
			7	1.9	20.1
		-60	8	B	
CLAY: Brown, high plastic, trace sand, gravel (A-7) *(continued)*					
CLAY LOAM: Brown, high plastic, trace gravel, organics (A-7)	540.22				
Borehole collapse measured at 63 feet two days (11/22/06) after drilling was completed.			8		
			13	3.5	16.9
		-65	19	B	
			7		
			12	2.9	19.0
		-70	18	B	
Coarse gravel/cobbles encountered during drilling from approximately 71 to 72 feet.			7		
			16	2.9	19.0
		-75	18	B	
Borehole collapse measured at 75 feet after the augers were removed on 11/21/06.					
CLAY: Brown, high plastic, trace sand, gravel (A-7)	524.72		7		
			15	2.1	19.0
		-80	14	B	

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG

Division of Highways IDOT

Page 3 of 3 Date 11/15/06

ROUTE F.A. 87 (IL Rt 94) DESCRIPTION IL 94 Over Middle Creek, 1mi. N. of Stronghurst LOGGED BY SCI (BCR)

SECTION 109 BR-2 LOCATION SEC. 13, TWP. 9N, RNG. 5W

COUNTY Henderson DRILLING METHOD CME 850 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0012(Exist) 036-0069(Prop)
Station 301+61.00

BORING NO. 1 (N. Abut)
Station 301+26
Offset 30.00ft Rt
Ground Surface Elev. 601.72 ft

Surface Water Elev. 590.74 ft
Stream Bed Elev. 589.95 ft

Groundwater Elev.:
First Encounter 587.2 ft ▼
Upon Completion 596.2 ft ▽
After 48 Hrs. 596.7 ft ▽

Description	Elev. (ft)	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY: Brown, high plastic, trace sand, gravel (A-7) *(continued)*			11		
			15	1.9	16.5
		-85	15	B	
SAND: Gray, fine to medium, trace to some clay, trace organics (A-2)	514.72				
Augers sinking and sand blown in augers after advancing augers to 88.5 feet.			12		
			20		17.8
		-90	13		
Grades to trace gravel			17		
			25		10.6
		-95	28		
SAND: Gray, fine to medium, trace gravel (A-3)	504.72		24		
	502.22		26	3.1	15.4
CLAYEY SHALE: Gray		-100	100/5"	S	
CLAYEY SHALE: Gray *(continued)*			50/4"	4.5	11.9
			50/1"	P	
	497.72		50/4"	4.5	15.1
AASHTO classifications are field visual only for this boring; no lab class. were run End of Boring			50/1"	P	
		-105			
		-110			
		-115			
		-120			

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	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

SOIL BORING LOG B-1
STRUCTURE NO. 036-0069

THOUVENOT, WADE & MOERCHEN, INC.
CORPORATE OFFICE
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Swansea, Illinois 62226
Tel: 618.624.4488
Fax: 618.624.6688
SWANSEA • WATERLOO • EDWARDSVILLE • CARBONDALE • ST. CHARLES

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EXCEPTIONAL SERVICE. NOTHING LESS.

SHEET NO. 16
SHEETS 17

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	443
		CONTRACT NO. 88773		

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

Plotted by: lstein 1/21/2009 10:02:51 AM

SOIL BORING LOG B-2 — STRUCTURE NO. 036-0069

Illinois Department of Transportation — SOIL BORING LOG (Page 1 of 3)

Division of Highways
IDOT

Page 1 of 3

Date 11/21/06

ROUTE F.A. 87 (IL Rt 94) DESCRIPTION IL 94 Over Middle Creek, 1mi. N. of Stronghurst LOGGED BY SCI (BCR)

SECTION 109 BR-2 LOCATION SEC. 13, TWP. 9N, RNG. 5W

COUNTY Henderson DRILLING METHOD CME 850 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0012(Exist) 036-0069(Prop)
Station 301+61.00

BORING NO. 2 (S. Abut)
Station 302+06
Offset 30.00ft Rt
Ground Surface Elev. 601.33 ft

Surface Water Elev. 590.74 ft
Stream Bed Elev. 589.95 ft

Groundwater Elev.:
First Encounter 590.3 ft ▼
Upon Completion - ft
After - Hrs. - ft

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
FILL: Brown, low plastic silty clay loam (A-6)			2		
			3	0.5	9.3
			3	P	
FILL: Brown, low plastic silty clay (A-6)	598.33		1		
			2	0.3	28.3
		-5	2	B	
SILTY CLAY LOAM: Dark brown, low plastic (A-6)	596.08		1		
			1	0.3	35.0
CLAY LOAM: Dark brown, high plastic, trace sand deposits (A-7)	594.33		2	B	
			1		
			2	0.5	25.7
		-10	3	B	
Grades to some fine to medium sand deposits ▼			2		
			3	-	29.0
			4		
SAND: Gray, fine to medium, trace to some clay (A-2)	588.33		3		
			5		22.9
		-15	5		
CLAY LOAM: Gray, high plastic (A-7)	585.33		0		
Grades to trace sand deposits			1	0.7	17.8
			3	B	
			3		
Grades to trace gravel			6	3.1	16.7
		-20	15	B	

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
CLAY LOAM: Gray, high plastic (A-7) *(continued)*			6		
			6	2.8	15.8
			11	B	
			5		
			11	2.6	16.7
		-25	19	B	
			5		
			6	2.2	17.2
			8	B	
			3		
			5	2.8	18.1
		-30	7	B	
CLAY: Brown and gray, high plastic, trace sand, gravel (A-7)	569.33		4		
			6	1.9	19.6
		-35	7	B	
Poor recovery - gravel blockage			5		
			6	-	20.5
		-40	12		

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG (Page 2 of 3)

Division of Highways
IDOT

Page 2 of 3

Date 11/21/06

ROUTE F.A. 87 (IL Rt 94) DESCRIPTION IL 94 Over Middle Creek, 1mi. N. of Stronghurst LOGGED BY SCI (BCR)

SECTION 109 BR-2 LOCATION SEC. 13, TWP. 9N, RNG. 5W

COUNTY Henderson DRILLING METHOD CME 850 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0012(Exist) 036-0069(Prop)
Station 301+61.00

BORING NO. 2 (S. Abut)
Station 302+06
Offset 30.00ft Rt
Ground Surface Elev. 601.33 ft

Surface Water Elev. 590.74 ft
Stream Bed Elev. 589.95 ft

Groundwater Elev.:
First Encounter 590.3 ft ▼
Upon Completion - ft
After - Hrs. - ft

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
CLAY: Brown and gray, high plastic, trace sand, gravel (A-7) *(continued)*					
Becomes brown, trace organics			5		
			7	2.1	23.0
		-45	8	B	
Becomes dark brown			4		
Becomes brown			7	2.1	26.6
		-50	8	B	
			7		
CLAY LOAM: Brown, high plastic, trace gravel (A-7)	547.08		12	1.8	18.7
		-55	14	B	
			5		
			11	2.5	17.5
		-60	29	B	

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
CLAY LOAM: Brown, high plastic, trace gravel (A-7) *(continued)*					
SILTY LOAM: Brown and gray, low plastic (A-4)	540.33				
Unconfined compressive strength (UCS) test reported for the SILTY LOAM. The UCS for the CLAY LOAM is 4.5 tsf (P).	537.33		40		
			32	2.2	22.1
SAND: Brown, fine to medium (A-3)	536.58	-65	14	S	
CLAY LOAM: Brown, high plastic, trace gravel (A-7)					
			6		
			8	1.9	18.3
		-70	11	B	
SILTY CLAY LOAM: Gray, medium plastic (A-7)	528.58				
Sample broken in SPT spoon.			6		
			9	-	24.0
		-75	10		
			10		
	522.08		18	2.5	18.2
		-80	25	B	

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation — SOIL BORING LOG (Page 3 of 3)

Division of Highways
IDOT

Page 3 of 3

Date 11/21/06

ROUTE F.A. 87 (IL Rt 94) DESCRIPTION IL 94 Over Middle Creek, 1mi. N. of Stronghurst LOGGED BY SCI (BCR)

SECTION 109 BR-2 LOCATION SEC. 13, TWP. 9N, RNG. 5W

COUNTY Henderson DRILLING METHOD CME 850 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0012(Exist) 036-0069(Prop)
Station 301+61.00

BORING NO. 2 (S. Abut)
Station 302+06
Offset 30.00ft Rt
Ground Surface Elev. 601.33 ft

Surface Water Elev. 590.74 ft
Stream Bed Elev. 589.95 ft

Groundwater Elev.:
First Encounter 590.3 ft ▼
Upon Completion - ft
After - Hrs. - ft

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
CLAY LOAM: Gray, high plastic, trace gravel (A-7) *(continued)*					
CLAY: Gray, high plastic (A-7)	519.83				
			7		
			10	3.3	22.1
		-85	12	B	
SAND: Gray, fine to coarse, trace to some gravel (A-1)	514.33		26		
			20		
		-90	52		
Some gravel in lower part of SPT spoon.					
SANDY CLAY LOAM: Gray, low plastic (A-6)	509.33		33		
SAND: Gray, fine to coarse, trace to some gravel (A-1)	507.33		24		
		-95	25		
SHALEY CLAY: Brown, high plastic (A-7)	502.58		30		
CLAYEY SHALE: Brown	502.08		50/3"	3.6	14.1
		-100	50/1"	S	

Description	Elev. (ft)	Depth (ft)	Blows (/6")	UCS Qu (tsf)	Moist (%)
CLAYEY SHALE: Brown *(continued)*					
Becomes gray			50/2.5"	4.5	13.4
			50/1.5"	P	
	497.33		50/5"		
AASHTO classifications are field visual only for this boring; no lab class. were run			20/1"	4.5	13.8
End of Boring		-105	50/1.5"	P	
		-110			
		-115			
		-120			

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	MJJ
CHECKED	ALN
DRAWN	MJJ
CHECKED	ALN

SOIL BORING LOG B-2
STRUCTURE NO. 036-0069

THOUVENOT, WADE & MOERCHEN, INC.
CORPORATE OFFICE
4940 Old Collinsville Road
Swansea, Illinois 62226
Tel: 618.624.4488
Fax: 618.624.6688
SWANSEA • WATERLOO • EDWARDSVILLE • CARBONDALE • ST. CHARLES

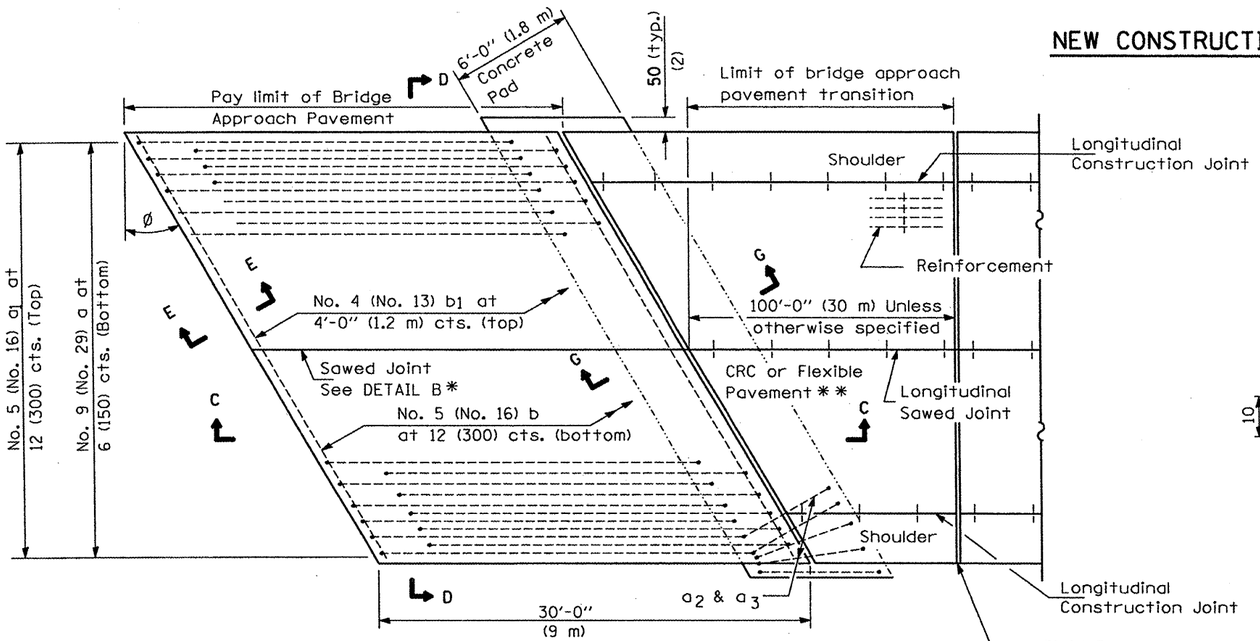
TWM
EXCEPTIONAL SERVICE. NOTHING LESS.

SHEET NO. 17
SHEETS 17

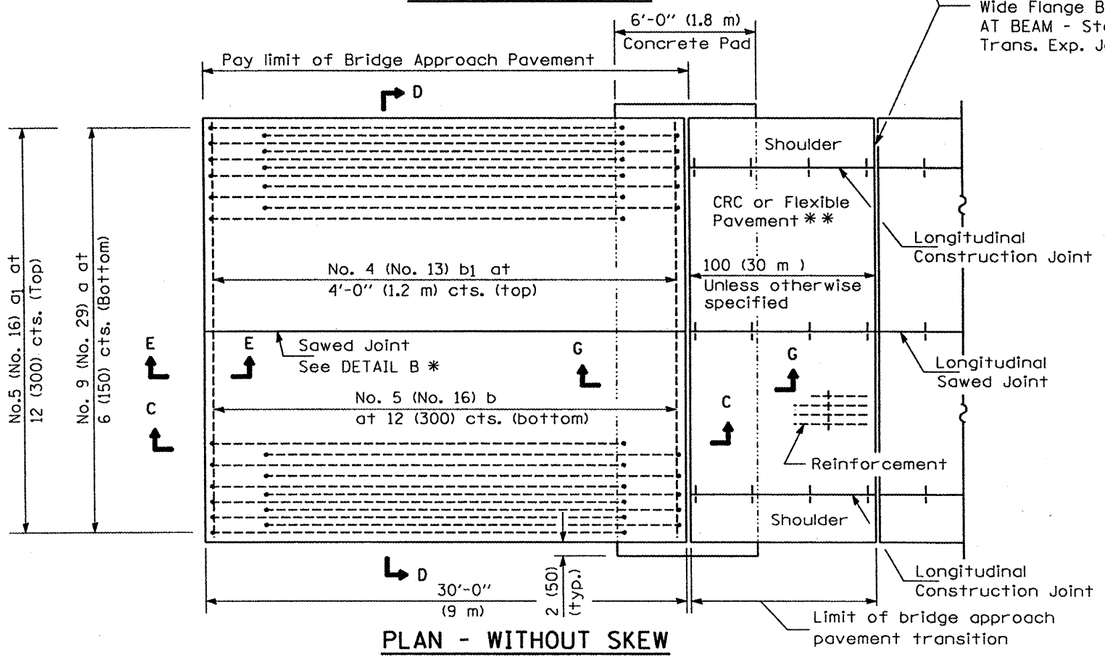
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	109BR-2	HENDERSON	490	444
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

Plotted by: jstein 1/21/2009 10:03:15 AM

NEW CONSTRUCTION



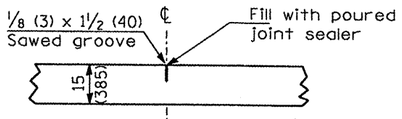
PLAN - WITH SKEW



PLAN - WITHOUT SKEW

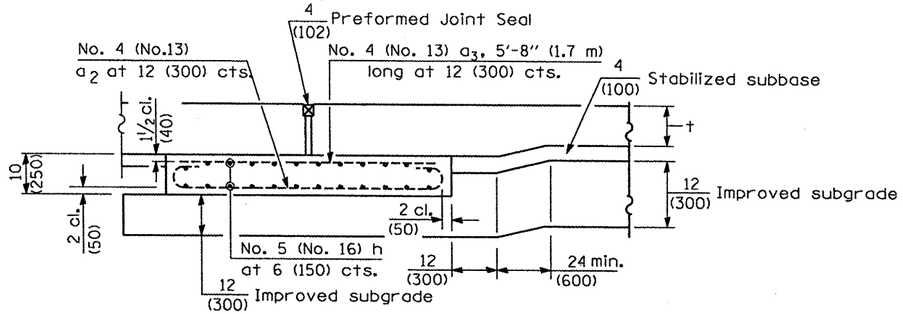
Rigid Pavement only:

Wide Flange Beam Terminal Joint (See DETAIL AT BEAM - Standard 421101 or 421106) or 2 (50) Trans. Exp. Joint as detailed on Standard 420001.



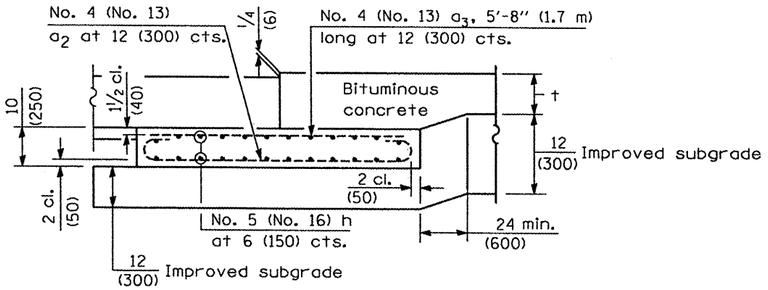
DETAIL B*

(Reinforcement Not Shown)



SECTION G-G - RIGID PAVEMENT

(Showing reinforcement)



SECTION G-G - FLEXIBLE PAVEMENT

(Showing reinforcement)

GENERAL NOTES

THICKNESS-"t"=Thickness of Pavement.

See Standard 421001 for reinforcement details not shown.

See Standard 420001 for joint details not shown.

All dimensions are in inches (millimeters) unless otherwise shown.

* Saw ℄ or lane edge if poured two or more lane widths at a time.

** Omit Reinforcement, tie bars and Long. sawed Jt. for Flexible Pavement.

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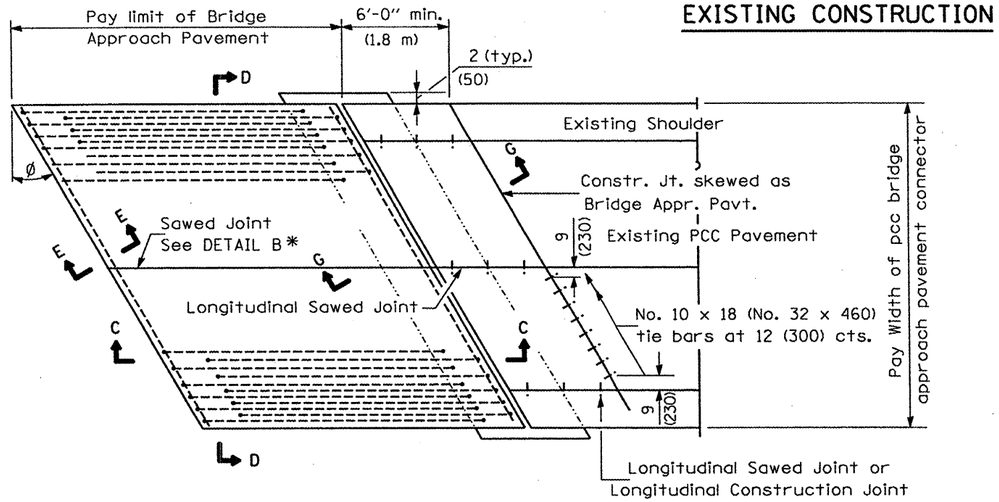
		DRAWN - JWS	REVISED -
	PLOT SCALE = 100.0.000 '1' / IN.	CHECKED - SJK	REVISED -
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH PAVEMENT DETAILS

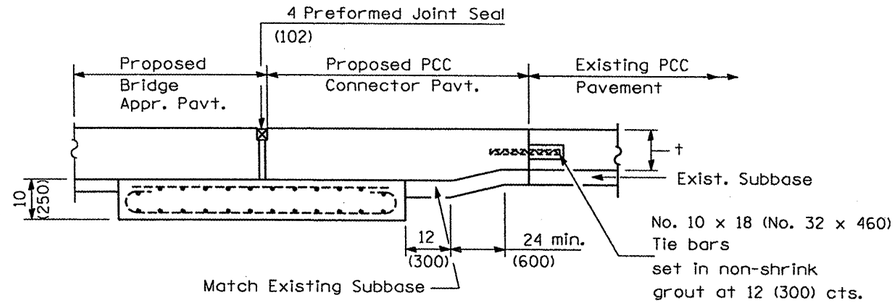
SCALE: 1" = 50' | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	1445
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

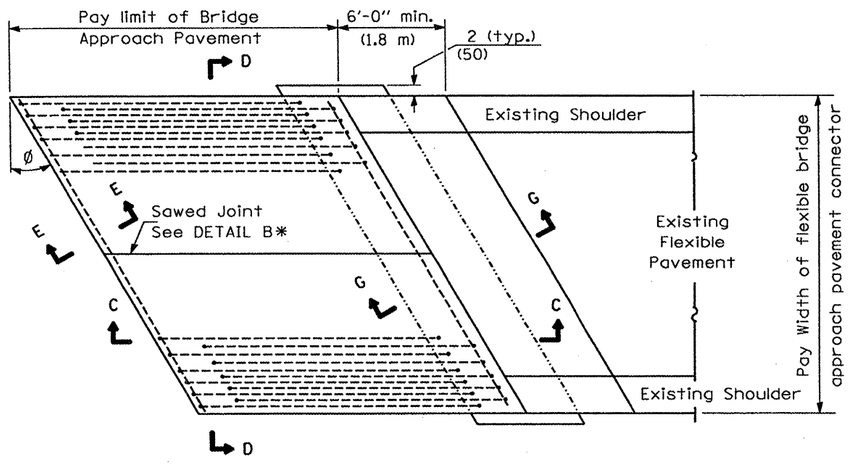


EXISTING CONSTRUCTION

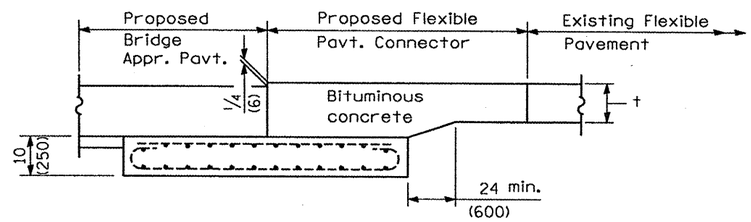
BRIDGE APPROACH PAVEMENT CONNECTOR (PCC)



SECTION G-G - RIGID PAVEMENT



BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)



SECTION G-G - FLEXIBLE PAVEMENT

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		DRAWN - JWS	REVISED -
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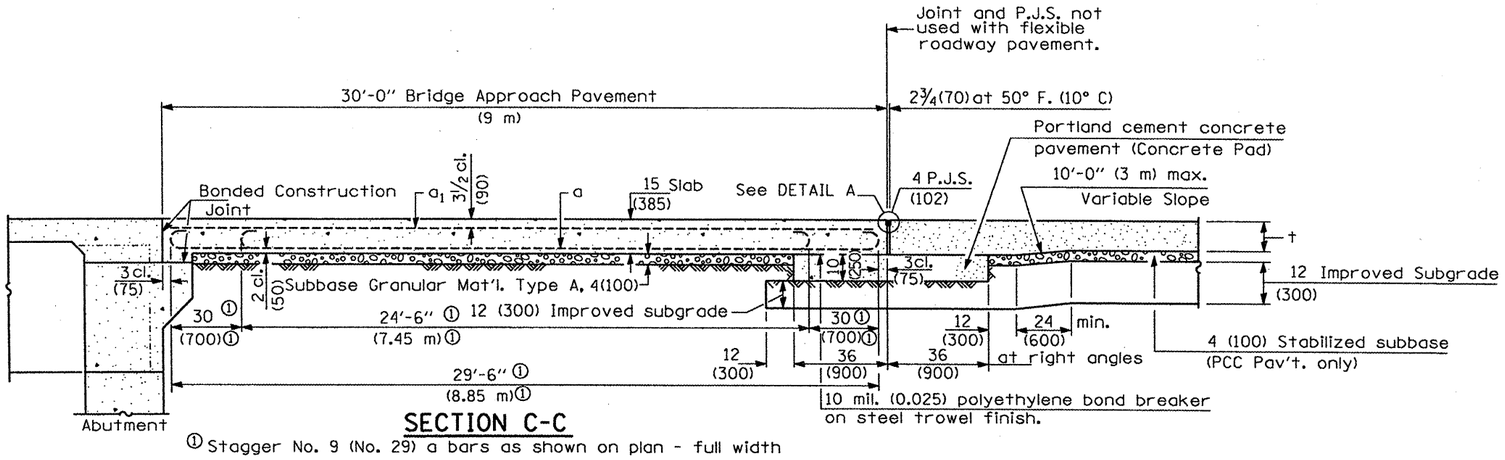
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH PAVEMENT DETAILS

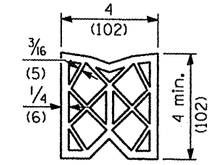
SCALE: 1" = 50' | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3(136)R,109BR-2	HENDERSON	490	446
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

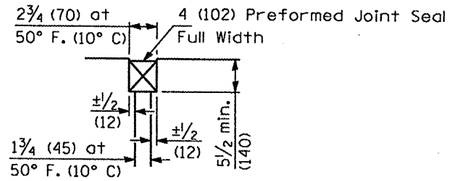


SECTION C-C

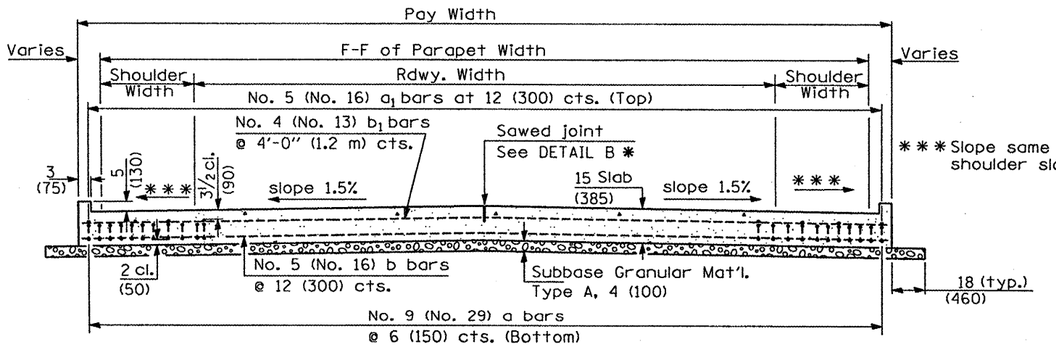
① Stagger No. 9 (No. 29) a bars as shown on plan - full width



PREFORMED JOINT SEAL



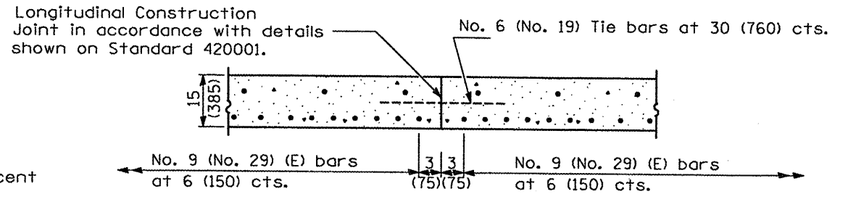
DETAIL A



*** Slope same as adjacent shoulder slope.

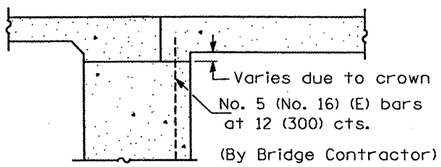
SECTION D-D

(See Plan for Dimensions not shown)



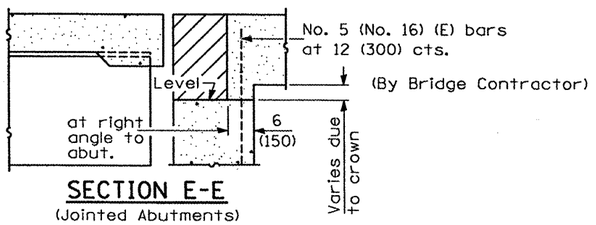
OPTIONAL LONGITUDINAL CONSTRUCTION JOINT

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



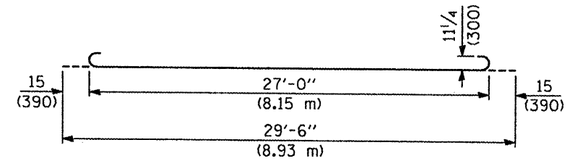
SECTION E-E

(Integral Abutments)

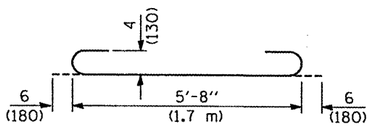


SECTION E-E

(Jointed Abutments)



BAR a



BAR a2

DESIGN STRESSES

fy = 60,000 p.s.i. (400 MPa)
f'c = 3,500 p.s.i. (24 MPa)
n = 8.5

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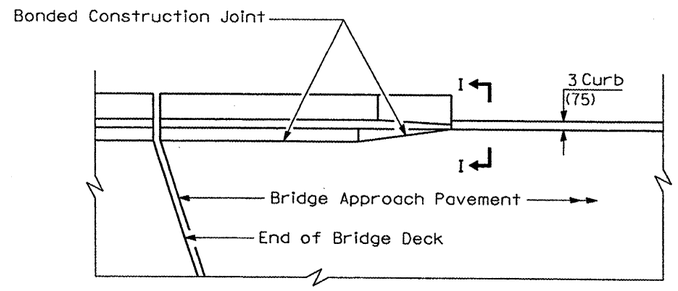
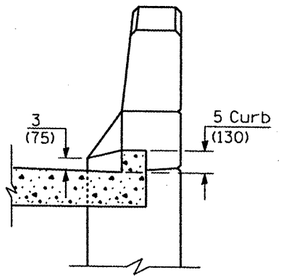
		DRAWN - JWS	REVISED -	BRIDGE APPROACH PAVEMENT DETAILS
	PLOT SCALE = 100.0.000 '/ IN.	CHECKED - SJK	REVISED -	SCALE: 1" = 50' | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -	

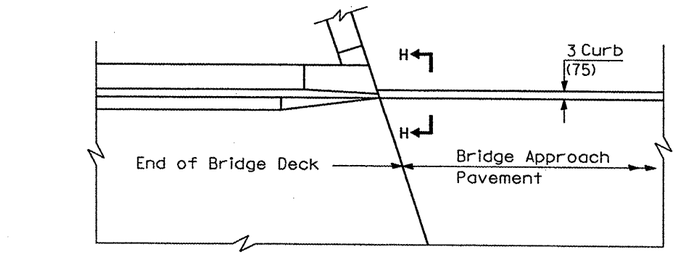
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	136,137W&RS-3;136R;109BR-2	HENDERSON	490	447
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



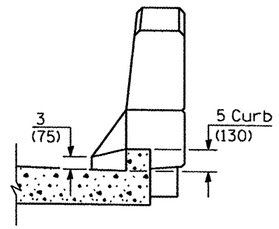
PARAPET TO CURB TRANSITION
PILE BENT ABUTMENT



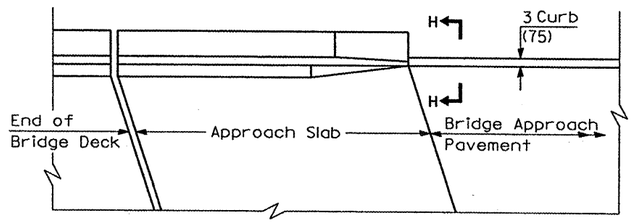
SECTION I - I



PARAPET TO CURB TRANSITION
INTEGRAL ABUTMENT



SECTION H - H



PARAPET TO CURB TRANSITION
VAULTED ABUTMENT

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		DRAWN - JWS	REVISED -
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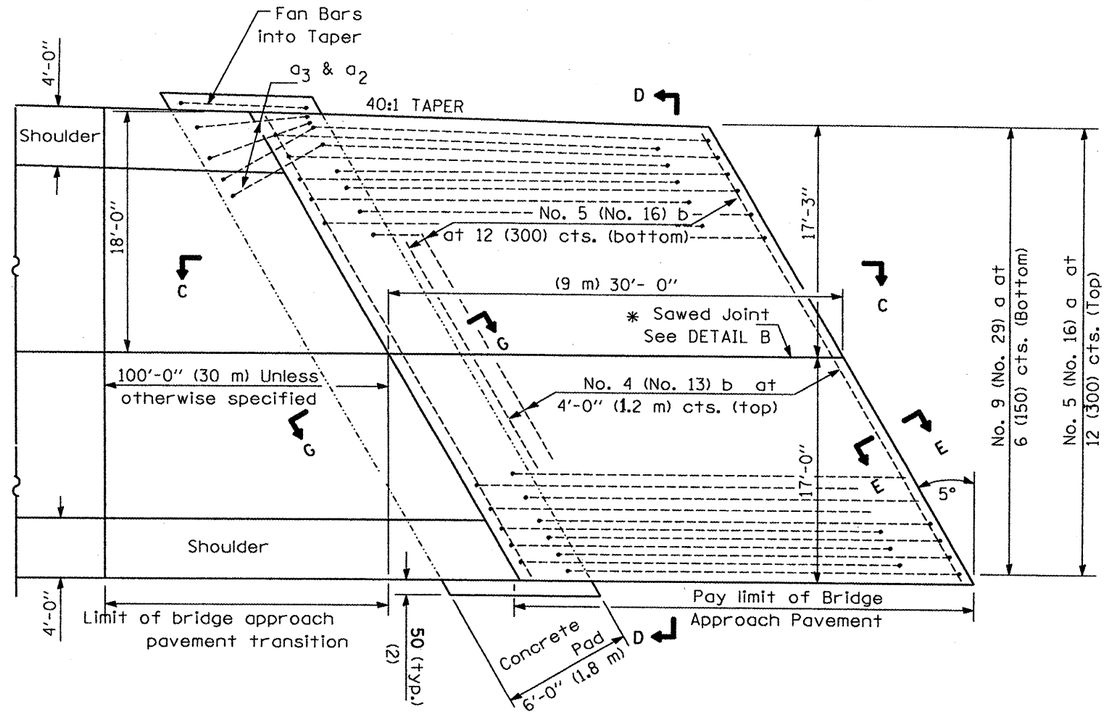
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH PAVEMENT DETAILS

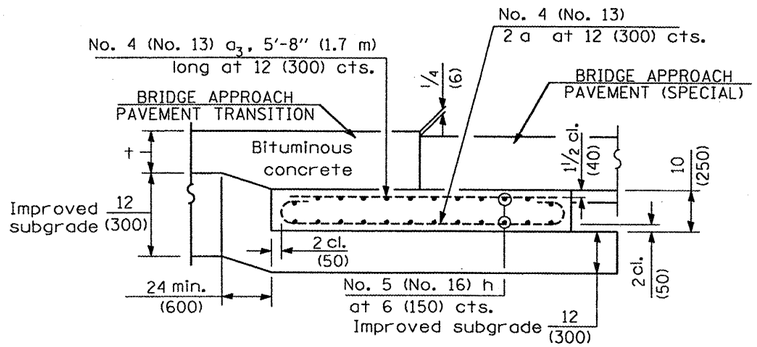
SCALE: 1" = 50' | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	448
		CONTRACT NO. 88113		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		



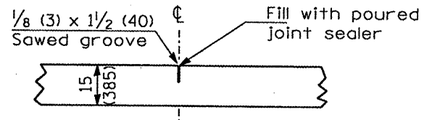
PLAN

* Saw ℄ or lane edge if poured two or more lane widths at a time.



SECTION G-G - FLEXIBLE PAVEMENT

(Showing reinforcement)



DETAIL B *

(Reinforcement Not Shown)

GENERAL NOTES

THICKNESS-"t"=Thickness of Pavement.

See Standard 421001 for reinforcement details not shown.

See Standard 420001 for joint details not shown.

All dimensions are in inches (millimeters) unless otherwise shown.

See Bridge Approach Pavement Details, Sheet 3 of 4 for Section C-C, D-D, E-E, Longitudinal Joint, Design Stresses and Bar Details.

See Sheet 4 of 4 for Parapet to Curb Transition Detail and Section H-H.

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		DRAWN - JWS	REVISED -
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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH PAVEMENT (SPECIAL) DETAILS

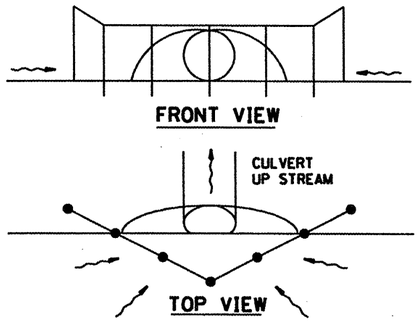
SCALE: 1" = 50' | SHEET NO. 1 OF 1 SHEETS | STA. 296+00.00 TO STA. 309+80.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	449
		CONTRACT NO. 88773		

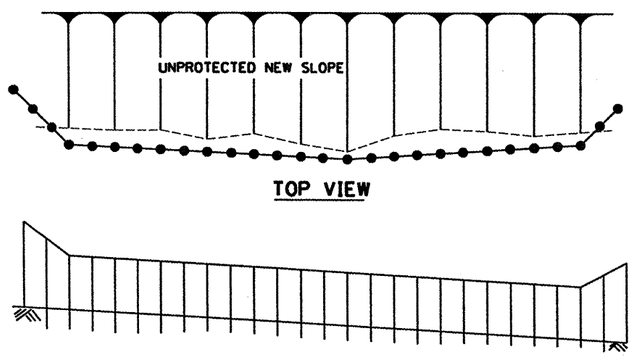
FED. ROAD DIST. NO. 7 | ILLINOIS | FED. AID PROJECT

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	4136.137HBARS-3 136H109BR-2	HENDERSON	490	450
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



UPSTREAM PIPE CULVERT EROSION CONTROL



GENERAL NOTES:

1. This work shall be performed in accordance with Sections 280 & 1081, of the Standard Specifications.
2. Additional Timber or Metal Post shall be installed, as needed.

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. A-12.05, NEW REVISION BOX	T.P.
3-11-03	ELIMINATED SILT FENCE DITCH CHECK	M.M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SPECIAL DETAIL SHEET

TYPICAL APPLICATION OF SILT FILTER FENCE

CADD DETAIL 280001-D4 DRAWN BY CADD

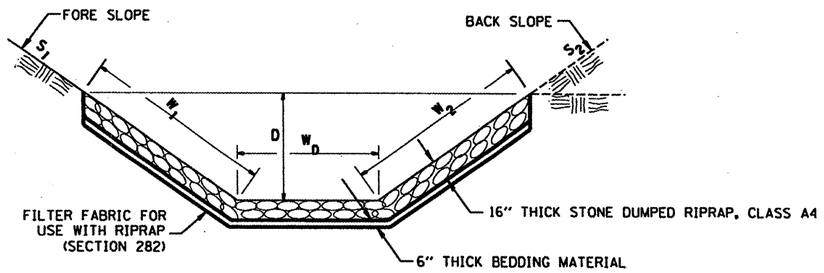
SCALE: NOT DRAWN TO SCALE CHECKED BY

280001-D4

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)WRS-3, 136R(10)BR-2	HENDERSON	490	451
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

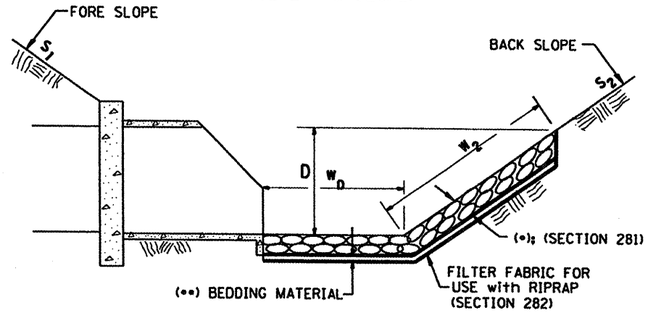
CASE 1
(DITCH)



STONE RIPRAP, CLASS B4				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	sq yds (m)	sq yds (m^2)
303+41.81 TO 303+53.81	9.5	12	14	14
309+75.84 TO 309+87.84	9.5	12	15	15
TOTAL			29	29

(1) WIDTH = $W_1 + W_2 + W_D$

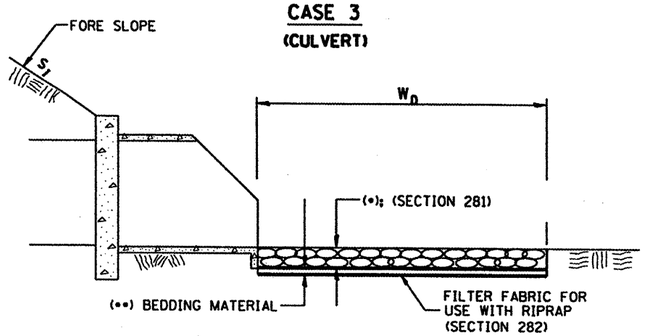
CASE 2
(CULVERT & SLOPE)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = $W_2 + W_D$

CASE 3
(CULVERT)



(*)				
LOCATION	WIDTH (1)	LENGTH	RIPRAP	FABRIC
STA TO STA	lin ft (m)	lin ft (m)	tons (m tons)	sq yds (m^2)
TOTAL				

(1) WIDTH = W_D

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. A-12.02, NEW REVISION BOX	T.P.
12-1-97	CORRECT FILTER FABRIC LEADER ARROW	J.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

SPECIAL DETAIL SHEET

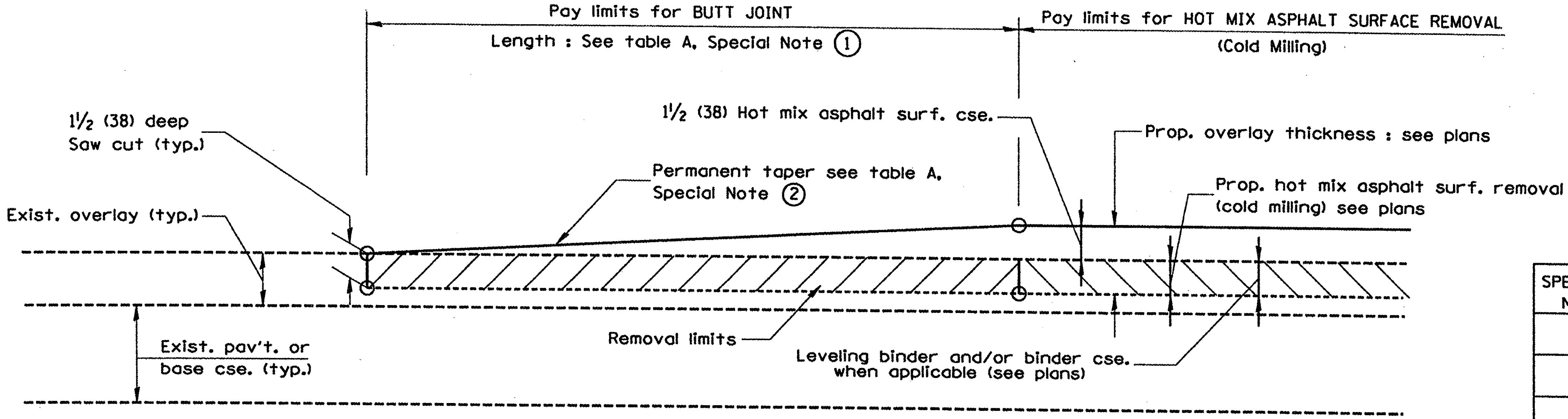
RIPRAP DITCH FOR EROSION PROTECTION

CADD DETAIL 281001-D4
SCALE: NOT DRAWN TO SCALE

DRAWN BY CADD
CHECKED BY

281001-D4

DESIGNER NOTES:
1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Surface Removal (Cold Milling).
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).



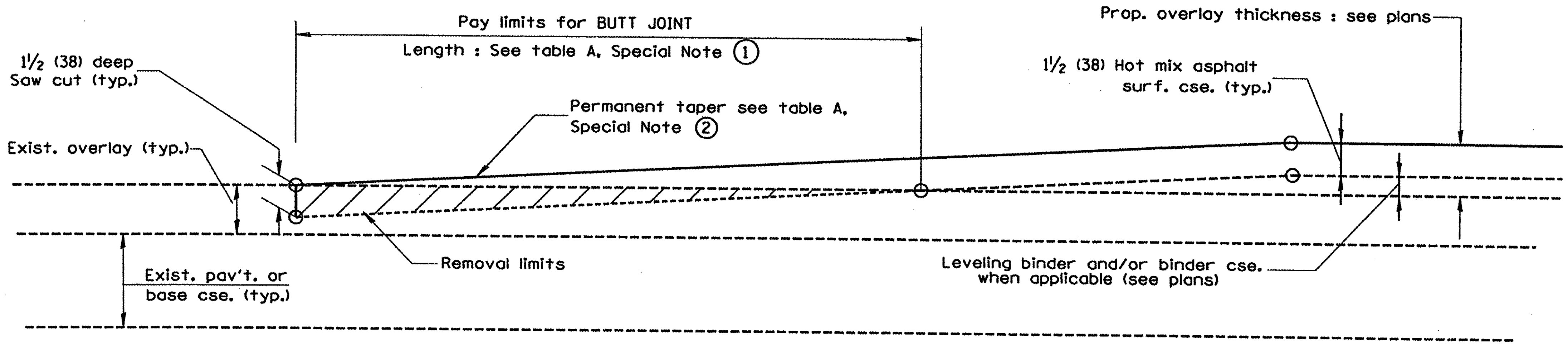
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
(LENGTHS AND TAPER RATES)

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
①	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
②	PERMANENT TAPER RATE	1:480	1:240
③	TEMPORARY RAMP TAPER RATE	1:80	1:40
④	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
⑤	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.



CASE 2 : NO HOT MIX ASHALT SURFACE REMOVAL (COLD MILLING)

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
4-1-97	CORRECTION TO DEPTH	J.A.
9-15-05	REVISED DESIGNER NOTE	M.M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

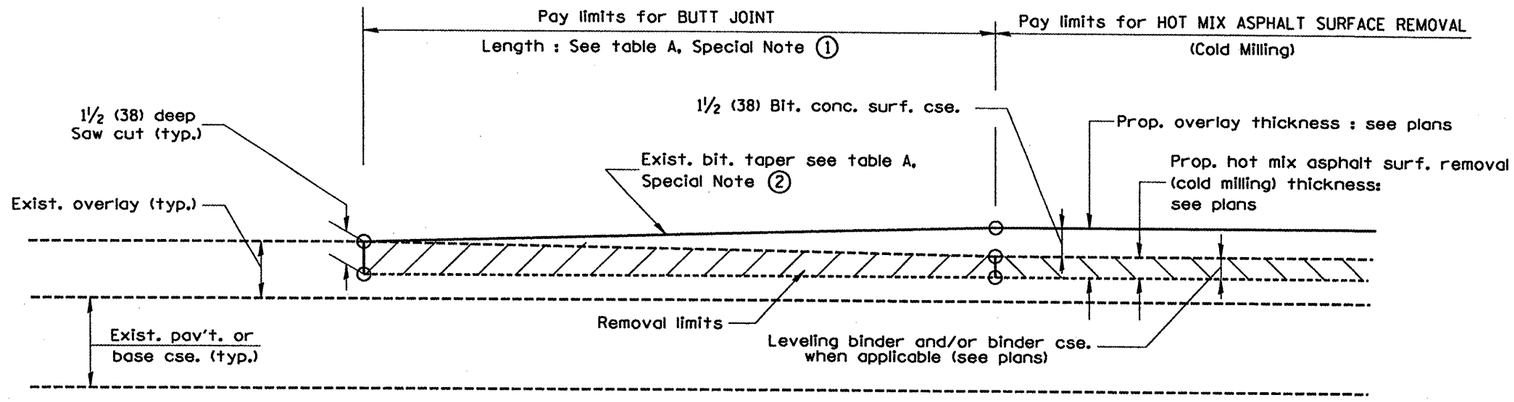
ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

BUTT JOINTS

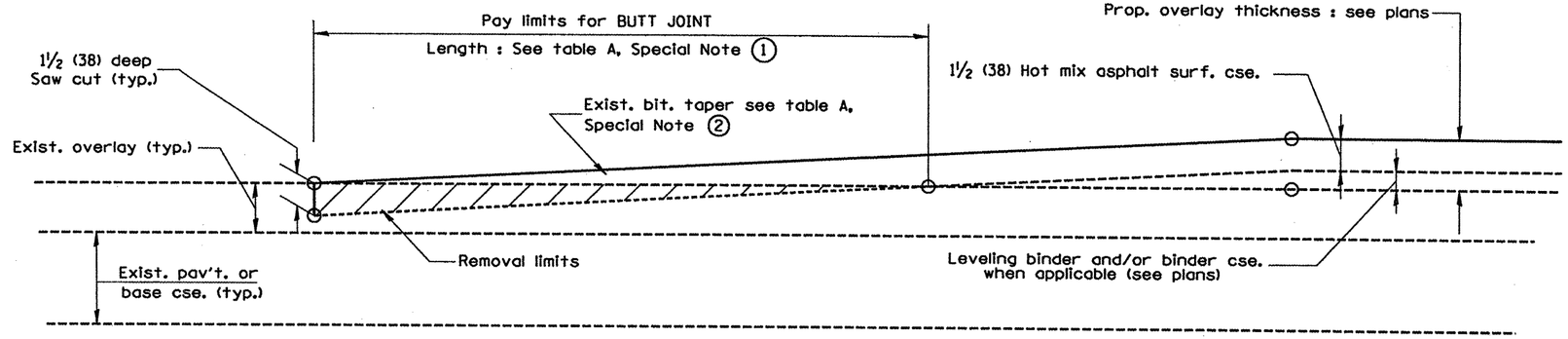
CADD STD NO. 406101-D4 SHEET 1 OF 3
SCALE: NOT DRAWN TO SCALE
DRAWN BY CADD
DATE
CHECKED BY

CONTRACT NO. 88773

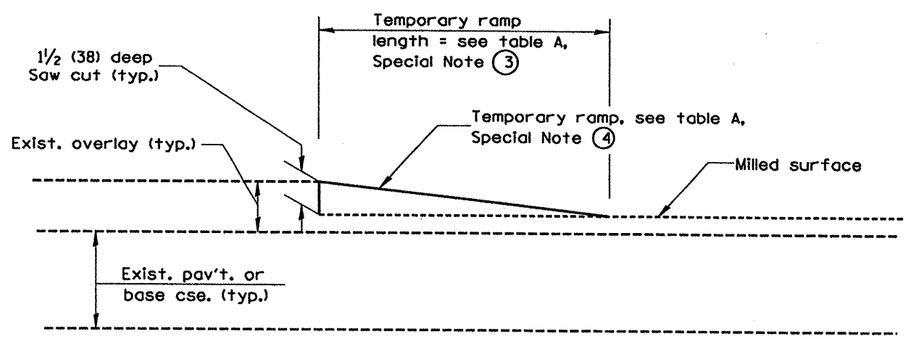
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)RBRS-3, 136R109BR-2	HENDERSON	490	453
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

CADD STD NO. 406101-D4 SHEET 2 OF 3

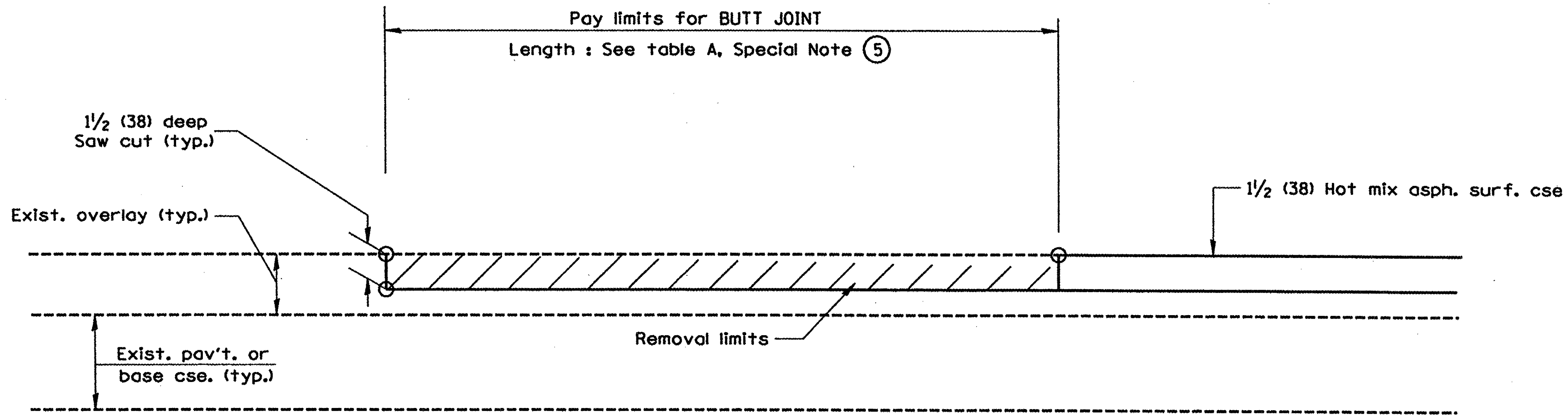
SCALE: NOT DRAWN TO SCALE DRAWN BY CADD

CHECKED BY

406101-D4 (2)

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3; 136R;109BR-2	HENDERSON	490	454
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

BUTT JOINTS

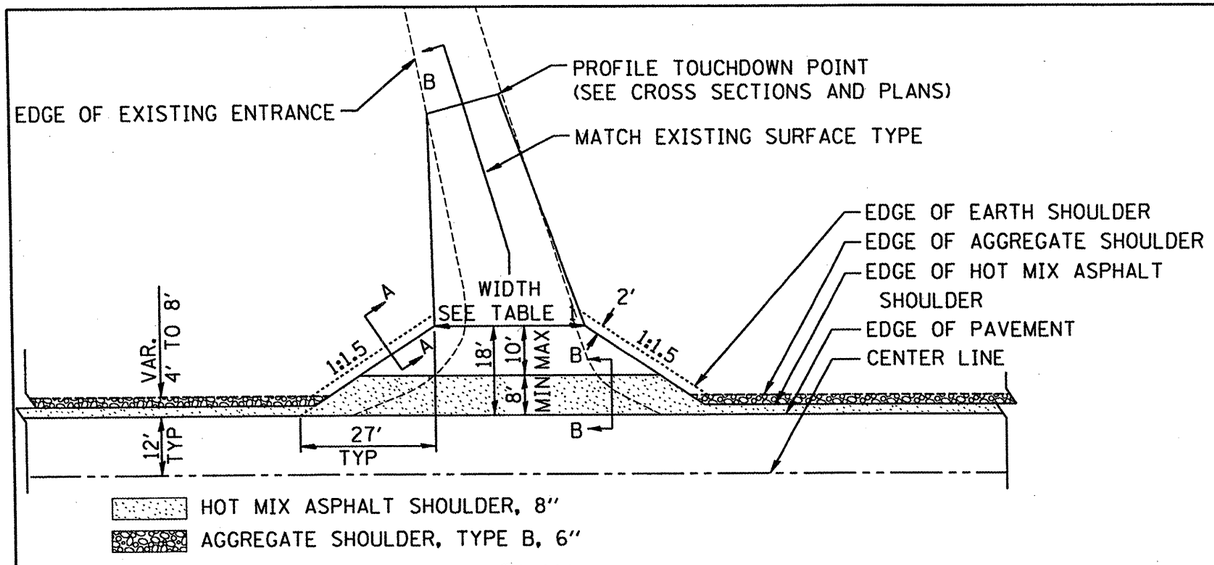
CADD STD NO. 406101-D4 SHEET 3 OF 3

SCALE: NOT DRAWN TO SCALE DRAWN BY CADD CHECKED BY

406101-D4 (3)

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)HBRS-3; 136R(10)HBR-2	HENDERSON	490	455
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



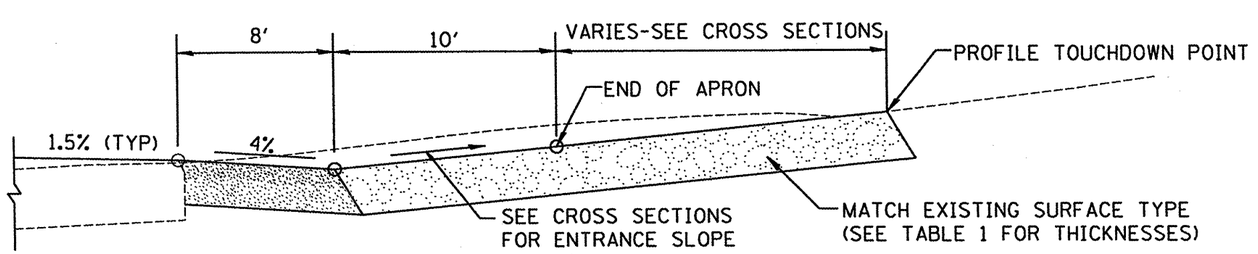
PLAN

COMMERCIAL / FARM-RELATED ENTRANCE

TABLE 1

RURAL ENTRANCE DESIGN

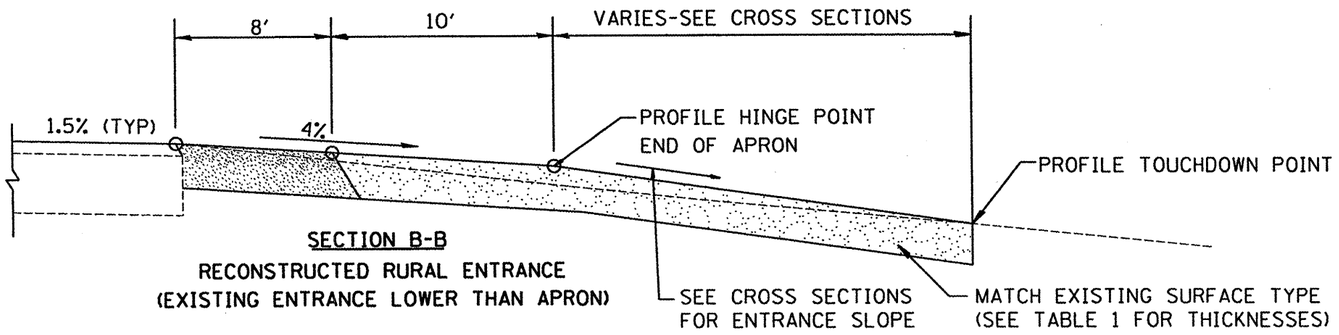
ELEMENT	NON-COMMERCIAL		NON-COMMERCIAL W/ LARGE FARM EQUIPMENT		COMMERCIAL 1-WAY OPERATION		COMMERCIAL 2-WAY OPERATION	
WIDTH (W)	12'(3.6m) Min.	24'(7.2m) Max.	20' (6.1m)Max.	30' (9.0m)Max.	14'(4.3m) Min.	24'(7.2m) Max.	24'(7.2m) Min.	35'(10.7m) Max.
FLARE	1:1.5							
MAX. GRADE (G)	12%		12%		10%			
SURFACE TYPE								
INCIDENTAL HOT MIX ASPHALT SURFACING	6"		—		8"			
AGGREGATE SURFACE COURSE	6"		8"		8"			
PCC DRIVEWAY PAVEMENT	6"		—		7"			



SECTION B-B

RECONSTRUCTED RURAL ENTRANCE

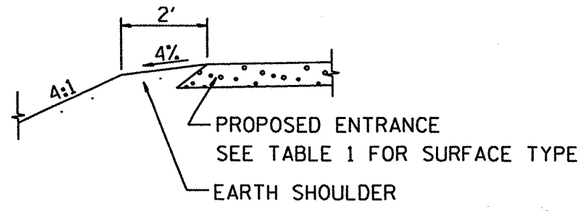
(EXISTING ENTRANCE HIGHER THAN APRON)



SECTION B-B

RECONSTRUCTED RURAL ENTRANCE

(EXISTING ENTRANCE LOWER THAN APRON)



SECTION A-A

SHOULDER TREATMENT FOR RURAL ENTRANCES

GENERAL NOTES

1. ENTRANCES SHALL SLOPE AWAY FROM THE PAVEMENT AT A RATE EQUAL TO THE SHOULDER SLOPE FOR A MINIMUM DISTANCE OF 8'.

2. A MINIMUM 8' PAVED SHOULDER SHALL BE CONSTRUCTED BETWEEN LOCATIONS WHERE THE RURAL ENTRANCE IS LESS THAN 50' FROM AN ADJACENT SIDEROAD, ENTRANCE OR MAILBOX TURNOUT.

3. A TAPER RATE OF 5:1 IS DESIRABLE WHEN TRANSITING FROM THE RURAL ENTRANCE WIDTH SHOWN IN TABLE 1, TO THE EXISTING ENTRANCE WIDTH.

DATE	REVISIONS	BY
1-1-97	RENUM. C-103.06, NEW REVISION BOX	T.P.
7-1-97	REVISE DESIGNER NOTES	J.A.
1-17-03	ADJUST DESIGN, CHANGE ENTRANCE	JATR
9-15-05	RADIUS FOR FLARE	M.M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

RURAL ENTRANCES FOR "3R" PROJECTS

SHEET 1 OF 2

CADD STD NO. 406301-D4

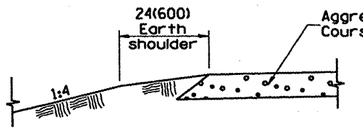
SCALE: NOT DRAWN TO SCALE — DRAWN BY CADD

DATE — CHECKED BY: T. PICKERING

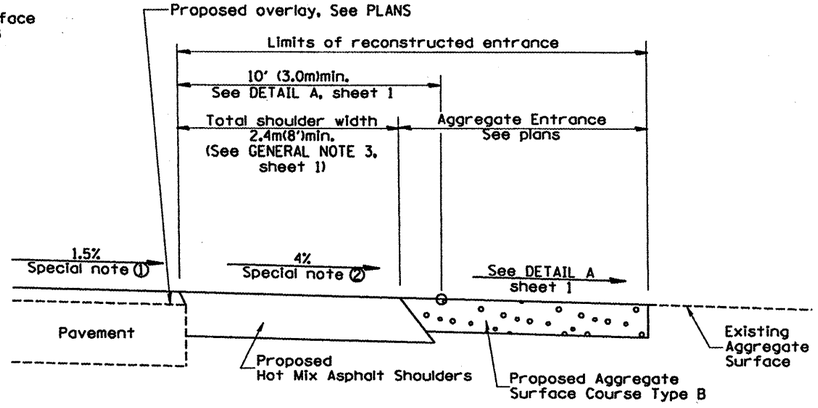
406301-D4(1)

CONTRACT NO. 88773

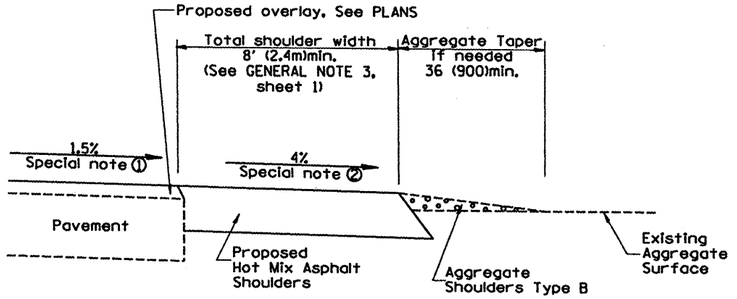
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(13C,13TH&RS-3&13GR&109BR-2	HENDERSON	490	456
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



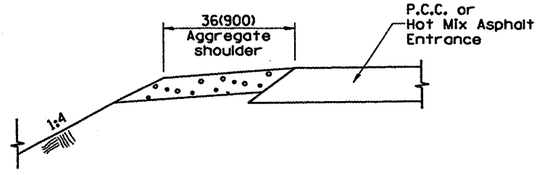
SECTION A-A
SHOULDER TREATMENT FOR AGGREGATE ENTRANCES



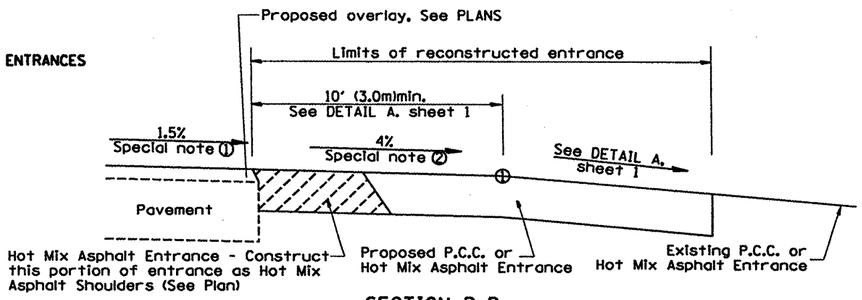
SECTION B-B
RECONSTRUCTED AGGREGATE ENTRANCE



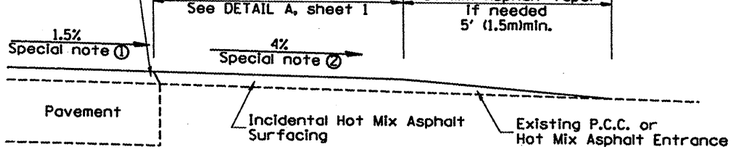
SECTION B-B
EXISTING AGGREGATE ENTRANCE



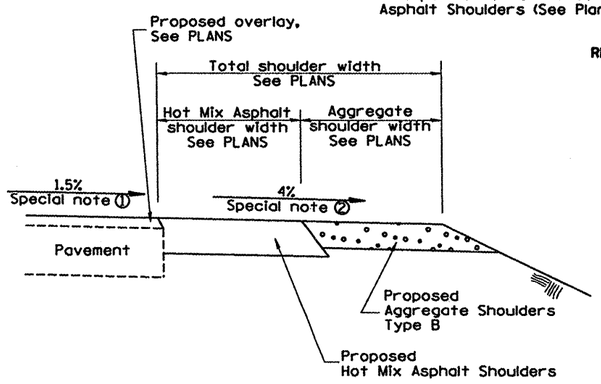
SECTION C-C
SHOULDER TREATMENT FOR P.C.C. OR HOT MIX ASPHALT ENTRANCES



SECTION D-D
RECONSTRUCTED P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION D-D
EXISTING P.C.C. OR HOT MIX ASPHALT ENTRANCE



SECTION E-E
MAINLINE SHOULDER TREATMENT

SPECIAL NOTES

① The mainline pavement cross-slope is 1.5% for tangent alignment. See PLANS for cross-slope on superelevated horizontal curves.

② The shoulder slope shall control the entrance profile for a distance of 10' (3.0m) minimum from the pavement edge. The shoulder cross-slope is 4% for tangent alignment. Through superelevated curves, the maximum pavement-shoulder breakover should not be greater than 10% for shoulders 6' (1.8m) and wider and 12% for shoulders 4' (1.2m) and less. Where 12' (366cm) paved shoulders are provided, the breakover should be at the edge of the paved shoulder rather than at the pavement edge.

All slope ratios are expressed as units of vertical displacement to units of horizontal displacement (V:H).
All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

RURAL ENTRANCES FOR "3R" PROJECTS

SHEET 2 OF 2

CADD STD NO. 406301-D4

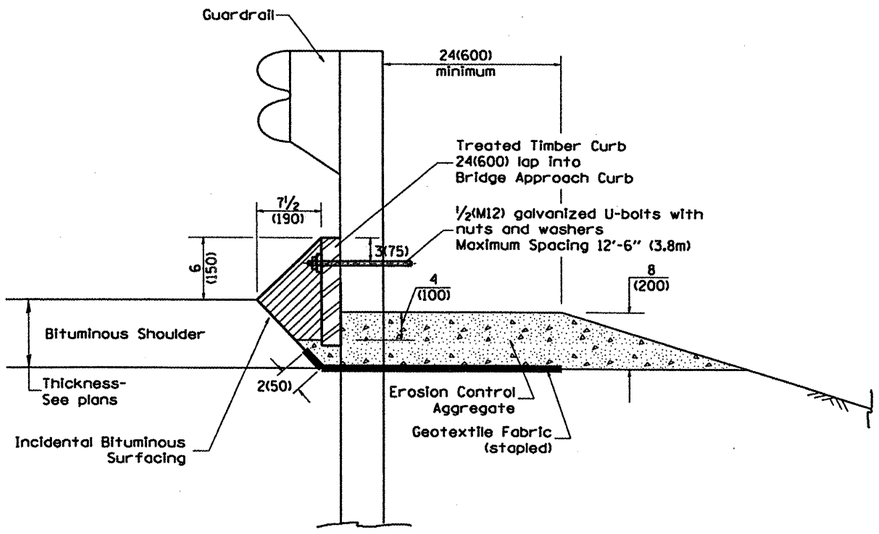
SCALE: NOT DRAWN TO SCALE

DRAWN BY CADD

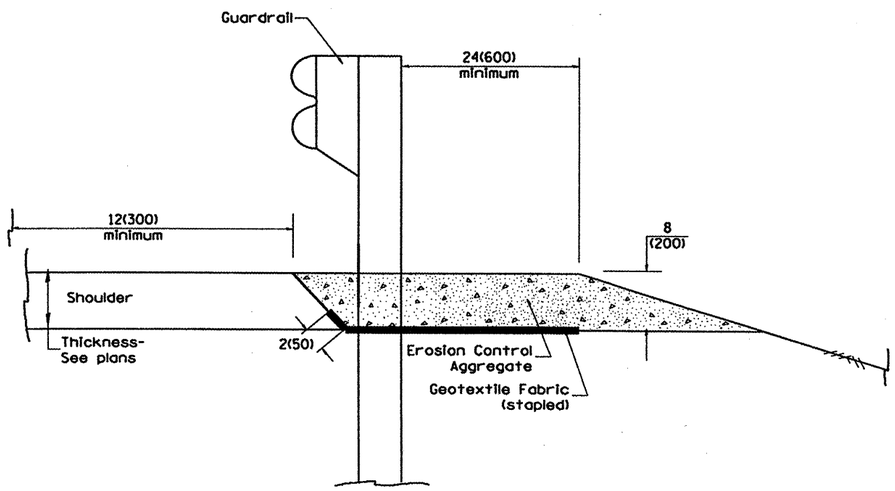
CHECKED BY: T. PICKERING

406301-D4(2)

DESIGNER NOTE: 1. Use EROSION CONTROL CURB at guardrail installations where grades are equal to or greater than 1¼ and at inlets. Include District Special Provision
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1¼ (include District Special Provision)
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Exposed Pipes; Seepage Collars for Exposed Pipes; Slope Drains for Buried Pipes; Seepage Collars for Buried Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision -"Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3 (136R,109BR-2	HENDERSON	490	457
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

All dimensions are in inches (millimeters) unless otherwise noted.

DATE	REVISIONS	BY
1-1-97	RENUM. C-22.01, NEW REVISION BOX	T.P.
3-1-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
11-3-00	CORRECTION TO NOTES	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION
DISTRICT CADD STANDARD

GUARDRAIL EROSION CONTROL TREATMENTS

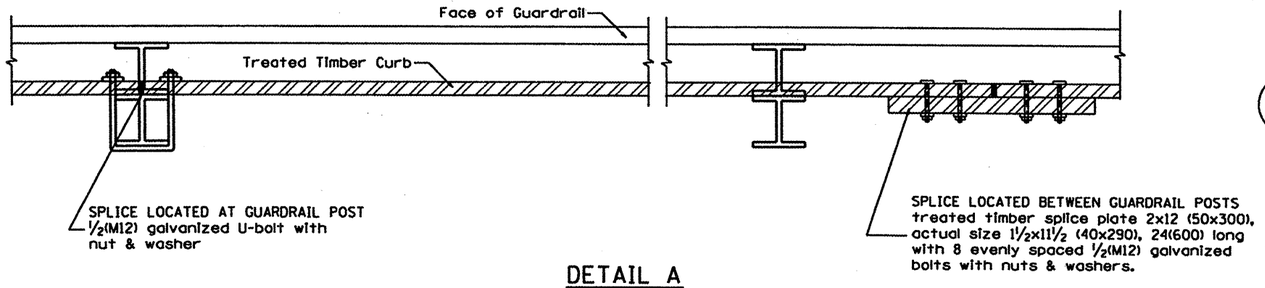
CADD STD NO. 630101-D4(1)
SCALE: NOT DRAWN TO SCALE

SHEET 1 OF 2
DRAWN BY CADD
CHECKED BY

630101-D4(1)

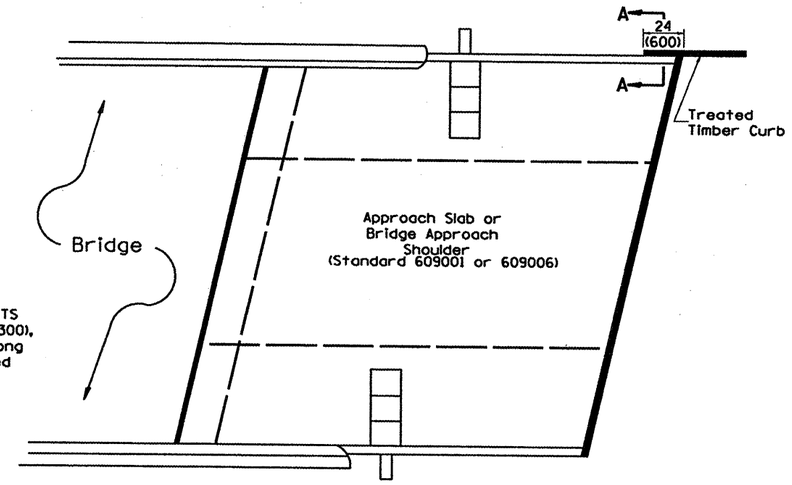
CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	1136,1371W&RS-3 1368,1098R-2	HENDERSON	490	458
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



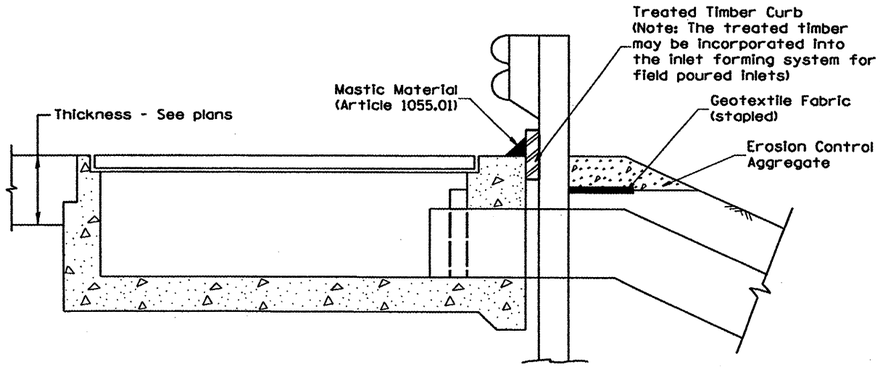
DETAIL A

(Typical Treated Timber Splices)

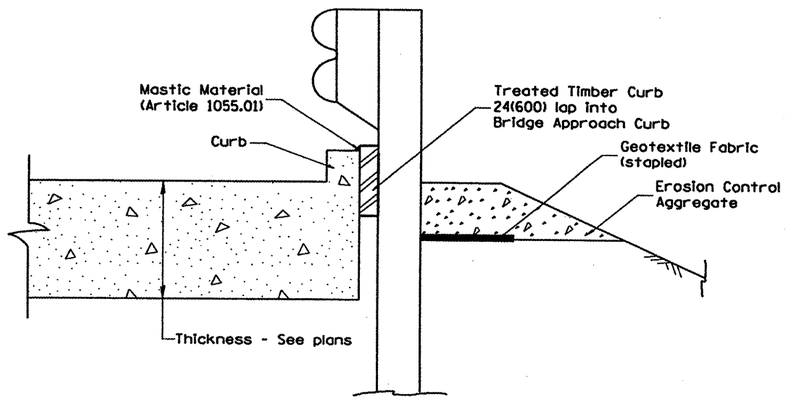


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB AT INLETS TYPE E & F (STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

GUARDRAIL EROSION CONTROL TREATMENTS

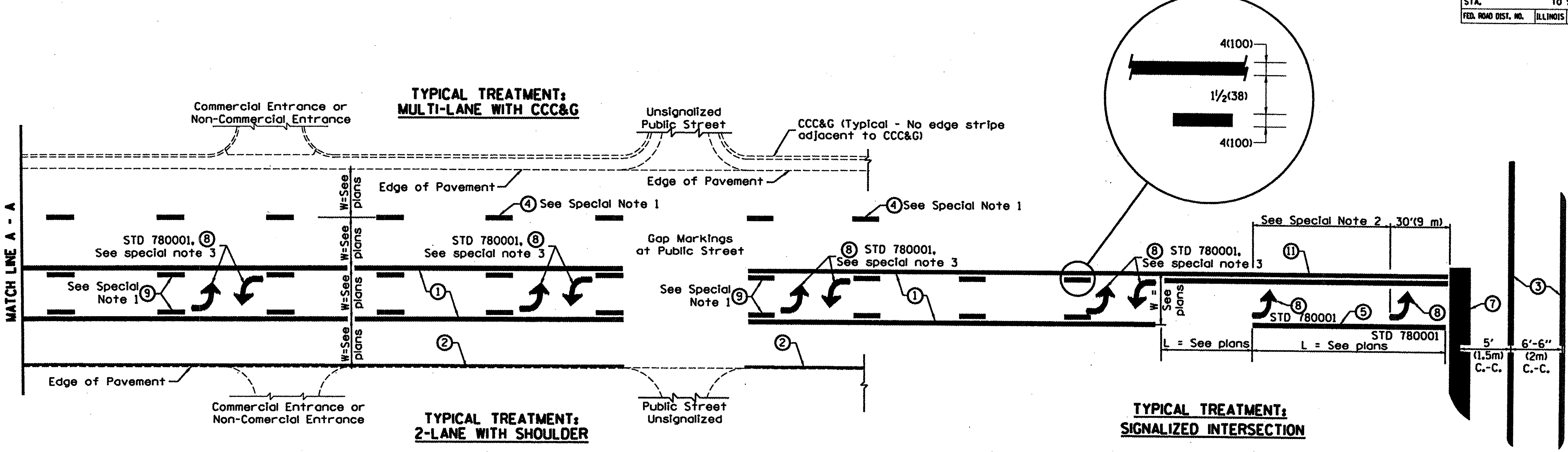
CADD STD NO. 630101-D4(2)
SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2
DRAWN BY CADD
CHECKED BY

630101-D4(2)

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3; 136R;109BR-2	HENDERSON	490	459
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

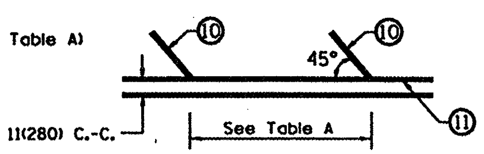


FLUSH PAVED MEDIAN: TWO-WAY LEFT TURN LANE WITH ONE-WAY LEFT TURN LANE AT SIGNALIZED INTERSECTION

TYPICAL PAVEMENT MARKING LEGEND

(Note: This is a District Standard Legend. Some elements may not apply to specific project.)

1. 4(100) Solid (Yellow)
2. 4(100) Solid (White)
3. 2-6(150) Crosswalk @ 6'-6" (2m)min C.-C. (White)
   2-8(200) Crosswalk @ 6'-6" (2m)min C.-C. (White) (When traffic signals are present.)
4. 6(150) Skip-Dash (White) 10' (3.05m) 30' (9.14m) 10' (3.05m) (See Special Note 1)
5. 8(200) Solid (White)
6. 12(300) Diagonal (White) (Item 6 is shown on Std. 780001)
7. 24(600) Stop Bar (White)
8. Letters & Arrows 33' (10m) (See Std. 780001 and Special Notes 2 & 3)
9. 4(100) Skip-Dash (Yellow) 10' (3.05m) 30' (9.14m) 10' (3.05m) (See Special Note 1)
10. 12(300) Diagonal (Yellow) (See Table A)
11. 4(100) Double Solid (Yellow)



SPECIAL NOTES

1. Skip-Dash markings will be centered between both ends of city blocks and shall be placed in alignment transversly across the pavement.
2. The following shall apply to arrows located in one-way left turn lanes:
   A. A minimum of two (2) arrows is required.
   B. The maximum spacing between arrows is 80' (24 m).
   C. Arrows shall be evenly spaced if three (3) or more are required.
3. The following shall apply to arrow pairs located in two-way left turn lanes:
   A. A minimum of two (2) arrow pairs is required.
   B. The maximum spacing between arrow pairs is 200' (61 m).
   C. Arrow pairs shall be evenly spaced if three (3) or more are required.
   D. The spacing between Bi Directional Left Turn Arrows is 33' (10 m).

GENERAL NOTES

1. Refer to State Standard 780001 for additional Pavement Markings including letters & arrows.
2. See Plans for Pavement Markings adjacent to curbed islands and medians, and through lane reductions.

All dimensions are in inches (millimeters) unless otherwise noted.

DESIGNER NOTES:
1. Include State Standard 780001 (Typical Pavement Markings)

DATE	REVISIONS	BY
1-1-97	RENUM. F-8.03, NEW REVISION BOX	T.P.
2-7-97	ADD BI DIRECTIONAL DIMENSION	J.A.
10-97	CORRECT BI DIRECTIONAL DIMENSION	J.A.
8-02	ADD CROSSWALK DMNS. WITH T.S.	M.A.
10-16-06	REVISED TO 2007 SPEC.	M.A.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

TYPICAL PAVEMENT MARKINGS

CADD STANDARD 780001-D4

SCALE: NOT DRAWN TO SCALE

SHEET 1 OF 2

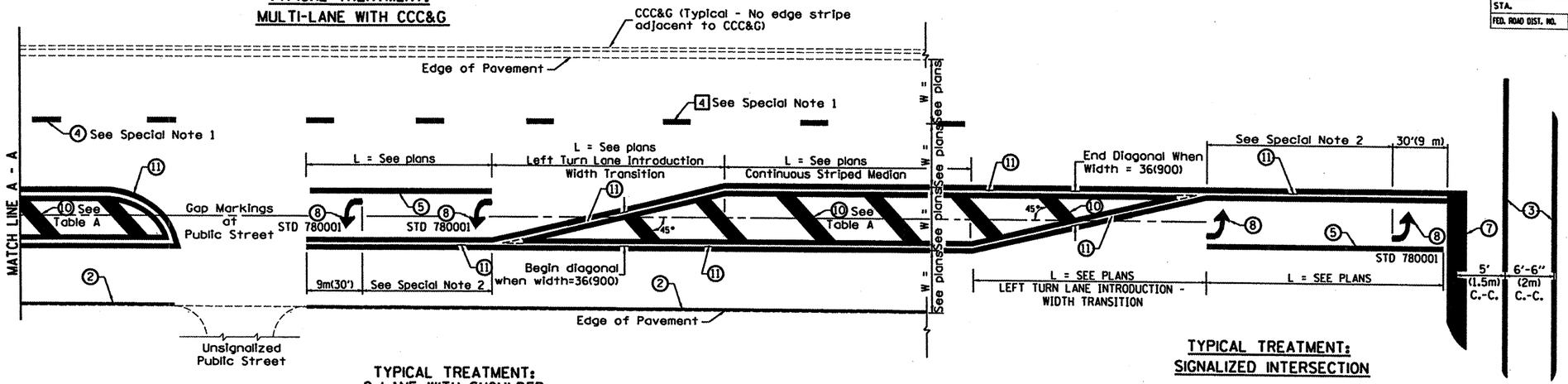
DRAWN BY CADD

CHECKED BY

CONTRACT NO. 88773

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)WARS-3, 136R(105BR-2	HENDERSON	490	460
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL TREATMENT: MULTI-LANE WITH CCC&G

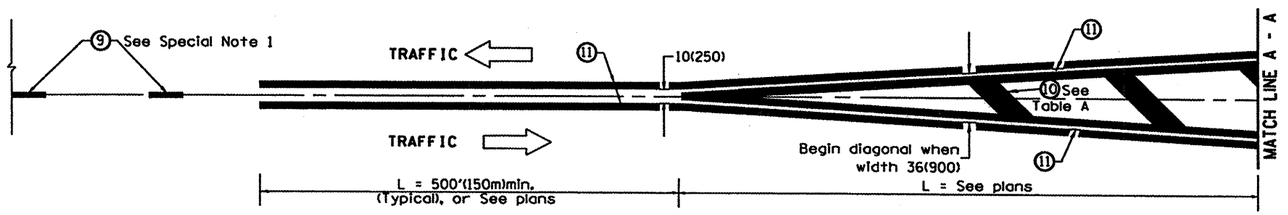


TYPICAL TREATMENT: 2-LANE WITH SHOULDER

TYPICAL MEDIAN TRANSITIONS

TYPICAL TREATMENT: SIGNALIZED INTERSECTION

FLUSH PAVED MEDIAN: RESTRICTED LEFT TURN LANE



MEDIAN INTRODUCTION - WIDTH TRANSITIONS

TABLE A

RECOMMENDED SPACING BETWEEN DIAGONAL LINES

SPEED LIMIT RANGE	CONTINUOUS	INTERSECTION CHANNELIZATION (Includes Width Transitions for Median and Left Turn Lane Introductions)
Less Than 30 mph (50 km/h)	50' (15m)	15' (5m)
30 - 45 mph (50 - 70 km/h)	75' (23m)	20' (6m)
Over 45 mph (70 km/h)	150' (46m)	30' (9m)

All dimensions are in inches (millimeters) unless otherwise noted.

ILLINOIS DEPARTMENT OF TRANSPORTATION

DISTRICT CADD STANDARD

TYPICAL PAVEMENT MARKINGS

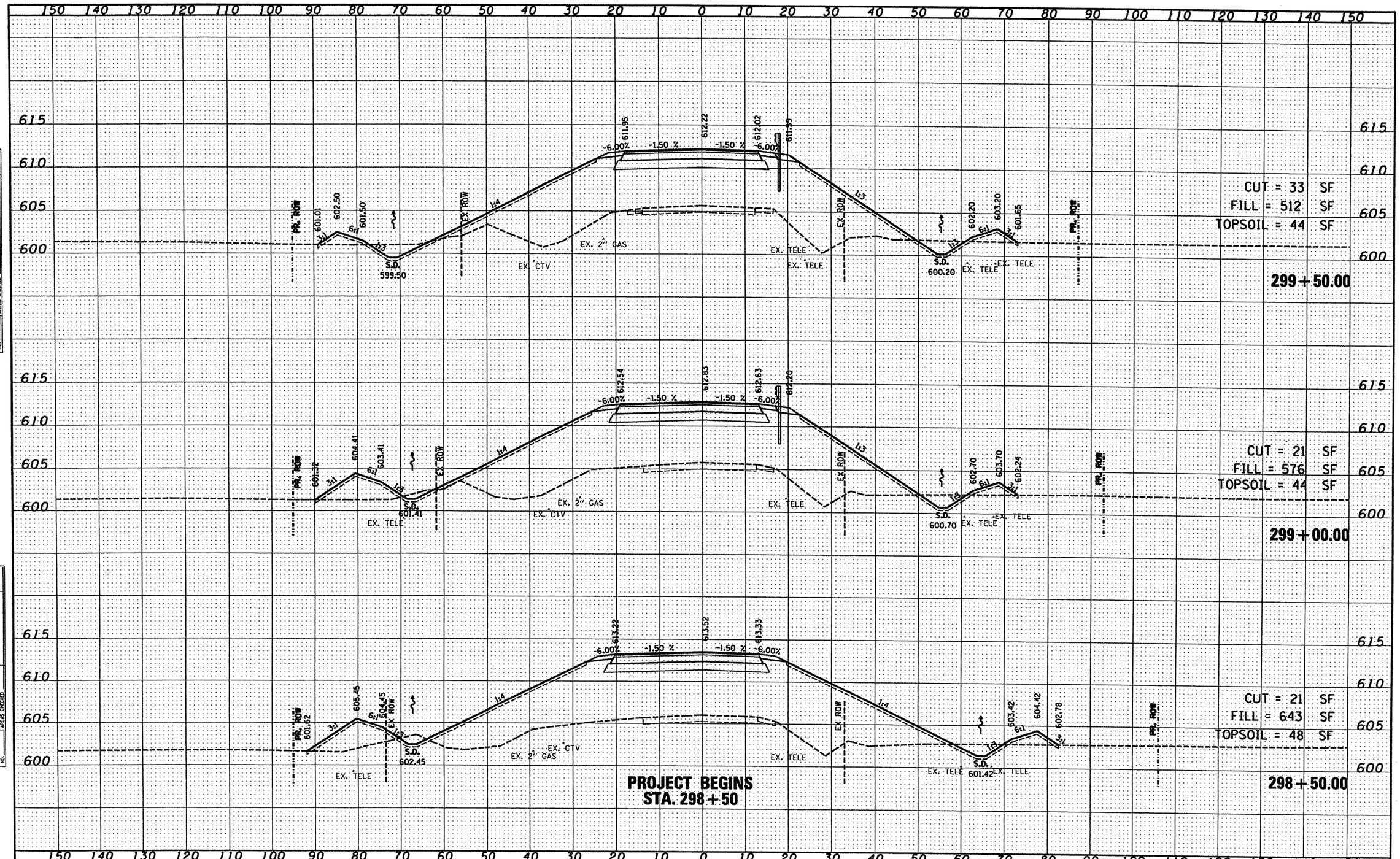
CADD STANDARD 780001-D4

SCALE: NOT DRAWN TO SCALE

SHEET 2 OF 2

DRAWN BY CADD

CHECKED BY



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

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

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	xssht.dgn	DRAWN - JWS	REVISED -
	PLOT SCALE = 20.0000 ' / IN.	CHECKED - SJK	REVISED -
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

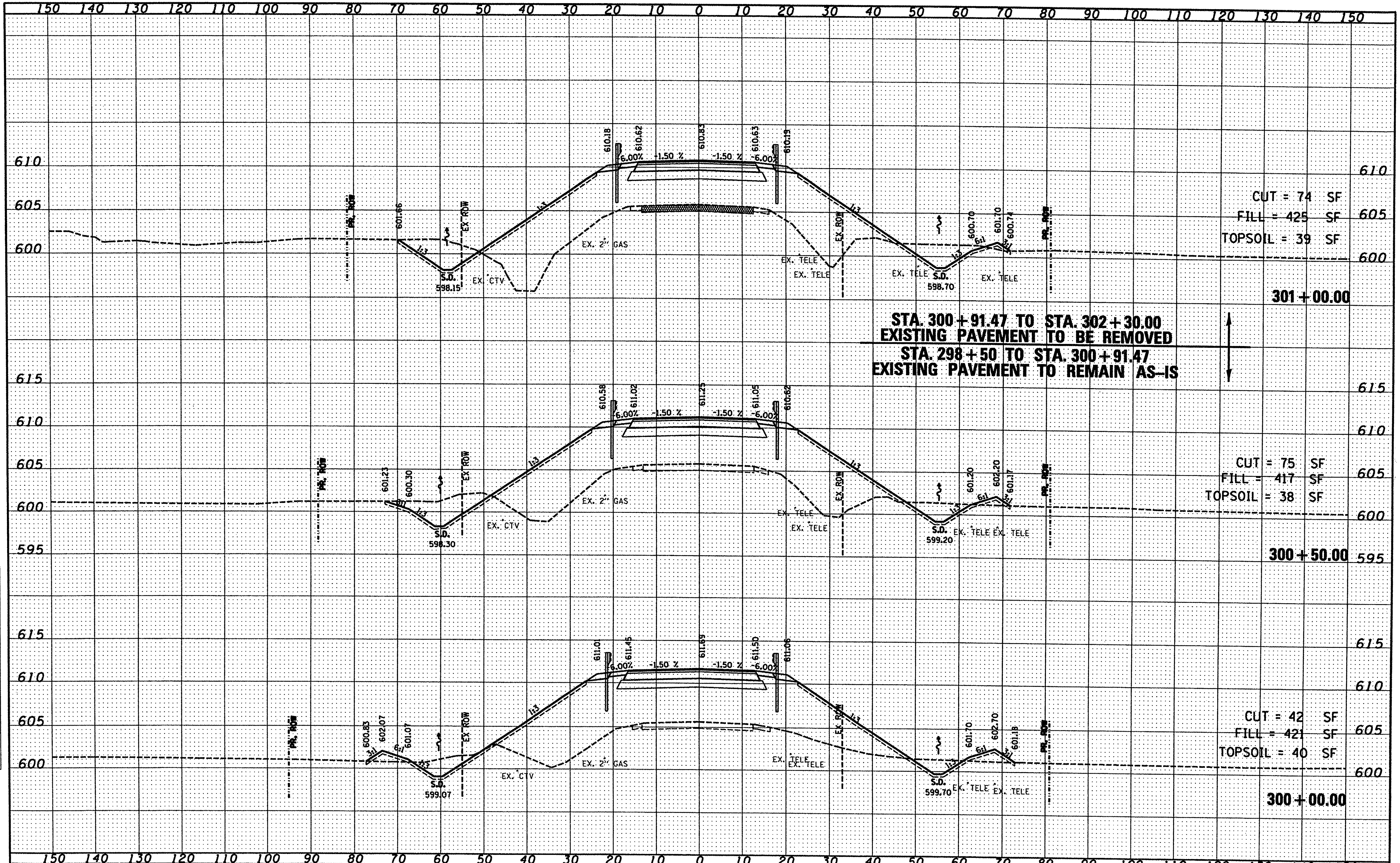
ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;(136R;109BR-2	HENDERSON	490	461

CONTRACT NO. 88773

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



610
605
600
6.00% -1.50 % -1.50 % -6.00%
610.18
610.62
610.83
610.63
610.19
601.66
600.70
601.70
600.74
PR. ROW
EX. ROW
EX. 2" GAS
EX. CTV
EX. TELE
S.D. 598.15
S.D. 598.70
CUT = 74 SF
FILL = 425 SF
TOPSOIL = 39 SF
301 + 00.00
STA. 300 + 91.47 TO STA. 302 + 30.00
EXISTING PAVEMENT TO BE REMOVED
STA. 298 + 50 TO STA. 300 + 91.47
EXISTING PAVEMENT TO REMAIN AS-IS
615
610
605
600
595
610.58
611.02
611.25
611.05
610.62
601.23
600.30
601.20
602.20
601.17
S.D. 598.30
S.D. 599.20
CUT = 75 SF
FILL = 417 SF
TOPSOIL = 38 SF
300 + 50.00
611.01
611.45
611.69
611.50
611.06
600.83
602.07
601.07
601.70
602.70
601.18
S.D. 599.07
S.D. 599.70
CUT = 42 SF
FILL = 421 SF
TOPSOIL = 40 SF
300 + 00.00
150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED - ___

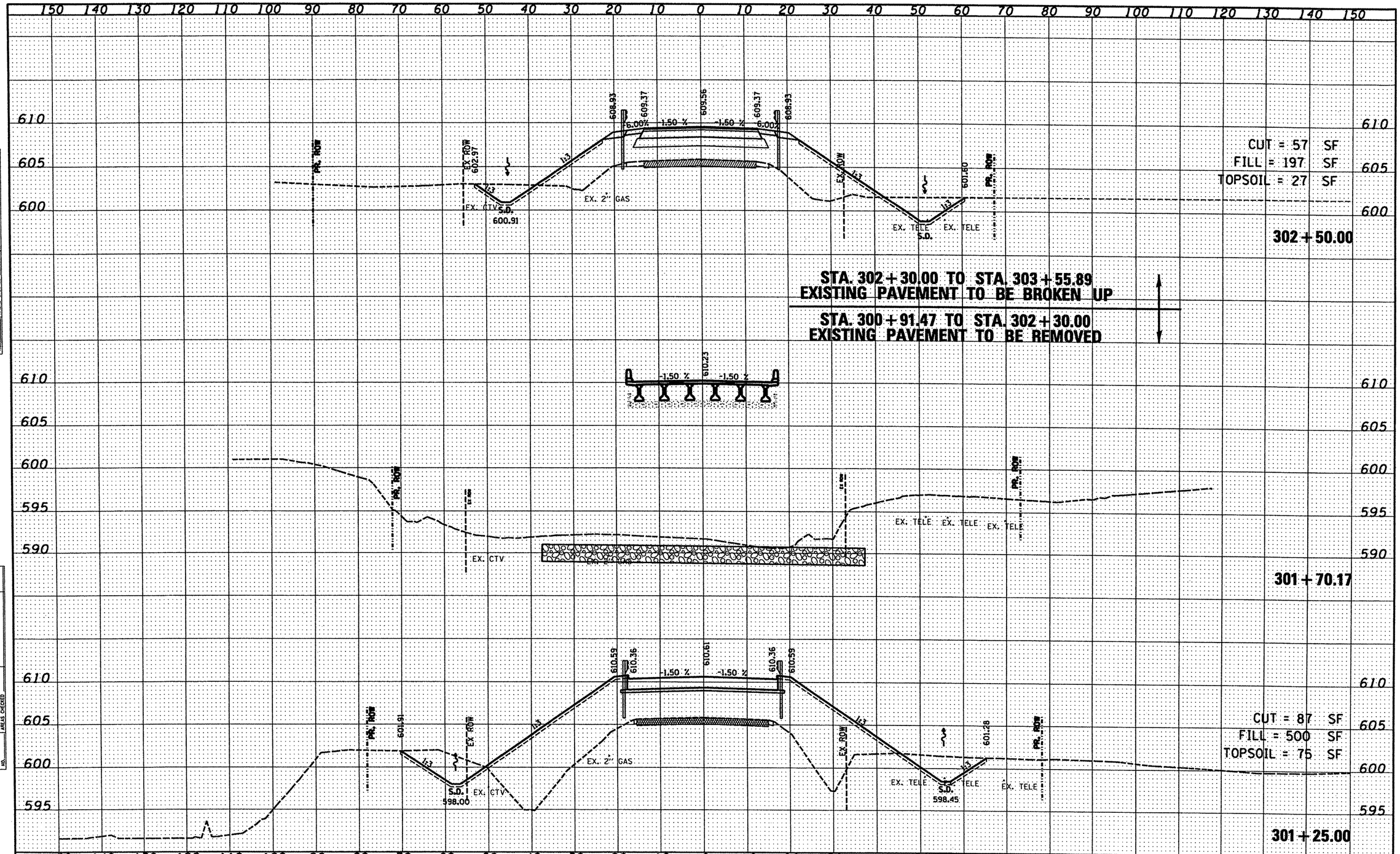
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	462

CONTRACT NO. 88773



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

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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

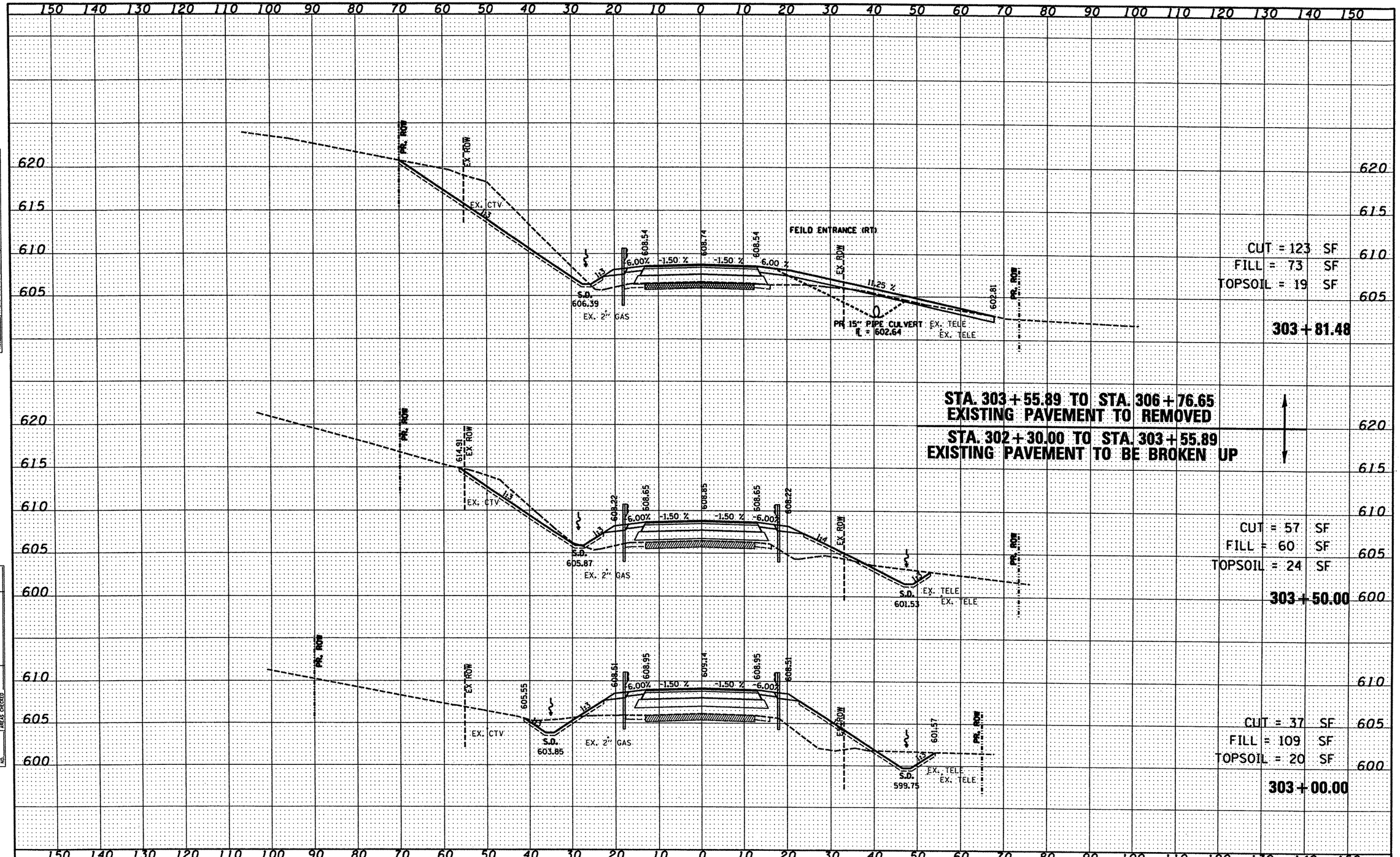
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R,109BR-2	HENDERSON	490	463
		CONTRACT NO. 88773		

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



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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

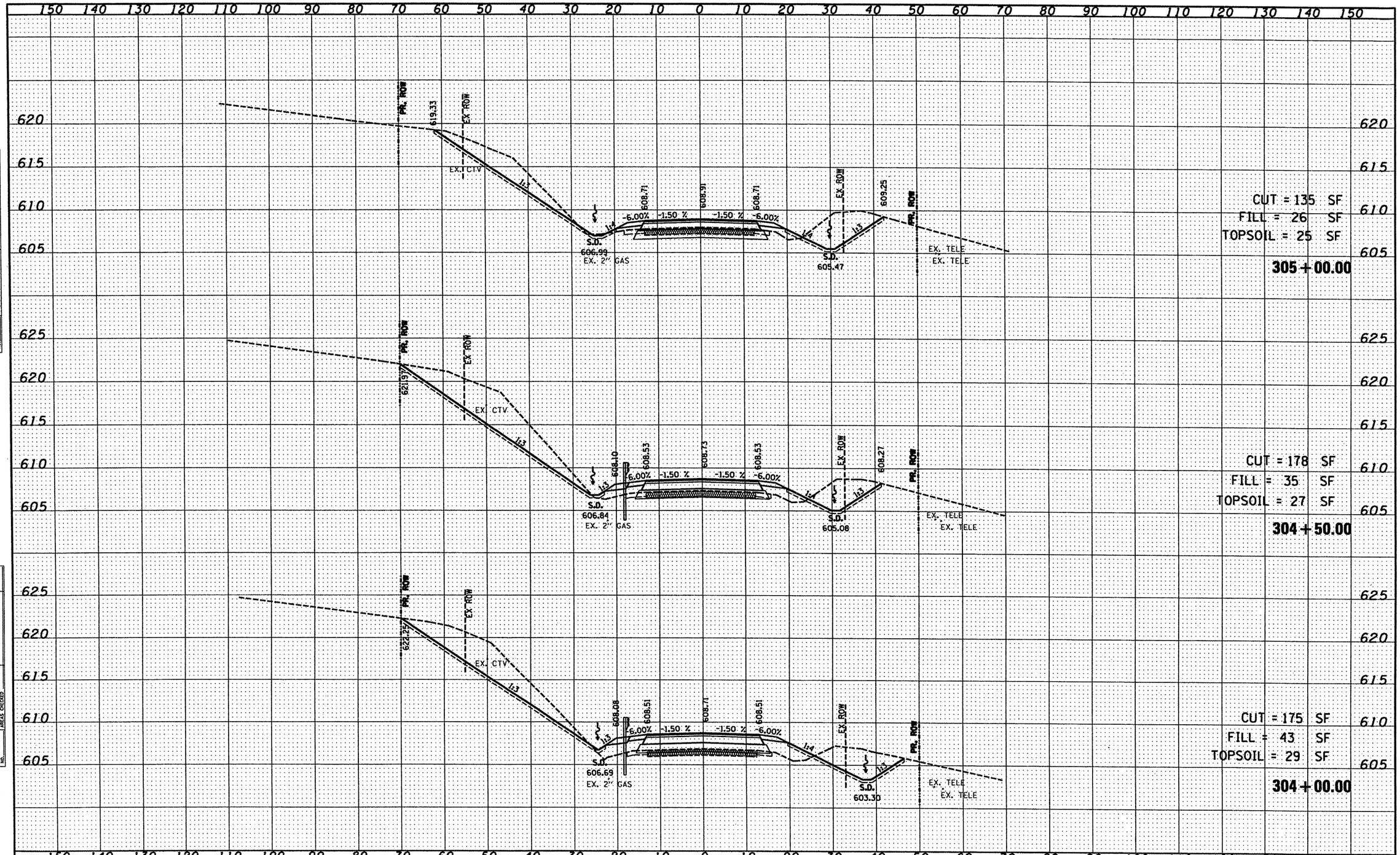
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	464
		CONTRACT NO. 88773		

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



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

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

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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

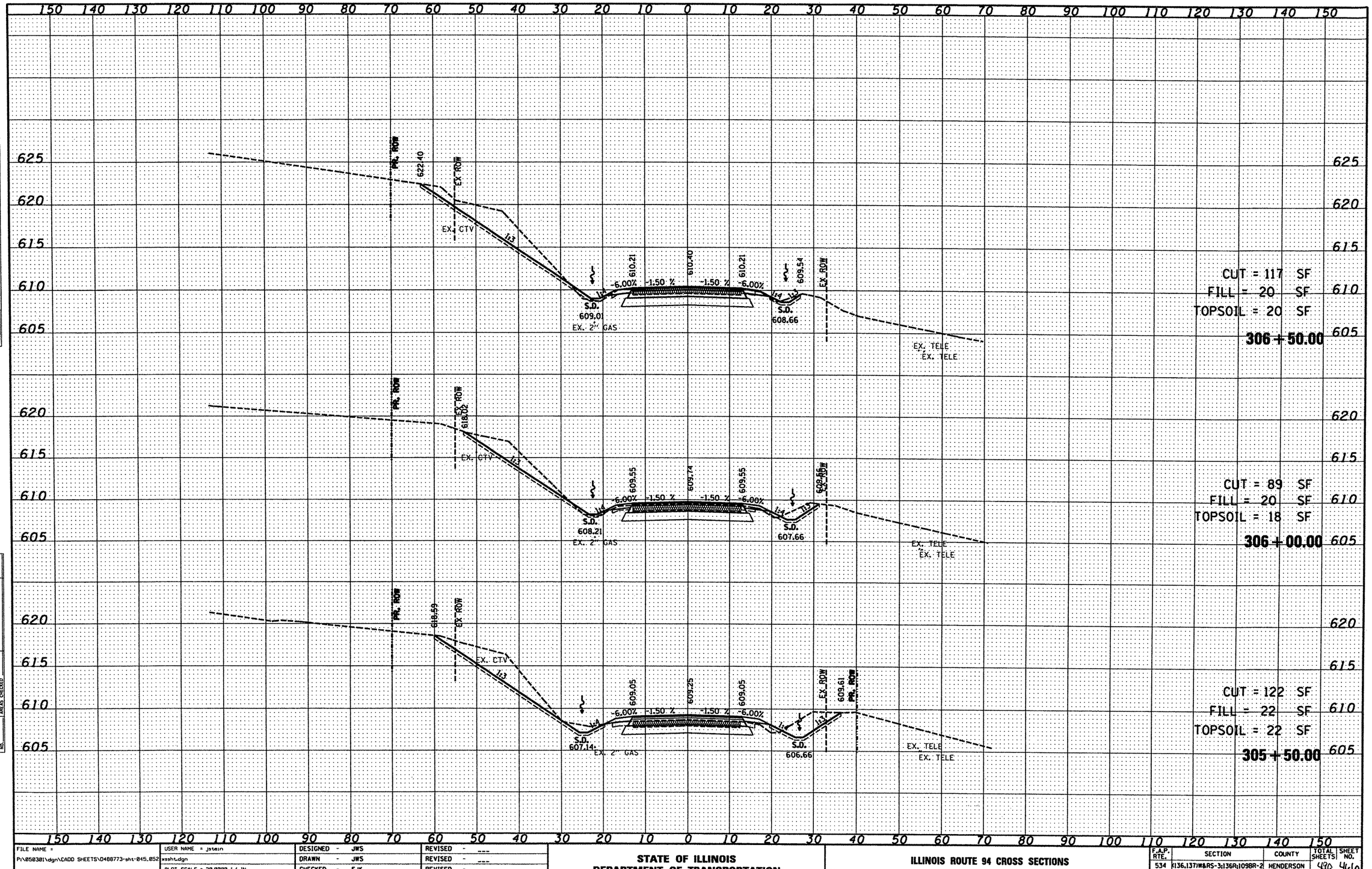
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;(136R,109BR-2	HENDERSON	490	465
		CONTRACT NO. 88773		

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



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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	480	466
		CONTRACT NO. 88773		

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

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

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

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

625 620 615 610 605

EX. ROW
EX. CTV
610.71
EX. 2" GAS
EX. ROW
EX. TELE
EX. TELE

CUT = 0 SF
FILL = 0 SF
TOPSOIL = 0 SF
307+50.00

MAINLINE PROJECT ENDS
STA. 307+06.65

PR. ROW
EX. ROW
EX. CTV
611.13
-1.50 %
611.33
-1.50 %
611.13
EX. ROW
EX. 2" GAS
EX. TELE
EX. TELE

CUT = 0 SF
FILL = 0 SF
TOPSOIL = 0 SF
307+06.65

PR. ROW
EX. ROW
EX. CTV
611.02
-1.50 %
611.22
-1.50 %
611.02
EX. ROW
EX. 2" GAS
EX. TELE
EX. TELE

CUT = 0 SF
FILL = 0 SF
TOPSOIL = 0 SF
307+00.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

ORIGINAL SURVEY — NOTE BOOK — NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS CHECKED

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	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	467
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

620 615 610 605 625

EX ROW

615.72

610.41

CUT = 2 SF
FILL = 0 SF
TOPSOIL = 0 SF

309+80.00

EX ROW

FEILD ENTRANCE (LT)

615.46 0.69% 614.66 4.00% 615.07 4.00% 615.29

PR. 15" PIPE CULVERT
E = 611.35'

CUT = 0 SF
FILL = 39 SF
TOPSOIL = 0 SF

309+52.50

EX ROW

612.60

614.75

CUT = 1 SF
FILL = 0 SF
TOPSOIL = 0 SF

309+20.00

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

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

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

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	PLOT SCALE = 20.0000 ' / IN.	CHECKED - SJK	REVISED - ---
	PLOT DATE = 1/21/2009	DATE - 1/21/2009	REVISED - ---

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ILLINOIS ROUTE 94 CROSS SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
534	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	468

CONTRACT NO. 88773

FED. ROAD DIST. NO. 2 | ILLINOIS | FED. AID PROJECT

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	469
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 88773		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY PLANS

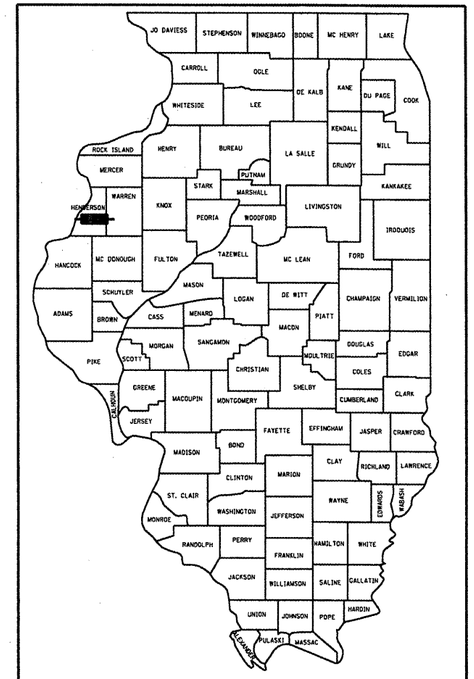
FAP ROUTES 665 & 534 (IL 116 & IL 94)
SECTION (136,137) W&RS-3;136R;109BR-2
PROJECT
TYPE OF IMPROVEMENT 3R
HENDERSON COUNTY

C-94-347-96

FOR INDEX OF SHEETS, SEE SHEET NO. 2

VOLUME III

D-94-068-96

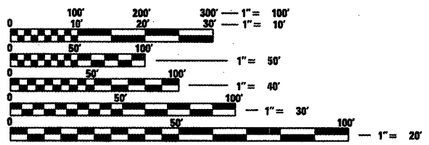


LOCATION OF SECTION INDICATED THUS:- ■

DESIGN DESIGNATION

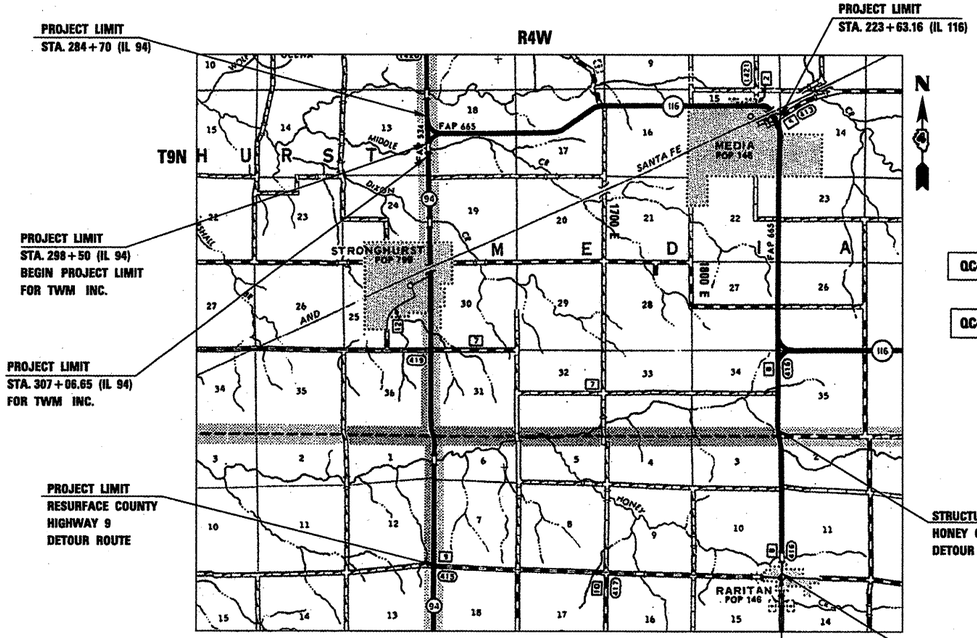
FAP ROUTE 665 (IL 116)
MINOR ARTERIAL
AADT (2006) = 800 (ACTUAL) 1,000 (DESIGN)
MU = 8%
SU = 5%

FAP ROUTE 534 (IL 94)
MINOR ARTERIAL
TRUCK ROUTE CLASS III
AADT (2006) = 1,750
MU = 5%
SU = 4%



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



QC/QA BITUMINOUS

QC/QA CONCRETE

STRUCTURE REPLACEMENT
HONEY CREEK TRIBUTARY
DETOUR ROUTE

PROJECT LIMIT
RESURFACE COUNTY
HIGHWAY 9
DETOUR ROUTE

RADIUS IMPROVEMENT
INTERSECTION IN
RARITAN

GROSS LENGTH = 43,532 FT. = 8.2 MILES
NET LENGTH = 22,176 FT. = 4.2 MILES

NPDES PERMIT REQUIRED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED _____ 20 _____

_____
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

_____ 20 _____

_____
ENGINEER OF DESIGN AND ENVIRONMENT

_____ 20 _____

_____
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PROJECT ENGINEER: RICH DOTSON (309)671-3455
PROJECT MANAGER: RON NOLTE (309)671-3470

CATALOG NO. 031267-00D
CONTRACT NO. 88773

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

ENVIRONMENTAL REVIEWS

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

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

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

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

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

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

PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING CONSTRUCTION PER ARTICLE 107.09 UNLESS ARRANGEMENTS ARE MADE IN WRITING BY THE CONTRACTOR WITH THE PROPERTY OWNERS WITH A COPY TO THE ENGINEER FOR SHORT-TERM CLOSURES.

GENERAL NOTES

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

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

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

4. SEEDING WILL NOT BE PERMITTED AT ANY TIME WHEN THE GROUND IS FROZEN, WET OR IN AN UNTILLABLE CONDITION. AREAS TO BE SEEDED SHALL BE DETERMINED BY THE ENGINEER AND SEEDED AS SOON AS POSSIBLE.

5. ALL SAW CUTS, NECESSARY TO COMPLETE THE WORK DETAILED IN THESE PLANS, SHALL BE INCLUDED IN THE COST FOR THE VARIOUS PAY ITEMS INVOLVED. THE MINIMUM SAW CUT DEPTH IN THE PAVEMENT SHALL BE 1 1/2" UNLESS OTHERWISE SPECIFIED IN A DETAIL SHOWN IN THE PLANS.

6. UNLESS DIRECTED BY THE ENGINEER, PAVEMENT MARKING LINES SHALL NOT BE LAID DIRECTLY OVER A LONGITUDINAL CRACK OR JOINT NOR OVER A TAR OR ASPHALT PAINTED LINE. THE EDGE OF A CENTERLINE OR LANE LINE SHALL BE OFFSET A MINIMUM DISTANCE OF 2" FROM A LONGITUDINAL CRACK OR JOINT. EDGE LINES SHALL BE APPROXIMATELY 2" FROM THE EDGE LINE OF PAVEMENT. SEE SECTION 780 OF THE STANDARD SPECIFICATIONS FOR TRAFFIC CONTROL ITEMS.

7. ABANDONED UNDERGROUND UTILITIES THAT CONFLICT WITH CONSTRUCTION SHALL BE DISPOSED OUTSIDE THE LIMITS OF 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 PER CUBIC YARD FOR EARTH EXCAVATION AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

8. ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

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

10. THE EXISTING ROAD SIGNS THAT INTERFERE WITH CONSTRUCTION WILL BE REMOVED OR RELOCATED AS DIRECTED BY THE ENGINEER. AFTER THE CONSTRUCTION IS COMPLETED, THE CONTRACTOR WILL REPLACE THE SIGNS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE CONTRACT, AND NO COMPENSATION WILL BE ALLOWED.

11. THE LOCATION OF ALL UTILITIES ARE BASED ON INFORMATION PROVIDED BY OTHERS AND IS INTENDED TO BE APPROXIMATE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS CONSTRUCTION ACTIVITIES WITH THE VARIOUS UTILITY OWNERS. ALL POTENTIAL CONFLICTS SHALL BE INVESTIGATED AND REMEDIAL ACTION TAKEN PRIOR TO INTERRUPTION OF THE CONTRACTOR'S PROGRESS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FORM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 800-892-0123. A MINIMUM OF FORTY-EIGHT HOURS ADVANCE NOTICE IS REQUIRED.

13. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON U.S.G.S. MEAN SEAL LEVEL DATUM. ALL STATION AND OFFSET REFERENCES ARE TO THE ROADWAY CENTERLINE UNLESS OTHERWISE NOTED. THE STATE PLANE COORDINATE SYSTEM HAS BEEN USED FOR THE HORIZONTAL CONTROL.

14. THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKING (PHONE: 309-671-4460).

COMMITMENTS:

NONE

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED TO CALCULATE THE PLAN QUANTITIES:

HOT MIX ASPHALT MATERIALS (PRIME COAT)	0.00038 TON/SQ. YD. (ON PAVEMENT)
HOT MIX ASPHALT MATERIALS (PRIME COAT)	0.001425 TON/SQ. YD. (ON AGG)
HOT MIX ASPHALT SURFACE / BINDER	0.056 TON/SQ. YD. PER 1" DEPTH
AGGREGATE MATERIAL	2.05 TON/CU. YD.
NITROGEN FERTILIZER NUTRIENT	90 LBS./ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	90 LBS./ACRE
POTASSIUM FERTILIZER NUTRIENT	90 LBS./ACRE
AGGREGATE PRIME COAT	0.002 TON/SQ. YD.

MIXTURE REQUIREMENTS

LOCATION(S)	SURFACE			
MIXTURE USE(S):	HOT MIX ASPHALT SURFACE COURSE MIX "D", N50 AND TEMPORARY RAMP	VAR. DEPTH BINDER	HMA SHOULDERS (LOWER LIFTS)	HMA SHOULDERS (SURFACE LIFT)
AC/PG:	PG 64-22	PG 64-22	PG 64-22	PG 64-22
(MAX). RAP%	15%	25%	30%	30%
DESIGN AIR VOIDS	4.0% @ N DESIGN = 50	4.0% @ N DESIGN = 50	4.0% @ N = 30	3.0% @ N = 30
MIXTURE COMPOSITION	IL 9.5 OR 12.5	IL 19.0	IL 19.0 L	IL 9.5 L
FRICTION AGGREGATE	MIX D	N/A	N/A	N/A

* IF THE RAP OPTIONS SELECTED THE ASPHALT CEMENT GRADE MAY BE ADJUSTED. THIS WILL BE DETERMINED BY THE ENGINEER.

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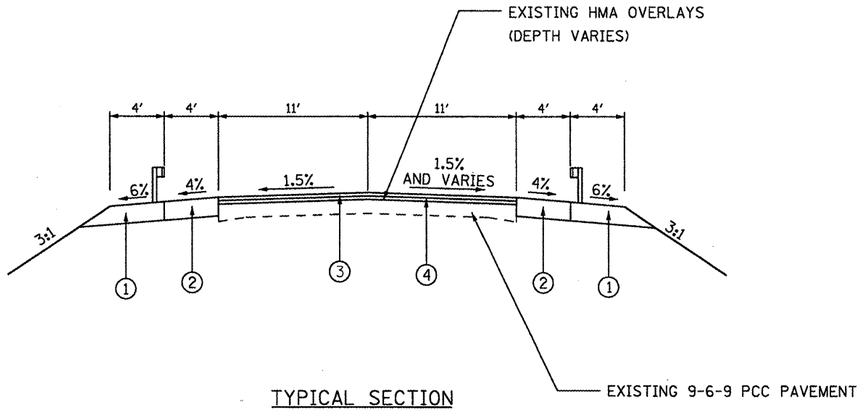
		DRAWN -	REVISED -
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -
THE UPCHURCH GROUP, INC.	PLOT DATE = 2/19/2009 2:13:54 PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES AND INDEX OF SHEETS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

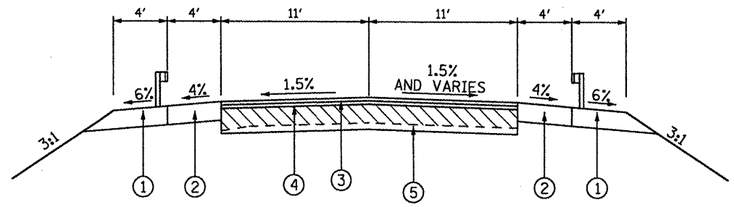
SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	470
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



TYPICAL SECTION
LOOKING UPSTATION

STA. 18+70.17 TO 19+70.00
STA. 20+30.00 TO 21+26.26



TYPICAL SECTION
LOOKING UPSTATION

STA. 19+70.00 TO 20+30.00
(CLASS "D" PATCH, TYPE IV)

SHOULDER NOTE:

PROVIDE AGGREGATE SHOULDER TYPE B 4' WIDE
STA. 18+70.17 LT TO STA. 19+00.17 LT
AND STA. 21+00.89 RT TO STA. 21+26.26 RT
(SEE PLAN AND PROFILE SHEET)

EXIST PAV'T TO BE REMOVED AND SHALL BE INCLUDED IN THE COST OF THE CLASS D PATCHES PAY ITEM.

LEGEND

1. PROPOSED GUARDRAIL AGGREGATE EROSION CONTROL 8"
2. PROPOSED HMA SHOULDER 8"
3. PROPOSED HMA SURFACE COURSE 1½"
4. PROPOSED HMA BINDER COURSE (VARIES ¾" TO 1½")
5. PROPOSED CLASS D, PATCHES TYPE IV, 8 INCH

FILE NAME = typicalsections.dgn	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TYPICAL SECTIONS COUNTRY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			665	136,137)W&RS-3;136R;109BR-2	Henderson	490	471
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FUHRMANN ENGINEERING, INC.	PLOT DATE = 2/19/2009 2:16:15 PM	DATE -	REVISED -		SCALE: SHEET NO. 1 OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

ITEM NO. 28000300
TEMPORARY DITCH CHECKS

LOCATION		EACH
RT STA	18+50.99	1
RT STA	19+90.82	1
RT STA	19+72.08	1
RT STA	20+23.28	1
RT STA	21+07.97	1
RT STA	21+57.97	1
LT STA	18+49.22	1
LT STA	18+86.21	1
LT STA	19+70.40	1
LT STA	20+24.17	1
LT STA	21+07.97	1
LT STA	21+57.97	1
TOTAL =		12

ITEM NO. 28000400
PERIMETER EROSION BARRIER

LOCATION		FOOT
RT STA	18+50 TO 19+87	137
RT STA	20+03 TO 21+50	147
LT STA	18+50 TO 19+86	136
LT STA	20+02 TO 21+50	148
TOTAL =		568

ITEM NO. #4001878
HOT MIX ASPHALT BINDER COURSE
IL-9.5, N50 SPECIAL

LOCATION		THICKNESS	TON
STA	18+70.17 TO 21+26.26	VAR. 3/4" - 1 1/2"	54

ITEM NO. 40600215
POLYMERIZED BITUMINOUS MATERIALS
(PRIME COAT)

LOCATION		TON
STA	18+70.17 TO 21+26.26	0.5

ITEM NO. 40600982
HOT-MIX ASPHALT SURFACE REMOVAL
BUTT JOINT

LOCATION		SQ. YD.
STA	18+70.17 TO 19+00.17	74
STA	20+96.26 TO 21+26.26	74
TOTAL =		148

ITEM NO. 40603335
HOT-MIX ASPHALT SURFACE COURSE
MIX "D", N50

LOCATION		THICKNESS	TON
STA	18+70.17 TO 21+26.26	1 1/2"	54

ITEM NO. 48101200
AGGREGATE SHOULDERS, TYPE B

LOCATION		TON
RT STA	21+00.89 TO 21+26.26	4
LT STA	18+70.17 TO 18+94.66	4
TOTAL =		8

ITEM NO. 48203029
HOT-MIX ASPHALT SHOULDERS, 8"

LOCATION		SQ. YD.
RT STA	18+70.17 TO 21+00.89	102
LT STA	18+94.66 TO 21+26.26	103
TOTAL =		205

ITEM NO. X0301512
GUARDRAIL AGGREGATE EROSION CONTROL

LOCATION		TON
RT STA	18+70.17 TO 21+00.89	41
LT STA	18+94.66 TO 21+26.26	41
TOTAL =		82

ITEM NO. 44201747
CLASS "D" PATCH, TYPE IV, 8"

LOCATION		SQ. YD.
STA	19+32.22 TO 20+57.69	147

ITEM NO. 78001110
PAINT PAVEMENT MARKING - LINE 4"

LOCATION		FEET
STA	18+70.17 TO 21+26.26	512

GUARDRAIL SCHEDULE

ITEM	LOCATION	QUANTITY
STEEL PLATE BEAM GUARDRAIL, TYPE A, 6.75 FT POSTS	RT STA 19+59.88 TO STA. 19+84.88	25 LF
(ITEM NO. 63000002)	LT STA 20+11.13 TO 20+36.13	25 LF
STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURE	RT STA 19+84.88 TO 20+11.13	26.25 LF
(ITEM NO. 63000025)	LT STA (SAME AS ABOVE)	26.25 LF
TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TAN	RT STA 19+09.88 TO 19+59.88	1 EA
(ITEM NO. 63100167)	RT STA 20+11.13 TO 20+61.13	1 EA
	LT STA 19+34.88 TO 19+84.88	1 EA
	LT STA 20+36.13 TO 20+86.13	1 EA
GUARDRAIL REMOVAL	RT STA 19+63.29 TO 19+88.01	24.72 LF
(ITEM NO. 63200310)	RT STA 20+10.78 TO 20+36.07	25.29 LF
	LT STA 19+63.11 TO 19+88.40	25.29 LF
	LT STA 20+11.05 TO 20+36.20	25.15 LF
TERMINAL MARKER - DIRECT APPLIED	RT STA 19+09.88	1 EA
(ITEM NO. 78201000)	RT STA 20+61.13	1 EA
	LT STA 19+34.88	1 EA
	LT STA 20+86.13	1 EA
GUARDRAIL MARKERS, TYPE A	RT STA 19+59.88 TO 20+11.13	4 EA
(ITEM NO. 78200410)	LT STA 19+84.88 TO 20+36.13	4 EA

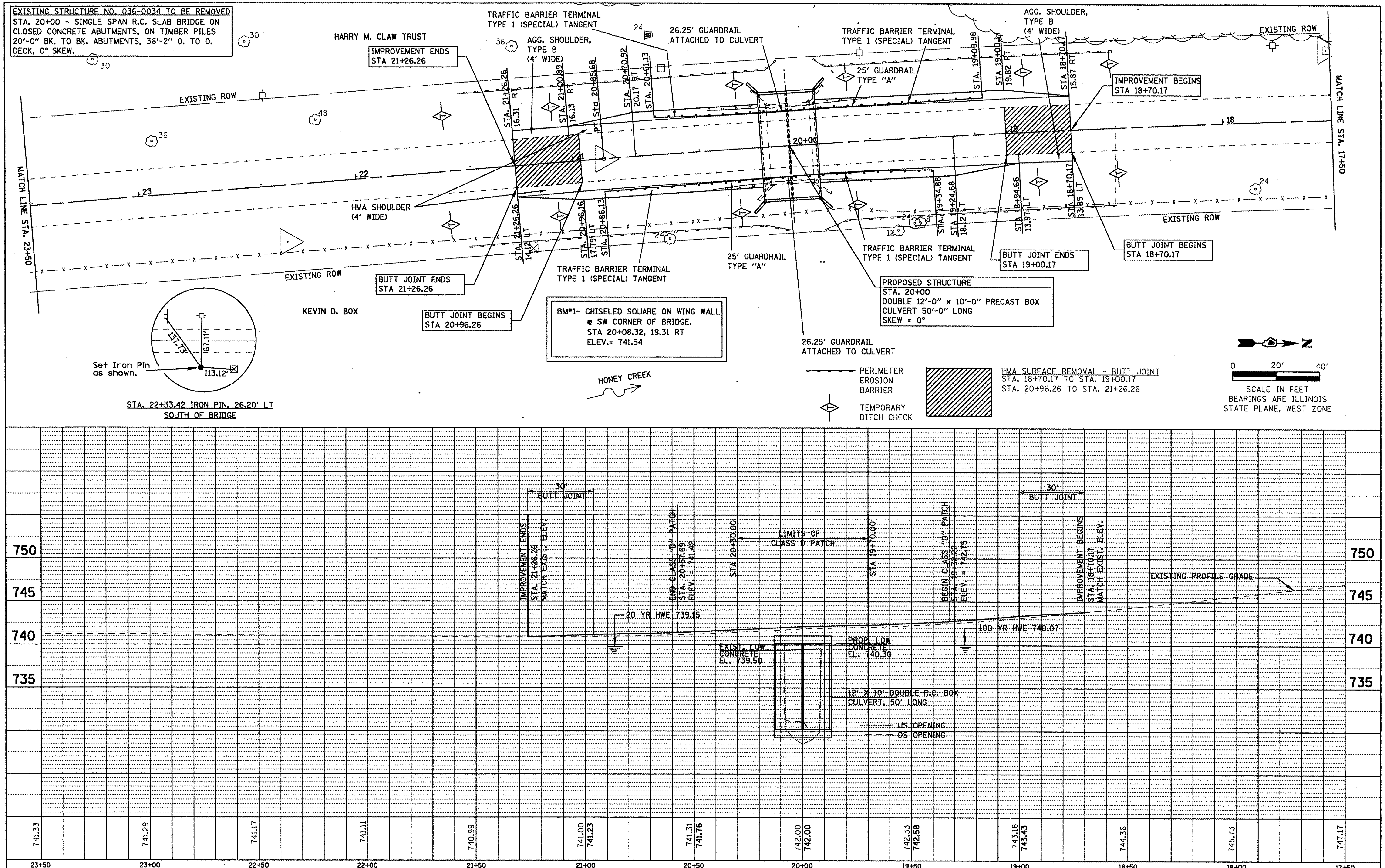
FILE NAME = quantityscheduleshset.dgn	USER NAME = _USER_	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
FUHRMANN ENGINEERING, INC.	PLOT DATE = 2/19/2009 2:15:07 PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

QUANTITY SCHEDULES
COUNTRY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	472
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		


EXISTING STRUCTURE NO. 036-0034 TO BE REMOVED
STA. 20+00 - SINGLE SPAN R.C. SLAB BRIDGE ON CLOSED CONCRETE ABUTMENTS, ON TIMBER PILES 20'-0" BK. TO BK. ABUTMENTS, 36'-2" O. TO O. DECK, 0° SKEW.
HARRY M. CLAW TRUST
TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
IMPROVEMENT ENDS STA 21+26.26
AGG. SHOULDER, TYPE B (4' WIDE)
26.25' GUARDRAIL ATTACHED TO CULVERT
TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
25' GUARDRAIL TYPE "A"
AGG. SHOULDER, TYPE B (4' WIDE)
EXISTING ROW
IMPROVEMENT BEGINS STA 18+70.17
MATCH LINE STA. 17+50
MATCH LINE STA. 23+50
EXISTING ROW
STA. 21+26.26 16.31 RT
STA. 21+00.89 16.13 RT
P.I. Sta 20+85.68
STA. 20+70.92 20.17 RT
STA. 20+61.13
STA. 19+08.88
STA 19+00.17 19.82 RT
STA 18+70.17 15.87 RT
20+00
HMA SHOULDER (4' WIDE)
STA. 21+26.26 14.12 LT
STA. 20+96.16 17.79 LT
STA. 20+86.13
STA. 19+34.88
STA. 19+24.68 18.12 LT
STA. 18+94.66 13.87 LT
STA. 18+70.17 13.85 LT
EXISTING ROW
BUTT JOINT ENDS STA 21+26.26
BUTT JOINT BEGINS STA 20+96.26
TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
25' GUARDRAIL TYPE "A"
TRAFFIC BARRIER TERMINAL TYPE 1 (SPECIAL) TANGENT
BUTT JOINT ENDS STA 19+00.17
BUTT JOINT BEGINS STA 18+70.17
KEVIN D. BOX
BM#1- CHISELED SQUARE ON WING WALL @ SW CORNER OF BRIDGE. STA 20+08.32, 19.31 RT ELEV.= 741.54
PROPOSED STRUCTURE
STA. 20+00
DOUBLE 12'-0" x 10'-0" PRECAST BOX CULVERT 50'-0" LONG
SKEW = 0°
26.25' GUARDRAIL ATTACHED TO CULVERT
Set Iron Pin as shown.
137.73'
167.11'
113.12'
STA. 22+33.42 IRON PIN, 26.20' LT SOUTH OF BRIDGE
HONEY CREEK
PERIMETER EROSION BARRIER
TEMPORARY DITCH CHECK
HMA SURFACE REMOVAL - BUTT JOINT
STA. 18+70.17 TO STA. 19+00.17
STA. 20+96.26 TO STA. 21+26.26
0 20' 40'
SCALE IN FEET
BEARINGS ARE ILLINOIS STATE PLANE, WEST ZONE
30' BUTT JOINT
IMPROVEMENT ENDS STA. 21+26.26 MATCH EXIST. ELEV.
END CLASS "D" PATCH STA. 20+57.69 ELEV. = 741.42
STA 20+30.00
LIMITS OF CLASS D PATCH
STA 19+70.00
BEGIN CLASS "D" PATCH STA. 19+33.22 ELEV. = 742.75
30' BUTT JOINT
IMPROVEMENT BEGINS STA. 18+70.17 MATCH EXIST. ELEV.
EXISTING PROFILE GRADE
20 YR HWE 739.15
100 YR HWE 740.07
EXIST. LOW CONCRETE EL. 739.50
PROP. LOW CONCRETE EL. 740.30
12' X 10' DOUBLE R.C. BOX CULVERT, 50' LONG
US OPENING
DS OPENING
750
745
740
735
741.33
741.29
741.17
741.11
740.99
741.00 741.23
741.31 741.76
742.00 742.00
742.33 742.58
743.18 743.43
744.36
745.73
747.17
23+50
23+00
22+50
22+00
21+50
21+00
20+50
20+00
19+50
19+00
18+50
18+00
17+50

PLAN — NOTE BOOK NO. — SURVEYED / PLOTTED / ALIGNMENT CHECKED / R.O.W. CHECKED / CADD FILE NAME — BY — DATE

PROFILE — NOTE BOOK NO. — SURVEYED / PLOTTED / GRADES CHECKED / B.M. NOTED / STRUCTURE NOTATIONS CHKD — BY — DATE

FILE NAME = p&p2.dgn	USER NAME = msummers	DESIGNED -	REVISED -
		DRAWN - MAS/JAF	REVISED -
	PLOT SCALE = 1"=20'	CHECKED - GMF	REVISED -
FUHRMANN ENGINEERING, INC.	PLOT DATE = 2/19/2009 2:14:44 PM	DATE - 01-21-09	REVISED -

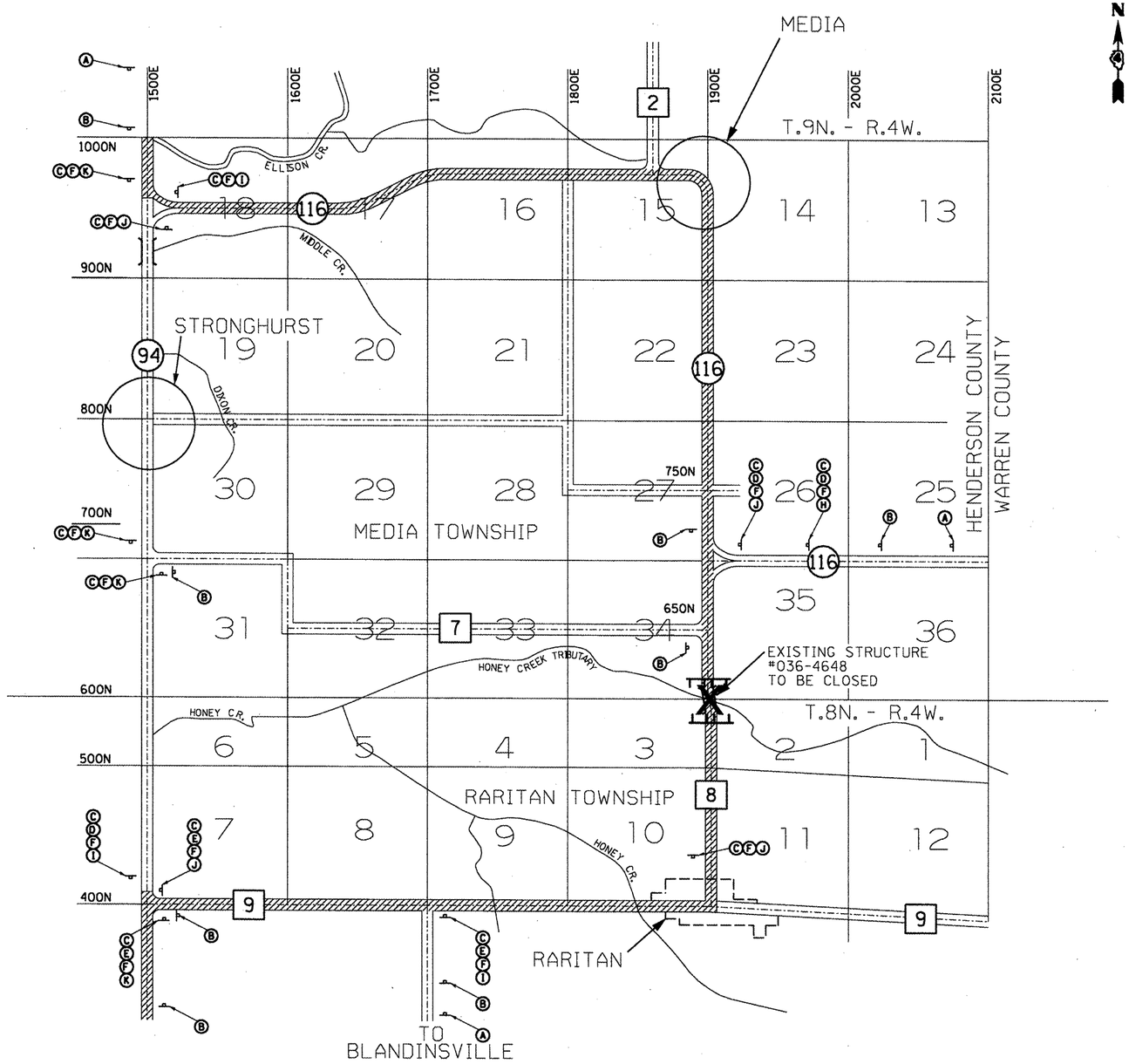
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE
COUNTRY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

SCALE: | SHEET NO. 3 OF SHEETS | STA. 17+50 TO STA. 23+50

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	HENDERSON	490	473
		CONTRACT NO. 88773		

FED. ROAD DIST. NO. 4 | ILLINOIS | FED. AID PROJECT



N

Sign Legend

(A)	W20-2-4848	DETOUR AHEAD
(B)	R11-3-6030	CH 8 CLOSED XX MILES N. OF RARITAN
(C)	M4-8-2412	DETOUR
(D)	M3-3-2115	SOUTH
(E)	M3-1-2115	NORTH
(F)	M1-5-2424	CH 8
(G)	M5-1-2115	
(H)	M5-1-2115	
(I)	M6-1-2115	
(J)	M6-1-2115	
(K)	M6-3-2115	

Legend

T — detour sign

X — closure

Sign placement and spacing will be as directed by the Resident Engineer

FILE NAME = CH8 Detour.dgn	USER NAME = kilmankk	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 103.7051 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 2/26/2009	DATE -	REVISED -

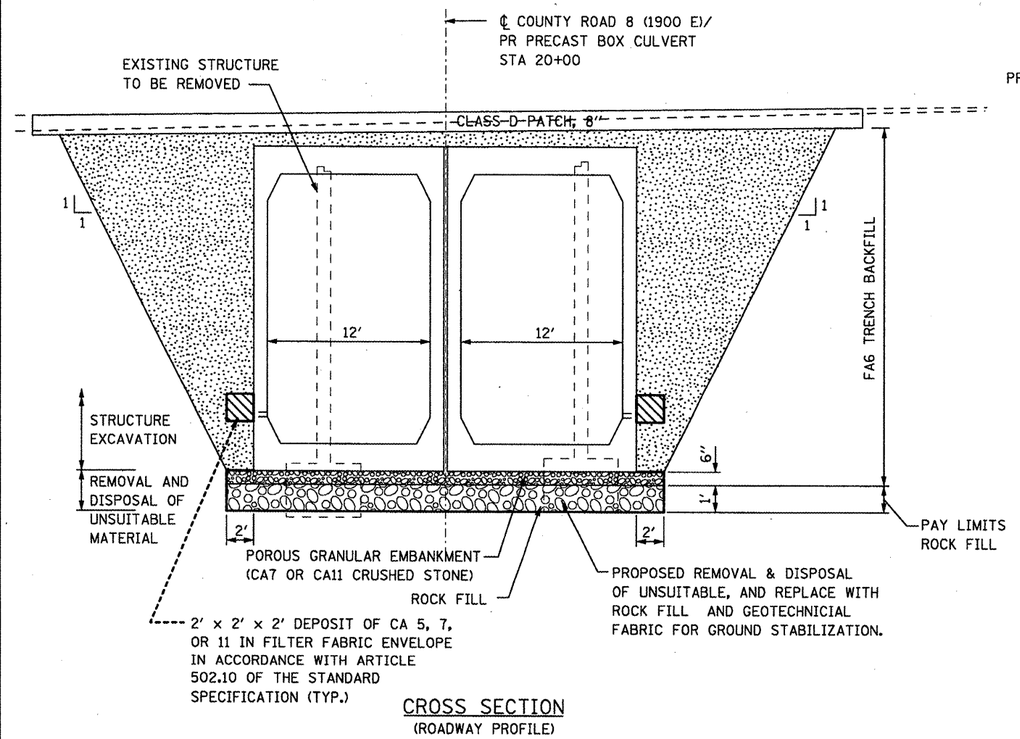
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY DETOUR PLAN
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

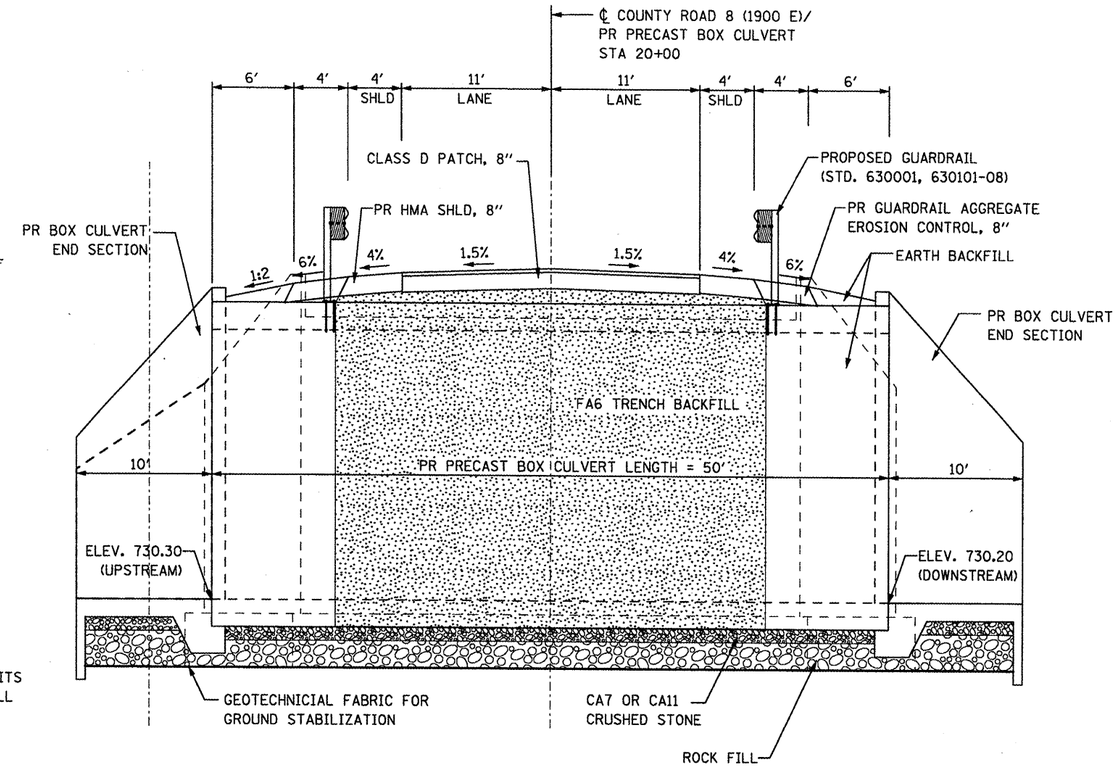
SCALE: NONE | SHEET NO. OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	HENDERSON		47
		CONTRACT NO. 88773		

FED. ROAD DIST. NO. 4 | ILLINOIS | FED. AID PROJECT



CROSS SECTION
(ROADWAY PROFILE)



LONGITUDINAL CROSS SECTION
(LOOKING UPSTATION)

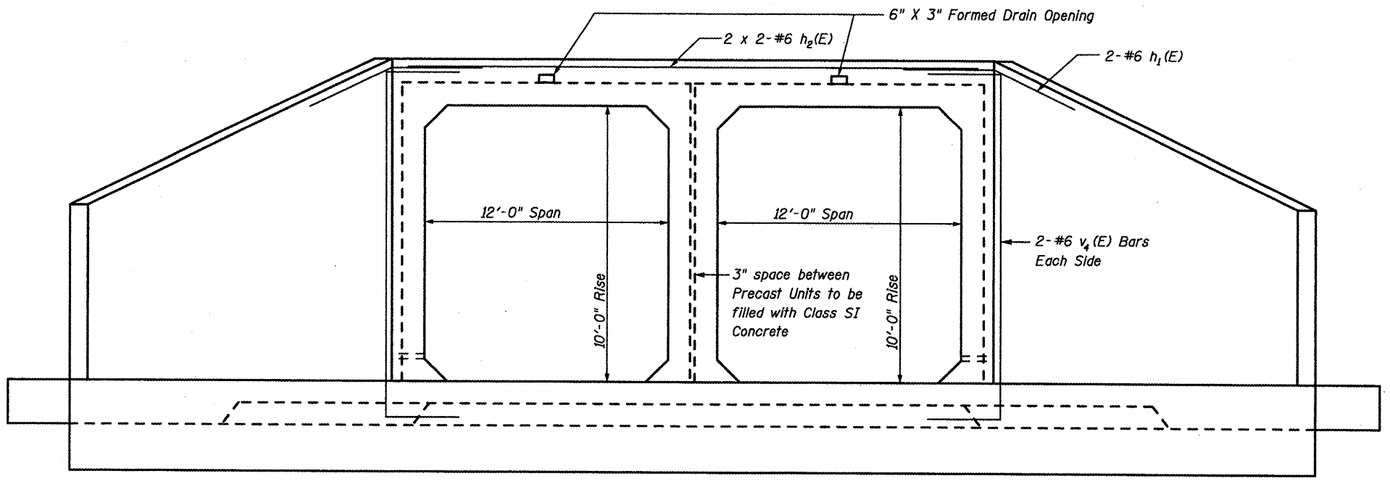
NOTES:

1. STRUCTURE EXCAVATION AND BACKFILL SHALL BE IN ACCORDANCE WITH SECTION 502 AND PAYMENT FOR STRUCTURE EXCAVATION SHALL BE IN ACCORDANCE TO ARTICLE 502.13 OF THE STANDARD SPECIFICATIONS.
2. POROUS GRANULAR EMBANKMENT SHALL BE PLACED IN ACCORDANCE WITH ARTICLE 540.06 OF THE STANDARD SPECIFICATIONS AND SHALL BE INCLUDED IN THE COST OF THE PRECAST BOX CULVERT PAY ITEM.
3. WRAP POROUS GRANULAR MATERIAL AND ROCK FILL IN FABRIC. THE FABRIC SHALL BE ACCORDING TO THE REQUIREMENTS OF THE APPLICABLE PORTIONS OF SECTION 1080 AND SECTION 282 WITH 6 OR 8 OZ/SQ YD MATERIAL ALLOWED.
4. THE COST OF THE TRENCH BACKFILL SHALL BE INCLUDED IN THE COST OF THE PRECAST BOX CULVERT PAY ITEM.

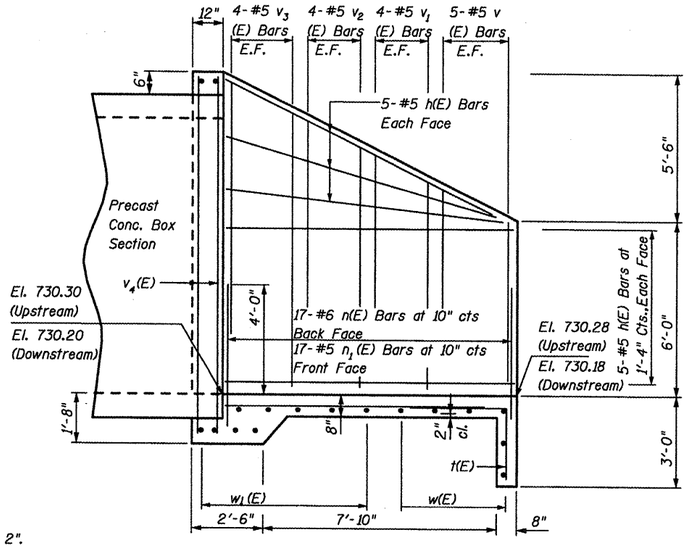
ITEM	UNIT	QUANTITY
REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU. YD.	272
GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ. YD.	331
STRUCTURE EXCAVATION	CU. YD.	671
ROCKFILL	TON	209

FILE NAME = ...\D488773-sht-culvertdetail.dgn	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXCAVATION AND BACKFILL DETAILS FOR PRECAST BOX CULVERT COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK
		DRAWN -	REVISED -		
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$	CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.
	PLOT DATE = 2/19/2009 2:11:17 PM	DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	475
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



END ELEVATION



HALF SIDE ELEVATION

NOTES

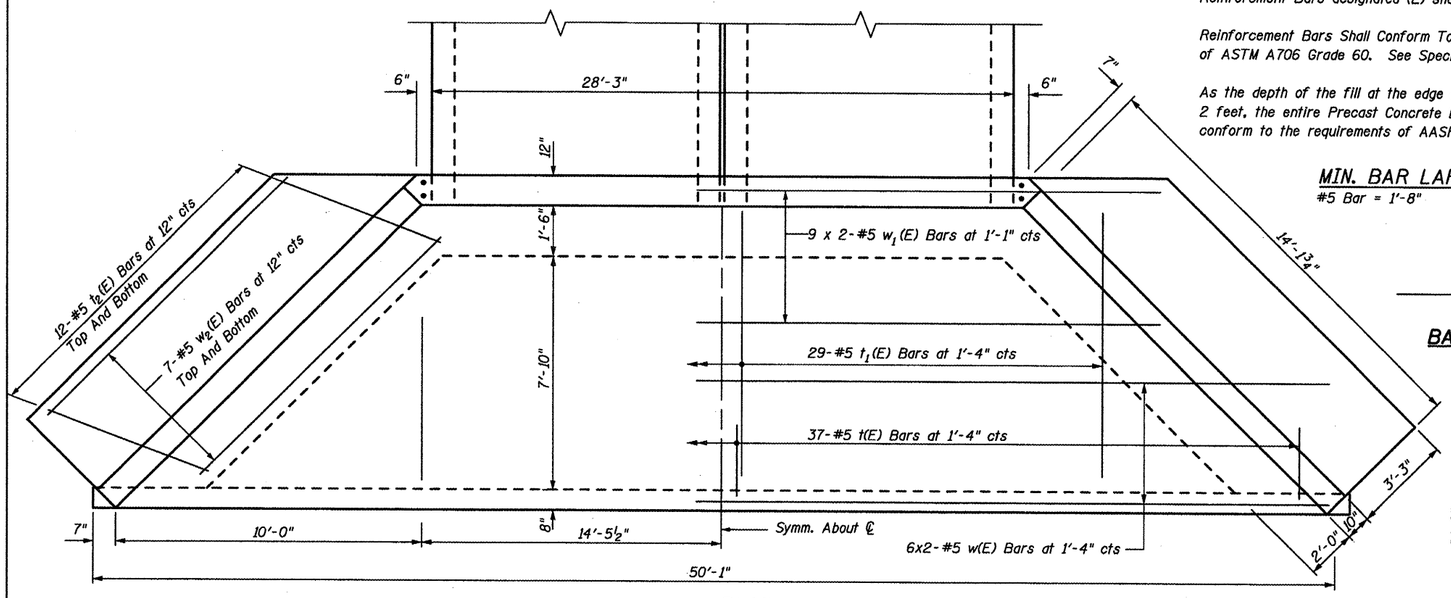
Minimum Cover To Reinforcement 2".

Exposed Edges Shall Be Beveled $\frac{3}{4}$".

Reinforcment Bars designated (E) shall be epoxy coated.

Reinforcement Bars Shall Conform To The Requirements of ASTM A706 Grade 60. See Special Provisions.

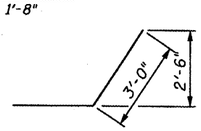
As the depth of the fill at the edge of shoulder is less than 2 feet, the entire Precast Concrete Box Culvert shall conform to the requirements of AASHTO M273.



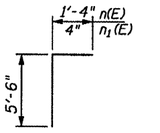
PLAN

MIN. BAR LAP

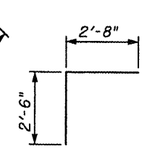
#5 Bar = 1'-8"



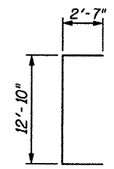
BAR h1(E)



BAR n(E), n_1(E)



BAR t(E)



BAR v4(E)

BILL OF MATERIAL

(For Two End Sections)

Bar	No.	Size	Length	Shape
h(E)	80	#5	13'-10"	
h_1(E)	8	#6	6'-0"	
h_2(E)	8	#6	15'-4"	
n(E)	68	#6	6'-10"	
n_1(E)	68	#5	5'-10"	
t(E)	74	#5	5'-2"	
t_1(E)	58	#5	8'-8"	
t_2(E)	96	#5	6'-3"	
v(E)	40	#5	5'-8"	
v_1(E)	32	#5	6'-4"	
v_2(E)	32	#5	7'-8"	
v_3(E)	32	#5	9'-0"	
v_4(E)	8	#6	18'-0"	
w(E)	24	#5	25'-8"	
w_1(E)	36	#5	19'-9"	
w_2(E)	56	#5	11'-1"	
Concrete Headwalls			Cu. Yd.	64
Reinforcement Bars, Epoxy Coated			Pound	7320

Bars indicated thus 6 x 2-#5 etc. Indicates 6 lines of bars with 2 lengths per line.

FILE NAME = ...\D488773-sht-culvert.dgn	USER NAME = _USER_	DESIGNED -	REVISED -
		DRAWN -	REVISED -
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THE UPCHURCH GROUP, INC.	PLOT DATE = 2/19/2009 2:10:49 PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CULVERT END SECTION DETAILS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

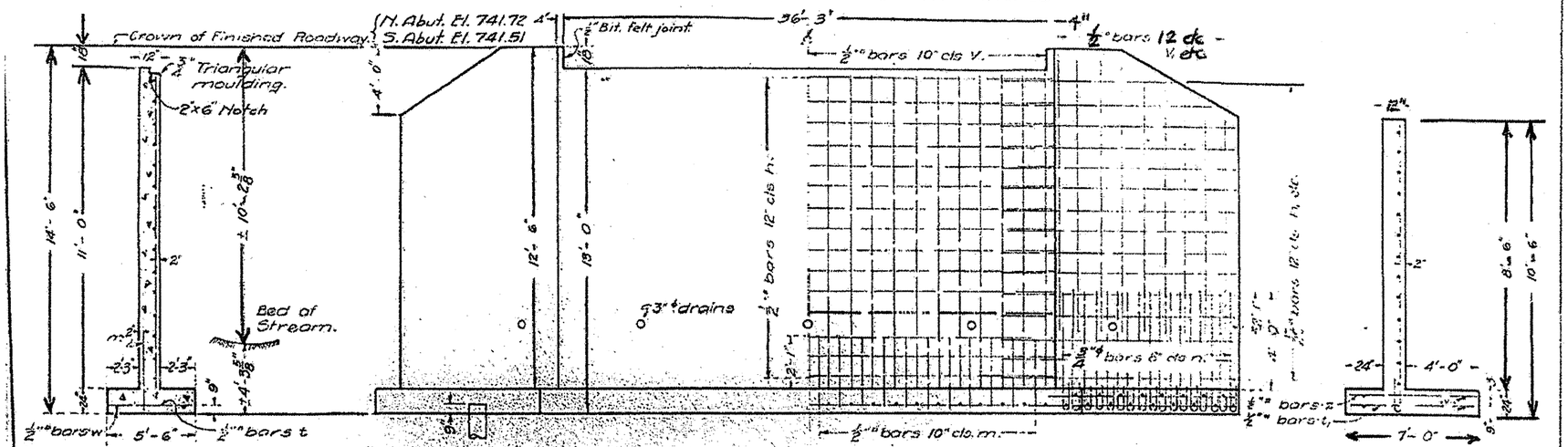
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	476
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

Existing Structure - Slab bridge 18' span
20' roadway to be removed by contractor
B.M. #27 - S. & W. Vert. in 24" Elm
Lt. Sta. 410+42 Elev. 754.48

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

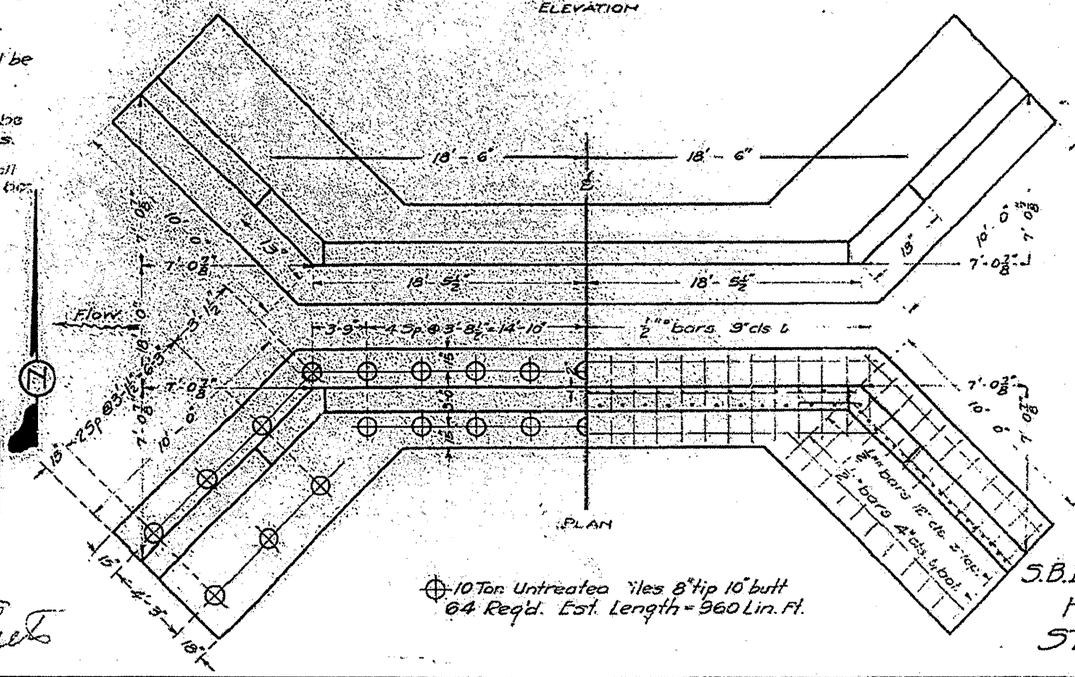
R.C. ABUTMENTS FOR SLAB BRIDGE
HEIGHT OVER ALL 14 FEET 6 INCHES

BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
97 A	Henderson	135	31	28



SECTION OF ABUTMENT — SHOWING OUTLINES — ELEVATION — SHOWING REINFORCEMENT — END OF WING

Class X Concrete shall be used in Footings.
Proportions 1-2-3½.
Class A concrete shall be used above top of footings.
Proportions 1:2½:4.
All reinforcing steel shall be securely wired in place before concrete is poured.



BILL OF MATERIAL

Bars	No.	Size	Length
V	90	½"	10'-9"
V'	12	½"	10'-0"
V₂	12	½"	8'-6"
V₃	16	½"	7'-0"
n	44	⅝"	19'-6"
h,	36	½"	11'-6"
h₂	8	½"	7'-6"
r	80	3/12"	
t	100	½"	5'-3"
t,	136	½"	6'-3"
z	40	½"	6'-3"
n'	8	⅝"	19'-6"
m,	16	½"	10'-6"
m	90	½"	3'-0"
Concrete Cl "A" - Cu. Yds.			453
Reinforcing Steel - Lbs.			5040
Concrete Cl. "X" - Cu. Yds.			49.8

STANDARD	COMPUTED	M.P.D. Flatt
	CHECKED	C.D. Looney
	DRAWN	T.H. Yadon
	CHECKED	H.P.D.
SPECIAL	ASSEMBLED	I.B. Kirkwood
	CHECKED	F.K. Anderson

EXAMINED May 5 1928
A.T. Burch — BUREAU ENGINEER
APPROVED — ENGINEER OF DESIGN
Frank T. Sheets — CHIEF HIGHWAY ENGINEER

⊕ 10 Ton Untreated Piles 8" tip 10" butt
64 Req'd. Est. Length = 960 Lin. Ft.

S.B.I. ROUTE 97A SEC. 135
HENDERSON COUNTY
STATION 413+70

980

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		DRAWN -	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE ABUTMENTS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

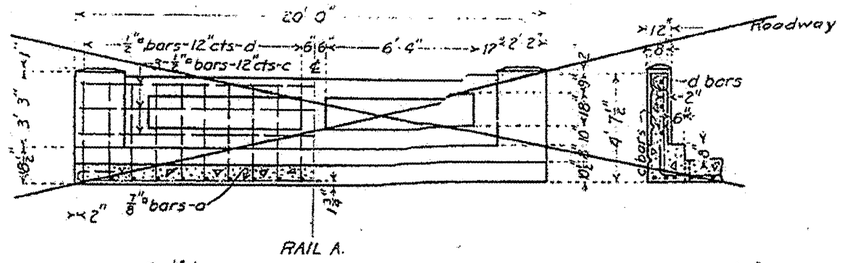
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490477	
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

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

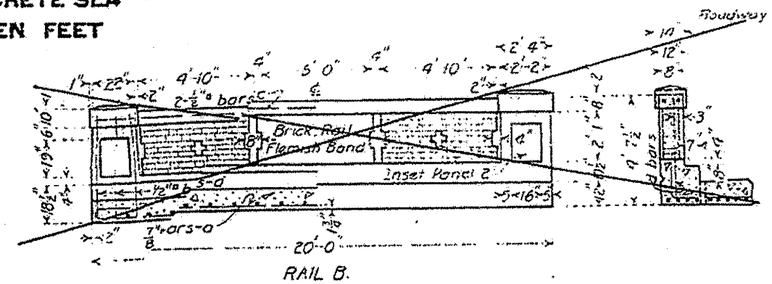
BOND ISSUE ROUTE NO.	COUNTY	SEC.	TOTAL SHEETS	SHEET NO.
97 A	Henderson	135	31	26

Sheet No. 2 Sheets

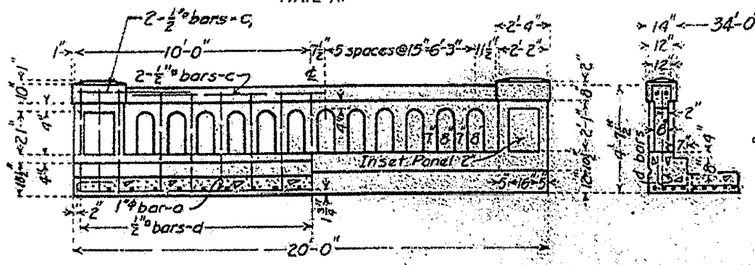
REINFORCED CONCRETE SLAB
SPAN - EIGHTEEN FEET



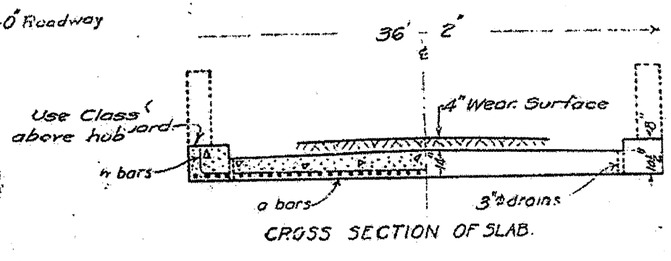
RAIL A.



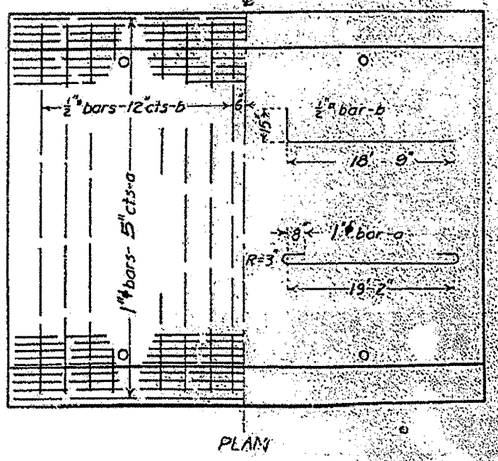
RAIL B.



RAIL C



CROSS SECTION OF SLAB.



PLAN

BILL OF MATERIAL

	16 FT. ROADWAY				18 FT. ROADWAY				20 FT. ROADWAY				24 FT. ROADWAY				34 FT. ROADWAY			
	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length	Bars	No.	Size	Length
RAIL A	a	49	7/8"ø	22'-0"	a	50	7/8"ø	22'-0"	a	55	7/8"ø	22'-0"	a	65	7/8"ø	22'-0"	a	81	7/8"ø	22'-0"
	b	18	½"ø	19'-6"	b	18	½"ø	21'-6"	b	18	½"ø	23'-6"	b	36	½"ø	15'-0"	b	36	½"ø	18'-0"
	c	6	½"ø	19'-6"	c	6	½"ø	19'-6"	c	6	½"ø	19'-6"	c	6	½"ø	19'-6"	c	6	½"ø	19'-6"
	d	40	½"ø	4'-3"	d	40	½"ø	4'-3"	d	40	½"ø	4'-3"	d	40	½"ø	4'-3"	d	20	½"ø	4'-3"
	Steel-Lbs.			3120	Steel-Lbs.			3440	Steel-Lbs.			3750	Steel-Lbs.			4420	Steel-Lbs.			5430
	Concrete-Cu.Yds.			17.7	Concrete-Cu.Yds.			19.2	Concrete-Cu.Yds.			20.6	Concrete-Cu.Yds.			23.5	Concrete-Cu.Yds.			27.9
RAIL B	a	46	7/8"ø	22'-0"	a	50	7/8"ø	22'-0"	a	55	7/8"ø	22'-0"	a	65	7/8"ø	22'-0"	a	81	7/8"ø	22'-0"
	b	18	½"ø	19'-6"	b	18	½"ø	21'-6"	b	18	½"ø	23'-6"	b	36	½"ø	15'-0"	b	36	½"ø	18'-0"
	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"
	d	12	½"ø	4'-3"	d	12	½"ø	4'-3"	d	12	½"ø	4'-3"	d	12	½"ø	4'-3"	d	12	½"ø	4'-3"
	Steel-Lbs.			2980	Steel-Lbs.			3300	Steel-Lbs.			3620	Steel-Lbs.			4290	Steel-Lbs.			5300
	Concrete-Cu.Yds.			16.7	Concrete-Cu.Yds.			18.1	Concrete-Cu.Yds.			19.6	Concrete-Cu.Yds.			22.5	Concrete-Cu.Yds.			26.8
	Brick Rail-Cu.Yds.			1.4	Brick Rail-Cu.Yds.			1.4	Brick Rail-Cu.Yds.			1.4	Brick Rail-Cu.Yds.			1.4	Brick Rail-Cu.Yds.			1.4
RAIL C	a	46	7/8"ø	22'-0"	a	50	7/8"ø	22'-0"	a	55	7/8"ø	22'-0"	a	65	7/8"ø	22'-0"	a	87	1"ø	22'-0"
	b	18	½"ø	19'-6"	b	18	½"ø	21'-6"	b	18	½"ø	23'-6"	b	36	½"ø	15'-0"	b	36	½"ø	20'-0"
	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"	c	9	½"ø	19'-6"	c	9	½"ø	15'-0"
	d	34	½"ø	4'-3"	d	34	½"ø	4'-3"	d	34	½"ø	4'-3"	d	34	½"ø	4'-3"	d	34	½"ø	4'-3"
	Steel-Lbs.			3060	Steel-Lbs.			3380	Steel-Lbs.			3700	Steel-Lbs.			4370	Steel-Lbs.			5930
	Concrete-Cu.Yds.			17.2	Concrete-Cu.Yds.			18.7	Concrete-Cu.Yds.			20.7	Concrete-Cu.Yds.			23.0	Conc. "A"-Cu.Yds.			28.5
																	Conc. "X"-Cu.Yds.			3.2

Class A concrete to be used below top of hubguard. Proportions-1:2:4

Class X Concrete to be used above top of hubguard. Proportions 1:2-3½.

USE RAIL C, 34 FT ROADWAY.

STANDARD	COMPUTED	Walter S. Todd
	CHECKED	T. H. Buchanan
	DRAWN	M. B. Mahaven
	CHECKED	A. V. Kalik
SPECIAL	ASSEMBLED	I. B. Kirkwood
	CHECKED	F. R. Anderson

EXAMINED: Nov. 5, 1928
BRIDGE ENGINEER
APPROVED
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER

S.B.I. ROUTE 97A SEC. 135
HENDERSON COUNTY
STATION 413 + 70

FILE NAME = ...\D488773-sht-ebdetails.dgn	USER NAME = _USER_	DESIGNED -	REVISED -
		DRAWN -	REVISED -
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = 2/19/2009 2:13:30 PM	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING BRIDGE DETAILS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	478
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Page 1 of 1

Date 1/7/09

ROUTE FAP 665 (IL 116) & FAP 534 (IL 94) DESCRIPTION Culvert Boring LOGGED BY SCI

SECTION (136, 137)W&RS-3; 136R; 109BR-2 LOCATION Media Township; SW 1/4, SEC. 35, TWP. 9N, RNG. 4W,

COUNTY Henderson DRILLING METHOD CME 45 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0034 (existing)
Station

BORING NO. 53
Station 19+67
Offset 11 ft Lt
Ground Surface Elev. 742.1 ft

Surface Water Elev. 733.10 ft
Stream Bed Elev. 730.70 ft

Groundwater Elev.:
First Encounter 724.1 ft ▼
Upon Completion 733.1 ft ▽
After ____ Hrs. Backfilled ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT - 2 inches 741.9			
FILL: Milled asphalt and crushed rock	4		
740.1	5	2.5	19
FILL: Brown and dark brown sandy clay loam (A-6)	5	P	
738.6			
FILL: Dark brown clay loam (A-7)	3		
No recovery - auger cuttings obtained.	3	-	30
-5	4		
736.6			
CLAY: Dark brown (A-7)	1		
	3	0.9	33
	3	B	
734.1			
SILTY CLAY LOAM: Gray (A-7)	1		
▽	1	0.3	27
-10	3	B	
731.6			
SANDY CLAY LOAM: Gray, trace to some fine gravel (A-6) Approximately 8 inches of soft sediment observed in stream bed south of bridge to approximate El. 730.	2		
	2	1.2	13
729.1	5	S	
SANDY LOAM: Gray (A-2)	2		
	4	-	20
-15	4		
	2		
	5	0.8	20
	7	S	
▼			
	12		
	14	0.9	20
-20	18	S	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY LOAM: Gray (A-2) (continued)			
	16		
	26	1.3	20
	40	S	
	18		
	100	-	18
-25			
Trace thin organic deposits	28		
	100	0.9	21
		S	
	5		
	9	-	28
-30	9		
Harder drilling at 32 feet.			
710.1			
SILTSTONE with SANDY SHALE: Gray	100	-	10
Upon removal of lead auger, carbide teeth were worn off. 707.6			
-35 End of Boring at 34.5 ft.			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
AASHTO Classifications are based on visual classifications unless otherwise noted. BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
SCI Engineering, Inc.

SOIL BORING LOG

Page 1 of 1

Date 1/7/09

ROUTE FAP 665 (IL 116) & FAP 534 (IL 94) DESCRIPTION Culvert Boring LOGGED BY SCI

SECTION (136, 137)W&RS-3; 136R; 109BR-2 LOCATION Media Township; SW 1/4, SEC. 35, TWP. 9N, RNG. 4W,

COUNTY Henderson DRILLING METHOD CME 45 w/HSA HAMMER TYPE Automatic

STRUCT. NO. 036-0034 (existing)
Station

BORING NO. 54
Station 20+38
Offset 13 ft Rt
Ground Surface Elev. 741.4 ft

Surface Water Elev. 733.10 ft
Stream Bed Elev. 730.70 ft

Groundwater Elev.:
First Encounter 730.4 ft ▼
Upon Completion 729.4 ft ▽
After ____ Hrs. Backfilled ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CRUSHED ROCK - 8 inches estimated 740.7			
FILL: Brown silty clay loam (A-7)	3		
	2	2.0	24
	3	P	
	1		
737.4			
FILL: Brown and dark brown silty clay (A-6)	2	0.5	29
-5	3	P	
735.9			
CLAY LOAM: Dark brown (A-7)	1		
	1	0.4	32
	2	B	
733.4			
SANDY CLAY LOAM: Gray, trace organics (A-7)	1		
	2	0.6	20
731.9	4	B	
SANDY LOAM: Gray, trace fine gravel (A-2)			
-10			
730.9			
CLAY LOAM: Brown (A-7) Approximately 8 inches of soft sediment observed in stream bed south of bridge to approximate El. 730.	1		
▽	2	1.9	17
	3	B	
Becomes gray and brown 728.4			
SANDY LOAM: Gray (A-2)	2		
	4	2.5	20
-15	5	P	
	3		
	5	2.5	19
	6	P	
	5		
	9	0.8	21
-20	12	S	

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SANDY LOAM: Gray (A-2) (continued)			
	6		
	15	2.8	19
	28	P	
	17		
	46	0.7	20
-25	97	S	
	27		
	100	-	17
Becomes light brown, trace to some organics and trace fine gravel			
	4		
	5	-	24
-30	8		
Hard drilling at 32 feet.			
709.4			
SILTSTONE with SANDY SHALE: Gray	100	-	18
Carbide teeth on lead auger worn off in B-53. Additional augering with second lead auger in B-54 stopped at 33.5 feet due to possible breakage or excessive wear on carbide teeth. 707.4			
-35 End of Boring at 34.0 ft.	100	-	16
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)
AASHTO Classifications are based on visual classifications unless otherwise noted. BBS, form 137 (Rev. 8-99)

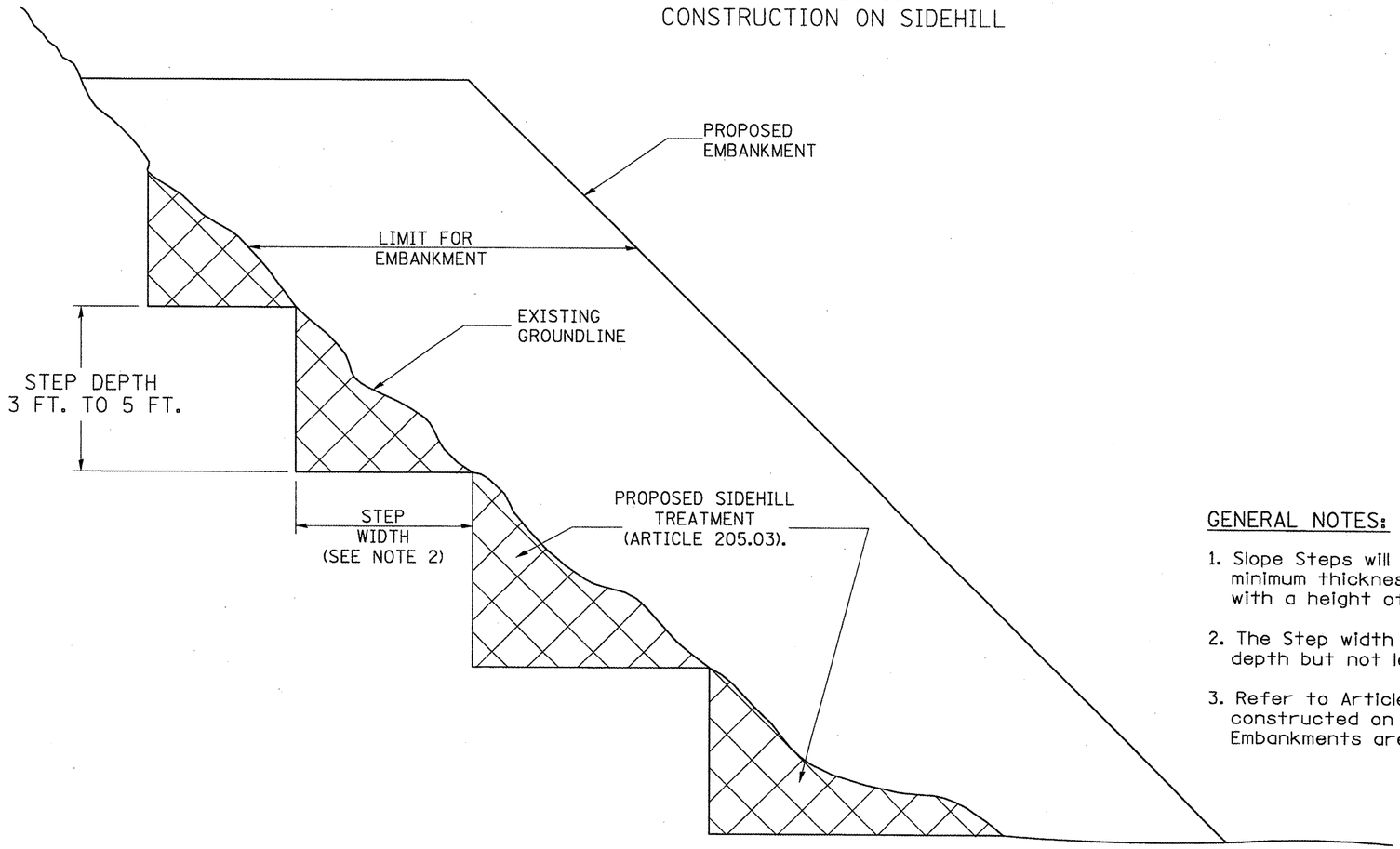
FILE NAME = ...\D488773-sht-soil.dgn	USER NAME = _USER_	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORINGS COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK
		DRAWN -	REVISED -		
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$	CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.
	PLOT DATE = 2/19/2009 2:15:48 PM	DATE -	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	479
		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTE:
1. EACH PROJECT SHOULD BE REVIEWED INDEPENDENTLY FOR TREATMENT REQUIRED.
2. REFER TO THIS DETAIL WITH NOTE ON APPLICABLE TYPICAL SECTIONS.

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT
CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "silver fills" and on a fills with a height of 10'(3.0m).
2. The Step width shall be twice the Step depth but not less than 6 feet.
3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT
(IN ACCORDANCE WITH
205 OF THE STANDARD SPECIFACATION).

All dimensions are in inches (millimeters) unless otherwise noted.

FILE NAME = ..\D488773-sht-205001.dgn	USER NAME = .USER.	DATA	REVISED	BY
		1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE BOX,	T.P.
	PLOT SCALE = $SCALE$		REVISED GENERAL NOTES.	
THE UPCHURCH GROUP, INC.	PLOT DATE = 2/19/2009 2:07:41 PM	10-16-06	REVISED TO 2007 SPEC.	M.A.

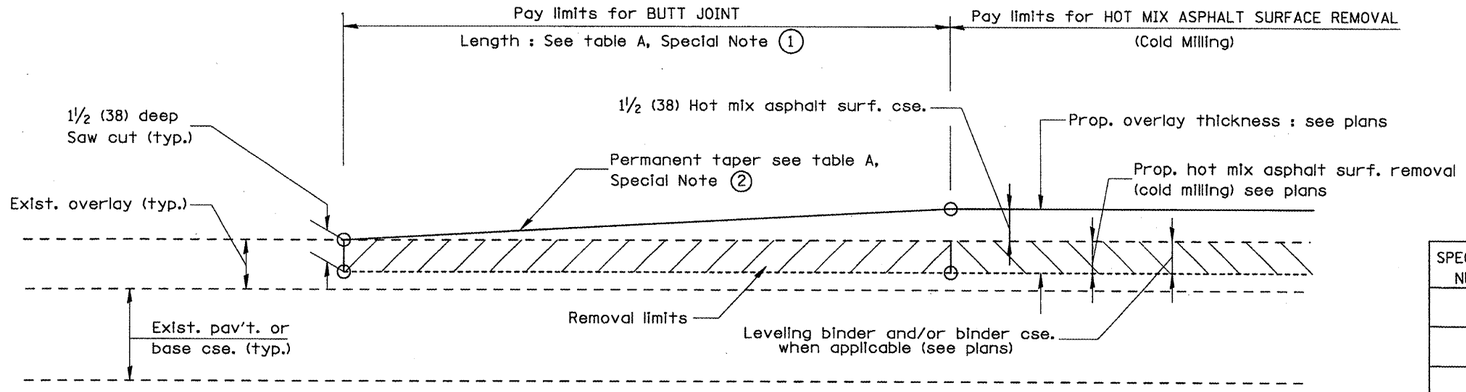
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLOPE STEPS DETAIL
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	480
CADD STD 205001-04		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTES:
1. Include District Special Provision for Butt Joints & for Hot Mix Asphalt Removal (Cold Milling).
2. The butt joints pay item includes the saw cut & temporary ramp. Payment for the Butt Joint applies whether or not the project features Hot Mix Asphalt Removal (Cold Milling).



CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
(LENGTHS AND TAPER RATES)

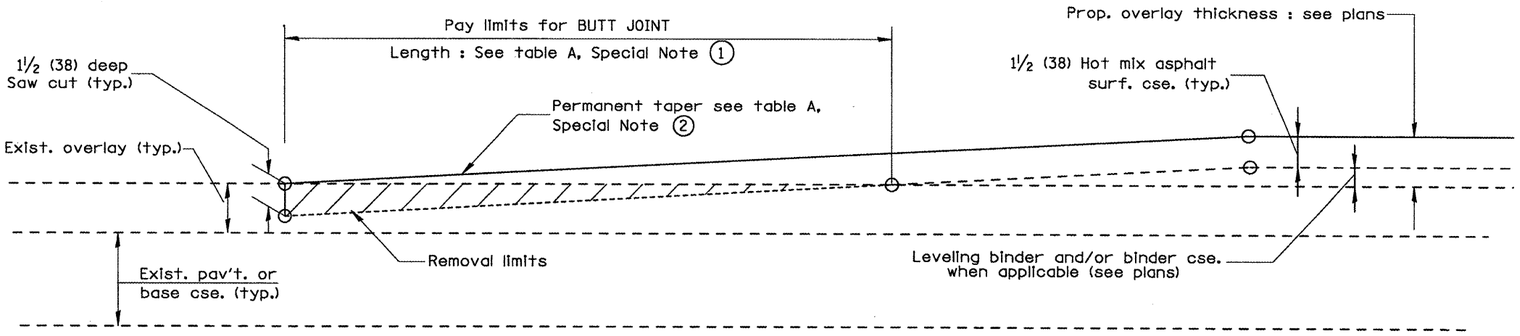
SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	LENGTH OF BUTT JOINT	60'(18.0 m)	30'(9.0 m)
(2)	PERMANENT TAPER RATE	1:480	1:240
(3)	TEMPORARY RAMP TAPER RATE	1:80	1:40
(4)	TEMPORARY RAMP LENGTH	10'(3.0 m)	5'(1.5 m)
(5)	LENGTH OF BUTT JOINT	10'(3.0 m)	10'(3.0 m)

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.

2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.

3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.



CASE 2 : NO HOT MIX ASHALT SURFACE REMOVAL (COLD MILLING)

All dimensions are in inches (millimeters) unless otherwise noted.

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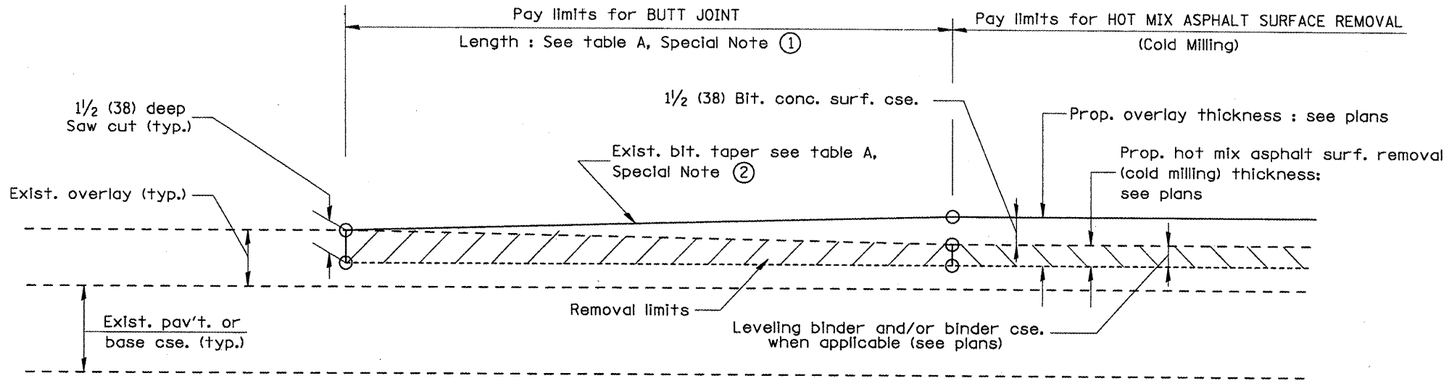
		1-1-97	RENUM. C-23.01, NEW REVISION BOX	T.P.
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$	4-1-97	CORRECTION TO DEPTH	J.A.
	PLOT DATE = 2/19/2009 2:08:07 PM	9-15-05	REVISED DESIGNER NOTE/10-16-06 REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

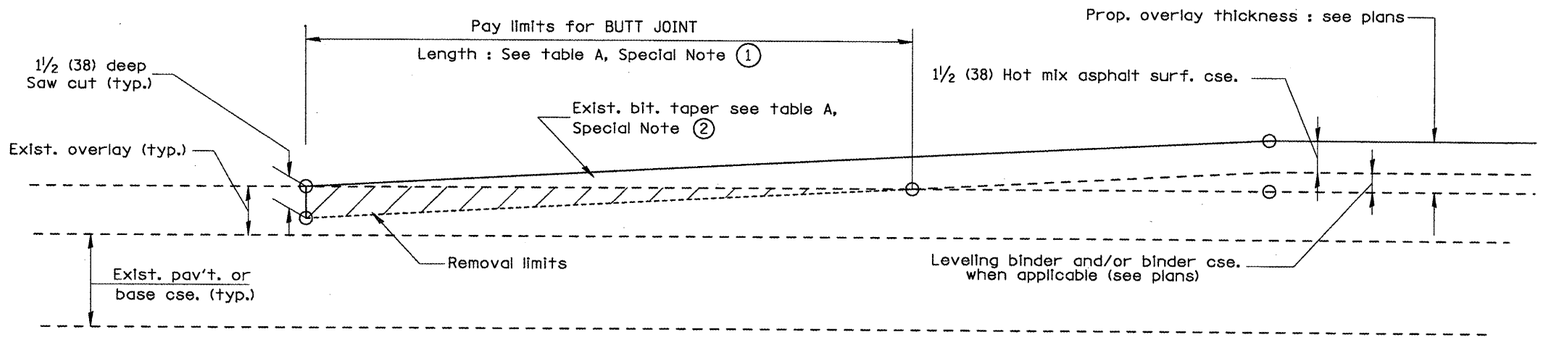
BUTT JOINTS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

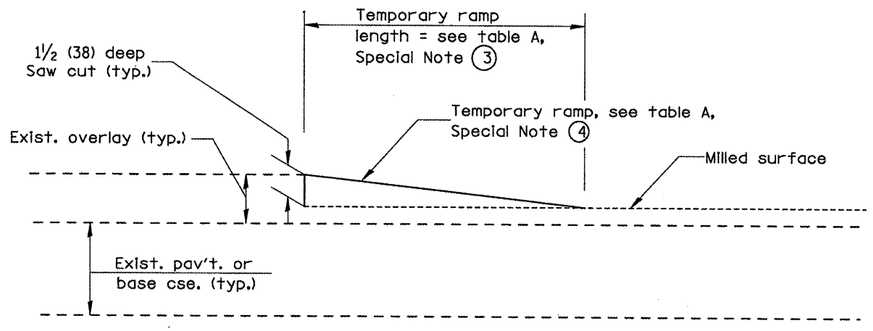
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	48
	CADD STD 406101-04 SHT 1 OF 3	CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



CASE 3 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



CASE 4 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

All dimensions are in inches (millimeters) unless otherwise noted.

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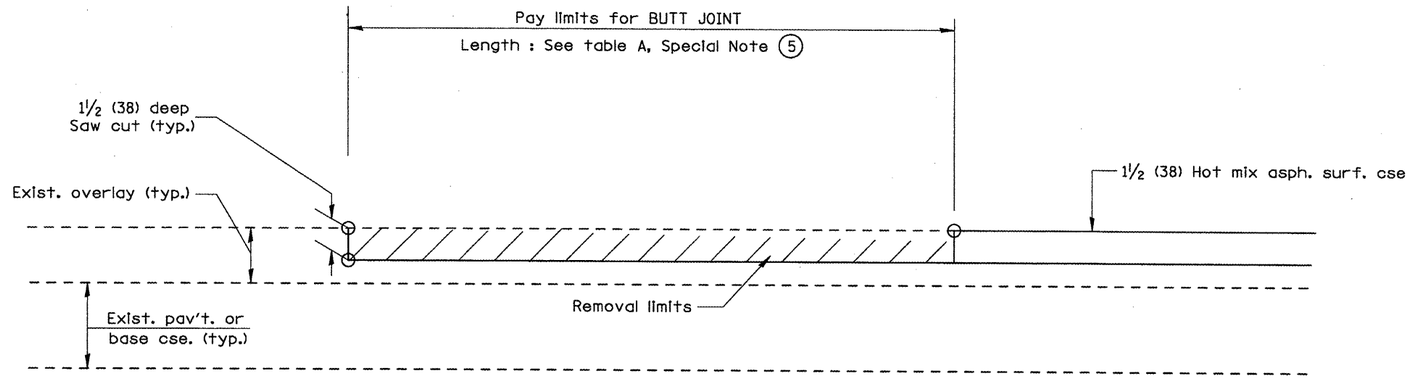
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$			
	PLOT DATE = 2/19/2009 2:08:24 PM			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	482
	CADD STD 406101-04 SHT 2 OF 3	CONTRACT No. 88773		
	FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT			



CASE 5 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER

All dimensions are in inches (millimeters) unless otherwise noted.

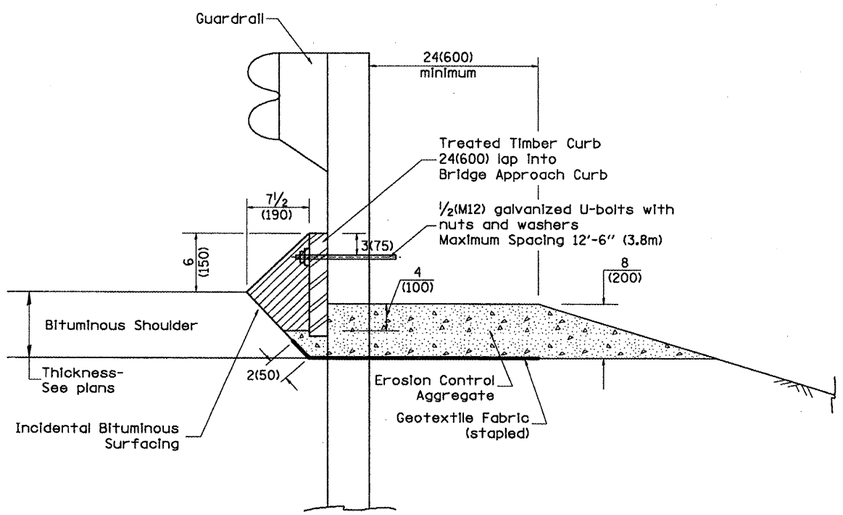
FILE NAME = ...\D488773-sht-406101.dgn	USER NAME = _USER_	DATA	REVISED	BY	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$				
	PLOT DATE = 2/19/2009 2:08:41 PM				

BUTT JOINTS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

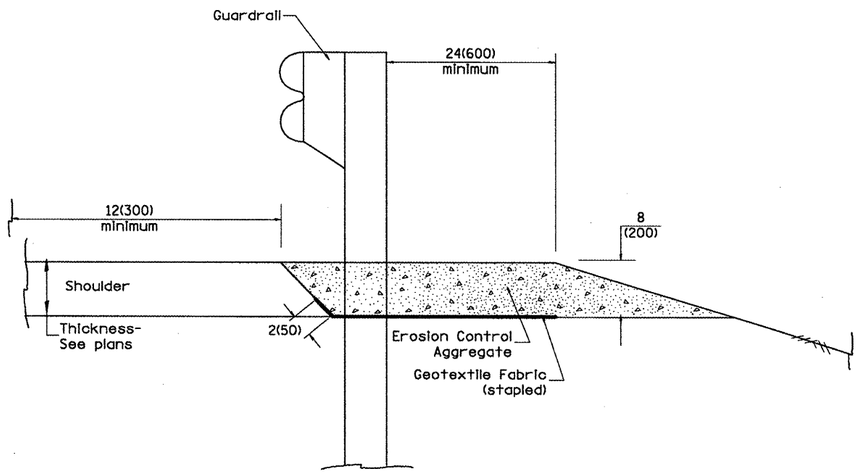
SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	483
CADD STD 406101-D4 SHT 3 OF 3		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

DESIGNER NOTE:
1. Use EROSION CONTROL CURB at guardrail installations where grades are equal to or greater than 1% and at inlets. (Include District Special Provision)
2. Use GUARDRAIL AGGREGATE EROSION CONTROL at guardrail installations where grades are less than 1% (Include District Special Provision)
3. Include State Standards 609001, 609006 or 610001 if applicable.
4. Include the following District Cadd Standards as needed: Slope Drains for Exposed Pipes; Slope Drains for Buried Pipes; Seepage Collars for Buried Pipes; Seepage Collars for Exposed Pipes; Concrete Thrust Blocks and Pipe Elbow.
5. Include District Special Provision "Aggregate Quality" for projects located in the Western Area of the District - approx. dividing line is IL 97.



TYPICAL SECTION WITH EROSION CONTROL CURB



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: EROSION CONTROL CURB

1. This work shall consist of grading as needed, installing hardware and treated timber boards, furnishing and placing mastic material and incidental bituminous surfacing in front of Steel Plate Beam Guardrail in accordance with Plan Details.

2. Timber shall be treated in accordance with Article 1007.12. All preservatives specified in the article will be allowed. Waterborne preservatives "asa" and "cca" shall have a minimum retention of 0.40 lbs./cu. ft. (6.4 kg/m³)

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.

All dimensions are in inches (millimeters) unless otherwise noted.

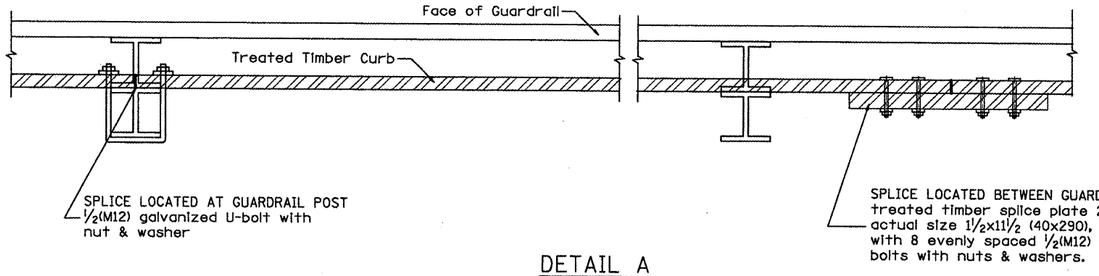
FILE NAME =	USER NAME = .USER.	DATA	REVISED	BY
...\D488773-sht-630101.dgn		1-1-97	RENUM. C-22.01, NEW REVISION BOX	T.P.
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$	3-1-97	CORRECT STD. NUMBERS IN NOTES PG. 2	J.A.
	PLOT DATE = 2/19/2009 2:09:04 PM	11-3-00	CORRECTION TO NOTES/ 10-16-06 REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

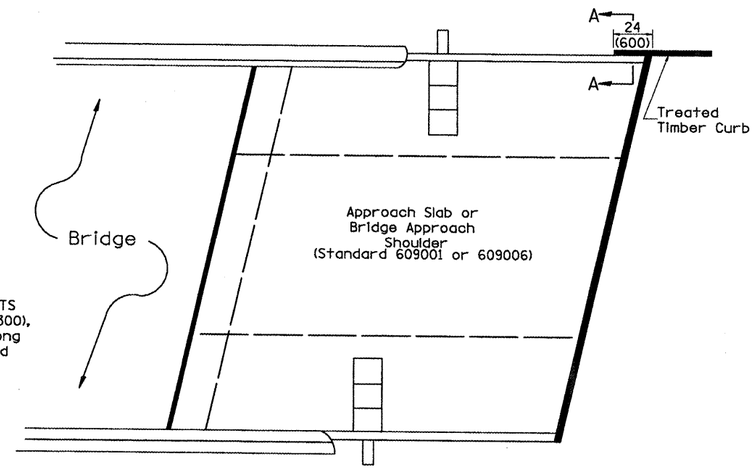
SCALE: NTS | SHEET NO. OF SHEETS | STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	484
CADD STD 630101-04 SHT 1 OF 2		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



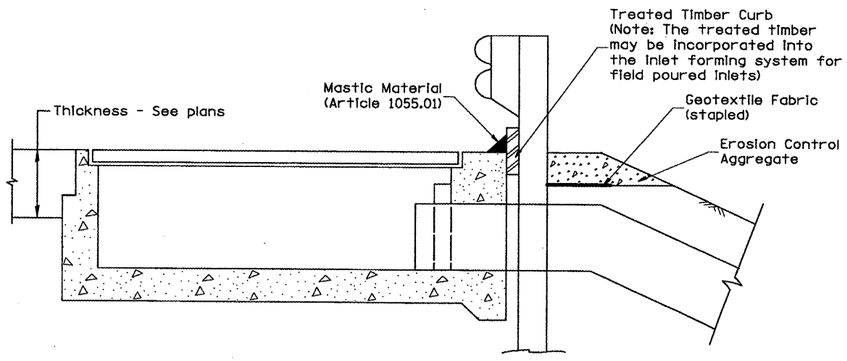
DETAIL A

(Typical Treated Timber Splices)

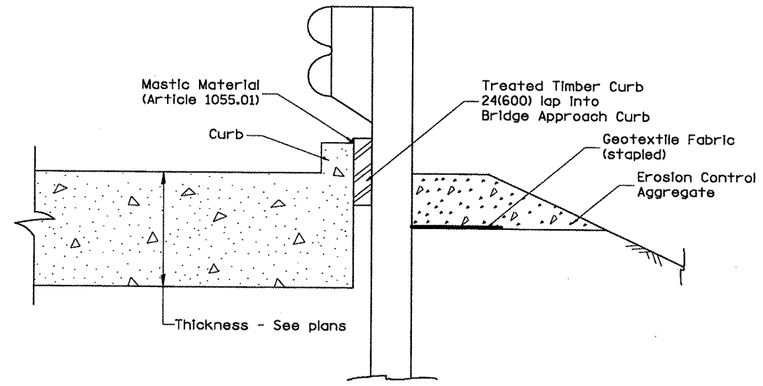


PLAN VIEW

APPROACH SLAB OR BRIDGE APPROACH SHOULDER
(STANDARD 609001 or 609006)



TYPICAL SECTION WITH EROSION CONTROL CURB
AT INLETS TYPE E & F (STANDARD 610001)
AND INLET TYPE B (STANDARD 609001)



SECTION A-A

TYPICAL SECTION WITH EROSION CONTROL CURB
AT BRIDGE APPROACH CURB
(STANDARD 609001 OR 609006)

All dimensions are in inches (millimeters) unless otherwise noted.

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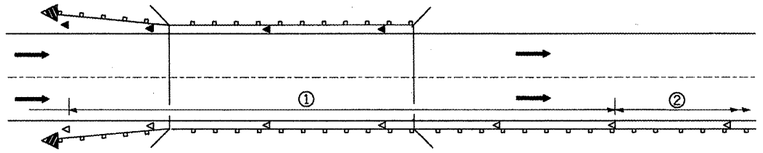
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$				
	PLOT DATE = 2/19/2009 2:09:25 PM				

GUARDRAIL EROSION CONTROL TREATMENTS
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	485
CADD STD 630101 SHT 2 OF 2		CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

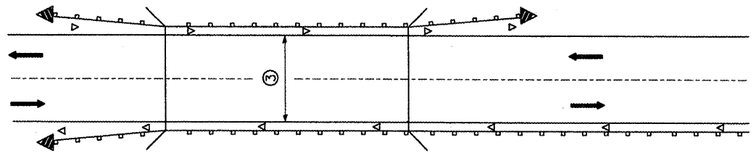
DESIGNER NOTE:
1. INCLUDE APPROPRIATE SPECIAL PROVISIONS FOR "GUARD RAIL DELINEATION POLICY: 1. TERMINAL MARKER, 2. TERMINAL MARK POST, AND 3. GUARDRAIL AND BARRIER WALL MARKERS." FROM INTERIM SPECIAL PROVISIONS 94-14, "GUARDRAIL AND BARRIER WALL DELINEATION."
2. IF POST MOUNT TERMINAL MARKER IS USED, INCLUDE STATE STD. 720011.



① Spacing 80 ft. (24 m) max. for first 400 ft. (122 m) or curve spacing shown in Standard 635001, whichever is less (min. 4 reflectors regardless of length).

② After 400 ft. (122 m), transition to normal delineator spacing shown in Standard 635001, and continue as required.

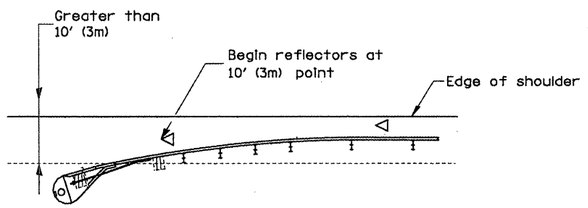
ONE-WAY TRAFFIC



③ Bidirectional silver/silver should be used in lieu of monodirectional silver on both sides of two-lane bridges where the bridge pavement is less than 24 (610) wider than the pavement approaching the bridge.

TWO-WAY TRAFFIC

GUARDRAIL / BARRIER WALL / BRIDGE RAIL REFLECTORS



NOTE: Omit terminal marker when terminal over 10' (3m) from edge of paved shoulder or break point of unpaved shoulder, or when terminal buried in backslope.

Traffic Barrier Terminal Type(*) and/or Turned-Down Terminal

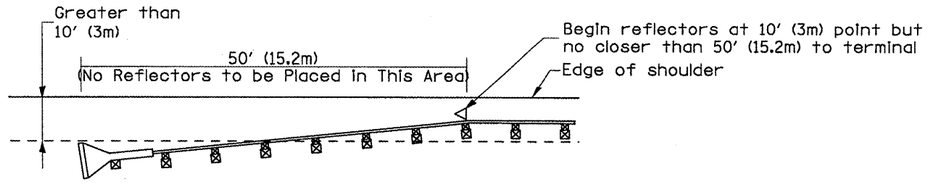
[Terminal over 10' (3m) from edge of shoulder]
*See Plans for Type

LEGEND

◁ Monodirectional silver

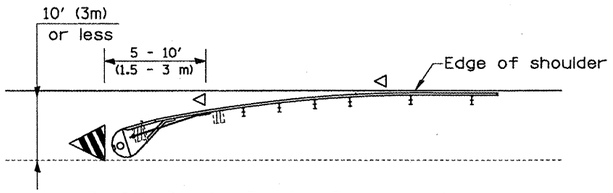
◀ Monodirectional amber

Terminal Marker - Black/Yellow
Left or Right as appropriate



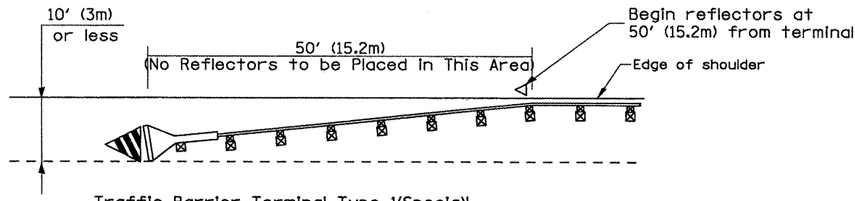
NOTE: Omit terminal marker when terminal over (10') from edge of paved shoulder or break point of unpaved shoulder.

Traffic Barrier Terminal Type 1 (Special)
[Terminal over 10' (3m) from edge of shoulder]



Traffic Barrier Terminal Type(*) and/or Turned-Down Terminal

[Terminal over 10' (3m) or less from edge of shoulder]
*See Plans for Type



Traffic Barrier Terminal Type 1(Special)
[Terminal 10' (3m) or less from edge of shoulder]

TERMINAL MARKER PLACEMENT

All dimensions are in inches (millimeters) unless otherwise noted.

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		1-1-97	RENUM. E-10.02, NEW REVISION BOX	T.P.
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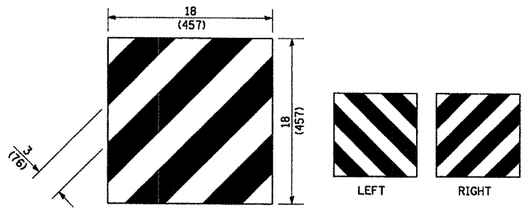
THE UPCHURCH GROUP, INC.	PLOT DATE = 2/19/2009 2:09:51 PM	10-16-06	REVISED TO 2007 SPEC.	M.A.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

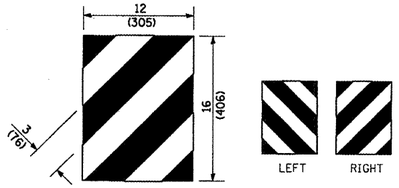
GUARDRAIL AND BARRIER WALL DELINEATION
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	486
	CADD STD 635101-04 SHT 1 OF 3	CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



For Traffic Barrier Terminal Type 1 (Special)



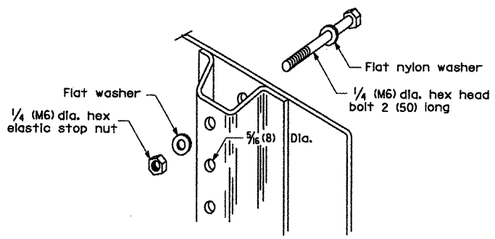
For Traffic Barrier Terminal Type (*)
and Post Mount
* See Plans for Type

TERMINAL MARKER DETAILS

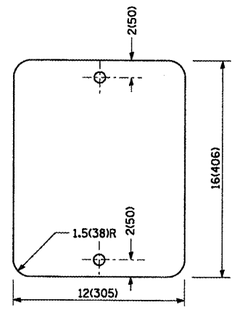
Color: Black / Yellow reflectorized

OM - I100 (L or R) Direct applied reflective sheeting

OM - I200 (L or R) Post mounted

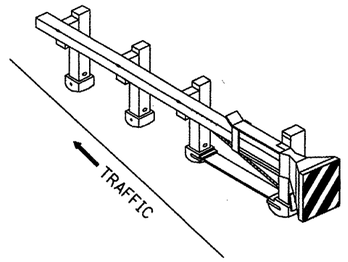


DETAIL OF MOUNTING TERMINAL MARKER TO POST

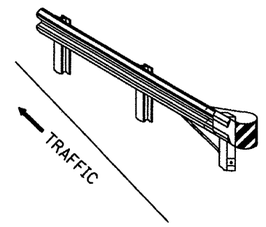


STANDARD TERMINAL MARKER

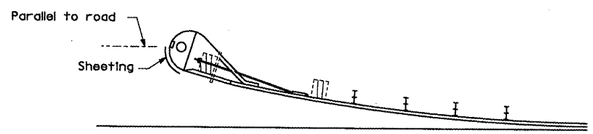
POST MOUNTED TERMINAL MARKER ASSEMBLY



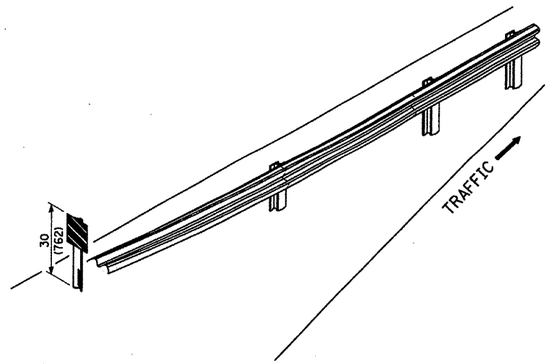
Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type 1 (Special)



Standard Treatment - Direct Applied Sheeting
Traffic Barrier Terminal Type (*)
* See Plans for Type



Sheeting Position for
Traffic Barrier Terminal Type (*)
* See Plans for Type



ALTERNATE TREATMENT - POST MOUNTED
(For turned-down terminal where sheeting cannot be direct applied)

TERMINAL MARKER TREATMENTS

GENERAL NOTES

All dimensions are in inches (millimeters) unless otherwise noted.

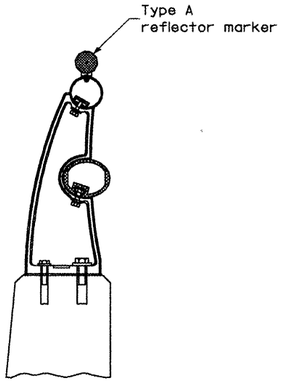
FILE NAME = ...\D488773-sht-635101.dgn	USER NAME = _USER_	DATA	REVISED	BY
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$			
	PLOT DATE = 2/19/2009 2:10:07 PM			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

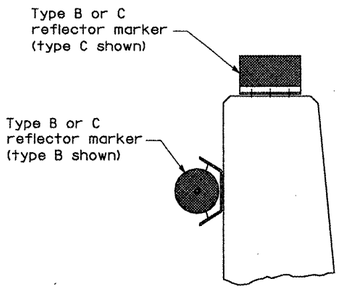
GUARDRAIL AND BARRIER WALL DELINEATION
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	487
CADD STD 635101-04	SHT 2 OF 3	CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		

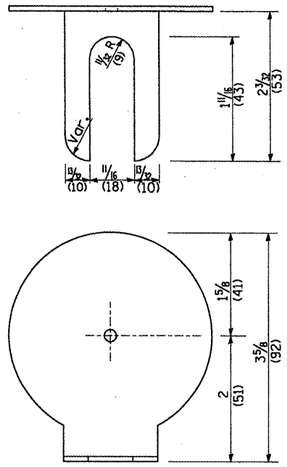


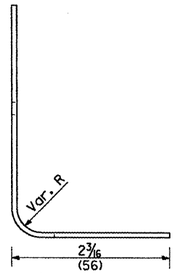
TYPICAL MOUNTING DETAIL
FOR BRIDGE RAIL REFLECTOR



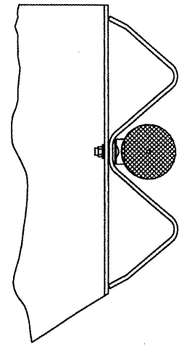
TYPICAL MOUNTING DETAIL
FOR BARRIER WALL REFLECTOR

REFLECTOR MOUNTING

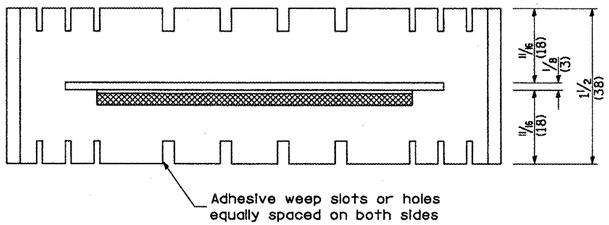


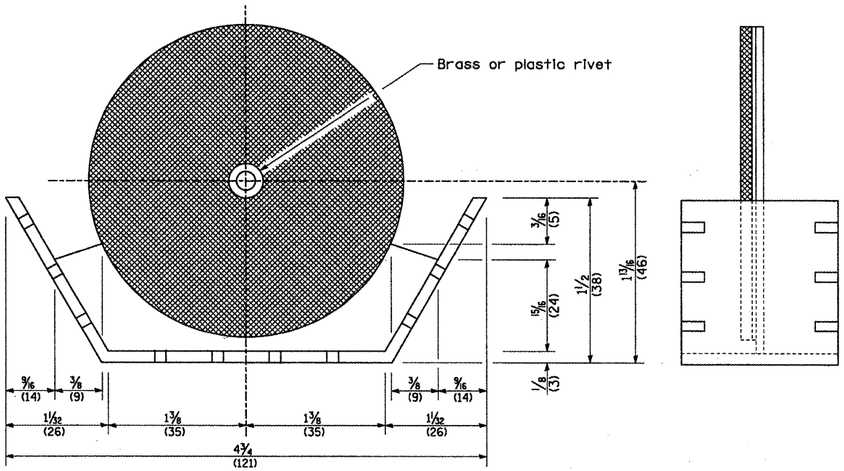


REFLECTOR MARKER TYPE A



TYPICAL GUARDRAIL MOUNTING WITH
REFLECTOR MARKER TYPE A





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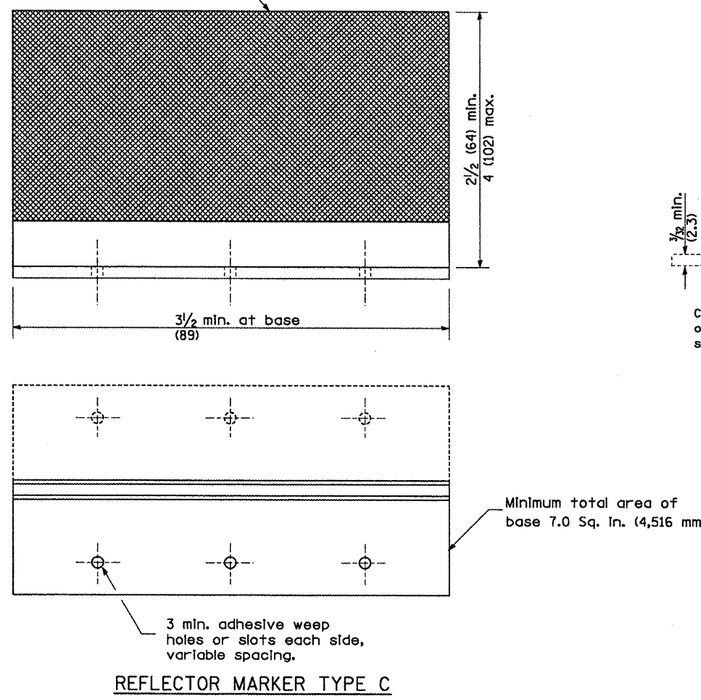
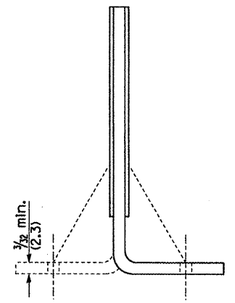


REFLECTOR MARKER TYPE C



Cross section may be "T"
or "L" shaped and may have
side supports at ends.

REFLECTORS

All dimensions are in inches (millimeters)
unless otherwise noted.

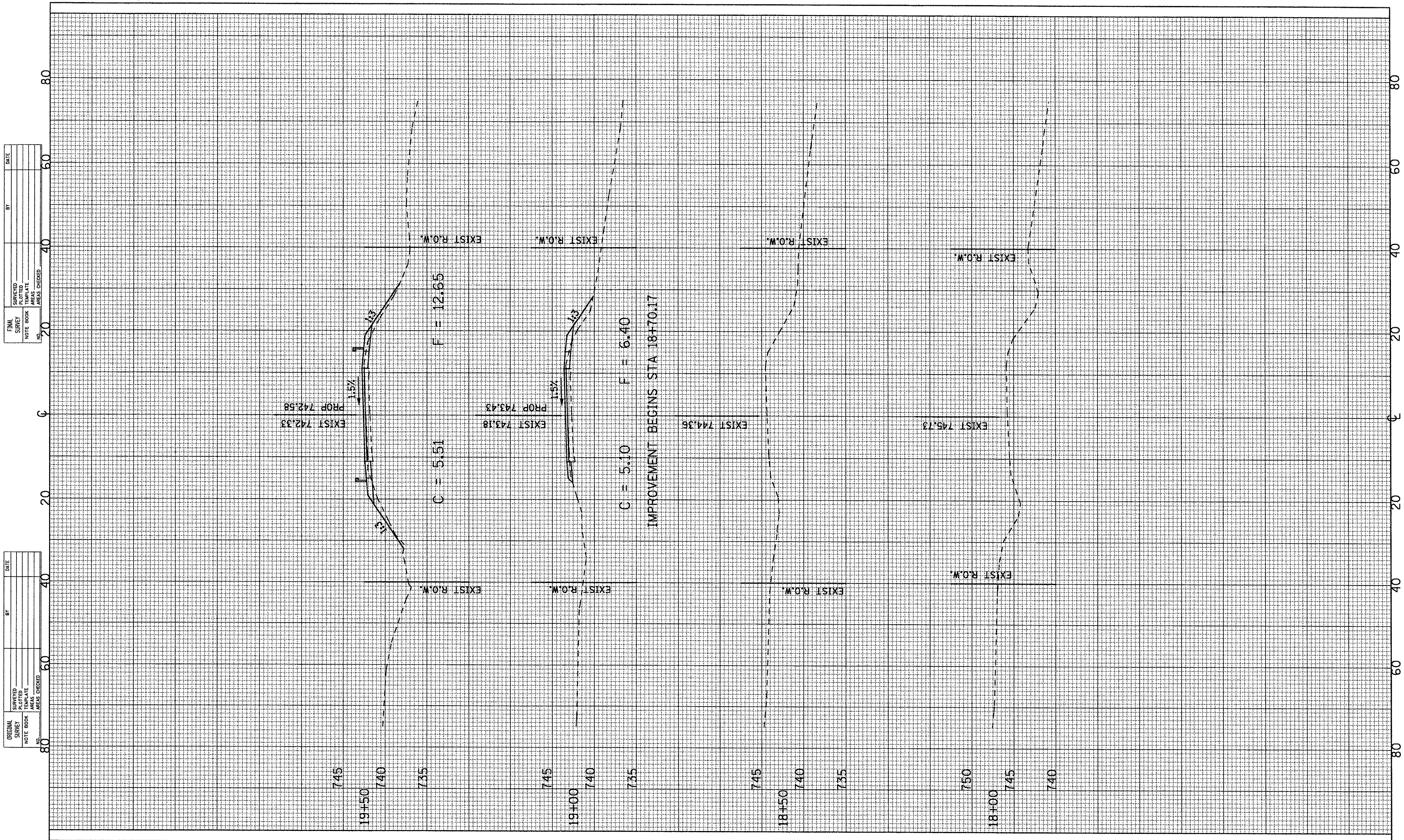
FILE NAME = ...\D488773-sht-635101.dgn	USER NAME = _USER_	DATA	REVISED	BY
THE UPCHURCH GROUP, INC.	PLOT SCALE = $SCALE$			
	PLOT DATE = 2/19/2009 2:10:23 PM			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL AND BARRIER WALL DELINEATION
COUNTY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	488
CADD STD 635101-04	SHT 3 OF 3	CONTRACT NO. 88773		
FED. ROAD DIST. NO. 4	ILLINOIS	FED. AID PROJECT		



FILE NAME = xsections2d.dgn	USER NAME = MAS	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
FUHRMANN ENGINEERING, INC.	PLOT DATE = 2/4/2009 9:08 A.M.	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
COUNTRY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

SCALE: | SHEET NO. 9 OF SHEETS | STA. 18+00 TO STA. 19+50

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;136R;109BR-2	Henderson	490	489
		CONTRACT NO. 88773		

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

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

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

IMPROVEMENT ENDS STA 21+26.26

EXIST 740.99
EXIST 741.00
PROP 741.25
0.14%
F = 22.25
C = 2.54
EXIST R.O.W.
EXIST 741.31
PROP 741.56
0.32%
F = 45.27
C = 0.41
EXIST R.O.W.
EXIST 742.06
PROP 742.31
0.5%
F = 4.63
C = 3.98
EXIST R.O.W.
CULVERT OMISSION
EXIST 742.06
PROP 742.31
0.75%
F = 9.20
C = 4.69
EXIST R.O.W.

745
740
735
21+50
21+00
20+50
20+14.13
19+85.88

FILE NAME = xsections2d.dgn	USER NAME = MAS	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = *SCALE*	CHECKED -	REVISED -
FUHRMANN ENGINEERING, INC.	PLOT DATE = 2/4/2009 9:08 A.M.	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
COUNTRY ROAD 8 (1900 E) OVER BRANCH OF HONEY CREEK

SCALE: | SHEET NO. 10 OF SHEETS | STA. 19+84.88 TO STA. 21+50

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
665	(136,137)W&RS-3;(136R;109BR-2	Henderson	490	490
		CONTRACT NO. 88773		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		