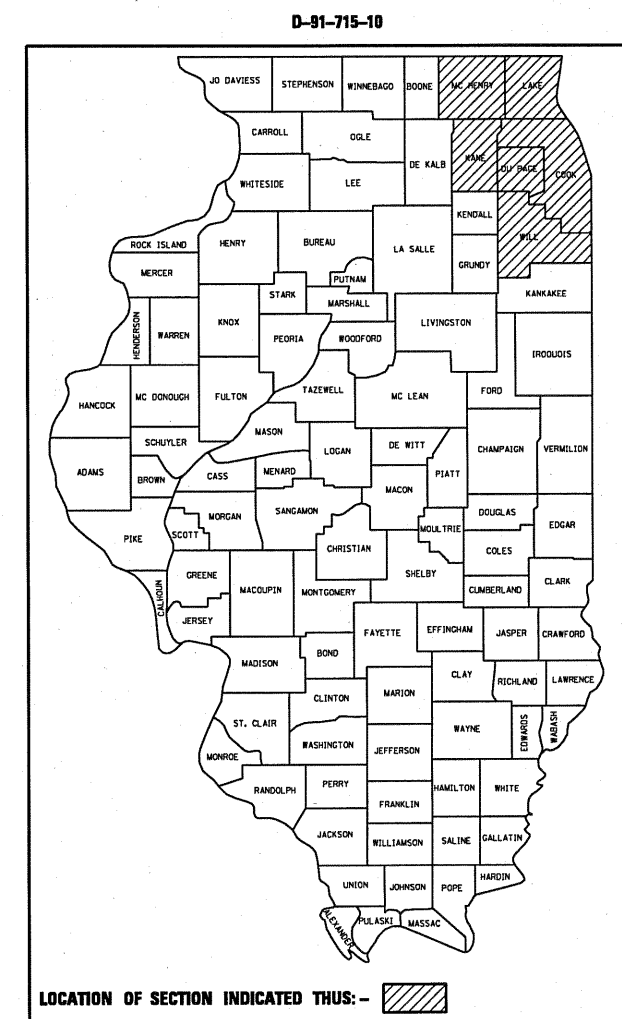


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2010-071-1	VARIOUS	15	1
FED. ROAD DIST. NO. 1	ILLINOIS	CONTRACT NO. 60L56		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
PROPOSED
HIGHWAY PLANS
VARIOUS ROUTES DISTRICT WIDE
SECTION: 2010-071-1
AT VARIOUS EXPRESSWAY MEDIANS
HIGH TENSION CABLE BARRIER REPAIR
VARIOUS COUNTIES
C-91-715-10

FOR INDEX OF SHEETS, SEE SHEET NO. 2



SEE LOCATION MAPS
SHEETS 4-10

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

PROJECT ENGINEER: BOB BORO (847) 705-4178
PROJECT MANAGER: ISSAM RAYYAN (847) 705-4556

CONTRACT NO. 60L56

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
 SUBMITTED August 20, 2010
Diane M. O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
October 1, 2010
Scott E. Still, P.E.
 ENGINEER OF DESIGN AND ENVIRONMENT
October 1, 2010
Christine N. Reeder
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

STATE STANDARDS

GENERAL NOTES

<u>SHEET NO.</u>	<u>DESCRIPTION</u>	<u>STANDARD NO.</u>	<u>DESCRIPTION</u>
1	COVER SHEET	701400-04	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
2	INDEX OF SHEETS, STANDARDS AND GENERAL NOTES	701401-05	LANE CLOSURE, FREEWAY/EXPRESSWAY
3	SUMMARY OF QUANTITIES	701406-05	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
4-10	LOCATION MAPS	701421-02	LANE CLOSURE, MULTILANE, DAY OPERATIONS ONLY
11	TRAFFIC CONTROL FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES (TC-17)	701901-01	TRAFFIC CONTROL DEVICES
12-13	HIGH TENSION GUARDRAIL DETAILS (BRIFEN USA)		
14	HIGH TENSION GUARDRAIL DETAILS (GIBLARTAR)		
15	HIGH TENSION GUARDRAIL DETAILS (TRINITY HIGHWAY)		

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "J.U.L.I.E." AT (800) 892-0123 OR 811 FOR FIELD LOCATIONS OF BURIED ELECTRIC, TELEPHONE AND GAS UTILITIES. 48 HOUR NOTIFICATION IS REQUIRED.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH UTILITY COMPANIES.

THE CONTRACTOR WILL NOT BE ALLOWED TO SET UP A YARD OR FIELD OFFICE ON STATE PROPERTY WITHOUT WRITTEN PERMISSION FROM THE DEPARTMENT.

THE CONTRACTOR SHALL CALL STATE ELECTRICAL CONTRACTOR AT (773) 287-7600 TO LOCATE STATE OWNED FACILITIES.

THE CONTRACTOR SHALL WORK IN THE DIRECTION OF TRAFFIC.

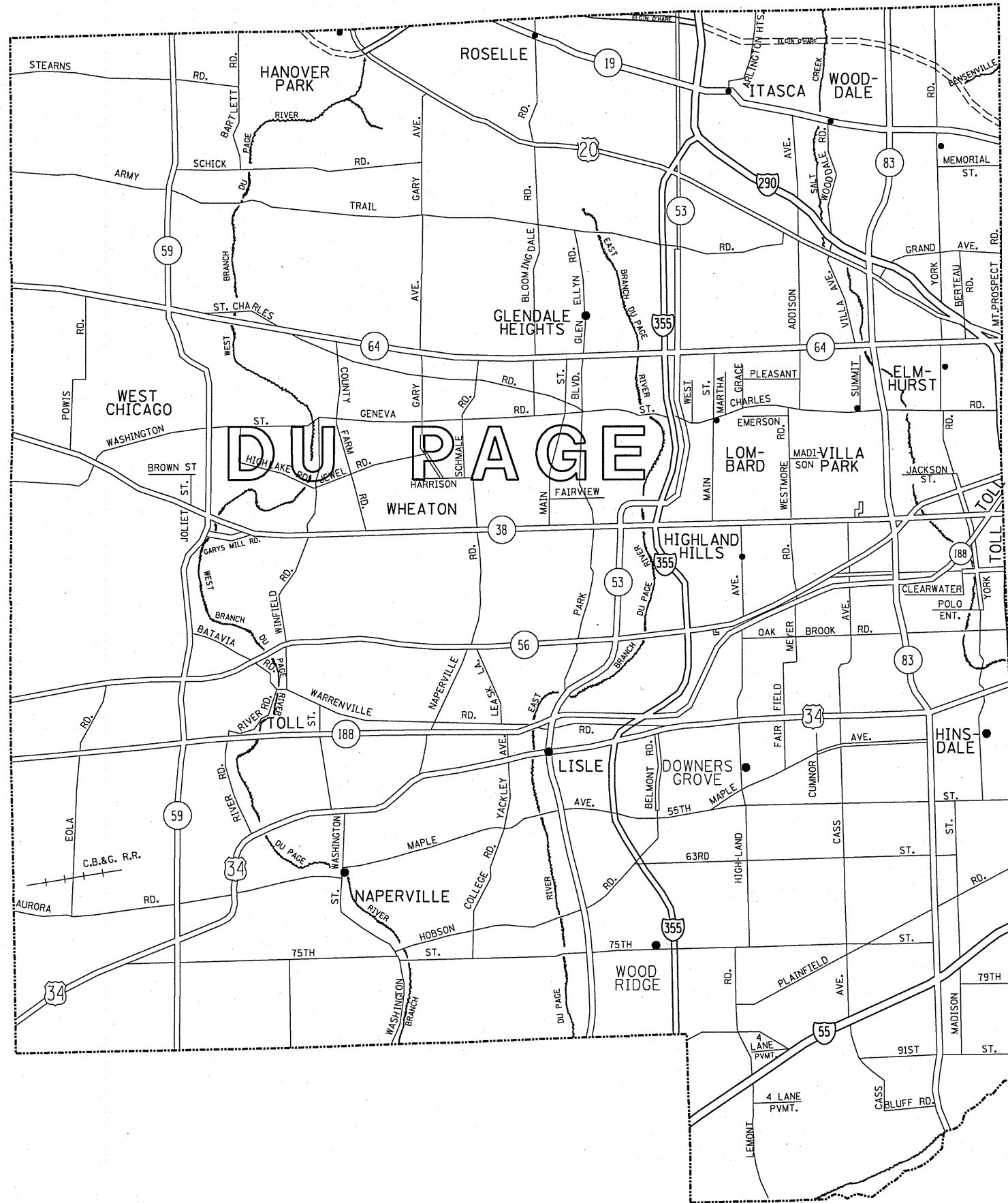
THE CONTRACTOR WILL NOT BE ALLOWED TO STORE MATERIALS OVERNIGHT IN THE MEDIAN.





THE PROPOSED DEPTH OF THE CONCRETE SOCKETED FOUNDATIONS SHALL BE 42" (MINIMUM).

FILE NAME =	USER NAME = nethenbo	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE BARRIER REPAIR AT VARIOUS EXPRESSWAY MEDIANS INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pv_work\pwidot\nethenbo\0212218\01718-ah-t-plen.dgn	DRAWN -	REVISED -	VAR.			2010-071 I	VARIOUS	15	2	
PLOT SCALE = 1/8" = 1' / IN.	CHECKED -	REVISED -	CONTRACT NO. 60L56							
PLOT DATE = 8/19/2010	DATE -	REVISED -	FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.			

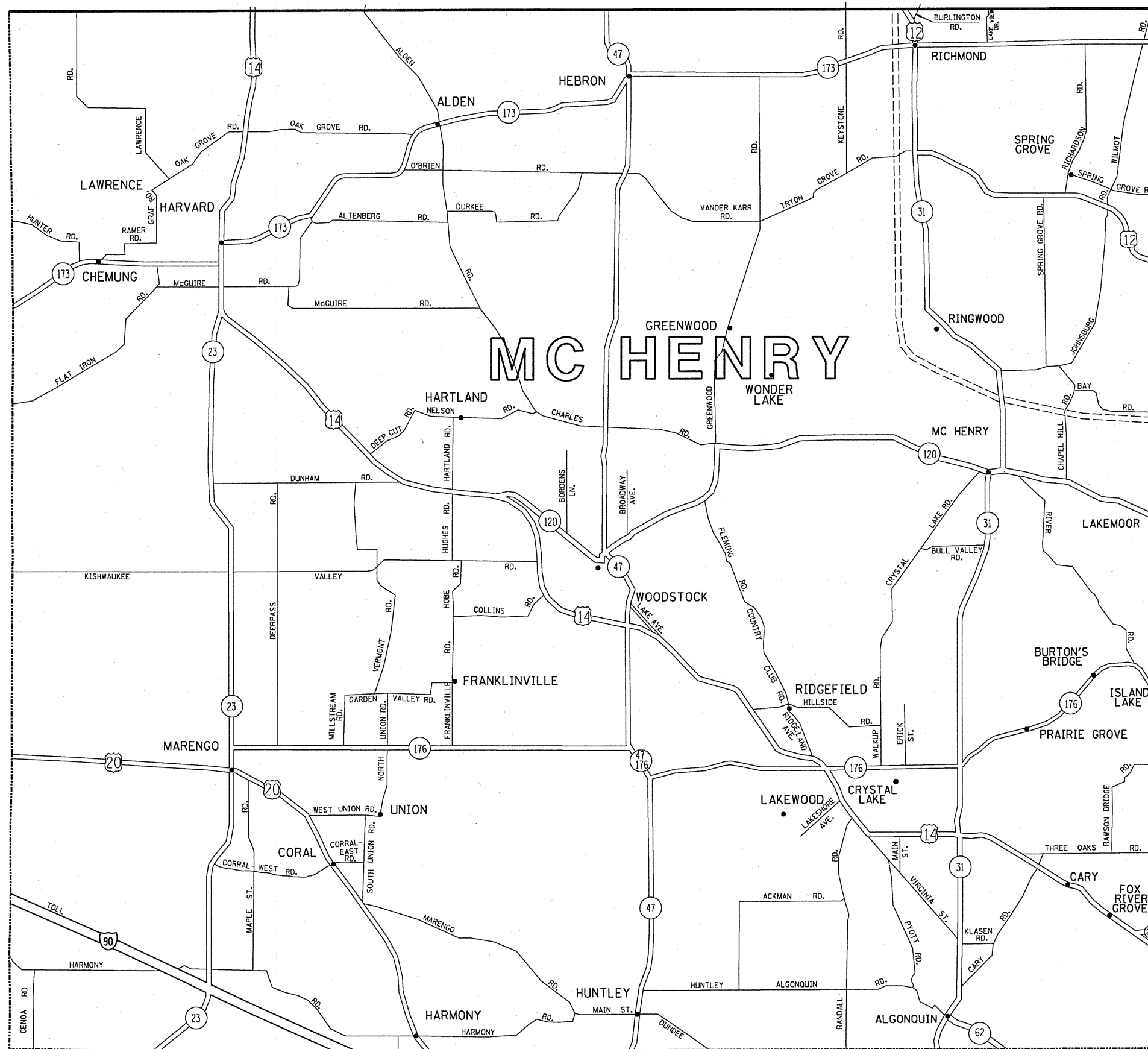
SUMMARY OF QUANTITIES			CONSTRUCTION TYPE CODE 0021							
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	100% STATE		100% MCHD				
				CONTRACT MAINTENANCE		0021	0021			
X0325256	REPAIR HIGH TENSION CABLE (BRIFEN)	FOOT	180	176		4				
X0325258	REPAIR HIGH TENSION CABLE SYSTEM END SECTION (BRIFEN)	EACH	6	5		1				
X0325260	REPAIR POSTS (BRIFEN)	EACH	750	733		17				
X0325899	REPAIR HIGH TENSION CABLE (GIBRALTAR)	FOOT	120	117		3				
X0325901	REPAIR POSTS (GIBRALTAR)	EACH	975	953		22				
X0325975	REPAIR HIGH TENSION CABLE SYSTEM END SECTION (GIBRALTAR)	EACH	6	5		1				
X0326201	REPAIR HIGH TENSION CABLE (TRINITY)	FOOT	90	88		2				
X0326202	REPAIR POSTS (TRINITY)	EACH	75	73		2				
X0326203	REPAIR HIGH TENSION CABLE SYSTEM END SECTION (TRINITY)	EACH	4	3		1				

FILE NAME =	USER NAME = nathanbc	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES				F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwworking\dnathanbc\0212218\071510-sht-plan.dgn		DRAWN -	REVISED -						VAR	2010-071-1	VARIOUS	15	3
		CHECKED -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.				FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
		DATE -	REVISED -						CONTRACT NO. 60L56				



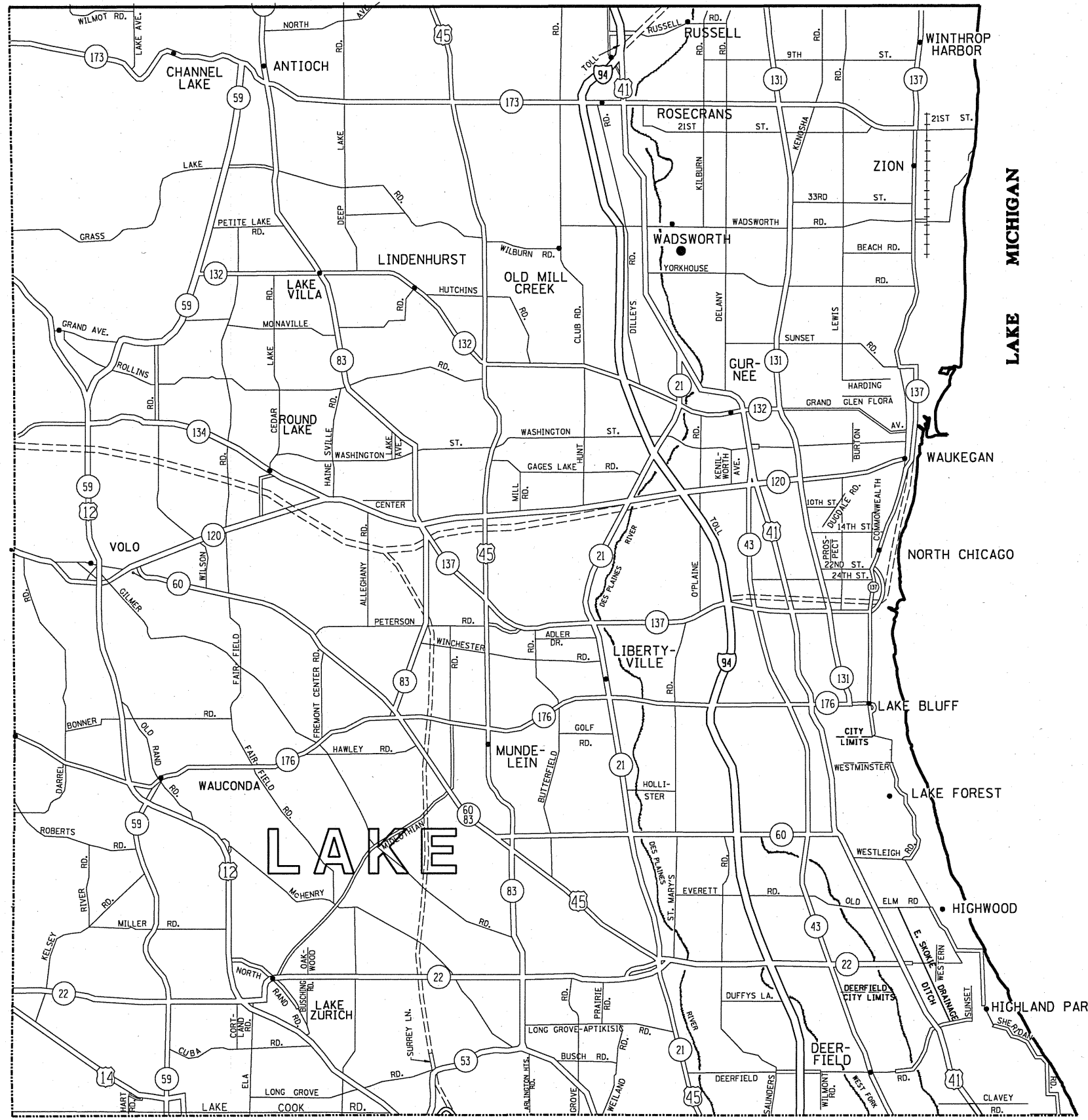
- LEGEND**
-  STATE HIGHWAYS & EXPRESSWAYS WITH EXISTING HIGH TENSION BARRIERS.
 -  STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS)
 -  FUTURE HIGHWAYS
 -  VARIOUS AGENCIES HIGHWAYS

FILE NAME =	USER NAME = nathanba	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE BARRIER REPAIR AT VARIOUS EXPRESSWAY MEDIANS DUPAGE COUNTY LOCATION MAP	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ct:\pvt\work\pwt\dot\nathanba\0212218\0171	18-sht-plen.dgn	DRAWN -	REVISED -			VAR.	2010-071 I	VARIOUS	15	4
PLOT SCALE = 103.1218' / IN.		CHECKED -	REVISED -			CONTRACT NO. 60L56				
PLOT DATE = 8/19/2010		DATE -	REVISED -			SCALE:		SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT







- LEGEND**
- STATE HIGHWAYS & EXPRESSWAYS WITH EXISTING HIGH TENSION BARRIERS.
 - STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS)
 - FUTURE HIGHWAYS
 - VARIOUS AGENCIES HIGHWAYS

FILE NAME = c:\pwwork\pwwork\mhenryba\0212218\0171	USER NAME = nethanba 118-sh1-plan.dgn	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE BARRIER REPAIR AT VARIOUS EXPRESSWAY MEDIANS McHENRY COUNTY LOCATION MAP	F.A. RTE. VAR.	SECTION 2010-071 I	COUNTY VARIOUS	TOTAL SHEETS 15	SHEET NO. 5
PLOT SCALE = 1/8" = 1' IN. PLOT DATE = 8/19/2010		CHECKED - DATE -	REVISED - REVISED -	SCALE: SHEET NO. OF SHEETS STA. TO STA.		FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT CONTRACT NO. 60L56				



LEGEND

-  STATE HIGHWAYS & EXPRESSWAYS WITH EXISTING HIGH TENSION BARRIERS.
-  STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS)
-  FUTURE HIGHWAYS
-  VARIOUS AGENCIES HIGHWAYS

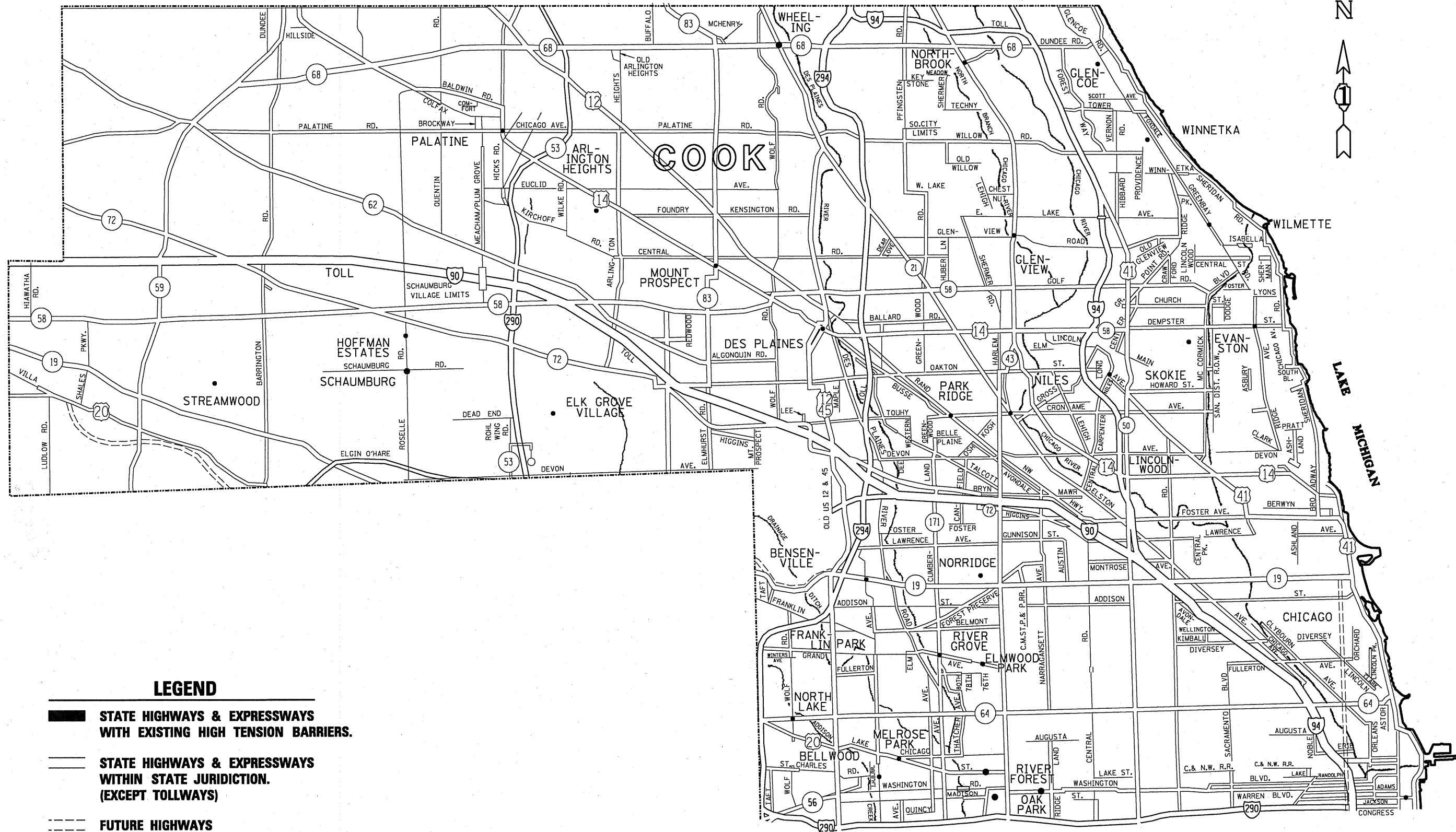
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PLOT SCALE = 1/8" = 1' IN.		CHECKED -	REVISED -
PLOT DATE = 8/19/2010		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**CABLE BARRIER REPAIR
AT VARIOUS EXPRESSWAY MEDIANS
LAKE COUNTY LOCATION MAP**

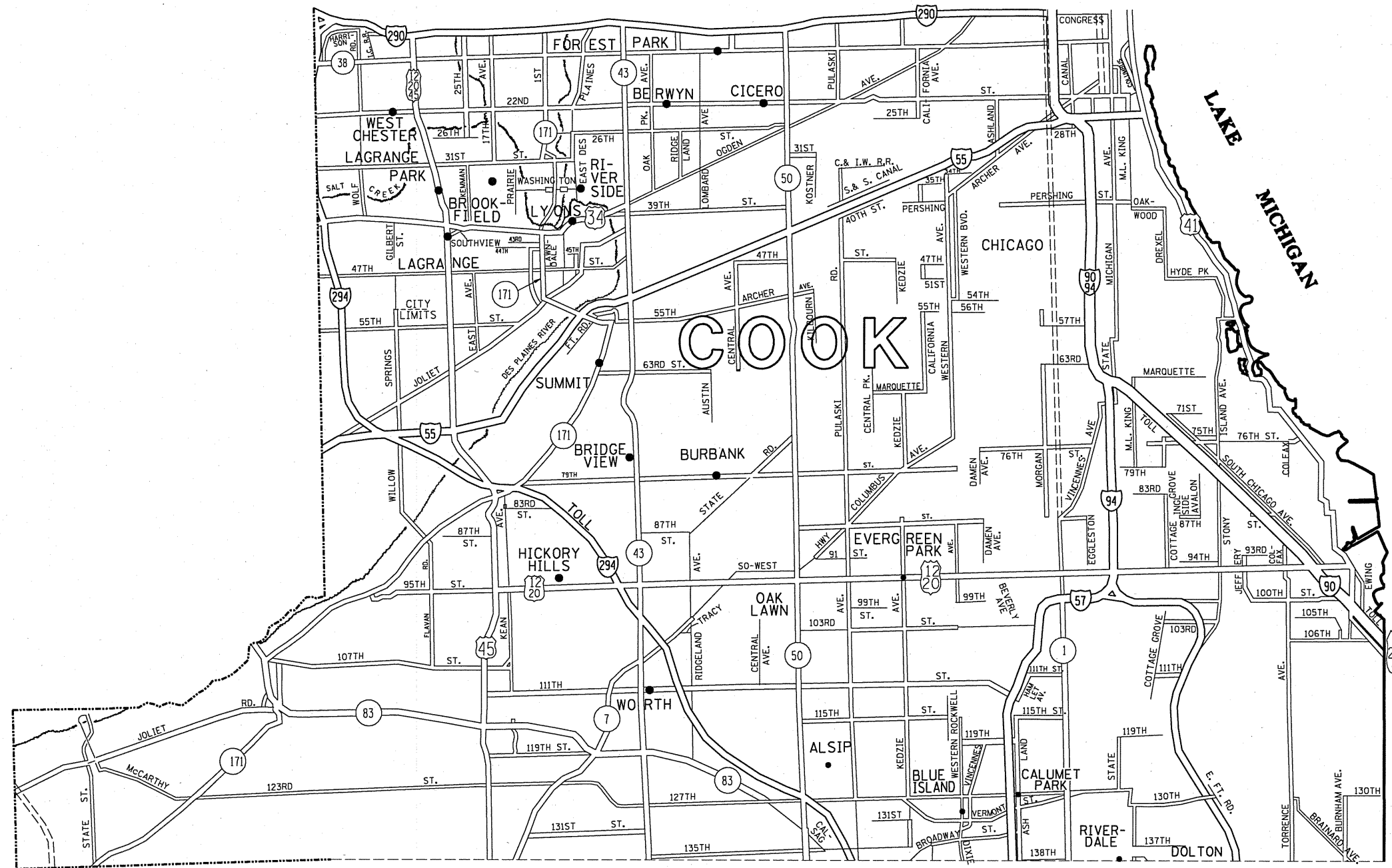
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2010-071 I	VARIOUS	15	6
CONTRACT NO. 60L56				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

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







- LEGEND**
- STATE HIGHWAYS & EXPRESSWAYS WITH EXISTING HIGH TENSION BARRIERS.
 - STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS)
 - FUTURE HIGHWAYS
 - VARIOUS AGENCIES HIGHWAYS

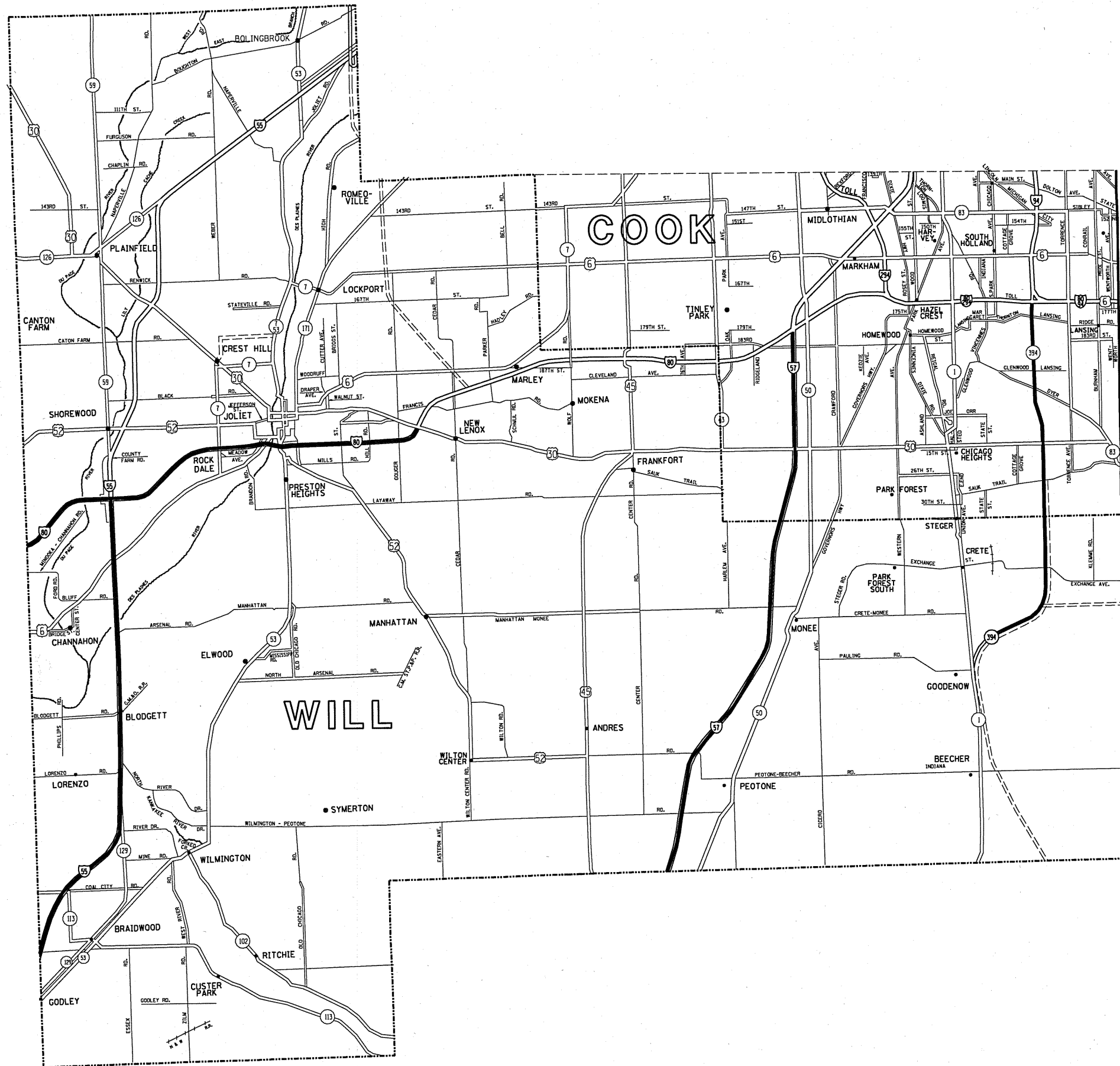
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PLOT SCALE = 1/8" = 1' / IN.	CHECKED -	REVISED -	SCALE: 1" = 1 MILE			SHEET NO. OF SHEETS	STA. TO STA.				
PLOT DATE = 8/19/2018	DATE -	REVISED -									



LEGEND

-  STATE HIGHWAYS & EXPRESSWAYS WITH EXISTING HIGH TENSION BARRIERS.
-  STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS)
-  FUTURE HIGHWAYS
-  VARIOUS AGENCIES HIGHWAYS

FILE NAME =	USER NAME = nathanbc	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CABLE BARRIER REPAIR AT VARIOUS EXPRESSWAY MEDIANS COOK COUNTY (CENTRAL) LOCATION MAP	F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
18-aht-pl.en.dgn	18-aht-pl.en.dgn	DRAWN -	REVISED -			VAR.	2010-071 I	VARIOUS	15	9
PLOT SCALE = 1/8" = 1' IN.		CHECKED -	REVISED -			CONTRACT NO. 60L56				
PLOT DATE = 8/19/2010		DATE -	REVISED -			FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				
				SCALE: 1" = 1 MILE		SHEET NO. OF SHEETS STA. TO STA.				



- LEGEND**
- STATE HIGHWAYS & EXPRESSWAYS WITH EXISTING HIGH TENSION BARRIERS.
 - STATE HIGHWAYS & EXPRESSWAYS WITHIN STATE JURISDICTION. (EXCEPT TOLLWAYS)
 - FUTURE HIGHWAYS
 - VARIOUS AGENCIES HIGHWAYS

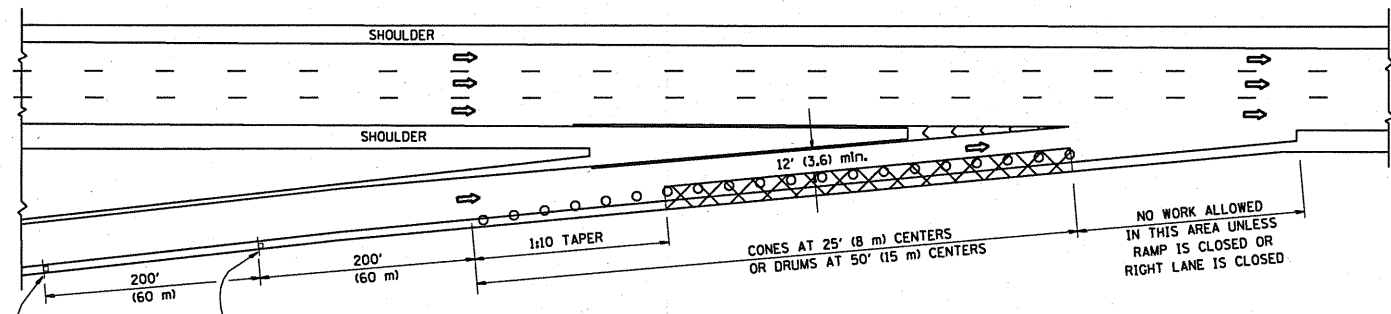
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PLOT SCALE = 183.1218 / IN.		CHECKED -	REVISED -
PLOT DATE = 8/19/2010		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

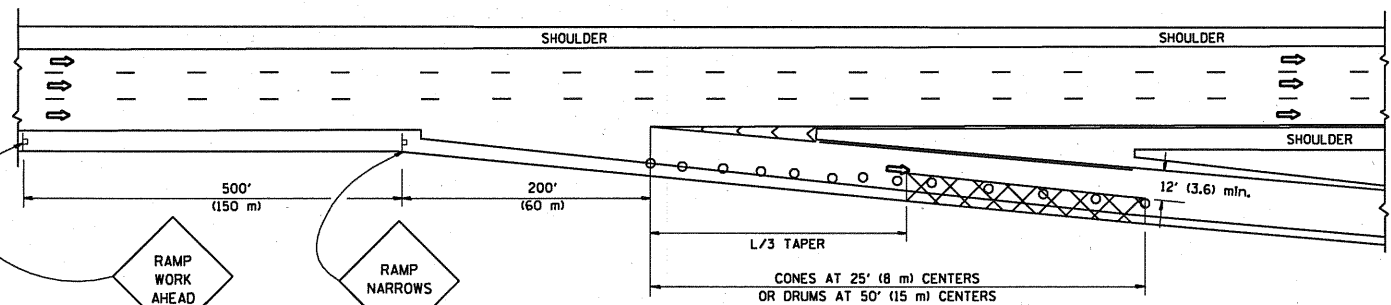
**CABLE BARRIER REPAIR
AT VARIOUS EXPRESSWAY MEDIANS
WILL & COOK (SOUTH) COUNTIES LOCATION MAP**

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2010-071 I	VARIOUS	15	10
			CONTRACT NO. 60L56	
SCALE: SHEET NO. OF SHEETS STA. TO STA. FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				

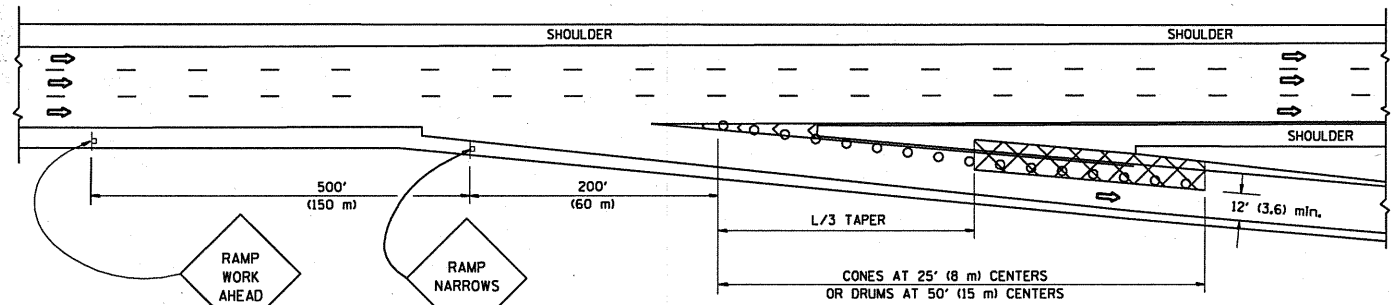
PARTIAL RAMP CLOSURE DETAILS



TYPICAL ENTRANCE RAMP



TYPICAL EXIT RAMP



TYPICAL EXIT RAMP

SYMBOLS

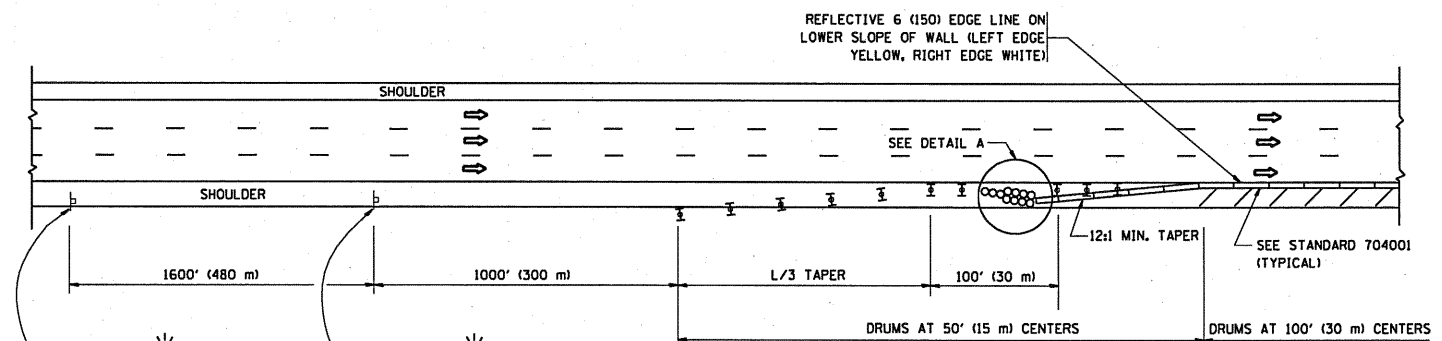
- ACTIVE WORK AREA
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- FLAGGER WITH CONTROL SIGN
- TYPE II BARRICADE, DRUM OR VERTICAL BARRICADE WITH STEADY BURN MONO-DIRECTIONAL LIGHT
- CONE, DRUM OR BARRICADE

GENERAL NOTES

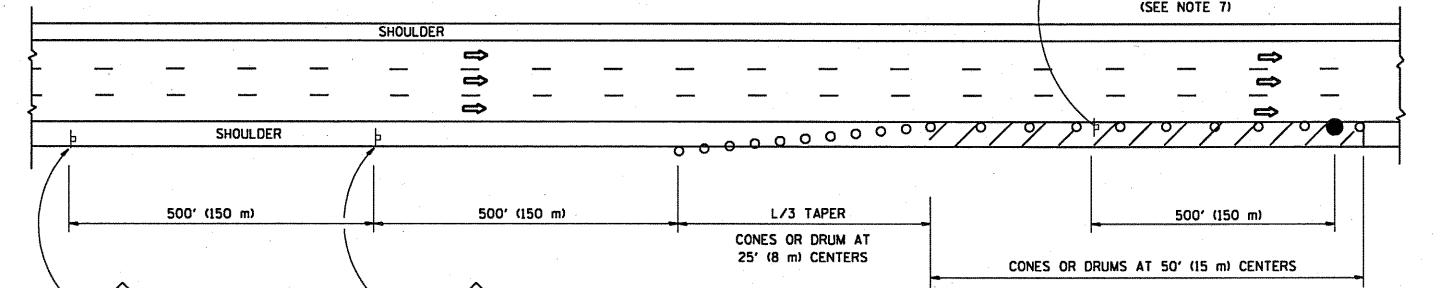
1. THE "L" DISTANCE EQUALS:

SPEED LIMIT	FORMULAS
45 mph (80 km/h) OR GREATER:	METRIC: $L=0.65(W)(S)$ ENGLISH: $L=(W)(S)$
	W = WIDTH OF OFFSET IN FEET (METERS)
	S = NORMAL POSTED SPEED MPH (KM/H)
2. PLASTIC DRUMS WITH HIGH PERFORMANCE REFLECTIVE SHEETING AND STEADY BURNING LIGHTS ARE REQUIRED FOR ALL NIGHTTIME CLOSURES.
3. ALL SIGNS SHALL BE POST MOUNTED IF THE CLOSURE TIME EXCEEDS FOUR DAYS.
4. FLASHING LIGHTS SHALL BE USED DURING THE HOURS OF DARKNESS AND SHALL BE INSTALLED ABOVE THE FIRST TWO SETS OF SIGNS.

SHOULDER CLOSURE DETAILS

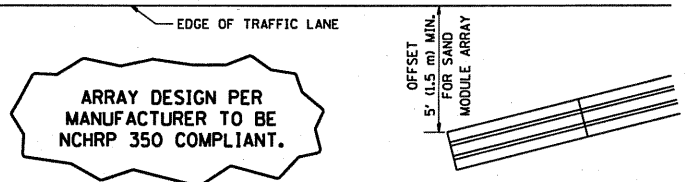


PERMANENT SHOULDER CLOSURE



DAYTIME SHOULDER CLOSURE

THIS DETAIL IS USED WHERE:
 1. VEHICLES, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH IN AN AREA CLOSER THAN 15' (4.5 m) TO THE EDGE OF PAVEMENT FOR A PERIOD IN EXCESS OF 15 MINUTES.



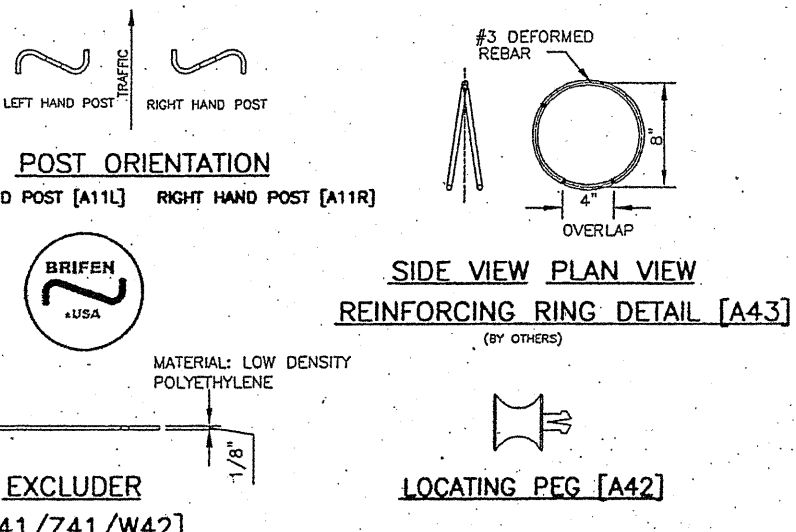
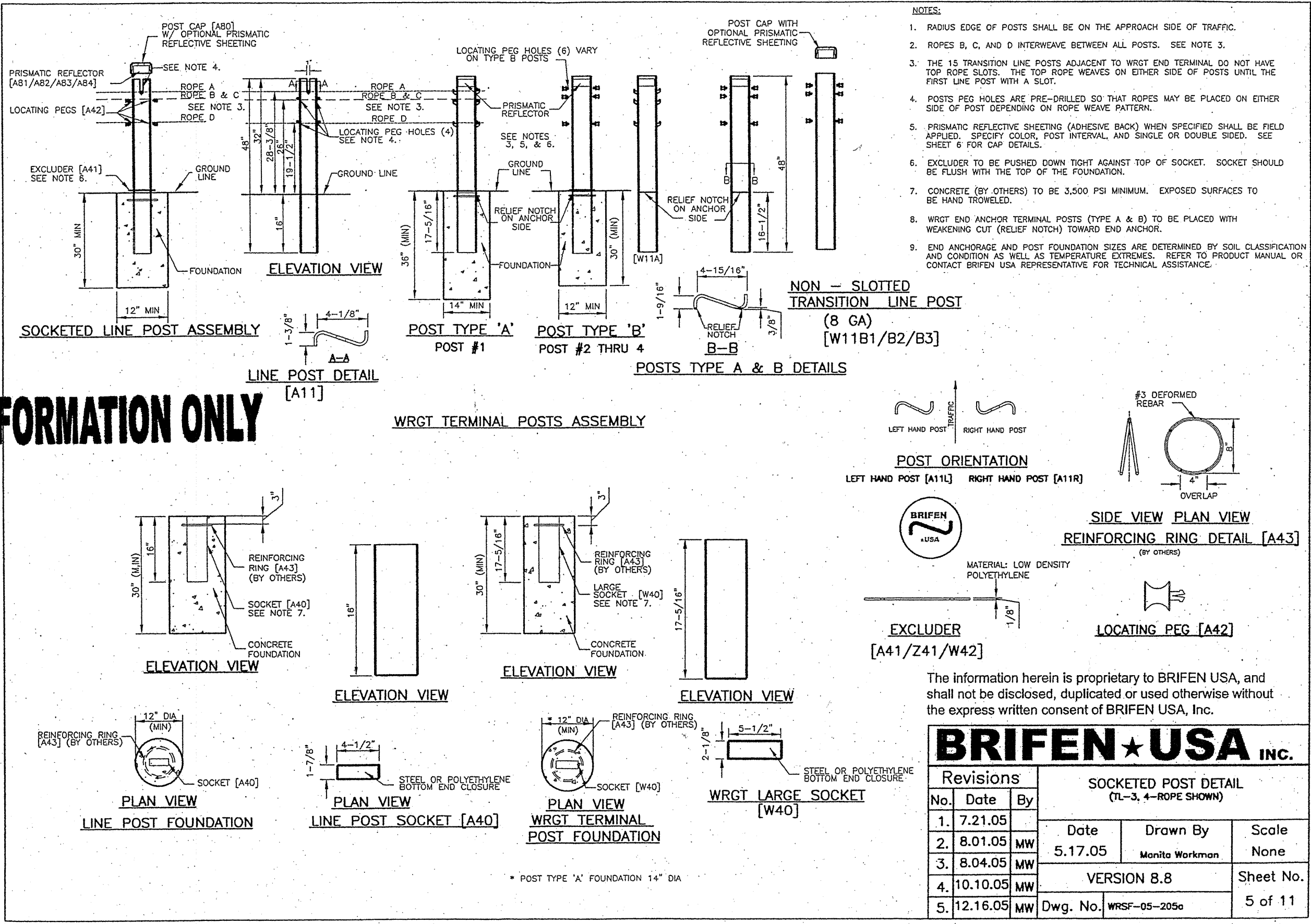
**DETAIL "A"
IMPACT ATTENUATOR, TEMPORARY
(SEE NOTE 5)**

5. THE IMPACT ATTENUATOR, TEMPORARY IS NOT REQUIRED WHEN THE TEMPORARY CONCRETE BARRIER WALL IS PROTECTED BY OR IS TIED INTO THE EXISTING GUARDRAIL. IF OFFSET IS LESS THAN 5 FEET USE NARROW USE TYPE DEVICE TO MEET NCHRP350.
6. AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL FREEWAY CLOSURES.
7. THE FLAGGER AND FLAGGER SIGN ARE REQUIRED AT THE ABOVE WORK SITES WHEN:
 - a. FOUR OR MORE WORK VEHICLES ENTER THE TRAFFIC LANES IN A ONE HOUR PERIOD.
 - b. THE WORK AVTIVITY REQUIRES FREQUENT ENCROACHMENT INTO THE LANE OPEN TO TRAFFIC.
 THE FLAGGER SHALL BE STATIONED APPROXIMATELY 100' (30 m) TO 200' (60 m) IN ADVANCE OF THE WORKERS.

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

FILE NAME =	USER NAME = nathanbo	DESIGNED -	REVISED - 04-03	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURES AND PARTIAL RAMP CLOSURES	F.A. R.T.E.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
118-shst-plen.dgn	DRAWN - D.W.S.	REVISED - J.A.F. 12-06	VAR.			2010-071-1	WILL	15	11	
PLOT SCALE = 1/8" = 1'-0"	CHECKED -	REVISED - S.P.B. 01-07	TC-17			CONTRACT NO. 60L56				
PLOT DATE = 8/19/2010	DATE - 11-96	REVISED - S.P.B. 12-09	SCALE: NONE			SHEET NO. OF SHEETS STA. TO STA.				

FOR INFORMATION ONLY



BRIFEN USA INC.

Revisions			SOCKETED POST DETAIL (TL-3, 4-ROPE SHOWN)		
No.	Date	By	Date	Drawn By	Scale
1.	7.21.05		5.17.05	Manita Workman	None
2.	8.01.05	MW			
3.	8.04.05	MW	VERSION 8.8		
4.	10.10.05	MW			
5.	12.16.05	MW	Dwg. No.	WRSF-05-205a	Sheet No. 5 of 11

REV: 6

DATE: 09/13/07

APPROVER: RV

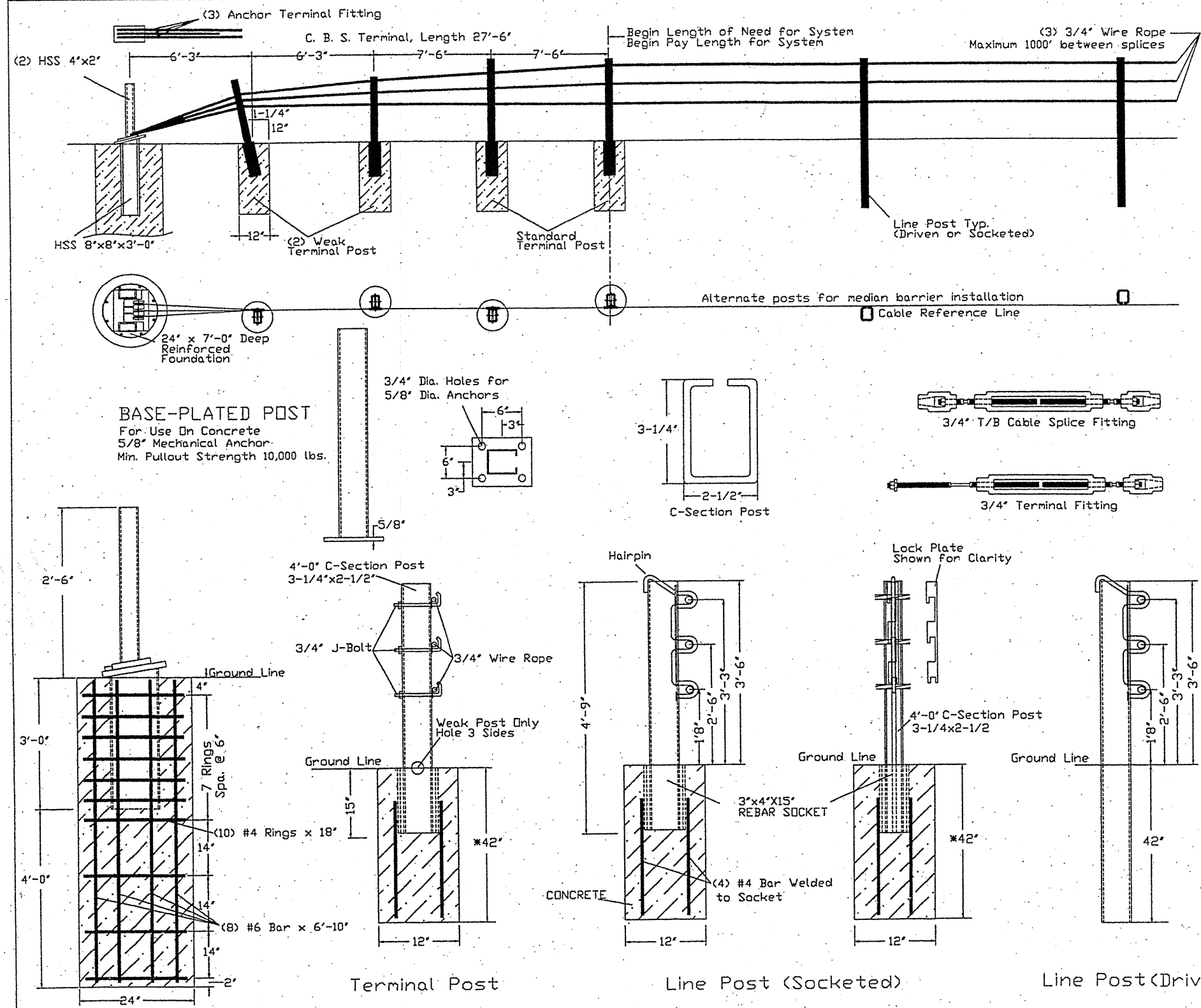
GENERAL NOTES

- For additional information contact Gibraltar, Inc. at 1-800-495-8957, or see the manufacturer's product manual.
- All concrete shall be minimum 2500 PSI.
- Alternate Post for bi-directional traffic flow. If installed for traffic in one direction install cables on traffic side of posts.
- The Cable Barrier System shall be installed on shoulders or on medians with slopes of 6:1 or flatter. If installed on slopes steeper than 6:1 up to 4:1 the TL-4 system performs as a TL-3 and Gibraltar must be contacted for various guidelines related to placement.
- The Cable Barrier System is accepted by the FHWA Test Level - 4
- See the MUTCD for proper "Barrier" delineation
- Rock Clause: Where solid rock is encountered:
 - For socketed post, continue digging 12" diameter, 15" deep into rock or the required plan depth, whichever comes first.
 - For driven post, core drill a 4" diameter hole 18" deep into rock or the required plan depth, whichever comes first.
 - For Anchor post, continue digging 24" diameter, 30" deep into rock or the required plan depth, whichever comes first.
- The Gibraltar cable barrier system shall be installed in NCHRP Report 350 standard compacted soil. Soil must be well drained.
- Every component to be galvanized.

Cable Tension	
-10F	8000
0	7600
10	7200
20	6800
30	6400
40	6000
50	5600
60	5200
70	4800
80	4400
90	4000
100	3600
110	3200

Allowable Deviation from Chart +/- 10%

Deflection	Post Spacing
9'3"	30.FT
9'	28.FT
8'	20.FT
7'	12.FT
6'8"	10.FT



Cable Release Anchor Post

Terminal Post

Line Post (Socketed)

Line Post (Driven)

*30"x12" Concrete Foundation with Min. 18" wide Mow Strip
 *42"x12" Deep w/o Mow Strip

FOR INFORMATION ONLY

GIBRALTAR
 320 Southland Road
 Burnet, Texas 78611
 1-800-495-8957

Cable Barrier System
 Patent Pending

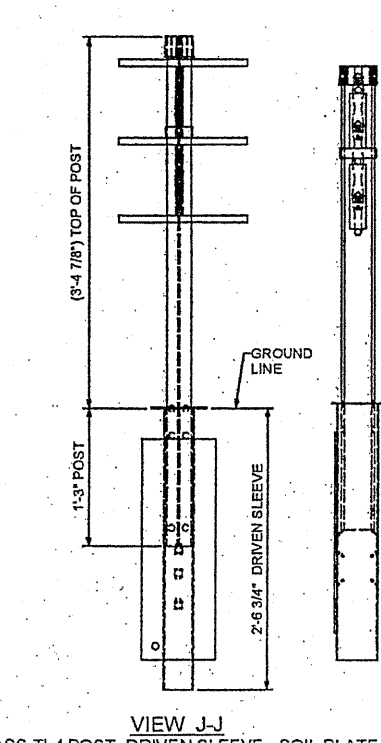
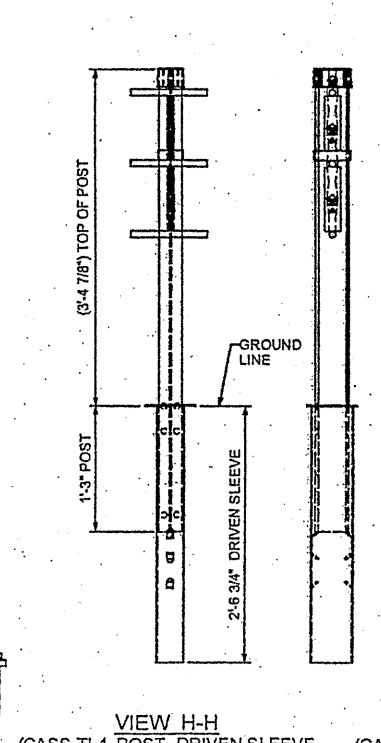
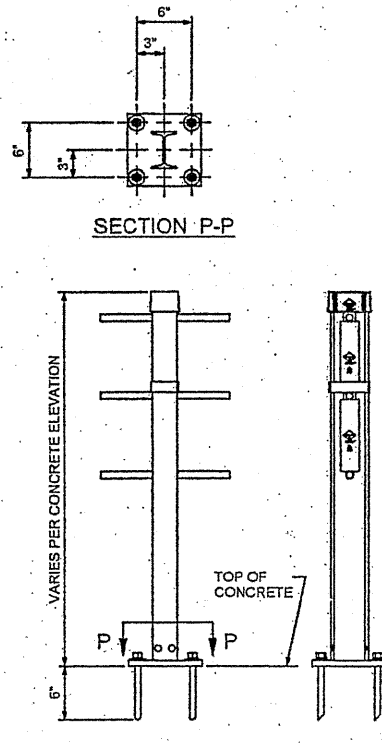
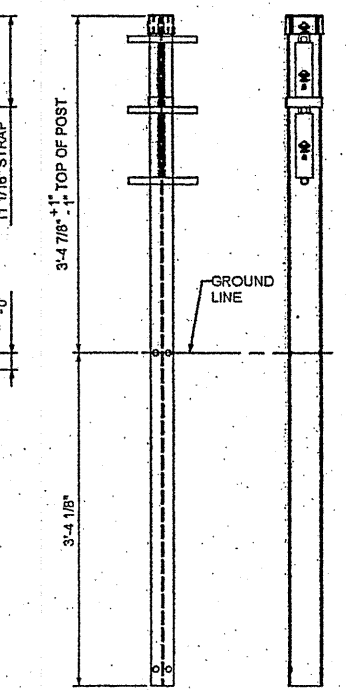
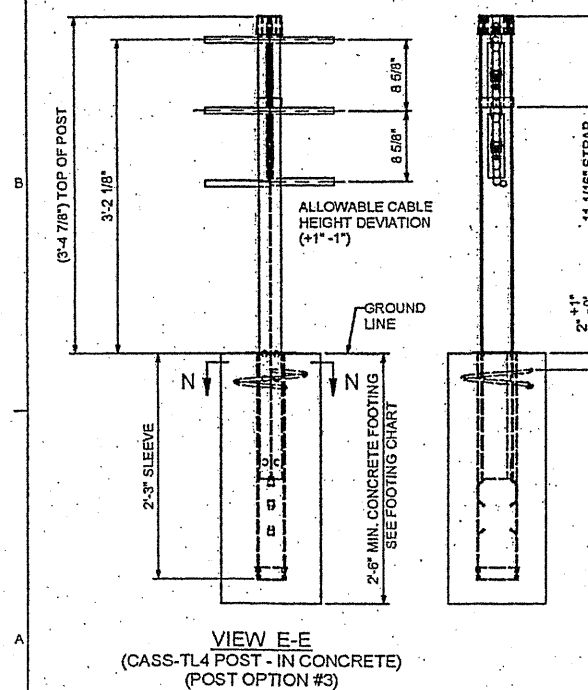
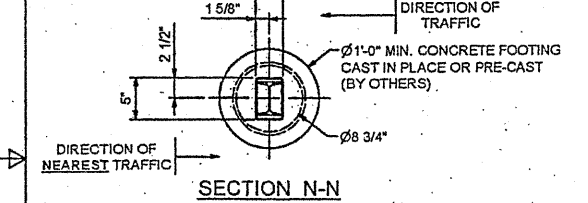
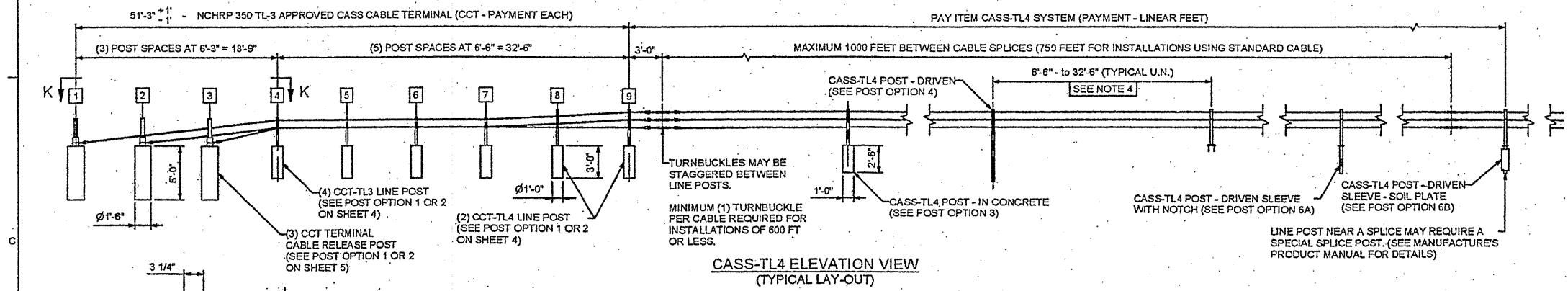
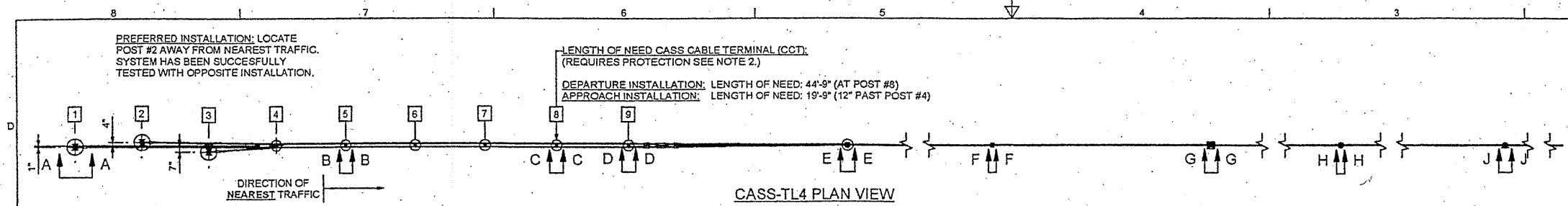
SYSTEM: TL-4 SCALE: NTS DRAFTERS: EJ&TJ DATE: 09/13/07

FILE NAME =	USER NAME = nathanbc	DESIGNED -	REVISED -
en:\pwwork\pwwork\pwwork\nathanbc\0212218\0171\18-shr-plan.dgn		DRAWN -	REVISED -
PLOT SCALE = 1/8" = 1'-0"		CHECKED -	REVISED -
PLOT DATE = 6/21/2010		DATE -	REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

CABLE BARRIER REPAIR
 AT VARIOUS EXPRESSWAY MEDIANS
 HIGH TENSION GUARDRAIL DETAILS (GIBRALTAR)

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	2010-071 I	VARIOUS	15	14
CONTRACT NO. 60L56				
FED. ROAD DIST. NO. 1 ILLINOIS FED. AID PROJECT				



FOR INFORMATION ONLY

- NOTES:**
- CASS-TL4 HAS BEEN SUCCESSFULLY TESTED TO NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM REPORT 350 TEST LEVEL 4 (NCHRP 350 TL4) AND ACCEPTED BY FHWA FOR VARIOUS POST SPACINGS. CASS CABLE TERMINAL (CCT) HAS BEEN SUCCESSFULLY TESTED AND APPROVED TO NCHRP TL3.
 - AN NCHRP 350 TL3 APPROVED TERMINAL (CCT) OR CASS-TL4 TRANSITION (VARIOUS) SHALL BE USED ON APPROACH AND DEPARTURE TERMINATIONS WHEN CASS-TL4 IS INSTALLED ON THE NATIONAL HIGHWAY SYSTEM (NHS). IF THE TERMINATION POINT IS LOCATED OUTSIDE THE CLEAR ZONE AND/OR PROTECTED BY OTHER MEANS (CRASHWORTHY BARRIER, TERMINALS, ETC.), A NON-NCHRP 350 TL3 ANCHOR (CCA) MAY BE USED ON APPROACH AND DEPARTURE TERMINATIONS.
 - CASS-TL4 SHALL BE INSTALLED ON SHOULDERS OR MEDIANS WITH SLOPES OF 6:1 OR FLATTER WITHOUT OBSTRUCTIONS, DEPRESSIONS, ETC. THAT MAY SIGNIFICANTLY AFFECT THE STABILITY OF AN ERRANT VEHICLE. GRADING OF SITE AND/OR APPROPRIATE FILL MATERIALS MAY BE REQUIRED. THE DESIGNER/INSTALLER SHALL "FLATTEN" OR "ROUND" VARIOUS TOPOGRAPHICAL INCONSISTENCIES THAT COULD INTERFERE WITH THE ABILITY OF THE INSTALLER TO CONSISTENTLY MAINTAIN THE DESIGN HEIGHT (IN RELATION TO THE TERRAIN) OF THE CABLES. PLEASE CONSULT THE CASS MANUAL(S) FOR INSTALLATIONS IN "DITCH SECTIONS".
 - CASS-TL4 POST SPACING MAY BE MODIFIED TO AVOID OBSTACLES THAT CONFLICT WITH THE INSTALLATION OF CASS-TL4 LINE POSTS. NO POST SPACE CAN EXCEED THE MAXIMUM POST SPACE LIMIT OF 32'-6", OR MAXIMUM POST SPACING ALLOWED BY PROJECT ENGINEER - WHICHEVER IS LESS. REDUCING OR INCREASING POST SPACING AFFECTS DEFLECTION. CASS-TL4 MAY BE LATERALLY TRANSFERRED AT A RATE NOT TO EXCEED 30:1.
 - POST FOUNDATIONS MAY BE DRILLED THROUGH EXISTING PAVEMENT. TRINITY MAY ALLOW THE USE OF ALTERNATE LINE POST FOOTINGS IF SYSTEM IS INSTALLED WITH AN ACCEPTABLE MOWSTRIP APPLICATION - PLEASE CONTACT TRINITY.
 - FOR AESTHETIC PURPOSES TRINITY RECOMMENDS ALL SLEEVES, DRIVEN POSTS, AND LOWER CABLE RELEASE POSTS TO BE INSTALLED REASONABLY PLUMB (APPROXIMATELY 1/8" PER FOOT).
 - ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. PRIOR TO TENSIONING THE SYSTEM. TRINITY RECOMMENDS THE CONCRETE TO BE VIBRATED IN ACCORDANCE WITH THE LATEST APPLICABLE AGENCY SPECIFICATION.
 - CASS-TL4 SHALL BE INSTALLED IN WELL-DRAINED, COMPACTED, NCHRP REPORT 350 STANDARD SOILS. IF SOIL DOESN'T MEET THIS CLASSIFICATION, IF SOLID ROCK/CONCRETE IS ENCOUNTERED BELOW GRADE OR IF SOIL IS SUSCEPTIBLE TO SEVERE FREEZE/THAW CYCLES, PLEASE CONTACT TRINITY ABOUT ALTERNATE FOOTING DESIGN(S). TRINITY SUGGESTS THE USE OF "MOW STRIPS" FOR EROSION PREVENTION AND EASE OF MAINTENANCE / INSTALLATION.
 - PLEASE SEE SPECIFYING AGENCY (OR MUTCD) FOR PROPER "BARRIER" DELINEATION.
 - PLEASE CONTACT TRINITY OR CONSULT THE DESIGN, INSTALLATION, OR REPAIR MANUAL(S) FOR ADDITIONAL INFORMATION.

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MOW STRIP DETAIL*			CONCRETE FOOTING CHART		
MOW STRIP	DEPTH	WIDTH	FOOTING	TUBE SLEEVE	REBAR RING
NONE			30" MIN.	27" MIN.	YES
HMA	6" MIN.	3" MIN.	27" MIN.	15" MIN.	NO
HMA	8" MIN.	3" MIN.	24" MIN.	15" MIN.	NO
RC	3" MIN.	3" MIN.	24" MIN.	15" MIN.	NO

CHART DOES NOT APPLY TO TERMINAL POSTS 1 THRU 9
 *MOW STRIP OR PAVEMENT
 HMA = HOT MIX ASPHALT (NOT RECYCLED ASPHALT PAVEMENT)
 RC = REINFORCED CONCRETE (3,000 P.S.I. MINIMUM)

No.	CASS-TL4 POST OPTIONS
1	CCT - TERMINAL POST 1 - 9 - IN CONCRETE
2	CCT - TERMINAL POST 1 - 9 - WITH SOIL PLATE
3	CASS-TL4 POST - IN CONCRETE
4	CASS-TL4 POST - DRIVEN
5	CASS-TL4 POST - BASE-PLATED
6	CASS-TL4 POST - IN DRIVEN SLEEVE
	6A - DRIVEN SLEEVE - WITH NOTCH
	6B - DRIVEN SLEEVE - WITH SOIL PLATE

CASS-TL4 3-CABLE GUARDRAIL SAFETY SYSTEM

TRINITY HIGHWAY PRODUCTS, LLC

PROJ: CASS-TL4

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