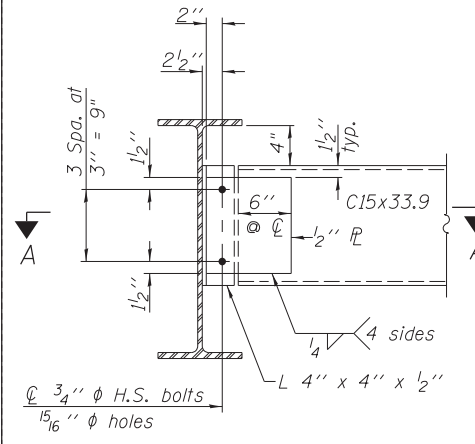


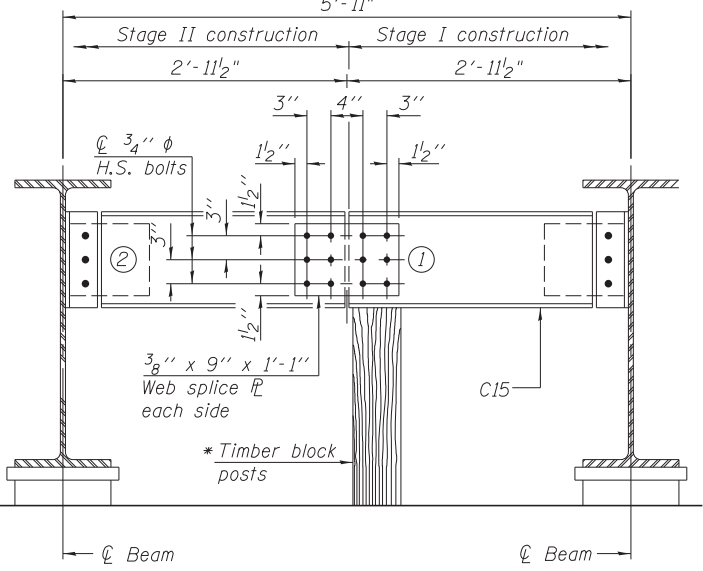
SECTION A-A



END DIAPHRAGM

Note: (22 Required)
Two hardened washers required for each set of oversized holes.

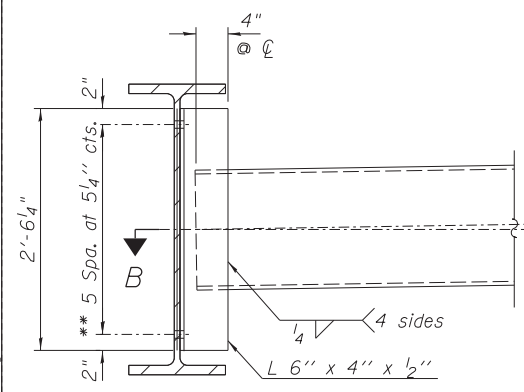
* Cost of Timber Block Posts is included with Structural Steel.



END DIAPHRAGM

END DIAPHRAGM STAGE CONSTRUCTION SEQUENCE

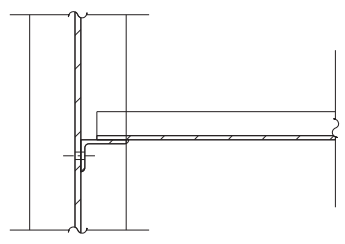
- 1.) Order diaphragm in two sections.
- 2.) Attach section ① of diaphragm to beam
- 3.) Place timber block posts between section ① of diaphragm and abutment bearing section.
- 4.) Attach section ② of diaphragm to both beam and section ① of diaphragm during stage II construction with splice plates.
- 5.) Remove timber block posts.



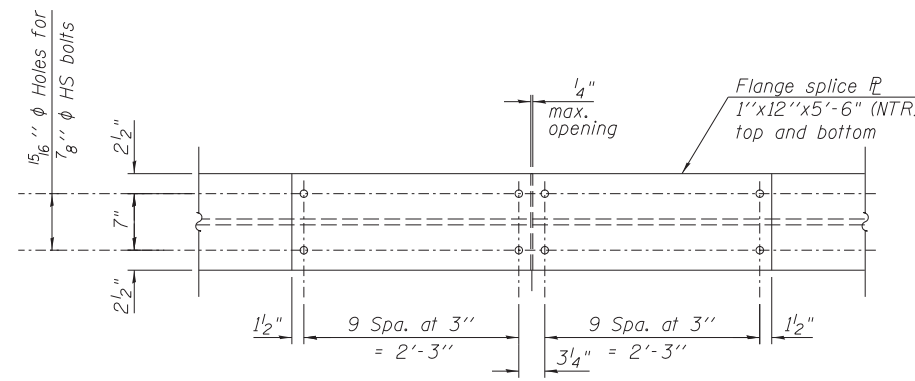
INTERIOR DIAPHRAGM

(110 Required)

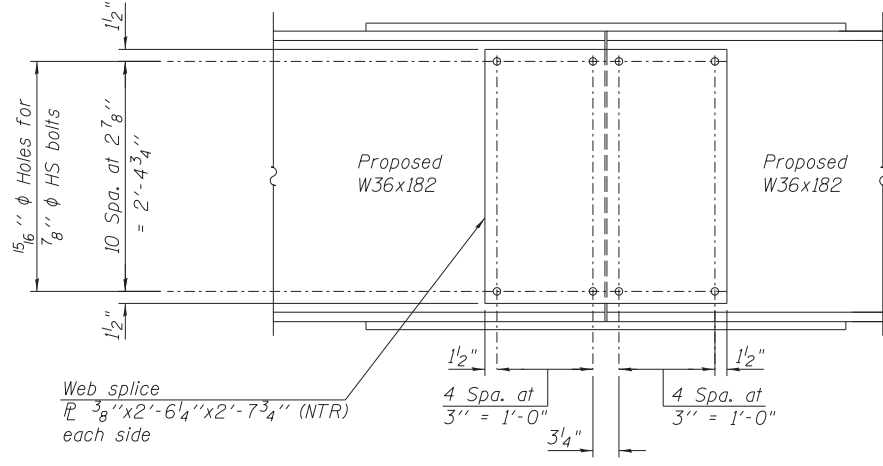
Note: Two hardened washers required for each set of oversized holes.
* Alternate channel C15x50 is permitted to facilitate material acquisition. Calculated weight of structural steel is based on the lighter section. The alternate, if utilized, shall be provided at no additional cost to the Department.
** 3/4" φ HS bolts, 15/16" φ holes.



SECTION B-B



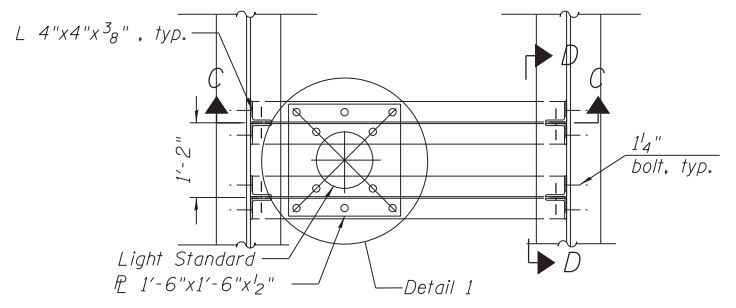
PLAN



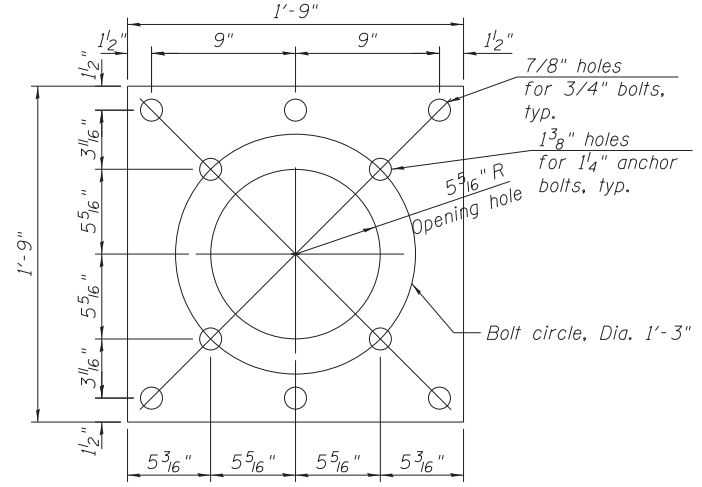
ELEVATION

FIELD SPLICE DETAIL

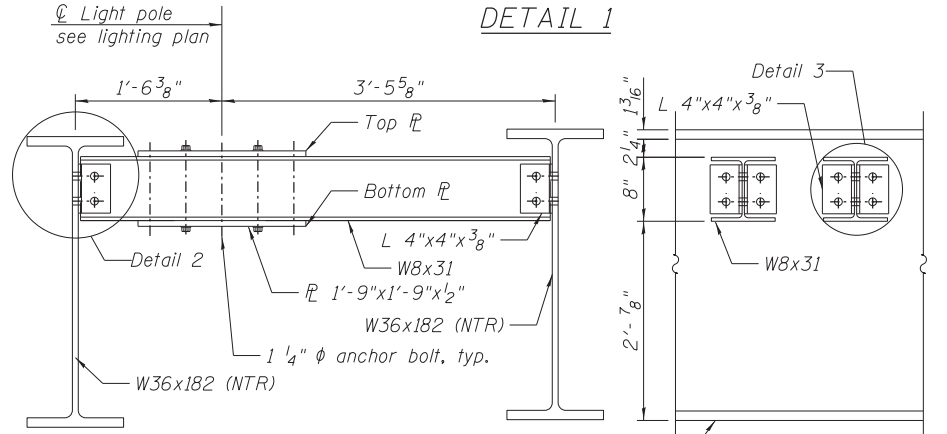
(48 Required)



LIGHT POLE SUPPORT SYSTEM PLAN

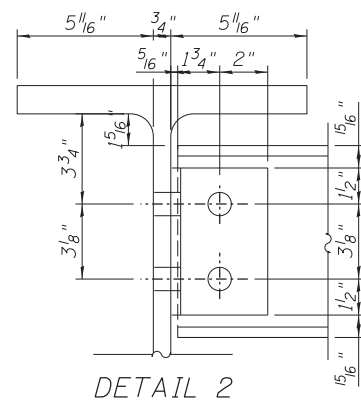


DETAIL 1

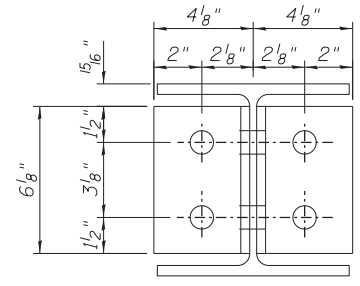


SECTION C-C

SECTION D-D



DETAIL 2



DETAIL 3

FILE PATH = C:\Users\will.mardoush\Desktop\WorGen\0161709-60W25-S24-StructSteel\Det.dgn

HBM ENGINEERING GROUP, LLC. CONSULTING & DESIGN INSPECTION & RATING RESEARCH & TESTING 4415 WEST HARRISON ST. SUITE 231 HILLSIDE, IL 60162 PHONE: (708) 236-0900 FAX: (708) 236-0901	0161709-60W25-S24-StructSteelDet.dgn	DESIGNED - MI, LAB, MMW	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL STEEL DETAILS STRUCTURE NO. 016-1709		F.A.I. R.E. 90/94/290	SECTION 2013-007R	COUNTY COOK	TOTAL SHEETS 317	SHEET NO. 168
	USER NAME = will.mardoush	DRAWN - LAB, MMW	REVISED -		SCALE: SHEET S1-24 OF 51 SHEETS STA. TO STA.		CONTRACT NO. 60W25		ILLINOIS FED. AID PROJECT		
	PLOT SCALE = 1:80.0000 ' / in.	CHECKED - MAI, MI, JJS	REVISED -								
	PLOT DATE = 6/14/2013	DATE - 6/17/2013	REVISED -								