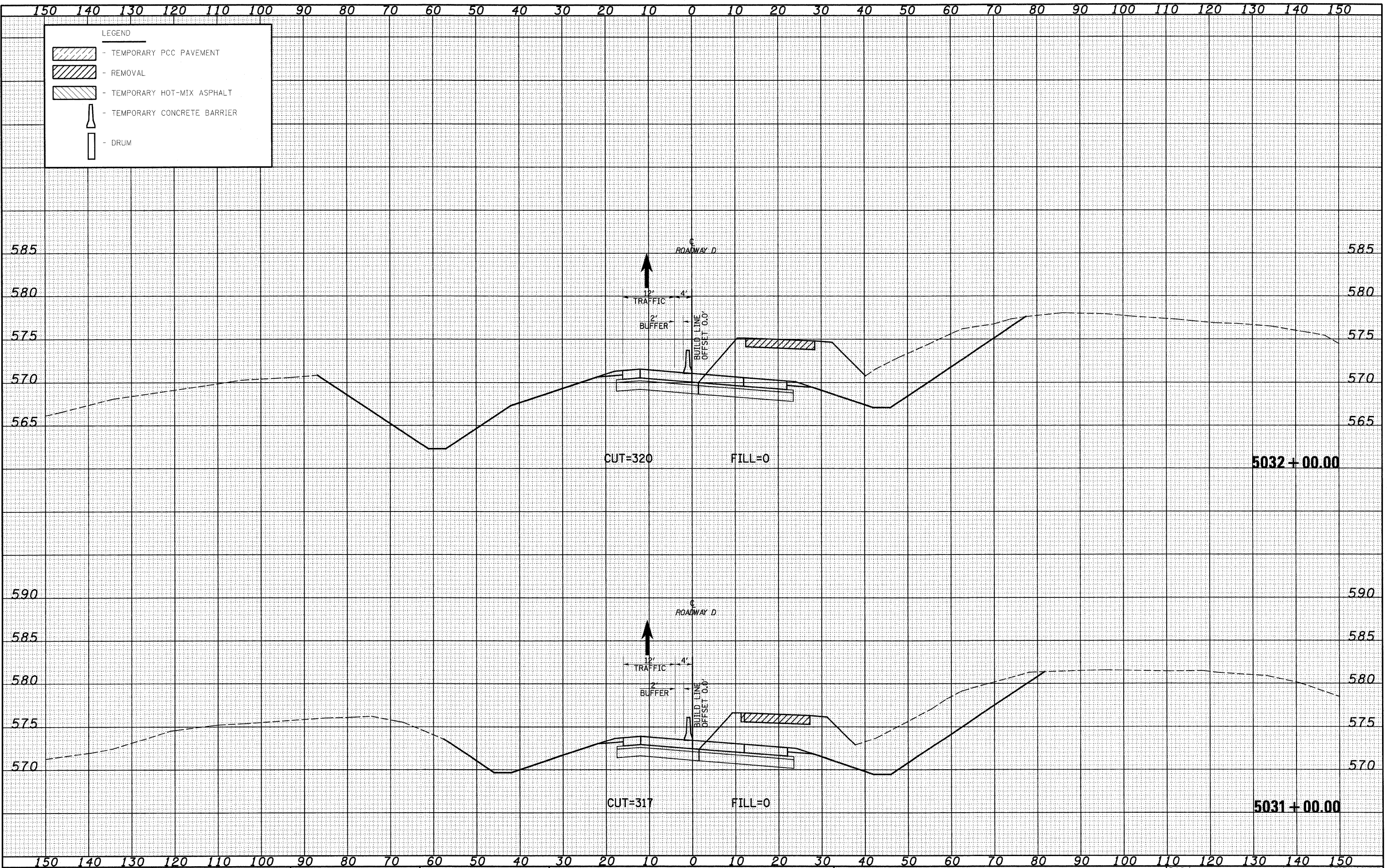


DATE _____
 BY _____
 SURVEYED _____
 DRAWN _____
 CHECKED _____
 DATE _____

DATE _____
 BY _____
 SURVEYED _____
 DRAWN _____
 CHECKED _____
 DATE _____



FILE NAME = S:\Projects\103-2007\103-2007.dwg
 USER NAME = linda

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISÉ -
 REVISÉ -
 REVISÉ -
 REVISÉ -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

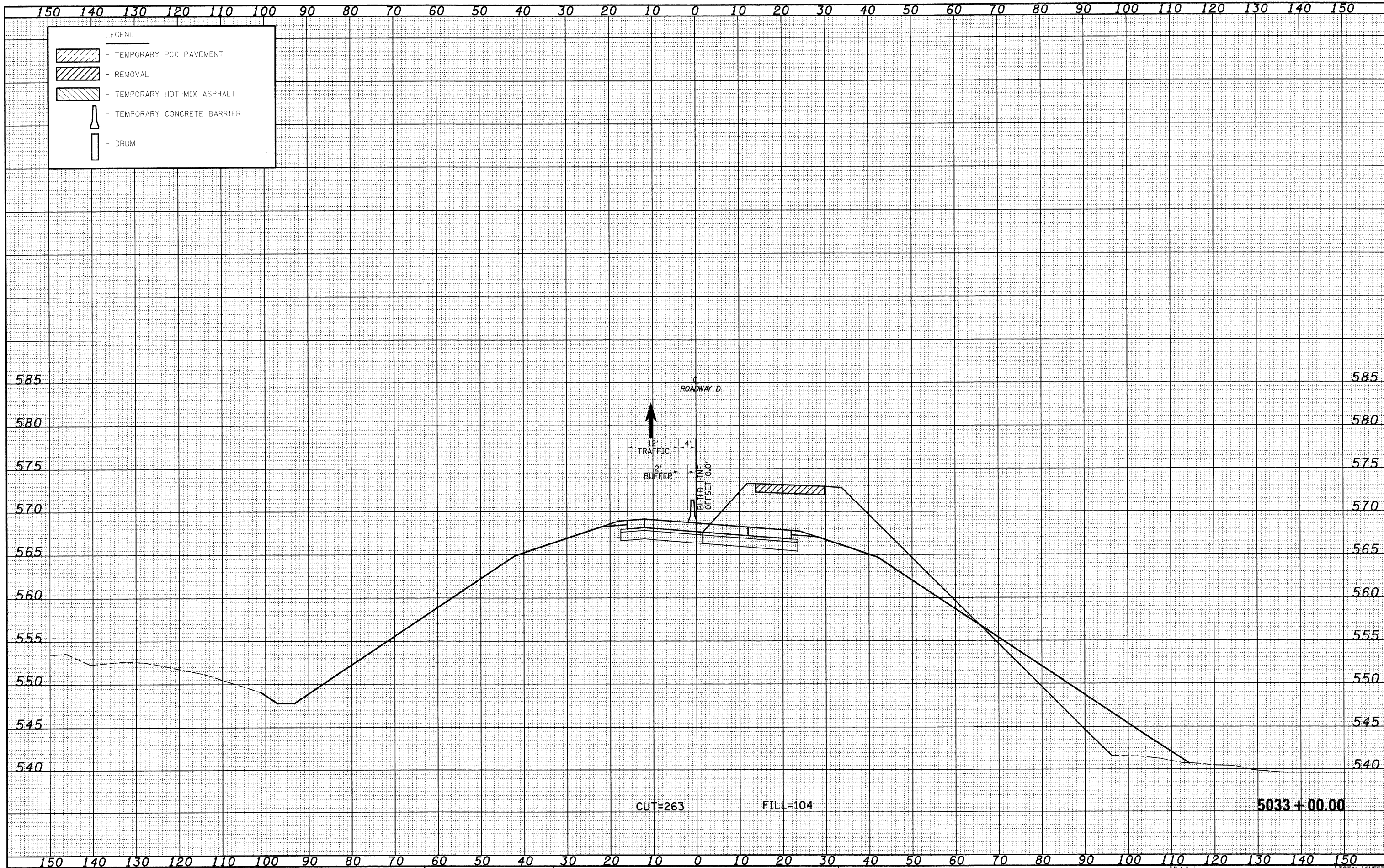
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)

SCALE: 1"=10' SHEET NO. 3 OF 9 SHEETS STA. 5031+00.00 TO STA. 5032+00.00

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1301
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

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

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



LEGEND

- TEMPORARY PCC PAVEMENT
- REMOVAL
- TEMPORARY HOT-MIX ASPHALT
- TEMPORARY CONCRETE BARRIER
- DRUM

FILE NAME =
 S:\Projects\103-8007-31-70.dgn\103-8007-31-70.dgn

USER NAME = Linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISIONS
 REVISIONS
 REVISIONS
 REVISIONS

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

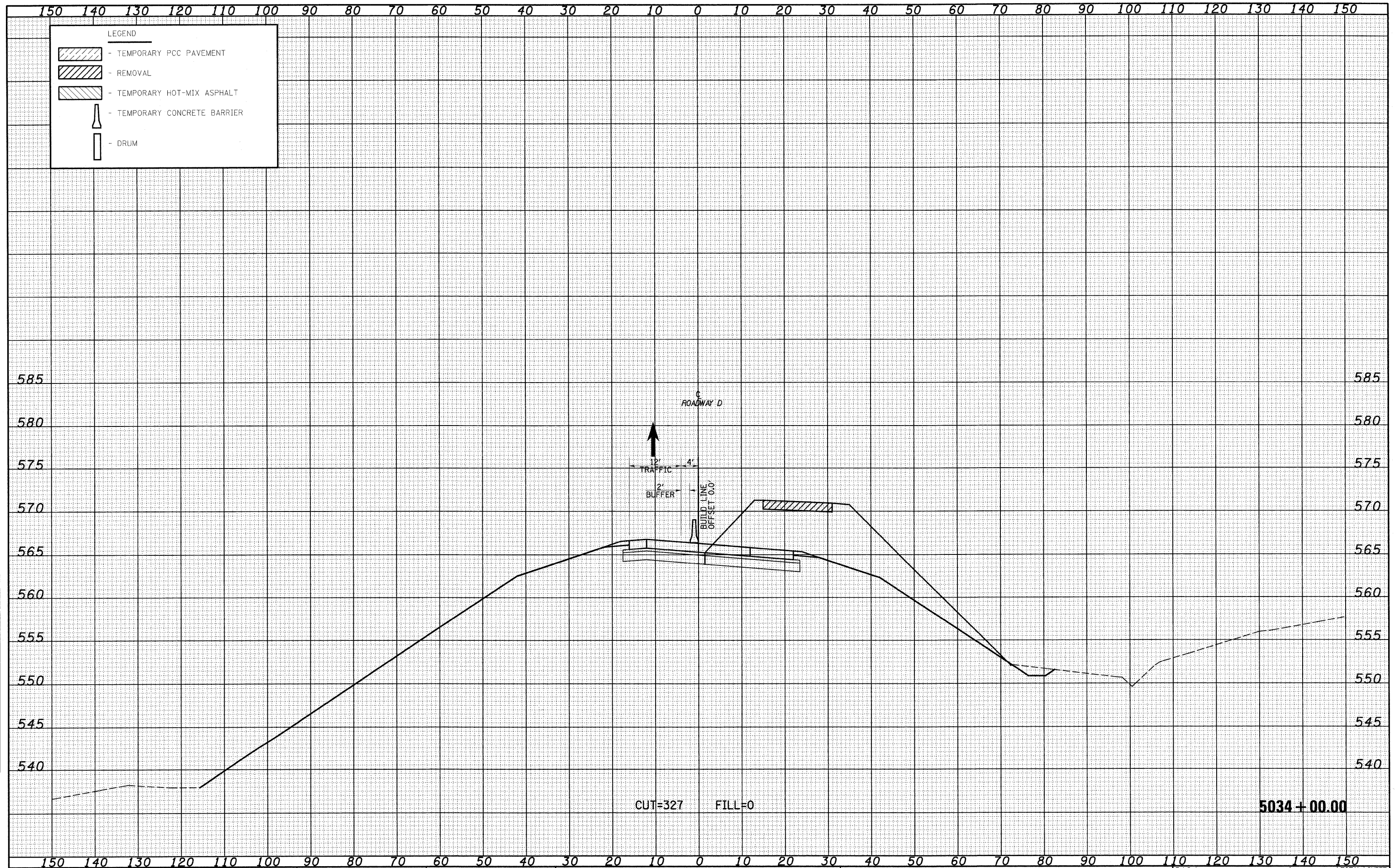
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)

SCALE: 1"=10' SHEET NO. 4 OF 9 SHEETS STA. 5033+00.00 TO STA. 5033+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1302
CONTRACT NO. 74296			ILLINOIS FED. AID PROJECT	

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

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



FILE NAME = S:\Projects\483-00072-57-78.dgn
 USER NAME = trinda

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

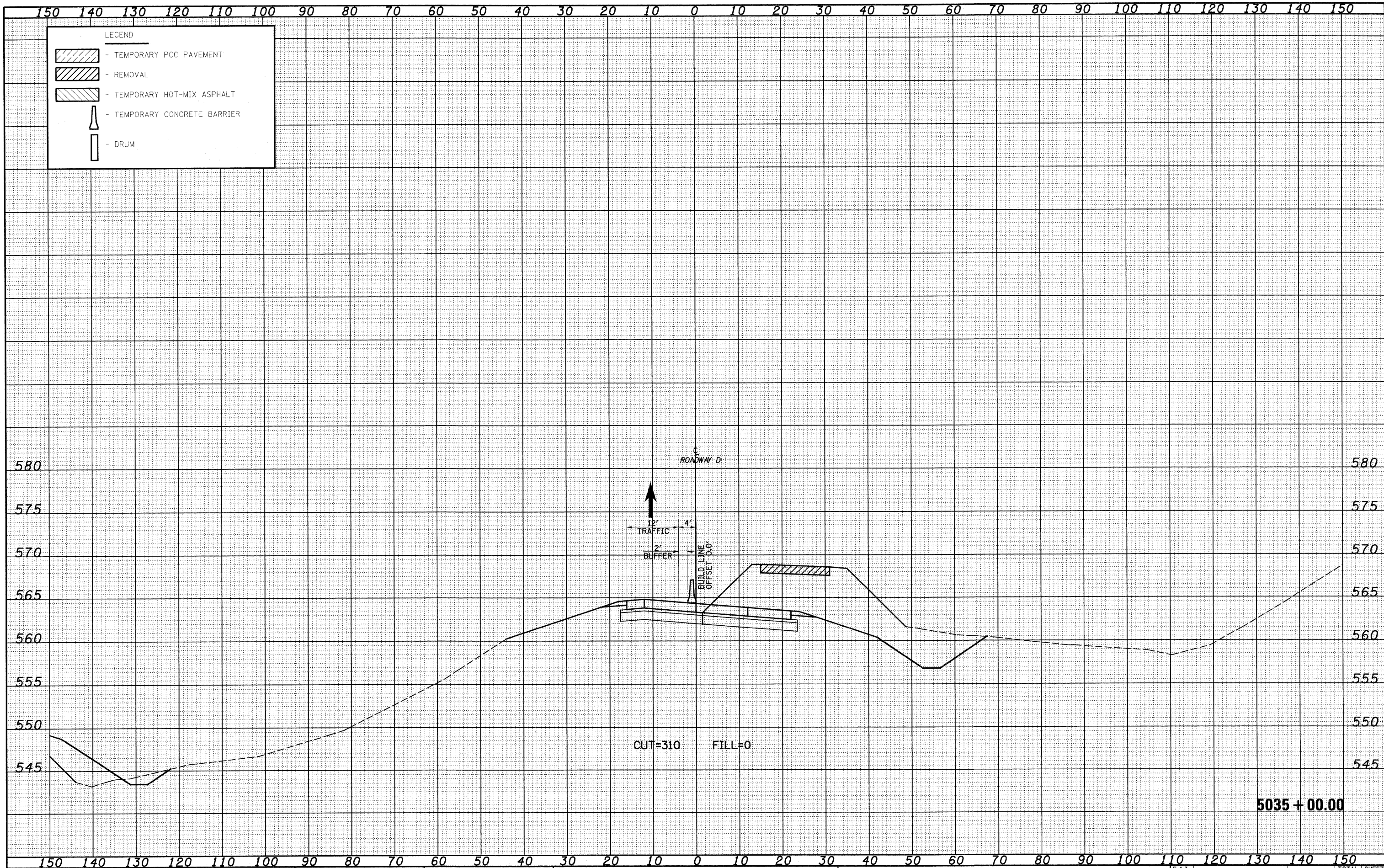
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)

SCALE: 1"=10'
 SHEET NO. 5 OF 9 SHEETS
 STA. 5034+00.00 TO STA. 5034+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3R)	EFFINGHAM	1416	1303
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 74296	

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

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



FILE NAME =
 S:\projects\103-0000\7.51-70.dwg\15 1in\work\1030001 52.dwg

USER NAME = lnda
 PLOT SCALE = 20.0000' / IN.
 PLOT DATE = 2/10/2010

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

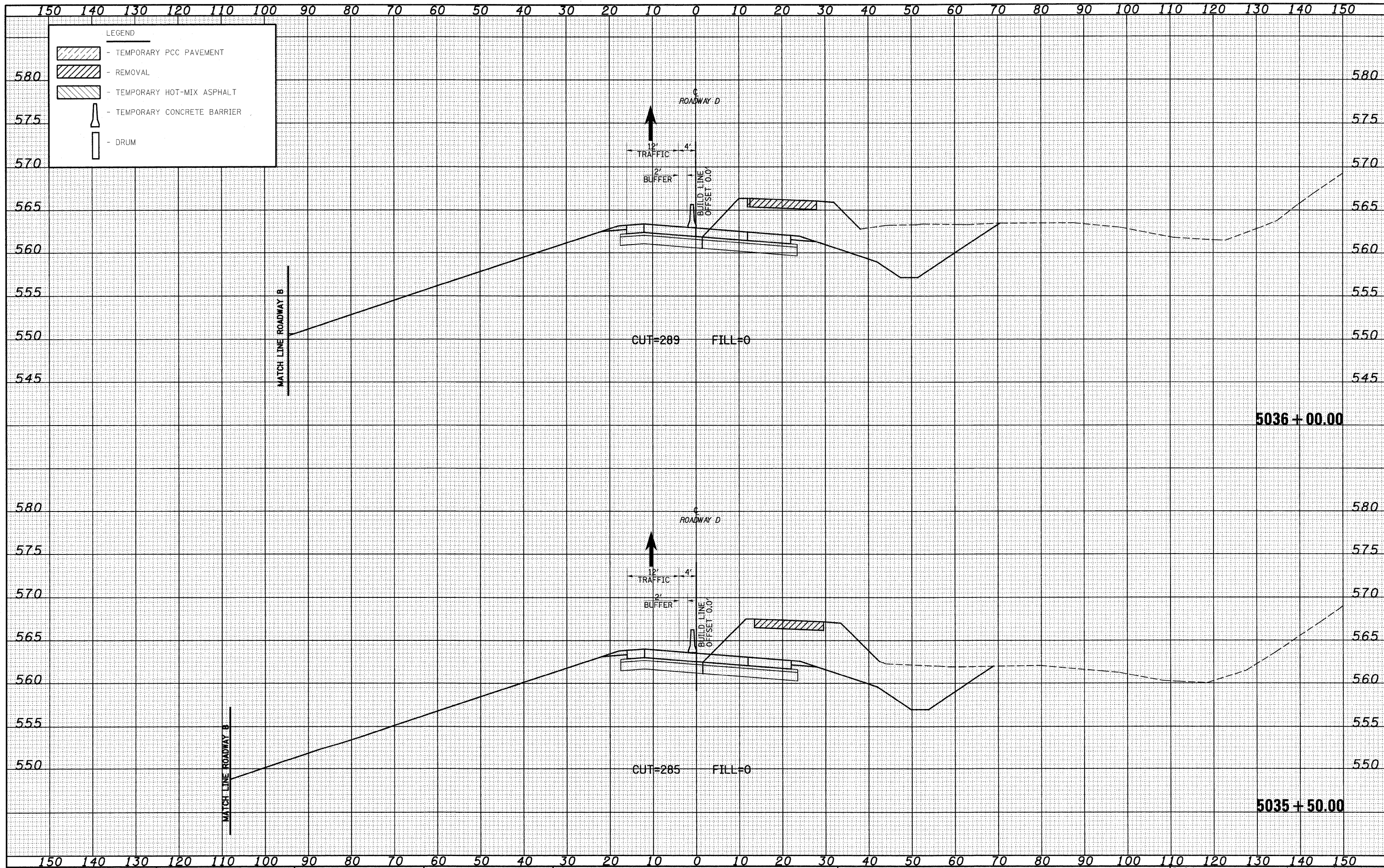
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)
 SCALE: 1"=10' SHEET NO. 6 OF 9 SHEETS STA. 5035+00.00 TO STA. 5035+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1304
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 74296	

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
AREAS CHECKED	



FILE NAME = S:\Project\103-00072-51-70.dgn
 USER NAME = linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISOR -
 REVISION -
 REVISION -
 REVISION -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

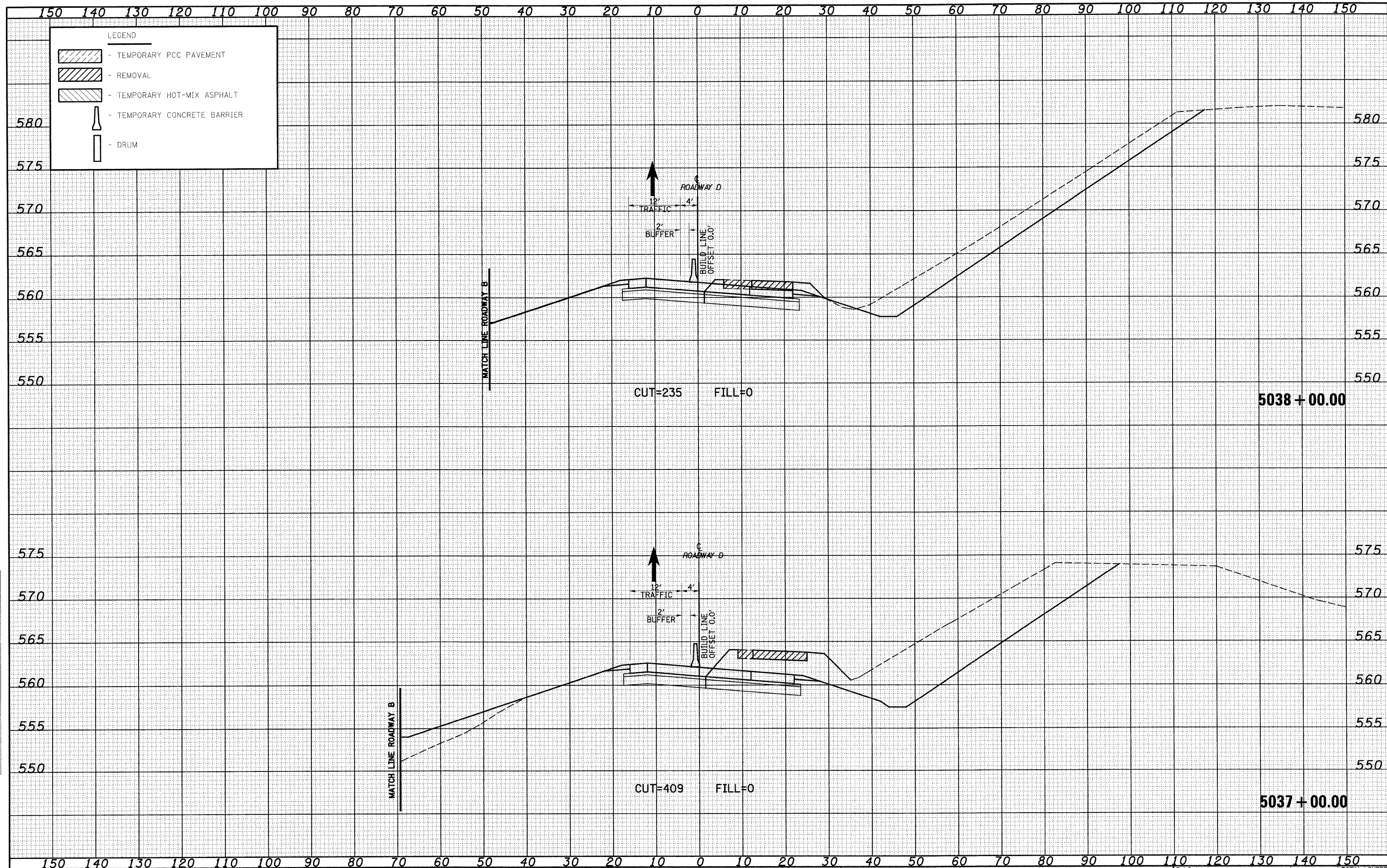
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)

SCALE: 1"=10' SHEET NO. 7 OF 9 SHEETS STA. 5035+50.00 TO STA. 5036+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1305
CONTRACT NO. 74296				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

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

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



FILE NAME = S:\projects\483\48307257\Roadway\1\Draw\DR08M01-5.dwg
 PLOT SCALE = 20.00000 ' / IN.
 PLOT DATE = 2/10/2010

USER NAME = lnda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

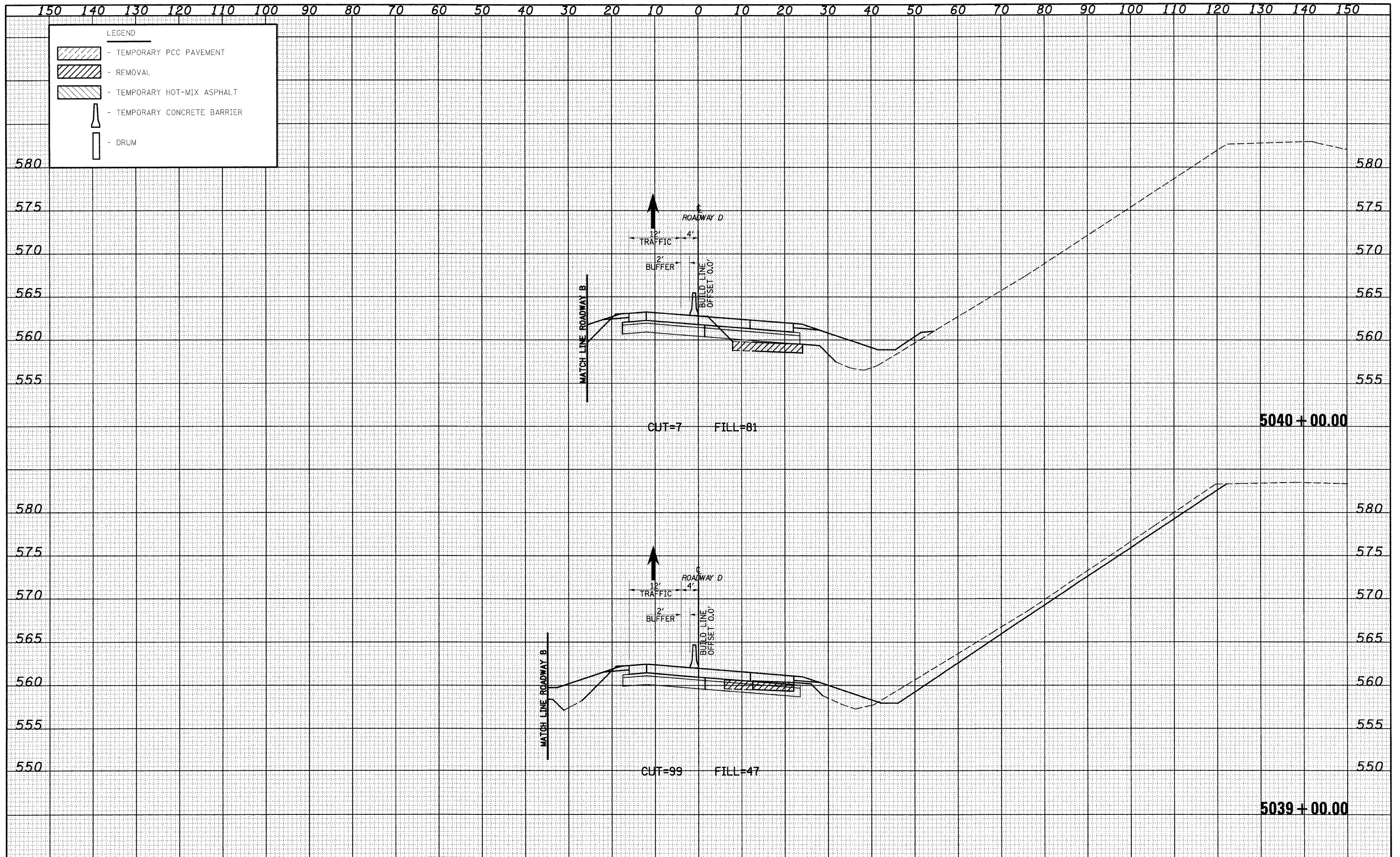
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)

SCALE: 1"=10' SHEET NO. 8 OF 9 SHEETS STA. 5037+00.00 TO STA. 5038+00.00

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1306
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
TEMP. AREAS CHECKED	

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



FILE NAME -
 S:\Projects\143-2007-57-70\Drawings\17682007-57.dwg

USER NAME = lunda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

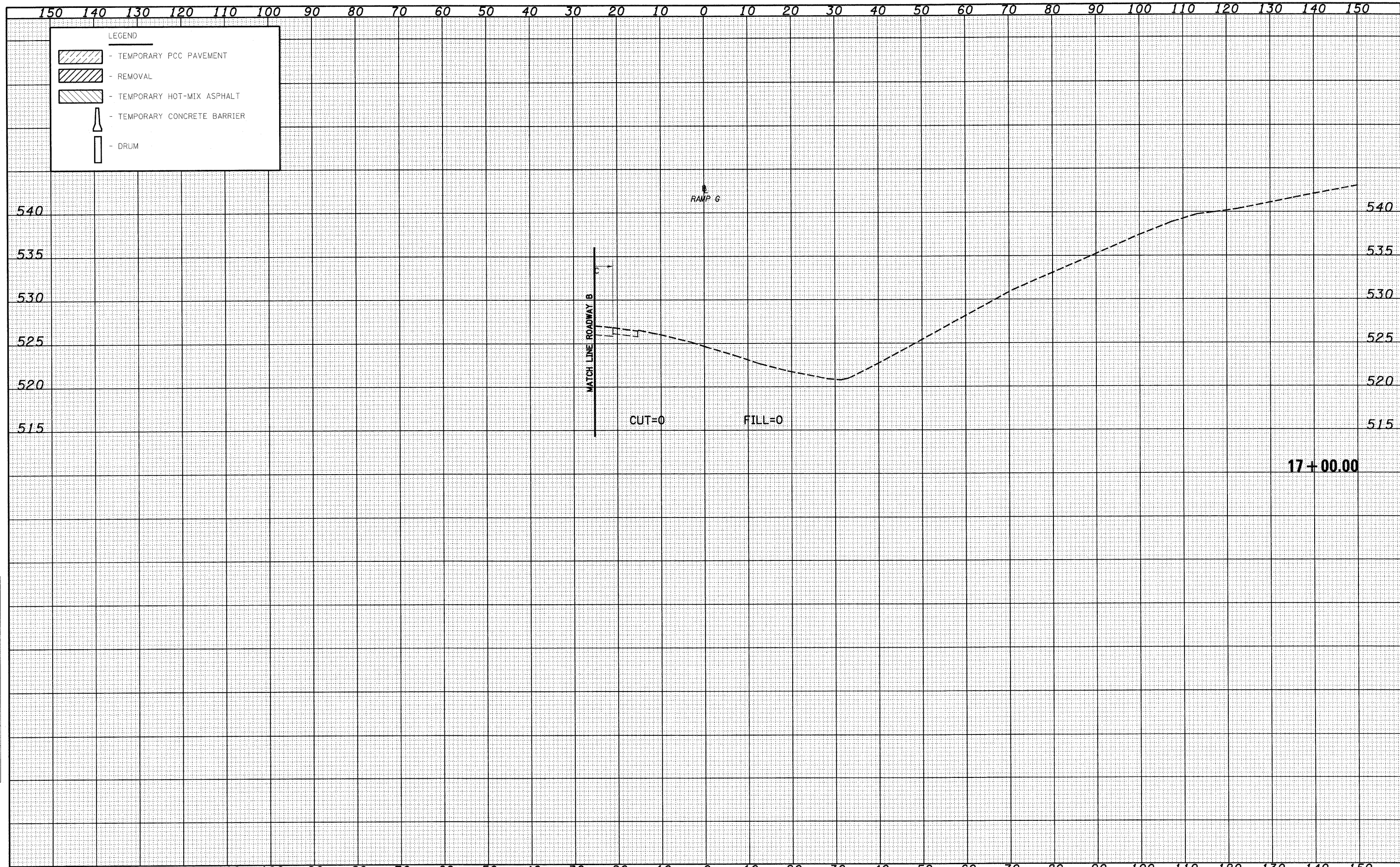
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - ROADWAY D (STAGE 2)
 SCALE: 1"=10' SHEET NO. 9 OF 9 SHEETS STA. 5039+00.00 TO STA. 5040+00.00

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1307
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

DATE _____ BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____

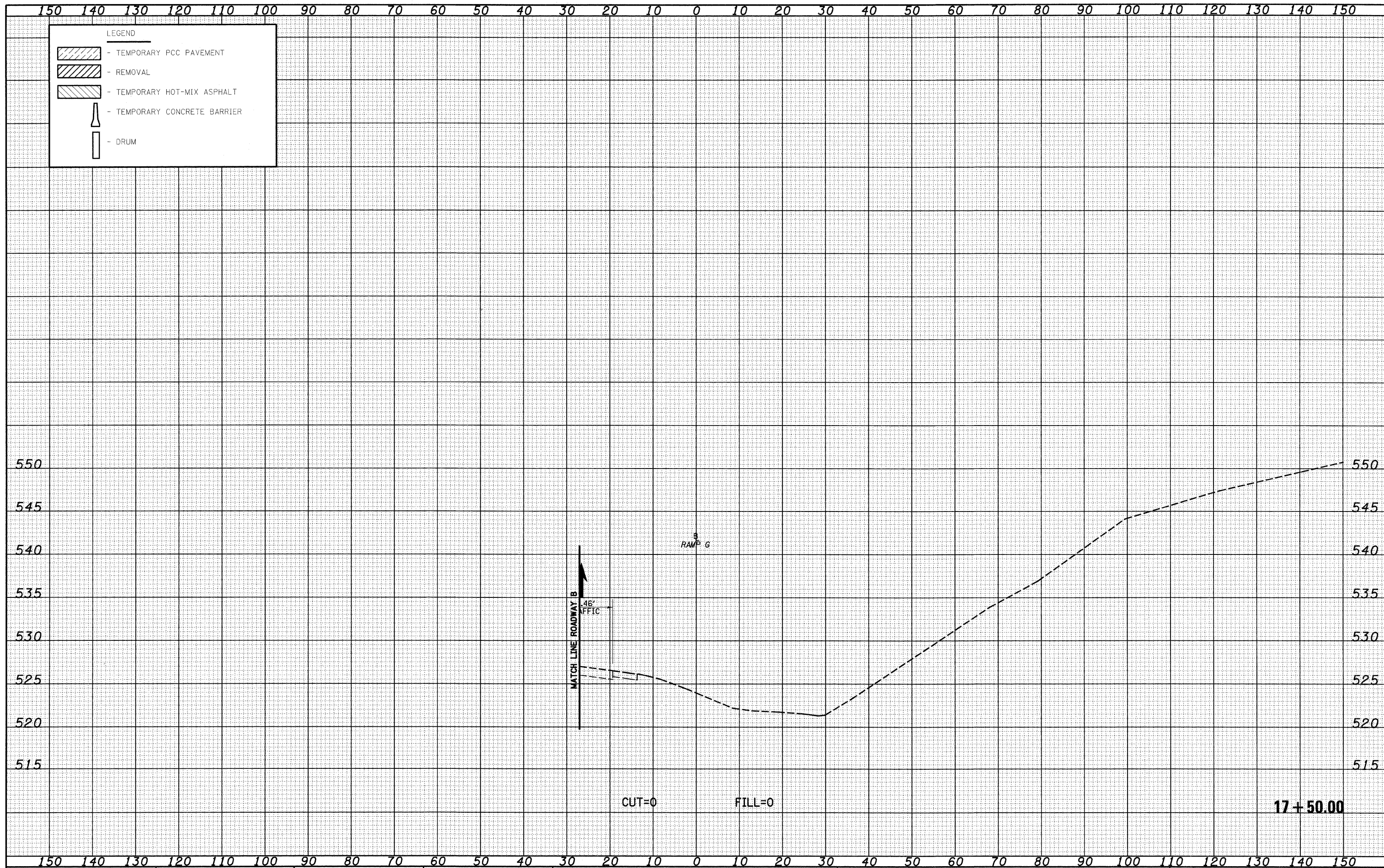
DATE _____ BY _____
 SURVEYED _____
 PLOTTED _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____



FILE NAME =	USER NAME = linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (PRE-STAGE 1)			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\Projects\02-0007-57-70\Map\17+00\17+00.dwg		DRAWN - LEC	REVISED -		SCALE: 1"=10'	SHEET NO. 1 OF 9 SHEETS	STA. 17+00.00 TO STA. 17+00.00	57/70	(25-3)R	EFFINGHAM	1416	1308
PLOT SCALE = 20.00000 ' / IN.		CHECKED - BRM	REVISED -					CONTRACT NO. 74296				
PLOT DATE = 2/18/2010		DATE - 2-25-08	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
SURVEYED	
TEMPLATE	
NO. BOOK	
AREAS CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



FILE NAME = S:\Project\03-0007-57-70.dgn
 USER NAME = Linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISIED -
 REVISIED -
 REVISIED -
 REVISIED -

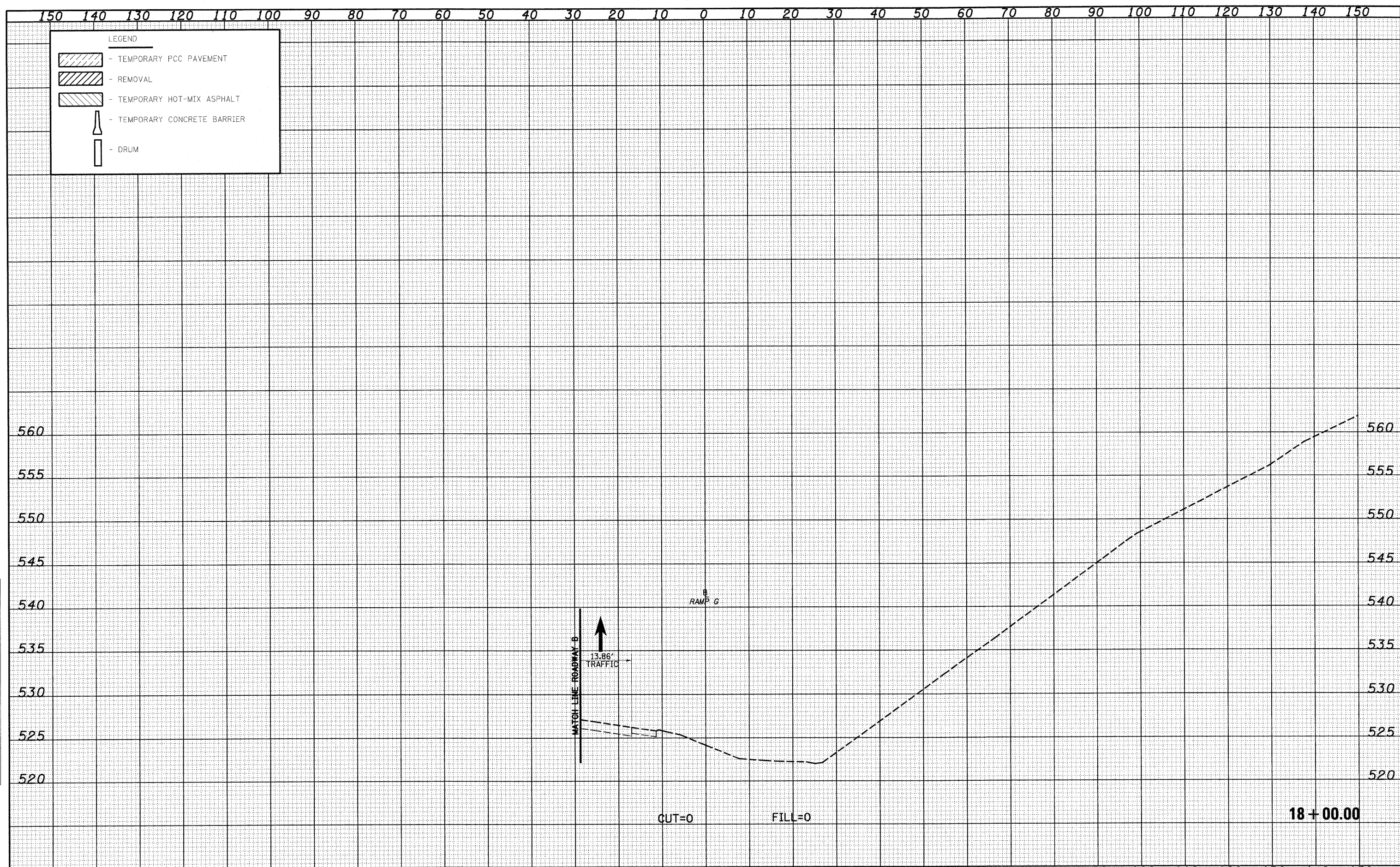
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL -
 RAMP G (PRE-STAGE 1)
 SCALE: 1"=10' SHEET NO. 2 OF 9 SHEETS STA. 17+50.00 TO STA. 17+50.00

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1309
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

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

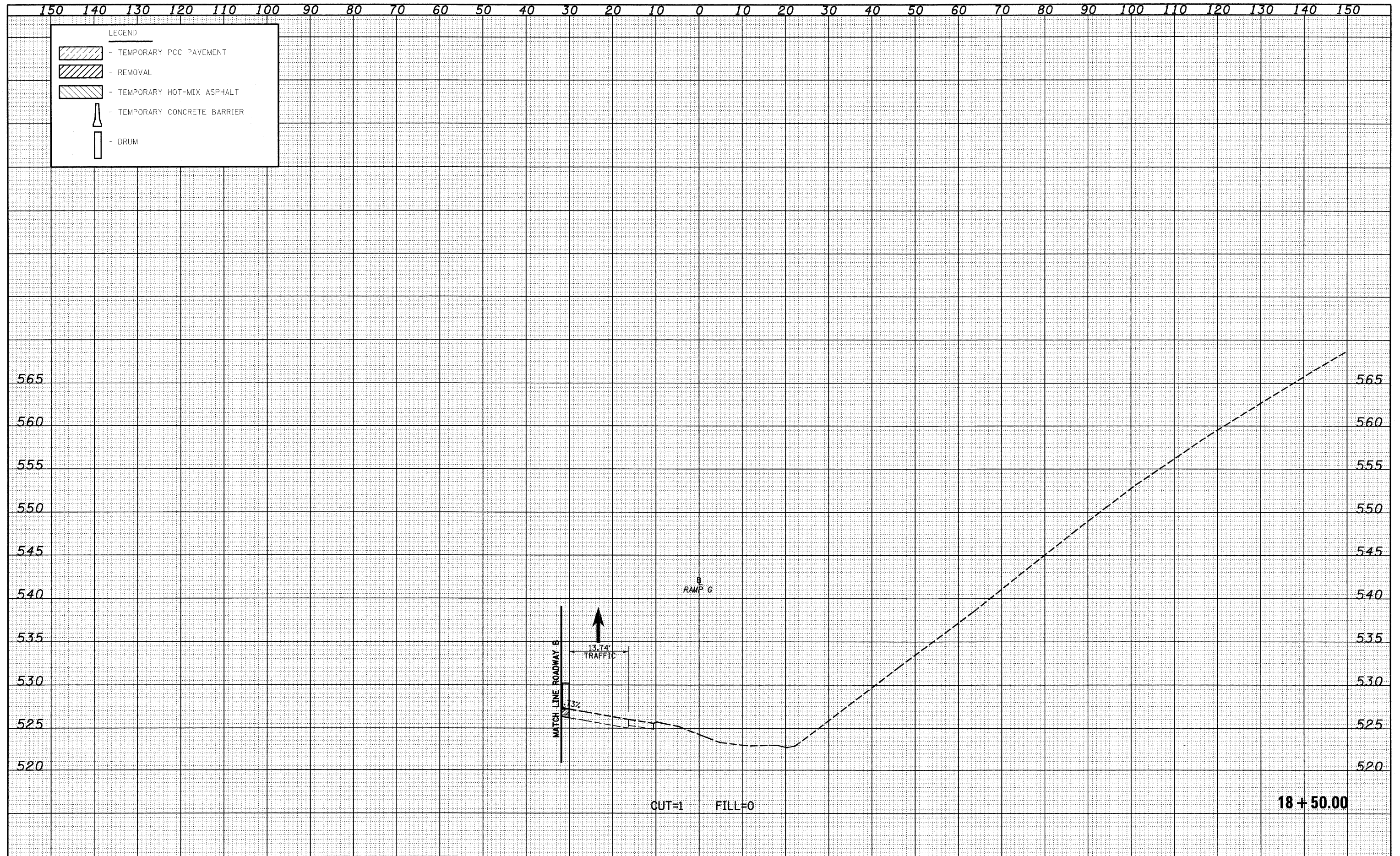
DATE	
BY	
ORIGINAL SURVEY	
SURVEY PLOTTED	
NOTE BOOK	
NO.	
TEMPLATE	
AREAS CHECKED	



FILE NAME =	USER NAME = jinda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (PRE-STAGE 1)			F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1310
PROJECT NO. 000257-70.dgn	PLOT SCALE = 20.0000' / IN.	DRAWN - LEC	REVISED -		SCALE: 1"=10'	SHEET NO. 3 OF 9 SHEETS	STA. 18+00.00 TO STA. 18+00.00	CONTRACT NO. 74296				
	PLOT DATE = 2/18/2010	CHECKED - BRM	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							
		DATE - 2-25-08	REVISED -									

DATE	
BY	
FINAL SURVEY	
NO. _____	
NOTE BOOK	
NO. _____	
AREAS CHECKED	

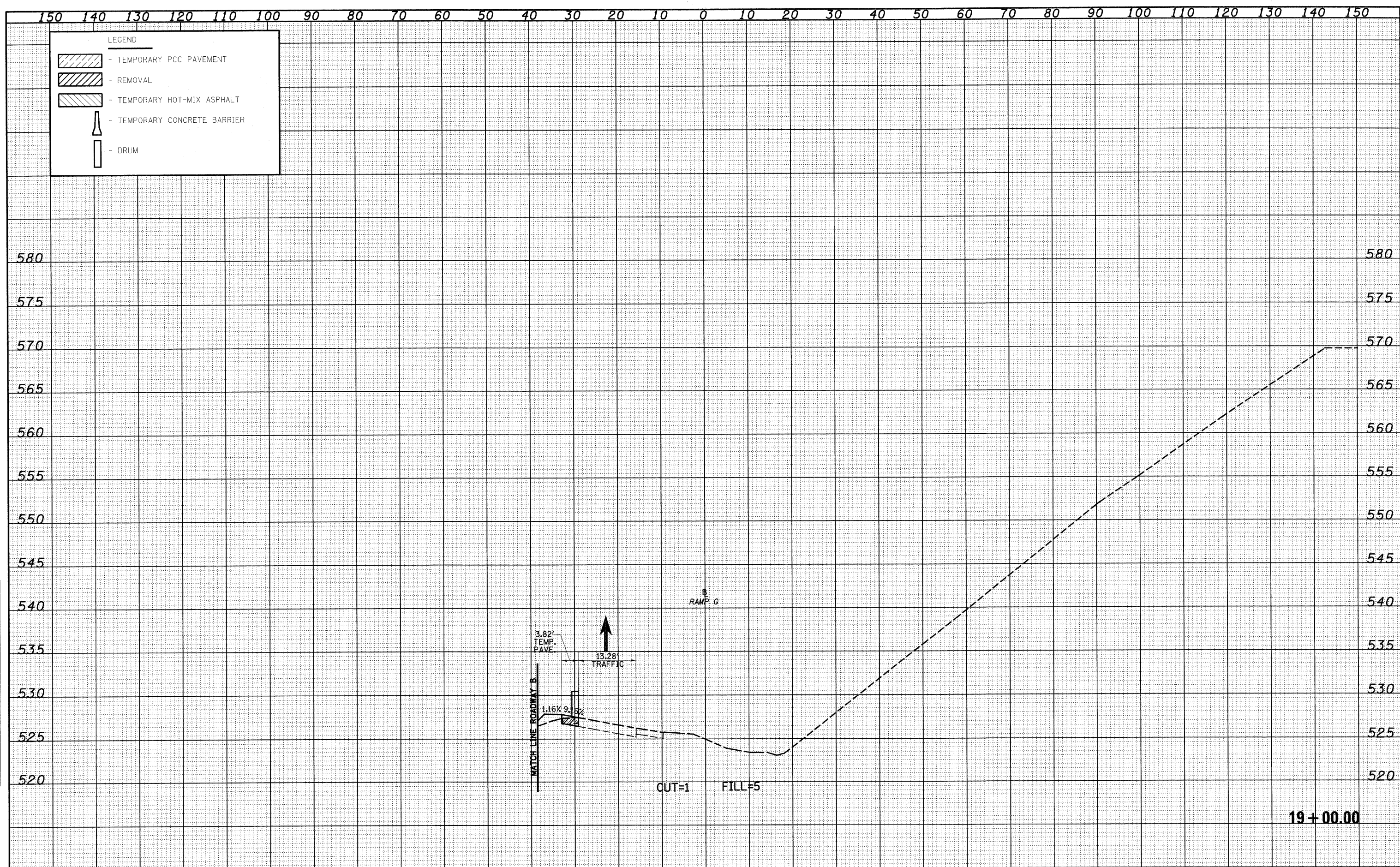
DATE	
BY	
ORIGINAL SURVEY	
NO. _____	
NOTE BOOK	
NO. _____	
AREAS CHECKED	



FILE NAME =	USER NAME = Junda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (PRE-STAGE 1)				F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1311
		DRAWN - LEC	REVISED -		SCALE: 1"=10'	SHEET NO. 4 OF 9 SHEETS	STA. 18+50.00 TO STA. 18+50.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 74296			
		CHECKED - BRM	REVISED -										
		DATE - 2-25-08	REVISED -										

DATE	
BY	
FINAL SURVEY	
SURVEYED	
NOTED	
PLANNED	
TEMP.	
AREAS	
CHECKED	

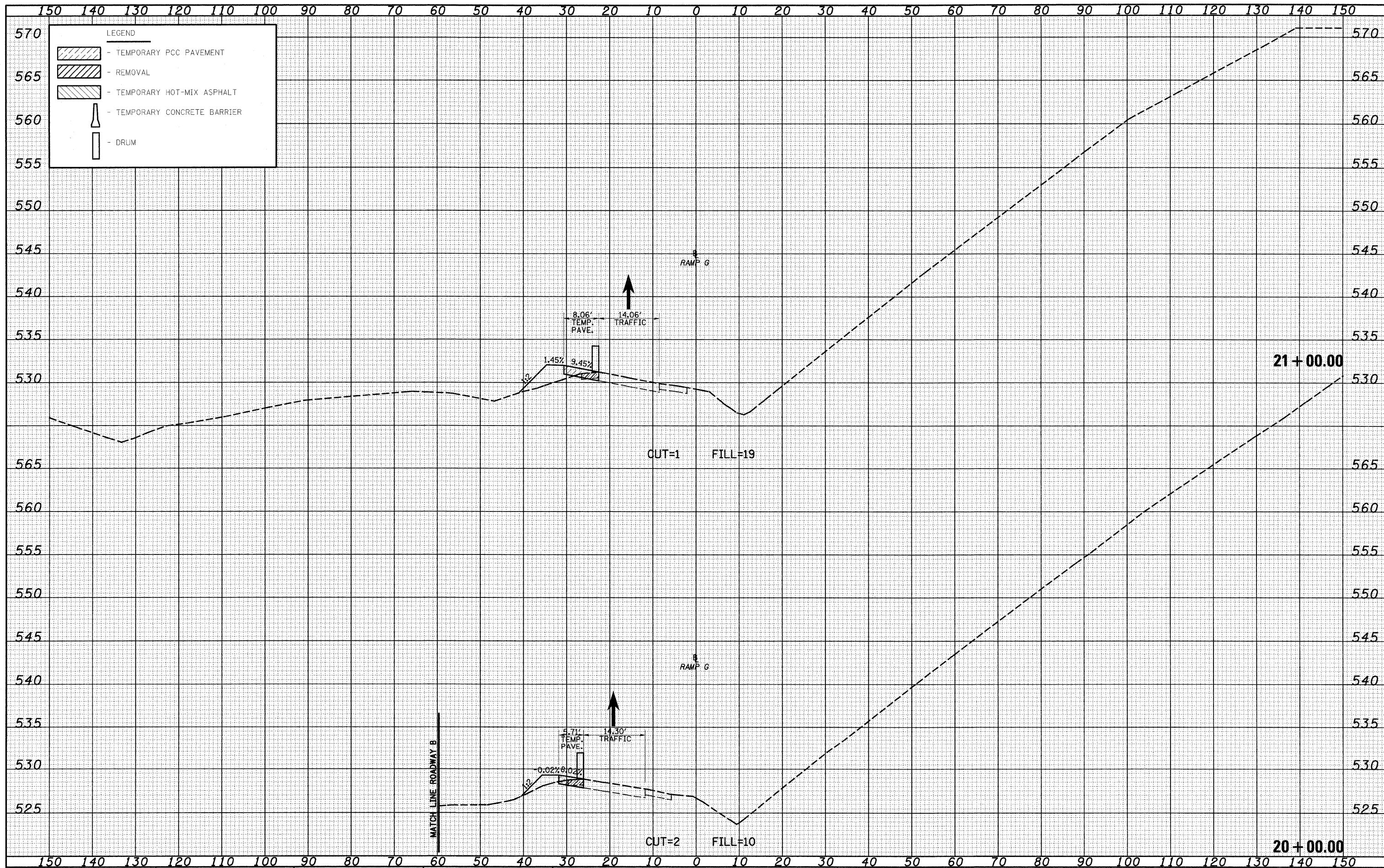
DATE	
BY	
ORIGINAL SURVEY	
SURVEYED	
NOTED	
PLANNED	
TEMP.	
AREAS	
CHECKED	



FILE NAME =	USER NAME = linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (PRE-STAGE 1)		F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1312
SAProject\180\007251-7\Map\19\TriLevel\190901\F3.dwg	PLOT SCALE = 20,00000 ' / IN.	DRAWN - LEC	REVISED -		SCALE: 1"=10'	SHEET NO. 5 OF 9 SHEETS	STA. 19+00.00 TO STA. 19+00.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 74296	
	PLOT DATE = 2/18/2010	CHECKED - BRM	REVISED -								
		DATE - 2-25-08	REVISED -								

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

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



FILE NAME = S:\Projects\403\403-70\403-70.dwg
 USER NAME = Linda

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISÉ -
 REVISÉ -
 REVISÉ -
 REVISÉ -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

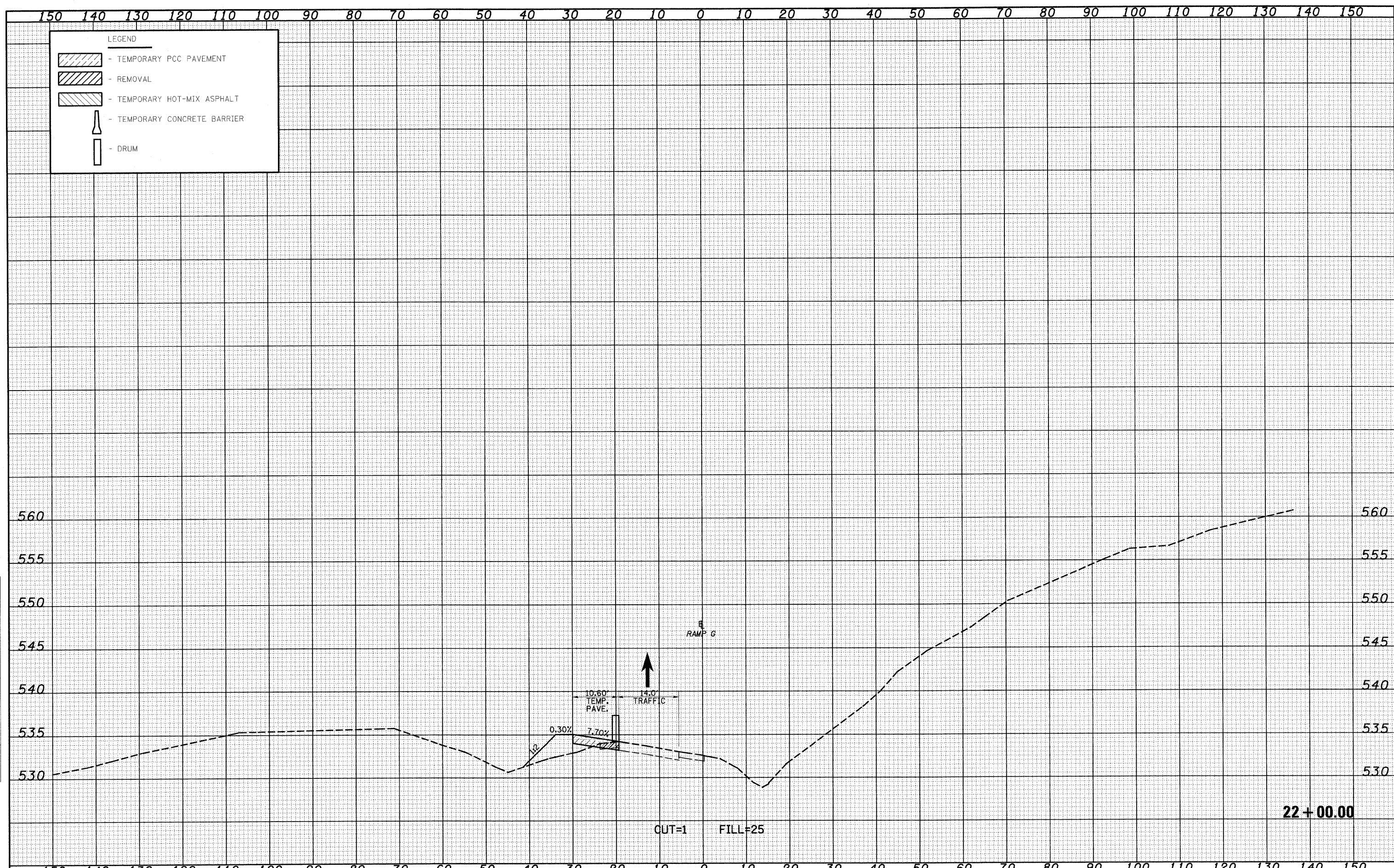
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL -
 RAMP G (PRE-STAGE 1)

SCALE: 1"=10'
 SHEET NO. 6 OF 9 SHEETS
 STA. 20+00.00 TO STA. 21+00.00

F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1313
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



FILE NAME = S:\Projects\103-00072.57-70\Map\15 Trk\Asst.DWG\0808.Plot.dwg
 PLOT SCALE = 20.00000 ' / IN.
 PLOT DATE = 2/18/2010

USER NAME = linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

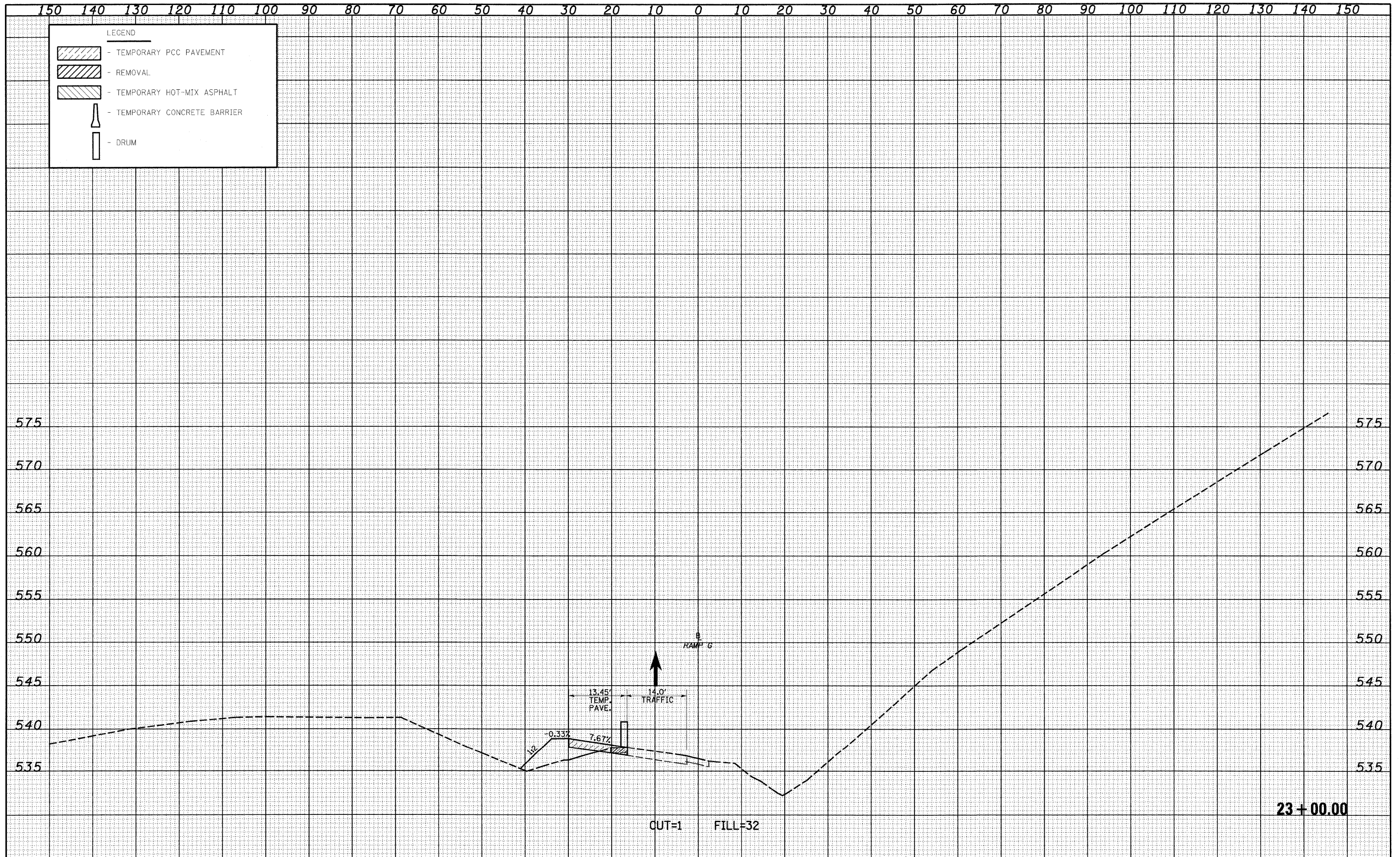
**MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL -
 RAMP G (PRE-STAGE 1)**

SCALE: 1"=10' SHEET NO. 7 OF 9 SHEETS STA. 22+00.00 TO STA. 22+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3R)	EFFINGHAM	1416	1314
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 74296		

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
TEMPLATES	
AREAS CHECKED	

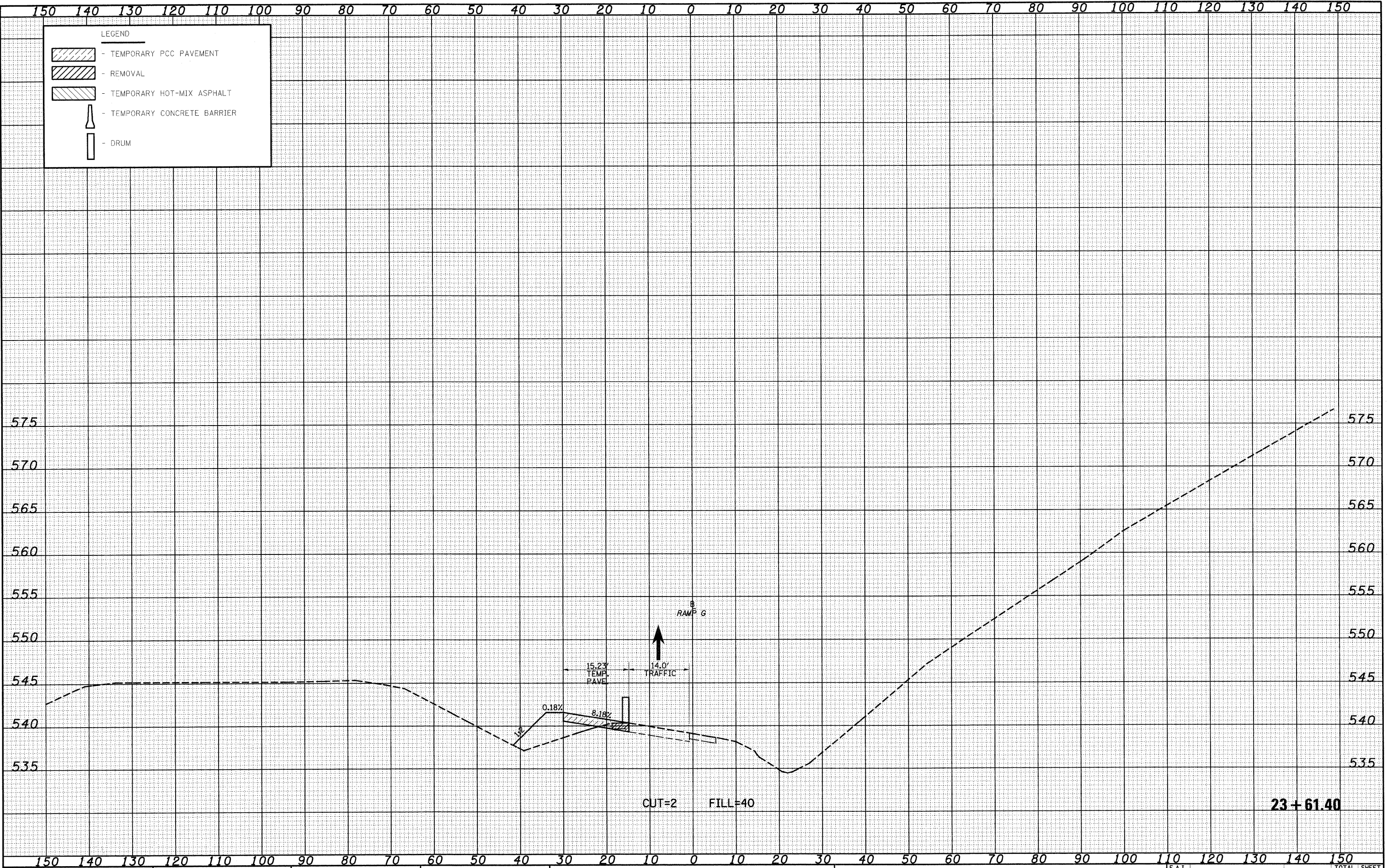
DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
NO.	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
TEMPLATES	
AREAS CHECKED	



FILE NAME -	USER NAME - linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (PRE-STAGE 1)			F.A.I. RTE. 57/70	SECTION (25-31R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1315
PROJECT NO. 0072-57-70(1)S 1-1.1\enk.DWG\F01.dwg	PLOT SCALE = 20.0000' / IN.	DRAWN - LEC	REVISED -		SCALE: 1"=10'	SHEET NO. 8 OF 9 SHEETS	STA. 23+00.00 TO STA. 23+00.00	CONTRACT NO. 74296		ILLINOIS FED. AID PROJECT		
	PLOT DATE = 2/10/2010	CHECKED - BRM	REVISED -									
		DATE - 2-25-08	REVISED -									

DATE _____
 BY _____
 SURVEYED _____
 SURVEY _____
 NOTE BOOK _____
 AREAS CHECKED _____

DATE _____
 BY _____
 SURVEYED _____
 SURVEY _____
 NOTE BOOK _____
 AREAS CHECKED _____



LEGEND

- TEMPORARY PCC PAVEMENT
- REMOVAL
- TEMPORARY HOT-MIX ASPHALT
- TEMPORARY CONCRETE BARRIER
- DRUM

FILE NAME =
 PROJECT NO. 000257-70(1)S Trk Area 1209001 P3.dwg

USER NAME = linda
 PLOT SCALE = 20.0/200' / IN.
 PLOT DATE = 2/19/2010

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

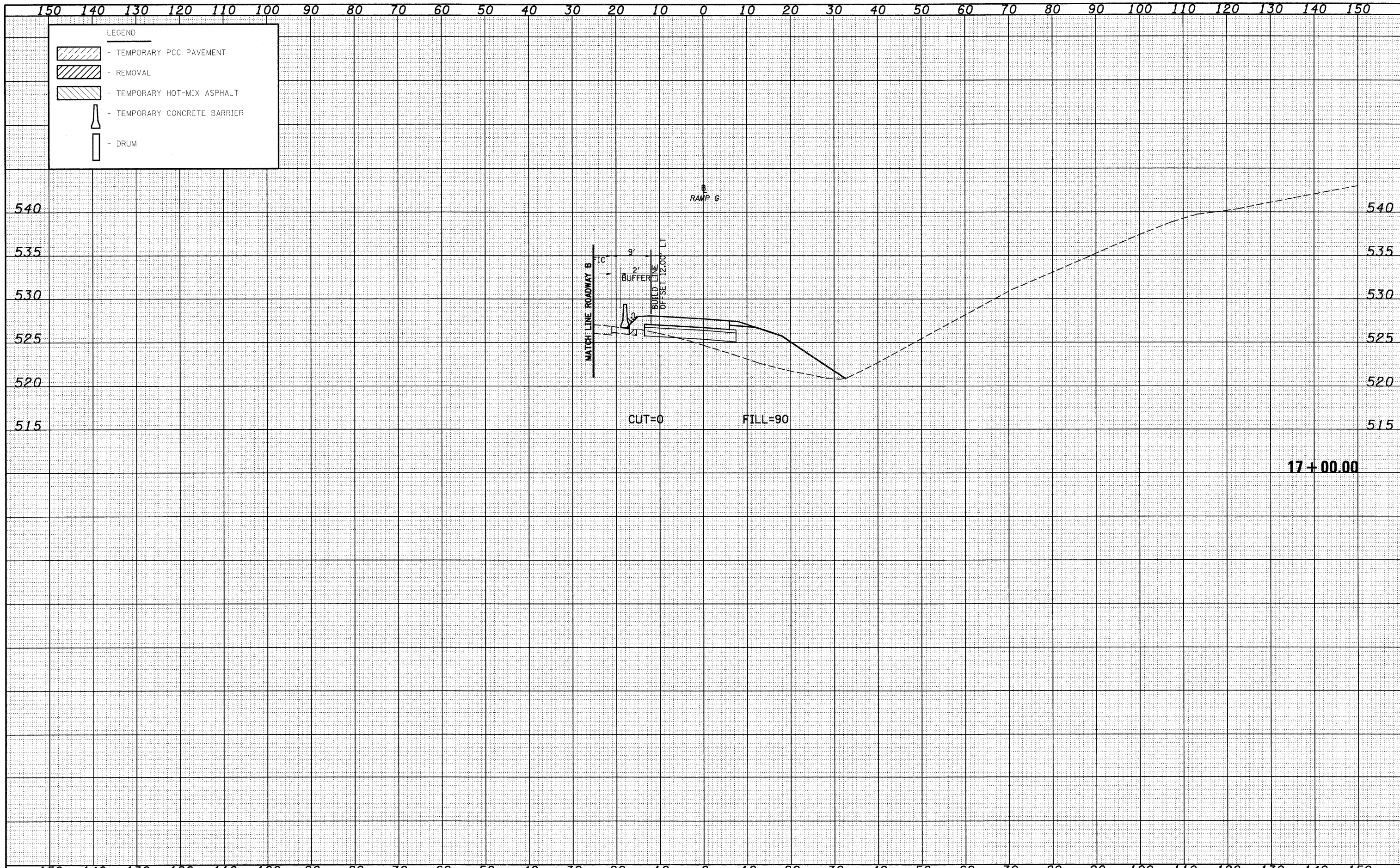
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL -
 RAMP G (PRE-STAGE 1)**
 SCALE: 1"=10' SHEET NO. 9 OF 9 SHEETS STA. 23+61.40 TO STA. 23+61.40

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1316
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
CONTRACT NO. 74296				

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

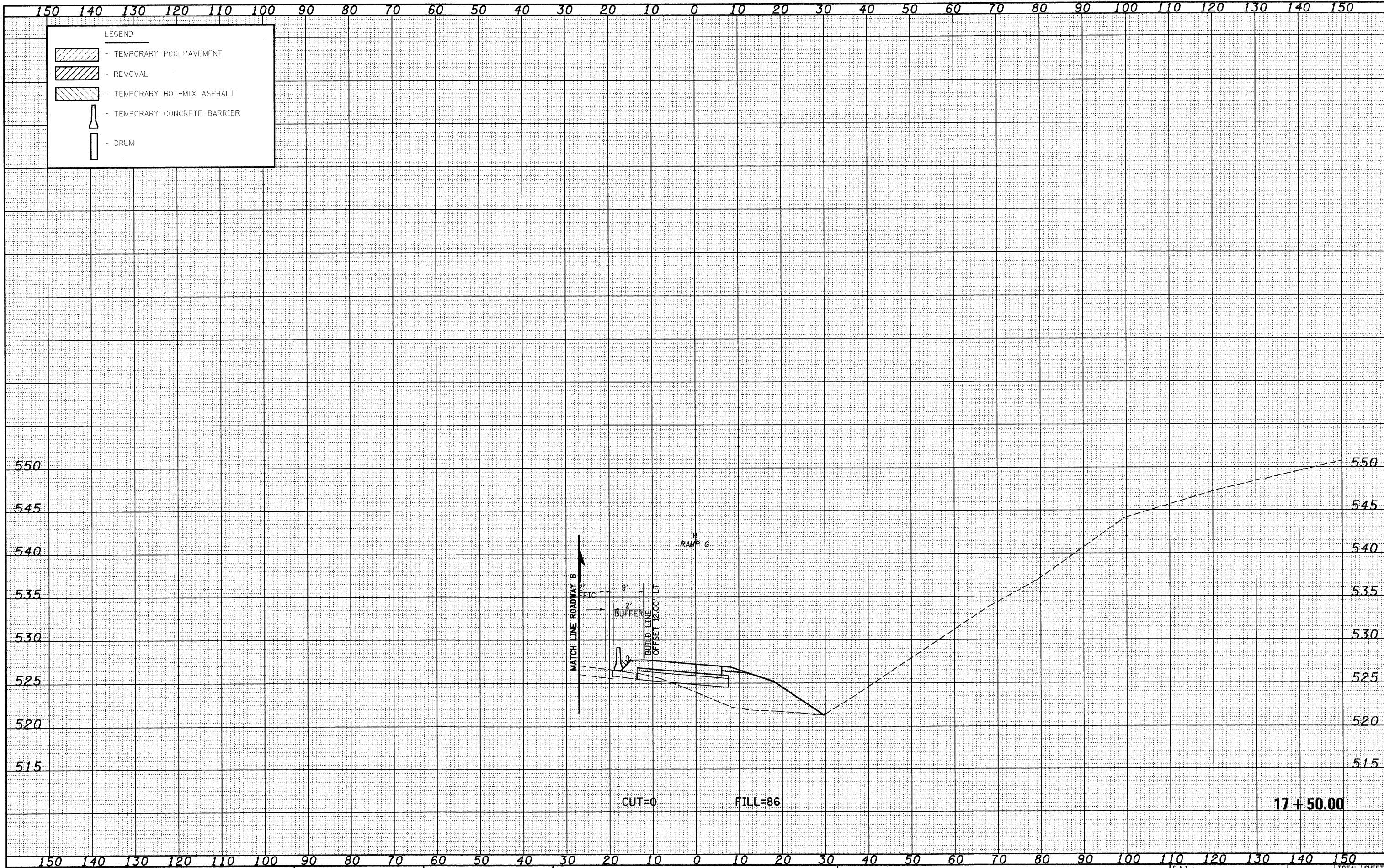
DATE _____
 BY _____
 SURVEYED _____
 SURVEY _____
 NOTE BOOK _____
 TEMPLATE _____
 AREAS CHECKED _____
 NO. _____



FILE NAME -	USER NAME - linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)	F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1317	
PLOT SCALE = 20.0000' / IN.	CHECKED - BRM	REVISIED -	SCALE: 1"=10'			SHEET NO. 1 OF 9 SHEETS	STA. 17+00.00 TO STA. 17+00.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 74296	
PLOT DATE = 2/10/2010	DATE - 2-25-08	REVISIED -									

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

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



FILE NAME = S:\Projects\143-000\17-50-10.dgn
 PLOT SCALE = 20,0000 ' / IN.
 PLOT DATE = 2/10/2010

USER NAME = linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

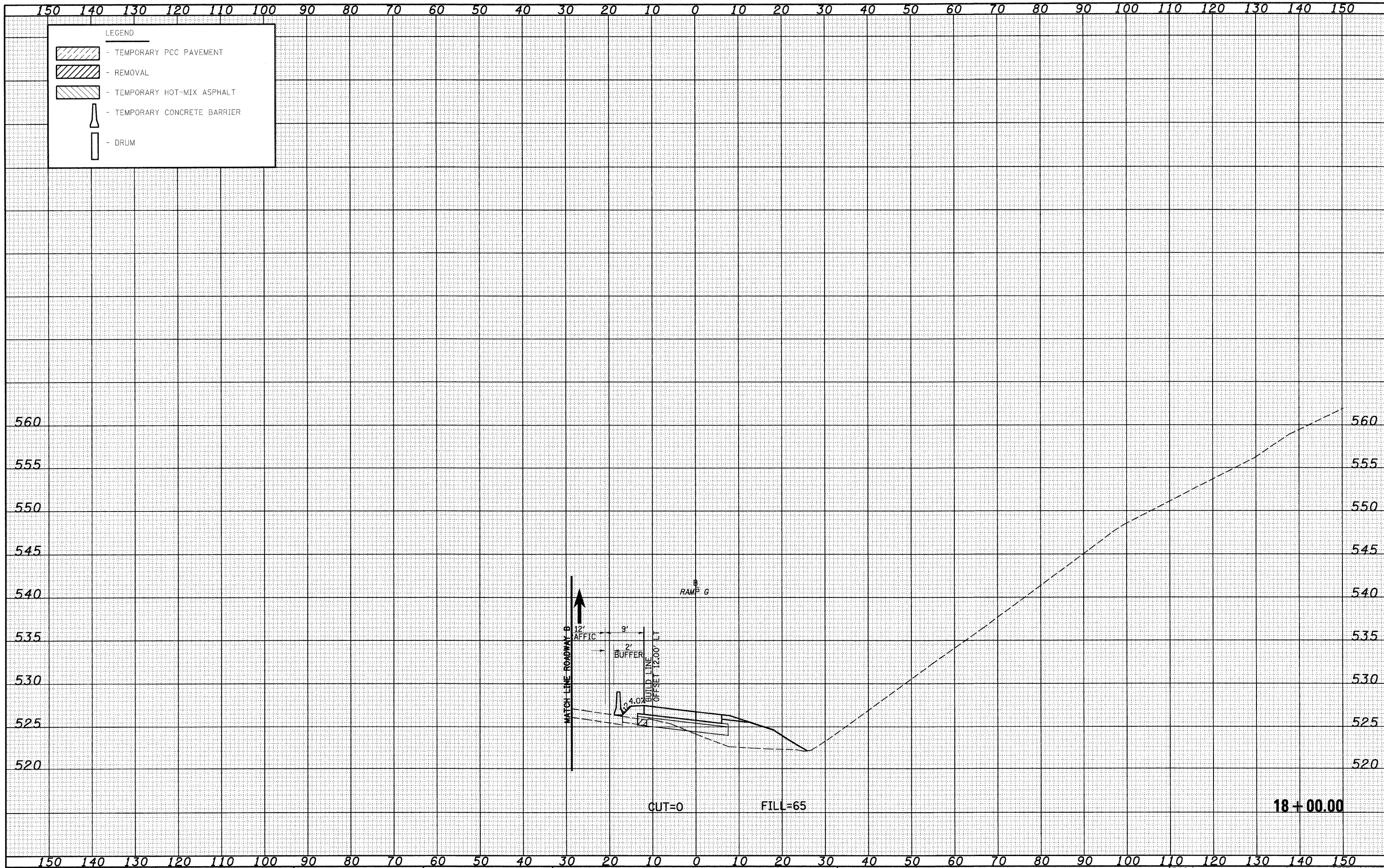
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)
 SCALE: 1"=10' SHEET NO. 2 OF 9 SHEETS STA. 17+50.00 TO STA. 17+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1318
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 74296

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

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



FILE NAME =
 S:\Project\43-000\25-3R\43-000-131.dwg

USER NAME = Linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

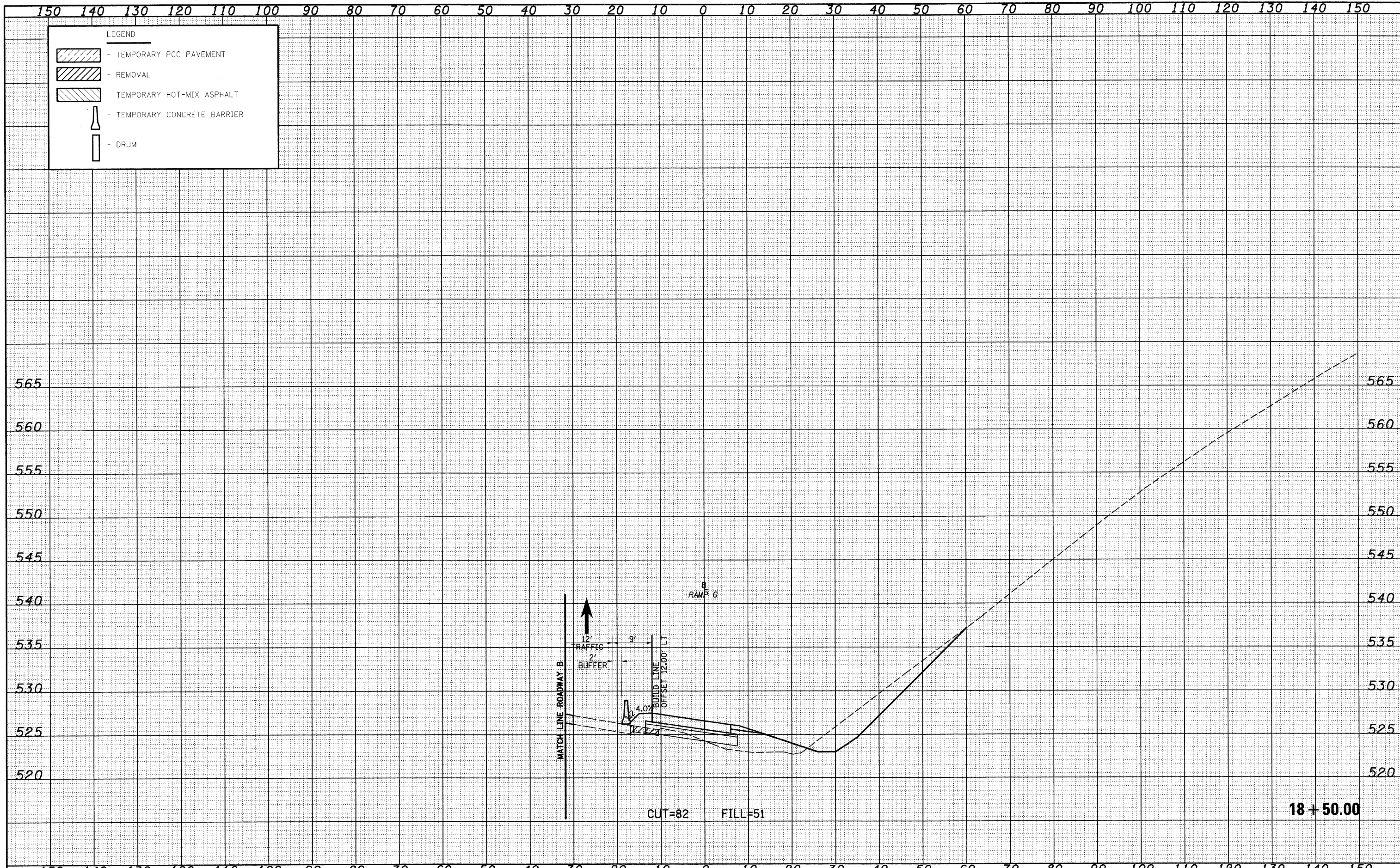
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)

SCALE: 1"=10' SHEET NO. 3 OF 9 SHEETS STA. 18+00.00 TO STA. 18+00.00

F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1319
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

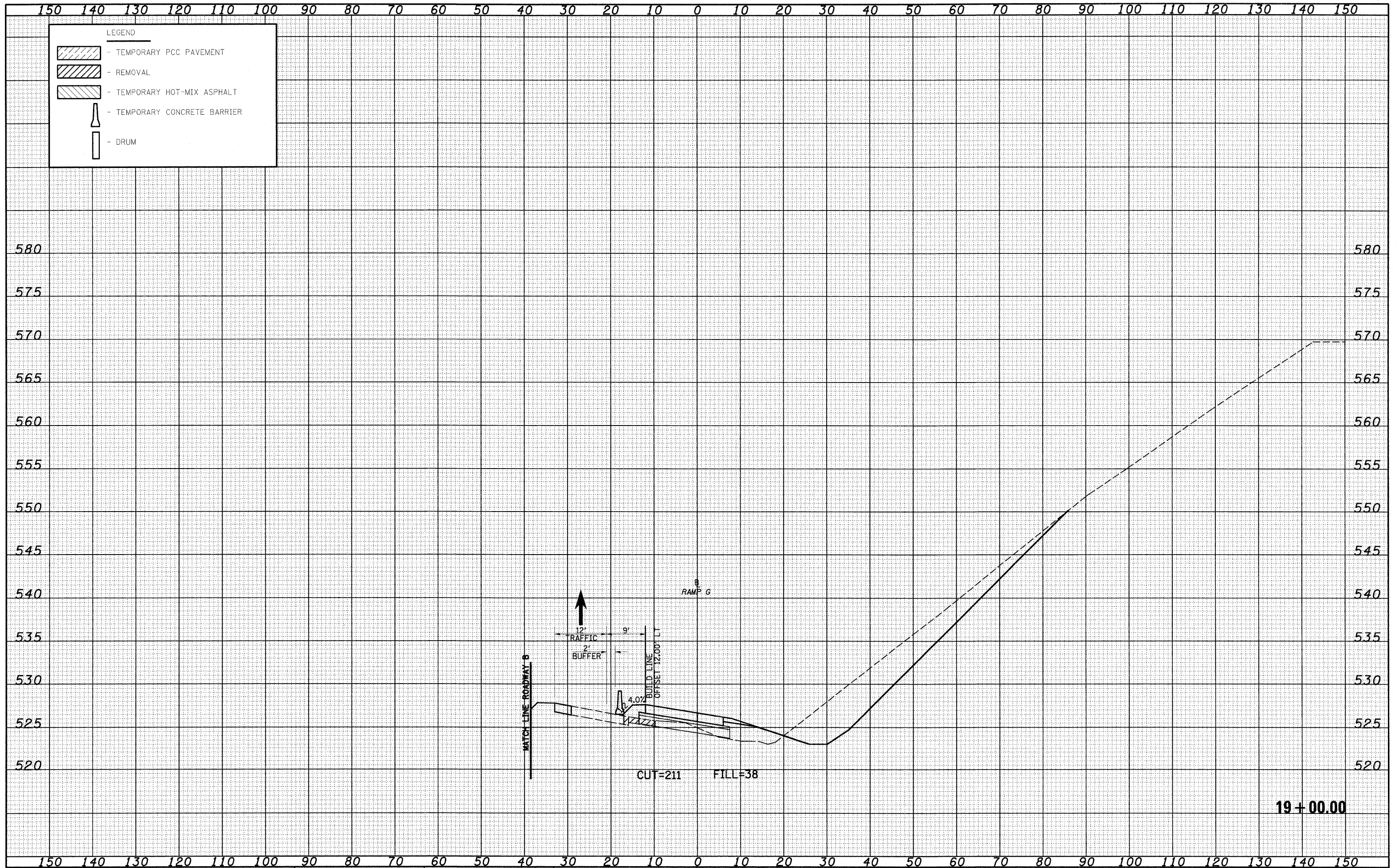
DATE _____
 BY _____
 SURVEYED _____
 SURVEY _____
 TEMPLATE _____
 NOTE BOOK _____
 AREAS CHECKED _____
 NO. _____

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



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

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



19+00.00

FILE NAME = S:\Project\403-00072-57-76.dgn
 USER NAME = lsnda

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

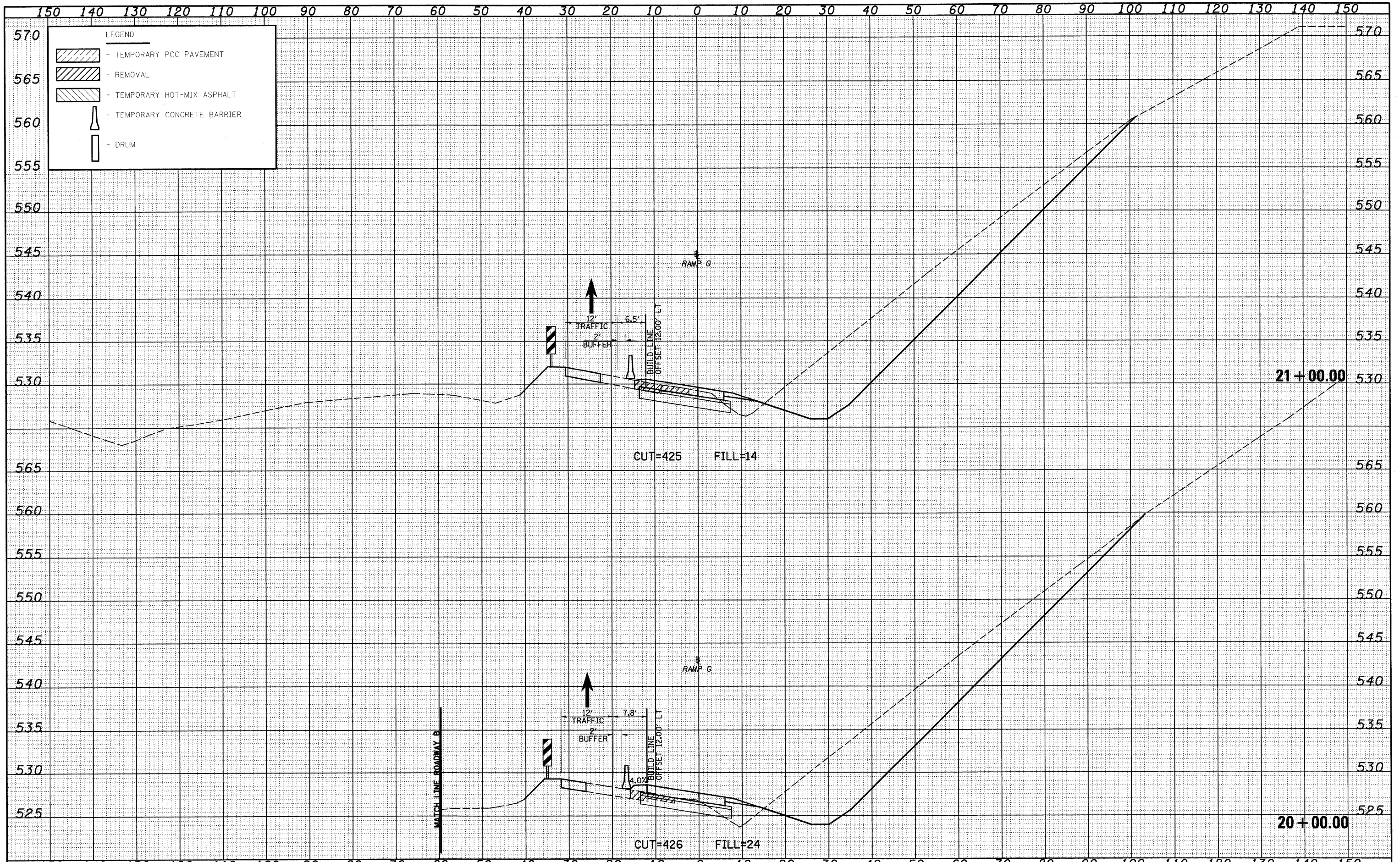
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)

SCALE: 1"=10' SHEET NO. 5 OF 9 SHEETS STA. 19+00.00 TO STA. 19+00.00

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1321
CONTRACT NO. 74296			ILLINOIS FED. AID PROJECT	

DATE	
BY	
SURVEYED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

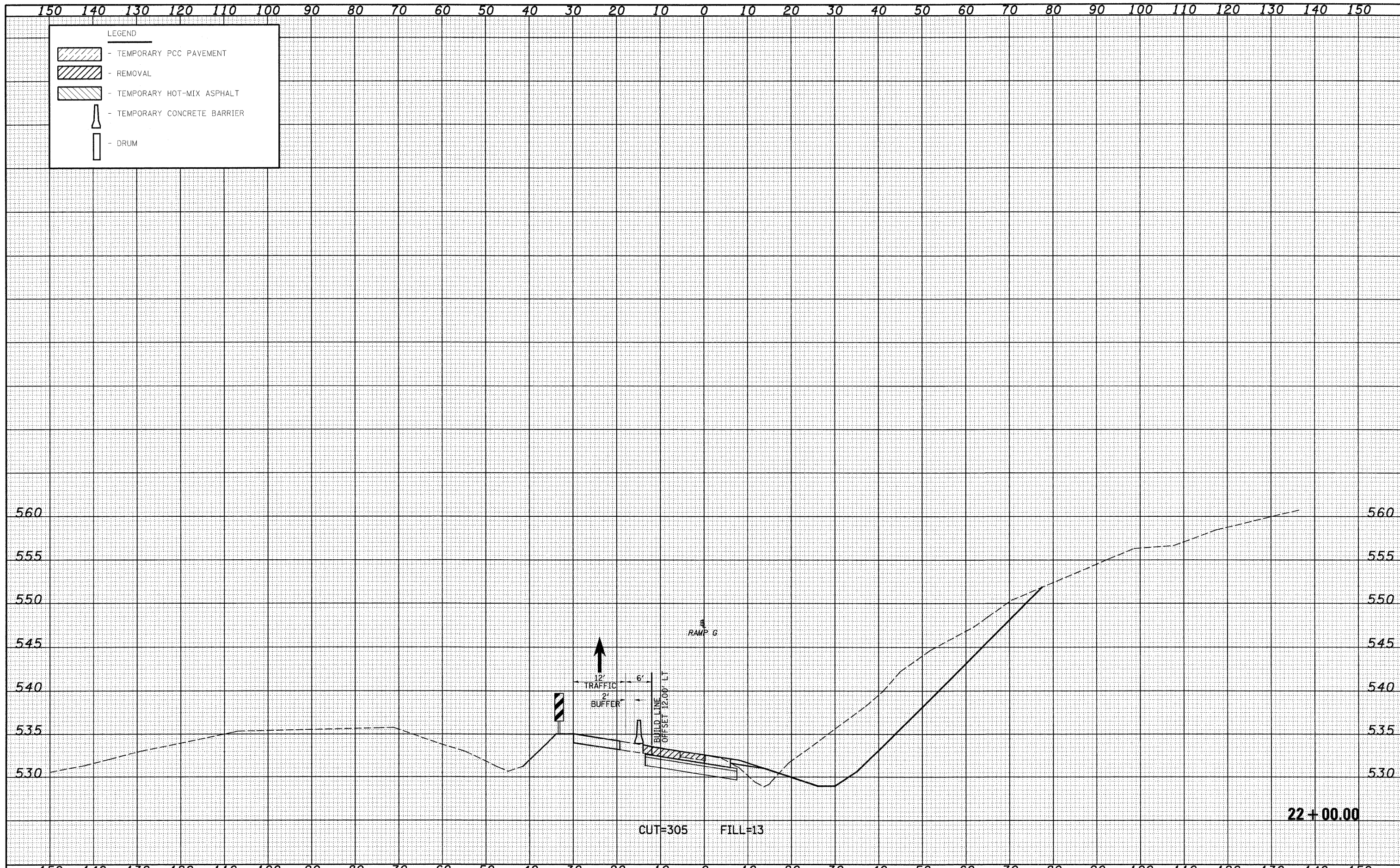
DATE	
BY	
SURVEYED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	



FILE NAME *	USER NAME = Linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
5:\Projects\103\1007257-70.dwg\15.Trd\Aeak.DWG0001.dwg	PLOT SCALE = 20.0/2000' / IN.	DRAWN - LEC	REVISED -			57/70	(25-3)R	EFFINGHAM	1416	1322
PLOT DATE = 2/18/2010	DATE - 2-25-08	CHECKED - BRM	REVISED -			CONTRACT NO. 74296				
		DATE - 2-25-08	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	

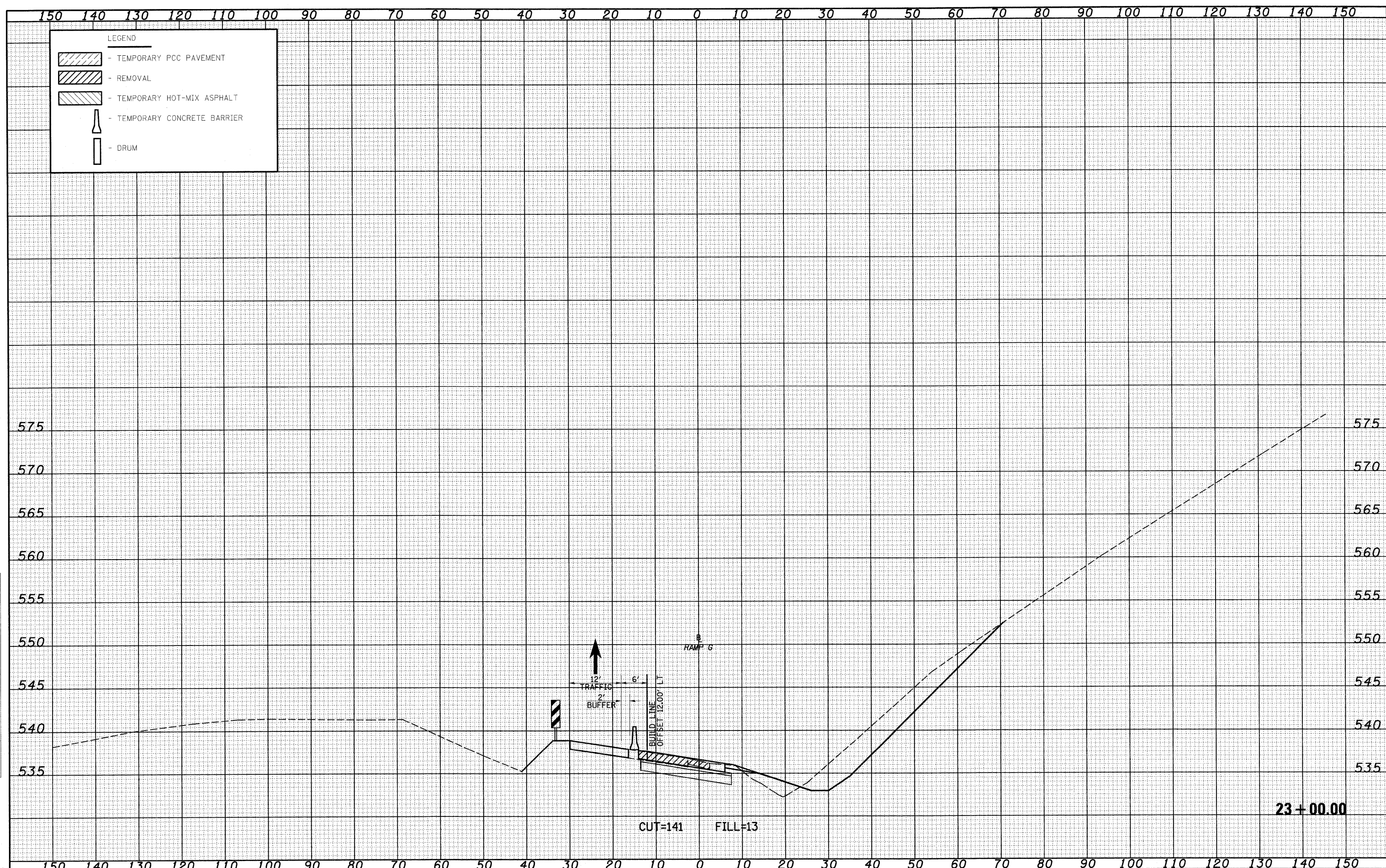
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	



FILE NAME =	USER NAME = linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
S:\Projects\MS-0072-57-70.dgn		DRAWN - LEC	REVISED -			57/70	(25-3R)	EFFINGHAM	1416	1323	
PLOT SCALE = 20,00000 ' / IN.		CHECKED - BRM	REVISED -			CONTRACT NO. 74296					
PLOT DATE = 2/10/2010		DATE - 2-25-08	REVISED -			SCALE: 1"=10'		SHEET NO. 7 OF 9 SHEETS		STA. 22+00.00 TO STA. 22+00.00	
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

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

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



23+00.00

FILE NAME =
 S:\Projects\140\14072517\14072517.dwg

USER NAME = Linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

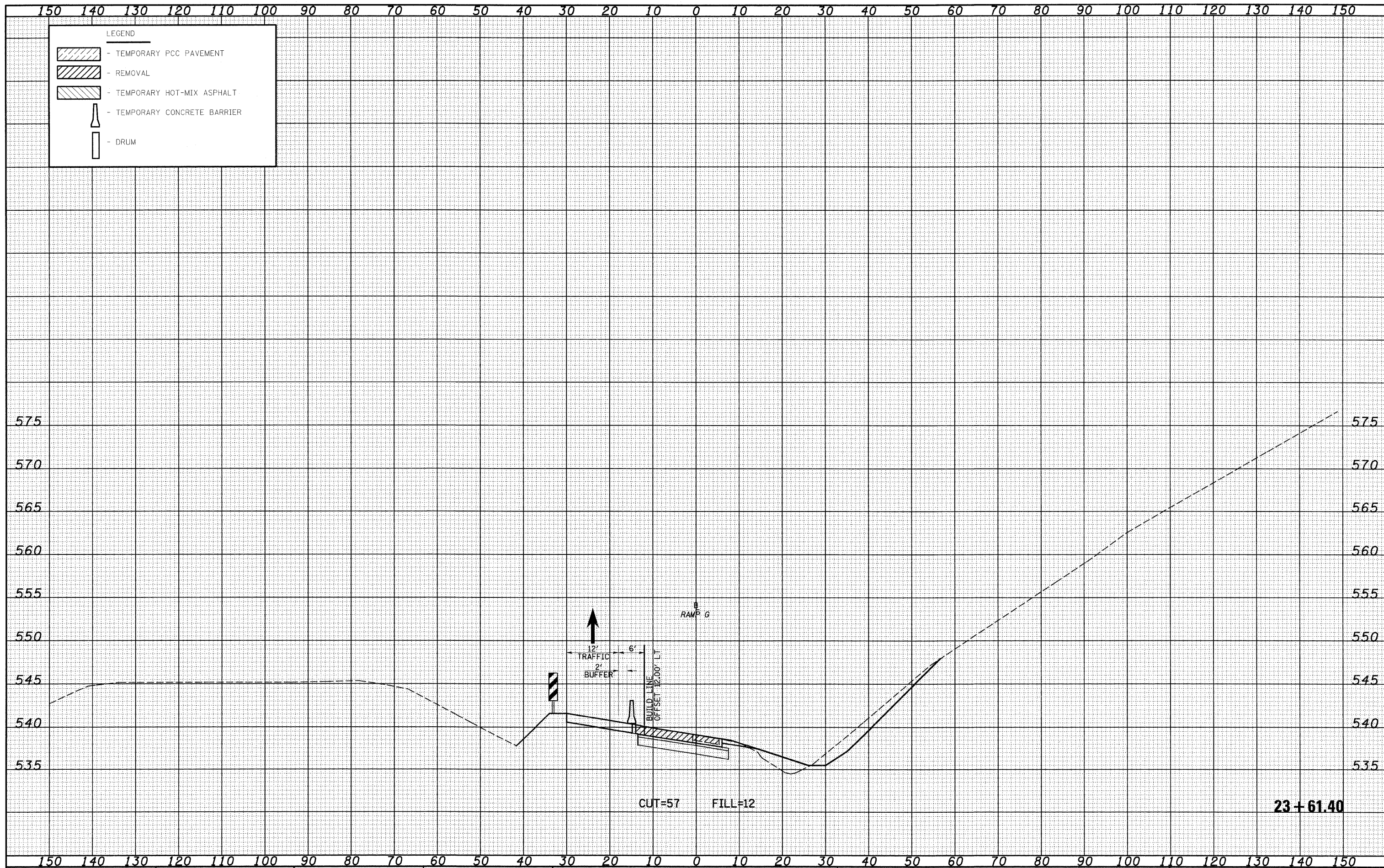
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)
 SCALE: 1"=10' SHEET NO. 8 OF 9 SHEETS STA. 23+00.00 TO STA. 23+00.00

F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1324
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		
		CONTRACT NO. 74296		

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

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



LEGEND

- TEMPORARY PCC PAVEMENT
- REMOVAL
- TEMPORARY HOT-MIX ASPHALT
- TEMPORARY CONCRETE BARRIER
- DRUM

FILE NAME = S:\Project\03-000257-70.dgn
 USER NAME = Linda

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

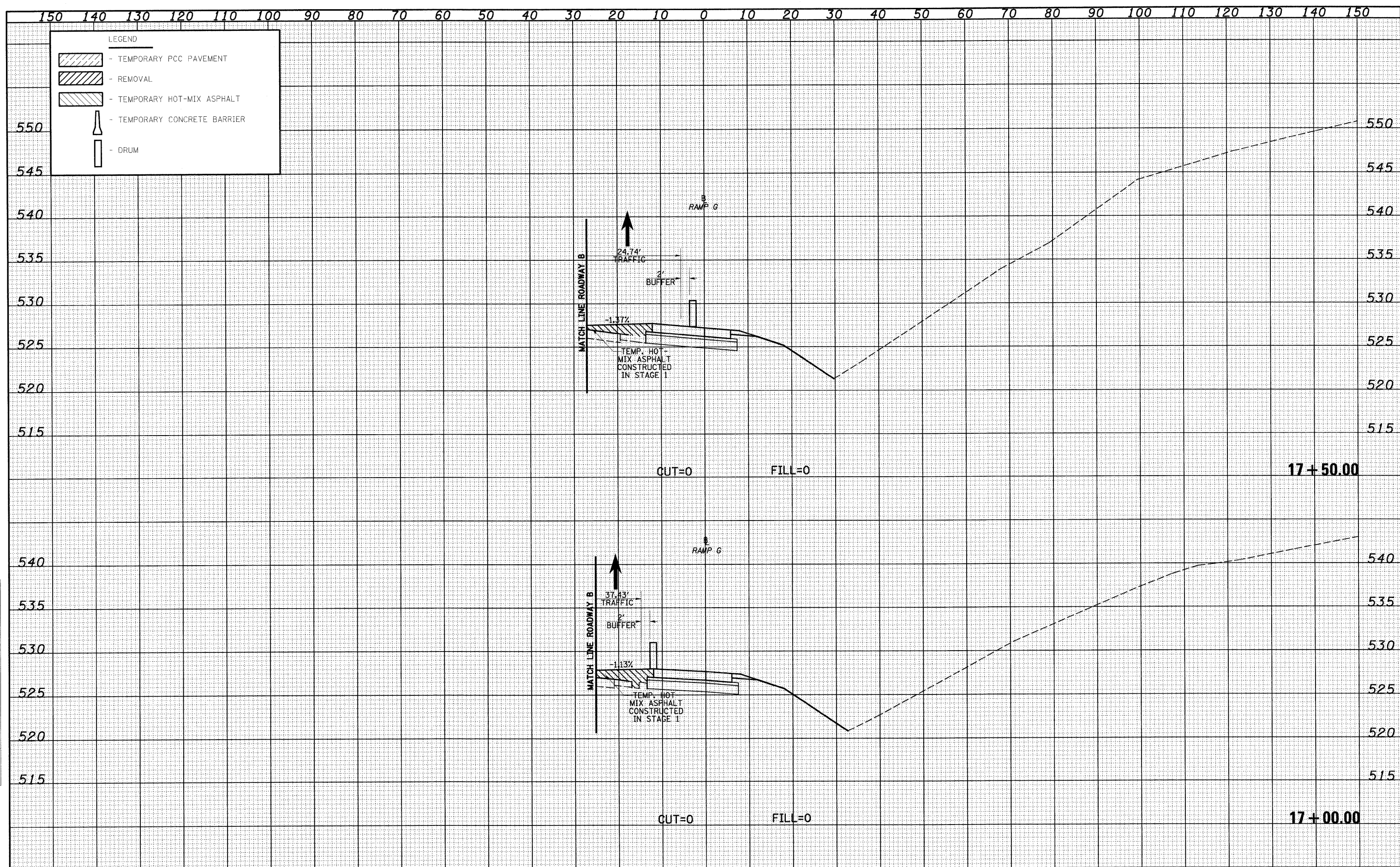
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1)

SCALE: 1"=10' SHEET NO. 9 OF 9 SHEETS STA. 23+61.40 TO STA. 23+61.40

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1325
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

DATE	
BY	
FINAL SURVEY	
PLotted	
NOTE BOOK	
AREAS CHECKED	

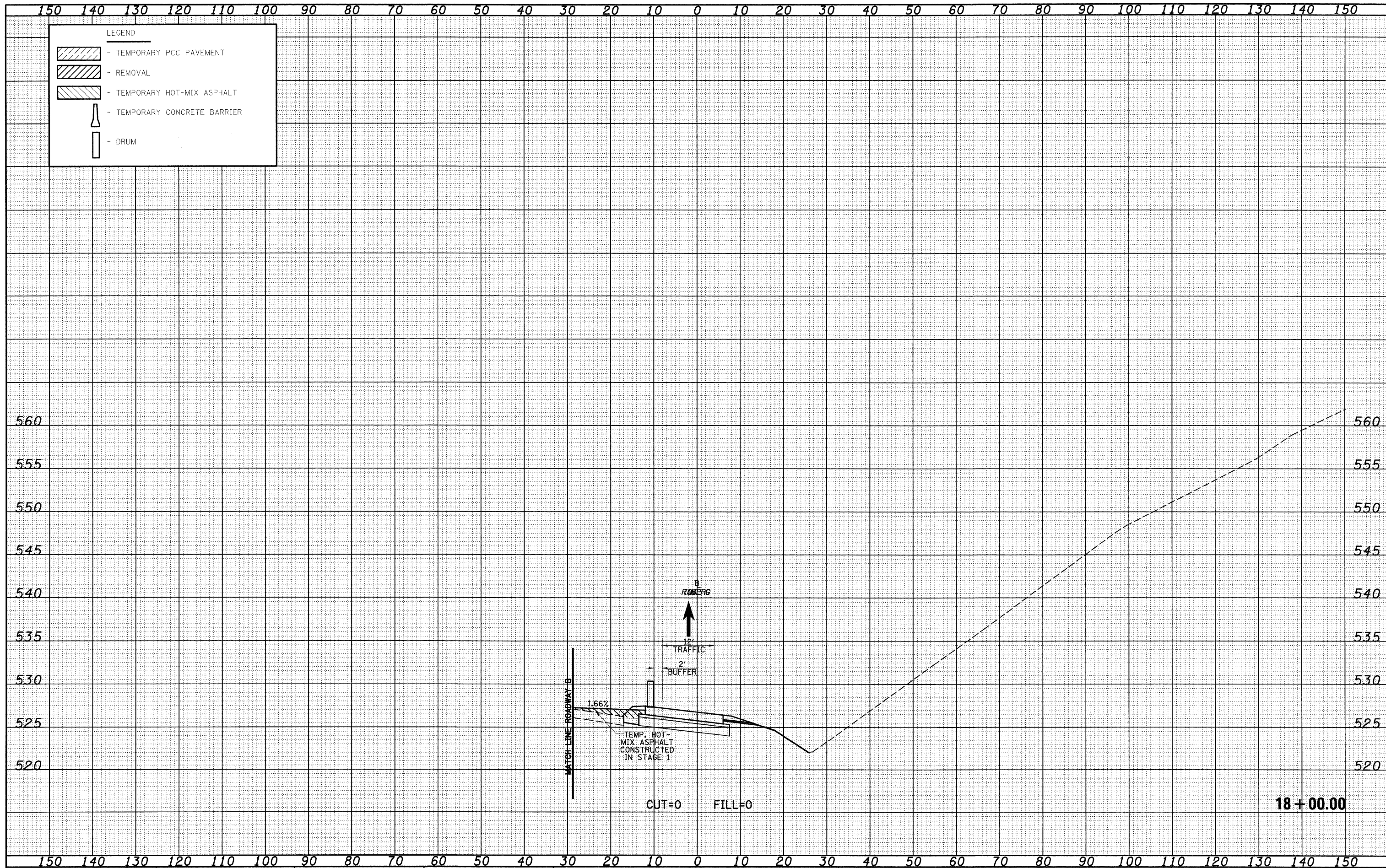
DATE	
BY	
ORIGINAL SURVEY	
PLotted	
NOTE BOOK	
AREAS CHECKED	



FILE NAME =	USER NAME = Linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1B)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\projects\400\400725\704p\5 Trk\work\DR0001-08.dwg	PLOT SCALE = 20.0000' / IN.	DRAWN - LEC	REVISED -			57/70	(25-3)R	EFFINGHAM	1416	1326
PLOT DATE = 2/10/2010	DATE - 2-25-08	CHECKED - BRM	REVISED -			CONTRACT NO. 74296		ILLINOIS FED. AID PROJECT		
		DATE - 2-25-08	REVISED -			SCALE: 1"=10'	SHEET NO. 1 OF 4 SHEETS	STA. 17+00.00 TO STA. 17+50.00		

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

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



FILE NAME = S:\Project\403-2007\257-70\403 Trk\Task1\200801-50.dwg
 USER NAME = linda
 PLOT SCALE = 20.0000' / IN.
 PLOT DATE = 2/18/2010

DESIGNED -	JWS	REVISED -	
DRAWN -	LEC	REVISED -	
CHECKED -	BRM	REVISED -	
DATE -	2-25-08	REVISED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

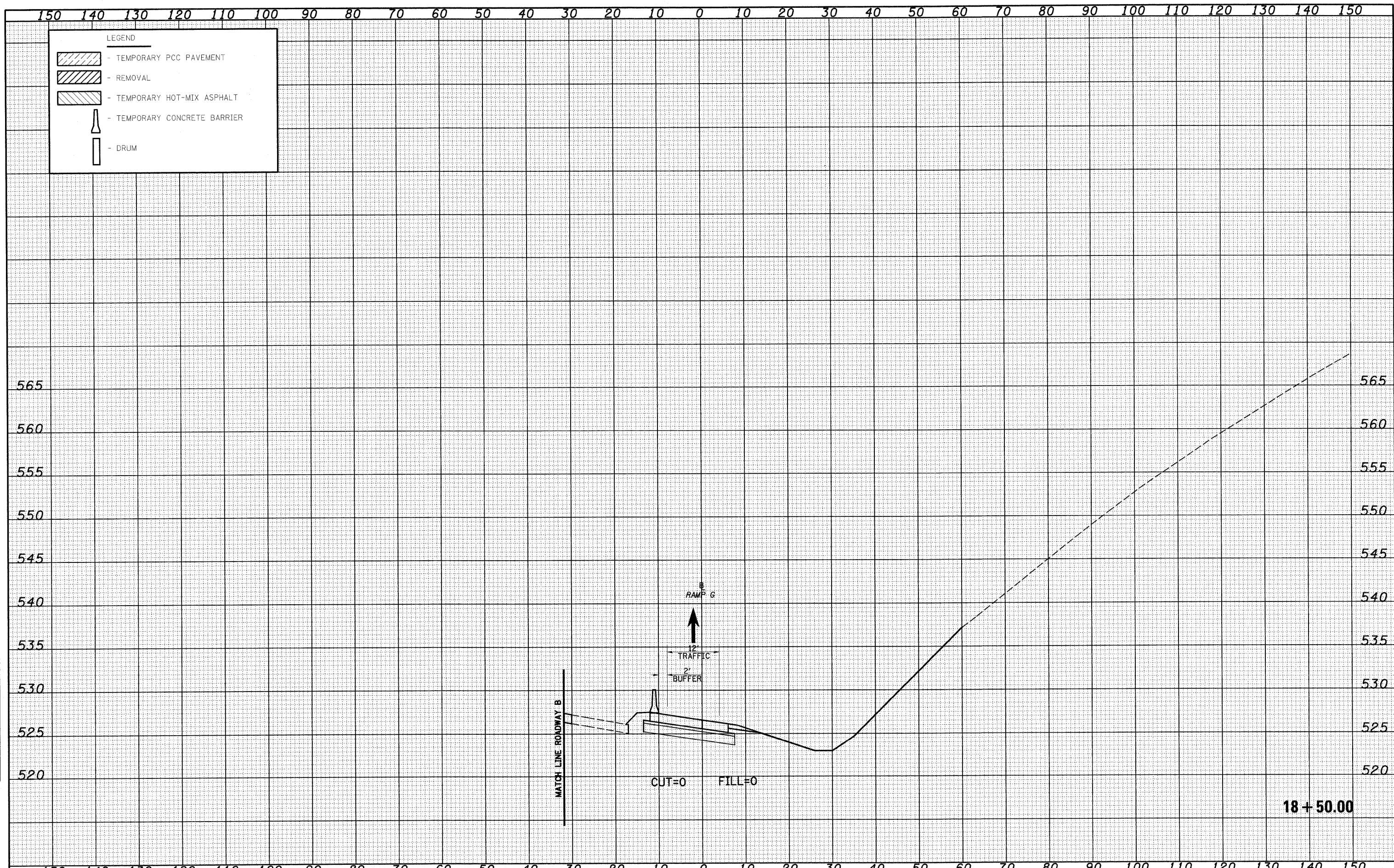
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1B)

SCALE: 1"=10' SHEET NO. 2 OF 4 SHEETS STA. 18+00.00 TO STA. 18+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1327
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

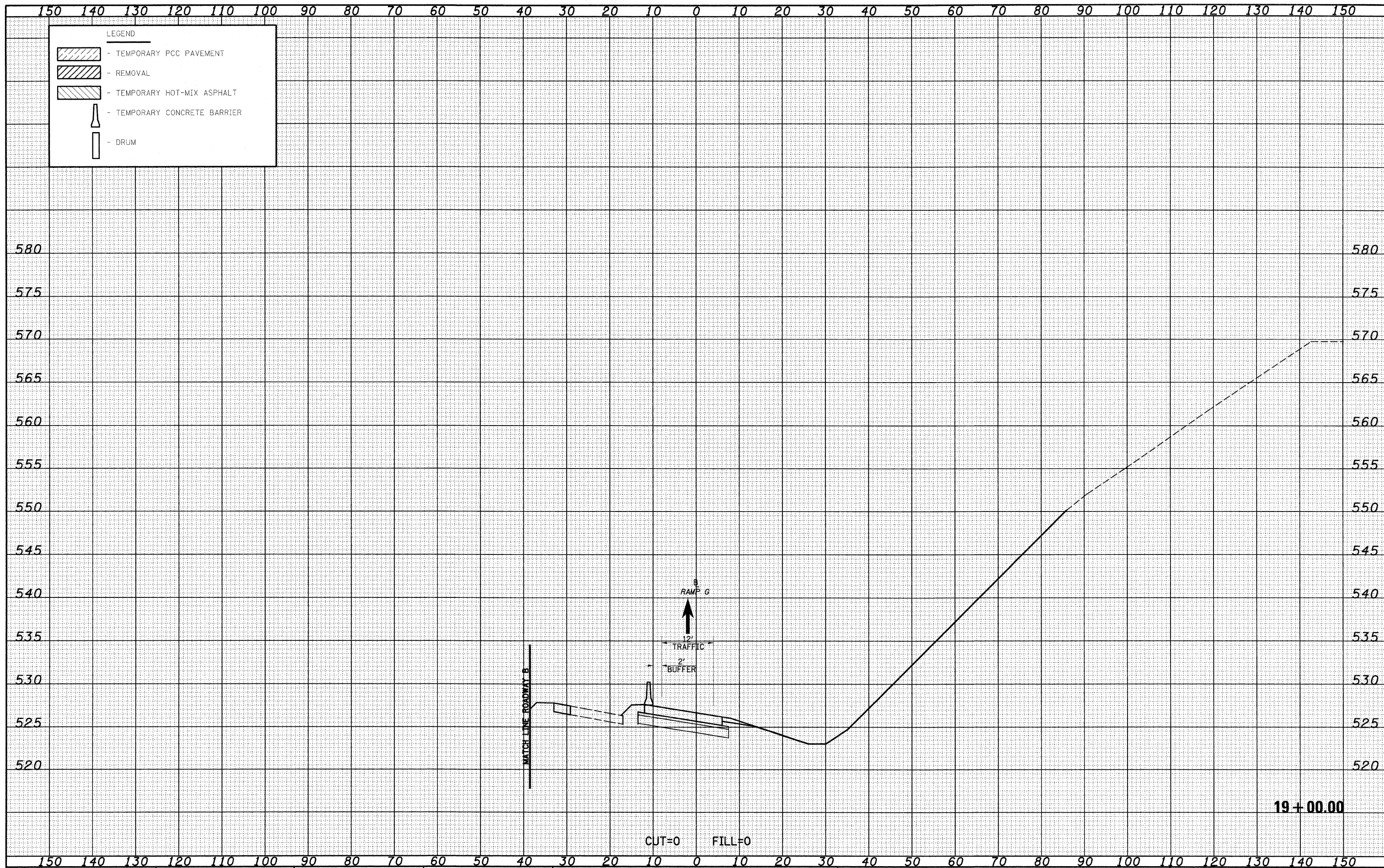
DATE	
BY	
FINAL SURVEY	SURVEYED
NOTE BOOK	PLotted
NO.	TEMP. AREAS CHECKED

DATE	
BY	
ORIGINAL SURVEY	SURVEYED
NOTE BOOK	PLotted
NO.	TEMP. AREAS CHECKED



DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	
DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
REVISIONS	
NO.	



FILE NAME = S:\Project\03\2007\17-70.dgn
 USER NAME = linda

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

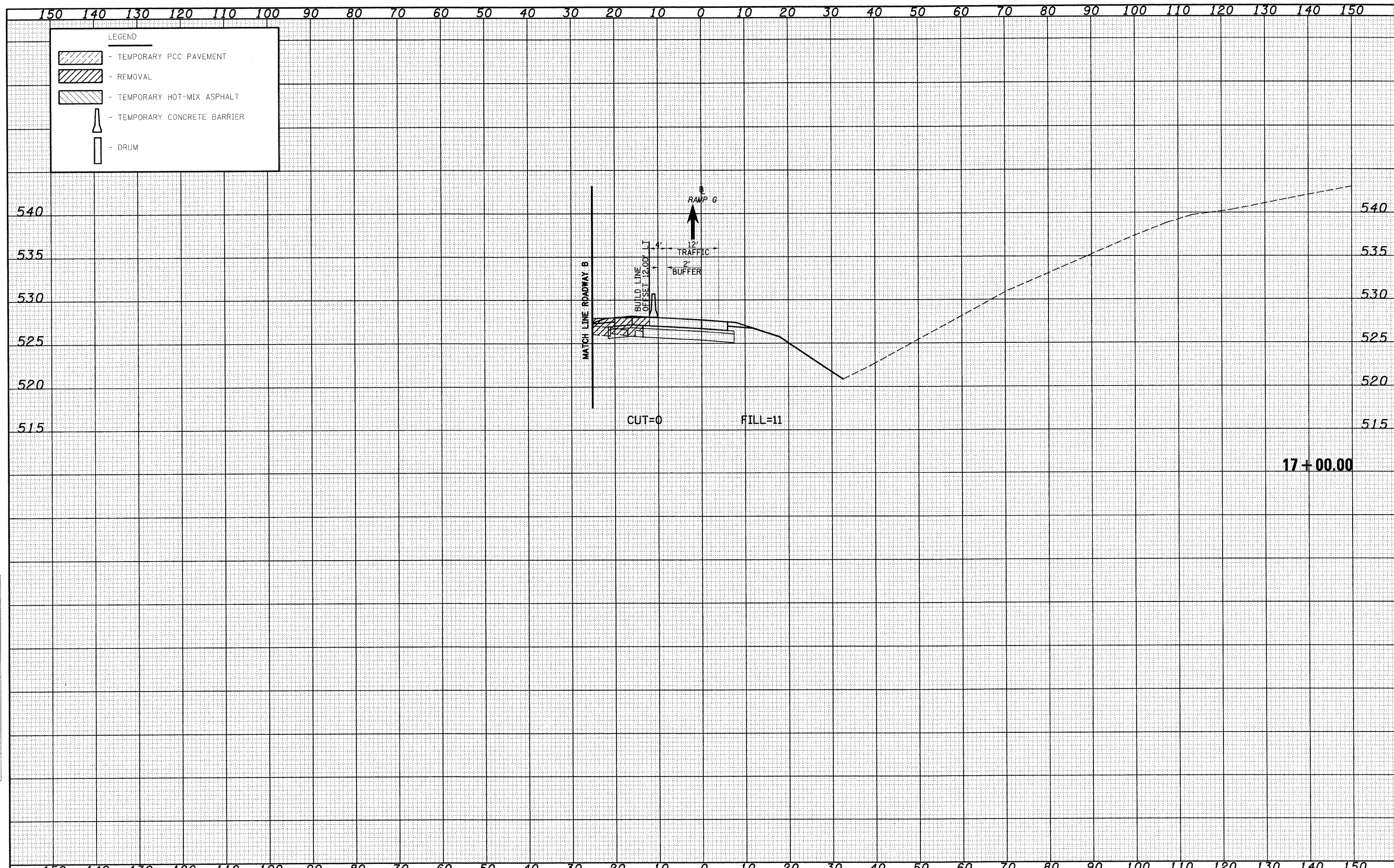
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 1B)

SCALE: 1"=10' SHEET NO. 4 OF 4 SHEETS STA. 19+00.00 TO STA. 19+00.00

F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1329
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

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

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



FILE NAME = S:\Project\102-8007-51-70\Map\17.DWG
 USER NAME = linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISIONS
 REVISION NO. DATE DESCRIPTION
 REVISION NO. DATE DESCRIPTION
 REVISION NO. DATE DESCRIPTION

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

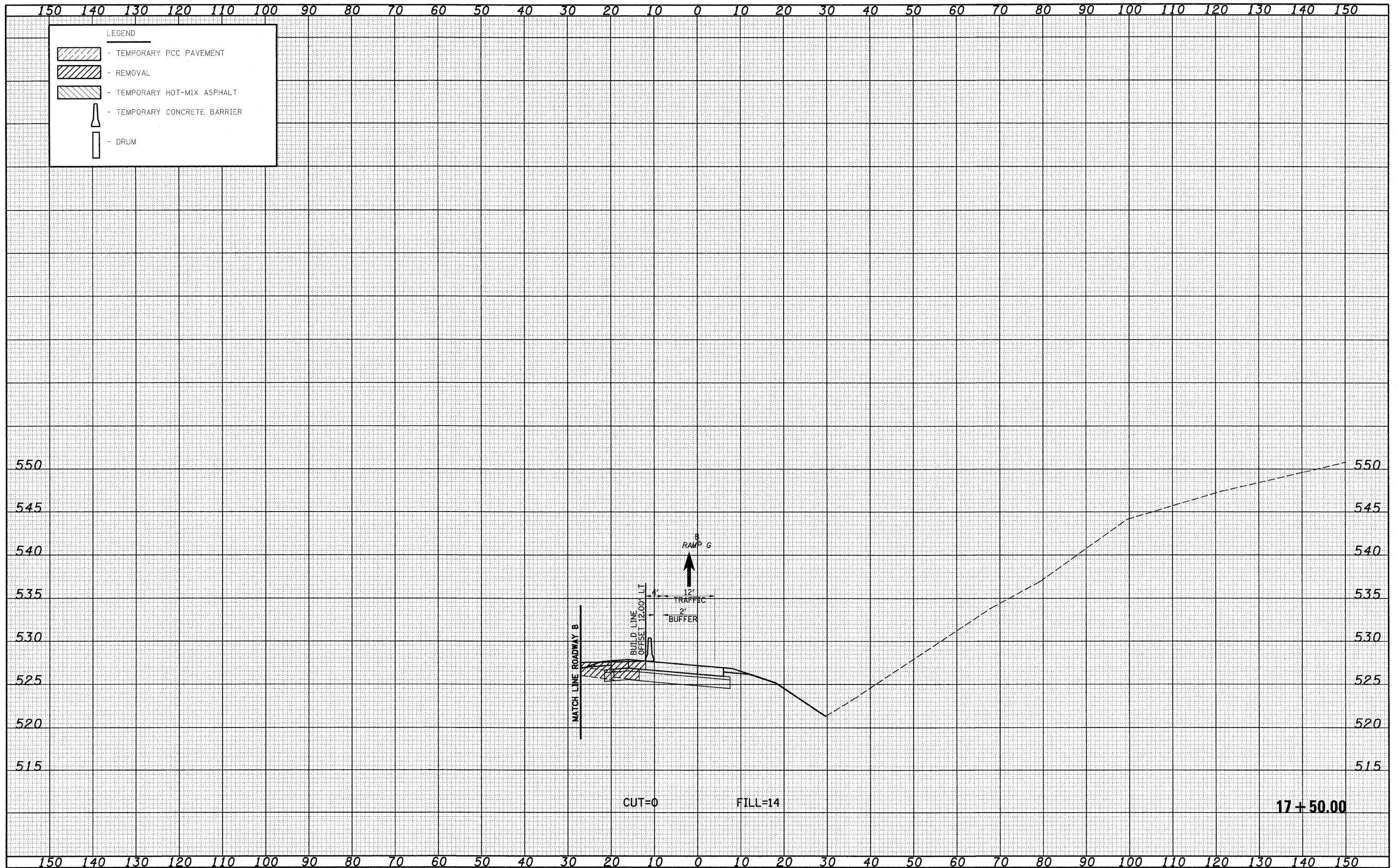
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)
 SCALE: 1"=10' SHEET NO. 1 OF 9 SHEETS STA. 17+00.00 TO STA. 17+00.00

F.A.I. RTE. 57/70 SECTION (25-3R) COUNTY EFFINGHAM TOTAL SHEETS 1416 SHEET NO. 1330 CONTRACT NO. 74296

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

DATE	
BY	
SURVEYED	
TEMP. BY	
AREAS CHECKED	
NO.	

DATE	
BY	
SURVEYED	
TEMP. BY	
AREAS CHECKED	
NO.	



FILE NAME = S:\Project\143\143-71\143-71.dgn
 USER NAME = lnda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08
 PLOT SCALE = 20.0000' / IN.
 PLOT DATE = 2/10/2010

DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08
 REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

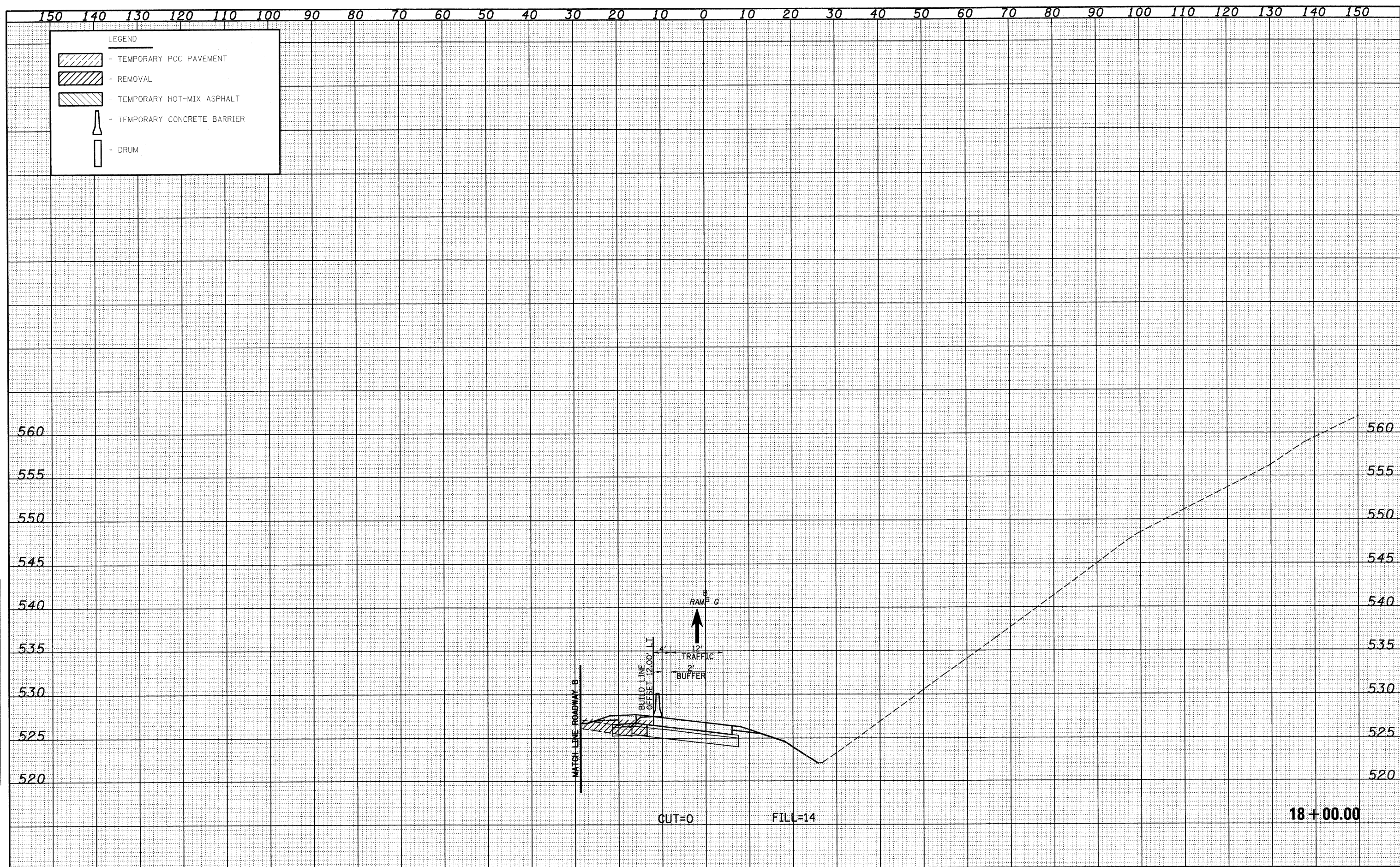
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)

SCALE: 1"=10' SHEET NO. 2 OF 9 SHEETS STA. 17+50.00 TO STA. 17+50.00

F.A.T. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1331
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT			CONTRACT NO. 74296	

DATE	
BY	
FINAL SURVEY	
NOTE BOOK	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

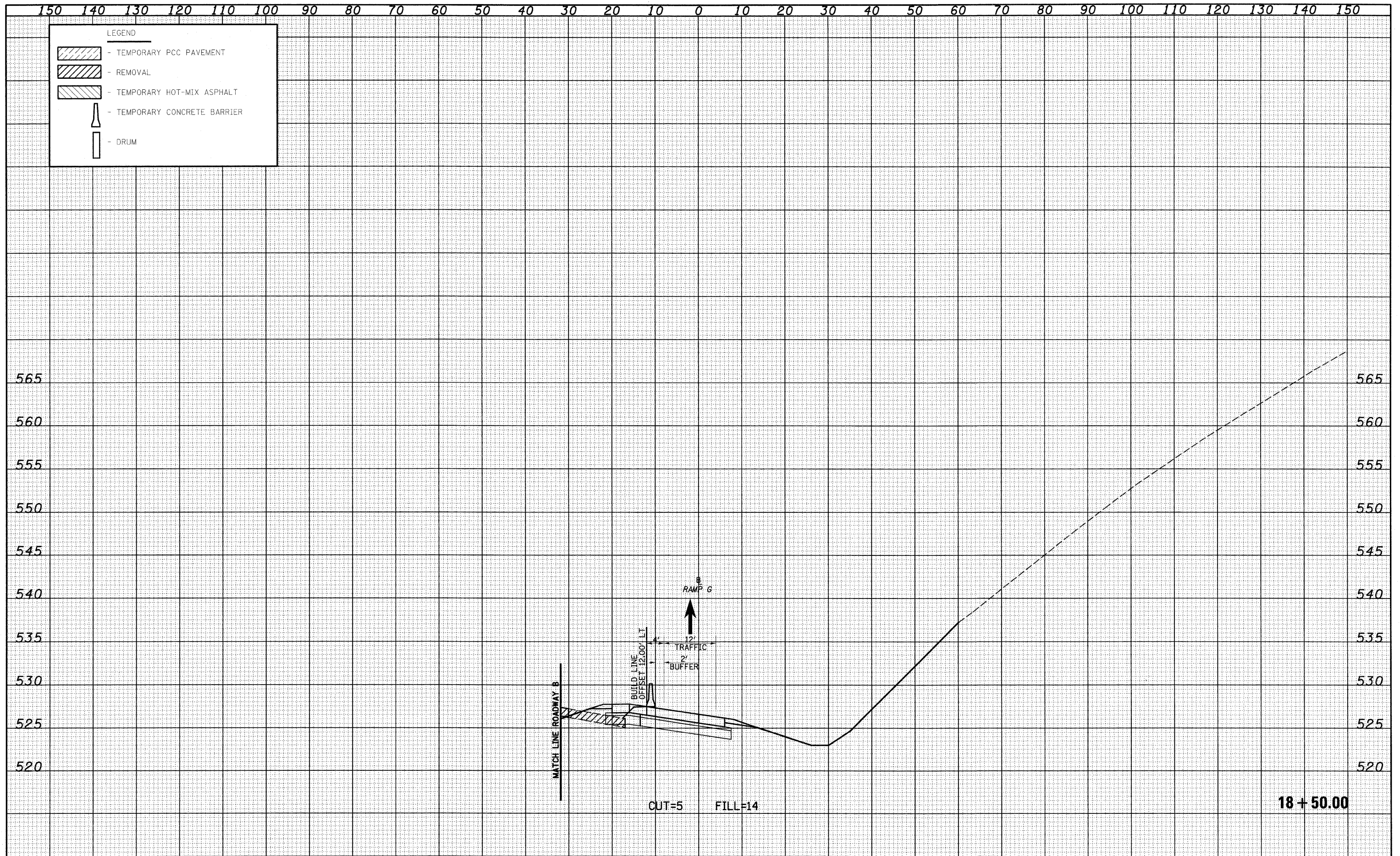
DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	



FILE NAME =	USER NAME = Linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)	F.A.I. RTE. 57/70	SECTION (25-3R)	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1332	
PLOT SCALE = 20.00000' / IN.	CHECKED - BRM	REVISIED -	SCALE: 1"=10'			SHEET NO. 3 OF 9 SHEETS	STA. 18+00.00 TO STA. 18+00.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 74296	
PLOT DATE = 2/18/2010	DATE - 2-25-08	REVISIED -									

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

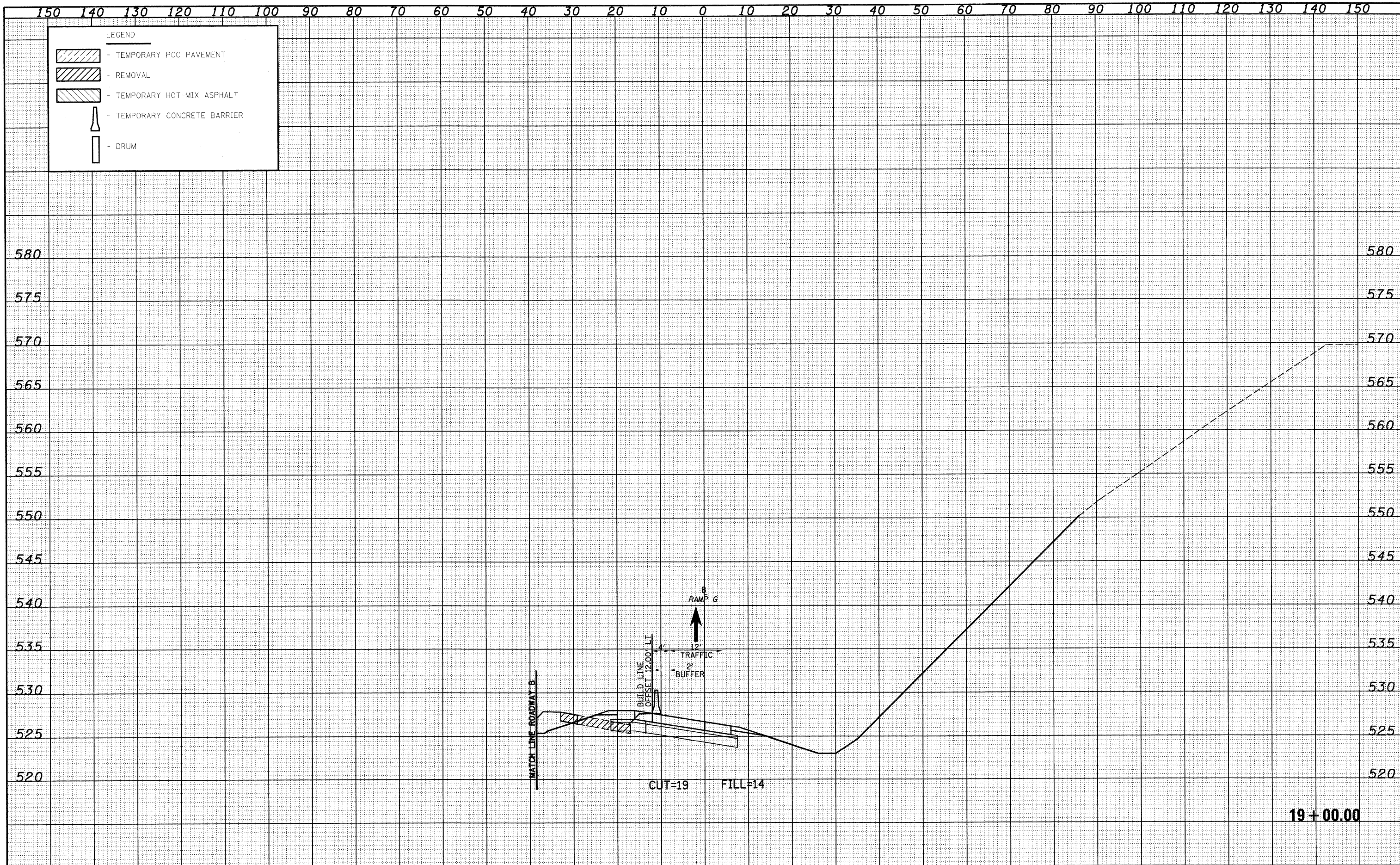
DATE	
BY	
SURVEYED	
TEMPLATE	
AREAS CHECKED	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	



FILE NAME =	USER NAME = lnda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
S:\Projects\183-0007-57-70\Drawings\1830007-57.dwg	PLOT SCALE = 20.0000' / IN.	DRAWN - LEC	REVISED -			57/70	(25-3)R	EFFINGHAM	1416	1333	
	PLOT DATE = 2/18/2010	CHECKED - BRM	REVISED -			CONTRACT NO. 74296					
		DATE - 2-25-08	REVISED -			SCALE: 1"=10' SHEET NO. 4 OF 9 SHEETS STA. 18+50.00 TO STA. 18+50.00 FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					

DATE	
BY	
FINAL SURVEY	
REVISED	
NOTED	
NOTE BOOK	
NO.	

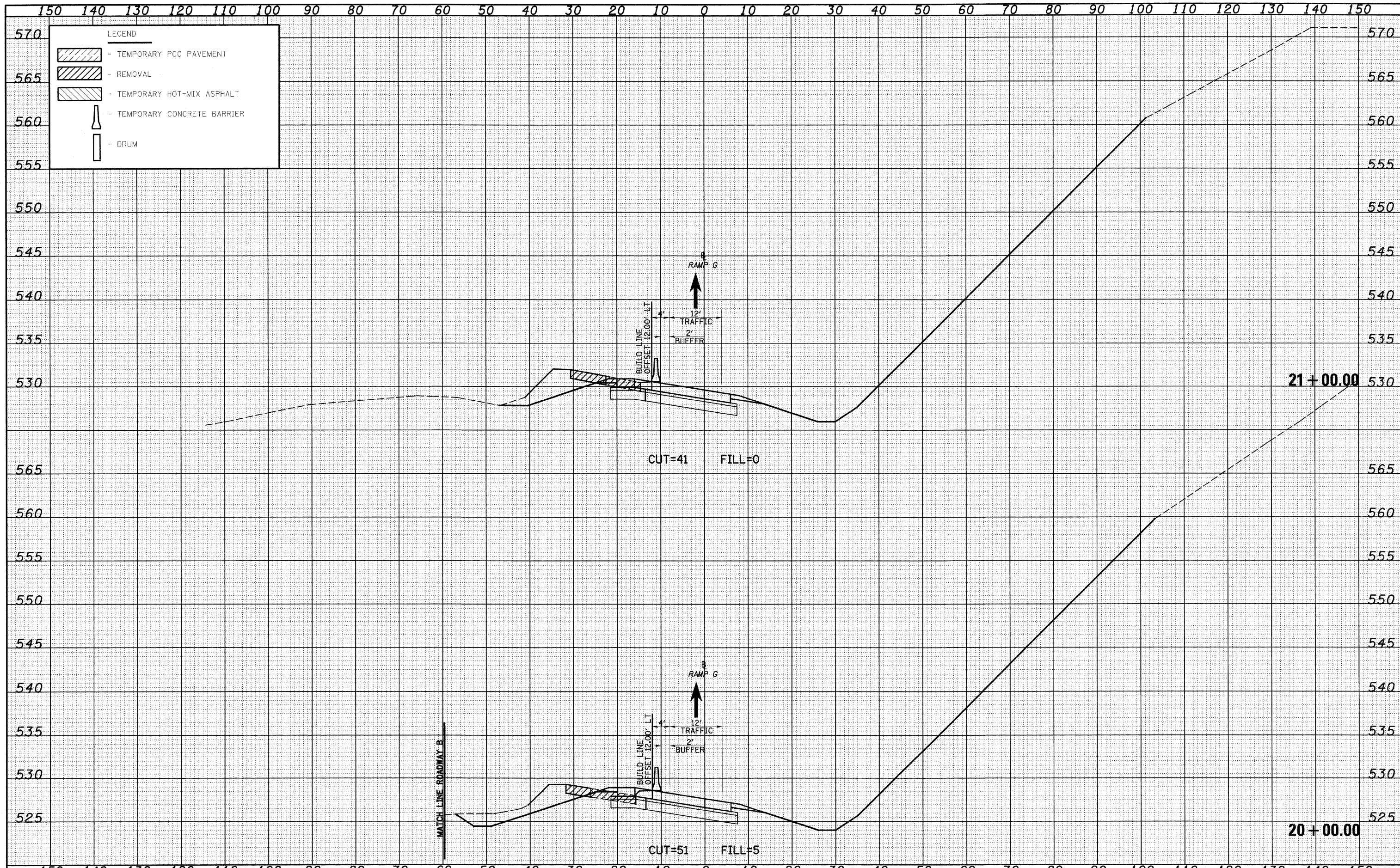
DATE	
BY	
ORIGINAL SURVEY	
REVISED	
NOTED	
NOTE BOOK	
NO.	



FILE NAME =	USER NAME = linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\projects\190\1907251-78.dwg\15 TriLevel_1789001.dwg	PLOT SCALE = 20.0000' / IN.	DRAWN - LEC	REVISED -		57/70	(25-3)R	EFFINGHAM	1416	1334	CONTRACT NO. 74296	
PLOT DATE = 2/18/2010	DATE - 2-25-08	CHECKED - BRM	REVISED -		SCALE: 1"=10'	SHEET NO. 5 OF 9 SHEETS	STA. 19+00.00 TO STA. 19+00.00	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		
		DATE - 2-25-08	REVISED -								

DATE	
BY	
FINAL SURVEY	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	

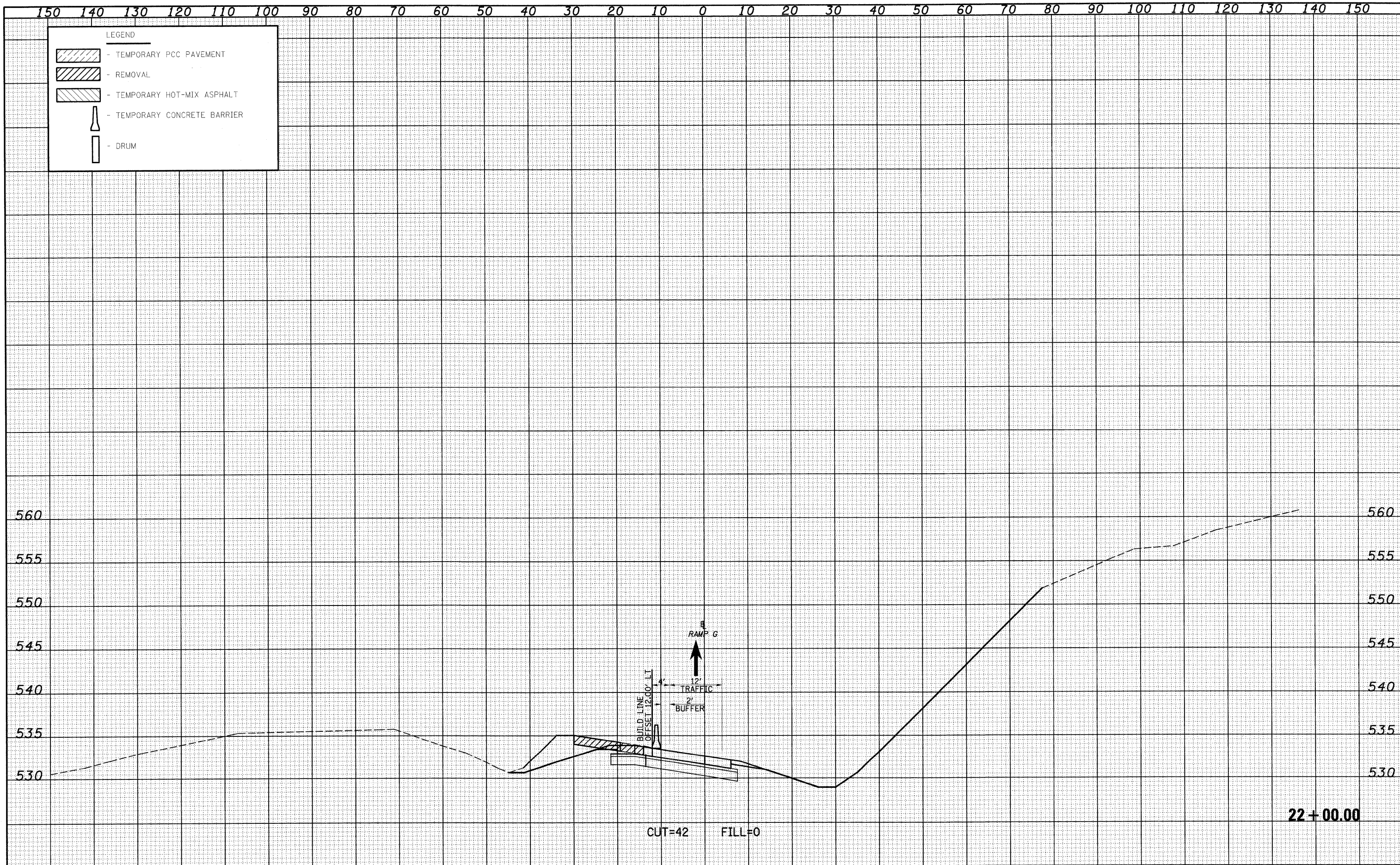
DATE	
BY	
ORIGINAL SURVEY	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	



FILE NAME =	USER NAME = linda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)	F.A.I. RTE. 57/70	SECTION (25-3)R	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1335	
PLOT SCALE = 20,0000' / IN.	CHECKED - BRM	REVISED -	SCALE: 1"=10'			SHEET NO. 6 OF 9 SHEETS	STA. 20+00.00 TO STA. 21+00.00	CONTRACT NO. 74296		ILLINOIS FED. AID PROJECT	
PLOT DATE = 2/18/2010	DATE - 2-25-08	REVISED -									

DATE	
BY	
FINAL SURVEY	
REVISED	
NOTE BOOK	
NO.	

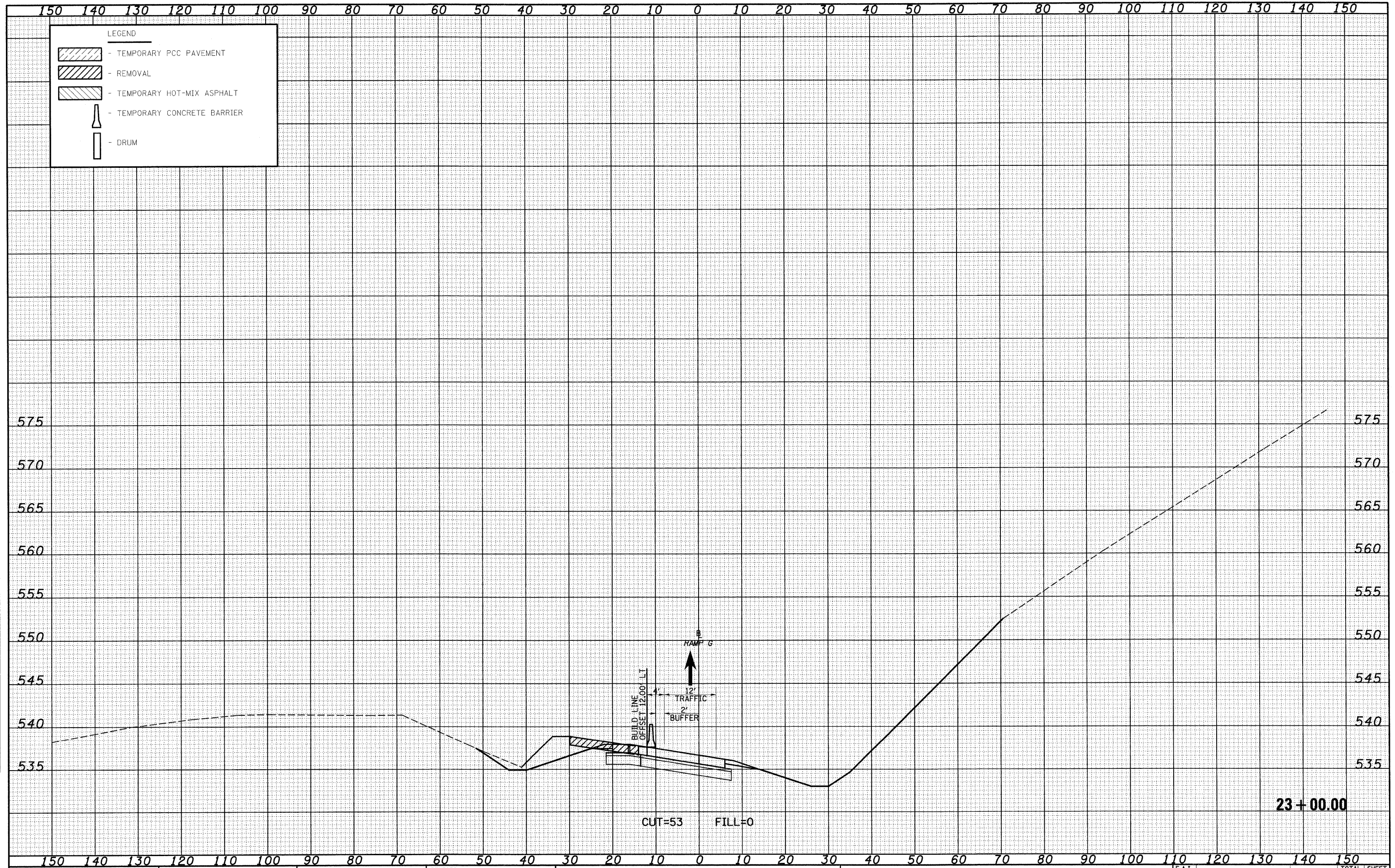
DATE	
BY	
ORIGINAL SURVEY	
REVISED	
NOTE BOOK	
NO.	



FILE NAME =	USER NAME = l1nda	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\Project\103-400\751-70\Map\11789001-52.dwg	PLOT SCALE = 20.00000 ' / IN.	DRAWN - LEC	REVISED -			57/70	(25-3R)	EFFINGHAM	1416	1336
PLOT DATE = 2/18/2010	DATE - 2-25-08	CHECKED - BRM	REVISED -			CONTRACT NO. 74296				
		DATE - 2-25-08	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
SCALE: 1"=10' SHEET NO. 7 OF 9 SHEETS STA. 22+00.00 TO STA. 22+00.00										

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
FILE NAME	
PROJECT NO.	
SECTION	
COUNTY	
TOTAL SHEETS	
SHEET NO.	

DATE	
BY	
DESIGNED	
DRAWN	
CHECKED	
DATE	
FILE NAME	
PROJECT NO.	
SECTION	
COUNTY	
TOTAL SHEETS	
SHEET NO.	



FILE NAME = S:\Projects\02-2007-21-70\02-21-70.dwg
 USER NAME = Linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISI
 REVISI
 REVISI
 REVISI

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

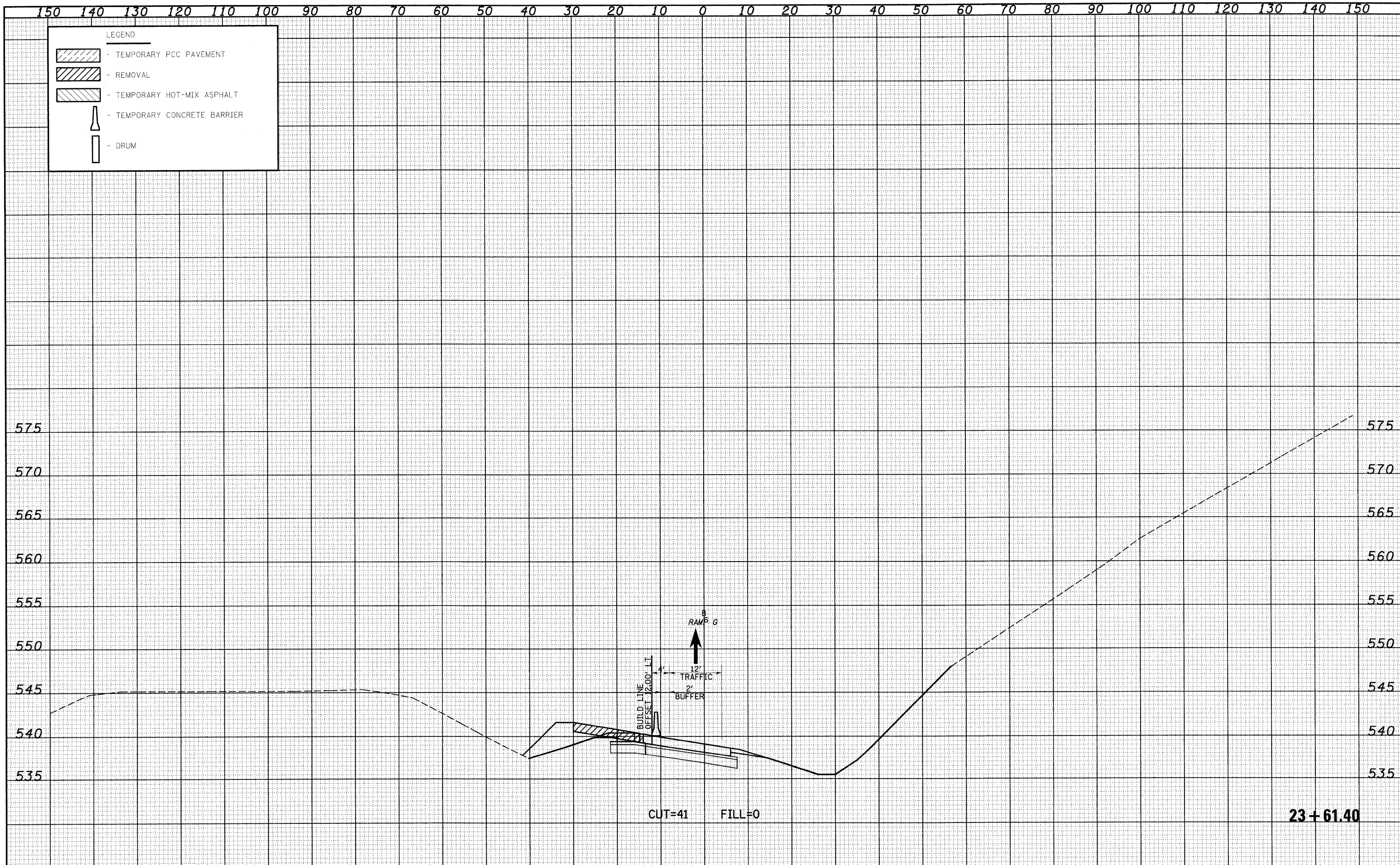
MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)
 SCALE: 1"=10'
 SHEET NO. 8 OF 9 SHEETS
 STA. 23+00.00 TO STA. 23+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1337
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

CONTRACT NO. 74296

DATE	
BY	
FINAL SURVEY	
REVISIONS	
NO. DATE	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
REVISIONS	
NO. DATE	
NO.	



FILE NAME =
 S:\Project\103-00072.51-70.dgn\103-00072.51-70.dgn

USER NAME = linda
 DESIGNED - JWS
 DRAWN - LEC
 CHECKED - BRM
 DATE - 2-25-08

REVISED -
 REVISED -
 REVISED -
 REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

MAINTENANCE OF TRAFFIC SOUTH TRI LEVEL - RAMP G (STAGE 2)

SCALE: 1"=10' SHEET NO. 9 OF 9 SHEETS STA. 23+61.40 TO STA. 23+61.40

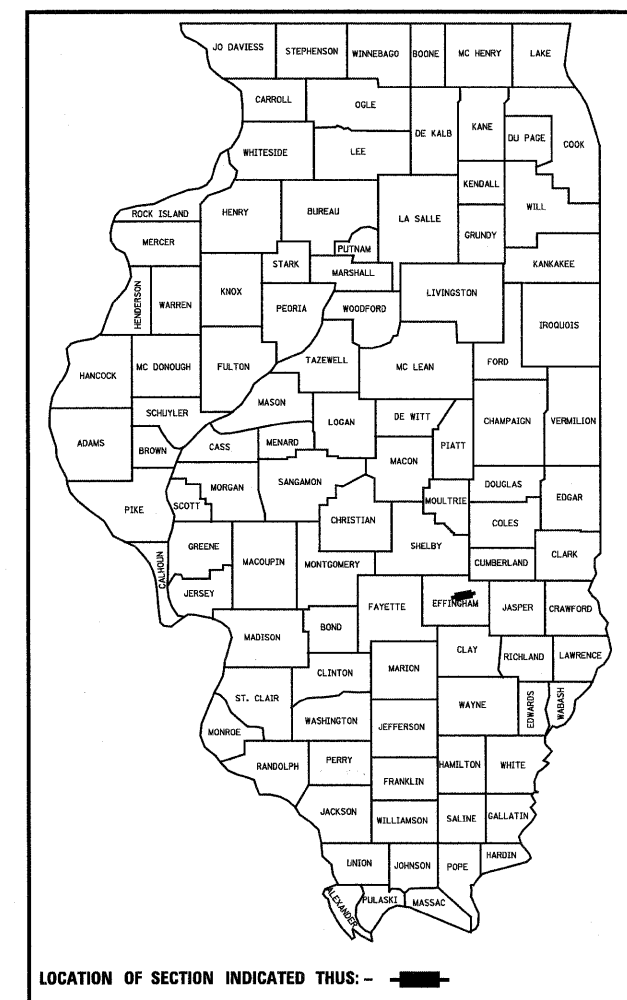
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)R	EFFINGHAM	1416	1338
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT	
			CONTRACT NO. 74296	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)BR	EFFINGHAM	1416	1339
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 74296		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PLANS FOR PROPOSED
HIGHWAY IMPROVEMENT**

FOR INDEX OF SHEETS, SEE SHEET NO. 1340

FAI ROUTE 57/70 (I-57/70)
SECTION (25-3)BR
EFFINGHAM COUNTY
BRIDGE REPAIR

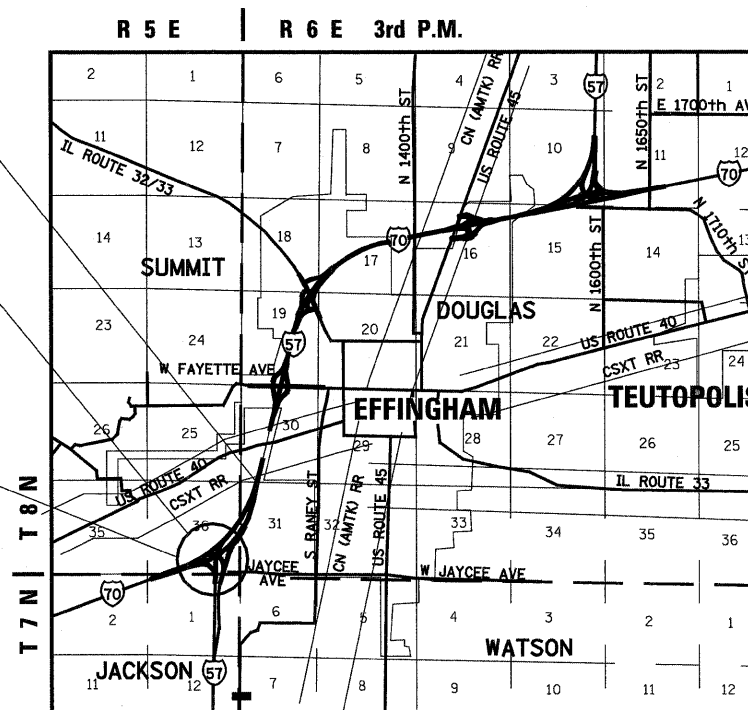


LOCATION OF SECTION INDICATED THIS: - ■ -

STATION EQUATION
AH STA 2093+00.73 =
BK STA 2090+18.51

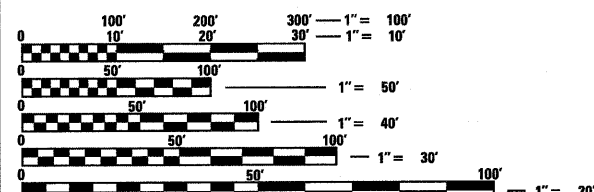
SET 3 LOCATION 2
SECTION (25-3HB)I-3 INCLUDES BEARING REPLACEMENT, SEISMIC CABLE RESTRAINERS, MICROSILICA OVERLAY AND MISC. CONCRETE REPAIR FOR THE STRUCTURE CARRYING RAMP F (WESTBOUND FAI-70) OVER SOUTHBOUND FAI-57 AND EASTBOUND FAI-70
STA 6+84.16 (RAMP F)
SN 025-0018

SET 3 LOCATION 1
SECTION (25-3HB)I-2 INCLUDES MICROSILICA OVERLAY, BEARING REPLACEMENT, SEISMIC CABLE RESTRAINERS AND MISC. CONCRETE REPAIR FOR THE STRUCTURE CARRYING SOUTHBOUND FAI-57 OVER EASTBOUND FAI-70.
STA 5029+52.21 (RDWY C)
SN 025-0001



LOCATION MAP

JACKSON, SUMMIT & DOUGLAS TOWNSHIP



DESIGN DESIGNATION

7070 (30) PRINCIPAL ARTERIAL-INTERSTATE	ADT 45,400 (2010)	FAI 57/70
		45% TRUCKS
	ADT 18,800 (2010)	FAI 57 SOUTH TRI-LEVEL
		44% TRUCKS
	ADT 27,000 (2010)	FAI 70 WEST OF SOUTH TRI-LEVEL
		46% TRUCKS

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

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

PROJECT ENGINEER: TOM RONAN (217)342-8320

CONTRACT NO. 74296

GROSS SECTION LENGTH		
LOCATION 1	= 185.73 FEET	= 0.035 MILES
LOCATION 2	= 260.38 FEET	= 0.049 MILES
TOTAL	= 446.11 FEET	= 0.084 MILES
NET SECTION LENGTH = 446.11 FEET = 0.084 MILES		

SET 3 OF 3



BERNARDIN * LOCHMUELLER & ASSOCIATES, INC.
3 OAK DRIVE
MARYVILLE, ILLINOIS 62062
PHONE (618) 288-4665
FAX (618) 288-4666

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

GENERAL NOTES

- ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.
- THE WORK IN THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, AS DIRECTED BY THE ENGINEER, IN ACCORDANCE WITH THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED JANUARY 1, 2007; THE LATEST EDITION OF THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL FOR THIS PROJECT.
- THE PROPOSED PROJECT IS LOCATED AT 2 SEPARATE LOCATIONS ON FAI ROUTES 57 AND 70 IN EFFINGHAM COUNTY, ILLINOIS.
- THE WORK INCLUDED IN SECTION (25-3)BR CONSISTS OF BRIDGE REPAIR OPERATIONS AT THE 2 LOCATIONS AS SHOWN ON THE PLANS.
- THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE HMA PLANT QUALITY CONTROL LAB SO THAT HMA PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF THE HOT-MIX ASPHALT ITEMS.
- WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING AN AUTHORIZED SURVEYOR RE- ESTABLISH ANY SECTION OR SUBSECTION MONUMENTS DESTROYED BY HIS OPERATIONS.
- ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY ALSO BE OBTAINED BY CALLING J.U.L.I.E. AND FOR NON-J.U.L.I.E. MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS.

- AMEREN / CIPS GAS / ELECTRIC
- ILLINOIS CONSOLIDATED. TELEPHONE
- CITY OF EFFINGHAM WATER / SEWER

(MEMBERS OF J.U.L.I.E. (800) 892-0123 ARE INDICATED BY *
NON-J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.)

- THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS TO 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.
- ANY EXCAVATION ADJACENT TO EDGE OF PAVEMENTS SHALL BE PROTECTED WITH EXTENDED LEG BARRICADES AND APPROPRIATE LIGHTS.
- FULL DEPTH SAW CUTTING AT THE EDGE OF PAVEMENT WILL BE REQUIRED IN ORDER TO REMOVE EXISTING PAVEMENTS OR SHOULDERS. THIS SAW CUTTING WILL NOT BE PAID FOR SEPARATELY BUT CONSIDERED AS INCLUDED IN THE COST OF THE RESPECTIVE REMOVAL ITEMS.
- ANY FACILITIES OR APPURTENANCES WHICH ARE THE PROPERTY OF ANY PUBLIC UTILITY LOCATED WITHIN THE LIMITS OF CONSTRUCTION, SHALL BE RELOCATED OR ADJUSTED BY THEIR RESPECTIVE OWNERS. THE CONTRACTOR SHALL NOTIFY AND COOPERATE WITH THE OWNERS OF SUCH FACILITIES IN THEIR REMOVAL AND REARRANGEMENT OPERATIONS IN ORDER THAT THESE OPERATIONS AND THE CONSTRUCTION OF THIS PROJECT MAY PROGRESS IN A REASONABLE MANNER.
- THE REMOVAL OF MISCELLANEOUS BITUMINOUS SURFACES PLACED ON SHOULDERS OR OTHER AREAS FOR MAINTENANCE OPERATIONS WILL NOT BE PAID FOR SEPARATELY BUT INCLUDED FOR PAYMENT AS EARTH EXCAVATION.
- ALL CONFLICTING GROUND MOUNTED SIGNS AND SIGN SUPPORTS ARE TO BE REMOVED, COVERED OR RELOCATED AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE DONE IN ACCORDANCE WITH SECTIONS 724 OF THE STANDARD SPECIFICATIONS EXCEPT THAT IT WILL NOT BE MEASURED FOR PAYMENT BUT CONSIDERED AS INCLUDED IN THE VARIOUS ITEMS OF WORK. SIGNS SHALL BE STORED AS DIRECTED BY THE ENGINEER AND CAREFULLY PROTECTED BY THE CONTRACTOR.
- THE ENGINEER WILL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT LIFTS.
- FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SAND BAGS PER BARRICADE.
- THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT PRIOR WRITTEN PERMISSION FROM THE DEPARTMENT.
- THE CONTRACTOR SHALL USE EITHER RC-70, SSIH, OR SSIHP, APPLIED AT THE RATE DIRECTED BY THE ENGINEER, FOR THE PAY ITEM BITUMINOUS MATERIALS (PRIME COAT).
- SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE MILLED SURFACE, BITUMINOUS MATERIALS (PRIME COAT), AND HOT-MIX ASPHALT SURFACE COURSE AS SPECIFIED IN SECTION 703 OF THE STANDARD SPECIFICATIONS. TEMPORARY TAPE SHALL BE USED ON THE SURFACE COURSE AND PAINT SHALL BE USED ON THE MILLED SURFACES.
- IN ADDITION TO SURVEYS, SOME OF THE PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY SUCH DIMENSIONS IN THE FIELD. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION DUE TO A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.
- MAINTENANCE OF TRAFFIC AND STAGE CONSTRUCTION OPERATIONS FOR THIS CONSTRUCTION SECTION (SET 3 OF 3) ARE SUBJECT TO THE OVERALL SEQUENCE OF CONSTRUCTION FOR THE COMBINED SETS OF PLANS. (SEE SPECIAL PROVISIONS)

COMMITMENT - NONE

MIXTURE REQUIREMENTS
THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

INTERSTATE RESURFACING		
	HOT-MIX ASPHALT SURFACE COURSE	HOT-MIX ASPHALT SHOULDER RESURFACING
PG GRADE	SBS PG 70-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ Ndes=105	4.0% @ Ndes=30
MIXTURE COMPOSITION	IL-9.5	IL-19.0L
FRICTION AGGREGATE	MIXTURE D	N/A

INDEX OF SHEETS

1339	TITLE SHEET
1340	GENERAL NOTES, INDEX OF SHEETS AND STANDARDS
1341	SUMMARY OF QUANTITIES
1342	TYPICAL SECTIONS - EXISTING
1343	SCHEDULE OF QUANTITIES
1344-1349	HORIZONTAL CONTROL
1350-1351	PLAN AND PROFILE
1352	SURFACE TRANSITION DETAILS
1353	MAINTENANCE OF TRAFFIC AND STAGE CONSTRUCTION DETAILS
1354	ROAD CLOSURE AND DETOUR PLANS
1355-1381	BRIDGE REPAIR PLANS - ROADWAY C SN 025-0001
1382-1416	BRIDGE REPAIR PLANS - RAMP F SN 025-0018
1416A	BRIDGE REPAIR PLANS - RAMP F SN 025-0018

IDOT HIGHWAY STANDARDS

420001-07	PAVEMENT JOINTS
420601-05	24' (7.2 m) PCC PAVEMENT
420701-02	PAVEMENT FABRIC
482011-03	HMA SHOULDER STRIPS/SHOULDERS, WITH RESURFACING OR WIDENING AND RESURFACING PROJECTS
701101-02	OFF-ROAD OPERATIONS, MULTILINE, 4.5 M (15') TO 600 MM (24") FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILINE, MORE THAN 4.5 M (15') AWAY
701400-04	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-05	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-07	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701411-06	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701451-01	RAMP CLOSURE FREEWAY/EXPRESSWAY
701901-01	TRAFFIC CONTROL DEVICES
704001-06	TEMPORARY CONCRETE BARRIER
780001-02	TYPICAL PAVEMENT MARKINGS
000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT

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

BITUMINOUS MATERIALS (PRIME COAT)	0.075	GAL / SQ YD
AGGREGATE (PRIME COAT)	0.0015	TONS / SQ YD
HOT-MIX ASPHALT SURFACE COURSE	0.056	TONS / SQ YD / INCH
HOT-MIX ASPHALT SHOULDERS	0.056	TONS / SQ YD / INCH

CODED NO	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE BRIDGE 025-0001 X271	100% STATE BRIDGE 025-0018 X271	
	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	240		240	
	POROUS GRANULAR EMBANKMENT	CU YD	235		235	
	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	40	40		
	AGGREGATE (PRIME COAT)	TON	1	1		
	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	412	412		
	PORTLAND CEMENT CONCRETE SURFACE REMOVAL - BUTT JOINT	SQ YD	111	111		
	TEMPORARY RAMP	SQ YD	49	49		
	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N105	TON	41	41		
	PORTLAND CEMENT CONCRETE PAVEMENT 12"	SQ YD	975	975		
	PAVEMENT FABRIC	SQ YD	975	975		
	PAVED SHOULDER REMOVAL	SQ YD	950	950		
	HOT-MIX ASPHALT SHOULDERS	TON	11	11		
	CONCRETE REMOVAL	CU YD	92.5	44	48.5	
	SLOPE WALL REMOVAL	SQ YD	418	59	359	
	PROTECTIVE SHIELD	SQ YD	416	244	172	
	STRUCTURE EXCAVATION	CU YD	36	24	12	
	CONCRETE STRUCTURES	CU YD	93.4	49.8	43.6	
	RUBBED FINISH	SQ FT	737	323	414	
	CONCRETE SUPERSTRUCTURE	CU YD	125	42.9	82.1	
	BRIDGE DECK GROOVING	SQ YD	732	652	80	
	PROTECTIVE COAT	SQ YD	1018	819	199	
	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	17305	7466	9839	
	JACK AND REMOVE EXISTING BEARINGS	EACH	26	18	8	
	CLEANING AND PAINTING STEEL BRIDGE NO. 1	L SUM	1	1		
	CLEANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1		1	
	REINFORCEMENT BARS, EPOXY COATED	POUND	32680	12170	20510	
	BAR SPLICERS	EACH	117	86	31	
	SLOPE WALL 4 INCH	SQ YD	400	48	352	
	PREFORMED JOINT STRIP SEAL	FOOT	150	91	59	
	NEOPRENE EXPANSION JOINT 2"	FOOT	232	111	121	
	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	26	18	8	
	ANCHOR BOLTS, 1"	EACH	36	36		
	ANCHOR BOLTS, 1 1/4"	EACH	134	72	62	
	ANCHOR BOLTS, 1 1/2"	EACH	16		16	
	CONCRETE SEALER	SQ FT	3400	1938	1462	
	MOBILIZATION	L SUM	0.04	0.02	0.02	
	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	0.04	0.02	0.02	
	TRAFFIC CONTROL AND PROTECTION (DETOUR 1)	L SUM	0.5		0.5	
	TRAFFIC CONTROL SURVEILLANCE	CAL DA	2	1	1	
	SHORT-TERM PAVEMENT MARKING	FOOT	24	24		
	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	282	282		
	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	35	35		
	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	112	112		
	TEMPORARY CONCRETE BARRIER	FOOT	400	400		

CODED NO	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE		
				100% STATE BRIDGE 025-0001 X271	100% STATE BRIDGE 025-0018 X271	
	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	400	400		
	SEISMIC RESTRAINER	EACH	28	12	16	
	MATERIAL TRANSFER DEVICE	TON	41	41		
	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	862	388	474	
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1		
	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1	
	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 2 1/4"	SQ YD	591	591		
	CONCRETE BRIDGE DECK SCARIFICATION (1/2 INCH)	SQ YD	652	652		
	CONSTRUCTION LAYOUT	L SUM	0.04	0.02	0.02	
	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	25	14	11	
	DRAINAGE SYSTEM	L SUM	1		1	
	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1		
	UN SOUND CONCRETE REMOVAL	SQ YD	15.8	10.8	5	

FILE NAME =
S:\projects\03-2010\7-27-10\pdp\pdp\sheet\summary.dwg

USER NAME = betsy
PLOT SCALE = 1/8"=1'-0"
PLOT DATE = 5/7/2010

DESIGNED - ESW
DRAWN - PDB
CHECKED - BRM
DATE - 07-21-08

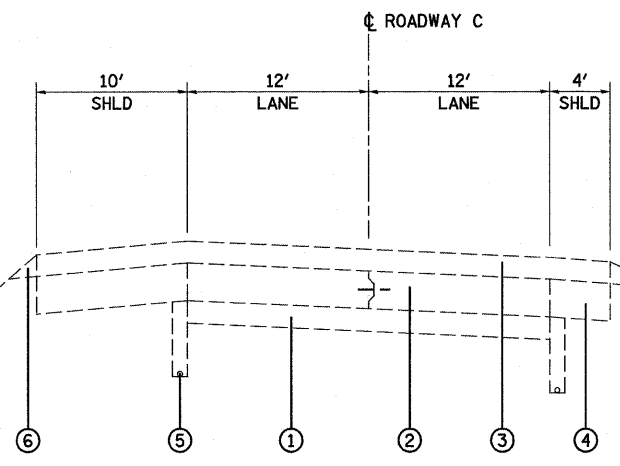
REVISED - 05-06-10
REVISED -
REVISED -
REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

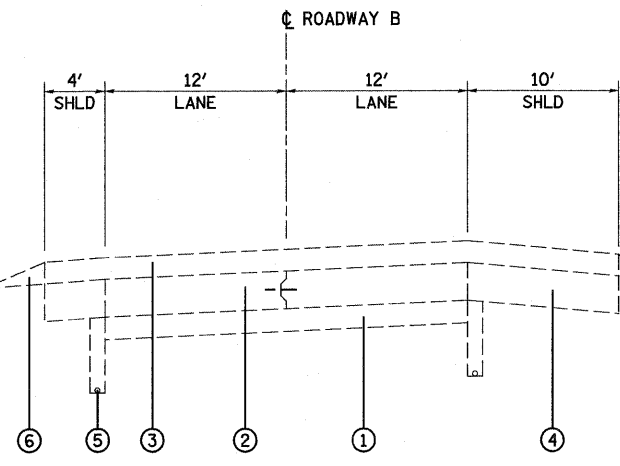
SCHEDULES

SCALE:	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	F.A.I. RTE. 57/70	SECTION (25-3)BR	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1341	CONTRACT NO. 74296
--------	-------------------------	------	---------	-------------------	------------------	------------------	-------------------	----------------	--------------------

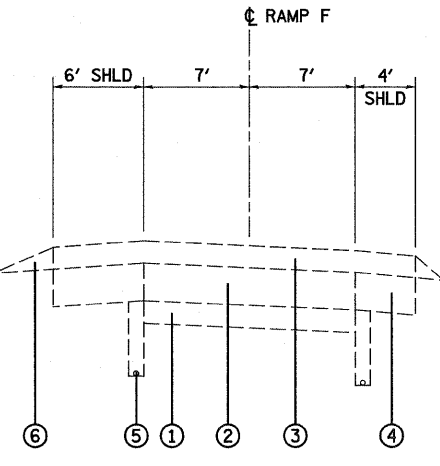
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



EXISTING SUPERELEVATED SECTION
ROADWAY C



EXISTING SUPERELEVATED SECTION
ROADWAY B



EXISTING SUPERELEVATED SECTION
RAMP F

LEGEND

- ① EXISTING SUB-BASE GRANULAR MATERIAL, TYPE A 6"
- ② EXISTING PCC PAVEMENT 10" (w/LONG METAL JT & PAVT FABRIC)
- ③ EXISTING HOT-MIX ASPHALT RESURFACING 6"±
- ④ EXISTING PAVED SHOULDER
- ⑤ EXISTING PIPE UNDERDRAINS
- ⑥ EXISTING AGGREGATE SHOULDERS
- ⑦ EXISTING CURB OR CURB & GUTTER
- ⑧ EXISTING AGGREGATE WITH OIL AND CHIP SURFACE

EXISTING SOUTH TRI-LEVEL ROADWAYS

SUPERELEVATION MAY SLOPE RIGHT
OR LEFT PER EXISTING ROADWAY

FILE NAME =	USER NAME = paul	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING TYPICAL SECTIONS - SOUTH TRI-LEVEL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
SVProject\MS-40072.57-70.dgn		DRAWN - PDB	REVISED -			57/70	(25-3)BR	EFFINGHAM	1416	1342	
PLOT SCALE = 1/8" = 1' / IN.		CHECKED - BRM	REVISED -			SCALE: 1"=50'		SHEET NO. 1 OF 1 SHEETS		STA. TO STA.	
PLOT DATE = 2/11/2010		DATE - 7-21-08	REVISED -			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT					
						CONTRACT NO. 74296					

PAVING SCHEDULE

LOCATION	SIDE	PORTLAND CEMENT CONCRETE PAVEMENT 12" (SQ YD)	BITUMINOUS MATERIALS (PRIME COAT) (GALLON)	AGGREGATE (PRIME COAT) (TON)	TEMPORARY RAMP (SQ YD)	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N105 (TON)	MATERIAL TRANSFER DEVICE (TON)	PAVEMENT FABRIC (SQ YD)	HOT-MIX ASPHALT SHOULDERS (TON)
STATION TO STATION									
LOCATION 1: SN 025-0001									
5024+94.60 TO 5028+26.40	LT	352						352	
5027+51.40 TO 5028+52.65	RT	48						48	
5027+86.06 TO 5028+56.06	LT/RT		21	0.4	26	21	21		6.2
5030+40.73 TO 5031+10.73	LT/RT		19	0.4	23	20	20		4.6
5030+43.00 TO 5034+66.50	LT	381						381	
5030+84.40 TO 5034+95.91	RT	194						194	
LOCATION 1 SUBTOTAL		975	40	1	49	41	41	975	11
	TOTAL	975	40	1	49	41	41	975	11

REMOVAL SCHEDULE

LOCATION	SIDE	HOT-MIX ASPHALT SURFACE REMOVAL-BUTT JOINT (SQ YD)	PORTLAND CEMENT CONCRETE SURFACE REMOVAL-BUTT JOINT (SQ YD)	PAVED SHOULDER REMOVAL (SQ YD)
STATION TO STATION				
LOCATION 1: SN 025-0001				
5024+94.60 TO 5028+26.40	LT			349
5027+51.40 TO 5028+52.90	RT			38
5027+86.06 TO 5028+56.06	LT/RT	208	64	
5030+40.73 TO 5031+10.73	LT/RT	204	47	
5030+43.00 TO 5034+66.50	LT			373
5030+84.40 TO 5034+95.90	RT			190
LOCATION 1 SUBTOTAL		412	111	950
	TOTAL	412	111	950

TRAFFIC CONTROL SCHEDULE

LOCATION	TEMPORARY CONCRETE BARRIER (FOOT)	RELOCATE TEMPORARY CONCRETE BARRIER (FOOT)	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 (EACH)	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3 (EACH)
STATION TO STATION				
LOCATION 1: SN 025-0001				
5028+49.50 TO 5032+37.02	400	400	1	1
LOCATION 1 SUBTOTAL	400	400	1	1
	TOTAL	400	1	1

PAVEMENT MARKING SCHEDULE

LOCATION	SHORT-TERM PAVEMENT MARKING		TEMPORARY PAVEMENT MARKING - LINE 4"		TEMPORARY PAVEMENT MARKING - LINE 6"	WORK ZONE PAVEMENT MARKING REMOVAL (SQ FT)
	YELLOW (FOOT)	WHITE (FOOT)	SOLID YELLOW (FOOT)	SOLID WHITE (FOOT)	SKIP DASH WHITE (FOOT)	
STATION TO STATION						
LOCATION 1: SN 025-0001						
5026+18.06 TO 5028+56.06						
5027+86.05 TO 5028+56.06	4	8	81.3	60.6	17.5	56.0
5028+56.06 TO 5030+40.60						
5030+40.60 TO 5031+10.73	4	8	82.2	57.8	17.5	55.4
5030+40.60 TO 5035+00.00						
LOCATION 1 SUBTOTAL	8	16	163.5	118.4	35	111.4
	TOTAL	24		282	35	112

FILE NAME =
S:\Projects\081002157-7\4p10-Report\South\shchd1.mxd

USER NAME = paul
PLOT SCALE = 100.0000' / IN.
PLOT DATE = 3/17/2010

DESIGNED - ESW
DRAWN - PDB
CHECKED - BRM
DATE - 07-21-08

REVISED -
REVISED -
REVISED -
REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SCHEDULE OF QUANTITIES

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

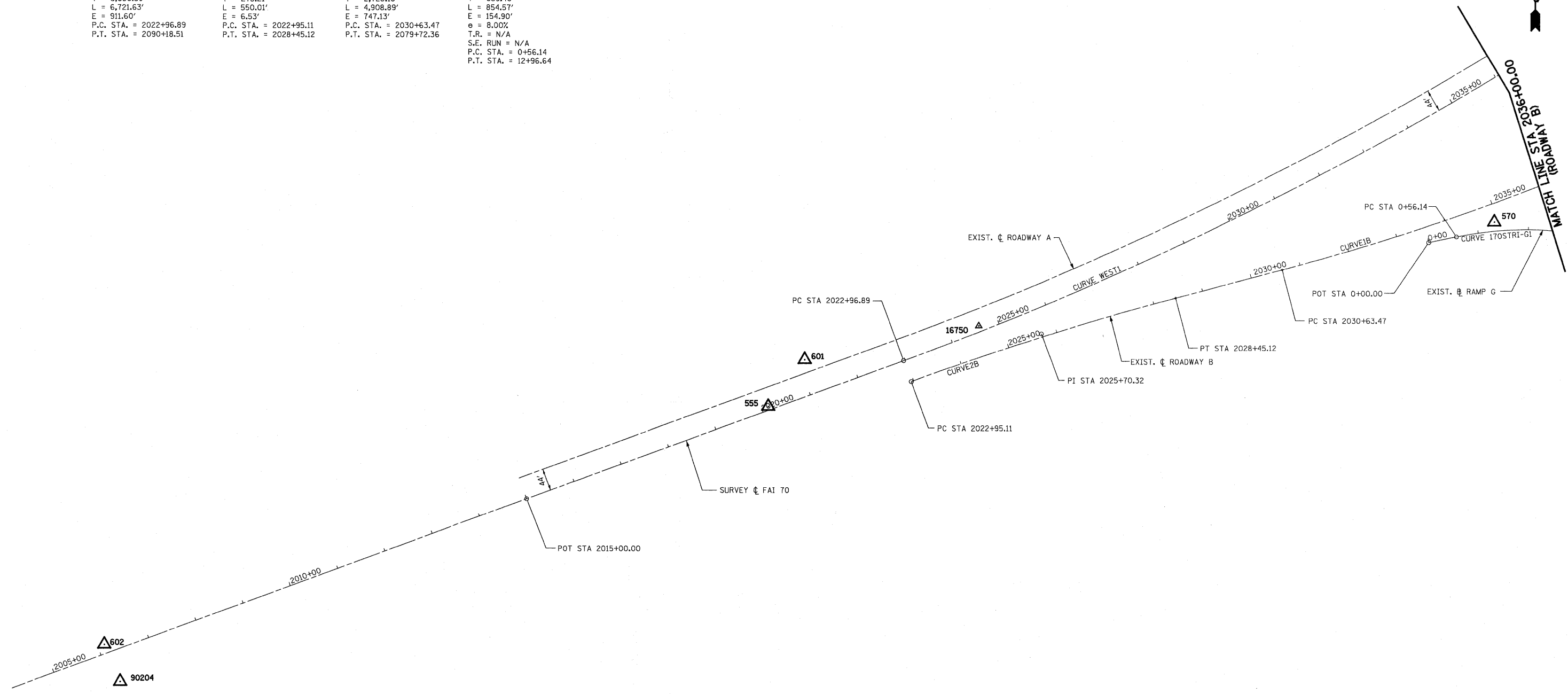
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)BR	EFFINGHAM	1416	1343
CONTRACT NO. 74296				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

EXIST. SURVEY ϕ FAI 70
 EXIST. CURVE WEST1
 PI STA. = 2059+53.47
 $\Delta = 55^\circ 59' 40''$ (LT)
 $D = 0^\circ 49' 59''$
 $R = 6,877.84'$
 $T = 3,656.59'$
 $L = 6,721.63'$
 $E = 911.60'$
 P.C. STA. = 2022+96.89
 P.T. STA. = 2090+18.51

EXIST. ROADWAY B
 EXIST. CURVE CURVE2B
 PI STA. = 2025+70.32
 $\Delta = 5^\circ 26' 19''$ (RT)
 $D = 0^\circ 59' 20''$
 $R = 5,794.33'$
 $T = 275.21'$
 $L = 550.01'$
 $E = 6.53'$
 P.C. STA. = 2022+95.11
 P.T. STA. = 2028+45.12

EXIST. ROADWAY B
 EXIST. CURVE CURVE1B
 PI STA. = 2057+83.65
 $\Delta = 61^\circ 25' 59''$ (LT)
 $D = 1^\circ 15' 05''$
 $R = 4,578.30'$
 $T = 2,720.18'$
 $L = 4,908.89'$
 $E = 747.13'$
 P.C. STA. = 2030+63.47
 P.T. STA. = 2079+72.36

EXIST. RAMP G
 EXIST. CURVE 170STRI-G1
 PI STA. = 9+15.54
 $\Delta = 101^\circ 50' 25''$ (RT)
 $D = 8^\circ 12' 35''$
 $R = 697.91'$
 $T = 859.40'$
 $L = 854.57'$
 $E = 154.90'$
 $e = 8.00\%$
 T.R. = N/A
 S.E. RUN = N/A
 P.C. STA. = 0+56.14
 P.T. STA. = 12+96.64



BENCHMARK #551:
 CHISELED SQUARE ON TOP OF SLOPE
 WALL ON EAST SIDE OF LITTLE WABASH RIVER
 STA 2005+75, 25.7' OFF OF CENTERLINE I-70 WEST
 ELEV 521.58

BENCHMARK #2020:
 CHISELED SQUARE NORTHEAST CORNER OF
 CONCRETE DROP INLET JUST WEST OF SOUTH
 TRI-LEVEL IN MEDIAN
 STA. 2020+00
 ELEV 521.68

BENCHMARK #1:
 CHISELED SQUARE CENTER OF WEST CONCRETE
 FOUNDATION TO OVERHEAD SIGN TRUSS I-70 EB
 STA. 2032+50 LT
 ELEV 523.52

SURVEY ϕ FAI 70

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
POT STA 1966+63.14	881449.64	906570.31
PC STA 2022+96.89	883392.73	911858.36
PI STA 2059+53.47	884653.89	915290.58
PT STA 2090+18.51	888204.48	916164.64

EXISTING ROADWAY B

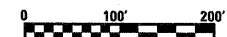
DESCRIPTION	COORDINATE	
	NORTHING	EASTING
PC STA 2022+95.11	883351.43	911873.54
PI STA 2025+70.32	883446.35	912131.86
PT STA 2028+45.12	883516.36	912398.02
PC STA 2030+63.47	883571.91	912609.18
PI STA 2057+83.65	884263.88	915239.88
PT STA 2079+72.36	886905.21	915890.10
POT STA 2092+99.59	888193.96	916207.36

EXISTING SOUTH TRI LEVEL RAMP G

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
POT STA 0+00.00	883626.36	912899.87
PC STA 0+56.14	883637.67	912954.86
PI STA 9+15.54	883810.87	913796.62
PT STA 12+96.64	882951.48	913793.41

CONTROL POINTS

CONTROL POINT	COORDINATE	
	NORTHING	EASTING
90204	882755.24	910303.19
602	882829.02	910271.77
555	883301.86	911589.92
16750	883461.94	912007.47
601	883394.86	911662.17
570	883666.87	913029.90



FILE NAME =	USER NAME = poul	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HORIZONTAL CONTROL, FAI ROUTE 70, SOUTH TRI LEVEL	F.A.I. RTE. = 57/70	SECTION = (25-3)BR	COUNTY = EFFINGHAM	TOTAL SHEETS = 1416	SHEET NO. = 1344		
						SCALE: 1"=100'	SHEET NO. 1 OF 6 SHEETS	STA. 2005+00.00 TO STA. 2036+00.00	CONTRACT NO. 74296			
						FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT						

EXIST. SURVEY C FAI 70
 EXIST. CURVE WEST1
 PI STA. = 2059+53.47
 $\Delta = 55^\circ 59' 40''$ (LT)
 D = 0' 49' 59"
 R = 6,877.84'
 T = 3,656.59'
 L = 6,721.63'
 E = 911.60'
 P.C. STA. = 2022+96.89
 P.T. STA. = 2090+18.51

EXIST. ROADWAY B
 EXIST. CURVE CURVE1B
 PI STA. = 2057+83.65
 $\Delta = 61^\circ 25' 59''$ (LT)
 D = 1' 15' 05"
 R = 4,578.30'
 T = 2,720.18'
 L = 4,908.89'
 E = 747.13'
 P.C. STA. = 2030+63.47
 P.T. STA. = 2079+72.36

EXIST. ROADWAY C
 EXIST. SB FAI 57
 EXIST. CURVE I57SRC-1
 PI STA. = 5032+76.40
 $\Delta = 42^\circ 31' 30''$ (RT)
 D = 3' 10' 09"
 R = 1,807.88'
 T = 703.50'
 L = 1,341.81'
 E = 132.05'
 $\theta = 6.00\%$
 T.R. = 42.50'
 S.E. RUN = 170.00'
 P.C. STA. = 5025+72.90
 P.T. STA. = 5039+14.71

EXIST. ROADWAY D
 EXIST. NB FAI 57
 EXIST. CURVE I57SRD3
 PI STA. = 5033+76.84
 $\Delta = 19^\circ 34' 27''$ (RT)
 D = 1' 15' 00"
 R = 4,583.75'
 T = 790.68'
 L = 1,565.96'
 E = 67.70'
 P.C. STA. = 5025+86.16
 P.T. STA. = 5041+52.12

EXIST. RAMP F
 EXIST. CURVE I70STRI.F1
 PI STA. = 0+83.67
 $\Delta = 15^\circ 49' 29''$ (RT)
 D = 9' 31' 03"
 R = 602.00'
 T = 83.67'
 L = 166.27'
 E = 5.79'
 P.C. STA. = 0+00.00
 P.C.C. STA. = 1+66.27

EXIST. RAMP F
 EXIST. CURVE I70STRI.F2
 PI STA. = 12+67.74
 $\Delta = 115^\circ 16' 56''$ (RT)
 D = 8' 12' 35"
 R = 697.91'
 T = 1,101.47'
 L = 1,404.23'
 E = 606.05'
 $\theta = 7.90\%$
 T.R. = 44.62'
 S.E. RUN = 235.00'
 P.C.C. STA. = 1+66.27
 P.T. STA. = 15+70.50

EXIST. RAMP G
 EXIST. CURVE I70STRI-G1
 PI STA. = 9+15.54
 $\Delta = 101^\circ 50' 25''$ (RT)
 D = 8' 12' 35"
 R = 697.91'
 T = 859.40'
 L = 854.57'
 E = 154.90'
 $\theta = 8.00\%$
 T.R. = N/A
 S.E. RUN = N/A
 P.C. STA. = 0+56.14
 P.T. STA. = 12+96.64

BENCHMARK #511:

CHISELED SQUARE ON EAST CONCRETE BASE OF OVERHEAD SIGN ON I-57/70 "I-70 WEST ST. LOUIS ARROW, CHICAGO & INDIANAPOLIS ARROWS" STA 5021+02 88.2' RT ELEV 574.56

BENCHMARK #510:

CHISELED SQUARE ON WEST CONCRETE BASE ON OVERHEAD SIGN ON I-57/70 "SOUTH MEMPHIS ARROWS, WEST ST. LOUIS ARROWS" STA. 2059+28 10' LT ELEV 565.31

BENCHMARK #19:

CHISELED SQUARE TOP OF PAPAPET WALL NORTHWEST CORNER OF LEVEL 2 BRIDGE (025-000) I-57 SB ELEV 558.25

BENCHMARK #20:

CHISELED SQUARE TOP OF PARAPET WALL SOUTHEAST CORNER OF LEVEL 2 BRIDGE (025-000) I-57 SB ELEV 557.27

BENCHMARK #21:

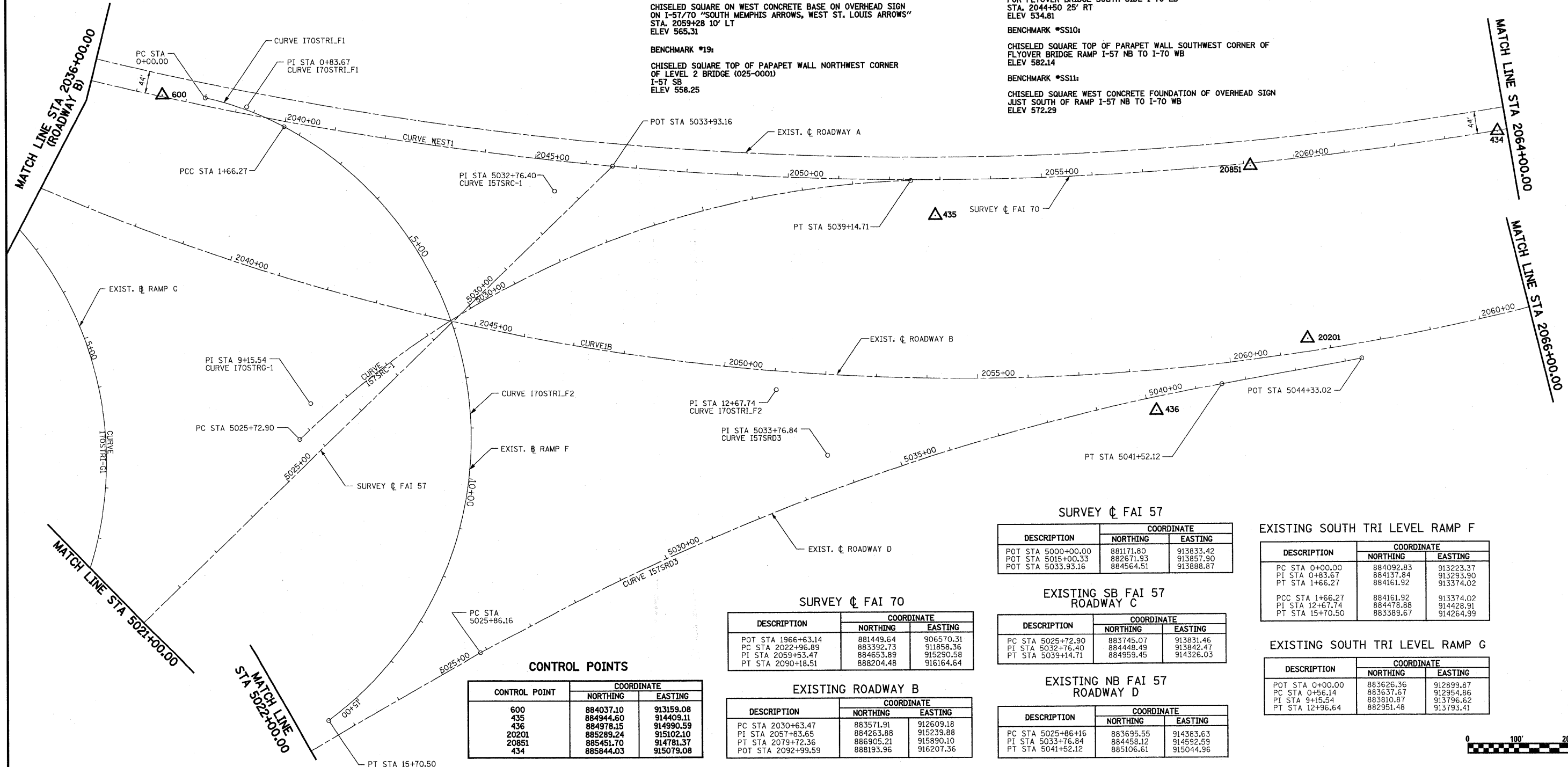
CHISELED SQUARE NORTHWEST CORNER BRIDGE PIER FOUNDATION FOR FLYOVER BRIDGE SOUTH SIDE I-70 EB STA. 2044+50 25' RT ELEV 534.81

BENCHMARK #SS10:

CHISELED SQUARE TOP OF PARAPET WALL SOUTHWEST CORNER OF FLYOVER BRIDGE RAMP I-57 NB TO I-70 WB ELEV 582.14

BENCHMARK #SS11:

CHISELED SQUARE WEST CONCRETE FOUNDATION OF OVERHEAD SIGN JUST SOUTH OF RAMP I-57 NB TO I-70 WB ELEV 572.29



CONTROL POINTS

CONTROL POINT	COORDINATE	
	NORTHING	EASTING
600	884037.10	913159.08
435	884944.60	914409.11
436	884978.15	914990.59
20201	885289.24	915102.10
20851	885451.70	914781.37
434	885844.03	915079.08

SURVEY C FAI 70

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
POT STA 1966+63.14	881449.64	906570.31
PC STA 2022+96.89	883392.73	911858.36
PI STA 2059+53.47	884653.89	915290.56
PT STA 2090+18.51	888204.48	916164.64

EXISTING ROADWAY B

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
PC STA 2030+63.47	883571.91	912609.18
PI STA 2057+83.65	884263.88	915239.88
PT STA 2079+72.36	886905.21	915890.10
POT STA 2092+99.59	888193.96	916207.36

SURVEY C FAI 57

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
POT STA 5000+00.00	881171.80	913833.42
POT STA 5015+00.33	882671.93	913857.90
POT STA 5033.93.16	884564.51	913688.87

EXISTING SB FAI 57 ROADWAY C

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
PC STA 5025+72.90	883745.07	913831.46
PI STA 5032+76.40	884448.49	913842.47
PT STA 5039+14.71	884959.45	914326.03

EXISTING NB FAI 57 ROADWAY D

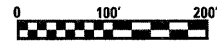
DESCRIPTION	COORDINATE	
	NORTHING	EASTING
PC STA 5025+86+16	883695.55	914383.63
PI STA 5033+76.84	884458.12	914592.59
PT STA 5041+52.12	885106.61	915044.96

EXISTING SOUTH TRI LEVEL RAMP F

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
PC STA 0+00.00	884092.83	913223.37
PI STA 0+83.67	884137.84	913293.90
PT STA 1+66.27	884161.92	913374.02
PCC STA 1+66.27	884161.92	913374.02
PI STA 12+67.74	884478.88	914428.91
PT STA 15+70.50	883389.67	914264.99

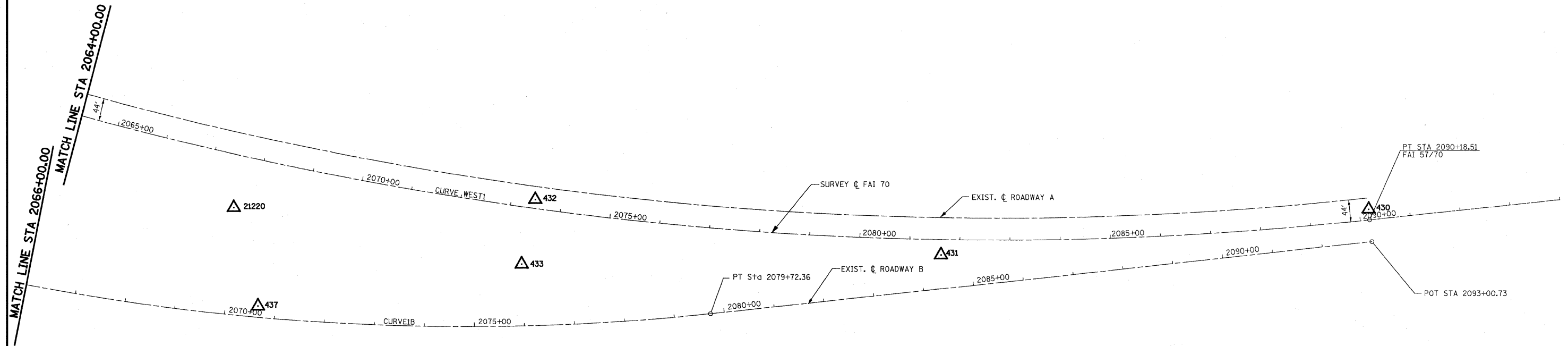
EXISTING SOUTH TRI LEVEL RAMP G

DESCRIPTION	COORDINATE	
	NORTHING	EASTING
POT STA 0+00.00	883626.36	912899.87
PC STA 0+56.14	883631.67	912954.66
PI STA 9+15.54	883810.87	913796.62
PT STA 12+96.64	882951.48	913793.41



EXIST. SURVEY C FAI 70
 EXIST. CURVE WEST1
 PI STA. = 2059+53.47
 $\Delta = 55^\circ 59' 40''$ (LT)
 $D = 0^\circ 49' 59''$
 $R = 6,877.84'$
 $T = 3,656.59'$
 $L = 6,721.63'$
 $E = 911.60'$
 P.C. STA. = 2022+96.89
 P.T. STA. = 2090+18.51

EXIST. ROADWAY B
 EXIST. CURVE CURVE1B
 PI STA. = 2057+83.65
 $\Delta = 61^\circ 25' 59''$ (LT)
 $D = 1^\circ 15' 05''$
 $R = 4,578.30'$
 $T = 2,720.18'$
 $L = 4,908.89'$
 $E = 747.13'$
 P.C. STA. = 2030+63.47
 P.T. STA. = 2079+72.36



BENCHMARK #508:
 CHISELED SQUARE ON MEDIAN INLET I-57/70
 STA 2092+94 0.7' RT
 ELEV 592.11

BENCHMARK #509:
 CHISELED SQUARE ON WEST CONCRETE BASE OF
 OVERHEAD SIGN ON I-57/70 "SOUTH MEMPHIS,
 WEST ST. LOUIS"
 STA. 2078+07 86.8' LT
 ELEV 581.46

SURVEY C FAI 70

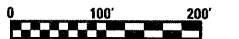
DESCRIPTION	COORDINATE	
	NORTHING	EASTING
POT STA 1966+63.14	881449.64	906570.31
PC STA 2022+96.89	883392.73	911858.36
PI STA 2059+53.47	884653.89	915290.58
PT STA 2090+18.51	888204.48	916164.64

EXISTING ROADWAY B

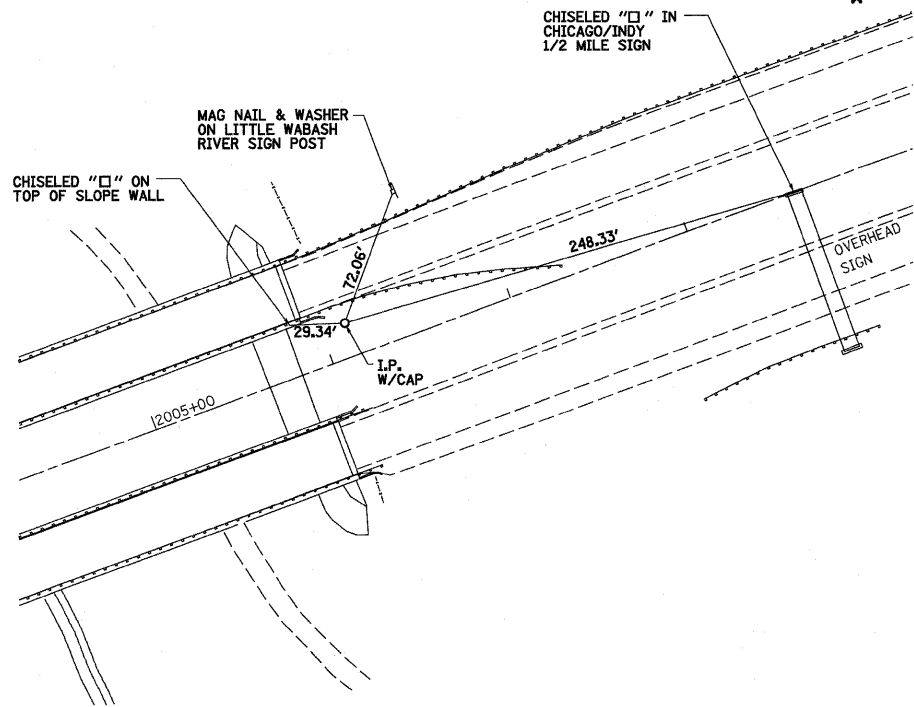
DESCRIPTION	COORDINATE	
	NORTHING	EASTING
PC STA 2030+63.47	883571.91	912609.18
PI STA 2057+83.65	884263.88	915239.88
PT STA 2079+72.36	886905.21	915890.10
POT STA 2092+99.59	888193.96	916207.36

CONTROL POINTS

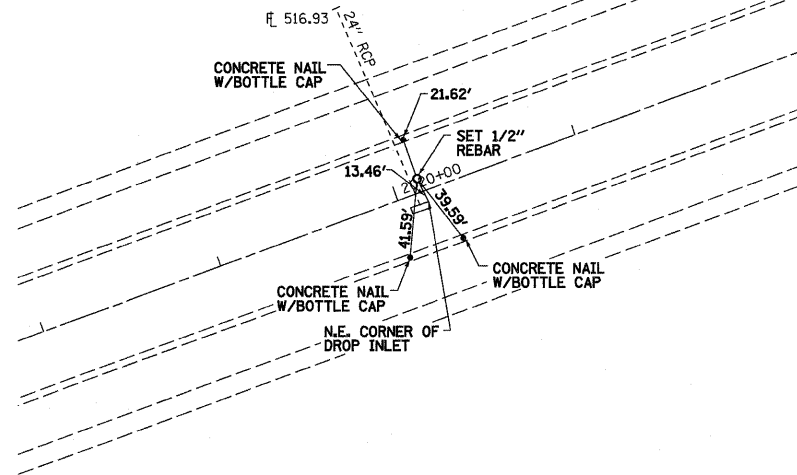
CONTROL POINT	COORDINATE	
	NORTHING	EASTING
437	886061.10	915567.38
21220	886082.88	915366.17
432	886654.25	915557.06
433	886584.80	915668.79
431	887377.45	915937.24
430	888210.11	916143.88



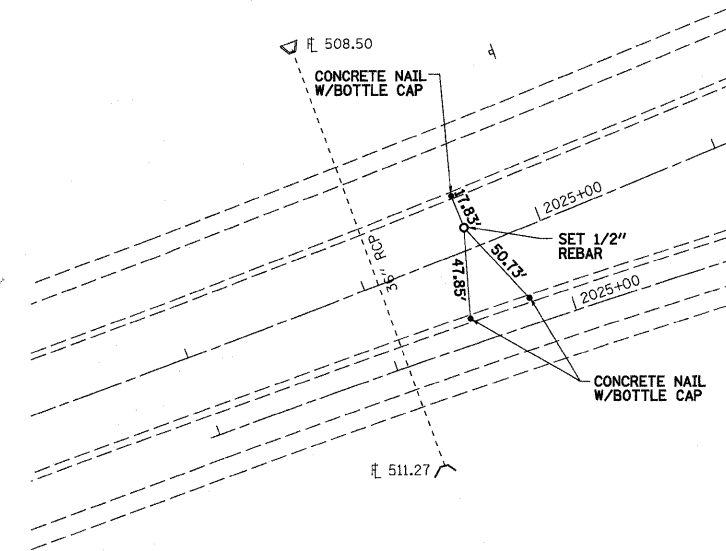
FILE NAME = S:\Projects\MD\8872.57-78\Drawings\Paper\Sheet\Hct.stb	USER NAME = paul	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	HORIZONTAL CONTROL, FAI ROUTES 57/70, SOUTH TRI LEVEL	F.A.I. RTE. 57/70	SECTION (25-3)BR	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1346		
PLOT SCALE = 200.0000' / IN.	CHECKED - BRM	REVISIED -	SCALE: 1"=100'			SHEET NO. 3 OF 6 SHEETS	STA. 2066+00.00 TO STA. 2094+00.00	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT		CONTRACT NO. 74296		
PLOT DATE = 2/11/2010	DATE - 8-01-08	REVISIED -										



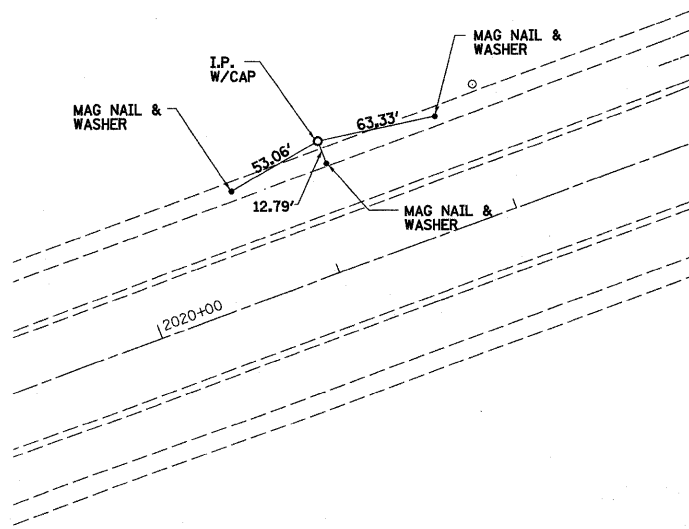
TRAVERSE/P.O.T. NUMBER 602



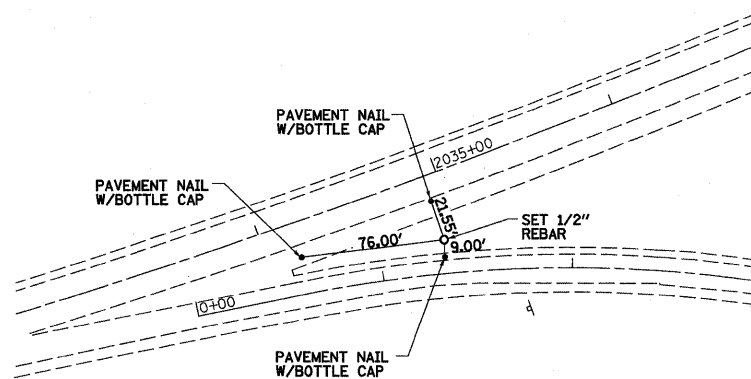
TRAVERSE/P.O.T. NUMBER 555



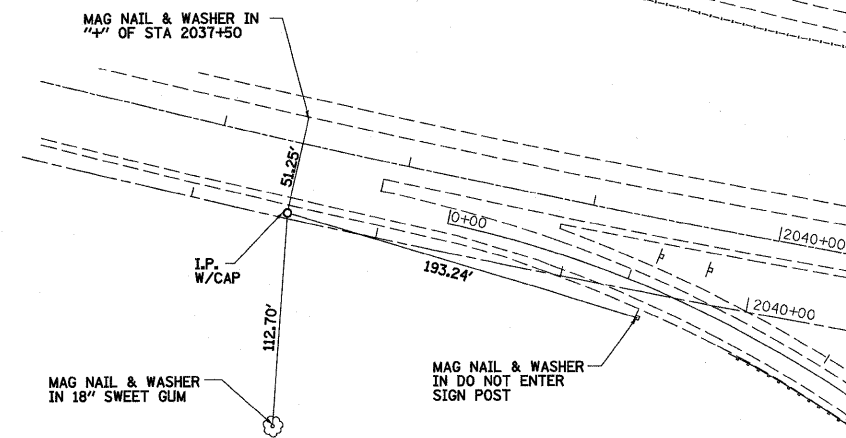
TRAVERSE/P.O.T. NUMBER 16750



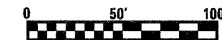
TRAVERSE/P.O.T. NUMBER 601



TRAVERSE/P.O.T. NUMBER 570



TRAVERSE/P.O.T. NUMBER 600



FILE NAME = S:\projects\483\88172-57-70\p1\01\Paper\Scale\loc.ctb

USER NAME =
 DESIGNED - JWS
 DRAWN - MAB
 CHECKED - BRM
 DATE - 1-21-09

REVISED
 REVISED
 REVISED
 REVISED

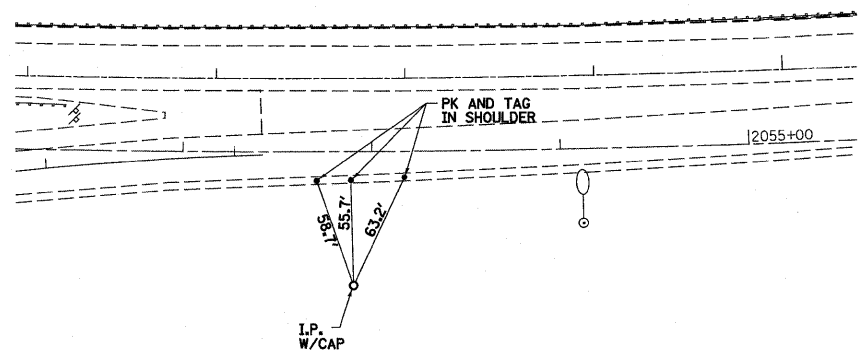
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

TIE POINTS, FAI ROUTES 57/70

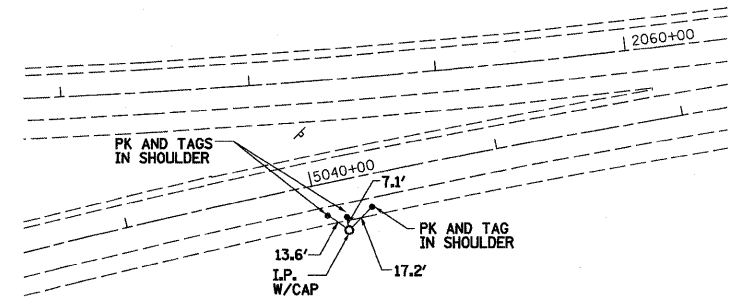
SCALE: 1"=50' SHEET NO. 4 OF 6 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)BR	EFFINGHAM	1416	1347
CONTRACT NO. 74296				

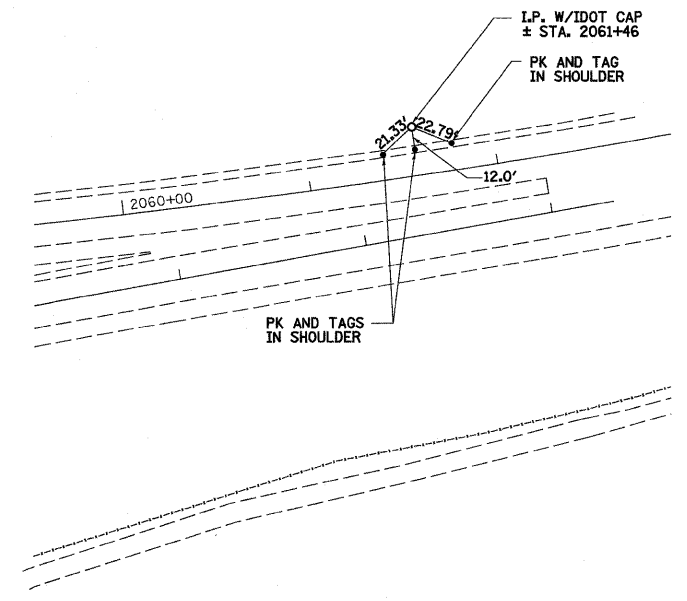
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT



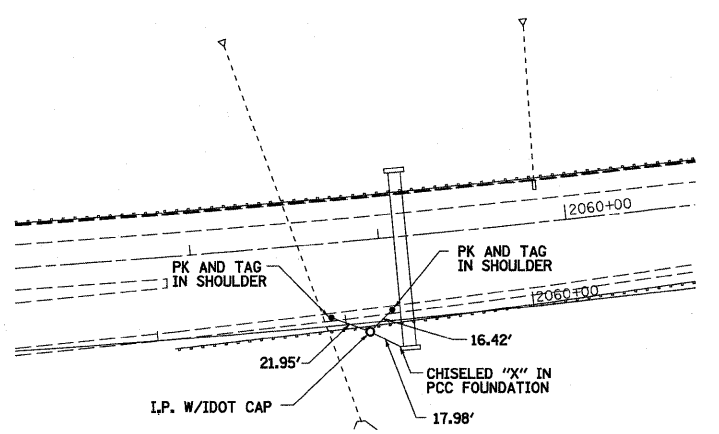
TRAVERSE/P.O.T. NUMBER 435



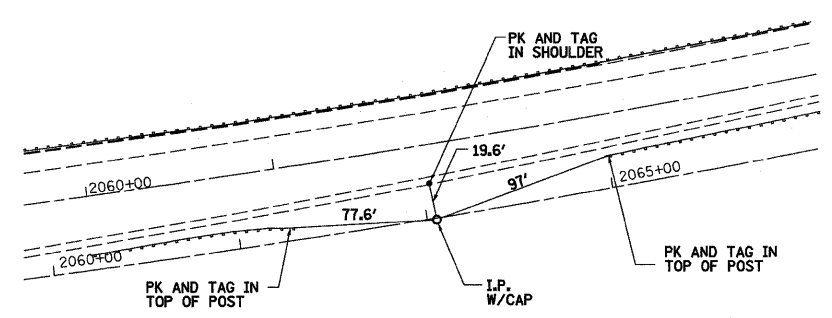
TRAVERSE/P.O.T. NUMBER 436



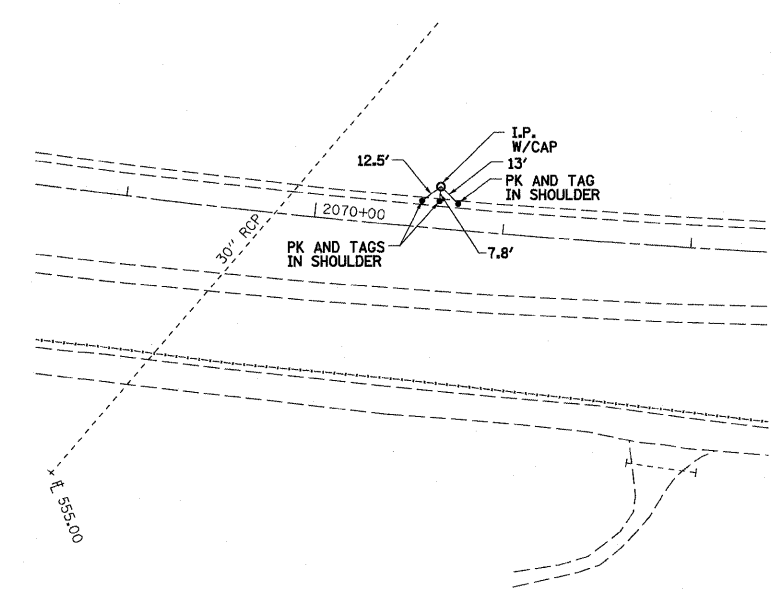
TRAVERSE/P.O.T. NUMBER 20201



TRAVERSE/P.O.T. NUMBER 20851

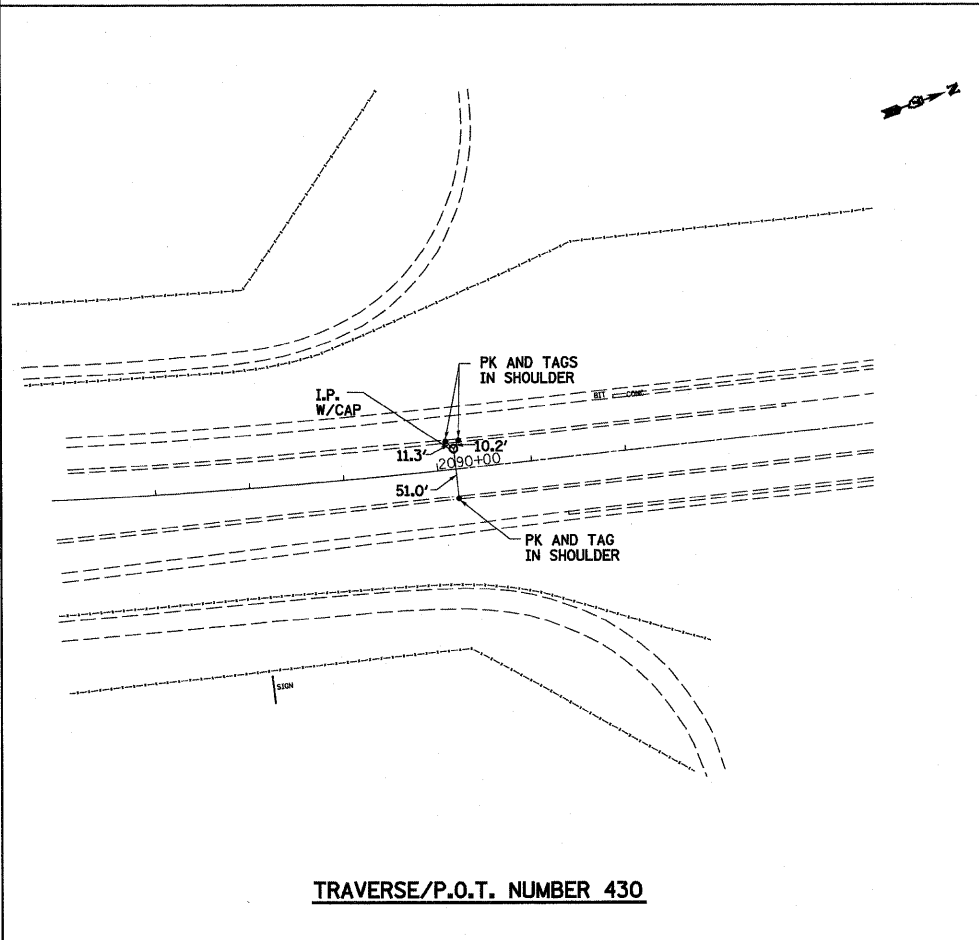
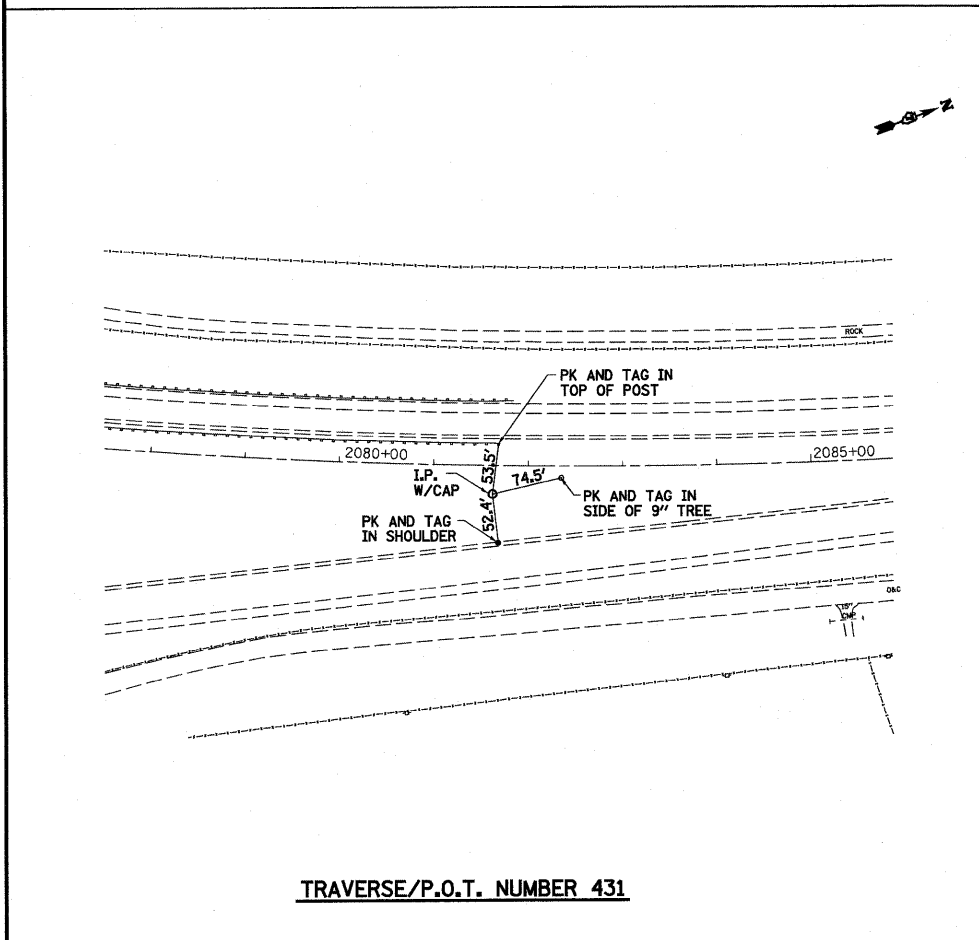
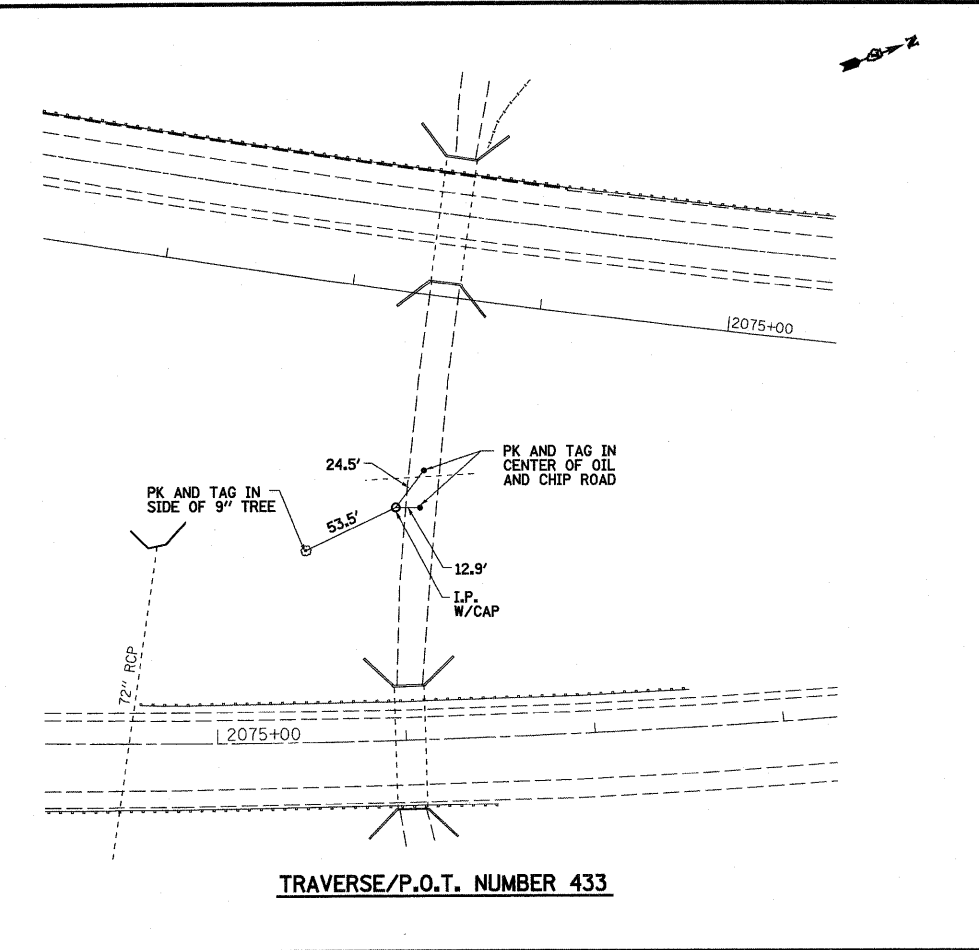
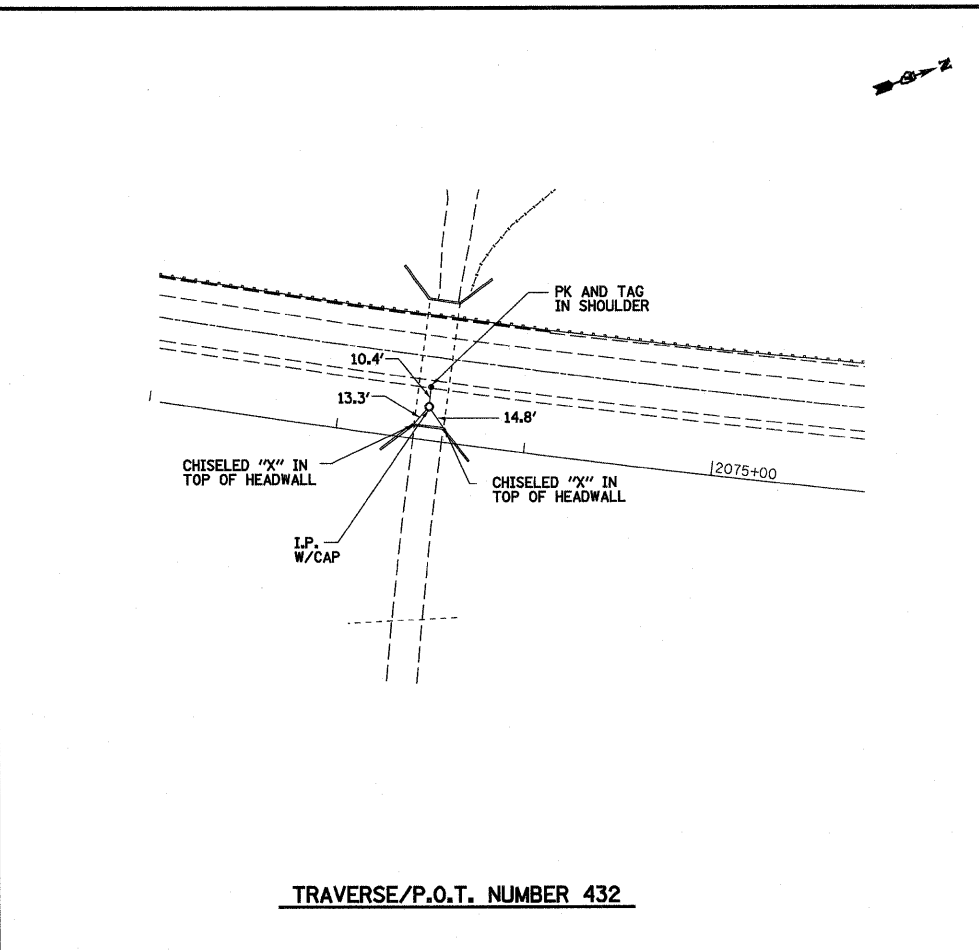
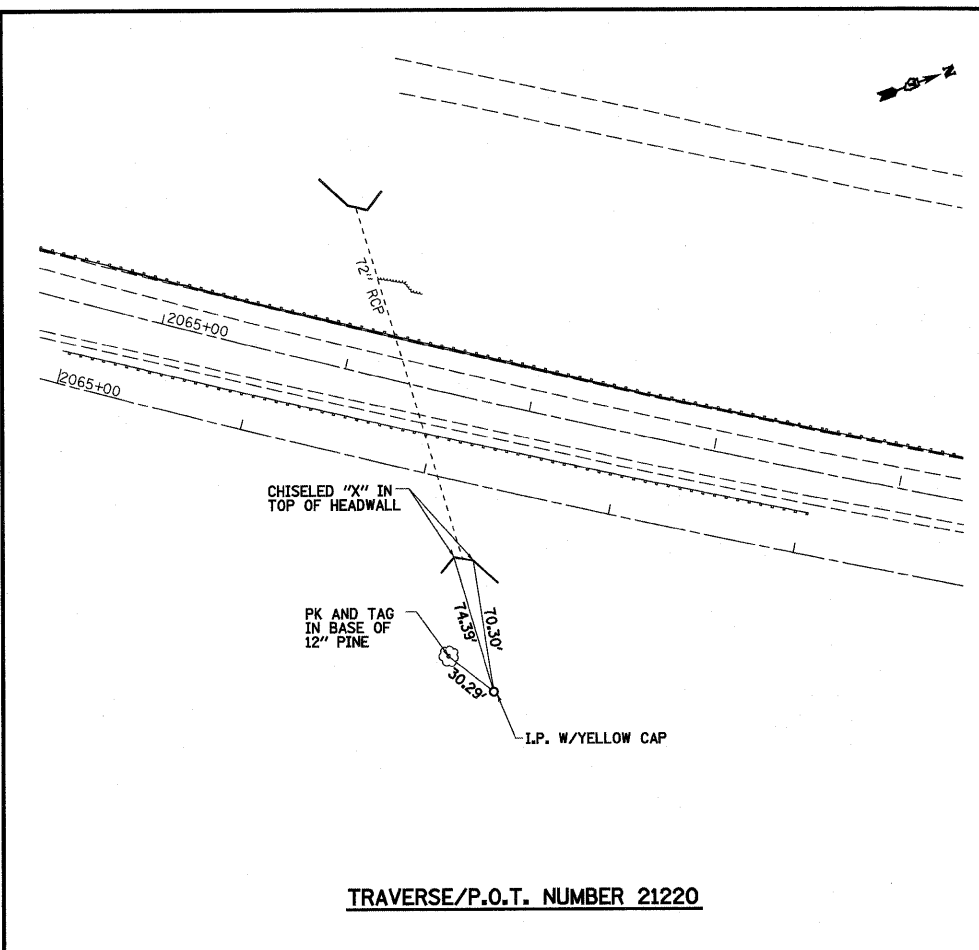


TRAVERSE/P.O.T. NUMBER 434



TRAVERSE/P.O.T. NUMBER 437

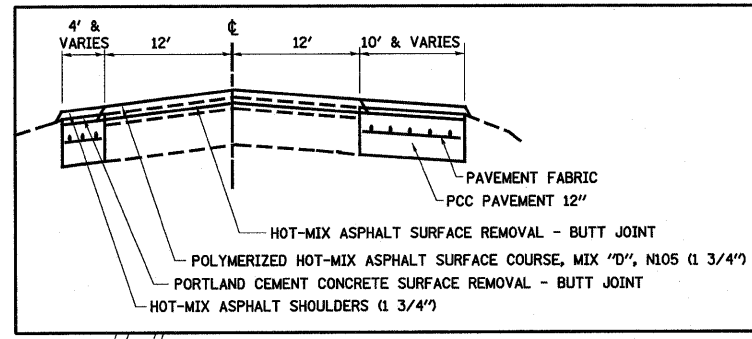
FILE NAME =	USER NAME =	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TIE POINTS, FAI ROUTES 57/70			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\Projects\435\435-01-01\Drawings\Roadway\TiePoints\TiePoints.dwg		DRAWN - MAB	REVISED -					57/70	(25-3)BR	EFFINGHAM	1416	1348
PLOT SCALE =	CHECKED - BRM	REVISED -	REVISED -					CONTRACT NO. 74296				
PLOT DATE =	DATE - 1-21-09	REVISED -	REVISED -					FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				
				SCALE: 1"=50'			SHEET NO. 5 OF 6 SHEETS	STA.	TO STA.			



FILE NAME =	USER NAME =	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TIE POINTS, FAI ROUTES 57/70			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\Projects\483\8007237\70\dwg\tr\Report\Draw\Tie.stb		DRAWN - MAB	REVISED -		57/70	(25-3)BR	EFFINGHAM	1416	1349			
PLOT SCALE =	CHECKED - BRM	REVISED -	SCALE: 1"=50'		SHEET NO. 6 OF 6 SHEETS	STA.	TO STA.	CONTRACT NO. 74296				
PLOT DATE =	DATE - 1-21-09	REVISED -					FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				

DATE	
BY	
PLAN	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NO.	
NOTE BOOK	
NO.	
RT. OF WAY CHECKED	
NO.	
PAV. FILE NAME	

DATE	
BY	
PROFILE	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NO.	
NOTE BOOK	
NO.	
STRUCTURE NOTATIONS OK'D	



SECTION A-A

I-57 SOUTHBOUND ROADWAY C
 PI STA. = 5032+51.28
 $\Delta = 41^\circ 08' 08''$ (RT)
 $D = 3^\circ 10' 09''$
 $R = 1,807.88'$
 $T = 678.38'$
 $L = 1,297.97'$
 $E = 123.08'$
 $e = 6.02'$
 P.C. STA. = 5025+72.90
 P.T. STA. = 5038+70.87

EXISTING PAVED SHOULDER TO BE REMOVED AND RECONSTRUCTED WITH PORTLAND CEMENT CONCRETE PAVEMENT 12" FOR STAGE CONSTRUCTION OPERATIONS. PCC PAVEMENT TO REMAIN AFTER STAGE CONSTRUCTION OPERATIONS.

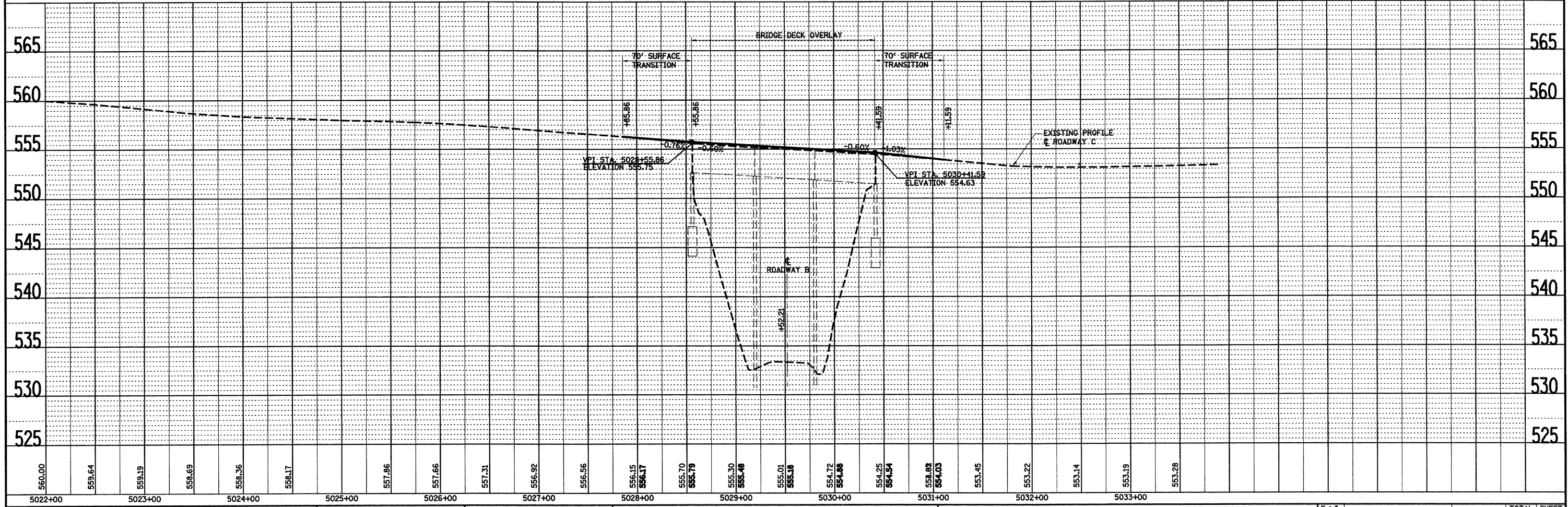
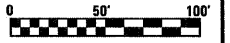
LOCATION 1
 STA 5029+52.21 (ROADWAY C)
 EXISTING 3 SPAN STRUCTURE TO BE REPAIRED INCLUDING A MICROSILICA OVERLAY, BEARING REPLACEMENT, SEISMIC CABLE RESTRAINERS AND MISCELLANEOUS CONCRETE REPAIR.
 SN 025-0001

EXISTING PAVED SHOULDER TO BE REMOVED AND RECONSTRUCTED WITH PORTLAND CEMENT CONCRETE PAVEMENT 12" FOR STAGE CONSTRUCTION OPERATIONS. PCC PAVEMENT TO REMAIN AFTER STAGE CONSTRUCTION OPERATIONS.

NOTE:
 FOR ROADWAY C RECONSTRUCTION AND RESURFACING PLANS SEE SET 2 OF 3 PLANS

NOTE:
 TRAFFIC CONTROL AND PROTECTION FOR ROADWAY B SHALL BE IN ACCORDANCE WITH STANDARDS 701101 AND 701106 AND/OR 701400 AND 701401 AS DIRECTED BY THE ENGINEER.

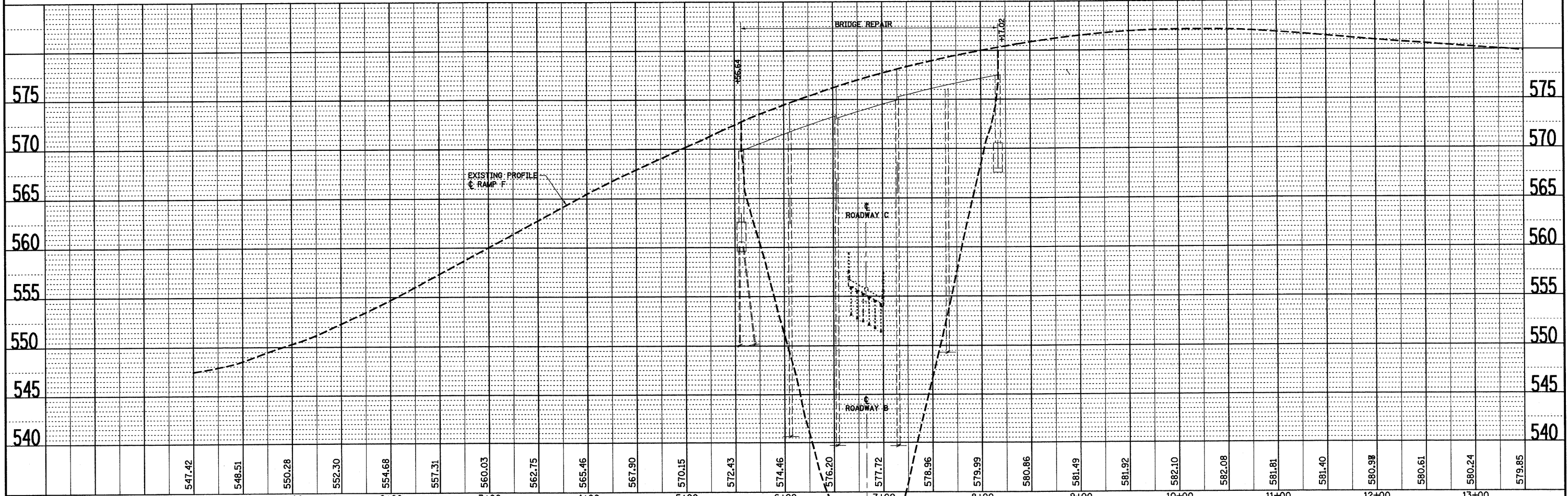
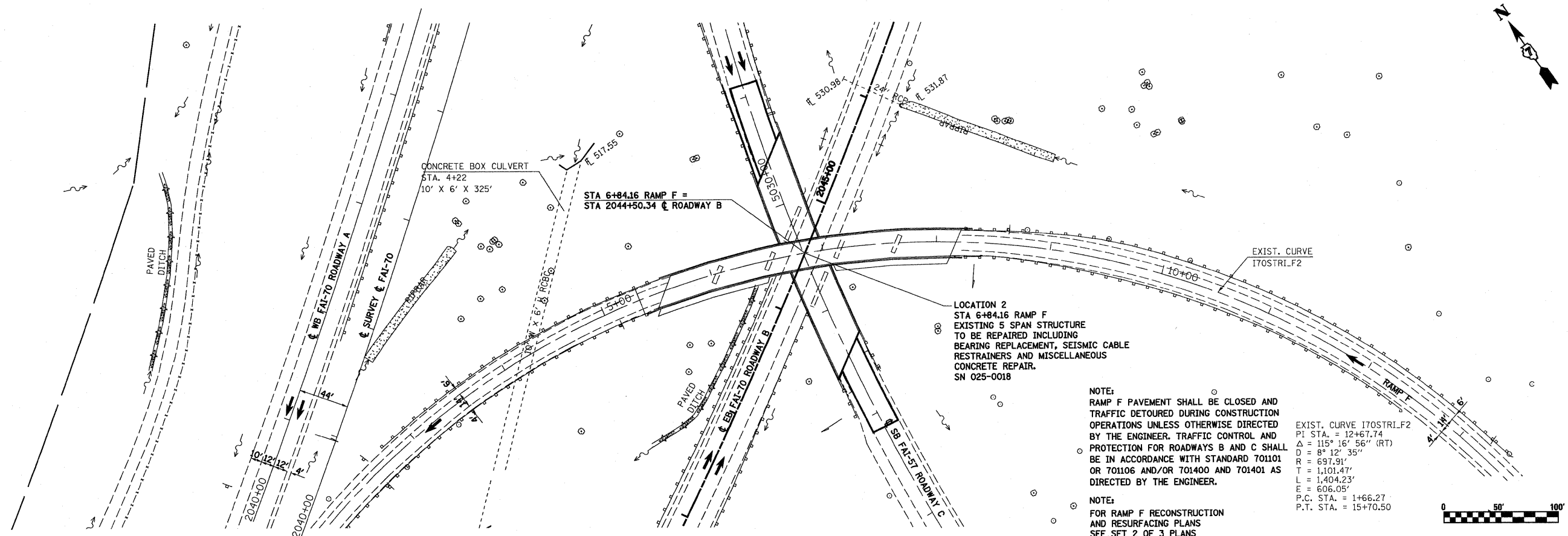
FOR TRAFFIC CONTROL AND STAGE CONSTRUCTION OPERATIONS, SEE MAINTENANCE OF TRAFFIC DETAILS.



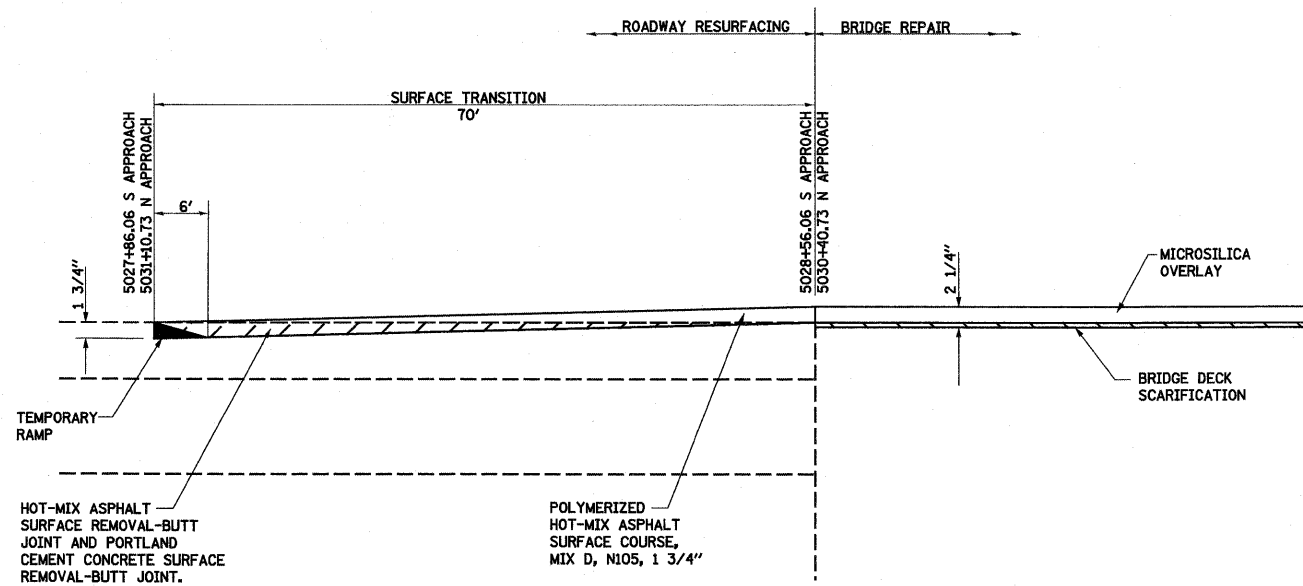
FILE NAME =	USER NAME = paul	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION 1 PLAN AND PROFILE, SOUTH TRI LEVEL, ROADWAY C		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\Projects\403-00072-57-70\dgn\3P Repdr\South\57-70\ pavement C.dgn	PLANNED - PDB	REVISED -	REVISED -		57/70	(25-3)BR	EFFINGHAM	1416	1350		
PLLOT SCALE = 1/80.0000' / IN.	CHECKED - BRM	REVISED -	REVISED -		CONTRACT NO. 74296						
PLLOT DATE = 2/11/2010	DATE - 7-21-08	REVISED -	REVISED -		SCALE: 1"=50'	SHEET NO. 1 OF 2 SHEETS	STA. 5025+72.90 TO STA. 5040+00.00	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT	

DATE	
BY	
SURVEYED	CHECKED
ALIGNED	BY
NOTE BOOK	NO.
FILE NAME	

DATE	
BY	
SURVEYED	CHECKED
ROADS	BY
NOTE BOOK	NO.
STRUCTURE	NOTATIONS



FILE NAME =	USER NAME = paul	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	LOCATION 2 PLAN AND PROFILE, SOUTH TRI LEVEL, RAMP F		F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
SV\projects\102-00072-27-01\plan\102-00072-27-01-001.dwg		DRAWN - PDB	REVISED -		57/70	(25-3)BR	EFFINGHAM	1416	1351			
PLOT SCALE = 1/80.0002' / IN.		CHECKED - BRM	REVISED -		SCALE: 1"=50'		SHEET NO. 2 OF 2 SHEETS		STA. 15+50.00 TO STA. 13+50.00		CONTRACT NO. 74296	
PLOT DATE = 2/11/2010		DATE - 7-21-08	REVISED -		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							



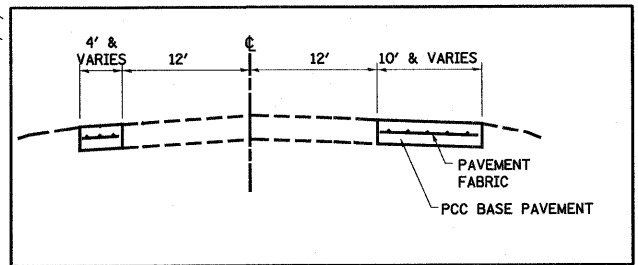
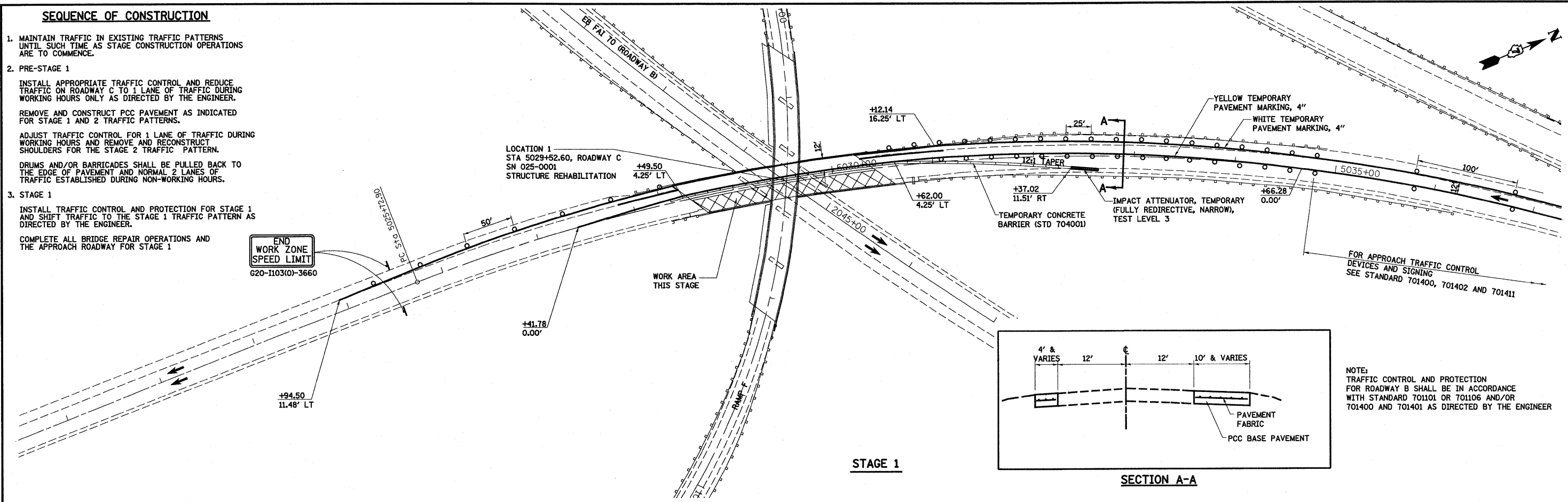
**SURFACE TRANSITION DETAIL
SOUTH TRI-LEVEL
ROADWAY C**

FILE NAME =	USER NAME = paul	DESIGNED - JWS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SURFACE TRANSITION DETAIL			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S:\projects\103-00072-57-70.dgn\Report\South\surface trans detail.dgn		DRAWN - PDB	REVISED -					57/70	(25-3)BR	EFFINGHAM	1416	1352
PLOT SCALE = 40.0000' / IN.		CHECKED - BRM	REVISED -		SCALE: 1"=20'			CONTRACT NO. 74296				
PLOT DATE = 2/11/2010		DATE - 8-6-08	REVISED -		SHEET NO. 1 OF 1 SHEETS			ILLINOIS FED. AID PROJECT				

SEQUENCE OF CONSTRUCTION

1. MAINTAIN TRAFFIC IN EXISTING TRAFFIC PATTERNS UNTIL SUCH TIME AS STAGE CONSTRUCTION OPERATIONS ARE TO COMMENCE.
2. PRE-STAGE 1
INSTALL APPROPRIATE TRAFFIC CONTROL AND REDUCE TRAFFIC ON ROADWAY C TO 1 LANE OF TRAFFIC DURING WORKING HOURS ONLY AS DIRECTED BY THE ENGINEER.
REMOVE AND CONSTRUCT PCC PAVEMENT AS INDICATED FOR STAGE 1 AND 2 TRAFFIC PATTERNS.
ADJUST TRAFFIC CONTROL FOR 1 LANE OF TRAFFIC DURING WORKING HOURS AND REMOVE AND RECONSTRUCT SHOULDERS FOR THE STAGE 2 TRAFFIC PATTERN.
DRUMS AND/OR BARRICADES SHALL BE PULLED BACK TO THE EDGE OF PAVEMENT AND NORMAL 2 LANES OF TRAFFIC ESTABLISHED DURING NON-WORKING HOURS.
3. STAGE 1
INSTALL TRAFFIC CONTROL AND PROTECTION FOR STAGE 1 AND SHIFT TRAFFIC TO THE STAGE 1 TRAFFIC PATTERN AS DIRECTED BY THE ENGINEER.
COMPLETE ALL BRIDGE REPAIR OPERATIONS AND THE APPROACH ROADWAY FOR STAGE 1

END WORK ZONE SPEED LIMIT
G20-1103(0)-3660



NOTE:
TRAFFIC CONTROL AND PROTECTION FOR ROADWAY B SHALL BE IN ACCORDANCE WITH STANDARD 701101 OR 701106 AND/OR 701400 AND 701401 AS DIRECTED BY THE ENGINEER

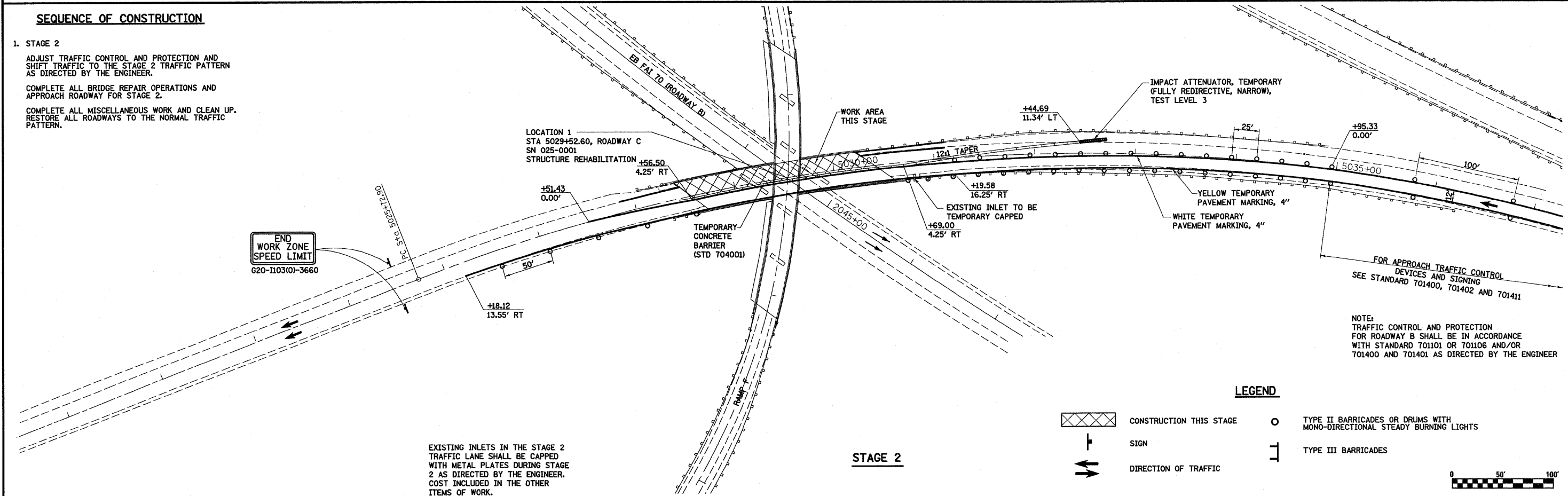
STAGE 1

SECTION A-A

SEQUENCE OF CONSTRUCTION

1. STAGE 2
ADJUST TRAFFIC CONTROL AND PROTECTION AND SHIFT TRAFFIC TO THE STAGE 2 TRAFFIC PATTERN AS DIRECTED BY THE ENGINEER.
COMPLETE ALL BRIDGE REPAIR OPERATIONS AND APPROACH ROADWAY FOR STAGE 2.
COMPLETE ALL MISCELLANEOUS WORK AND CLEAN UP. RESTORE ALL ROADWAYS TO THE NORMAL TRAFFIC PATTERN.

END WORK ZONE SPEED LIMIT
G20-1103(0)-3660

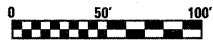


NOTE:
TRAFFIC CONTROL AND PROTECTION FOR ROADWAY B SHALL BE IN ACCORDANCE WITH STANDARD 701101 OR 701106 AND/OR 701400 AND 701401 AS DIRECTED BY THE ENGINEER

STAGE 2

LEGEND

- CONSTRUCTION THIS STAGE
- TYPE II BARRICADES OR DRUMS WITH MONO-DIRECTIONAL STEADY BURNING LIGHTS
- SIGN
- TYPE III BARRICADES
- DIRECTION OF TRAFFIC



EXISTING INLETS IN THE STAGE 2 TRAFFIC LANE SHALL BE CAPPED WITH METAL PLATES DURING STAGE 2 AS DIRECTED BY THE ENGINEER. COST INCLUDED IN THE OTHER ITEMS OF WORK.

FILE NAME =	USER NAME = paul	DESIGNED - JWS	REVISED -
S:\Projects\403-00072-57-70\dgn\Br Repair\South\1103_52.STP Roadway C.dgn		DRAWN - PDB	REVISED -
PLOT SCALE = 1/80,0000' / IN.		CHECKED - BRM	REVISED -
PLOT DATE = 2/12/2010		DATE - 7-21-08	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

LOCATION 1	
MAINTENANCE OF TRAFFIC, SOUTH TRI LEVEL ROADWAY C	
SCALE: 1"=50'	SHEET NO. 1 OF 1 SHEETS
STA. TO STA.	

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57/70	(25-3)BR	EFFINGHAM	1416	1353
CONTRACT NO. 74296				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

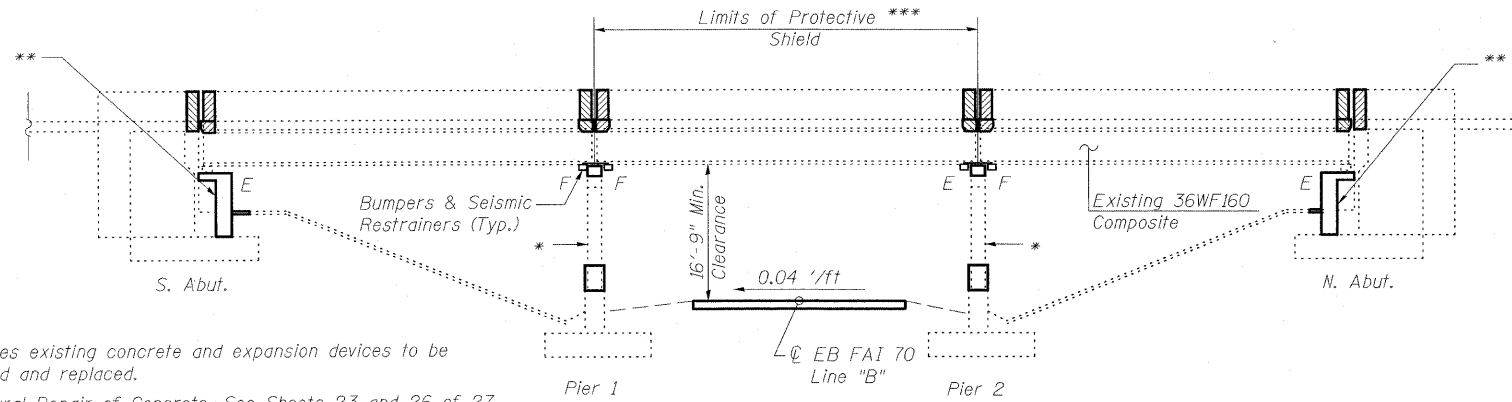
Bench Mark: Chiseled "□" Top of parapet wall at Southeast Corner of I-57 SB (Level 2) Bridge Elev. 557.27

Existing Structure: #025-0001 Constructed in 1960 & reconstructed in 1992 is 185'-7³/₄" BK to BK of abutments & 35'-8" out to out. The structure consists of three simple spans supported on hammer head piers and spill through abutments. The superstructure is a reinforced concrete deck that is composite with 36" deep steel wide flange beams. One lane of traffic shall be maintained using staged construction.

No salvage.

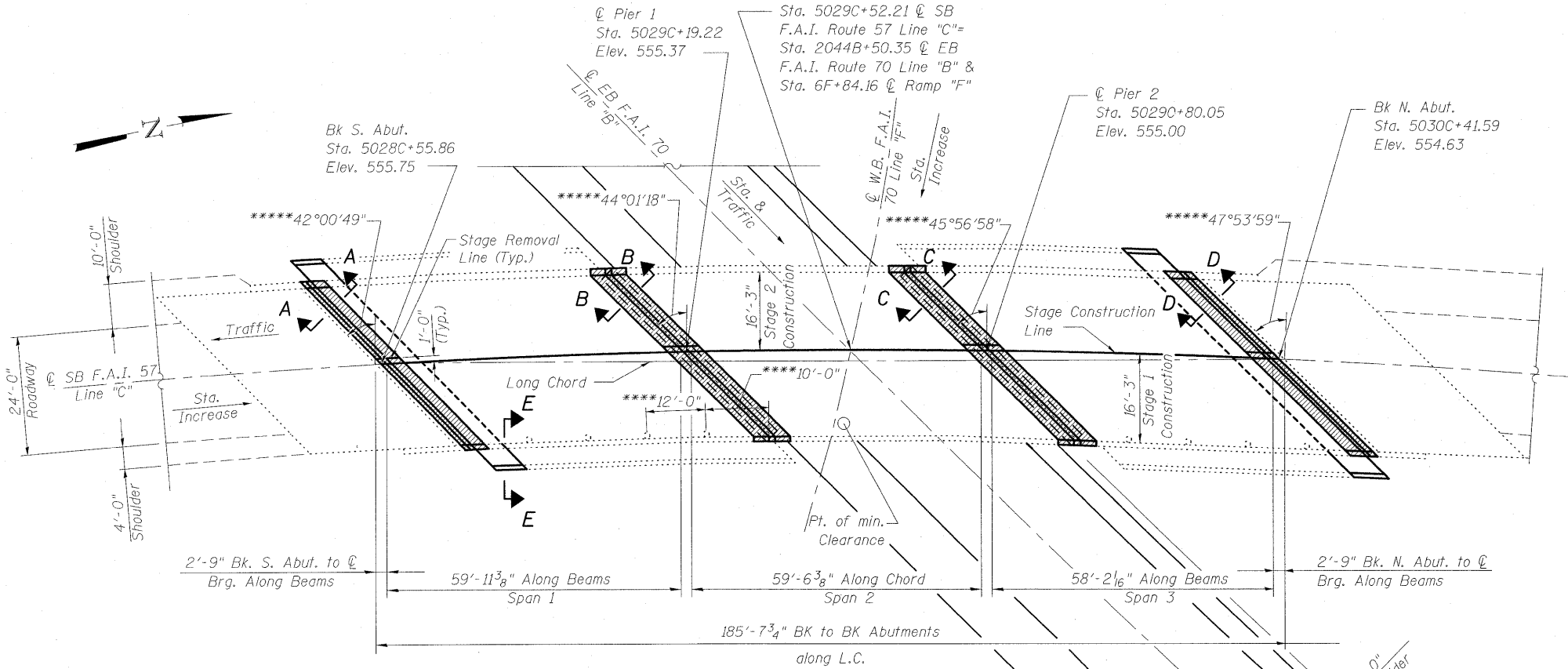
INDEX OF SHEETS

1. General Plan
2. General Data
3. General Information
4. Concrete Removal & Deck Slab Repair Superstructure
5. Superstructure
6. Superstructure Slab Repair Details
7. Superstructure Bill of Materials & Parapet Details
8. Preformed Joint Strip Seal
9. Neoprene Expansion Joints
10. Bar Splicer Assembly Details
11. Seismic Restrainer & Bracket Details
- 12.-13. Bumper Details
14. Bearing Details
15. Concrete Removal & Repair South Abutment
16. South Abutment Details
17. South Abutment Sections
18. Concrete Removal & Repair North Abutment
19. North Abutment Details
20. North Abutment Sections
21. Pier 1 General Plan
22. Pier 1 Details
23. Pier 1 Repair Details
24. Pier 2 General Plan
25. Pier 2 Details
26. Pier 2 Repair Details
27. Existing Steel Paint Details Steel Bridge No. 1



ELEVATION

- ▨ Indicates existing concrete and expansion devices to be removed and replaced.
- * Structural Repair of Concrete. See Sheets 23 and 26 of 27 for Limits of concrete repair.
- ** Limits of Unsound Concrete Removal and cleaning of existing rebars. See Sheet 15 and 18 of 27 for limits of repair.
- *** See sheet 5 of 27 for transverse limits.



PLAN

For sections A-A, B-B, C-C, D-D and E-E See Sheet 3 of 27.

DESIGN SPECIFICATIONS

- 2002 AASHTO Standard Specifications for Highway Bridges
- 1995 F.H.W.A. Seismic Retrofitting Manual for Highway Bridges
- 2006 F.H.W.A. Seismic Retrofitting Manual for Highway Structures Part 1-Bridges (Reference Only)

SEISMIC DATA

Seismic Performance Category (SPC) = B
Bedrock Acceleration Coefficient (A) = 0.075 g
Site Coefficient = 1.0

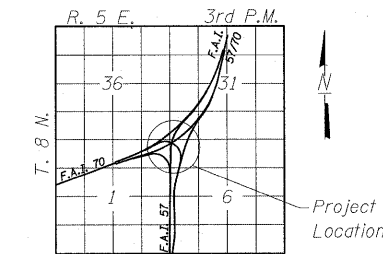
- **** Existing floor drains @ ±12'-0" on center and 10'-0" clr. from all substructure elements. No drains in Span 2.
- **** Skew angle measured to tangent at intersection of & roadway & substructure.

DESIGN STRESSES

- New Construction**
 - f'c = 3,500 psi
 - fy = 60,000 psi (Reinforcement)
 - fy = 50,000 psi (Structural Steel)
 - (AASHTO M270 Grade 50)
- Existing Structure**
 - f'c = 3500 psi
 - fy = 40,000 psi (Sub) (Reinforcement)
 - fy = 33,000 psi (Structural Steel)
 - fy = 60,000 psi (Super) (Reinforcement)

LOADING HS20-44 & ALT.

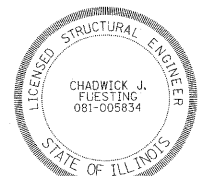
No Future Wearing Surface



LOCATION SKETCH

GENERAL PLAN
SOUTHBOUND F.A.I. ROUTE 57
OVER EASTBOUND
F.A.I. ROUTE 57-70
STATION 5029C+52.21
STRUCTURE NO. 025-0001

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



EXP. 11-30-2010
Chadwick J. Fleesting 4/29/2010

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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

Illinois Design Firm Number 184.001670



BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Merrville, IL 62962-5655
Local (618) 298-4665
Fax 618-298-4666

SHEET NO. 1 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)-2	EFFINGHAM	1416	1355
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUB			TOTAL
		SUPER	ABUT.	PIER	
Concrete Removal	Cu. Yd.	33.0	11.0		44.0
Protective Shield	Sq. Yd.	244			244
Concrete Structures	Cu. Yd.		28.0	21.8	49.8
Concrete Superstructure	Cu. Yd.	42.9			42.9
Bridge Deck Grooving	Sq. Yd.	652			652
Protective Coat	Sq. Yd.	819			819
Furnishing & Erecting Structural Steel	Pound	7466			7466
Reinforcement Bars, Epoxy Coated	Pound	5550	3620	3000	12170
Bar Splicers	Each	56	22	8	86
Slopedwall, 4"	Sq. Yd.		48		48
Preformed Joint Strip Seal	Foot	91			91
Neoprene Expansion Joint, 2"	Foot	111			111
Elastomeric Bearing Assembly Type I	Each	18			18
Anchor Bolts, 1"	Each	36			36
Anchor Bolts, 1/4"	Each	72			72
Concrete Sealer	Sq. Ft.		1456	482	1938
Seismic Restrainer	Each	12			12
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.		65	323	388
Jack & Remove Existing Bearings	Each	18			18
Bridge Deck Microsilica Concrete Overlay, 2 1/4"	Sq. Yd.	591			591
Concrete Bridge Deck Scarification, 1/2"	Sq. Yd.	652			652
Slopedwall Removal	Sq. Yd.		59		59
Structure Excavation	Cu. Yd.		24		24
Rubbed Finish	Sq. Ft.			323	323
Cleaning and Painting Steel Bridge No. 1	L. Sum		1		1
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	14.0			14.0
Unsound Concrete Removal	Sq. Yd.		8.9	1.9	10.8
Containment and Disposal of Non-Lead Paint Cleaning Residues, Location 1	L. Sum				1

GENERAL NOTES

Fasteners shall be AASHTO M164 Type 1, mechanically galvanized bolts. Bolts 7/8" φ, holes 15/16" φ, unless otherwise noted.
All structural steel shall be AASHTO M 270 Grade 50.
Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.
Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that can not be removed by grinding 1/4 in deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Concrete Sealer shall be applied to the designated areas of the abutments and piers.
No field welding is permitted except as specified in the contract documents.

The existing structural steel does not contain lead paint.
Cleaning and painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning - SSPC-SP10 shall be painted according to the requirements of Paint System 1 - OZ/E/U.

The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No. 5B 7/1.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field.

The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams, brackets and bumper steel shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

See sheet 5 of 27 for Stage Construction.

Any reinforcement bars damaged during Concrete Removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

The Contractor is advised that cribbing may be necessary to support the existing structure during the replacement of the bearings and the reconstruction of the concrete bearing seats at the North and South Abutments & Pier 2 supporting Span 2 only. Cost included with Jack and Remove Existing Bearings.

SCOPE OF WORK

1. Install temporary cribbing & shoring system to support bridge dead & live loads. Jacking and cribbing required at North & South Abutments & Pier 2 supporting span 2 only. (see sheet 14 of 27)
2. Remove the existing bearings and bearing extensions at each abutment.
3. Extend the abutment cap heights and seat widths, and perform concrete repair.
4. Install new elastomeric bearings at abutments.
5. Construct new elevated pier cap at Pier 1. The pier cap extension should encase the existing bolster supporting spans 1 and 2.
6. Remove and replace the existing bearings supporting span two at Pier 2.
7. Construct new elevated pier cap at Pier 2. The pier cap extension should encase the existing bolster supporting span 3 at Pier 2. Install side retainer at Pier 2.
8. Install new elastomeric bearings for span 2 at Pier 2.
9. Install Bumper & Cable assemblies at all piers.
10. Complete Structural Repair of Concrete on the piers, Rubbed Finish & construct crashwalls.
11. Remove and replace the existing expansion joints.
12. Scarify Existing Deck 1/2".
13. Complete Deck Slab Repairs.
14. Apply a microsilica overlay over entire deck.
15. Clean & Paint Structure at designated locations.

GENERAL DATA
STRUCTURE NO. 025-0001

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

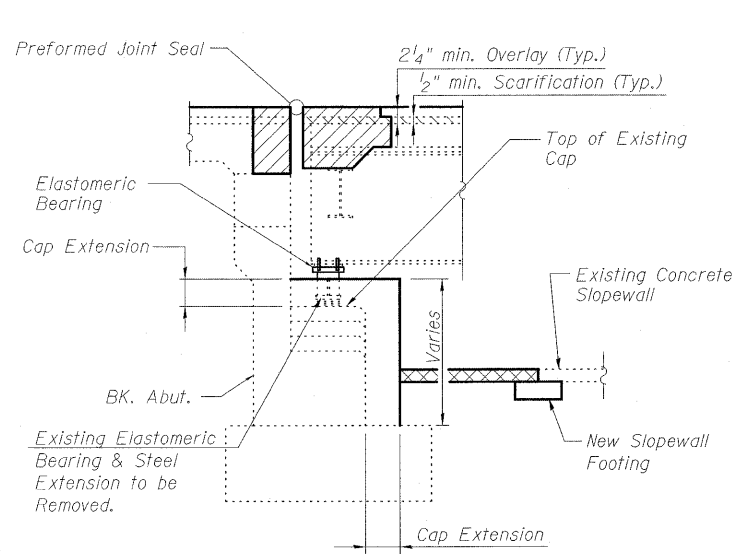


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

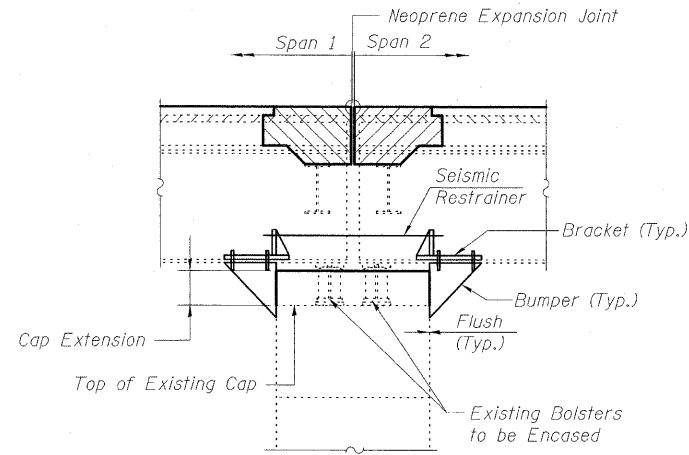
3 Oak Drive
Maryville, IL 62962-5655
Local (618) 298-4665
Fax 618-298-4666

SHEET NO. 2 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)-I-2	EFFINGHAM	1416	1356
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

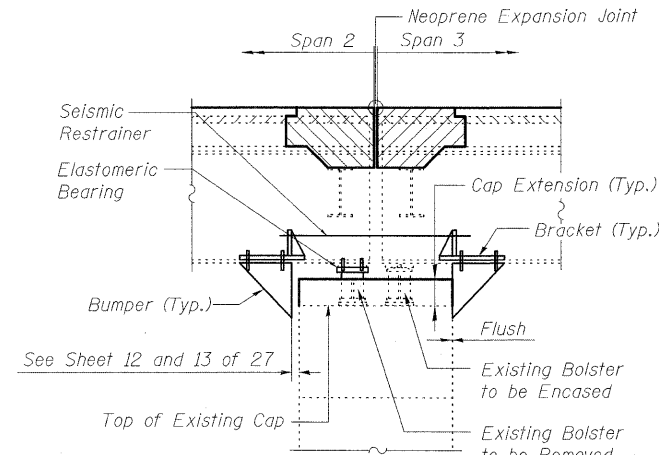
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



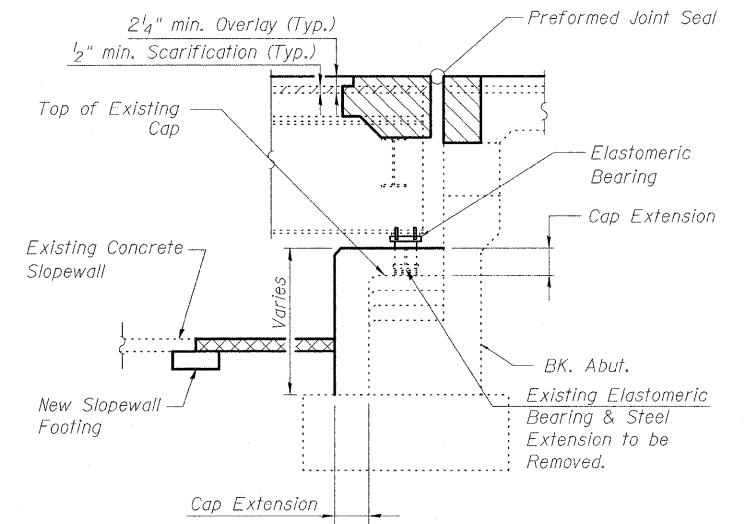
SECTION A-A



SECTION B-B

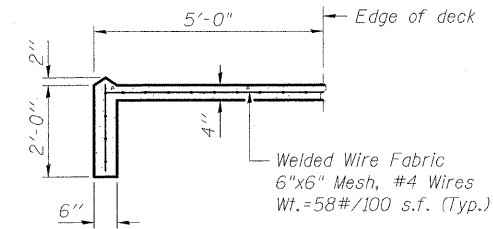


SECTION C-C

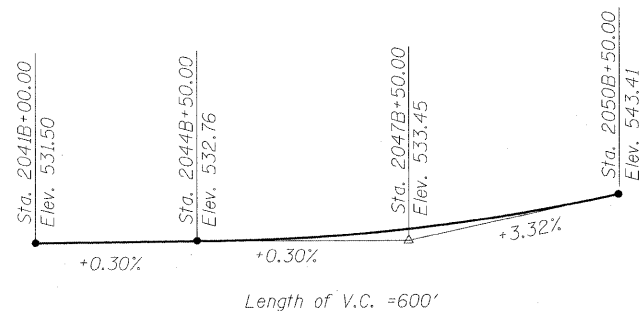


SECTION D-D

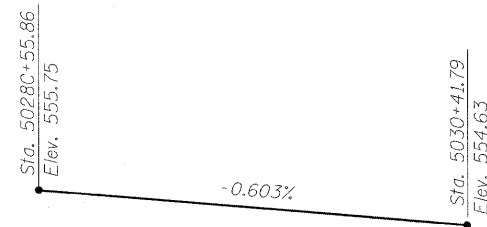
Indicates Removal and Replacement of Concrete Slopewall
Indicates Removal and Replacement of Concrete and Existing Neoprene Expansion Joints



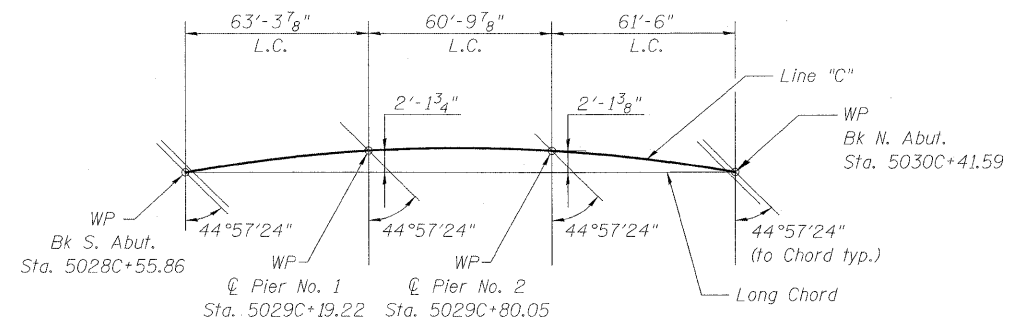
SECTION E-E



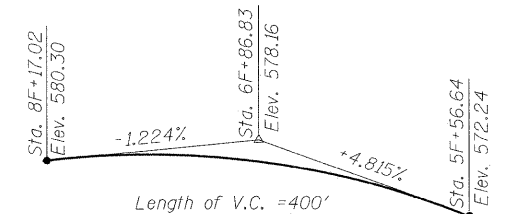
PROPOSED PROFILE GRADE
(F.A.I. Route 70 Line "B")



PROPOSED PROFILE GRADE
(F.A.I. Route 57 Line "C")



OFFSET SKETCH



PROFILE GRADE
(F.A.I. Route 57 Line "F")

HORIZONTAL CURVE DATA

(Existing)
P.I. Sta. 2057B+83.65 Line "B"
 $\Delta = 61^\circ 25' 59''$ (LT)
 $D = 1^\circ 15' 05''$
 $R = 4578.30'$
 $T = 2720.18'$
 $L = 4908.89'$
 $E = 747.13'$

HORIZONTAL CURVE DATA

(Existing)
P.I. Sta. 5032C+76.40 Line "C"
 $\Delta = 42^\circ 31' 30''$ (RT)
 $D = 3^\circ 10' 09''$
 $R = 1807.88'$
 $T = 703.50'$
 $L = 1341.81'$
 $E = 132.05'$

HORIZONTAL CURVE DATA

(Existing)
P.I. Sta. 12F+67.74 Line "F"
 $\Delta = 115^\circ 16' 56''$ (RT)
 $D = 8^\circ 12' 35''$
 $R = 697.91'$
 $T = 1101.47'$
 $L = 1404.23'$
 $E = 606.05'$

Note:
For Roadway Intersection Plan see Roadway Plans.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

GENERAL INFORMATION
STRUCTURE NO. 025-001

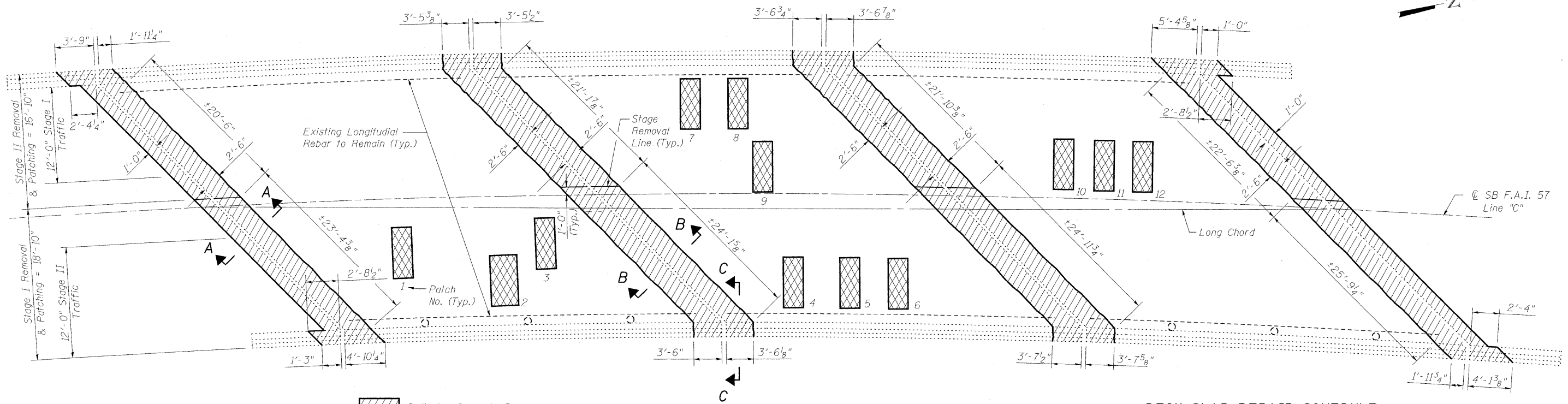
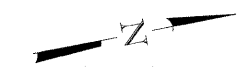
SHEET NO. 3 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1357
		SN 025-0001	CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4696

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Indicates Concrete Removal
 Indicates Deck Slab Repair (Full Depth, Type II)

PLAN

DECK SLAB REPAIR SCHEDULE

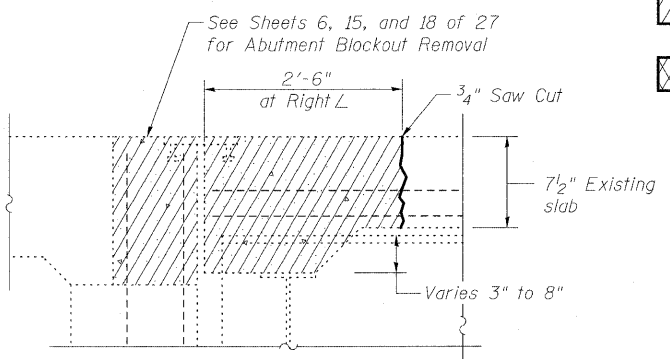
Patch No.	Size	Deck Slab Repair		
		(Part. Depth)	(FD TY I)	(FD TY II)
1	2.0 x 5.0			1.1
2	3.0 x 5.0			1.7
3	2.0 x 5.0			1.1
4	2.0 x 5.0			1.1
5	2.0 x 5.0			1.1
6	2.0 x 5.0			1.1
7	2.0 x 5.0			1.1
8	2.0 x 5.0			1.1
9	2.0 x 5.0			1.1
10	2.0 x 5.0			1.1
11	2.0 x 5.0			1.1
12	2.0 x 5.0			1.1
Total (Sq. Yd.)		0	0	13.8
Use (Sq. Yd.)		0	0	14.0

BILL OF MATERIAL

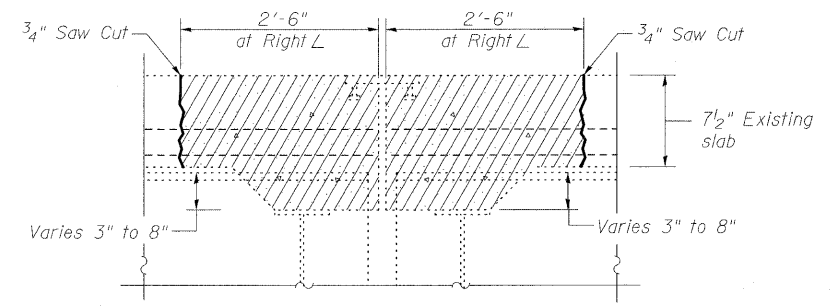
Item	Unit	Total
Concrete Removal	Cu. Yd.	33.0
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	14.0

Notes:
The Deck Slab Repairs shall be completed prior to placement of overlay.
The condition of the deck shall be inspected and surveyed for additional Deck Slab Repairs if the date of construction occurs after April 2012.
The locations and sizes of the Deck Slab Repairs are approximate. Actual locations and sizes are to be determined in the field by the Engineer.
The locations and sizes of the Deck Slab Repairs were determined by a visual survey completed on February 1, 2010.
The Engineer shall record the location of the actual Deck Slab Repair on the As Built Plans.

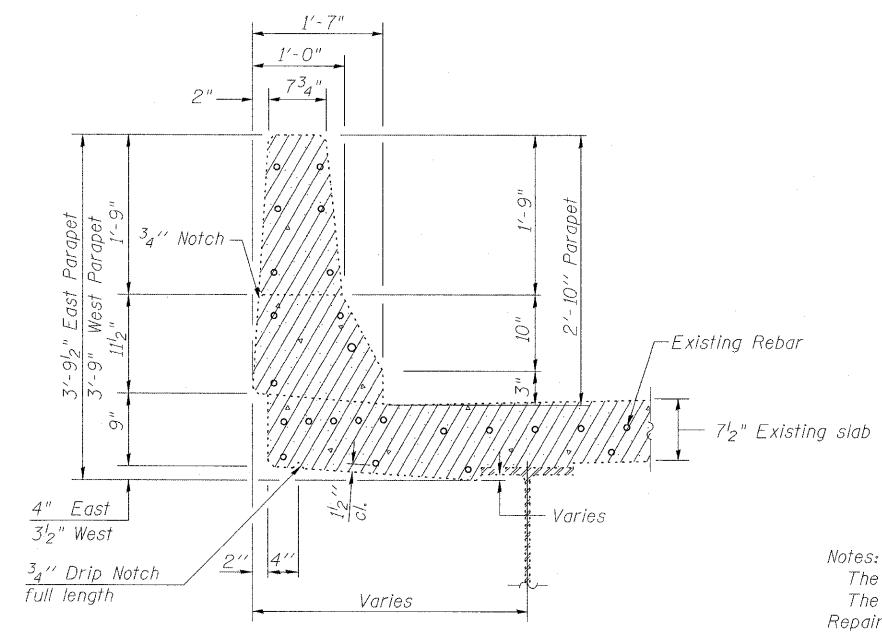
CONCRETE REMOVAL & DECK SLAB REPAIR SUPERSTRUCTURE STRUCTURE NO. 025-001



SECTION A-A



SECTION B-B



SECTION C-C (at Right L)

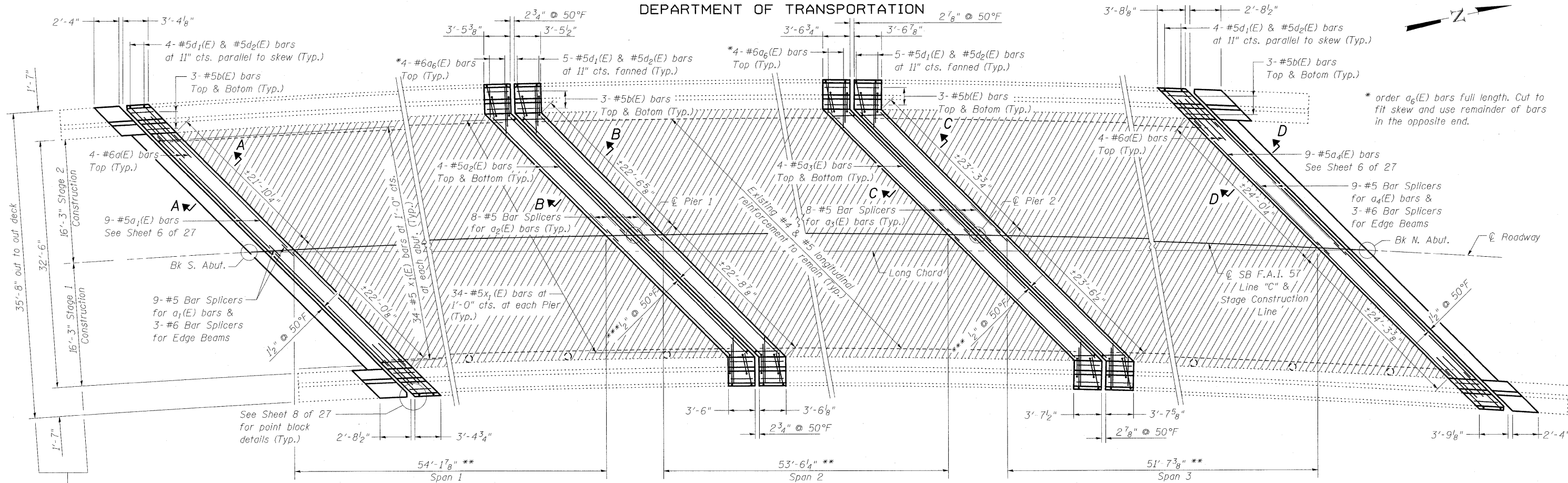
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4666
Fax 618-288-4666

SHEET NO. 4 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1358
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

03/18/2010 3:18:20 AM 102500017.0234.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

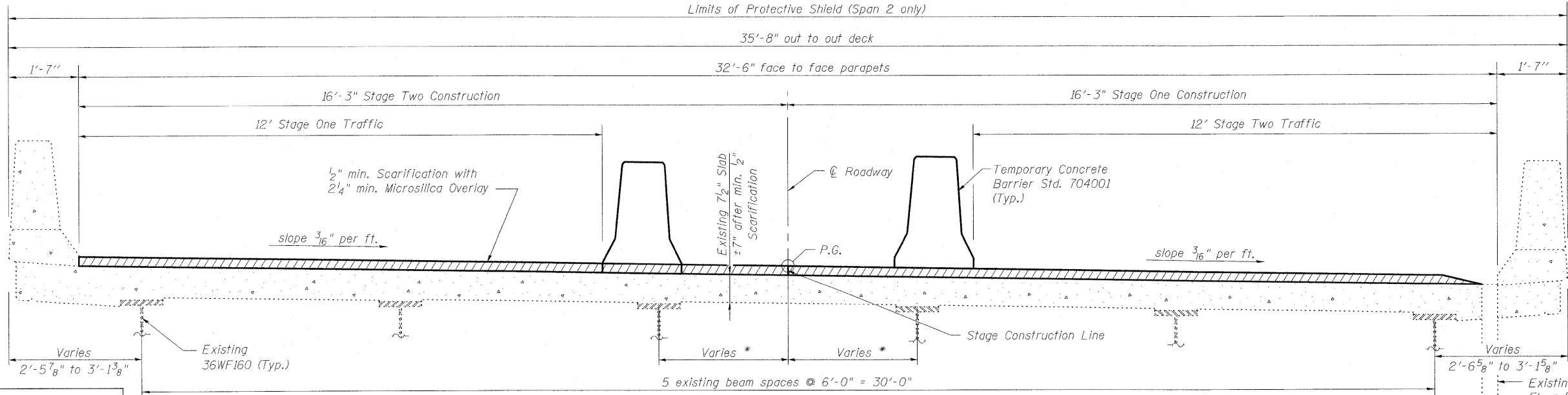


* order $a_6(E)$ bars full length. Cut to fit skew and use remainder of bars in the opposite end.

** Dimensions measured along \varnothing Roadway and Stage Construction Line

*** For Piers 1 & 2, the detailed expansion width of $\frac{1}{2}$ " at 50°F is not standard. The existing field conditions may allow for an increase in expansion width. This increase in width shall be approved by the Engineer.

PLAN



Indicates limits of Scarification and Microsilica Overlay

Notes:
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sheet 8 of 27.
See Sheet 6 of 27 for Sections A-A, B-B, C-C and D-D.
See Sheet 7 of 27 for Section thru parapet.
 $x(E)$ and $a_5(E)$ bars between beams at abutments not shown for clarity. See Sheet 6 of 27 for placement.

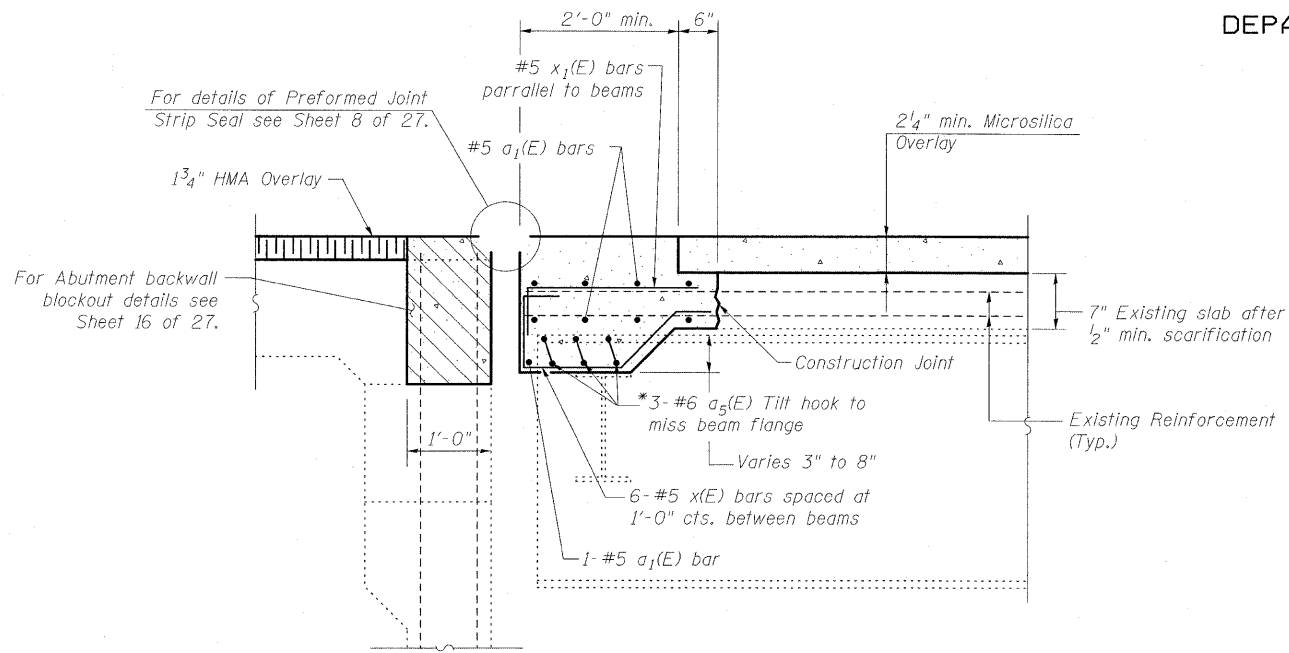
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

* Beams in Span 2 are not parallel.
STAGE CONSTRUCTION
(Looking North)
All dimensions shown are radial

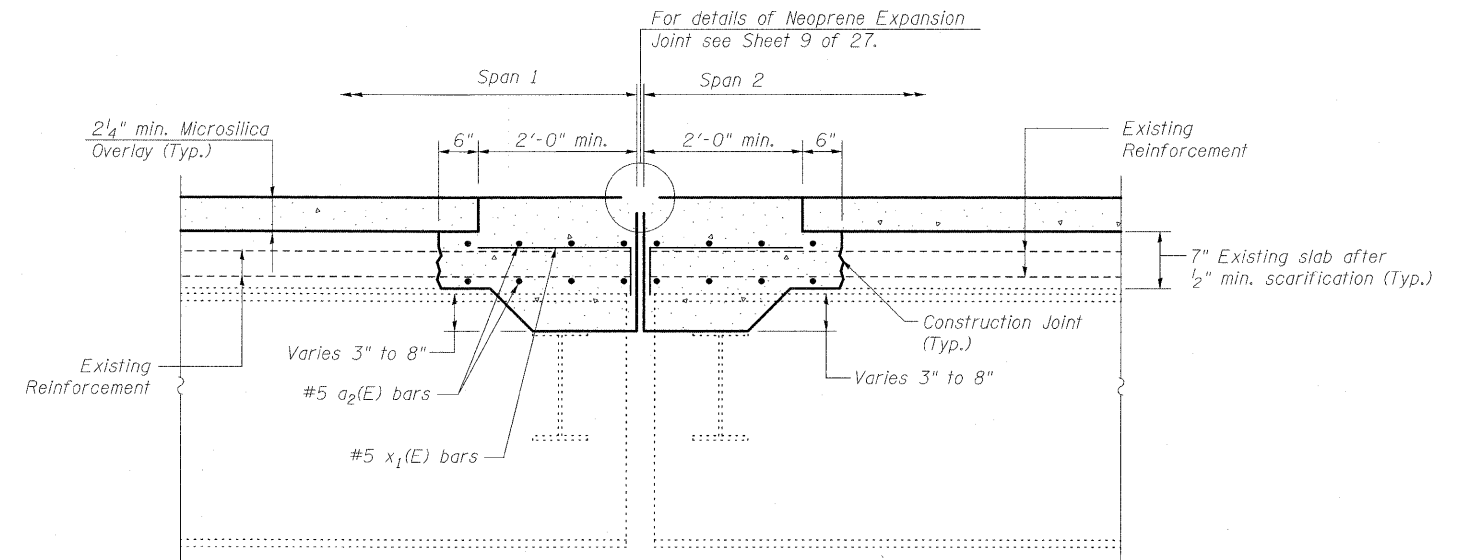
BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62442-6655
Local (618) 298-4665
Fax 618-298-4666

SHEET NO. 5 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)-1-2	EFFINGHAM	1416	1359
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

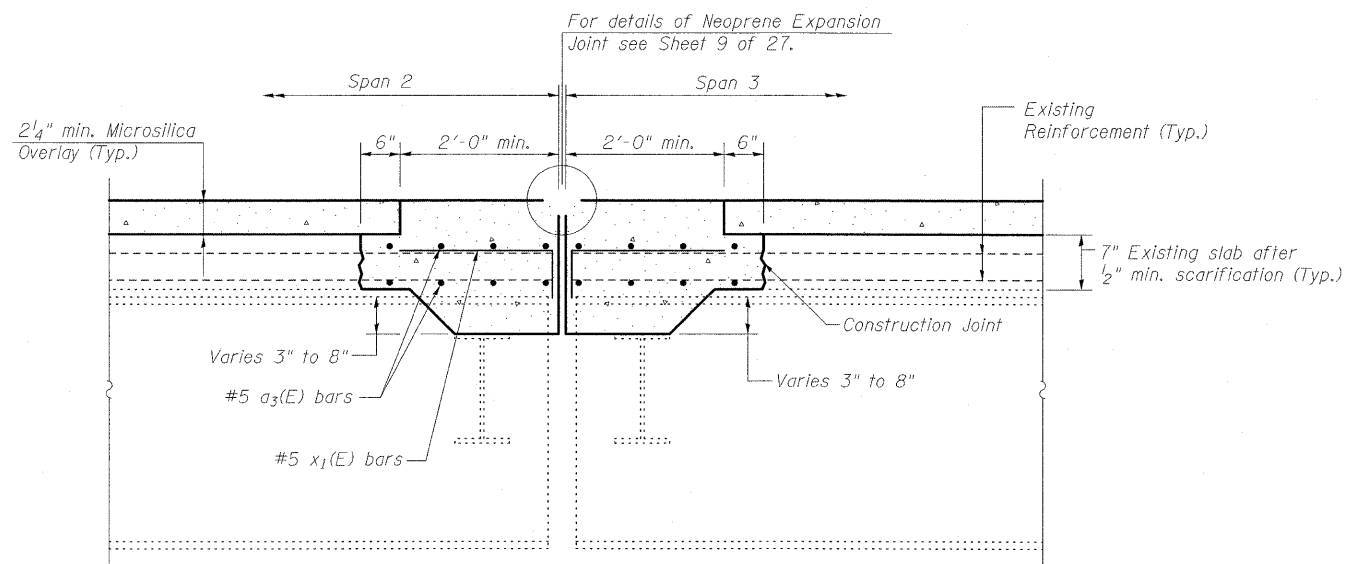
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



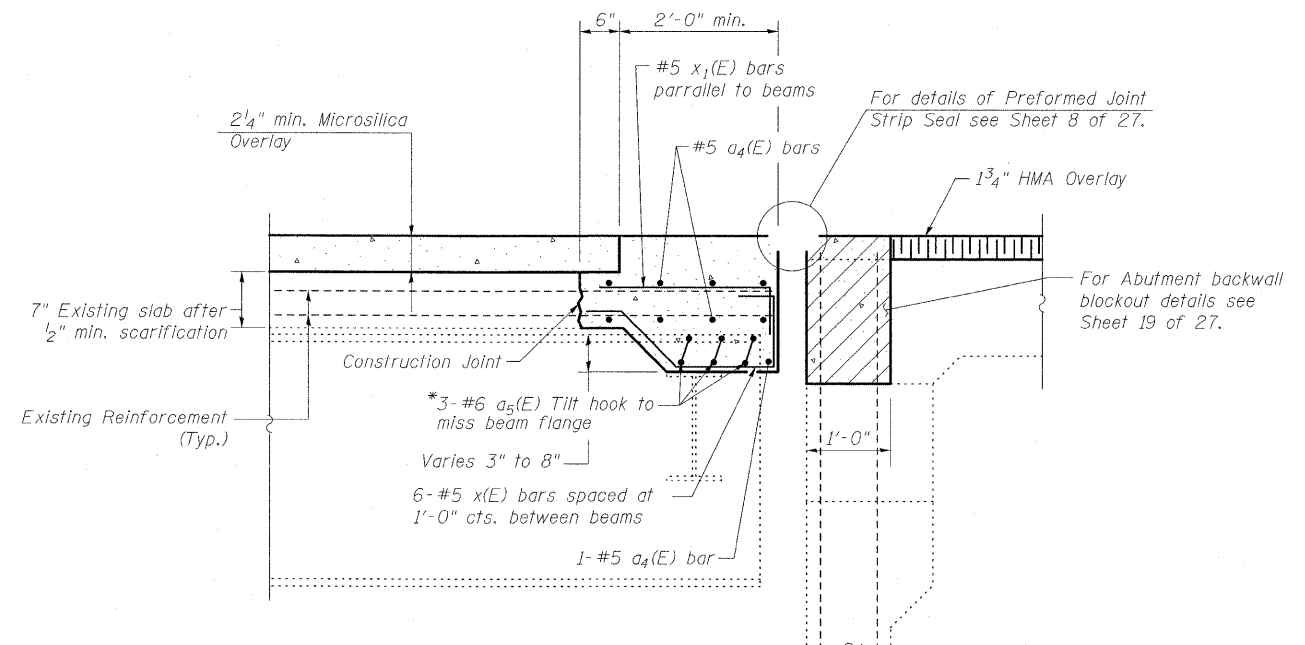
SECTION A-A
(South Abutment)



SECTION B-B
(Pier 1)



SECTION C-C
(Pier 2)



SECTION D-D
(North Abutment)

* Use 3-#6 Bar Splicers for Edge Beams at Stage Construction Joints. See Sheet 10 of 27.

Notes:
Dimensions shown are at right angles to deck joints.
Place x(E) and x1(E) bars parallel to beams.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

**SUPERSTRUCTURE
SLAB REPAIR DETAILS
STRUCTURE NO. 025-0001**

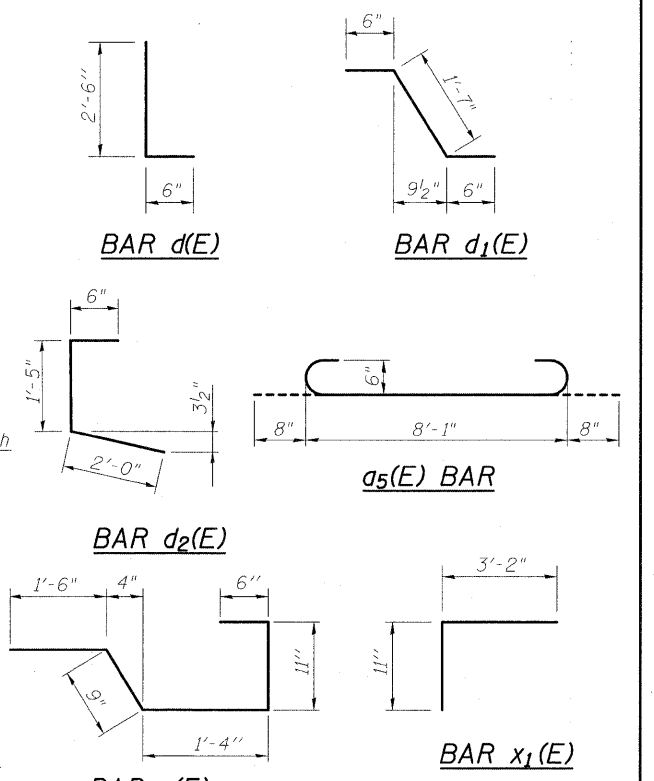
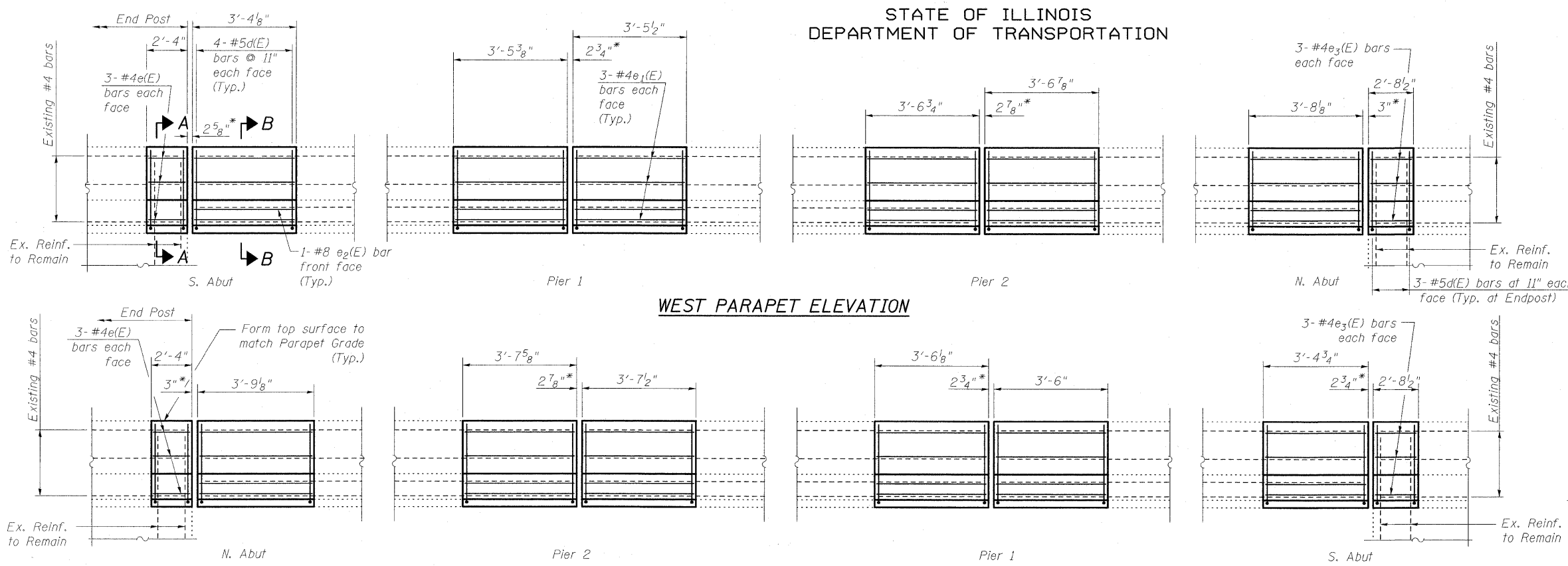


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

8 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 6 27 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1360
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



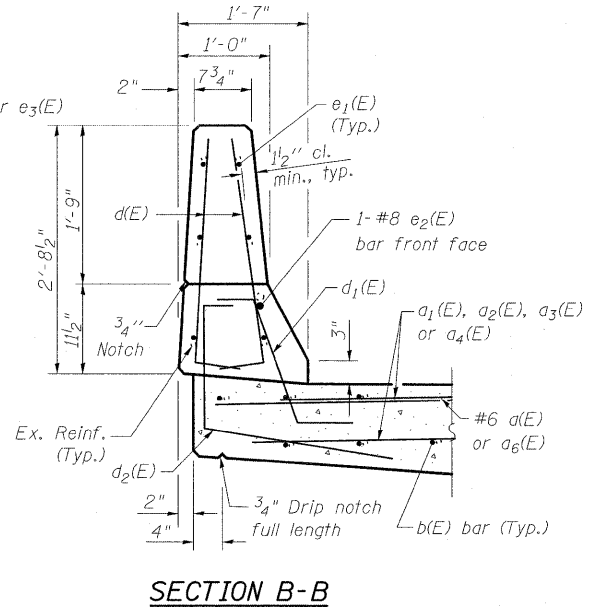
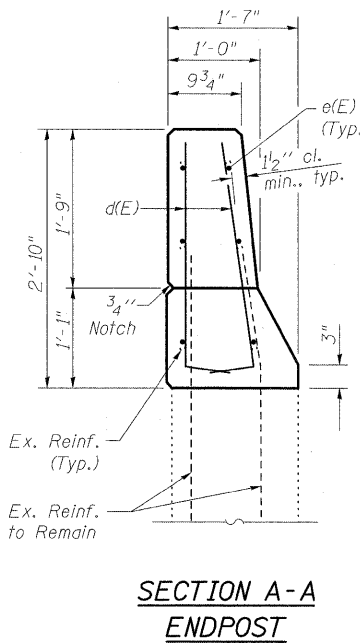
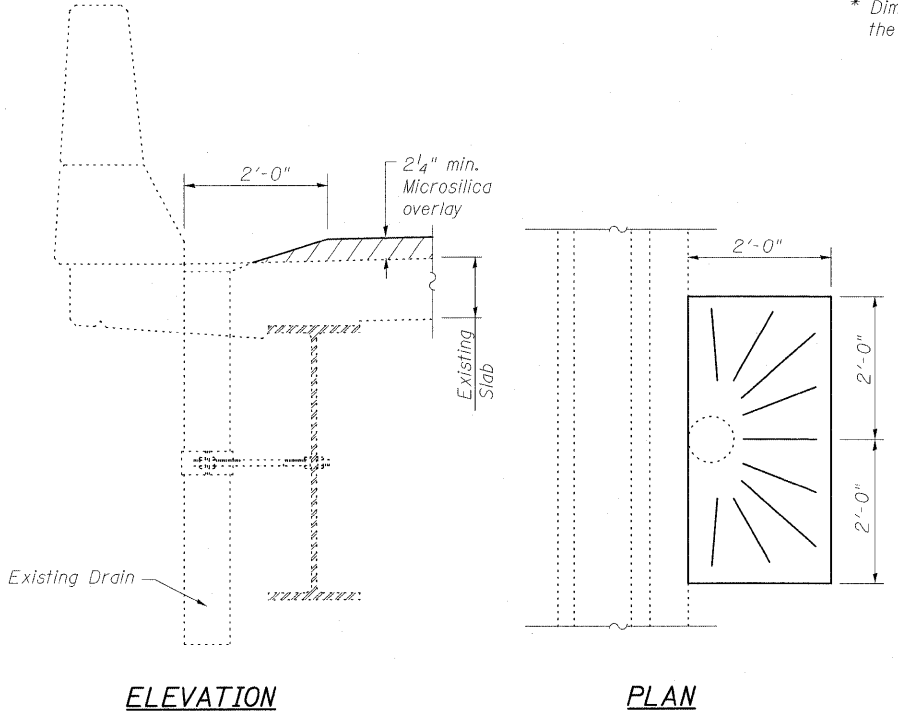
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	16	#6	8'-0"	—
d1(E)	18	#5	22'-10"	—
d2(E)	32	#5	23'-7"	—
e(E)	32	#5	24'-4"	—
a5(E)	18	#5	25'-2"	—
a5(E)	24	#6	9'-6"	U
a6(E)	16	#6	5'-7"	—
b(E)	72	#5	3'-0"	—
d(E)	120	#5	3'-0"	—
d1(E)	56	#5	2'-7"	—
d2(E)	56	#5	3'-11"	—
e(E)	12	#4	2'-0"	—
e1(E)	72	#4	3'-0"	—
e2(E)	12	#8	3'-0"	—
e3(E)	12	#4	2'-5"	—
x(E)	60	#5	5'-0"	—
x1(E)	204	#5	4'-1"	—
Bar Splicers			Each	56
Concrete Superstructure			Cu. Yd.	42.9
Reinforcement Bars, Epoxy Coated			Pound	5550
Concrete Bridge Deck Scaffication, 1/2"			Sq. Yd.	652
Bridge Deck Microsilica Concrete Overlay, 2 1/4"			Sq. Yd.	591

Note:
Quantity of End Post Concrete included with Concrete Superstructures.

EAST PARAPET ELEVATION

* Dimensions are along the length of the parapet at 50° F.



SUPERSTRUCTURE BILL OF MATERIAL & PARAPET DETAILS
STRUCTURE NO. 025-0001

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

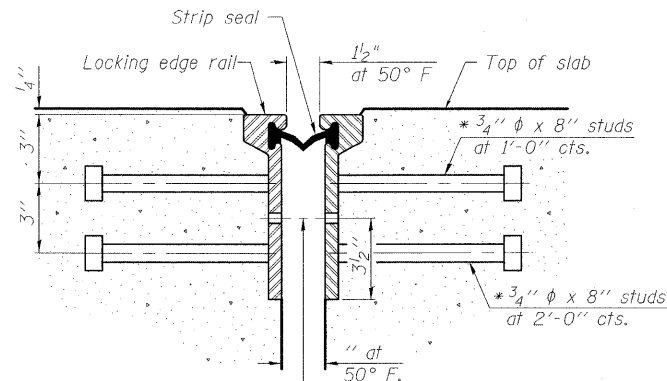
OVERLAY DETAIL FOR EXISTING DECK DRAINS THAT ARE TO REMAIN OPEN

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62422-5635
Local: (618) 338-4995
Fax: 618-338-4666

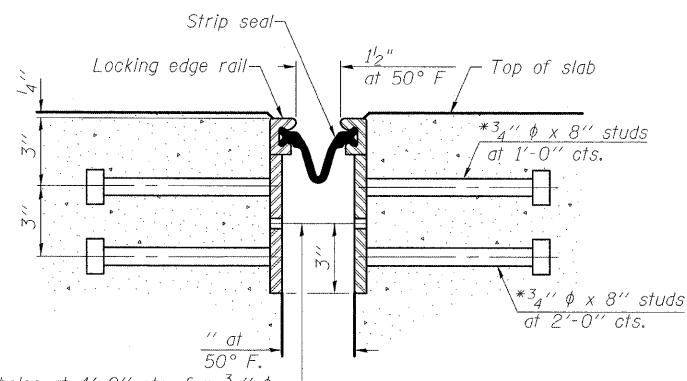
SHEET NO. 7 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1361
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

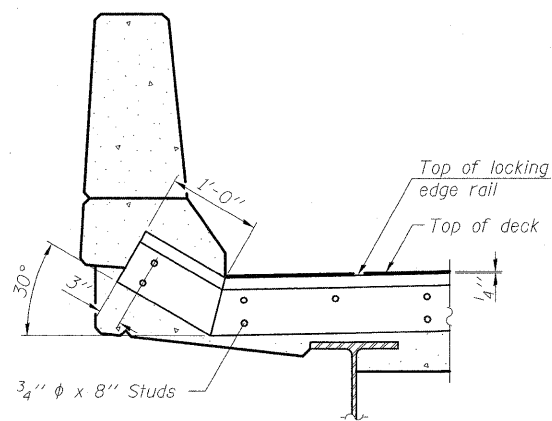
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SECTION THRU
ROLLED RAIL JOINT

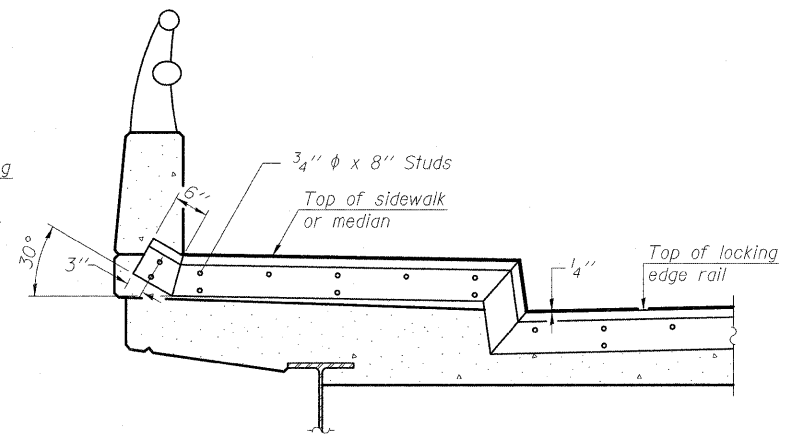


SECTION THRU
WELDED RAIL JOINT



AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

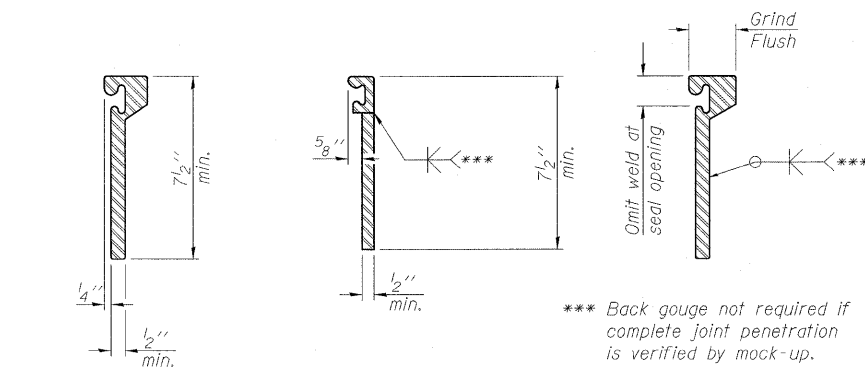
7/16" φ holes at 4'-0" cts. for 3/8" φ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

TYPICAL END TREATMENTS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches. The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed. The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State. All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications. Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.

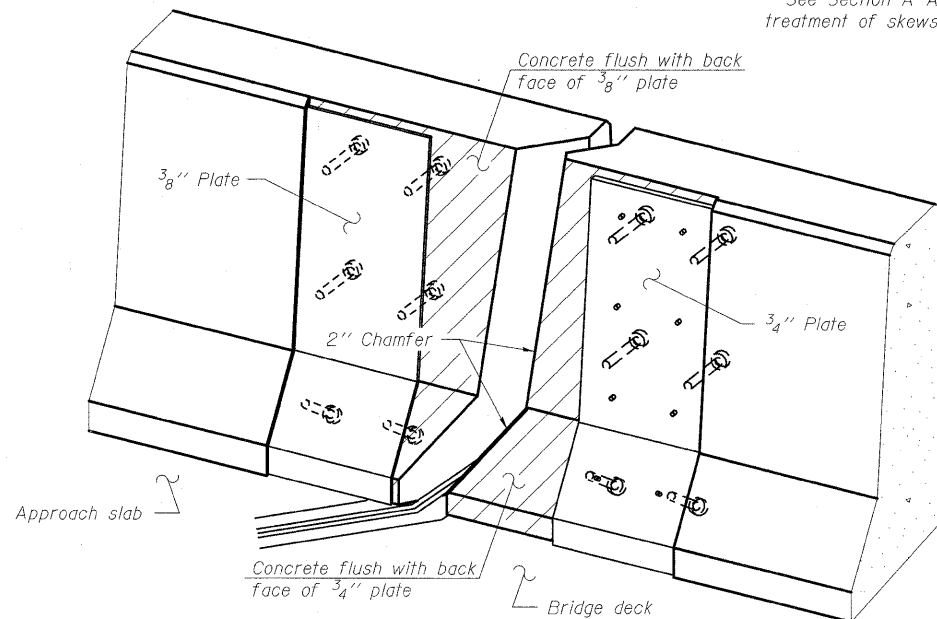


ROLLED
EXTRUDED RAIL

WELDED RAIL

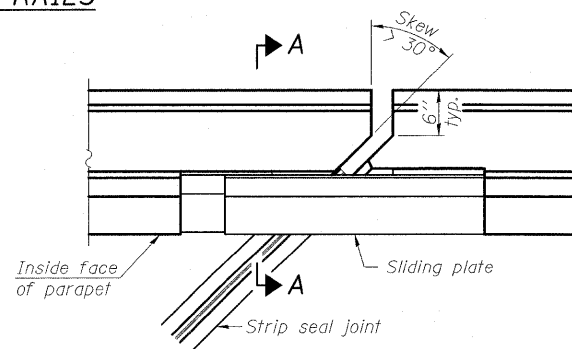
LOCKING EDGE
RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

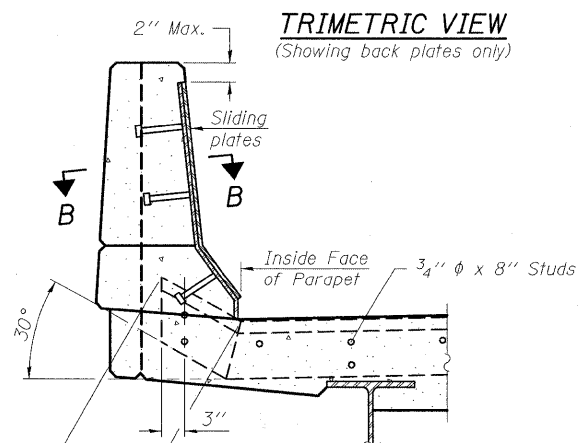


TRIMETRIC VIEW
(Showing back plates only)

LOCKING EDGE RAILS

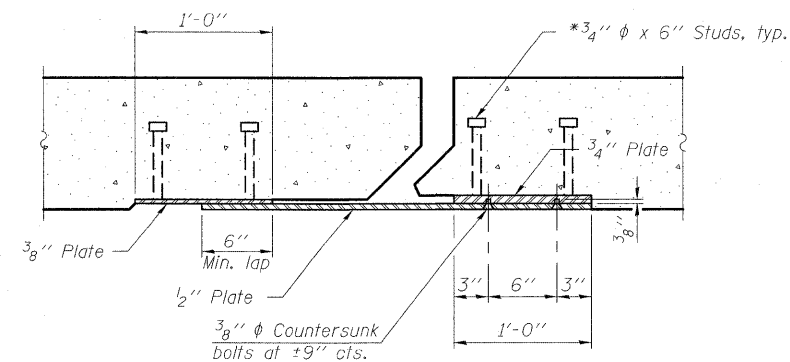


PLAN



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	91

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 025-0001

DESIGNED	
CHECKED	
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

EJ-SSJ

11-1-09

SHEET NO. 8
27 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	(25-3HB)I-2	EFFINGHAM	1416	1362
SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT				



BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Joint Size	"C" at 50°F	"D" at 50°F
2"	1/2"	1 1/2" Min.

For Piers 1 & 2, the detailed expansion width of 1/2" at 50°F is not standard. The existing field conditions may allow for an increase in expansion width. This increase in width shall be approved by the Engineer.

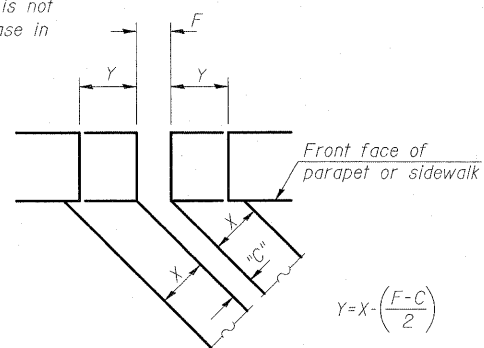
INSTALLATION NOTES

- Install continuous seal in roadway, parapet, curb, and sidewalk.
- Install anchor blocks as indicated.

Note A:
Maximum spacing of anchor bolts shall be 12" centers.

SKEW LIMITATIONS

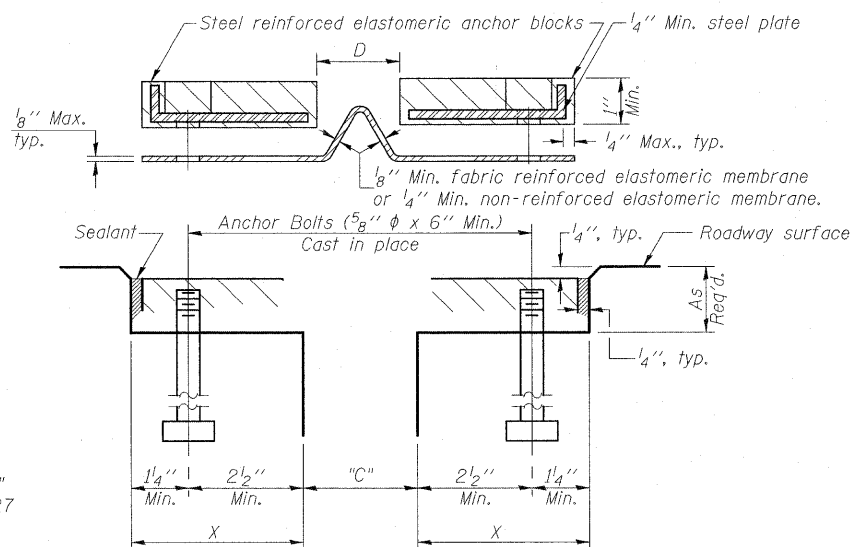
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



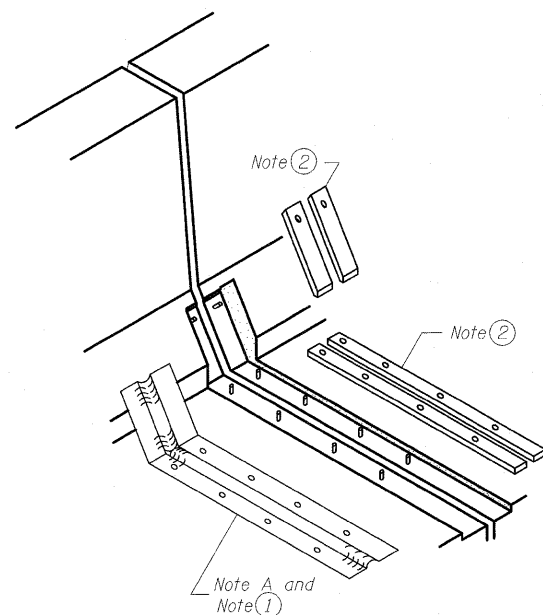
FORMING BLOCKOUT SKETCH

$$Y = X \cdot \left(\frac{F - C}{2} \right)$$

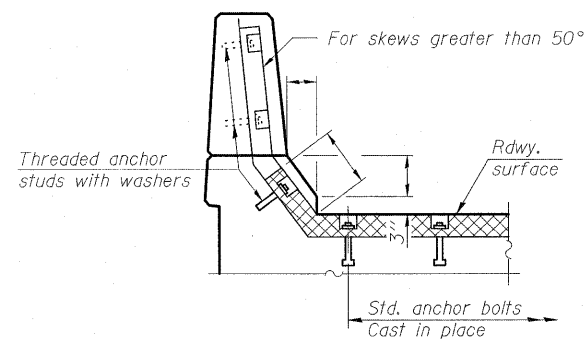
For dimension "F" see sheet 5 of 27



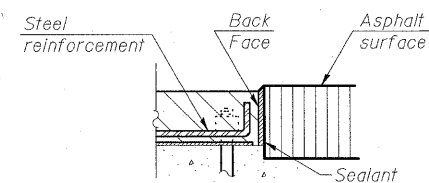
CROSS SECTION



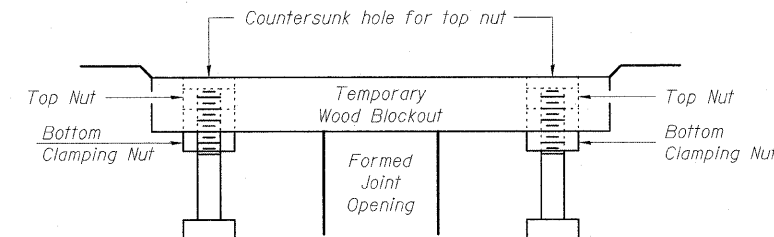
AT PARAPET



AT PARAPET



ANCHOR BLOCK WITH ASPHALT SURFACE



Note:
Stud needs to be threaded lower to allow for use of clamping nut.

RECOMMENDED BLOCKOUT DETAIL

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane.

The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

The parapet and roadway membrane shall be made continuous by an approved vulcanizing process. Lapping will not be permitted.

BILL OF MATERIAL

Item	Unit	Total
Neoprene Expansion Joint 2"	Foot	111

**NEOPRENE EXPANSION JOINT
STRUCTURE NO.025-0001**

DESIGNED	
CHECKED	
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

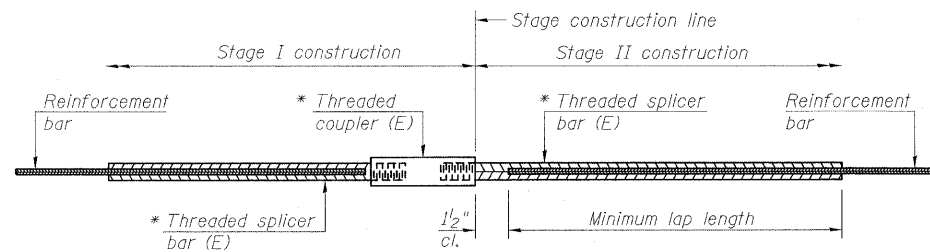


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Meryville, IL 62062-5635
Local (618) 288-4955
Fax 618-288-4666

SHEET NO. 9 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)1-2	EFFINGHAM	1416	1363
		SN 025-0001	CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

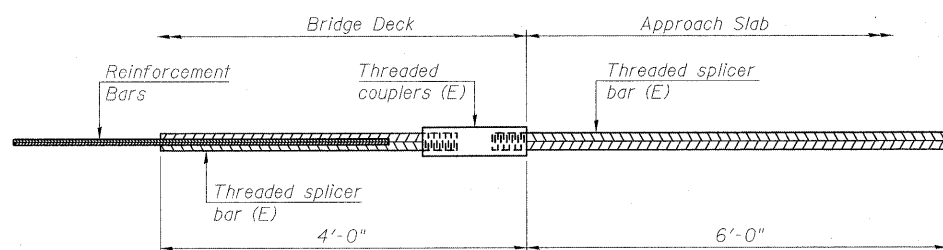
Minimum Lap Lengths				
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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

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

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

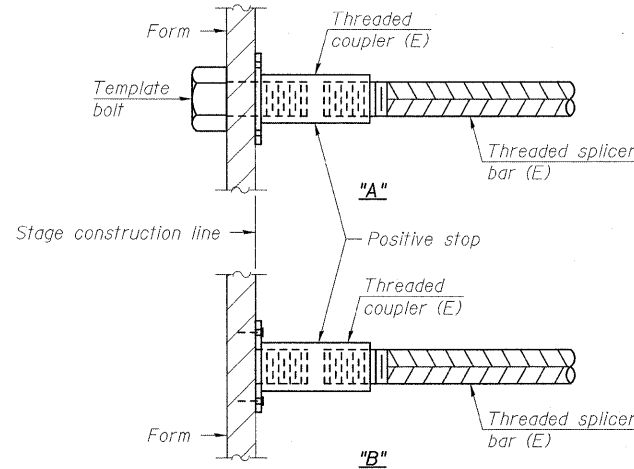
Location	Bar size	No. assemblies required	Table for minimum lap length
Superstructure	#5	50	3
Abutment Blockouts	#6	8	3
Abutment Caps	#5	14	3
Pier Caps	#5	8	3



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

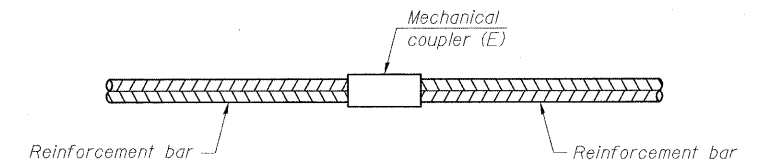
No. required =

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



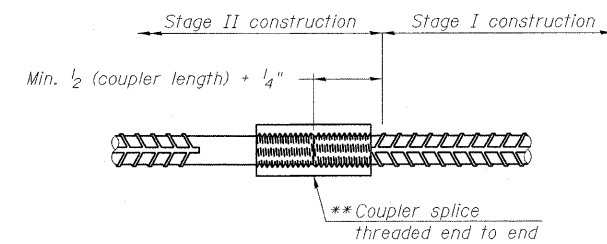
INSTALLATION AND SETTING METHODS

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



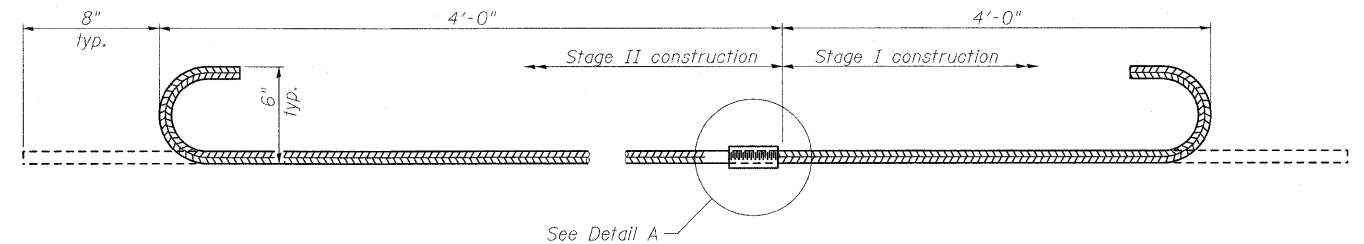
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



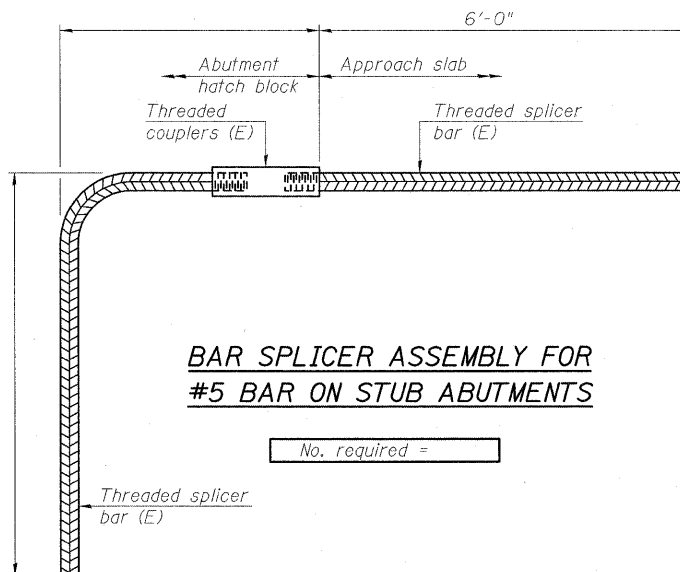
DETAIL A

** The bar splicer assembly shall utilize splice bars with the threaded ends oversized to ensure no reduction in cross sectional area after threading and be designed to allow completion of the splice without turning either of the splice bars.



#6 (E) BAR SPLICER ASSEMBLY FOR EDGE BEAMS AT STAGE CONSTRUCTION JOINT

No. required = 6



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 025-0001**

SHEET NO. 10 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1364
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT		



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

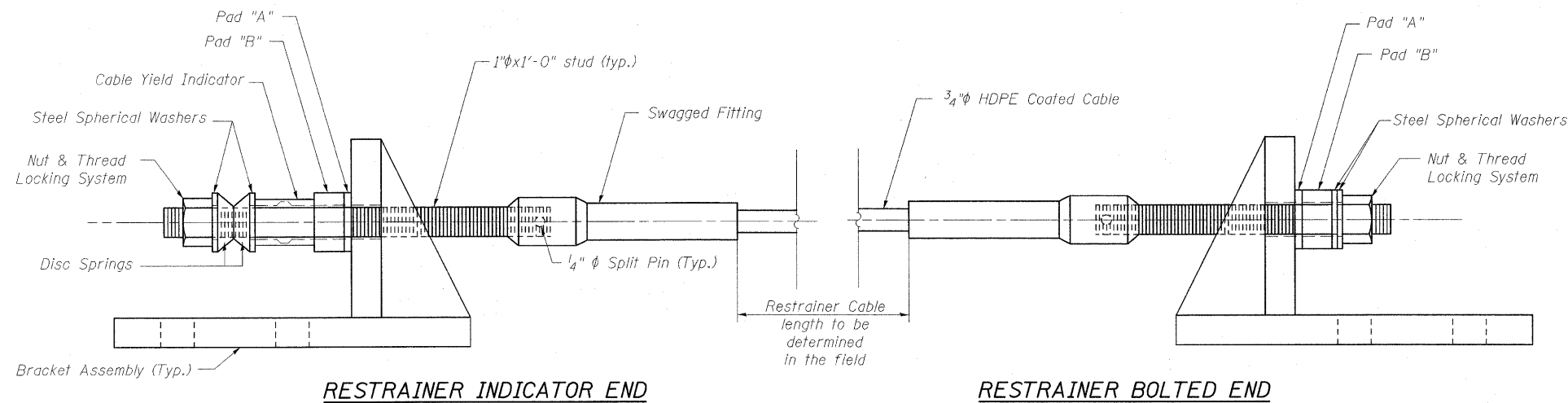
3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax 618-288-4666

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CABLE RESTRAINER UNIT INSTALLATION PROCEDURE

1. Align cable assembly angles with bumper assembly. For Bumper placement see Sheet 12 and 13 of 27.
2. Install Cable Yield Indicator, Spherical Washers, Disc Springs, Washers and Nut on the indicator end of Seismic Restrainers.
3. Place Spherical Washers and Nut on bolted end of restrainers. Place Thread Locking System on bolted end stud prior to installing nut and washers, and prior to setting the cable.
4. Tighten nut on the cable at the indicator end of restrainer. The cable should be approximately straight with no sag.
5. Place Thread Locking System on indicator end stud after tightening the cable but before backing off the nut. Back off the nut at restrainer indicator end a distance equal to maximum additional amount that the joint is expected to open, relative to existing ambient conditions. See Expansion Table on Sheet 13 of 27.
6. If the cable needs to be secured from turning while tightening, use double nut locking technique on the stud to protect the threads.
7. For Thread Locking System, see Special Provision for Seismic Restrainers.

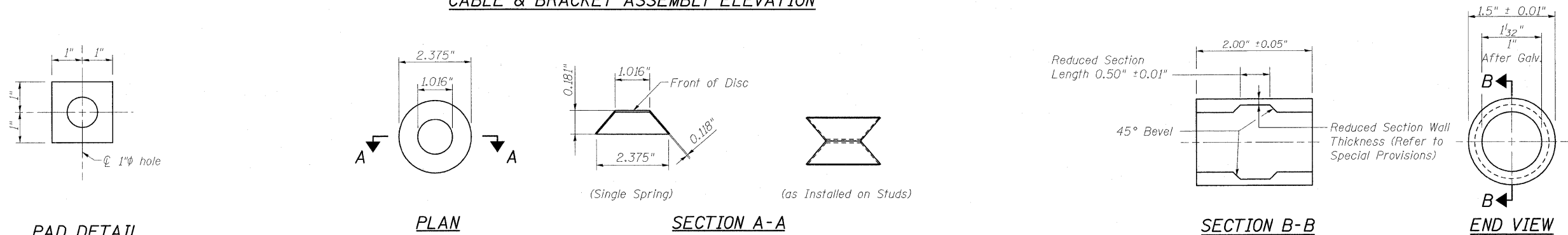
Cost of Bracket Assemblies is included with Furnishing and Erecting Structural Steel.



RESTRAINER INDICATOR END

RESTRAINER BOLTED END

CABLE & BRACKET ASSEMBLY ELEVATION



PAD DETAIL

Pad "A" = 2"x2"x1/4" Plain Elastomeric Bearing Pad (50 Durometer)

Pad "B" = 2"x2"x1" Washer

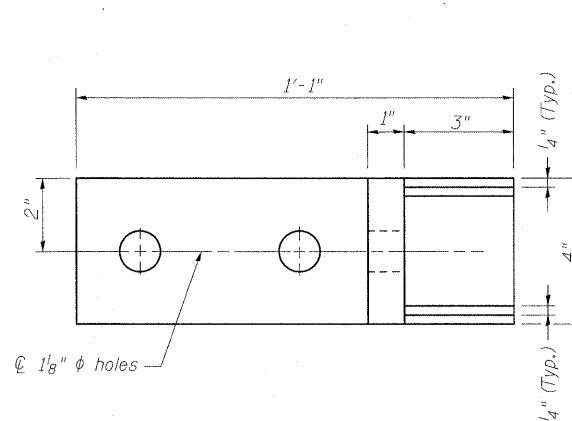
PLAN

SECTION A-A

SECTION B-B

END VIEW

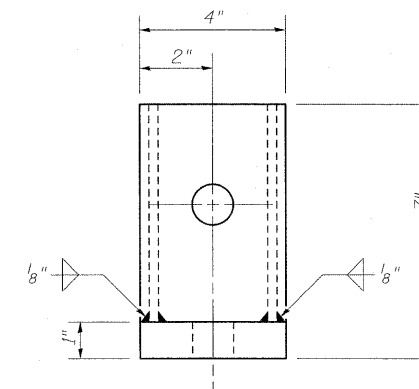
DISC SPRING



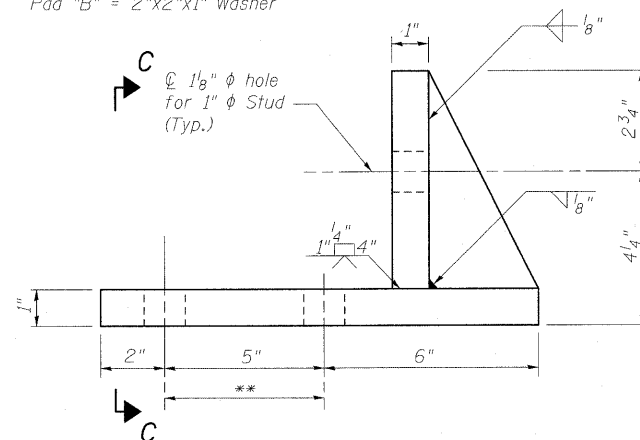
BRACKET ASSEMBLY

CABLE YIELD INDICATOR

(All dimensions are before galvanizing except as noted)



SECTION C-C



ELEVATION

** \varnothing 1/8" hole for 1" x 4 1/2" long A325 bolts with 1-1/16" washer

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

**SEISMIC RESTRAINER & BRACKET DETAILS
STRUCTURE NO. 025-0001**

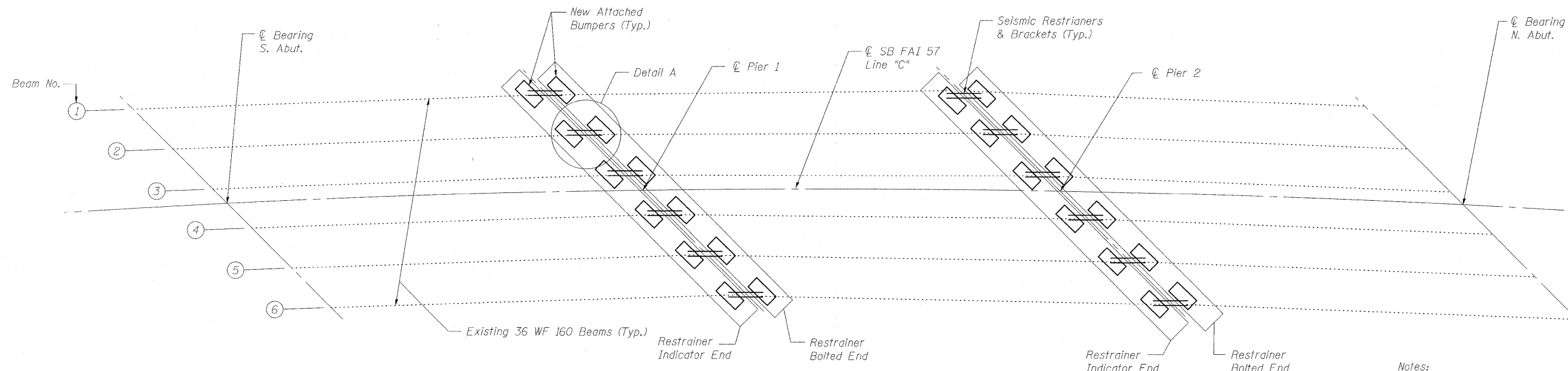


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Mazzyville, IL 62062-5685
Local: (618) 288-4685
Fax: 618-288-4686

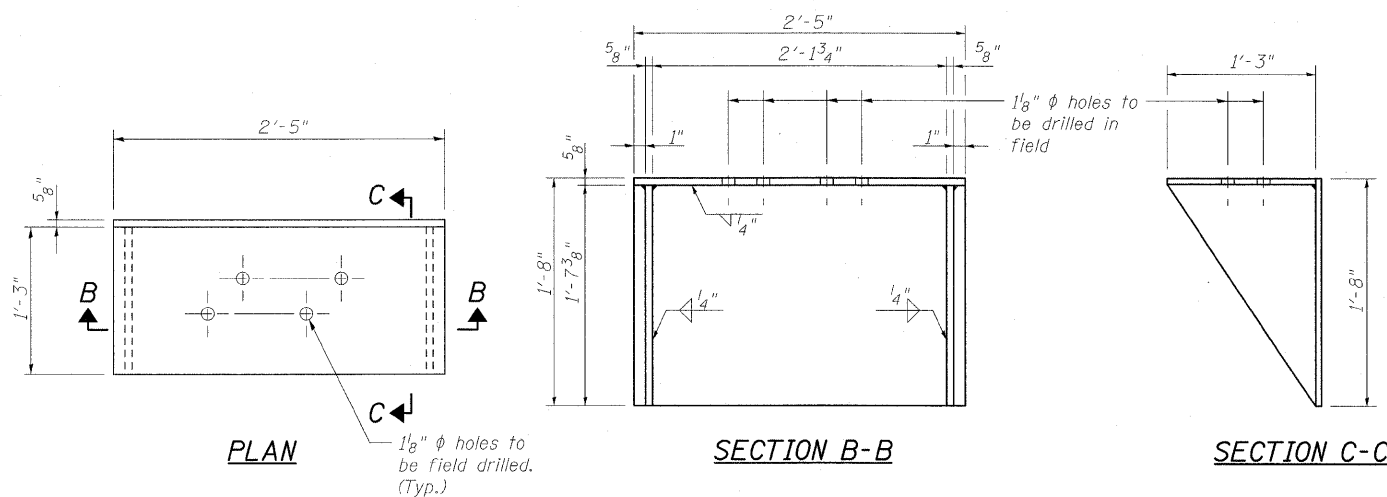
SHEET NO. 11 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HBII-2)	EFFINGHAM	1416	1365
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

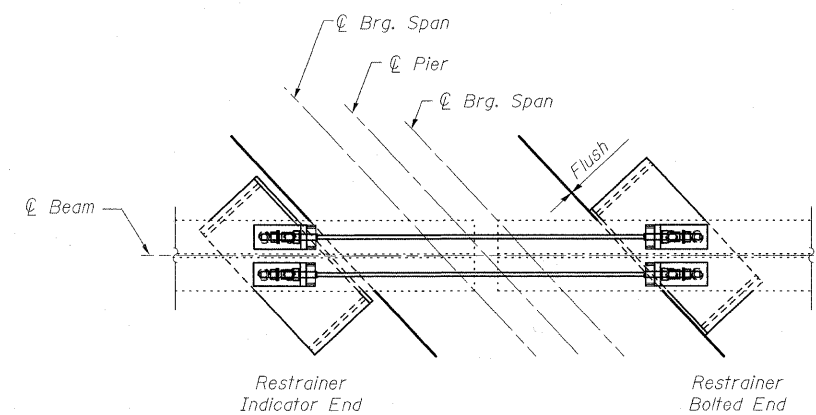


FRAMING PLAN

Notes:
See Sheet 13 of 27 for additional Details,
Notes, Bill of Materials and Pier 2 Plan at
Beams 1 and 6.



BUMPER DETAILS
(24 Required)



**DETAIL A
GENERAL PLAN SHOWING
RESTRAINER, BRACKETS &
BUMPERS**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

**BUMPER DETAILS
STRUCTURE NO. 025-0001**

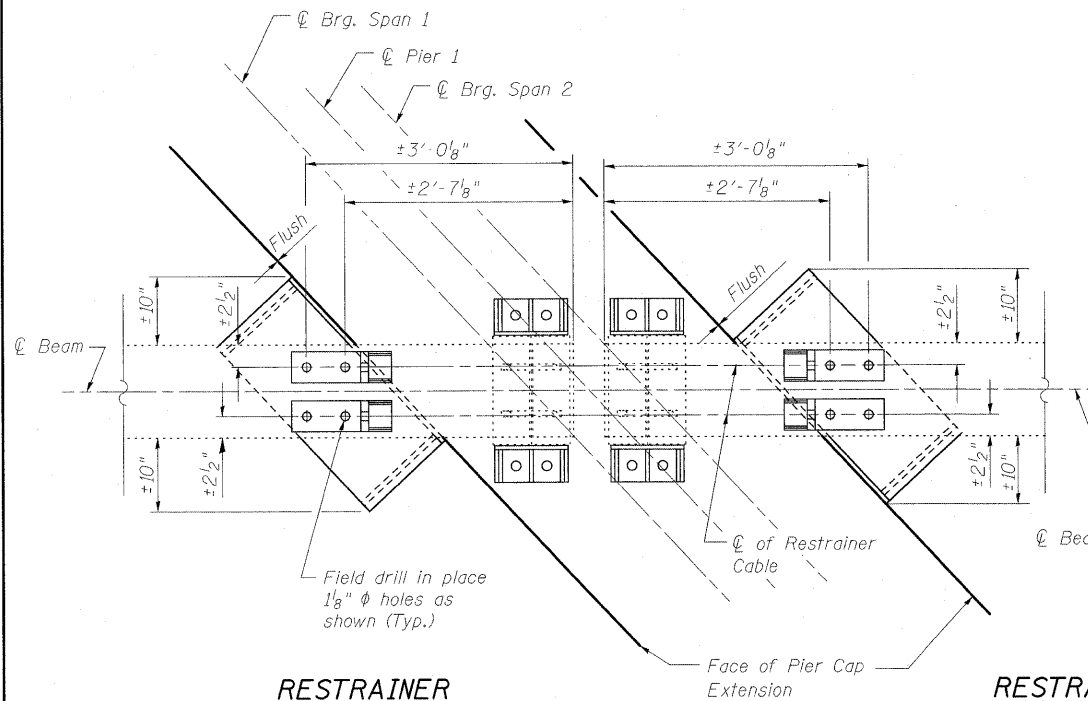


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 12 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1366
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

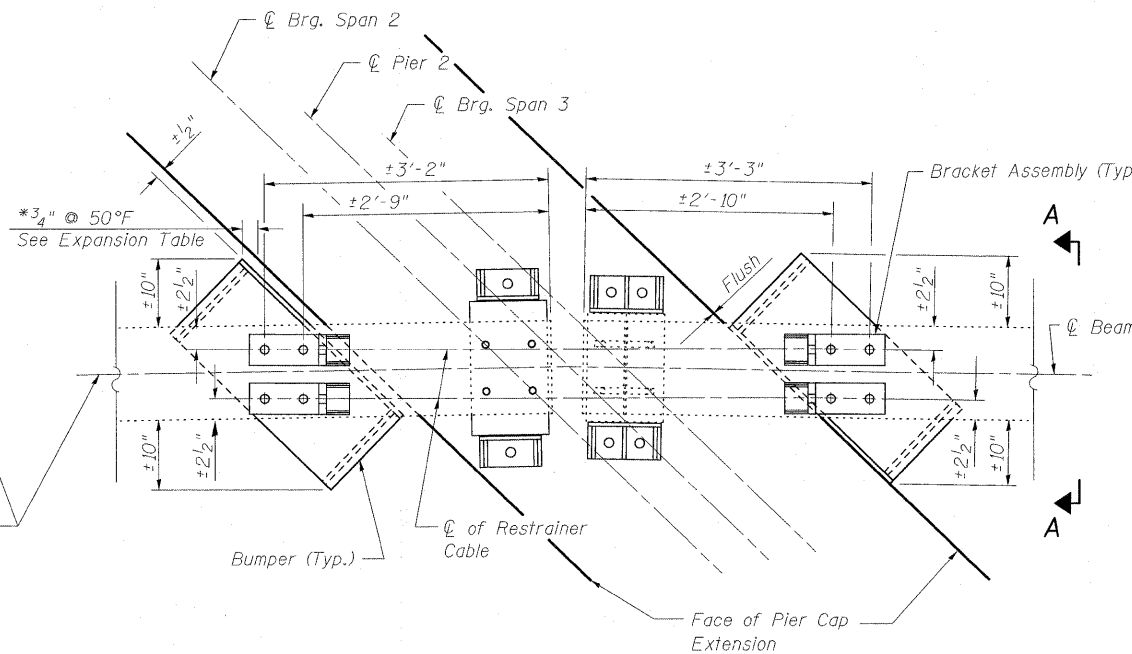


**RESTRAINER
INDICATOR END**

PIER 1 PLAN
(Beams 1 thru 6)
(6 Required)

**RESTRAINER
BOLTED END**

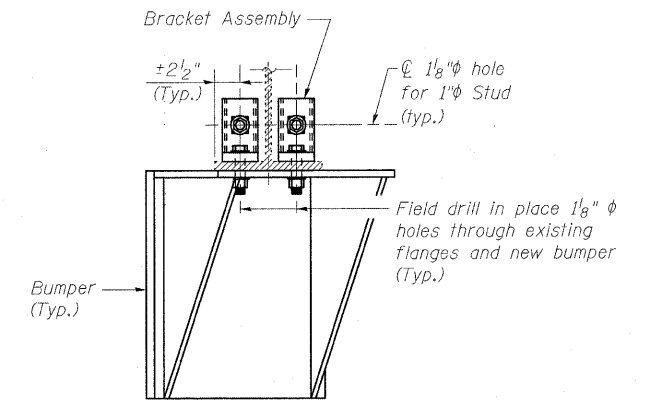
The backing off of the nut in step 5 of Cable Restrainer Unit Installation Procedure on sheet 11 of 27 should be omitted at Pier 1. The disc springs should be fully compressed during installation at Pier 1, Span 1.



**RESTRAINER
INDICATOR END**

PIER 2 PLAN
(Beams 2 thru 5)
(4 Required)

**RESTRAINER
BOLTED END**

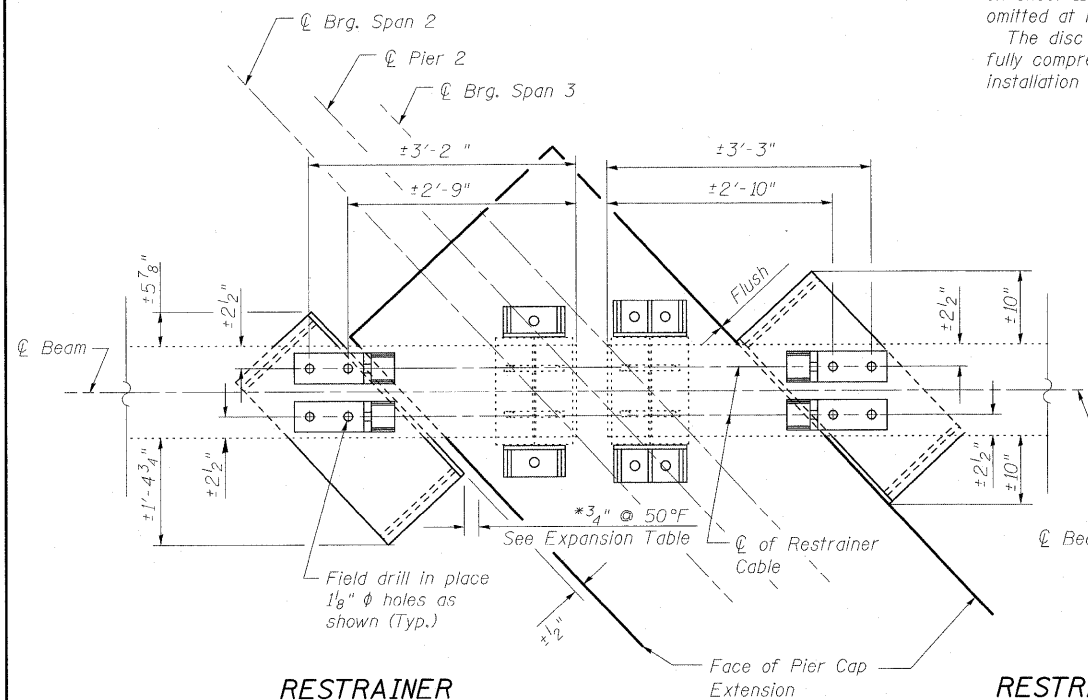


SECTION A-A
Bumper shown on skew

Ambient Temperature	Gap
T < 50°F	3/4" - Δ Temp
T = 50°F	3/4"
T > 50°F	3/4" + Δ Temp

*Δ Temp = 1/32" for every ±10°F (Typ.)

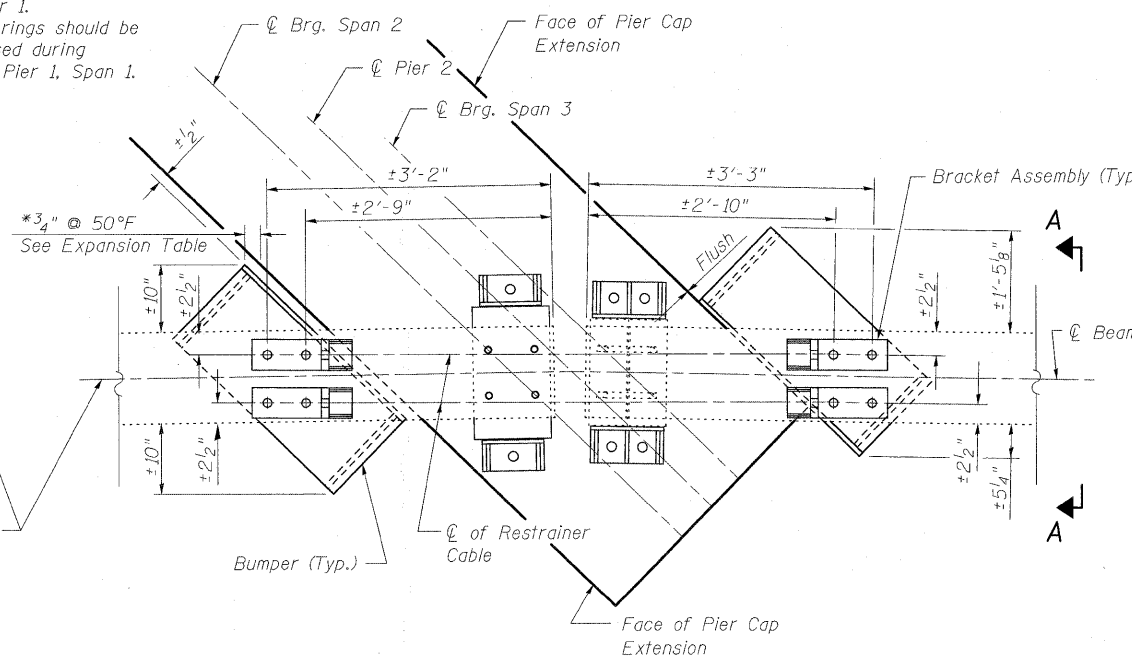
EXPANSION TABLE



**RESTRAINER
INDICATOR END**

PIER 2 PLAN
(Beam 1)
(1 Required)

**RESTRAINER
BOLTED END**



**RESTRAINER
INDICATOR END**

PIER 2 PLAN
(Beam 6)
(1 Required)

**RESTRAINER
BOLTED END**

Notes:
For General Elevation Views of Seismic Restrainers, see Sections A-A thru D-D on Sheet 3 of 27.
Two hardened washers are required for each set of oversized holes.
Bumpers shall be paid for as Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Seismic Restrainer	Each	12
Furnishing & Erecting Structural Steel	Pound	6926

**BUMPER DETAILS
STRUCTURE NO. 025-0001**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

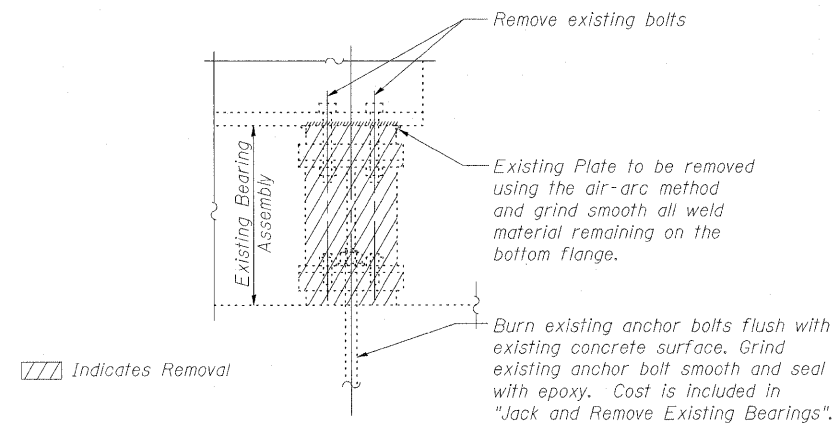


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 13 27 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1367
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EXISTING BEARING REMOVAL DETAIL

(18 Required)
6 at each Abutment & 6 at Pier 2

PROCEDURE TO JACK AND REMOVE EXISTING BEARINGS

(North & South Abutments & Pier No. 2, Span 2 only)
(Minimum Jack Capacity Required 60 tons at the Abutments and 110 tons at Pier 2)

1. Jack and Remove Existing Bearings shall be conducted according to the Bridge Special Provision "Jack and Remove Existing Bearings. See Interior Beam Reaction Table for loads.
2. Jacking and removing existing bearings shall be done after partial deck concrete removal and before new deck concrete is poured.
3. Three beams may be lifted simultaneously, as outlined in the stage construction layout.
4. The existing anchor bolts shall be cut off flush with the existing bridge seat, the rockers, top and bottom plates shall be removed.
5. Formwork and bearing seat construction shall occur.
6. The new elastomeric bearings shall be placed and the jacks shall be lowered.
7. The new holes for the side retainers shall be drilled at the locations specified.
8. No Bearing Replacement is required at Pier 1 and (Pier 2 - Span 3). Clean and paint as specified for Structural Steel.

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

Anchor bolts for side retainers may be cast in place or installed in holes drilled before or after members are in place.

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

Side retainers and other steel members required at the expansion bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

See Sheet 16 of 27 for Anchor Bolt location Details at South Abutment.

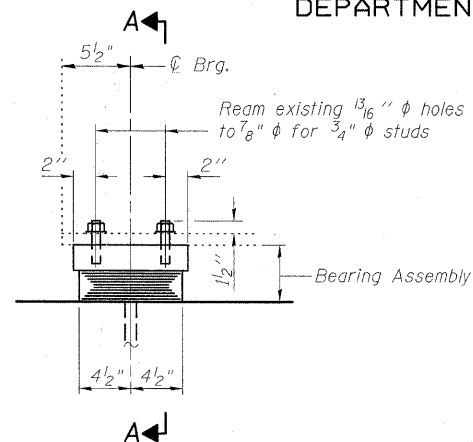
See Sheet 19 of 27 for Anchor Bolt location Details at North Abutment.

See Sheet 22 of 27 for Anchor Bolt location Details at Pier 1.

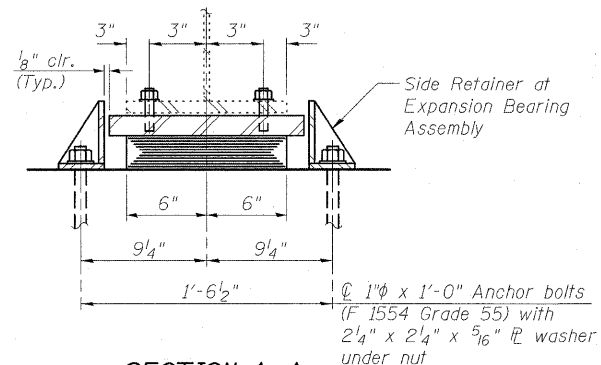
See Sheet 25 of 27 for Anchor Bolt location Details at Pier 2.

Side retainers, anchor bolts, nuts, washers and bearing plates may be galvanized according to AASHTO M111 or M232 (as applicable).

Side Retainers at the Encased Fixed Bearings shall be paid for as Furnishing & Erecting Structural Steel.



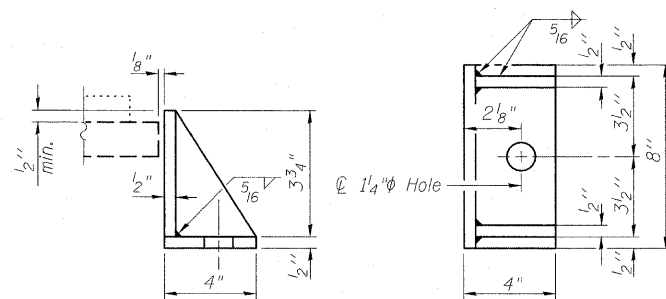
ELEVATION



SECTION A-A

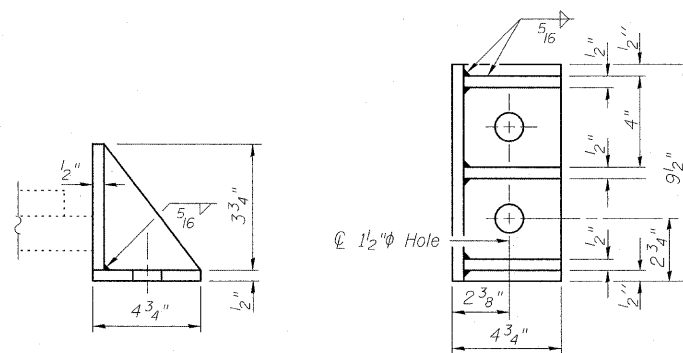
TYPE I ELASTOMERIC EXP. BRG.

(18 Required)
6 at each Abutment & 6 at Pier 2



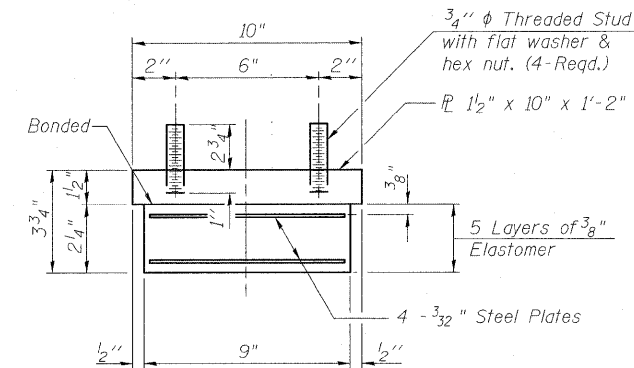
SIDE RETAINER AT EXPANSION BEARING ASSEMBLY

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SIDE RETAINER AT ENCASED FIXED BEARINGS

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BEARING ASSEMBLY

INTERIOR GIRDER MOMENT TABLE		0.5 Span
I_s	(in ⁴)	9750
$I_c(n)$	(in ⁴)	21790
$I_c(3n)$	(in ⁴)	16008
S_s	(in ³)	542
$S_c(n)$	(in ³)	734
$S_c(3n)$	(in ³)	664
ϕ	(k/')	0.701
$M \phi$	(k)	315.5
$s \phi$	(k/')	0.287
$M_s \phi$	(k)	129.2
M_t	(k)	439.0
M_{1M}	(k)	118.5
$S_3 [M_t + i]$	(k)	929.2
M_a	(k)	1786.1
M_u	(k)	2857
$f_s \phi$ non-comp	(ksi)	6.99
$f_s \phi$ (comp)	(ksi)	2.33
$f_s S_3 [M_t + M_1]$	(ksi)	15.19
f_s (Overload)	(ksi)	24.77
f_s (Total)	(ksi)	31.90

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

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

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

ϕ : Un-factored non-composite dead load (kips/ft.).

$M \phi$: Un-factored moment due to non-composite dead load (kip-ft.).

$s \phi$: Un-factored long-term composite (superimposed) dead load (kips/ft.).

$M_s \phi$: Un-factored moment due to long-term composite (superimposed) dead load (kip-ft.).

M_t : Un-factored live load moment (kip-ft.).

M_1 : Un-factored moment due to impact (kip-ft.).

M_a : Factored design moment (kip-ft.).

$1.3 [M \phi + M_s \phi + \frac{5}{3} (M_t + M_1)]$

M_u : Compact composite moment capacity according to AASHTO LFD 10.50.1.1 or compact non-composite moment capacity according to AASHTO LFD 10.48.1 (kip-ft.).

f_s (Overload): Sum of stresses as computed from the moments below (ksi). $M \phi + M_s \phi + \frac{5}{3} (M_t + M_1)$

f (Total): Sum of stresses as computed from the moments below on non-compact section (ksi). $1.3 [M \phi + M_s \phi + \frac{5}{3} (M_t + M_1)]$

INTERIOR BEAM REACTION TABLE					
	S. Abut.	Pier 1	Pier 2	N. Abut.	
$R \phi$	(k)	29.6	59.0	58.2	28.7
R_t	(k)	37.0	68.3	68.2	36.8
$Imp.$	(k)	10.0	18.4	18.4	9.9
R_{Total}	(k)	76.6	145.8	144.7	75.5

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	18
Anchor Bolts, 1"	Each	36
Anchor Bolts, 1 1/4"	Each	72
Jack & Remove Existing Bearings	Each	18
Furnishing & Erecting Structural Steel	Pound	540

**BEARING DETAILS
STRUCTURE NO. 025-0001**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

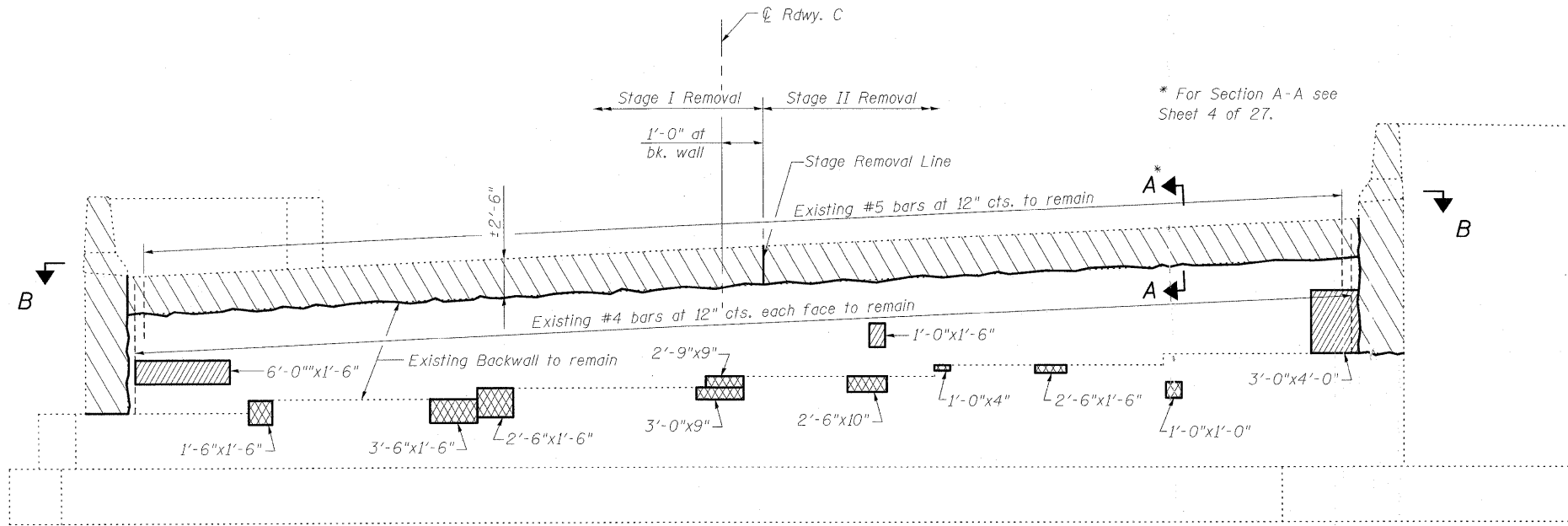


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

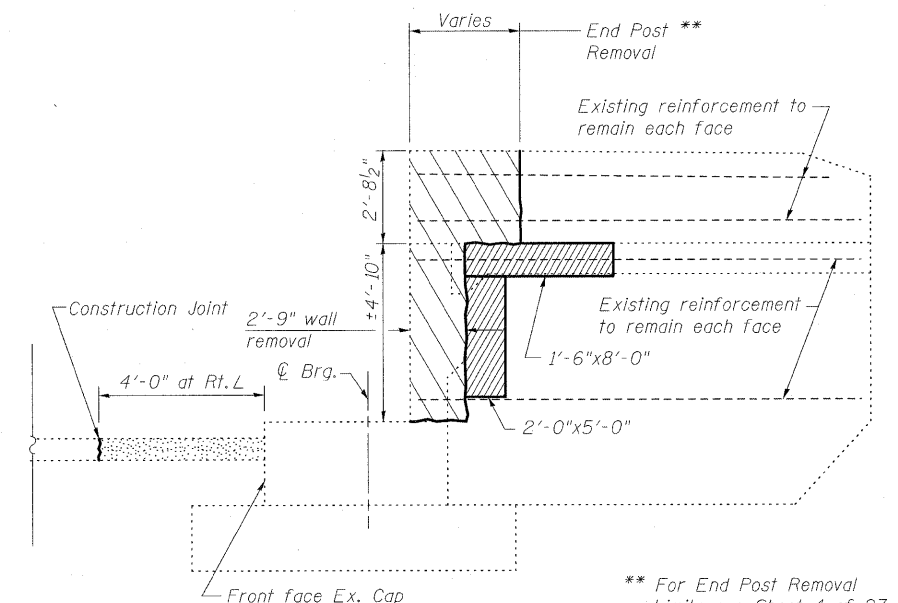
3 Oak Drive
Maryville, IL 62062-5655
Local (618) 388-4885
Fax 618-388-4886

SHEET NO. 14	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
27 SHEETS	57	(25-3HB)I-2	EFFINGHAM	1416	1368
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

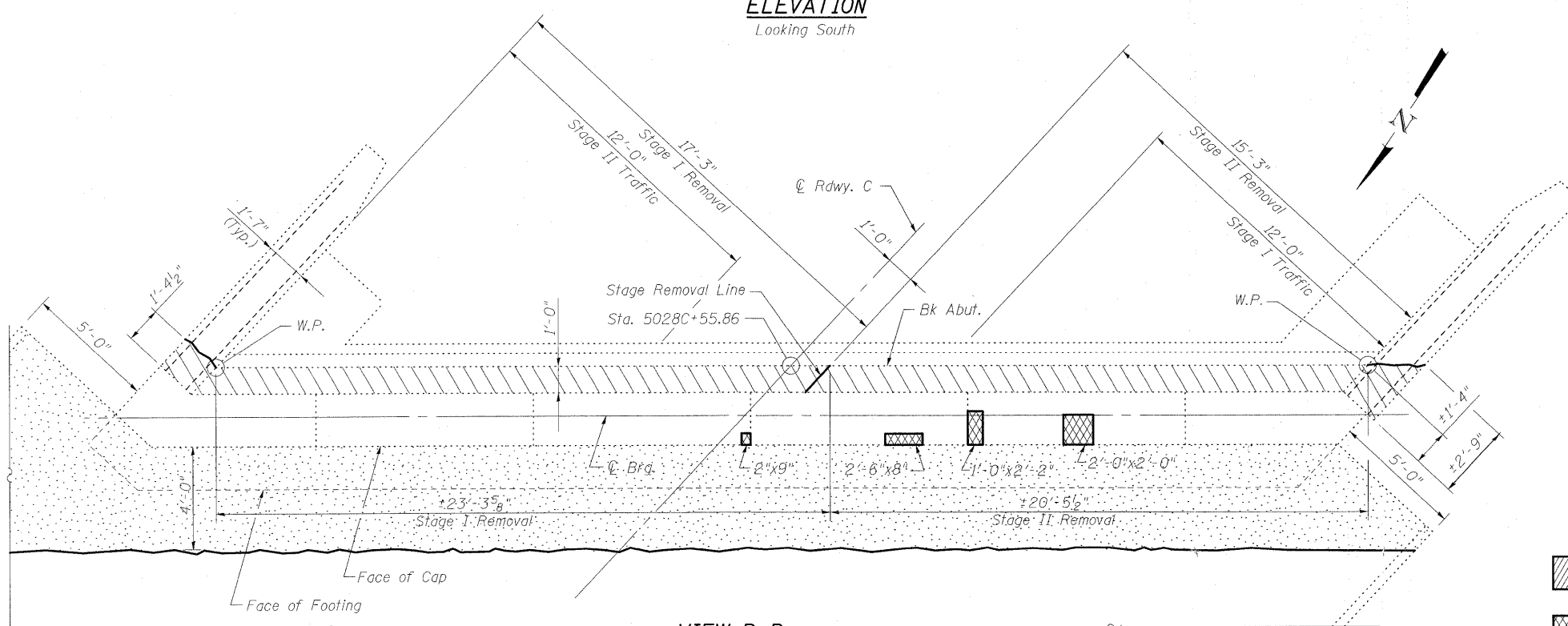


ELEVATION
Looking South

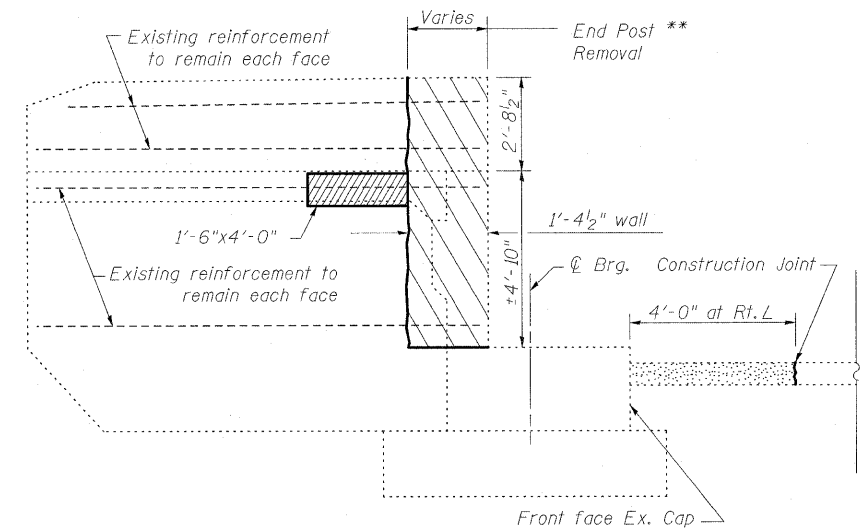


WEST WING WALL

** For End Post Removal Limits see Sheet 4 of 27.







VIEW B-B
SOUTH ABUTMENT



EAST WING WALL

LEGEND

-  Indicates Structural Repair of Concrete
-  Indicates Unsound Concrete Removal
-  Indicates Concrete Removal
-  Indicates Slopewall Removal

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	5.2
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	51
Unsound Concrete Removal	Sq. Yd.	3.4

CONCRETE REMOVAL & REPAIR
SOUTH ABUTMENT
STRUCTURE NO. 025-0001

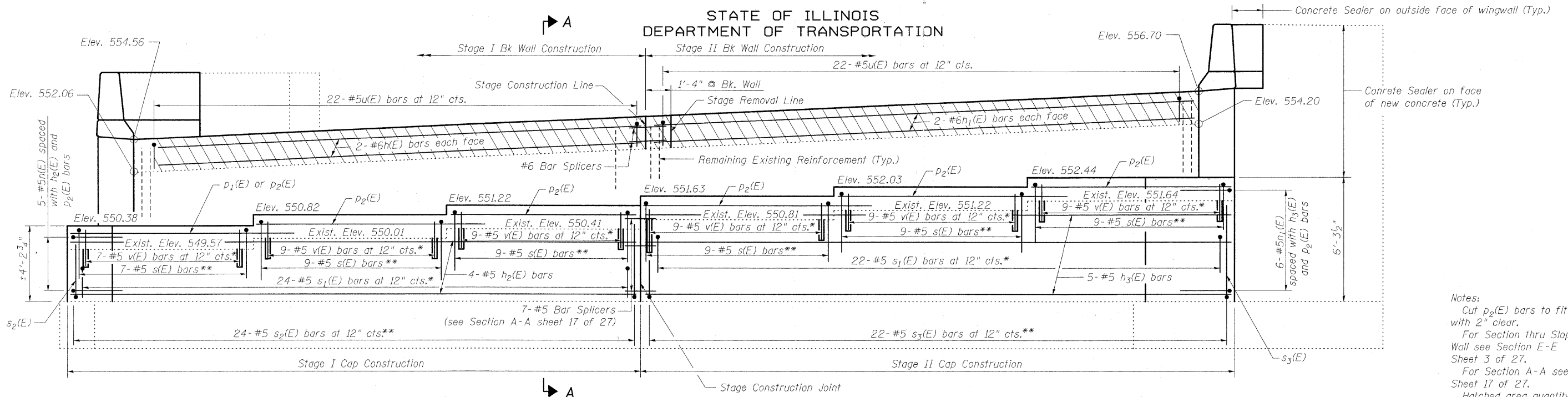
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62452-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 15	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1369
27 SHEETS	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

10/4/35 AM 3/18/2010 10:25:00 14294501

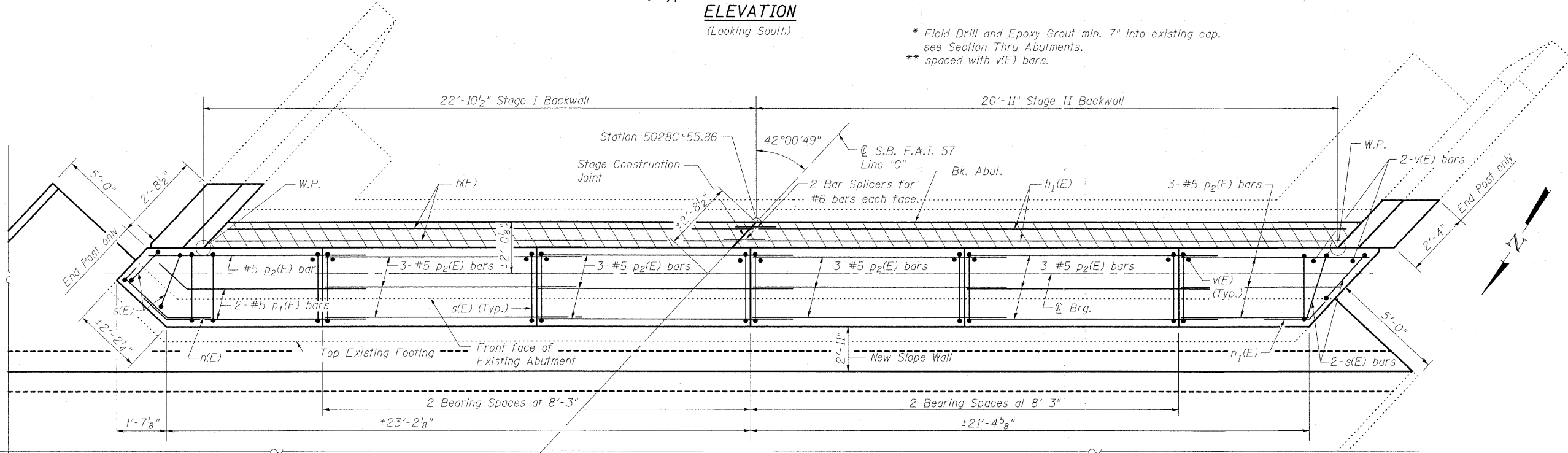
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



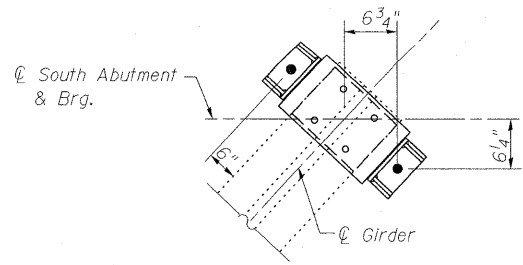
Notes:
Cut $p_2(E)$ bars to fit with 2" clear.
For Section thru Slope Wall see Section E-E Sheet 3 of 27.
For Section A-A see Sheet 17 of 27.
Hatched area quantity of concrete included with Concrete Superstructure.
Space reinforcement to miss anchor bolts.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.

ELEVATION
(Looking South)

* Field Drill and Epoxy Grout min. 7" into existing cap. see Section Thru Abutments.
** spaced with v(E) bars.



PLAN



ANCHOR BOLT DETAIL
SOUTH ABUTMENT

MIN BAR LAP
#5 bar = 1'-8"

SOUTH ABUTMENT DETAILS
STRUCTURE NO. 025-0001

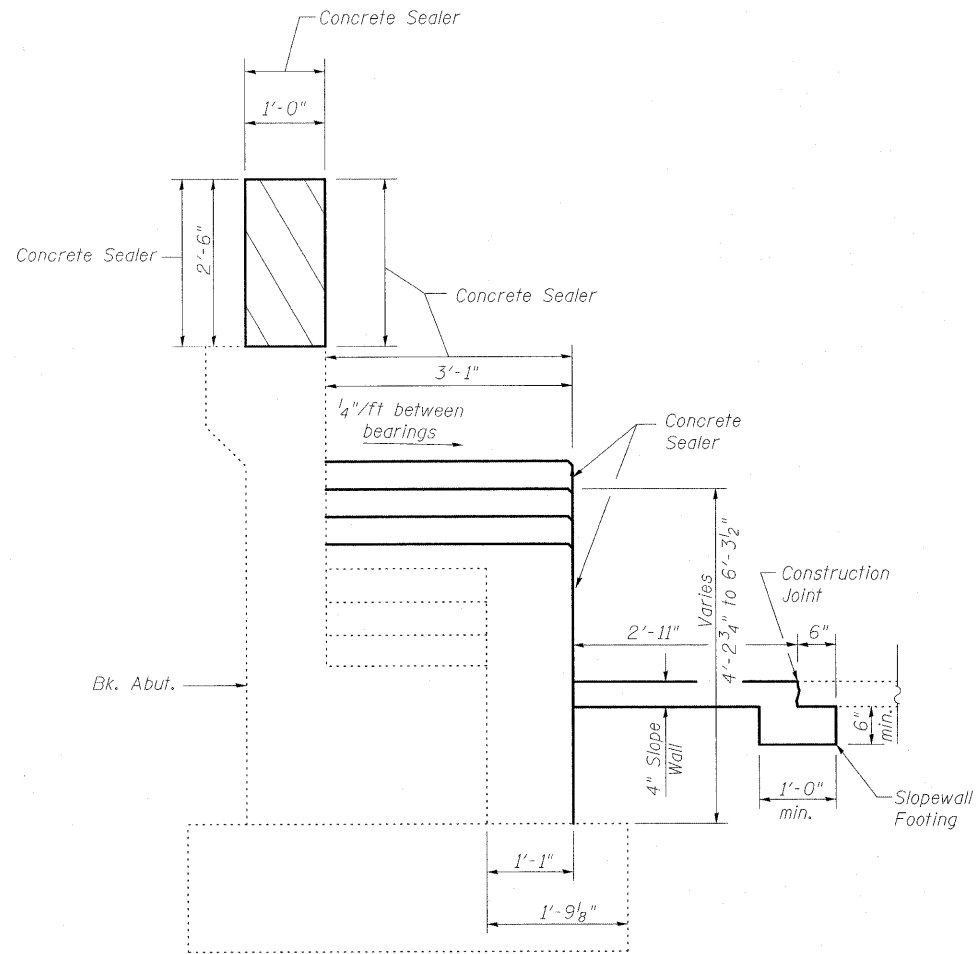
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

SHEET NO. 16 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1370
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62862-5635
Local (618) 285-4065
Fax 618-288-4666

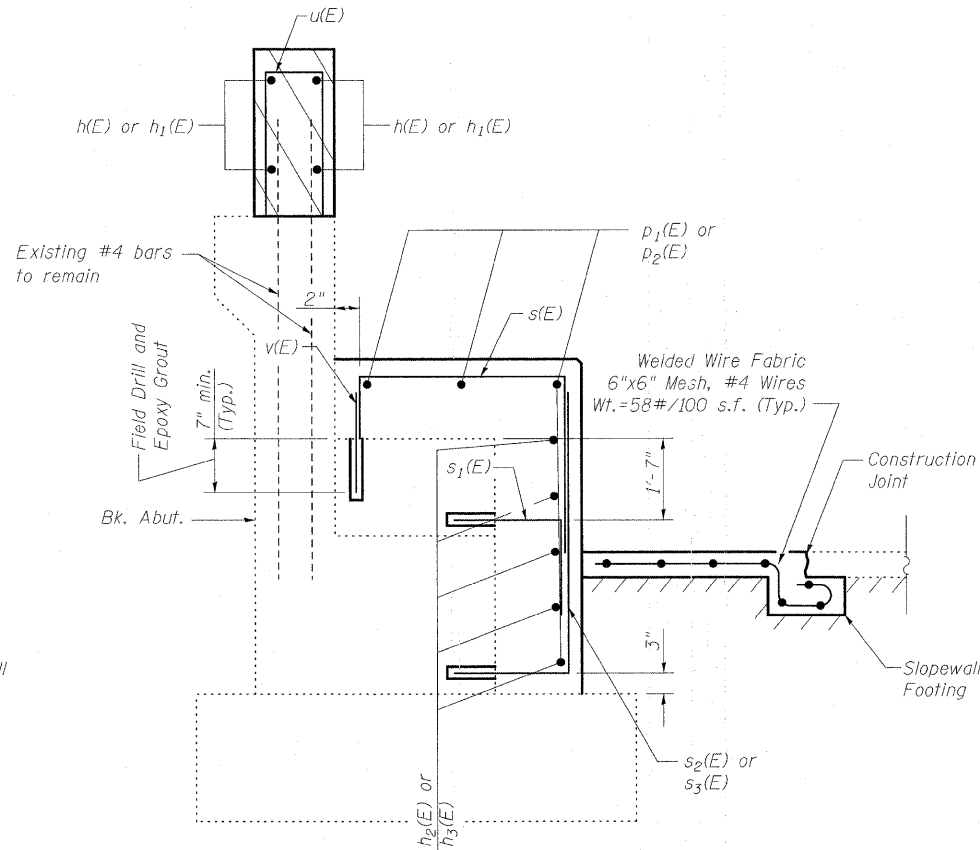
R01446 NM 3/18/2010 1025000174294.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Dimensions at Rt L

**SECTION A-A
THRU ABUTMENT
SHOWING OUTLINE**

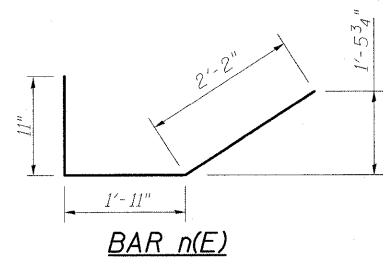


**SECTION A-A
THRU ABUTMENT
SHOWING REINFORCEMENT**

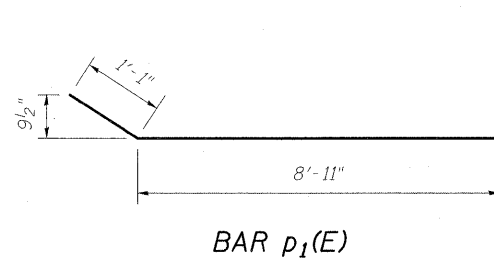
Notes:
For Endpost details see Sheet 7 of 27.
Hatched area quantity of concrete included with Concrete Superstructure.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Cost of Slopewall Footing included with Slopewall 4".
Apply Concrete Sealer to exposed horizontal and vertical faces of abutment extension.

**SOUTH ABUTMENT
BILL OF MATERIAL**

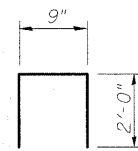
Bar	No.	Size	Length	Shape	
h(E)	4	#6	21'-7"	—	
h ₁ (E)	4	#6	21'-5"	—	
h ₂ (E)	4	#5	24'-10"	—	
h ₃ (E)	5	#5	21'-0"	—	
n(E)	5	#5	5'-0"	└	
n ₁ (E)	6	#5	3'-5"	└	
p ₁ (E)	2	#5	10'-0"	└	
p ₂ (E)	16	#5	10'-3"	└	
s(E)	52	#5	7'-2"	└	
s ₁ (E)	46	#5	3'-0"	└	
s ₂ (E)	24	#5	4'-5"	└	
s ₃ (E)	22	#5	5'-9"	└	
u(E)	44	#5	4'-9"	└	
v(E)	52	#5	1'-2"	—	
Concrete Sealer				Sq. Ft.	691
Slopewall, 4"				Sq. Yd.	23
Concrete Structures				Cu. Yd.	14.0
Reinforcement Bars, Epoxy Coated				Pound	1760



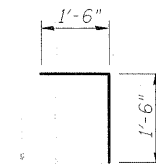
BAR n(E)



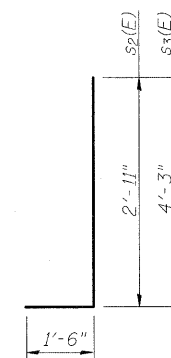
BAR p₁(E)



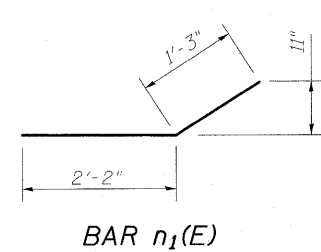
BAR u(E)



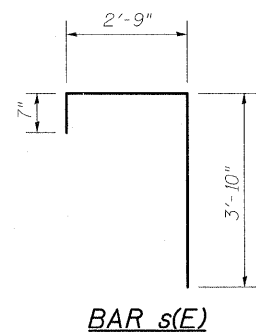
BAR s₁(E)



BARS s₂(E)-s₃(E)



BAR n₁(E)



BAR s(E)

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



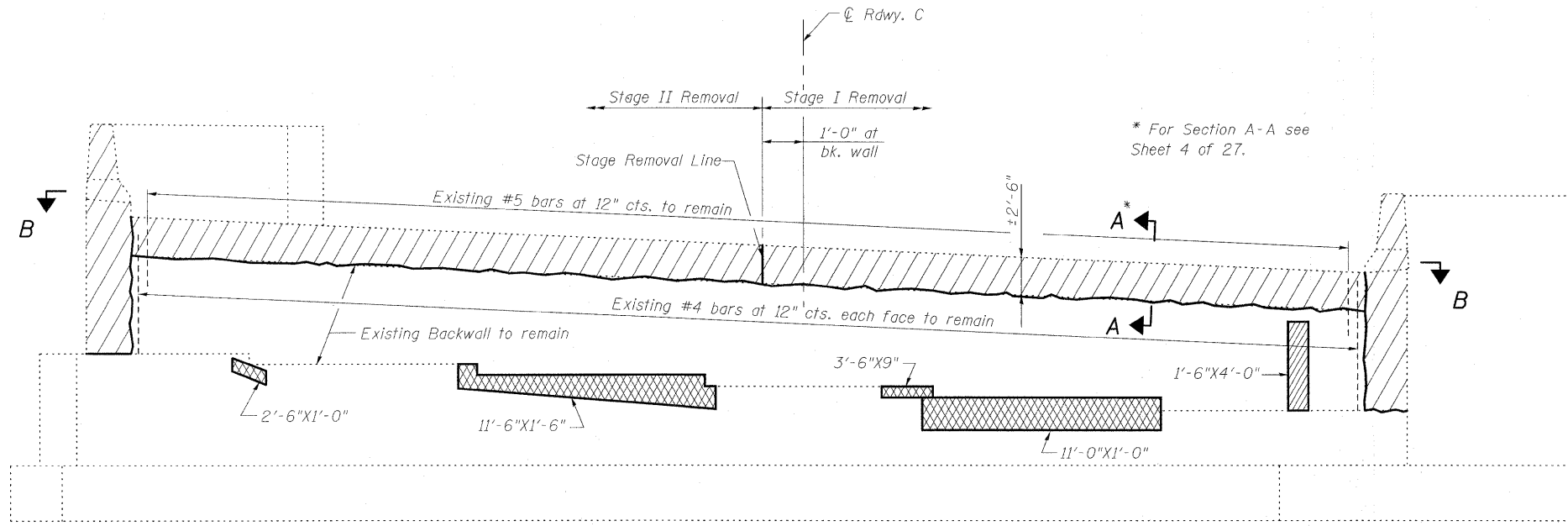
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Marysville, IL 62452-5685
Local (618) 288-4965
Fax 618-288-4966

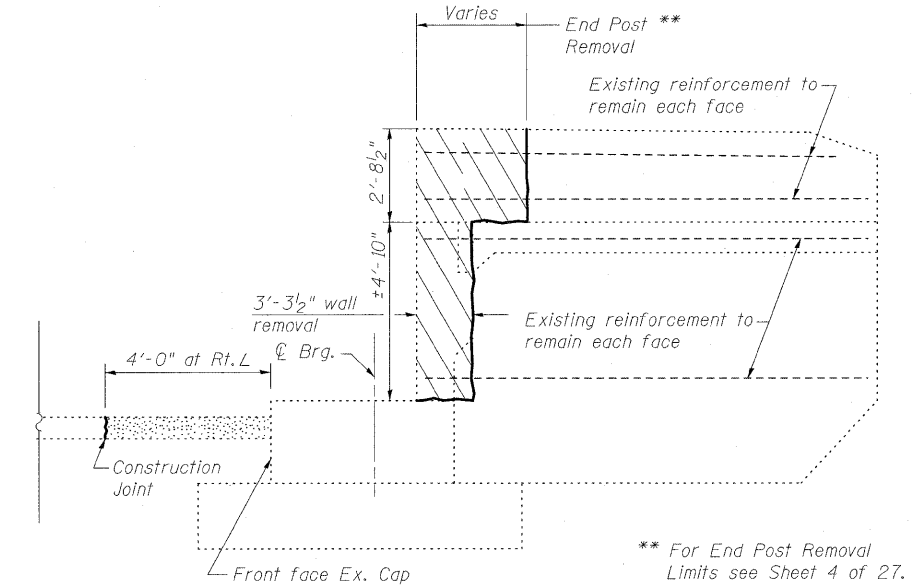
SHEET NO. 17 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1371
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

**SOUTH ABUTMENT SECTIONS
STRUCTURE NO. 025-0001**

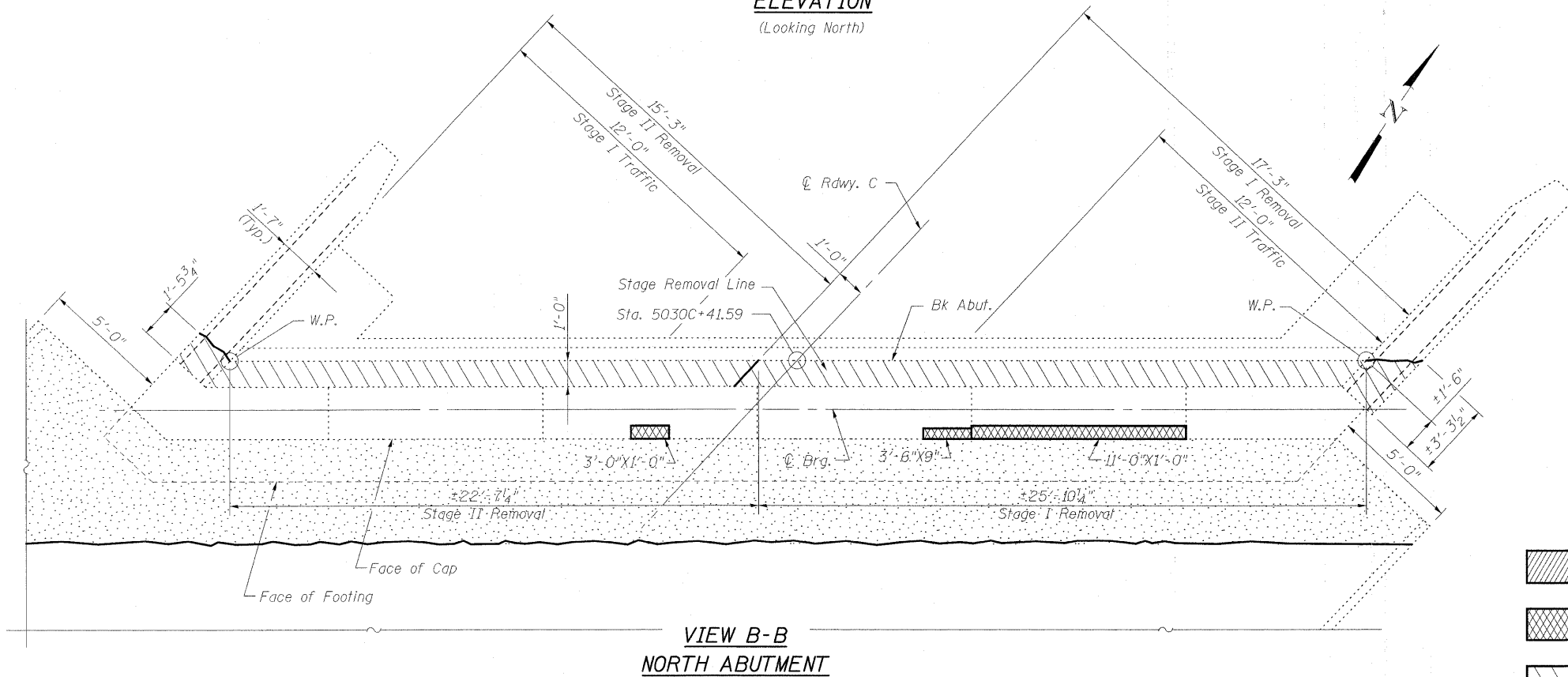
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



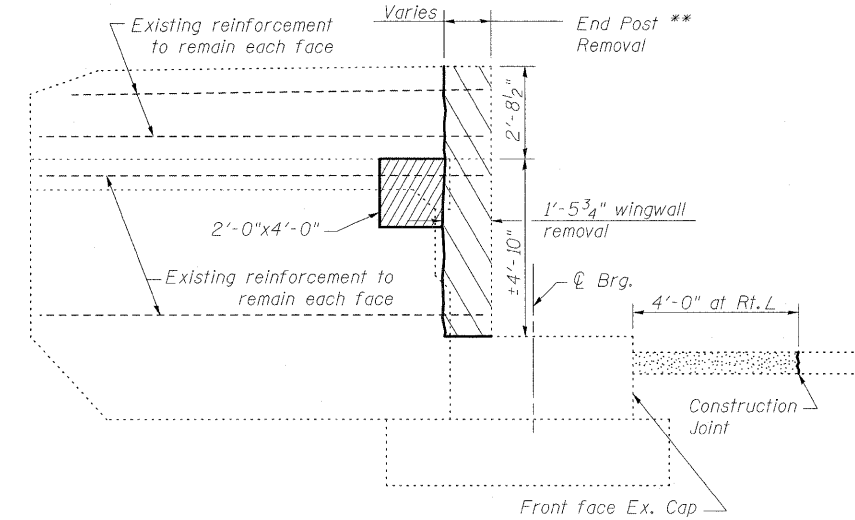
ELEVATION
(Looking North)



EAST WING WALL



VIEW B-B
NORTH ABUTMENT



WEST WING WALL

LEGEND

- Indicates Structural Repair of Concrete
- Indicates Unsound Concrete Removal
- Indicates Concrete Removal
- Indicates Slopewall Removal

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	5.8
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	14
Unsound Concrete Removal	Sq. Yd.	5.5

CONCRETE REMOVAL & REPAIR
NORTH ABUTMENT
STRUCTURE NO. 025-0001

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

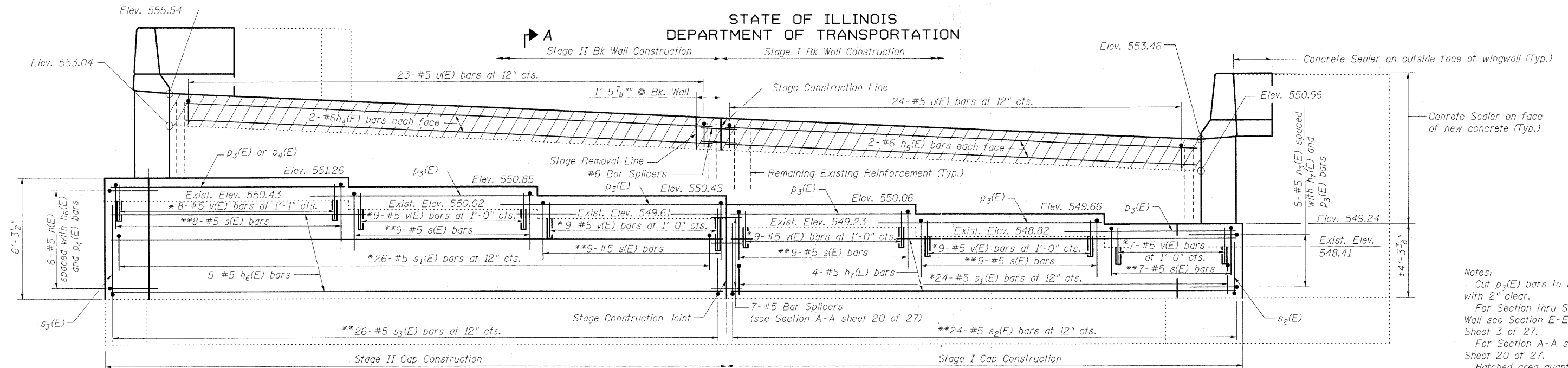


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-9635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 18 27 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1372
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

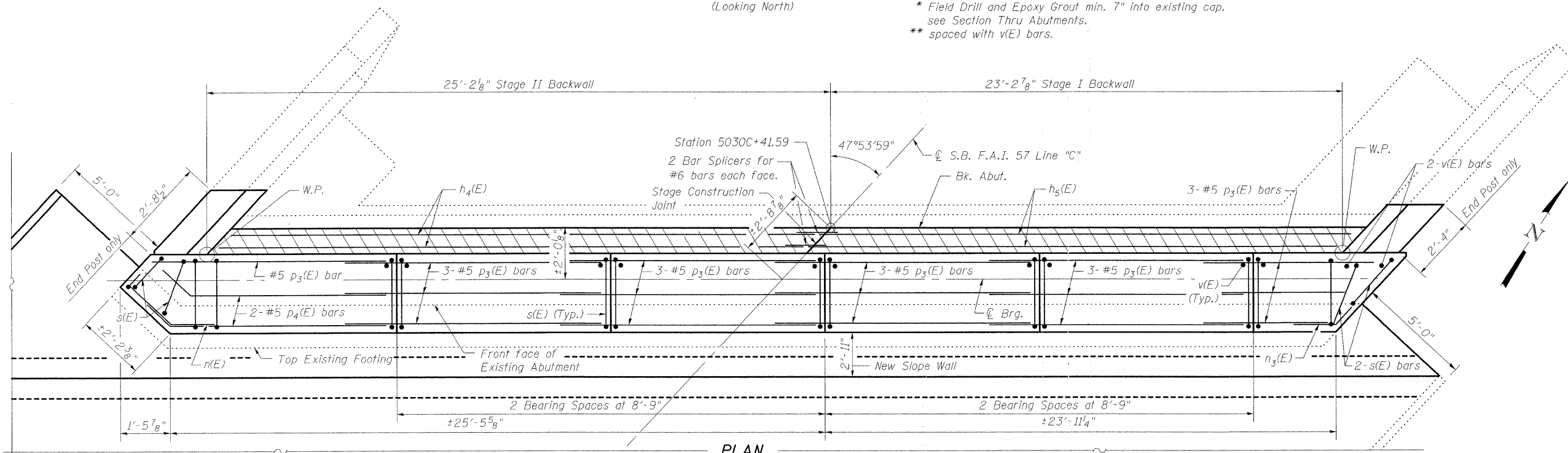
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



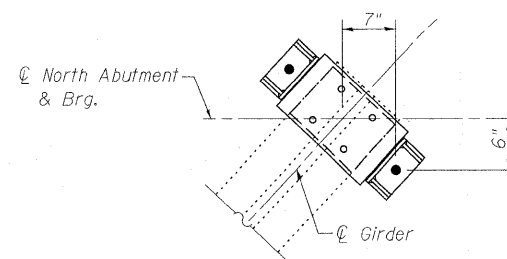
ELEVATION
(Looking North)

* Field Drill and Epoxy Grout min. 7" into existing cap.
see Section Thru Abutments.
** spaced with v(E) bars.

Notes:
Cut p₃(E) bars to fit with 2" clear.
For Section thru Slope Wall see Section E-E Sheet 3 of 27.
For Section A-A see Sheet 20 of 27.
Hatched area quantity of concrete included with Concrete Superstructure.
Space reinforcement to miss anchor bolts.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.



PLAN



ANCHOR BOLT DETAIL
NORTH ABUTMENT

MIN. BAR LAP
#5 bar = 1'-8"



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

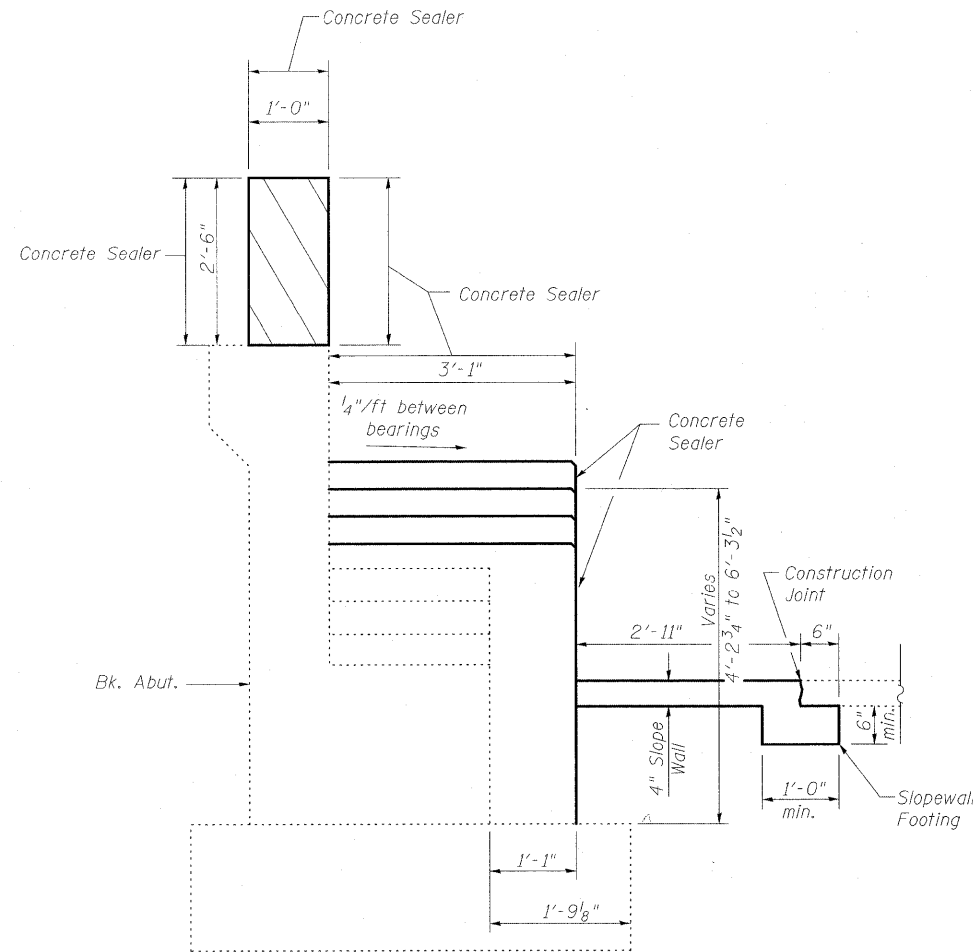
3 Oak Drive
Maryville, IL 62052-5635
Local: (618) 388-4095
Fax: 618-388-4666

NORTH ABUTMENT DETAILS
STRUCTURE NO. 025-0001

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

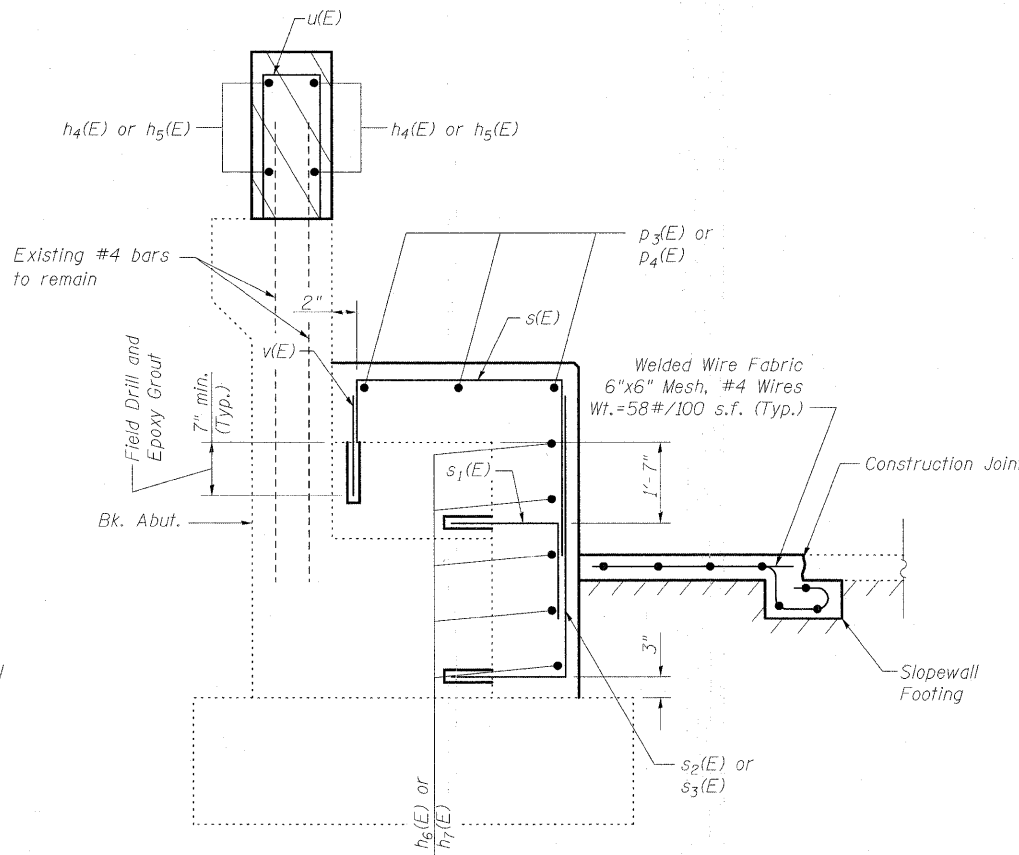
SHEET NO. 19 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HBII-2)	EFFINGHAM	1416	1373
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

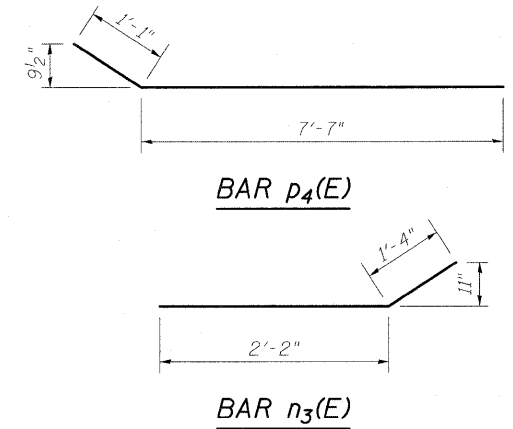


Dimensions at Rt L

**SECTION A-A
THRU ABUTMENT
SHOWING OUTLINE**



**SECTION A-A
THRU ABUTMENT
SHOWING REINFORCEMENT**



**NORTH ABUTMENT
BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$h_4(E)$	4	#6	23'-7"	—
$h_5(E)$	4	#6	23'-11"	—
$h_6(E)$	5	#5	25'-1"	—
$h_7(E)$	4	#5	23'-9"	—
$n(E)$	6	#5	5'-0"	└
$n_3(E)$	5	#5	3'-6"	└
$p_3(E)$	16	#5	10'-3"	—
$p_4(E)$	2	#5	8'-8"	└
$s(E)$	51	#5	7'-2"	└
$s_1(E)$	50	#5	3'-0"	└
$s_2(E)$	24	#5	4'-5"	└
$s_3(E)$	26	#5	5'-9"	└
$u(E)$	47	#5	4'-9"	└
$v(E)$	51	#5	1'-2"	—
Concrete Sealer		Sq. Ft.	765	
Slopewall, 4"		Sq. Yd.	25	
Concrete Structures		Cu. Yd.	14.0	
Reinforcement Bars, Epoxy Coated		Pound	1860	
Structure Excavation		Cu. Yd.	13.0	

Notes:
For Endpost details see Sheet 7 of 27.
For additional bar bend details see Sheet 17 of 27.
Hatched area quantity of concrete included with Concrete Superstructure.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Cost of Slopewall Footing included with Slopewall 4".
Apply Concrete Sealer to exposed horizontal and vertical faces of abutment extension.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



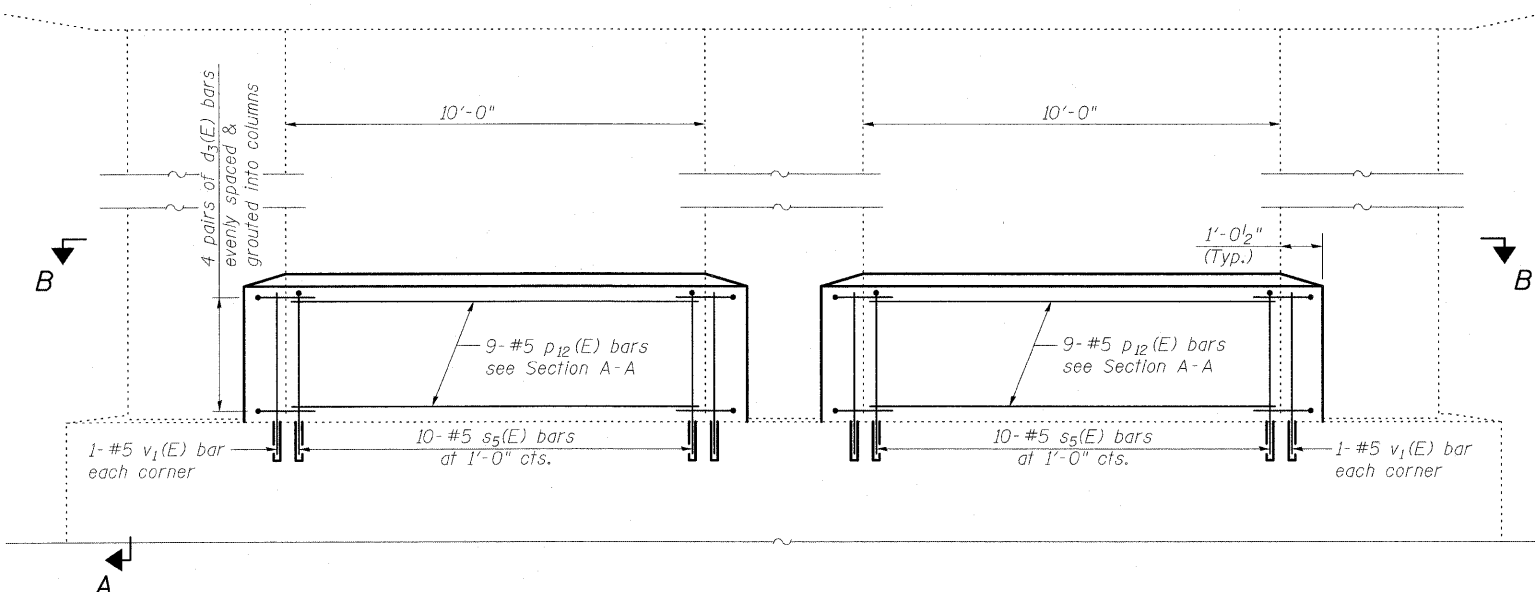
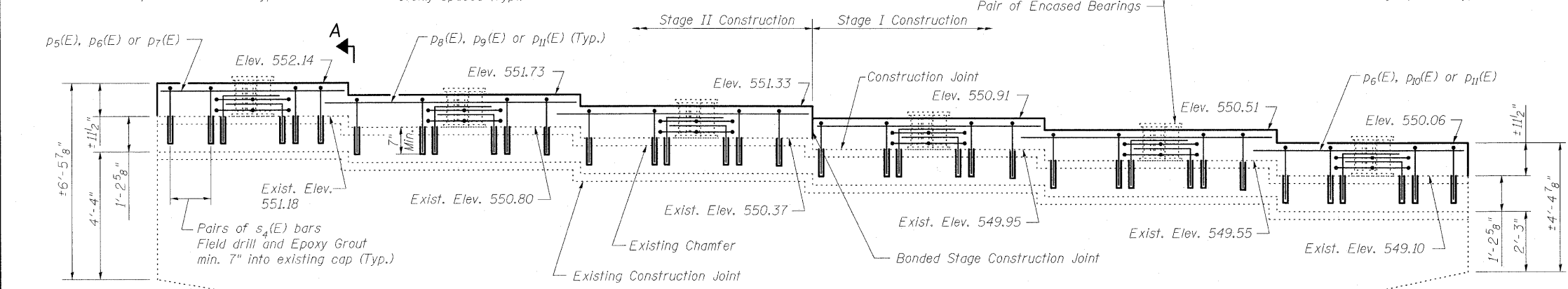
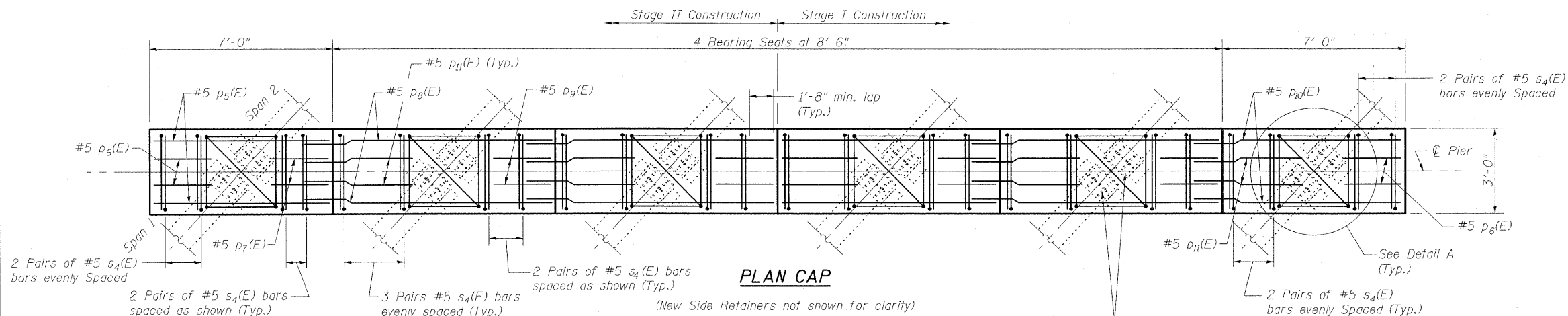
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62962-5685
Local: (618) 288-4685
Fax: 618-288-4686

SHEET NO. 20 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1374
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

**NORTH ABUTMENT SECTIONS
STRUCTURE NO. 025-0001**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Notes:
For Detail A & Detail B see Sheet 22 of 27
For View B-B see Sheet 22 of 27.
Space reinforcement in cap to miss anchor bolts. Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 1.
Cut p₈(E) and p₉(E) bars to fit with 2" clear.

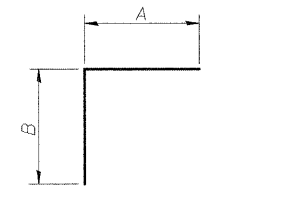
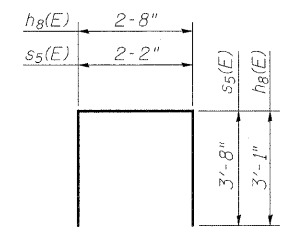
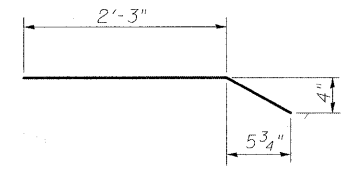
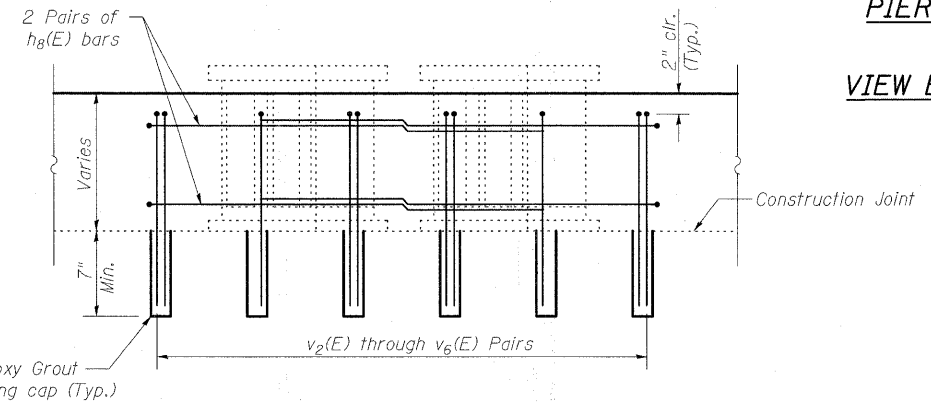
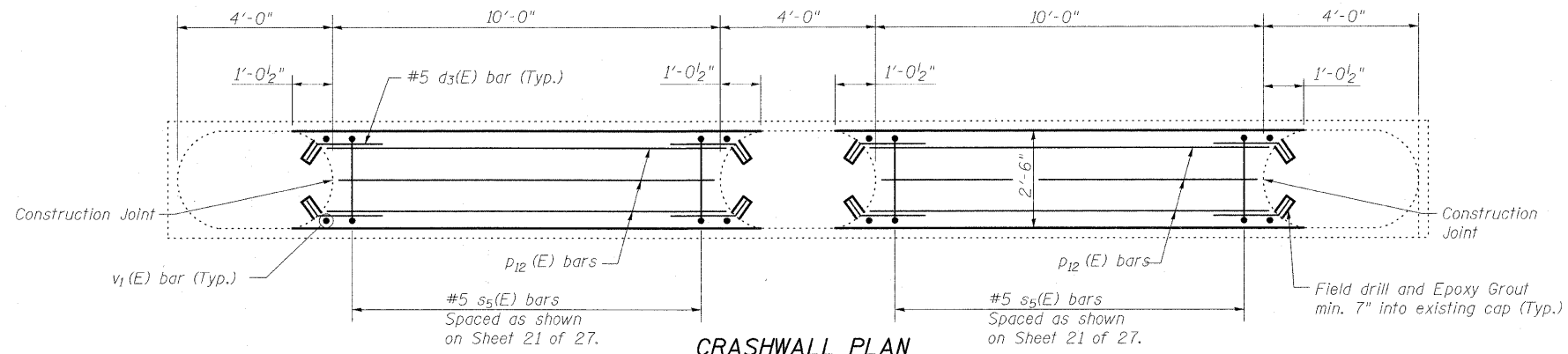
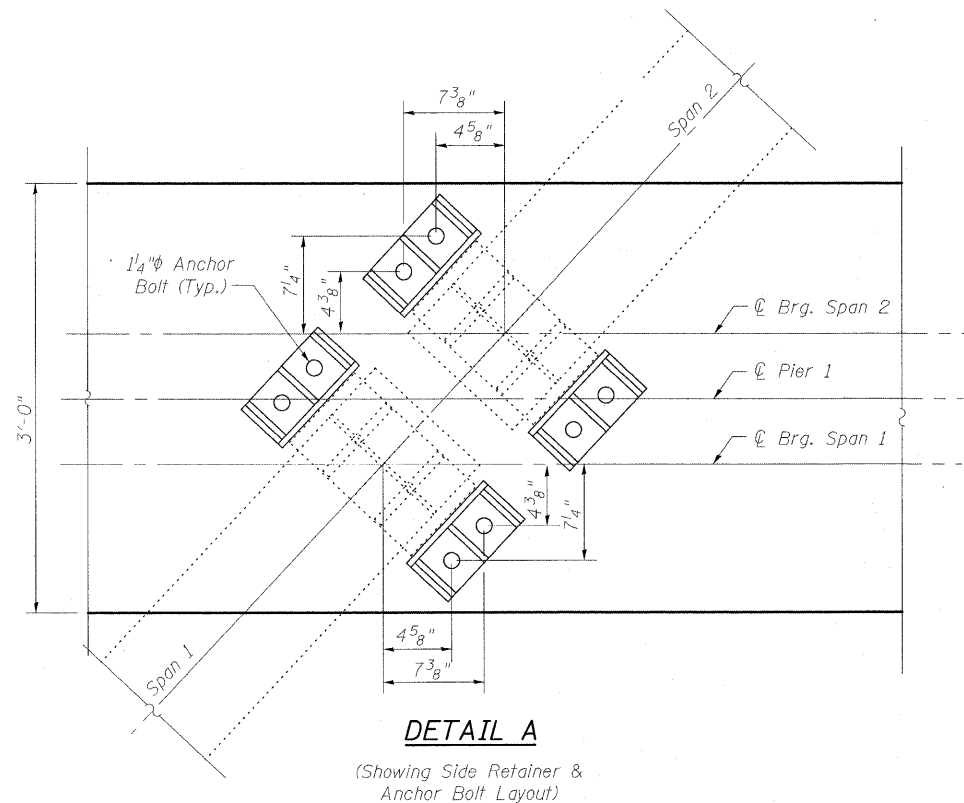
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Mayville, IL 62662-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 21 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1375
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

1/23/11 AM 4/29/2010 10:25:00 AM 74296.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



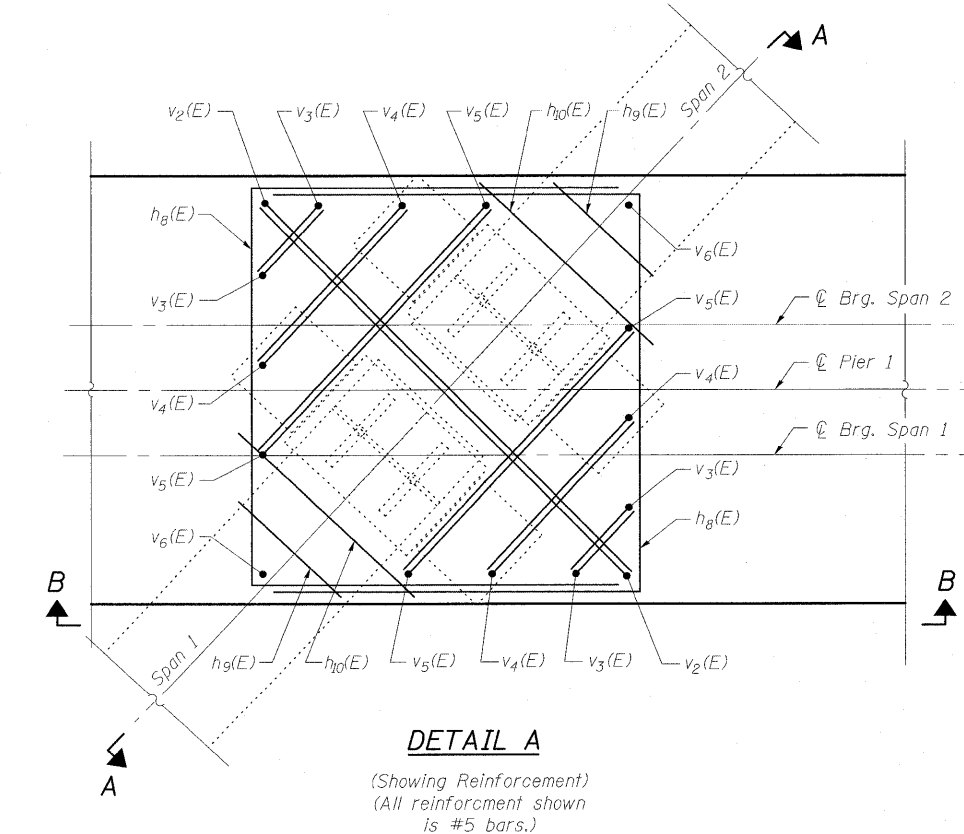
Bar	A	B
s4(E)	2'-8"	1'-4"
v2(E)	3'-11"	1'-4"
v3(E)	9"	1'-4"
v4(E)	1'-8"	1'-4"
v5(E)	2'-8"	1'-4"

Notes:
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 1.

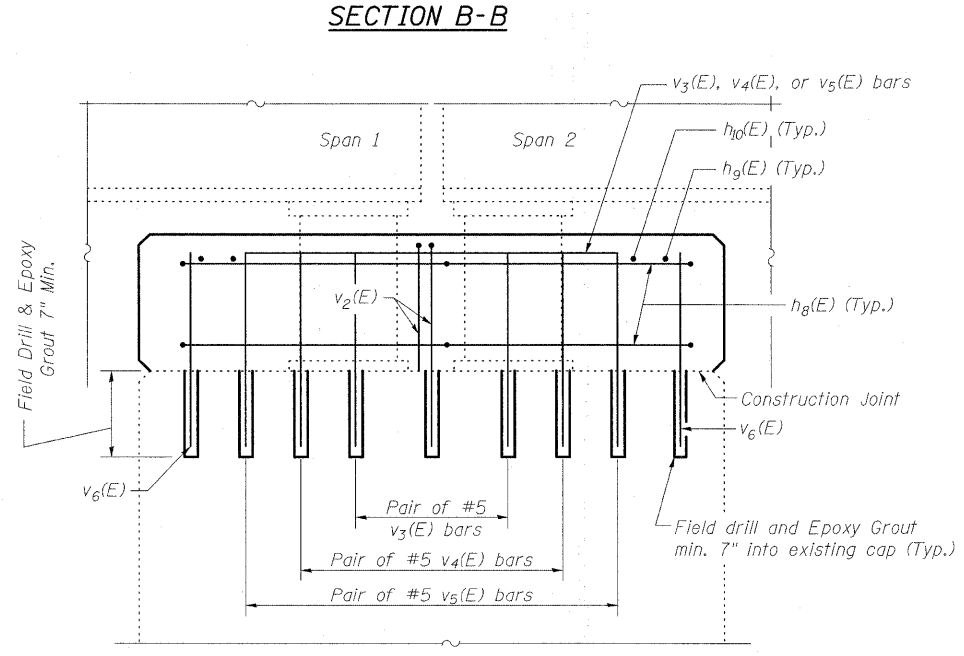
PIER 1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d3(E)	32	#5	2'-10"	—
h8(E)	24	#5	8'-10"	□
h9(E)	12	#5	1'-3"	—
h10(E)	12	#5	2'-0"	—
p5(E)	2	#5	6'-8"	—
p6(E)	4	#5	1'-9"	—
p7(E)	2	#5	2'-10"	—
p8(E)	8	#5	10'-0"	—
p9(E)	8	#5	2'-6"	—
p10(E)	2	#5	8'-6"	—
p11(E)	10	#5	4'-8"	—
p12(E)	18	#5	9'-8"	—
s4(E)	56	#5	4'-1"	┌
s5(E)	20	#5	9'-6"	□
v1(E)	8	#5	3'-8"	—
v2(E)	12	#5	5'-3"	┌
v3(E)	24	#5	2'-1"	┌
v4(E)	24	#5	3'-0"	┌
v5(E)	24	#5	4'-0"	┌
v6(E)	12	#5	1'-4"	—
Concrete Sealer		Sq. Ft.	248	
Concrete Structures		Cu. Yd.	11.2	
Reinforcement Bars, Epoxy Coated		Pound	1510	

PIER 1 DETAILS
STRUCTURE NO. 025-0001



MIN BAR LAP
#5 bar = 1'-8"



(All v(E) bars shown are drilled and grouted)
Side Retainers not shown for clarity.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

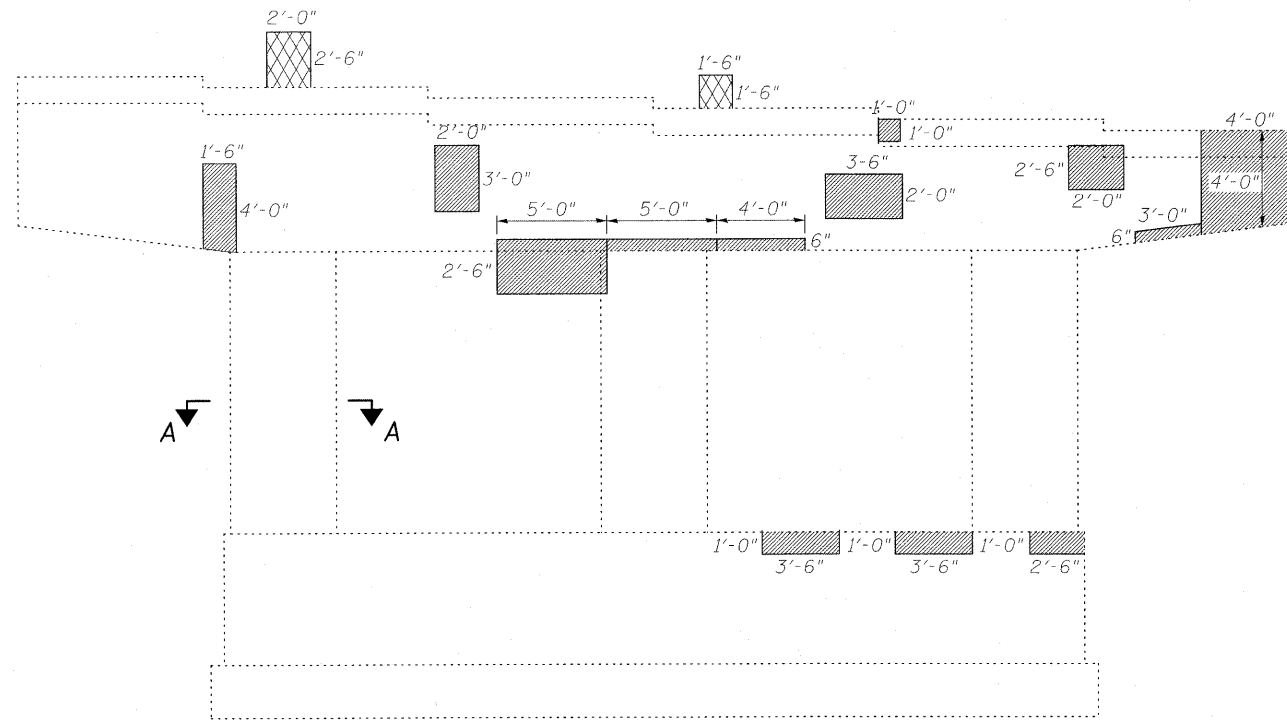


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

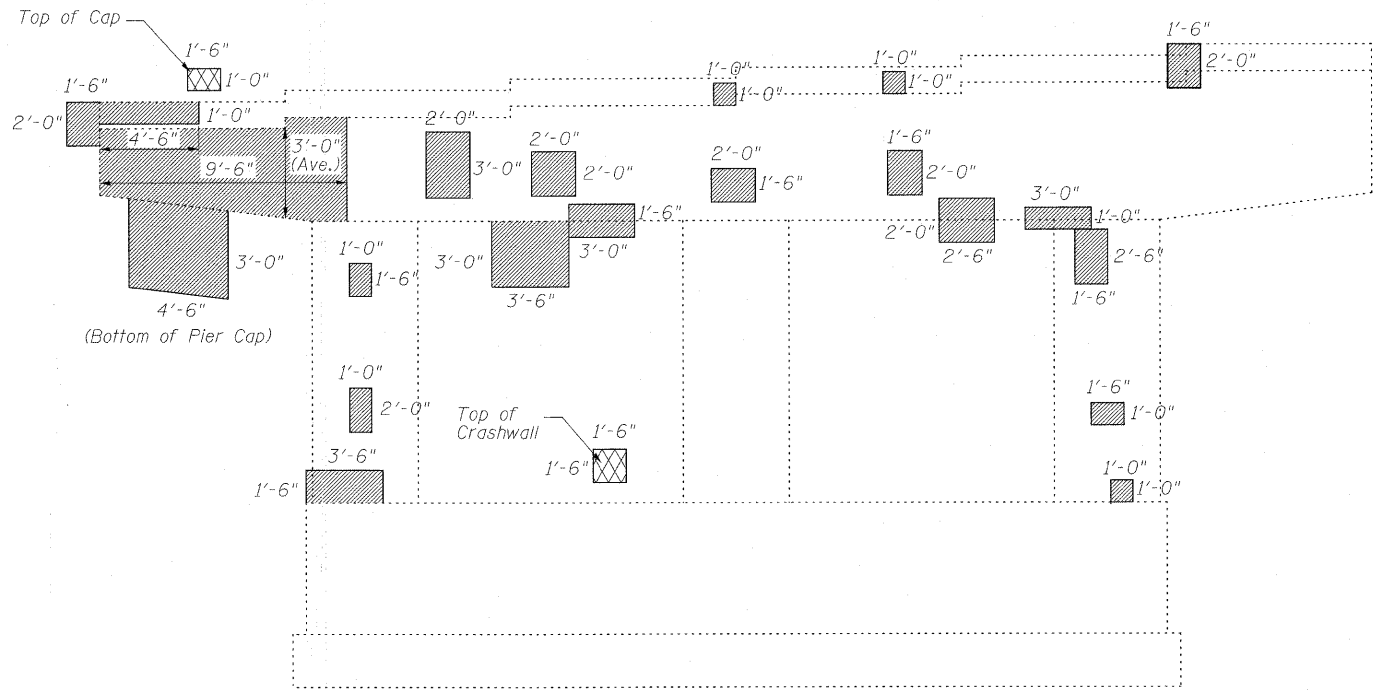
3 Oak Drive
Maryville, IL 62052-5655
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 22 27 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1376
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

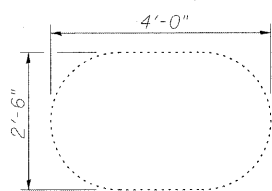


PIER 1
(Looking North)



PIER 1
(Looking South)

- Indicates Unsound Concrete Removal
- Indicates Structural Repair of Concrete



SECTION A-A
Typical Section
Through Column

Notes:
Rubbed finish for Structural Repair of Concrete
Areas shall be completed according to article 503.15
of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	178
Rubbed Finish	Sq. Ft.	178
Unsound Concrete Removal	Sq. Yd.	1.2

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



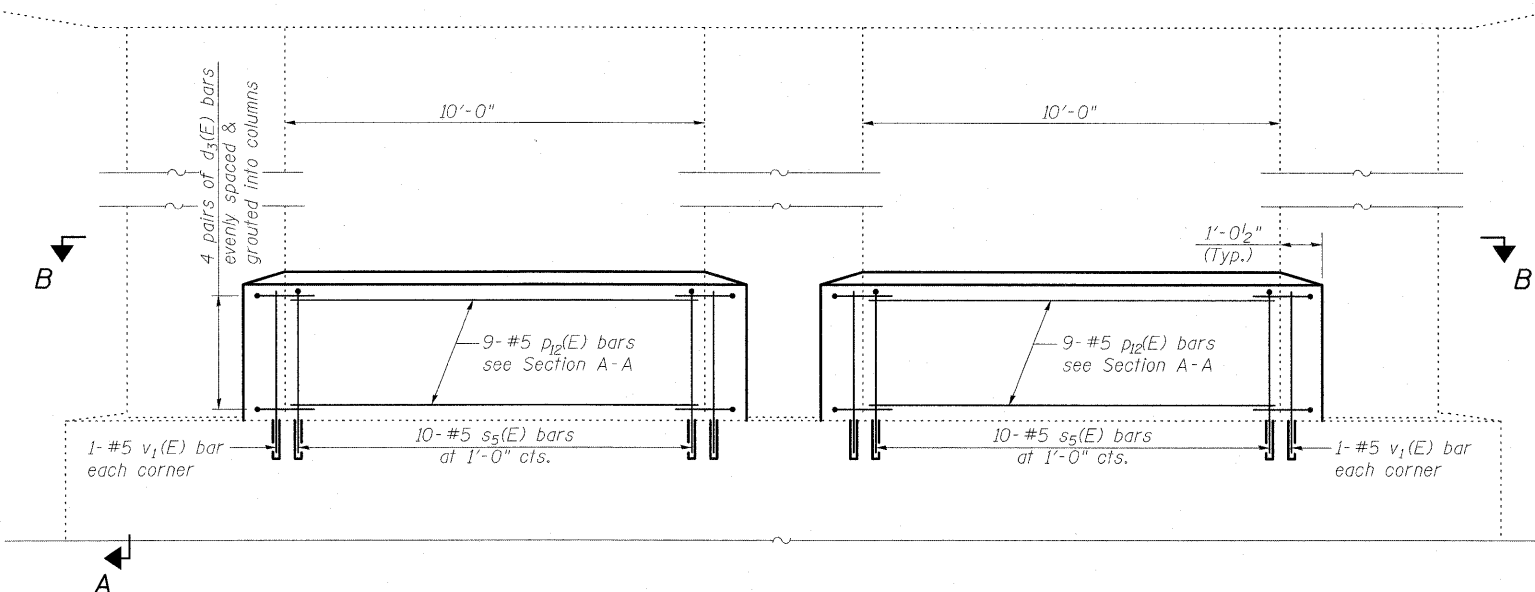
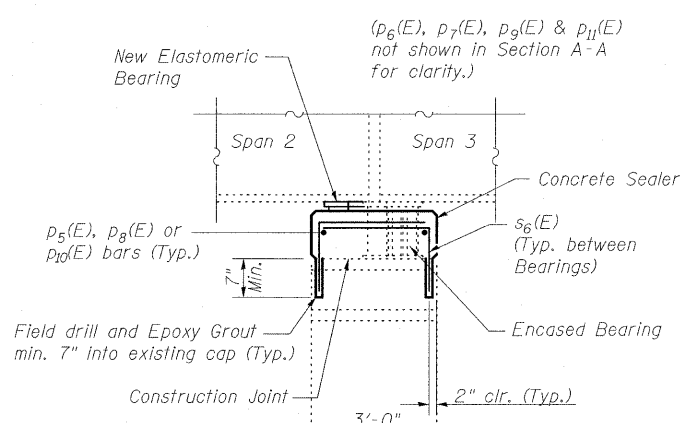
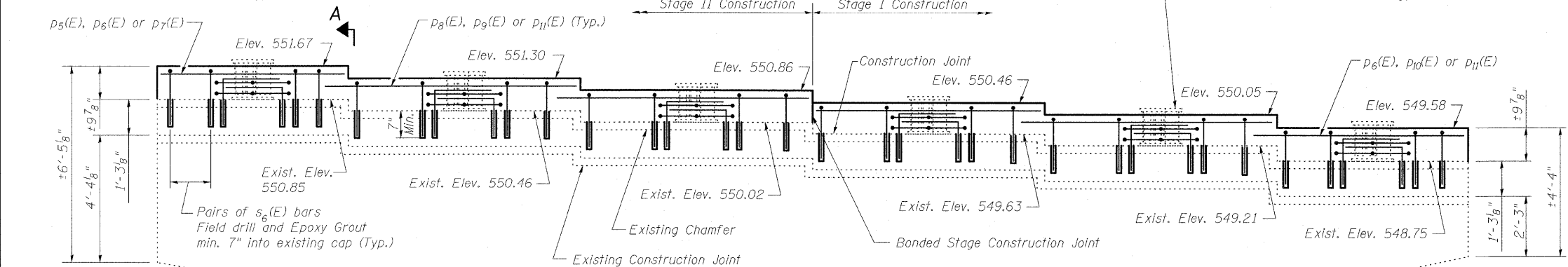
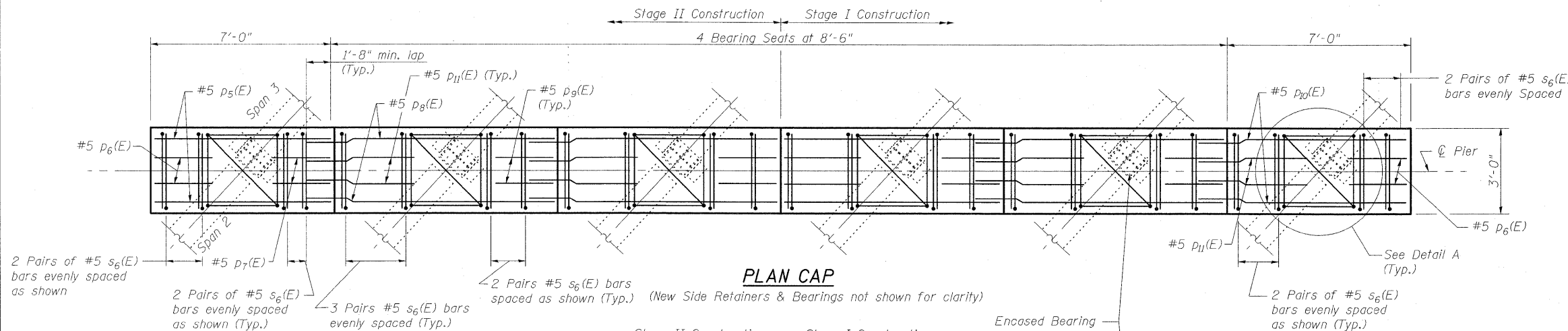
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax (618) 288-4666

SHEET NO. 23 27 SHEETS	F.A.I. RTE.	SECTION (25-3HB)I-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1377
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

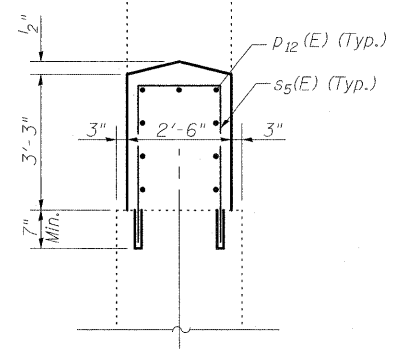
**PIER 1 REPAIR DETAILS
STRUCTURE NO. 025-0001**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking North)

Notes:
For Detail A see Sheet 25 of 27
For View B-B see Sheet 25 of 27.
For Bearing Removal Details see Sheet 14 of 27.
Space reinforcement in cap to miss anchor bolts. Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 2.
Cut p₈(E) and p₉(E) bars to fit with 2" clear.



SECTION A-A
(Showing Bearings and Superstructure)

PIER 2 GENERAL PLAN
STRUCTURE NO. 025-0001

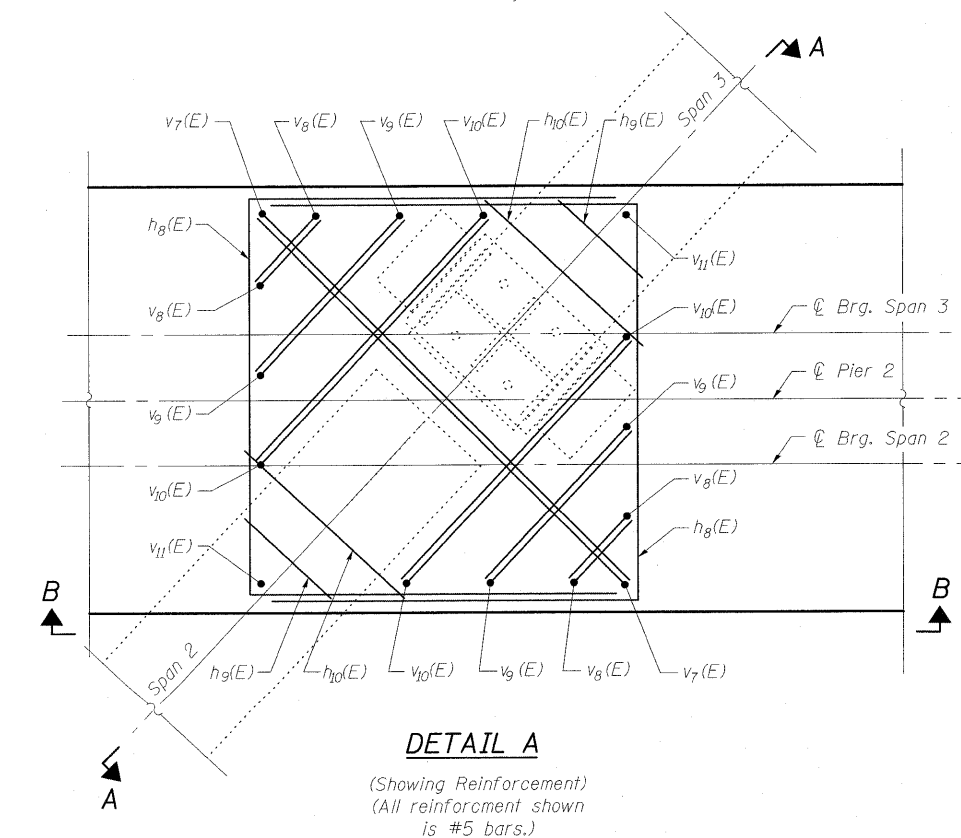
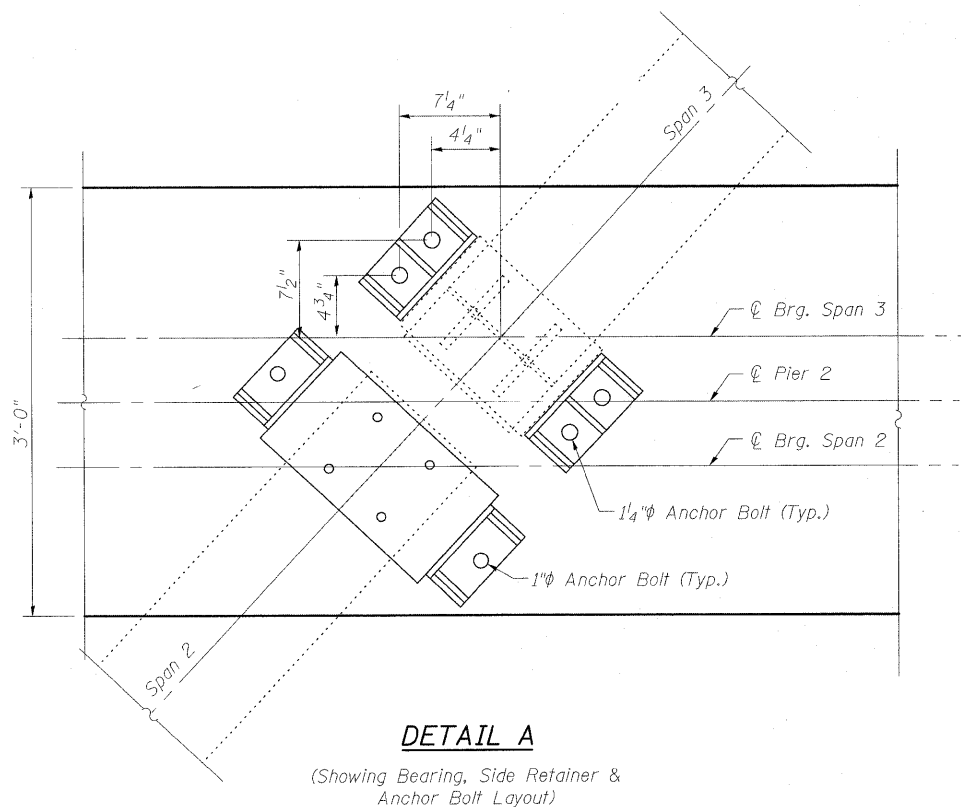
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.

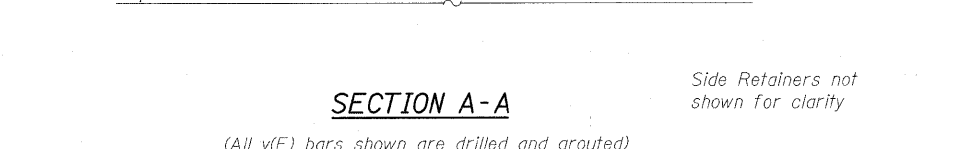
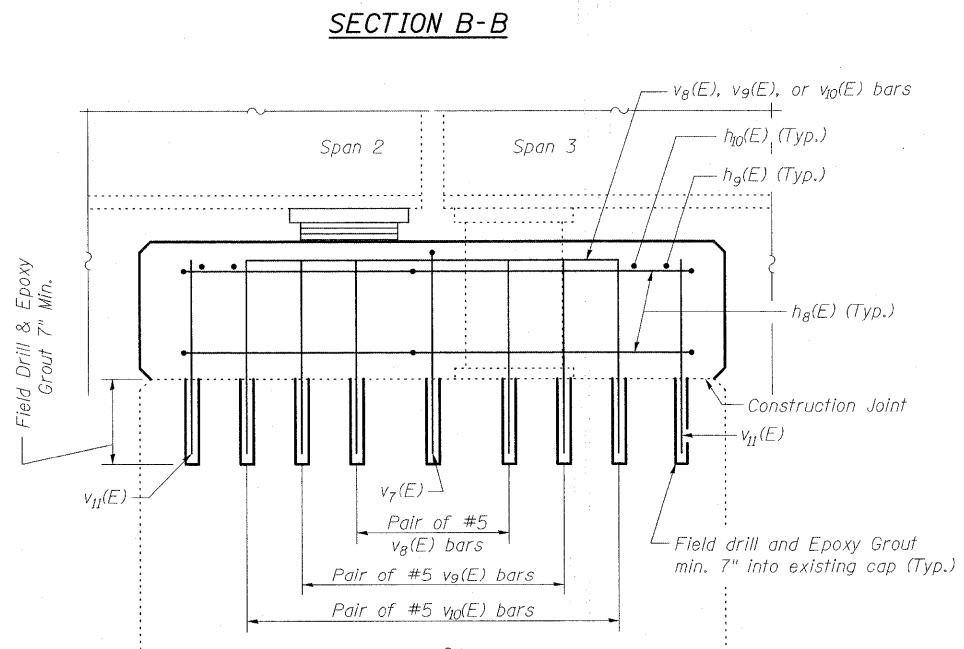
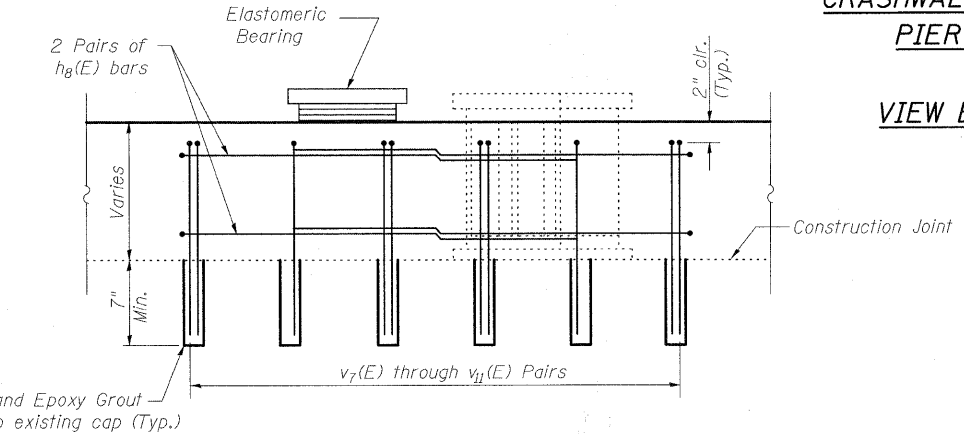
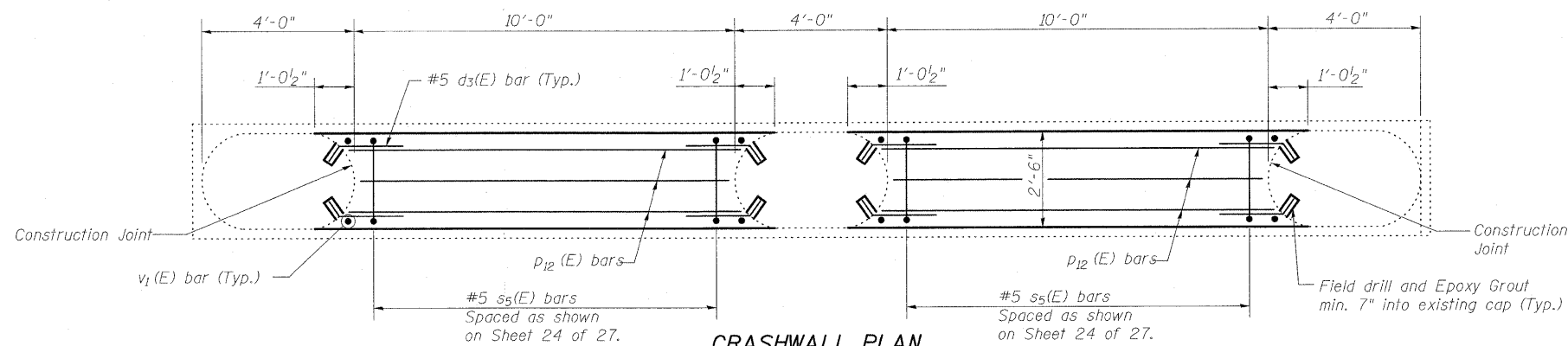
3 Oak Drive
Maryville, IL 62462-5655
Local (618) 388-4685
Fax 618-388-4686

SHEET NO. 24 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1378
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

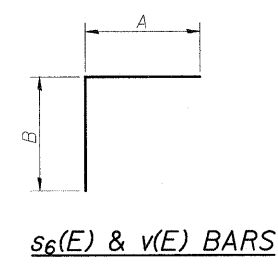


Notes:
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 2.

MIN BAR LAP
#5 bar = 1'-8"

PIER 2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d ₃ (E)	32	#5	2'-10"	—
h ₈ (E)	24	#5	8'-10"	□
h ₉ (E)	12	#5	1'-3"	—
h ₁₀ (E)	12	#5	2'-0"	—
p ₅ (E)	2	#5	6'-8"	—
p ₆ (E)	4	#5	1'-9"	—
p ₇ (E)	2	#5	2'-10"	—
p ₈ (E)	8	#5	10'-0"	—
p ₉ (E)	8	#5	2'-6"	—
p ₁₀ (E)	2	#5	8'-6"	—
p ₁₁ (E)	10	#5	4'-8"	—
p ₁₂ (E)	18	#5	9'-8"	—
s ₅ (E)	20	#5	9'-6"	□
s ₆ (E)	56	#5	3'-10"	□
v ₁ (E)	8	#5	3'-8"	—
v ₇ (E)	12	#5	5'-1"	□
v ₈ (E)	24	#5	1'-11"	□
v ₉ (E)	24	#5	2'-10"	□
v ₁₀ (E)	24	#5	3'-10"	□
v ₁₁ (E)	12	#5	1'-2"	—
Concrete Sealer		Sq. Ft.	234	
Concrete Structures		Cu. Yd.	10.6	
Reinforcement Bars, Epoxy Coated		Pound	1490	



Bar	A	B
s ₆ (E)	2'-8"	1'-2"
v ₇ (E)	3'-11"	1'-2"
v ₈ (E)	9"	1'-2"
v ₉ (E)	1'-8"	1'-2"
v ₁₀ (E)	2'-8"	1'-2"

PIER 2 DETAILS
STRUCTURE NO. 025-0001

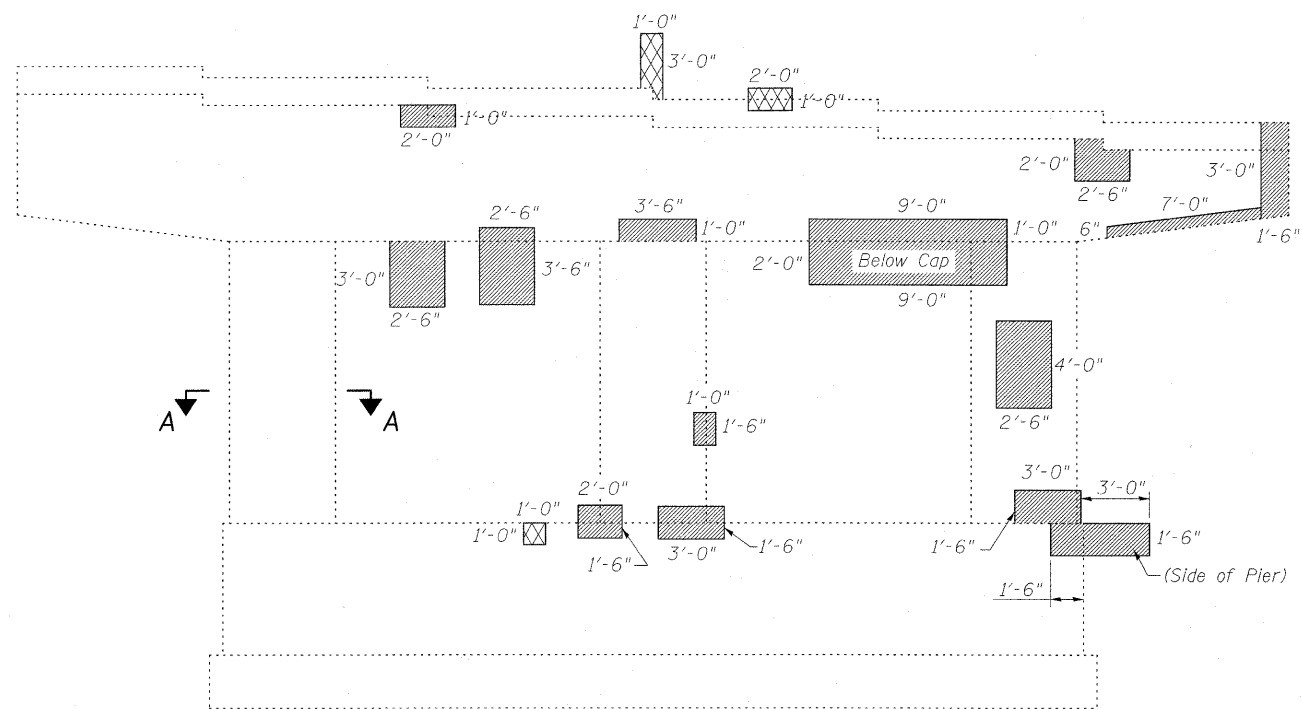
SHEET NO. 25 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1379
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.

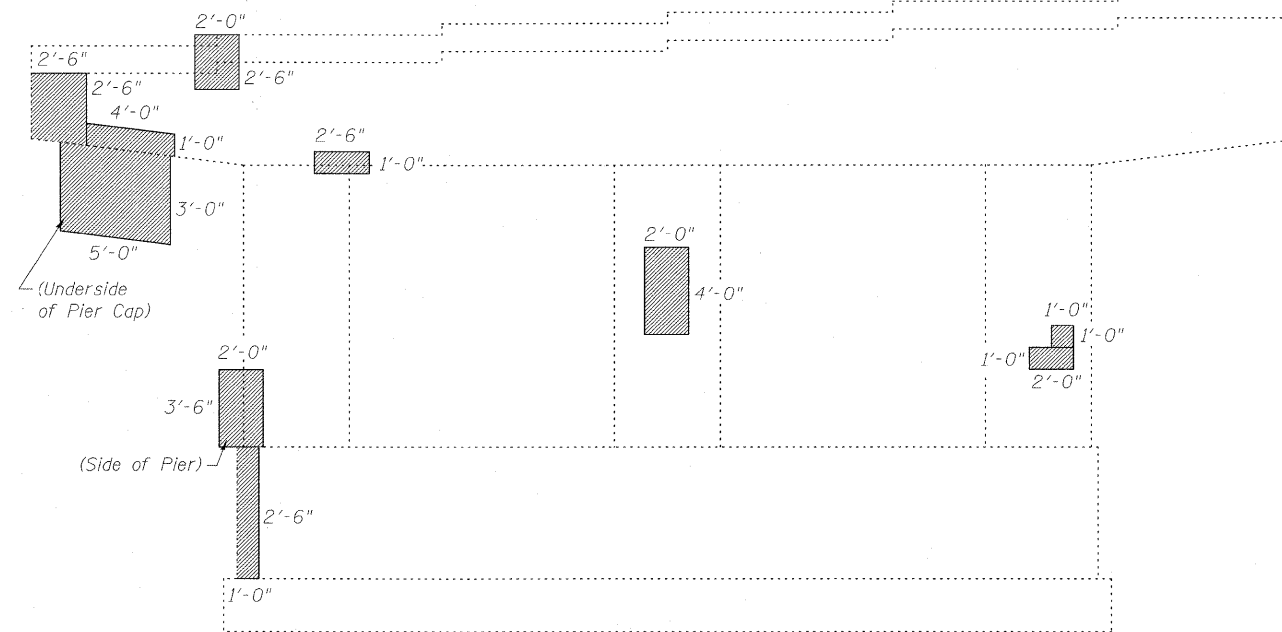
3 Oak Drive
Maryville, IL 62862-5685
Local (618) 388-4665
Fax 618-388-4666

10/16/04 AM 3/18/2010 10:25:00 74296.dgn



STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

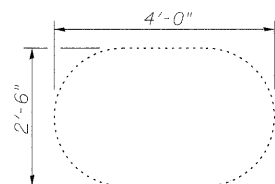


PIER 2
(Looking North)



PIER 2
(Looking South)

 Indicates Unsound Concrete Removal
 Indicates Structural Repair of Concrete



SECTION A-A
Typical Section
Through Column

Notes:
Rubbed finish for Structural Repair of Concrete Areas shall be completed according to article 503.15 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	145
Rubbed Finish	Sq. Ft.	145
Unsound Concrete Removal	Sq. Yd.	0.7

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



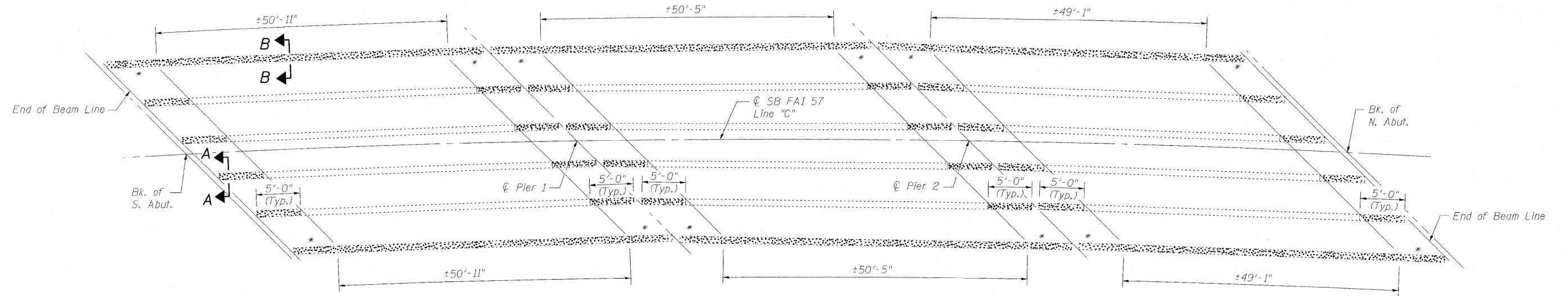
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 26 27 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-2	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1380
	SN 025-0001		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

**PIER 2 REPAIR DETAILS
STRUCTURE NO. 025-0001**

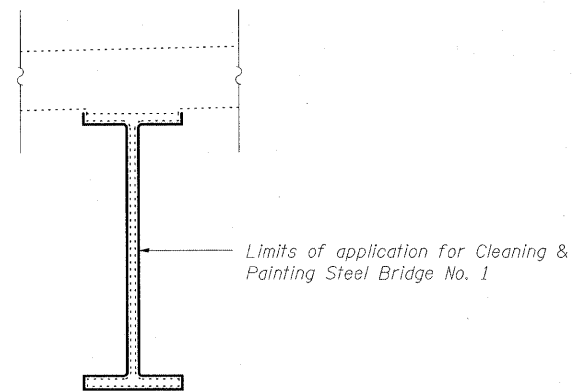
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



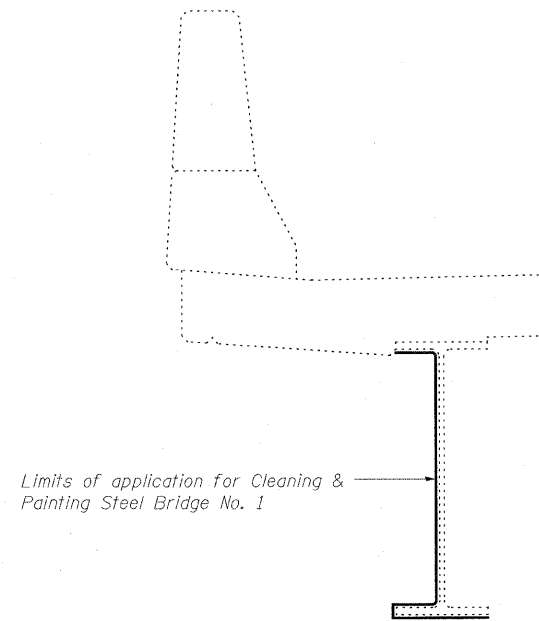
PLAN

Notes:
All beams are 36 WF160
See General Notes for additional painting requirements.
* Indicates limits defined in Section A-A.

 Locations where Cleaning and Painting Steel Bridge are Required. See Sections A-A and B-B for limits of application.



SECTION A-A



SECTION B-B

**EXISTING STEEL CLEANING & PAINTING DETAILS
STEEL BRIDGE NO. 1
STRUCTURE NO. 025-0001**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62462-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 27 27 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-2	EFFINGHAM	1416	1381
SN 025-0001			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

Bench Mark: Chiseled "□" Station 5021C+02 88.2 ft right of centerline of survey on east concrete base of overhead sign on I-57 - 70 "I-70 West St. Louis Arrow, Chicago & Indianapolis Arrows" Elev. = 574.56.

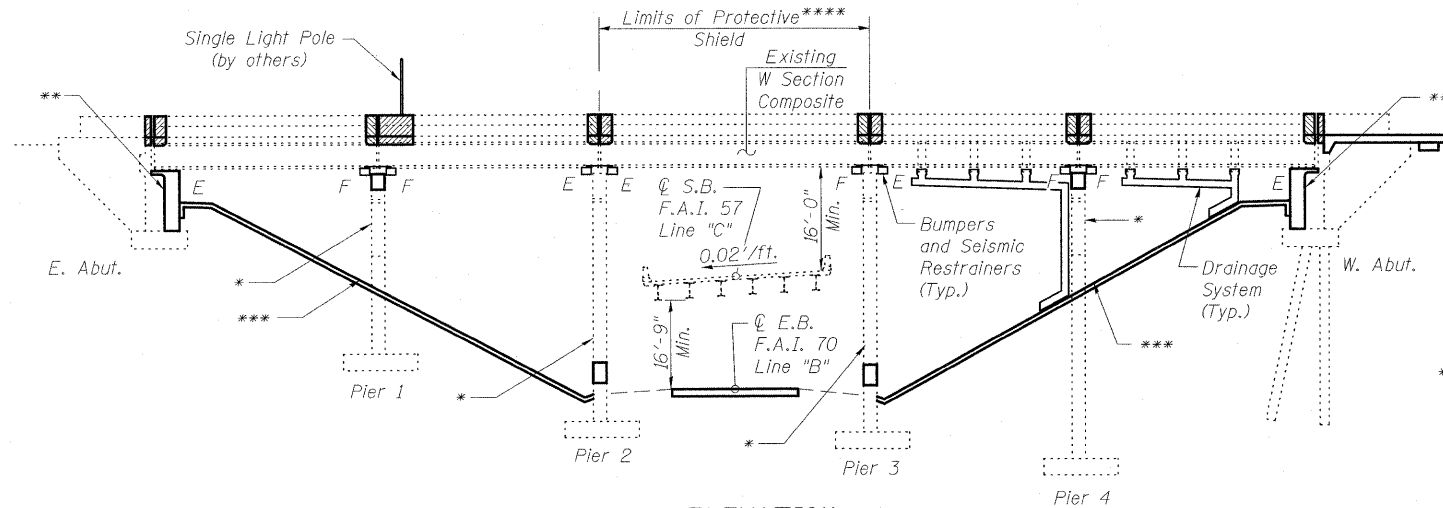
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Existing Structure: #025-0018 Constructed in 1960 & reconstructed in 1992 is 25'-8" out to out and 258'-10⁷/₁₆" BK to BK of abutments along the long chord. The structure consists of 5 simple spans made up of R.C. slab and composite steel I-Beams which are supported by R.C. spill through abutments and 2-column piers with hammer head caps. Traffic shall be detoured during construction.

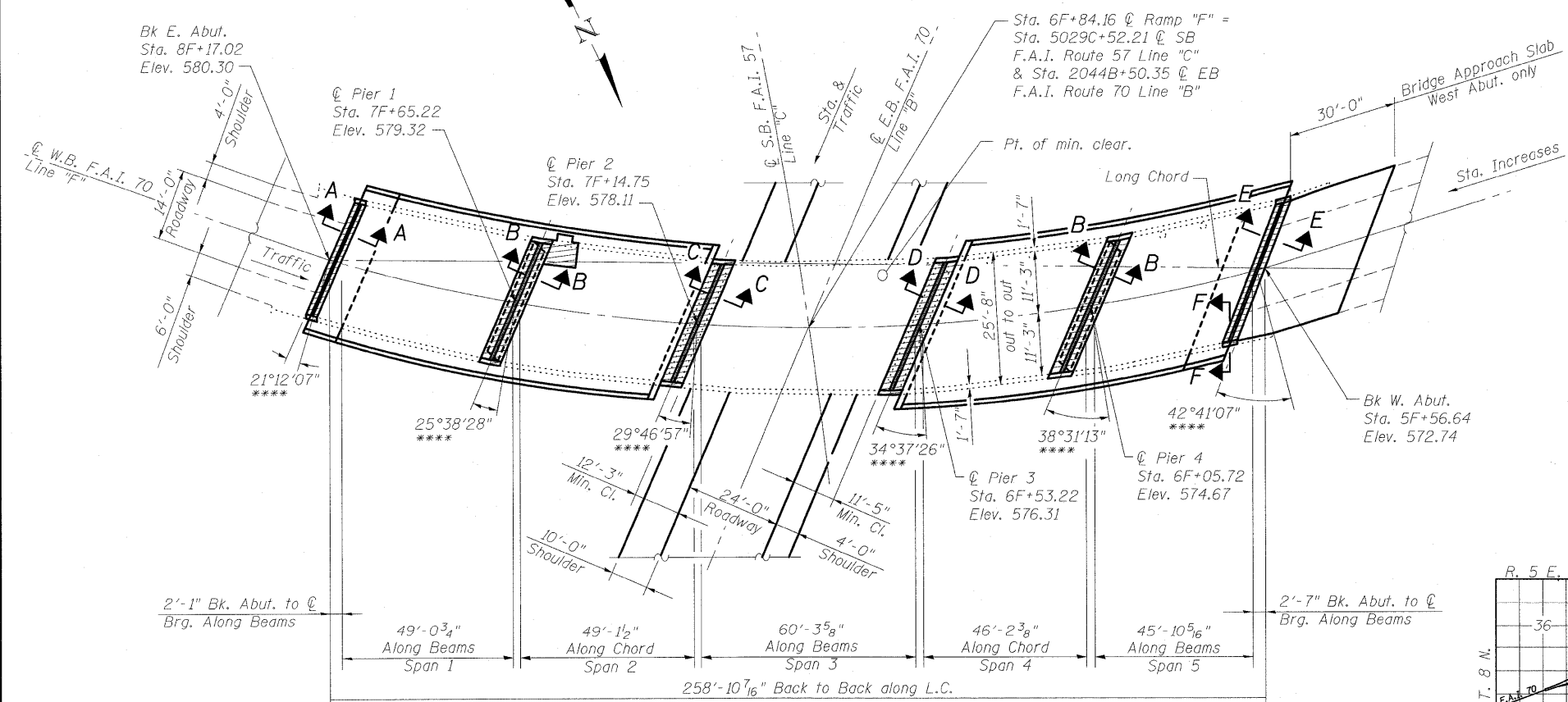
No Salvage

INDEX OF SHEETS

1. General Plan
2. General Data
3. General Information
4. Concrete Removal & Deck Slab Repair Superstructure
5. Superstructure Slab Repair Details
6. Superstructure Slab Repair Details
7. Parapet Details
8. Superstructure Bill of Materials & Bridge Approach Slab Details
9. Bridge Approach Slab Details
10. Slope Wall Details
11. Preformed Joint Strip Seal
12. Neoprene Expansion Joint
13. Seismic Restrainer & Bracket Details
14. Bumper Details
15. Bearing Details
16. Concrete Removal & Repair East Abutment East Abutment Details
17. East Abutment Sections
18. Concrete Removal & Repair West Abutment West Abutment Details
19. West Abutment Sections
20. Pier 1 General Plan
21. Pier 1 Details
22. Pier 1 Repair Details
23. Pier 2 General Plan and Details
24. Pier 2 Repair Details
25. Pier 3 General Plan and Details
26. Pier 3 Repair Details
27. Pier 4 General Plan
28. Pier 4 Details
29. Pier 4 Repair Details
30. Existing Steel Paint Details No. 2
31. Drainage System Details
32. Bar Splicer Assembly and Mechanical Splicer Details



ELEVATION



PLAN

**** Skew angle measured to tangent at intersection of @ roadway & @ substructure.

For Sections A-A, B-B, C-C, D-D, E-E and F-F see Sheet 3 of 36.

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

1995 F.H.W.A. Seismic Retrofitting Manual for Highway Bridges

2006 F.H.W.A. Seismic Retrofitting Manual for Highway Structures Part 1-Bridges (Reference Only)

SEISMIC DATA

Seismic Performance Category (SPC) = B

Bedrock Acceleration Coefficient (A) = 0.075 g

Site Coefficient = 1.0

DESIGN STRESSES

New Construction

f'c = 3,500 psi

fy = 60,000 psi (Reinforcement)

fy = 50,000 psi (Structural Steel) (AASHTO M270 Grade 50)

Existing Structure

f'c = 3500 psi

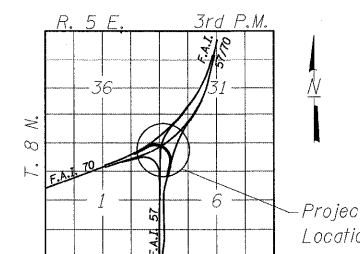
fy = 40,000 psi (Sub) (Reinforcement) (Abutments, Pier No. 1, Pier No. 4 & footings)

fy = 33,000 psi (Structural Steel)

fy = 60,000 psi (Pier No. 2 & Pier No. 3) (Reinforcement)

LOADING HS20-44 & ALT.

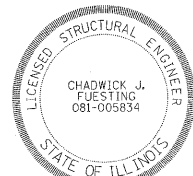
No Future Wearing Surface



LOCATION SKETCH

GENERAL PLAN
F.A.I. ROUTE 70 AND F.A.I. ROUTE 57
INTERCHANGE RAMP "F" OVER
SOUTHBOUND F.A.I. ROUTE 57
STATION 6F+84.16
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



EXP. 11-30-2010
Chadwick J. Fuesting
4/29/2010

APPROVED
FOR STRUCTURAL ADEQUACY ONLY

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



Illinois Design Firm Number 184.001670
BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Merrville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 1 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3H)I-3	EFFINGHAM	1416	1382
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB		TOTAL
			ABUT.	PIER	
Removal and Disposal of Unsuitable Material	Cu. Yd.		240		240
Porous Granular Embankment	Cu. Yd.		235		235
Concrete Removal	Cu. Yd.	42.1	6.4		48.5
Slope Wall Removal	Sq. Yd.		359		359
Protective Shield	Sq. Yd.	172			172
Structure Excavation	Cu. Yd.		12		12
Concrete Structures	Cu. Yd.	10.7	22.2	10.7	43.6
Rubbed Finish	Sq. Ft.			414	414
Concrete Superstructure	Cu. Yd.	82.1			82.1
Bridge Deck Grooving	Sq. Yd.	80			80
Protective Coat	Sq. Yd.	199			199
Furnishing and Erecting Structural Steel	Pound	9839			9839
Jack and Remove Existing Bearings	Each		8		8
Cleaning and Painting Steel Bridge - No. 2	L. Sum	1			1
Reinforcement Bars, Epoxy Coated	Pound	16350	2520	1640	20510
Bar Splicers	Each		31		31
Slope Wall 4 Inch	Sq. Yd.		352		352
Prefomed Joint Strip Seal	Foot	59			59
Neoprene Expansion Joint, 2"	Foot	121			121
Elastomeric Bearing Assembly, Type I	Each	8			8
Anchor Bolts, 1 1/4"	Each		62		62
Anchor Bolts, 1 1/2"	Each		16		16
Concrete Sealer	Sq. Ft.		1002	460	1462
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	11.0			11.0
Drainage System	L. Sum	1			1
Unsound Concrete Removal	Sq. Yd.		4	1	5
Seismic Restrainer	Each	16			16
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.		60	414	474
Containment and Disposal of Non-Lead Paint Cleaning Residues, Location 2	L. Sum				1

GENERAL NOTES

Fasteners shall be AASHTO M164 Type I, mechanically galvanized bolts. Bolts 7/8" ϕ , holes 15/16" ϕ , unless otherwise noted.

All structural steel shall be AASHTO M 270 Grade 50. Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated. Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer.

Any cracks that can not be removed by grinding 1/4 in deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

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

Concrete Sealer shall be applied to the designated areas of the abutments and piers. No field welding is permitted except as specified in the contract documents.

The existing structural steel does not contain lead paint. Cleaning and painting of the existing structural steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning - SSPC-SP10.

The designated areas cleaned per Near White Blast Cleaning - SSPC-SP10 and shall be painted according to the requirements of Paint System 1 - OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Gray, Munsell No. 5B 7/1.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams, brackets and bumper steel shall be Gray, Munsell No. 5B 7/1. See Special Provision for "Cleaning and Painting New Metal Structures".

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

Any reinforcement bars damaged during Concrete Removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50°F.

The Contractor is advised that cribbing may be necessary to support the existing structure during the replacement of the bearings and the reconstruction of the concrete bearing seats at the East and West Abutments. Cost included with Jack and Remove Existing Bearings.

SCOPE OF WORK

1. Install temporary cribbing & shoring system to support bridge dead & construction live loads. Jacking and cribbing required at East & West Abutments. (See sheet 16 of 36)
2. Remove the existing bearings and bearing extensions at each abutment.
3. Extend the abutment cap heights and seat widths, and perform concrete repair.
4. Install new elastomeric bearings at abutments.
5. Construct new elevated pier cap at Pier 1. The pier cap extension should encase the existing bolster supporting spans 1 and 2.
6. Construct new elevated pier cap at Pier 4. The pier cap extension should encase the existing bolster supporting span 4 at Pier 5.
7. Install Bumper & Cable assemblies at all piers.
8. Install new Side Retainers at Abutments and Piers 1 & 4.
9. Complete Deck Slab Repairs.
10. Complete Structural Repair of Concrete on the piers, Rubbed Finish & construct crashwalls.
11. Remove and Replace the existing expansion joints.
12. Install Drainage System.
13. Remove existing pavement at West Abutment and construct West Bridge Approach Slab.
14. Remove and replace existing Concrete Slopewalls.
15. Clean & paint structure at designated locations.

GENERAL DATA
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

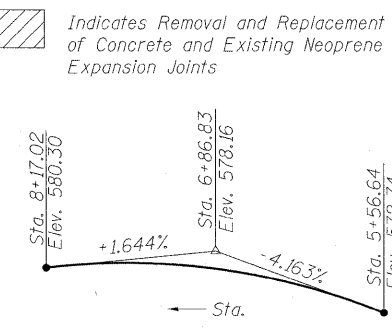
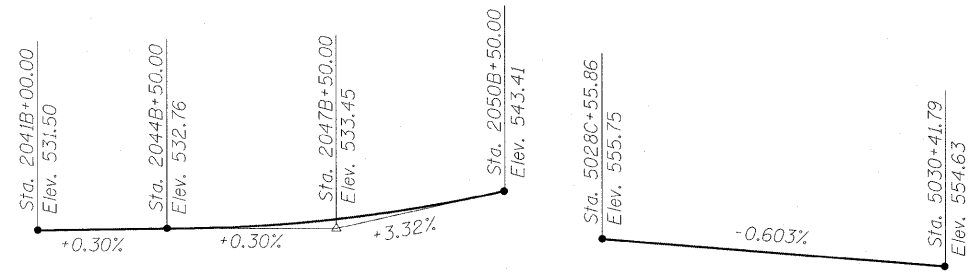
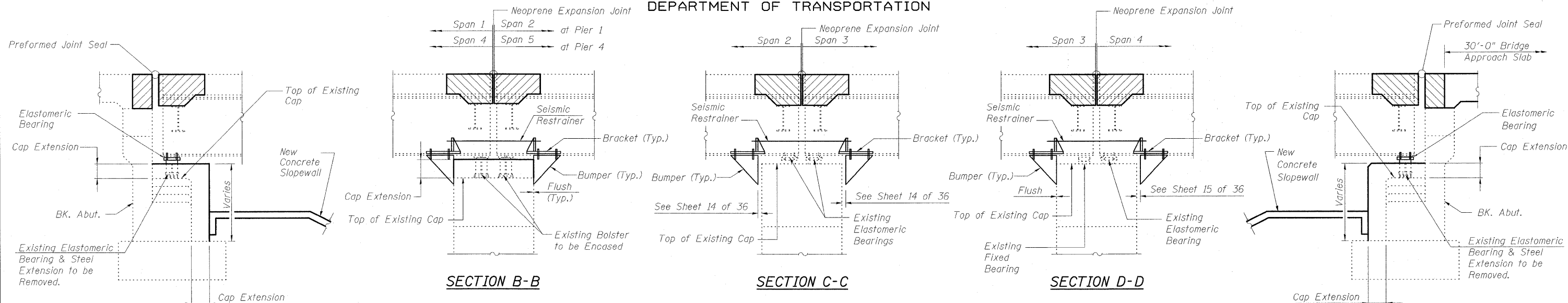


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

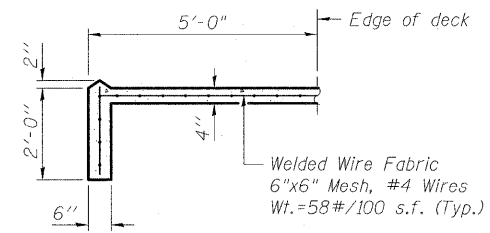
3 Oak Drive
Maryville, IL 62962-5635
Local (618) 298-4665
Fax 618-298-4666

SHEET NO. 2	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1383
36 SHEETS	SN 025-0018		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

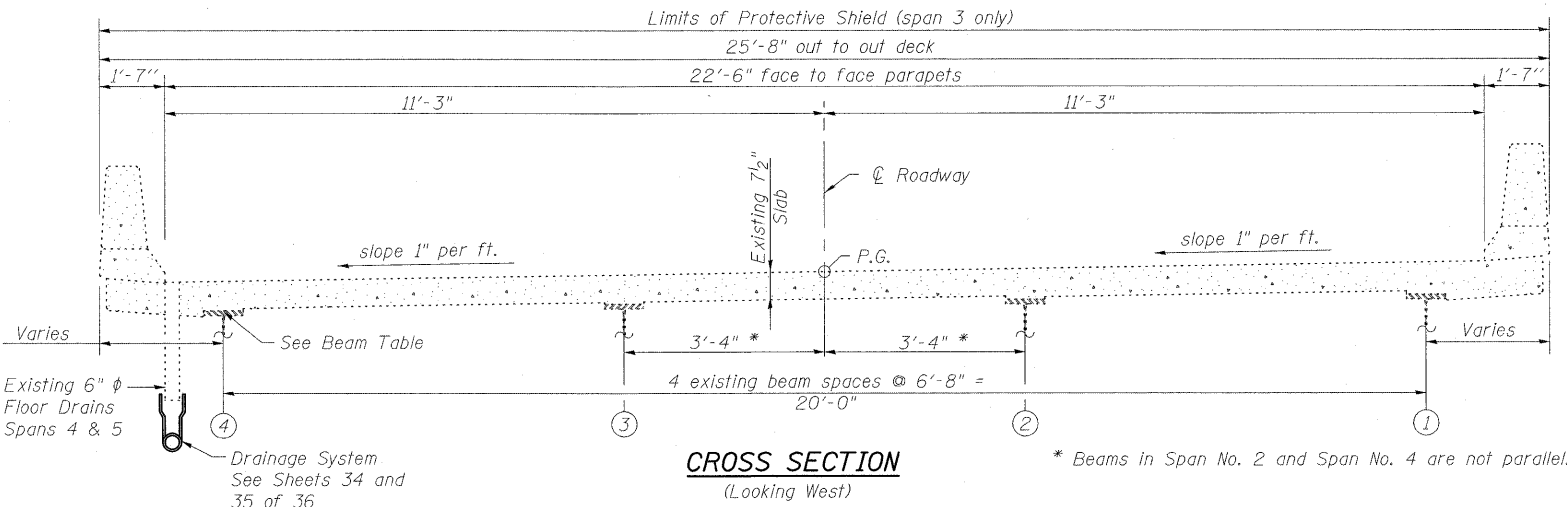
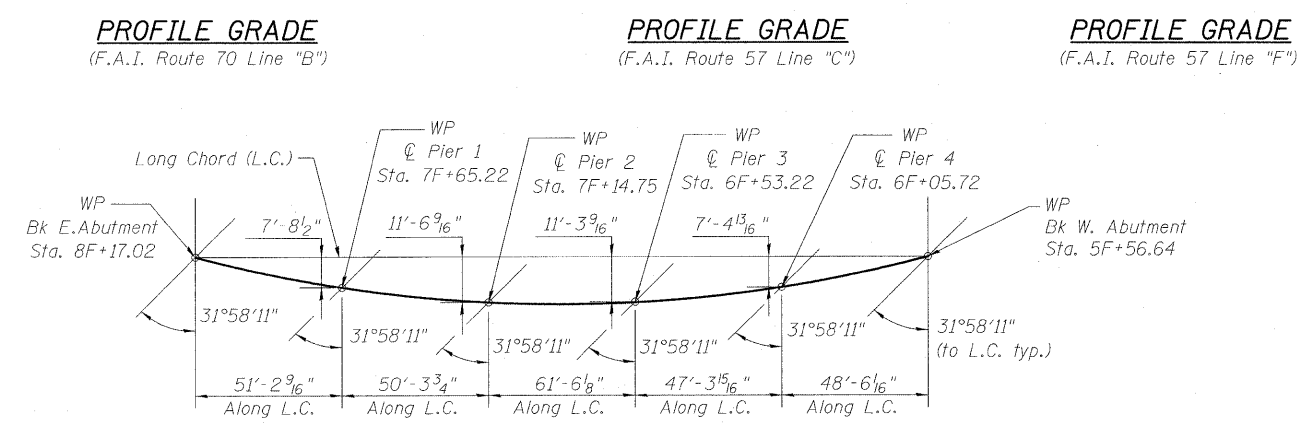
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



Indicates Removal and Replacement of Concrete and Existing Neoprene Expansion Joints



BEAM TABLE					
	Span 1	Span 2	Span 3	Span 4	Span 5
Beam No. 1	36WF150	36WF150	36WF182	36WF150	36WF150
Beam No. 2	33WF141	33WF141	36WF182	33WF130	33WF130
Beam No. 3	33WF141	33WF141	36WF182	33WF130	33WF130
Beam No. 4	36WF150	36WF150	36WF182	36WF150	36WF150



HORIZONTAL CURVE DATA	HORIZONTAL CURVE DATA	HORIZONTAL CURVE DATA
(Existing F.A.I. 70 Line "B") P.I. Sta. 2057B+83.65 Line "B" Δ = 61°25'59" (LT) D = 1°15'05" R = 4578.30' T = 2720.18 L = 4908.89' E = 747.13	(Existing F.A.I. 57 Line "C") P.I. Sta. 5032C+76.40 Line "C" Δ = 42° 31' 30" (RT) D = 3° 10' 09" R = 1807.88' T = 703.50' L = 1341.81' E = 132.05'	(Existing F.A.I. 70 Line "F") P.I. Sta. 12F+67.74 Line "F" Δ = 115° 16' 56" (RT) D = 8° 12' 35" R = 697.91' T = 1101.47' L = 1404.23' E = 606.05'

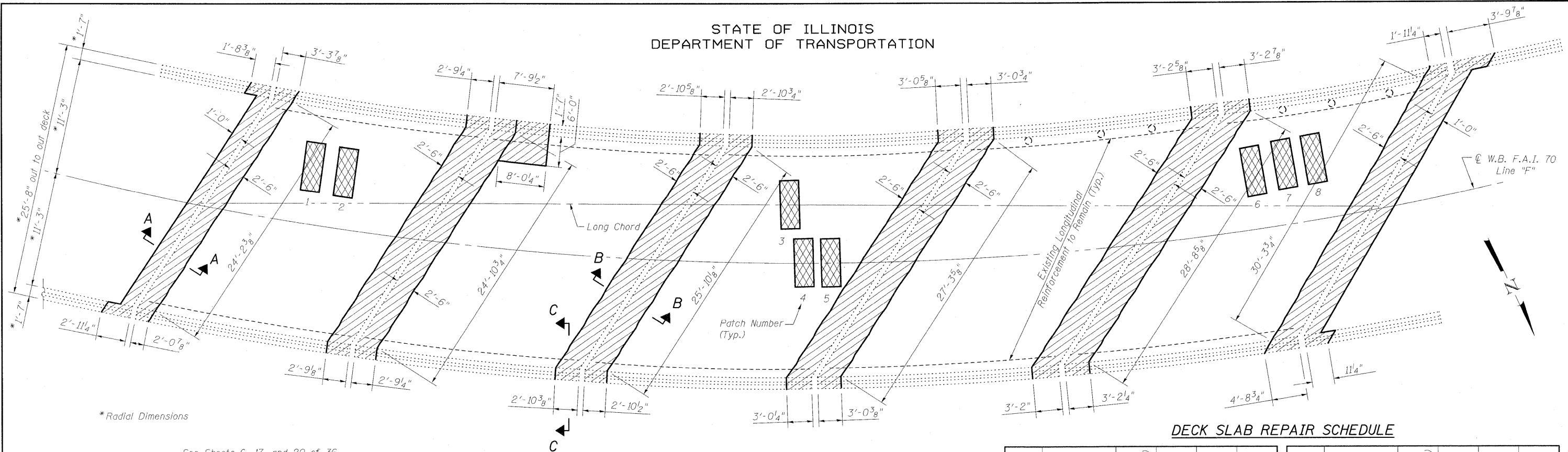
DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

GENERAL INFORMATION
STRUCTURE NO. 025-0018

SHEET NO. 3 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1384
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Merrville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4995

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



*Radial Dimensions

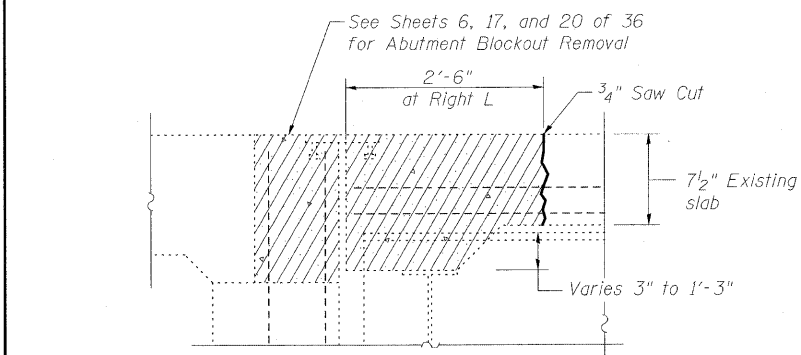
DECK SLAB REPAIR SCHEDULE

Patch No.	Size	Deck Slab Repair (Part. Depth)	Deck Slab Repair (FD TY I)	Deck Slab Repair (FD TY II)	Patch No.	Size	Deck Slab Repair (Part. Depth)	Deck Slab Repair (FD TY I)	Deck Slab Repair (FD TY II)
1	2.0 x 5.7			1.3					
2	2.0 x 5.7			1.3					
3	2.0 x 5.7			1.3					
4	2.0 x 5.7			1.3					
5	2.0 x 5.7			1.3					
6	2.0 x 5.7			1.3					
7	2.0 x 5.7			1.3					
8	2.0 x 5.7			1.3					
Total (Sq. Yd.)		0	0	10.4					
Use (Sq. Yd.)		0	0	11.0					

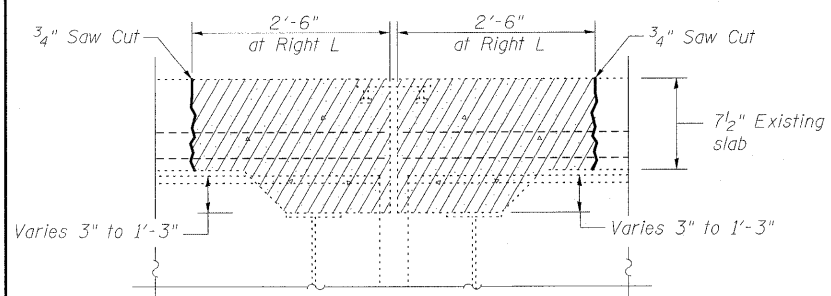
PLAN

- Indicates Concrete Removal
- Indicates Deck Slab Repair (Full Depth, Type II)

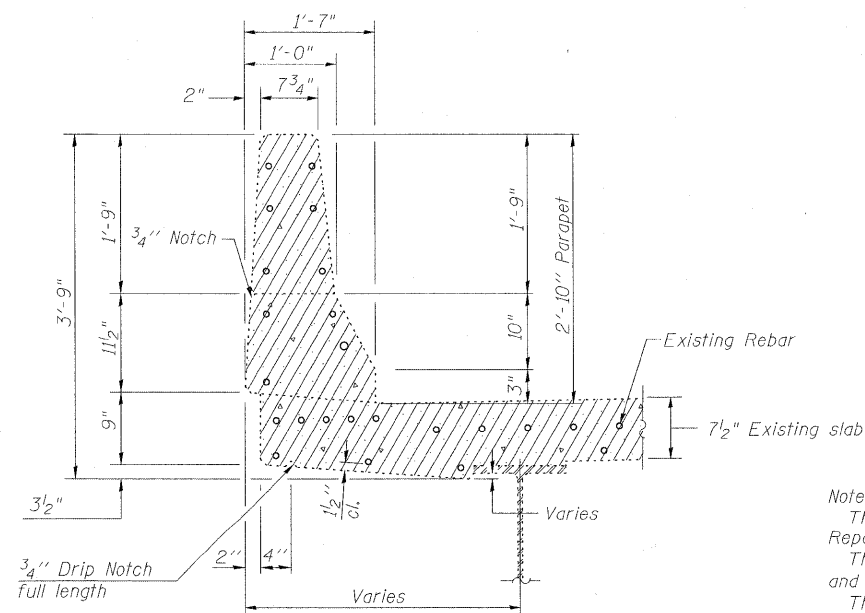
SECTION A-A



SECTION B-B



SECTION C-C



Notes:

The condition of the deck shall be inspected and surveyed for additional Deck Slab Repairs if the date of construction occurs after April 2012.
The locations and sizes of the Deck Slab Repairs are approximate. Actual locations and sizes are to be determined in the field by the Engineer.
The locations and sizes of the Deck Slab Repairs were determined by a visual survey completed on February 1, 2010.
The Engineer shall record the location of the actual Deck Slab Repair on the As Build Plans.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	42.1
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	11.0

CONCRETE REMOVAL &
DECK SLAB REPAIR
SUPERSTRUCTURE
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

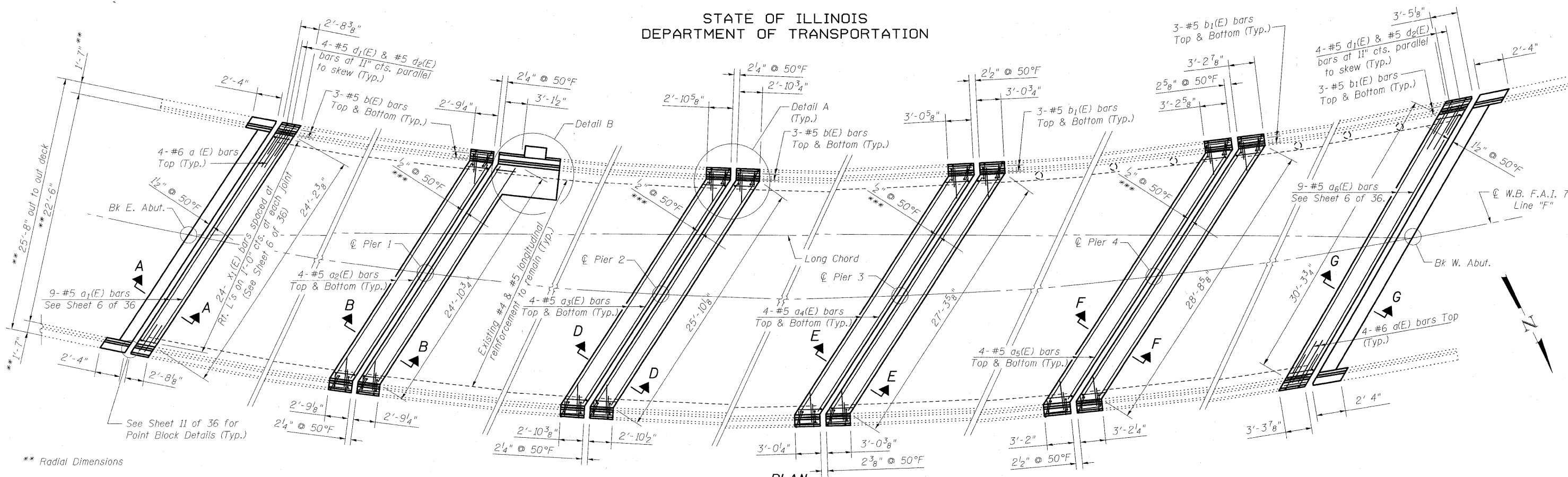


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

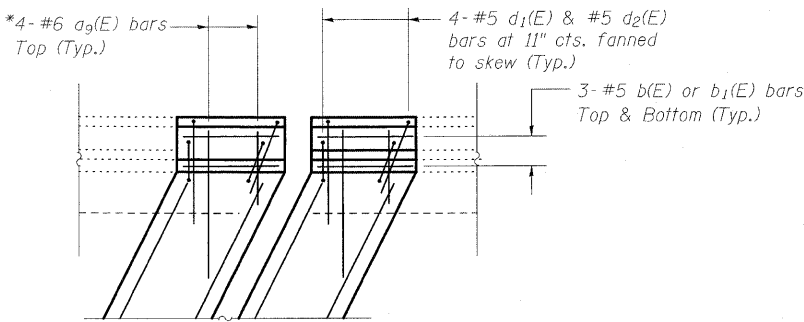
SHEET NO. 4 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1385
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLAN

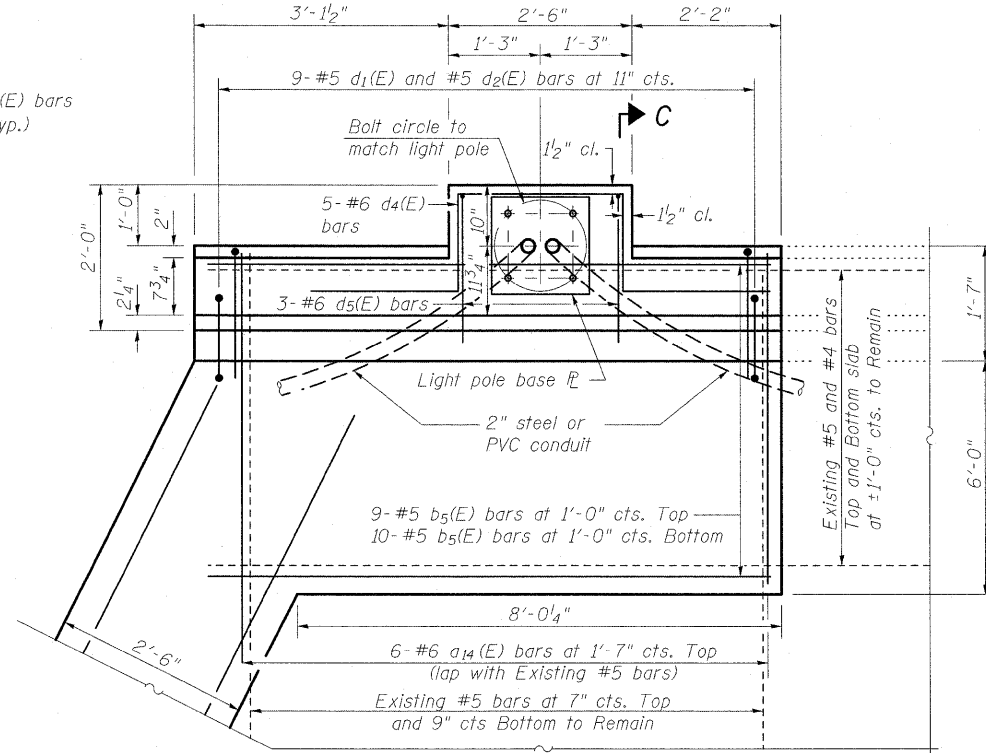
*** For Piers 1, 2, 3 & 4 the detailed expansion width of 1/2" at 50°F is not Standard. The existing field conditions may allow for an increase in expansion width. This increase in width shall be approved by the Engineer.



DETAIL A

(Typical Reinforcement at Parapet Joints, Piers 1, 2, 3 & 4)

* Order a9(E) bars full length. Cut to fit skew and use remainder of bars on opposite end.



DETAIL B

Note:
Cost of anchor rods and conduit is included with Concrete Superstructure.

Notes:
Dimensions are based on a Rolled Rail Strip Seal Joint. If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Sheet 11 of 36.
See Sheet 6 of 36 for Sections A-A, B-B, D-D, E-E, F-F and G-G.
See Sheet 7 of 36 for Section C-C.
x(E), a7(E) and a8(E) bars between beams at abutments not shown for clarity. See Sheet 6 of 36 for placement.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



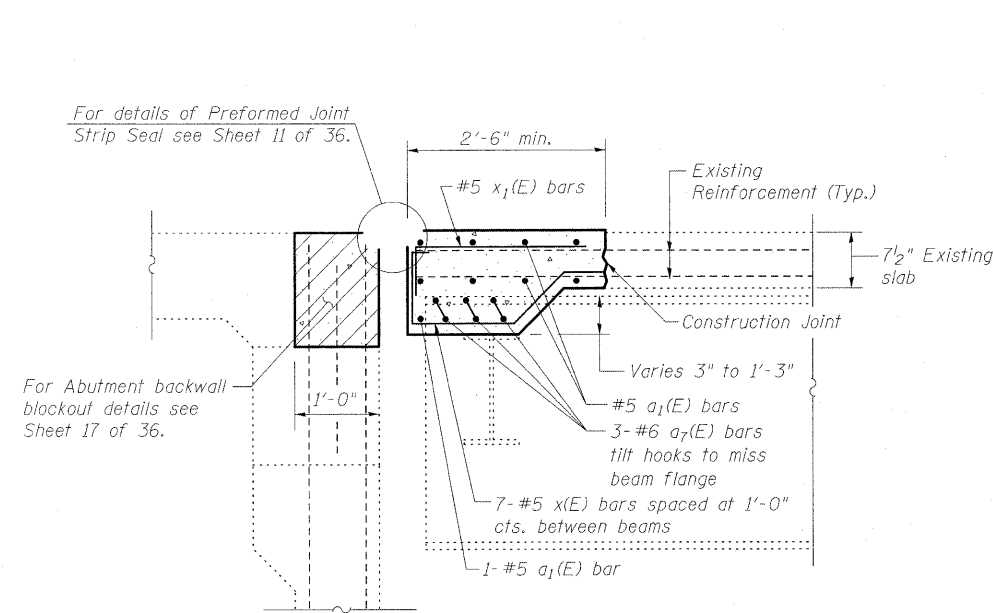
BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62052-5655
Local (618) 328-4665
Fax 618-288-4666

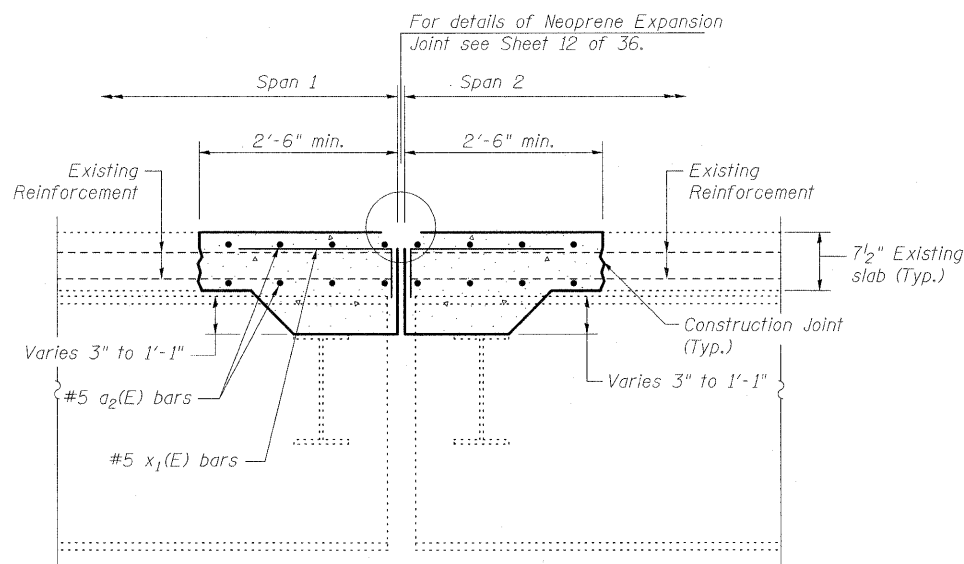
SUPERSTRUCTURE
STRUCTURE NO. 025-0018

SHEET NO. 5 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1386
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

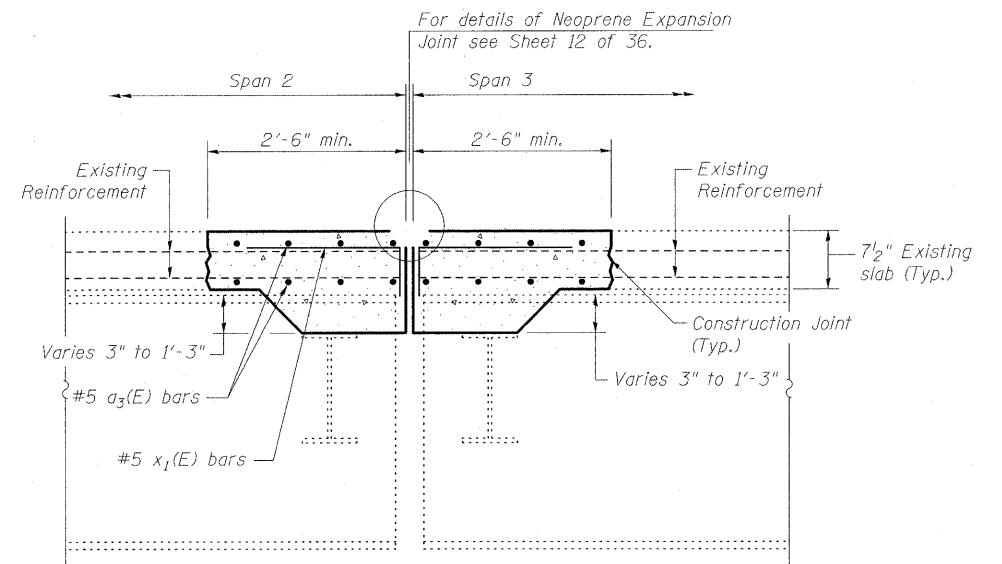
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



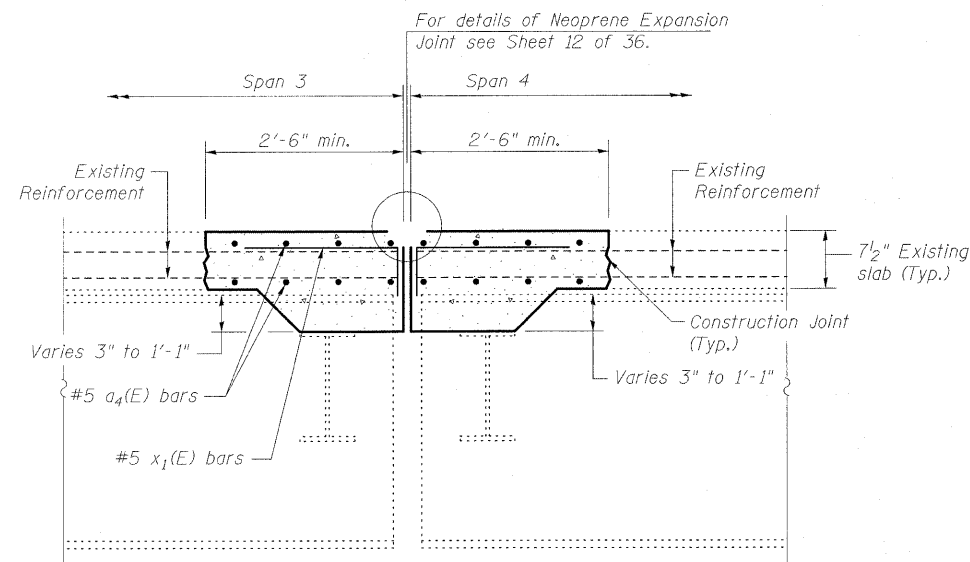
SECTION A-A
(East Abutment)



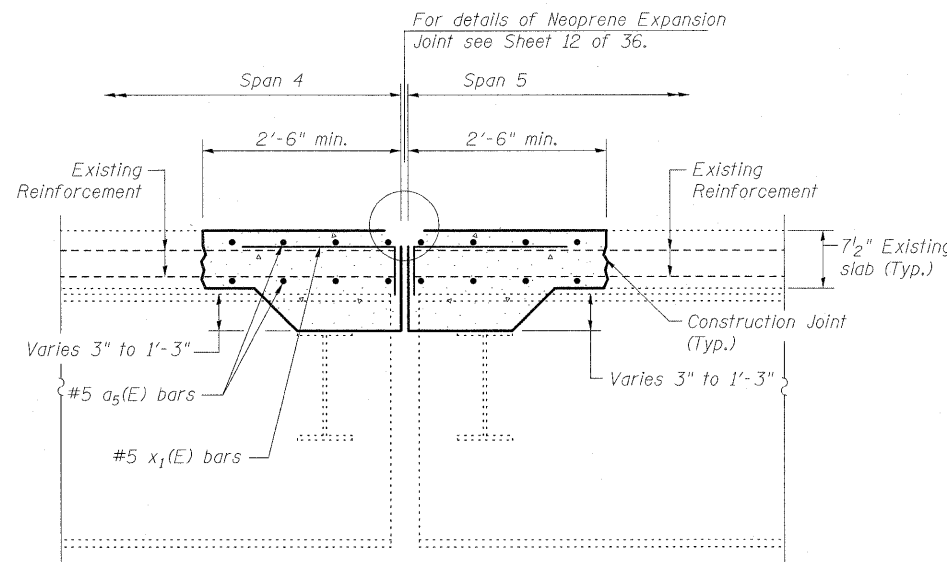
SECTION B-B
(Pier 1)



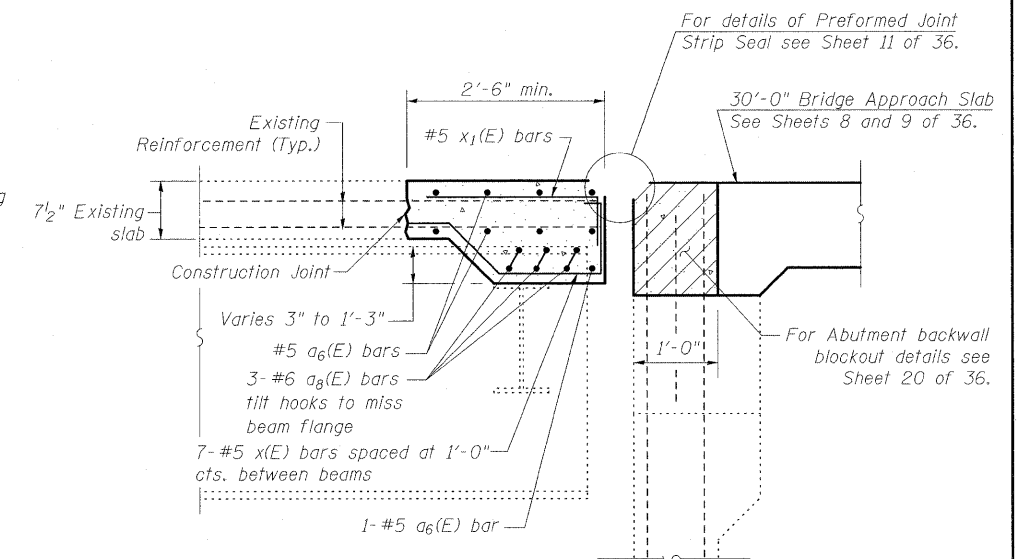
SECTION D-D
(Pier 2)



SECTION E-E
(Pier 3)



SECTION F-F
(Pier 4)



SECTION G-G
(West Abutment)

Notes:
Dimensions shown are at right angles to deck joints.
Place x(E) and x₁(E) bars parallel to beams.

**SUPERSTRUCTURE
SLAB REPAIR DETAILS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

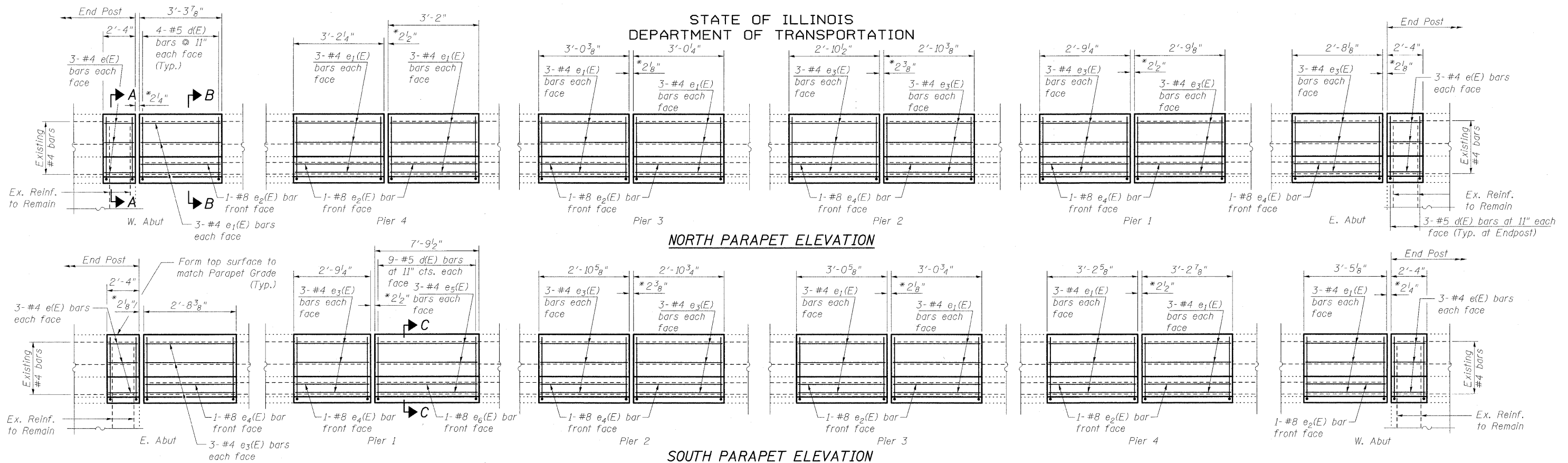


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Marysville, IL 62962-5635
Local (618) 288-4665
Fax 618-288-4666

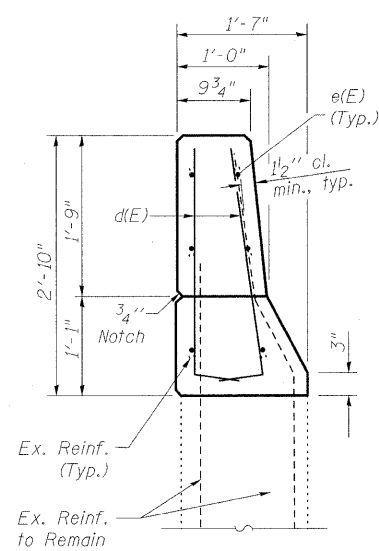
SHEET NO. 6 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1387
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

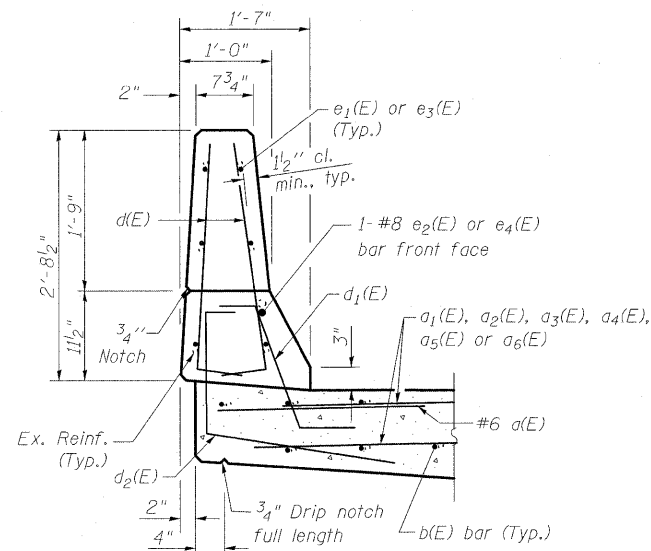


* Dimensions are along the length of the parapet at 50° F.

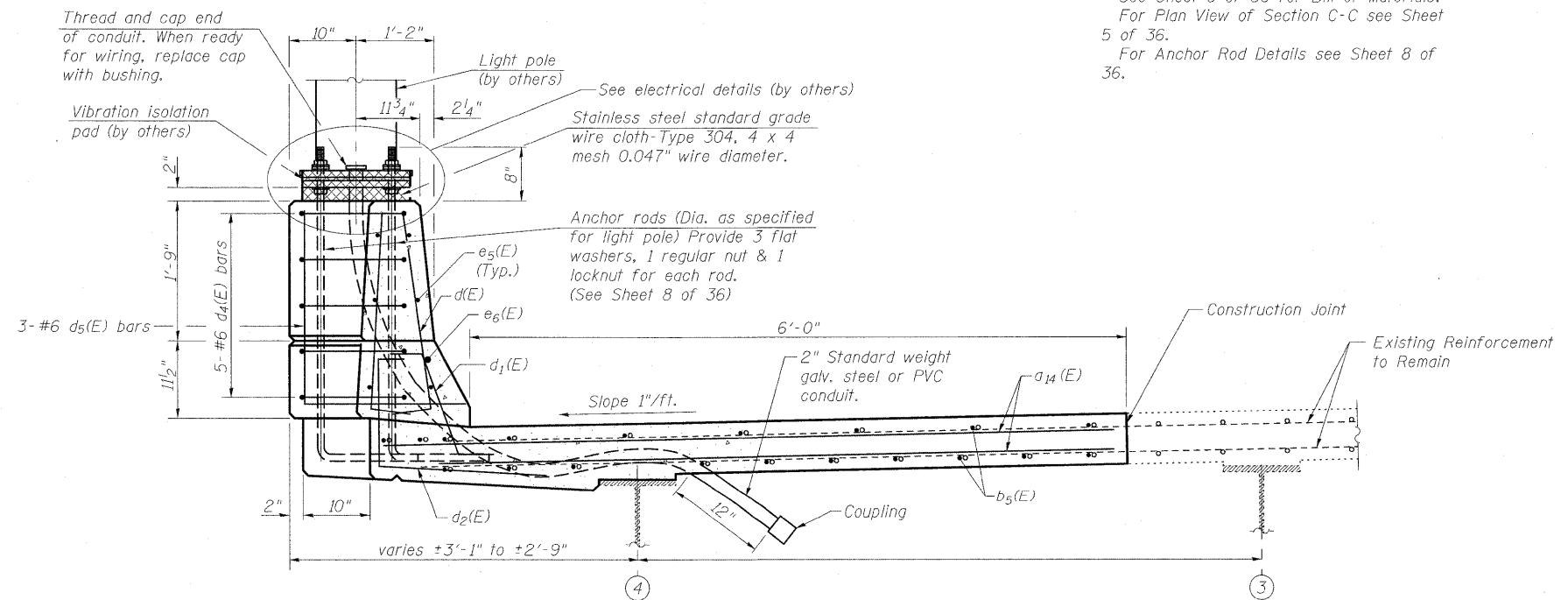
Note:
Quantity of End Post Concrete included with Concrete Superstructures. See Sheet 8 of 36 for Bill of Materials. For Plan View of Section C-C see Sheet 5 of 36. For Anchor Rod Details see Sheet 8 of 36.



SECTION A-A
ENDPOST



SECTION B-B



SECTION C-C

PARAPET DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



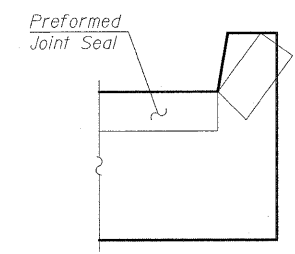
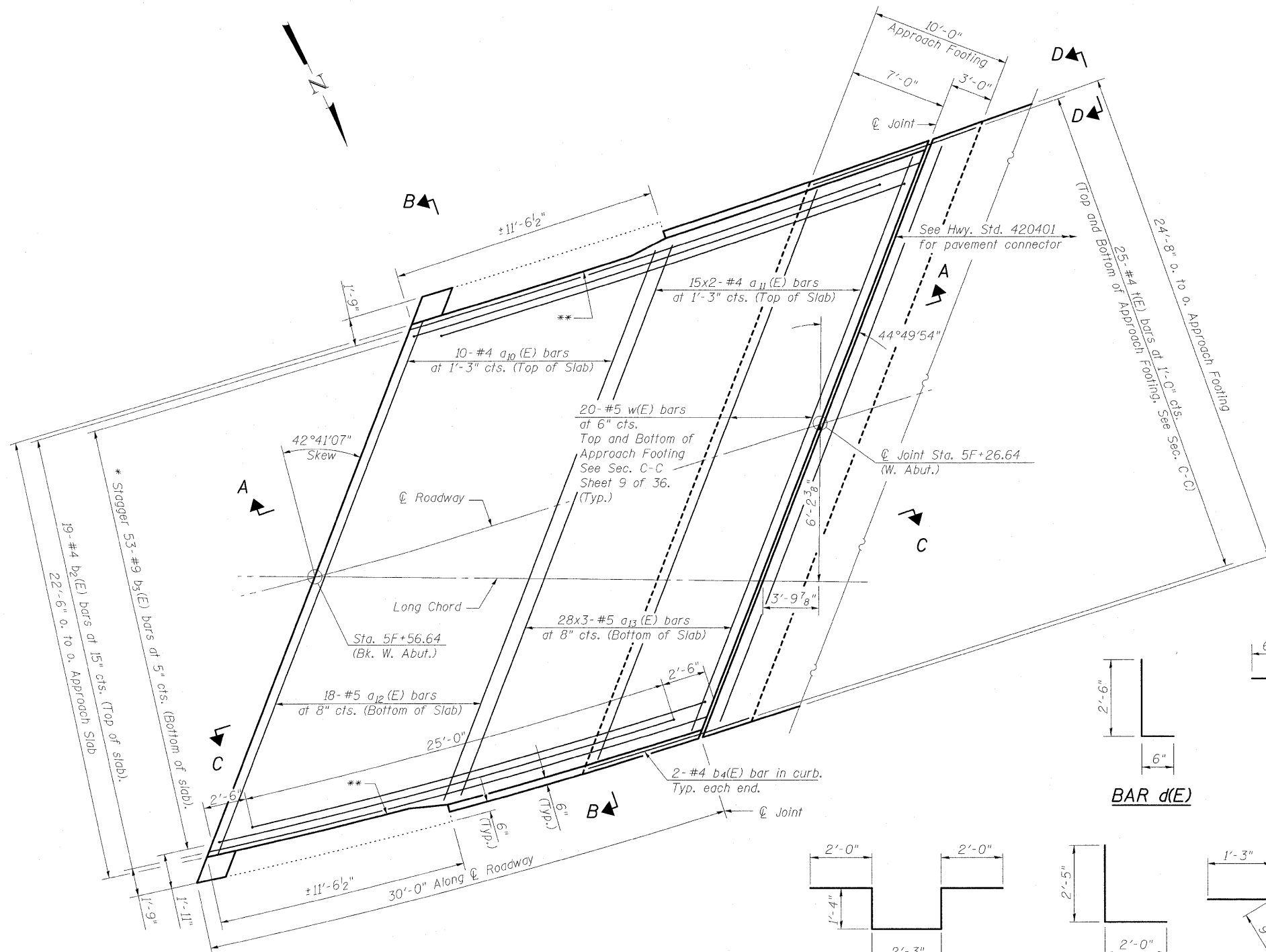
BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

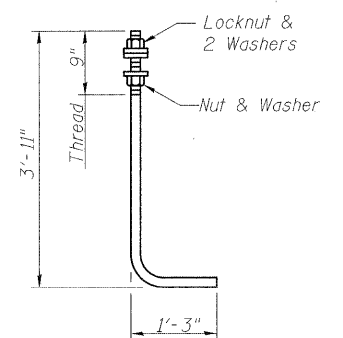
SHEET NO. 7 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1388
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

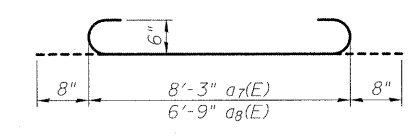
Notes:
See sheet 9 of 36 for Sections A-A & B-B and View C-C.
a₁₀(E) thru a₁₃(E) bar spacings measured along \varnothing Rdwy.
Bars indicated thus 15x2-#4 indicates 15 lines of #4 bars with 2 lengths per line.



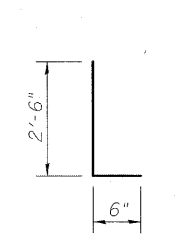
VIEW D-D
Angle Preformed Joint Seal at 45° at curbs when req'd for drainage.



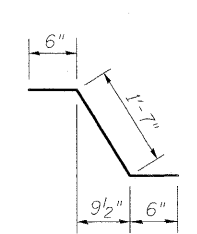
ANCHOR ROD
Diameter as specified for light poles. (ASTM F 1554 Grade 105)



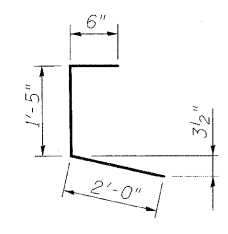
a7(E) & a8(E) BARS



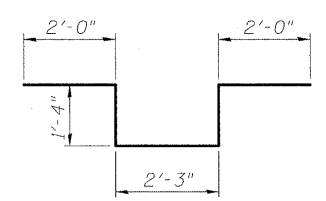
BAR d(E)



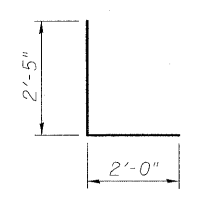
BAR d1(E)



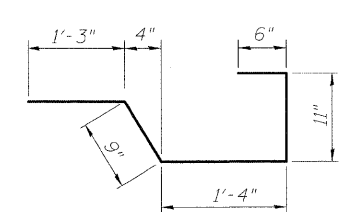
BAR d2(E)



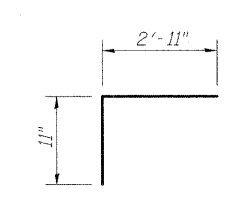
BAR d4(E)



BAR d5(E)



BAR x(E)



BAR x1(E)

MINIMUM BAR LAP

#4 bar = 2'-0"
#5 bar = 2'-6"

BILL OF MATERIAL SUPERSTRUCTURE

Bar	No.	Size	Length	Shape
a(E)	16	#6	8'-0"	
a1(E)	9	#5	24'-2"	
a2(E)	16	#5	24'-10"	
a3(E)	16	#5	25'-10"	
a4(E)	16	#5	27'-3"	
a5(E)	16	#5	28'-8"	
a6(E)	9	#5	30'-3"	
a7(E)	9	#6	8'-1"	
a8(E)	9	#6	9'-7"	
a9(E)	32	#6	6'-2"	
a14(E)	6	#6	7'-3"	
b(E)	54	#5	2'-6"	
b1(E)	60	#5	2'-10"	
b5(E)	19	#5	7'-6"	
d(E)	184	#5	3'-0"	
d1(E)	85	#5	2'-7"	
d2(E)	85	#5	3'-11"	
d4(E)	5	#6	8'-11"	
d5(E)	3	#6	4'-5"	
e(E)	24	#4	2'-0"	
e1(E)	60	#4	2'-11"	
e2(E)	10	#8	2'-11"	
e3(E)	54	#4	2'-6"	
e4(E)	9	#8	2'-6"	
e5(E)	6	#4	7'-7"	
e6(E)	1	#8	7'-5"	
x(E)	48	#5	4'-9"	
x1(E)	240	#5	3'-10"	
Concrete Superstructure			Cu. Yd.	43.2
Reinforcement Bars, Epoxy Coated			Pound	6330

SUPERSTRUCTURE BILL OF MATERIALS & BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

- * Tilt #9 b₃(E) bars as required to maintain clearance.
- ** Closed Cell Joint Filler according to Article 1051.08 of the Standard Specifications. Full depth of slab, full length of parapet.
- *** Skew angle measured to tangent at intersection of \varnothing of Roadway and West Approach Pavement

SHEET NO. 8 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1389
		SN 025-0018	CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

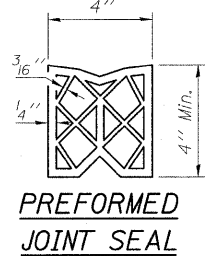
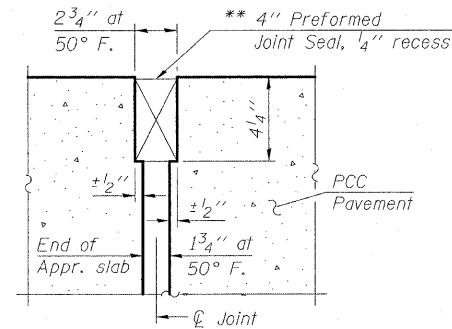
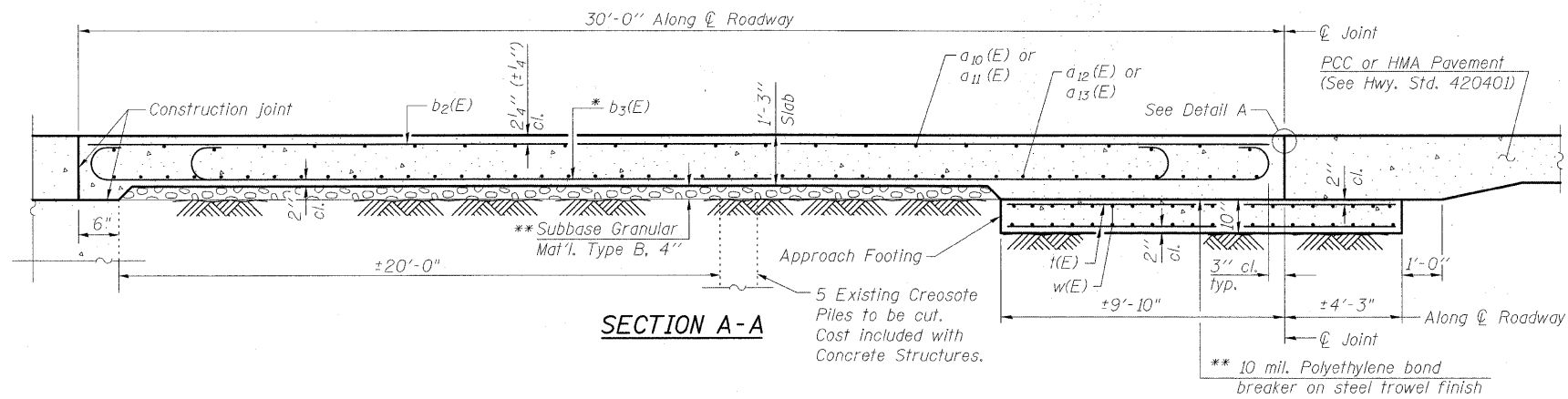
BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62452-5685
Local (618) 288-4665
Fax 618-288-4666

01/29/21 AM 3/18/2020 10:25:00 AM 14294.gm

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Notes:

Approach slab and parapet concrete shall be paid for as Concrete Superstructure.
Approach footing concrete shall be paid for as Concrete Structures.
Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.
Cost of excavation for approach footing included with Concrete Structures.
For additional parapet details, see sheet 7 of 36.
Cross-slope and Elevations of Approach shall match existing conditions.



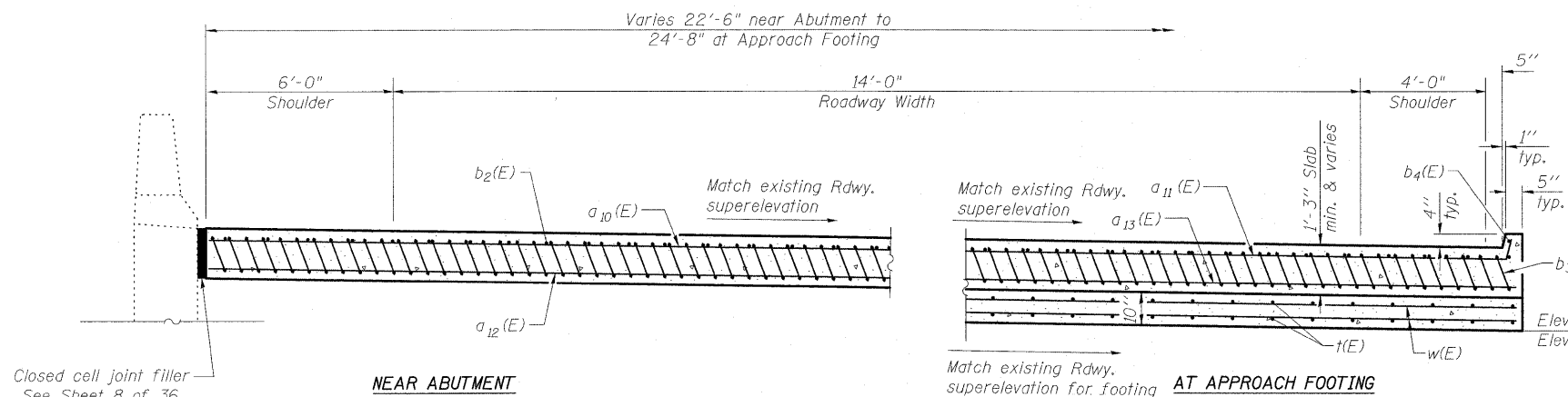
RIGID PAVEMENT

DETAIL A

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

** Cost included with Concrete Superstructure.

Elev. ±567.50 (S. Side of footing)
Elev. ±570.58 (N. Side of footing)



SECTION B-B

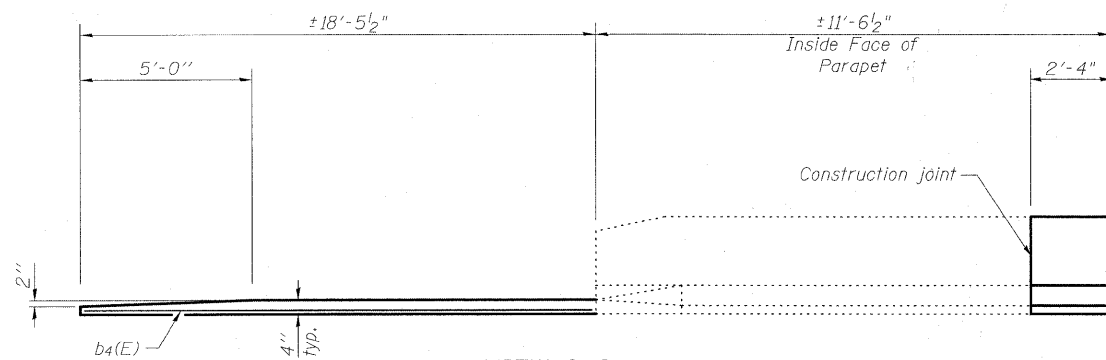
(Looking East)

(See Plan for dimensions not shown)

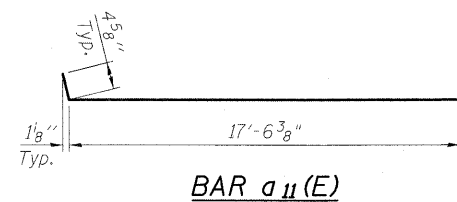
Closed cell joint filler
See Sheet 8 of 36.

NEAR ABUTMENT

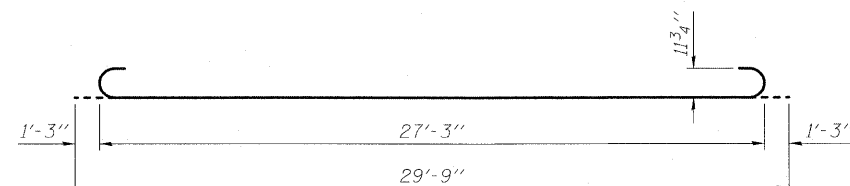
AT APPROACH FOOTING



VIEW C-C



BAR a11(E)



BAR b3(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a10(E)	10	#4	30'-2"	—	
a11(E)	30	#4	17'-11"	—	
a12(E)	18	#5	30'-2"	—	
a13(E)	84	#5	13'-2"	—	
b2(E)	19	#4	29'-8"	—	
b3(E)	54	#9	29'-9"	—	
b4(E)	4	#4	18'-2"	—	
t(E)	50	#4	13'-6"	—	
w(E)	40	#5	34'-0"	—	
Concrete Superstructure				Cu. Yd.	38.9
Concrete Structures				Cu. Yd.	10.7
Reinforcement Bars, Epoxy Coated				Pound	10020
Bridge Deck Grooving				Sq. Yd.	80

BRIDGE APPROACH SLAB DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

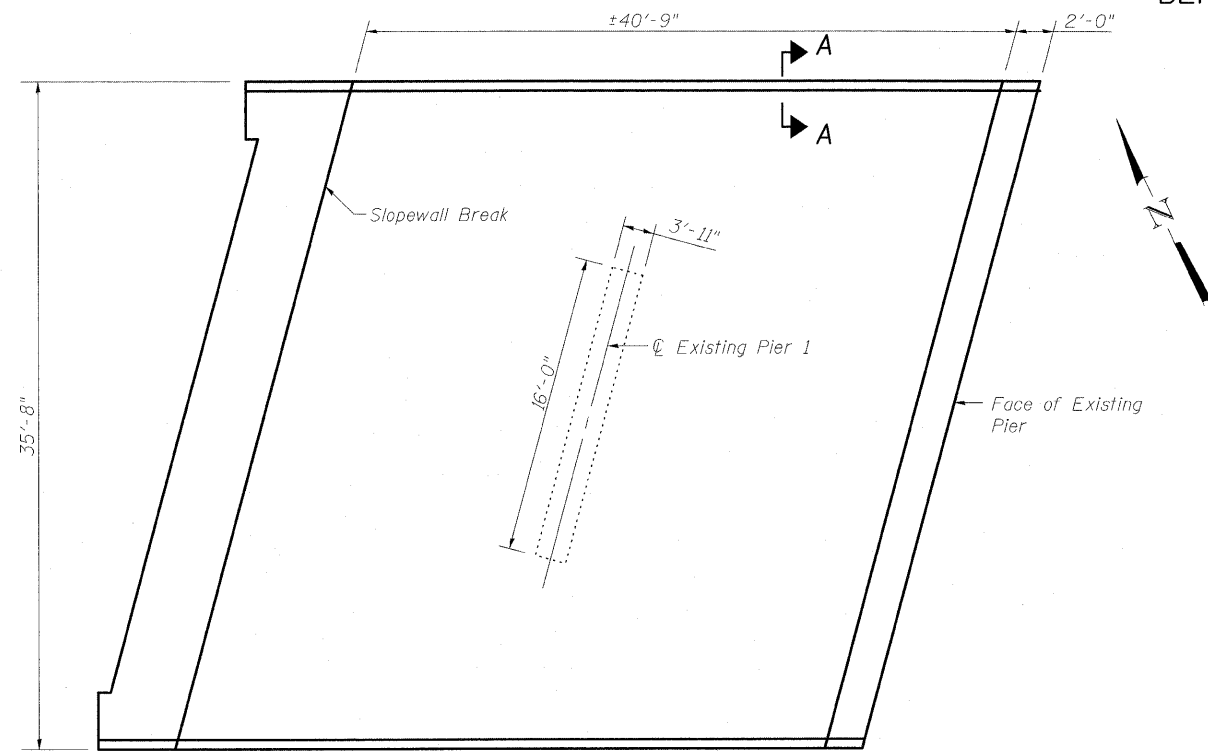


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

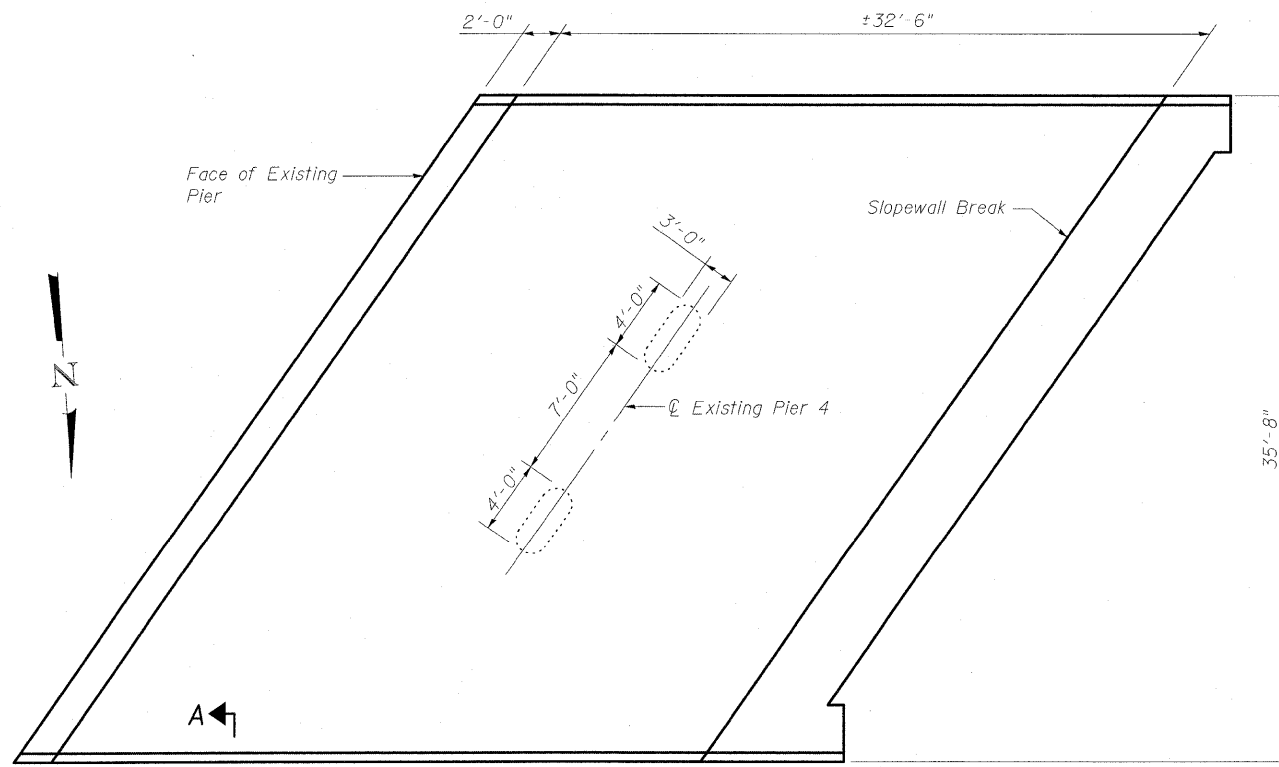
3 Oak Drive
Maryville, IL 62062-5655
Local (618) 298-4665
Fax 618-298-4666

SHEET NO. 9 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1390
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

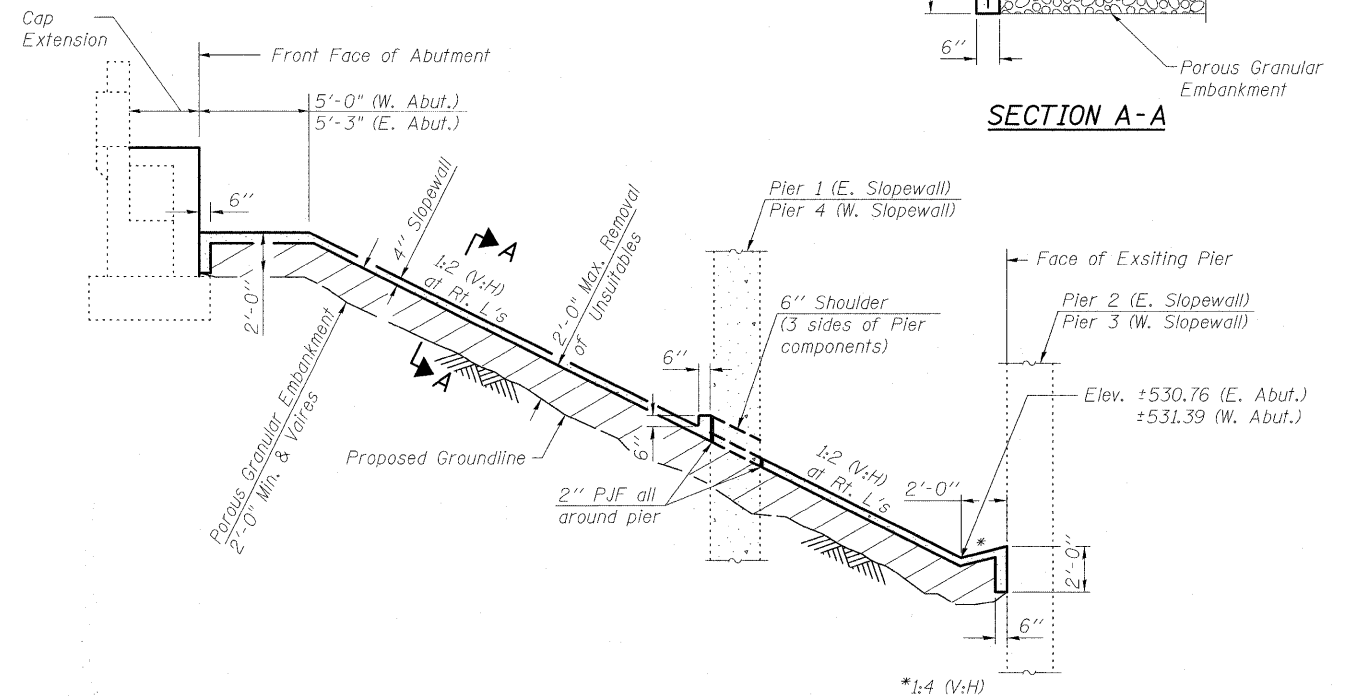
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



EAST SLOPEWALL PLAN
(Showing Dimensions Along SlopeWall)



WEST SLOPEWALL PLAN
(Showing Dimensions Along SlopeWall)



**TYPICAL SECTION THRU
CONCRETE SLOPEWALL**

Indicates Removal of Unsuitable Materials and replacement with Porous Granular Embankment

Notes:

SlopeWall shall be reinforced with welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

Prior to the placement of Porous Granular Embankment, the existing ground line shall be removed at least 2'-0" below the existing slopeWall. The removal of the existing embankment shall be paid for as Removal & Disposal of Unsuitable Materials.

Portions of the existing slopeWalls have voids in excess of 2'-0" in depth. In cases where the existing ground line has been voided under the existing slopeWall in excess of 2'-0", the embankment shall be reconstructed with Porous Granular Embankment. No Removal & Disposal of Unsuitable Materials will be required.

See sheets 19 and 22 of 36 for slopeWall end treatment at abutments.

**BILL OF MATERIAL
TWO SLOPEWALLS**

Item	Unit	Total
Porous Granular Embankment	Cu. Yd.	235
SlopeWall 4"	Sq. Yd.	352
Removal & Disposal of Unsuitable Materials	Cu. Yd.	240

**SLOPEWALL DETAILS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



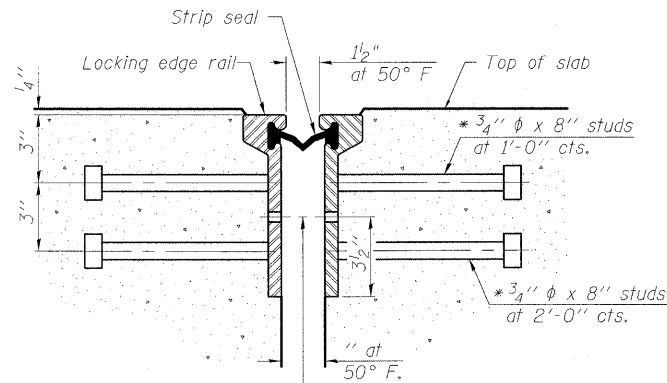
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 10 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1391
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

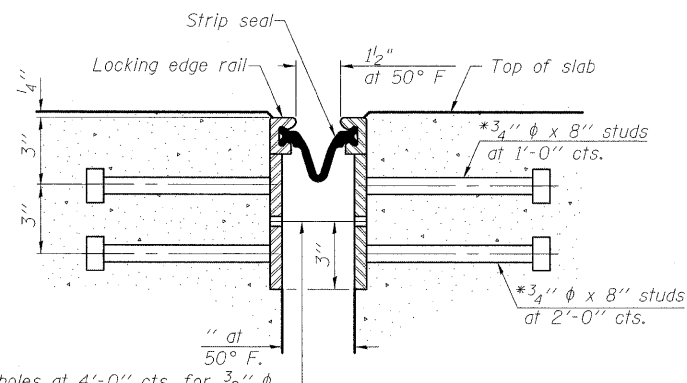
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



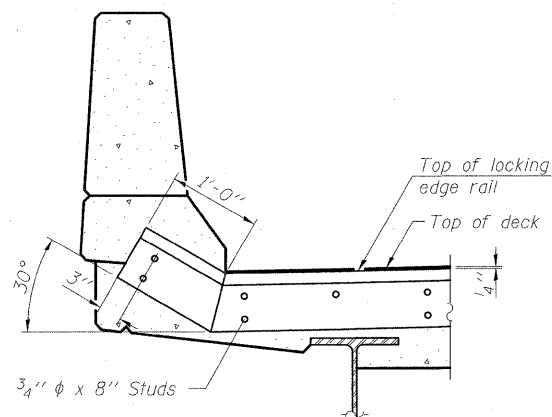
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
ROLLED RAIL JOINT



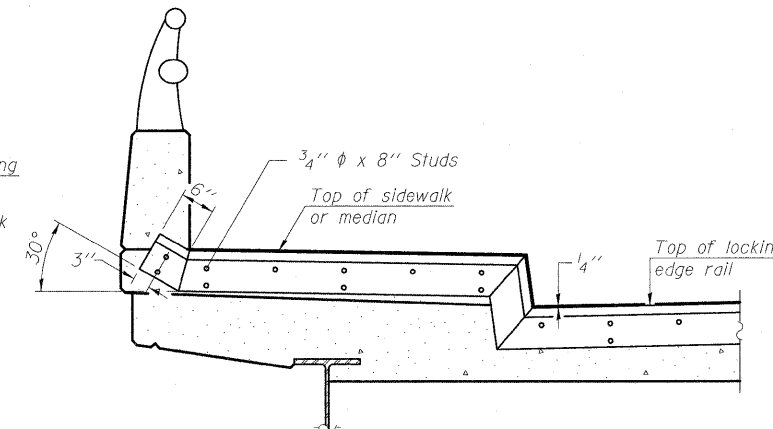
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU
WELDED RAIL JOINT



AT PARAPET

See Section A-A for end treatment of skews > 30°.



AT SIDEWALK OR MEDIAN

Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.

TYPICAL END TREATMENTS

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

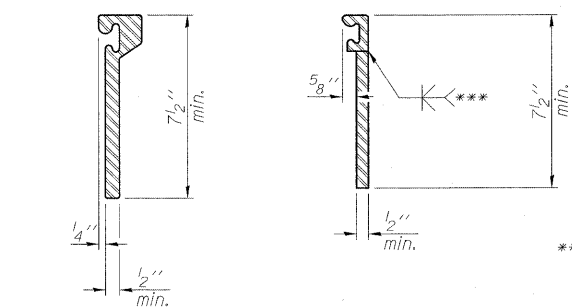
The Locking Edge Rails depicted are conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

The manufacturer's recommended installation methods shall be followed.

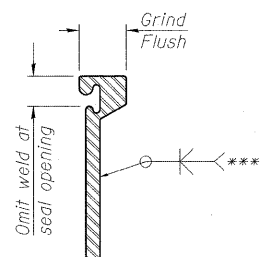
The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant.



ROLLED EXTRUDED RAIL WELDED RAIL



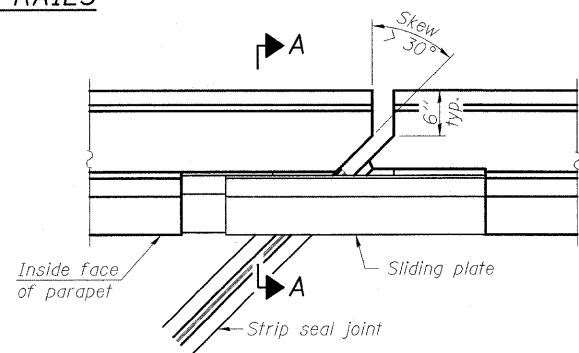
*** Back gouge not required if complete joint penetration is verified by mock-up.

LOCKING EDGE RAIL SPLICE

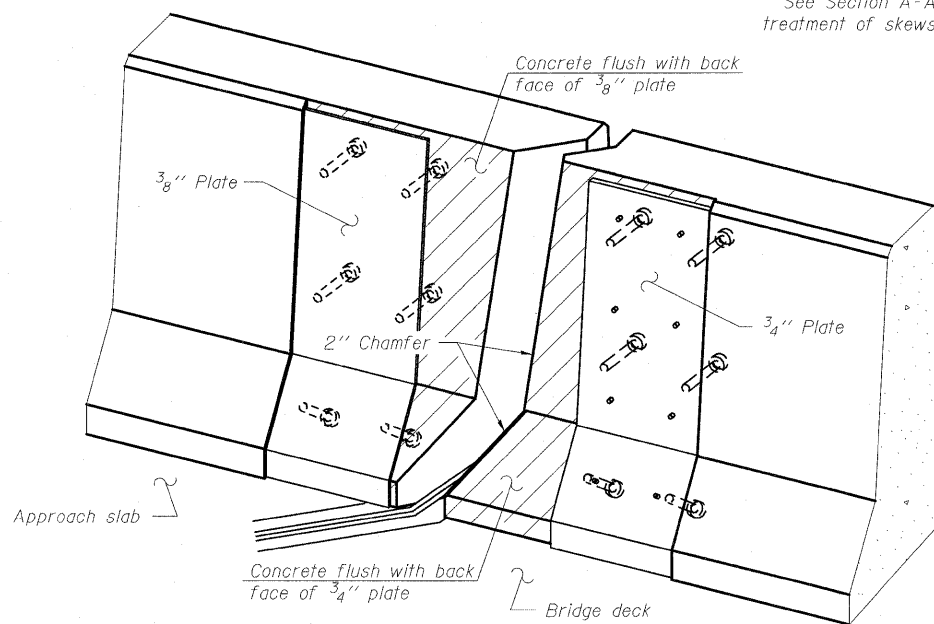
The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.

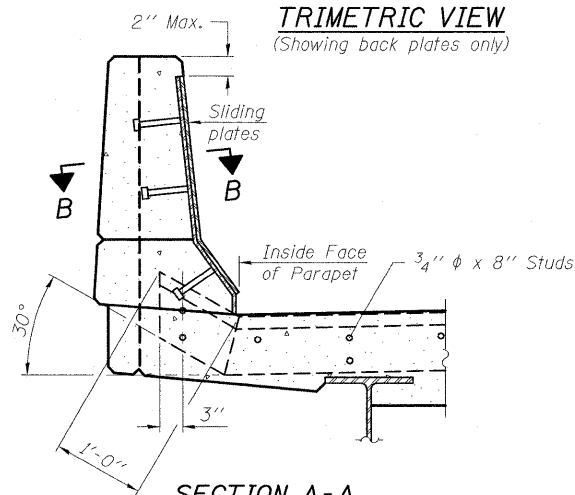
LOCKING EDGE RAILS



PLAN

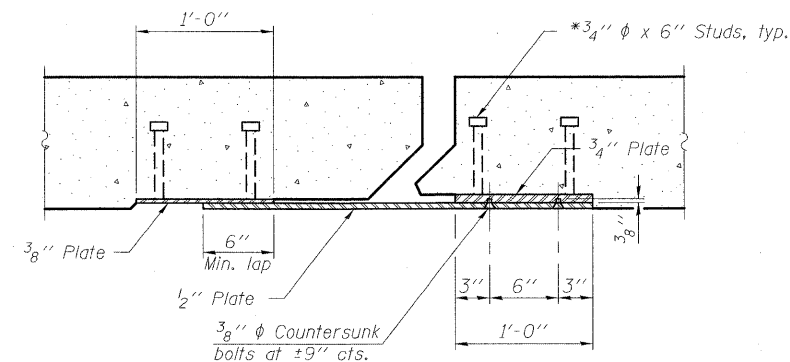


TRIMETRIC VIEW
(Showing back plates only)



SECTION A-A

POINT BLOCK DETAILS
(for skews > 30°)



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	59

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 025-0018

DESIGNED	
CHECKED	
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

EJ-SSJ 11-1-09



BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 11 36 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)-3	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1392
	SN 025-0018		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Joint Size	"C" at 50°F	"D" at 50°F
2"	1 1/2"	1 1/2" Min.

For Piers 1, 2, 3 & 4 the detailed expansion width of 1/2" at 50°F is not Standard. The existing field conditions may allow for an increase in expansion width. This increase in width shall be approved by the Engineer.

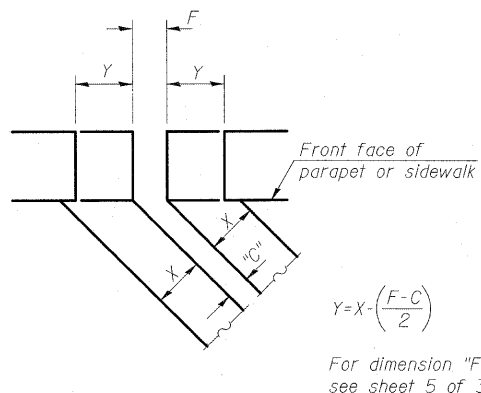
INSTALLATION NOTES

- ① Install continuous seal in roadway, parapet, curb, and sidewalk.
- ② Install anchor blocks as indicated.

Note A:
Maximum spacing of anchor bolts shall be 12" centers.

SKEW LIMITATIONS

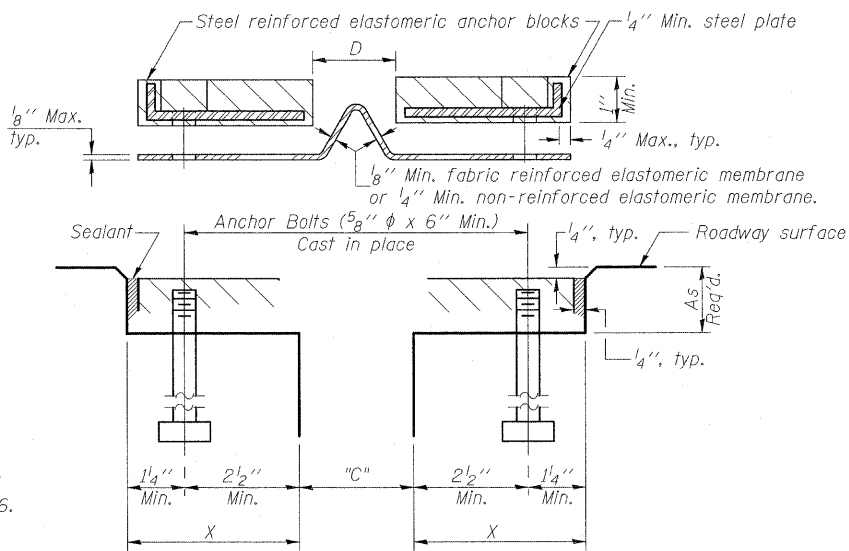
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 1/2" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



FORMING BLOCKOUT SKETCH

$$Y = X \left(\frac{F-C}{2} \right)$$

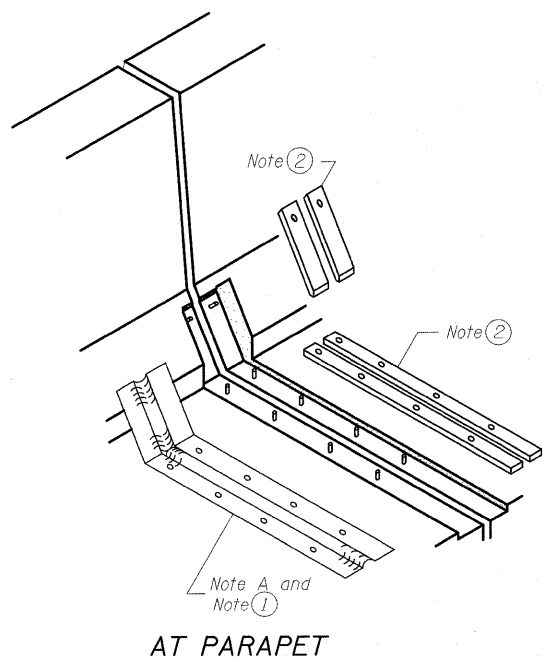
For dimension "F" see sheet 5 of 36.



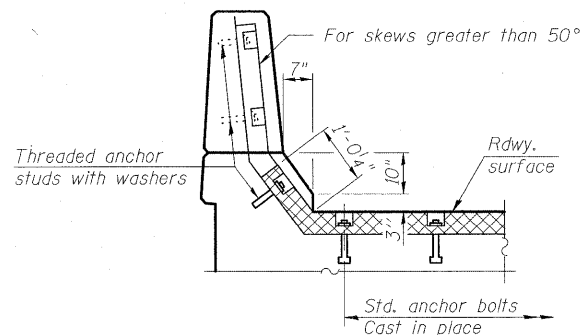
CROSS SECTION

GENERAL NOTES

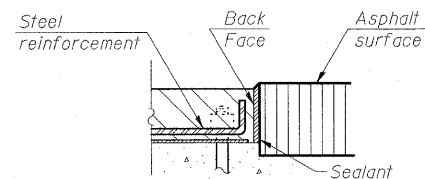
Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane.
The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.
The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.
Joint openings shall be adjusted according to Article 503.10(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.
The parapet and roadway membrane shall be made continuous by an approved vulcanizing process. Lapping will not be permitted.



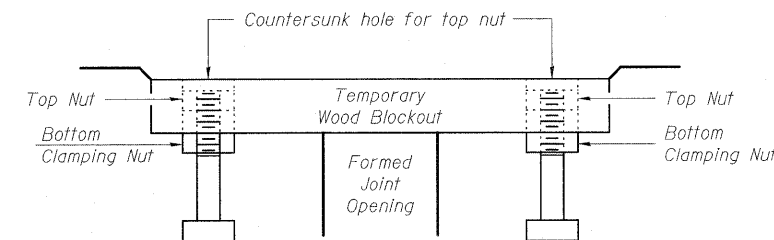
AT PARAPET



AT PARAPET



ANCHOR BLOCK WITH ASPHALT SURFACE



Note:
Stud needs to be threaded lower to allow for use of clamping nut.

RECOMMENDED BLOCKOUT DETAIL

BILL OF MATERIAL

Item	Unit	Total
Neoprene Expansion Joint 2"	Foot	121

**NEOPRENE EXPANSION JOINT
STRUCTURE NO. 025-0018**

DESIGNED	
CHECKED	
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



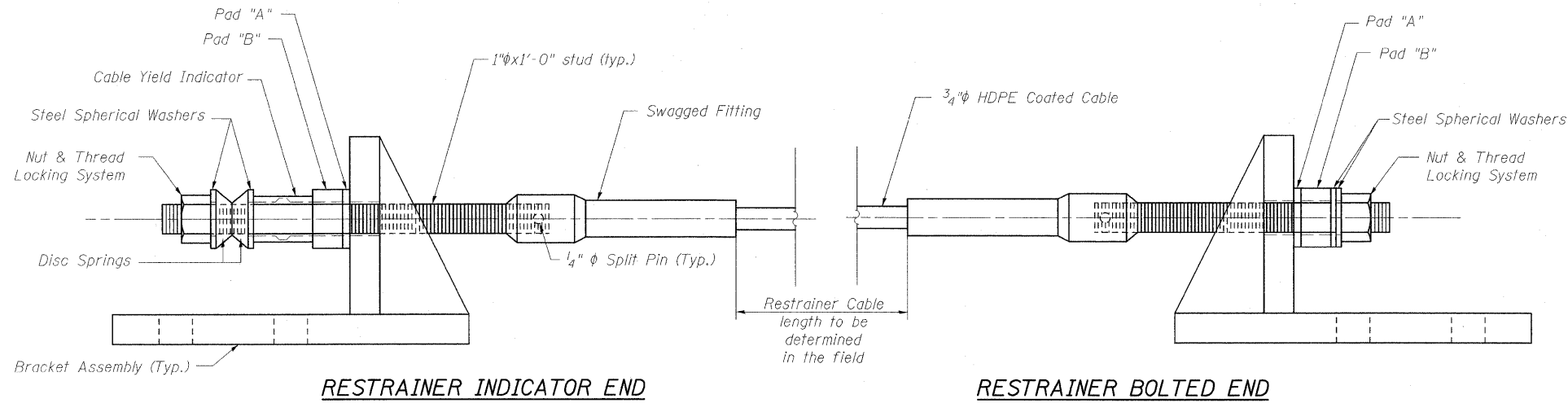
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 12 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)1-3	EFFINGHAM	1416	1393
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

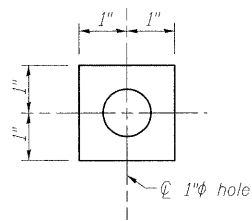
CABLE RESTRAINER UNIT INSTALLATION PROCEDURE



1. Align cable assembly angles with bumper assembly. For Bumper placement see Sheets 14 and 15 of 35.
2. Install Cable Yield Indicator, Spherical Washers, Disc Springs, Washers and Nut on the indicator end of Seismic Restrainers.
3. Place Spherical Washers and Nut on bolted end of restrainers. Place Thread Locking System on bolted end stud prior to installing nut and washers, and prior to setting the cable.
4. Tighten nut on the cable at the indicator end of restrainer. The cable should be approximately straight with no sag.
5. Place Thread Locking System on indicator end stud after tightening the cable but before backing off the nut. Back off the nut at restrainer indicator end a distance equal to maximum additional amount that the joint is expected to open, relative to existing ambient conditions. See Expansion Table on Sheet 15 of 36.
6. If the cable needs to be secured from turning while tightening, use double nut locking technique on the stud to protect the threads.
7. For Thread Locking System, see Special Provision for Seismic Restrainers.

Cost of Bracket Assemblies is included with Furnishing and Erecting Structural Steel.

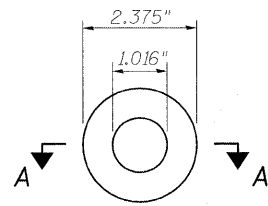
CABLE & BRACKET ASSEMBLY ELEVATION



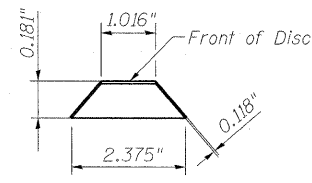
PAD DETAIL

Pad "A" = 2"x2"x1/4" Plain Elastomeric Bearing Pad (50 Durometer)

Pad "B" = 2"x2"x1" Washer



PLAN

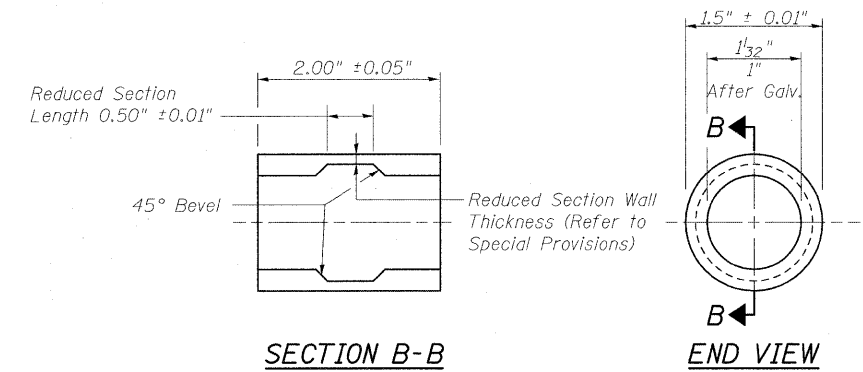


SECTION A-A

DISC SPRING

(Single Spring)

(as Installed on Stud)

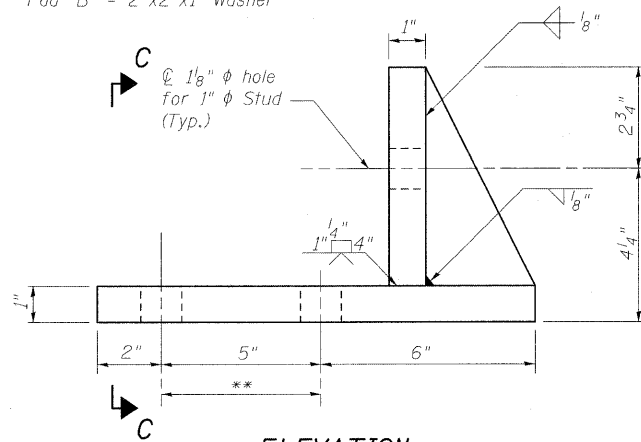


SECTION B-B

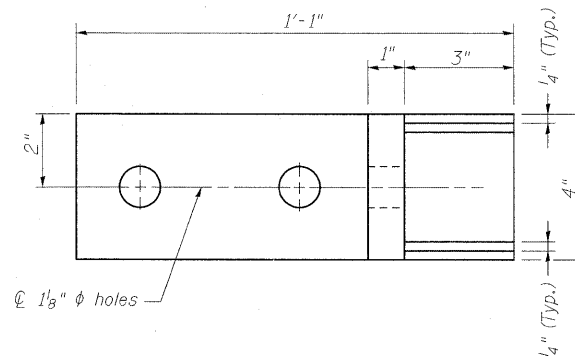
END VIEW

CABLE YIELD INDICATOR

(All dimensions are before galvanizing except as noted)

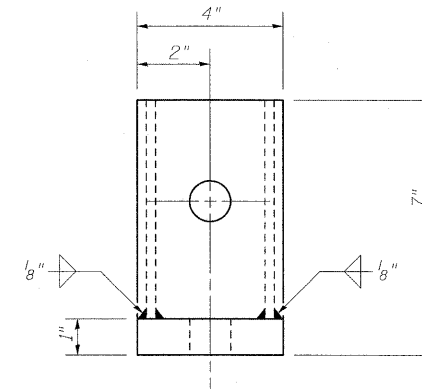


ELEVATION



PLAN

BRACKET ASSEMBLY



SECTION C-C

**SEISMIC RESTRAINER & BRACKET DETAILS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

** 1/8" hole for 1" x 4 1/2" long A325 bolts with 1-1/16" washer

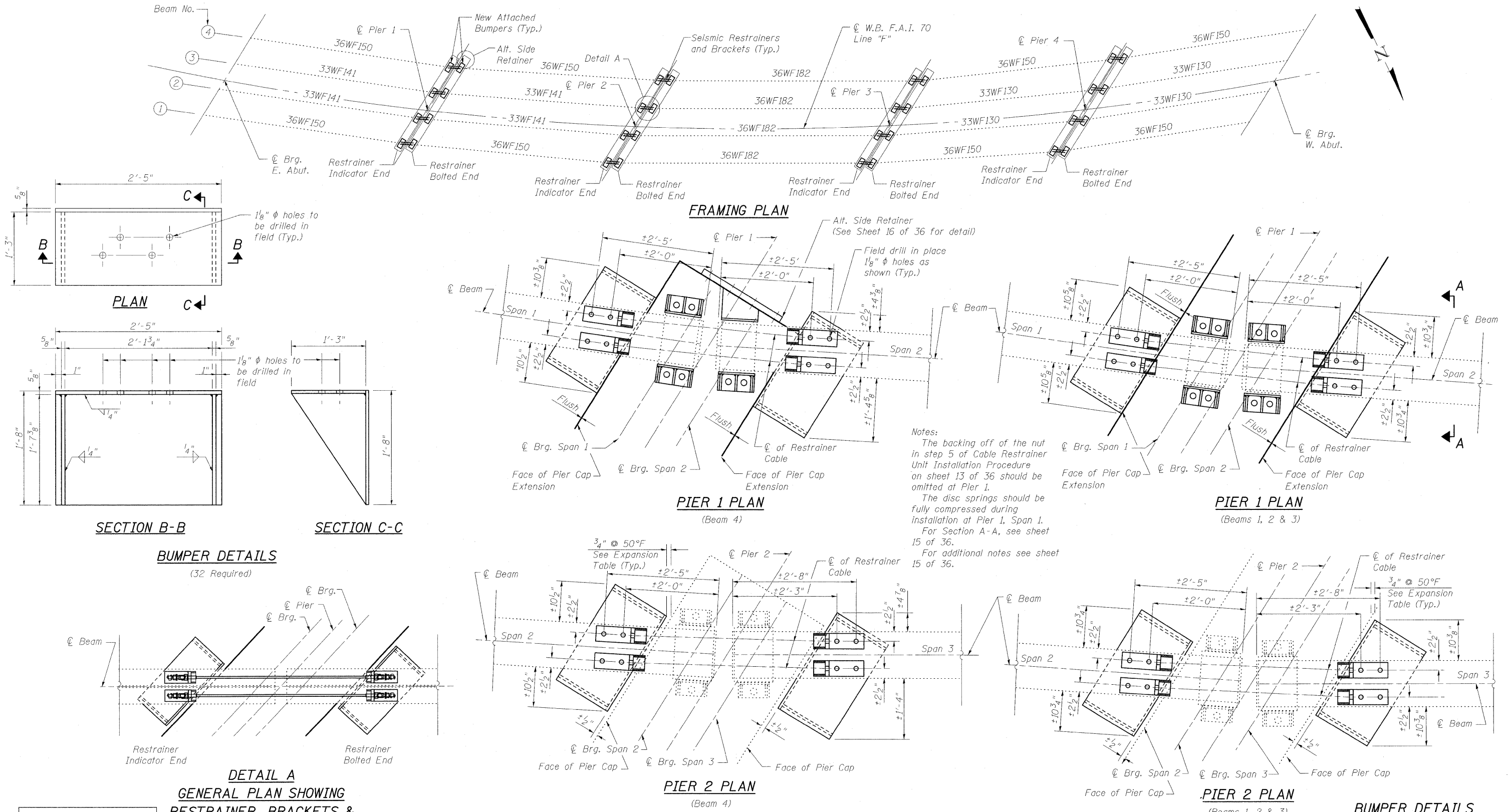


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62052-5655
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 13 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1394
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

**BUMPER DETAILS
STRUCTURE NO. 025-0018**

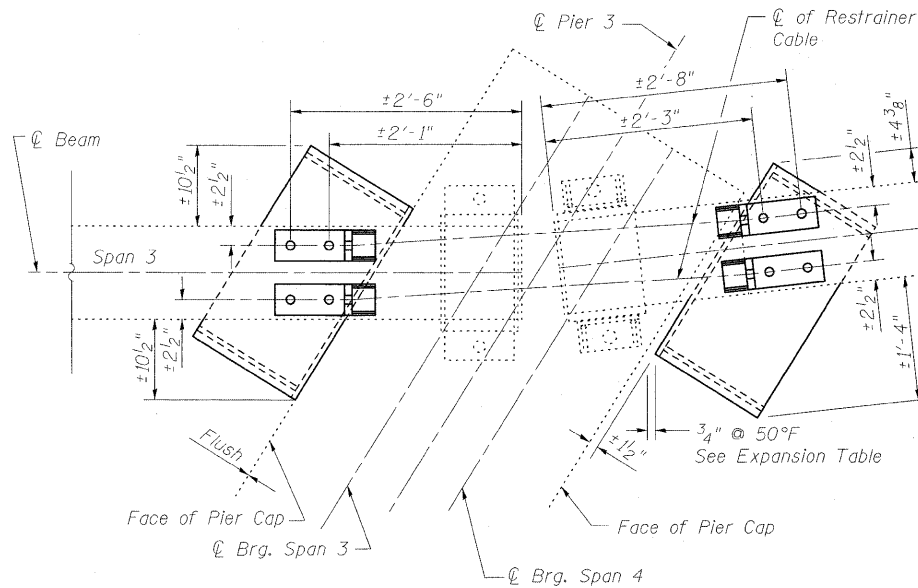
SHEET NO. 14 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1395
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					



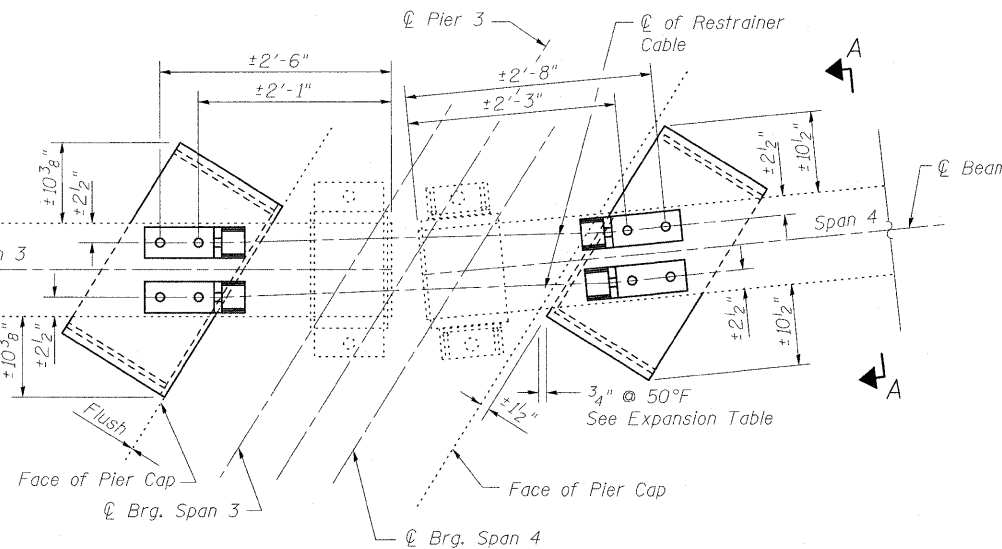
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62452-5635
Local (618) 388-4665
Fax 618-288-4666

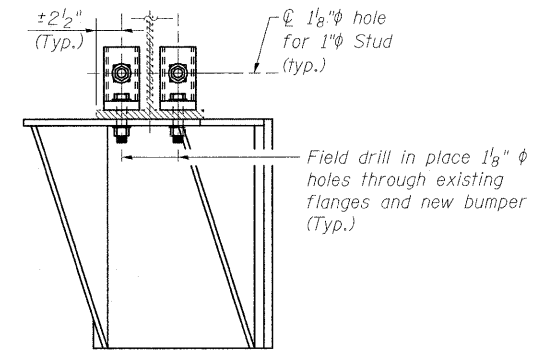
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PIER 3 PLAN
(Beam 4)

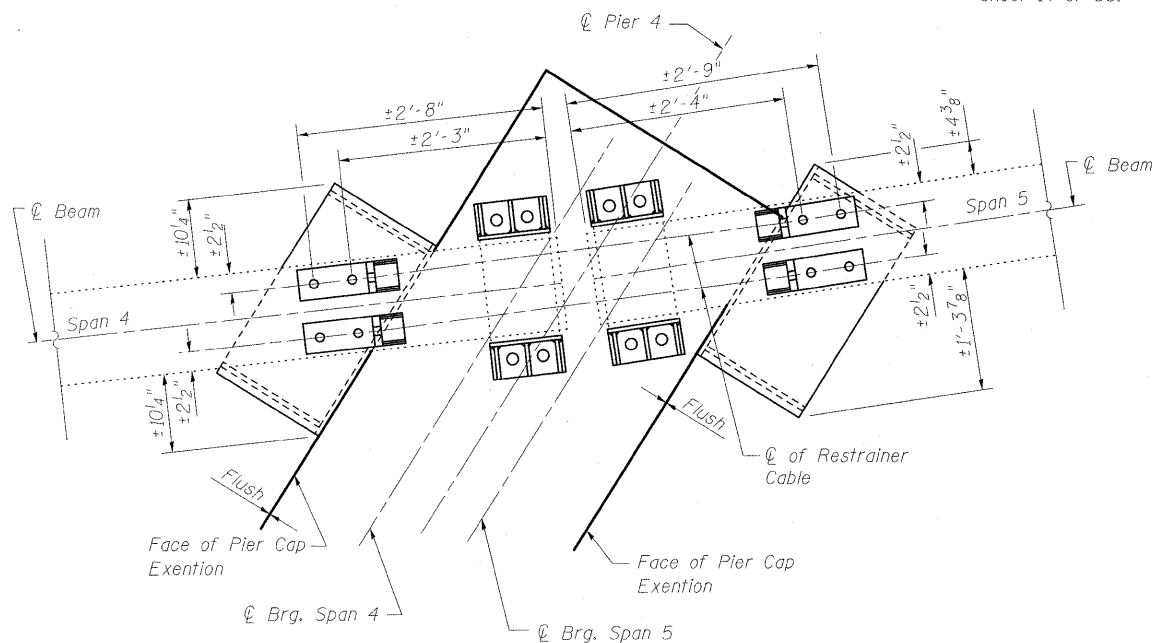


PIER 3 PLAN
(Beams 1, 2 & 3)

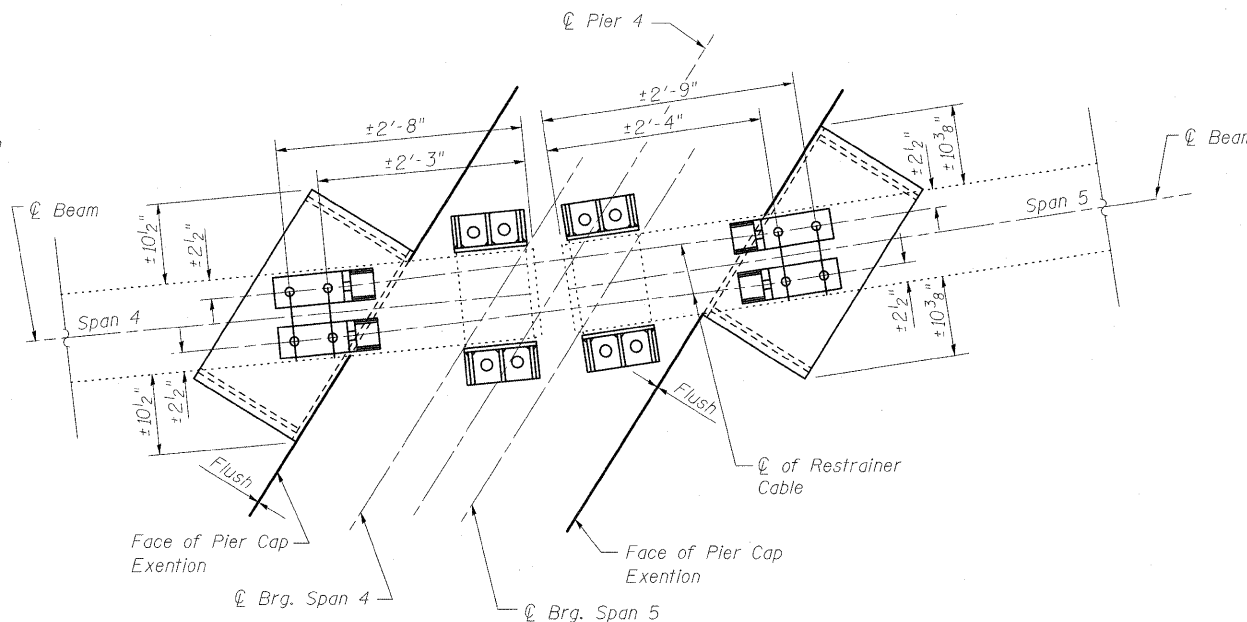


SECTION A-A
Bumper shown on skew

Notes:
The backing off of the nut in step 5 of Cable Restrainer Unit Installation Procedure on sheet 13 of 36 should be omitted at Pier 4.
The disc springs should be fully compressed during installation at Pier 4, Span 4.
For Bumper Details see sheet 14 of 36.



PIER 4 PLAN
(Beam 4)



PIER 4 PLAN
(Beams 1, 2 & 3)

Ambient Temperature	Gap
T < 50°F	3/4" - ΔTemp
T = 50°F	3/4"
T > 50°F	3/4" + ΔTemp

*ΔTemp = 1/32" for every ±10°F (Typ.)

EXPANSION TABLE

BILL OF MATERIAL

Item	Unit	Total
Seismic Restrainer	Each	16
Furnishing & Erecting Structural Steel	Pound	9839

Notes:
For General Elevation Views of Seismic Restrainers, see Sections B-B thru D-D on Sheet 3 of 36.
Seismic Restrainers shall be placed on each beam line.
Two hardened washers are required for each set of oversized holes.
Bumpers shall be paid for as Furnishing and Erecting Structural Steel.

BUMPER DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

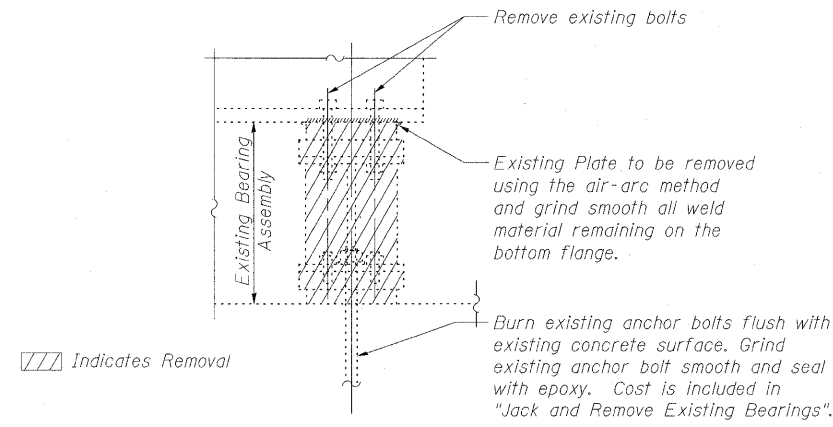


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

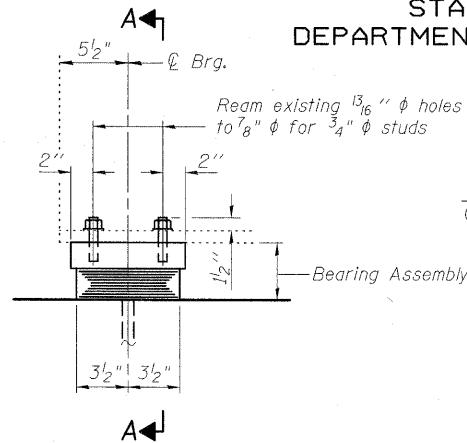
SHEET NO. 15 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1396
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

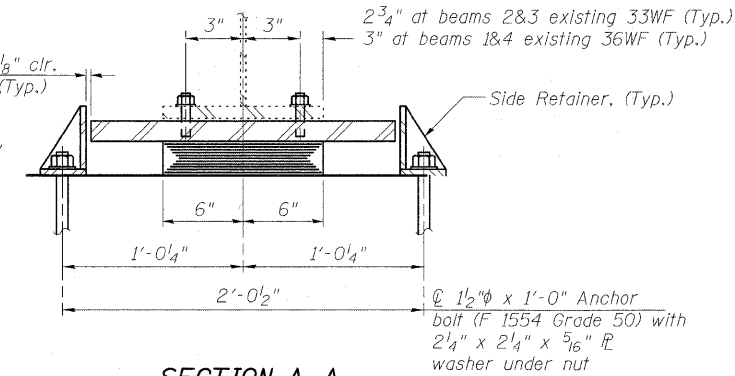


EXISTING BEARING REMOVAL DETAIL

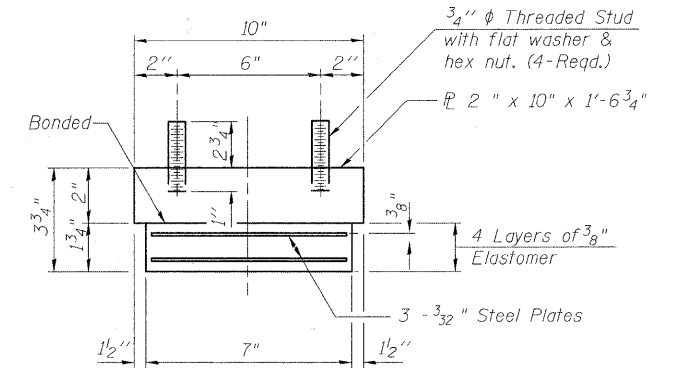
(8 Required)
4 at each Abutment



ELEVATION



SECTION A-A



BEARING ASSEMBLY

TYPE I ELASTOMERIC EXP. BRG.

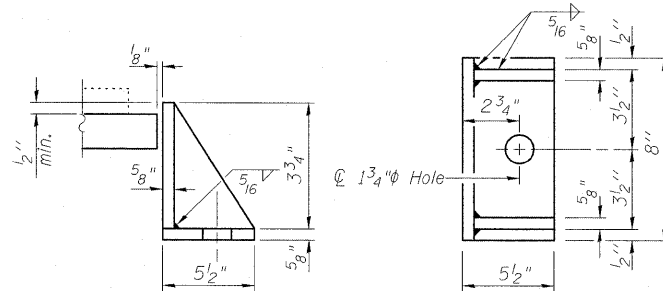
(8 Required)
4 at each Abutment

Note:
W. Abut. Anchor Bolts are offset from centerline of bearing. (See Sheet 21 Of 36)

PROCEDURE TO JACK AND REMOVE EXISTING BEARINGS

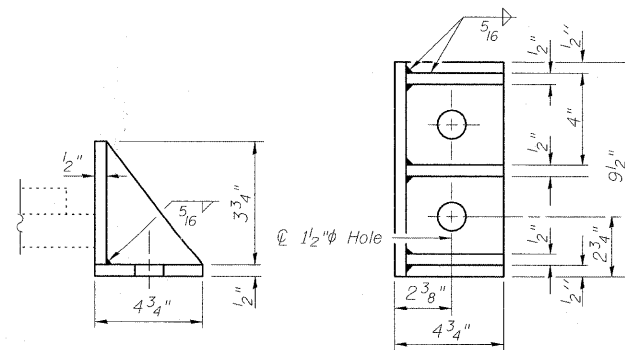
(East & West Abutments)
(Minimum Jack Capacity Required 25 tons at Abutment)

1. Jack and Remove Existing Bearings shall be conducted according to the Bridge Special Provision "Jack and Remove Existing Bearings." See Interior Beam Reaction Table for loads.
2. Jacking and removing existing bearings shall be done after partial deck concrete removal and before new deck concrete is poured.
3. Four beams may be lifted simultaneously.
4. The existing anchor bolts shall be cut off flush with the existing bridge seat, the rockers, top and bottom plates shall be removed.
5. Formwork and bearing seat construction shall occur.
6. The new elastomeric bearings shall be placed and the jacks shall be lowered.
7. The new holes for the side retainers shall be drilled at the locations specified.
8. No Bearing Replacement is required at Pier 1, Pier 2, Pier 3 and Pier 4. Clean and paint as specified for Structural Steel.



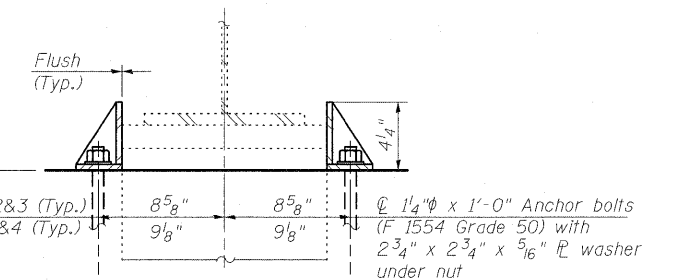
SIDE RETAINER AT ABUTMENTS

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



SIDE RETAINER AT ENCASED FIXED BEARINGS

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



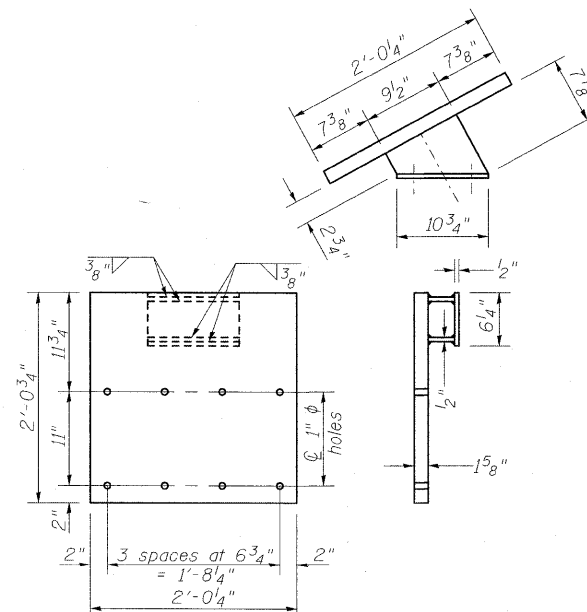
SIDE RETAINERS AT ENCASED FIXED BEARINGS PIERS 1 & 4

INTERIOR BEAM REACTION TABLE			
		E. Abut.	W. Abut.
R ₂	(k)	25.1	23.2
R ₄	(k)	35.3	34.7
Imp.	(k)	10.2	10.1
R _{Total}	(k)	70.6	68.0

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	8
Anchor Bolts, 1 1/4"	Each	62
Anchor Bolts, 1 1/2"	Each	16
Jack & Remove Existing Bearings	Each	8

**BEARING DETAILS
STRUCTURE NO. 025-0018**



ALT. SIDE RETAINER AT PIER 1, SPAN 2, BEAM 4

(see sheet 14 of 36 for location)
(see sheet 23 of 36 for Embedded Anchor layout)

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

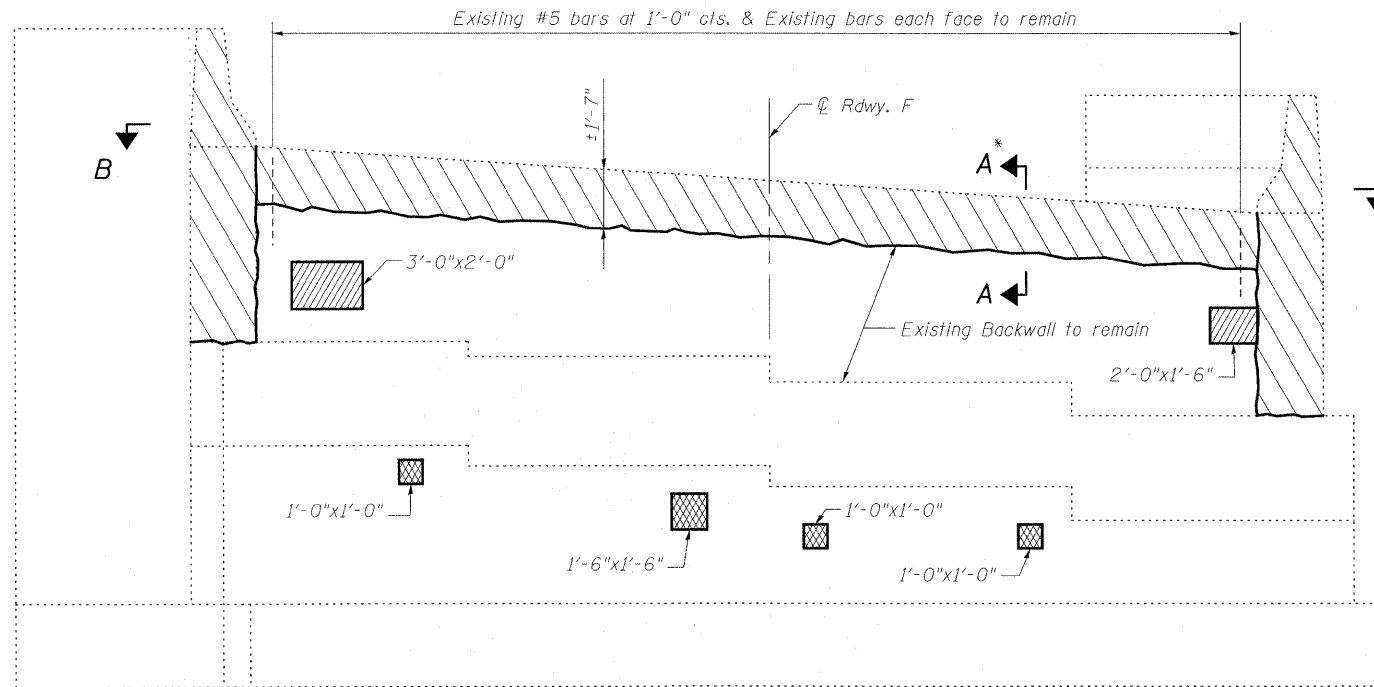


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

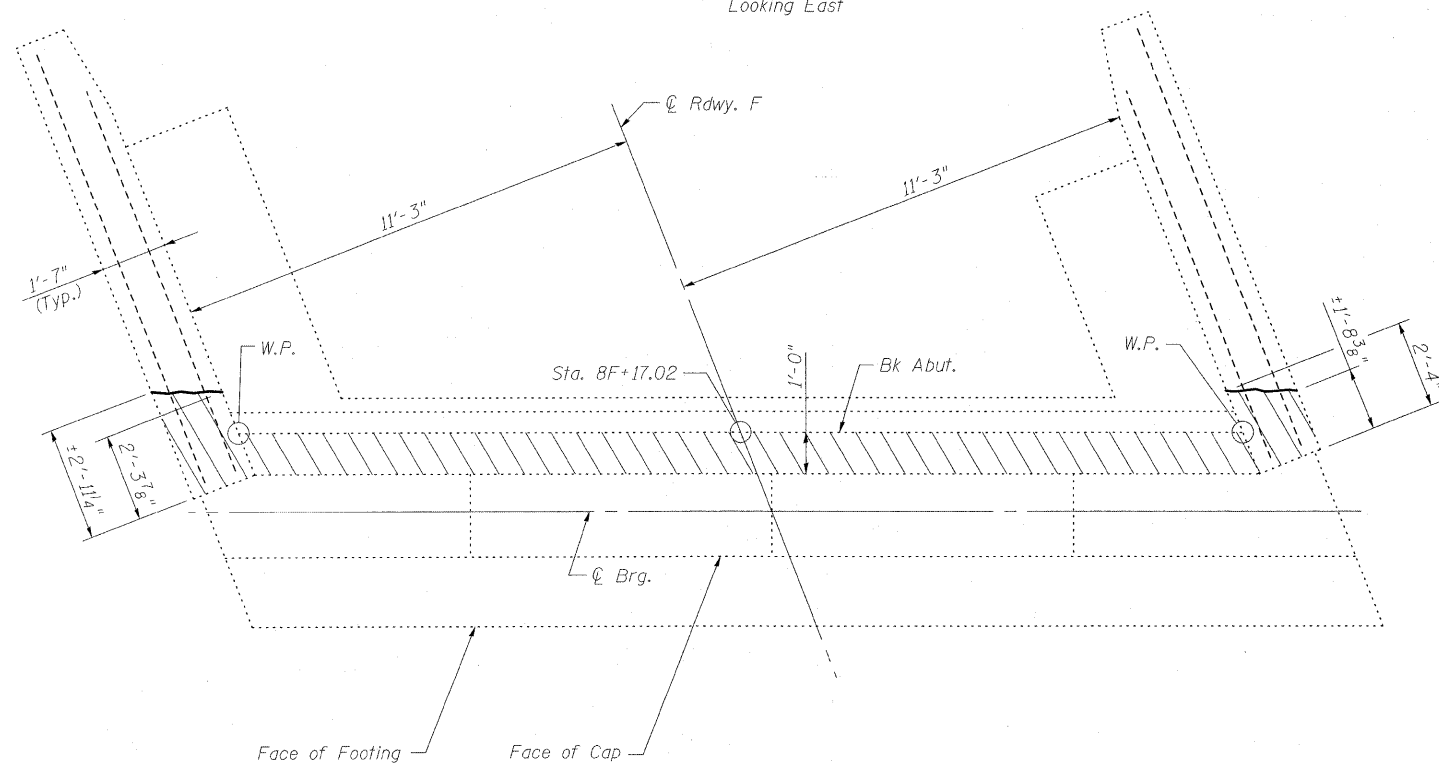
3 Oak Drive
Maryville, IL 62452-9635
Local (618) 338-4665
Fax 618-388-4666

SHEET NO. 16 36 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-3	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1397
	SN 025-0018		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

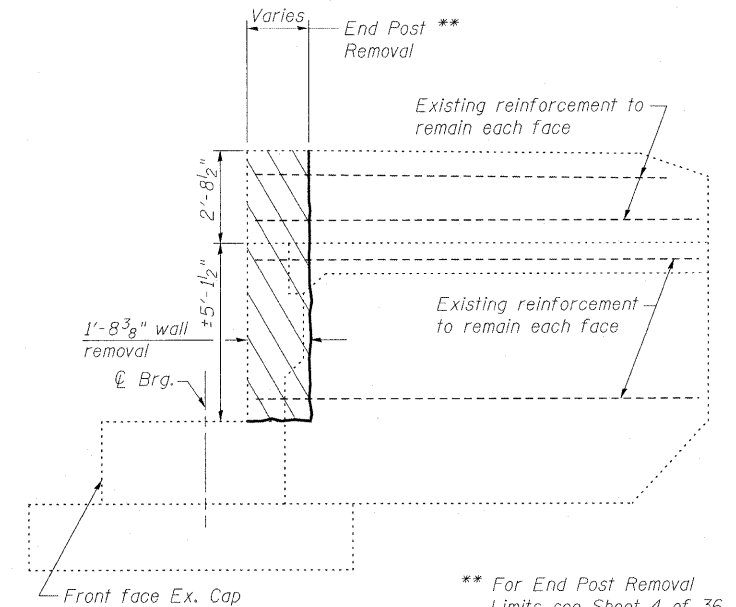


ELEVATION
Looking East



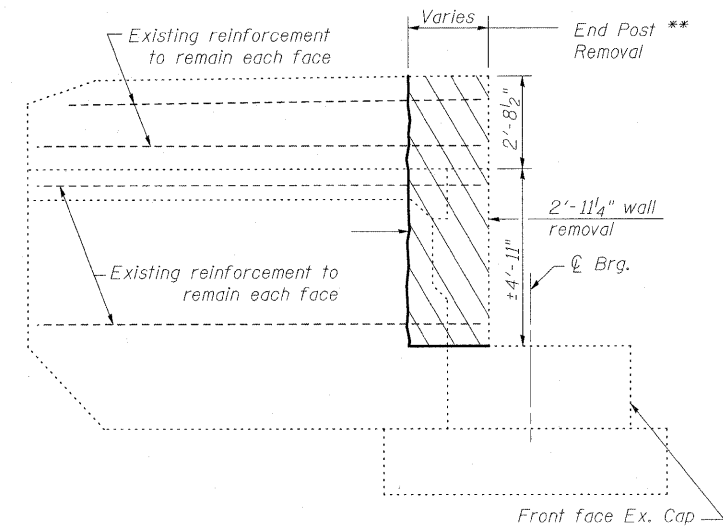
VIEW B-B
EAST ABUTMENT

* For Section A-A see
Sheet 4 of 36.



SOUTH WING WALL

** For End Post Removal
Limits see Sheet 4 of 36.



NORTH WING WALL

LEGEND

- Indicates Structural Repair of Concrete
- Indicates Unsound Concrete Removal
- Indicates Concrete Removal

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	3.1
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	9
Unsound Concrete Removal	Sq. Yd.	0.6

CONCRETE REMOVAL & REPAIR
EAST ABUTMENT
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



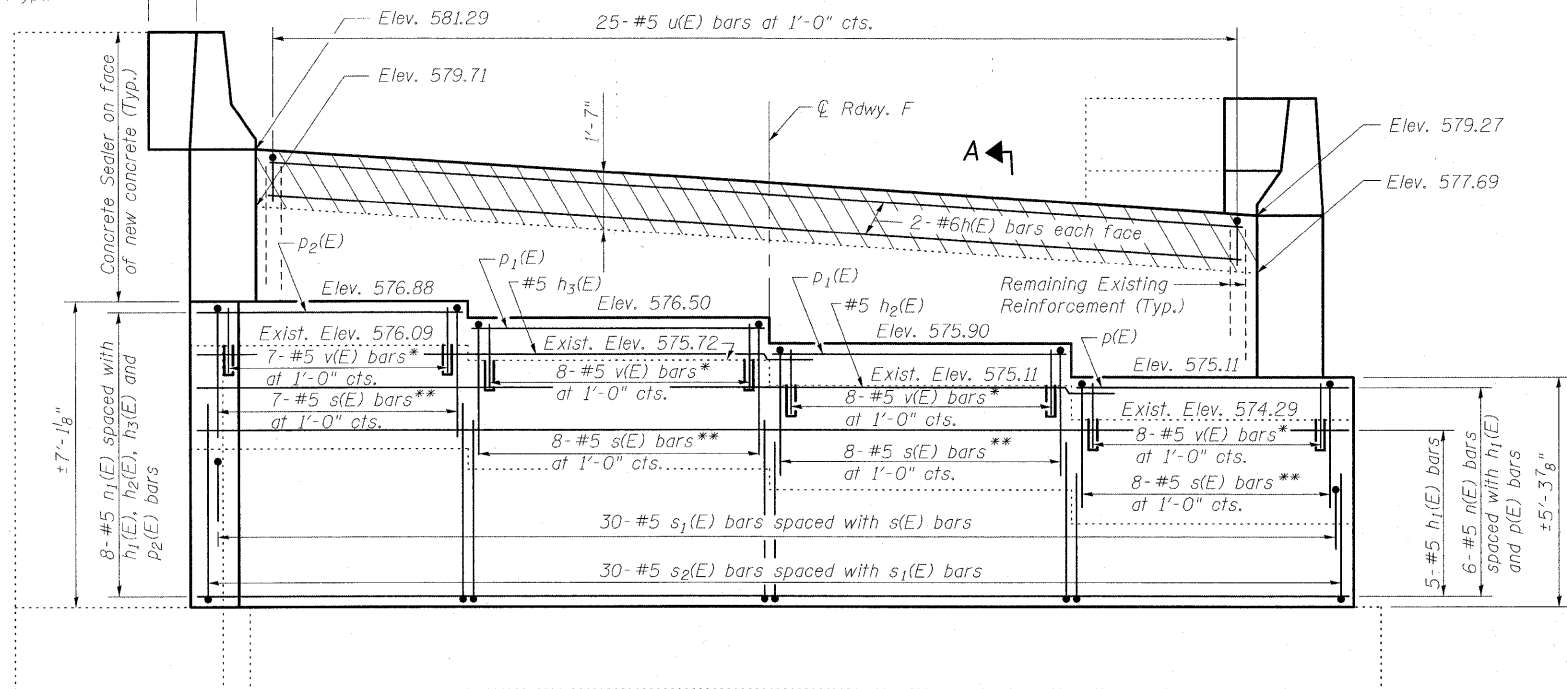
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Meryville, IL 62962-4635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 17 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1398
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Concrete Sealer on outside
Face of wingwall (Typ.)



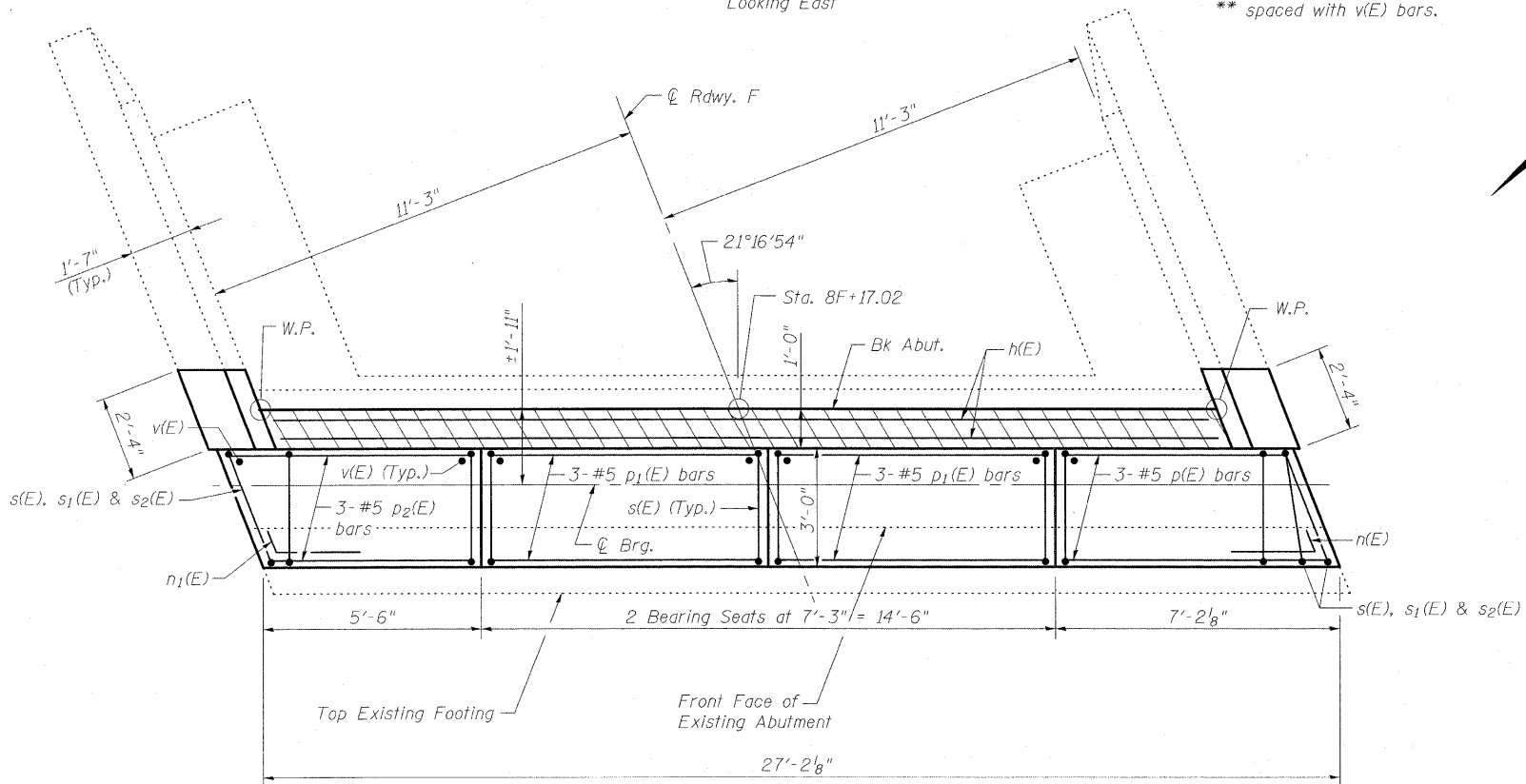
ELEVATION
Looking East



* Field Drill and Epoxy Grout min. 7" into existing cap.
see Section Thru Abutments.
** spaced with v(E) bars.

Notes:

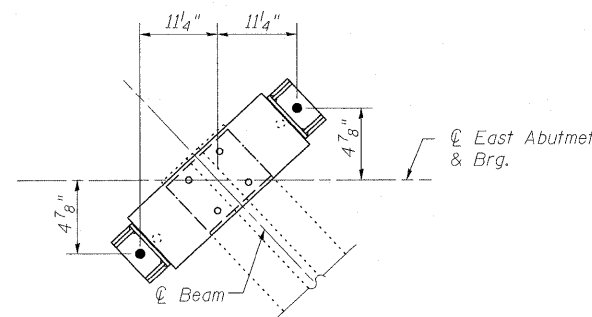
Cut p(E) and p2(E) bars to fit with 2" clear.
For Section thru Slope Wall see Section F-F
on sheet 3 of 36.
For Section A-A see sheet 19 of 36.
Hatched area quantity of concrete included
with Concrete Superstructure.
Space reinforcement to miss Anchor Bolts.
Bars shall be drilled and grouted according to
Section 584 of the Standard Specifications.



PLAN

MIN BAR LAP

#5 bar = 1'-8"



ANCHOR BOLT DETAIL
EAST ABUTMENT

EAST ABUTMENT DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

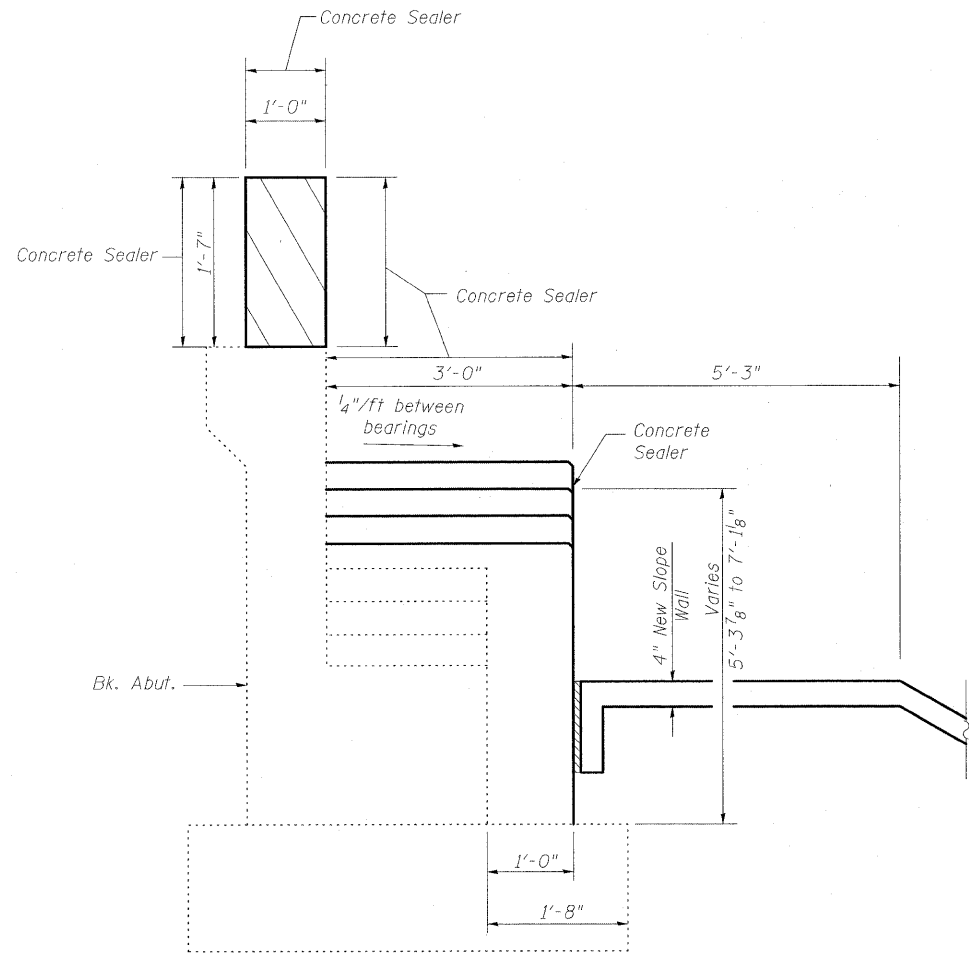


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62442-5635
Local (618) 338-4665
Fax 618-288-4666

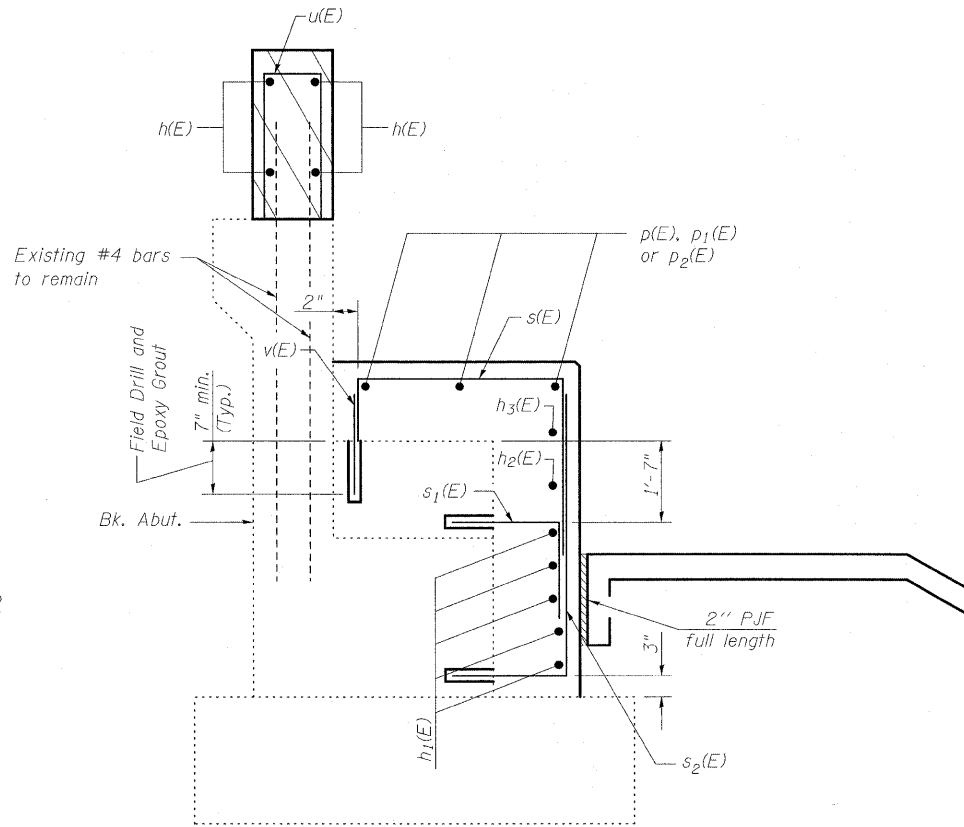
SHEET NO. 18 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1399
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

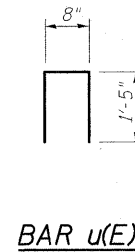
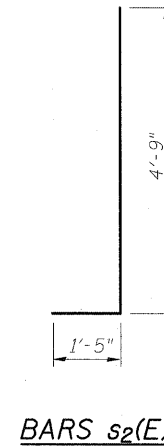
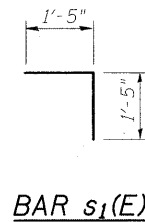
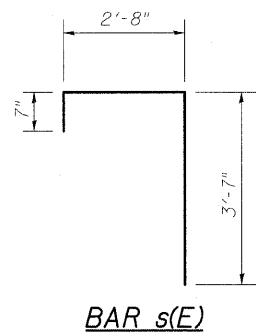
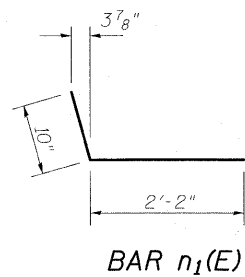
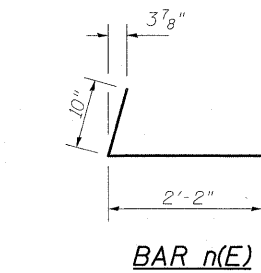


Dimensions at Rt L

**SECTION A-A
THRU ABUTMENT
SHOWING OUTLINE**



**SECTION A-A
THRU ABUTMENT
SHOWING REINFORCEMENT**



Notes:

For Endpost details see Sheet 7 of 36.
Hatched area quantity of concrete included with Concrete Superstructure.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Apply Concrete Sealer to exposed horizontal and vertical faces of abutment extension.

**BILL OF MATERIAL
EAST ABUTMENT**

Bar	No.	Size	Length	Shape
h(E)	4	#6	23'-10"	—
h1(E)	5	#5	26'-10"	—
h2(E)	1	#5	21'-6"	—
h3(E)	1	#5	14'-3"	—
n(E)	6	#5	3'-0"	↘
n1(E)	8	#5	3'-0"	↘
p(E)	3	#5	6'-10"	—
p1(E)	6	#5	6'-11"	—
p2(E)	3	#5	6'-3"	—
s(E)	31	#5	6'-10"	┌
s1(E)	30	#5	2'-10"	┌
s2(E)	30	#5	6'-2"	┌
u(E)	25	#5	3'-6"	┌
v(E)	31	#5	1'-2"	—
Concrete Sealer		Sq. Ft.	431.0	
Concrete Structures		Cu. Yd.	9.3	
Reinforcement Bars, Epoxy Coated		Pound	1080	

**EAST ABUTMENT SECTIONS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

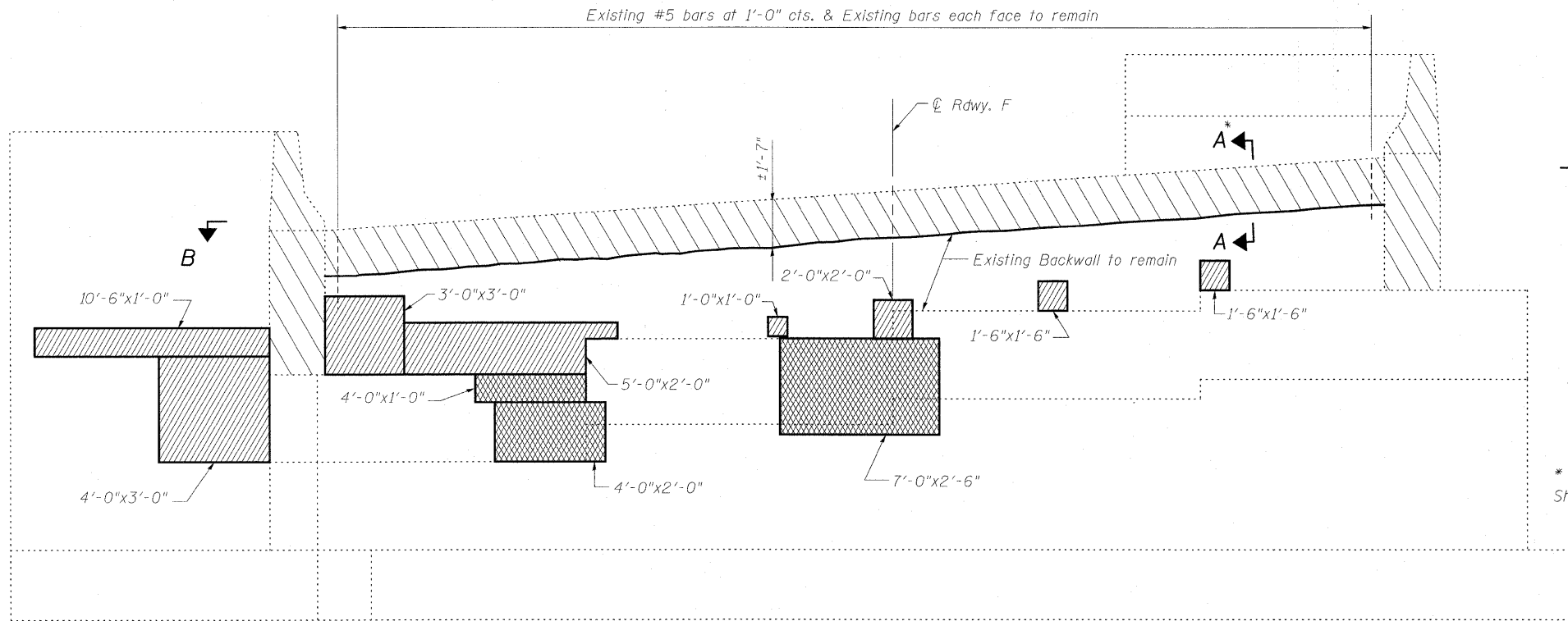


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

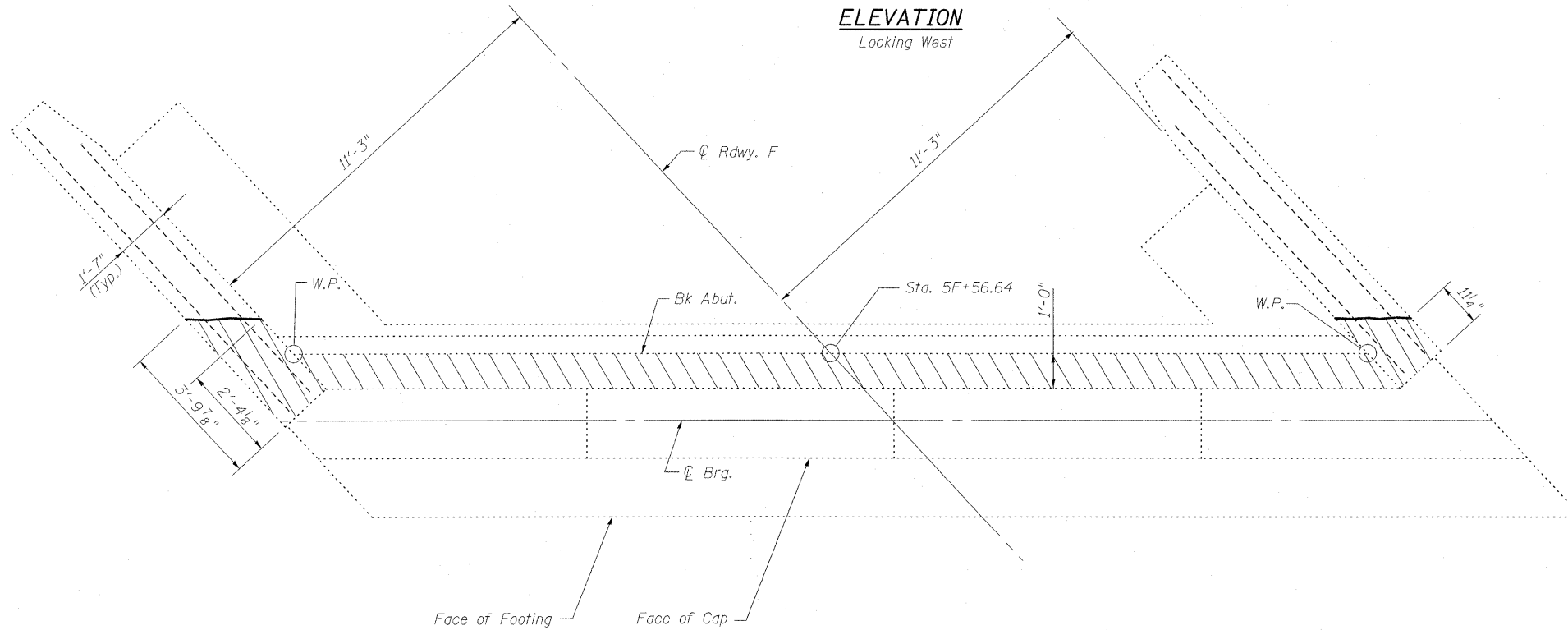
8 Oak Drive
Mareville, IL 62662-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 19 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1400
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

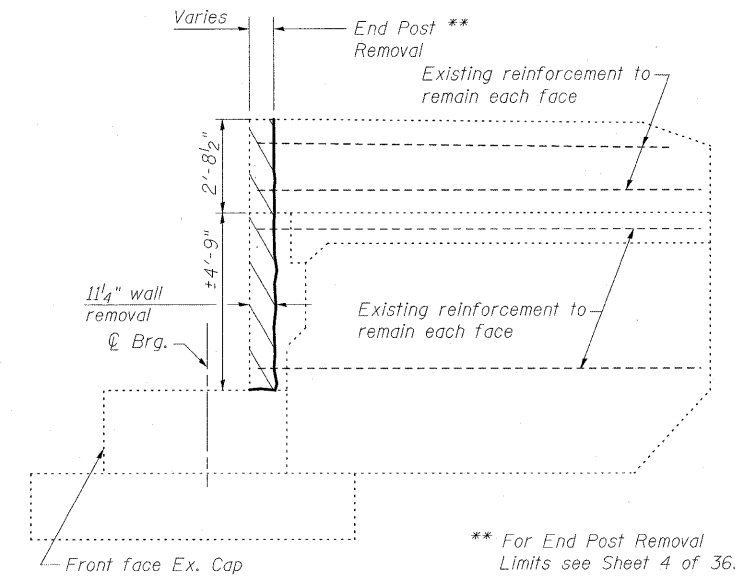
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
Looking West

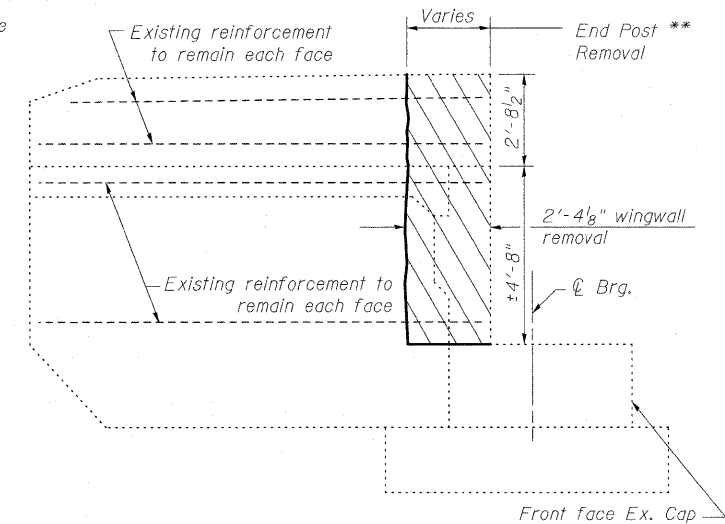


VIEW B-B
WEST ABUTMENT



NORTH WING WALL

* For Section A-A see Sheet 4 of 36.



SOUTH WING WALL

LEGEND

- Indicates Structural Repair of Concrete
- Indicates Unsound Concrete Removal
- Indicates Concrete Removal

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	3.3
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	51
Unsound Concrete Removal	Sq. Yd.	3.3

CONCRETE REMOVAL & REPAIR
WEST ABUTMENT
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

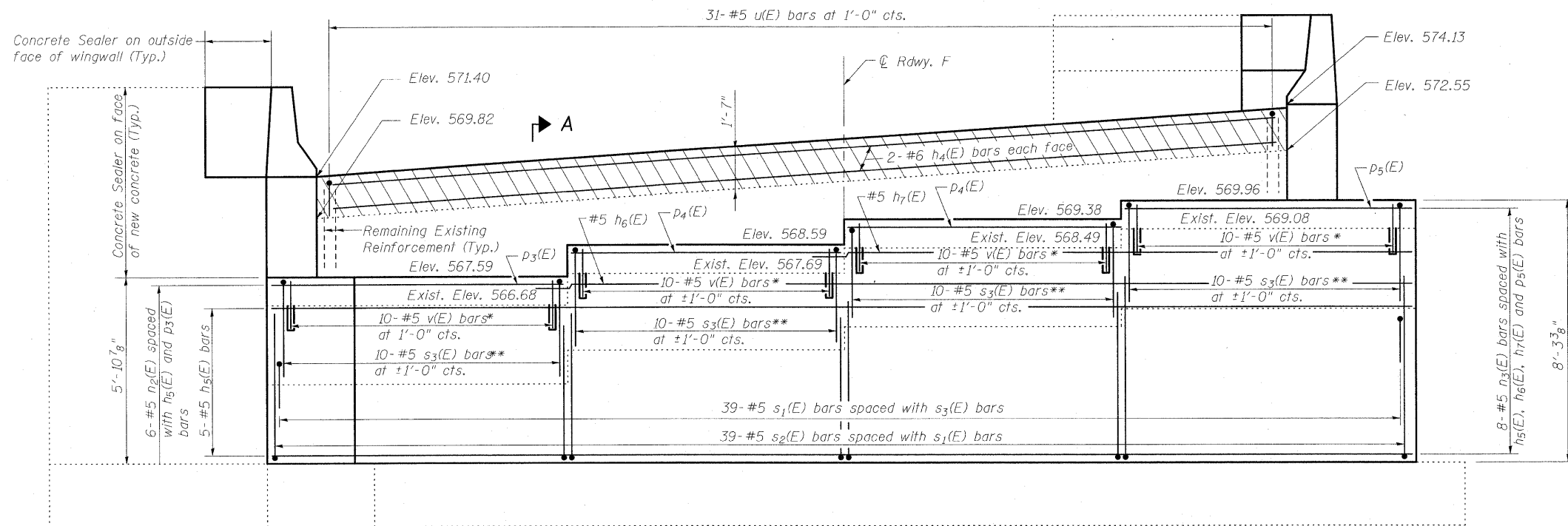


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

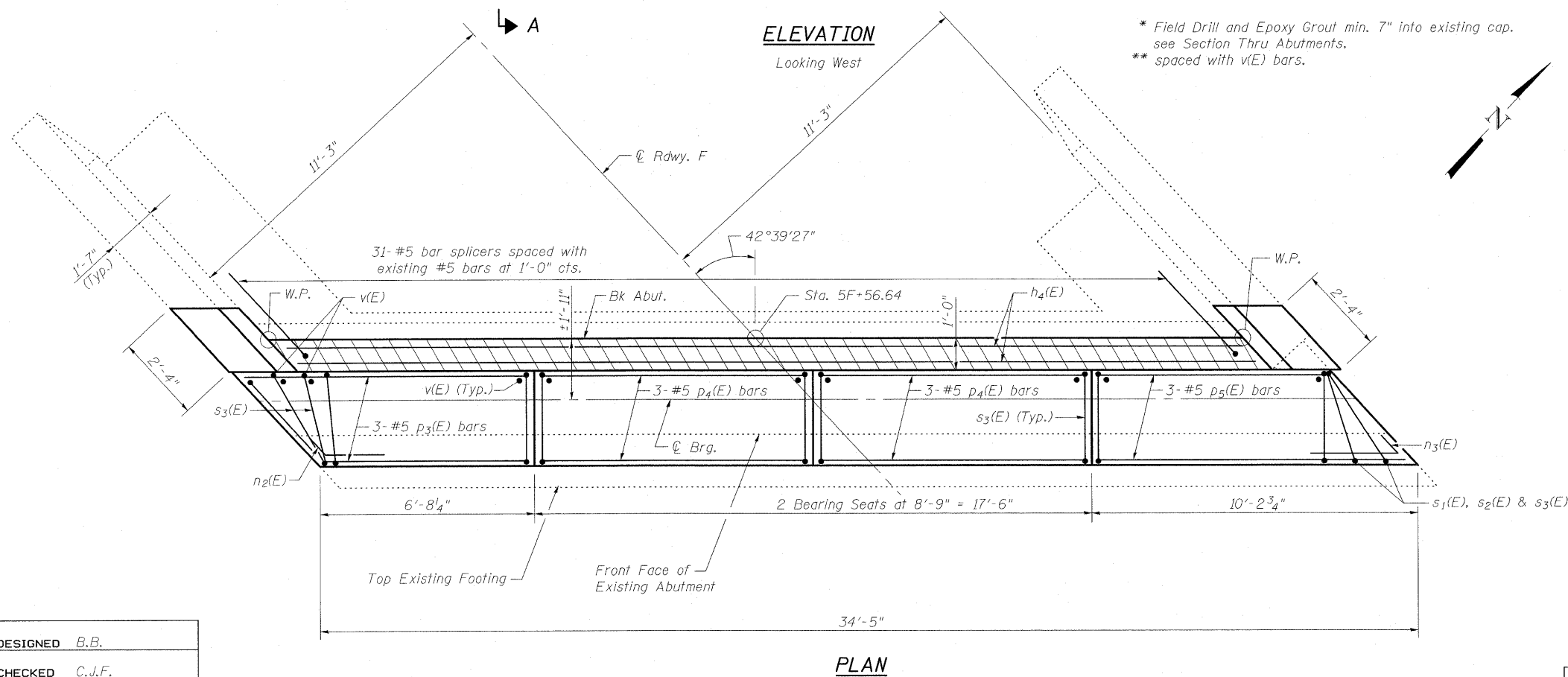
3 Oak Drive
Maryville, IL 62442-5655
Local (618) 398-4665
Fax 618-288-4666

SHEET NO. 20 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1401
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

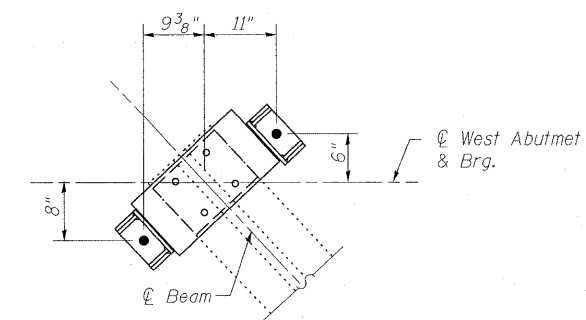


Notes:
Cut p₃(E) and p₅(E) bars to fit with 2" clear.
For Section thru Slope Wall see Section F-F on sheet 3 of 36.
For Section A-A see sheet 22 of 36.
Hatched area quantity of concrete included with Concrete Superstructure.
Space reinforcement to miss Anchor Bolts.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.



MINIMUM BAR LAP

#5 bar = 1'-8"



ANCHOR BOLT DETAIL
WEST ABUTMENT

WEST ABUTMENT DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

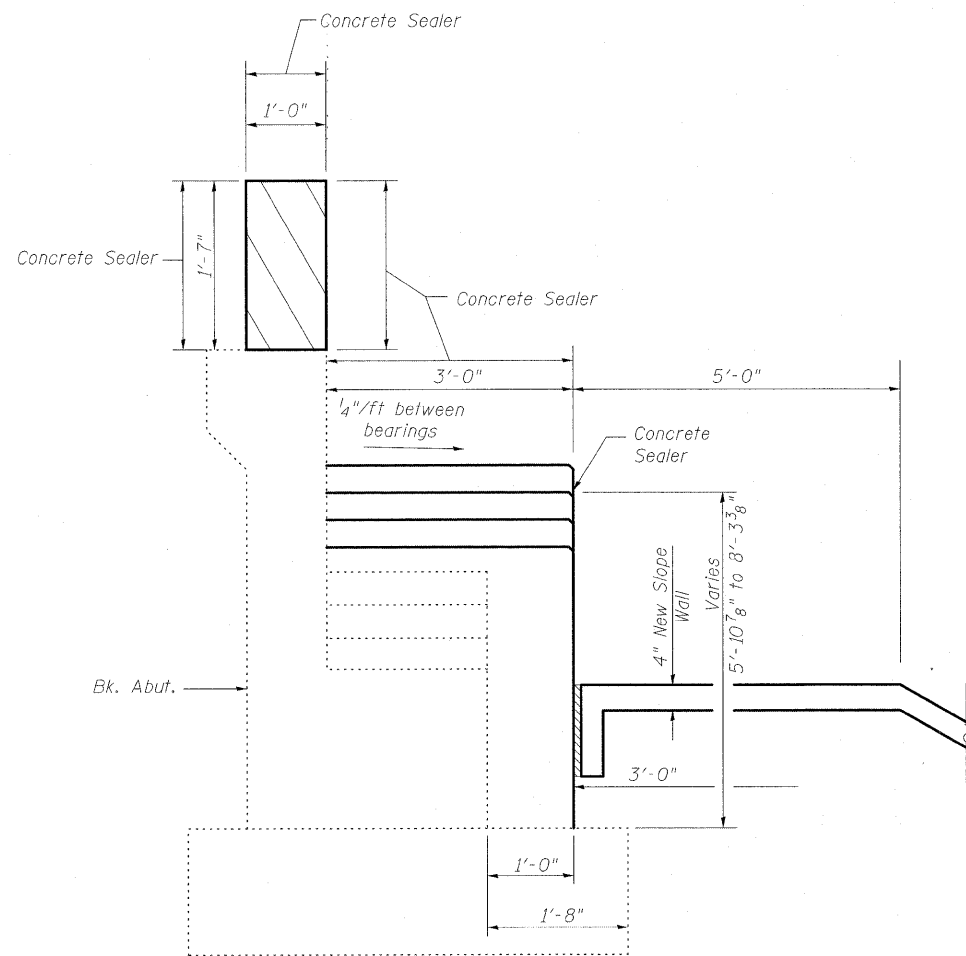


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

3 Oak Drive
Maryville, IL 62062-6635
Local (618) 288-4665
Fax 618-288-4666

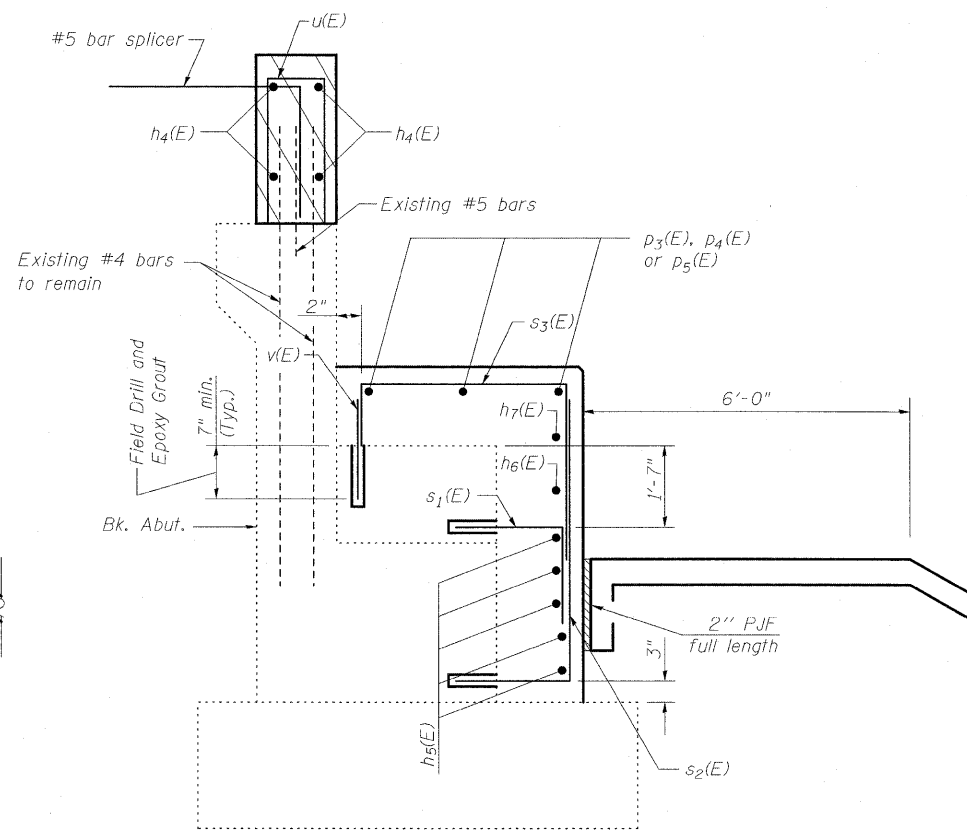
SHEET NO. 21 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1402
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

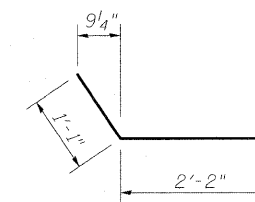


Dimensions at Rt L

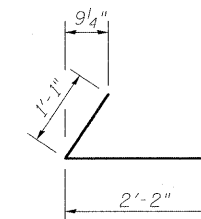
**SECTION A-A
THRU ABUTMENT
SHOWING OUTLINE**



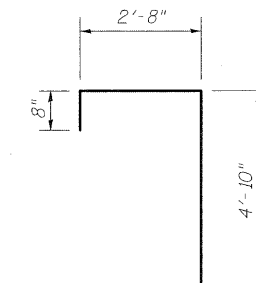
**SECTION A-A
THRU ABUTMENT
SHOWING REINFORCEMENT**



BAR n₂(E)



BAR n₃(E)



BAR s₃(E)

**BILL OF MATERIAL
WEST ABUTMENT**

Bar	No.	Size	Length	Shape
h ₄ (E)	4	#6	30'-3"	—
h ₅ (E)	5	#5	34'-1"	—
h ₆ (E)	1	#5	29'-2"	—
h ₇ (E)	1	#5	20'-5"	—
n ₂ (E)	6	#5	3'-3"	┘
n ₃ (E)	8	#5	3'-3"	┘
p ₃ (E)	3	#5	9'-1"	—
p ₄ (E)	6	#5	8'-5"	—
p ₅ (E)	3	#5	9'-10"	—
s ₁ (E)	39	#5	2'-10"	┘
s ₂ (E)	39	#5	6'-2"	┘
s ₃ (E)	40	#5	8'-2"	┘
u(E)	31	#5	3'-6"	□
v(E)	40	#5	1'-2"	—
Concrete Sealer		Sq. Ft.	571	
Concrete Structures		Cu. Yd.	12.9	
Reinforcement Bars, Epoxy Coated		Pound	1440	
Bar Splicers		Each	31	

Notes:
For Endpost details see Sheet 7 of 36.
Hatched area quantity of concrete included with Concrete Superstructure.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Cost of Slopewall Footing included with Slopewall, 4".
Apply Concrete Sealer to exposed horizontal and vertical faces of abutment extension.
For additional bar details see Sheet 19 of 36.

**WEST ABUTMENT SECTIONS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

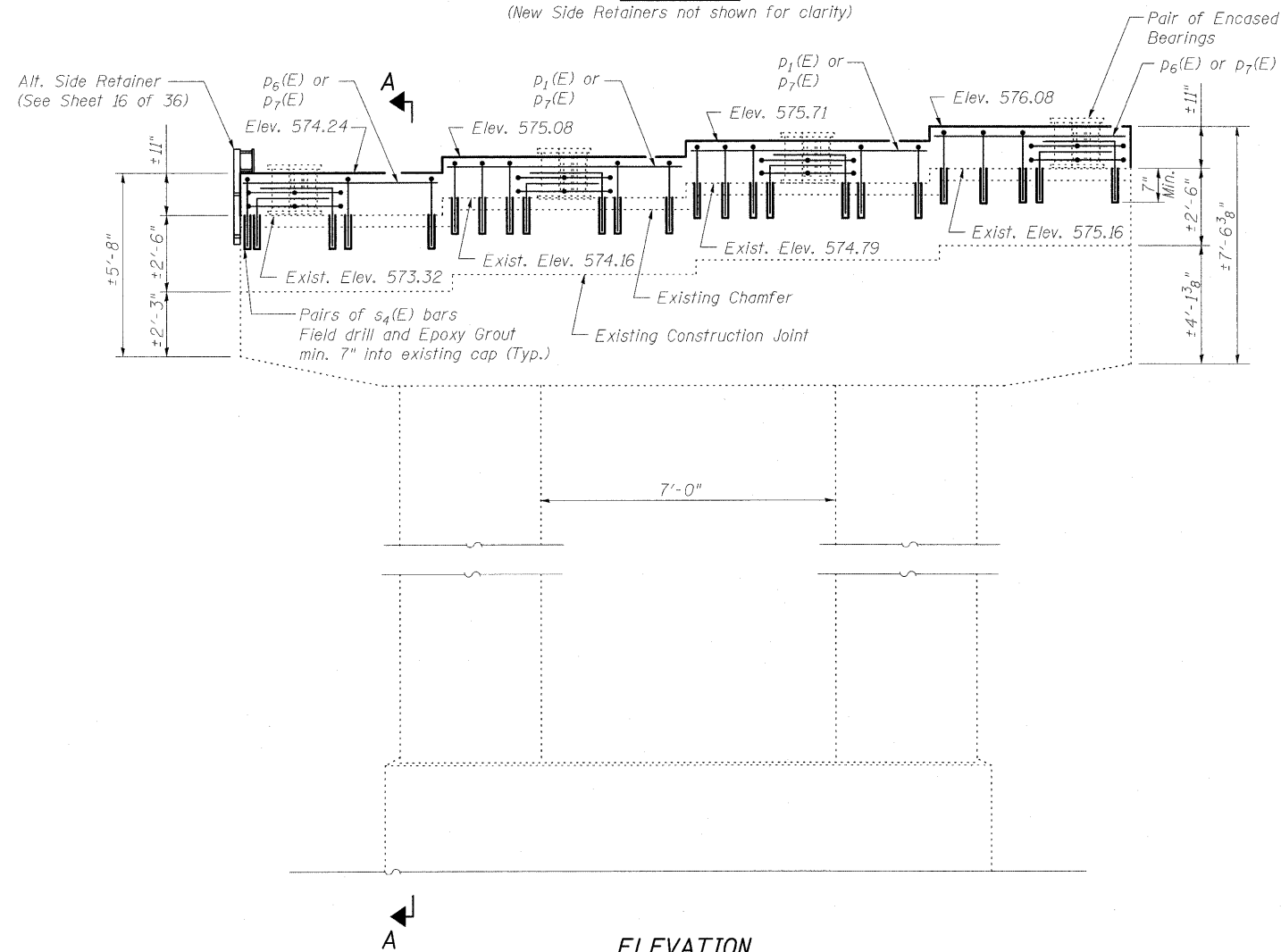
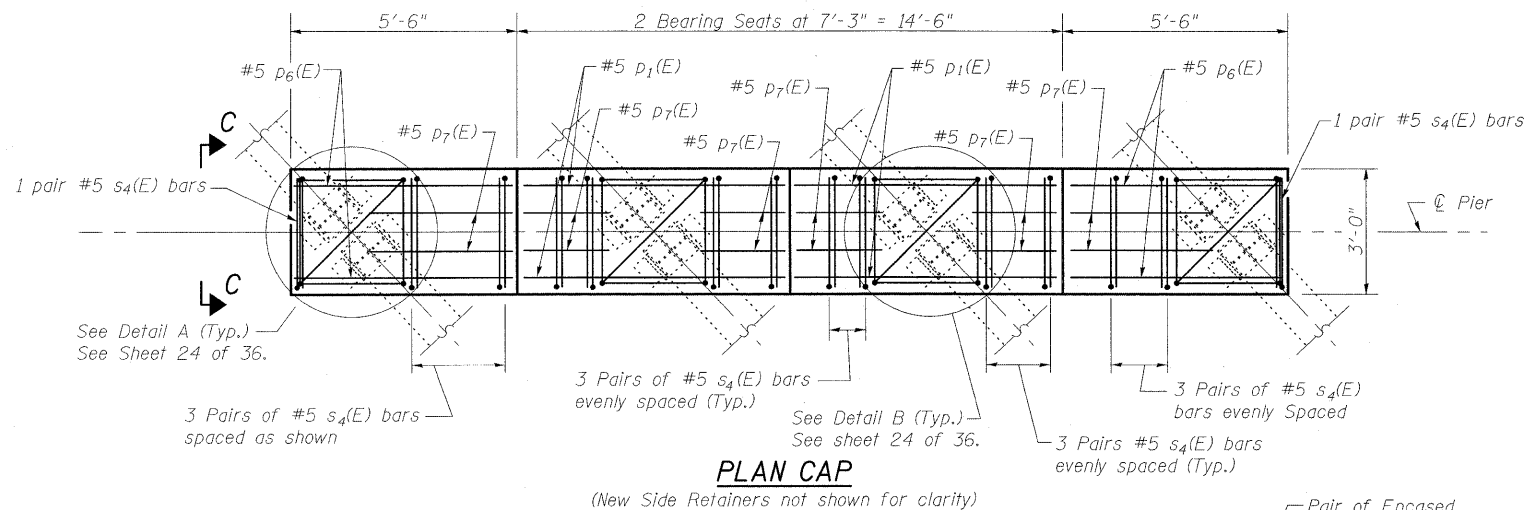


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

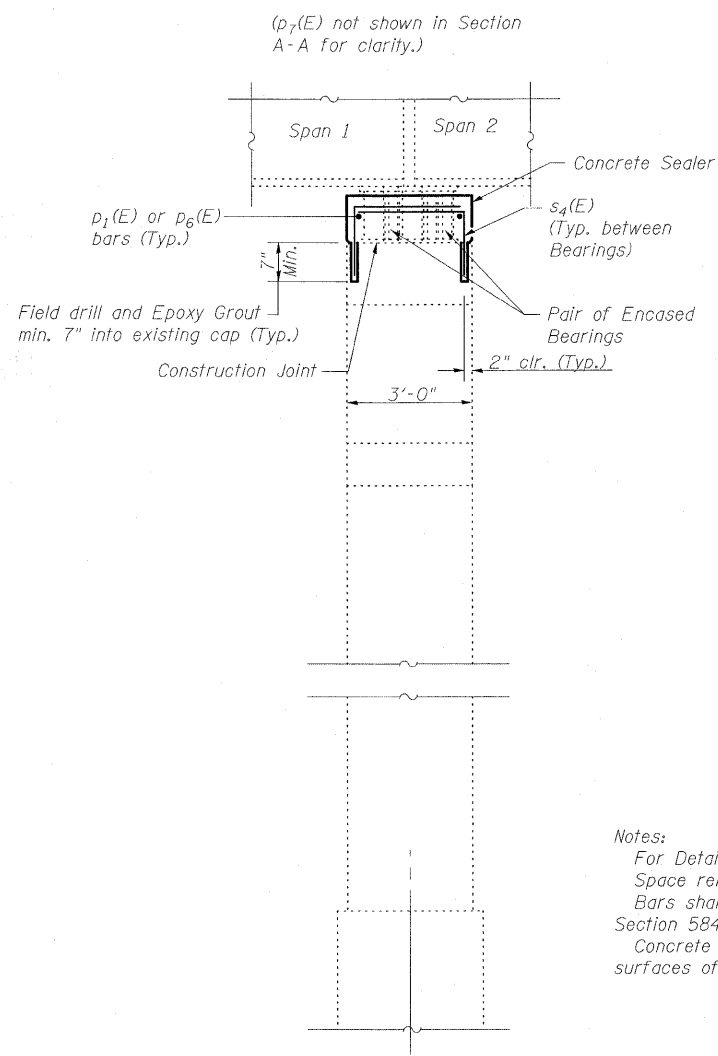
3 Oak Drive
Maryville, IL 62062-2635
Local: (618) 398-4005
Fax: 618-398-4696

SHEET NO. 22 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1403
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

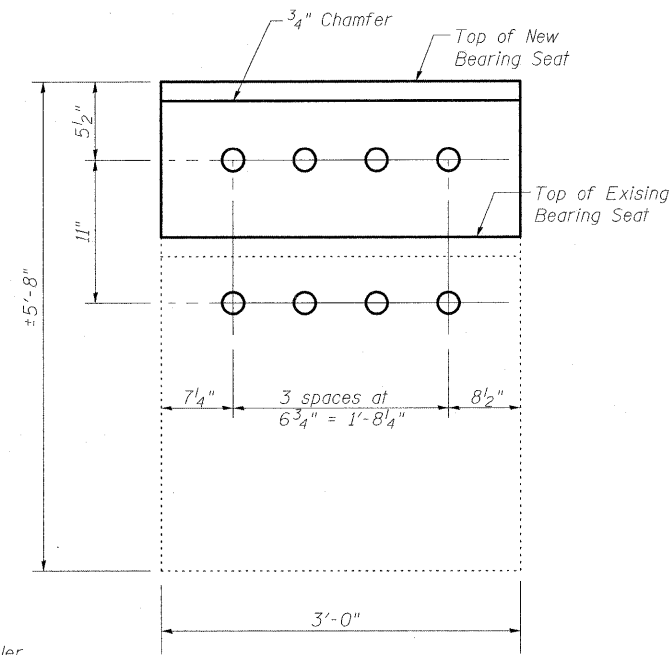
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking West)



SECTION A-A
(Showing Bearings and Superstructure)



View C-C
(Showing Alt. Side Retainer Anchor Layout)

Notes:
For Detail A & Detail B see Sheet 24 of 36
Space reinforcement in cap to miss Anchor Bolts.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 1.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

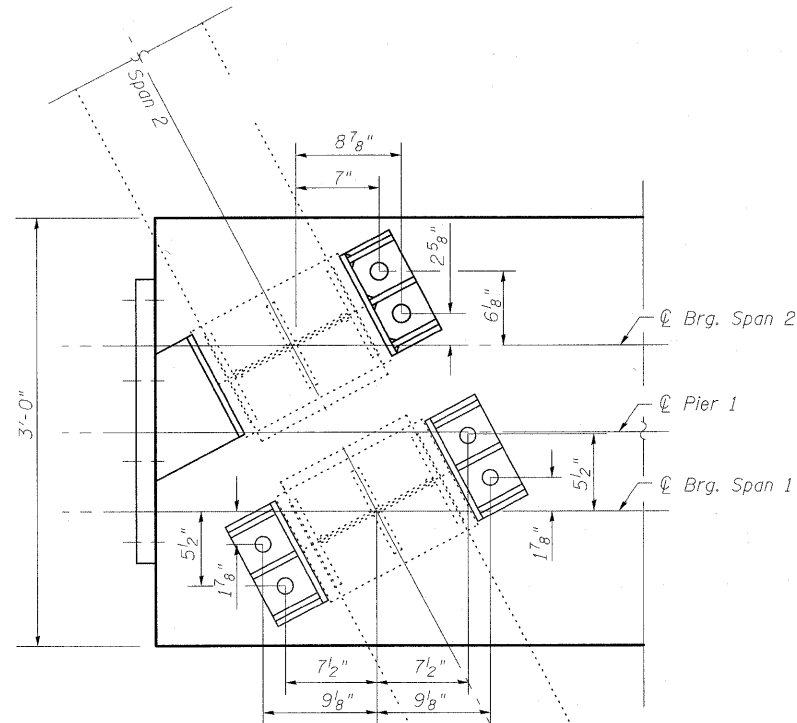
3 Oak Drive
Maryville, IL 62062-5635
Local (618) 298-4665
Fax 618-298-4666

SHEET NO. 23 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)-3	EFFINGHAM	1416	1404
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

**PIER 1 GENERAL PLAN
STRUCTURE NO. 025-0018**

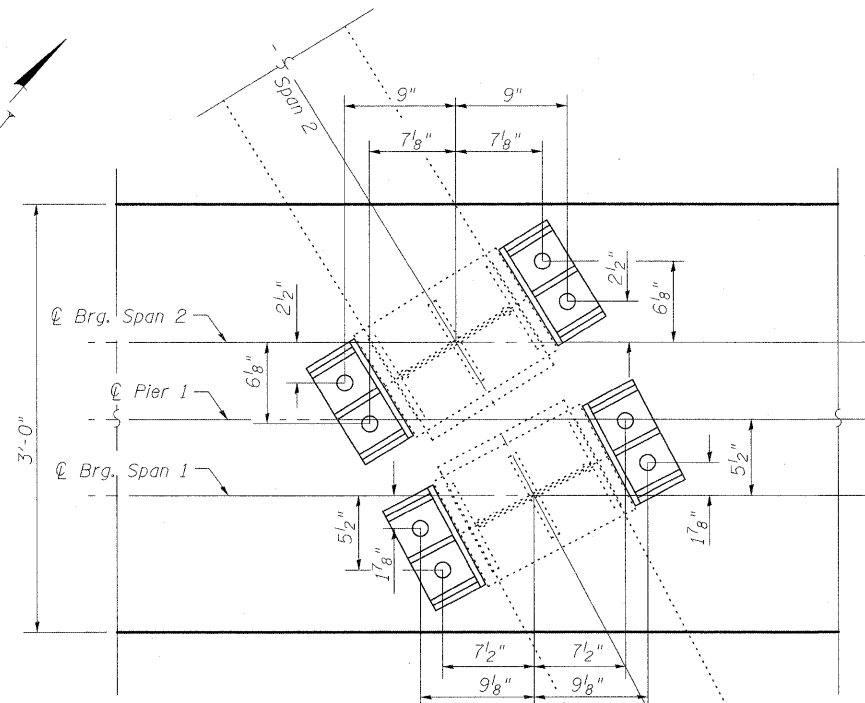
1/4/23 AM 4/29/2010 10:25:00 874294.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



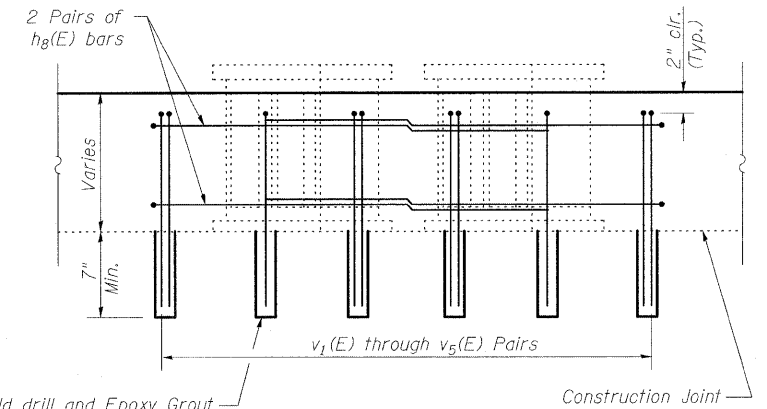
DETAIL A

(Showing Side Retainer & Anchor Bolt Layout)



DETAIL B

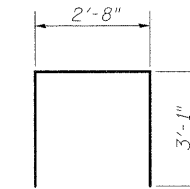
(Showing Side Retainer & Anchor Bolt Layout)



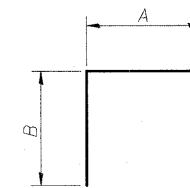
SECTION B-B

Notes:

Bars shall be drilled and grouted according to Section 584 of the Standard Specifications. Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 1.



BAR h8(E)



s4(E) & v(E) BARS

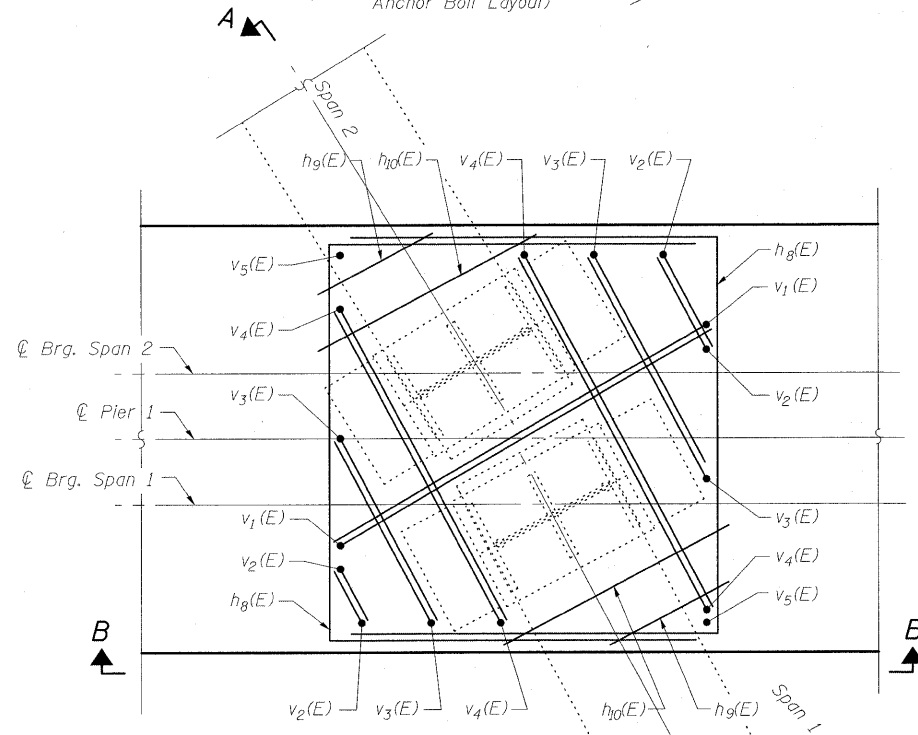
Bar	A	B
s4(E)	2'-8"	1'-4"
v1(E)	3'-3"	1'-4"
v2(E)	8"	1'-4"
v3(E)	1'-8"	1'-4"
v4(E)	2'-8"	1'-4"

MIN BAR LAP

#5 bar = 1'-8"

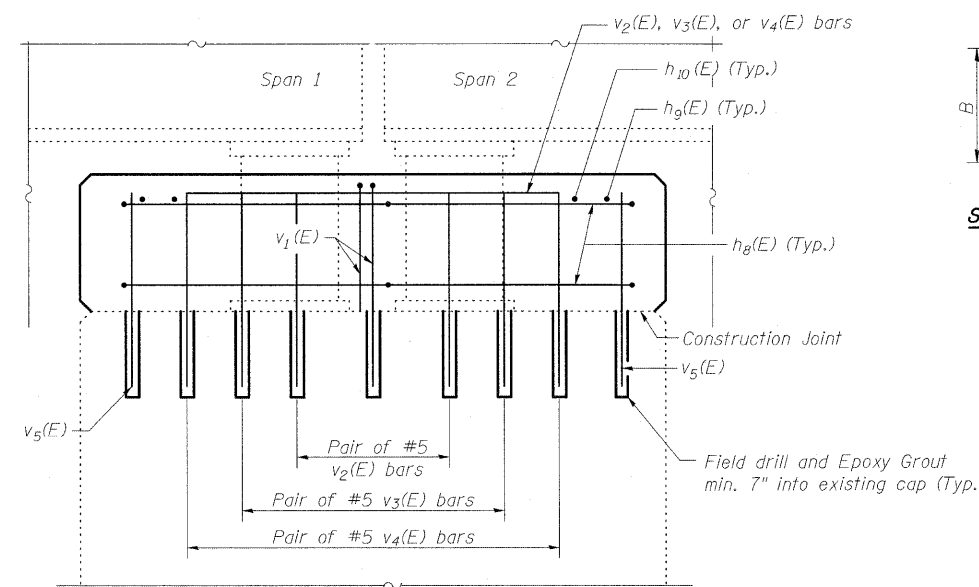
**BILL OF MATERIAL
PIER 1**

Bar	No.	Size	Length	Shape
h8(E)	16	#5	8'-10"	□
h9(E)	8	#5	0'-6"	—
h10(E)	8	#5	1'-6"	—
p1(E)	4	#5	6'-11"	—
p6(E)	4	#5	5'-2"	—
p7(E)	12	#5	1'-10"	—
s4(E)	40	#5	4'-0"	┌
v1(E)	8	#5	4'-7"	┌
v2(E)	16	#5	2'-0"	┌
v3(E)	16	#5	3'-0"	┌
v4(E)	16	#5	4'-0"	┌
v5(E)	8	#5	1'-4"	—
Concrete Sealer	Sq. Ft.	134		
Concrete Structures	Cu. Yd.	2.6		
Reinforcement Bars, Epoxy Coated	Pound	610		



DETAIL A & B

(Showing Reinforcement)
(All reinforcement shown is #5 bars.)



SECTION A-A

(All v(E) bars shown are drilled and grouted)
Side Retainers not shown for clarity.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



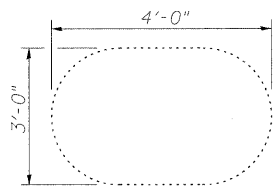
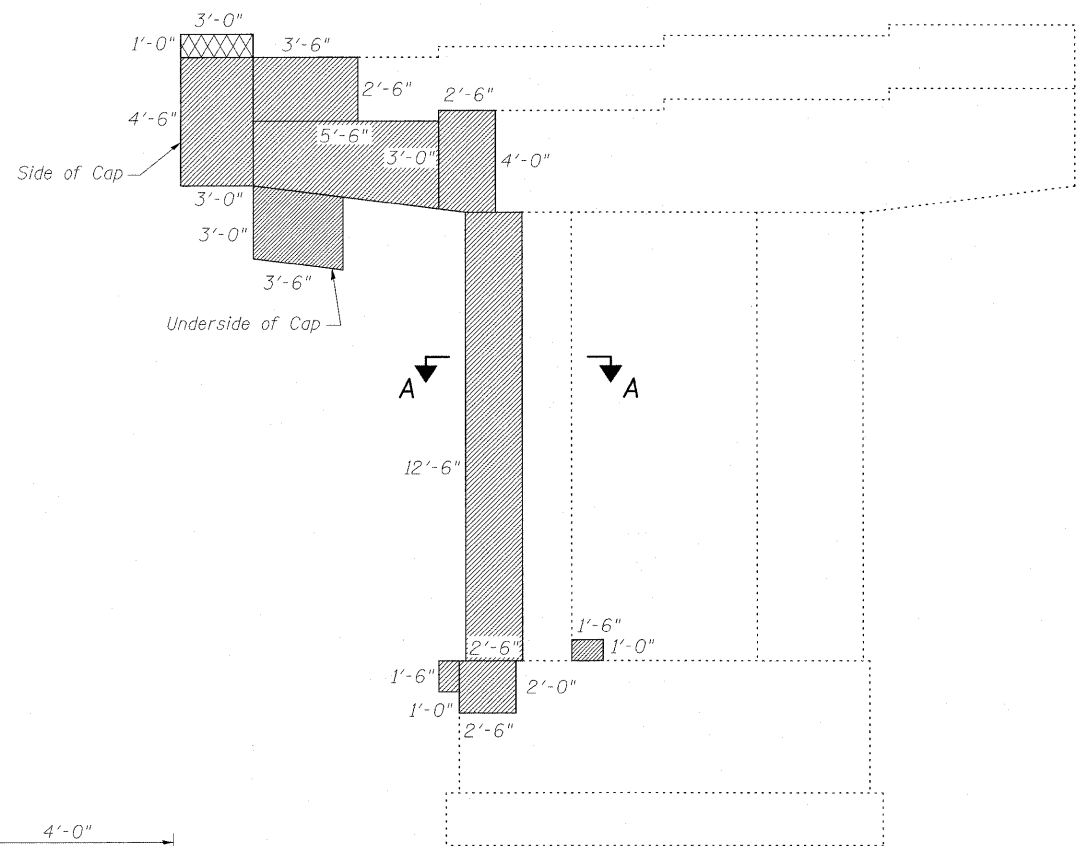
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62452-5685
Local (618) 388-4665
Fax 618-288-4666

SHEET NO. 24 36 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)-3	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1405
	SN 025-0018		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

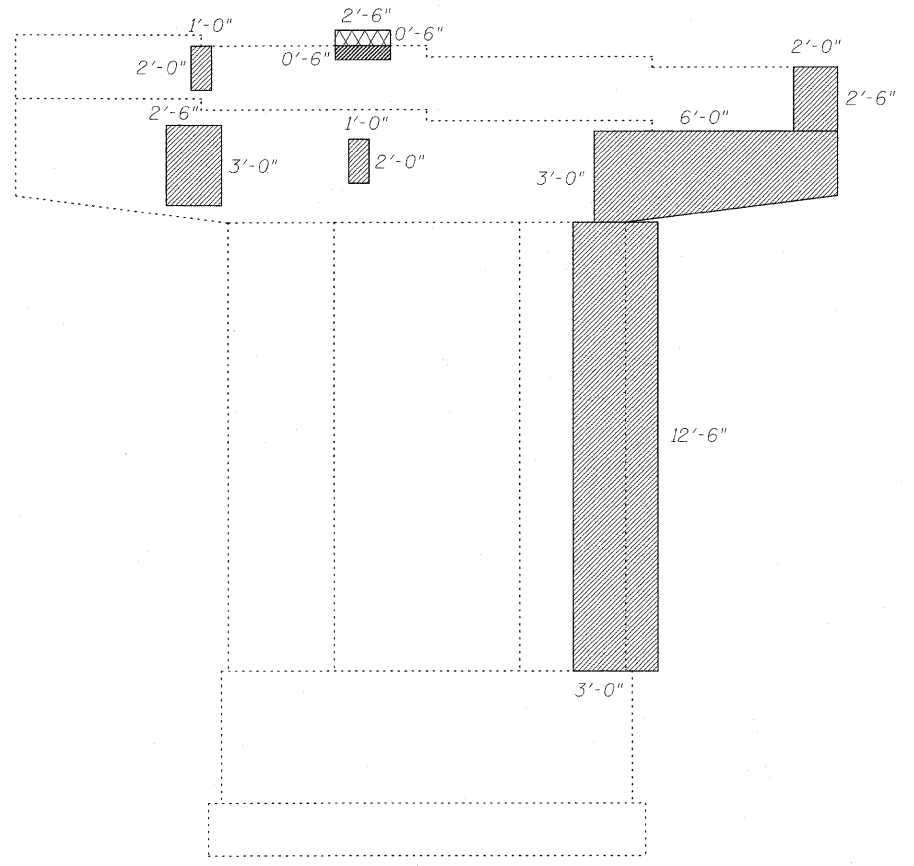
**PIER 1 DETAILS
STRUCTURE NO. 025-0018**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



SECTION A-A
Typical Section
Through Column

PIER 1
(Looking West)



PIER 1
(Looking East)

Indicates Unsound Concrete Removal
 Indicates Structural Repair of Concrete

Notes:
Rubbed finish for Structural Repair of Concrete Areas shall be completed according to article 503.15 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	171
Rubbed Finish	Sq. Ft.	171
Unsound Concrete Removal	Sq. Yd.	0.6

PIER 1 REPAIR DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



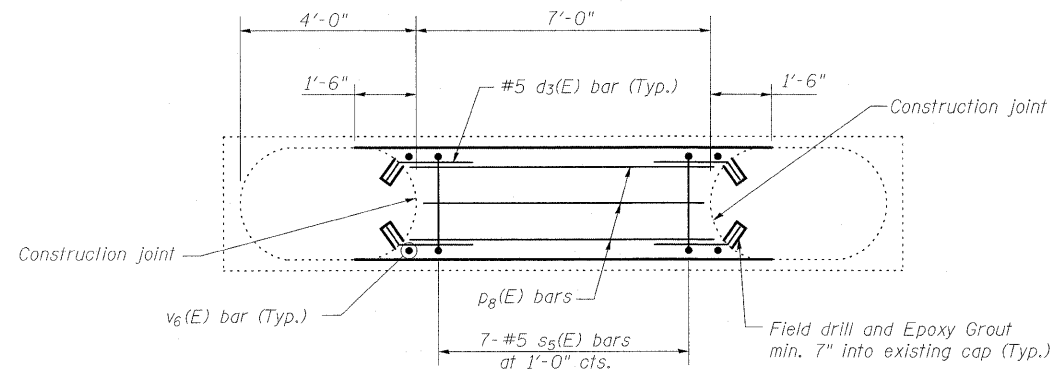
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62452-5635
Local (618) 288-4655
Fax 618-288-4666

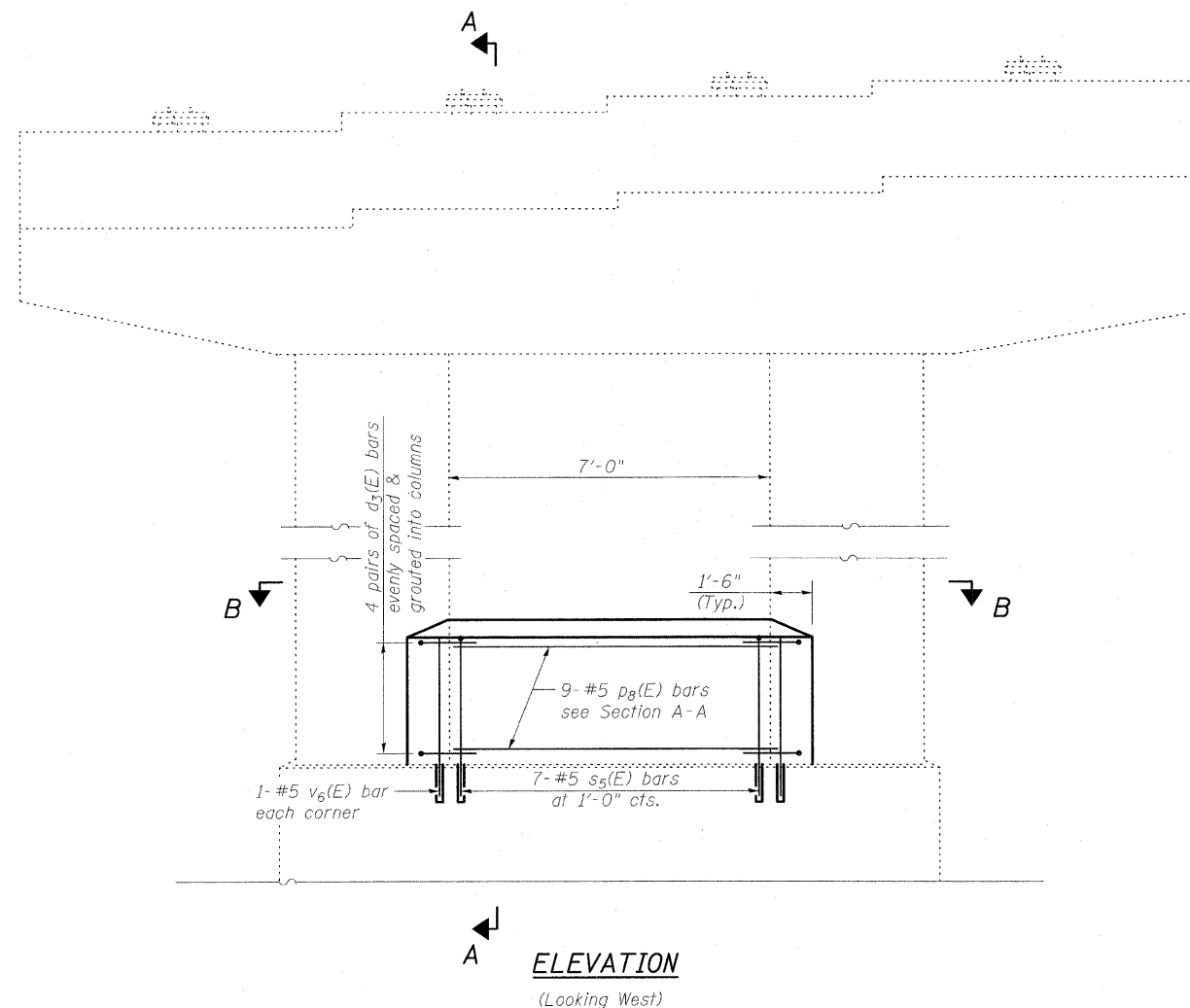
SHEET NO. 25 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1406
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

10:23:55 AM 3/18/2010 _X025001874296.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

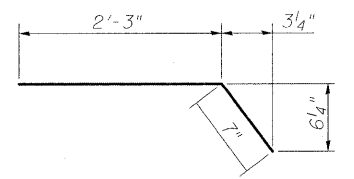


VIEW B-B
CRASHWALL PLAN - PIER 2

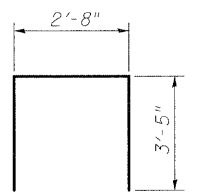


ELEVATION
(Looking West)

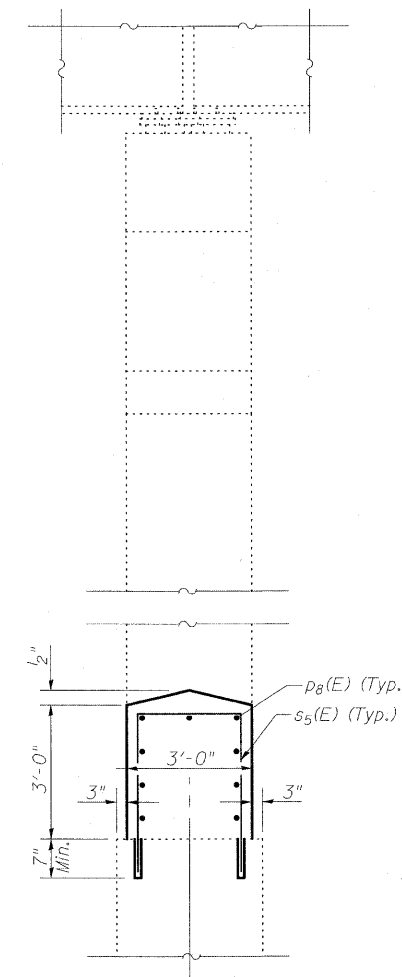
Notes:
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 2.



BAR d3(E)



BAR s5(E)



SECTION A-A
(Showing Bearings and Superstructure)

BILL OF MATERIAL
PIER 2

Bar	No.	Size	Length	Shape	
d ₃ (E)	16	#5	2'-10"	—	
p ₈ (E)	9	#5	6'-8"	—	
s ₅ (E)	7	#5	9'-6"	□	
v ₆ (E)	4	#5	3'-5"	—	
Concrete Sealer				Sq. Ft.	83
Concrete Structures				Cu. Yd.	2.5
Reinforcement Bars, Epoxy Coated				Pound	200

PIER 2 GENERAL PLAN
AND DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

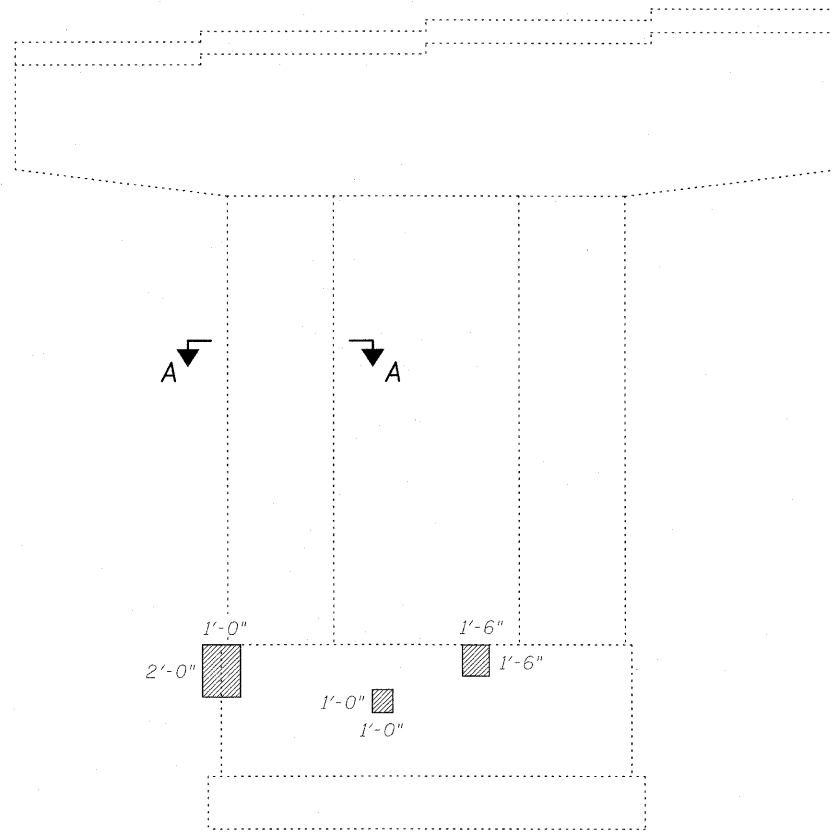


BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.

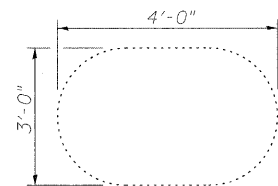
3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 26 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1407
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

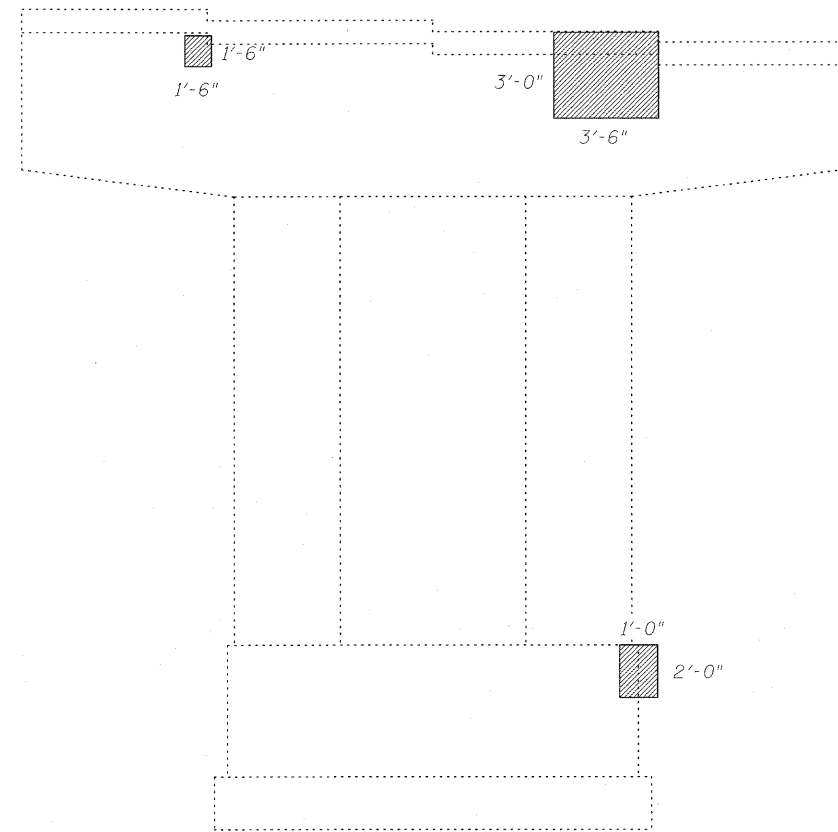
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PIER 2
(Looking West)



SECTION A-A
Typical Section
Through Column



PIER 2
(Looking East)

Indicates Structural Repair of Concrete

Notes:
Rubbed finish for Structural Repair of Concrete Areas shall be completed according to article 503.15 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	20
Rubbed Finish	Sq. Ft.	20

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

PIER 2 REPAIR DETAILS
STRUCTURE NO. 025-0018

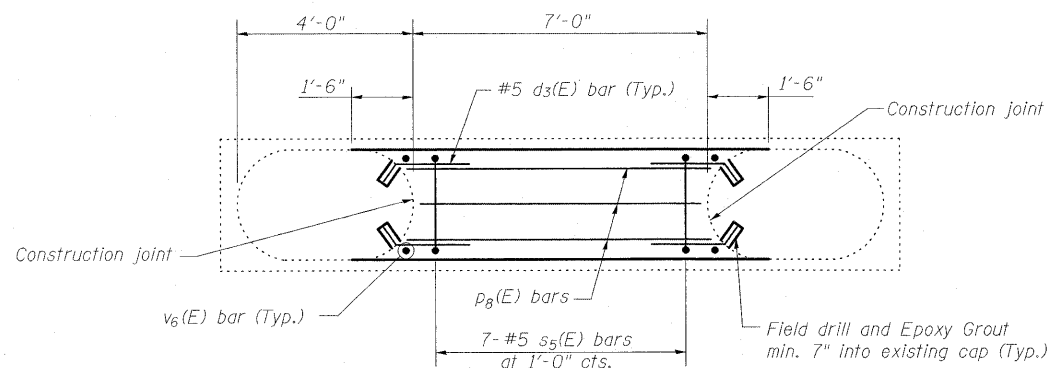


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

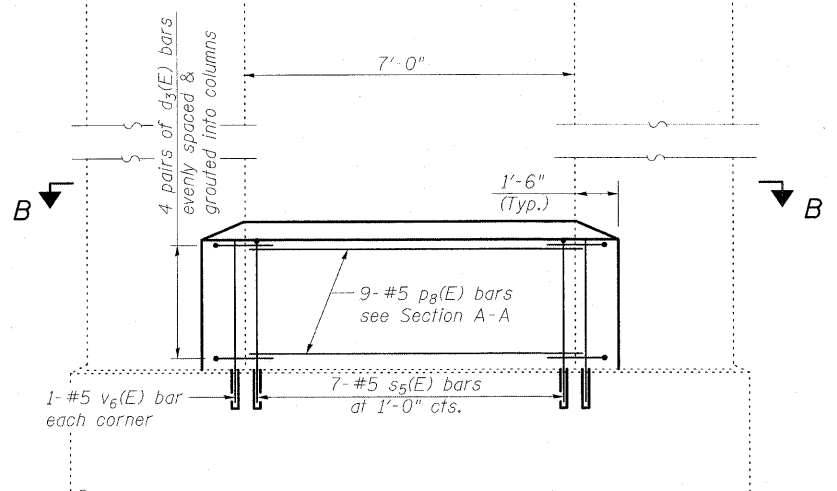
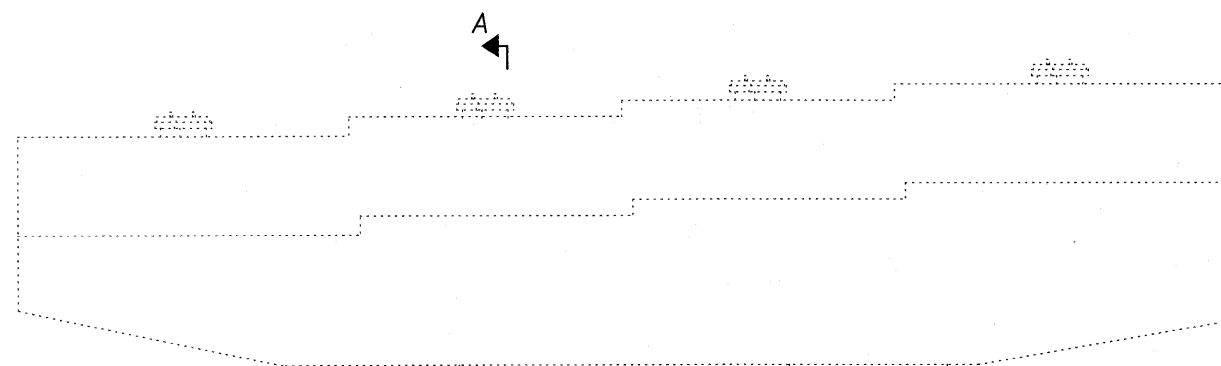
3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 27 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1408
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

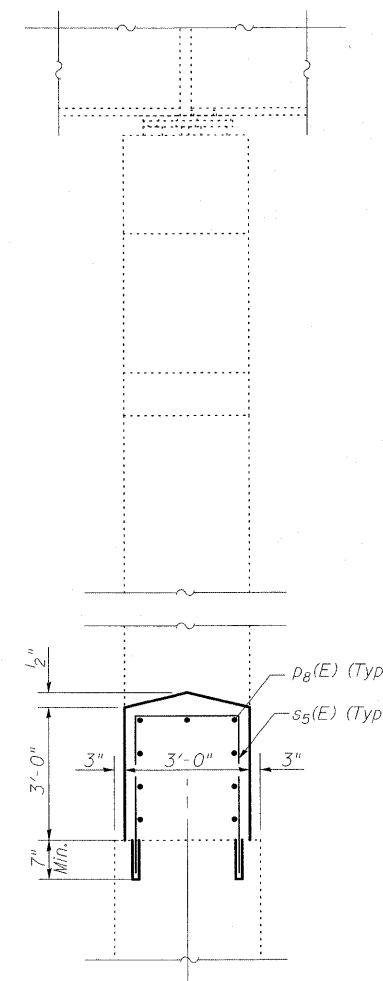


VIEW B-B
CRASHWALL PLAN - PIER 3



ELEVATION
(Looking West)

Notes:
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 3.
See Sheet 26 of 36 for Bar Bend details.



SECTION A-A
(Showing Bearings and Superstructure)

BILL OF MATERIAL
PIER 3

Bar	No.	Size	Length	Shape
d ₃ (E)	16	#5	2'-10"	—
p ₈ (E)	9	#5	6'-8"	—
s ₅ (E)	7	#5	9'-6"	□
v ₆ (E)	4	#5	3'-5"	—
Concrete Sealer			Sq. Ft.	83
Concrete Structures			Cu. Yd.	2.5
Reinforcement Bars, Epoxy Coated			Pound	200

PIER 3 GENERAL PLAN
AND DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

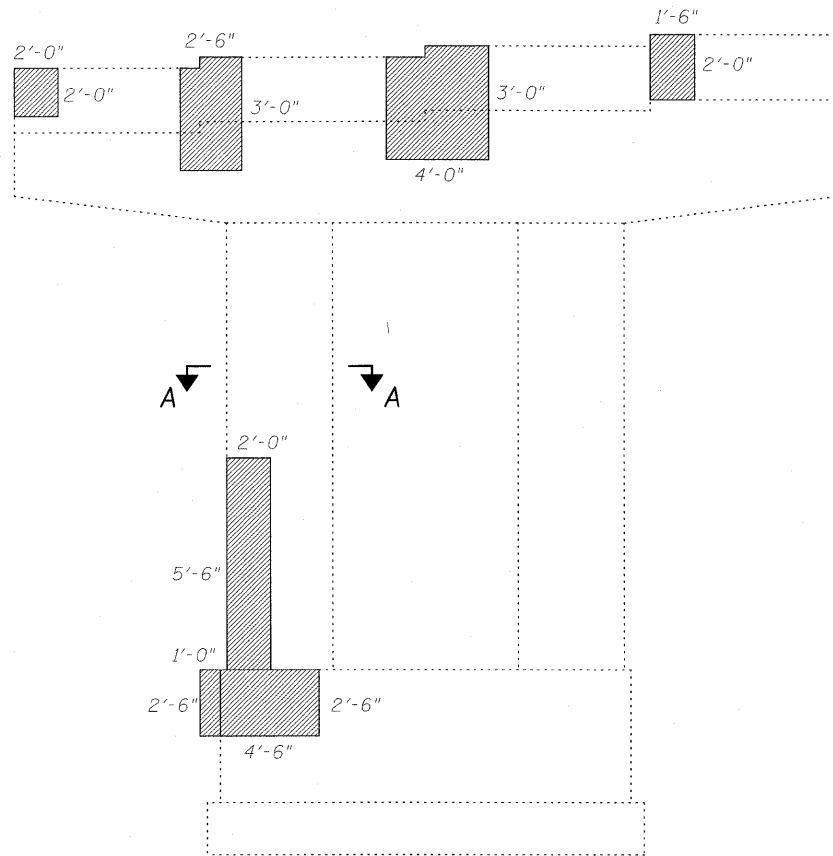


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

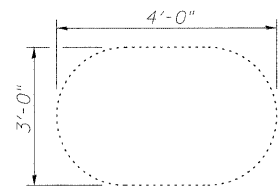
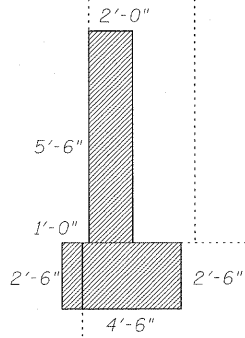
3 Oak Drive
Maryville, IL 62442-5685
Local: (618) 288-4665
Fax: 618-288-4666

SHEET NO. 28 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1409
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

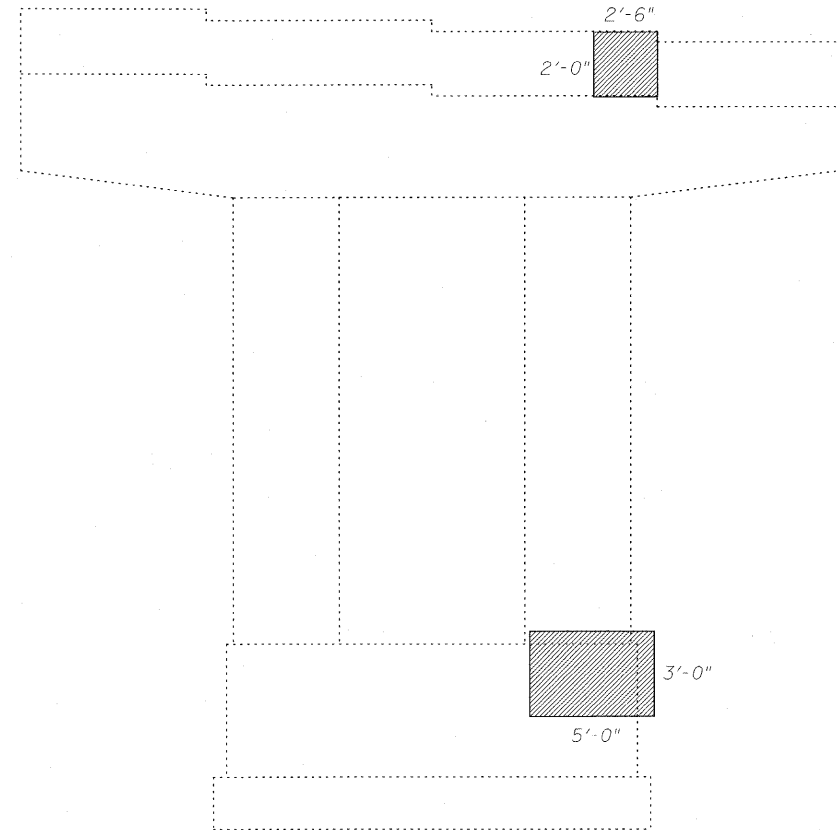


A ↙ ↘ A



SECTION A-A
Typical Section
Through Column

PIER 3
(Looking West)



PIER 3
(Looking East)

Indicates Structural Repair of Concrete

Notes:
Rubbed finish for Structural Repair of Concrete Areas shall be completed according to article 503.15 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	71
Rubbed Finish	Sq. Ft.	71

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.



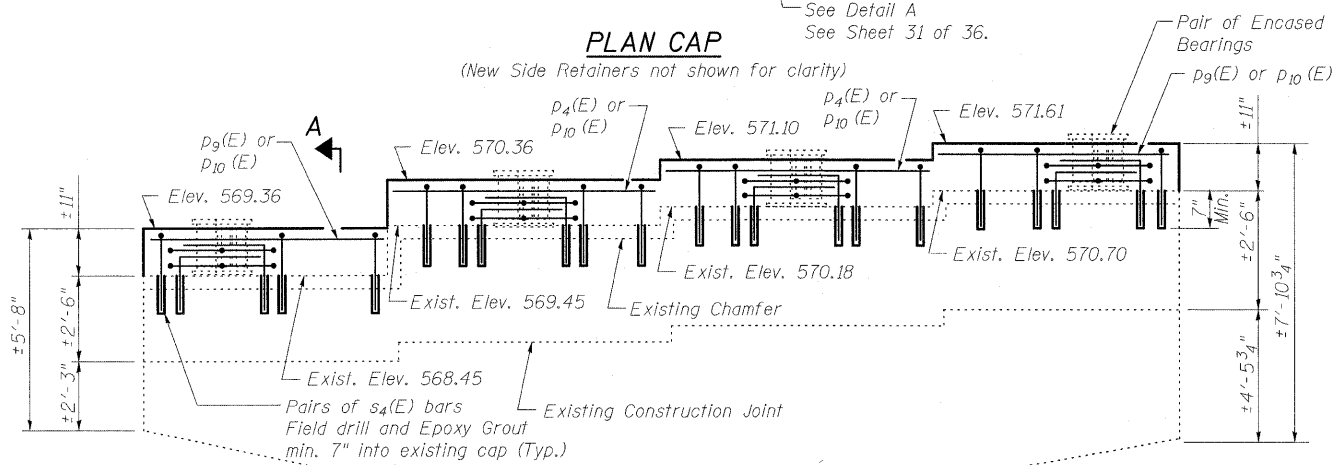
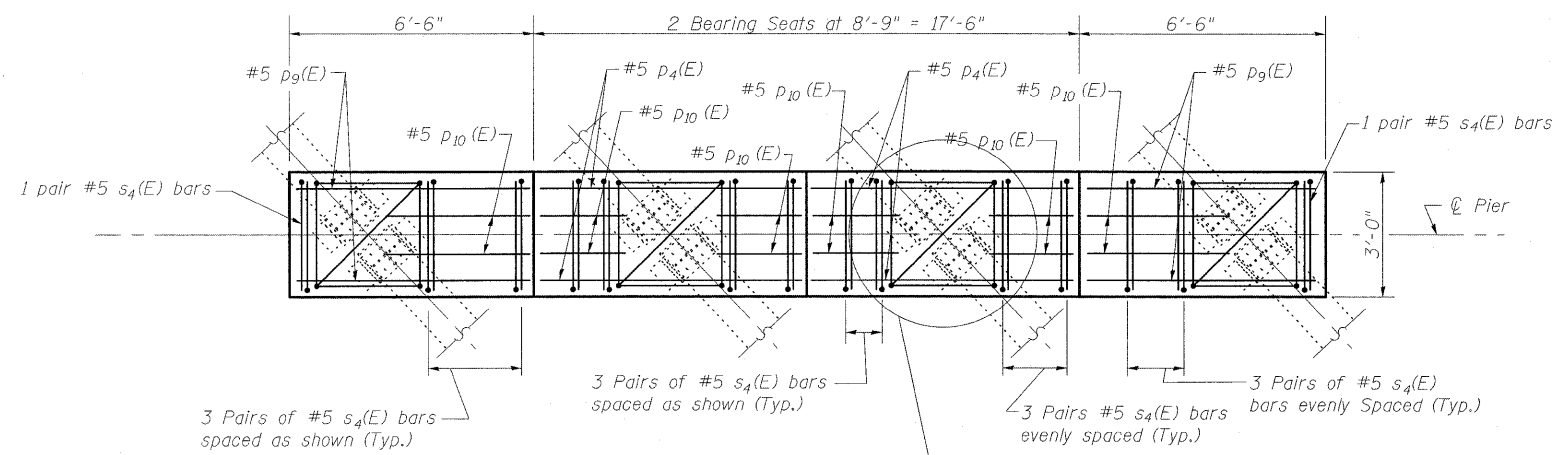
**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62002-5635
Local (618) 288-4665
Fax 618-288-4666

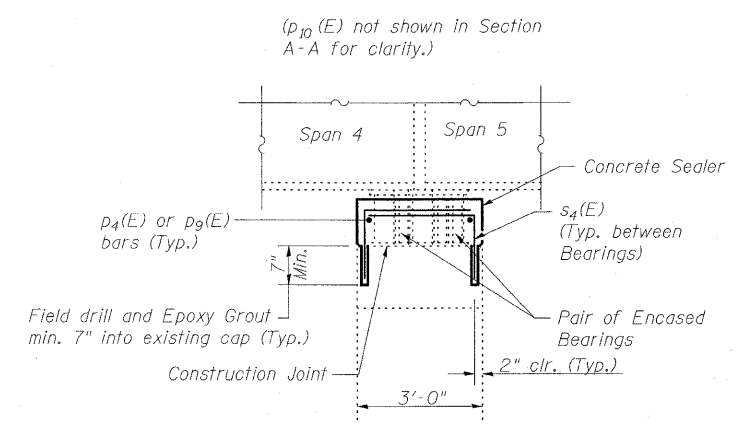
SHEET NO. 29 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1410
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

**PIER 3 REPAIR DETAILS
STRUCTURE NO. 025-0018**

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



ELEVATION
(Looking East)



SECTION A-A
(Showing Bearings and Superstructure)

Notes:
For Detail A see Sheet 31 of 36.
Space reinforcement in cap to miss Anchor Bolts.
Bars shall be drilled and grouted according to Section 584 of the Standard Specifications.
Concrete Sealer shall be applied only to exposed surfaces of the new concrete on Pier 4.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

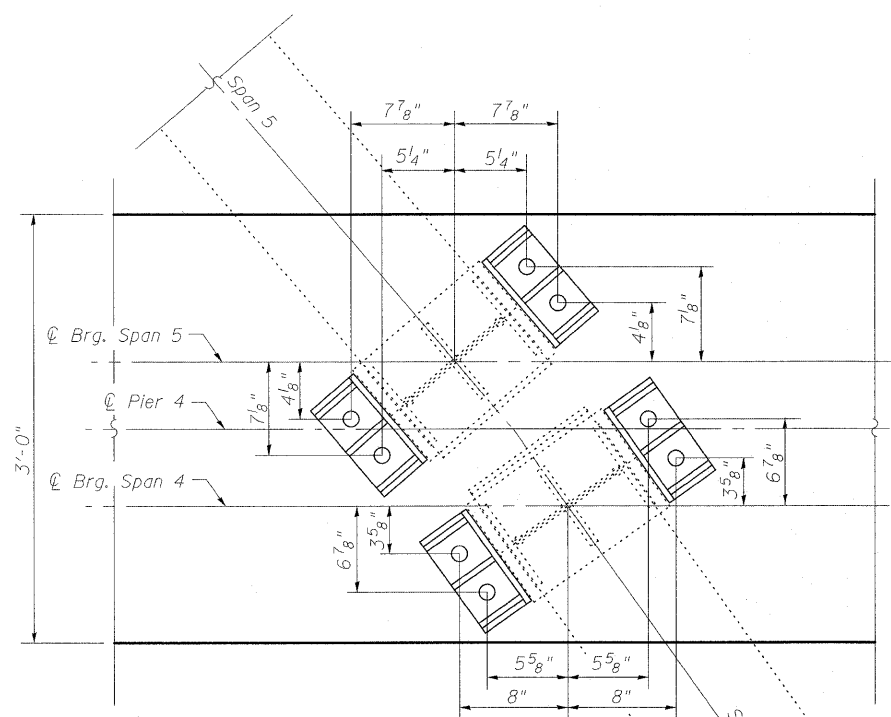
BERNARDIN LOCHMUELLER & ASSOCIATES, INC.
3 Oak Drive
Maryville, IL 62062-9655
Local (618) 398-4665
Fax 618-288-4666

SHEET NO. 30 36 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-3	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1411
	SN 025-0018		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

PIER 4 GENERAL PLAN
STRUCTURE NO. 025-0018

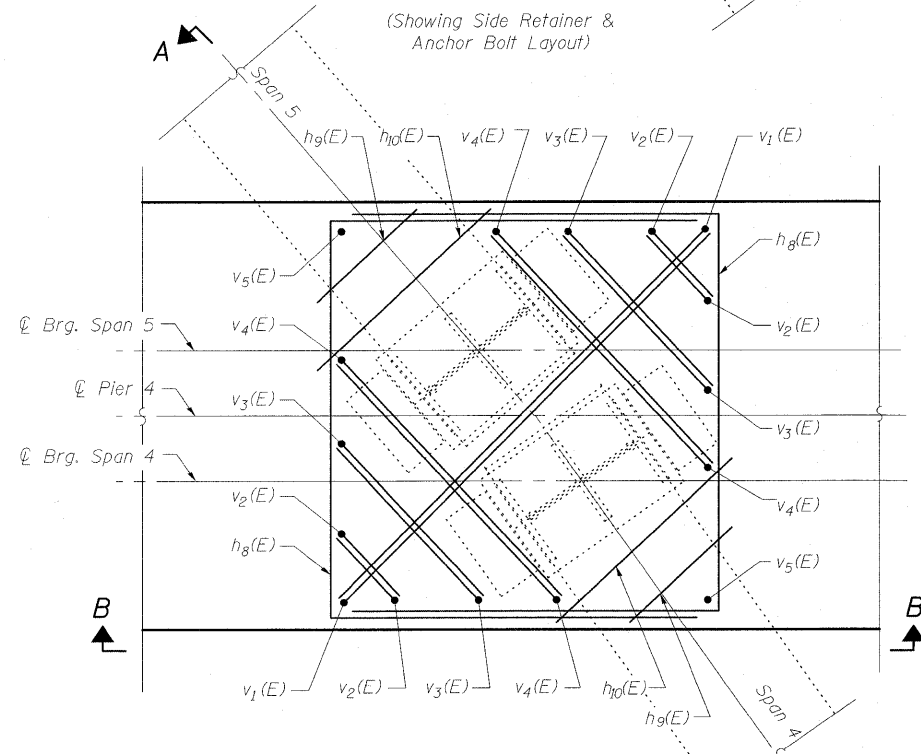
11/16/25 AM 4/29/2010 10250018-74296.dgn

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



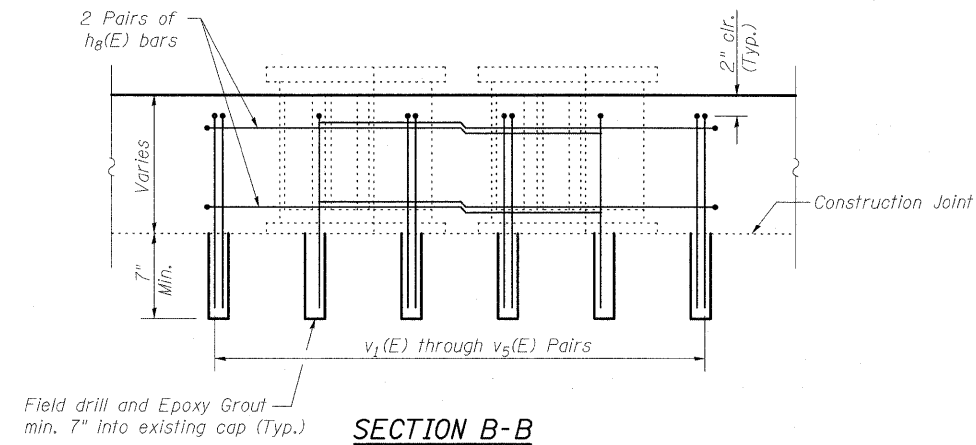
DETAIL A

(Showing Side Retainer & Anchor Bolt Layout)

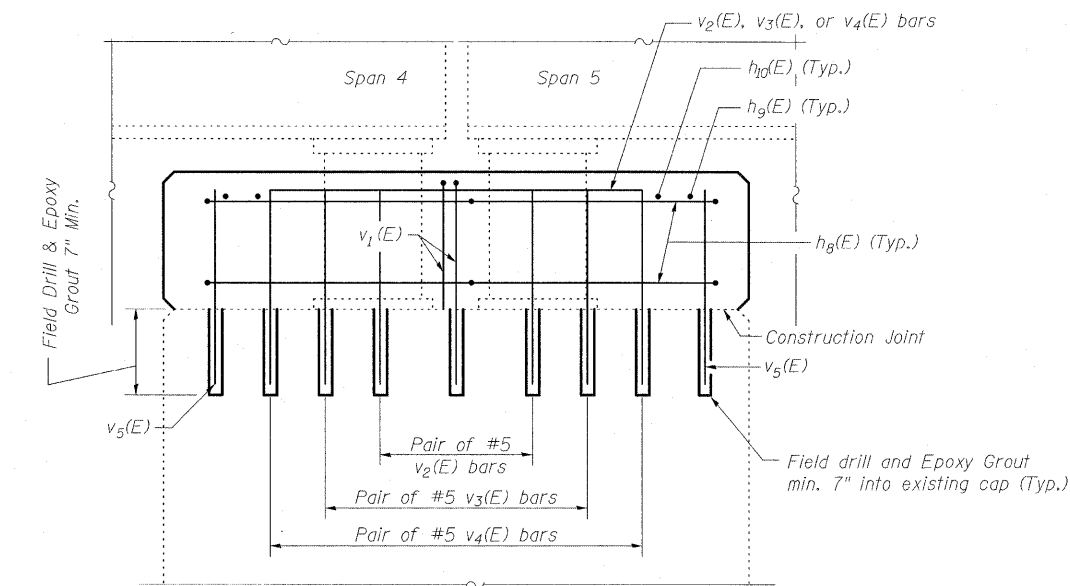


DETAIL A

(Showing Reinforcement)
(All reinforcement shown is #5 bars.)



SECTION B-B



SECTION A-A

(All $v(E)$ bars shown are drilled and grouted)
Side Retainers not shown for clarity.

Notes:
See Sheet 24 of 36 for Bar Bend Details.

**BILL OF MATERIAL
PIER 4**

Bar	No.	Size	Length	Shape
$h_8(E)$	16	#5	8'-10"	□
$h_9(E)$	8	#5	0'-6"	—
$h_{10}(E)$	8	#5	1'-6"	—
$p_4(E)$	4	#5	8'-5"	—
$p_9(E)$	4	#5	6'-2"	—
$p_{10}(E)$	12	#5	2'-7"	—
$s_4(E)$	40	#5	4'-0"	└
$v_1(E)$	8	#5	4'-7"	└
$v_2(E)$	16	#5	2'-0"	└
$v_3(E)$	16	#5	3'-0"	└
$v_4(E)$	16	#5	4'-0"	└
$v_5(E)$	8	#5	1'-4"	—
Concrete Sealer		Sq. Ft.	160	
Concrete Structures		Cu. Yd.	3.1	
Reinforcement Bars, Epoxy Coated		Pound	630	

**PIER 4 DETAILS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

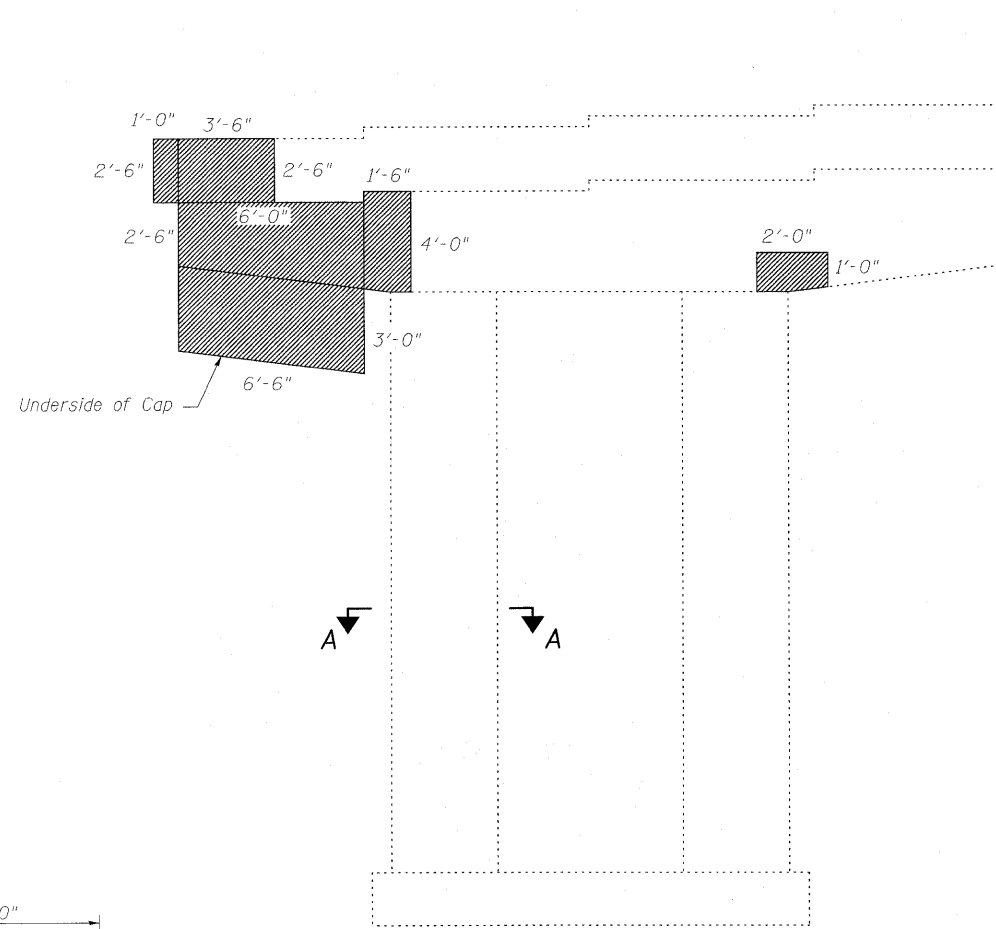


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

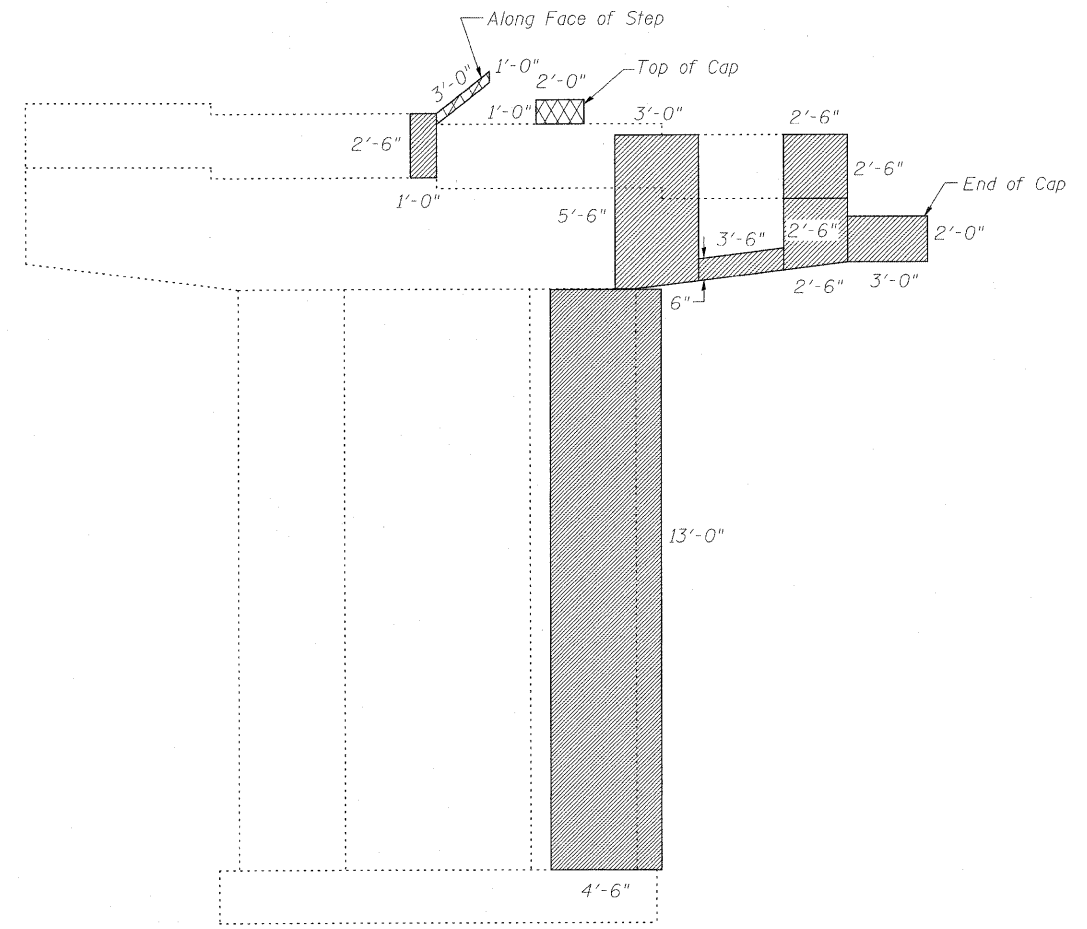
3 Oak Drive
Maryville, IL 62442-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 31 36 SHEETS	F.A.I. RTE. 57	SECTION (25-3HB)I-3	COUNTY EFFINGHAM	TOTAL SHEETS 1416	SHEET NO. 1412
	SN 025-0018		CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

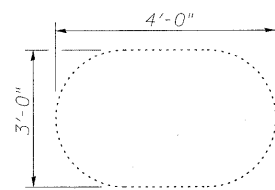
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PIER 4
(Looking West)



PIER 4
(Looking East)



SECTION A-A
Typical Section
Through Column

Indicates Unsound Concrete Removal
 Indicates Structural Repair of Concrete

Notes:
Rubbed finish for Structural Repair of Concrete Areas shall be completed according to article 503.15 of the Standard Specifications.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	152
Rubbed Finish	Sq. Ft.	152
Unsound Concrete Removal	Sq. Yd.	0.6

PIER 4 REPAIR DETAILS
STRUCTURE NO. 025-0018

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

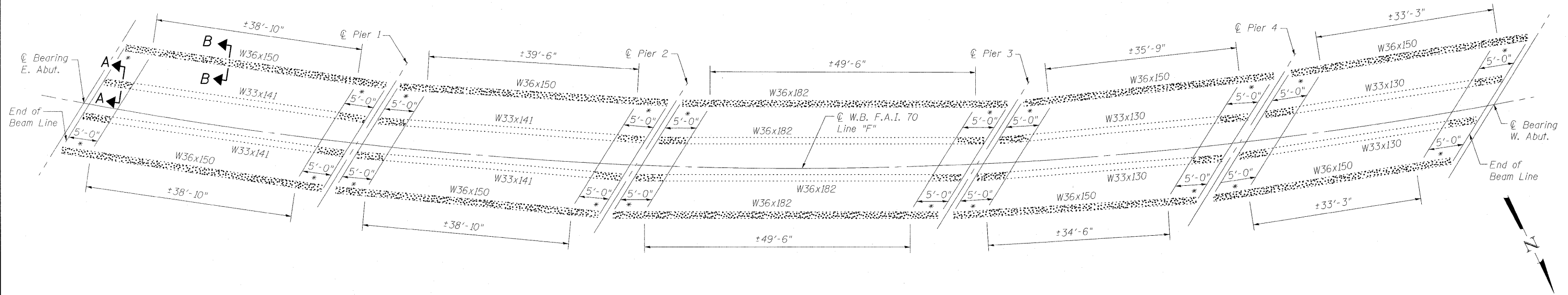


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62062-5635
Local (618) 288-4065
Fax 618-288-4996

SHEET NO. 32 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1413
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

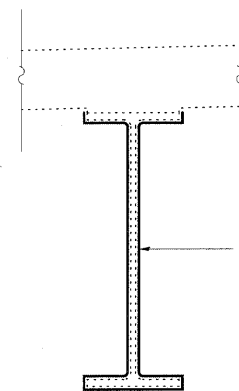


PLAN

* Indicates limits defined in Section A-A.

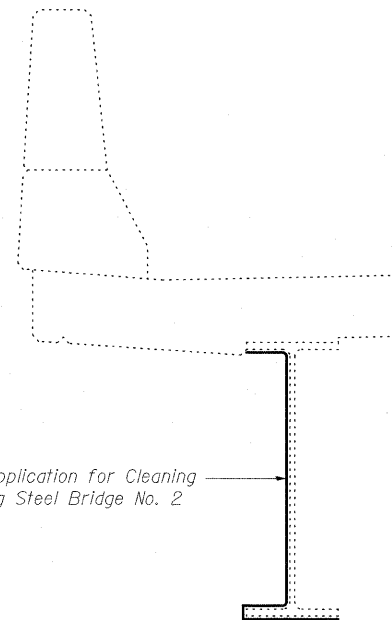


Locations where Cleaning and Painting Steel Bridge are Required. See Sections A-A and B-B for limits of application.



Limits of application for Cleaning and Painting Steel Bridge No. 2

SECTION A-A



Limits of application for Cleaning and Painting Steel Bridge No. 2

SECTION B-B

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

EXISTING STEEL PAINT DETAILS No. 2
STRUCTURE NO. 025-0018

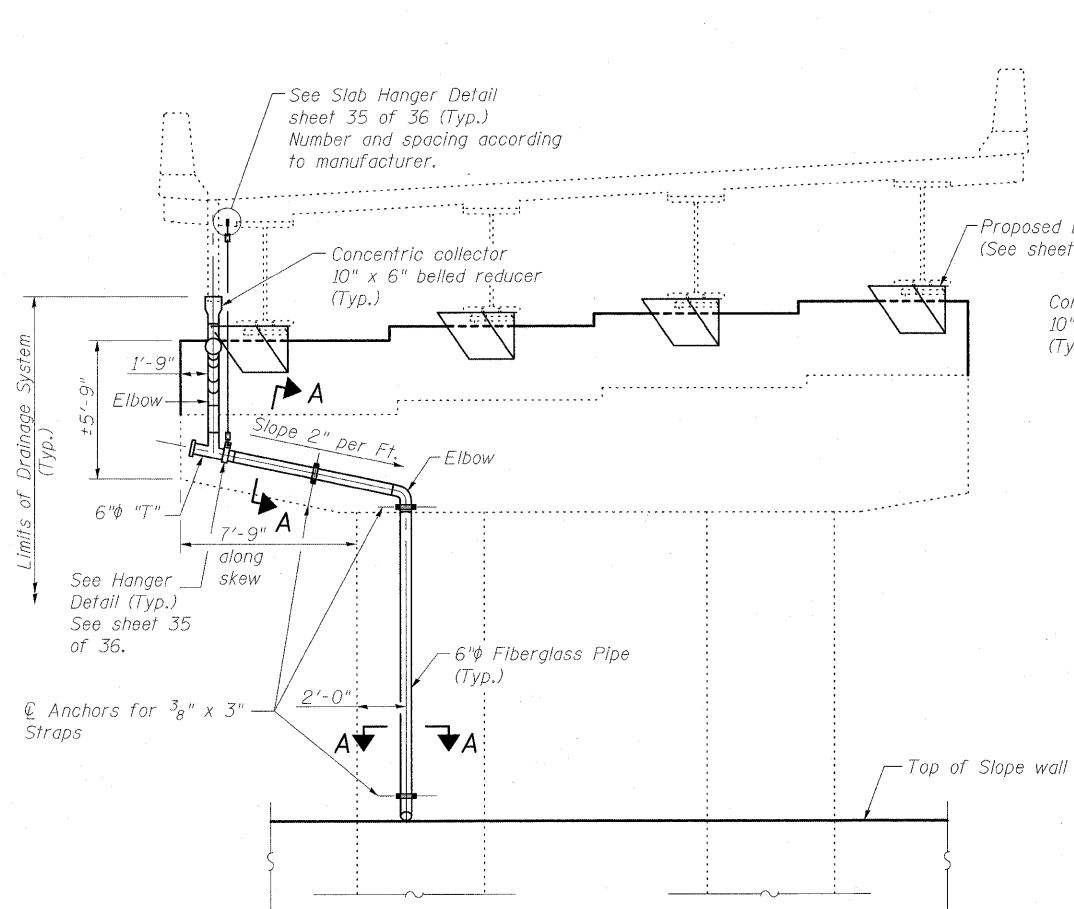


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

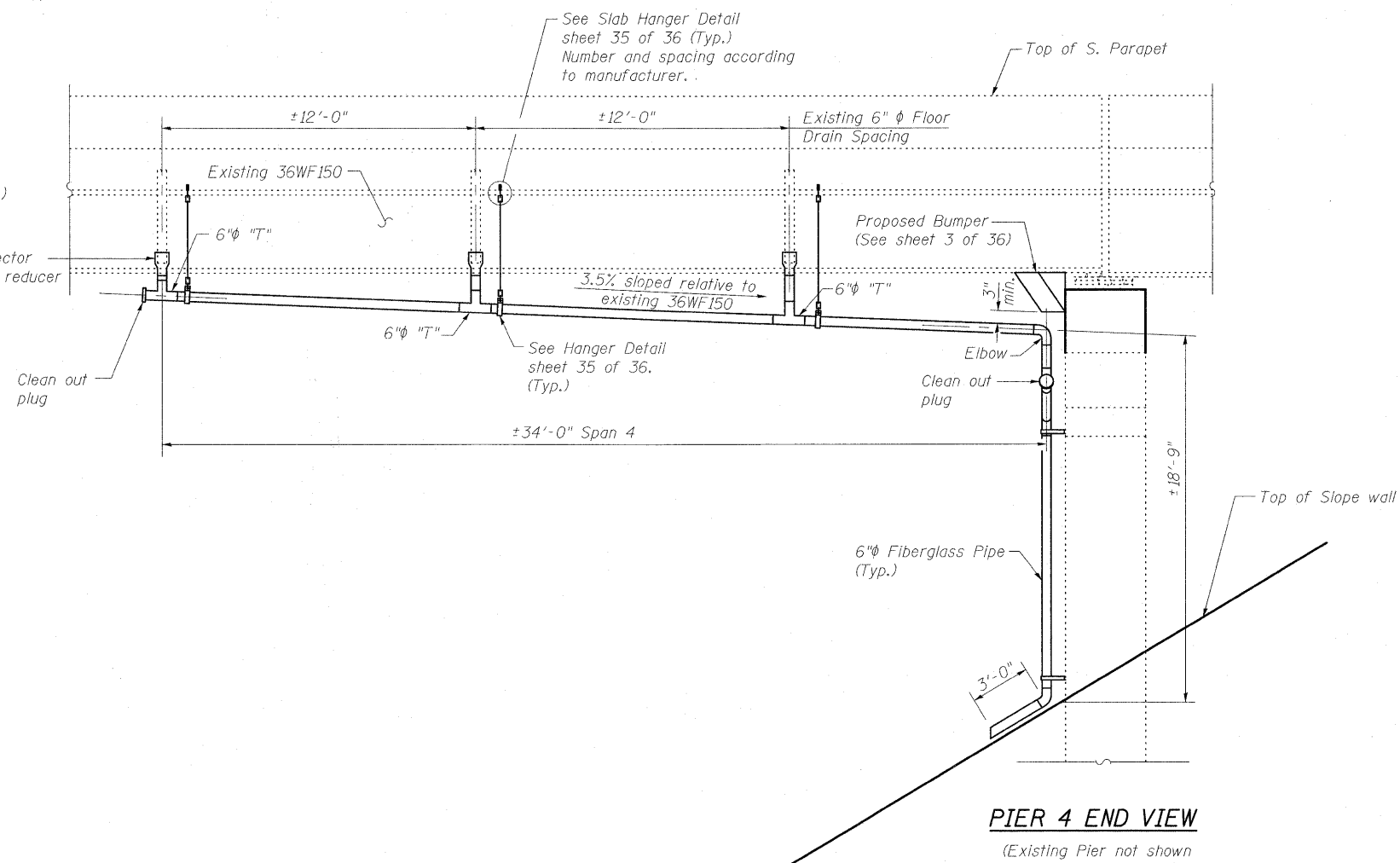
3 Oak Drive
Maryville, IL 62002-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 33 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1414
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

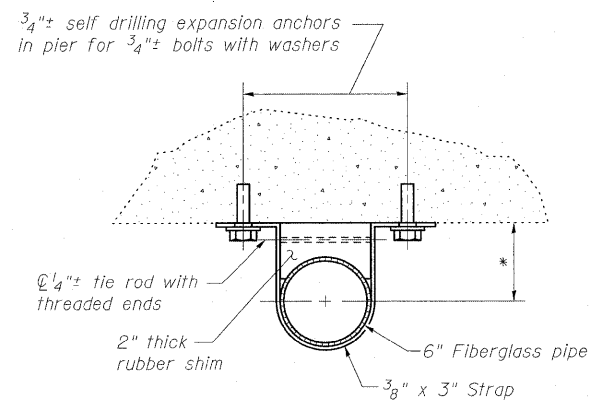
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PIER 4 ELEVATION
(Looking West)



PIER 4 END VIEW
(Existing Pier not shown on skew for clarity.)



SECTION A-A

Notes:
The surface of the fiberglass pipe and fittings shall be free of bond inhibiting agents.
The pipe and fittings shall be reinforced fiberglass according to ASTM D 2996 RTRP with 30,000 p.s.i. minimum short-time rupture strength hoop tensile stress. The reinforced fiberglass shall also have an apparent stiffness factor at 5 percent deflection exceeding 200 cu. in.-lb/sq. in. and a minimum wall thickness of 0.10 in.
The pay item "Drainage System" shall include providing and installing 6"± pipe, 6"± T's, elbows, expansion collars and reducers, clean outs, inserts, straps, hangers and all other necessary items to complete the underdeck drainage system. See Special Provisions. The clamping devices, hangers, inserts and the straps shall be hot dipped galvanized in accordance with AASHTO M-232.
Bolts, washers and nuts for "Drainage System" shall conform to the requirements of ASTM A-307.
The exterior surfaces of the fiberglass pipes and fittings for the "Drainage System" shall be pigmented through out or have a resin-rich pigmented exterior coat, specifically designed for overcoating fiberglass, as recommended by the manufacturer. The color shall be as specified by the Engineer. The resin in either case shall have an ultraviolet absorber designed to prevent ultraviolet degradation. The supplier shall certify the material supplied meets these requirements.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

**SPAN 4
DRAINAGE SYSTEM
STRUCTURE NO. 025-0018**

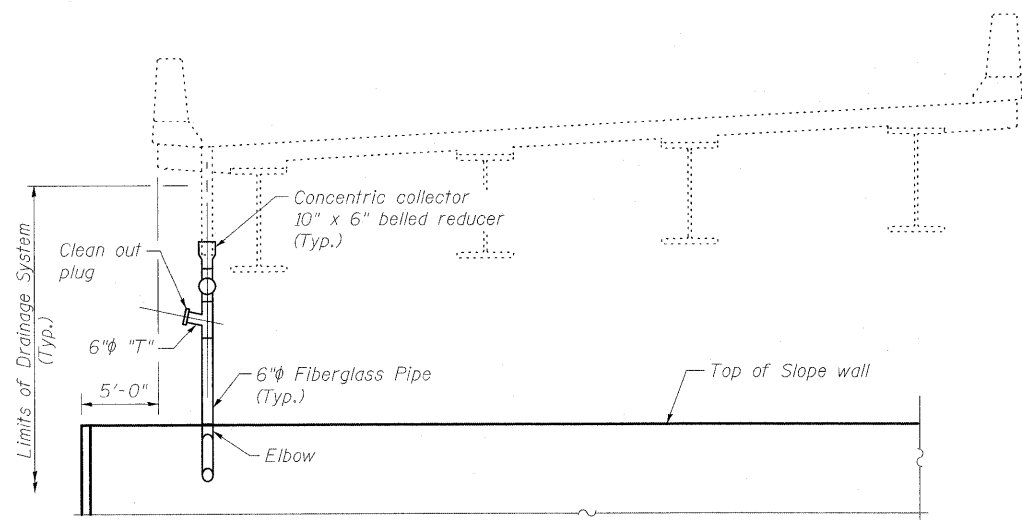


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

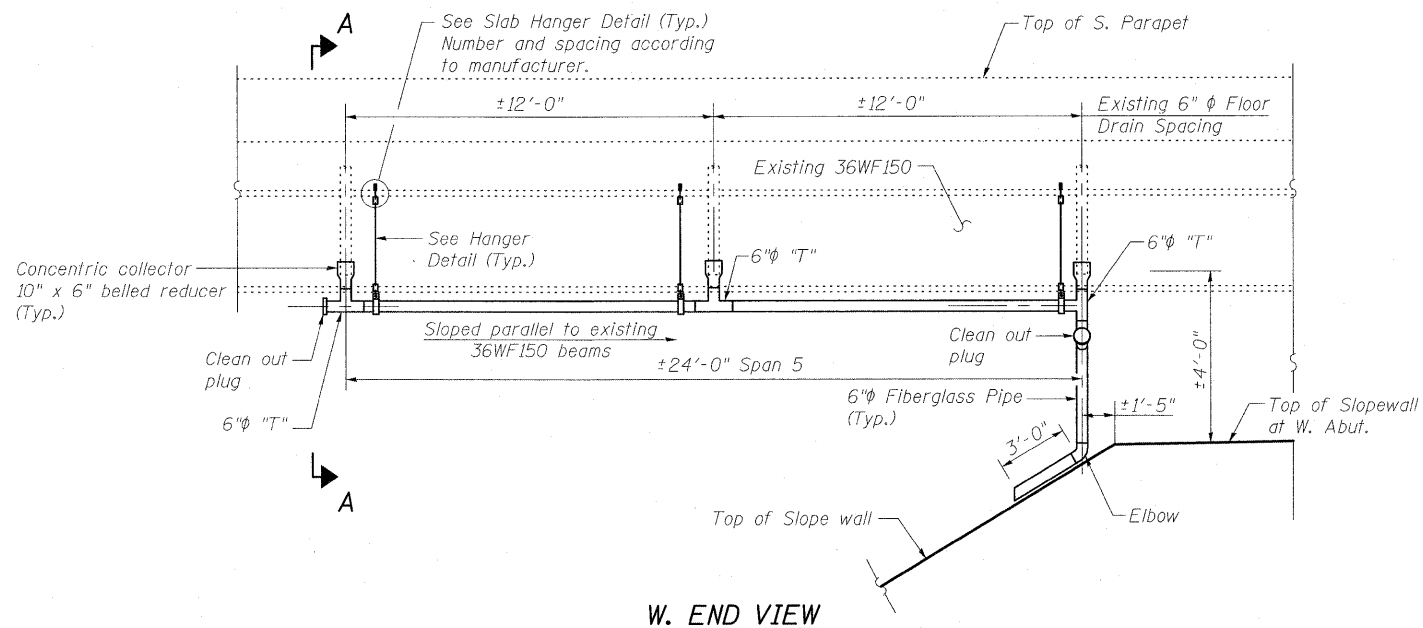
3 Oak Drive
Meryville, IL 62062-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 34 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1415
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

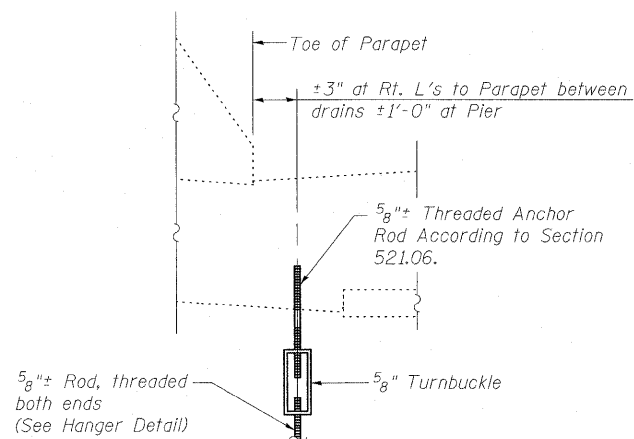
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



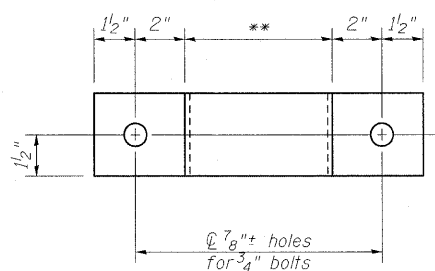
SECTION A-A
(Looking East)



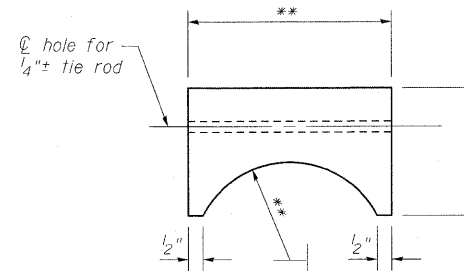
W. END VIEW



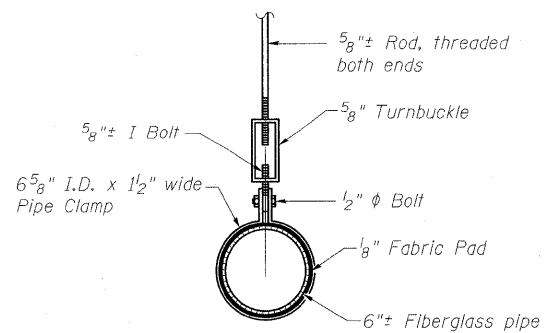
SLAB HANGER DETAIL



3/8" x 3" STRAP DETAIL



RUBBER SHIM DETAIL



HANGER DETAIL

* Dimension as required by the pipe strap.
** Dimension as required by the pipe.

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

**SPAN 5
DRAINAGE SYSTEM
STRUCTURE NO. 025-0018**

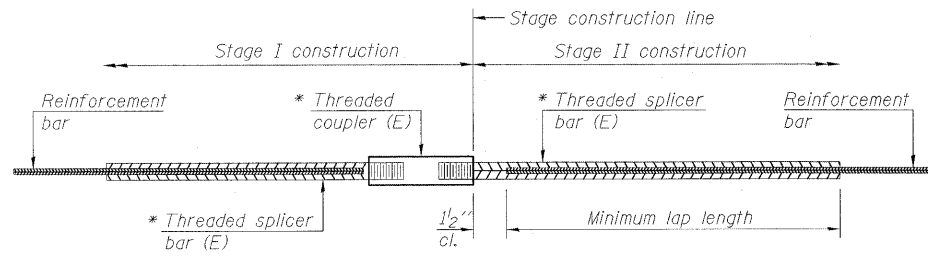


**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Mareville, IL 62462-5635
Local (618) 288-4665
Fax 618-288-4666

SHEET NO. 35 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1416
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



STANDARD BAR SPLICER ASSEMBLY

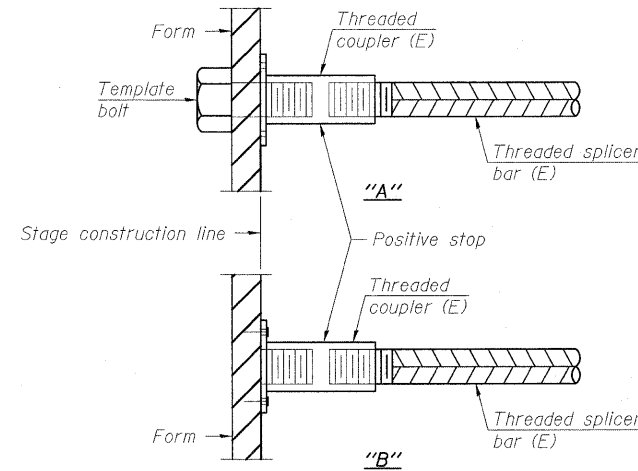
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

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

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

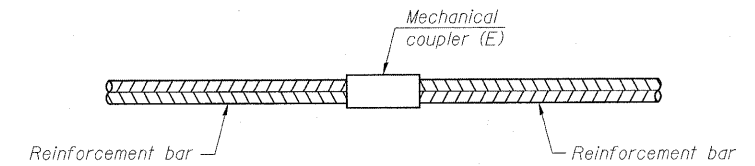
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

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



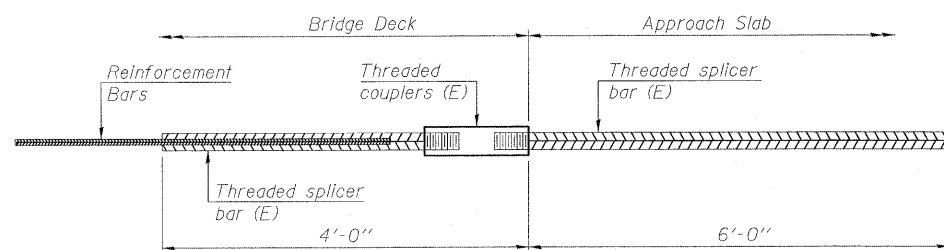
INSTALLATION AND SETTING METHODS

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



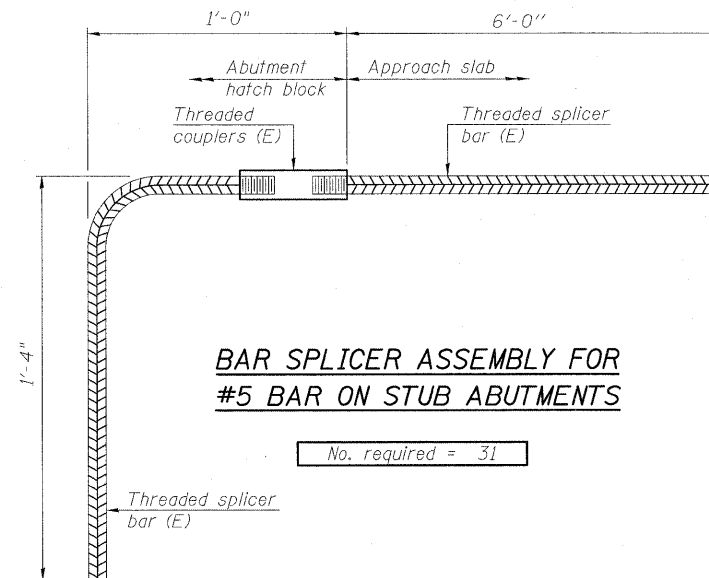
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



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

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See special provision for Mechanical Splicers.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 025-0018**

DESIGNED	B.B.
CHECKED	C.J.F.
DRAWN	W.J.S.
CHECKED	C.J.F. & B.B.

BSD-1

11-1-09



**BERNARDIN
LOCHMUELLER &
ASSOCIATES, INC.**

3 Oak Drive
Maryville, IL 62452-5885
Local: 618-288-4665
Fax: 618-288-4668

SHEET NO. 36 36 SHEETS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	57	(25-3HB)I-3	EFFINGHAM	1416	1416A
SN 025-0018			CONTRACT NO. 74296		
FED. ROAD DIST. NO. 7 ILLINOIS FED. AID PROJECT					