Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/30/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY JH

SECTION 1B-2 LOCATION NE 1/4 SEC. 28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. P6E DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 732+58
Offset 38 Rt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.06 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 9.2 feet Water					
		-5			
	618.86				
WEATHERED LIMESTONE at 9.2 feet		-10	50/2"		10
Run 1					
10' – 18' : REC 98/96, 100%					
RQD 52/96, 54%					
Drill Time: 10'-13': 3 minutes					
13'-18': 5.5 minutes					
		-15			
Run 2					
18' – 28' : REC 48/120, 40%				821	
RQD 36/120, 30%					
Drill time: 18'-23': 2 minutes					
23'-28': 2 minutes		-20			

SOIL DESCRIPTION (continued)	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
(continued) WEATHERED LIMESTONE					
Void from 21' to 22'					
Void from 24' to 27'				1018	
		-25			
Run 3					
28' – 35' : REC 60/84, 71%					
RQD 36/84, 43%					
Drill time: 28'-33': 2.5 minutes					
33'-35': 3 minutes		-30			
	593.06	-35		273	
Bottom of Boring @ 593.06'					
		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 2

Date 9/30/2008

ROUTE FAP 646 (IL 40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E. 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 618.86 ft
Begin Core Elev. 618.06 ft

BORING NO. B-P6E
Station 732+58
Offset 38 Rt
River Water Surface Elev. 628.06 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: yellow brown to gray, hard, fine to medium, slightly to non-calcareous, occasional chert, occasional vugs, some partially filled; horizontal joints, partially remineralized, generally hard and little to no soil filling. 37 pieces ¼"-11" long; slightly vesicular	1	100	54		
Depth 10-13 feet took 3 minutes to core				1.0	
-15					
Depth 13-18 feet took 5.5 minutes to core 610.06 -18				1.1	821
Light gray to yellow brown from 18-21 feet; 9 pieces ¼"-12" long.	2	40	30		
-20					
Void – 21 to 22 feet, per driller. No soil material present in recovered core.					
Depth 18-23 feet took 2 minutes to core				0.4	
Yellow brown and gray, intact from 22-24 feet; 2 pieces 10"-11" long. Void – 24 to 27 feet (Driller described as a "very soft" filled void.) No soil material present in recovered core.					1,018
-25					
27-28 feet – broken but hard; 5 pieces 1"-3" long.					
Depth 23-28 feet took 2 minutes to core 600.06 -28				0.4	
Yellow brown to light yellow brown; vesicular, vuggy with enclosed chert fragments. 26 pieces ¼"-9" long.	3	71	43		
-30					

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

Page 2 of 2

Date 9/30/2008

ROUTE FAP 646 (IL 40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E. 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 618.86 ft
Begin Core Elev. 618.06 ft

BORING NO. B-P6E
Station 732+58
Offset 38 Rt
River Water Surface Elev. 628.06 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Depth 28-33 feet took 2.5 minutes to core				0.5	
Depth 33-35 feet took 3 minutes to core 593.06 -35				1.5	273

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

FILE NAME = D264980 sht borings16.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING AND ROCK CORE LOGS STRUCTURE NO. 098-0115	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - JMB	REVISED -			646	1B-2	WHITESIDE	257	201
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -					CONTRACT NO. 64B80		
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -		SHEET NO. 98 OF 103 SHEETS			ILLINOIS FED. AID PROJECT		

Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 10/3/2008

ROUTE FA 648 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY TC

SECTION 1B-2 LOCATION NE 1/4 SEC.28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. P6W DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 732+58
Offset 44 Lt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.11 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 9.7 feet Water					
		-5			
	618.41				
WEATHERED LIMESTONE at 9.7 feet		-10	50/2"		11
	616.61				
LIMESTONE WITH CHERT AND SHALE SEAMS				742	
Run 1					
11.5' – 19.5' : REC 96/96, 100% RQD 78/96, 81%					
Drill Time: 11.5'-14.5': 3 minutes		-15			
14.5'-19.5': 5.5 minutes					
	608.61				
LIMESTONE		-20			

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
LIMESTONE					
Run 2					
19.5' – 29.5' : REC 114/120, 95% RQD 90/120, 75%					
Drill time: 19.5'-24.5': 6.5 minutes					
24.5'-29.5': 5.5 minutes					
		-25			
Run 3					
29.5' – 37' : REC 90/90, 100% RQD 58/90, 64%					
		-30			
Drill time: 29.5'-34.5': 7 minutes					
34.5'-37': 2 minutes					
		-35			
	591.11				
Bottom of Boring @ 591.11'		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 2

Date 10/3/2008

ROUTE FAP 648 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E.3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 618.41 ft
Begin Core Elev. 616.61 ft

BORING NO. B-P6W
Station 732+58
Offset 44 Lt
River Water Surface Elev. 628.11 ft

		DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
	616.61	-11.5					
DOLOMITE: light gray to white, hard, fine to medium, slightly to non-calcareous, occasional chert; horizontal joints, partially remineralized, generally hard and little to no soil filling. 23 pieces 1'-12" long; generally intact			1	100	81		742
Depth 11.5-14.5 feet took 3 minutes to core		-15				1.0	
Depth 14.5-19.5 feet took 5.5 minutes to core	606.61	-18.5				1.1	
Light gray and gray; 22 pieces 1"-18" long; occasional vugs, some partially filled.		-20	2	95	75		
Depth 19.5-24.5 feet took 6.5 minutes to core		-25				1.3	
Slightly to moderately vesicular below about 28 feet							
Depth 24.5-29.5 feet took 5.5 minutes to core	598.61	-29.5				1.1	
Light gray; 25 pieces 1"-13" long		-30	3	100	64		

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 136 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

Page 2 of 2

Date 10/3/2008

ROUTE FAP 648 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E.3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 618.41 ft
Begin Core Elev. 616.61 ft

BORING NO. B-P6W
Station 732+58
Offset 44 Lt
River Water Surface Elev. 628.11 ft

		DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Depth 29.5-34.5 feet took 7 minutes to core		-35				1.4	
Depth 34.5-37 feet took 2 minutes to core	591.11	-37				0.8	

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 136 (Rev. 3/01)

FILE NAME = 0264B80-sht-borings17.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -
		CHECKED - JMB	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING AND ROCK CORE LOGS
STRUCTURE NO. 098-0115
SHEET NO. 99 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	202
		CONTRACT NO. 64B80		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation

SOIL BORING LOG

Date 9/29/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY JH

SECTION 1B-2 LOCATION NE 1/4 SEC.28 TWP. 21N. RNG. 7E.P.M 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. P7E DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 733+71
Offset 38 Rt
Ground Surface Elev. _____ (ft)

Surface Water Elev. 628.28 (ft.)
Groundwater Elev.
First Encounter ____ (ft)
Upon Completion ____ (ft)
After ____ Hrs. ____ (ft)

SOIL DESCRIPTION	ELEV. (ft)	DEPTH (ft)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 9.5 feet Water					
		-5			
Loose, Brown SILTY SAND AND GRAVEL	618.78	-10	13 11 4		5
Hard, White SILTY CLAY	616.78 615.78		13	3.5	15
WEATHERED ROCK	615.28		50/3"		
LIMESTONE Run 1 13' – 18' : REC 60/60, 100% RQD 21/60, 35% Drill time: 5.5 minutes		-15			
Run 2 18' - 28': REC 52/120, 43% RQD 48/120, 40% Drill time: 18'-23': 3 minutes 23'-28': 1 minutes		-20			

SOIL DESCRIPTION	ELEV. (ft)	DEPTH (ft)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Void from 23.5' to 27.5'		-25		298	
LIMESTONE Run 3 28' – 38' : REC 120/120, 100% RQD 83/120, 69% Drill Time: 28'-33': 3.5 minutes 33'-38': 5 minutes	600.28 618.78	-30		230	
		-35			
Bottom of Boring @ 590.28'	590.28	-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/06)

Illinois Department of Transportation

ROCK CORE LOG

Date 9/29/2008

ROUTE FAP 646 (IL 40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26
Core Diameter 1 7/8 in
Top of Rock Elev. 615.78 ft
Begin Core Elev. 615.28 ft

BORING NO. B-P7E
Station 733+71
Offset 38 Rt
River Water Surface Elev. 628.28 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: yellow brown to brown, hard, fine to medium, slightly to non-calcareous, occasional chert; slightly vesicular, horizontal joints, partially remineralized, generally hard and little to no soil filling. 21 pieces 1'-9" long; 4" vertical joint at about 15 feet	-15	1	100	35	1.1	
Light gray below about 16.5 feet.	610.28 -18					
10 pieces 1'-10" long 1" clay seam at 19 feet	-20	2	43	40		
4" vertical joint at about 22.5 feet. Depth 18-23 feet took 3 minutes to core. Yellow brown at about 23 feet. Void – 23.5 to 27.5 feet (Driller noted as open, air filled.)	-25				0.6	298
Depth 23-28 feet took 1 minute to core	600.28 -28				0.2	
21 pieces 2'-12" long Yellow brown to light yellow brown; significant presence of vugs (some with embedded chert), vesicular; weathered appearance in upper 2 feet. Trace embedded fossils and shell fragments at 29 feet.	-30	3	100	89		230
Depth 28-33 feet took 3.5 minutes to core					0.7	

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

Date 9/29/2008

ROUTE FAP 646 (IL 40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26
Core Diameter 1 7/8 in
Top of Rock Elev. 615.78 ft
Begin Core Elev. 615.28 ft

BORING NO. B-P7E
Station 733+71
Offset 38 Rt
River Water Surface Elev. 628.28 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
More intact below 29 feet; grades from light yellow brown to light gray; Still moderately vesicular with vugs (generally open).	-35					
Depth 33-38 feet took 5 minutes to core	590.28 -38				1.0	

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

FILE NAME = D254B80-sht-borings18.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING AND ROCK CORE LOGS STRUCTURE NO. 098-0115	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - JMB	REVISED -			646	1B-2	WHITESIDE	257	203
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -					CONTRACT NO. 64B80		
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -		SHEET NO. 100 OF 103 SHEETS			ILLINOIS FED. AID PROJECT		

Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 10/3/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY TC

SECTION 1B-2 LOCATION NE 1/4 SEC.28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. P7W DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 733+71
Offset 43 Lt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.11 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 9.5 feet Water					
		-5			
	616.61				
WEATHERED LIMESTONE at 9.5 feet		-10	50/3"		10
	616.11				
WEATHERED LIMESTONE WITH CHERT Run 1 12' – 20' : REC 96/96, 100% RQD 40/96, 42%					
Drill time: 12'-15': 3.5 minutes 15'-20': 5 minutes		-15			
		-20		241	

SOIL DESCRIPTION (continued)	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
(continued) WEATHERED LIMESTONE Run 2 20' – 23' : REC 28/36, 78% RQD 0/36, 0%					
Drill time: 20'-23': 3 minutes					
Clay encountered @ 23.5'					
½" void encountered at 24.5'					
Run 2 – continued (labeled Run 3)		-25			
23' – 30' : REC 44/84, 52% RQD 12/84, 14%					
Drill time: 23'-25': 2 minutes 25'-30': 4.5 minutes					
4" void from 28.5'-28.8'					
Clay encountered @ 30' – 31'		-30			
Run 3 (labeled Run 4) 30' – 37' : REC 63/86, 73% RQD 37/86, 43%				292	
Drill time: 30'-35': 2.5 minutes 35'-27': 2 minutes					
2.5'-3' void encountered from 30 to 35 feet		-35			
	591.11				
Bottom of Boring @ 591.11'					
NOTE: CORING CAUSES BUBBLING FROM PRIOR ADJOINING CORE HOLE AT B-P7E		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 2

Date 10/3/2008

ROUTE FAP 646 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1.7/8 in
Top of Rock Elev. 618.61 ft
Begin Core Elev. 616.11 ft

BORING NO. B-P7W
Station 733+71
Offset 43 Lt
River Water Surface Elev. 628.11 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: yellow brown to light gray, hard, fine to medium, slightly to non-calcareous, occasional chert; horizontal joints, partially remineralized, generally hard and little to no soil filling, moderately intact. 32 pieces 1"-6" long		1	100	42		
Depth 12-15 feet took 3.5 minutes to core	-15				1.2	
Depth 15-20 feet took 5 minutes to core	606.11 -20				1.0	241
16 pieces ¾"-3" long; yellow brown, vesicular, small vugs, soil film on joints		2	78	0		
Inner barrel plugged. Run terminated (probably due to clay). Depth 20-23 feet took 3 minutes to core	605.11 -23				1.0	
As above. More vesicular and vugs with depth; some soil filled joints More than 30 pieces ¼"-6" long; "Clay" reported at 23.5 feet; brown stiff clay in upper 6" of core run; ½" void at 24.5 feet. Depth 23-25 feet took 2 minutes to core	-25	3	52	14	1.0	
Void – 28.5 to 28.8 feet.						
Depth 25-30 feet took 4.5 minutes to core	598.11 -30				0.9	
Yellow brown, brown and gray stiff clay, upper 9" of recovered core. 14 pieces ½"-12"		4	73	43		292

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

Page 2 of 2

Date 10/3/2008

ROUTE FAP 646 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1.7/8 in
Top of Rock Elev. 618.61 ft
Begin Core Elev. 616.11 ft

BORING NO. B-P7W
Station 733+71
Offset 43 Lt
River Water Surface Elev. 628.11 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Void – 2.5 to 3.0 feet from 30-35 feet Yellow brown to brown moderately to highly vesicular, vuggy (some ½"- ¾" wide and deep) below about 36 feet.						
Depth 30-35 feet took 2.5 minutes to core	-35				0.5	
Depth 35-37 feet took 2 minutes to core	591.11 -37				1.0	
	-40					

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

FILE NAME = D264880-sht-borings19.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -
		CHECKED - JMB	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING AND ROCK CORE LOGS
STRUCTURE NO. 098-0115
SHEET NO. 101 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	204
		CONTRACT NO. 64B80		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 9/29/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY JH

SECTION 1B-2 LOCATION NE ¼ SEC.28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. ANE DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 734+84
Offset 39 Rt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.28 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 5 feet Water					
	623.28	-5			
Very Soft Dark Brown SANDY CLAY			WOR WOR WOR		
	620.28		WOH		
WEATHERED LIMESTONE at 8 ft			50/2"		11
Run 1 10' – 18' : REC 93/96, 97% RQD 77/96, 80%		-10			
Drill time: 10'-13': 3.25 minutes 13'-18': 4 minutes				638	
		-15			
Run 2 18' – 28' : REC 120/120, 100% RQD 100/100, 83%					
Drill time: 18'-23': 3.5 minutes 23'-28': 3.5 minutes		-20			

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
		-25			
Run 3 28' – 35' : REC 84/84, 100% RQD 44/84, 52%					
		-30			
				466	
	593.28	-35			
Bottom of Boring @ 593.28'					
		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 2

Date 9/29/2008

ROUTE FAP 646 (IL 40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26
Core Diameter 1 7/8 in
Top of Rock Elev. 620.28 ft
Begin Core Elev. 618.28 ft

BORING NO. B-ANE
Station 734+84
Offset 39 Rt
River Water Surface Elev. 628.28 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
DOLOMITE: yellow brown to white, hard, fine to medium, slightly to non-calcareous, occasional chert; occasional vugs, some partially filled; horizontal joints, partially remineralized, generally hard and little to no soil filling. More than 25 pieces ½"-13" long; generally intact below 12 feet.		1	97	80		
Depth 10-13 feet took 3.25 minutes to core					1.1	638
	-15					
Depth 13-18 feet took 4 minutes to core	610.28 -18				0.8	
32 pieces ½"-10" long		2	100	83		
Slightly vesicular below about 20 feet.	-20					
Several large open vugs below about 22 feet.						
Depth 18-23 feet took 3.5 minutes to core					0.7	
	-25					
Depth 23-28 feet took 3.5 minutes to core	600.28 -28				0.7	
More than 50 pieces ¼"-16" long; brown, very vesicular and vuggy from 28-30 feet, some fossils; less with depth		3	100	52	NR	
	-30					

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

Page 2 of 2

Date 9/29/2008

ROUTE FAP 646 (IL 40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E, 3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26
Core Diameter 1 7/8 in
Top of Rock Elev. 620.28 ft
Begin Core Elev. 618.28 ft

BORING NO. B-ANE
Station 734+84
Offset 39 Rt
River Water Surface Elev. 628.28 ft

	DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Light yellow brown to white below about 33 feet.						466
	593.28 -35					

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

FILE NAME = 0264B80-sht-borings20.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -
		CHECKED - JMB	REVISED -
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORING AND ROCK CORE LOGS
STRUCTURE NO. 098-0115
SHEET NO. 102 OF 103 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	205
		CONTRACT NO. 64B80		
	ILLINOIS FED. AID PROJECT			

Illinois Department of Transportation

SOIL BORING LOG

Page 1 of 1

Date 10/3/2008

ROUTE FA 646 (IL-40) DESCRIPTION IL-40 over the Rock River LOGGED BY TC

SECTION 1B-2 LOCATION NE 1/4 SEC.28 TWP. 21N RNG. 7EPM 3

COUNTY Whiteside STRUCTURE NO. 098-0014 (Exist.)

BORING NO. ANW DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic SPT Hammer

Station 734+85
Offset 41 Lt
Ground Surface Elev. _____ (ft.)

Surface Water Elev. 628.11 (ft.)
Groundwater Elev.
First Encounter ____ (ft.)
Upon Completion ____ (ft.)
After ____ Hrs. ____ (ft.)

SOIL DESCRIPTION	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
Approx. 4.5 feet Water					
	623.61				
Very Loose Dark Brown, Fine to Coarse SAND, trace clay		-5	WHO WOH 1		32
	621.11				
Very Loose Dark Brown, Fine to Medium SILTY SAND, with WEATHERED LIMESTONE	619.11		1 WOH 2		35
WEATHERED LIMESTONE at 9 ft		-10			
Run 1 11.6' – 19.6' : REC 81/96, 84% RQD 9/96, 9%					
Drill time: 11.6'-14.6': 2 minutes 14.6'-19.6': 4 minutes					
		-15			
		-20			

SOIL DESCRIPTION (continued)	ELEV. (ft.)	DEPTH (ft.)	SPT N (blows)	UCS Qu (tsf)	MOIST. (%)
WEATHERED LIMESTONE (continued)				287	
Run 2 19.6' – 29.6' : REC 90/120, 75% RQD 45/120, 38%					
Drill time: 19.6'-24.6': 4 minutes 24.6'- 29.6': 5.5 minutes					
		-25			
Run 3 29.6' – 36.6' : REC 67/84, 80% RQD 27/84, 32%		-30			
Drill time: 29.6'-34.6': 4.5 minutes 34.6'-36.6': 1.5 minutes				245	
		-35			
	591.51				
Bottom of Boring @ 591.51'					
		-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer).
The Standard Penetration Test (SPT) N Value is per (AASHTO T206)

BBS 137 (9/05)

Illinois Department of Transportation

ROCK CORE LOG

Page 1 of 2

Date 10/3/2008

ROUTE FAP 646 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E.3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 619.11 ft
Begin Core Elev. 618.51 ft

BORING NO. B-ANW
Station 734+85
Offset 41 Lt
River Water Surface Elev. 628.11 ft

		DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Starting depth of Core 1 is 11.6 feet	618.51	-11.6					
DOLOMITE, yellow brown to brown, hard, broken, fine to medium, slightly to non-calcareous, occasional chert; occasional vugs, slightly vesicular; horizontal joints, partially remineralized, generally hard and little to no soil filling. More than 40 pieces ½"-7" long		-12	1	84	9		
Depth 11.6-14.6 feet took 2 minutes to core		-15				0.7	
Stiff yellow brown clay (3" thick) at base of recovered core run. Depth 14.6-19.6 feet took 4 minutes to core Ending depth of Core 1 is 19.6 feet	608.51	-19.6				0.8	
More than 50 pieces ¼"-7" long As above, somewhat less broken except at about 27-28 feet where highly fractured and broken; more vesicular and vuggy.		-20	2	75	38		287
Depth 19.6-24.6 feet took 4 minutes to core		-25				0.8	
Depth 24.6-29.6 feet took 5.5 minutes to core Ending depth of Core 2 is 29.6 feet	598.51	-29.6				1.1	
Brown to about 31 feet, then light yellow brown to white. Highly broken at about 29.6-30 feet, and at about 32-32.5 feet; More than 50 pieces ½"-8" long; vesicular and vugs still present		-30	3	80	32		

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

Illinois Department of Transportation

ROCK CORE LOG

Page 2 of 2

Date 10/3/2008

ROUTE FAP 646 (IL40) DESCRIPTION ILLINOIS 40 OVER ROCK RIVER STERLING – ROCK FALLS LOGGED BY G. Jamison

SECTION 1B-2 LOCATION NE ¼ SEC. 28 TWP. 21N RNG. 7E.3 PM

COUNTY Whiteside CORING METHOD Wireline

STRUCT. NO. 098-0014 CORING BARREL TYPE & SIZE NQ

Station 729+71.26 Core Diameter 1 7/8 in
Top of Rock Elev. 619.11 ft
Begin Core Elev. 618.51 ft

BORING NO. B-ANW
Station 734+85
Offset 41 Lt
River Water Surface Elev. 628.11 ft

		DEPTH (ft)	CORE (#)	RECOVERY (%)	RQD (%)	CORE TIME (min/ft)	STRENGTH (tsf)
							246
Depth 29.6-34.6 feet took 4.5 minutes to core		-35				0.9	
Depth 34.6-36.6 feet took 1.5 minutes to core Ending depth of Core 3 is 36.6 feet	591.51	-36.6				0.8	

Color pictures of the cores Yes
Cores will be stored for examination until _____
The "Strength" column represents the unlaxial compressive strength of the core sample (ASTM D-2938)

BBS 138 (Rev. 3/01)

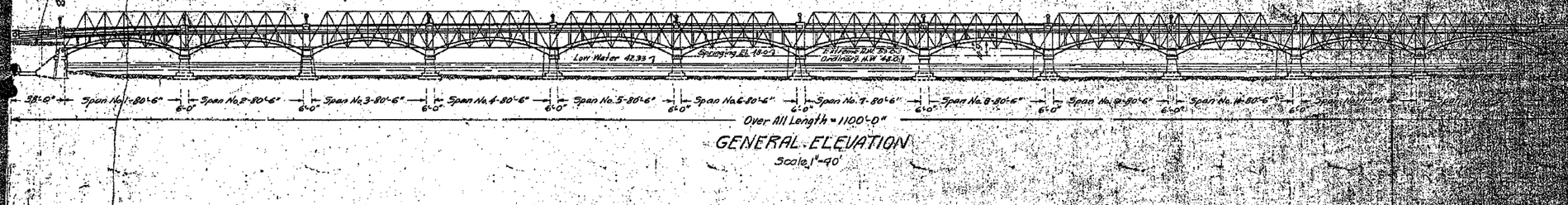
FILE NAME = D264880-sht-borings21.dgn	USER NAME = dwozniarski	DESIGNED - ACB	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SOIL BORING AND ROCK CORE LOGS STRUCTURE NO. 098-0115	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CHECKED - JMB	REVISED -			646	1B-2	WHITESIDE	257	206
	PLOT SCALE = 1.0000 ' / IN.	DRAWN - RLK	REVISED -					CONTRACT NO. 64B80		
	PLOT DATE = 7/18/2011	CHECKED - ACB	REVISED -		SHEET NO. 103 OF 103 SHEETS			ILLINOIS FED. AID PROJECT		

E-R24

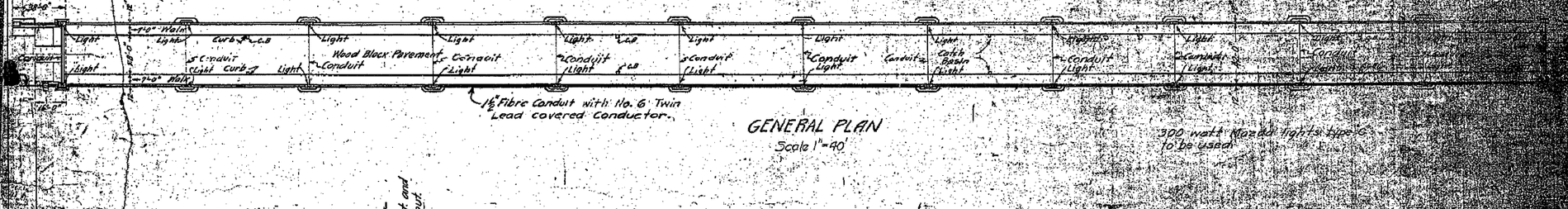
Bm #22 – 2½" from N.E. corner of top of masonry at E end of N abutment of wagon bridge between Sterling and Rock Falls. – Elev. 56.37

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

FOR INFORMATION ONLY

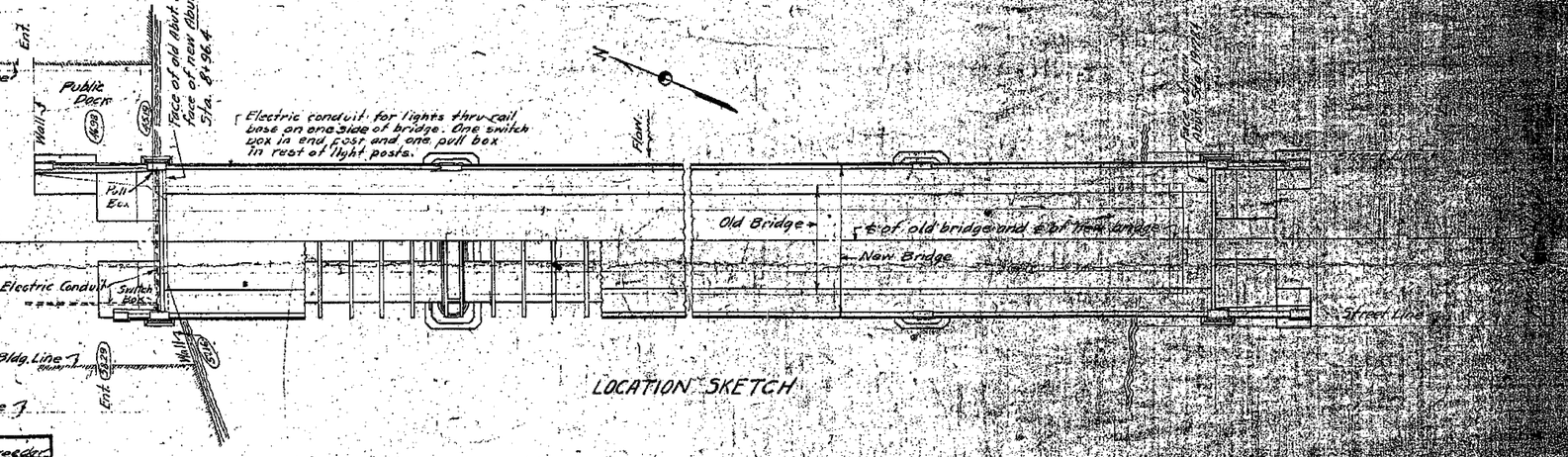


GENERAL ELEVATION
Scale 1" = 40'



GENERAL PLAN
Scale 1" = 40'

300 watt Mazda lights type C to be used



LOCATION SKETCH

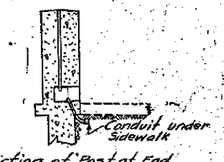
STANDARD	COMPUTED	W. N. Schroeder
	CHECKED	C. P. Murphy
	DRAWN	W. N. S.
	CHECKED	C. P. M.
SPECIAL	ASSEMBLED	
	CHECKED	

EXAMINED June 5 1922
H. F. Bunch
BRIDGE ENGINEER

PASSED
ENGINEER OF DESIGN

APPROVED
C. Older
CHIEF HIGHWAY ENGINEER

O.K. as revised
Jan. 16, 1923
H. F. Bunch



Section of Post at End of Bridge Showing Switch Box or Pull Box

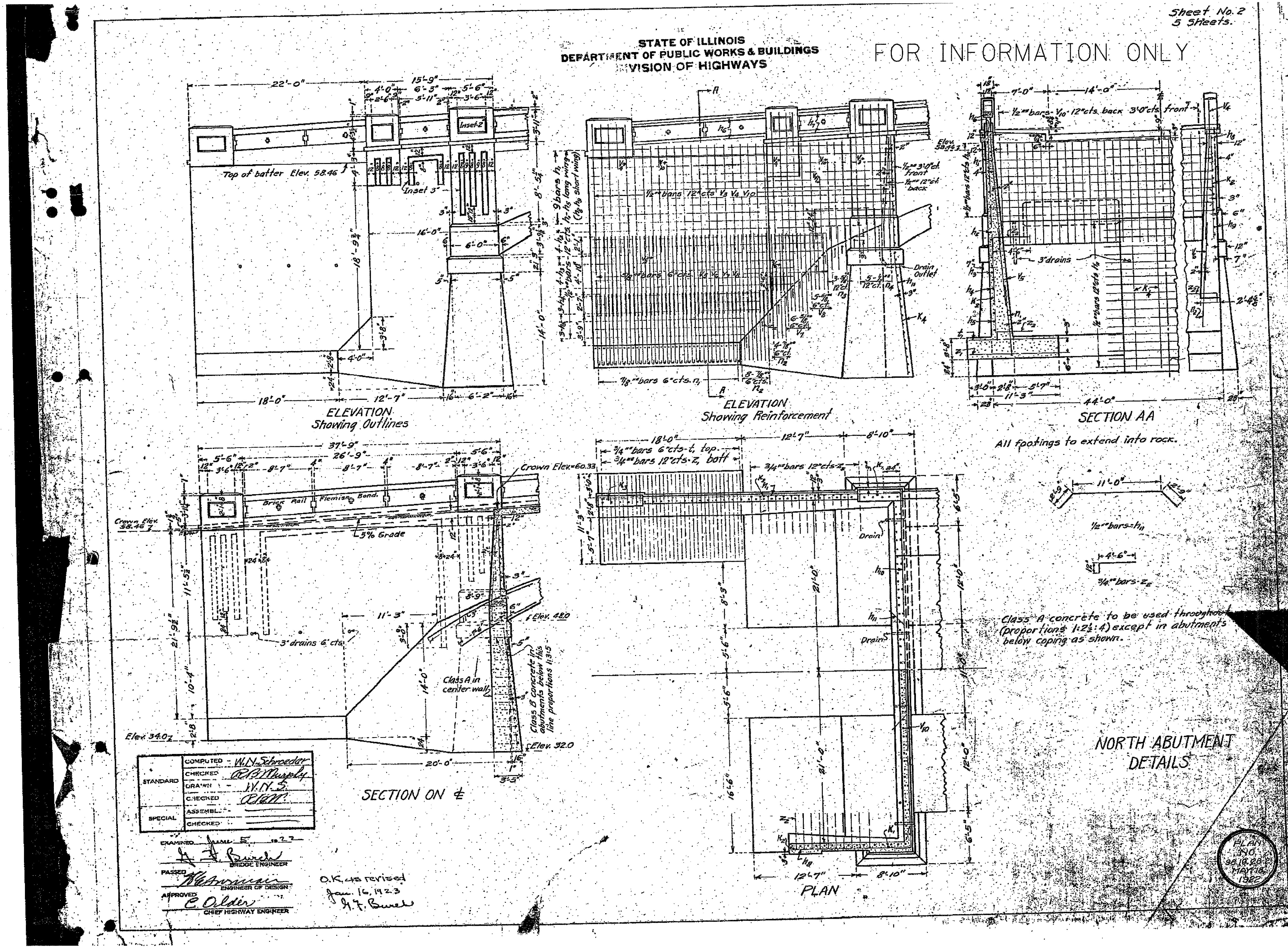
New
FA
6A6

PLANS FOR
FIRST AVENUE BRIDGE
IN
STERLING TOWNSHIP
WHITESIDE COUNTY
ILLINOIS

FIRST AVENUE BRIDGE IN STERLING

SHEET NO.	TOTAL SHEETS	SHEET NO.
1 OF 5	257	207

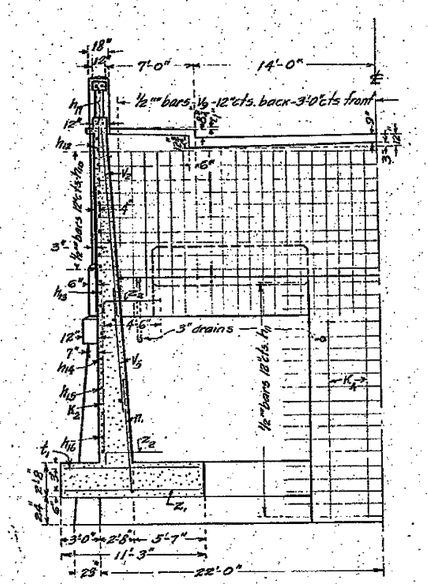
CONTRACT NO. 64B80
FOR INFORMATION ONLY


Sheet No. 2
5 Sheets.
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS
FOR INFORMATION ONLY
ELEVATION
Showing Outlines
ELEVATION
Showing Reinforcement
SECTION AA
All footings to extend into rock.
SECTION ON ℄
PLAN
Class A concrete to be used throughout (proportions 1:2½:4) except in abutments below coping as shown.
NORTH ABUTMENT
DETAILS
Top of batter Elev. 58.46
Crown Elev. 60.33
Crown Elev. 58.46
5% Grade
Brick Rail Flemish Bond.
3" drains 6" cts.
Class A in center wall
Class B concrete in abutments below this line proportions 1:3:5
Elev. 34.0
Elev. 32.0
Elev. 48.0
COMPUTED W.N. Schroeder
CHECKED R.B. Murphy
DRAWN W.N.S.
CHECKED R.B.M.
STANDARD
SPECIAL
ASSEMBL.
CHECKED
EXAMINED June 5 1922
BRIDGE ENGINEER
PASSED
ENGINEER OF DESIGN
APPROVED C. Older
CHIEF HIGHWAY ENGINEER
O.K. as revised
Jan. 16, 1923
G.F. Burch
PLAN NO. 8618.28 MAY 18 1922

SHEET NO. 2 OF 5	TOTAL SHEETS	SHEET NO.
	257	208
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

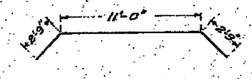
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

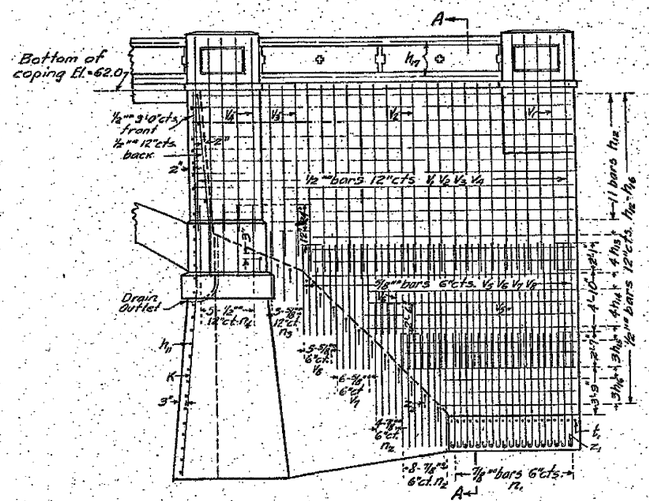
FOR INFORMATION ONLY



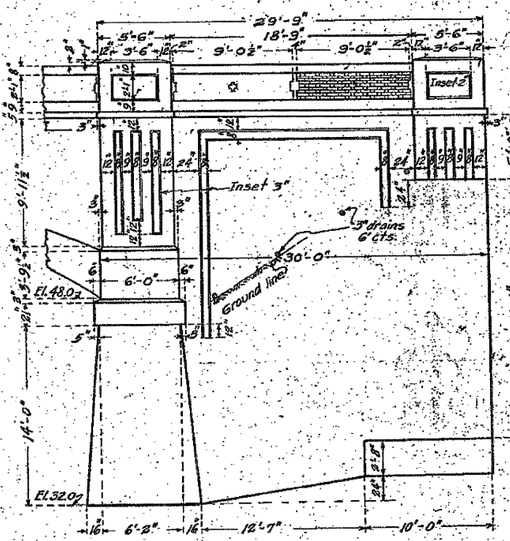
SECTION AA

All footings to extend into rock.

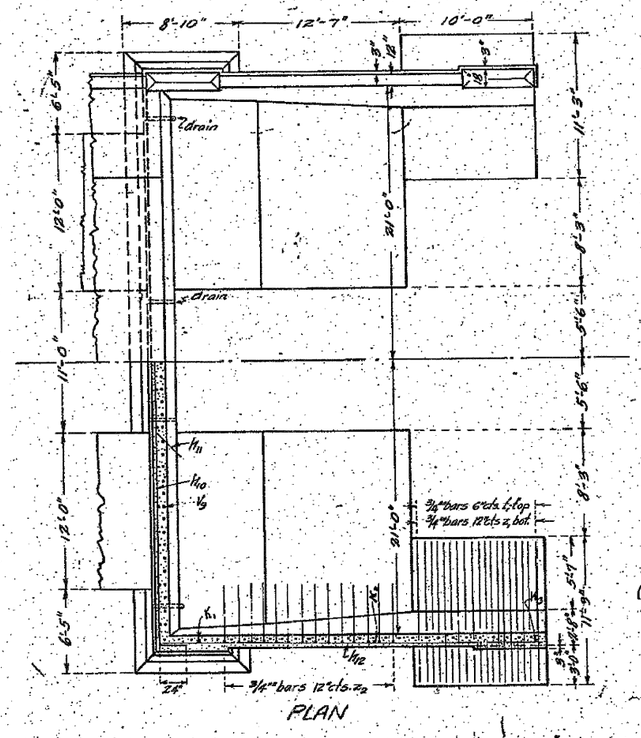




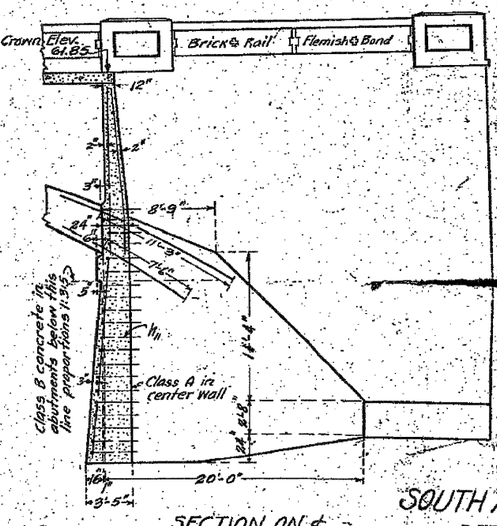
ELEVATION
Showing Reinforcement



ELEVATION
Showing Outlines



PLAN



SECTION ON ℄

Class A concrete to be used throughout (proportions 1:2½:4) except in abutments below coping as shown.

SOUTH ABUTMENT DETAILS

STANDARD	COMPUTED	W.N. Schroeder
	CHECKED	R.B. Murphy
	DRAWN	W.N.S.
	CHECKED	R.B.M.
SPECIAL	ASSEMBLED	
	CHECKED	

EXAMINED March 5, 1923
A.T. Bruce
BRIDGE ENGINEER

PASSED
ENGINEER OF DESIGN

APPROVED
CHIEF HIGHWAY ENGINEER

O.K. as revised
Jan. 16, 1923
A.T. Bruce

PLAN NO. 38.19.28-2
MAY 18 1922

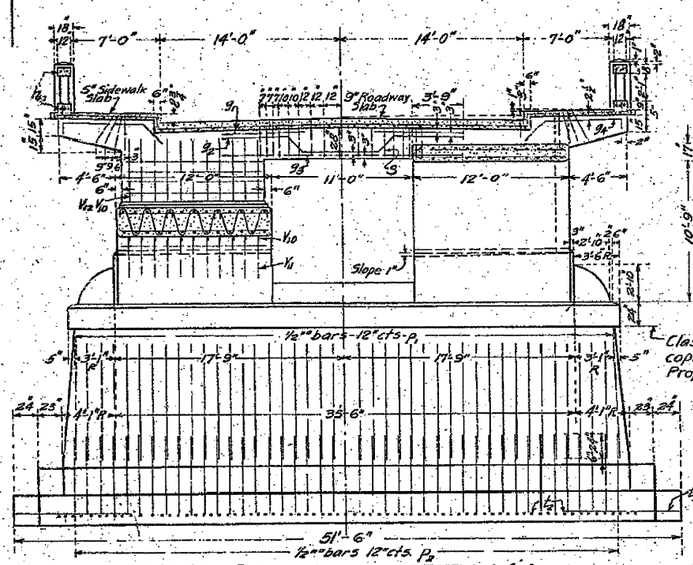
SHEET NO. 3 OF 5	TOTAL SHEETS 257	SHEET NO. 209
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

Sheet No. 4
5 Sheets

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

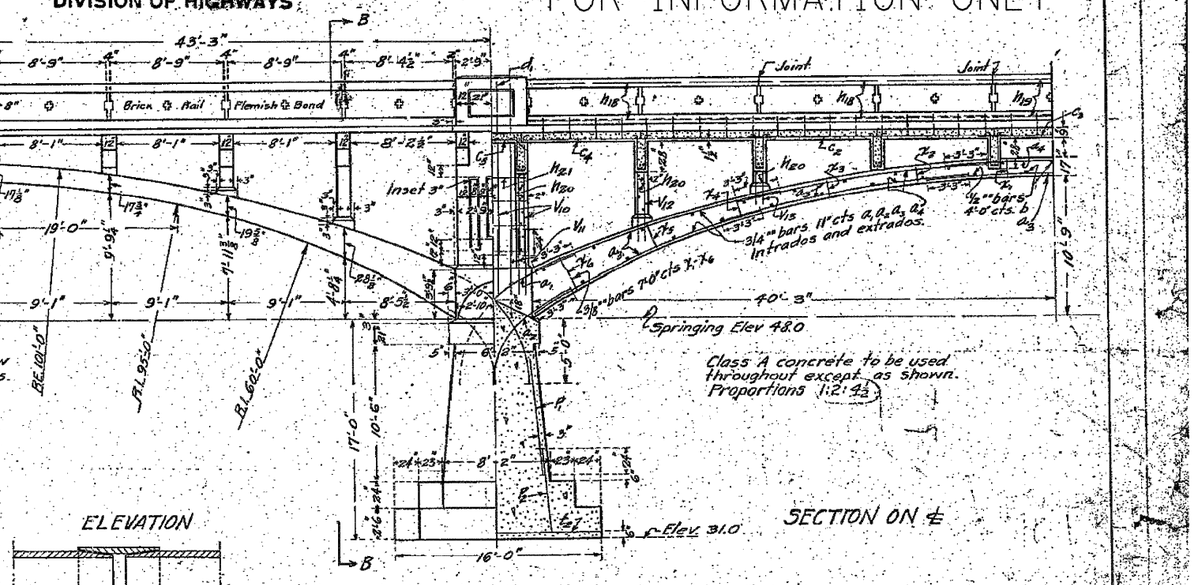
FOR INFORMATION ONLY

Note: All utilities using this bridge to be suspended by hangers from bottom of floor beams between arch ribs. West side of space to be reserved for Illinois Bell Telephone Co. Other utilities to be located in east half of space.



SECTION B B

SECTION A A

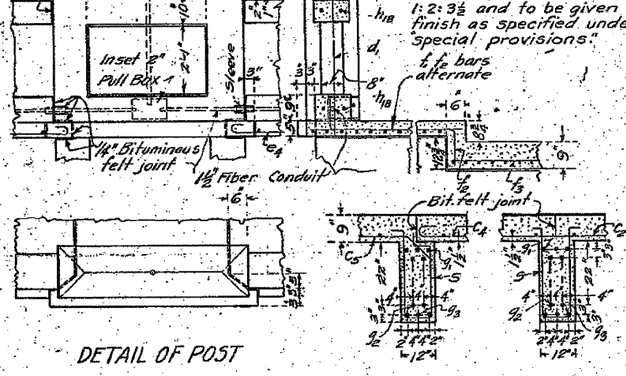


ELEVATION

SECTION ON ℄

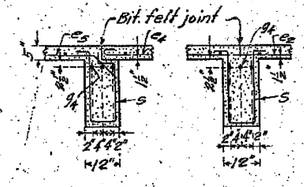
Detail of conduit at joints other than expansion.

Note: Top 2" of roadway slab to be class "X" concrete proportions 1:2:3½ and to be given a pavement finish as specified under "special provisions."



DETAIL OF POST

DETAIL OF FLOOR BEAMS



DETAIL OF CANTILEVERS

STANDARD	COMPUTED	W.N. Schroeder
	CHECKED	E.B. Murphy
	DRAWN	W.N.S.
	CHECKED	R.B.M.
SPECIAL	ASSEMBLED	
	CHECKED	

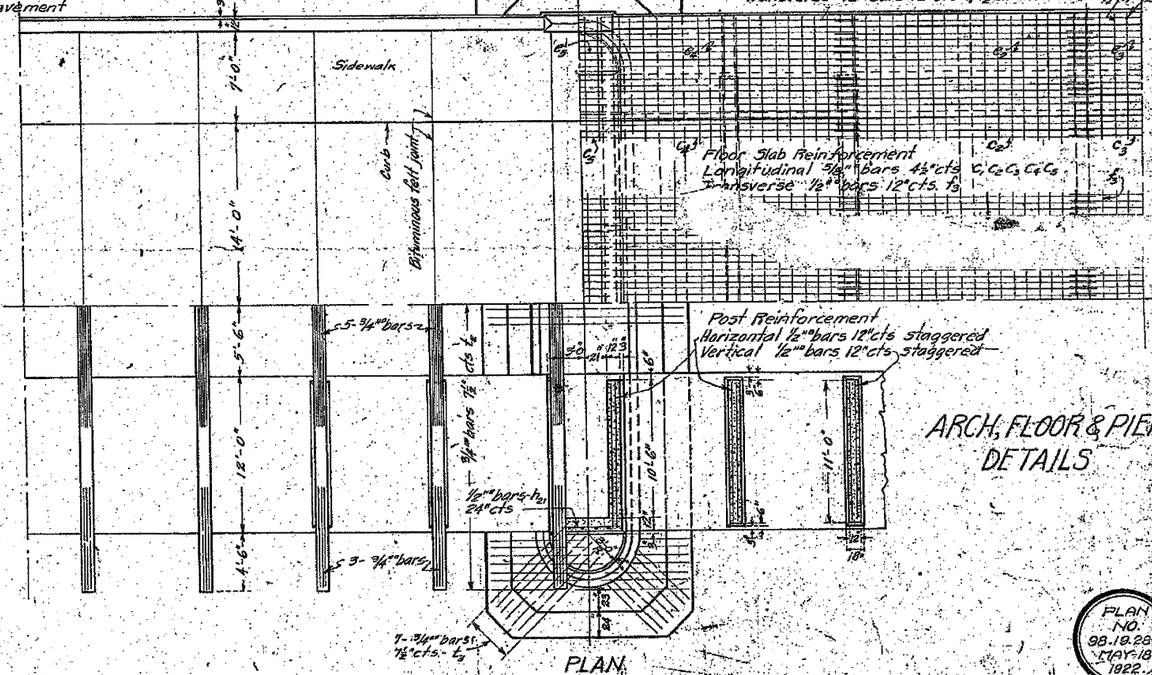
EXAMINED May 5, 1922
BRIDGE ENGINEER

PASSED
ENGINEER OF DESIGN

APPROVED
CHIEF HIGHWAY ENGINEER

O.K as revised
Jan. 16, 1923
H.F. Bruner

Sidewalk Slab Reinforcement.
Longitudinal ½"" bars 5" cts $c_1 c_2 c_3 c_4 c_5$
Transverse ½"" bars 12" cts f_1 f_2 alternate



PLAN

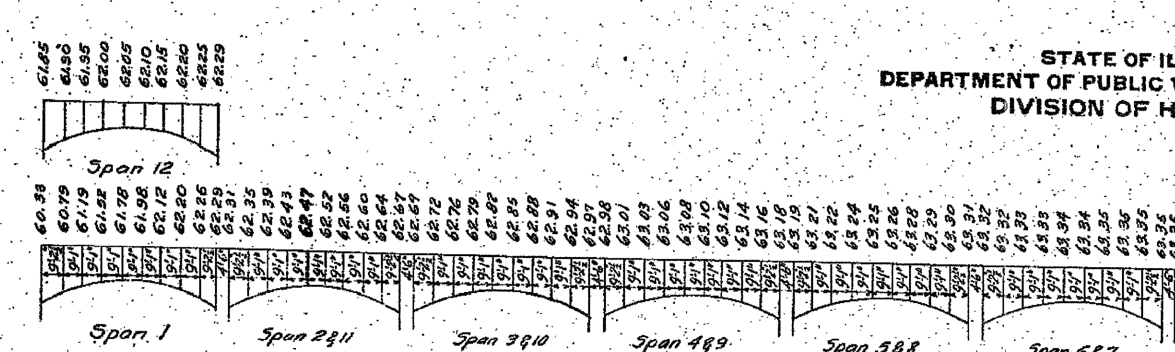
ARCH, FLOOR & PIER DETAILS

PLAN NO. 98.18.28℄ MAY 18, 1922.

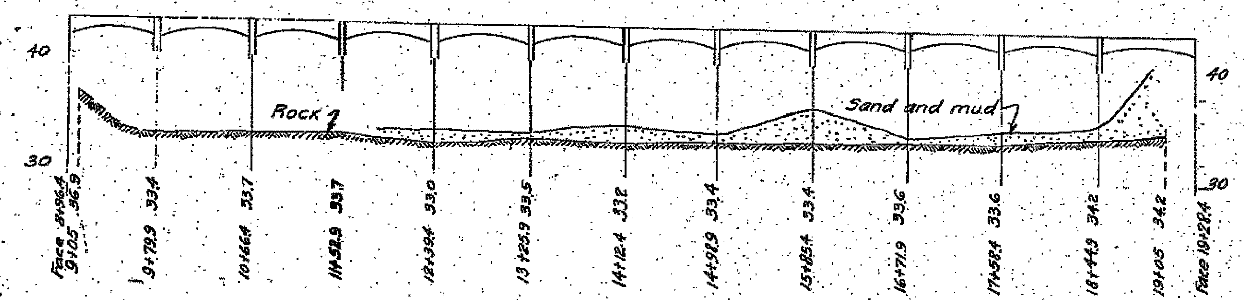
SHEET NO.	TOTAL SHEETS	SHEET NO.
4 OF 5	257	210
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

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

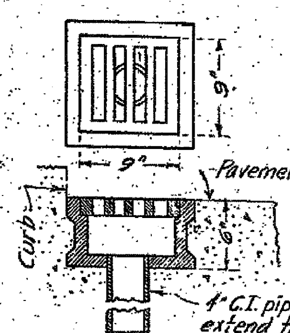
FOR INFORMATION ONLY



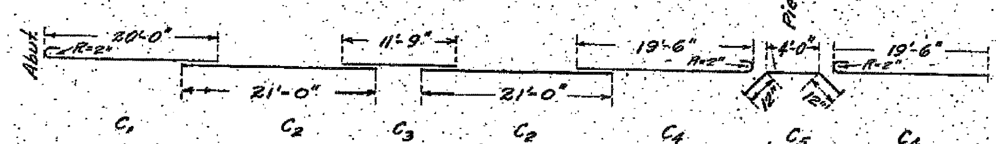
CAMBER SKETCH
Showing Crown Elevations



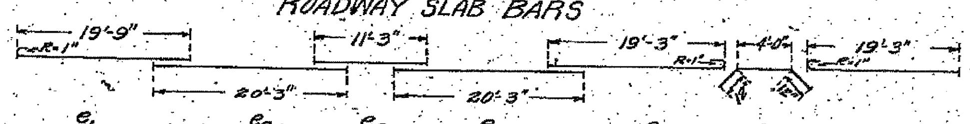
PROFILE OF STREAM BED
Showing Rock Elevations
Scale: Hor. 1"=80' Vert. 1"=8'



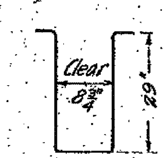
C.I. CATCH BASIN
One at each curb
spans 2, 5, 8, 11.
8-Reqd.



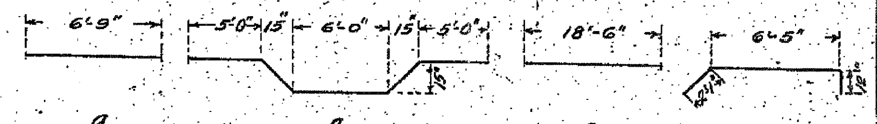
ROADWAY SLAB BARS



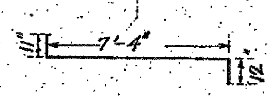
SIDEWALK SLAB BARS



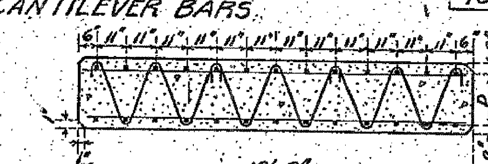
STIRRUPS - S



FLOOR BEAM & CANTILEVER BARS.

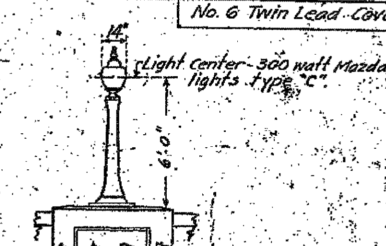


1/2" bar f_2

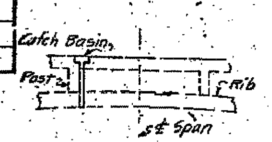


DETAIL OF STIRRUPS.

Bar	D
x_1	13¼"
x_2	13¼"
x_3	14"
x_4	15¾"
x_5	2'1¼"
x_6	2'-6½"



SKETCH OF LAMP POST.
26-Reqd.



Location of Catch Basin

BILL OF MATERIAL

Bar	No.	Size	Length	Bar	No.	Size	Length
V_1	10	1/2"	18'-0"	h_{20}	640	1/2"	10'-9"
V_2	32	1/2"	14'-6"	h_{21}	88	1/2"	5'-3"
V_3	16	1/2"	13'-6"	V_{10}	572	1/2"	8'-3"
V_4	19	1/2"	15'-0"	V_{11}	572	1/2"	5'-3"
V_5	97	5/8"	9'-6"	V_{12}	528	1/2"	7'-6"
V_6	16	5/8"	7'-0"	V_{13}	528	1/2"	5'-0"
V_7	24	5/8"	9'-6"	P_1	1034	1/2"	9'-0"
V_8	20	5/8"	7'-0"	P_2	1034	1/2"	6'-6"
V_9	55	1/2"	12'-6"	t_2	803	3/4"	15'-9"
V_{10}	88	1/2"	11'-3"	t_3	308	3/4"	9'-0"
h_1	18	1/2"	19'-9"	d_1	88	1/2"	3'-9"
h_2	8	1/2"	15'-0"	h_{18}	384	1/2"	17'-9"
h_3	4	1/2"	24'-6"	h_{19}	96	1/2"	9'-0"
h_4	3	1/2"	20'-6"	c_1	154	5/8"	20'-6"
h_5	3	1/2"	18'-6"	c_2	1848	5/8"	21'-0"
h_6	8	1/2"	14'-3"	c_3	924	5/8"	11'-9"
h_7	4	1/2"	5'-9"	c_4	1694	5/8"	20'-0"
h_8	9	1/2"	15'-6"	c_5	847	5/8"	[illegible]
h_9	4	1/2"	6'-0"	e_1	72	1/2"	[illegible]
h_{10}	40	1/2"	25'-0"	e_2	864	1/2"	20'-3"
h_{11}	38	1/2"	16'-6"	e_3	432	1/2"	11'-3"
h_{12}	44	1/2"	15'-9"	e_4	792	1/2"	[illegible]
h_{13}	8	1/2"	20'-6"	e_5	396	1/2"	6'-0"
h_{14}	8	1/2"	16'-0"	a_1	624	3/4"	14'-9"
h_{15}	6	1/2"	13'-0"	a_2	624	3/4"	11'-0"
h_{16}	6	1/2"	10'-6"	a_3	2808	3/4"	19'-6"
h_{17}	8	1/2"	18'-6"	a_4	312	3/4"	16'-6"
				g_1	708	3/4"	6'-9"
K_1	4	1/2"	11'-0"	g_2	236	3/4"	19'-6"
K_2	4	1/2"	18'-0"	g_3	354	3/4"	18'-6"
K_3	6	1/2"	13'-0"	g_4	708	3/4"	9'-6"
K_4	8	1/2"	15'-0"	S	2950	3/8"	6'-6"
				f_1	1004	1/2"	8'-0"
n_1	73	7/8"	10'-0"	f_2	1028	1/2"	9'-3"
n_2	40	7/8"	8'-6"	f_3	2032	1/2"	15'-6"
n_3	12	5/8"	5'-6"	x_1	144	3/8"	7'-3"
n_4	20	1/2"	5'-6"	x_2	144	3/8"	[illegible]
z_1	38	3/4"	11'-0"	x_3	[illegible]	3/8"	[illegible]
t_1	75	3/4"	11'-0"	x_4	[illegible]	[illegible]	[illegible]
z_2	52	3/4"	5'-6"	x_5	144	[illegible]	[illegible]
				x_6	144	3/8"	12'-9"

Reinforcing Steel Lbs.	482520	Brick Rail Cu.Yds.	99.6
Class A Concrete Cu.Yds.	4190	1½" Fiber Conduit Lin.Ft.	1630
Class B Concrete Cu.Yds.	3276	Catch Basins	8
Class X Concrete Cu.Yds.	179	Concrete Lamp Posts	26
Total Concrete Cu.Yds.	7645	Pull Boxes-25 Switch Box-1	

No. 6 Twin Lead Covered Conductor Lin.Ft. 1830

CBM
Checked
Jan. 5, 1922
Burch — BRIDGE ENGINEER
[signature] — ENGINEER OF DESIGN
Alder — CHIEF HIGHWAY ENGINEER

O.K. as revised
Jan. 16, 1923
G. F. Burch

PLAN No. 58.19.28-2 MAY 18 1922

SHEET NO. 5 OF 5	TOTAL SHEETS	SHEET NO.
	257	211
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

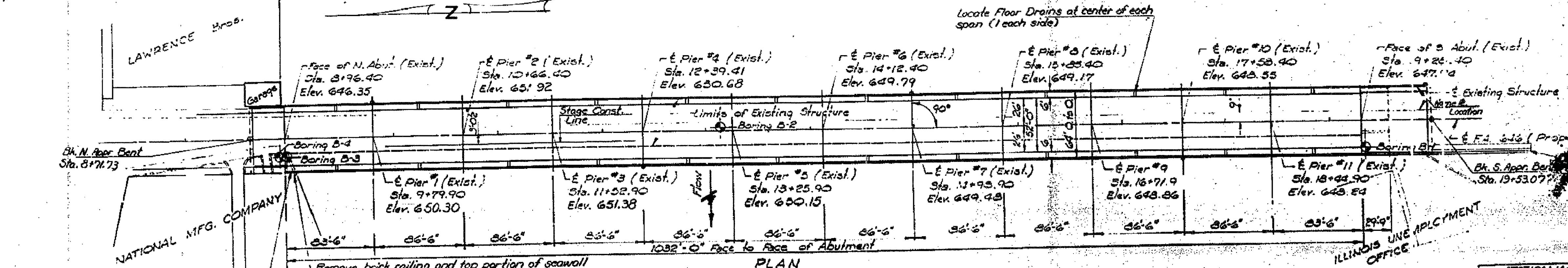
B.M. Chiseled "X" on S.E. Bolt N. End of W. Handrail 21' Rt. Sta. 8+87. Elev. 645.84

Existing Structure: Twelve spans 80'-6" clear span each, plus two end spans. Built as First Avenue Bridge, @ Sta. 14+12.4 in 1923. Repaired under Sec. 1BR SB; Rte. 88 in 1953. Superstructure is an open spandrel concrete arch. Substructure is R.C. Pier and R.C. Abuts. Rebuild the Superstructure above arch rings with P.P.C. Box beams, widen and rebuild the substructure as shown. Existing Bridge # 098-0014. Maintain traffic at all time. Use stage Construction. Removal of existing superstructure shall include removal of highway lighting.

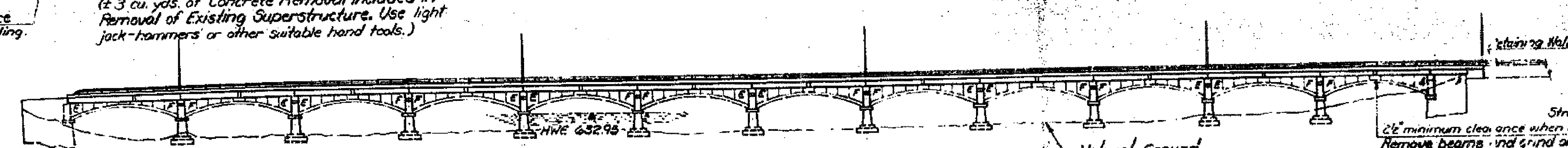
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Because of the presence of storm sewers and foundations for adjacent structures precoring for the piles at the North Abutment and at the North Approach Bent will be required. In the areas of the storm sewers precoring can determine thier locations and the pile spacing shown on the plans can be altered ± 1.5 ft. accordingly. In the areas of adjacent footings precoring should be extended thru the subject footings so as to not damage the structures they support by trying to drive the piles thru.

Route	Section	County	Total sheets	Sheet no.
F.A. 646	1BR-1	Whiteside	64	32



PLAN



ELEVATION

2½" minimum clearance when beams are first set. Remove beams and grind arch in the event that 2½" clearance is not obtained.

STATION 14+12.40
BUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 646 SEC. 1BR-1
F.A. PROJ. BR-F-646(12)
LOADING HS20
STR. NO.

NAME PLATE
Std. 2113
Structure number to be supplied by District

GENERAL NOTES

See Proposal for Boring Data.

All structural steel shall be shop painted with two coats of basic lead silico chromate paint.

Expansion guards which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

The Contractor shall drive 2 Steel HP10x42 test piles one each in a permanent location at each approach bent as directed by the Engineer before ordering the remainder of piles.

A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for percast prestressed concrete deck beams and Class X Concrete for parapets.

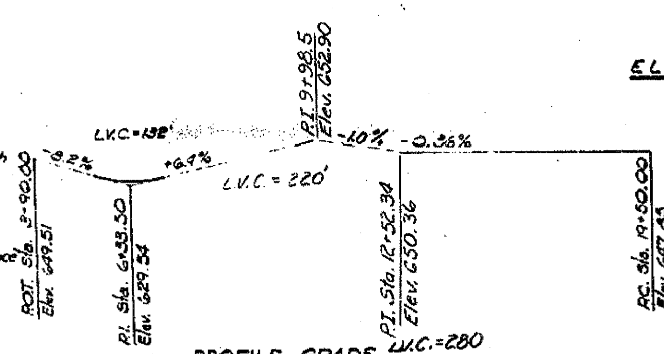
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

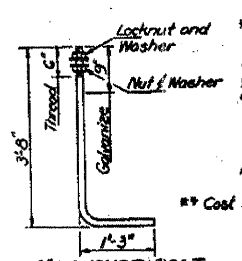
Expansion bolts shall consist of self drilling expansion anchors and ¾"φ x 12" hooked bolts.

Reinforcement bars shall conform to the requirements of AASHTO: M31 or M53 Grade 60.

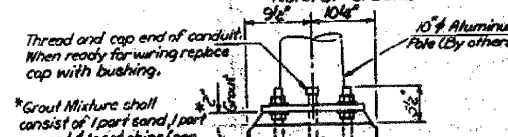
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



PROFILE GRADE
℄ F.A. Rte. 646



1¼"φ ANCHOR BOLT

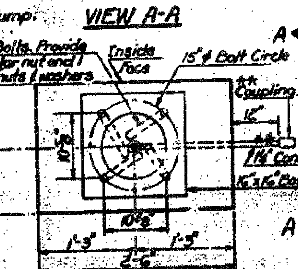


VIEW A-A

*Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump.

** 1¼"φ x 4'-11" Anchor Bolts. Provide 2 flat washers, 1 regular nut and 1 locknut for ea. bolt. All nuts & washers must be galvanized.

** Cost Incidental



LIGHT STANDARD MOUNTING PLAN

DESIGN STRESSES
PRECAST PRESTRESSED UNITS

$f'c$ = 6,000 psi
$f's$ = 270,000 psi (½"φ Strands)
fsi = 189,000 psi (½"φ Strands)

FIELD UNITS

$f'c$ = 3,500 psi
fy = 60,000 psi
fs = 20,000 psi (Structural Steel)

LOADING HS 20-44

Allow 25#/sq. ft. future wearing surface.
Design Specification: 1977 AASHTO and 1978 & 1979 Interim Specifications.

WATERWAY INFORMATION

Drainage Area	=	8740 sq. mi.
Design Discharge (50 yr.)	=	57,900 c.f.s.
Existing Opening	=	11,750 sq. ft.
Required Opening	=	11,750 sq. ft.
Proposed Opening	=	11,750 sq. ft.
Created Head (50 yr., 100 yr.)	=	0
100 yr. Discharge	=	63,200 c.f.s.
Design 50 yr. H.W.E.	=	Elev. 632.95
100 yr. H.W.E.	=	Elev. 633.35

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course, Class I	Ton	885		885
Removal of Existing Superstructure	Each	1		[illegible]
Concrete Removal	Cu. Yd.		310	310
Expansion Bolts ¾"φ	Each		154	154
Floor Drain Special***	Each	24		24
Protective Coat	Sq. Yd.	2082	13	2095
Class X Concrete	Cu. Yd.	837.6	1997.1	2834.7
Cofferdams	Each		11	[illegible]
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	61,920		[illegible]
Aluminum Railing, Type "L"	Lin. Ft.	2113	57	[illegible]
Reinforcement Bars	Pound	89,950	95,010	[illegible]
Steel Piles HP 10x42	Lin. Ft.		648	[illegible]
Steel Piles HP 12x74	Lin. Ft.		1122	[illegible]
Test Pile Steel HP 10x42	Each		2*	[illegible]
Name Plates	Each	1		[illegible]
Structural Steel	Pound	7260		[illegible]
Structure Excavation	Cu. Yd.		256	[illegible]
Waterproofing Membrane System	Sq. Yd.	258		[illegible]
Preformed Joint Sealer (2½")	Lin. Ft.	131		131
Neoprene Expansion Joints (2½")	Lin. Ft.	321		321
Temporary Bridge Rail	Lin. Ft.	1087		1087
Portland Cement Mortar Fairing Course	Lin. Ft.	19,606		19,606
Cofferdam Excavation	Cu. Yd.		275	275
Repair of Concrete Structures	Sq. Ft.		835	835

*** See Special Provisions

LOCATION SKETCH

GENERAL PLAN AND ELEVATION
F.A. RTE. 646 OVER ROCK RIVER
F.A. RT. 646 SEC. 1BR-1

February 29 1980

DESIGNED	Dan Krull
CHECKED	M. J. Ryan J.R.S
DRAWN	
CHECKED	MJR

EXAMINED Carl E. Thunman
PASSED
APPROVED

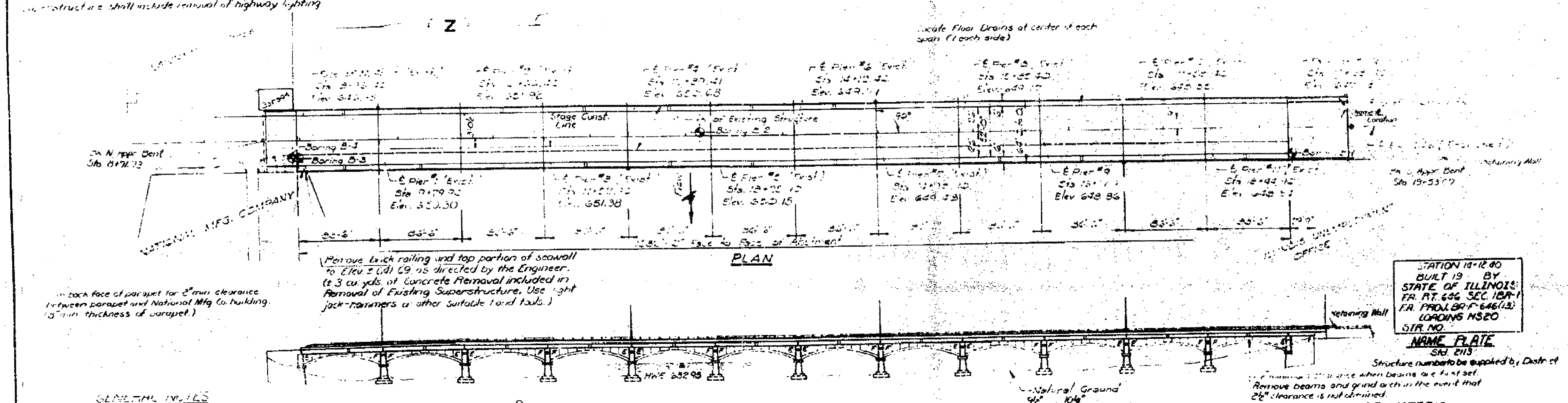
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 1A — 26 SHEETS

Because of the presence of storm sewers and foundations for adjacent structures ... at the sites of the North Abutment and of the North Approach Bent will be required ... the storm sewers ... determine their locations and the pile spacing shown ... plans can be altered ± 1.5 ft. accordingly. In the areas of adjacent footings ... be exercised that the subject footings so as to not damage the structures they support by trying to drive the piles thru.

... Removal of existing superstructure shall include removal of highway lighting.



PLAN

(Remove brick railing and top portion of seawall to Elev. ± 649.0 as directed by the Engineer. (± 3 cu. yds. of Concrete Removal included in Removal of Existing Superstructure. Use light jack-hammers or other suitable hand tools.)

... back face of parapet for 2" min. clearance between parapet and National Mfg. Co. building. (8" min. thickness of parapet.)

ELEVATION

STATION 14+12.60
BUILT 19 BY
STATE OF ILLINOIS
F.A. RT. 646 SEC. 18R-1
F.A. PROJ. BR-F-646(13)
LOADING HS20
STR. NO.

NAME PLATE
Std. 2113
Structure number to be supplied by District

... clearance when beams are first set. Remove beams and grind arch in the event that 2½" clearance is not obtained.

TOTAL BILL OF MATERIAL

Item	Unit	Super	Sub	Total
Bituminous Concrete Surface Course, Class I	Ton	885		885
Removal of Existing Superstructure	Each	1		1
Concrete Removal	Cu. Yd.		310	310
Expansion Bolts ¾"⌀	Each		154	154
Floor Drain Special***	Each	28		28
Protective Coat	Sq. Yd.	2092	3	2095
Class X Concrete	Cu. Yd.	837.6	2004.6	2842.2
Cofferdams	Each		11	11
Precast Prestressed Concrete Deck Beams (33" Depth)	Sq. Ft.	61,980		61,980
Aluminum Railing, Type L	Lin. Ft.	2113	57	2170
Reinforcement Bars	Pound	69,950	15,640	85,590
Steel Piles HP 10 x 42	Lin. Ft.		288	288
Steel Piles HP 12 x 74	Lin. Ft.		1122	1122
Test Pile Steel HP 10 x 42	Each		2	2
Name Plates	Each	1		1
Structural Steel	Pound	7260		7260
Structure Excavation	Cu. Yd.		273	273
Waterproofing Membrane System	Sq. Yd.	6236		6236
Preformed Joint Sealer (2½")	Lin. Ft.	131		131
Neoprene Expansion Joints (2½")	Lin. Ft.	321		321
Temporary Bridge Rail	Lin. Ft.	1087		1087
Portland Cement Mortar Fairing Course	Lin. Ft.	19,608		19,608
Cofferdam Excavation	Cu. Yd.		275	275
Repair of Concrete Structures	Sq. Ft.		635	635

*** See Special Provision

GENERAL NOTES

See Special Provision for Boring Data.

All structural steel shall be shop painted with two coats of basic lead silico chromate paint.

Expansion joints which are not cast in the precast unit shall be fabricated and erected in accordance with Article 503.07(c) of the Standard Specifications and are included in quantity of structural steel.

The Contractor shall drive 2 Steel HP10x42 test piles one each in a permanent location at each approach bent as directed by the Engineer before ordering the remainder of piles.

Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the concrete for precast prestressed concrete deck beams and Class X Concrete for parapets.

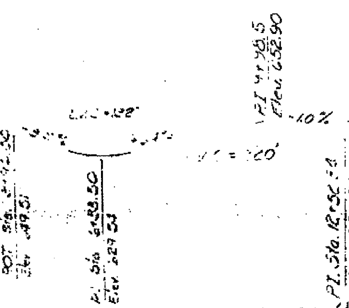
The top surface of the beams shall be finished in accordance with Article 505.06 of the Standard Specifications except that the surface shall not be roughened by brooming. The finished surface shall be free of depressions or high spots with sharp corners.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

Expansion bolts shall consist of self drilling expansion anchors and ¾"⌀ x 12" hooked bolts.

Reinforcement bars shall conform to the requirements of AASHTO M31 or M53 Grade 60.

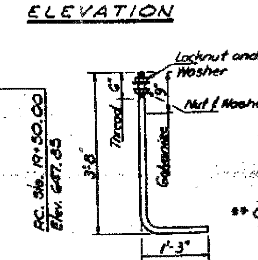
Plan dimensions and details relative to existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the contractor's responsibility to verify such dimensions and details in the field and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.



PROFILE GRADE
℄ F.A. Rte. 646

WATERWAY INFORMATION

Drainage Area	=	6740 sq. mi.
Design Discharge (50yr.)	=	57,900 c.f.s.
Existing Opening	=	?,750 sq. ft.
Required Opening	=	?,750 sq. ft.
Proposed Opening	=	?,750 sq. ft.
Created Head (50yr., 100yr.)	=	0
100yr. Discharge	=	63,200 cfs.
Design 50yr. H.W.E.	=	Elev. 632.95
100 yr. H.W.E.	=	Elev. 633.55

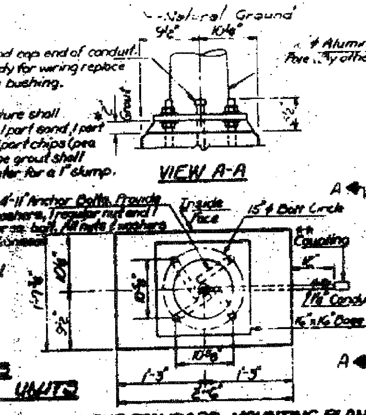


1¼"⌀ ANCHOR BOLT

** Cost Incidental

Thread and cap end of conduit when ready for wiring replace cap with bushing.

Grout Mixture shall consist of 1 part sand, 1 part cement & 1 part chips (pea gravel). The grout shall contain water for a 1" slump.



VIEW A-A

LIGHT STANDARD MOUNTING PLAN
Range 7E 4th P.M.

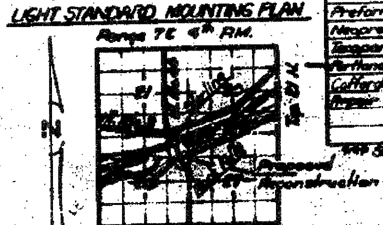
DESIGN STRESSES
PRECAST PRESTRESSED UNITS

f'c = 6,000 psi
f's = 270,000 psi (½"⌀ Strands)
fsi = 189,000 psi (½"⌀ Strands)

FIELD UNITS

f'c = 3,500 psi
fy = 60,000 psi
fs = 20,000 psi (Structural Steel)

LOADING HS 20-44
Allow 25#/sq. ft. future wearing surface.
Design Specifications: 1977 AASHTO and 1978-1979 Interim Specifications.



LOCATION SKETCH

GENERAL PLAN AND ELEVATION
F.A. RT. 646 OVER ROCK RIVER

DESIGNED	Dale Kruse
CHECKED	J.R.S.
DRAWN	
CHECKED	

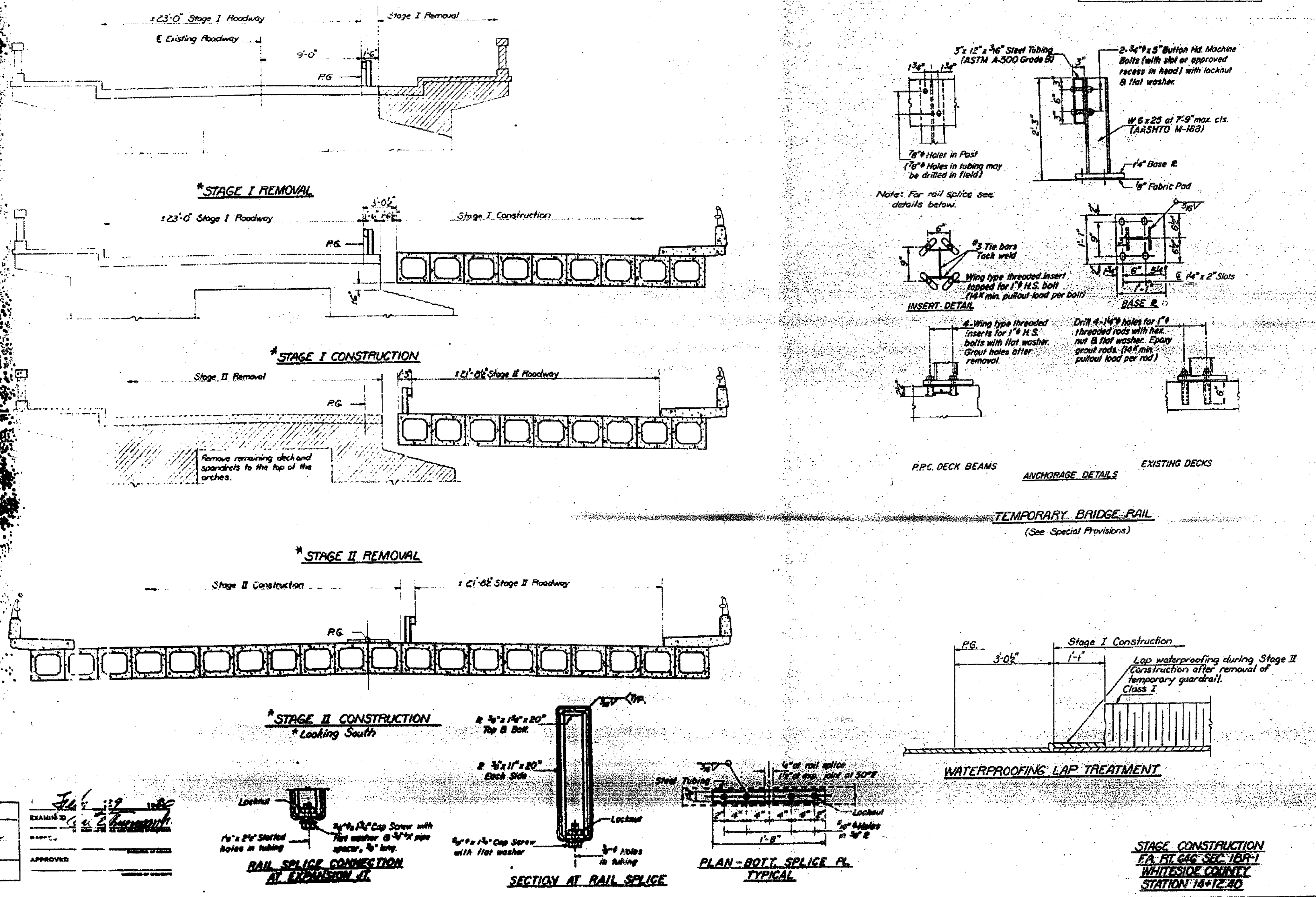
February 29, 1980
EXAMINED: Carl E. ...
PASSED
APPROVED

Revised 5/5/81

SHEET NO. 2 OF 31	TOTAL SHEETS	SHEET NO.
	257	213
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. 646	IBR-1	Whiteside	64	23	SHEET NO. 2 / 26 SHEETS



*STAGE I REMOVAL
*STAGE I CONSTRUCTION
*STAGE II REMOVAL
*STAGE II CONSTRUCTION
*Looking South
Stage I Removal
Existing Roadway
Stage I Construction
Stage II Removal
Stage II Construction
Stage II Roadway
P.G.
Remove remaining deck and spandrels to the top of the arches.
3"x 12"x 3/16" Steel Tubing (ASTM A-500 Grade B)
W 6 x 25 at 7'-9" max. cts. (AASHTO M-188)
Note: For rail splice see details below.
INSERT DETAIL
BASE PL
P.P.C. DECK BEAMS
ANCHORAGE DETAILS
EXISTING DECKS
TEMPORARY BRIDGE RAIL
(See Special Provisions)
Lap waterproofing during Stage II Construction after removal of temporary guardrail.
WATERPROOFING LAP TREATMENT
RAIL SPLICE CONNECTION AT EXPANSION JT.
SECTION AT RAIL SPLICE
PLAN - BOTT. SPLICE PL. TYPICAL

STAGE CONSTRUCTION
F.A. RT. 646 SEC. IBR-1
WHITESIDE COUNTY
STATION 14+12.40

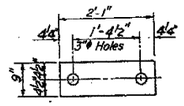
SHEET NO.	TOTAL SHEETS	SHEET NO.
3 OF 31	257	214

CONTRACT NO. 64B80

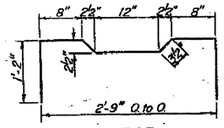
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE SHT. NO.	SECTION	COUNTY	TOTAL SHTS.	SHEET NO.
F.A.S. 646	IBR-1	Whiteside	64	24

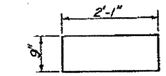
SHEET NO. 3
26 SHEETS



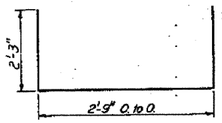
FABRIC BEARING PAD



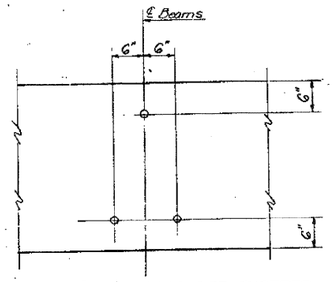
A1 BAR



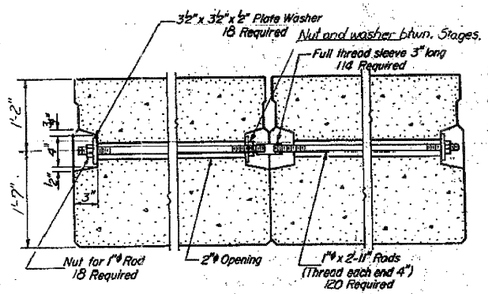
GRAPHITED ASBESTOS BEARING PAD



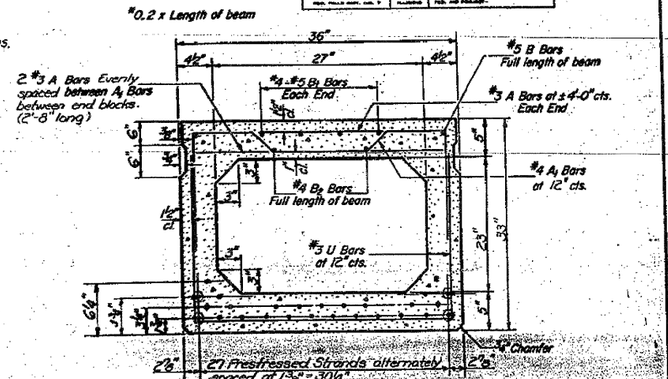
U & U1 BARS



LOCATION OF THREADED INSERTS
For ⅝"ϕ bolts in sides of outside beams to attach drain scuppers. Spans 1 thru 12.

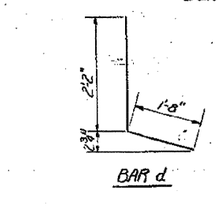


TYPICAL TRANSVERSE TIE ASSEMBLY



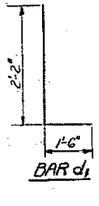
Note: Place strands symmetrically about ℄ beam.
Ⓓ Draped Strands (to 30 and 28)

TYPICAL SECTION
½"ϕ Strands Each Strand Stressed to 22,900 lbs.
12-Strands 1¾" up, 9-Strands 3¼" up, 4-Strands 4¾" up, 2 Strands 6¼" up

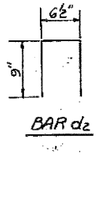


BAR C1

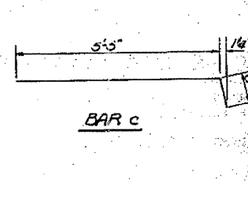
BAR d



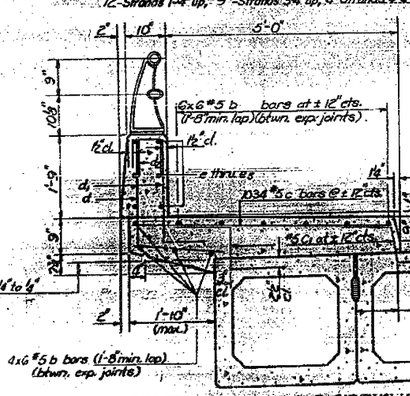
BAR d1



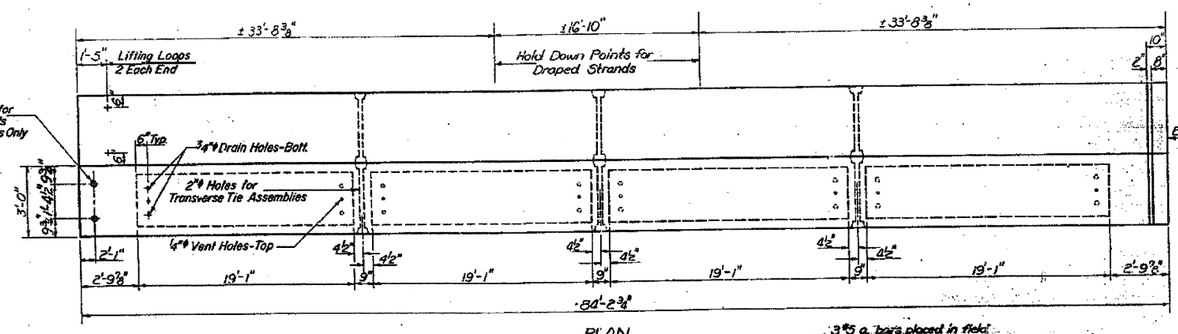
BAR d2



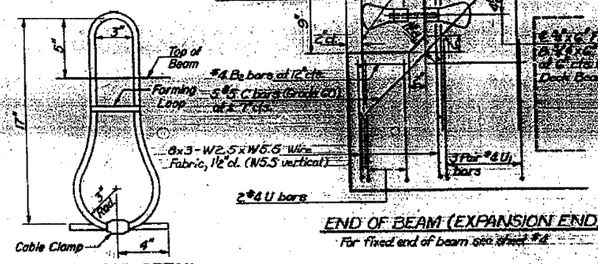
BAR c



SEC. THRU PARAPET AND SIDEWALK
(Spans 1 thru 12)



PLAN



LIFTING LOOP DETAIL

END OF BEAM (EXPANSION END)
For fixed end of beam see sheet #4

NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.
Lifting loops shall be ⅞" diameter, 6x25 class wire rope with fiber core and shall have a minimum breaking tensile strength of 63,000 lbs.
Prior to placing the transverse tie bar, the assembly shall be tightened to a snug fit and the threads coated with a grease. The outside tie bar on the transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar. After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and the anchor dowels shall be grouted in place.
Reinforcement for A shall conform to AASHTO M-31 (M-31M) Grade 60.
Cost of reinforcement and accessories cast into the beam, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams".
Bars indicated thus 4x2-#5 etc. indicates 4 lines of bars with 2 lengths per line.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Precast Prestressed Concrete Deck Beams			Sq. Ft.	10,108

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

July 29 1980
EXAMINED Carl E. Hammarth
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

PD-3-S 7-15-75

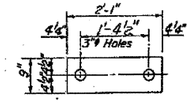
SPANS 1 & 12
SUPERSTRUCTURE
F.A. RT. 646 SECT. IBR-1
WHITESIDE COUNTY
STATE OF ILLINOIS

SHEET NO. 4 OF 31	TOTAL SHEETS 257	SHEET NO. 215
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

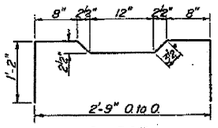
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONTR. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
64B80	1BR-1	Whiteside	64	25
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

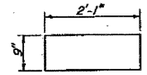
SHEET NO. 4
26 SHEETS



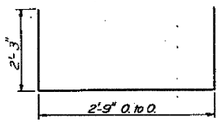
FABRIC BEARING PAD



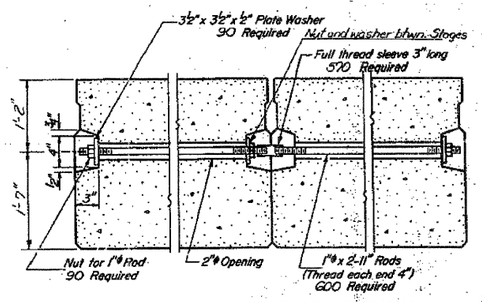
A1 BAR



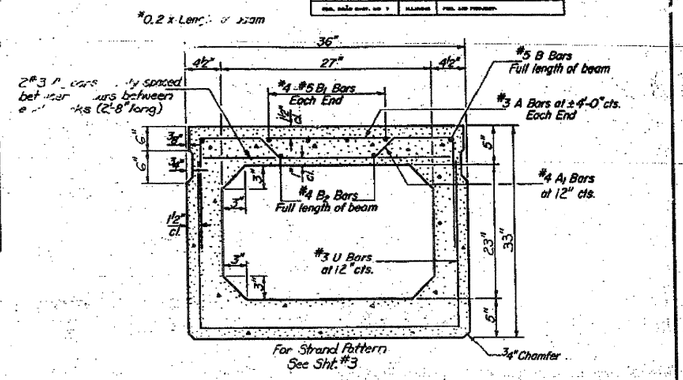
GRAPHITED ASBESTOS BEARING PAD



U & U1 BARS



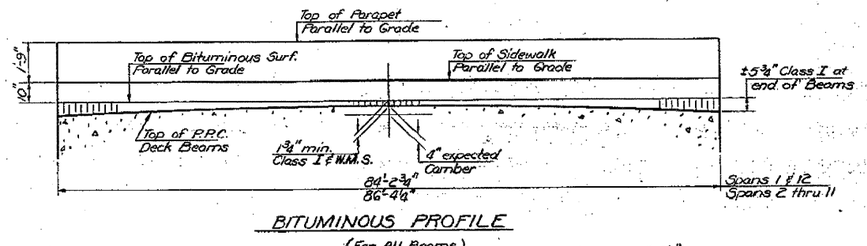
TYPICAL TRANSVERSE TIE ASSEMBLY



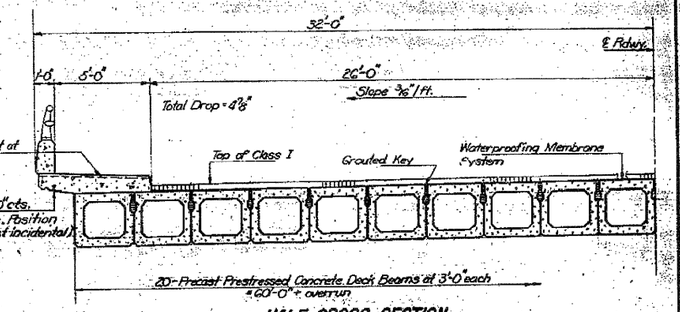
Note: Place strands symmetrically about ℄ beam.

TYPICAL SECTION

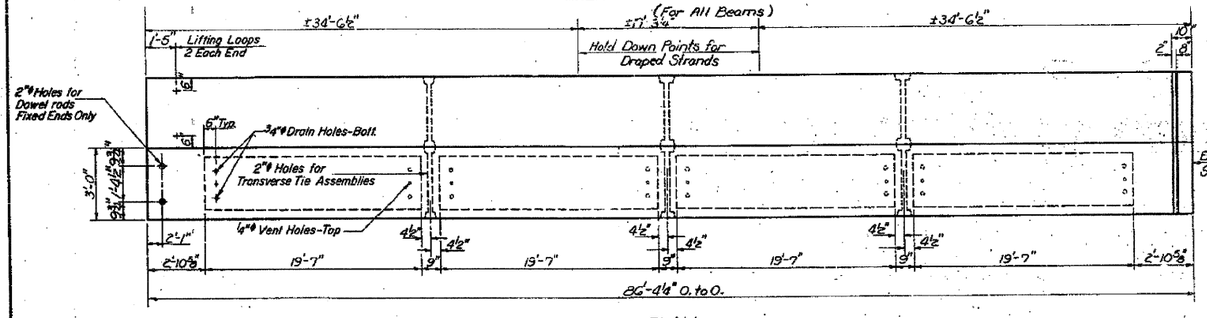
2" ø Strands Each Strand Stressed to 22,900 lbs.
12-Strands 1¾" up, 9 -Strands 3¼" up, 4-Strands 4¾" up, 2 Strands 6¼" up



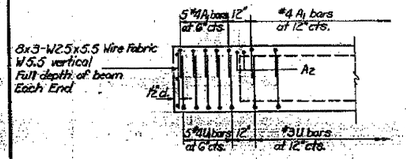
BITUMINOUS PROFILE



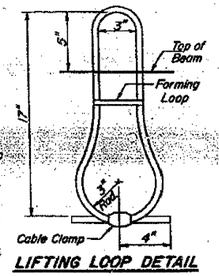
HALF CROSS SECTION



PLAN



END ELEVATION
(Fixed)



LIFTING LOOP DETAIL

NOTES

Prestressing steel shall be non-galvanized high strength, stress-relieved 7-wire strand, Grade 270. The nominal diameter shall be ½" and the nominal cross-sectional area shall be 0.153 sq. in.

Lifting loops shall be ⅝" diameter, 6 x 25 class wire rope with fiber core and shall have a minimum ultimate tensile strength of 63,000 lbs.

The 1"ø rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.

Longitudinal shear keys shall be packed with a very dry mix of 2:1 sand and P.C. mortar.

After beams have been erected, holes for the dowel anchors shall be drilled into the substructure and the anchor dowels shall be grouted in place.

Reinforcement bars shall conform to AASHTO M-31 or M-53, Grade 60.

"Cost of reinforcement and accessories cast into the beams, of bearing pads, of armor angles, and of grouting longitudinal shear keys is included in unit price bid for "Precast Prestressed Concrete Deck Beams."

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
Precast Prestressed Concrete Deck Beams			Sq. Ft.	31,012

DESIGNED	Dan Krull
CHECKED	Mark Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

EXAMINED July 27 1980
Carl E. Brunnemann
DIVISION OF WATER AND WATER SURVEYS
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

PD-3-S 7-15-75

SPANS 2 THRU 11
SUPERSTRUCTURE
F.A. RTE. 20 SEC. 1BR-1
WHITESIDE COUNTY
STA. 1+11.20

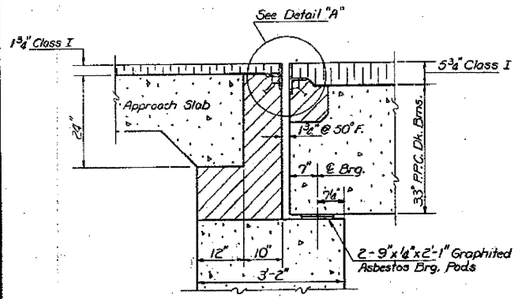
SHEET NO. 5 OF 31	TOTAL SHEETS	SHEET NO.
	257	216
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

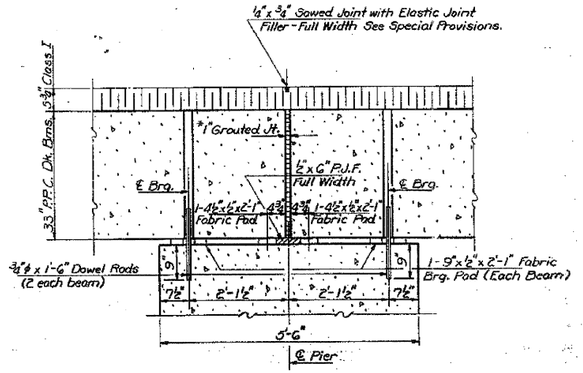
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S.446	1BR-1	Whiteside	64	26
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5
26 SHEETS

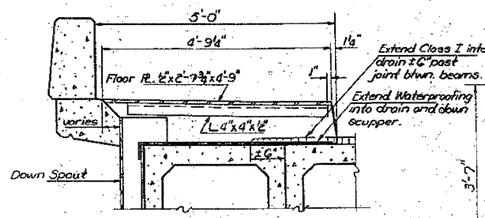


SEC. THRU ABUTS.

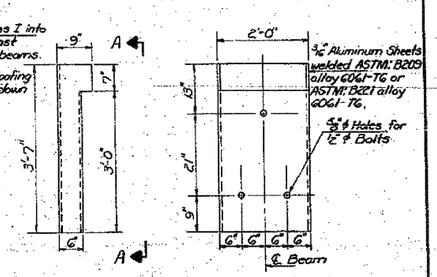


SEC. THRU FIXED PIERS

* 1" Joint shall be packed with a very dry mix of 2:1 sand and P.C. mortar. 1" Dimension may vary plus or minus to accomodate tolerance in beam lengths.

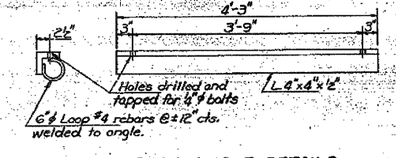


SECTION THRU DRAIN

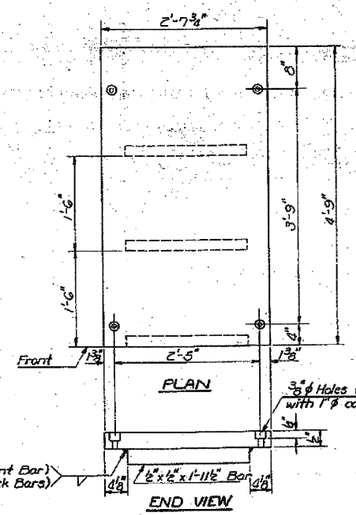


END VIEW VIEW A-A

DOWN SPOUT DETAILS



SEAT ANGLE DETAILS
See Detail "B"

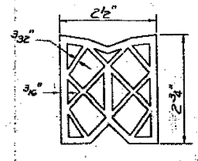


FLOOR PLATE DETAILS

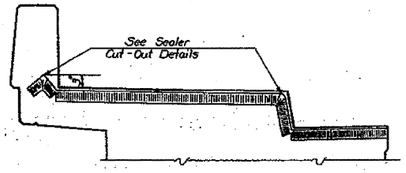
¼" ϕ BOLT

BILL OF MATERIAL

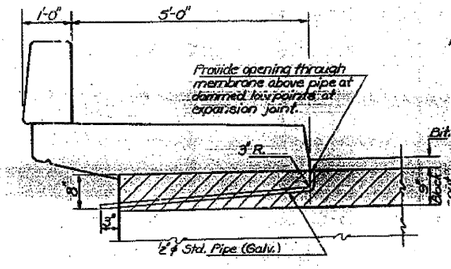
Bar	No	Size	Length	Shape
a	36	#5	26'-10"	—
a1	36	#5	32'-10"	—
b	720	#5	30'-2"	—
c	2068	#5	6'-2"	⌐
d	2122	#4	3'-10"	L
d1	2122	#4	3'-9"	L
d2	488	#4	2'-7"	⌐
e	6	#4	1'-4"	—
e1	30	#4	16'-9"	—
e2	300	#4	16'-8"	—
e3	390	#4	17'-0"	—
e4	12	#4	23'-0"	—
Class X Concrete			0.4 Yds	682.1
Reinforcement Bars			Pounds	64,270



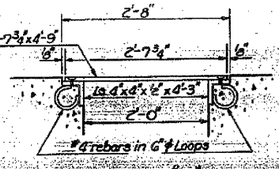
PREFORMED JOINT SEALER (2½")



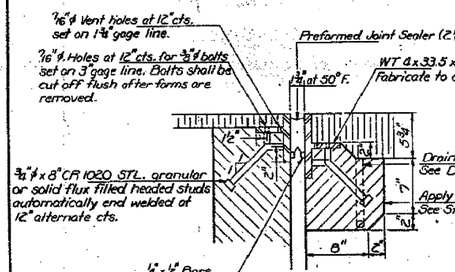
END OF SEALER TREATMENT



DRAIN HOLE ELEVATION

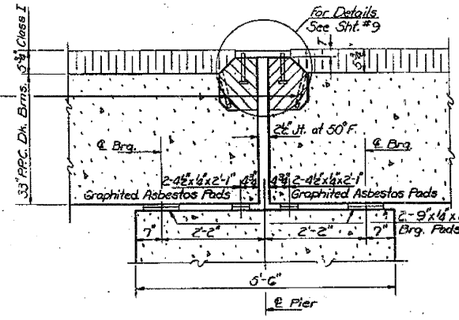


DETAIL "B"

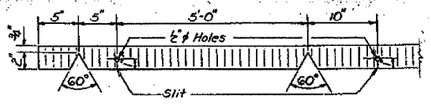


DETAIL "A"

Notes: Hatched areas to be poured after beams have been erected and joints grouted.
Ends of beams shall be aligned at the expansion joints. Any lineal variation in the beam lengths shall be placed at the fixed joint.
See End of Beam Detail for reinforcement.



SEC. THRU EXPANSION PIERS



SEALER CUT-OUT (2½")

DESIGNED	DAN KROLL	EXAMINED	Feb 19 1920
CHECKED	M.J.R.	PASSED	
DRAWN	Joe Sutherland	APPROVED	
CHECKED	MJR		

SUPERSTRUCTURE DETAILS
F.A. RT. 446 SEC. 1BR-1
WHITESIDE COUNTY
STATION 42+ R 20

SHEET NO. 6 OF 31	TOTAL SHEETS	SHEET NO.
	257	217
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. R.T. 646	1BR-1	Whiteside	68	27
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT	

SHEET NO. 6
26 SHEETS

SOUTH APPROACH

SPAN 12

SPAN 11

SPAN 10

SPAN 9

SPAN 8

SPAN 7

SPAN 6

SPAN 5

SPAN 4

SPAN 3

SPAN 2

SPAN 1

Light Standard Foundation

SEC. A-A
Typ. at Pier 4 and 10

* Space d and d_1 bars to miss parapet joints.

DESIGNED	Dan Krull
CHECKED	M.J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

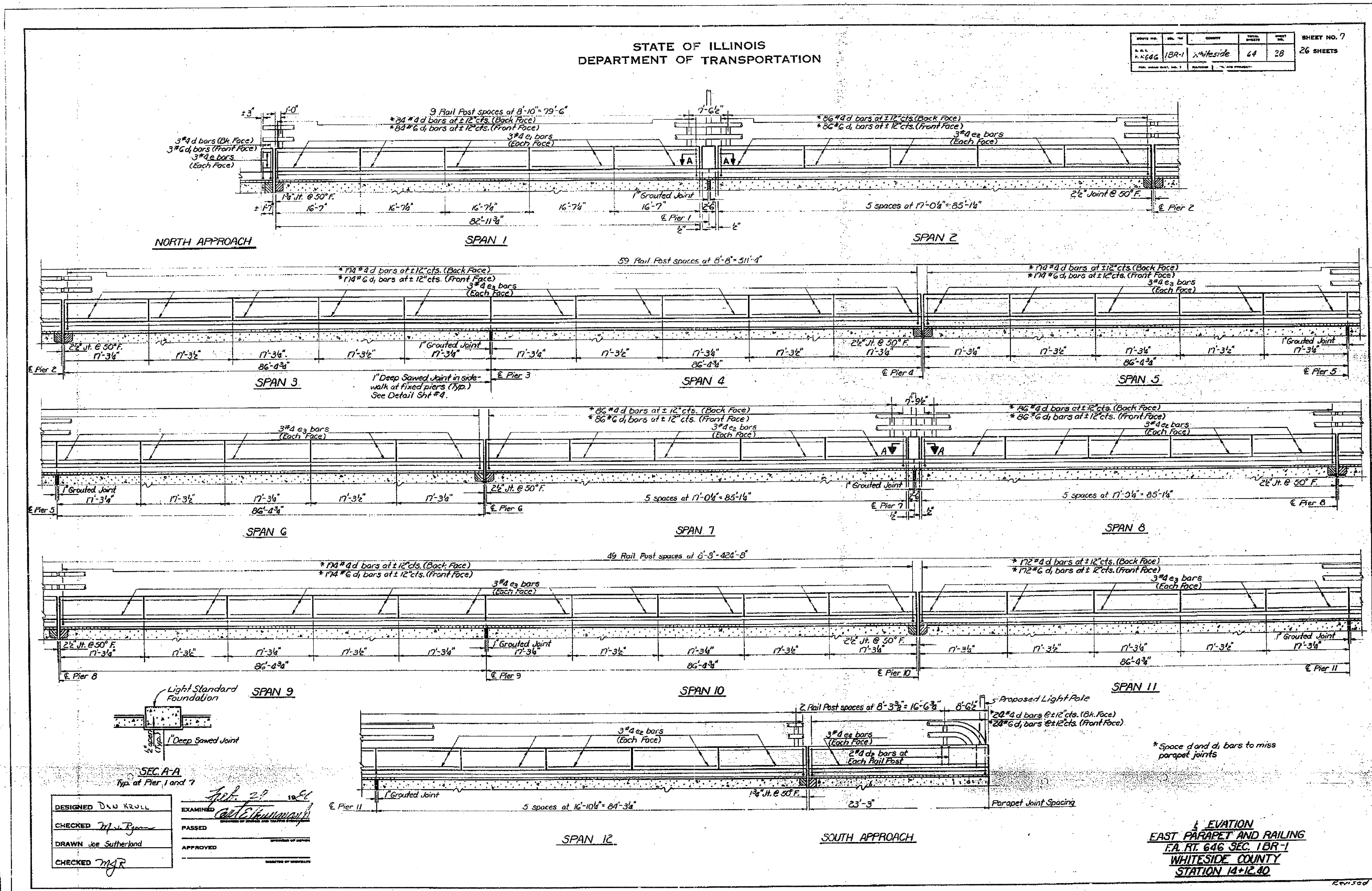
Feb. 29 1980
EXAMINED Carl E. Hammagh
DIRECTOR OF HIGHWAYS AND TRANSPORTATION
PASSED
DIVISION OF BRIDGES
APPROVED
DIRECTOR OF HIGHWAYS

ELEVATION
WEST PARAPET AND RAILING
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

Revised

SHEET NO. 7 OF 31	TOTAL SHEETS	SHEET NO.
	257	218
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY



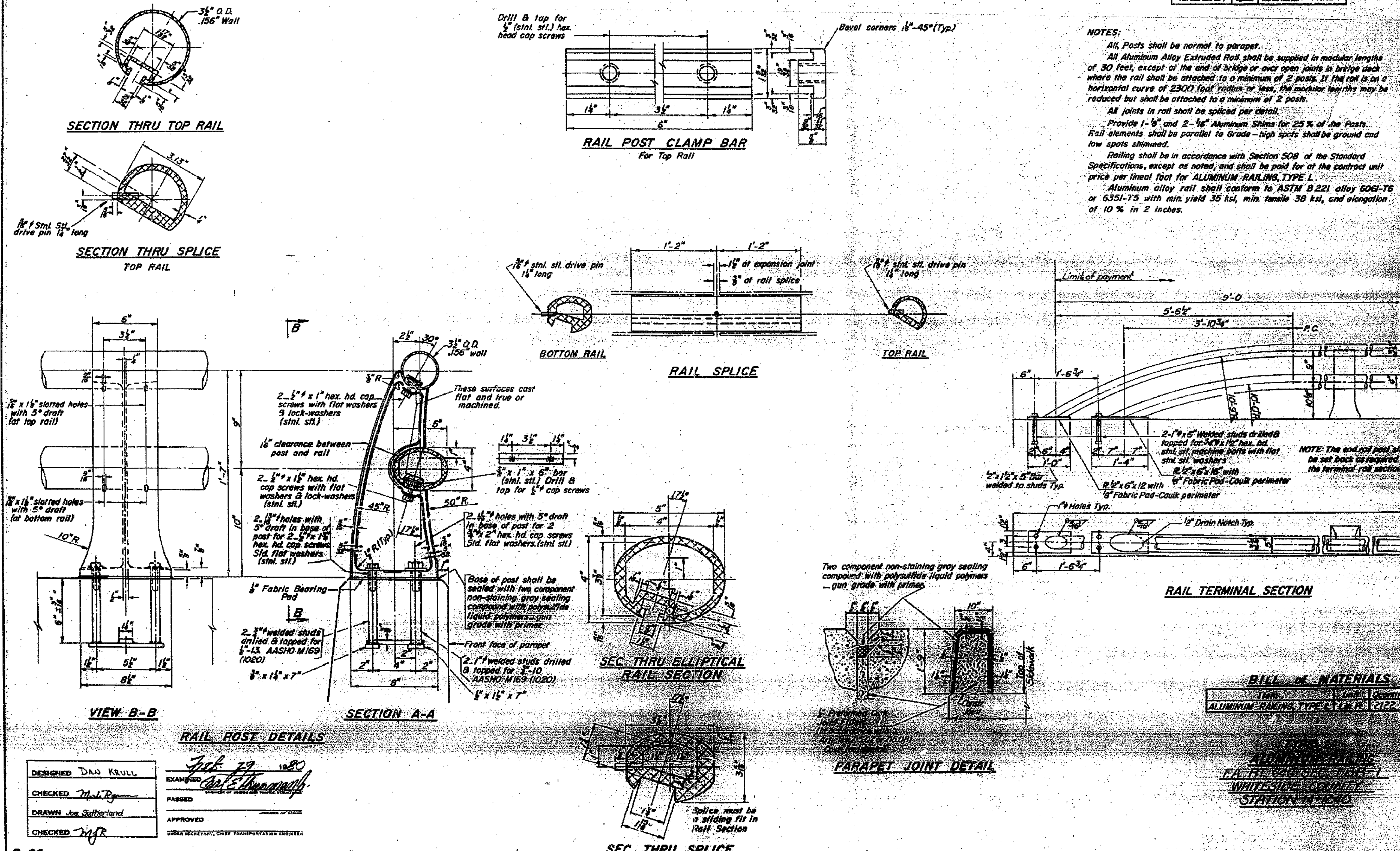
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
SHEET NO. 7
26 SHEETS
NORTH APPROACH
SPAN 1
SPAN 2
SPAN 3
SPAN 4
SPAN 5
SPAN 6
SPAN 7
SPAN 8
SPAN 9
SPAN 10
SPAN 11
SPAN 12
SOUTH APPROACH
SEC. A-A
Typ. at Pier 1 and 7
*Space d and d1 bars to miss parapet joints
ELEVATION
EAST PARAPET AND RAILING
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40
DESIGNED Dan Krull
CHECKED
DRAWN Joe Sutherland
CHECKED
EXAMINED
PASSED
APPROVED

SHEET NO. 8 OF 31	TOTAL SHEETS	SHEET NO.
	257	219
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1BR-1	Whiteside	64	29

26 SHEETS



NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

Provide 1-⅛" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail elements shall be parallel to Grade - high spots shall be ground and low spots shimmed.

Railing shall be in accordance with Section 508 of the Standard Specifications, except as noted, and shall be paid for at the contract unit price per lineal foot for ALUMINUM RAILING, TYPE L.

Aluminum alloy rail shall conform to ASTM B 221 alloy 6061-T6 or 6351-T5 with min. yield 35 ksi, min. tensile 38 ksi, and elongation of 10% in 2 inches.

BILL of MATERIALS

Item	Unit	Quantity
ALUMINUM RAILING, TYPE L	Lin. Ft.	2122

ALUMINUM RAILING
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION [illegible]

DESIGNED	Dan Krull
CHECKED	[illegible]
DRAWN	Joe Sutherland
CHECKED	[illegible]

Feb. 29, 1980
EXAMINED [signature]
PASSED
APPROVED
UNDER SECRETARY, CHIEF TRANSPORTATION ENGINEER

R-20 4-15-73

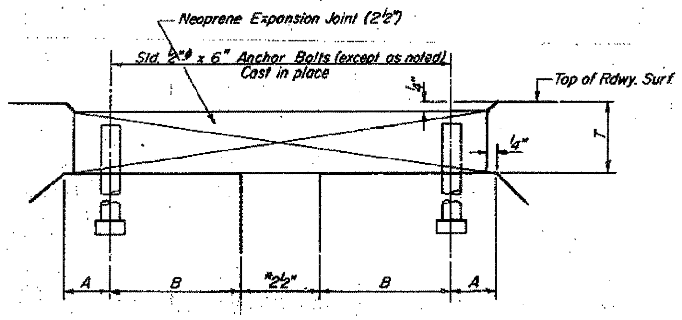
SHEET NO.	TOTAL SHEETS	SHEET NO.
9 OF 31	257	220

CONTRACT NO. 64880

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	IBR-1	Whiteside	64	30

SHEET NO. 9
26 SHEETS



CROSS SECTION

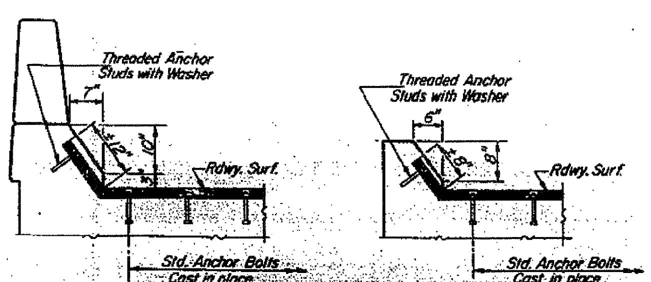
*At 50° F.
Dimensions are at right angles.

NOTE:
Joint openings shall be adjusted in accordance with Article 503.07 (c) of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

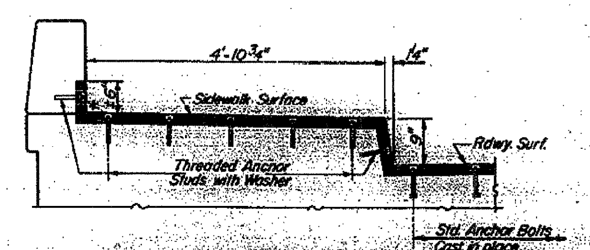
ALTERNATE NEOPRENE EXPANSION JOINTS (2½")

(See Special Provisions)

Model	Supplier	Blockout Dimensions
TRANSFLEX, MODEL 250 Use ⅝"⌀ x 6" Anchor Bolts.	General T. e Company	T = 2 1/16", A = 1½", B = 4¼"
WABOFLEX, MODEL SR 2.5 Use ⅝"⌀ x 6" Anchor Bolts.	Watson Bowman Associates, Inc.	T = 2 1/16", A = 1½", B = 4¼"
FEL-SPAN, MODEL T-30 Set joint seal 1⅝" at 50° F.	Fel-Pro Building Products Inc.	T = 1¾", A = 2¼, B = 2 9/16"
WABO ELASTODAM, TYPE 300 Set joint seal 1⅝" at 50° F.	Watson Bowman Associates, Inc.	T = 1¾", A = 2¼", B = 2 9/16"
WABO ALU-STRIP, TYPE III S300 Set joint seal 1½" at 50° F. Permitted for 0° skew only	Watson Bowman Associates, Inc.	T = 1¾", A = 1⅝", B = 2½"
LOW PROFILE ONFLEX-25 Set joint seal 1½" at 50° F. Roadway bolt channel shall be filled with approved grout. Permitted for up to 50° skew.	Structural Accessories, Inc.	T = 1¾", A = 1⅝", B = 2⅛"

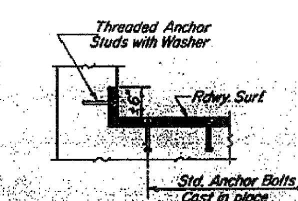


AT CURBS



AT SIDEWALK

*6" up except for west side of Piers 8 and 10 the neoprene ends at face of light standard. See Sht. # 6



AT ABUTMENT

TYPICAL END TREATMENTS

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

Feb 7 1980
EXAMINED [signature]
[illegible]
PASSED
[illegible]
APPROVED
DIRECTOR OF HIGHWAYS

EJ-2 2-10-77

NEOPRENE EXPANSION JOINTS (2½")
FOR EXPANSION LENGTH OF DECK [illegible]

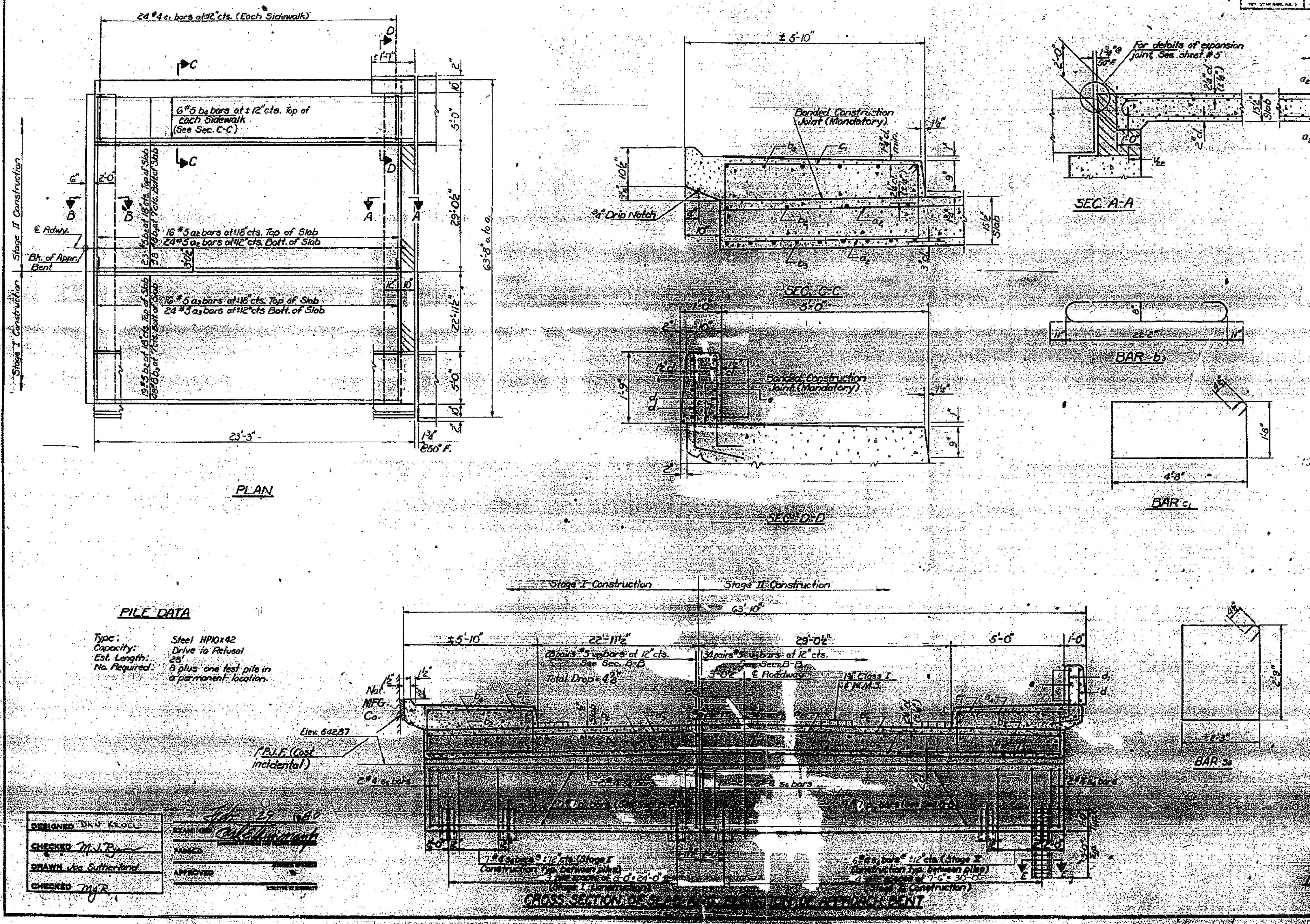
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO.	TOTAL SHEETS	SHEET NO.
10 OF 31	257	221

CONTRACT NO. 64B80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. 646	IBR-1	Whiteside	64	91	SHEET NO. 10 / 26 SHEETS



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a2	40	#5	33'-9"	straight
a3	40	#5	29'-4"	straight
b2	42	#5	22'-2"	straight
b3	106	#8	24'-0"	hooped
b4	12	#5	23'-0"	straight
c1	48	#4	13'-5"	closed
P1	7	#7	29'-4"	straight
P2	7	#7	33'-9"	straight
s6	53	#4	10'-9"	closed
v23	124	#5	2'-6"	straight
* Class X Concrete			Cu. Yd.	[illegible]
* Reinforcement Bars			Pound	[illegible]
Steel Piles (HP10x42)			Lin. Ft.	224
Test Pile Steel (HP10x42)			Each	[illegible]

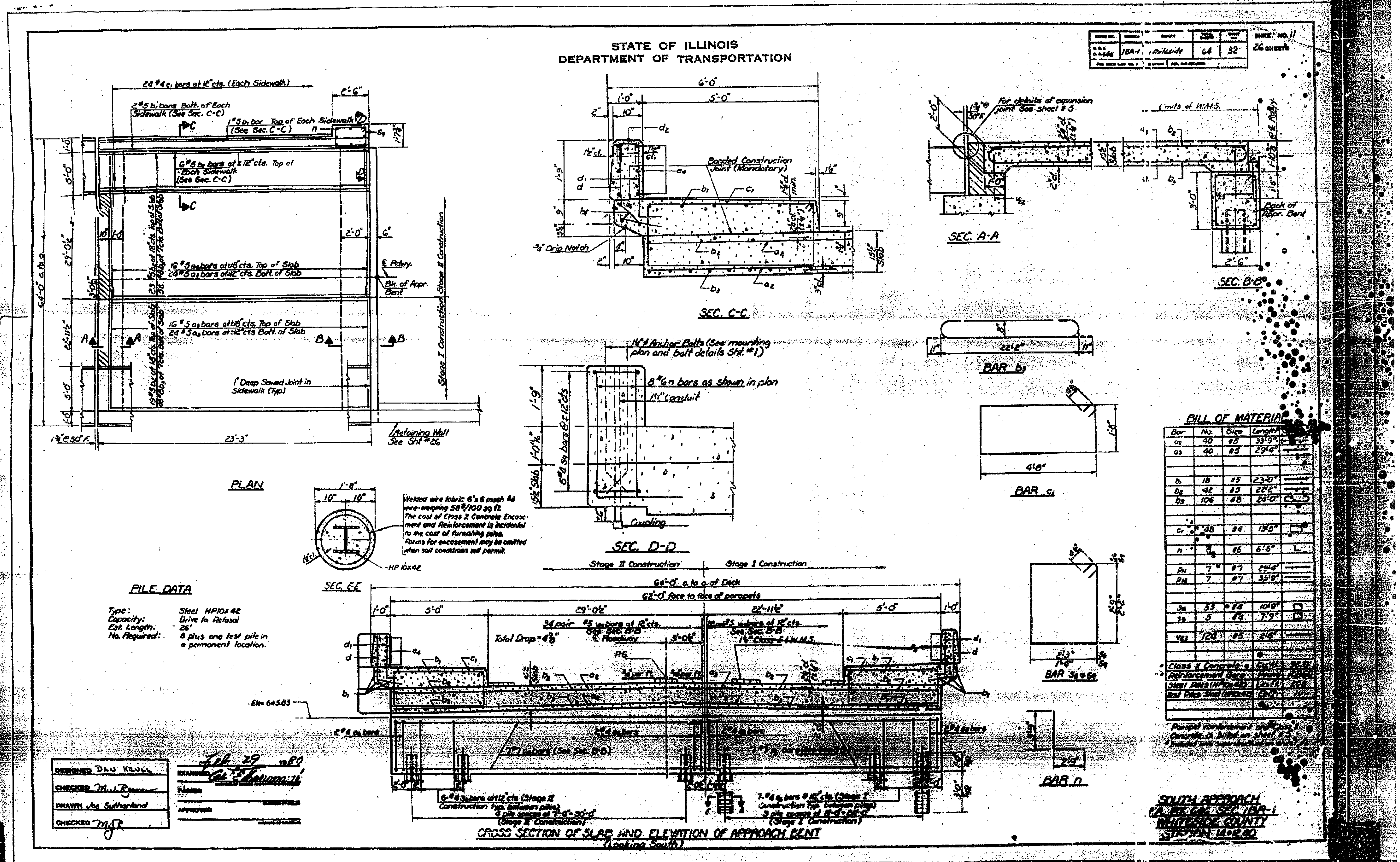
Parapet reinforcement and Class X Concrete is billed on sheet #...

SHEET NO. 11 OF 31	TOTAL SHEETS 257	SHEET NO. 222

CONTRACT NO. 64B80

FOR INFORMATION ONLY

FOR INFORMATION ONLY



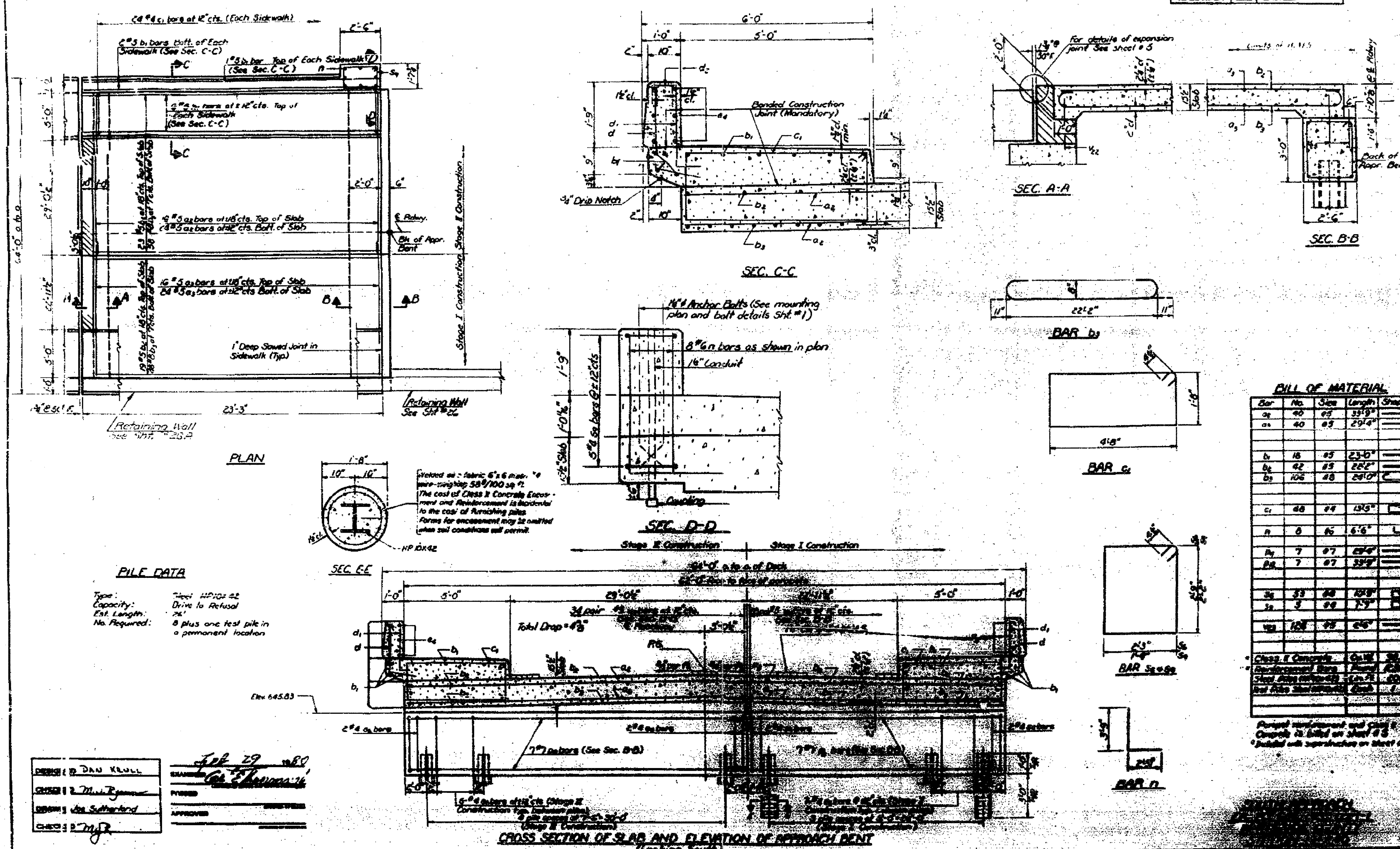
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLAN
SEC. C-C
SEC. A-A
SEC. B-B
BAR b1
BAR c1
BAR n
SEC. D-D
SEC. E-E
PILE DATA
Type: Steel HP10x42
Capacity: Drive to Refusal
Est. Length: 26'
No. Required: 8 plus one test pile in a permanent location.
BILL OF MATERIAL
Stage II Construction
Stage I Construction
CROSS SECTION OF SLAB AND ELEVATION OF APPROACH BENT
(Looking South)
SOUTH APPROACH
F.A. RT. 646 SEC. (BR-1
WHITESIDE COUNTY
STATION 14+12.80
DESIGNED DAN KRULL
DRAWN Joe Sutherland

SHEET NO. 12 OF 31	TOTAL SHEETS	SHEET NO.
	257	223
CONTRACT NO. 64880		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO. 11-A
26 SHEETS



BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a_2	40	#5	33'-9"	—
a_3	40	#5	29'-4"	—
b_1	18	#5	23'-0"	—
b_2	42	#5	28'-2"	—
b_3	106	#8	24'-0"	⊂⊃
c_1	48	#4	13'-5"	⊏
n	6	#6	6'-6"	L
B_1	7	#7	29'-4"	—
B_2	7	#7	33'-9"	—
S_8	33	#8	[illegible]	▯
S_9	5	#4	7'-9"	▯
[illegible]	128	#5	6'-6"	—

Class X Concrete	Cu. Yd.	[illegible]
Reinforcement Bars	Pound	[illegible]
Steel Piles HP10x42	Lin. Ft.	608
Test Piles Steel HP10x42	Each	1

Parapet reinforcement and Class X Concrete is billed on sheet #3.
* Included with superstructure on sheet #4.

DESIGNED: Dan Krull
CHECKED: M. [illegible]
DRAWN: Joe Sutherland
CHECKED: M.J.R.

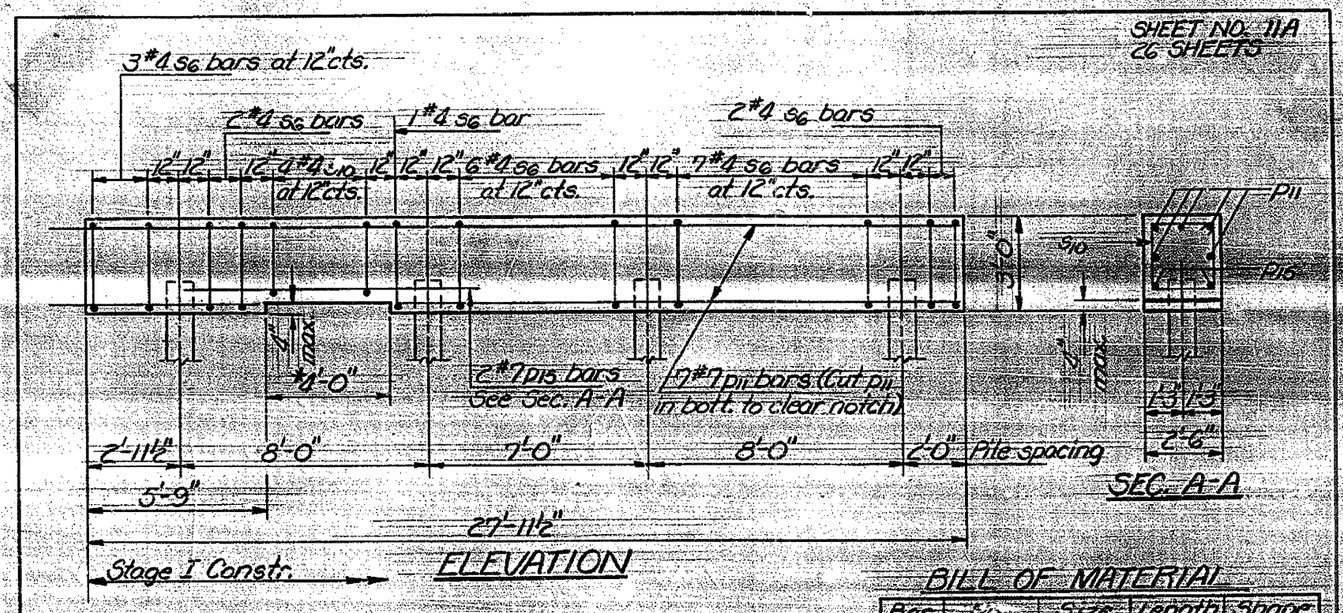
Feb 29 1980

Revised 5/5/81

SHEET NO. 13 OF 31	TOTAL SHEETS	SHEET NO.
	257	224
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

SHEET NO. 11A
26 SHEETS

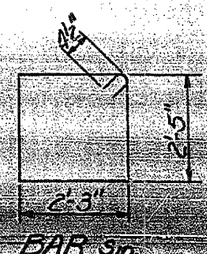


*4'-0" Notch for existing telephone conduit.

Note: Work this sheet for construction changes with sheet 11 of 26 in the Bridge Plans.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
P15	2	#7	9'-6"	
S10	4	#4	10'-1"	
Reinforcement Bars		Pound	110	



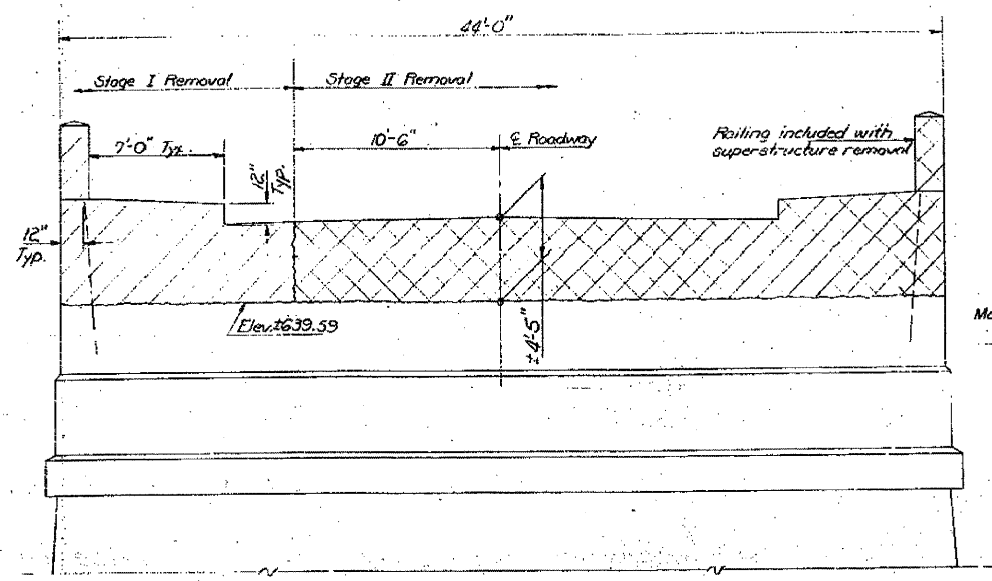
CONSTRUCTION CHANGE
SOUTH APPROACH BENT
FA RT 646 SEC 1BR-1
WHITESIDE COUNTY
STATION 14+17.40

SHEET NO. 14 OF 31	TOTAL SHEETS	SHEET NO.
	257	225
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

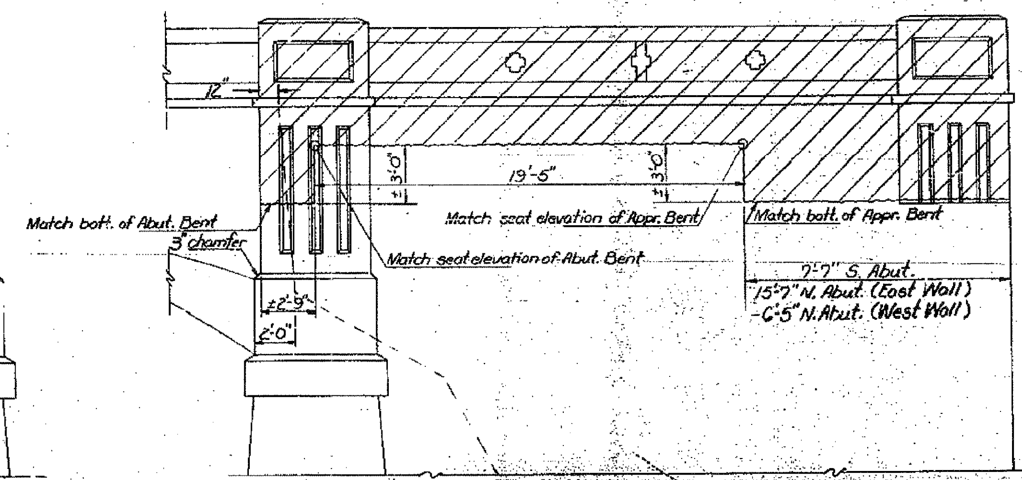
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A. 646	1BR-1	Whiteside	64	33

SHEET NO. 12
26 SHEETS



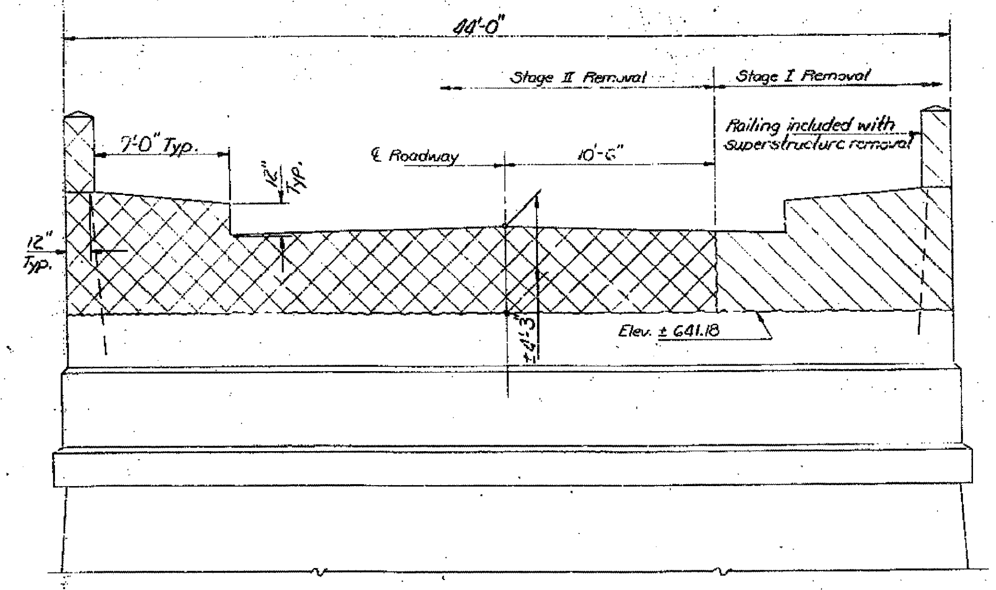
ELEVATION EXISTING NORTH ABUTMENT
Looking North



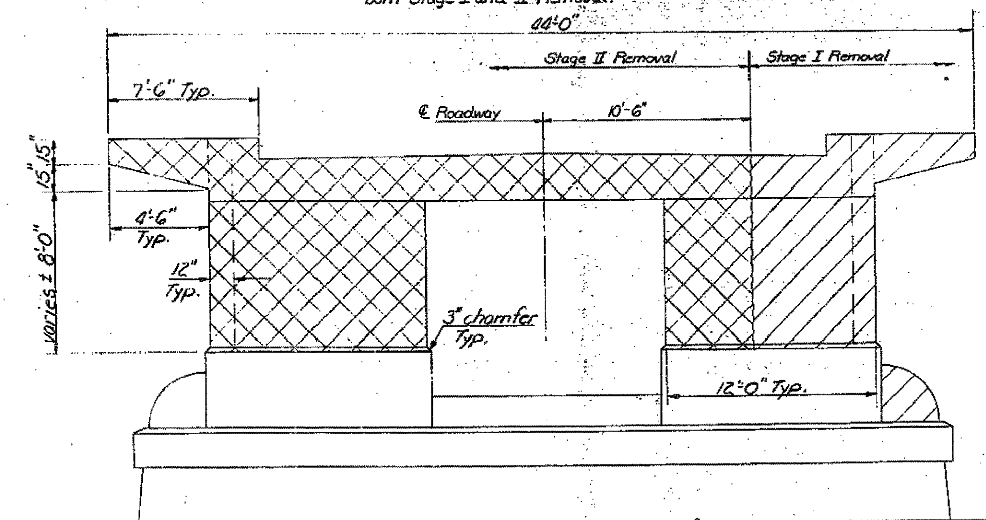
ELEVATION OF EXISTING ABUTMENT WALLS
Stage Removal is typical for both Abutments and also for both Stage I and II Removal.

REPAIR OF CONCRETE STRUCTURES

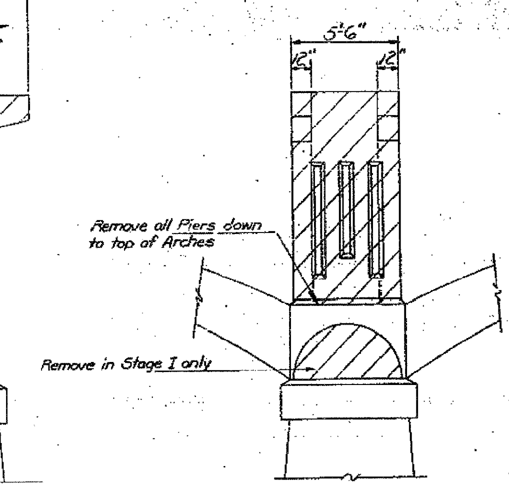
Type Repair	Location	Quantity
Arch Spall	Span 3	100 Sq. Ft.
	4	140 Sq. Ft.
	5	10 Sq. Ft.
	7	40 Sq. Ft.
	8	65 Sq. Ft.
	9	85 Sq. Ft.
	10	150 Sq. Ft.
	11	120 Sq. Ft.
	12	80 Sq. Ft.
Pier Spall	Pier 3	10 Sq. Ft.
	4	10 Sq. Ft.
	5	25 Sq. Ft.



ELEVATION EXISTING SOUTH ABUTMENT
Looking South



ELEVATION EXISTING PIERS
Looking South



END VIEW

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	310

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

Feb. 29 1980
EXAMINED Carl Ekmann
PASSED
APPROVED

STAGE REMOVAL
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

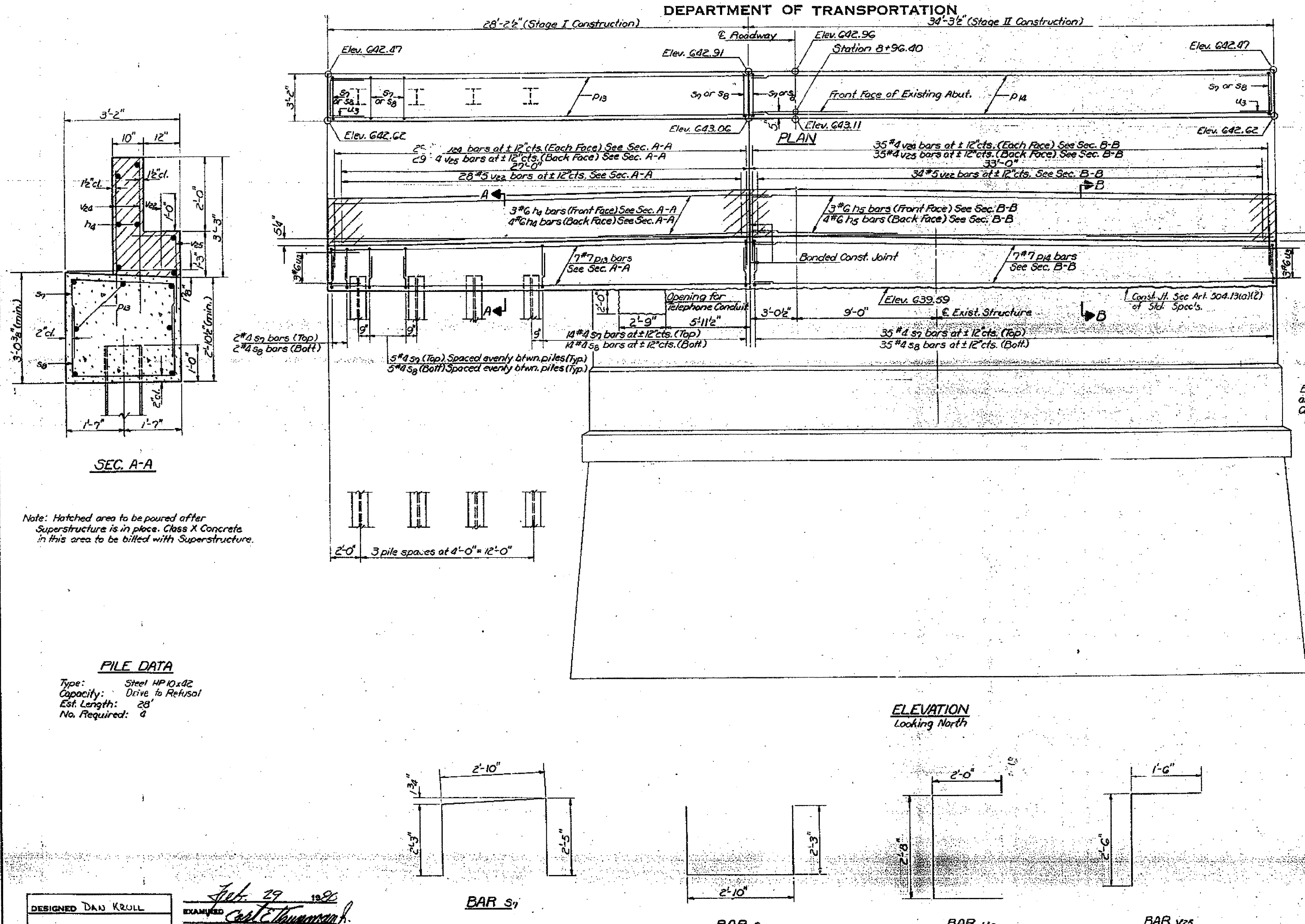
SHEET NO. 15 OF 31	TOTAL SHEETS	SHEET NO.
	257	226

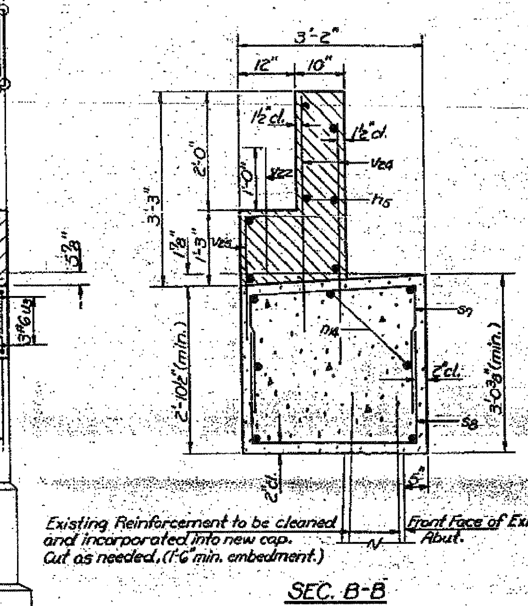
CONTRACT NO. 64B80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Route No.	Section	County	Total Sheets	Sheet No.
F.A. 646	IBR-1	Whiteside	64	34

SHEET NO. 13
26 SHEETS





BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h4	7	#6	29'-7"	
h5	7	#6	34'-2"	
p13	7	#7	29'-7"	
p14	7	#7	34'-2"	
s7	66	#4	7'-6"	
s8	66	#4	7'-4"	
u3	6	#6	6'-8"	
v22	62	#5	2'-0"	
v24	128	#4	4'-6"	
v25	64	#4	4'-0"	
Class X Concrete			Cu. Yd.	23.4
Reinforcement Bars			Pound	2980
Steel Piles HP 10x42			Lin. Ft.	112

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

Feb. 29 1980
EXAMINED Carl E. Kupferman Jr.
PASSED
APPROVED

NORTH ABUTMENT
F.A. RT. 646 SEC. IBR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO.	TOTAL SHEETS	SHEET NO.
16 OF 31	257	227

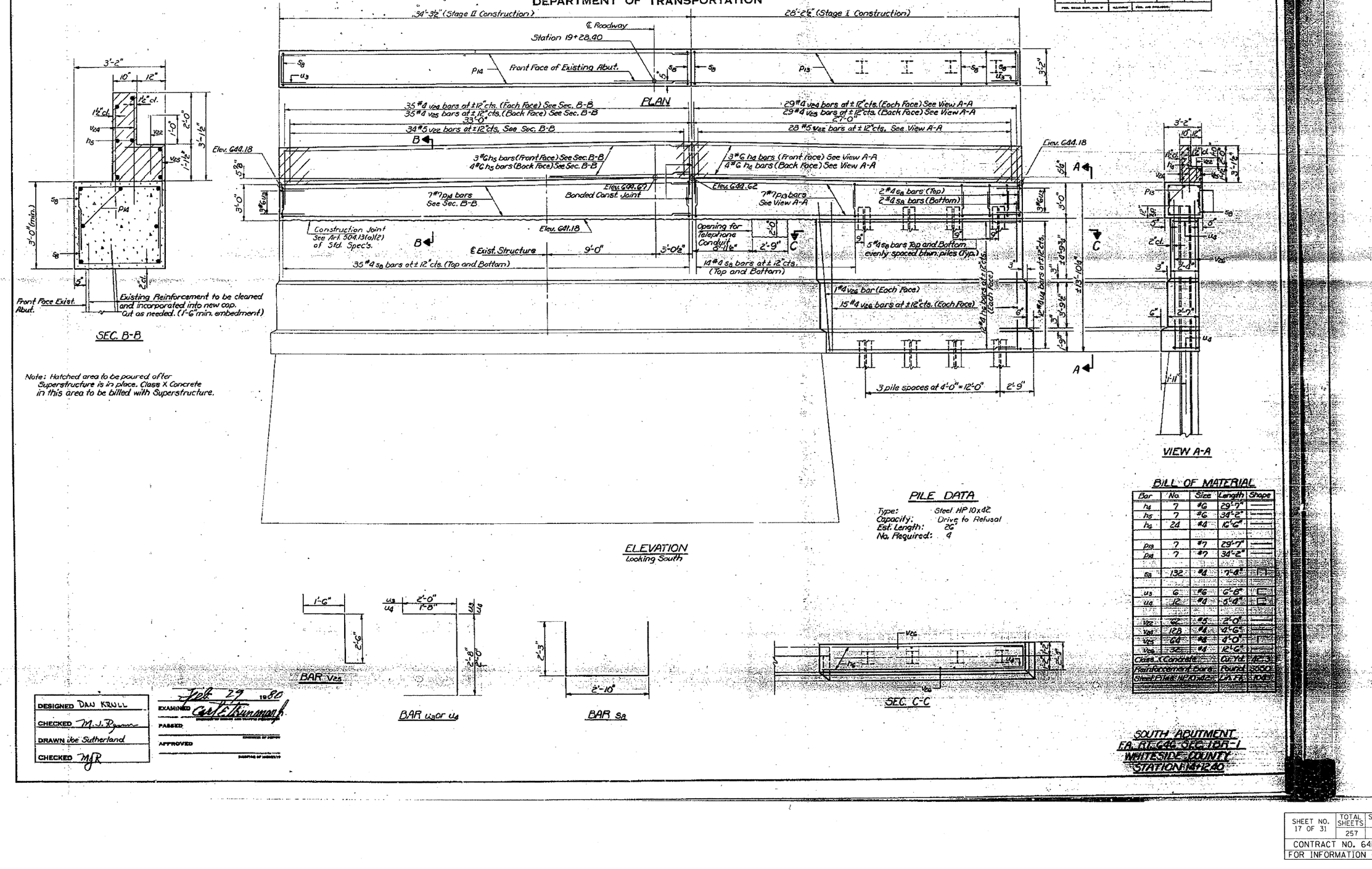
CONTRACT NO. 64B80

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DIVISION	COUNTY	TOTAL SHEETS	SHEET NO.
IBR-1	Whiteside	48	35

SHEET NO. 14
26 SHEETS



PILE DATA

Type: Steel HP 10x42
Capacity: Drive to Refusal
Est. Length: 26'
No. Required: 4

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h4	7	#6	29'-7"	
h5	7	#6	34'-2"	
h6	24	#4	12'-6"	
p13	7	#7	29'-7"	
p14	7	#7	34'-2"	
sa	132	#4	7'-6"	
u3	6	#6	6'-6"	
u4	12	#4	5'-6"	
Vee	68	#5	2'-0"	
Vea	128	#4	4'-6"	
Vs5	68	#8	4'-0"	
Vs6	30	#4	12'-6"	
Class X Concrete			Cu. Yd.	42.3
Reinforcement Bars			Pounds	5050
Steel Piles HP10x42			L.F. Ea.	104

SOUTH ABUTMENT
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

DESIGNED	DAN KROLL
CHECKED	M.J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

EXAMINED Feb 29 1980 Carl E. Brunsman
PASSED
APPROVED

SHEET NO. 17 OF 31	TOTAL SHEETS	SHEET NO.
	257	228
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.S. F.A. 646	18R-1	Whiteside	64	36
PROJ. ROAD DIST. NO. 7	ILLINOIS	PROJ. AND PROJECT		

SHEET NO. 15
26 SHEETS

PLAN

VIEW F-F

VIEW E-E

ELEVATION

SEC. G-G

SEC. C-C

SEC. D-D

SEC. B-B

SEC. A-A

BARS S_3, S_4 or S_5

BAR w or u_2

BAR h_2

BAR s, S_1 or S_2

BAR v_3

BAR u

BAR p_3 or p_2

BAR n

*Position these bars as close as possible to the top of the rebar cage.

***Cut Reinforcement as needed for the Conduit Opening.

PILE DATA
Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd: 6

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	28	#5	21'-4"	
h_1	16	#5	18'-0"	
h_2	32	#5	9'-3"	
h_3	32	#5	18'-9"	
n	12	#7	8'-6"	
p_1	7	#5	28'-8"	
p_2	8	#8	7'-4"	
p_3	3	#5	6'-10"	
p_4	2	#5	29'-8"	
p_5	2	#5	25'-1"	
p_6	13	#8	18'-6"	
p_7	8	#8	9'-7"	
p_8	3	#5	9'-1"	
p_{10}	7	#5	35'-6"	
s	28	#4	10'-5"	
s_1	108	#4	10'-11"	
s_2	8	#4	9'-3"	
s_3	7	#3	7'-10"	
s_4	7	#3	4'-10"	
s_5	7	#3	6'-0"	
u	6	#6	11'-2"	
u_1	60	#5	17'-11"	
u_2	14	#5	16'-11"	
v_2	34	#5	3'-6"	
v_3	32	#5	16'-6"	
v_4	114	#4	7'-7"	
v_5	82	#4	11'-2"	
Reinforcement Bars			Pound	8220
Class X Concrete			Cu. Yd.	175.4
Expansion Bolts 3/4" ϕ			Each	14
Steel Piles HP12x74			Lin. Ft.	102
Cofferdam			Each	1

DESIGNED	DKU KRULL
CHECKED	M.J.R.
DRAWN	Joe Sutherland
CHECKED	MJR

EXAMINED Feb 29 1980
PASSED
APPROVED

PIER #1
F.A. RT. 646 SEC. 18R-1
WHITESIDE COUNTY
STATION 14+12.40

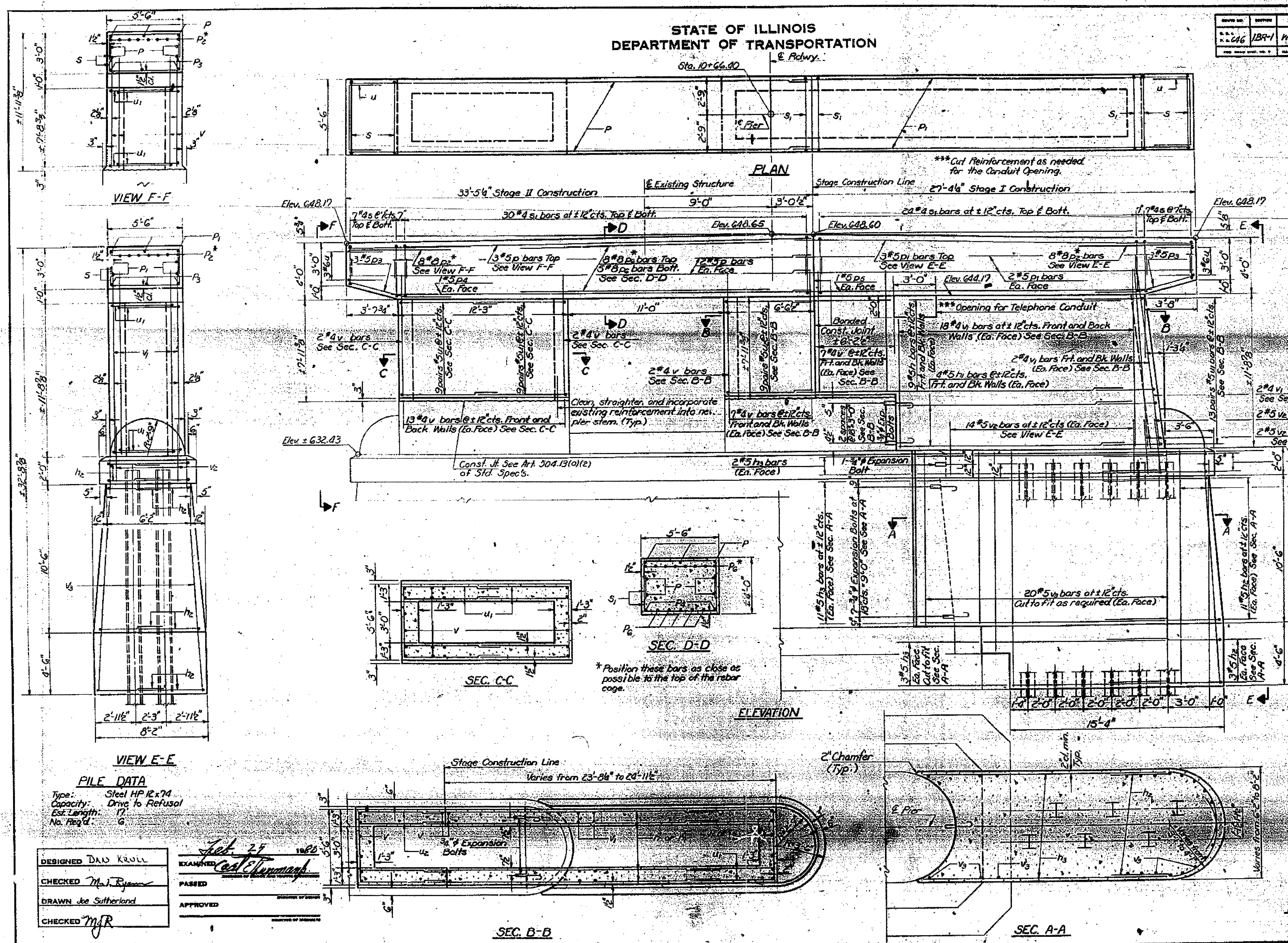
SHEET NO. 18 OF 31	TOTAL SHEETS 257	SHEET NO. 229
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RT.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	IBR-1	Whiteside	64	37

SHEET NO. 16 — 26 SHEETS



PILE DATA

Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17
No. Req'd.: 6

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	36	#5	21'-4"	
h1	16	#5	14'-0"	
h2	32	#5	9'-3"	
h3	32	#5	18'-9"	
p	7	#5	33'-3"	
p1	7	#5	28'-8"	
p2	16	#8	7'-4"	
p3	6	#5	6'-10"	
p4	2	#5	29'-8"	
p5	2	#5	25'-1"	
p6	13	#8	18'-6"	
s	28	#4	10'-5"	
s1	108	#4	10'-11"	
u	6	#6	11'-2"	
u1	62	#5	17'-11"	
u2	18	#5	16'-11"	
v	114	#4	9'-2"	
v1	82	#4	13'-0"	
v2	34	#5	3'-6"	
v3	32	#5	16'-6"	
Reinforcement Bars			Pound	8520
Class X Concrete			Cu. Yd.	180.2
Expansion Bolts ¾" Ø			Each	14
Steel Piles HP12x74			Lin. Ft.	102
Cofferdam			Each	1

PIER #2
F.A. RT. 646 SEC. IBR-1
WHITESIDE COUNTY
STATION 11+12.40

DESIGNED Dan Kroll
CHECKED M. J. Ryan
DRAWN Joe Sutherland
CHECKED MJR
EXAMINED Carl E. Thunman — Feb. 27, 1986
PASSED
APPROVED

SHEET NO. 19 OF 31	TOTAL SHEETS 257	SHEET NO. 230

CONTRACT NO. 64B80
FOR INFORMATION ONLY

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATE SEC.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
A.A.C.A.G.	IBR-1	Whiteside	64	38
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

SHEET NO. 17
26 SHEETS

PLAN

VIEW F-F

VIEW E-E

ELEVATION

SEC. B-B

SEC. C-C

SEC. D-D

SEC. A-A

BAR u_1 or u_2

BAR h_2

BAR s or s_1

BAR v_3

BAR u

BAR p_3

*Position these bars as close as possible to the top of the rebar cage.

***Cut Reinforcement as needed for the Conduit Opening.

***Opening for Telephone Conduit.

PILE DATA

Type: Steel HP12x74
Capacity: Drive to Refusal
Est. Length: 77'
No. Req'd.: 6

DESIGNED Dan Krull
CHECKED M.J. Ryan
DRAWN Joe Sutherland
CHECKED MJR

EXAMINED Carl E. Hammarth
PASSED
APPROVED

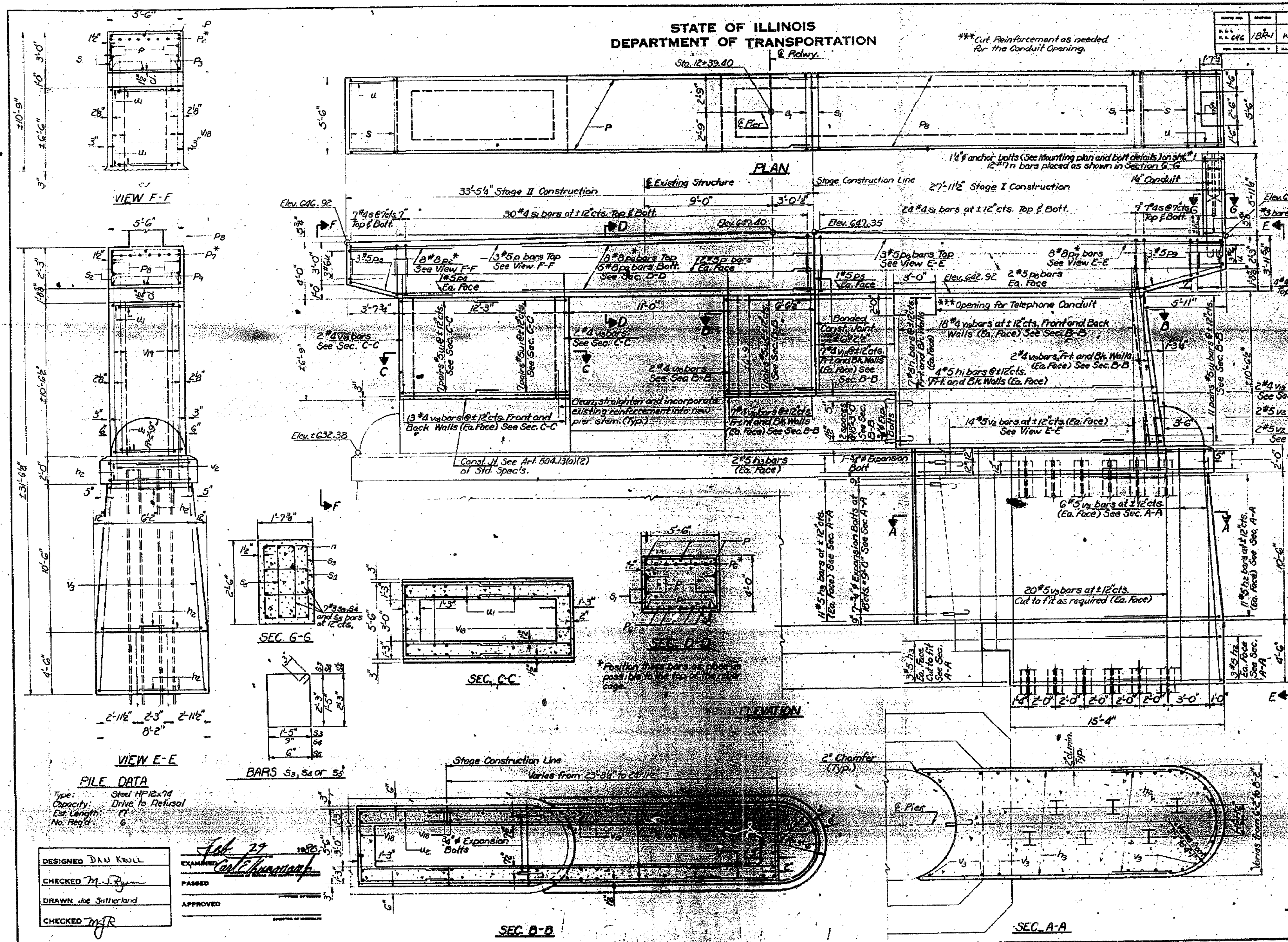
Jan 29 1980

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_1	32	#5	21'-4"	
h_3	16	#5	14'-0"	
h_2	32	#5	9'-3"	
h_3	32	#5	18'-9"	
p	7	#5	33'-3"	
p_1	7	#5	28'-8"	
p_2	16	#8	7'-4"	
p_3	6	#5	6'-10"	
p_4	2	#5	29'-8"	
p_5	2	#5	25'-1"	
p_6	13	#8	18'-6"	
s	28	#4	10'-5"	
s_1	108	#8	10'-11"	
u	6	#6	11'-2"	
u_1	36	#5	17'-11"	
u_2	16	#5	16'-11"	
v_2	34	#8	3'-6"	
v_3	82	#5	16'-6"	
v_6	118	#4	8'-9"	
v_7	82	#8	12'-7"	
Reinforcement Bars			Pound	9230
Class K Concrete			Cu. Yd.	118.5
Expansion Bolts 3/4" ϕ			Each	14
Cofferdam			Each	1
Steel Piles HP12x74			Lin. Ft.	102

PIER #3
F.A. RT. 646 SEC. IBR-1
WHITESIDE COUNTY
STATION 18+12.40

SHEET NO. 20 OF 31	TOTAL SHEETS	SHEET NO.
	257	231
CONTRACT NO. 64880		
FOR INFORMATION ONLY		


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
PLAN
ELEVATION
VIEW F-F
VIEW E-E
SEC. G-G
SEC. C-C
SEC. D-D
SEC. B-B
SEC. A-A
BARS S3, S4 or S5
PILE DATA
Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd: 6
DESIGNED Dan Krull
CHECKED
DRAWN Joe Sutherland
CHECKED
EXAMINED
PASSED
APPROVED
***Cut Reinforcement as needed for the Conduit Opening.
33'-5¼" Stage II Construction
27'-11½" Stage I Construction
***Opening for Telephone Conduit
Const. Jt. See Art. 504.13(a)(2) of Std. Spec's.

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	28	#5	21'-4"	
h1	16	#5	14'-0"	
h2	32	#5	9'-3"	
h3	32	#5	18'-9"	
n	12	#7	8'-6"	
p	7	#5	33'-3"	
p2	8	#8	7'-4"	
p3	3	#5	6'-10"	
p4	2	#5	29'-8"	
p5	2	#5	25'-1"	
p6	13	#8	18'-6"	
p7	8	#8	9'-7"	
p8	7	#5	30'-11"	
p9	3	#5	9'-1"	
s	28	#4	10'-5"	
s1	108	#4	10'-11"	
s2	8	#4	9'-3"	
s3	7	#3	7'-10"	
s4	7	#3	4'-10"	
s5	7	#3	6'-0"	
u	6	#6	11'-2"	
u1	50	#5	17'-11"	
u2	14	#5	16'-11"	
v2	34	#5	3'-6"	
v3	52	#5	16'-6"	
v18	114	#4	8'-1"	
v19	82	#4	11'-10"	

Item	Unit	Quantity
Reinforcement Bars	Pound	8280
Class X Concrete	Cu. Yd.	177.4
Expansion Bolts ¾"	Each	14
Steel Piles HP 12x74	Lin. Ft.	102
Cofferdam	Each	1

PIER #4
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO.	TOTAL SHEETS	SHEET NO.
21 OF 31	257	232

CONTRACT NO. 64880
FOR INFORMATION ONLY

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION	COUNTY	TOTAL SHEET NO.	PROJECT NO.
646 IBR-1	Whiteside	44	40

SHEET NO. 19
26 SHEETS

PLAN

VIEW F-F

VIEW E-E

ELEVATION

SEC. C-C

SEC. D-D

SEC. B-B

SEC. A-A

*Position these bars as close as possible to the top of the rebar cage.

***Cut Reinforcement as needed for the Conduit Opening.

PILE DATA
Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd: 6

DESIGNED Dan Krull
CHECKED M.N.R.
DRAWN Joe Sutherland
CHECKED M.J.R.

EXAMINED Feb 27 1980 Carl E. Hunnemeyer
PASSED
APPROVED

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	28	#5	21'-4"	
h1	16	#5	18'-0"	
h2	32	#5	9'-3"	
h3	32	#5	18'-9"	
p	7	#5	33'-3"	
p1	7	#5	28'-8"	
p2	16	#8	7'-4"	
p3	6	#5	6'-10"	
p4	2	#5	29'-8"	
p5	2	#5	25'-1"	
p6	13	#8	18'-6"	
s	28	#4	10'-3"	
s1	108	#8	70'-11"	
u	6	#6	11'-2"	
u1	30	#5	17'-11"	
u2	14	#5	16'-11"	
v2	34	#5	3'-6"	
v3	52	#5	16'-6"	
v4	114	#4	7'-6"	
v5	82	#4	11'-3"	
Reinforcement Bars			Pound	7820
Class X Concrete			Cu. Yd.	172.8
Expansion Bolts 3/4" ø			Each	16
Steel Piles HP 12x74			Lin. Ft.	102
Cofferdam			Each	1

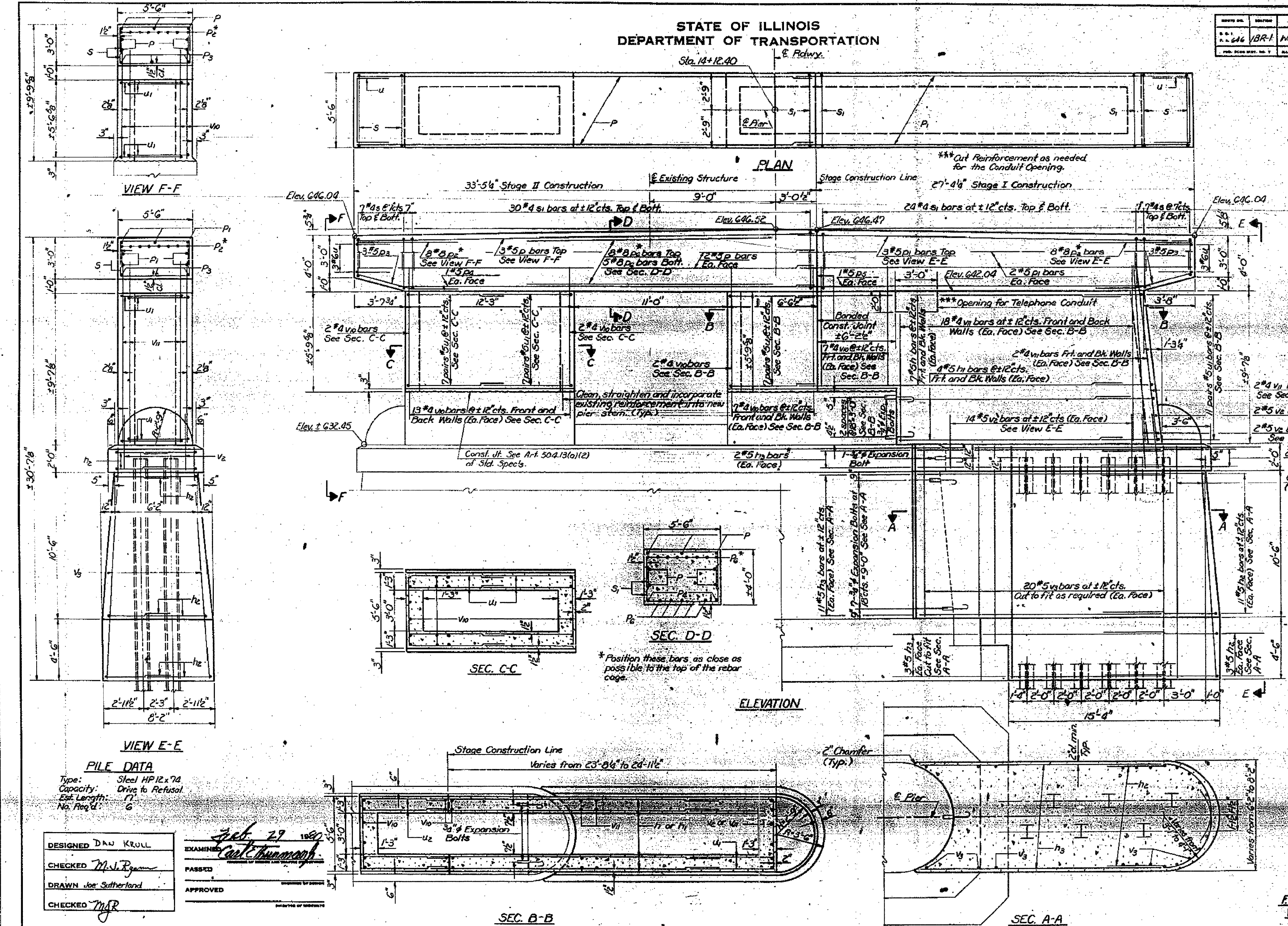
PIER #5
F.A. RT. 646, SEC. IBR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO. 22 OF 31	TOTAL SHEETS	SHEET NO.
	257	233
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	13R-1	Whiteside	64	41

SHEET NO. 20
26 SHEETS



BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	28	#5	21'-4"	
h1	16	#5	14'-0"	
h2	32	#5	9'-3"	
h3	32	#5	18'-9"	
p	7	#5	33'-3"	
p1	7	#5	28'-8"	
p2	16	#8	7'-4"	
p3	6	#5	6'-10"	
p4	2	#5	29'-8"	
p5	2	#5	25'-1"	
p6	13	#8	18'-6"	
s	28	#4	10'-5"	
s1	108	#4	10'-11"	
u	6	#6	11'-2"	
u1	50	#5	17'-11"	
u2	14	#5	16'-11"	
v2	34	#5	3'-6"	
v3	52	#5	16'-6"	
v10	114	#4	7'-2"	
v11	82	#4	10'-11"	
Reinforcement Bars			Pound	7780
Class X Concrete			Cu. Yd.	171.0
Expansion Bolts ¾" ϕ			Each	14
Steel Piles HP12x74			Lin. Ft.	102
Cofferdam			Each	1

PILE DATA

Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd.: 6

DESIGNED Dan Krull
CHECKED M.J. Ryan
DRAWN Joe Sutherland
CHECKED MJR

EXAMINED Feb. 29 1980 Carl Thurnau
PASSED
APPROVED

PIER #6
F.A. RT. 646 SEC. 13R-1
WHITESIDE COUNTY
STATION 14+12.40

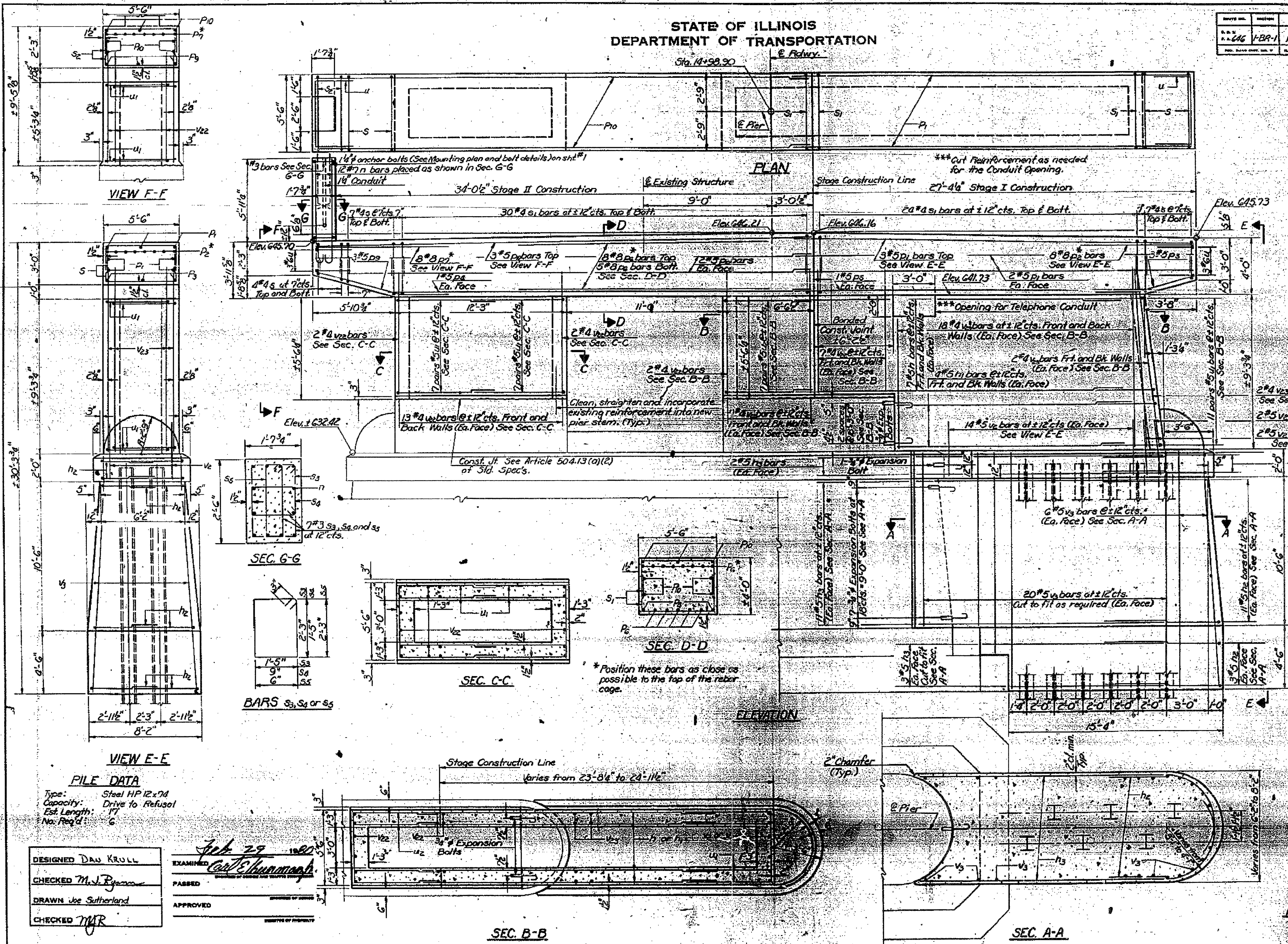
SHEET NO. 23 OF 31	TOTAL SHEETS	SHEET NO.
	257	234

CONTRACT NO. 64B80

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.R.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1-BR-1	Whiteside	64	42

SHEET NO. 21
26 SHEETS



BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	28	#5	21'-4"	
h1	16	#5	14'-0"	
h2	32	#5	9'-3"	
h3	32	#5	18'-9"	
n	12	#7	8'-6"	
p1	7	#5	28'-8"	
p2	8	#8	7'-4"	
p3	3	#5	6'-10"	
p4	2	#5	29'-8"	
p5	2	#5	25'-1"	
p6	13	#8	18'-6"	
p7	8	#8	9'-7"	
p9	3	#5	9'-1"	
p10	7	#5	35'-6"	
s	28	#4	10'-5"	
s1	108	#4	10'-11"	
s2	8	#4	9'-3"	
s3	7	#3	7'-10"	
s4	7	#3	4'-10"	
s5	7	#3	6'-0"	
u	6	#6	11'-2"	
u1	50	#5	17'-11"	
u2	14	#5	16'-11"	
v2	34	#5	3'-6"	
v3	52	#5	16'-6"	
v22	114	#4	6'-10"	
v23	82	#4	10'-8"	

Reinforcement Bars	Pound	8130
Class X Concrete	Cu. Yd.	171.8
Expansion Bolts ¾" ϕ	Each	14
Steel Piles HP 12x74	Lin. Ft.	102
Cofferdam	Each	1

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR

EXAMINED Feb 29 1980 Carl E. Thunman Jr.
PASSED
APPROVED

PIER #7
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO.	TOTAL SHEETS	SHEET NO.
24 OF 31	257	235

CONTRACT NO. 64880
FOR INFORMATION ONLY

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SECTION NO.	ROUTE	COUNTY	TOTAL SHEETS	SHEET NO.
R.B.I. 646	IBR-1	Whiteside	64	43
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 22
26 SHEETS

PLAN

VIEW F-F

VIEW E-E

ELEVATION

SEC. B-B

SEC. C-C

SEC. D-D

SEC. A-A

*Position these bars as close as possible to the top of the rebar cage.

**Cut reinforcement as needed for the Conduit Opening.

***Opening for Telephone Conduit

BAR u_1 or u_2

BAR h_2

BAR s or s_1

BAR v_3

BAR u

BAR p_3

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	24	#5	21'-4"	
h_1	16	#5	14'-0"	
h_2	32	#5	9'-3"	
h_3	32	#5	18'-9"	
p	7	#5	33'-3"	
p_1	7	#5	23'-8"	
p_2	16	#8	7'-4"	
p_3	6	#5	6'-10"	
p_4	2	#5	29'-8"	
p_5	2	#5	25'-1"	
p_6	13	#8	18'-6"	
s	28	#4	10'-5"	
s_1	108	#4	10'-11"	
u	6	#6	11'-2"	
u_1	44	#5	10'-11"	
u_2	12	#5	10'-11"	
v_2	34	#3	3'-6"	
v_3	56	#5	16'-6"	
v_{12}	110	#4	6'-7"	
v_{13}	82	#4	10'-5"	
Reinforcement Bars			Pound	14700
Class X Concrete			Cu. Yd.	168.0
Expansion Joints 6"			Foot	14.0
Steel Piles HP 12x74			Each	100
Cofferdam			Each	1

PILE DATA
Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd: 6

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Joe Sutherland
CHECKED	MJR
EXAMINED	Carl E. Brummagh
PASSED	
APPROVED	

Feb. 27, 1980

PIER #8
F.A. RT. 646 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

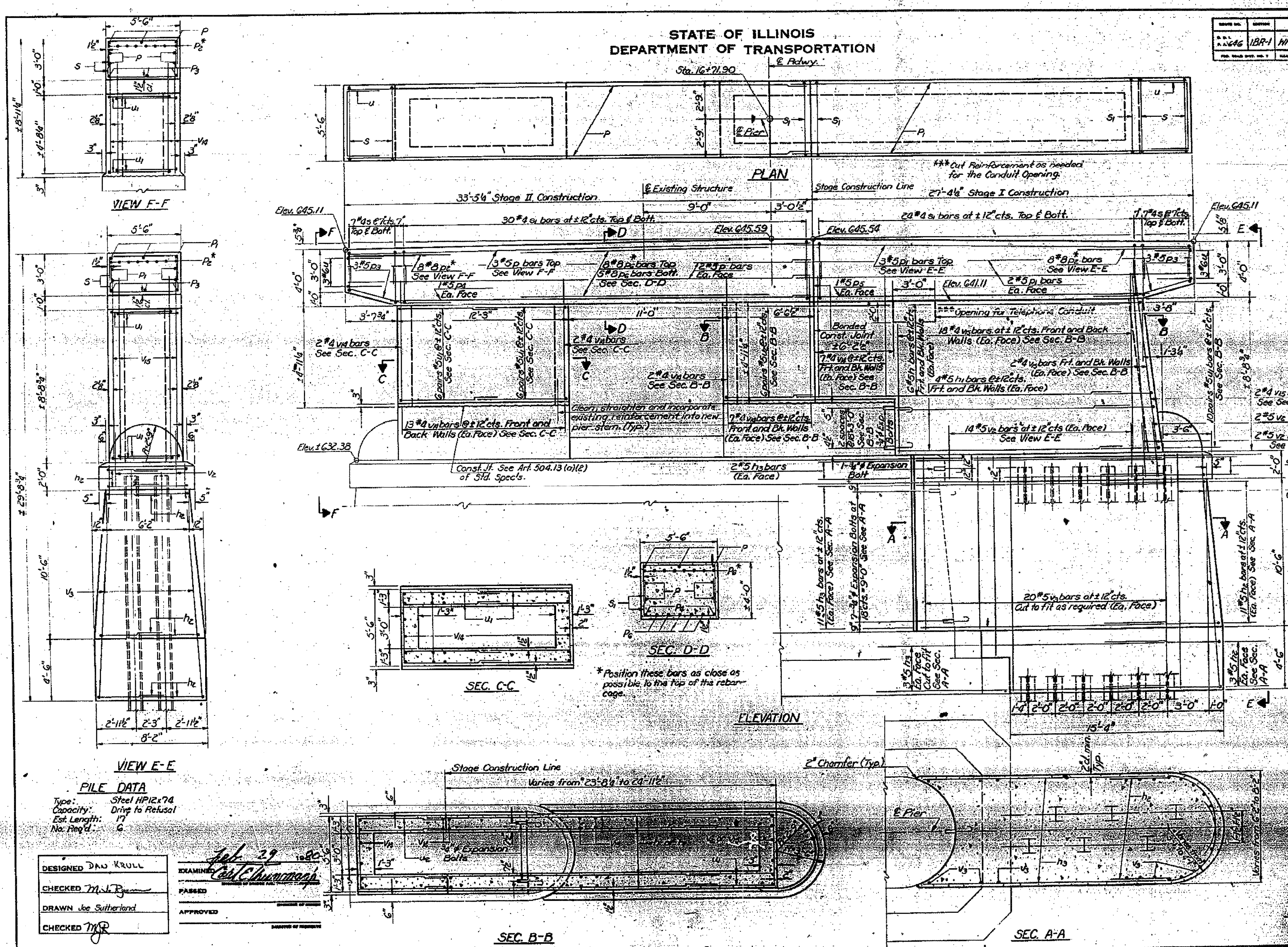
SHEET NO.	TOTAL SHEETS	SHEET NO.
25 OF 31	257	236
CONTRACT NO. 64880		
FOR INFORMATION ONLY		

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	IBR-1	Whiteside	64	44

SHEET NO. 23
26 SHEETS



PILE DATA

Type: Steel HP12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd.: 6

DESIGNED Dan Krull
CHECKED M.L. Ryan
DRAWN Joe Sutherland
CHECKED MJR
EXAMINED Feb. 29 1980 Carl E. Thunman
PASSED
APPROVED

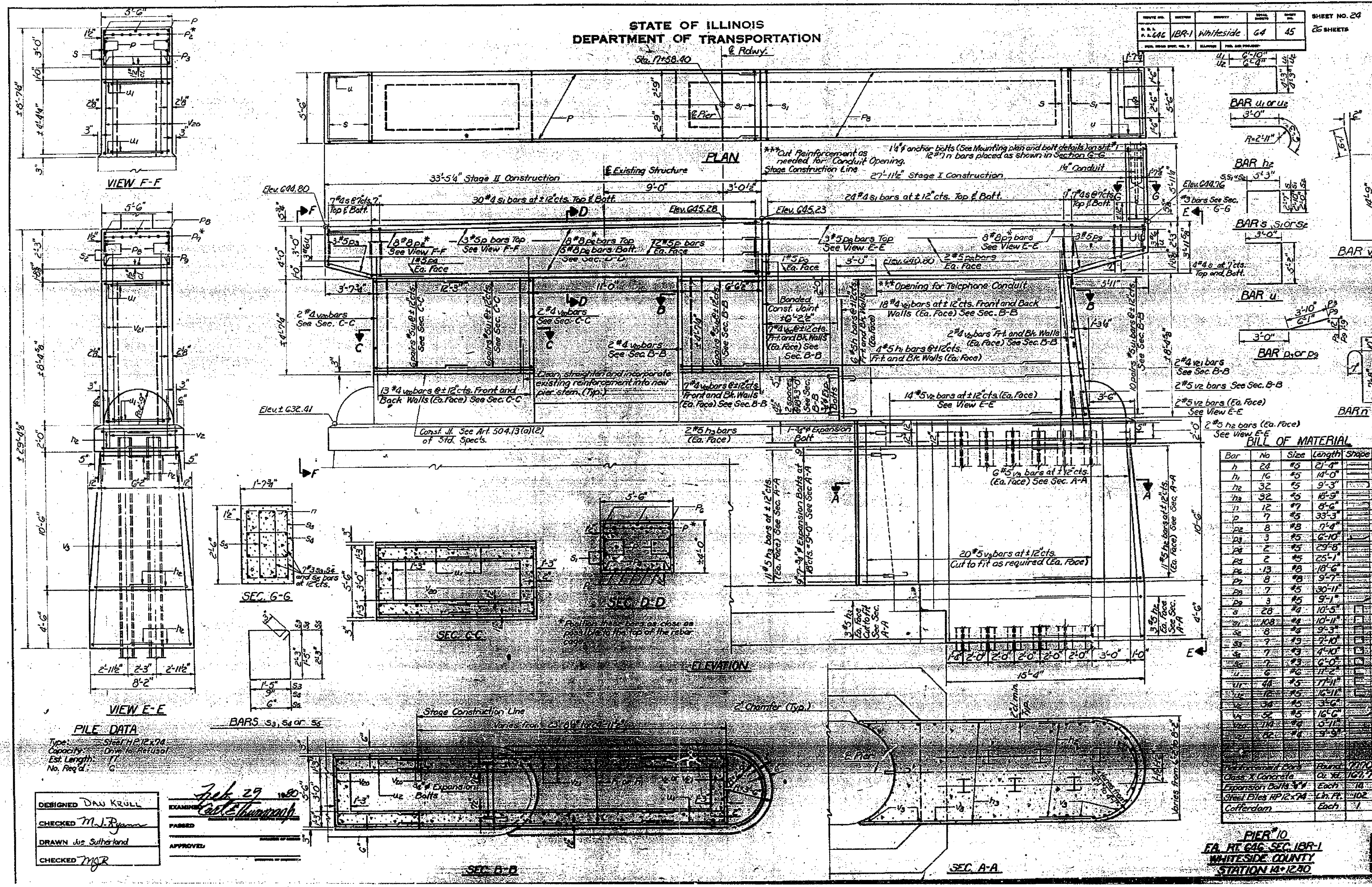
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	24	#5	21'-4"	
h1	16	#5	14'-0"	
h2	32	#5	9'-3"	
h3	32	#5	18'-9"	
p	7	#5	33'-3"	
p1	7	#5	28'-8"	
p2	16	#8	7'-4"	
p3	6	#5	6'-10"	
p4	2	#5	29'-8"	
p5	2	#5	25'-1"	
p6	13	#8	18'-6"	
s	28	#4	10'-5"	
s1	108	#4	10'-11"	
u	6	#6	11'-2"	
u1	44	#5	17'-11"	
u2	12	#5	16'-11"	
v2	34	#5	3'-6"	
v3	52	#5	16'-6"	
v14	114	#4	6'-3"	
v15	82	#4	10'-1"	
Reinforcement Bars			Pound	7430
Class X Concrete			Cu. Yd.	107.1
Expansion Bolts ¾"			Each	14
Steel Piles HP12x74			Lin. Ft.	102
Cofferdam			Each	1

PIER #9
F.A. RT. 646 SEC. IBR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO. 26 OF 31	TOTAL SHEETS	SHEET NO.
	257	237

CONTRACT NO. 64B80
FOR INFORMATION ONLY


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
F.A. RT. 646 | IBR-1 | Whiteside | 64 | 45
SHEET NO. 24
26 SHEETS
PLAN
ELEVATION
VIEW F-F
VIEW E-E
SEC. G-G
SEC. C-C
SEC. D-D
SEC. B-B
SEC. A-A
BARS S_3, S_4 or S_5
PILE DATA
Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 17'
No. Req'd.: 6
DESIGNED Dan Krull
CHECKED M. J. Ryan
DRAWN Joe Sutherland
CHECKED MJR
Feb. 29 1980
PIER #10
F.A. RT. 646 SEC. IBR-1
WHITESIDE COUNTY
STATION 14+12.80

BILL OF MATERIAL

Bar	No	Size	Length	Shape
h	24	#5	21'-4"	
h_1	16	#5	14'-0"	
h_2	32	#5	9'-3"	
h_3	32	#5	16'-9"	
n	12	#7	8'-6"	
p	7	#5	33'-3"	
p_2	8	#8	7'-4"	
p_3	3	#5	6'-10"	
p_4	2	#5	29'-8"	
p_5	2	#5	25'-1"	
p_6	13	#8	18'-6"	
p_7	8	#8	9'-7"	
p_8	7	#5	30'-11"	
p_9	3	#5	9'-1"	
s	28	#4	10'-5"	
s_1	108	#4	10'-11"	
s_2	8	#4	9'-3"	
s_3	7	#3	7'-10"	
s_4	7	#3	4'-10"	
s_5	7	#3	6'-0"	
u	6	#6	11'-2"	
u_1	44	#5	17'-11"	
u_2	12	#5	16'-11"	
v_2	34	#5	3'-6"	
v_3	52	#5	16'-6"	
v_{20}	114	#4	5'-11"	
v_{21}	82	#4	9'-9"	
[illegible]				
[illegible]				
Reinforcement Bars			Pound	7770
Class X Concrete			Cu. Yd.	161.7
Expansion Bolts ¾"φ			Each	14
Steel Piles HP 12x74			Lin. Ft.	102
Cofferdam			Each	1

FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SHEET NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.P. 646	12R-1	Whiteside	64	46

SHEET NO. 25
26 SHEETS

PLAN

VIEW F-F

VIEW E-E

ELEVATION

SEC. C-C

SEC. D-D

SEC. B-B

SEC. A-A

BAR u_1 or u_2

BAR h_2

BAR s or s_1

BAR v_3

BAR u

BAR p_3

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	20	#5	21'-4"	
h_1	16	#5	14'-0"	
h_{2e}	32	#5	9'-3"	
h_3	32	#5	18'-9"	
p	7	#5	33'-3"	
p_1	7	#5	28'-8"	
p_2	16	#8	7'-4"	
p_3	6	#5	6'-10"	
p_4	2	#5	29'-8"	
p_5	2	#5	25'-1"	
p_6	13	#8	18'-6"	
s	28	#4	10'-5"	
s_1	108	#4	10'-11"	
u	6	#6	71'-2"	
u_1	38	#5	17'-11"	
u_2	10	#5	16'-11"	
v_2	34	#5	31'-6"	
v_3	32	#5	16'-6"	
v_6	114	#4	5'-8"	
v_7	82	#4	9'-6"	
Reinforcement Bars			Pound	7110
Class X Concrete			Cu. Yd.	64.3
Expansion Bolts 1" ø			Each	142
Steel Piles HP 12x74			Lin. Ft.	102
Cofferdam			Each	1

PILE DATA
Type: Steel HP 12x74
Capacity: Drive to Refusal
Est. Length: 77'
No. Req'd: 6

DESIGNED	Dan Krull	
CHECKED	M.J. Ryan	
DRAWN	Joe Sutherland	
CHECKED	MJR	
EXAMINED	Feb. 29	1980
PASSED		
APPROVED		

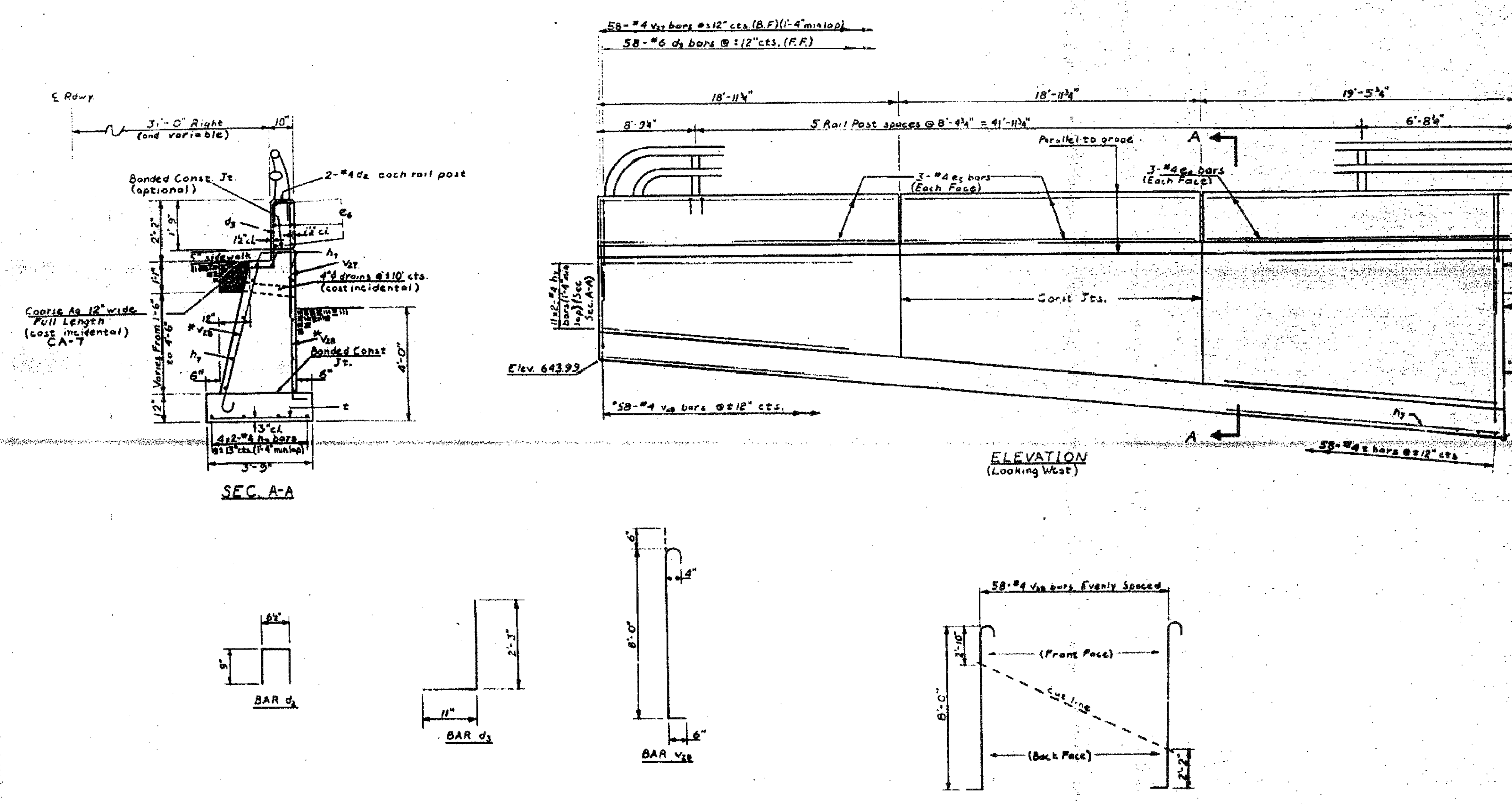
PIER # 11
F.A. RTE. 646 SEC. 12R-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO. 28 OF 31	TOTAL SHEETS	SHEET NO.
	257	239
CONTRACT NO. 64880		
FOR INFORMATION ONLY		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1BR-1	Whiteside	64	[illegible]

SHEET NO. 26 OF [illegible] SHEETS



***Field Cutting Diagram**

Order v_{28} bars full length and cut to fit in the field as shown. Use the remaining bars in the opposite face.

NOTES:
Bars indicated thus 4x2-#4 etc. indicates 4 lines of bars with 2 lengths per line.
5" sidewalk is not included in this contract.
Maximum soil pressure = ±1.5 ksf

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d_2	12	[illegible]	2'-1"	[illegible]
d_3	58	[illegible]	[illegible]-2"	[illegible]
e_5	12	[illegible]	18'-7"	[illegible]
e_6	[illegible]	[illegible]	19'-3"	[illegible]
h_7	50	[illegible]	23'-2"	[illegible]
t	58	[illegible]	3'-6"	—
v_{27}	58	#4	[illegible]	[illegible]
v_{28}	58	#4	[illegible]-0"	[illegible]
Class X Concrete			[illegible]	
Reinforcement Bars			[illegible]750	

RETAINING WALL [illegible]
F.A.I. RT. 646 [illegible]
WHITESIDE [illegible]
STATION 14+[illegible]

DESIGNED	Dan Krull
CHECKED	M. J. Ryan
DRAWN	Dan Krull
CHECKED	M.J.R.

EXAMINED Feb. 29 1980 Carl E. Thunman
PASSED
APPROVED

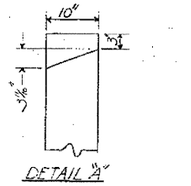
SHEET NO. 29 OF 31	TOTAL SHEETS	SHEET NO.
	257	240

CONTRACT NO. 64880

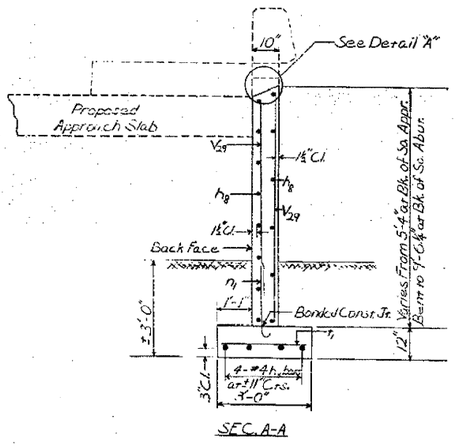
FOR INFORMATION ONLY

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

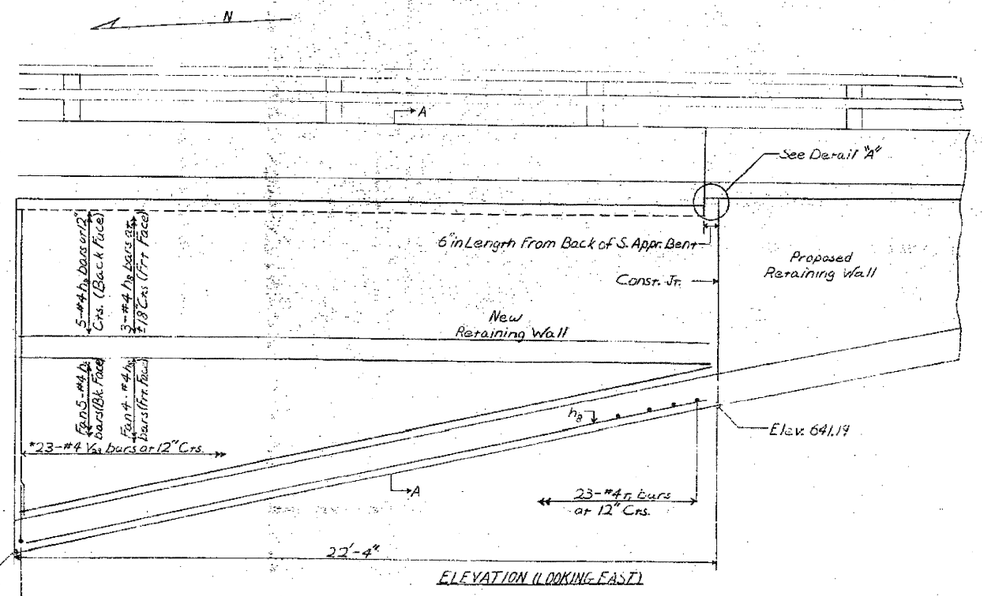
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S. B. I.				SHEET NO. 26A
F. A.				26 SHEETS
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		



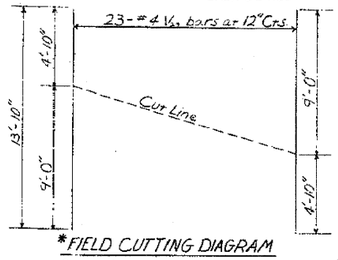
DETAIL "A"



SEC. A-A

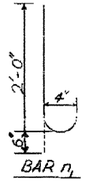


ELEVATION (LOOKING EAST)



*FIELD CUTTING DIAGRAM

Order V_{24} bars full length and cut to fit in the field as shown. Use the remaining bars in the opposite face.



BAR n_1

Notes:
Maximum soil pressure = ±0.71 KSF

BILL OF MATERIALS

Bar	No	Size	Length	Shape
h_2	21	#4	22'-0"	
n_1	23	#4	2'-6"	
n_1	23	#4	2'-8"	
V_{24}	23	#4	13'-10"	
Class X Concrete		Cu. Yd.	7.5	
Reinforcement Bars		Pound	600	

DESIGNED	Mich. Ryan
CHECKED	Lance Kidd
DRAWN	Lance Kidd
CHECKED	MR

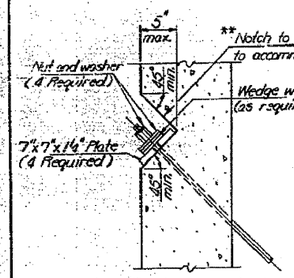
EXAMINED April 27 1984
Carl E. Thomason Jr.
DIRECTOR OF HIGHWAYS AND STATE ENGINEER
PASSED
APPROVED
DIRECTOR OF HIGHWAYS

RETAINING WALL DETAIL
FA RT 646 Sec 1BR-1
WHITESIDE COUNTY
STATION 14+12.46

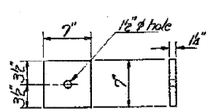
SHEET NO.	TOTAL SHEETS	SHEET NO.
30 OF 31	257	241
CONTRACT NO. 64B80		
FOR INFORMATION ONLY		

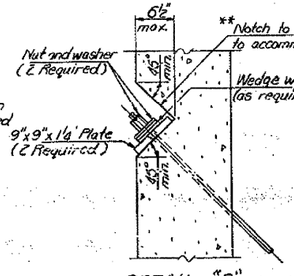
FOR INFORMATION ONLY

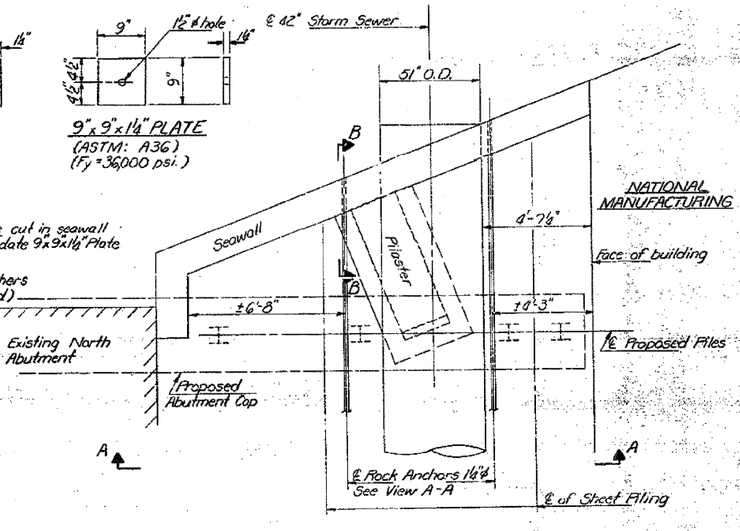
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

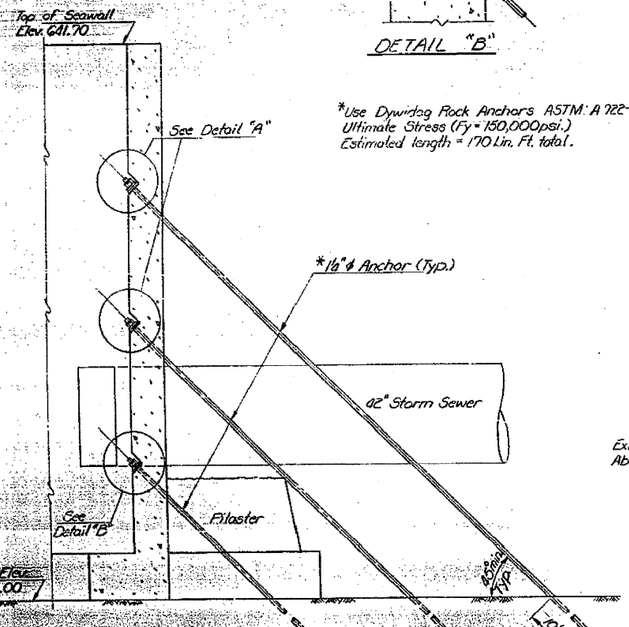


** After placement of anchors fill notch in wall with a mixture of sand and approved epoxy mortar.

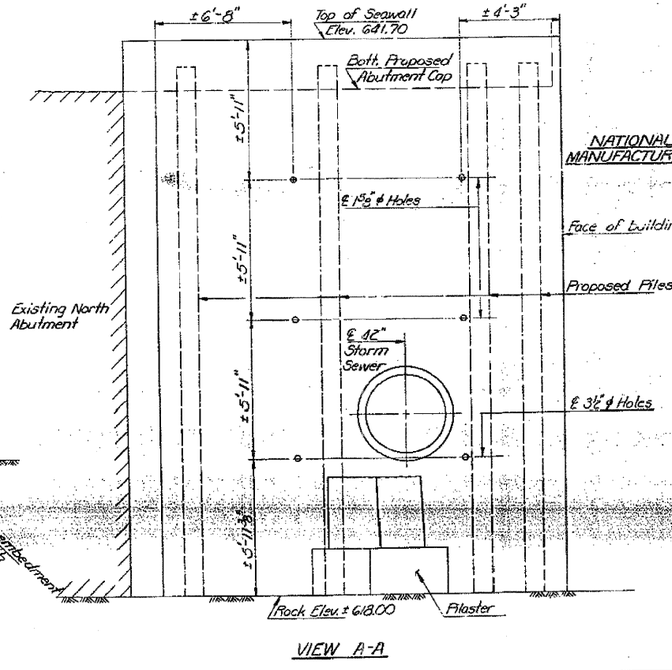








*Use Dywidag Rock Anchors ASTM: A 722-75.
Ultimate Stress (Fy = 150,000psi.)
Estimated length = 1710 Lin. Ft. total.



Notes:
Use Dywidag resin anchor installation procedures.
1.) Drill and clean hole.
2.) Insert resin cartridges: Use fast setting resin for embedment length.
3.) Insert Dywidag Anchor: Spin anchor with drill tool at about 100 rpm. Advance anchor through cartridges while spinning. Spin for 30 to 60 seconds after reaching the bottom of the hole. Total spinning time should not exceed gel time.
4.) Mount bearing plate and secure plate with anchor nut. Wedge washers are required when anchor plate is not perpendicular to anchor.
5.) Stress test the bottom anchor in each row: Stress each anchor to 49 kips after resin has cured.
6.) All anchor nuts shall be tightened to a snug fit.

DESIGNED	Mike Ryan
CHECKED	Jeffrey Duncan
DRAWN	Joe Sutherland
CHECKED	GR

19
EXAMINED
PASSED
APPROVED

SEAWALL ANCHOR DETAILS
F.A. RT. 686 SEC. 1BR-1
WHITESIDE COUNTY
STATION 14+12.40

SHEET NO. 31 OF 31	TOTAL SHEETS	SHEET NO.
	257	242
CONTRACT NO. 64880		
FOR INFORMATION ONLY		

CATCH BASIN OR INLETS TO BE ADJUSTED OR RECONSTRUCTED
(DETAILS FOR CURB & GUTTER REPLACEMENT)

CONCRETE CURB AND GUTTER SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, STANDARD 606001 AND THIS DRAWING.

CLASS SI CONCRETE SHALL BE USED THROUGHOUT. A HOLE 40 (1 1/2) IN DIAMETER AND 225 (9) DEEP SHALL BE DRILLED IN THE EXISTING CONCRETE CURB AS SHOWN. A 32x450 (1 1/4 X 18) SMOOTH DOWEL BAR SHALL BE GROUTED IN THE HOLE LONGITUDINALLY.

JOINTS OF A TYPE SIMILAR TO THAT IN THE UNDERLYING PAVEMENT (EXPANSION OR CONTRACTION) SHALL BE INSTALLED IN THE CONCRETE CURB IN ALIGNMENT WITH THE JOINTS IN THE PAVEMENT.

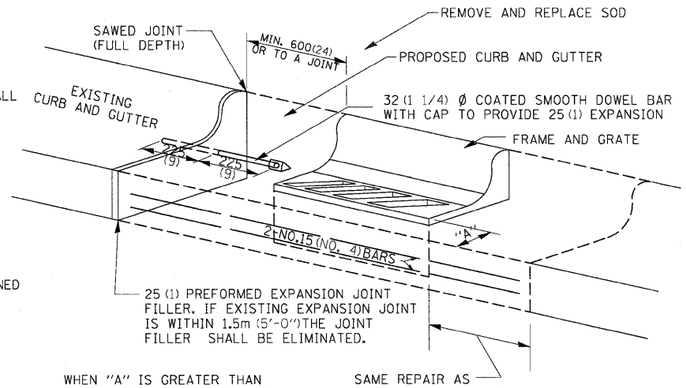
THE PROPOSED CONFIGURATION OF THE CURB AND GUTTER SHALL MATCH THAT REMOVED.

THE LOCATION OF THE DOWEL BAR SHALL BE DETERMINED BY THE ENGINEER.

ALL EXISTING TIE BARS IN EDGE OF PAVEMENT SLAB THRU REPLACEMENT AREA SHALL BE CUT OFF.

THE WORK SHALL BE DONE IN ACCORDANCE WITH SECTION 602 OF THE STANDARD SPECIFICATIONS AND INCLUDES THE REMOVAL AND REPLACEMENT OF SOD, CONCRETE PAVEMENT AND/OR CURB AND GUTTER ADJACENT TO CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AND SHALL BE INCLUDED IN THE PAY ITEM OF CATCH BASINS OR INLETS TO BE ADJUSTED OR RECONSTRUCTED AS SPECIFIED.

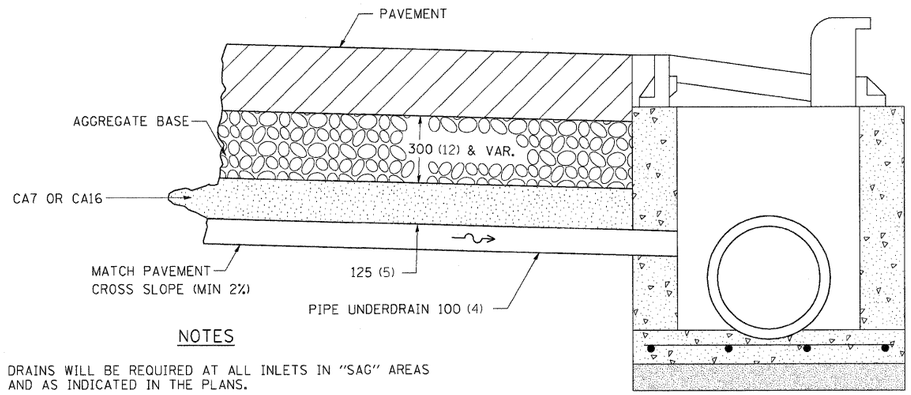
REVISED - 9-07-10



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

CATCH BASIN OR INLETS TO BE ADJUSTED OR RECONSTRUCTED 17.4

DRAIN FOR AGGREGATE BASES IN URBAN AREAS



NOTES

DRAINS WILL BE REQUIRED AT ALL INLETS IN "SAG" AREAS AND AS INDICATED IN THE PLANS.

THIS WORK SHALL BE COMPLETED ACCORDING TO SECTION 601 OF THE STANDARD SPECIFICATIONS.

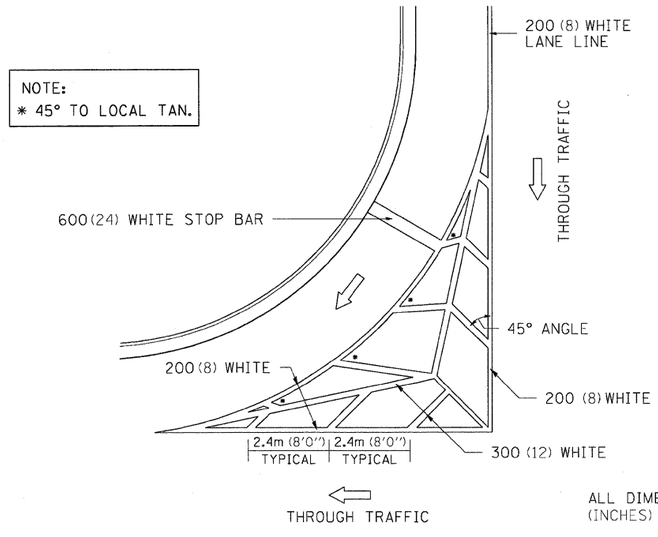
THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER METER (FOOT) FOR PIPE UNDERDRAINS OF THE DIAMETER SPECIFIED WHICH PRICE SHALL INCLUDE THE CA7 OR CA16 AND THE CONNECTION TO THE INLET.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 4-7-99

DRAIN FOR AGGREGATE BASES IN URBAN AREAS 88.4

TYPICAL MARKING FOR PAINTED ISLANDS



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

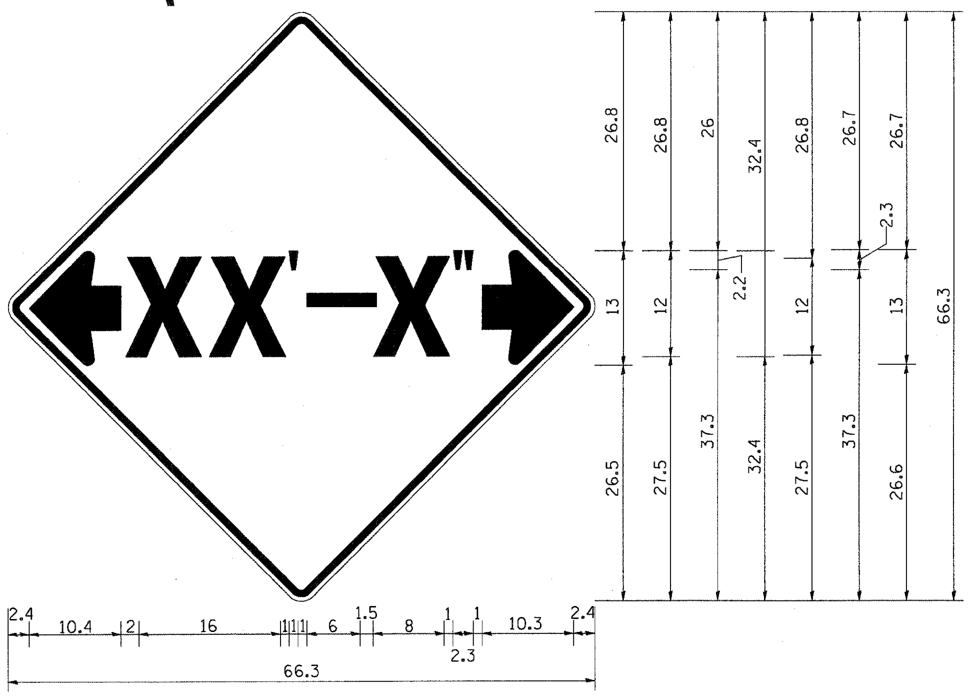
REVISED - 2-07-05

TYPICAL MARKING FOR PAINTED ISLANDS 93.4

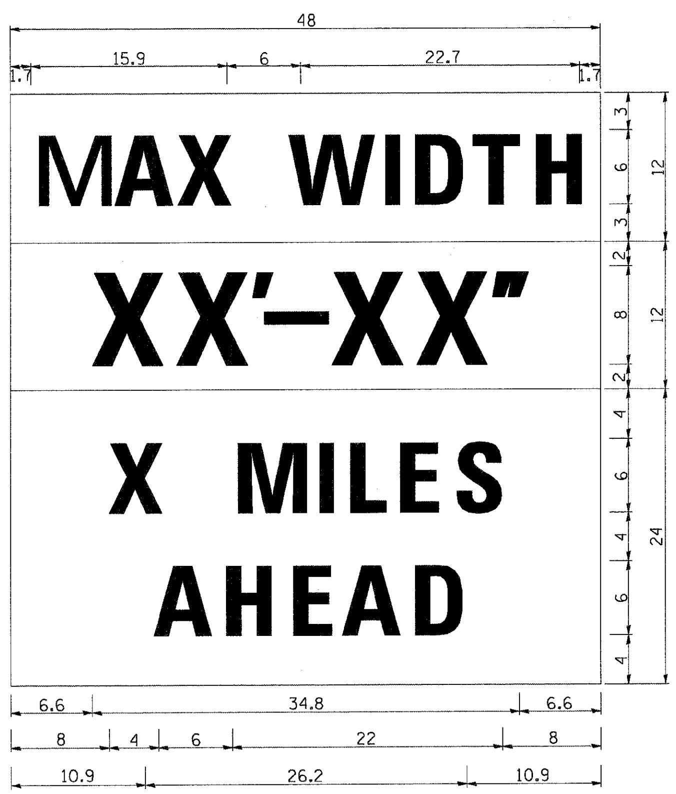
REVISED -	**REGION 2 / DISTRICT 2 STANDARD**				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -					646	1B-2	WHITESIDE	257	243
REVISED -							CONTRACT NO. 64B80		
REVISED -	SCALE: 50.00 ' / IN.	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 7/14/2011

INFORMATIONAL WARNING SIGN (FOR NARROW TRAVEL LANES)



NOTES
W12-2 - Horizontal Clearance Sign 48.0" across sides, 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange; Standard Arrow Custom 10.4" X 8.1" 180° Black 11 Inch D Series Lettering; Standard Arrow Custom 10.4" X 8.1" 0°



W12-I103 (Width is 8D);
No border, Black on White;
[MAX WIDTH] D;

No border, Black on Orange;
[XX'-XX"] D;

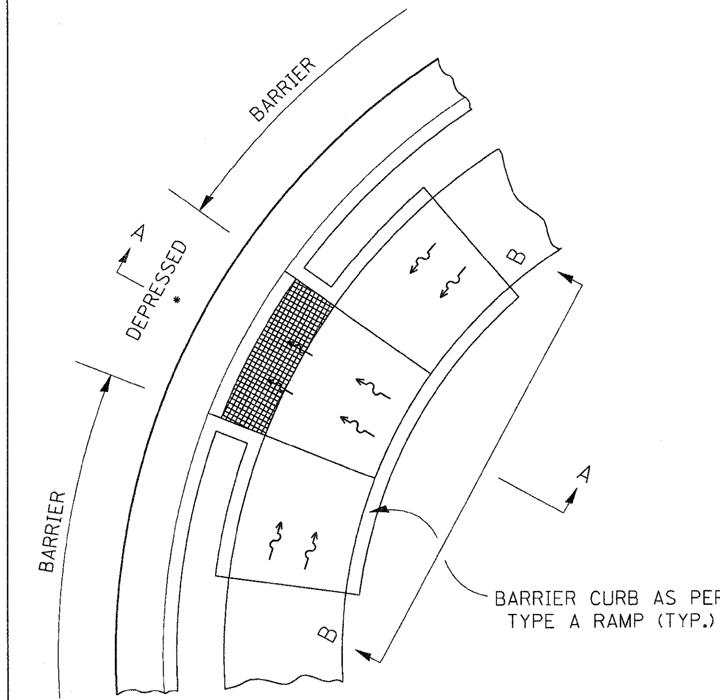
No border, Black on White;
[X MILES] D; [AHEAD] D;

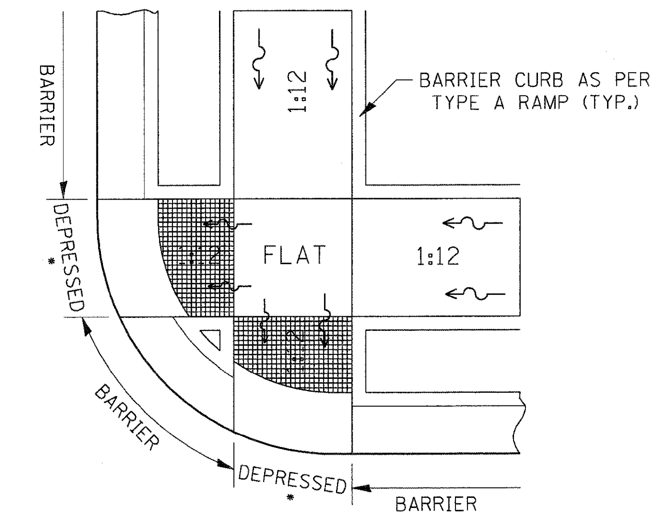
All work to furnish and install these signs shall be included in the cost of the Traffic Control Standards and shall not be paid for separately.

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

REVISED - 5-15-09

DISABLED RAMP DETAIL FOR TYPE A

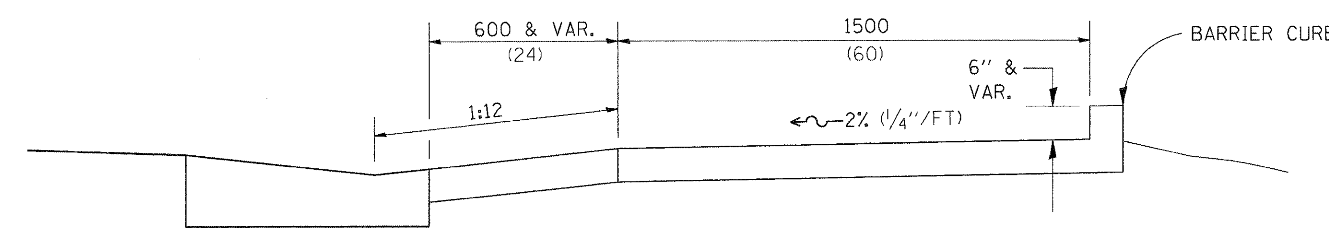




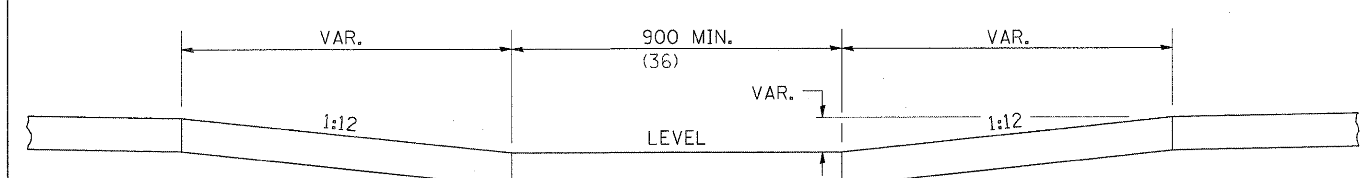
SEE STANDARD 424001 FOR THE DETAIL OF SIDE CURB & SEE PLANS FOR RAMP TYPE.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

* SEE NOTE BELOW



SECTION A-A



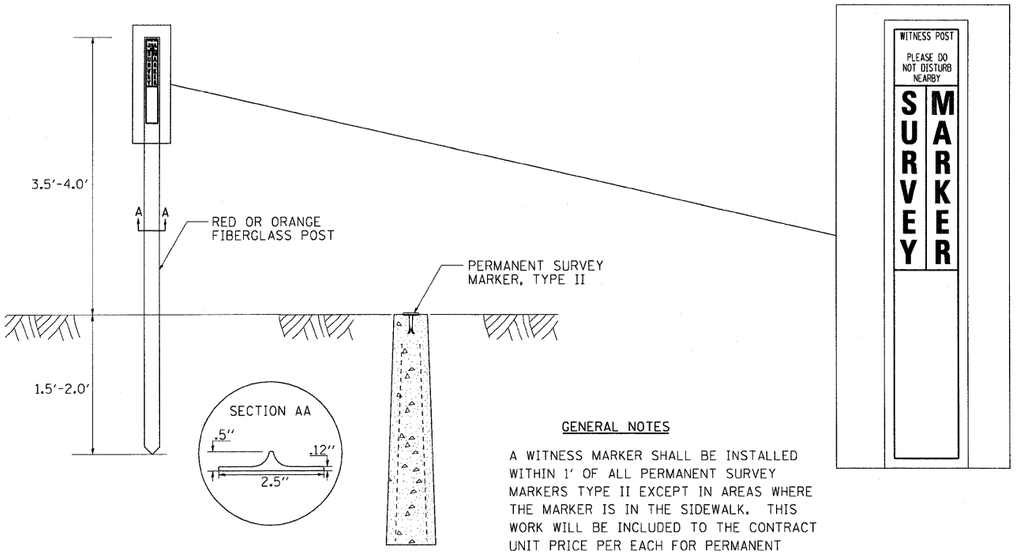
SECTION B-B

NOTES : THIS DETAIL TO BE USED IN CONJUNCTION WITH STATE STANDARD 424001.
THE MAXIMUM ALLOWABLE CROSS SLOPE FOR SIDEWALK IS 2% (1/4"/FT).
THE MAXIMUM ALLOWABLE SIDEWALK GRADE IS 8% (1/12"/FT). IF SPACE LIMITATIONS PROHIBIT THE USE OF THE 1:12 SLOPE, THEN SLOPES BETWEEN 1:10 ARE 1:12 ARE PERMITTED FOR A MAXIMUM RISE OF 150 (6). SLOPES 1:8 AND 1:10 ARE ALLOWED FOR A MAXIMUM RISE OF 75 (3). SLOPES STEEPER THAN 1:8 ARE NOT PERMITTED.
THE DEPRESSED CURB IS NOT STANDARD. THE RISE IS 13 (1/2) INSTEAD OF 40 (1 1/2).

REVISED - 10-1-08 REVISED -	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE. 646	SECTION 1B-2	COUNTY WHITESIDE	TOTAL SHEETS 257 / SHEET NO. 244
REVISED -				CONTRACT NO. 64B80	
REVISED -					
REVISED -	SCALE: 50.00 '/ IN. / SHEET NO. 1 OF 1 SHEETS / STA. / TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT		

PLOT DATE = 7/14/2011

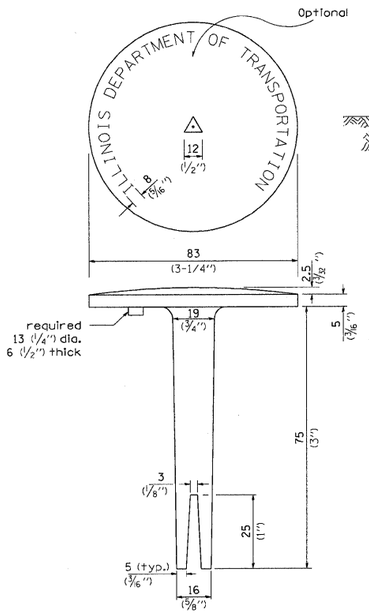
WITNESS MARKER FOR PERMANENT SURVEY MARKERS, TYPE II



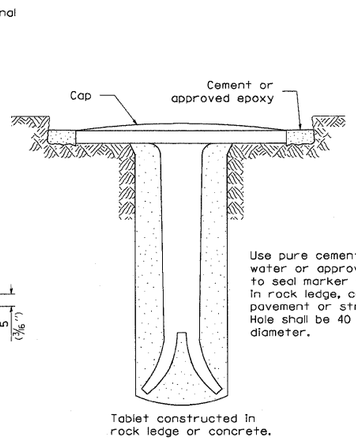
GENERAL NOTES

A WITNESS MARKER SHALL BE INSTALLED WITHIN 1' OF ALL PERMANENT SURVEY MARKERS TYPE II EXCEPT IN AREAS WHERE THE MARKER IS IN THE SIDEWALK. THIS WORK WILL BE INCLUDED TO THE CONTRACT UNIT PRICE PER EACH FOR PERMANENT SURVEY MARKERS, TYPE II.

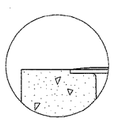
PERMANENT SURVEY MARKERS, TYPE II



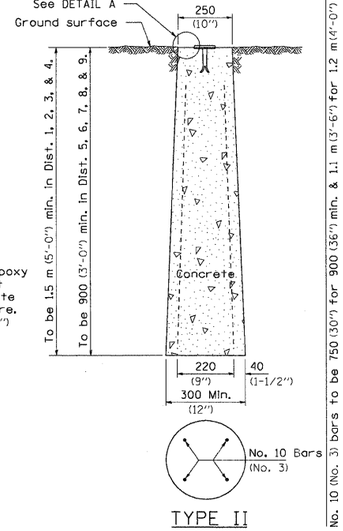
BRASS OR ALUMINUM TABLET



TYPE II



DETAIL A



TYPE II

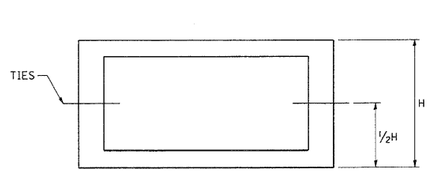
CAST-IN-PLACE MARKER

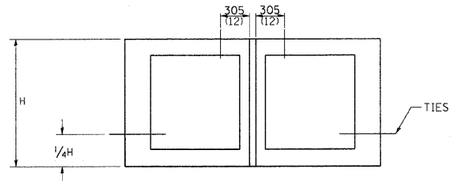
(INCHES)

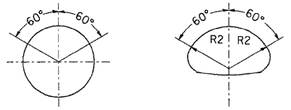
10-21-08

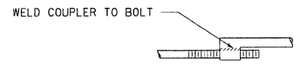
MECHANICAL JOINTS FOR CONCRETE PIPE AND BOX CULVERTS

THE CULVERT TIES SHALL BE INCLUDED IN THE COST OF THE CONCRETE PIPE CULVERTS OR THE PRECAST CONCRETE BOX CULVERT. THE MECHANICAL TIES SHALL BE ON THE OUTSIDE OF THE CULVERT. THE NUTS AND WASHERS SHALL BE PLACED ON THE INSIDE OF OF THE CULVERT AND COVERED WITH MASTIC JOINT SEALER CONFORMING TO ARTICLES 1055 OR 1056 IN THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

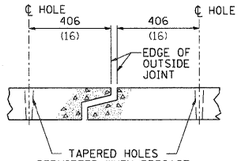


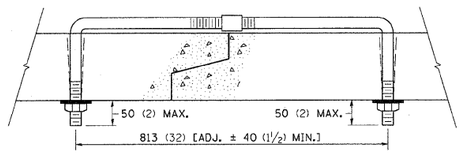






TOP VIEW



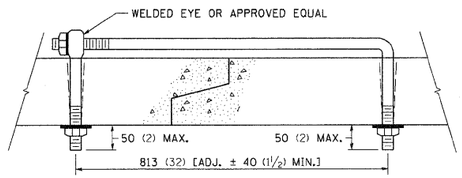


ADJUSTABLE TIE

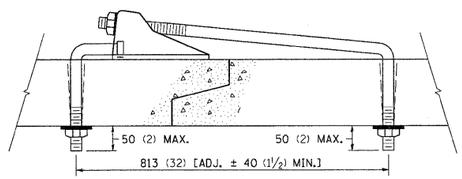
PLACEMENT OF HOLES		
BOX CULVERT METERS (FEET)	PIPE SIZE MILLIMETERS (INCHES)	THREAD DIAMETER
	300 (12)	16 (5/8) ROLLED THREADS (SEE NOTE 4)
	380 (15)	
	450 (18)	
	530 (21)	
	600 (24)	
	680 (27)	
	760 (30)	
0.9x0.6 (3x2)	830 (33)	19 (3/4) CUT OR ROLLED
0.9x0.9 (3x3)	910 (36)	
1.2x0.6 (4x2)	1060 (42)	
1.2x0.9 (4x3)	1210 (48)	
1.2x1.2 (4x4)	1370 (54)	
1.5x0.9 (5x3)	1520 (60)	
1.5x1.2 (5x4)	1670 (66)	
1.5x1.5 (5x5)	1820 (72)	25 (1) CUT OR ROLLED
1.8x • (6x •)	1980 (78)	
2.1x • (7x •)	2130 (84)	
2.4x • (8x •)	2280 (90)	
2.7x • (9x •)	2430 (96)	
3.0x • (10x •)	2590 (102)	
	2740 (108)	
	3040 (120)	
	3350 (132)	
3.4x • (11x •) AND GREATER	3500 (138) AND GREATER	35 (1 1/4)

NOTES:

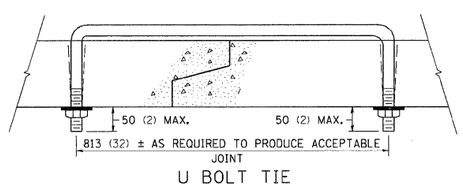
1. HOLES SHALL BE CAST-IN OR DRILLED 400 (16) FROM OUTSIDE EDGE OF JOINT.
2. NUTS AND WASHERS ARE NOT REQUIRED ON INSIDE OF 675 (27) DIAM. PIPE OR LESS.
3. TIES ARE NOT REQUIRED FOR BELL PIPE 600 (24) AND SMALLER. ON OTHER SIZES TIE MAY BE INSERTED FROM INSIDE.
4. CUT THREADS MAY BE USED IF WASHER AND NUT ARE USED.
5. PIPE SIZE LISTED IS INSIDE DIAM. OF ROUND PIPE OR EQUIVALENT DIAM. OF PIPE ARCH OR ELLIPTICAL.
6. GALVANIZING OF TIES IS REQUIRED.
7. ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.



EYE BOLT TIE



CANOPY TIE



U BOLT TIE

REVISED 2-01-00

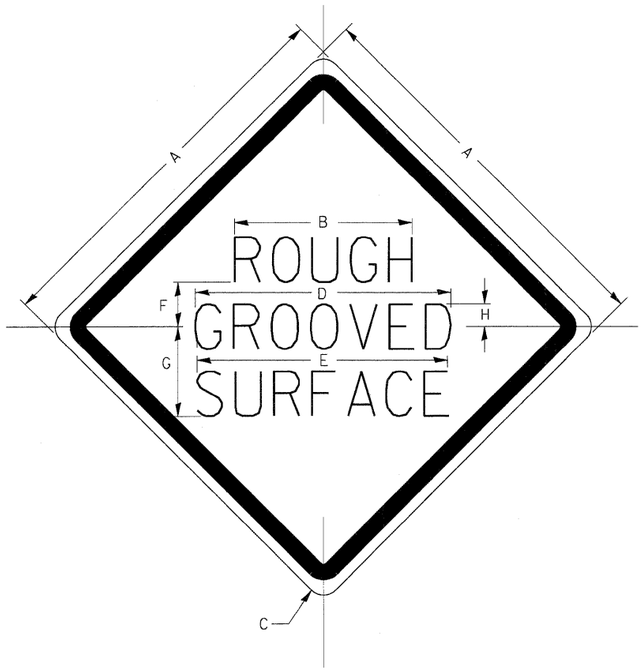
REVISED -	REGION 2 / DISTRICT 2 STANDARD				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
REVISED -					646	1B-2	WHITESIDE	257	245
REVISED -							CONTRACT NO. 64B80		
REVISED -	SCALE: 50.00 ' / IN.	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

PLOT DATE = 7/14/2011

ROUGH GROOVED SURFACE SIGN

ILLINOIS STANDARD W8-I107

SIGN PANEL TYPE 1



COLOR: LEGEND AND BORDER - BLACK NON-RELFLECTIVE
BACKGROUND - ORANGE REFLECTORIZED

SIGN SIZE	DIMENSIONS							
	A	B	C	D	E	F	G	H
1200x1200 (48x48)	1200 (48.0)	600 (24.1)	75 (3.0)	850 (34.0)	825 (33.0)	150 (6.0)	325 (13.0)	88 (3.5)

SIGN SIZE	SERIES LINES			MARGIN	BORDER	BLANK STD.
	1	2	3			
1200x1200 (48x48)	7C	7C	7C	20 (0.8)	30 (1.2)	B4-48D

ALL DIMENSIONS IN INCHES.

GENERAL NOTES

SIGN PANELS AND FACE MATERIALS SHALL BE ACCORDING TO SECTION 720 OF THE STANDARD SPECIFICATIONS

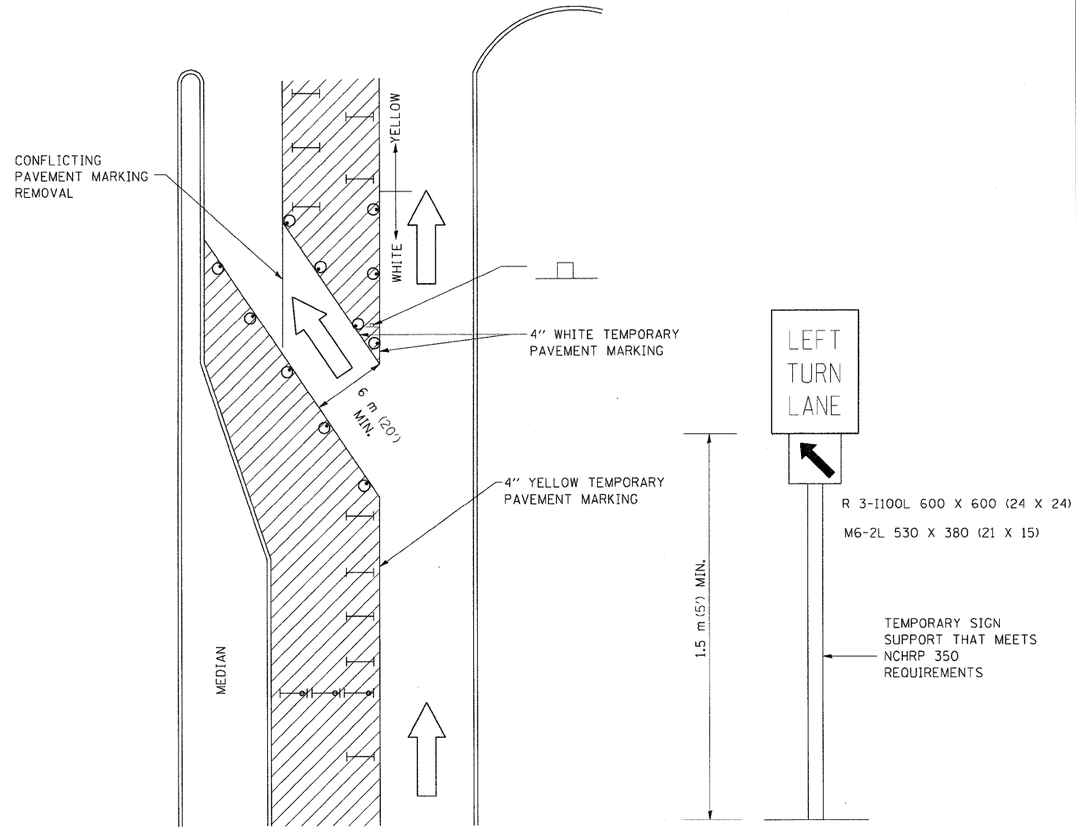
METAL POSTS SHALL BE IN ACCORDANCE WITH STD. 720011.

ALL MOUNTING HARDWARE SHALL BE ALUMINUM, STAINLESS STEEL, ZINC OR CADMIUM PLATED STEEL AND SHALL BE INCLUDED TO THE COST OF THE INSTALLATION.

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED - 1-09-08

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC)



LEGEND

- WORK AREA
- LANE OPEN TO TRAFFIC
- TYPE I OR II BARRICADE OR DRUM WITH FLASHING BURNING LIGHT
- DRUM OR BARRICADE WITH STEADY BURN LIGHT
- SIGN (SEE DETAIL)
- TYPE I OR II CHECK BARRICADE WITH STEADY LIGHT BURN

GENERAL NOTES

CONES MAY BE SUBSTITUTED FOR BARRICADES OR DRUMS AT HALF THE SPACING DURING DAY OPERATIONS. CONES SHALL BE A MINIMUM OF 710 (28) IN HEIGHT.

STEADY BURNING LIGHTS WILL NOT BE REQUIRED ON BARRICADES OR DRUMS FOR DAY OPERATIONS. ALL LIGHTS WILL BE MONODIRECTIONAL.

TEMPORARY PAVEMENT MARKING SHALL BE PLACED THROUGHOUT THE BARRICADED AREA OF EACH BAY WHERE THE CLOSURE TIME IS GREATER THAN FOURTEEN DAYS.

THIS APPLICATION ALSO APPLIES WHEN WORK IS BEING PERFORMED IN THE RIGHT LANE(S) AND THE RIGHT TURN BAY IS TO REMAIN OPEN. UNDER THIS CONDITION, "RIGHT TURN LANE" R3-100 600 x 600 (24 X 24) AND M6-2R 530 X 380 (21 X 15) SHALL BE USED.

THESE CONTROLS SHALL SUPPLEMENT MAINLINE TRAFFIC CONTROL FOR LANE CLOSURES. LONGITUDINAL DIMENSIONS MAY BE ADJUSTED TO FIT FIELD CONDITIONS.

TRAFFIC CONTROL AND PROTECTION AT TURN BAYS (TO REMAIN OPEN TO TRAFFIC) SHALL BE INCLUDED IN THE COST SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

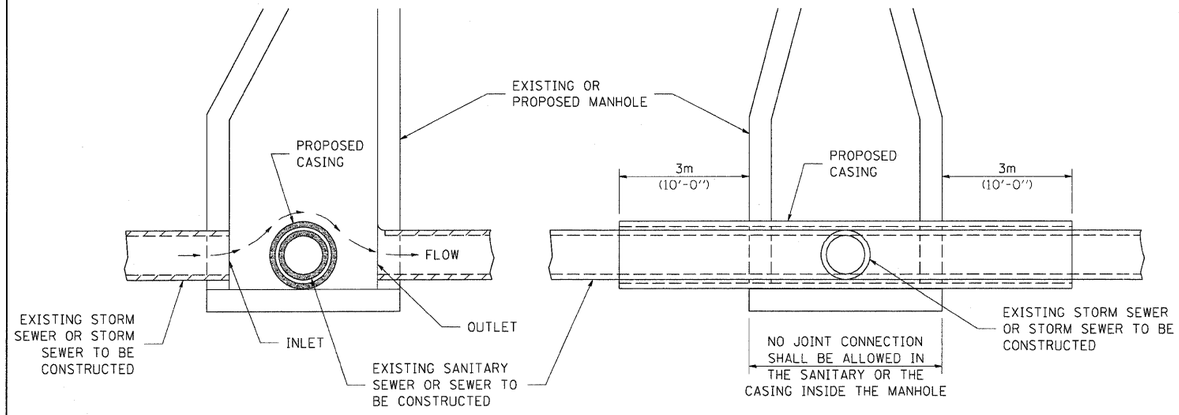
ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

REVISED 12-09-09

REVISED -	REGION 2 / DISTRICT 2 STANDARD			F.A.P. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
REVISED -				646	1B-2	WHITESIDE / 257 / 246
REVISED -						CONTRACT NO. 64B80
REVISED -	SCALE: 50.00 ' / IN.	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

PLOT DATE = 7/4/2013

SEWER AND WATER MAIN CROSSINGS



ELEVATION - ECCENTRIC

ELEVATION - CONCENTRIC

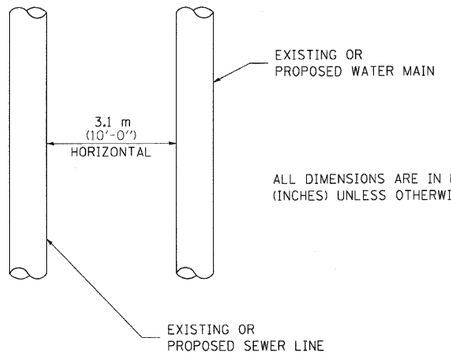
CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

AT GRADE CROSSING OF SANITARY AND STORM SEWER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

THIS DETAIL IS FOR UNKNOWN UTILITIES UNLESS QUANTITIES ARE INCLUDED IN THE PLANS THE EXTRA WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04.

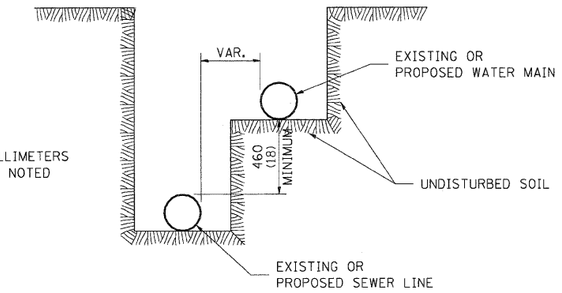
WHEN PROPOSED SEWER (OR WATER) IS LOCATED 3.1 m (10'-0") OR MORE FROM EXISTING WATER (OR SEWER) NO SPECIAL CONSTRUCTION REQUIRED.



PLAN VIEW

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

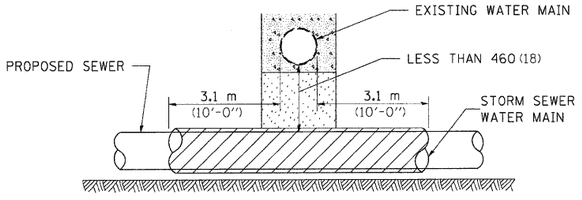
WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 3.1 m (10'-0") FROM EXISTING WATER (OR SEWER) DETAILS BELOW SHALL APPLY.



WATER AND SEWER HORIZONTAL SEPARATION REQUIREMENTS

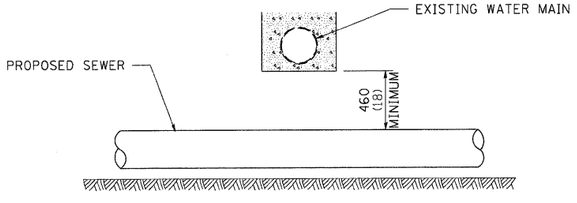
POINT LOADS SHALL NOT BE ALLOWED BETWEEN SEWER OR SEWER CASING AND WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH



PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1m (10') HORIZONTALLY

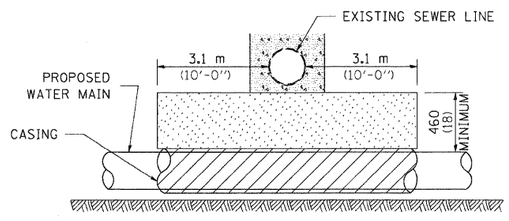


ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED SEWER LINE BELOW EXISTING WATER MAIN

PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT

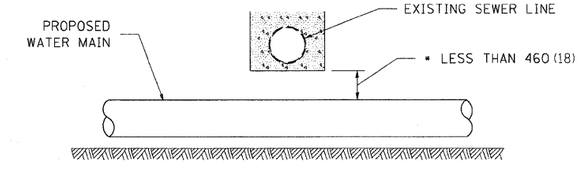
PLACE TRENCH BACKFILL FOR 3.1 m (10') ON EITHER SIDE OF SEWER LINE



CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

PROVIDE ADEQUATE SUPPORT FOR EXISTING WATER MAIN TO PREVENT DAMAGE DUE TO SETTLEMENT OF SEWER TRENCH

MAINTAIN 460 (18) MINIMUM VERTICAL SEPARATION FOR 3.1 m (10') HORIZONTALLY

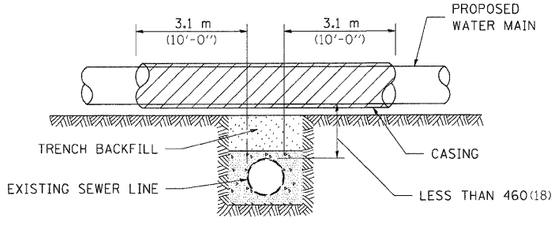


* NOT ALLOWED
MUST MAINTAIN 460 (18) VERTICAL SEPARATION

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN BELOW EXISTING SEWER LINE

POINT LOADS SHALL NOT BE ALLOWED BETWEEN WATER MAIN OR WATER MAIN CASING AND SEWER

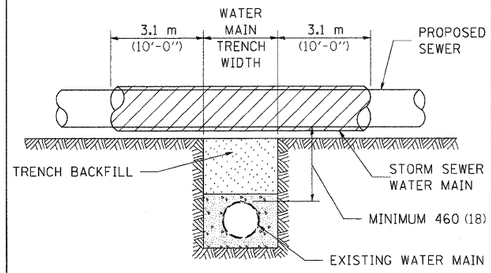


CASING SHALL BE CAST IRON WITH AN INSIDE DIAMETER 50 (2) LARGER IN DIAMETER THAN ENCASED PIPE OUTSIDE DIAMETER WITH BOTH ENDS OF CASING SEALED

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

PROPOSED WATER MAIN ABOVE EXISTING SEWER LINE

PROVIDE ADEQUATE SUPPORT FOR SEWER TO PREVENT SETTLING AND BREAKING THE WATER MAIN.



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED

EXISTING WATER MAIN BELOW PROPOSED SEWER LINE WITH MINIMUM 460 (18) VERTICAL SEPARATION

FILE NAME = D264B80-sht-DistStd5.dgn	USER NAME = dwozniarski	DESIGNED -	REVISED - 10-15-04
		DRAWN -	REVISED -
	PLOT SCALE = 50.00 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 7/14/2011	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

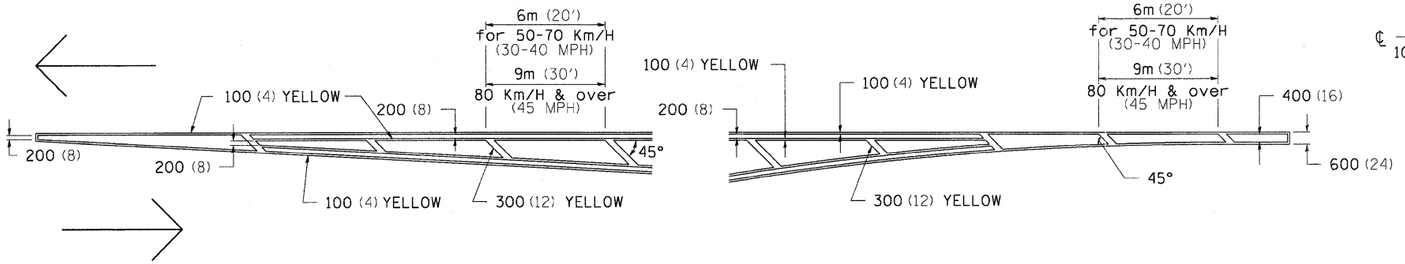
REGION 2 / DISTRICT 2 STANDARD

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

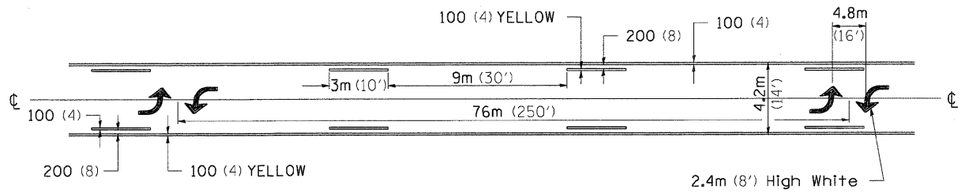
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			257	247
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN AT LEFT TURN LANE

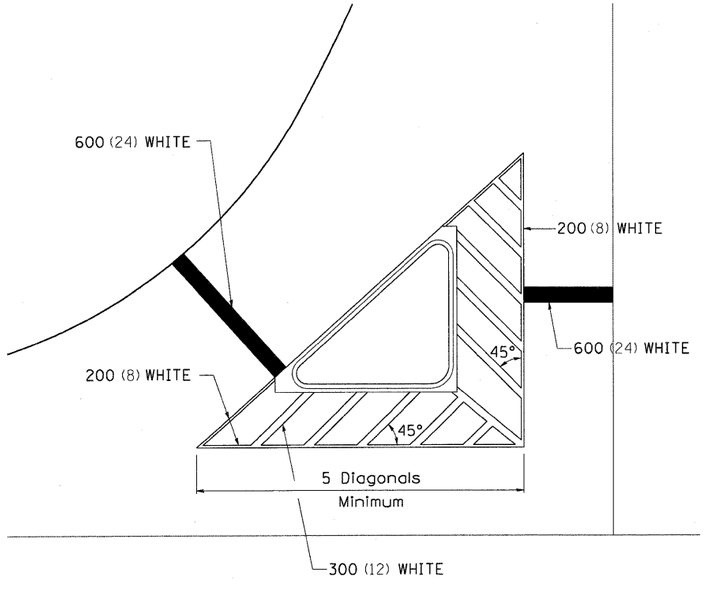


MEDIAN PAVEMENT MARKING

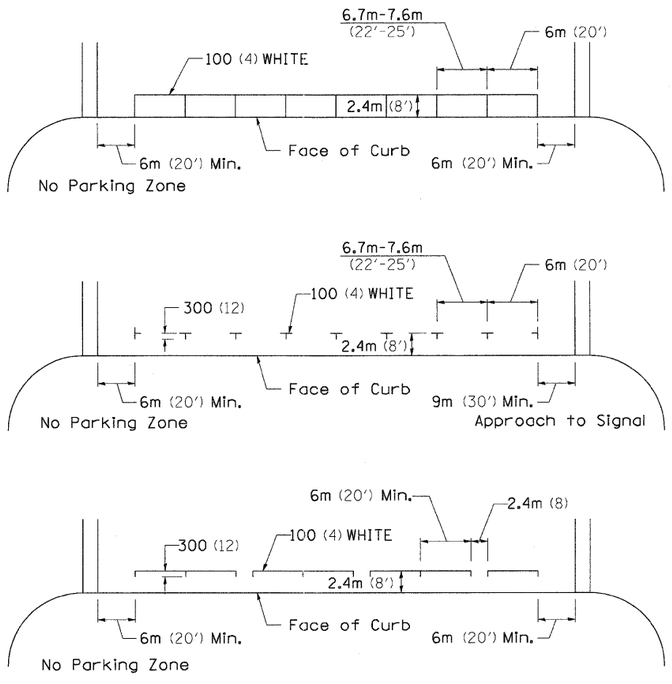


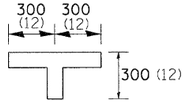
** ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL ISLAND OFFSET SHOULDER WIDTH



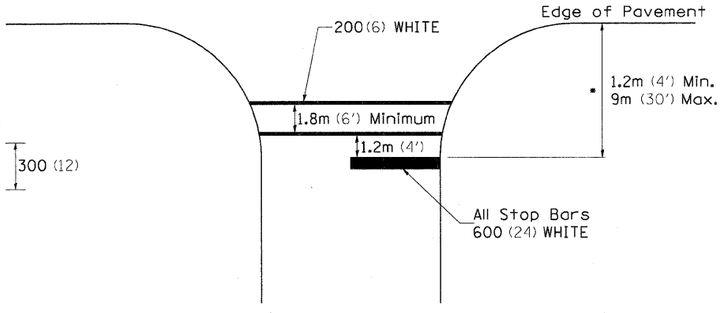
TYPICAL PARKING SPACING





STANDARD CROSSWALK MARKING

See Schedules for Locations



• Distance to the nearest edge of the intersecting roadway in the absence of a marked crosswalk.

FILE NAME = D264880-sht-DistStd6.dgn	USER NAME = dwozniak	DESIGNED -	REVISED - 10-21-08
		DRAWN -	REVISED -
	PLOT SCALE = 50.00 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 7/14/2011	DATE - 2-22-201	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

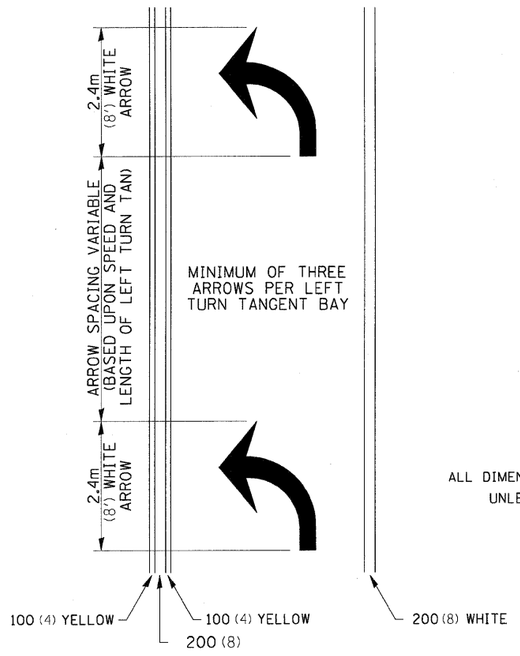
REGION 2 / DISTRICT 2 STANDARD

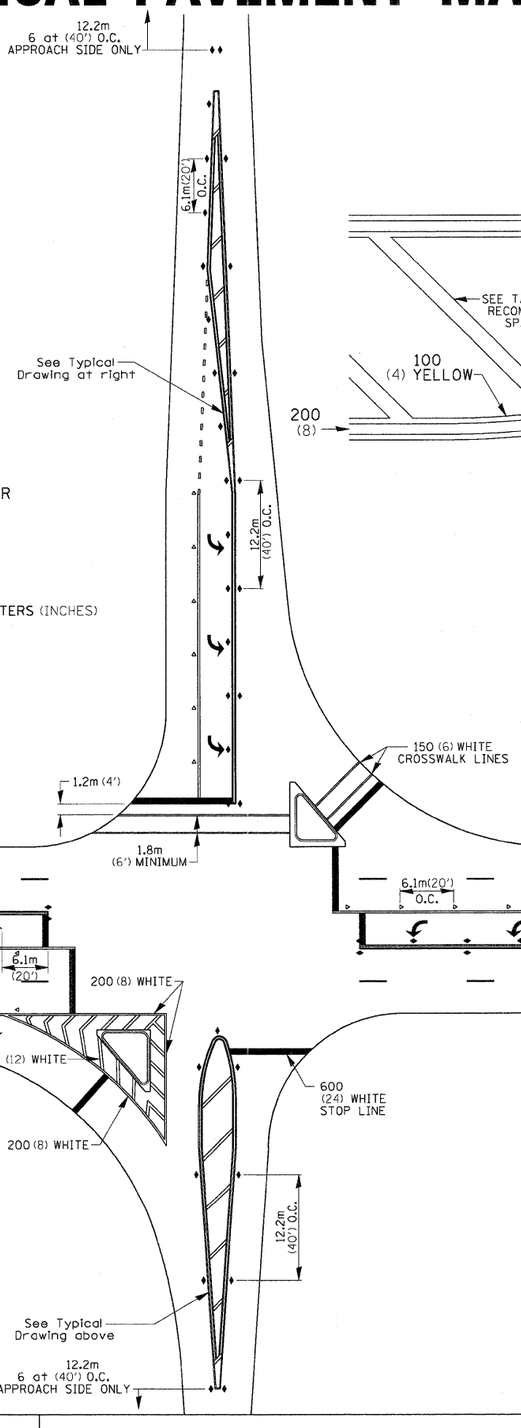
SCALE: | SHEET NO. 1 OF 3 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	248
		CONTRACT NO. 64B80		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS

ARROW LAYOUT





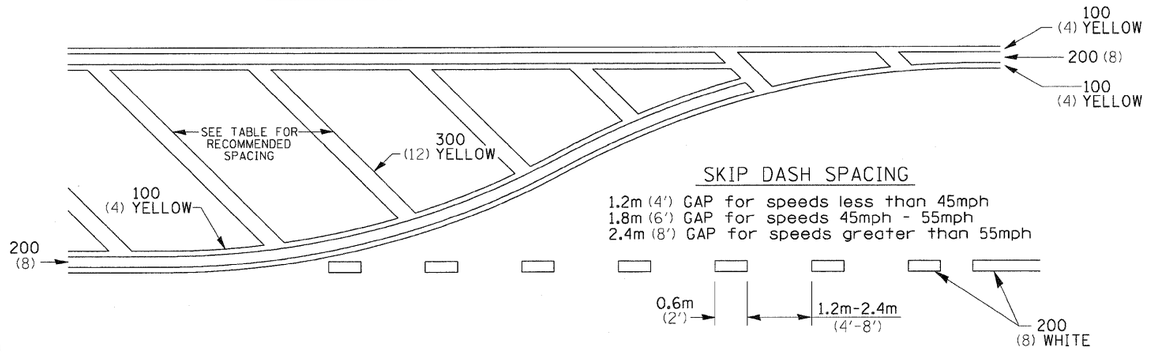
◀ ONE-WAY AMBER MARKER

◁ ONE-WAY CRYSTAL MARKER

◆ TWO-WAY AMBER MARKER

ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

TYPICAL PAVEMENT MARKING FOR FLUSH MEDIAN



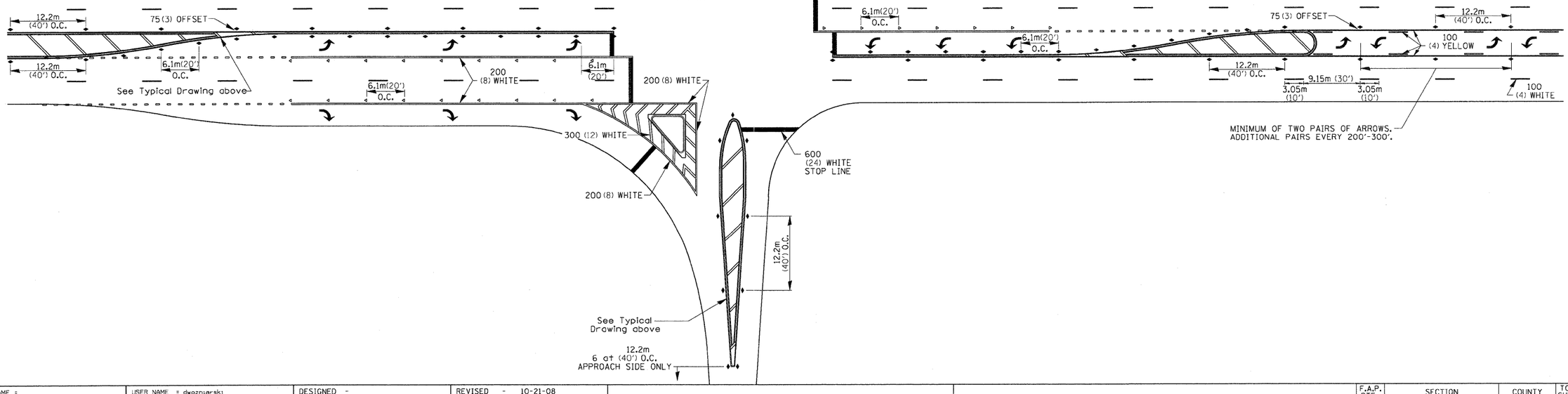
SKIP DASH SPACING

1.2m (4') GAP for speeds less than 45mph
1.8m (6') GAP for speeds 45mph - 55mph
2.4m (8') GAP for speeds greater than 55mph

RECOMMENDED SPACING BETWEEN DIAGONALS (IN FEET)

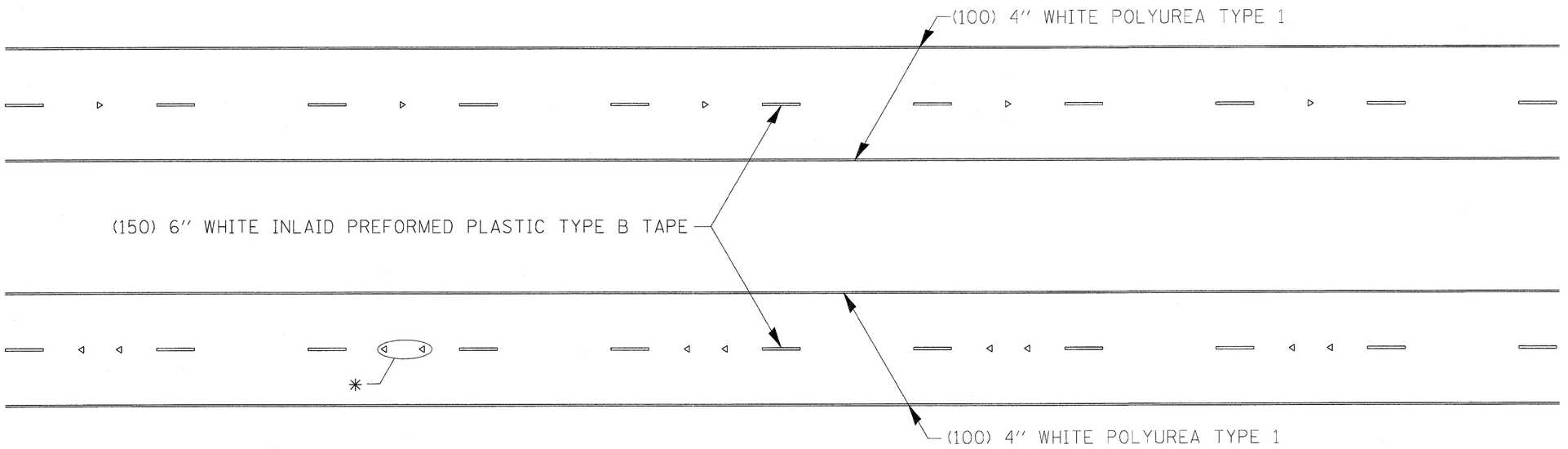
Speed Limit Range	Continuous Median Area	Intersection Channelization	Objects (Islands)
less than 50Km/H (30MPH)	15.3m (50')	4.53m (15')	3.05m (10')
50-60Km/H (30-40MPH)	22.9m (75')	6.1m (20')	4.53m (15')
70Km/H (45MPH) & over	22.9m (75')	9.05m (30')	6.1m (20')

NOTE: if the spacing recommended in the Table does not permit at least five diagonal lines in the area being marked, the spacing from the next lowest speed range should be used. The recommended spacing is measured parallel to the pavement center line.



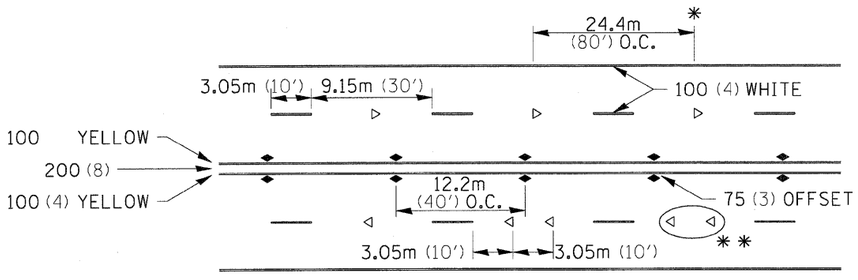
FILE NAME = D264880-sht-DistStd6.dgn	USER NAME = dwozniarski	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			646	1B-2	WHITESIDE	257	249
	PLOT SCALE = 50.00 ' / IN.	CHECKED -	REVISED -					CONTRACT NO. 64B80		
	PLOT DATE = 7/14/2011	DATE - 2-22-201	REVISED -		SCALE: SHEET NO. 2 OF 3 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

TYPICAL PAVEMENT MARKINGS



* SEE HIGHWAY STANDARD 781001 FOR SPACING DETAILS.
USE DOUBLE MARKERS WHEN ADT ≥ 25,000.

MULTI-LANE / DIVIDED



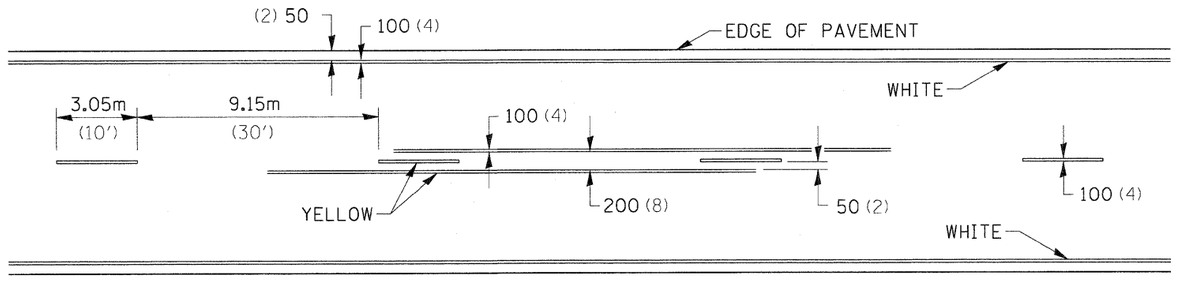
SYMBOLS

* REDUCE TO 12.2m (40') O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 15Km/H (10MPH) LOWER THAN POSTED SPEEDS.

** USE DOUBLE MARKERS WHEN ADT ≥ 25,000

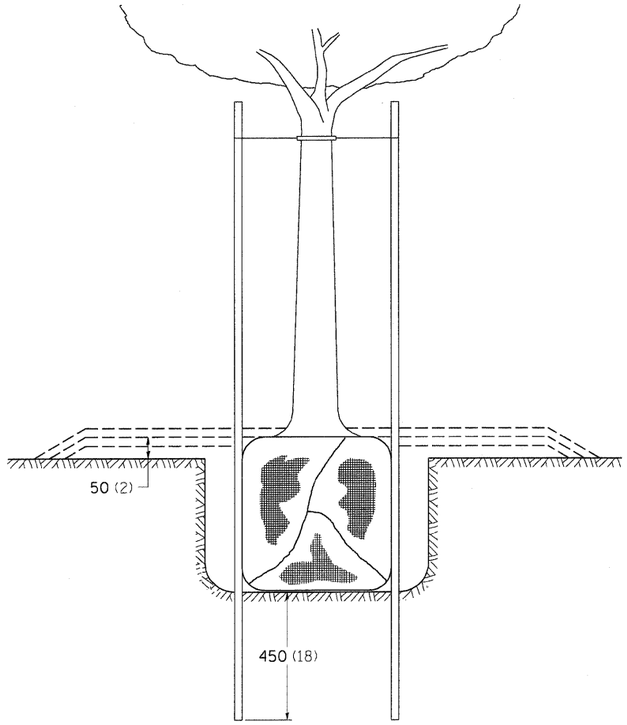
MULTI-LANE / UNDIVIDED

TYPICAL PAVEMENT MARKING FOR TWO LANE SECTION – NO PASSING ZONES

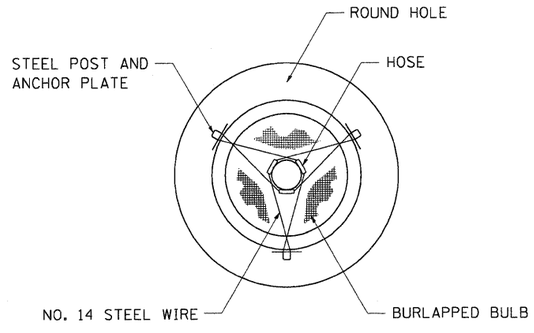


FILE NAME = D264880-sht-DistStd6.dgn	USER NAME = dwozniarski	DESIGNED -	REVISED - 10-21-08	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REGION 2 / DISTRICT 2 STANDARD		F.A.P. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
		DRAWN -	REVISED -				646	1B-2	WHITESIDE / 257 / 250
	PLOT SCALE = 50.00 ' / IN.	CHECKED -	REVISED -						CONTRACT NO. 64B80
	PLOT DATE = 7/14/2011	DATE - 2-22-201	REVISED -		SCALE:	SHEET NO. 3 OF 3 SHEETS STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT

DETAILS OF PLANTING AND BRACING TREES

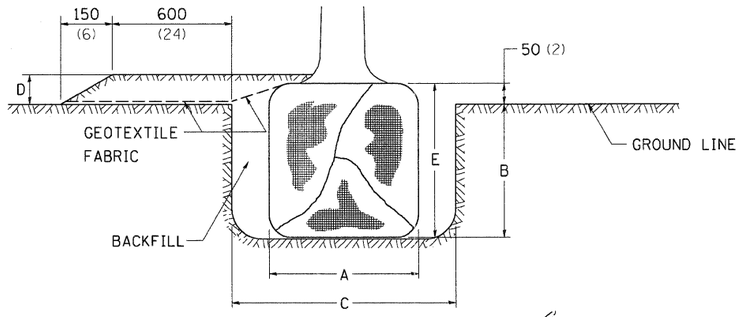


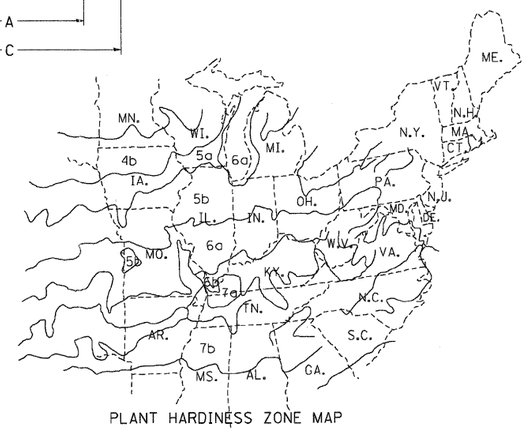
TREES SMALLER THAN 115 (4 1/2) IN DIAMETER



SMALL TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER m^3 (CU. YDS.)
1.5-1.8m (5'-6')	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.5-1.8m (5'-6') BB	400 (16)	250 (10)	750 (30)	100 (4)	300 (12)	0.41 (0.54)
1.8-2.0m (6'-7') BB	450 (18)	300 (12)	750 (30)	100 (4)	350 (14)	0.41 (0.54)
2.0-2.4m (7'-8') BB	500 (20)	275 (11)	750 (30)	100 (4)	325 (13)	0.41 (0.54)
2.4-3.0m (8'-10') BB	600 (24)	350 (14)	900 (36)	100 (4)	400 (16)	0.47 (0.61)
3.0-3.6m (10'-12') BB	650 (26)	375 (15)	900 (36)	100 (4)	425 (17)	0.47 (0.61)

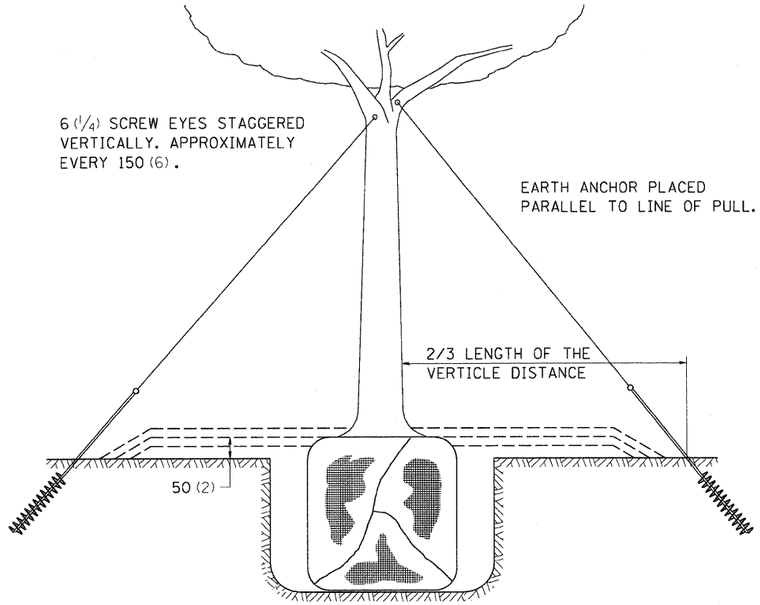
LARGE TREE SIZE	A DIAMETER OF BALL OR ROOT SYS.	B DEPTH OF HOLE EXCAVATION	C WIDTH OF HOLE EXCAVATION	D THICKNESS OF MULCH COVER	E DEPTH OF BALL OR ROOT SYS.	F VOLUME OF MULCH COVER m^3 (CU. YDS.)
0-50 (0-2)	500 (20)	275 (11)	900 (36)	100 (4)	325 (13)	0.47 (0.61)
50-65 (2-2 1/2)BB	600 (24)	350 (14)	1200 (48)	100 (4)	400 (16)	0.60 (0.78)
65-75 (2 1/2-3)BB	700 (28)	425 (17)	1200 (48)	100 (4)	475 (19)	0.60 (0.78)
75-90 (3-3 1/2) BB	800 (32)	425 (17)	1500 (60)	100 (4)	475 (19)	0.73 (0.96)
90-100 (3 1/2-4) BB	900 (36)	500 (20)	1500 (60)	100 (4)	550 (22)	0.73 (0.96)
100-115 (4-4 1/2) BB	1000 (40)	550 (22)	1800 (72)	100 (4)	600 (24)	0.89 (1.16)
115-125 (4 1/2-5) BB	1100 (44)	600 (24)	1800 (72)	100 (4)	650 (26)	0.89 (1.16)
125-140 (5-5 1/2) BB	1200 (48)	675 (27)	2100 (84)	100 (4)	725 (29)	1.06 (1.38)



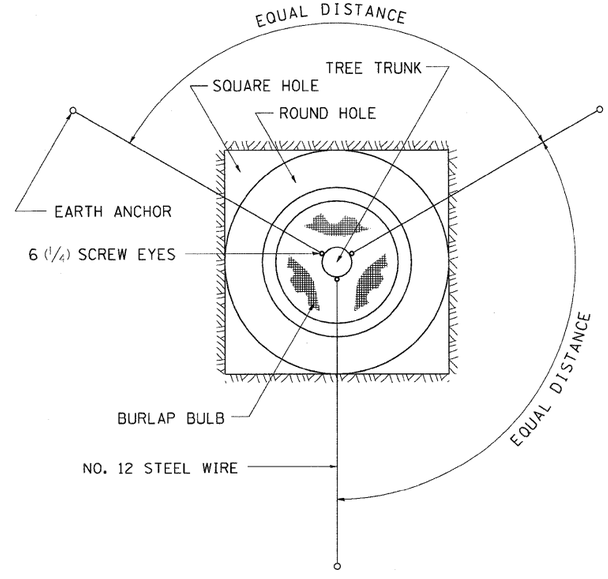


PLANT HARDINESS ZONE MAP

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
PUBLICATION NO. 814



TREES OVER 115 (4 1/2) IN DIAMETER



ALL DIMENSIONS ARE IN MILLIMETERS (INCHES) UNLESS OTHERWISE NOTED.

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		DRAWN -	REVISED -
	PLOT SCALE = 50.00 ' / IN.	CHECKED -	REVISED -
	PLOT DATE = 7/14/2011	DATE - 2-22-201	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 2 / DISTRICT 2 STANDARD

SCALE: N/A | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

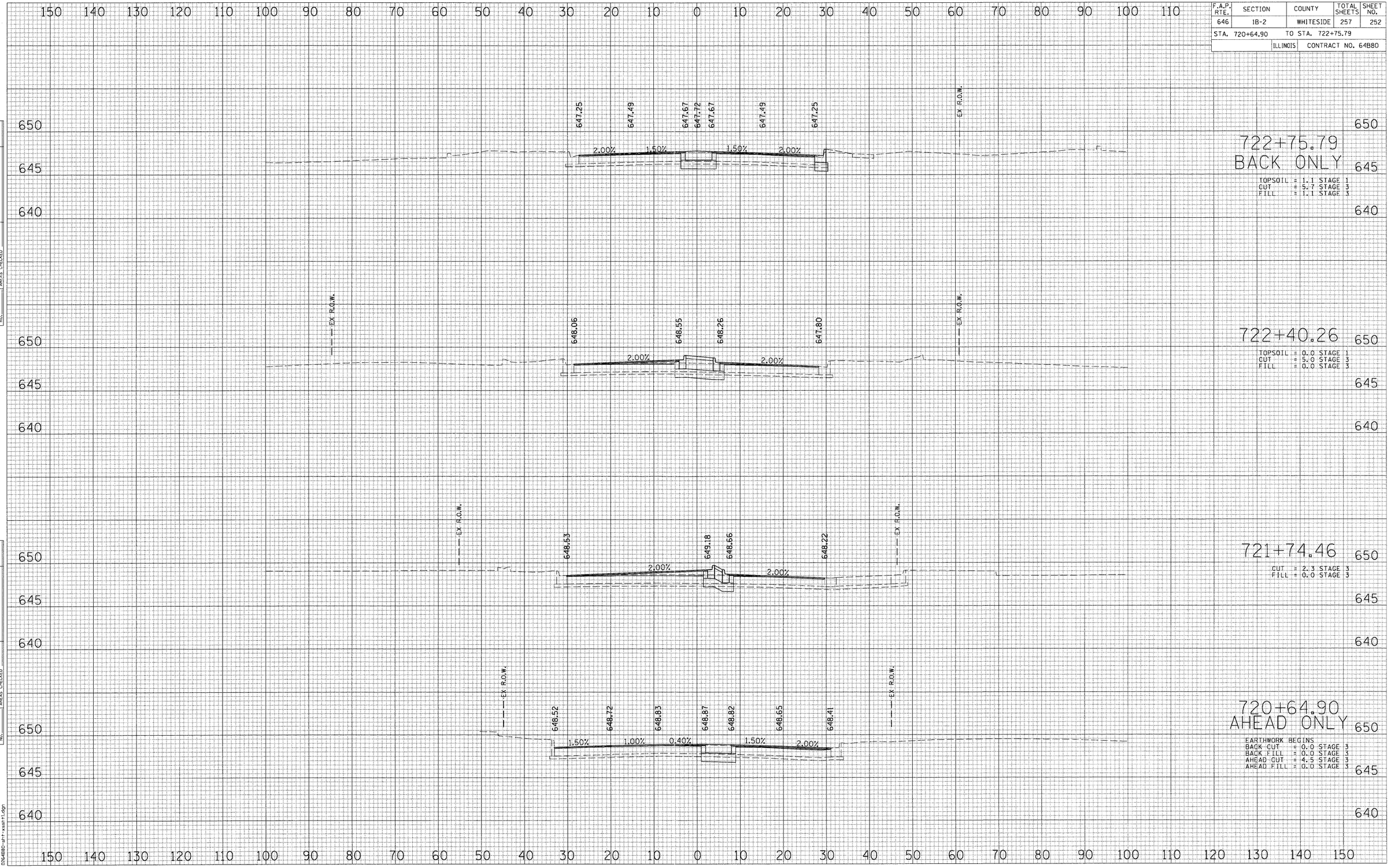
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	251
		CONTRACT NO. 64B80		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

DETAILS OF PLANTING AND BRACING TREES **92.1**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	252
STA. 720+64.90		TO STA. 722+75.79		
	ILLINOIS	CONTRACT NO. 64B80		

FINAL SURVEY — NOTE: BOOK — NO. — SURVEYED — PLOTTED — TYPED/RATE — AREAS — AREAS CHECKED — BY — DATE

ORIGINAL SURVEY — NOTE: BOOK — NO. — SURVEYED — PLOTTED — TYPED/RATE — AREAS — AREAS CHECKED — BY — DATE



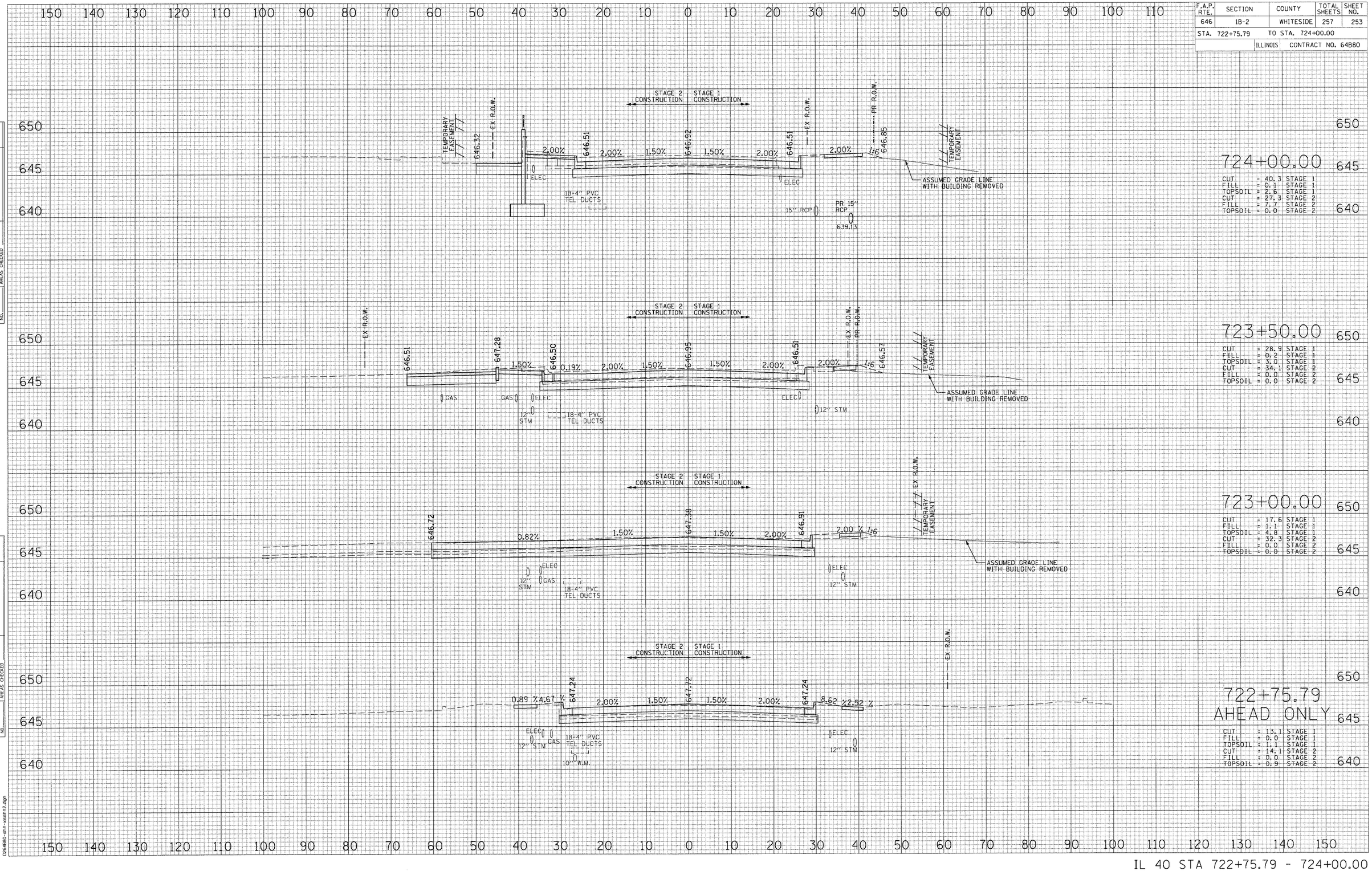
D:\64B80-sht-xsm1.dgn

IL 40 STA 720+64.90 - 722+75.79

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	253
STA. 722+75.79		TO STA. 724+00.00		
	ILLINOIS	CONTRACT NO. 64B80		

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

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

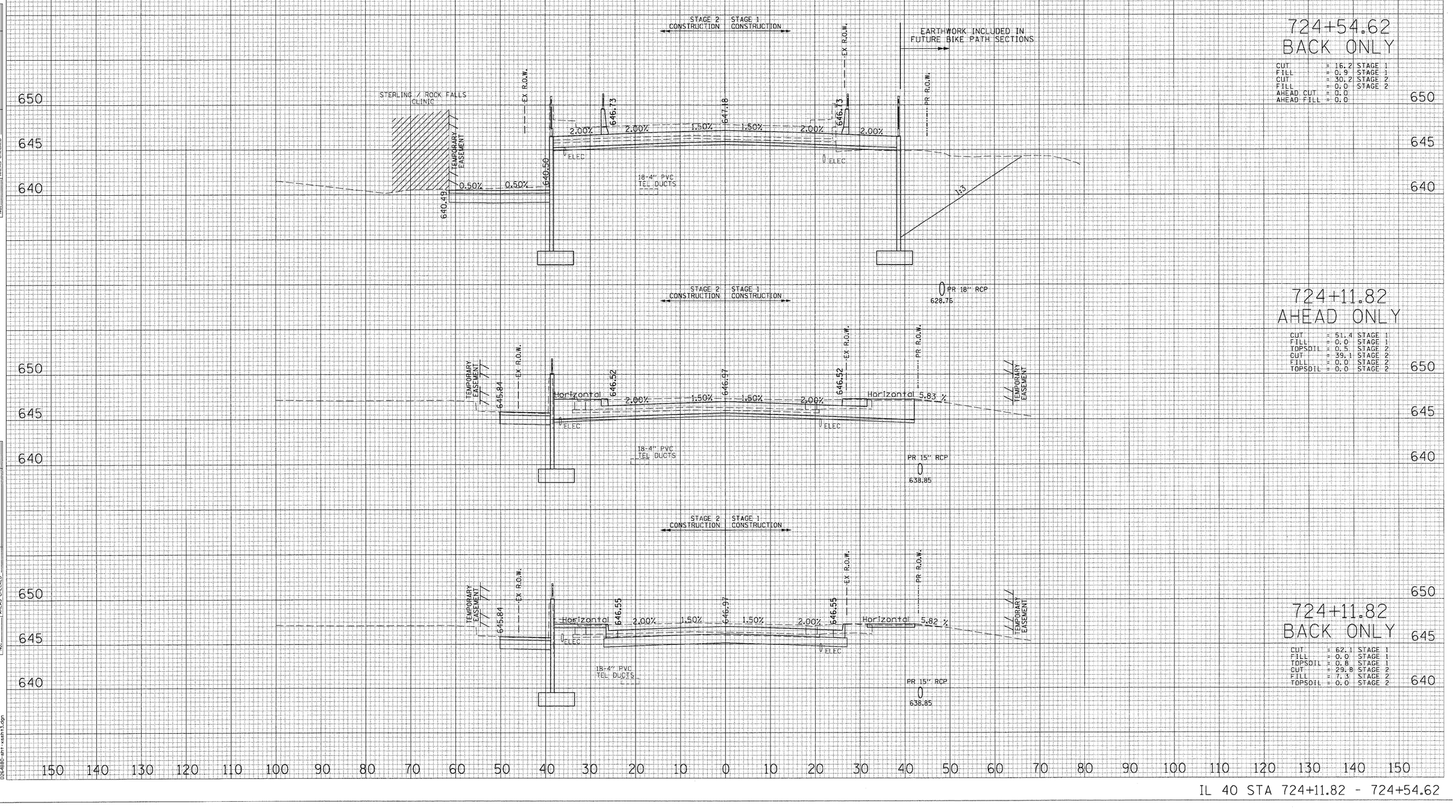


D26H80-sht-xsm12.dgn

IL 40 STA 722+75.79 - 724+00.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	254
STA. 724+11.82		TO STA. 724+54.62		
	ILLINOIS	CONTRACT NO. 64B80		

BRIDGE OMISSION
STA. 724+54.62 TO STA. 734+83.88



724+54.62 BACK ONLY

CUT	= 16.2	STAGE 1
FILL	= 0.9	STAGE 1
CUT	= 30.2	STAGE 2
FILL	= 0.0	STAGE 2
AHEAD CUT	= 0.0	
AHEAD FILL	= 0.0	

724+11.82 AHEAD ONLY

CUT	= 51.4	STAGE 1
FILL	= 0.0	STAGE 1
TOPSOIL	= 0.5	STAGE 2
CUT	= 39.1	STAGE 2
FILL	= 0.0	STAGE 2
TOPSOIL	= 0.0	STAGE 2

724+11.82 BACK ONLY

CUT	= 62.1	STAGE 1
FILL	= 0.0	STAGE 1
TOPSOIL	= 0.8	STAGE 2
CUT	= 29.8	STAGE 2
FILL	= 7.3	STAGE 2
TOPSOIL	= 0.0	STAGE 2

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

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

D264B80-sht-xsh13.dgn

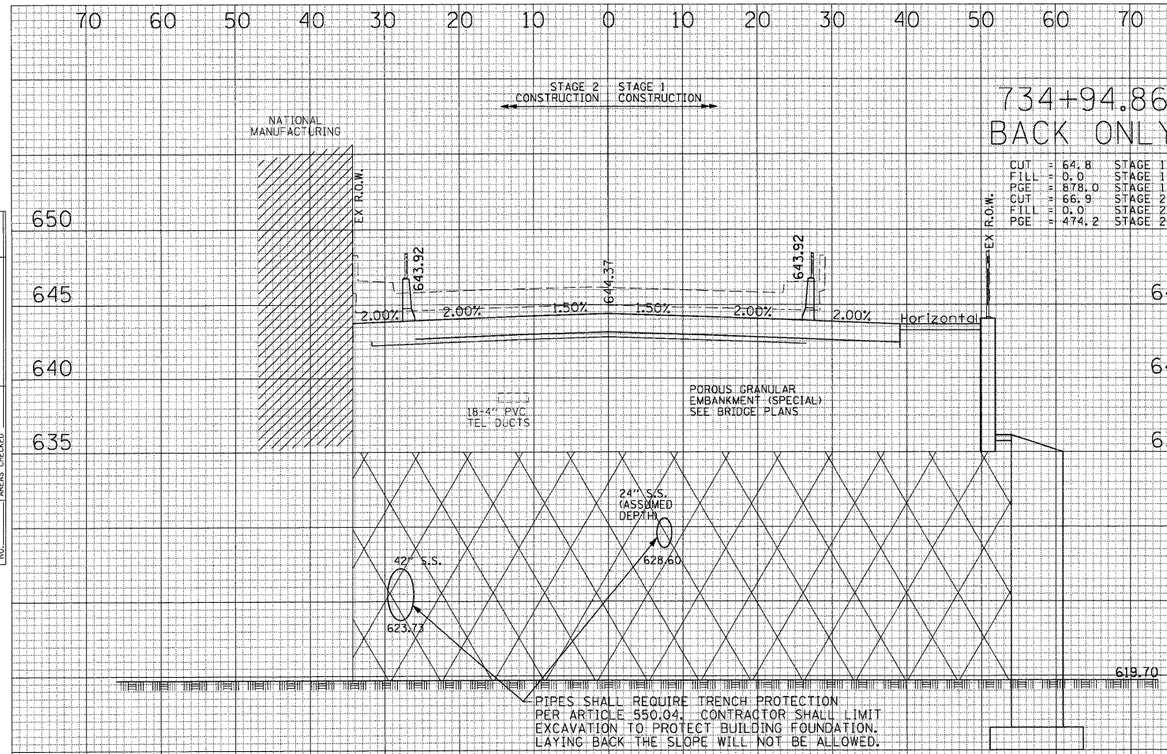
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	IB-2	WHITESIDE	257	255
STA. 734+83.88		TO STA. 734+98.00		
	ILLINOIS	CONTRACT NO. 64B80		

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

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

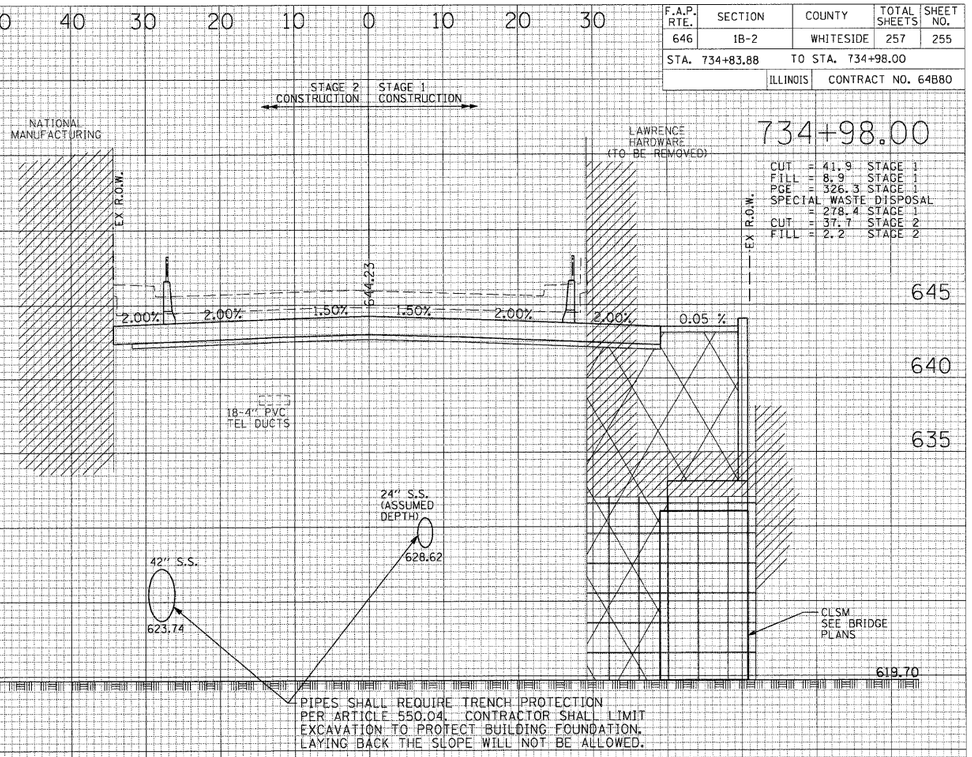
734+94.86 BACK ONLY

CUT = 64.8 STAGE 1
FILL = 0.0 STAGE 1
PGE = 878.0 STAGE 1
CUT = 66.9 STAGE 2
FILL = 0.0 STAGE 2
PGE = 474.2 STAGE 2



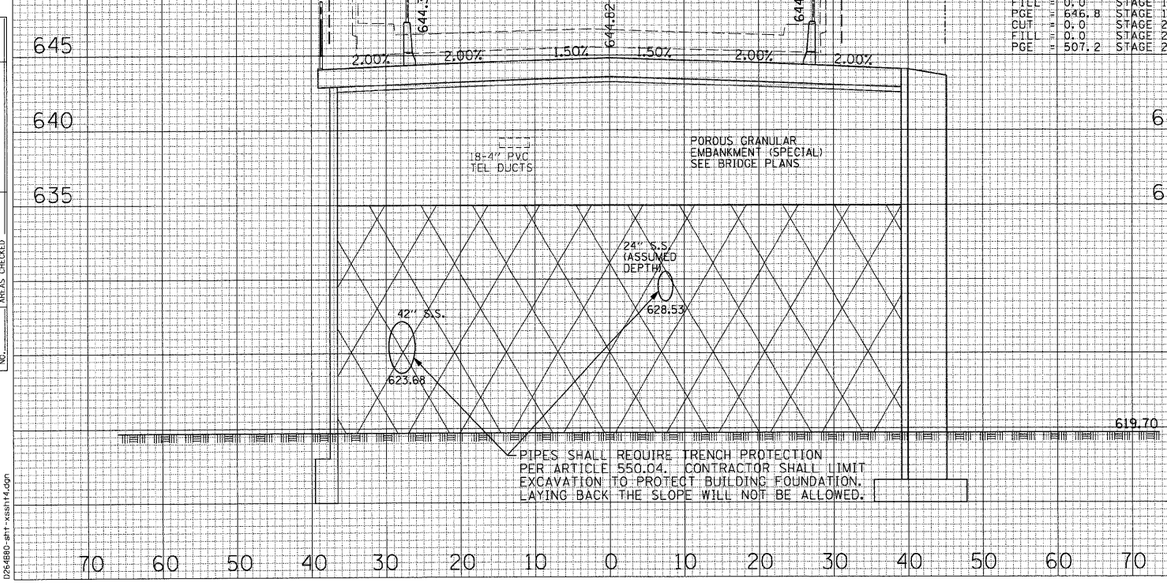
734+98.00

CUT = 41.9 STAGE 1
FILL = 8.9 STAGE 1
PGE = 326.3 STAGE 1
SPECIAL WASTE DISPOSAL = 278.4 STAGE 1
CUT = 37.7 STAGE 2
FILL = 2.2 STAGE 2



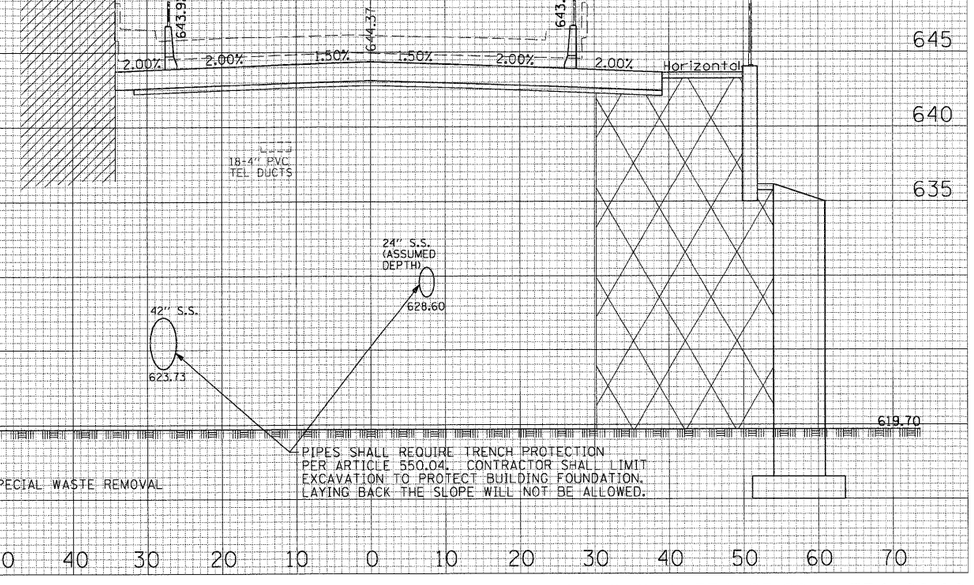
734+83.88 AHEAD ONLY

CUT = 0.0 STAGE 1
FILL = 0.0 STAGE 1
PGE = 645.8 STAGE 1
CUT = 0.0 STAGE 2
FILL = 0.0 STAGE 2
PGE = 507.2 STAGE 2



734+94.86 AHEAD ONLY

CUT = 67.9 STAGE 1
FILL = 0.0 STAGE 1
PGE = 516.5 STAGE 1
CUT = 59.6 STAGE 2
FILL = 0.0 STAGE 2



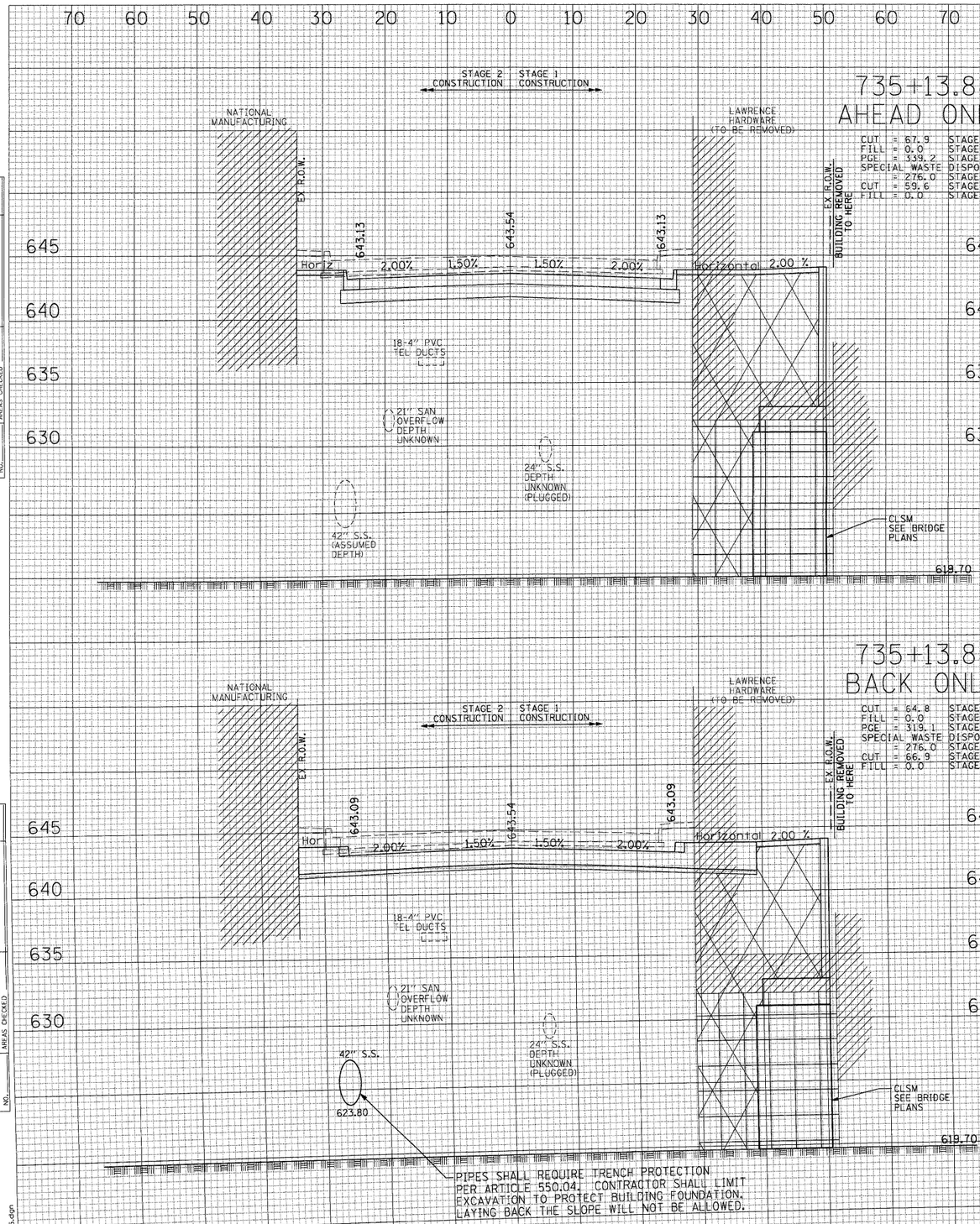
LEGEND: PGE — SPECIAL WASTE REMOVAL

D26-4680-sht-xssh114.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	256
STA. 735+13.88	TO STA. 735+33.75			
	ILLINOIS	CONTRACT NO. 64880		

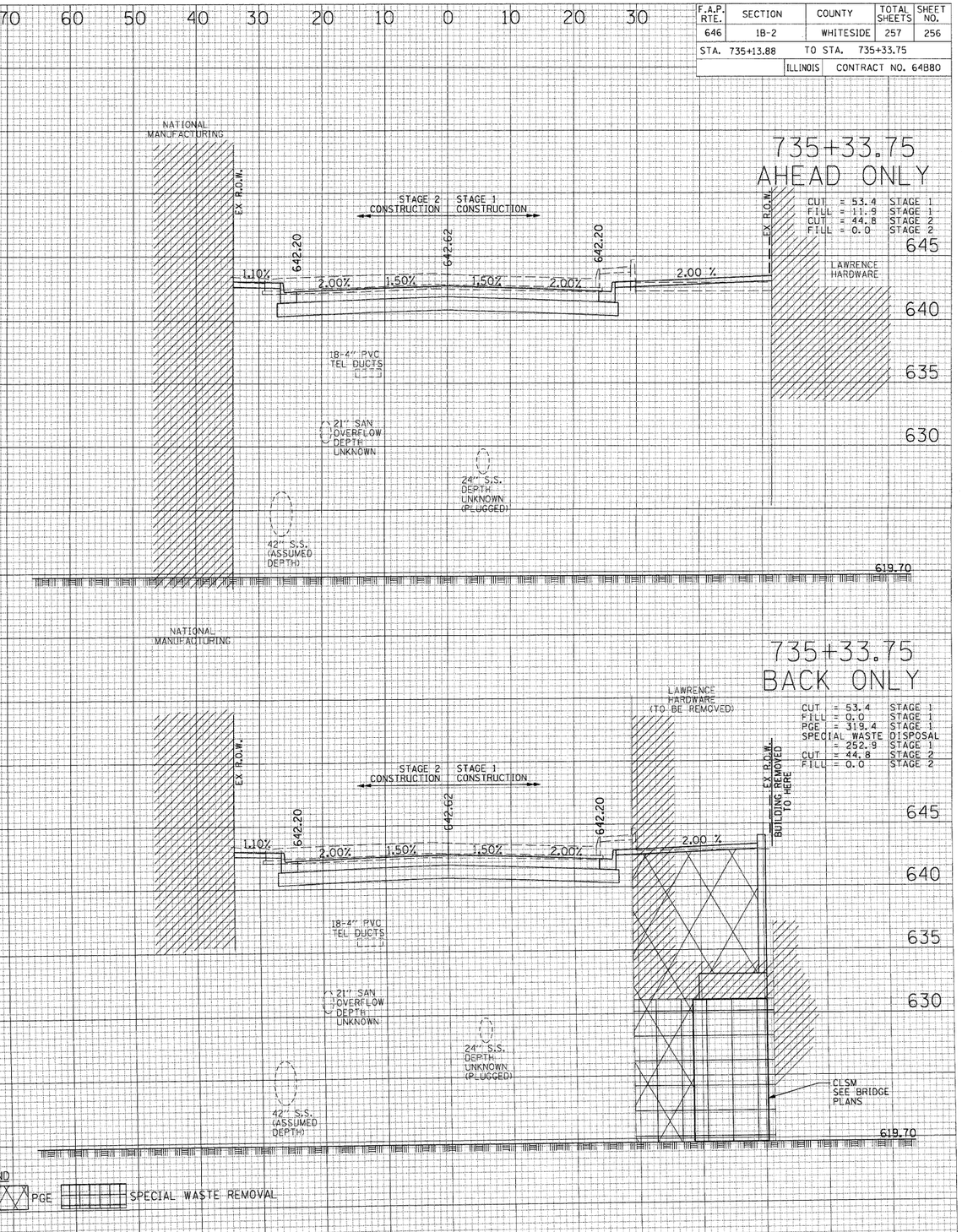
735+13.88 AHEAD ONLY

CUT	= 67.9	STAGE 1
FILL	= 0.0	STAGE 1
PGE	= 333.2	STAGE 1
SPECIAL WASTE		DISPOSAL
	= 276.0	STAGE 1
CUT	= 59.6	STAGE 2
FILL	= 0.0	STAGE 2



735+33.75 AHEAD ONLY

CUT	= 53.4	STAGE 1
FILL	= 11.9	STAGE 1
CUT	= 44.8	STAGE 2
FILL	= 0.0	STAGE 2



735+13.88 BACK ONLY

CUT	= 64.8	STAGE 1
FILL	= 0.0	STAGE 1
PGE	= 319.1	STAGE 1
SPECIAL WASTE		DISPOSAL
	= 276.0	STAGE 1
CUT	= 66.9	STAGE 2
FILL	= 0.0	STAGE 2

PIPES SHALL REQUIRE TRENCH PROTECTION PER ARTICLE 550.04. CONTRACTOR SHALL LIMIT EXCAVATION TO PROTECT BUILDING FOUNDATION. LAYING BACK THE SLOPE WILL NOT BE ALLOWED.

735+33.75 BACK ONLY

CUT	= 53.4	STAGE 1
FILL	= 0.0	STAGE 1
PGE	= 319.4	STAGE 1
SPECIAL WASTE		DISPOSAL
	= 252.9	STAGE 1
CUT	= 44.8	STAGE 2
FILL	= 0.0	STAGE 2

LEGEND: PGE, SPECIAL WASTE REMOVAL

IL 40 STA 735+13.88 - 735+33.75

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

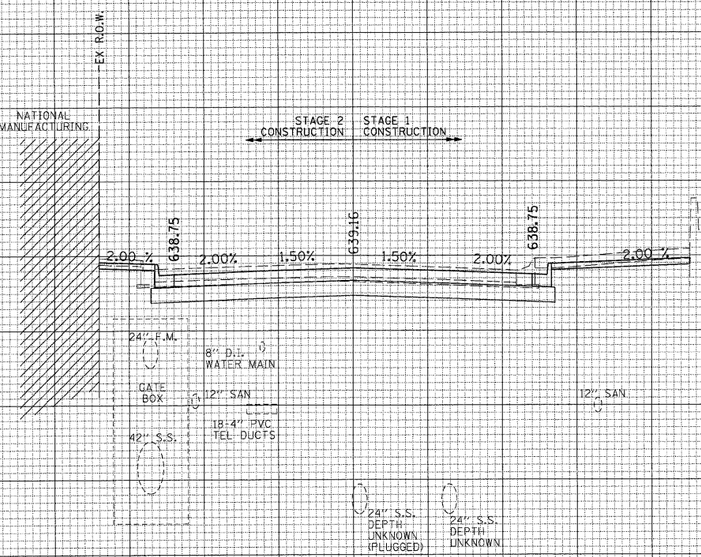
026480-gnr-xssht5.dgn

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
646	1B-2	WHITESIDE	257	257
STA. 735+50.00		TO STA. 736+55.00		
	ILLINOIS	CONTRACT NO. 64B80		

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

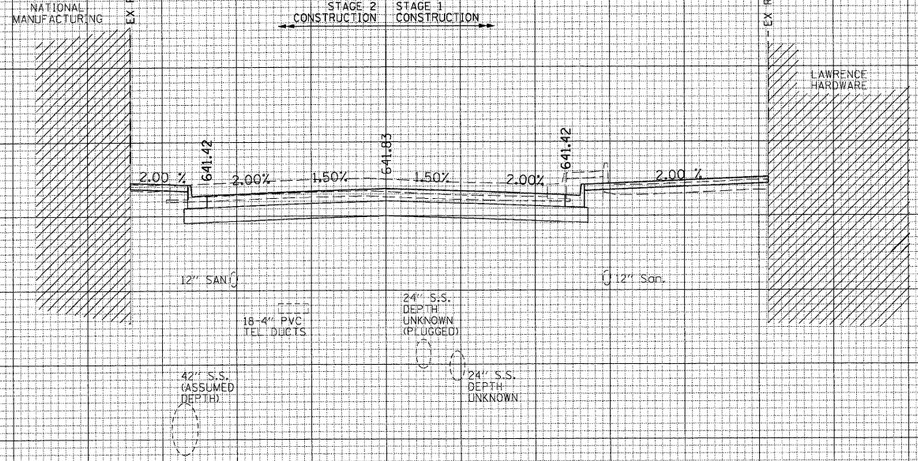
736+00.00

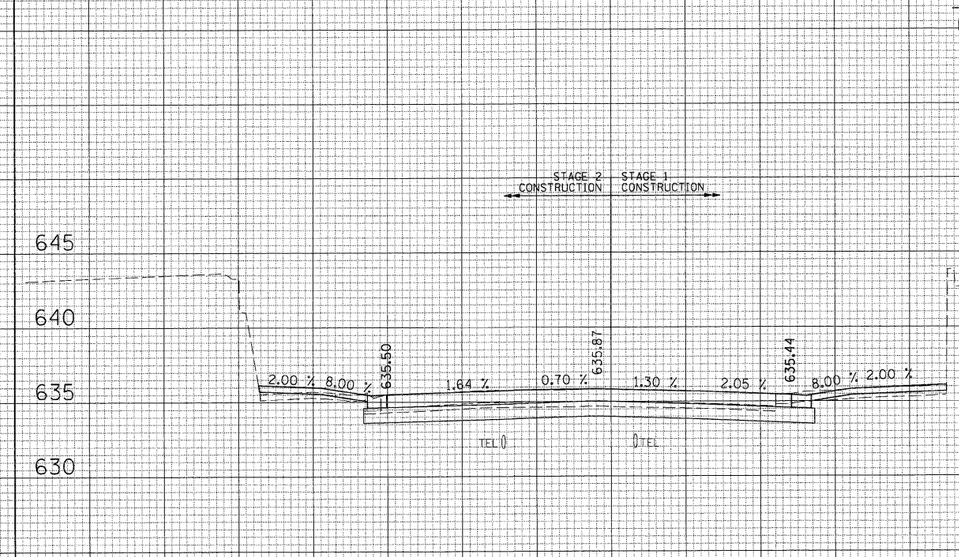
CUT = 32.9 STAGE 1
FILL = 0.0 STAGE 1
CUT = 27.0 STAGE 2
FILL = 2.1 STAGE 2



735+50.00

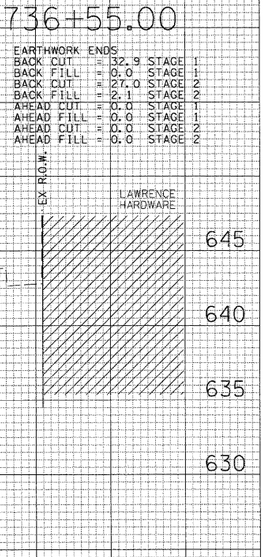
CUT = 41.9 STAGE 1
FILL = 8.9 STAGE 1
CUT = 37.7 STAGE 2
FILL = 2.2 STAGE 2





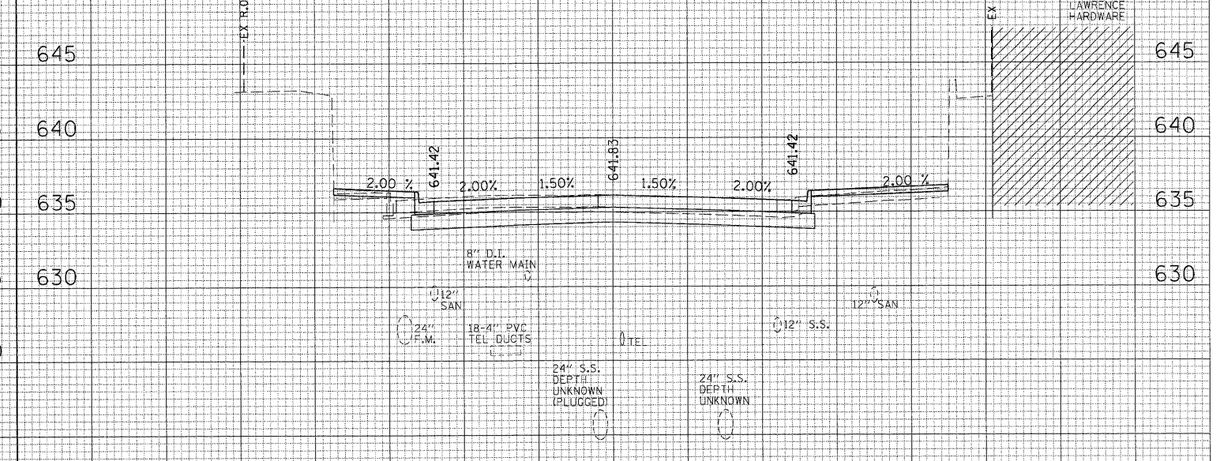
736+55.00

EARTHWORK ENDS
BACK CUT = 32.9 STAGE 1
BACK FILL = 0.0 STAGE 1
BACK CUT = 27.0 STAGE 2
BACK FILL = 2.1 STAGE 2
AHEAD CUT = 0.0 STAGE 1
AHEAD FILL = 0.0 STAGE 1
AHEAD CUT = 0.0 STAGE 2
AHEAD FILL = 0.0 STAGE 2



736+50.00

CUT = 20.5 STAGE 1
FILL = 0.0 STAGE 1
CUT = 22.6 STAGE 2
FILL = 6.7 STAGE 2



IL 40 STA 735+50.00 - 736+55.00

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