

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	GPS CORE STATION 2012-1	VERMILION	8	1
		ILLINOIS	CONTRACT NO. 70963	

FOR INDEX OF SHEETS, SEE SHEET NO. 2
FOR SUMMARY OF QUANTITIES SEE SHEET NO. 3

CURRENT TRAFFIC DATA
N/A

DESIGN DESIGNATION
N/A

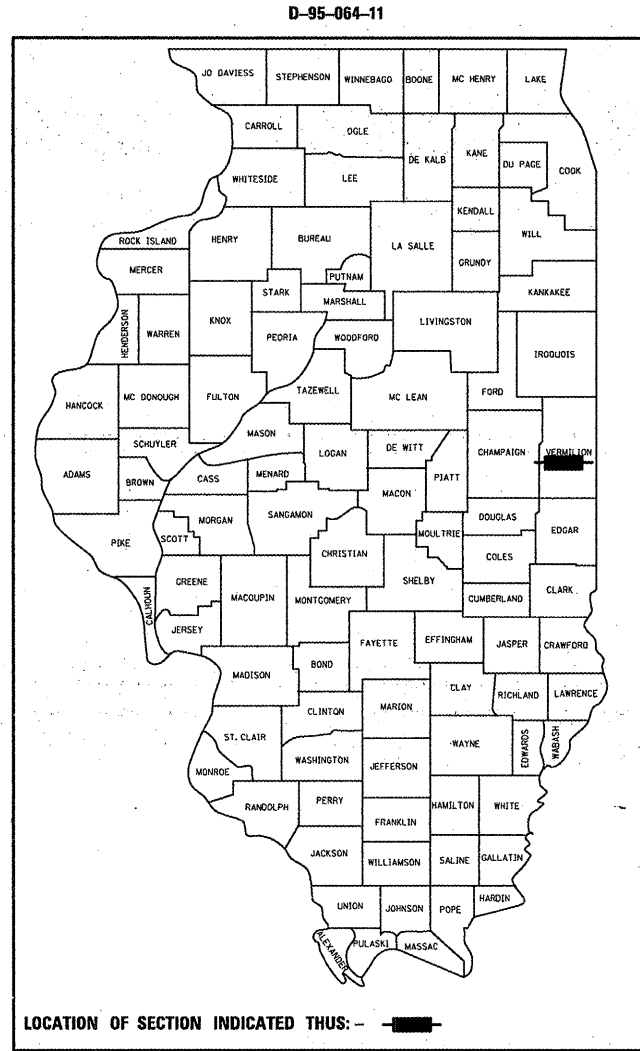
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
**PROPOSED
HIGHWAY PLANS**

F.A.I. ROUTE 74 (I-74)
SECTION GPS CORE STATION 2012-1

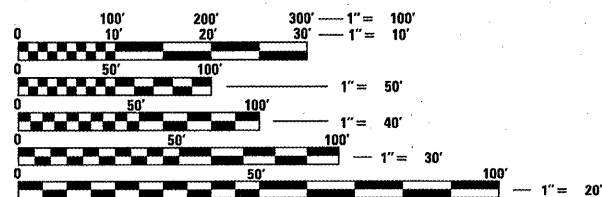
MISCELLANEOUS
VERMILION COUNTY

C-95-064-11

GPS CORE STATION AT SALT KETTLE REST AREA



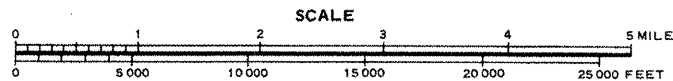
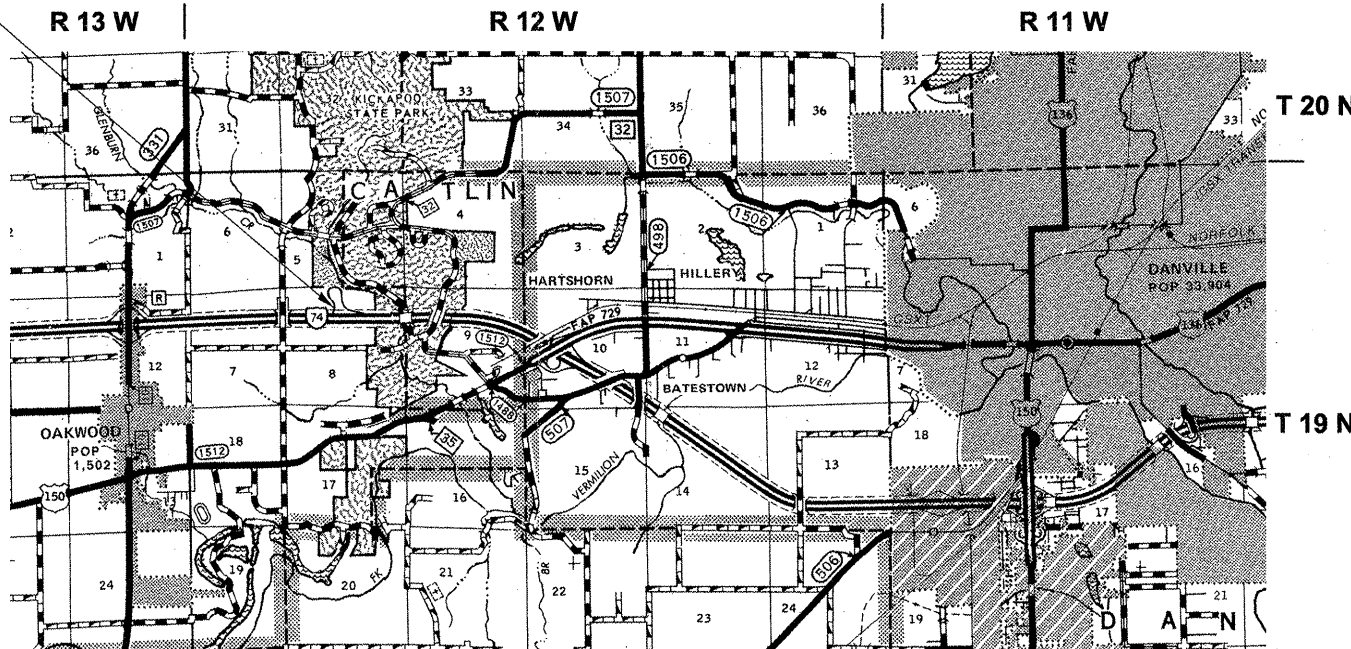
PROPOSED GPS CORE STATION
AT SALT KETTLE REST AREA



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

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

PROJECT ENGINEER: NANCY FASIG
SQUAD LEADER: BRIAN J. HOGAN
(217)-465-4181



GROSS LENGTH = N/A FT. = N/A MILE
NET LENGTH = N/A FT. = N/A MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 10/6/2011
[Signature] DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

Dec 9 2011
[Signature] acting ENGINEER OF DESIGN AND ENVIRONMENT

Dec 9 2011
[Signature] WILLIAM R. FLETCHER DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET
2	INDEX OF SHEETS
2	LIST OF HIGHWAY STANDARDS
2	GENERAL NOTES
3	SUMMARY OF QUANTITIES
4-5	PLAN SHEETS
6	GPS ANTENNA FOUNDATION DETAIL
7	GPS ANTENNA PEDESTAL DETAIL
8	ELECTRIC SERVICE INSTALLATION AND GPS RECEIVER BOX DETAIL

LIST OF HIGHWAY STANDARDS

STANDARD NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
664001-02	CHAIN LINK FENCE
701101-02	OFF-ROAD OPERATIONS, MULTILANE, 15' (4.5 m) TO 24" (600 mm) FROM PAVEMENT EDGE
701106-02	OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' (4.5 m) AWAY
701901-02	TRAFFIC CONTROL DEVICES

GENERAL NOTES

G.N.-100
ENGLISH UNITS OF MEASUREMENT SHALL GOVERN OVER AND SUPERSEDE ANY METRIC UNITS SHOWN IN THIS CONTRACT. WHERE INCLUDED, METRIC UNITS ARE FOR INFORMATION ONLY.

G.N.-100A
ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

G.N.-105.07B
EXISTING STATE-OWNED AND MAINTAINED UTILITY LINES ARE SHOWN ON THE PLANS TO INDICATE THEIR PRESENCE AND APPROXIMATE LOCATION. THE CONTRACTOR SHALL SECURE AN APPROVED LOCATING FIRM TO LOCATE STATE-OWNED UTILITIES PRIOR TO COMMENCING ANY EXCAVATION IN THE VICINITY OF THESE LINES IN ACCORDANCE TO SECTION 803 OF THE STANDARD SPECIFICATIONS. SHOULD ANY OF THE LINES BE DAMAGED BY THE CONTRACTORS OPERATION, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF THE ENGINEER AT NO COST TO THE STATE.

ALSO THERE MAY BE UTILITIES PRESENT WHICH WERE INSTALLED BY THE STATE BUT ARE MAINTAINED BY OTHERS (CITY, TOWN, ETC.) THE APPROXIMATE LOCATIONS OF THESE LINES ARE ALSO SHOWN ON THE PLANS ALONG WITH THE NAME OF THE MAINTAINING AGENCY. THE CONTRACTOR SHALL COORDINATE THE LOCATION OF THESE LINES WITH THE LOCAL AGENCY PRIOR TO COMMENCING ANY EXCAVATION OR BORING IN THEIR VICINITY. SHOULD THESE LINES BE DAMAGED BY THE CONTRACTORS OPERATIONS, THE CONTRACTOR SHALL REPAIR THEM TO THE SATISFACTION OF, AND AT NO COST TO, THE LOCAL AGENCY AND THE STATE.

THE CONTRACTOR SHOULD NOTE THE FOLLOWING UTILITY CONTACTS:

MR. DAVID BURKYBILE * ILLINOIS DEPARTMENT OF TRANSPORTATION 13473 IL HWY 133 P.O. BOX 610 PARIS, IL 61944-0610 (217) 466-7383 MOB: (217) 836-8236	INTERCHANGE LIGHTING INTERSTATE 74 GAS - NONE (ELECTRIC HEAT) WATER - (OAKWOOD WATER DISTRICT) SEWER - (LEACH FIELDS) ELECTRIC - (FROM REST AREA TO SEPTIC SYSTEM)
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G.N.-105.09A
ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988. (NAVD 88)

NO COMMITMENTS

FILE NAME = c:\p\work\p\p\dot\hogenb\10273753-057063-shl-gennote.dgn	USER NAME = hogenb.j	DESIGNED - BJH 9/6/2011	REVISED - -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	INDEX OF SHEETS, LIST OF HIGHWAY STANDARDS AND GENERAL NOTES	F.A.I. RTE. 74	SECTION GPS CORE STATION 2012-	COUNTY VERMILION	TOTAL SHEETS 8	SHEET NO. 2	CONTRACT NO. 70963
PLOT SCALE = 100.0000 / 1 in.		DRAWN -	REVISED -	SCALE: _____ SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____			ILLINOIS FED. AID PROJECT				
PLOT DATE = 10/5/2011		CHECKED -	REVISED -								
		DATE -	REVISED -								

SUMMARY OF QUANTITIES

LOCATION OF WORK: FAI74
 RURAL INTERSTATE
 GPS CORE STATION
 AT SALT KETTLE REST AREA
 VERMILION COUNTY

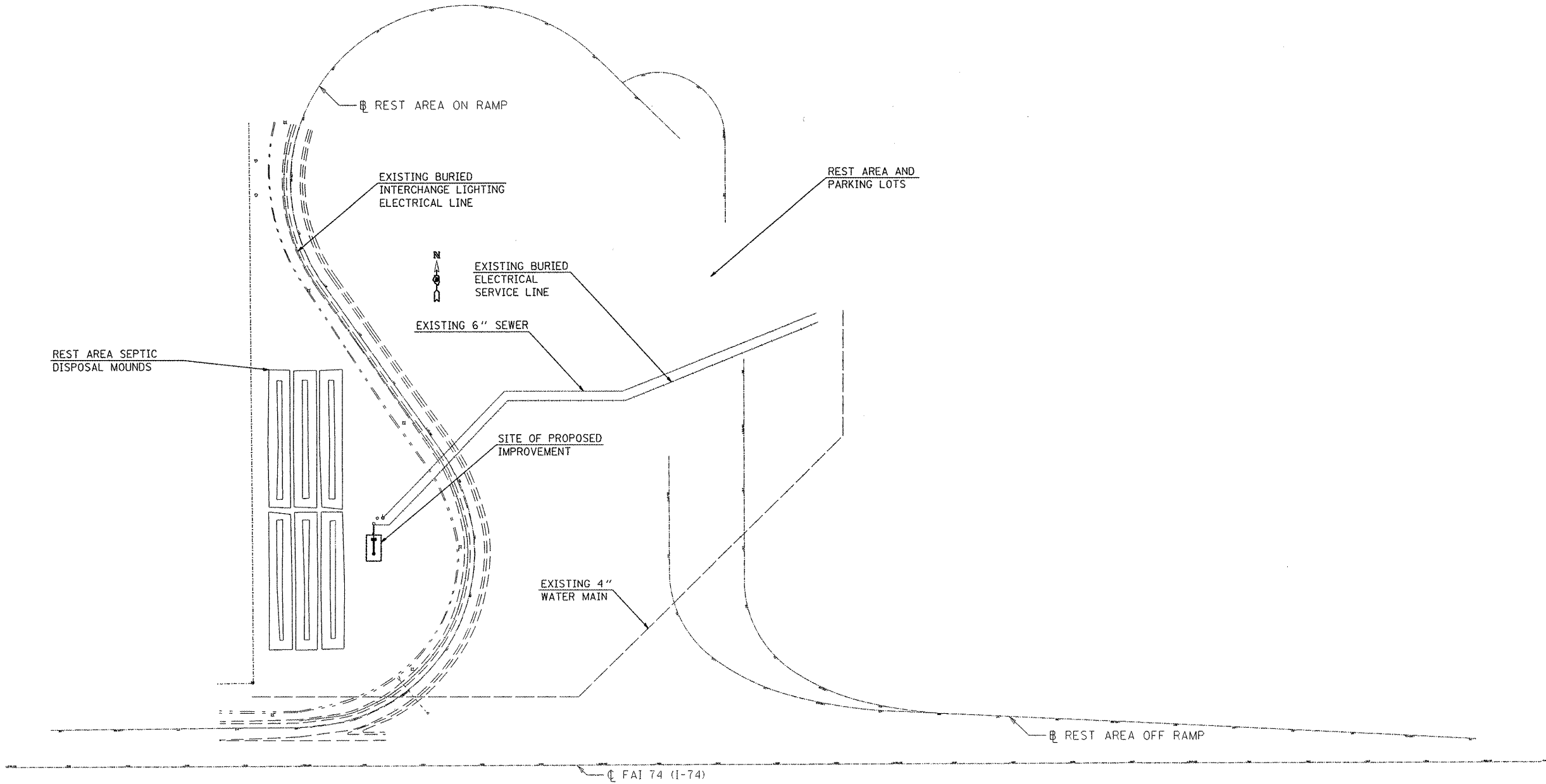
FUNDING BREAKOUT: 100% STATE
 CONSTRUCTION TYPE CODE: 0044

CODE NO.	ITEM	UNIT	TOTAL QUANTITY
20200100	EARTH EXCAVATION	CU YD	25.0
40200500	AGGREGATE SURFACE COURSE, TYPE A 6"	SQ YD	141.0
66400305	CHAIN LINK FENCE, 6'	FOOT	135.0
66402800	CHAIN LINK GATES, 6' X 5' SINGLE	EACH	1.0
67100100	MOBILIZATION	L SUM	1.0
81028300	UNDERGROUND CONDUIT, PVC, 1/2" DIA.	FOOT	35.0
81028320	UNDERGROUND CONDUIT, PVC, 1" DIA.	FOOT	40.0
81702441	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-12/C, 1-12/C GROUND	FOOT	50.0
87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	20.0
X0321501	WEED BARRIER FABRIC	SQ YD	141.0
X0325267	GPS ANTENNA PEDESTAL	EACH	1.0
X0326411	EQUIPMENT CABINET AND PEDESTAL MOUNTED BASE	EACH	1.0

* DENOTES SPECIALTY ITEM

FILE NAME =	USER NAME = hogenb_j	DESIGNED - BJH 9/6/2011	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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PLOT SCALE = 100.0000' / 1"	CHECKED -	REVISED -				CONTRACT NO. 70963					
PLOT DATE = 10/5/2011	DATE -	REVISED -				ILLINOIS FED. AID PROJECT					
				SCALE: _____ SHEET NO. 1 OF 1 SHEETS STA. _____ TO STA. _____							

SEC. 8, T 19 N, R 12 W, 2ND PM



FILE NAME :	USER NAME : hoganby	DESIGNED - BJH 8/19/2011	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GPS STATION SITE LOCATION			F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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PLOT SCALE : 200.0000 "/>												
PLOT DATE : 10/5/2011	DATE -	REVISED -	REVISED -		CONTRACT NO. 70963			ILLINOIS FED. AID PROJECT				

SEC. 8, T 19 N, R 12 W, 2ND PM



REST AREA SEPTIC DISPOSAL MOUNDS

PUMP STATION MANHOLE

SEPTIC TANK MANHOLE

EXISTING CIRCUIT BREAKER BOX WITH UNUSED 20 AMPERES CIRCUIT BREAKER (SEE DETAIL SHEET)

CHAIN LINK GATE, 6'X5' SINGLE

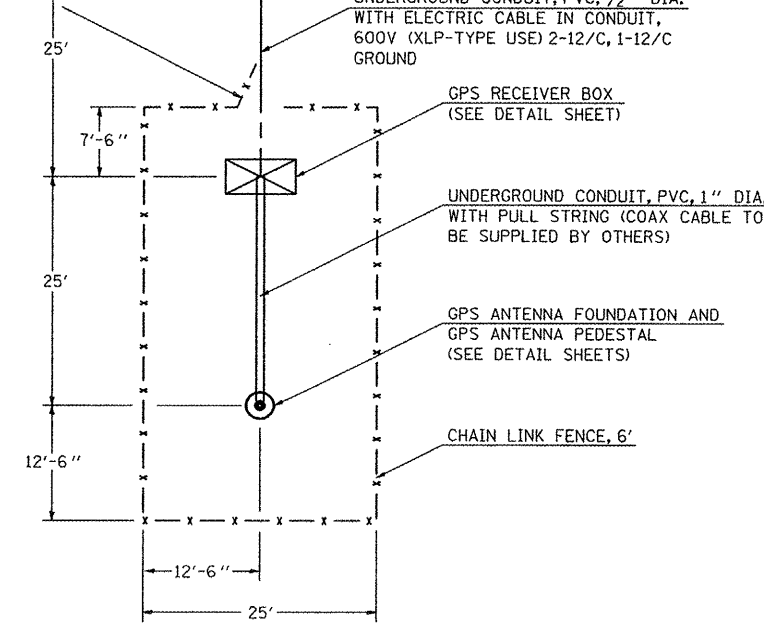
UNDERGROUND CONDUIT, PVC, 1/2" DIA. WITH ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 2-12/C, 1-12/C GROUND

GPS RECEIVER BOX (SEE DETAIL SHEET)

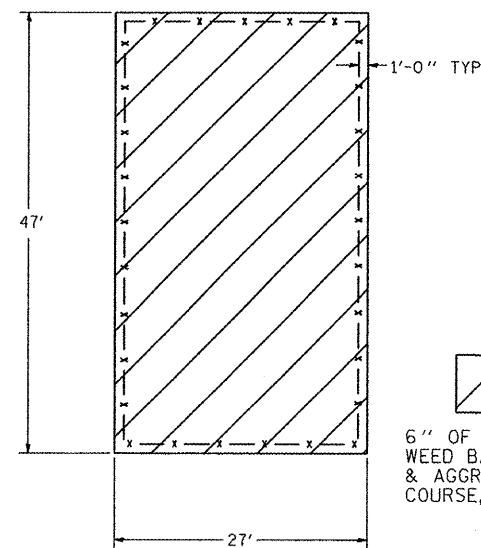
UNDERGROUND CONDUIT, PVC, 1" DIA. WITH PULL STRING (COAX CABLE TO BE SUPPLIED BY OTHERS)

GPS ANTENNA FOUNDATION AND GPS ANTENNA PEDESTAL (SEE DETAIL SHEETS)

CHAIN LINK FENCE, 6'



EARTH EX. & AGG. SURFACE COURSE DETAIL



6" OF EARTH EX., WEED BARRIER FABRIC, & AGGREGATE SURFACE COURSE, TYPE A 6"

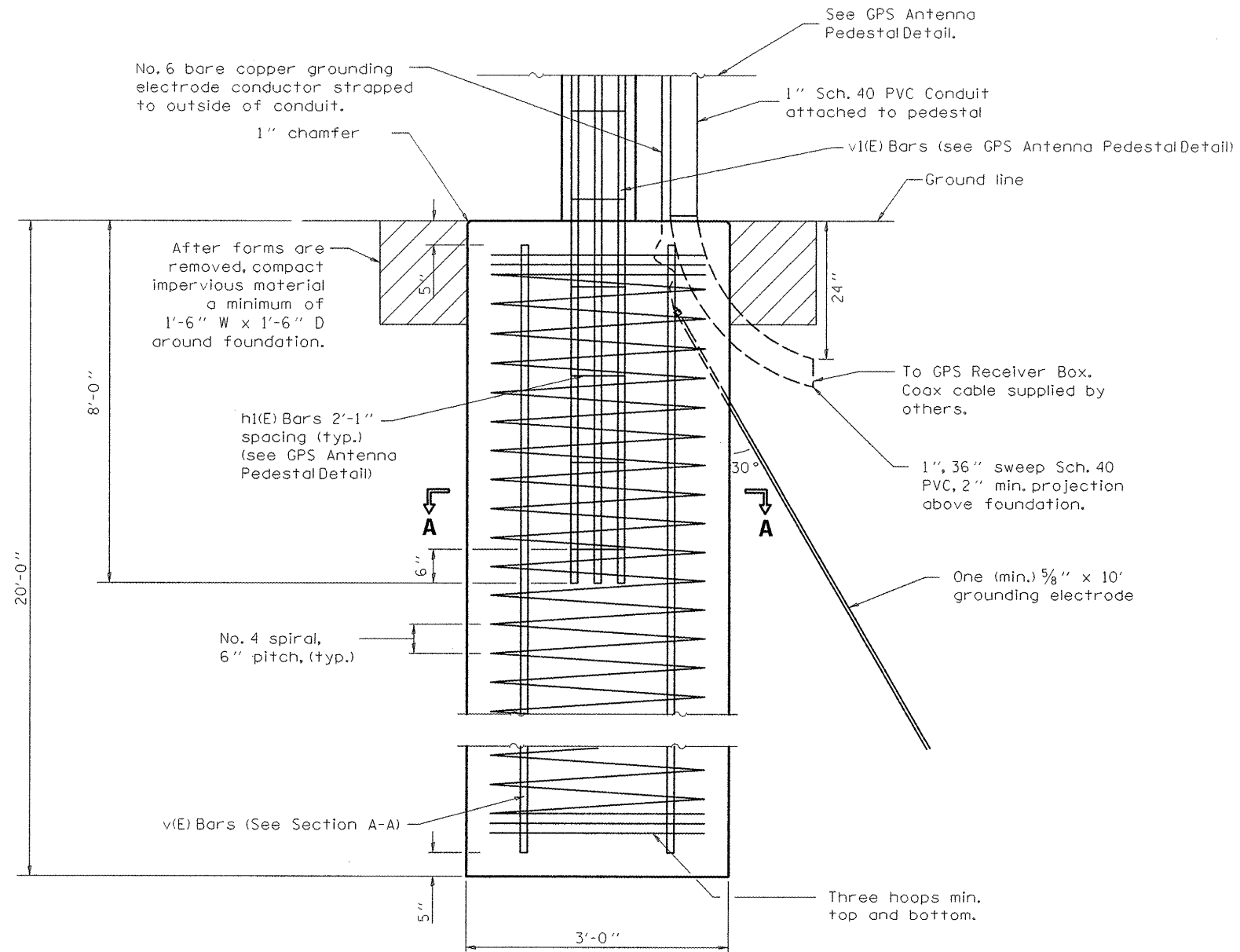
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20.0000 1/2 in.	-	-	-
PLOT DATE :	DATE :	REVISED :	REVISED :
10/5/2011	-	-	-

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

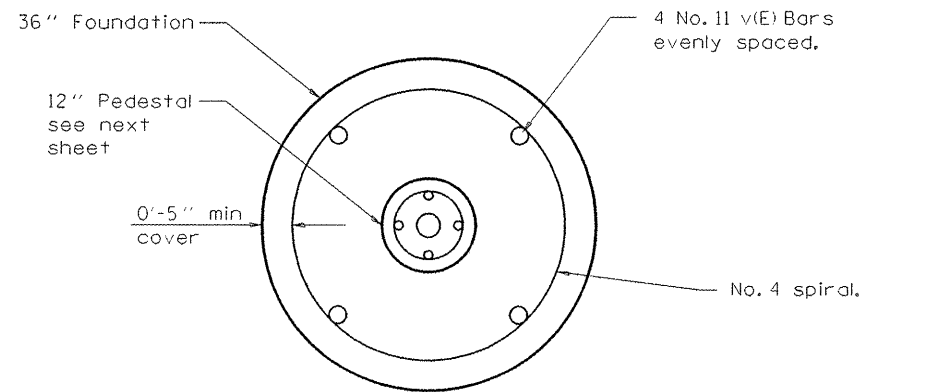
GPS STATION PLAN SHEET

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	GPS CORE STATION 2012-	VERMILION	8	5
CONTRACT NO. 70963				
ILLINOIS FED. AID PROJECT				



FOUNDATION ELEVATION



SECTION A-A

GENERAL NOTES

All foundation reinforcement steel shall be epoxy coated.

The cost of reinforcement and concrete shall be included in the cost of the foundation.

The foundation and pedestal shall be poured monolithically and shall have no construction joints.

Grounding electrodes shall be installed in an access well when there is a conflict in using the method shown.

All dimensions are in inches unless otherwise shown.

The shaft length(s) shall be based on soil borings in the plans. If different soils are encountered, the engineer shall be notified to provide a revised length.



SOIL BORING LOG

Page 1 of 1

Date 3/2/11

ROUTE FAI Rt. 74 (West Bound) DESCRIPTION Mast Arm at Off Ramp to Salt Kettle Rest Area LOGGED BY CNA

SECTION Sign Structure LOCATION NE SEC. 8 TWP. 19N. RNG. 12W. 2" PM GPS

COUNTY Vermilion DRILLING METHOD Hollow Stem Auger HAMMER TYPE Automatic

STRUCT. NO. <u>5 C 092 1074</u>	D	B	U	M	Surface Water Elev. _____ ft	D	B	U	M
Station <u>RL 103+00</u>	E	L	O	O	Stream Bed Elev. _____ ft	E	L	O	O
BORING NO. <u>1 Cantilever</u>	P	S	Q	S	Groundwater Elev.: _____ ft	P	S	Q	S
Station <u>20' W of Exist</u>	T	H	U	T	First Encounter _____ ft	T	H	U	T
Offset <u>200.0 ft L</u>	H	S	Q	T	Upon Completion _____ ft	H	S	Q	T
Ground Surface Elev. <u>638.1</u> ft	(ft)	(/ft)	(tsf)	(%)	After _____ Hrs.	(ft)	(/ft)	(tsf)	(%)

Brown Mottled Silt Loam					Brown Sand Loam Till (continued)				
	8								
	8	1.0	21		Gray Sandy Clay Loam Till	614.6		50-3'	
	8				(No Sample Obtained)				
	632.1								
Brown Sandy Clay Loam Till	3				(Drilled Very Hard - 5 ft in 10 Minutes)				
	5	1.0	14						
	6				(*NOTE: soil boring taken 20' West and 8' South of existing foundation)			50-3'	
	4								
	6	2.3	14						9
	10	15							
	627.6				End of Boring				
Brown Mottled Silt with Intermittent Fine Sand Seams	18								
	10	2.5	21						
	11								
	10								
	15	3.5	10						
	35								
	622.1								
Brown Dirty Coarse Sand with Gravel (Trace of Water)	25								
	35								
	40								
	619.6								
Brown Sand Loam Till	19								
	18		10						
	20								

An assumed centerline elevation of 100.00 and station of 10+00 is used when this information is not available. The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer) The SPT (N Value) is the sum of the last two blow values in each sampling zone (AASHTO T206) BBS, from 137 (Rev. 8-99)

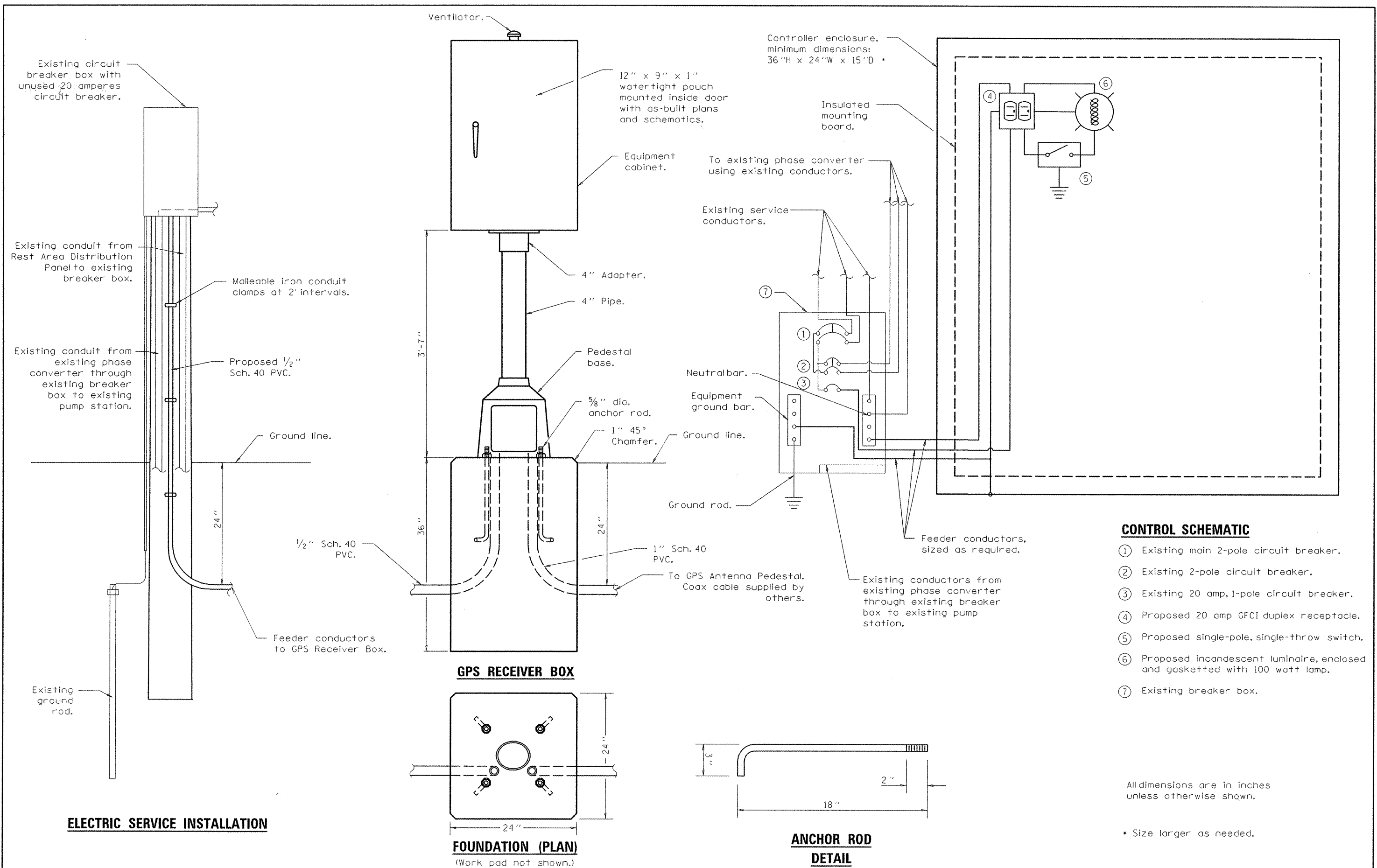
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PLOT SCALE : <u>40,0000' / in.</u>		DRAWN - <u>BJH 7/29/2011</u>	REVISED -
PLOT DATE : <u>10/5/2011</u>		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GPS ANTENNA
FOUNDATION DETAIL**

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

F.A.I. RTE. <u>74</u>	SECTION <u>GPS CORE STATION 2012-L</u>	COUNTY <u>VERMILION</u>	TOTAL SHEETS <u>8</u>	SHEET NO. <u>6</u>
CONTRACT NO. <u>70963</u>				



CONTROL SCHEMATIC

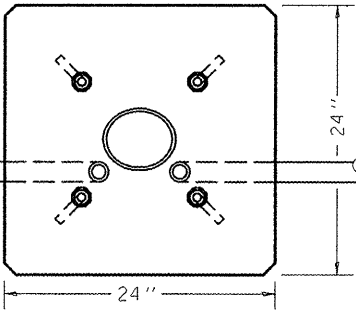
- ① Existing main 2-pole circuit breaker.
- ② Existing 2-pole circuit breaker.
- ③ Existing 20 amp, 1-pole circuit breaker.
- ④ Proposed 20 amp GFCI duplex receptacle.
- ⑤ Proposed single-pole, single-throw switch.
- ⑥ Proposed incandescent luminaire, enclosed and gasketed with 100 watt lamp.
- ⑦ Existing breaker box.

All dimensions are in inches unless otherwise shown.

* Size larger as needed.

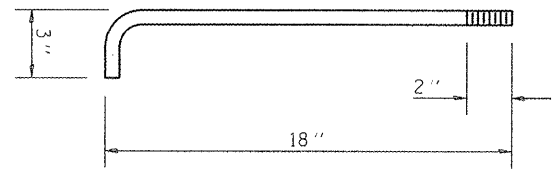
ELECTRIC SERVICE INSTALLATION

GPS RECEIVER BOX



FOUNDATION (PLAN)
(Work pad not shown.)

**ANCHOR ROD
DETAIL**



FILE NAME :	USER NAME : hoganby	DESIGNED - BJH 7/29/2011	REVISED -
at:\pwork\p\hidat\hoganby\d0273753\057063-shd-details.dgn		DRAWN - BJH 7/29/2011	REVISED -
		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

ELECTRIC SERVICE INSTALLATION AND GPS RECEIVER BOX DETAIL

SCALE: _____ SHEET NO. ____ OF ____ SHEETS STA. _____ TO STA. _____

F.A.I. RTE. 74	SECTION GPS CORE STATION 2012-1	COUNTY VEMILION	TOTAL SHEETS 8	SHEET NO. 8
CONTRACT NO. 70963				
ILLINOIS FED. AID PROJECT				