## 3-7-08 Letting, Item 139

DEPARTMENT OF TRANSPORTATION **DIVISION OF HIGHWAYS** 

STATE OF ILLINOIS

FOR INDEX OF SHEETS, SEE SHEET NO. 5

IMPROVEMENTS ARE LOCATED IN THE CITY OF CHICAGO, AND IN THE VILLAGES OF BURR RIDGE, MONEE, RICHTON PARK, SKOKIE, & TINLEY PARK

# **PROPOSED** HIGHWAY PLANS

**VARIOUS ROUTES VARIOUS LOCATIONS SECTION: 2007-040 I** PERMANENT PROTECTIVE SHIELDING **COOK & WILL COUNTIES** C-91-372-07

LOC	1	SN	016-0823
LOC	2	SN	016-2070, -2071
LOC	3	SN	016-0587
LOC	4	SN	016-0927
LOC	5	SN	016-0575
LOC	6	SN	099-0192
LOC	7	SN	099-0159
LOC	8	SN	099-0177

FOR LOCATION MAPS SEE SHEETS 2 - 4

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123 OR 811 C.U.A.N; CHICAGO UTILITY ALERT NETWORK 1-312-744-7000

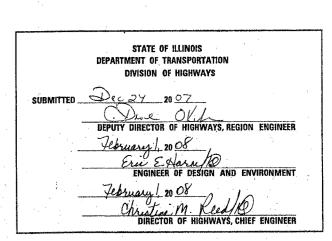
PROJECT ENGINEER ROBERT BORO (847) 705-4178 PROJECT MANAGER KEN ENG

CONTRACT NO. 60D28

2007-0401

D-91-372-07

COOK / WILL 19 1



PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

## INDEX OF SHEETS

- TITLE SHEET LOCATION MAPS INDEX OF SHEETS, STATE STANDARDS & GENERAL NOTES SUMMARY OF QUANTITIES BRIDGE PLANS LOC 1 (SN 016-0823) BRIDGE PLANS LOC 2 (SN 016-2070, -2071) 8-9
- BRIDGE PLANS LOC 3 (SN 016-0587) 10 BRIDGE PLANS LOC 4 (SN 016-0927) 11
- BRIDGE PLANS LOC 5 (SN 016-0575) 12 BRIDGE PLANS LOC 6 (SN 099-0192) 13
- BRIDGE PLANS LOC 7 (SN 099-0159) 14
- BRIDGE PLANS LOC 8 (SN 099-0177) 15
- PERMANENT PROTECTIVE SHIELDING DETAILS 16 FREEWAY ENTRANCE AND EXIT RAMP CLOSURE DETAILS
- 17
- TRAFFIC CONTROL DETAILS FOR FREEWAY SHOULDER CLOSURE AND PARTIAL RAMP CLOSURES TRAFFIC CONTROL DETAILS FOR FREEWAY SINGLE & MULTI-LANE WEAVE

## TSTATE STANDARDS

701006-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 4.5M (15') AWAY

701400-02 LANE CLOSURE, MULTILANE, FOR SPEEDS > 45 MPH

701401-04 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY

LANE CLOSURE, MULTILANE AT ENTRANCE OR EXIT RAMP 701411-04 FOR SPEEDS > MPH

TWO LANE CLOSURE, FREEWAY/EXPRESSWAY 701446

TRAFFIC CONTROL DEVICES 701901

## GENERAL NOTES

BEFORE STARTING ANY EXCAVATION, THE CONTRACTOR SHALL CALL "C.U.A.N." (CHICAGO UTILITY ALERT NETWORK) AT (312) 744-7000, OR "J.U.L.I.E." (JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION) AT (1-800)-892-0123 FOR FIELD LOCATIONS OF BURIED ELECTREIC, TELEPHONE AND GAS UTILITIES, (48 HOUR NOTIFICATION IS REQUIRED).

DO NOT SCALE PLANS FOR CONSTRUCTION DIMENSIONS

THE CONTRACTOR SHALL CONTRACT THE DISTRICT ONE TRAFFIC CONTROL SUPERVISOR AT (847) 705-4151 A MINIMUM OF 72 HOURS IN ADVANCE OF BEGINNING WORKS.

THESE PLANS HAVE BEEN PREPARED FROM NOTES RECIEVED FROM BRIDGE INSPECTORS.

THE CONTRACTOR SHALL BE AWARE THAT SOME LOCATIONS HAVE UTILITY CONDUITS. ANY DAMAGE TO THE CONDUITS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED OR REPAIRED BY THE CONTRACTOR AT THEIR EXPENSE, THE CONTRACTOR SHALL ADJUST THE PROTECTIVE SHIELDING TO FIT AROUND THE CONDUITS, DETAILS SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION, THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH THE UTILITY COMPANIES. SOME EXISTING CONDUIT MAY CONTAIN ASBESTOS. APPROPRIATE PRECAUTIONS SHALL BE TAKEN.

THE CONTRACTOR SHALL RELOCATE ANY CONDUIT ATTACHED TO THE FLANGE PRIOR TO THE INSTALLATION OF THE PROTECTIVE SHIELDING. UNDER NO CIRCUMSTANCES SHALL THE PROTECTIVE SHIELDING REST ON TOP OF THE CONDUIT.

ANY WORK DONE BY THE CONTRACTOR ON THE UNDERPASS LIGHTING SYSTEM WILL REQUIRE A TRANSFER OF MAINTENANCE OF THE EFFECTED CIRCUITS TO THE CONTRACTOR. ALTERNATIVELY, THE CONTRACTOR CAN AVOID A MAINTENANCE TRANSFER BY HIRING THE DEPARTMENT'S ELECTRICAL MAINTENANCE CONTRACTOR (EMC) TO RELOCATE THE CONDUIT.

IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND CONDITIONS EXISTING IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS,

THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ACCESS TO ABUTTING PROPERTY AT ALL TIMES DURING THE CONSTRUCTION OF THIS PROJECT.

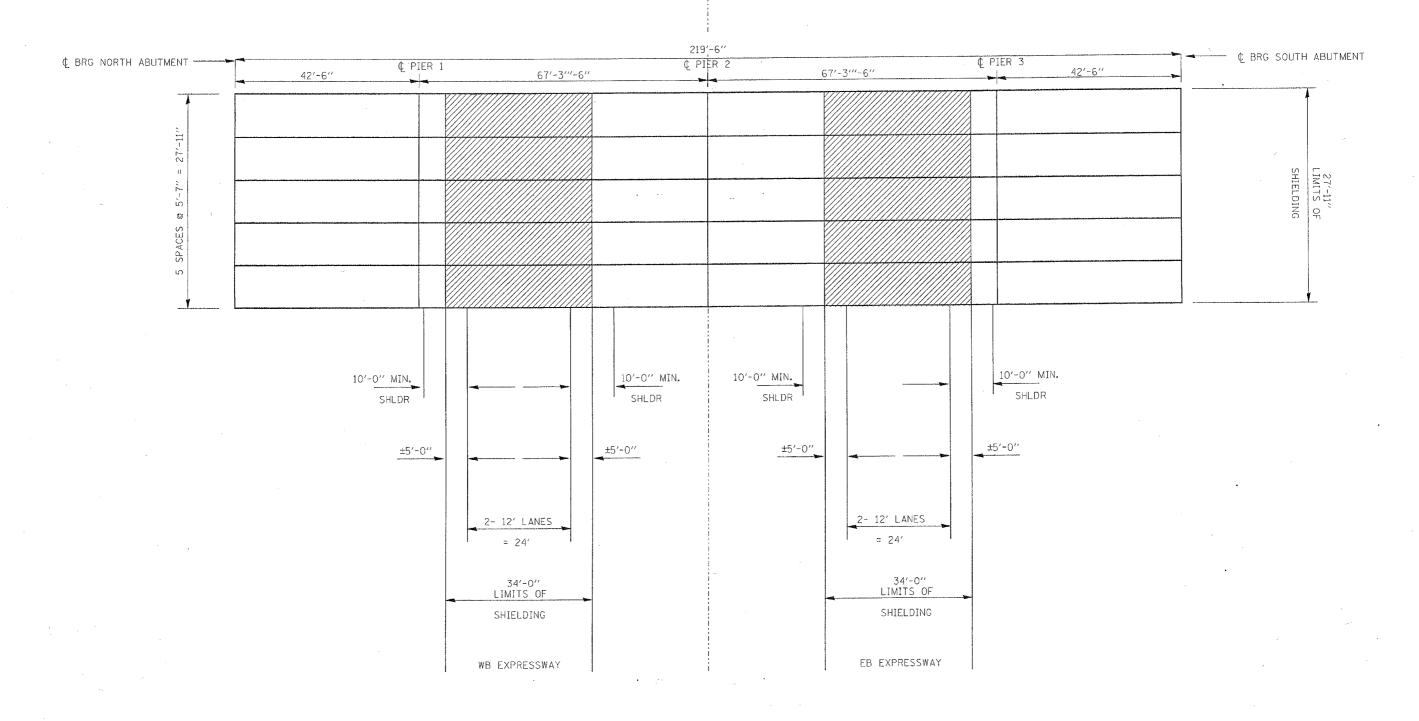
THE CONTRACTOR SHALL ADJUST THE PROTECTIVE SHIELDING TO RIDE ABOVE THE EXISTING LIGHTING FIXTURES IN ORDER TO MAINTAIN THE EXISTING LEVEL OF LIGHTING OF THE ROADWAY UNDERNEATH. DETAILS SHALL BE APPROVED BY THE ENGINEER BEFORE INSTALLATION. A CLEARANCE OF 1 1/2 " ± 1/4" AROUND THE FIXTURE SHALL BE PROVIDED FOR FUTURE MAINTENANCE.

ANY ADJUSTMENT DONE TO THE PROTECTIVE SHIELD SYSTEM MUST RESULT ON A SYSTEM WITH AN EQUIVALENT LOAD CARRYING CAPACITY AND CONTAINTMENT AS THE ONE SHOWN ON SHEET 16 OF 19.

WHEN ARTIFICIAL LIGHTING IS UTILIZED IN NIGHT OPRERATIONS, THE CONTRACTOR SHALL EXERCISE THE UTMOST PRECAUTIONS IN PREVENTING ADVERSE VISIBILITY TO THE MOTORING PUBLIC AND ADJOINING RESIDENTIAL AREAS.

					INDEX OF SHEETS	F.A.I. SECTION	COUNTY SHEETS NO.
FILE NAME =	USER NAME = hemdensh	DESIGNED - DRAWN -	REVISED - REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STATE STANDARDS	YAR   2007-040 1  STA.   FED. ROAD DIST. NO. 1   ILLINOIS	CONTRACT NO. 60D28
c:\projects\dl37207\designee.dgn	PLOT SCALE = 50.0000 ' / IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSFORTATION	SCALE: SHEET NO. OF SHEETS STA. TO S	STA.   FED. ROAD DIST. NO. 1 (ILLINOIS)	F.C.V. ALD THOUGHT
	PLOT DATE = 12/21/2007	107.0	Access to the second se	•			





¢ F.A.I. RTE. I ~ 94

### FRAMING PLAN

- INDICATES PROTECTIVE SHIELDING

		<del></del>	7		CTDUCTUDE DI AN	F.A.I. SECTION	COUNTY TOTAL SHEET
FILE NAME =	USER NAME = hamdanah	DESIGNED -	REVISED -		STRUCTURE PLAN	RTE. SECTION	SHEE IS NO.
o:\projects\d137207\designaa.dgn		DRAWN -	REVISED -	STATE OF ILLINOIS	WOLF RD OVER I-80	80 2007-040 1	COOK / WILL 19 13
	PLOT SCALE = 50.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	LOCATION 6: SN 099-0192		CONTRACT NO. 60D28
	PLOT DATE = 12/21/2007	DATE -	REVISED -		SCALE: SHEET NO. OF SHEETS STA. TO STA.	FED. ROAD DIST. NO. 1   ILLINOIS   F	FED, AID PROJECT

#### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

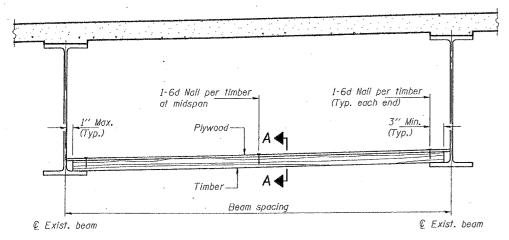
SHEET NO. YOYAL SHEETS VAR19 16 2007; COOK/WILL

SHEETS

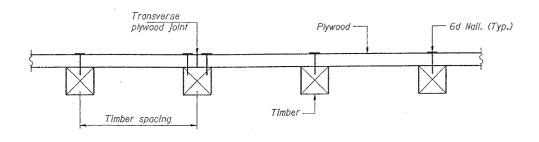
Contract Number: 60D28

#### 1-6d Nail pe<u>r timber</u> 1-6d Nail per timber at midspan (Typ. each end) I" Max. Plywood-(Typ.) *(Typ.)* A **4** Timber-Beam spacing € Exist. beam € Exist. beam

#### PPC I-BEAMS AND BULB-T's



#### STEEL BEAMS



SECTION A-A

Beam Spacing (ft.)	4" x 4" with min. Fb=775 psi Fv=135 psi	4" x 6" with min. Fb=775 psl Fv=135 psi	6" x 6" with min. Fb=575 psi Fv=125 psi
	Maximui	m Timber Spac	ing (in.)
4.5	<i>1</i> 6	16	16
4.75	16	16	16
5.0	16	16 🕾	16
5.25	<i>1</i> 6	16	<i>1</i> 6
5.5	16	16	16
5.75	16	16	16
6.0	<i>1</i> 6	16	16
6.25	12	16	16
6.5	12	16	16
6.75	12	16	16
7.0	8	16	16
7.25	8	16	16
7.5	8	16	<i>1</i> 6 .
7.75	8	<b>1</b> 6	16
8.0	8	12	16
8 <b>.</b> 25	8	12 .	16
8.5	6	12	12
8.75	6	12	12
9.0	6	8	12

TIMBER SPACING

Timber Sizes (in.)

#### PPC I-BEAMS AND BULB-T's

BEAM	"A"
36'' I-Beam	1'2"
42" I-Beam	1'2"
48" I-Beam	1'2"
54" I-Beam	158"
63" Bulb-T	3 <sup>3</sup> 8"
72" Bulb-T	33 <sub>8</sub> "

See special provision for Permanent Protective Shield System.

Timber sizes shown are nominal sizes. Rough sawn timber of the dimensions shown will also be considered acceptable.

The minimum Fb and Fv values shown are the tabulated design values given in the National Design Specification for Wood Construction for No. 2 Spruce-Pine-Fir without adjustment factors applied. Better grades or other species with equal or higher allowable stresses will also be considered acceptable.

The timber spacings shown have been determined using allowable stresses with all adjustment factors necessary for the anticipated service conditions.

All timber shall be treated.

Plywood shall be 58" Exterior type plywood.

Plywood shall be placed such that the face grain is perpendicular to the timber supports. When less than a full sheet (4' width) of plywood is used, the width of the strip used shall not be less than 2'.

Transverse plywood joints shall be supported by timbers.

When 4" x 6" timbers are used, they shall be placed such that the wide face is horizontal and the narrow face is vertical.

Design load = 200 psf.

#### BILL OF MATERIAL

Item	Unit	Total	
Protective Shield (Permanent)	Sq. Yd.	5052	

PERMANENT PROTECTIVE SHIELD