

└ 4-1"Ø HILTI, KWIK BOLT 3

-SS, 4³/₄" EMBEDMENT

SOP PLATE DETAIL

– 4-¾"Ø HILTI, KWIK BOLT 3

-SS, $4\frac{1}{2}$ " EMBEDMENT

NOTE: PAINT PLATE PER GENERAL CONSTRUCTION NOTE THIS HSS 6x4x³% OR HSS 6x3x³%

CENTERED ON PLATE

14"x14"x½" PL_

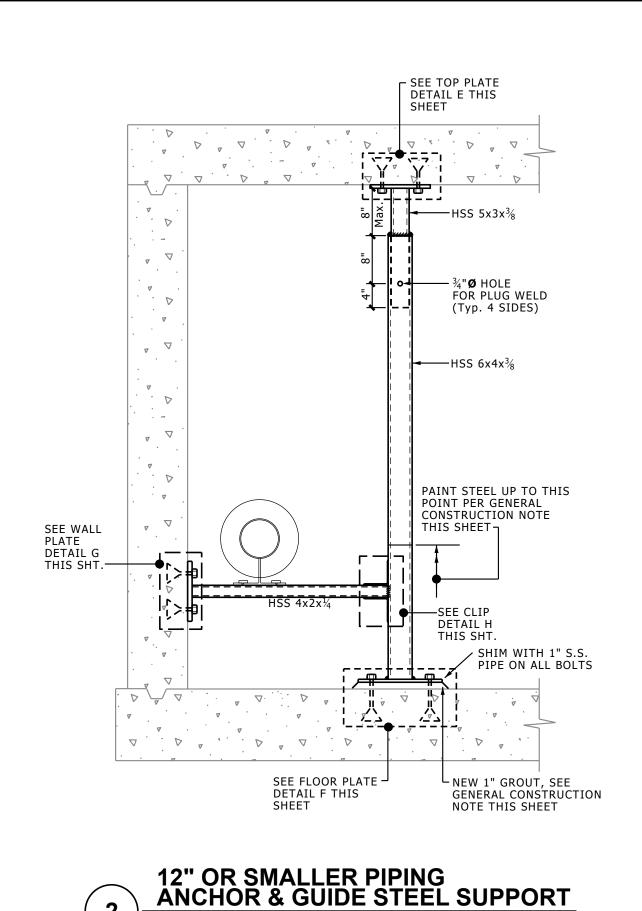
└ 4-¾"Ø HILTI, KWIK BOLT 3

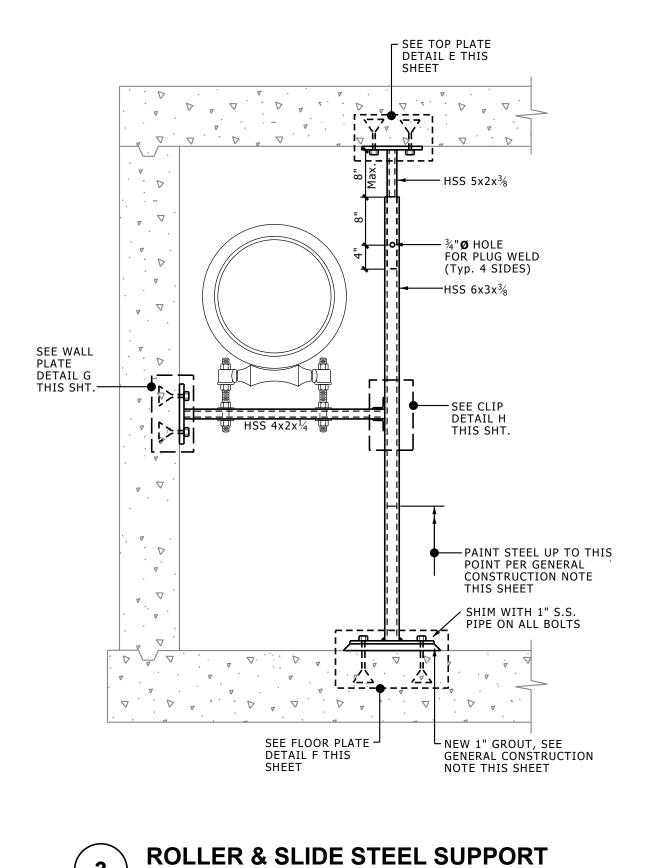
NOTE:
PAINT PLATE PER GENERAL
CONSTRUCTION NOTE THIS

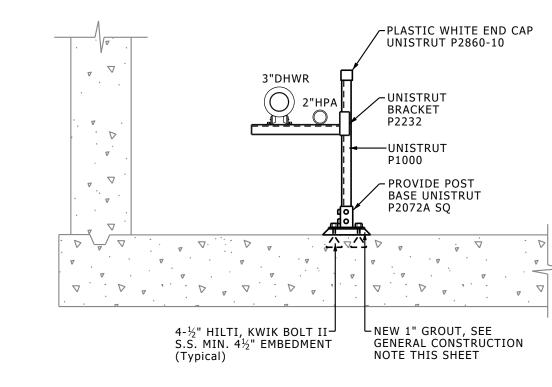
-SS, 4½" EMBEDMENT

NOTE: PAINT PLATE PER GENERAL

CONSTRUCTION NOTE THIS







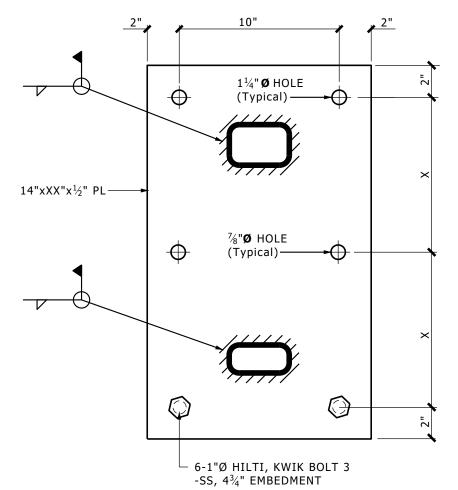
3" OR SMALLER PIPING ROLLER & SLIDE STEEL SUPPORT

General Construction Note

ROUGHEN CONCRETE AND APPLY BONDING AGENT BEFORE PLACING A NON-SHRINK METALLIC GROUT BASE, MIN. 1" THICK (OR AS SHOWN ON DETAIL) OR CONCRETE BASE AS SHOWN OVER EXISTING FLOOR. NON-SHRINK GROUT: GROUT SHALL BE PREMIXED, NON-SHRINK NON-CATALYZED NATURAL AGGREGATE GROUT, FOR COLUMN LEVELING PLATES WHICH ARE NOT BOLTED DOWN BEFORE COLUMN ERECTION, AND OTHER STRUCTURAL LOAD BEARING APPLICATIONS, AND FOR ITEMS SETS INTO CONCRETE BLOCKOUTS OR DEPRESSIÓNS, OR SET INTO CONCRETE TOPPINGS. L&M "CRYSTEX", W.R. MEADOWS "588 GROUT", MASTER BUILDERS "MASTERFLOW 928 GROUT", OR DAYTON-SUPERIÓR "HIGH PERFORMANCE". SEVEN-DAY COMPRESSIVE STRENGTH FOR THE SPECIFIED CONSISTENCY SHALL BE AT LEAST, 7,000 PSI PLASTIC, 6,000 PSI FLOWABLE, AND 5,000 PSI FLUID CONSISTENCY. PAINT UP TO 24" AFF, ALSO TOP & WALL PLATES WITH TWO COATS OF 'METALLIZE" POLYMER COATING BY DRUMMOND AMERICAN, ON ALL STEEL SUPPORTS, NOT FACTORY PAINTED. SURFACE PREPARATION AND APPLICATION PER MANUFACTURER INSTRUCTIONS. CLEAN/PREP EXISTING STEEL PER DETAIL PRIOR TO PAINTING. PAINT ALL STEEL,

Note to Designers:

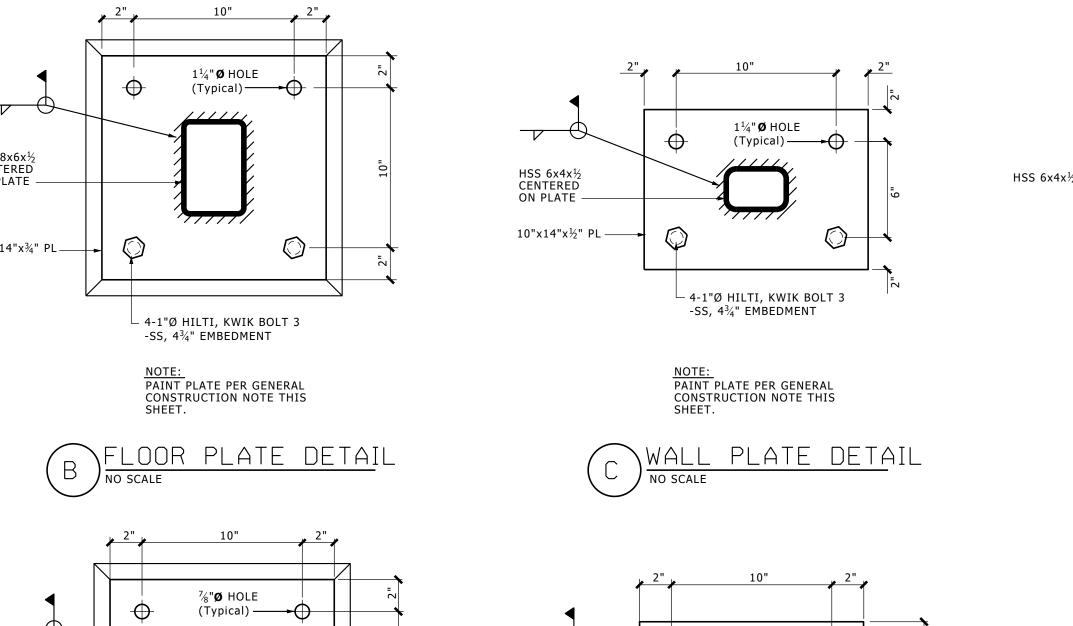
(2) DETAILS NOT INTENDED AS FINALIZED DESIGN. INTENT IS TO SHOW PREFERENCES IN CONSTRUCTION AND REQUIRED DEPTH OF DETAILS TO BE PROVIDED IN BID DOCUMENTS. APPROPRIATE APPLICATION AND ADEQUACY.



WALL PLATE USED WHEN (2) HORIZONTAL STEEL PIPE SUPPORTS ARE REQUIRED

NOTE:
PAINT PLATE PER GENERAL
CONSTRUCTION NOTE THIS
SHEET.

SCALE: 3/4" = 1'-0"



HSS 4x2x1/4-

CENTERED

ON PLATE

14"x10"x½" PL-

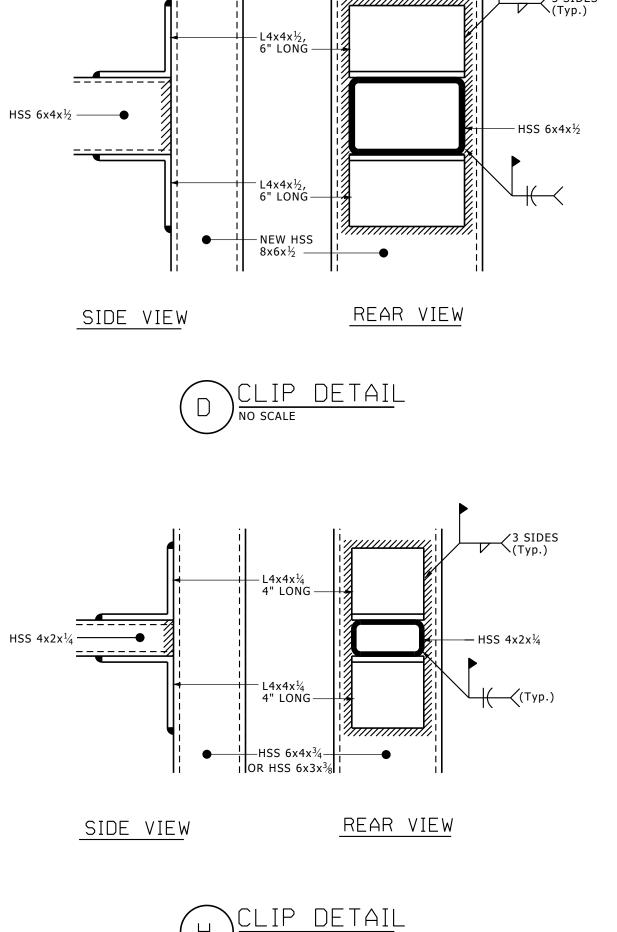
⁷⁄₈"**ø** HOLE

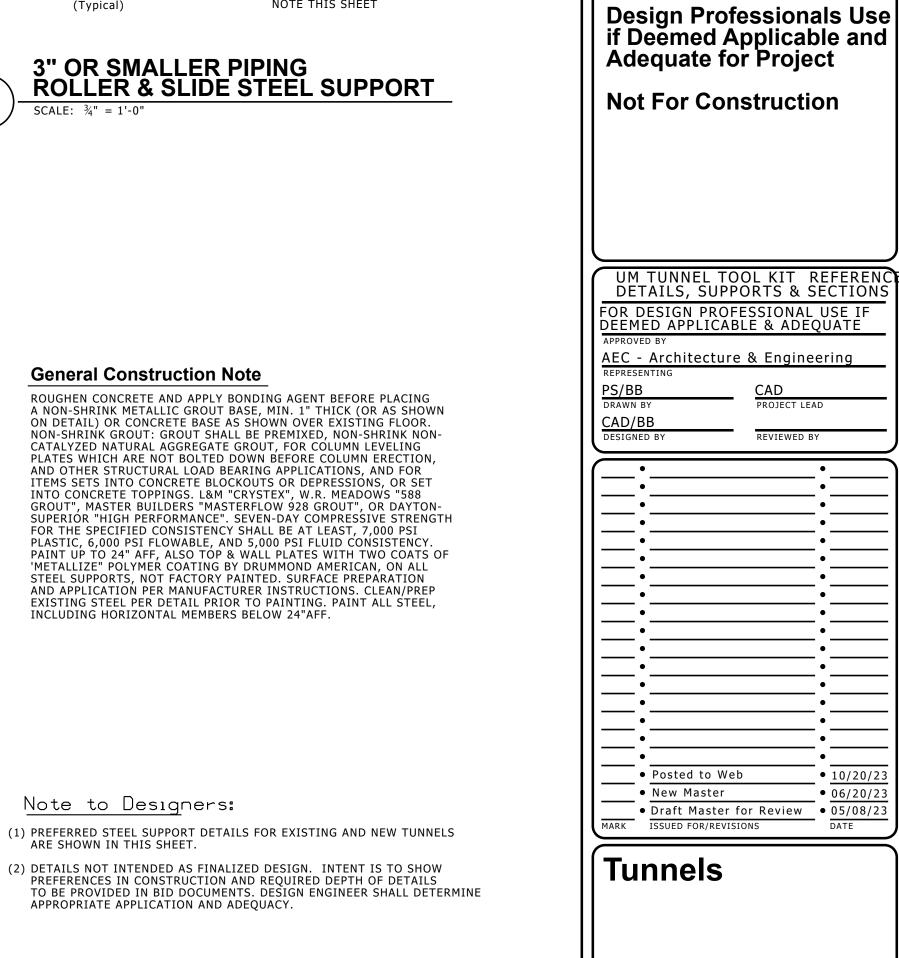
└ 4-¾"Ø HILTI, KWIK BOLT 3

-SS, $4\frac{1}{2}$ " EMBEDMENT

NOTE:
PAINT PLATE PER GENERAL
CONSTRUCTION NOTE THIS
SHEET.

(Typical)—





UNIVERSITY OF MICHIGAN ARCHITECTURE, ENGINEERING AND CONSTRUCTION

TUNNEL TOOL-KIT

REFERENCE DETAILS,

For

SUPPORTS & SECTIONS

ARCHITECTURE & ENGINEERING

326 East Hoover, Mail Stop B

Ann Arbor, MI 48109-1002

Phone: 734-764-3414

Fax: 734-936-3334

Tool Kıt

University Of Michigan Ann Arbor , MI



Tunnels

Steel Supports Typical Sections & Details

SHEET NO. 4 OF 13 SHEET FILE NO. TK-3 04 15.dgn

14"x12"x½" PL

W/(4)-7/8" Ø HOLES-

HSS 5x3x3/8

CENTERED

ON PLATE

0R HSS 5x2x3/8