

#### INTERCONNECT SCHEDULE OF QUANTITIES

UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	317
UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	227
HANDHOLE	EACH	1
HEAVY-DUTY HANDHOLE	EACH	3
MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	1
TRANSCEIVER - FIBER OPTIC	EACH	4
ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	5233
DRILL EXISTING HANDHOLE	EACH	1
REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	3007
ROD AND CLEAN EXISTING CONDUIT	FOOT	2832
FIBER OPTIC CABLE IN CONDUIT, NO. 62.5/125, MM12F SM24F	FOOT	5233
OPTIMIZE TRAFFIC SIGNAL SYSTEM	EACH	1

= Millennia Professiona

USER NAME = N

2600 Warrenville Road, Suite 203, Downers Grove, II. 60515
630.705.0110 voice, 630.839.2566 fax
www.mps-il.com

MILLENNIA PROFESSIONAL SERVICES
DATE

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 DATE
 12/22/2015
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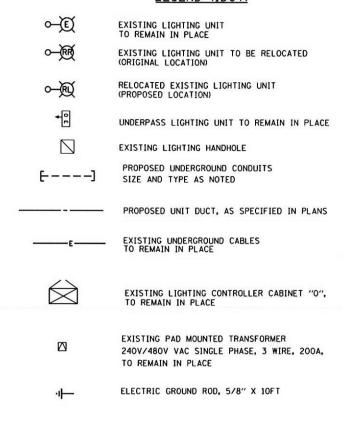
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

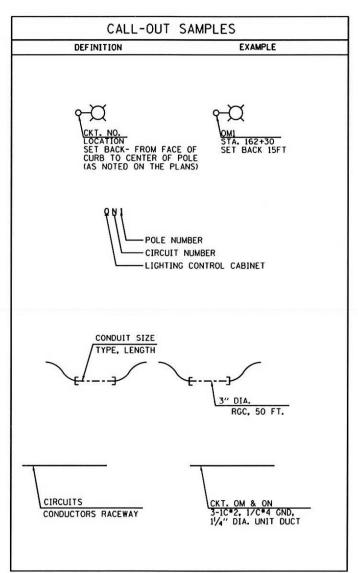
PROPOSED INTERCONNECT SCHEMATIC (SYSTEM NO. 84)
IL RTE 72 (HIGGINS ROAD)
PLUM GROVE RD TO 1-290/1L RTE 53 NB RAMP/FRONTAGE RD

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

0Y73-Sht-INTC03-Schematic.dgn

#### LEGEND (IDOT)





	SCHEDULE OF QUANTITIES		
	DESIGNATION	UNIT	TOTAL QUANTITY
	UNDERGROUND CONDUITS, GALVANIZED STEEL, 3" DIA.	FOOT	130
•	UNIT DUCT, 600V, 3-1C NO.2, 1/C NO.4 GROUND, (XLP-TYPE USE), 1 1/2" DIA. POLYETHYLENE	FOOT	1600
*	UNIT DUCT, 600V, 6-1C NO.6, 1/C NO.4 GROUND, (XLP-TYPE USE), 2" DIA. POLYETHYLENE	FOOT	370
	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	70
	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	8
	REMOVAL OF POLE FOUNDATION	EACH	8
	RELOCATE EXISTING LIGHTING UNIT	EACH	8
•	REMOVE EXISTING CABLE	F00T	400
*	MAINTENANCE OF LIGHTING SYSTEM	CAL MO	6

. DESIGNATES SPECIAL PROVISIONS



FILE NAME =

FILEL\*

GANDHI AND ASSOCIATES, INC ENGINEERS AND PLANNERS 6035 N. NORTHWEST HIGHWAY SUITE 306 CHICAGO, ILLINOIS 60631TEL.(773)774-5910

> USER NAME = #USER# DESIGNED - PKG REVISED -DRAWN - MAA, SHM REVISED -PLOT SCALE = 1\*=50" CHECKED - PKG REVISED PLOT DATE = \*DATE\* DATE - 12/16/11 REVISED

#### STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

	GENERAL	NOTES,	LEGEND,	AND S	CHEDULE (	F QUANTITIES
SCALE	NONE	SHEET NO.	1 OF 5	SHEETS	STA.	TO STA.

### **GENERAL NOTES:**

- THE CONTRACTOR SHALL VERIFY ALL OF THE INFORMATION SHOWN ON THE CONTRACT DRAWINGS, WHICH WOULD AFFECT THE WORK UNDER THIS CONTRACT.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN EXISTING FIELD CONDITIONS BEFORE BIDDING ON THIS PROJECT, SPECIFICALLY AS THEY RELATE TO LUMP SUM ITEMS AND UNIT PRICE ITEMS.
- ALL NEW CONDUITS, UNIT DUCTS, DIRECT BURIAL CABLES, AND APPURTENANCES ARE INDICATED DIAGRAMMATICALLY ON THE DRAWINGS. THE ACTUAL LOCATIONS IN THE FIELD SHALL MEET WITH APPROVAL OF THE ENGINEER.
- THE ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE IDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND ASSOCIATED SUPPLEMENTAL CONDITIONS (LATEST EDITION).
- THE SCALE SHOWN ON PLAN DRAWINGS APPLIES ONLY TO THE FULL SIZE PLANS AND NOT TO REDUCED SIZE PLANS.
- THE CONTRACTOR SHALL FURNISH AND INSTALL LUMINAIRE LAMPS IN ACCORDANCE WITH THE SUPPLIER'S RECOMMENDATIONS AND IN ACCORDANCE WITH THE SPECIFICATIONS. THE COST OF THIS WORK AND MATERIAL SHALL BE INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEM. SEPARATE PAYMENT WILL NOT BE MADE.
- ALL LUMINAIRES SHALL BE ORIENTED WITH THE OPTICS PERPENDICULAR TO THE ROADWAY UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCLUDED IN THE APPLICABLE LUMINAIRE PAY ITEMS. SEPARATE PAYMENT
- CONDUITS AND UNIT DUCTS SHALL BE INSTALLED AT A MINIMUM 30" DEPTH BELOW GRADE AND POSITIONED IN THE FIELD TO AVOID CONFLICT WITH ROADWAY UNDERDRAINS AND OTHER EXISTING AND PROPOSED UTILITIES. THE CONTRACTOR SHALL INCREASE DEPTH OF UNIT DUCT AND CONDUIT AS REQUIRED AT NO ADDITIONAL COST TO THE STATE, THE CONTRACTOR SHALL COORDINATE RACEWAY DEPTH WITH THE ELECTRICAL DETAILS OR AS DIRECTED BY THE ENGINEER.
- WHERE MULTIPLE CONDUITS ADJACENT TO EACH OTHER ARE INSTALLED IN A COMMON TRENCH, TRENCH AND BACKFILL WILL NOT BE PAID FOR EACH CONDUIT, BUT WILL BE PAID FOR THE LENGTH OF THE COMMON TRENCH ONLY.
- 10. WHERE THE CONTRACTOR'S EXCAVATION MEETS AN OBSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOR DIRECTION IN WRITING PRIOR TO EXCAVATION. THE CONTRACTOR SHALL RESTORE ANY DAMAGE TO EXISTING SYSTEMS OR UTILITIES AND REMOVE EXISTING OBSTRUCTIONS AND FOUNDATIONS TO THE SATISFACTION OF THE ENGINEER. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PAY
- BREAKAWAY DEVICE, TRANSFORMER BASE, 9", SHALL BE INSTALLED ON ALL GROUND MOUNTED POLES WITH 15" BOLT CIRCLE ON 24" DIA. FOUNDATION AS SHOWN IN THE
- 12. SET BACK DISTANCES FOR LIGHT POLES ALONG ILLINOIS ROUTE 72 ARE MEASURED FROM THE FACE OF CURB TO THE CENTER OF THE PROPOSED LIGHT POLE FOUNDATION, OR EDGE OF TRAVEL PAVEMENT WHEN CURB IN NOT EXIST.
- 13. THE COST OF ALL GROUND RODS SHALL BE INCLUDED IN THE COST OF THE ITEM FOR WHICH IT IS INSTALLED.



GANDHI AND ASSOCIATES INC. (184–001236) PETER A. VANDEMOTTER, P.E. # 062–043463

Peter a. Vandimitte DATE: 12/20/2015 SIGNATURE AND SEAL APPLIES TO DRWG NO 102 TO 106

> COUNTY TOTAL SHEET NO.
>
> COOK 153 102 SECTION 341 (32-3-R&0305-302K)TS&N-3 CONTRACT NO. 60Y73 FED. ROAD DIST. NO. 1 | ILLINOIS FED. AID PROJECT

**ABBREVIATIONS** 

ALTERNATING CURRENT AERIAL CABLE

ABOVE FINISHED GRADE

COILABLE NONMETALLIC CONDUIT
CURRENT TRANSFORMER

DISTRIBUTION PANEL EXISTING UNIT TO REMAIN

ELECTRIC CABLE ASSEMBLY EXISTING UNIT TO BE MODIFIED (e.g. NEW LUMINAIRE, BALLAST OR MAST ARM)

EXISTING RELOCATED UNIT

FOUNDATION BARRIER WALL

GROUND HIGH INTENSITY DISCHARGE

FOUNDATION CONCRETE OFFSET

FOUNDATION CONCRETE

FOUNDATION METAL FOUNDATION PARAPET WALL

JUNCTION BOX

KILOWATTS

MAST ARM MILLIMETER

METER

KILOVOLT-AMPERE

MOUNTING HEIGHT NUMBER PROPOSED

PANEL PVC COATED RIGID

GALVANIZED CONDUIT

POTENTIAL TRANSFORMER EXISTING UNIT TO BE REMOVED (OWNER SALVAGED U.N.O.)

EXISTING UNIT TO BE REMOVED AND REINSTALLED

RIGID GALVANIZED CONDUIT

TEMPORARY LIGHTING UNIT

UNLESS NOTED OTHERWISE

TEMPORARY UNIT TO BE REMOVED. SALVAGE EQUIPMENT AS SPECIFIED

TEMPORARY UNIT TO BE REMOVED AND RELOCATED

TEMPORARY UNIT ON UTILITY POLE TO BE REMOVED

TRANSFORMER BASE TEMPORARY

RIGID GALVANIZED STEEL SELECTOR SWITCH

**PUSH BUTTON** 

RECEPTACLE

SPACE STAINLESS STEEL

STATION

UNIT DUCT

TRANSFORMER

EXISTING TEMPORARY UNIT TO REMAIN

EXISTING TEMPORARY RELOCATED UNIT FEET OR FOOT

FOUNDATION BARRIER WALL OFFSET

CIRCUIT BREAKER

CONTROL PANEL

DIRECT CURRENT

DAVIT ARM

CIRCUIT CENTIMETER

SYMBOL

AC A/C AFG

CB CKT CM

CNC CT CP

DA DC DIA DP

ECA

ETR

FND BW FND BW OS

FND MET

GND

HID

JB KVA

KW

MA MM

MH NO.

PB

PT

RR

RECP

RGC RGS SEL SW

SPARE SPACE

SS STA

TB TMP

TR TRR

TUR

U.N.O.

WP XFMR

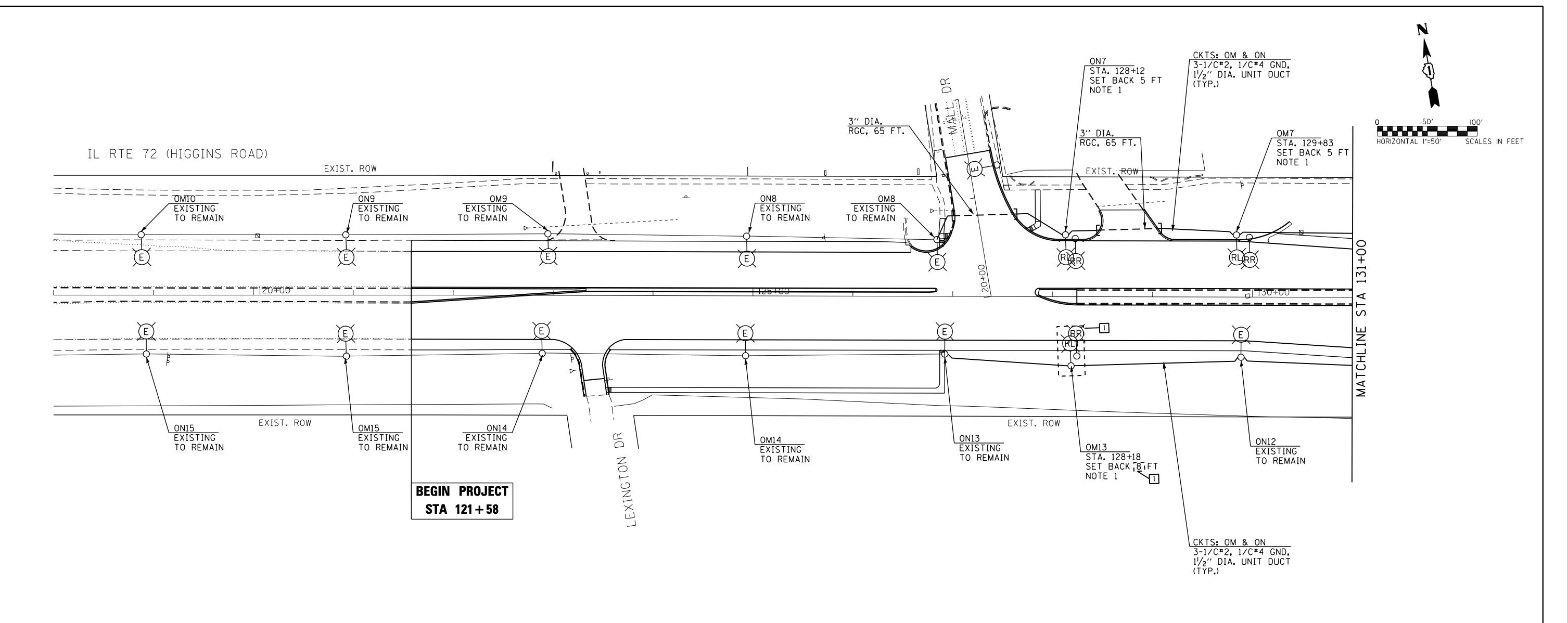
UD

PNL PVCC RGC

FND CON OS

EM

DESCRIPTION

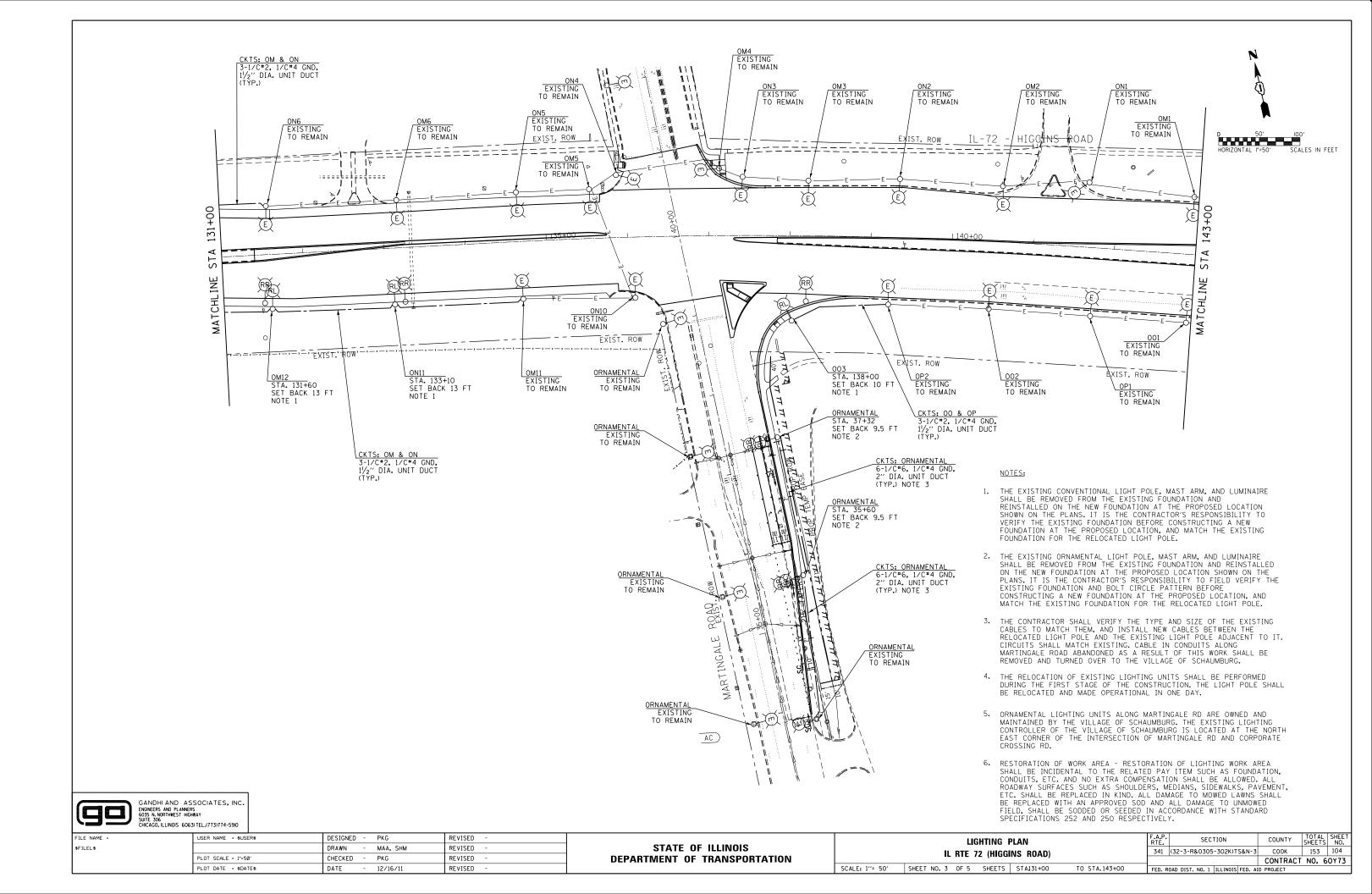


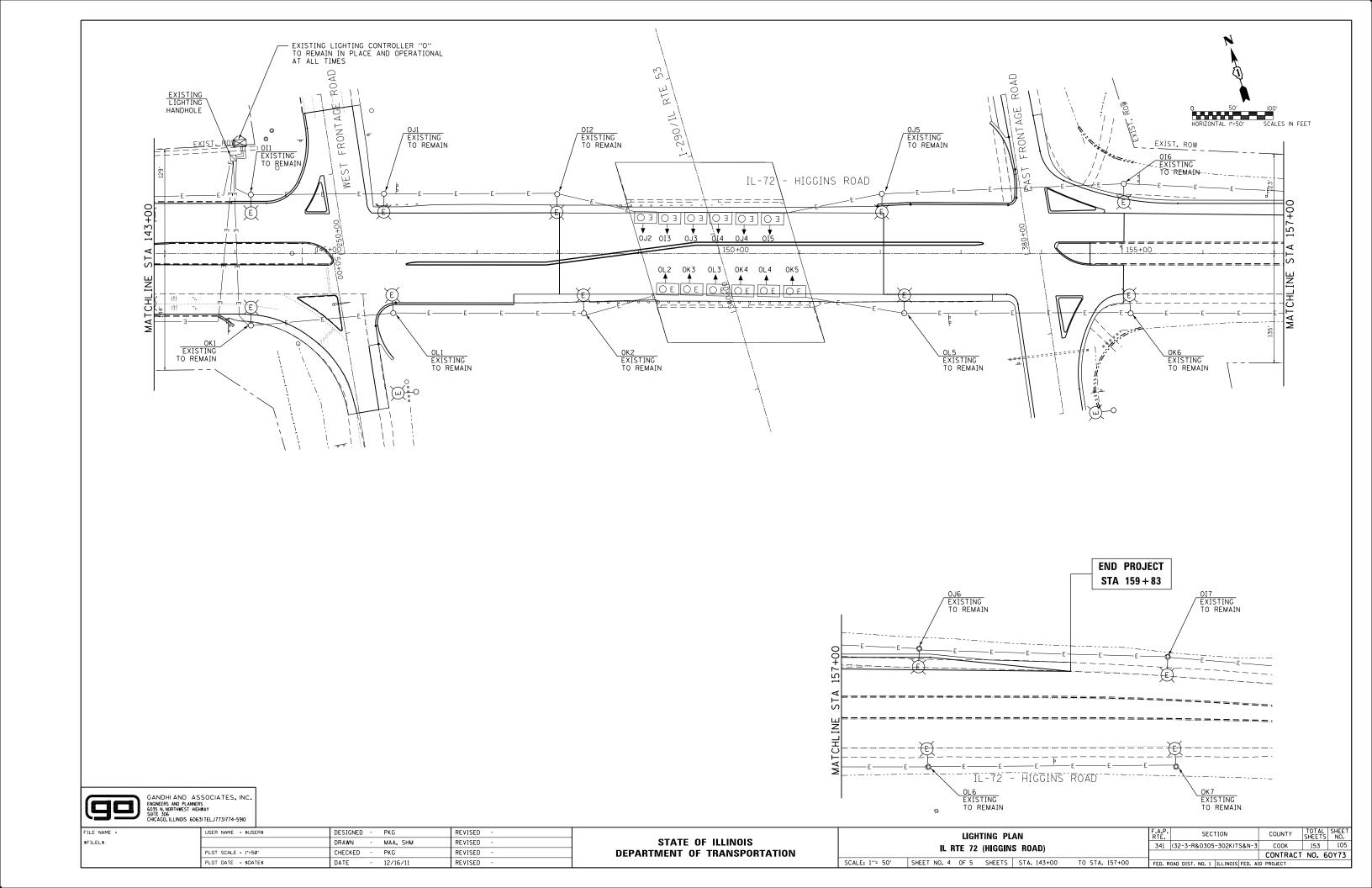
### NOTES:

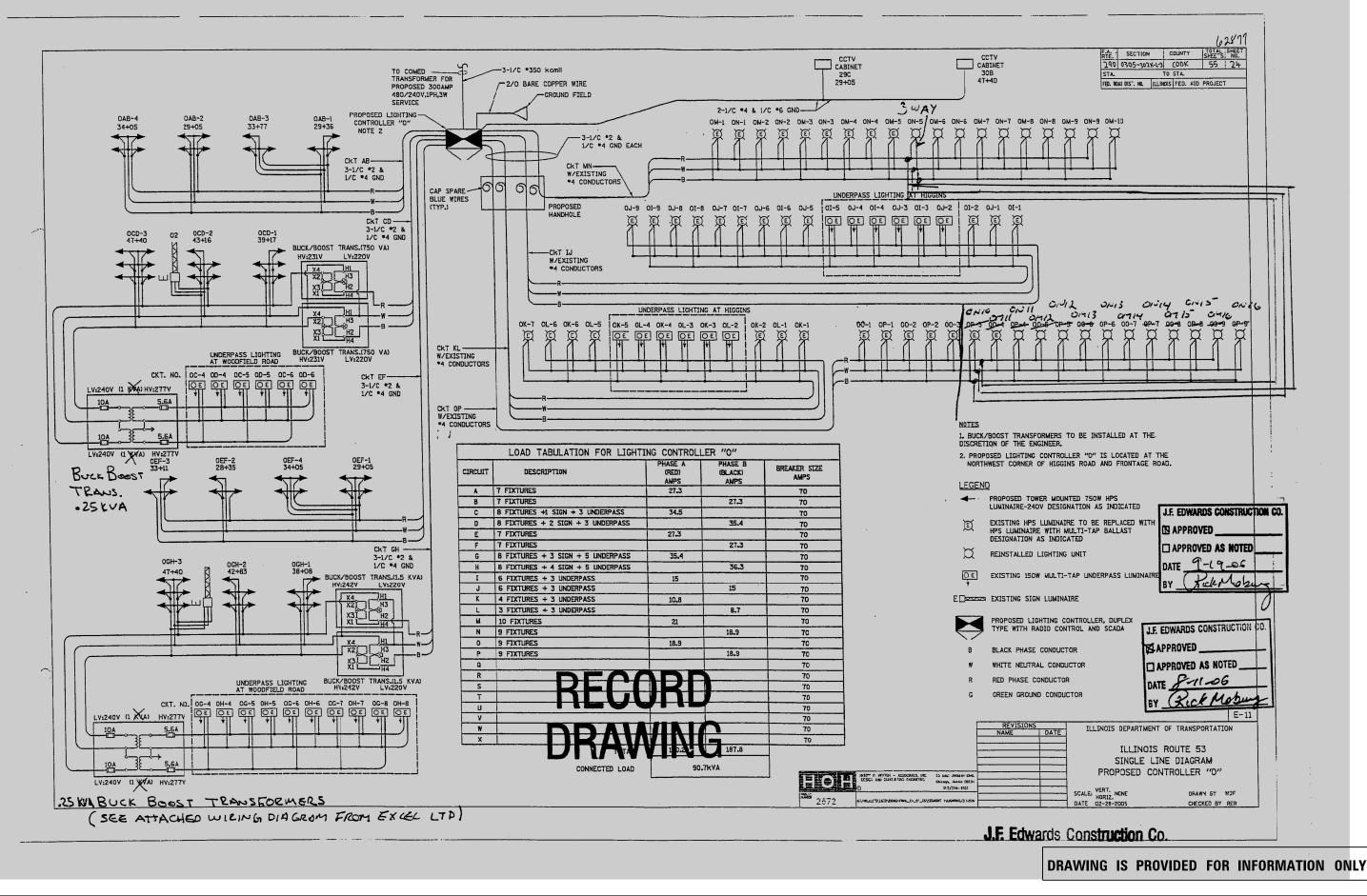
- 1. THE EXISTING CONVENTIONAL LIGHT POLE, MAST ARM, AND LUMINAIRE SHALL BE REMOVED FROM THE EXISTING FOUNDATION AND REINSTALLED ON THE NEW FOUNDATION AT THE PROPOSED LOCATION SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTING FOUNDATION BEFORE CONSTRUCTING A NEW FOUNDATION AT THE PROPOSED LOCATION, AND MATCH THE EXISTING FOUNDATION FOR THE RELOCATED LIGHT POLE.
- 2. THE EXISTING ORNAMENTAL LIGHT POLE, MAST ARM, AND LUMINAIRE SHALL BE REMOVED FROM THE EXISTING FOUNDATION AND REINSTALLED ON THE NEW FOUNDATION AT THE PROPOSED LOCATION SHOWN ON THE PLANS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTING FOUNDATION BEFORE CONSTRUCTING A NEW FOUNDATION AT THE PROPOSED LOCATION, AND MATCH THE EXISTING FOUNDATION FOR THE RELOCATED LIGHT POLE.
- 3. THE CONTRACTOR SHALL VERIFY THE TYPE AND SIZE OF THE EXISTING CABLES TO MATCH THEM, AND INSTALL NEW CABLES BETWEEN THE RELOCATED LIGHT POLE AND THE EXISTING LIGHT POLE ADJACENT TO IT.
- 4. THE RELOCATION OF EXISTING LIGHTING UNITS SHALL BE PERFORMED DURING THE FIRST STAGE OF THE CONSTRUCTION. THE LIGHT POLE SHALL BE RELOCATED AND MADE OPERATIONAL IN ONE DAY.
- 5. RESTORATION OF WORK AREA RESTORATION OF LIGHTING WORK AREA SHALL BE INCIDENTAL TO THE RELATED PAY ITEM SUCH AS FOUNDATION, CONDUITS, ETC. AND NO EXTRA COMPENSATION SHALL BE ALLOWED. ALL ROADWAY SURFACES SUCH AS SHOULDERS, MEDIANS, SIDEWALKS, PAVEMENT, ETC. SHALL BE REPLACED IN KIND. ALL DAMAGE TO MOWED LAWNS SHALL BE REPLACED WITH AN APPROVED SOD AND ALL DAMAGE TO UNMOWED FIELD, SHALL BE SODDED OR SEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 252 AND 250 RESPECTIVELY.



FILE NAME =	USER NAME = \$USER\$	DESIGNED - PKG	REVISED 1-3/3/2016 CONSTRUCTION REVISION		LIQUITING DI ANI	F.A.P.   SECTION   COUNTY   TOTAL   SHEET
\$FILEL\$		DRAWN - MAA, SHM	REVISED -	STATE OF ILLINOIS	LIGHTING PLAN	341 (32-3-R&0305-302K)TS&N-3 COOK 153 103
	PLOT SCALE = 1"=50"	CHECKED - PKG	REVISED -	DEPARTMENT OF TRANSPORTATION	IL RTE 72 (HIGGINS ROAD)	CONTRACT NO. 60Y73
	PLOT DATE = \$DATE\$	DATE - 03//17/16	REVISED -		SCALE: 1"= 50" SHEET NO. 2 OF 5 SHEETS STA118+00 TO STA. 131+00	FED. ROAD DIST. NO. 1   ILLINOIS FED. AID PROJECT





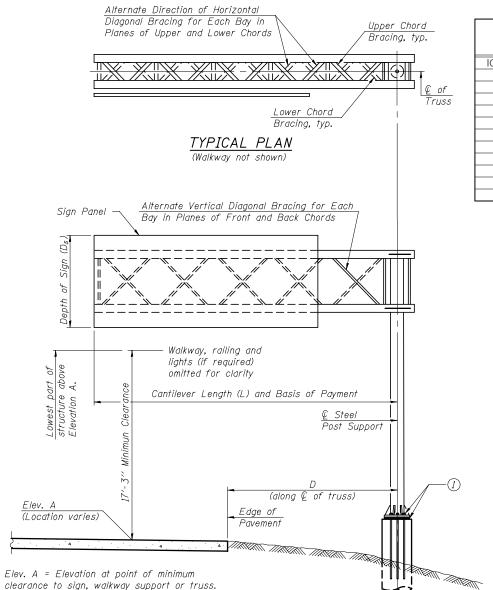


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STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

 EXISTING
 WIRING
 FOR
 LIGHTING
 CONTROLLER
 "O"
 F.A.P. REL. NO.5 SECTION REL.
 SECTION REL.

 SCALE: NONE
 SHEET NO. 5 OF 5 SHEETS STA.
 TO STA.
 FED. ROAD DIST. NO. 1 | ILLI

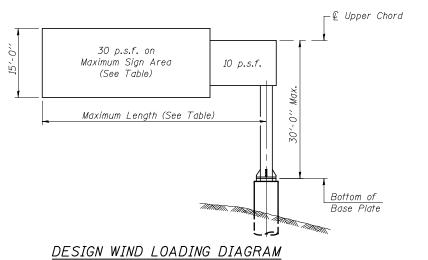


### TYPICAL ELEVATION Looking in Direction of Traffic

Sign support structures may be subject to damaging vibrations and oscillations when sign panels are not in place during erection or maintenance of the structure. To avoid these vibrations and oscillations, consideration should be given to attaching temporary blank sign panels to

Structure Number	Station	Design Truss Type	Cantilever Length (L)	Elev. A	Dim. D	Ds	Total Sign Area
IC016S072R(NA)	132+00.0	III-C-A	35'-6"	735.26	21'-9"	14'	217.0 SF

Truss Type	Maximum Sign Area	Maximum Length
I-C-A	170 Sq. Ft.	25 Ft.
II-C-A	340 Sq. Ft.	30 Ft.
III-C-A	400 Sq. Ft.	40 Ft.



#### Parameters shown are basis for I.D.O.T. Standards Installations not within dimensional limits shown require special analysis for all components.

Note

Trusses shall be shipped individually with adequate provision to prevent detrimental motion during transport. This may require ropes between horizontals and diagonals or energy dissipating (elastic) ties to the vehicle. The contractor is responsible for maintaining the configuration and protection of the trusses.

- (1) After adjustments to level truss and insure adequate vertical clearance, all top and leveling nuts shall be tightened against the base plate with a minimum torque of 200 lb.-ft. Stainless steel mesh shall then be placed around the perimeter of the base plate. Secure to base plate with stainless steel banding.
- \* If M270 Gr. 50W (M222) steel is proposed, chemistry for plate to be used shall first be approved by the Engineer as suitable for galvanizing and welding.

#### GENERAL NOTES

DESIGN: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals. ("AASHTO Specifications")

CONSTRUCTION: Current (at time of letting) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction, Supplemental Specifications and Special Provisions. ("Standard Specifications")

LOADING: 90 M.P.H. WIND VELOCITY

WALKWAY LOADING: Dead load plus 500 lbs. concentrated live load.

DESIGN STRESSES: Field Units  $f'_c = 3,500 \text{ p.s.i.}$ fy = 60,000 p.s.i. (reinforcement)

y = 60,000 p.s.i. (reintorcement)

WELDING: All welds to be continuous unless otherwise shown. All welding to be done in accordance with current AWS D1.1 and D1.2 Structural Welding Codes (Steel and Aluminum) and the Standard Specificiations.

MATERIALS: Aluminum Alloys as shown throughout plans. All Structural Steel Pipe shall be ASTM A53 Grade B or A500 Grade B or C. If A500 pipe is substituted for A53, then the outside diameter shall be as detailed and wall thickness greater than or equal to A53. All Structural Steel Plates and Shapes shall conform to AASHTO M270 Gr. 36, Gr. 50 or Gr. 50W\*. Stainless steel for shims, sleeves and handhole covers shall be ASTM A240, Type 302 or 304, or another alloy suitable for exterior exposure and acceptable to the Engineer. The steel pipe and stiffening ribs at the base plate for the column shall have a minimum longitudinal Charpy V-Notch (CVN) energy of 15 lb.-ft. at 40° F. (Zone 2) before galvanizing.

FASTENERS FOR ALUMINUM TRUSSES: All bolts noted as "high strength" must satisfy the requirements of AASHTO M164 (ASTM A325), or approved alternate, and must have matching lock nuts. Threaded studs for splices (if Members Interfere) must satisfy the requirements of ASTM A449, ASTM A193, Grade B7, or approved alternate, and must have matching lock nuts. Bolts and lock nuts not required to be high strength must satisfy the requirements of ASTM A307. All bolts and lock nuts must be hot dip galvanized per AASHTO M232. The lock nuts must have nylon or steel inserts. A stainless steel flat washer conforming to ASTM A240 Type 302 or 304, is required under both head and nut or under both nuts where threaded studs are used. High strength bolt installation shall conform to Article 505.04 (f) (2)d of the IDOT Standard Specifications for Road and Bridge Construction. Rotational capacity ("ROCAP") testing of bolts will not be required.

U-BOLTS AND EYEBOLTS: U-Bolts and Eyebolts must be produced from ASTM A276 Type 304, 304L, 316 or 316L, Condition A, cold finished stainless steel, or an equivalent material acceptable to the Engineer. All nuts for U-Bolts and Eyebolts must be lock nuts equivalent to ASTM A307 with nylon or steel inserts and hot dip galvanized per AASHTO M232. A stainless steel flat washer conforming to ASTM A240, Type 302 or 304, is required under each U-Bolt and Eyebolt lock nut.

GALVANIZING: All Steel Grating, Plates, Shapes and Pipe shall be Hot Dip Galvanized after fabrication in accordance with AASHTO M111. Painting is not permitted.

ANCHOR RODS: Shall conform to ASTM F1554 Gr. 105.

CONCRETE SURFACES: All concrete surfaces above an elevation 6" below the lowest final ground line at each foundation shall be cleaned and coated with Bridge Seat Sealer in accordance with the Standard Specifications.

REINFORCEMENT BARS: Reinforcement Bars designated (E) shall be epoxy coated in accordance with the Standard Specifications.

FOUNDATIONS: The contract unit price for Drilled Shaft Concrete Foundations shall include reinforcement bars complete in place.

#### TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE I-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE II-C-A	Foot	
OVERHEAD SIGN STRUCTURE CANTILEVER TYPE III-C-A	Foot	35'-6"
OVERHEAD SIGN STRUCTURE WALKWAY, TYPE A	Foot	
DRILLED SHAFT CONCRETE FOUNDATIONS	Cu. Yds.	12.6

OSC-A-1

6-1-12

the structure.

JU A I	0-1-12			
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	PLOT DATE =	CHECKED -	REVISED	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

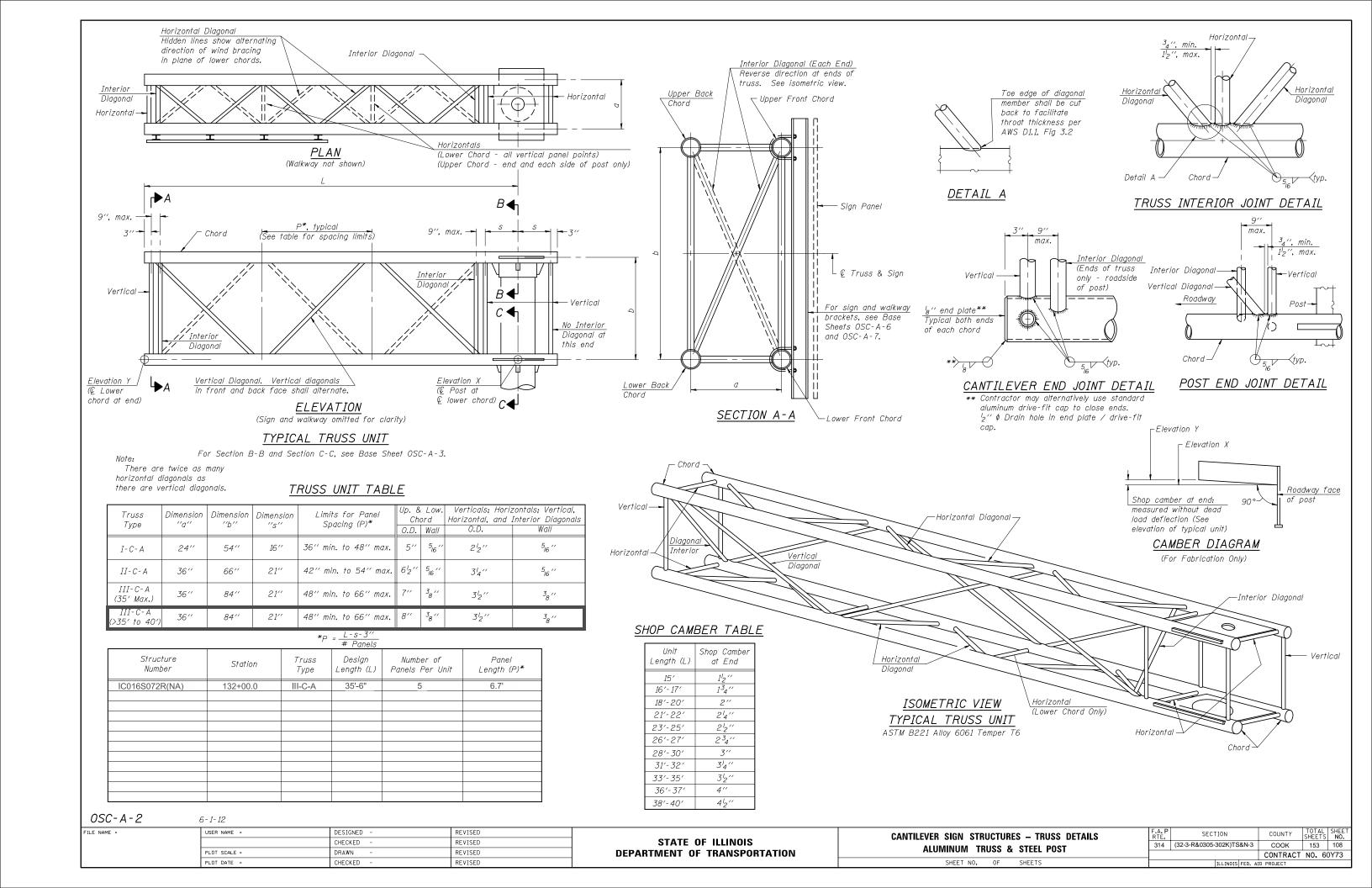
CANTILEVER SIGN STRUCTURES - GENERAL PLAN & ELEVATION

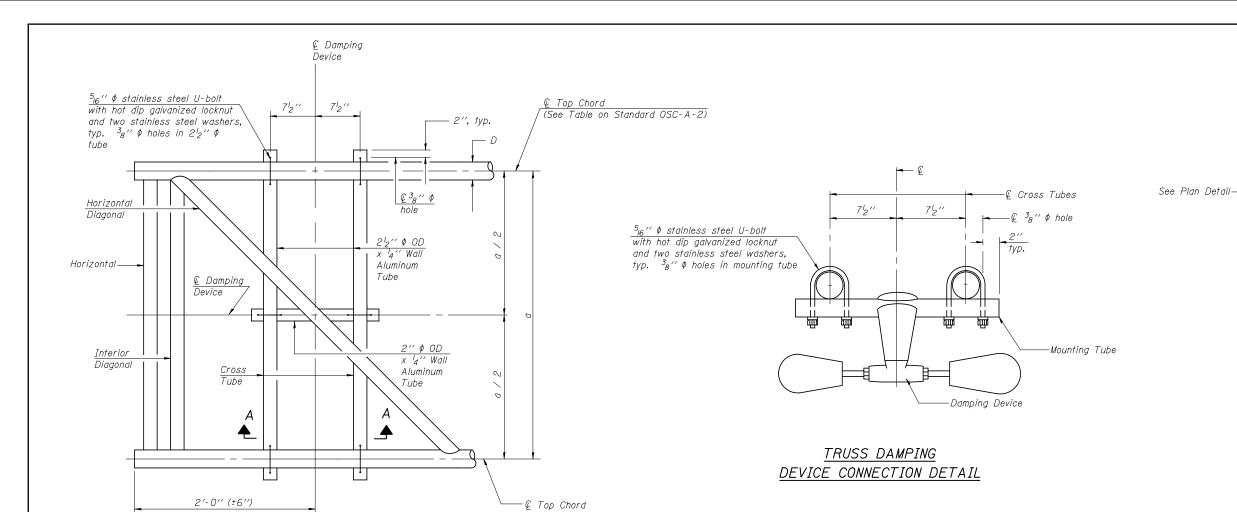
ALUMINUM TRUSS & STEEL POST

SHEET NO. OF SHEETS

SHEETS

F.A. P SECTION COUNTY TOTAL SHEE NO. 314 (32-3-R&0305-302K)TS&N-3 COOK 153 107 CONTRACT NO. 60Y73





ELEVATION

Aluminum Cantilever

Sign Structure

GENERAL NOTES One damper per truss. (31 lbs. Stockbridge-Type Aluminum-29" minimum between ends of weights) Damper:

Materials: Aluminum tubes shall be ASTM B221 alloy 6061

© Damping Device

temper T6

Device 5<sub>16</sub> " ♦ stainless steel U-bolt SECTION A-A

#### DAMPING DEVICE MOUNTING TUBE U-BOLT DETAIL (Typical)

TOP CHORD TO CROSS TUBE U-BOLT DETAIL (Typical)

OSC-A-D

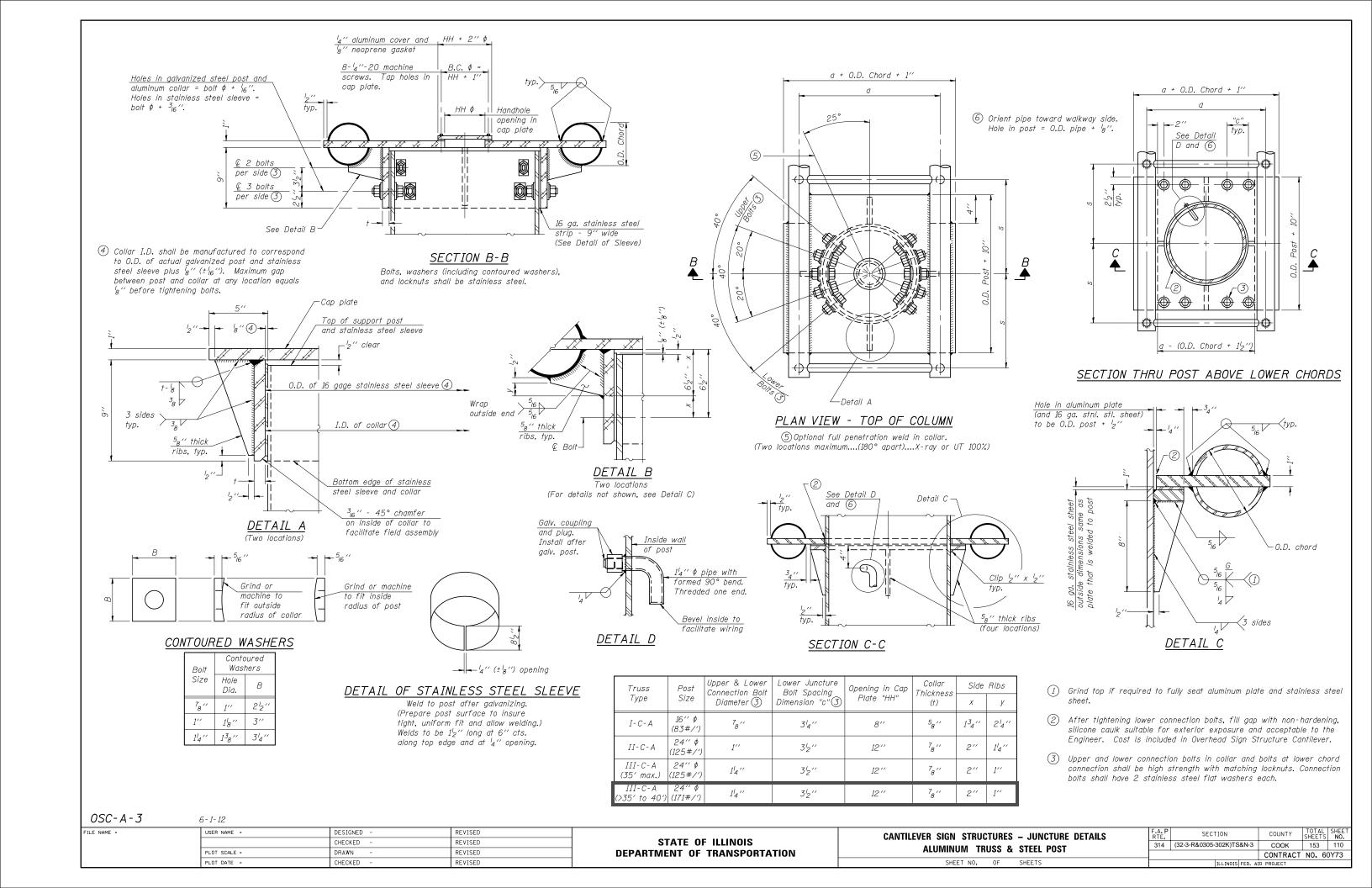
6-1-12

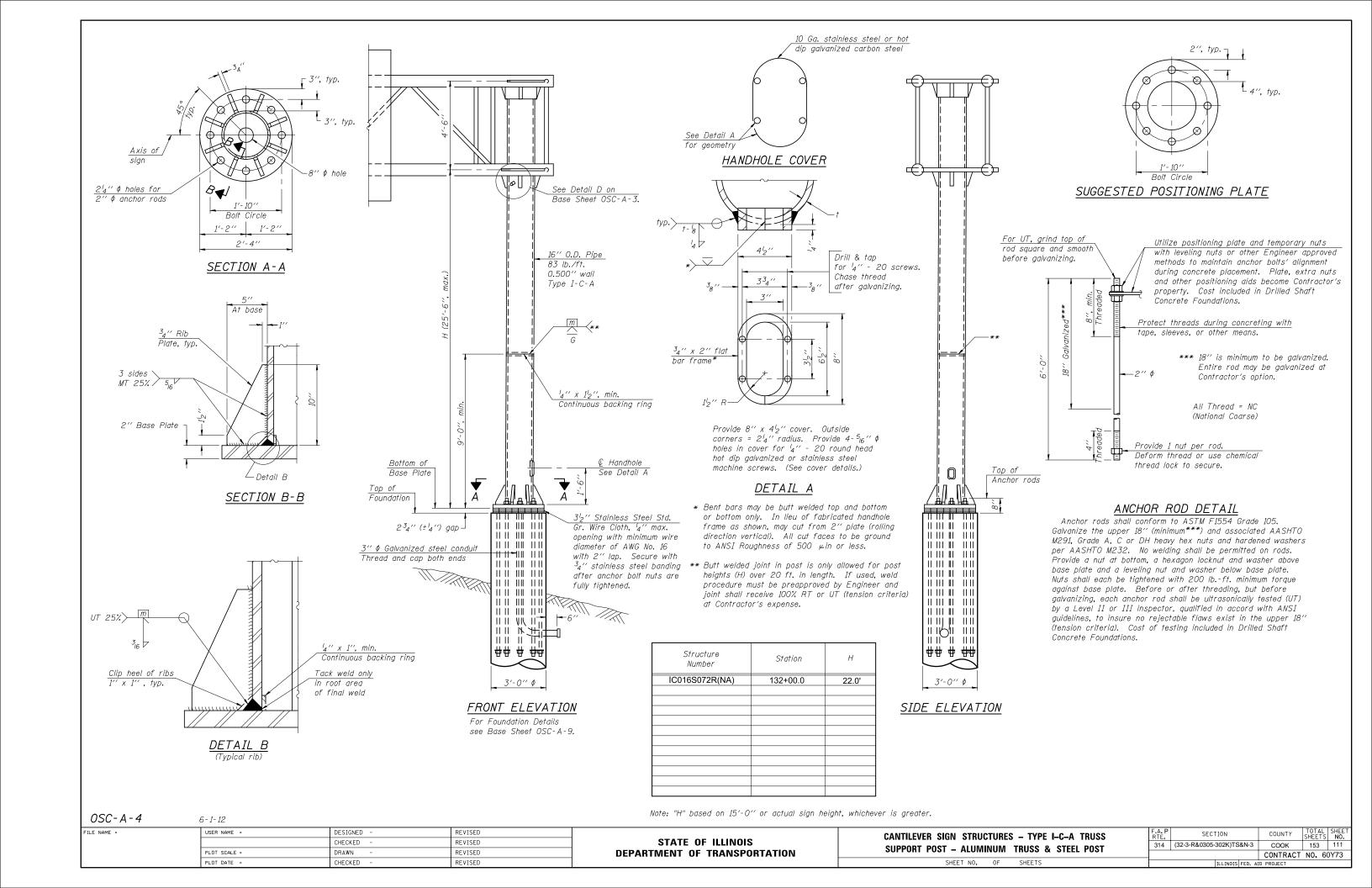
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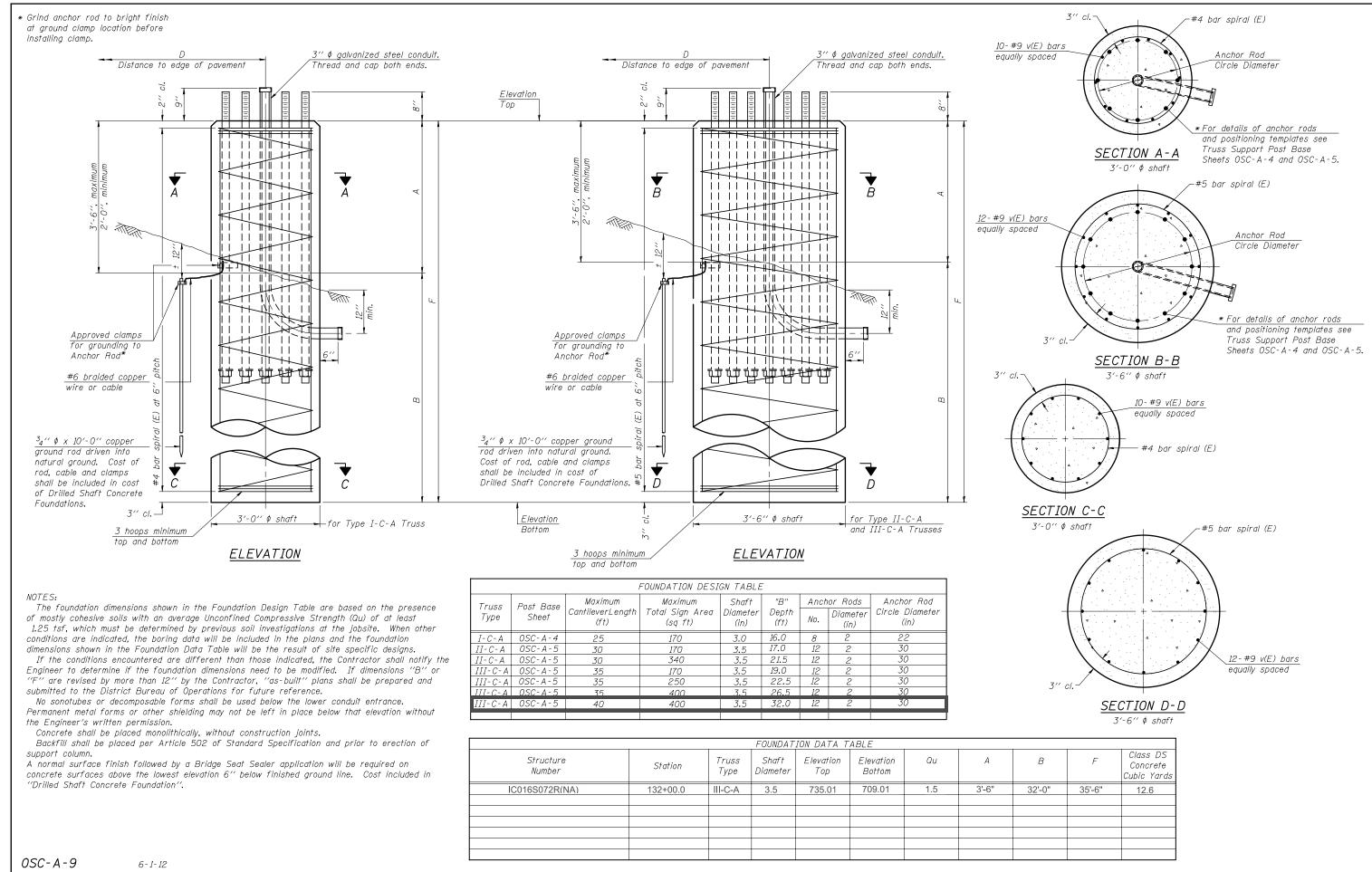
PLAN DETAIL

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

CANTILEVER SIGN STRUCTURE DAMPING DEVICE		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		(32-3-R&0305-302K)TS&N-3	COOK	153	109
			CONTRACT	NO. 60	)Y73
SHEET NO. OF SHEETS		TILINOIS EED AT	D DBU IECT		



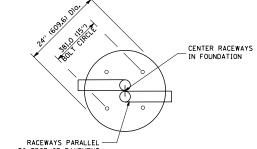


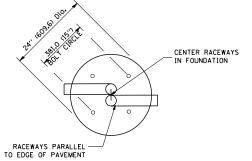


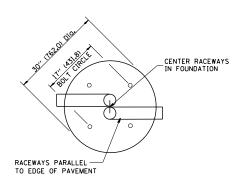
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CANTILEVER SIGN STRUCTURES - DRILLED SHAFT
ALUMINUM TRUSS & STEEL POST

SHEET NO. OF SHEETS







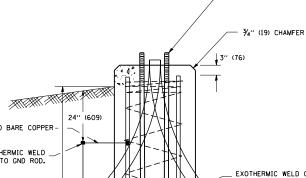
TOP VIEW

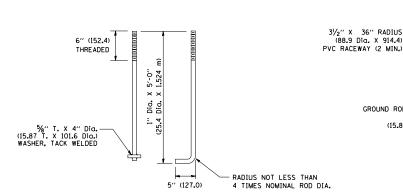
#### LIGHT POLE FOUNDATION DEPTH TABLE 40 FT. (12.192 m) TO 47.5 FT. (14.478 m) MOUNTING HEIGHT

SOIL CONDITIONS	DESIGN DEPTH "	DESIGN DEPTH "D" OF FOUNDATION			
SOIL CONDITIONS	SINGLE ARM POLE	TWIN ARM POLE			
SOFT CLAY	13'-0''	15'-0''			
Qu = 0.375 TON/SQ. FT.	(3.96 m)	(4 <b>.</b> 57 m)			
MEDIUM CLAY	9'-6''	10'-9''			
Qu = 0.75 TON/SQ.FT	(2 <b>.</b> 09 m)	(3 <b>.</b> 23 m)			
STIFF CLAY	7'-0''	8'-0''			
Ou = 1.50 TON/SO. FT.	(2 <b>.</b> 13 m)	(2 <b>.</b> 44 m)			
LOOSE SAND	9'-0''	10'-0''			
Ø = 34°	(2.74 m)	(3.05 m)			
MEDIUM SAND	8'-3''	9'-0''			
Ø = 37.5°	(2.52 m)	(2.74 m)			
DENSE SAND	7'-9''	9'-0''			
Ø = 40°	(2.36 m)	(2.74 m)			

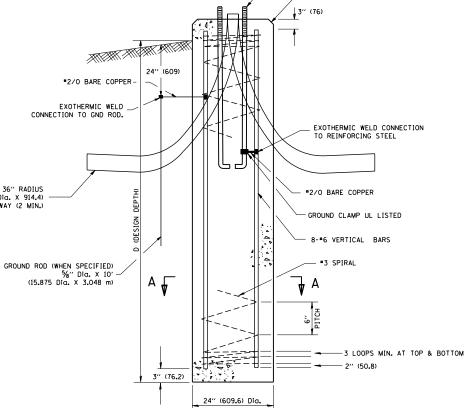


TOP VIEW ANCHOR ROD 4-1" Dia. X 5'-0" (4-25.4 Dia. X 1.524 m)

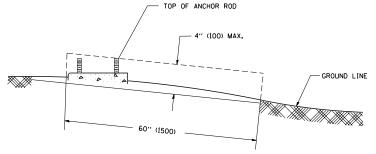




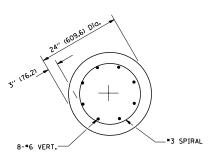
ANCHOR ROD DETAIL



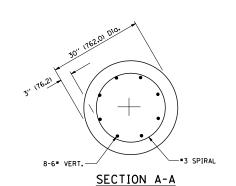
#### FOUNDATION DETAIL



FOUNDATION EXTENSION DETAIL



SECTION A-A



SCALE: NONE

#### **NOTES**

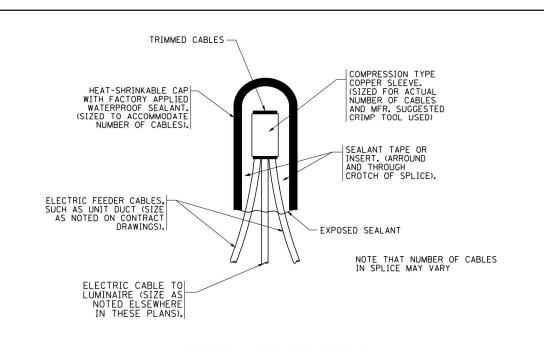
- 1. ALL DIMENSIONS ARE IN INCHES (MILLIMETERS) UNLESS OTHERWISE SHOWN.
- THE ANCHOR RODS AND RACEWAYS SHALL BE PROPERLY SECURED IN PLACE BEFORE THE CONCRETE IN PLACED.
- THE FOUNDATION SHALL NOT PROTRUDE MORE THAN 100MM (4 IN.) ABOVE THE FINISHED GRADE WITHIN A 60 IN. (1.5 m) CHORD ACROSS THE FOUNDATION, WITH ANCHOR RODS INCLUDED, IN ACCORDANCE WITH AASHTO GUIDELINES, IF THE FOUNDATION HEIGHT, INCLUDING ANCHOR RODS, EXTENDS BEYOND THESE SPECIFIED LIMITS, THE FOUNDATION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. SEE FOUNDATION EXTENSION DETAIL.
- 4. THE HOLE FOR THE FOUNDATION SHALL BE MADE BY DRILLING WITH AN AUGER, OF THE SAME DIAMETER AS THE FOUNDATION. IF SOIL CONDITIONS REQUIRE THE USE OF A LINER TO FORM THE HOLE, THE LINER SHALL BE WITHDRAWN AS THE CONCRETE IS DEPOSITED.
- THE TOP OF THE FOUNDATION SHALL BE CONSTRUCTED LEVEL. A LINER OR FORM SHALL BE USED TO PRODUCE A UNIFORM SMOOTH SIDE TO THE TOP OF THE FOUNDATION. FOUNDATION TOP
- 6. THE CONCRETE SHALL BE CLASS SI. CONCRETE SHALL CURE ACCORDING TO ARTICLE 1020.13 BEFORE LIGHT POLES ARE INSTALLED.
- THE ANCHOR ROD SHALL BE A HOOK ROD TYPE. COLD BENDING OF THE ANCHOR ROD WILL NOT BE ALLOWED. THE RADIUS OF THE HOOK BEND SHALL NOT BE LESS THAN 4 TIMES THE NOMINAL DIAMETER OF THE ANCHOR ROD. A TACK WELDED ANCHOR ROD MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER.
- 8. THE ANCHOR RODS SHALL BE ACCORDING TO ASTM F1554 GRADE 725 (GRADE 105). NUTS SHALL BE HEXAGON NUTS ACCORDING TO ASTM A 194 2H OR ASTM A 563 DH, AND WASHERS SHALL BE
- ANCHOR RODS, NUTS AND WASHERS SHALL BE COMPLETELY GALVANIZED BY EITHER THE HOT-DIPPED PROCESS CONFORMING WITH AASHTO M 232, THE MECHANICAL PLATING METHOD CONFORMING TO AASHTO M 298, CLASS 50 WITH A MAXIMUM COATING THICKNESS OF 150 UM(6 MILS) OR THE ELECTROLYTIC PROCESS ACCORDING TO ASTM F 1136.
- 10. THE ANCHOR RODS SHALL BE THREADED A MINIMUM OF 6 INCHES (150 mm) WITH A MINIMUM OF 3 INCHES (75 mm) OF THREADED ANCHOR ROD EMBEDDED IN THE FOUNDATION.
- 11. ANCHOR RODS SHALL PROJECT 2¾" (69.9 mm) ABOVE THE TOP OF THE FOUNDATION. IF BREAKAWAY COUPLINGS ARE SPECIFIED, THE CONTRACTOR SHALL CAREFULLY COORDINATE THE ANCHOR ROD PROJECTION WITH THE INSTALLATION REQUIREMENTS OF THE BREAKAWAY COUPLINGS.
- 12. THE CONTRACTOR SHALL USE A \*3 SPIRAL AT 6" (152.4 mm) PITCH OR MAY SUBSTITUTE \*3 TIES AT 12" (304.8 mm) O.C. WITH THE APPROVAL OF THE ENGINEER.
- 13. THE CABLE TRENCHES AND FOUNDATION SHALL BE BACK FILLED AND COMPACTED AS SPECIFIED BEFORE THE LIGHT POLE IS ERECTED.
- 14. THE RACEWAYS SHALL PROJECT 1" (25.4 mm) ABOVE THE TOP OF THE FOUNDATION.

#### FILE NAME = W:\diststd\22×34\be301.dqr

USER NAME = gaglianobt	DESIGNED -	REVISED - 04-22-02
	DRAWN -	REVISED -
PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -
PLOT DATE = 1/4/2008	DATE -	REVISED -

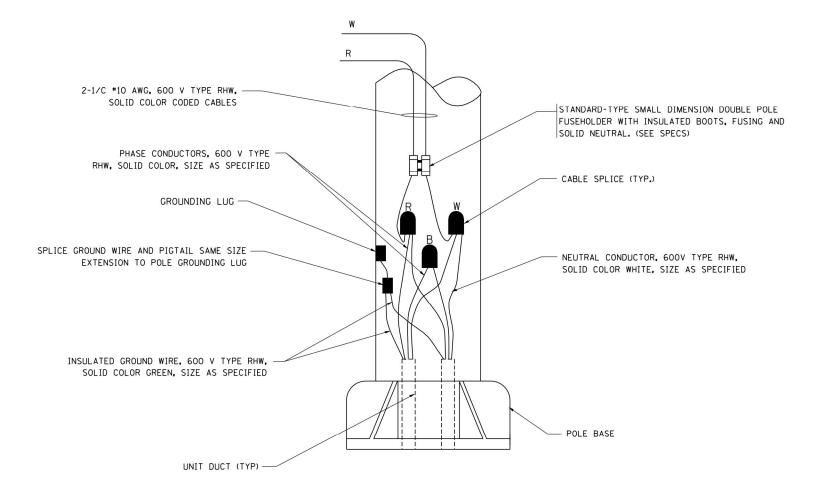
#### **STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**

	LIGHT P	OLE FOUN	DATION		F.A. P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
n' /12 10	2 m) TO 47 1/2' (14.4	170 m) M	U 45" /204	mm\ DOLT CIDCLE	341	(32-3-R&0305-302K)TS&N-3	COOK	153	113
U (12.13	2 III) 10 47 VZ (14.	+/0 III) IVI.	n. 13 (301	IIIII) BULI CINCLE		BE-301	CONTRACT	NO. 6	0Y73
	SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FFD. RC	DAD DIST, NO. 1 ILLINOIS FED. AI	D PROJECT		



#### TYPICAL SPLICE DETAIL

N.T.S.



# TYPICAL WIRING IN TRENCH DETAIL N.T.S.

30" (762) MINIMUM COVER 12" (305) MAXIMUM WIDTH EXCEPT AS APPROVED BY THE ENGINEER

12" (305)

WARNING TAPE AS SPECIFIED

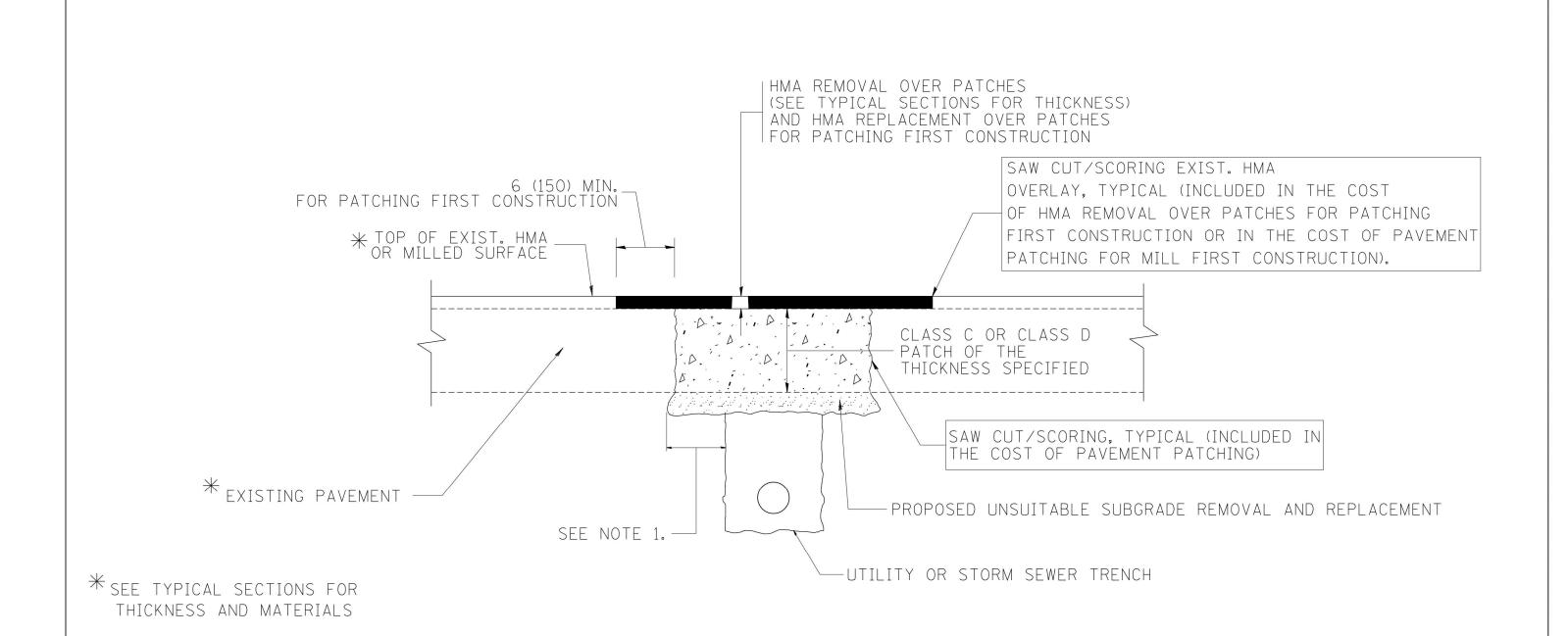
UNIT DUCT OR OTHER RACEWAY
AND WIRING AS PER PLANS. COMPLETE

WITH INTERNAL INSULATED EQUIPMENT GROUND WIRE.

#### POLE WIRING DETAIL

N.T.S.

EN E NAME	LIGER HAVE 1 1	DECIONED	REVISED - 08-08-03						EAP	CECTION	0.0	TOTAL S	1EET
FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - 08-08-03			MISC. ELECTRICAL	DETAILS		RTF.	SECTION	COUNTY	SHEETS	νω', Ι
W:\diststd\22x34\be702.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS			DETAILS		341	(32-3-R&0305-302K)TS&N-3	соок	153	114
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		SHEET A				BE-702	CONTRACT	(5507900)	73
	PLOT DATE = 1/4/2008	DATE -	REVISED -		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS	STA.	TO STA.	FED. RO		D PROJECT		$\exists$



#### NOTES:

- 1. THE WIDTH OF THE FULL DEPTH PATCH OVER A TRENCH SHALL BE 12 (300) WIDER ON EACH SIDE OF THE TRENCH.
- 2. FOR METHOD OF MEASUREMENT AND BASIS OF PAYMENT, SEE RECURRING SPECIAL PROVISION "PATCHING WITH HOT-MIX ASPHALT OVERLAY REMOVAL".

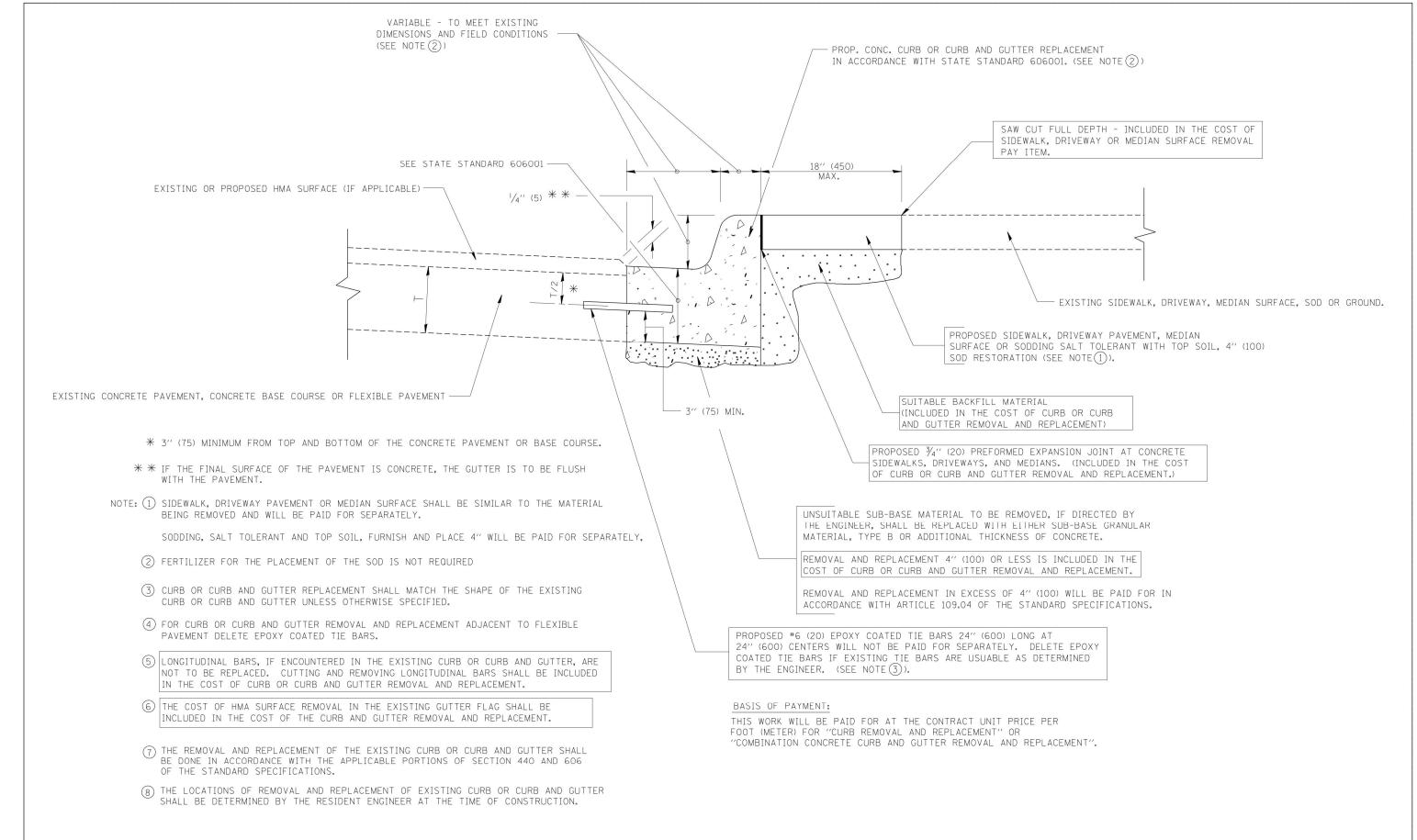
#### SEQUENCE OF CONSTRUCTION (PATCHING FIRST)

- 1. REMOVE THE EXISTING HMA MATERIAL OVER THE AREA TO BE PATCHED.
- 2. REMOVE AND REPLACE WITH CLASS C OR D PATCH.
- 3. REPLACE HMA MATERIAL OVER THE AREA TO BE PATCHED.

#### SEQUENCE OF CONSTRUCTION (MILLING FIRST)

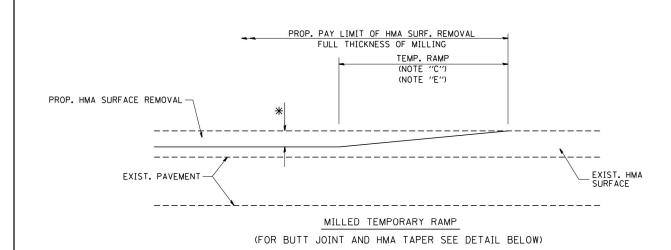
- 1. MILL HMA FIRST IF THERE IS AT LEAST 41/2 INCHES OR MORE OF HMA MATERIAL ON TOP OF THE EXISTING PAVEMENT OR IF THE PAVEMENT IS FULL DEPTH HMA. A MINIMUM OF 2 INCHES OF HMA MATERIAL SHALL BE IN PLACE AFTER MILLING.
- 2. REMOVE AND REPLACE WITH FULL DEPTH CLASS D PATCHES TO TOP OF MILLED SURFACE.

FILE NAME =	USER NAME = bauerdl	DESIGNED - R. SHAH	REVISED - A. ABBAS 04-27-98		PAVEMENT PATCHING FOR	F.A.P. SECTION	COUNTY TOTAL SHEET SHEETS NO.
c:\projects\diststd22x34\bd22.dgn		DRAWN -	REVISED - R. BORO 01-01-07	STATE OF ILLINOIS	HMA SURFACED PAVEMENT	341 (32-3-R&0305-302K)TS&N-3	COOK 153 115
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - R. BORO 09-04-07	DEPARTMENT OF TRANSPORTATION	NIMA SUNFACED PAVEMENT	BD400-04 (BD-22)	CONTRACT NO. 60Y73
	PLOT DATE = 10/27/2008	DATE - 10-25-94	REVISED - K. ENG 10-27-08		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		ID PROJECT

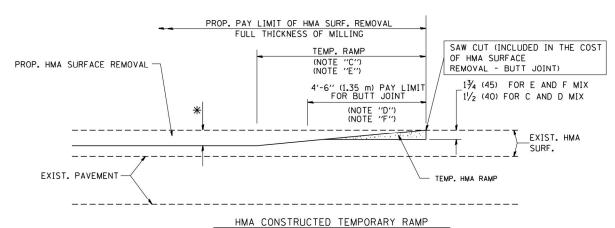


### CURB OR CURB AND GUTTER REMOVAL AND REPLACEMENT

FILE NAME =	USER NAME = drivakosgn	DESIGNED - A. HOUSEH	REVISED - R. SHAH 10-03-96			CURB OR CURB AND GUTTER	RTF	SECTION	COUNTY	SHEETS	SHEET
c:\pw_work\pwidot\drivakosgn\d0108315\bd	24.dgn	DRAWN -	REVISED - A. ABBAS 03-21-97	STATE OF ILLINOIS			341	(32-3-R&0305-302K)TS&N-3	соок	153	116
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - M. GOMEZ 01-22-01	DEPARTMENT OF TRANSPORTATION		REMOVAL AND REPLACEMENT		BD600-06 (BD-24)	CONTRACT	T NO. 6	0Y73
	PLOT DATE = 12/15/2009	DATE - 03-11-94	REVISED - R. BORO 12-15-09		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO STA.	FED. F	ROAD DIST. NO. 1   ILLINOIS FED. A	ID PROJECT		



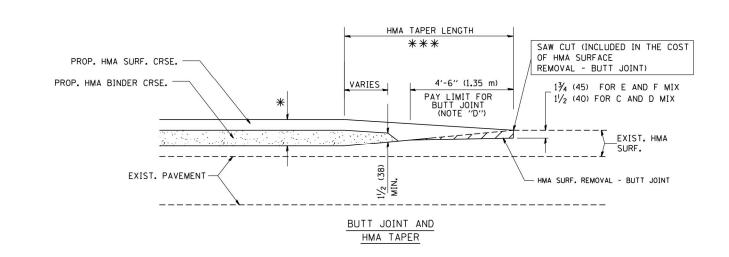
#### OPTION 1



(FOR BUTT JOINT AND HMA TAPER SEE DETAIL BELOW)

### OPTION 2

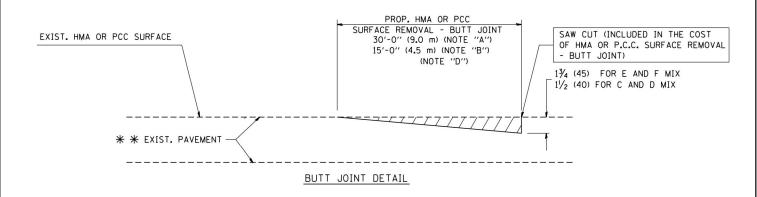
#### TYPICAL TEMPORARY RAMP

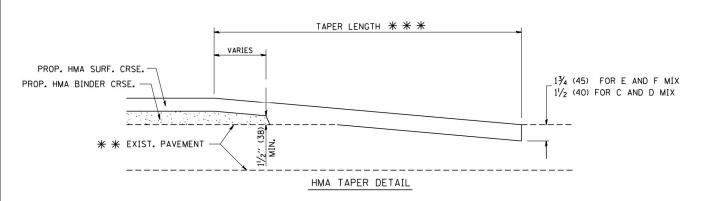


# TYPICAL BUTT JOINT AND HMA TAPER FOR MILLING AND RESURFACING

FILE NAME = USER NAME = gaglianobt DESIGNED - M. DE YONG REVISED - R. SHAH 10-25-94 l:\diststd\22x34\bd32.dqr DRAWN REVISED - A. ABBAS 03-21-97 CHECKED REVISED M. GOMEZ 04-06-01 PLOT SCALE = 50.0000 '/ IN. PLOT DATE = 1/4/2008 DATE 06-13-90 REVISED R. BORO 01-01-07

### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION





### TYPICAL BUTT JOINT AND HMA TAPER FOR RESURFACING ONLY

\* \* PC CONCRETE, HMA OR HMA RESURFACED PAVEMENT.

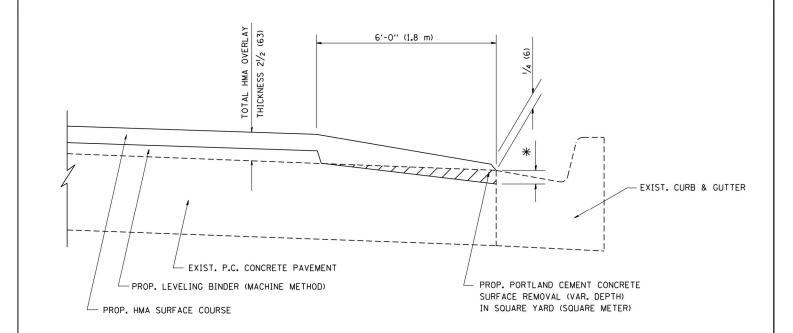
#### NOTES

- A: MAINLINE ROADWAYS AND MAJOR SIDE ROADS.
- B: MINOR SIDE ROADS.
- C: THE TEMP. RAMP SHALL BE CONSTRUCTED IMMEDIATELY UPON REMOVAL OF THE EXISTING HMA SURFACE.
- D: THE BUTT JOINT SHALL BE CONSTRUCTED IMMEDIATELY PRIOR TO PLACING THE PROPOSED HMA COURSES.
- E: TAPER THE TEMP. RAMP AT A RATE OF 3'-0" (900 mm) PER 1 INCH (25 mm) OF MILLING THICKNESS.
- F: INSTALLATION AND REMOVAL OF THE 4'-6" (1.35 m) TEMP. RAMP IS INCLUDED IN COST OF HMA SURFACE REMOVAL BUTT JOINT
- G: SEE ARTICLE 406.08 AND 406.14 OF THE STANDARD SPECIFICATIONS FOR "HMA AND/OR PCC SURFACE REMOVAL, BUTT JOINT".
- \* SEE TYPICAL SECTIONS FOR MILLING THICKNESS.
- \*\* \* 20'-0" (6.1 m) PER 1 (25) RESURFACING (NOTE "A") 10'-0" (3.0 m) PER 1 (25) RESURFACING (NOTE "B")

#### BASIS OF PAYMENT:

THE BUTT JOINT WILL BE PAID FOR AT THE CONTRACT UNIT PRICE PER SOUARE YARD (SOUARE METER) FOR "HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT" OR FOR "PORTLAND CEMENT CONCRETE SURFACE REMOVAL- BUTT JOINT".

SCALE: NONE



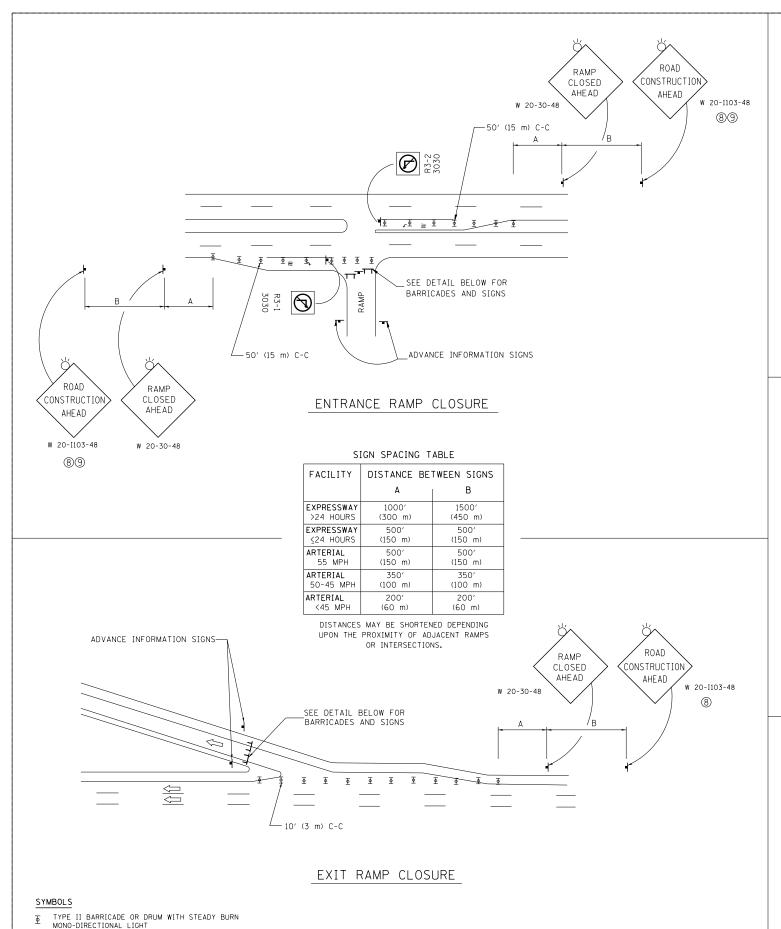
# HMA TAPER AT EDGE OF P.C.C PAVEMENT

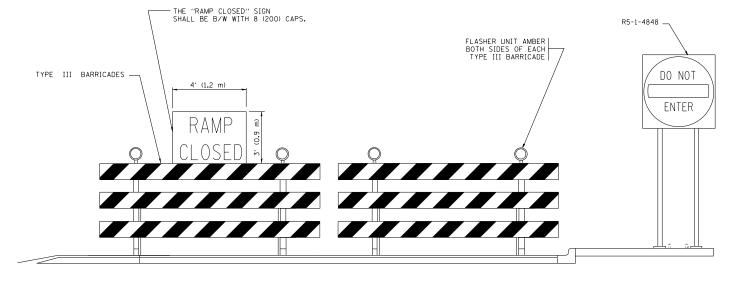
HMA SURFACE		LEVELING BINDER	
MIX	THICKNESS	THICKNESS	★ MILLING AT GUTTER FLAG
C OR D	11/2 (38)	1 (25)	11/4 (33)
F	1¾ (44)	3/4 (19)	11/2 (38)

FILE NAME =	USER NAME = gaglianobt	DESIGNED	-	R. SHAH	REVISED		R. SHAH 10-25-94
W:\diststd\22x34\bd33.dgn		DRAWN	-	JIS	REVISED	-	A. ABBAS 05-05-99
	PLOT SCALE = 50.0000 '/ IN.	CHECKED	-	A. ABBAS	REVISED	-	E. GOMEZ 12-21-00
	PLOT DATE = 1/4/2008	DATE	1-	09-10-94	REVISED	=	R. BORO 01-01-07

STATI	E OF	ILLINOIS
DEPARTMENT	<b>OF</b>	TRANSPORTATION

HMA TAPER AT						SECTION	COUNTY	COUNTY TOTAL SHEETS	
	EDGE OF P.C.	341	(32-3-R&0305-302K)TS&N-3	соок	153	118			
	EDGE OF F.C.	.U. FA	LEIVIEIAI		В	D400-06 (BD33)	CONTRACT	NO. 6	0Y73
SCALE: NONE	SHEET NO. 1 OF 1 SHE	ETS	STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED.	AID PROJECT		





DETAIL FOR REQUIRED BARRICADES & SIGNS



BLACK LEGEND ON ORANGE

BACKGROUND MOUNTED

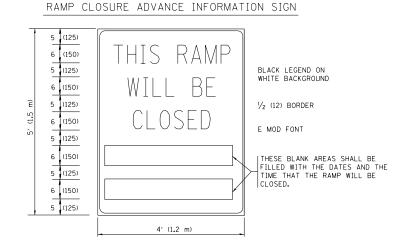
DIAGONALLY

E MOD FONT

1 (25) BORDER

SIGNS ARE REQUIRED ON ALL THE EXIT

THESE SIGNS ARE REQUIRED ON ALL THE EXIT
GUIDE SIGNS FOR EXIT RAMPS THAT WILL BE
CLOSED FOR MORE THAN FOUR (4) CONSECUTIVE DAYS.



THESE SIGNS ARE REQUIRED ON BOTH SIDES OF THE RAMP, MINIMUM OF 1 WEEK IN ADVANCE OF THE CLOSURE.

THESE SIGNS SHALL BE FABRICATED AND PAID FOR ACCORDING TO THE TEMPORARY INFORMATION SIGNING SPECIAL PROVISION

#### GENERAL NOTES:

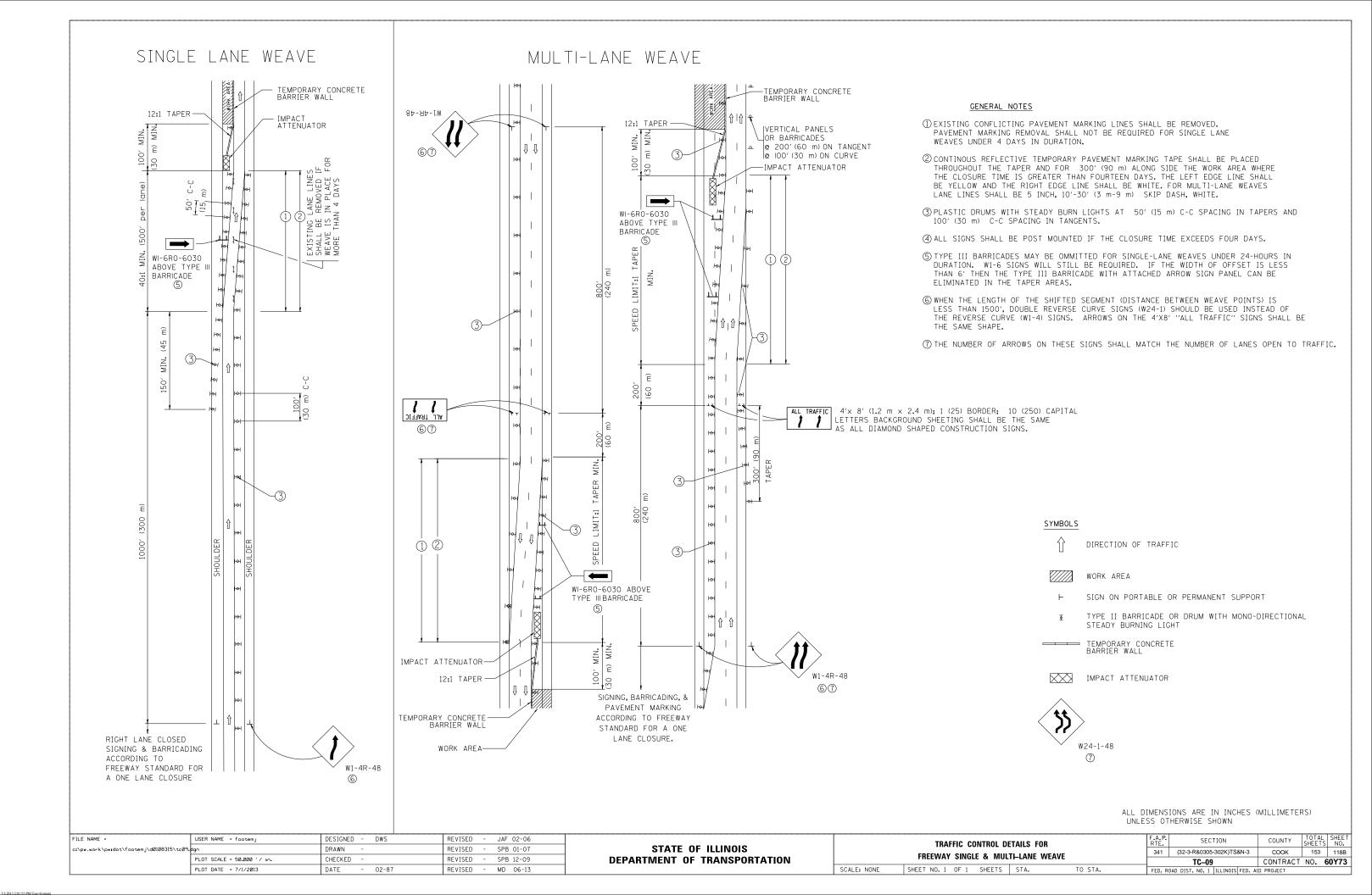
- ① CONES MAY BE SUBSTITUTED FOR DRUMS OR TYPE II
  BARRICADES DURING DAY OPERATIONS. CONES SHALL BE
  A MINIMUM OF 28 (700) HIGH.
- (2) STEADY BURN LIGHTS WILL NOT BE REQUIRED FOR DAY OPERATIONS.
- (3) A FLAGGER SHALL BE POSITIONED AT EACH CLOSED RAMP THAT IS OPEN TO CONSTRUCTION VEHICLES, PRECEEDED BY A W20-7 FLAGGER WARNING SIGN.
- 4 ALL ROUTE MARKERS AND TRAILBLAZER ASSEMBLIES WHICH DIRECT MOTORISTS TO A CLOSED ENTRANCE RAMP SHALL BE COVERED WHEN THE RAMP IS CLOSED FOR MORE THAN FOUR (4) DAYS.
- (5) THE SIGNING AND BARRICADING WHICH IS REQUIRED BY THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION (EXPRESSWAYS).

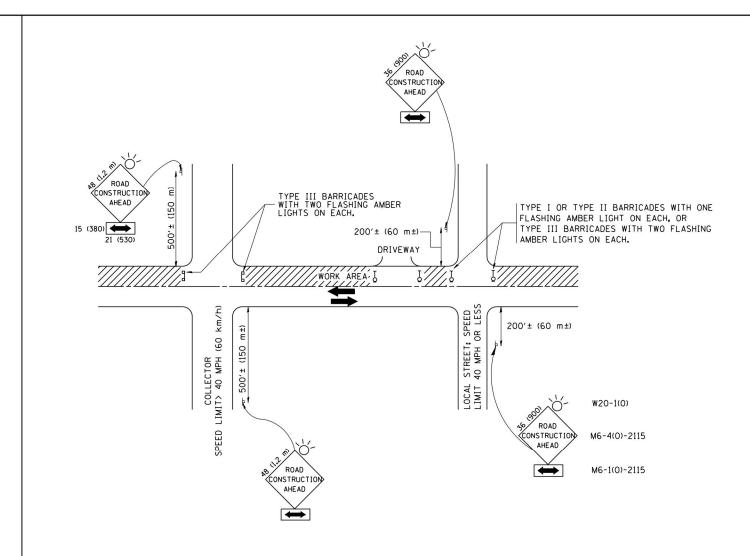
- 6 AUTHORIZATION FROM THE DISTRICT'S BUREAU OF TRAFFIC IS REQUIRED FOR ALL RAMP CLOSURES.
- THE RAMP CLOSURE ADVANCE INFORMATION SIGNS SHALL BE ERECTED IF THE CLOSURE TIME EXCEEDS TWENTY-FOUR (24) HOURS. ADDITIONAL ADVANCE WARNING SIGNS ON EXIT GUIDE SIGNING WILL BE REQUIRED FOR EXIT RAMP CLOSURES THAT EXCEED FOUR (4) DAYS IN LENGTH
- (8) ROAD CONSTRUCTION AHEAD SIGNS MAY BE OMITTED WHEN THIS DETAIL IS USED IN CONJUNCTION WITH OTHER TRAFFIC CONTROL THAT ALREADY INCLUDES A ROAD CONSTRUCTION AHEAD SIGN.
- ARTERIAL ROAD CONSTRUCTION AHEAD SIGNS SHALL BE INSTALLED
   ON THE LEFT SIDE OF TRAFFIC IF THE MEDIAN IS MORE THAN 10 FT WIDE.

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

FILE NAME =	USER NAME = footemj	DESIGNED - DWS	REVISED - JAF 02-06			ENTRANCE AND EXIT RAMP		F.A.P.	SECTION	COUNTY TO	OTAL SHEET
c:\pw_work\pwidot\footemj\d0108315\tc08.	dgn	DRAWN -	REVISED - SPB 01-07	STATE OF ILLINOIS				341	(32-3-R&0305-302K)TS&N-3	COOK 1	153 118A
	PLOT SCALE = 50.000 '/ in.	CHECKED -	REVISED - SPB 12-09	DEPARTMENT OF TRANSPORTATION		CLOSURE DETAILS			TC-08	CONTRACT N	10. 60Y73
	PLOT DATE = 7/8/2013	DATE - 02-83	REVISED - MD 06-13		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO.	a area we a but more sea	AID PROJECT	

TYPE III BARRICADE WITH 2 FLASHING LIGHTS





TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS

#### NOTES:

- A. FOR NO LANE RESTRICTION ON THE SIDE ROAD OR DRIVEWAYS
- SIDE ROAD WITH A SPEED LIMIT OF 40 MPH (60 km/h) OR LESS AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- Q) ONE ROAD CONSTRUCTION AHEAD SIGN 36 x 36 (900x900) WITH A FLASHER AND FLAG MOUNTED ON IT APPROXIMATELY 200' (60 m) IN ADVANCE OF THE MAIN ROUTE,
- b) the closed portion of the main route shall be protected by blocking with type I, type II or type III barricades, 1/3 of the cross section of the closed portion.
- 2. SIDE ROAD WITH A SPEED LIMIT GREATER THAN 40 MPH (60 km/h) AS SHOWN ON THE DRAWING AND AS DIRECTED BY THE ENGINEER:
- 0) ONE ROAD CONSTRUCTION AHEAD SIGN 48  $\times$  48 (1.2 m  $\times$  1.2 m) WITH A FLASHER MOUNTED ON IT APPROXIMATELY 500' (150 m) IN ADVANCE OF THE MAIN ROUTE.
- b) THE CLOSED PORTION OF THE MAIN ROUTE SHALL BE PROTECTED BY BLOCKING WITH TYPE III BARRICADES, 1/2 OF THE CROSS SECTION OF THE CLOSED PORTION.
- WHEN THE SIDE ROAD LIES BETWEEN THE BEGINNING OF THE MAINLINE SIGNING AND THE WORK ZONE, A SINGLE HEADED ARROW (MG-1) SHALL BE USED IN LIEU OF THE DOUBLE HEADED ARROW (MG-4).

SCALE: NONE

#### B. FOR A LANE CLOSURE ON A SIDE ROAD OR DRIVEWAY:

USE APPLICABLE PORTIONS OF THE TYPICAL APPLICATION OF TRAFFIC CONTROL DEVICES (STD. 701501, STD. 701606 OR THE APPROPRIATE STANDARD). THE SPACING OF SIGNS AND BARRICADES SHALL BE ADJUSTED FOR FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. THE DIRECTIONAL ARROW SHALL BE COVERED OR REMOVED WHEN NO LONGER CONSISTENT WITH THE SIDE ROAD LANE CLOSURE.

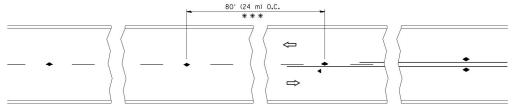
- C. ADVANCE WARNING SIGNS ARE TO BE OMITTED ON DRIVEWAY UNLESS OTHERWISE NOTED.
- D. THE TRAFFIC CONTROL AND PROTECTION FOR SIDE ROADS, INTERSECTIONS, AND DRIVEWAYS SHALL BE INCIDENTAL TO THE COST OF SPECIFIED TRAFFIC CONTROL STANDARDS OR ITEMS.

All dimensions are in millimeters (inches) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED - LHA	REVISED - J. OBERLE 10-18-95
W:\diststd\22x34\tc10.dgn		DRAWN -	REVISED - A. HOUSEH 03-06-96
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED - A. HOUSEH 10-15-96
	PLOT DATE = 1/4/2008	DATE - 06-89	REVISED -T. RAMMACHER 01-06-00

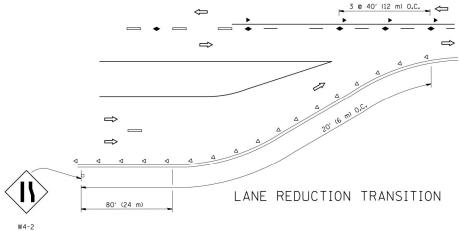
STATI	E OF	ILLINOIS
DEPARTMENT	<b>OF</b>	TRANSPORTATION

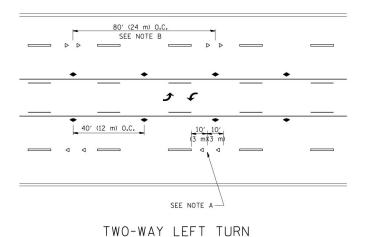
TRAFFIC CONTR	OL AND P	ROTECT	ON FOR	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
SIDE ROADS, INTER	CECTIONS	AND I	DIVENAVE	341	(32-3-R&0305-302K)TS&N-3	COOK	153	119
SIDE RUADS, INTER	1956110149	, AND L	MIVEVVATS		TC-10	CONTRACT	NO. 6	0Y73
SHEET NO. 1 OF 1	SHEETS	STA.	TO STA.	FED. RC	AD DIST. NO. 1 ILLINOIS FED. AI	D PROJECT		



\*\*\* REDUCE TO 40' (12 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEED 45 M.P.H. (70 km/h) OR LESS.

#### TWO-LANE/TWO-WAY





80' (24 m) 0.C.

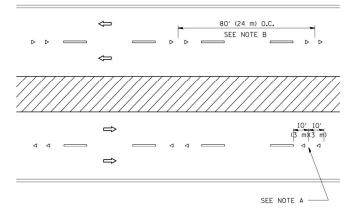
SEE NOTE B

40' (12 m) 0.C.

3 m) 3 m

SEE NOTE A

MULTI-LANE/UNDIVIDED



MULTI-LANE/DIVIDED

#### GENERAL NOTES

- 1. MARKERS USED WITH DASHED LINES SHALL BE CENTERED IN THE GAP BETWEEN SEGMENTS.
- 2. MARKERS USED ADJACENT TO SOLID LINES SHALL BE OFFSET 2 TO 3 (50 TO 75) TOWARD TRAFFIC AS SHOWN.
- 3. MARKERS THROUGH TANGENTS LESS THAN 500' (150 m) IN LENGTH BETWEEN CURVES SHALL BE INSTALLED AT THE LESSER OF THE TWO CURVE SPACINGS.

#### LANE MARKER NOTES

A. USE DOUBLE LANE LINE MARKERS SPACED AS SHOWN.

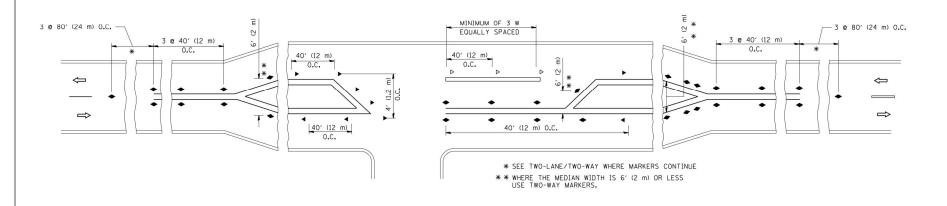
B. REDUCE TO 40' (12 m) O.C. ON CURVES WHERE ADVISORY SPEEDS ARE 10 M.P.H (20 km/h) LOWER THAN POSTED SPEEDS.

#### SYMBOLS

---- YELLOW STRIPE

── WHITE STRIPE

- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER (₩/0)
- ◆ TWO-WAY AMBER MARKER



LEFT TURN

All dimensions are in inches (millimeters) unless otherwise shown.

 COUNTY
 TOTAL SHEETS NO.

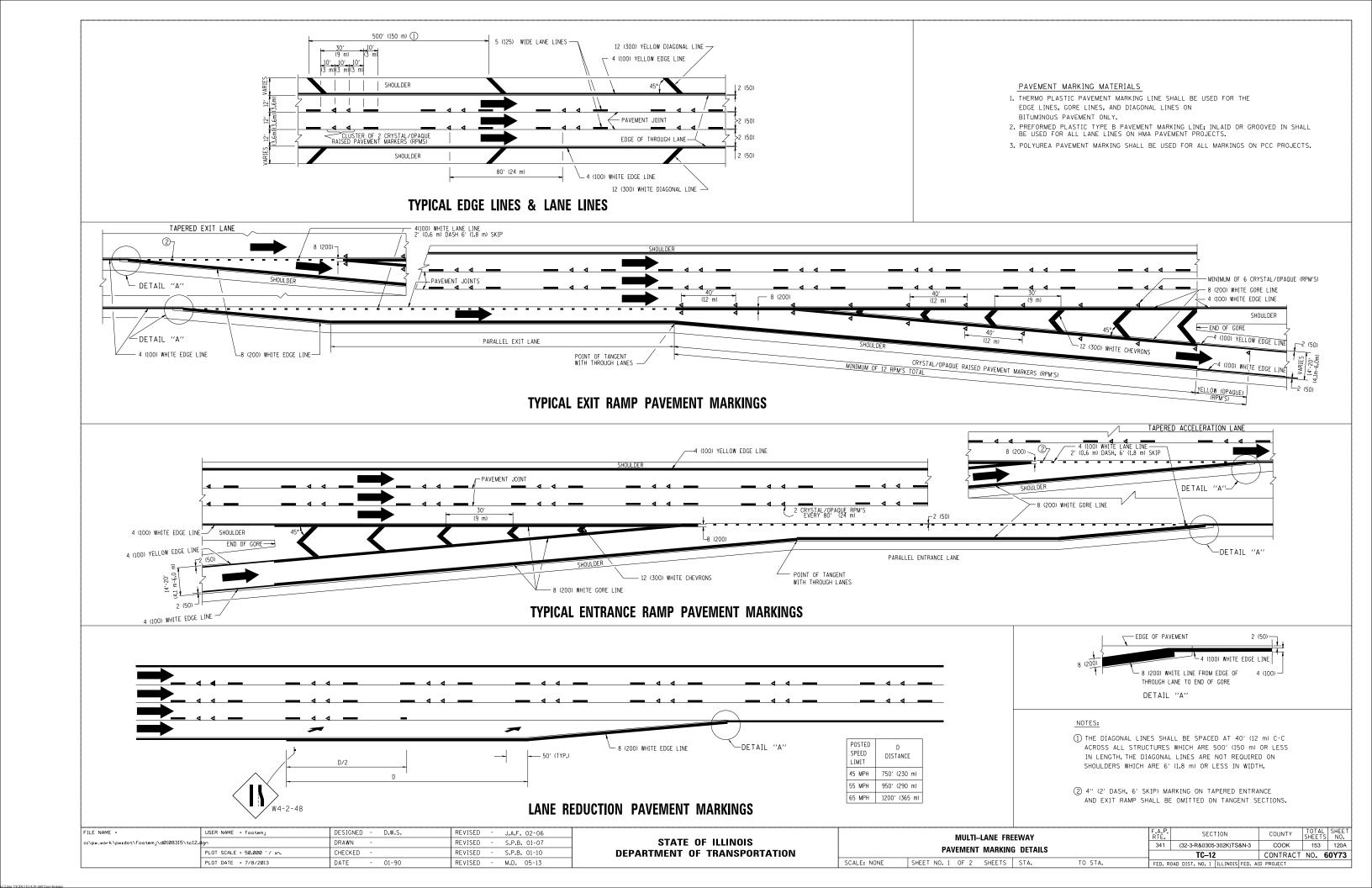
 COOK
 153
 120

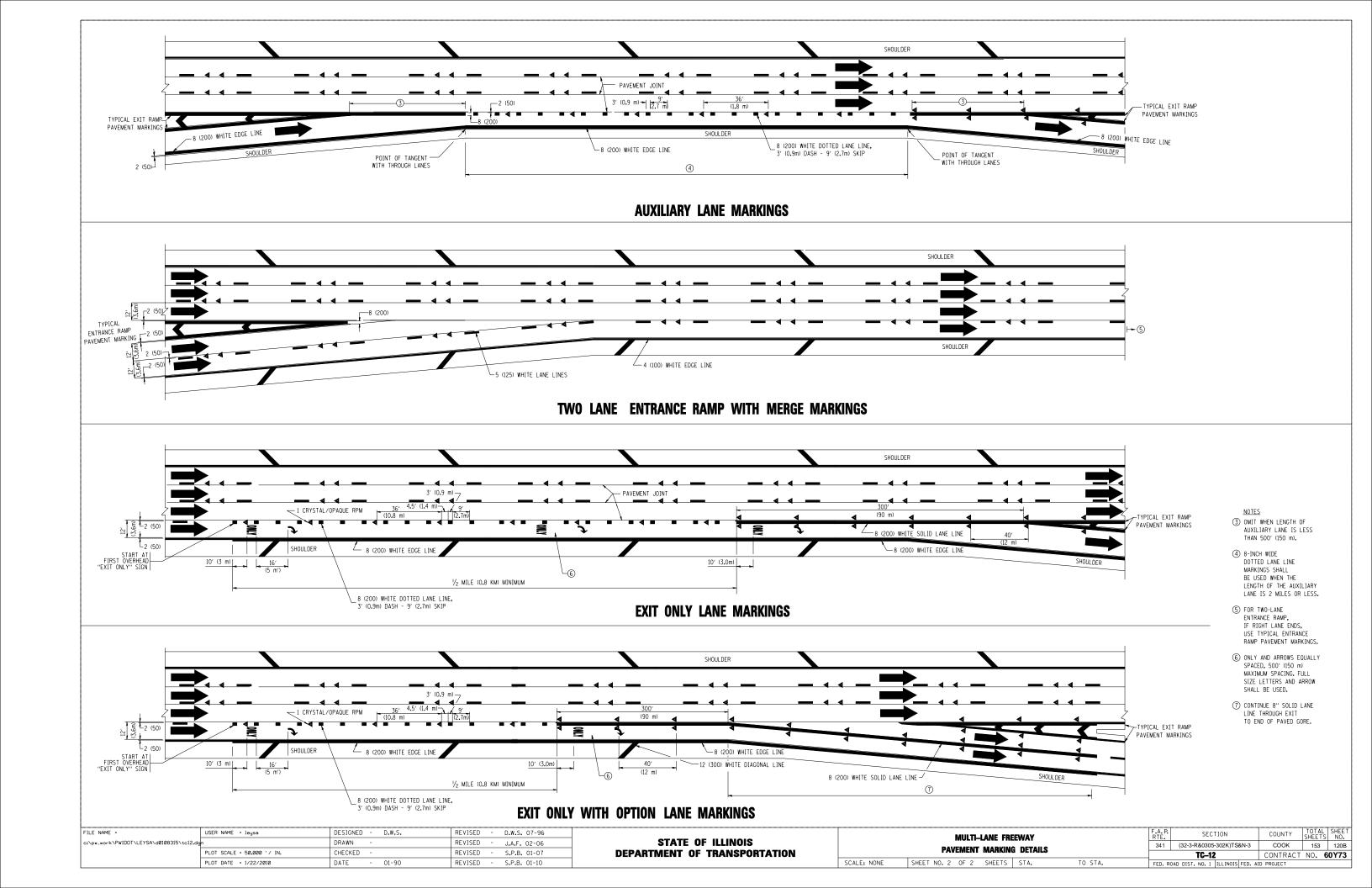
 CONTRACT NO.
 60Y73

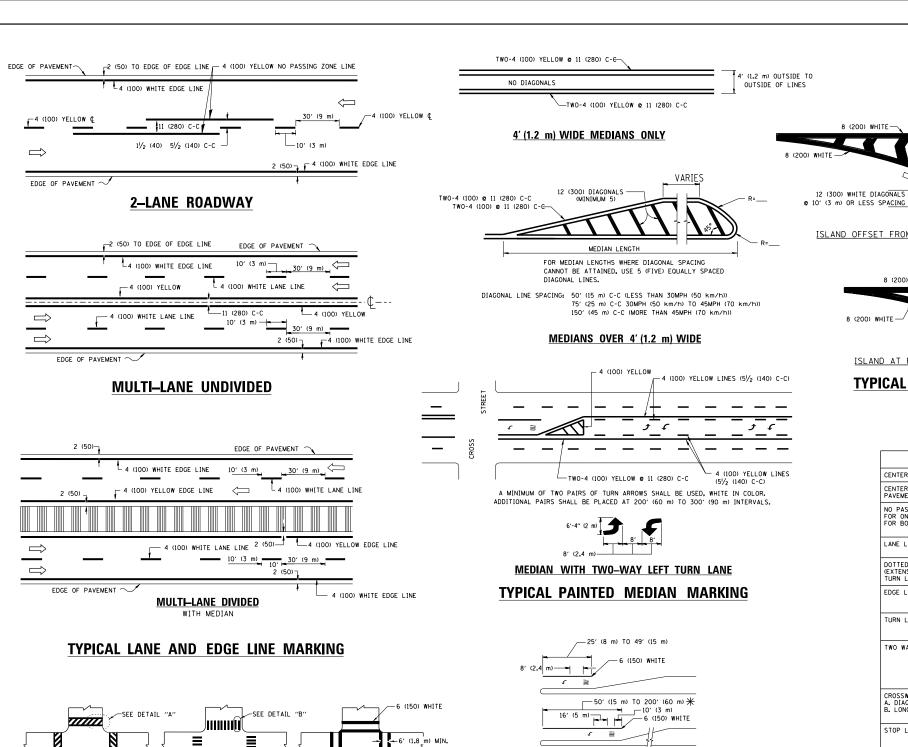
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c:\pw_work\pwidot\leysa\d0108315\tc11.dgn		DRAWN -	REVISED	-T. RAMMACHER	03-12-99
	PLOT SCALE = 50.000 ' / IN.	CHECKED -	REVISED	-T. RAMMACHER	01-06-00
	PLOT DATE = 3/2/2011	DATE -	REVISED	- C. JUCIUS	09-09-09

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

		TYPICAL APPLICATIONS	F.	F.A. P. SECT			TION		
	DAIGED D	REFLECTIVE PAVEMENT MARKERS (SNOW-PLOW RE	CICTANT\	341	(32-3-R&0305-302K)T				
NAISED REFLECTIVE PAVEMENT		ELLECTIVE PAVENCIAL MIANKENS (SMOVV-PEOVV NE	.3131AN1)		TC-11				
	SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA. TO	STA. FE	ED. ROAD	DIST. NO. 1	ILLINOIS	FED		







#### 40 (1020) ISLAND OFFSET FROM PAVEMENT EDGE COMBINATION LEFT AND U-TURN 8 (200) WHITE -— 2 (50) RAISED 5'-4" (1620) ISLAND √ 32 R (810) 8 (200) WHITE-2 (50) ISLAND AT PAVEMENT EDGE TYPICAL ISLAND MARKING LANE REDUCTION TRANSITION 40 (1020) \* LANE REDUCTION ARROWS REQUIRED AT SPEEDS OF 45 MPH OF GREATER OR WHEN SPECIFIED IN PLANS. **U-TURN** TYPE OF MARKING WIDTH OF LINE PATTERN COLOR SPACING / REMARKS CENTERLINE ON 2 LANE PAVEMENT 4 (100) SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE YELLOW CENTERLINE ON MULTI-LANE UNDIVIDED PAVEMENT 2 @ 4 (100) SOLID YELLOW 11 (280) C-C NO PASSING ZONE LINES: FOR ONE DIRECTION FOR BOTH DIRECTIONS 51/2 (140) C-C FROM SKIP-DASH CENTERLINE 4 (100) 2 **@** 4 (100) SOLID SOLID YELLOW YELLOW 5/2 (140) C-C 11 (280) C-C OMIT SKIP-DASH CENTERLINE BETWEEN LANE LINES SKIP-DASH SKIP-DASH 10' (3 m) LINE WITH 30' (9 m) SPACE 4 (100) 5 (125) ON FREEWAYS DOTTED LINES (EXTENSIONS OF CENTER, LANE OR TURN LANE MARKINGS) SAME AS LINE BEING EXTENDED SKIP-DASH SAME AS LINE BEING EXTENDED 2' (600) LINE WITH 6' (1.8 m) SPACE EDGE LINES SOLID 4 (100) OUTLINE MEDIANS IN YELLOW YELLOW-LEFT WHITE-RIGHT 6 (150) LINE; FULL SIZE LETTERS & SYMBOLS (8' (2.4m) SEE TYPICAL TURN LANE MARKING DETAIL TURN LANE MARKINGS SOLID 10' (3 m) LINE WITH 30' (9 m) SPACE FOR SKIP-DASH; 5/2 (140) C-C BETWEEN SOLID LINE AND SKIP-DASH LINE SEE TYPICAL TWO-WAY LEFT TURN MARKING DETAIL TWO WAY LEFT TURN MARKING 2 @ 4 (100) EACH DIRECTION YELLOW 8' (2.4m) LEFT ARROW WHITE CROSSWALK LINES (PEDESTRIAN) A. DIAGONALS (BIKE & EQUESTRIAN) B. LONGITUDINAL BARS (SCHOOL) 2 @ 6 (150) 12 (300) @ 45° 12 (300) @ 90° NOT LESS THAN 6' (1.8 m) APART 2' (600) APART 2' (600) APART SOLID SOLID SEE TYPICAL CROSSWALK MARKING DETAILS. PLACE 4' (1.2 m) IN ADVANCE OF AND PARALLEL TO CROSSMALK, IF PRESENT. OTHERWISE, PLACE AT DESIRED STOPPING POINT. PARALLEL TO CROSSROAD CENTERLINE, WHERE POSSIBLE STOP LINES 24 (600) SOLID WHITE 2 @ 4 (100) WITH 12 (300) DIAGONALS @ 45° NO DIAGONALS USED FOR 4' (1.2 m) WIDE MEDIANS 11 (280) C-C FOR THE DOUBLE LINE SEE TYPICAL PAINTED MEDIAN MARKING. SOLID PAINTED MEDIANS YELLOW: TWO WAY TRAFFIC WHITE: ONE WAY TRAFFIC GORE MARKING AND CHANNELIZING LINES 8 (200) WITH 12 (300) DIAGONALS @ 45° DIAGONALS: 15' (4.5' m) C-C (LESS THAN 30MPH (50 km/h)) 20' (6' m) C-C 30MPH (50 km/h) TO 45MPH (70 km/h)) 30' (9' m) C-C (OVER 45MPH (70 km/h))

24 (600) TRANSVERSE LINES; "RR" IS 6' (1.8 LETTERS; 16 (400) LINE FOR "X"

12 (300) **ø** 45°

SEE DETAIL

SEE DETAIL

SOLID

SOLID

SOLID

SOLID

WHITE

WHITE

WHITE

WHITE - RIGHT YELLOW - LEFT

RAILROAD CROSSING

U TURN ARROW

SCALE: NONE

2 ARROW COMBINATION LEFT AND U TURN

SHOULDER DIAGONALS (REQUIRED FOR SHOULDERS  $\geq$  8′)

6'-4" (1930)

D(FT)

345

425

500

580

665

750

**−20**′

SPEED LIMIT

45

50

55

# TYPICAL CROSSWALK MARKING

\* MARKINGS SHALL BE INSTALLED PARALLEL TO THE CENTERLINE OF THE ROAD WHICH IT CROSSES

6 (150) WHITE

DETAIL "A"

BICYCLE & EQUESTRIAN

FILE NAME : DESIGNED - EVERS USER NAME = liszekrf REVISED -T. RAMMACHER 10-27-94 w:\\ILØ84EBIDINTEG.:llino ments\IDOT Offices\District 1\Projects\Dist**BtQRZWWM**\CADDeta\CADsheets\tc13.dom REVISED -C. JUCIUS 09-09-09 CHECKED REVISED C. JUCIUS 07-01-13 REVISED -PLOT DATE = 12/21/2015 DATE 03-19-90 C. JUCIUS 12-21-15

2' (600)

DETAIL "B"

-12 (300) ₩HITE

PEDESTRIAN

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

\_\_\_ 6 (150) WHITE

OVER 200' (60 m)

FULL SIZE LETTERS 8' (2.4 m) AND ARROWS SHALL BE USED.

ARROW - "ONLY".

 $\uparrow$  AREA = 15.6 SO. FT. (1.5 m<sup>2</sup> ) **ONLY** AREA = 20.8 SO. FT. (1.9 m<sup>2</sup>) \* TURN LANES IN EXCESS OF 400' (120 m) IN LENGTH MAY HAVE AN ADDITIONAL SET OF ARROW - "ONLY" INSTALLED MIDWAY BETWEEN THE OTHER TWO SETS OF

TYPICAL LEFT (OR RIGHT) TURN LANE

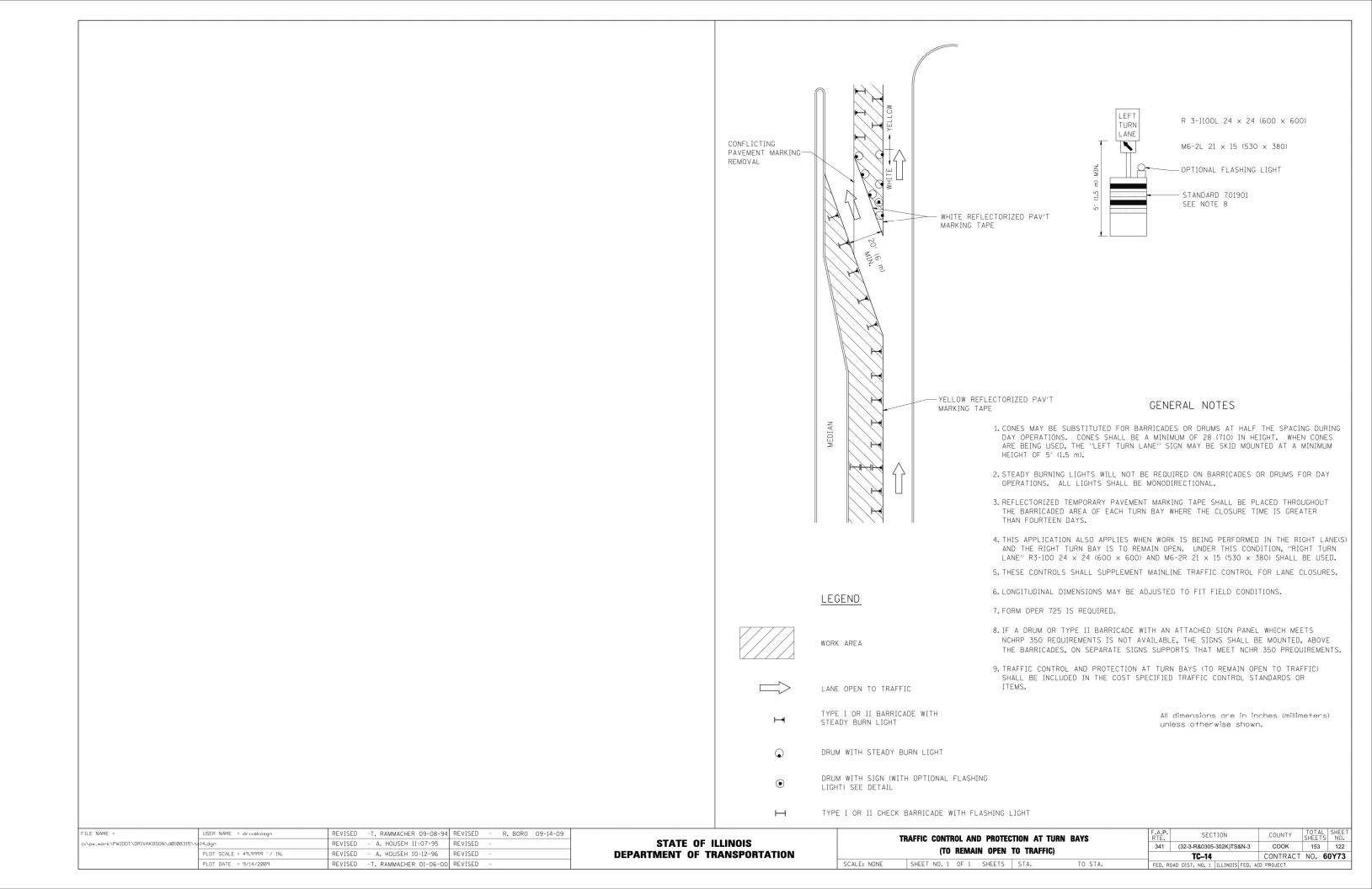
TYPICAL TURN LANE MARKING

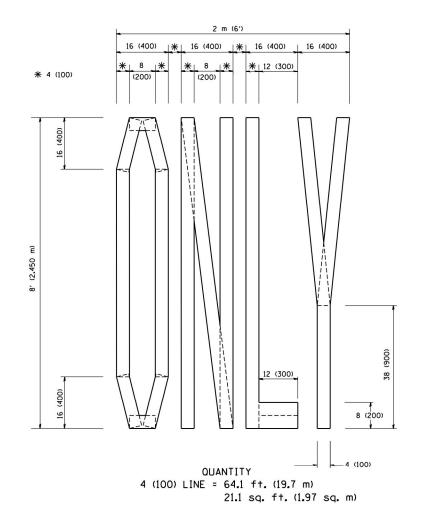
FOR FURTHER DETAILS ON PAVEMENT MARKING REFER TO STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND STATE STANDARD 780001. SECTION COUNTY DISTRICT ONE (32-3-R&0305-302K)TS&N-3 COOK 153 121 TYPICAL PAVEMENT MARKINGS CONTRACT NO. 60Y73 OF 1 SHEETS STA TO STA. SHEET 1

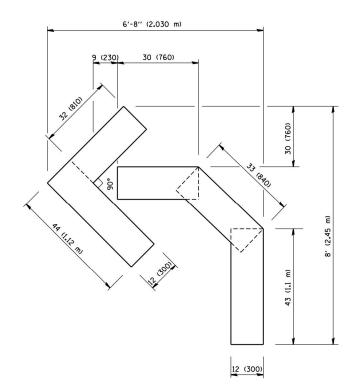
SEE STATE STANDARD 780001 AREA OF: "R"=3.6 SO. FT. (0.33 m²) EACH "X"=54.0 SO. FT. (5.0 m²)

30.4 SF

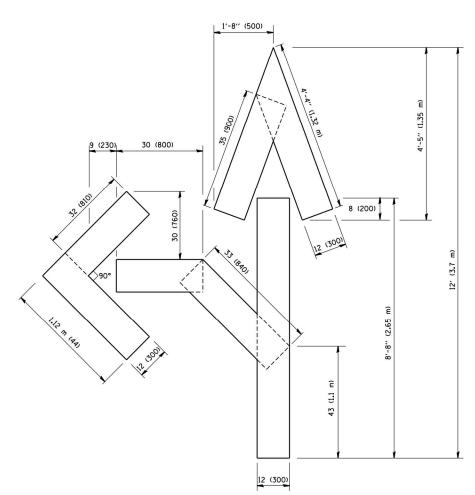
50' (15 m) C-C (LESS THAN 30MPH (50 km/h)) 75' (25 m) C-C (30 MPH (50 km/h) T0 45MPH (70 km/h)) 150' (45 m) C-C (0VER 45MPH (70 km/h))







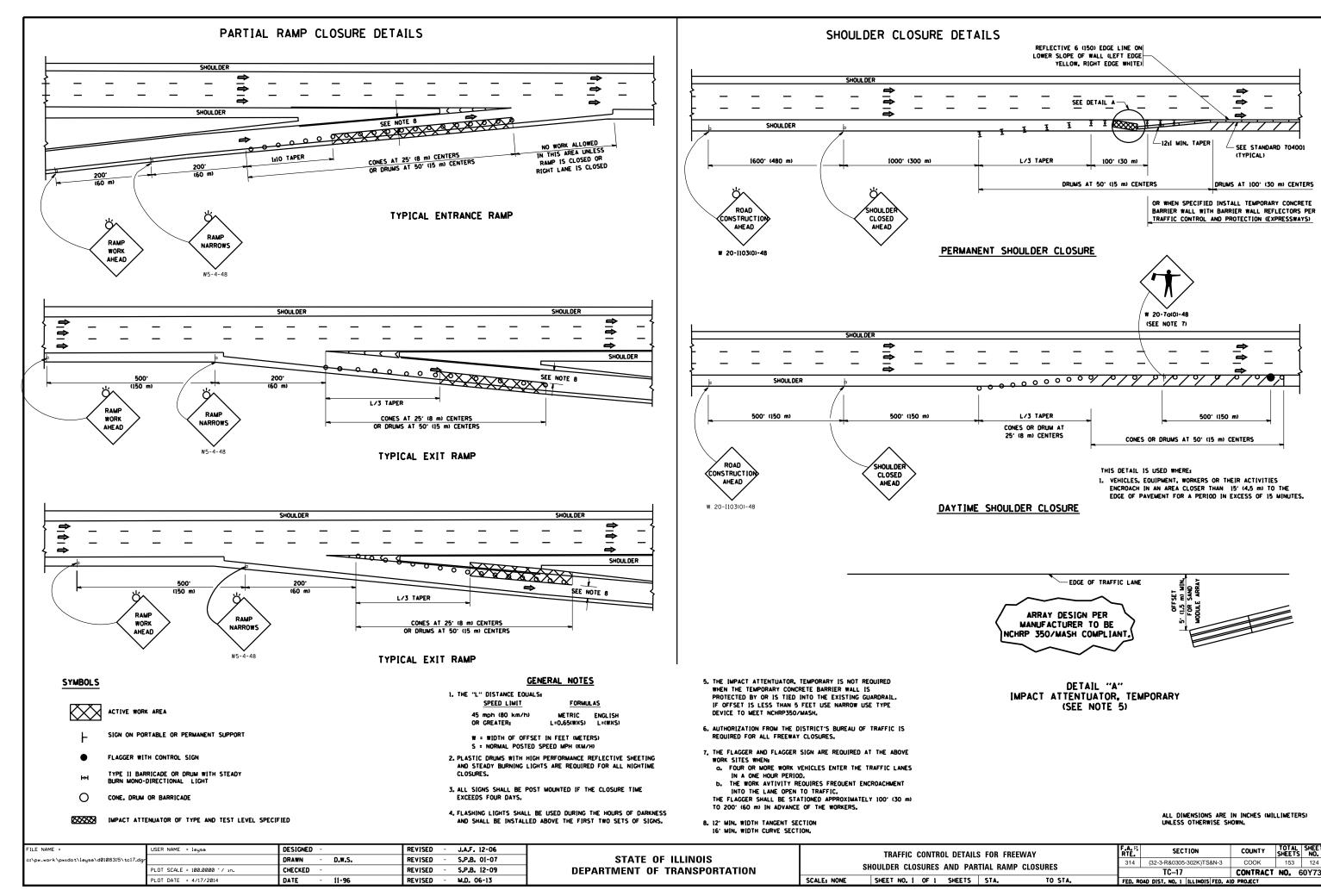
OUANTITY 4 (100) LINE = 45.5 ft. (13.9 m) 15.2 sq. ft. (1.39 sq. m)

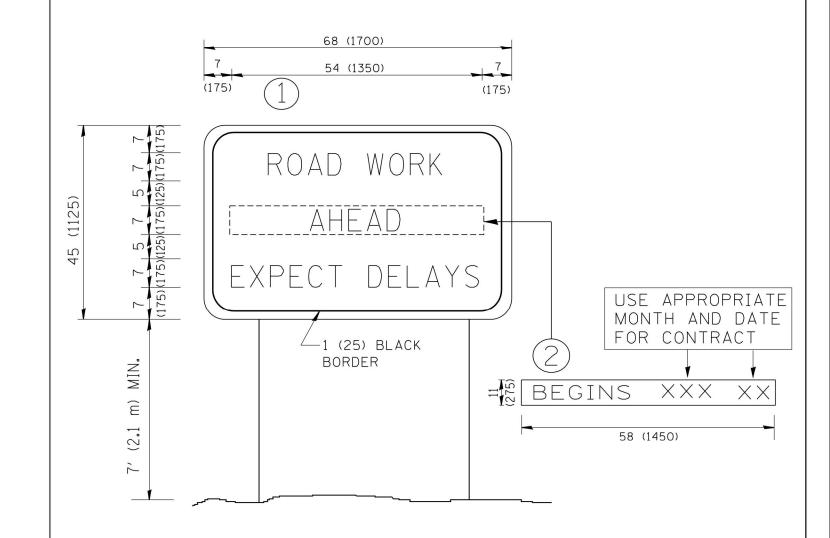


OUANTITY 4 (100) LINE = 82.5 ft. (25.3 m) 27.5 sq. ft. (2.53 sq. m)

All dimensions are in inches (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED -T. RAMMACHER 06-05-96		PAVEMENT MARKING LETTERS AND SYMBOLS	F.A.P.	SECTION	COUNTY	TOTAL SHEET SHEETS NO.
W:\diststd\22x34\tc16.dgn		DRAWN -	REVISED -T. RAMMACHER 11-04-97	STATE OF ILLINOIS			(32-3-R&0305-302K)TS&N-3	соок	153 123
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 03-02-98	DEPARTMENT OF TRANSPORTATION	FOR TRAFFIC STAGING		TC-16	CONTRACT	T NO. 60Y73
	PLOT DATE = 1/4/2008	DATE - 09-18-94	REVISED - E. GOMEZ 08-28-00		SCALE: NONE SHEET NO. 1 OF 1 SHEETS STA. TO STA.		OAD DIST. NO. 1 ILLINOIS FED. A	AID PROJECT	





### NOTES:

- 1. USE BLACK LETTERING ON ORANGE BACKGROUND.
- 2. ERECT SIGNS IN ADVANCE OF THE LOCATION FOR THE "ROAD CONSTRUCTION AHEAD" SIGN AT LOCATIONS AS DIRECTED BY THE ENGINEER.
- 3. ERECT SIGN (1) WITH INSTALLED PANEL (2) ONE WEEK PRIOR TO THE START OF CONSTRUCTION.
- 4. REMOVE PANEL (2) SOON AFTER THE START OF CONSTRUCTION.
- 5. SEE SPECIAL PROVISION FOR "TEMPORARY INFORMATION SIGNING" FOR ADDITIONAL INFORMATION.
- 6. ONE SIGN ASSEMBLY EQUALS 25.70 SQ. FT. (2.3 SQ. M.)
- 7. SHALL BE PAID FOR AS TEMPORARY INFORMATION SIGNING.

FILE NAME =	USER NAME = gaglianobt	DESIGNED -	REVISED - R. MIRS 09-15-97			ARTERIAL ROAD		F.A.P. RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
W:\diststd\22x34\tc22.dgn		DRAWN -	REVISED - R. MIRS 12-11-97	STATE OF ILLINOIS		INFORMATION SIGN		341	(32-3-R&0305-302K)TS&N-3	соок	153	125
	PLOT SCALE = 50.000 '/ IN.	CHECKED -	REVISED -T. RAMMACHER 02-02-99	DEPARTMENT OF TRANSPORTATION				_	TC-22	CONTRACT	T NO. 60	Y73
	PLOT DATE = 1/4/2008	DATE -	REVISED - C. JUCIUS 01-31-07		SCALE: NONE	SHEET NO. 1 OF 1 SHEETS STA.	TO STA.	FED. RO	DAD DIST. NO. 1 ILLINOIS FED. AL	D PROJECT		

