11-6-09 Letting, Item 073

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	1

STATE CONTRACT NO. 72852

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED HIGHWAY PLANS

FAP ROUTE 510 (IL 96)
SECTION 120 (I-6)
PROJECT: ACF-0510(035)
HANCOCK COUNTY
C-96-124-10

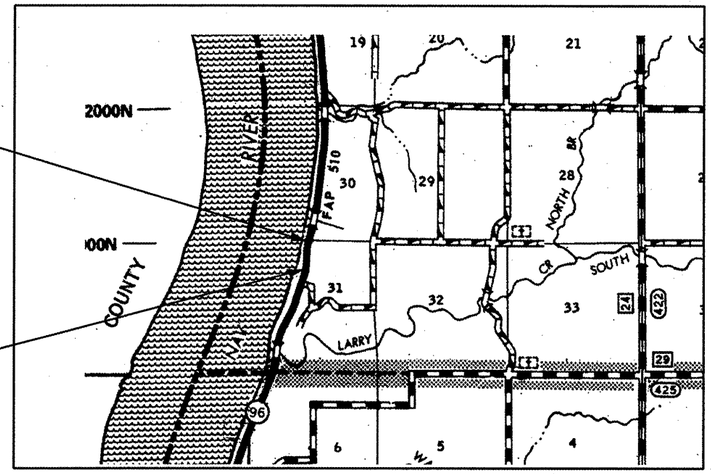
TRAFFIC DATA

ADT (2002)
1,650 (6% MU + SU)

INDEX OF SHEETS

IDOT HIGHWAY STANDARDS

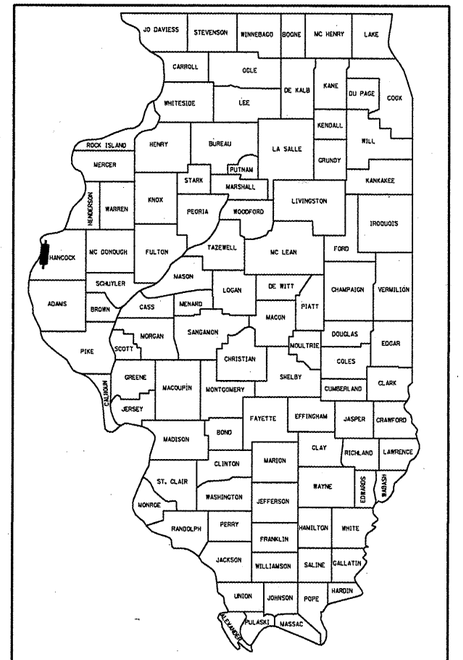
000001-05	635006-03	701311-03
001001-02	635011-02	701321-10
001006	701001-02	701901-01
280001-04	701006-03	704001-05
482011-03	701011-02	780001-02
630001-08	701201-03	781001-03
635001-01	701301-03	



NET LENGTH OF PROJECT: 187 FT (0.035 MILES)
GROSS LENGTH OF PROJECT: 187 FT (0.035 MILES)

N
(NOT TO SCALE)

D-96-569-03



LOCATION OF SECTION INDICATED THUS: -

100' 200' 300' — 1"= 100'
0 10' 20' 30' — 1"= 10'
0 50' 100' — 1"= 50'
0 50' 100' — 1"= 40'
0 50' 100' — 1"= 30'
0 50' 100' — 1"= 20'

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

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

CONTRACT NO. 72852

PLANS PREPARED BY

HORNER & SHIFRIN, INC.
ENGINEERS ■ ARCHITECTS ■ PLANNERS
141 MARKET PLACE SUITE 208 ■ FAIRVIEW HEIGHTS, ILLINOIS 62208
5200 OAKLAND AVENUE ■ ST. LOUIS, MISSOURI 63110
www.hornershifrin.com

Project Engineer: John Negangard Phone: (217) 782-6990
Squad Leader: Vince Madonia Phone: (217) 785-9046

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED August 13 2009
Roger Driskell
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 2, 2009
Charles J. Droessler
ENGINEER OF DESIGN AND ENVIRONMENT
October 2, 2009
Christine M. Reed
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	2
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852

GENERAL NOTES

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF STANDARD SPECIFICATION. THE J.U.L.I.E. NUMBER IS 1-800-892-0123.

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

   ALL UTILITY FACILITIES THAT REQUIRE RELOCATION WITHIN STATE R.O.W. SHALL BE COMPLETED BY THE UTILITY COMPANY UNLESS OTHERWISE SHOWN ON THE PLANS.

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

3. ALL STATIONS AND OFFSET REFERENCES ARE TO THE ROADWAY CENTERLINE (IL 96) UNLESS OTHERWISE NOTED. THE STATE PLANE COORDINATE SYSTEM HAS BEEN USED FOR THE HORIZONTAL CONTROL.

4. ALL ELEVATIONS SHOWN ON THE PLANS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM.

5. ANY REFERENCE WITHIN THESE PLANS TO A STANDARD SHALL BE INTERPRETED TO MEAN THE EDITION INDICATED BY THE SUB-NUMBER LISTED ON THE PREVIOUS SHEET OR THE COPY INCLUDED IN THESE PLANS.

6. THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS BITUMINOUS LIFTS.

7. ANY EARTH DISTURBED SHALL BE SEEDED, FERTILIZED, AND MULCHED TO THE SATISFACTION OF THE ENGINEER. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR COMPLYING WITH THIS REQUIREMENT.

8. FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

HMA CONCRETE BASE COURSE	0.056 TON/SQ YD/IN
HMA CONCRETE SURFACE COURSE	0.056 TON/SQ YD/IN
ALL AGGREGATE	2.05 TON/CU YD
BITUMINOUS MATERIALS:	
PRIME COAT FOR BITUMINOUS CONCRETE:	
- ON PAVEMENT	0.00038 TON/SQ YD
- ON AGGREGATE	0.001425 TON/SQ YD
- AGGREGATE (PRIME COAT)	0.002 TON/SQ YD

9. THE QUANTITY OF SHORT TERM PAVEMENT MARKING SHOWN IN THE PLANS IS BASED ON ONE APPLICATION EACH FOR THE BINDER COURSE AND SURFACE COURSE.

10. THE DISTRICT BUREAU OF OPERATIONS SHALL BE NOTIFIED AT LEAST 14 DAYS PRIOR TO PLACEMENT OF FINAL PAVEMENT MARKINGS PH: (217) 782-7314.

11. WHERE PROPOSED CONSTRUCTION ABUTS EXISTING APPURTENANCES, A SAW CUT SHALL BE MADE TO ACHIEVE A NEAT BUTT JOINT. ALL SAWED JOINTS FOR REMOVALS AND BUTT JOINTS SHALL BE CONSIDERED INCLUDED IN ITEM BEING REMOVED OR CONSTRUCTED.

12. A GEOTECHNICAL REPORT HAS BEEN PREPARED FOR THIS PROJECT AND IS AVAILABLE FOR REVIEW PRIOR TO BID AT THE DISTRICT OFFICE. CONTACT THE DISTRICT GEOTECHNICAL ENGINEER AT (217) 782-6709.

COMMITMENTS

NONE

MIX DESIGN

LOCATION(S):	
MIXTURE USE(S):	HMA SURFACE
AC / PG:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N DESIGN = 50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5 OR 12.5
FRICTION AGGREGATE:	MIX C

LOCATION(S):	
MIXTURE USE(S):	LEVEL BINDER (MACHINE METHOD)
AC / PG:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N DESIGN = 50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 9.5
FRICTION AGGREGATE:	N/A

LOCATION(S):	
MIXTURE USE(S):	HMA BASE COURSE
AC / PG:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N DESIGN = 50
MIXTURE COMPOSITION: (GRADATION MIXTURE)	IL 19.0
FRICTION AGGREGATE:	N/A

DISTRICT SIX

EXAMINED August 10 20 09
Kevin J Hoban
OPERATIONS ENGINEER

EXAMINED Aug 12 20 09
Pam L Heaini
PROGRAM IMPLEMENTATION ENGINEER

EXAMINED August 10 20 09
ORML-2
PROGRAM DEVELOPMENT ENGINEER

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GENERAL NOTES, COMMITMENTS & MIX DESIGN

F.A.P. 510 (IL 96)
HANCOCK COUNTY

SCALE: VERT. NONE
HORIZ. NONE
DATE 03/18/2004

DRAWN BY SSM
CHECKED BY SRD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	3
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852

SUMMARY OF QUANTITIES

	CODE NUMBER	PAY ITEM	UNIT	RURAL HANCOCK CO. 80% FED 20% STATE Y009
	20200100	EARTH EXCAVATION	CU YD	26.0
	28000400	PERIMETER EROSION BARRIER	FOOT	200
	31100100	SUB-BASE GRANULAR MATERIAL, TYPE A	TON	110
	35501332	HOT-MIX ASPHALT BASE COURSE, 12"	SQ YD	212
	40600200	BITUMINOUS MATERIALS (PRIME COAT)	TON	0.5
	40600300	AGGREGATE (PRIME COAT)	TON	3.0
	40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	25
	40600990	TEMPORARY RAMP	SQ YD	40
	40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	48
	44000198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	364
	44000100	PAVEMENT REMOVAL	SQ YD	101
	44000400	GUTTER REMOVAL	FOOT	125
	44004250	PAVED SHOULDER REMOVAL	SQ YD	84
	48101200	AGGREGATE SHOULDERS, TYPE B	TON	165
*	63000002	STEEL PLATE BEAM GUARD RAIL, TYPE A, 6.75 FOOT POSTS	FOOT	212.5
	63200310	GUARDRAIL REMOVAL	FOOT	212.5
	67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	5
	67100100	MOBILIZATION	L SUM	1
	70101205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1
	70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
	70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5
	70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	367
	70300230	TEMPORARY PAVEMENT MARKING - LINE 5"	FOOT	2932
	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	308
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	350
*	78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	2932
*	78200410	GUARDRAIL MARKERS, TYPE A	EACH	2
	78300100	PAVEMENT MARKING REMOVAL	SQ FT	746
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3
	X7200201	WIDTH RESTRICTION SIGNING	L SUM	1
	Z0030260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2
	X0326695	FURNISHING AND INSTALLING GROUTED PIN PILES	L SUM	1

* SPECIALTY ITEMS

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

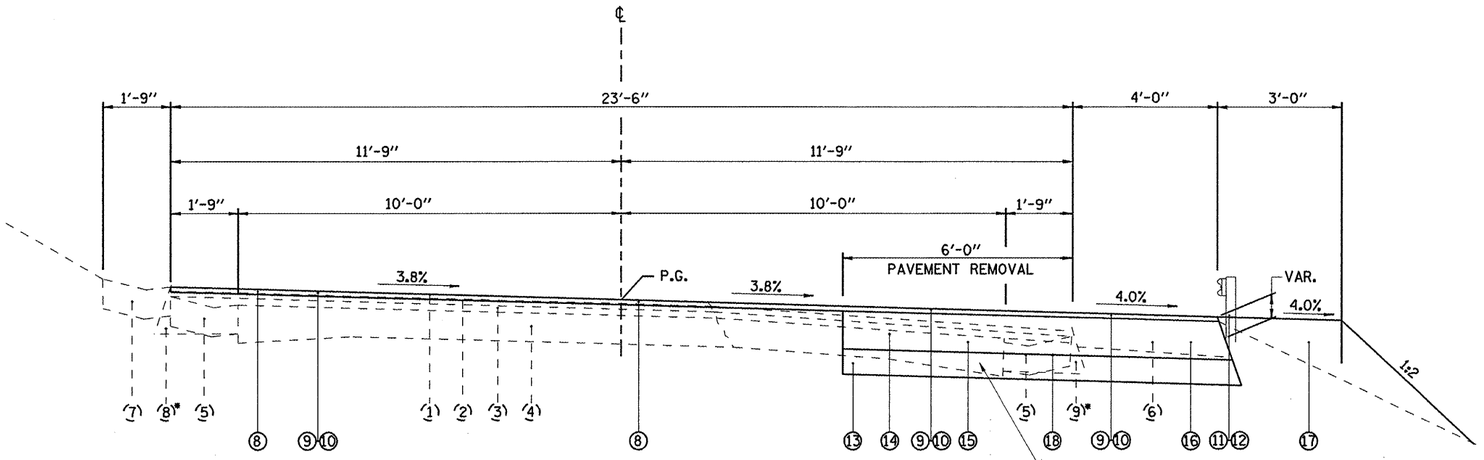
FAP ROUTE 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. NONE
HORIZ. NONE
DATE 03/18/2004

DRAWN BY SSM
CHECKED BY SRD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	4
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852



* STA 811+19 TO STA 811+80 ONLY

FAP ROUTE 510 (IL 96)
AREA OF SLOPE FAILURE

STA 809+94.00 TO STA 811+81.00

EXISTING MATERIAL LEGEND

(1) EXISTING BITUMINOUS CONCRETE SURFACE COURSE
(2) EXISTING BITUMINOUS CONCRETE BINDER COURSE, 1¾"
(3) EXISTING LEVELING BINDER
(4) EXISTING PAVEMENT
(5) EXISTING GUTTER
(6) EXISTING BITUMINOUS SHOULDER, 6"
(7) EXISTING CONCRETE GUTTER TYPE B
(8) EXISTING PCC BASE COURSE WIDENING, 9"
(9) EXISTING BITUMINOUS CONCRETE BASE COURSE WIDENING, 9"

PROPOSED MATERIAL LEGEND

(8) PROPOSED HMA SURFACE REMOVAL, VAR. DEPTH (2¼" TYP.)
(9) PROPOSED LEVELING BINDER (MACHINE METHOD), N50, ¾"
(10) PROPOSED HMA SURFACE COURSE, MIX "C", N50, 1½"
(11) PROPOSED GUARDRAIL REMOVAL
(12) PROPOSED STEEL PLATE BEAM GUARD RAIL, TYPE A
(13) PROPOSED SUB-BASE GRANULAR MATERIAL, TYPE A, 8"
(14) PROPOSED HMA BASE COURSE, 12"
(15) PROPOSED PAVEMENT REMOVAL
(16) PROPOSED PAVED SHOULDER REMOVAL
(17) PROPOSED AGGREGATE SHOULDERS, TYPE B
(18) PROPOSED GUTTER REMOVAL (STA 809+94 TO STA 811+19)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION
FAP 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. NONE HORIZ.
DATE 3/18/2004
DRAWN BY SSM
CHECKED BY SRD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	5
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852

BITUMINOUS MATERIALS

STATION TO STATION	LENGTH	WIDTH	HMA BASE COURSE, 12 IN.	LEVELING BINDER, (MACHINE METHOD), N50	HMA CONC. SURF. CSE. MIX "C", N-50	BITUMINOUS MATERIALS (PRIME COAT)	AGGREGATE (PRIME COAT)	SUB-BASE GRANULAR MATERIAL, TY A	TEMPORARY RAMP
	FOOT	FOOT	SQ. YD.	TON	TON	TON	TON	TON	SQ. YD.
809+94.00 TO 811+81.00	187	10	212	25	48	0.5	3.0	110	
809+94.00									20
811+81.00									20
		TOTAL =	212	25	48	0.5	3.0	110	40

PAVEMENT MARKING

STATION TO STATION	DESCRIPTION	LOCATION	PAINT PAVEMENT MARKING-LINE 5"	TEMPORARY PAVEMENT MARKING-LINE 5"	SHORT-TERM PAVEMENT MARKING (2 APPS)	WORK ZONE PAVEMENT MARKING REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	PAVEMENT MARKING REMOVAL
			FOOT	FOOT	FOOT	SQ FT	EACH	SQ FT
807+17.50 TO 814+50.00	DOUBLE SOLID	CL	1466	1466				
807+17.50 TO 814+50.00	EDGE	LT, RT	1466	1466				
807+17.50 TO 814+50.00	DASHED	CL			147	25		
807+17.50 TO 814+50.00	DOUBLE SOLID	CL						611
807+17.50 TO 809+17.50	EDGE	RT						84
812+67.00 TO 813+90.00	EDGE	RT						51
807+27.00 TO 809+94.00	EDGE	RT				111		
811+81.00 TO 813+90.00	EDGE	RT				87		
807+17.50, 814+50.00	STOP BAR					48		
809+94.00 TO 811+81.00		CL					3	
		TOTAL =	2932	2932	147	271	3	746

EROSION CONTROL

LOCATION	OFFSET	PERIMETER EROSION BARRIER
		FOOT
809+90.00 TO 811+90.00	RT	200
	TOTAL =	200

HMA SURFACE REMOVAL, VD

STATION TO STATION	WIDTH	AREA
		SQ. YD.
809+94.00 TO 811+81.00	17.5	364
	TOTAL =	364

AGGREGATE SHOULDER

STATION	STATION	LENGTH	AGG SHLDRS TYPE B
			TON
809+94.00	811+81.00	187	165
		TOTAL =	165

REMOVAL ITEMS

STATION	STATION	LENGTH	PAVEMENT REMOVAL	GUTTER REMOVAL	PAVED SHOULDER REMOVAL
			SQ YD	FOOT	SQ YD
809+94.00	811+81.00	187	101		84
809+94.00	811+19.00	125		125	
		TOTAL =	101	125	84

GUARDRAIL

LOCATION	SIDE	GUARDRAIL REMOVAL	SPBGR, TYPE A	GUARDRAIL MARKERS, TYPE A
		FOOT	FOOT	EACH
809+77.50 TO 811+90.00	RT	212.5	212.5	2
	TOTAL =	212.5	212.5	2

TEMPORARY CONCRETE BARRIER

LOCATION	SIDE	TEMPORARY CONCRETE BARRIER
		FOOT
809+17.50 TO 809+67.50	RT	50
809+67.50 TO 812+17.50	RT	250
812+17.50 TO 812+67.50	RT	50
	TOTAL =	350

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

FAP ROUTE 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

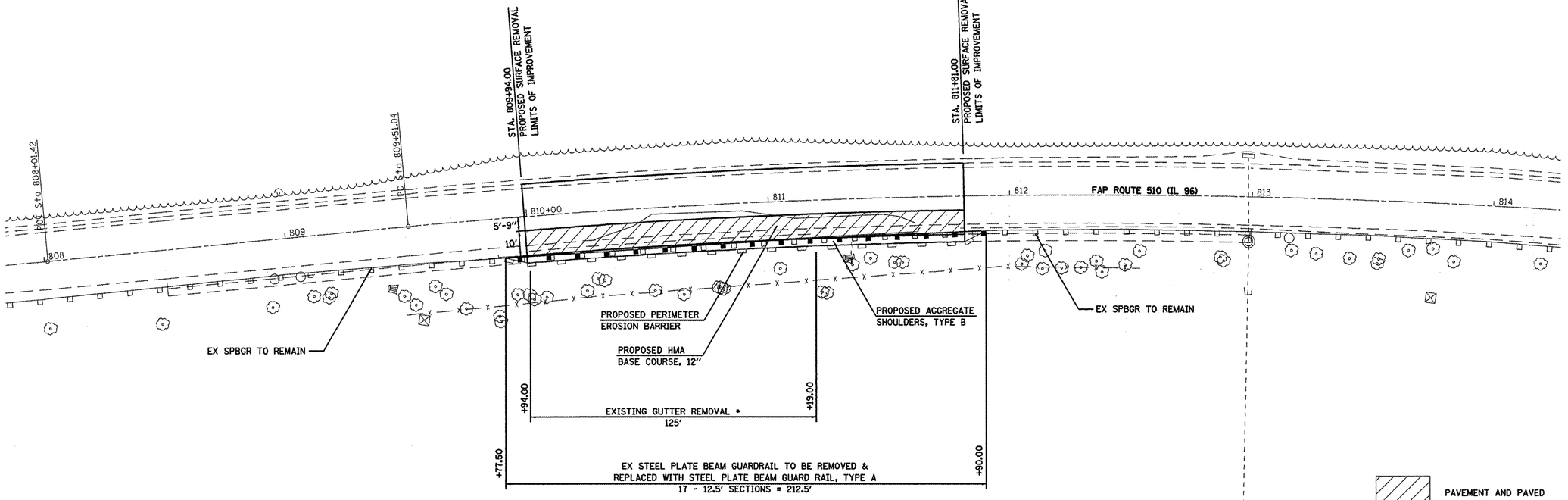
SCALE: VERT. NONE
HORIZ. NONE
DATE 03/18/2004

DRAWN BY SSM
CHECKED BY SRD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	6
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852

EXIST. CURVE 200
PI STA. = 812+45.40
Δ = 10° 58′ 16″ (RT)
D = 1° 52′ 09″
R = 3,065.18′
T = 294.36′
L = 586.92′
E = 14.10′
e = 3.8%
P.C. STA. = 809+51.04
P.T. STA. = 815+37.96



• REMOVAL OF PAVEMENT ON TOP OF GUTTER IS INCLUDED IN THE COST OF GUTTER REMOVAL.

PAVEMENT AND PAVED SHOULDER REMOVAL

20 10 0 20 40
SCALE IN FEET

BENCHMARK INFORMATION:

BM "1"
STA 807+32.30, 22.8′ RT
FOUND CHISELED "□" IN SOUTH WEST END OF RETAINING WALL NORTH OF SLIDE AREA
ELEVATION = 596.44

BM "2"
STA 812+99.00 +/-, 17.0′ LT
CHISELED "□" IN GUTTER ℄ NEAR INLET
ELEVATION = 589.22

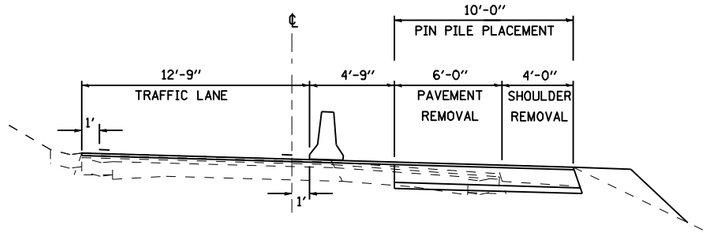
REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

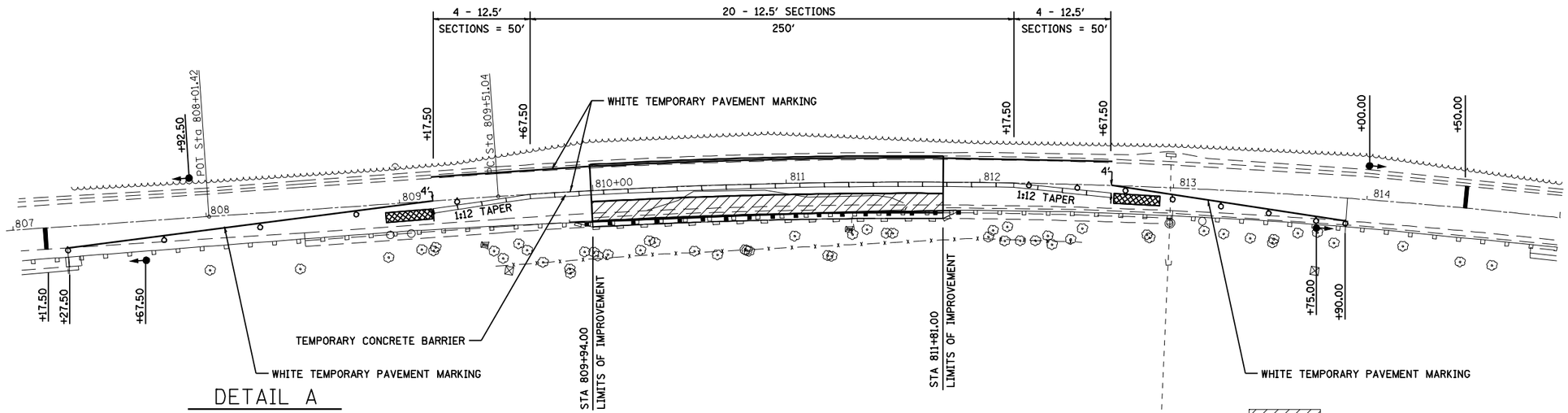
PLAN SHEET
FAP 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. NONE
HORIZ. 1″ = 20′
DATE 3/18/2004
DRAWN BY SSM
CHECKED BY SRD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	7
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
		STATE CONTRACT NO. 72852		



EXIST. CURVE 200
PI STA. = 812+45.40
Δ = 10° 58′ 16″ (RT)
D = 1° 52′ 09″
R = 3,065.18′
T = 294.36′
L = 586.92′
E = 14.10′
e = 3.80%
P.C. STA. = 809+51.04
P.T. STA. = 815+37.96



DETAIL A

SEQUENCE OF OPERATIONS						
PHASE	A			B		
INTERVAL	1	2	3	4	5	6
NORTHBOUND	G	Y	R	R	R	R
SOUTHBOUND	R	R	R	G	Y	R

PAVEMENT AND BITUMINOUS SHOULDER REMOVAL

IMPACT ATTENUATOR

SEQUENCE OF CONSTRUCTION

1) INSTALL TRAFFIC CONTROL PROTECTION STANDARD 701321
2) REMOVE PAVEMENT, SHOULDER, GUTTER, AND GUARD RAIL WITHIN PIN PILE PLACEMENT AREA
3) INSTALL PIN PILES
4) PATCH PAVEMENT AND RE-ERECT GUARD RAIL
5) REMOVE TRAFFIC CONTROL AND PROTECTION STANDARD 701321
6) PERFORM BITUMINOUS SURFACE REMOVAL, RESURFACING, AND FINAL PAVEMENT MARKINGS

NOTES:

ADVANCE WARNING SIGNS, TEMPORARY RUMBLE STRIPS, VERTICAL PANELS, PAVEMENT MARKERS, AND BARRIER WALL REFLECTORS SHALL BE LOCATED IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

SEE HIGHWAY STANDARD 701321 FOR MORE INFORMATION

IMPACT ATTENUATORS SHALL CONFORM TO:
BDE MEMO 34-04 "IMPACT ATTENUATORS, (CRASH CUSHIONS)"

30 0 30 60
SCALE IN FEET

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAIL

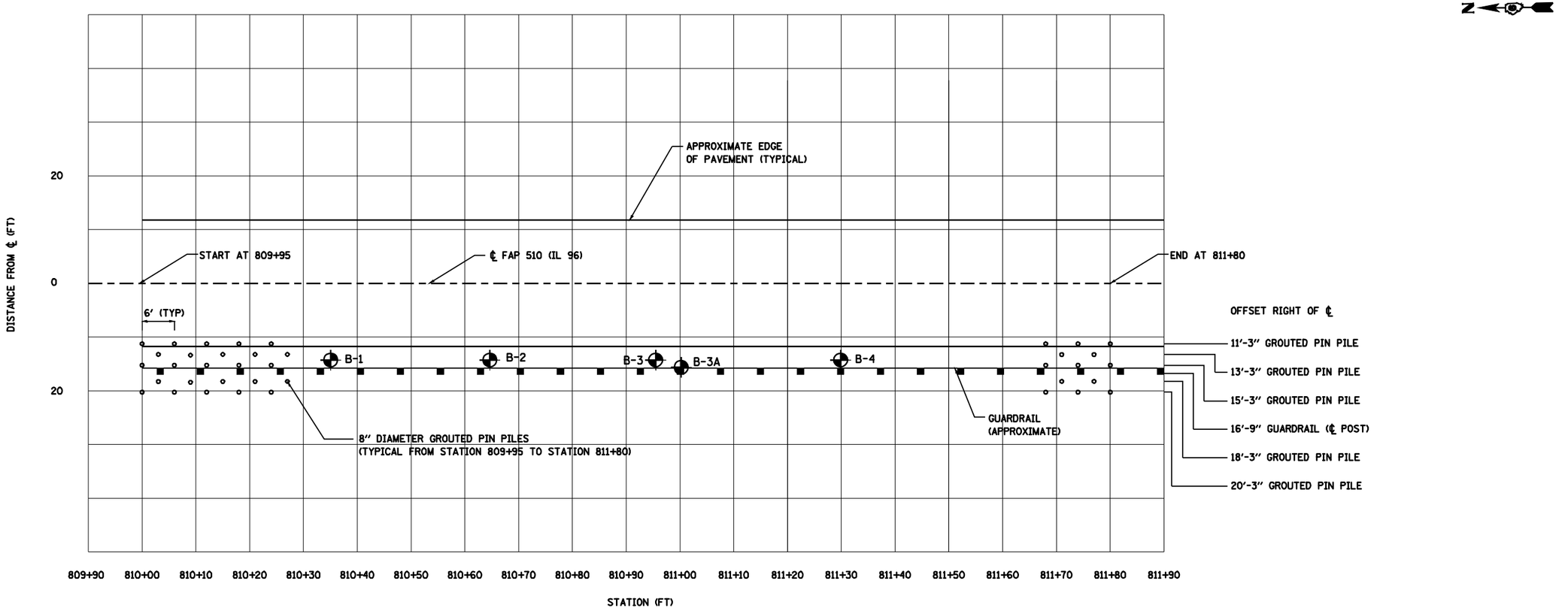
FAP 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. NONE
HORIZ. 1″=30′
DATE: 03/18/2004

DRAWN BY: SSM
CHECKED BY: SRD

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	8
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852



PLAN VIEW

10 5 0 10 20

SCALE IN FEET

BASED ON GEOTECHNICAL REPORT DATED MAY 2004
(PREPARED BY SCI ENGINEERING FOR IDOT)
AND PLAN PROVIDED BY IDOT DATED OCTOBER 1, 2003

NOTES: FIELD ADJUSTMENTS SHALL BE MADE AS NEEDED TO MAINTAIN AN 18 INCH SPACING BETWEEN ℄ OF GUARDRAIL AND ℄ OF ADJACENT GROUTED PIN PILE ROWS.

OTHER GROUTED PIN PILE DIAMETERS AND SPACINGS ARE ACCEPTABLE, AS PROVIDED IN THE SPECIAL PROVISIONS.

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GROUTED PIN PILE DETAIL

FAP 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. NONE
HORIZ. 1" = 10'
DATE 4/21/2005

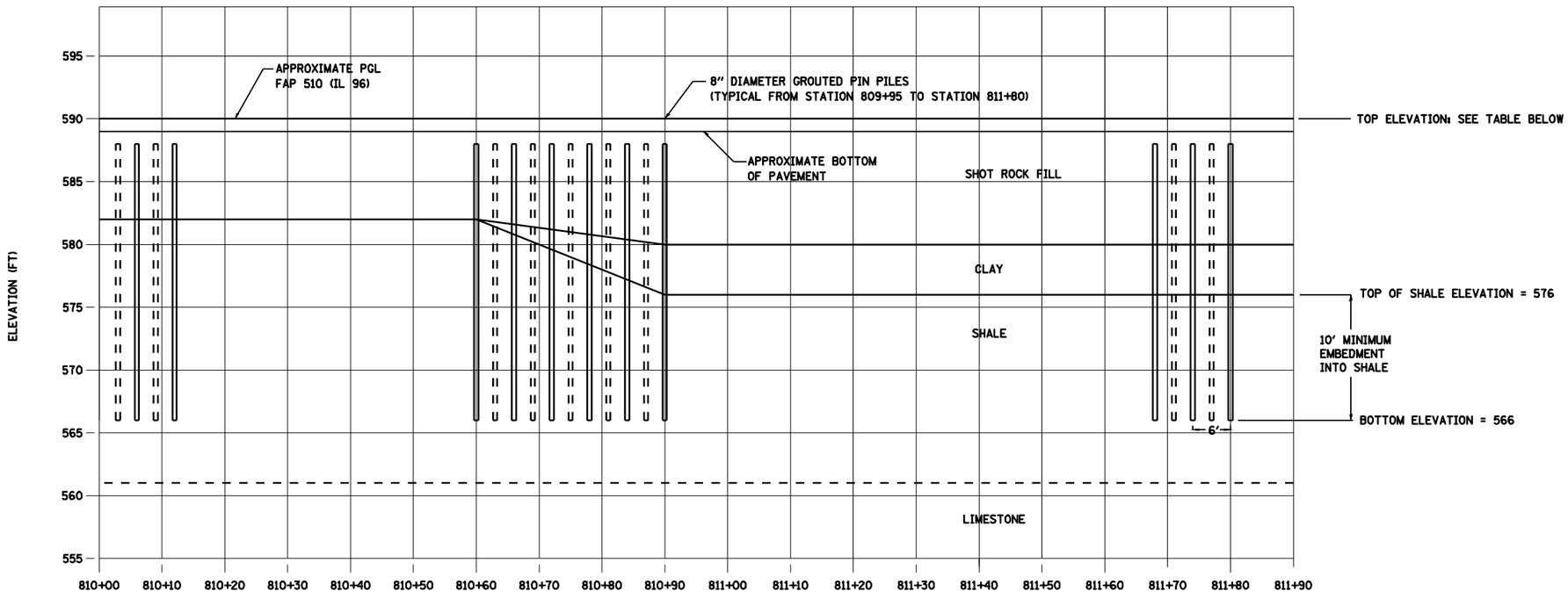
DRAWN BY SSM
CHECKED BY AGM

Plot Date: Aug-14-2009 10:24:43AM
Plot Time: 10:24:43 AM
Plotted By: mcdonnlov
Plot Scale: #SCALE#
Filename: #FILE#

SUB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	9
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852



STATION	OUTER ROW (RIVER SIDE)	INNER ROW (CL SIDE)
809+95 - 810+25	589	590
810+25 - 810+65	588	589
810+65 - 810+80	587	588

NOTE: TOP ELEVATIONS TO BE ADJUSTED IN ACCORDANCE WITH THE PROPOSED AGGREGATE SUBBASE ELEVATION.

THE TOP OF THE PIN PILES SHALL BE A MINIMUM OF 12 INCHES BELOW THE BOTTOM OF THE PROPOSED PAVEMENT.

ELEVATION VIEW

SCALE: HOR. 1" = 10'
VERT. 1" = 5'

SUBSURFACE MATERIAL CONSTRUCTION CONSIDERATIONS	
ROCK FILL	GRADATION RANGE: ±0.1" TO ±36"; UNEVENLY DISTRIBUTED; ±3 FT NOMINAL MAXIMUM DIMENSION. ROCK FILL COMPOSED OF PRIMARILY LIMESTONE, SOME BROKEN CONCRETE MAY BE ENCOUNTERED.
CLAY	FAILURE PLANE. LOW STRENGTH / HIGH MOISTURE.
SHALE	WEATHERED; 19%<RQD<92%; 4<N<100+. AUGURED USING STANDARD DRILLING EQUIPMENT DURING INVESTIGATION. BOULDERS ARE LIKELY TO BE ENCOUNTERED.
GROUNDWATER	RAPID SEEPAGE INTO EXCAVATION SHOULD BE EXPECTED.

10 5 0 10 20
SCALE IN FEET

NOTES: FIELD ADJUSTMENTS SHALL BE MADE AS NEEDED TO MAINTAIN A MINIMUM OF 12 INCHES BETWEEN GUARDRAIL POSTS AND EDGE OF GROUTED PIN PILES.

ELEVATIONS SHOWN DEPICT GENERALIZED SOIL CONDITIONS. ACTUAL CONDITIONS MAY VARY CONSIDERABLY.

OTHER GROUTED PIN PILE DIAMETERS AND SPACINGS ARE ACCEPTABLE, AS PROVIDED IN THE SPECIAL PROVISIONS.

BASED ON GEOTECHNICAL REPORT DATED MAY 2004
(PREPARED BY SCI ENGINEERING FOR IDOT)
AND PLAN PROVIDED BY IDOT DATED OCTOBER 1, 2003

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GROUTED PIN PILE DETAIL

FAP 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. 1" = 5'
HORIZ. 1" = 10'
DATE 4/21/2005

DRAWN BY SSM
CHECKED BY AGM

Plot Date: Aug-14-2009 10:24:15 AM
Plot Time: 10:24:15 AM
Plotted By: mcdonlov
Personnel: mcdonlov
Filename: $FILE$

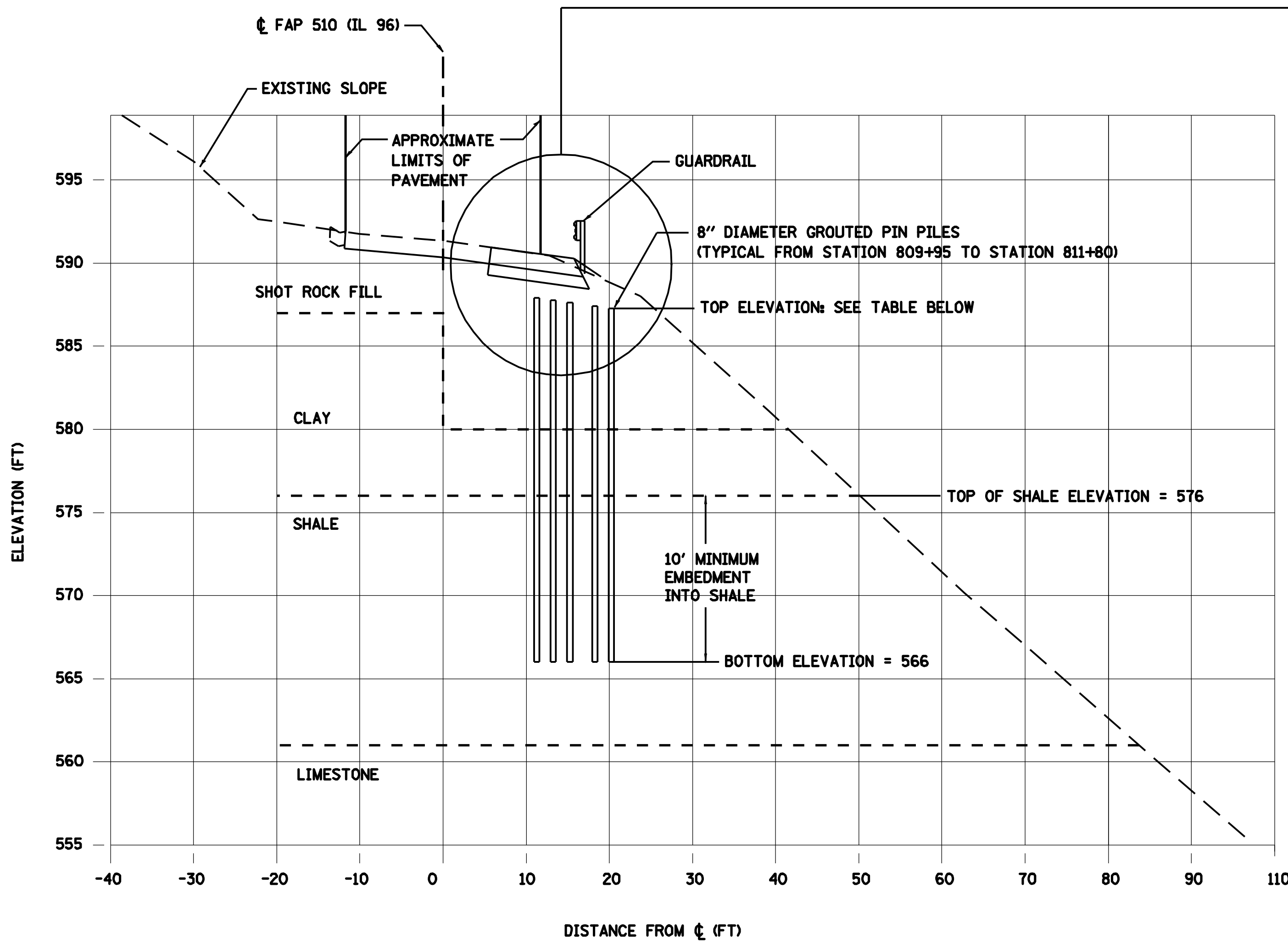
SUB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	10

STA. TO STA.

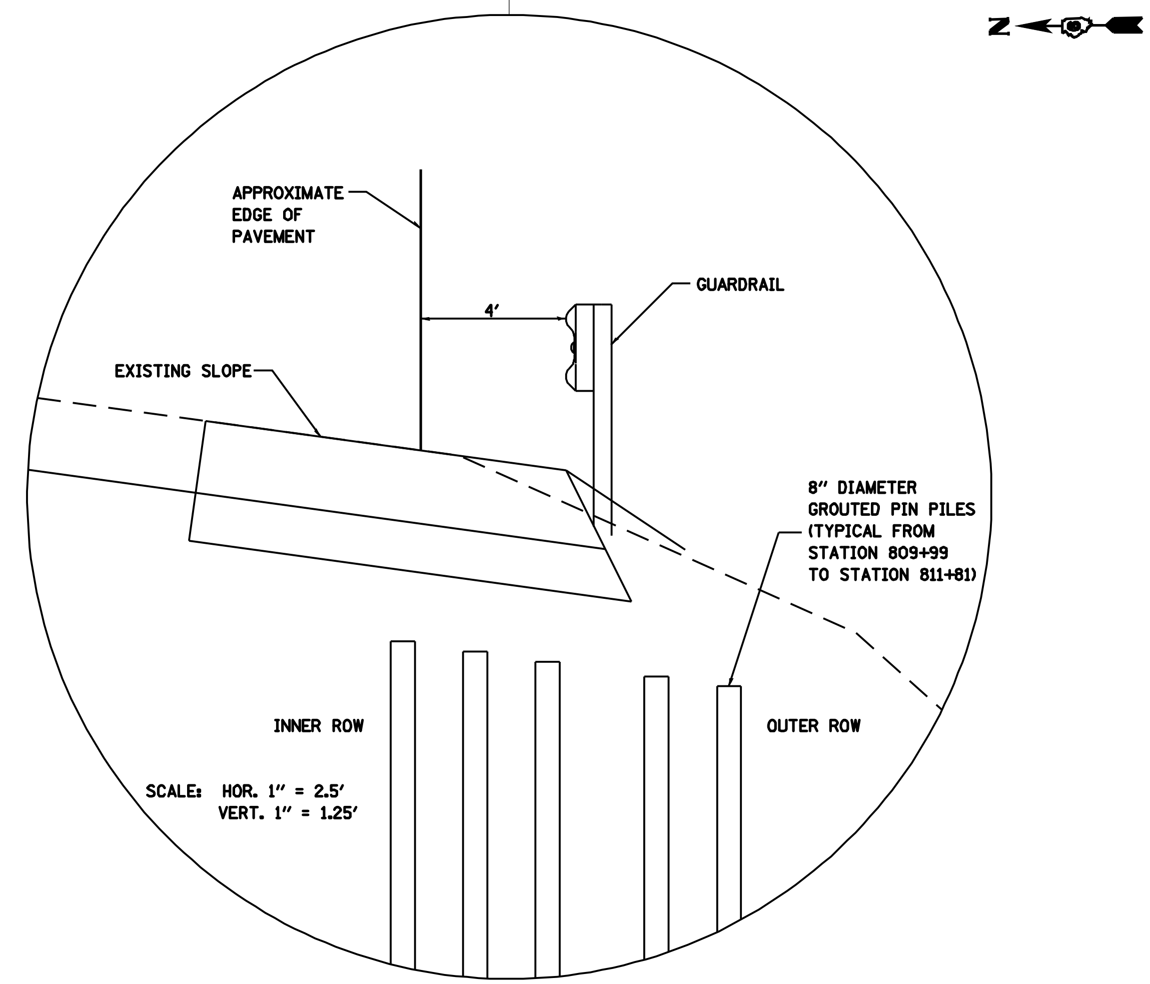
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT

STATE CONTRACT NO. 72852



CROSS SECTION VIEW

SCALE: HOR. 1" = 10'
VERT. 1" = 5'



STATION	OUTER ROW (RIVER SIDE)	INNER ROW (CL SIDE)
809+95 - 810+25	589	590
810+25 - 810+65	588	589
810+65 - 810+80	587	588

NOTE: TOP ELEVATIONS TO BE ADJUSTED IN ACCORDANCE WITH THE PROPOSED AGGREGATE SUBBASE ELEVATION.

THE TOP OF THE PIN PILES SHALL BE A MINIMUM OF 12 INCHES BELOW THE BOTTOM OF THE PROPOSED PAVEMENT.

SUBSURFACE MATERIAL CONSTRUCTION CONSIDERATIONS	
ROCK FILL	GRADATION RANGE: ±0.1" TO ±36"; UNEVENLY DISTRIBUTED; ±3 FT NOMINAL MAXIMUM DIMENSION. ROCK FILL COMPOSED OF PRIMARILY LIMESTONE, SOME BROKEN CONCRETE MAY BE ENCOUNTERED.
CLAY	FAILURE PLANE. LOW STRENGTH / HIGH MOISTURE.
SHALE	WEATHERED; 19%<RQD<92%; 4<N<100+. AUGURED USING STANDARD DRILLING EQUIPMENT DURING INVESTIGATION. BOULDERS ARE LIKELY TO BE ENCOUNTERED.
GROUNDWATER	RAPID SEEPAGE INTO EXCAVATION SHOULD BE EXPECTED.

10 5 0 10 20
SCALE IN FEET

NOTES: FIELD ADJUSTMENTS SHALL BE MADE AS NEEDED TO MAINTAIN AN 18 INCH SPACING BETWEEN ℄ OF GUARDRAIL AND ℄ OF ADJACENT GROUTED PIN PILE ROWS.

CROSS SECTION SHOWN DEPICTS GENERALIZED SOIL CONDITIONS. ACTUAL CONDITIONS MAY VARY CONSIDERABLY.

OTHER GROUTED PIN PILE DIAMETERS AND SPACINGS ARE ACCEPTABLE, AS PROVIDED IN THE SPECIAL PROVISIONS.

BASED ON GEOTECHNICAL REPORT DATED MAY 2004 (PREPARED BY SCI ENGINEERING FOR IDOT) AND PLAN PROVIDED BY IDOT DATED OCTOBER 1, 2003

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

GROUTED PIN PILE DETAIL

FAP 510 (IL 96)
SECTION 120 (I-6)
HANCOCK COUNTY

SCALE: VERT. 1" = 5'
HORIZ. 1" = 10'
DATE 4/21/2005

DRAWN BY SSM
CHECKED BY AGM

SUB

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	11
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852

Illinois Department of Transportation
Division of Highways
Idot District 6

SOIL BORING LOG

Date 6/7/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-5) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 8 W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. _____
Station _____

BORING NO. 1
Station 810+35
Offset 14.00ft Right
Ground Surface Elev. 591.5 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter No Encounter ft
Upon Completion Cored ft
After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Grey Moist Rock Fill w/ Limestone Cobbles and Boulders			
-5	4		
	6		10
	2		
585.50			
Grey Poorly Indurated LIMESTONE	2		
Auger Refusal at 7.5	3		
584.00	41		
Borehole continued with rock coring.			
-10			
-15			
-20			

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

BBS, from 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Idot District 6

ROCK CORE LOG

Date 6/7/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 8 W, 4 PM

COUNTY Hancock CORING METHOD Christensen NXB w/ Water

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE NXB

BORING NO. 1
Station 810+35
Offset 14.00ft Right
Ground Surface Elev. 591.5 ft

Core Diameter 1.875 in
Top of Rock Elev. 576.50 ft
Begin Core Elev. 584.00 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Light Grey Well Indurated Crystalline LIMESTONE w/ Thin Chert Seams Likely Not In Place	584.00				
Tan and Tannish Grey V. Weathered V. Poorly Indurated Clayey SHALE	583.40				
-10	1	10	10		
	2	25	0		
-15					
	3	73	58		
-20					
	4	81	71		
Dark Grey Well Indurated Clayey SHALE	568.90				
-25					
Dark Grey V. Well Indurated Clayey SHALE	564.80				
	5	98	96		

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

BBS, form 138 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways
Idot District 6

ROCK CORE LOG

Date 6/7/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 8 W, 4 PM

COUNTY Hancock CORING METHOD Christensen NXB w/ Water

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE NXB

BORING NO. 1
Station 810+35
Offset 14.00ft Right
Ground Surface Elev. 591.5 ft

Core Diameter 1.875 in
Top of Rock Elev. 576.50 ft
Begin Core Elev. 584.00 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Dark Grey V. Well Indurated Clayey SHALE *(continued)*					
-30					
561.00					
V. Light Brownish Grey Moderately Indurated Argillicecus LIMESTONE					
560.00					
Boring Complete					
Note - No Water Return During Rock Core Run					
Station, Elevation updated 08/20/04 MRM					
-35					
-40					
-45					

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

BBS, form 138 (Rev. 8-99)

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
SHEET 1 OF 3

SCALE: VERT.
HORIZ.
DATE

DRAWN BY IDOT
CHECKED BY

Illinois Department of Transportation
Division of Highways
Idot District 6

SOIL BORING LOG

Page 1 of 1
Date 6/8/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 8 W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. ____
Station ____

BORING NO. 2
Station 810+65
Offset 14.00ft Right
Ground Surface Elev. 590.8 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter No Encounter ft
Upon Completion 556.2 ft
After ____ Hrs. Plugged ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Grey Moist Rock Fill with Limestone Cobbles and Boulders				
	-5	2 3 3		7
		1 2 5		10
	-10	100 B.S.		
		1 1 3	0.5 B	20
577.30 Dark Grey Mottled CLAY Colluvium				
	-15	0 1 3	0.3 B	30
575.80 SHALE Grey and Tan V. Weathered Poorly Indurated Clayey SHALE				
		3 5 10	1.1 S-5	15
	-20	3 9	4.2	15

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SHALE *(continued)*		17	S-14	
Greyish Brown Weathered Poorly Indurated Clayey SHALE				
Brown and Grey Weathered Poorly Indurated Clayey SHALE		3 8 13	3.5 B	17
556.30				
Grey Moist Well Indurated CLAYEY SHALE Poker Chipped Sample	-25	20 100 /5"		9
Poker Chipped Sample		100 /5"		6
561.30 Boring Completed	-30	100 /4"		
Station, Elevation Updated 08/20/04 MRM				
	-35			
	-40			

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

BBS, from 137 (Rev. 8-99)

SOIL BORING IL 96 WALL M.GPJ DSTEMPLT.GDT 8/20/04
Latitude Longitude

Illinois Department of Transportation
Division of Highways
Idot District 6

SOIL BORING LOG

Page 1 of 1
Date 6/8/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 8 W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. ____
Station ____

BORING NO. 3
Station 810+95
Offset 13.00ft Right
Ground Surface Elev. 590.6 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter No Encounter ft
Upon Completion Dry ft
After ____ Hrs. Plugged ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Grey Moist Rock Fill w/ Large Limestone Cobbles and Boulders				
	-5	2 6 5		
		7 15 8		
Boulders and Cobbles Pushed Augers	-10	6 5 2		
580.10 Abandoned Hole - Moved to Boring 3a				
	-15			
	-20			

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

BBS, from 137 (Rev. 8-99)

SOIL BORING IL 96 WALL M.GPJ DSTEMPLT.GDT 8/20/04
Latitude Longitude

Illinois Department of Transportation
Division of Highways
Idot District 6

SOIL BORING LOG

Page 1 of 1
Date 6/8/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 8 W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. ____
Station ____

BORING NO. 3A
Station 811+00
Offset 15.00ft Right
Ground Surface Elev. 590.4 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 580.9 ft
Upon Completion 564.4 ft
After ____ Hrs. Plugged ft

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
Grey Moist Rock Fill w/ Limestone Cobbles and Boulders				
	-5	1 2 3		
		2 3 2		
Free Water	-10	1 2 2		
		1 2 3		
577.90 Brown and Grey Moist CLAY Colluvium				
	-15	0 1 2	0.4 B	22
574.40 SHALE Grey and Tan Moist V. Weathered Poorly Indurated Clayey SHALE		1 2 5	1.5 S-12	16
	-20	3 9	3.3	14

Description	DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SHALE *(continued)*		13	S-11	
Brown and Grey Weathered Poorly Indurated Clayey SHALE		3 10 14	5.0 P	15
Grey Dry Moderately Indurated Clayey SHALE	-25	20 100 /3"		7
561.40 Grey Moderately Indurated Argilliceous LIMESTONE 560.90	-30	100 /3"		
Boring Completed				
Station, Elevation updated 08/20/04 MRM				
	-35			
	-40			

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

BBS, from 137 (Rev. 8-99)

SOIL BORING IL 96 WALL M.GPJ DSTEMPLT.GDT 8/20/04
Latitude Longitude

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS

SHEET 2 OF 3

SCALE: VERT. HORIZ.
DATE

DRAWN BY IDOT
CHECKED BY

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
510	120 (I-6)	HANCOCK	13	13
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

STATE CONTRACT NO. 72852

Illinois Department of Transportation
Division of Highways
Ideal District 6

SOIL BORING LOG

Page 1 of 1

Date 6/9/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 6 W, 4 PM

COUNTY Hancock DRILLING METHOD HSA HAMMER TYPE 140# Auto

STRUCT. NO. _____
Station _____

BORING NO. 4
Station 811+29
Offset 14.00ft Right
Ground Surface Elev. 590.0 ft

Surface Water Elev. N/A ft
Stream Bed Elev. N/A ft

Groundwater Elev.:
First Encounter 578.5 ft
Upon Completion Cored ft
After ____ Hrs. Plugged ft

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Grey Moist Rock Fill w/ Limestone Cobbles and Boulders			
	0		
-5	1		
	4		
	2		
	3		
	4		
	60		
580.00 -10	25		
Brown and Dark Grey Moist CLAY Colluvium	4		
	1		
	2	0.6	22
577.00	2	B	
Grey and Tan V. Weathered V. Poorly Indurated Clayey SHALE			
	1		
-15	4	1.5	16
	6	S-10	
	5		
	10	3.0	15
	11	S-11	
	4		
570.00 -20	10	3.1	14

DEPTH (ft)	BLOWS /6"	UCS Qu (tsf)	MOIST (%)
Grey and Brown Weathered V. Poorly Indurated Clayey SHALE Borehole continued with rock coring.			
	10	S-12	
-25			
-30			
-35			
-40			

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

BBS, from 137 (Rev. 8-99)

SOIL BORING LOG.GPJ IDOT.GDT 6/30/04

Illinois Department of Transportation
Division of Highways
Ideal District 6

ROCK CORE LOG

Page 1 of 1

Date 6/9/99

ROUTE FAP 510 (IL 96) DESCRIPTION IL 96 Proposed Slope Repair LOGGED BY M. Tappan

SECTION 120 (I-6) LOCATION W 1/2, SEC. 31, TWP. 6 N, RNG. 6 W, 4 PM

COUNTY Hancock CORING METHOD Christensen NXB w/ Water

STRUCT. NO. _____
Station _____

CORING BARREL TYPE & SIZE NXB

BORING NO. 4
Station 811+29
Offset 14.00ft Right
Ground Surface Elev. 590.0 ft

Core Diameter 1.875 in
Top of Rock Elev. 570.00 ft
Begin Core Elev. 570.00 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
Grey and Brown Weathered V. Poorly Indurated Clayey SHALE					
570.00	1	48	19		
565.80					
Dark Grey Poorly Indurated Clayey SHALE					
564.60 -25	2	92	92		
Dark Grey Well Indurated Clayey SHALE					
561.00					
Light Brownish Grey Moderately Indurated Poorly Cemented Argillaceous LIMESTONE					
560.40 -30					
Boring Completed					
-35					
-40					

Refer Elevation to BM TJM100, Chisled Square on SW Corner of Existing Wall 'L' at STA 807+32, 14' Rt. BM TJM100=596.44'

Refer Stations to PK Nails set by D6 Survey Crew, STA Increase to South

Stations, Elevations Updated 08/20/04 MRM

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

BBS, form 138 (Rev. 8-99)

ROCK CORE - IL 96 FAU 510 SLOPE REPAIR.GPJ IDOT.GDT 6/30/04

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
SHEET 3 OF 3

SCALE: VERT.
HORIZ.
DATE

DRAWN BY IDOT
CHECKED BY