OCEAN

**GATEWAY** 

GARAGE LLC

PORTLAND, ME

RIVERWALK,

LLC

50 MONUMENT SQ.

PORTLAND, ME 04101

**OCEAN** 

**GATEWAY** 

**GARAGE** 

MIDDLE STREET

PORTLAND, MAINE

NO. DATE DESCRIPTION

\ 8.10.07 BULLETIN 1

PROJECT NO. 05-032

22 FEB 2007

AS NOTED

CLIENT

PROJECT

REVISIONS

DATE

SCALE

DRAWING TITLE

SHEET NUMBER

S7.01

**TYPICAL** 

**DETAILS** 

**ANCHOR** 

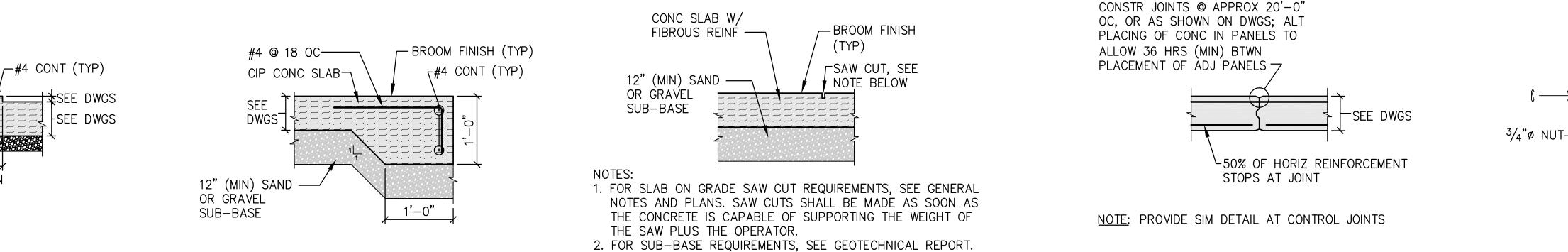
COLUMN

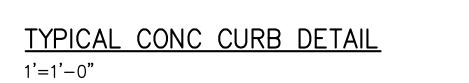
- COLUMN

WEB OR

FLANGE

OR GALV





SEE DWGS

CHAMFER (TYP) -

TOP OF CIP CONC

SLAB OR PRECAST

½" DIA EXP BOLT OR-

GROUTED @ 3'-0" OC

#4 DRILLED AND

CONC

DEPRESSED SLAB ON GRADE 1'=1'-0"

1:12 SLOPE \_\_\_\_

1'=1'-0"

LEAR OPENING

**ELEVATION** 

CONCRETE BLOCK OR —

PRECAST LINTELS

CLEAR SPAN.

UP TO 4'-0"

TO 5'-0"

TO 6'-0"

TO 7'-0"

TO 8'-0"

TO 9'-0"

8" BEARING EACH END

SLAB-ON-GRADE EDGE DETAIL 1'=1'-0"

<sup>-</sup>SEALANT ALL AROUND

CONC BLOCK LINTEL

PRECAST CONC LINTEL

12" WALL

2-#4

2-#4

2-#5

2-#6

2-#6

2-#6

SAME REINF TOP

AND BOTTOM SEE SCHEDULE

fc=3000 PSI SEE SCHEDULE

fc=3000 PSI

2-#6

BELOW

SECTION BELOW

TOP OF CONC

**ENCASEMENT** 

TYPICAL CONC COLUMN ENCASEMENT

REINFORCED CONCRETE LINTEL SCHEDULE

8"WALL

2-#3

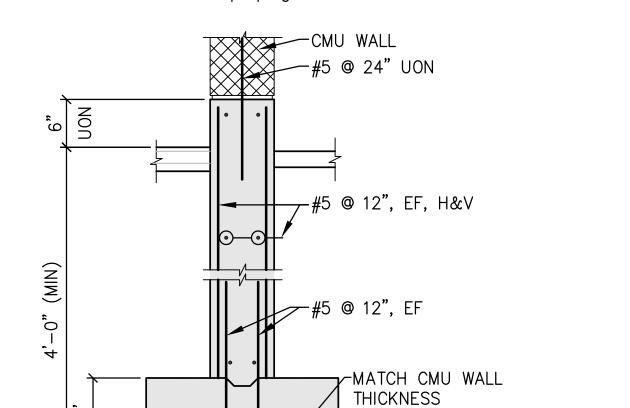
2-#4

2-#5

2-#6

-SLAB ON GRADE

TYPICAL SLAB-ON-GRADE 1'=1'-0"



TYPICAL CMU WALL FOUNDATION 1'=1'-0"

∕-#5 @ 12" OC NOTE: TYPICAL AT ONE STORY STRUCTURES ONLY.

STEEL LINTEL SCHEDULE						
CLEAR SPAN, L	LINTEL SIZE					
UP TO 4'-6"	L 4" x 3 <sup>1</sup> / <sub>2</sub> " x <sup>5</sup> / <sub>16</sub> "					
4'-7" TO 6'-0"	L 5" x 3½" x 5/16"					
6'-1" TO 8'-0"	L 6" x 3 <sup>1</sup> / <sub>2</sub> " x <sup>3</sup> / <sub>8</sub> "					

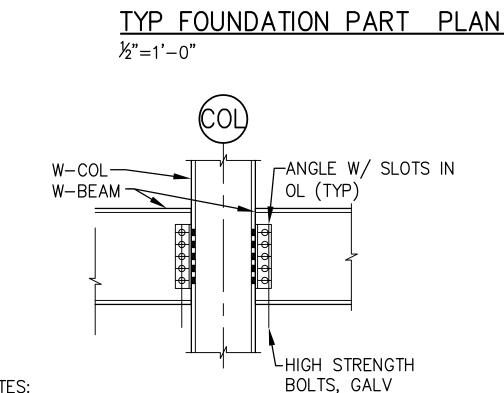
NOTES:

1. PROVIDE LINTELS OVER ALL OPENINGS EXCEPT WHERE LINTEL BLOCKS ARE PROVIDED.

- 2. PROVIDE ONE ANGLE FOR EACH 4" OF WALL THICKNESS 3. FOR 6" WALLS PROVIDE TEE OR BUILT UP SECTION WITH PROPERTIES EQUAL OR GREATER THAN 1.5 TIMES ANGLE PROPERTIES FOR 4" WALL
- THICKNESS.

STEEL LINTEL SCHEDULE AND NOTES

PROVID	E 6"	MIN	MUMIV	BEAR	ING	АТ	EACH	H EN	۱D	BUT	NOT	LESS	THAN	1"
PER F	T00T	OF	SPAN.	FILL	2	COU	RSES	OF	M/	SONF	۲۲	BELOW	BEAR	ING
WITH	MORT	AR.												



SEE TBL

NOTE: SEE PLANS AND DETAILS FOR CONSTRUCTION

JOINT LOCATIONS AND SPACING

∠LAP OUTSIDE BARS OR PROVIDE CORNER BAR

AS SHOWN. BAR SIZE TO MATCH HORIZ REINF

CONSTRUCTION JOINT IN CONC WALL

LDOWELS TO MATCH

CONST JOINT (IF REQ'D)

HORIZ REINF

16 BAR DIA-

IF LARGER)

AT FREE ENDS OF

WALLS, PROVIDE 4-#5

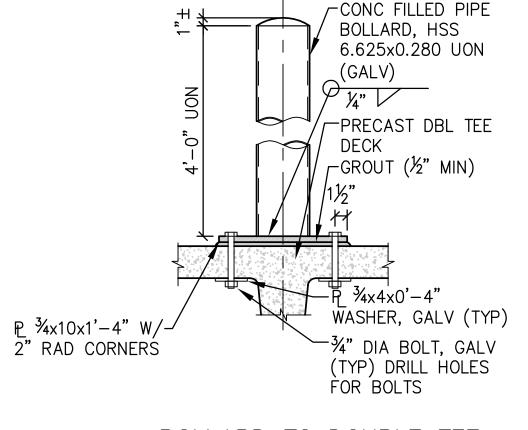
(MIN) W/ #4 @ 12" OC.

(USE VERT WALL REINF

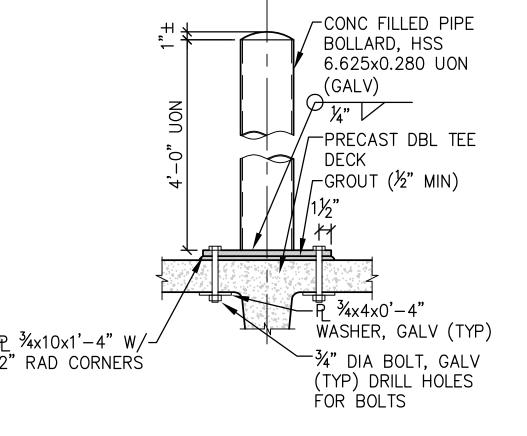
A. CONNECTION SHALL HAVE A MIN. CAPACITY OF 50% OF THE UNIFORM BEAM LOAD FOR SIZE AND SPAN PER AISC.

B. TOUCHUP ENDS OF TENSION-CONTROL BOLTS AFTER INSTALLATION.

## TYPICAL COLUMN TO BEAM CONNECTION DETAIL 1'=1'-0"



BOLLARD TO DOUBLE TEE



TYPICAL COLUMN TO BEAM MOMENT CONNECTION DTL

¹/₂"ø 7−WIRE — STRAND BARRIER

CABLE (GALV)

GRABB-IT-

ADJUSTABLE

— HOLE IN COLUMN

ADJUST CABLE AFTER INITIAL RELAXATION

BARRIER CABLE ANCHORAGE DETAILS

┌1" COMPRESSIBLE FILLER

(TYP) SEE NOTES D,E,F,G

 $^{ackslash}$ HIGH STRENGTH BOLTS.

SEE NOTE B (TYP)

AROUND COLUMN

-SLAB ON GRADE

TYPICAL SLAB ON GRADE AT COL

TYPICAL AT ALL FRAME BEAMS

A. MOMENT CONNECTIONS SHALL BE CAPABLE OF DEVELOPING

THE ELASTIC MOMENT CAPACITY OF THE BEAM OR GIRDER.

B. MOMENT CONNECTIONS SHALL HAVE A WEB SHEAR CAPACITY

C. STIFFENER PLATES FULL WIDTH OF COL EACH SIDE T & B-

STIFFENER TO MEET MEMBER FLANGES. FLANGE STIFFENER

D. ALL FRAME MOMENT CONNECTIONS MUST BE EXECUTED W/

WELD MATL HAVING CHARPY V-NOTCH TOUGHNESS OF 20

E. TOP FLANGE: ADD 5/6" MIN REINFORCING FILLET WELD @ TOP

RE-WELD THE ROOT PASS. ADD 5/6" MIN REINF FILLET WELD TO TOP & BOTTOM OF BOTTOM FLANGE.

G. MOMENT CONNECTIONS SHALL BE MADE AFTER ERECTION OF

F. BTM FLANGE: REMOVE BACKER BAR, BACK GOUGE AND

DBL TEES AND INITIAL SETTLEMENT HAS OCCURRED.

H. SEE PLAN FOR LOCATION OF MOMENT CONNECTIONS.

PLATES ARE REQ'D AT ALL FRAME MEMBER MOMENT CONN.

SAME THICKNESS AS BEAM FLANGES. LOCATE BOTTOM

AT LEAST 50% GREATER THAN THAT REQ'D FOR A

UNIFORMLY LOADED SIMPLE SPAN.

FT-LB @ ZERO DEGREE FAHRENHEIT

OF FLANGE.

SEE NOTE C

W-BEAM -

(TYP)-

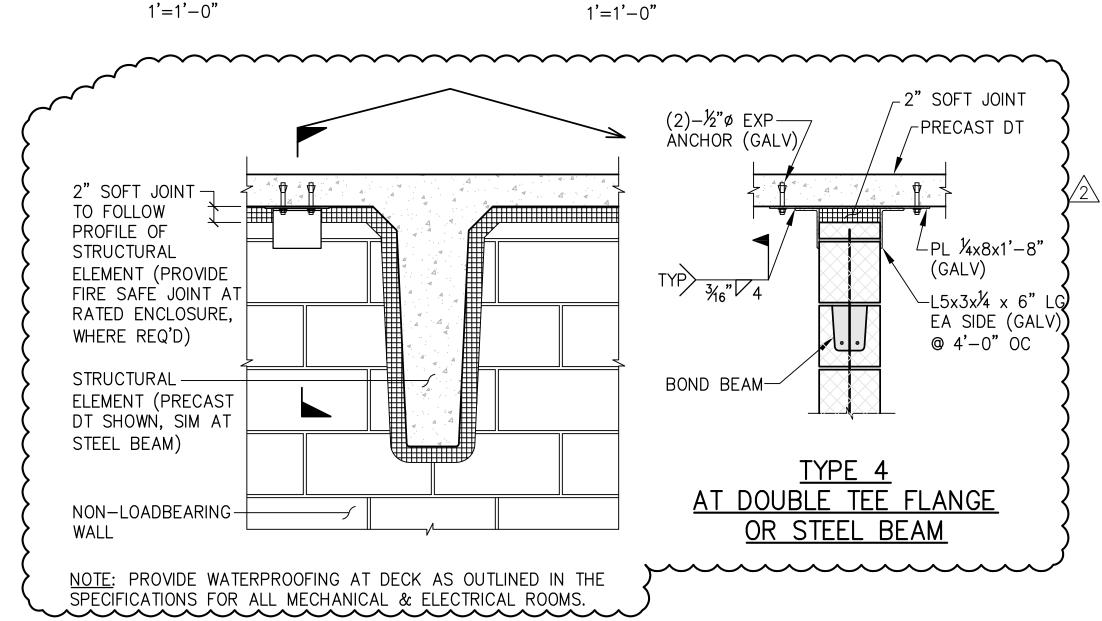
NOTES:

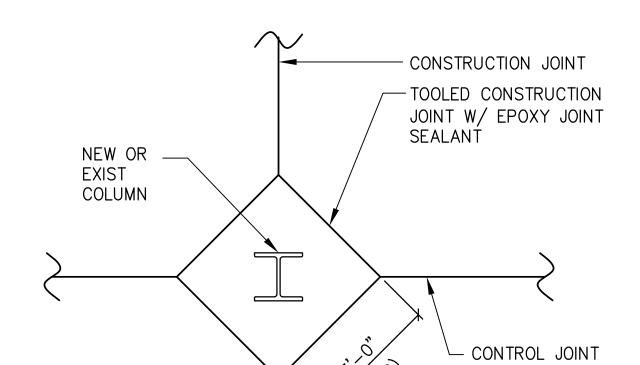
OF STRANDS AND AS NECESSARY.

-COLUMN WEB

OR FLANGE

ANCHOR





TYPICAL COLUMN ISOLATION JOINT DETAIL  $\frac{1}{2}$ "=1'-0"

REINFORCEMENT EMBEDMENT AND TENSION LAP LENGTHS

BAR SIZE	TOP BA	ARS IN MEMBERS WHERE D>12"	OTHER BARS			
	EMB	TENSION LAP	EMB	TENSION LAP		
#4	2'-1"	2'-9"	1'-7"	2'-1"		
<b>#</b> 5	2'-7"	3'-5"	2'-0"	2'-7"		
<b>#</b> 6	3'-2"	4'-1"	2'-5"	3'-2"		
<b>#</b> 7	4'-6"	5'-11"	3'-6"	4'-6"		
#8	5'-2"	6'-9"	4'-0"	5'-2"		
<b>#</b> 9	5'-10"	7'-7"	4'-6"	5'-10"		
#10	6'-7"	8'-5"	5'-1"	6'-7"		
#11	7'-3"	9'-3"	5'-7"	7'-3"		

NOTE: LENGTHS BASED ON ACI 318, CHAPTER 12 FOR NORMAL WEIGHT CONC (f'c=4000 PSI) AND UNCOATED BARS (fy=60,000 PSI).

SOLID GROUT IN

ABUTTING CORES

¼" ROUND TIES

TYPICAL JOINT REINFORCING AT WALL CORNERS

AROUND VERT BARS

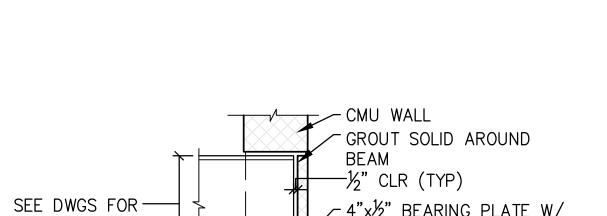
✓ CMU WALL

1'=1'-0"

FOR BOLTS

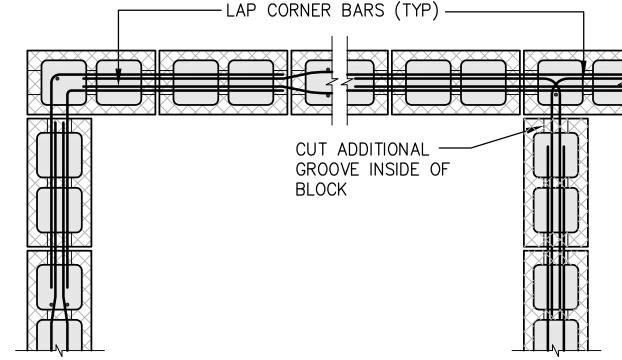
ADJUST AS NECESSARY AS PER ACI REQUIREMENTS.

## REINFORCED CONCRETE LINTEL DETAILS AND SCHEDULE $\frac{1}{2}$ "=1'-0"



·4"x½" BEARING PLATE W/ SIZE 1/4" FILLET WELD TO BEAM OR TUBE STEEL BEAM OR TUBE-·1" NON-SHRINK GROUT (2) ½" Ø ANCHOR —— TWO CELLS GROUTED SOLID BENEATH BRG PL

TYPICAL BEAM BEARING IN CMU WALL 1'=1'-0"



 $\frac{1}{2}$ "=1'-0"

1'=1'-0"

COMPOSITE DECK OR

PRECAST

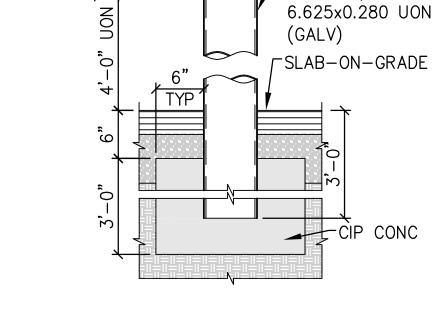
L<sub>3</sub>6" PL W/ ¼" DIA

-HOHMANN AND

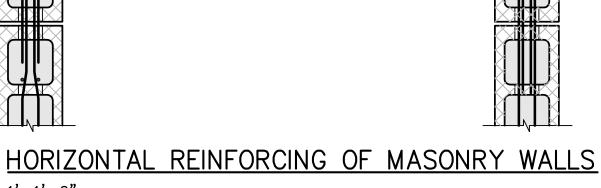
BARNARD CLIPS

BOLTS TO ATTACH TO

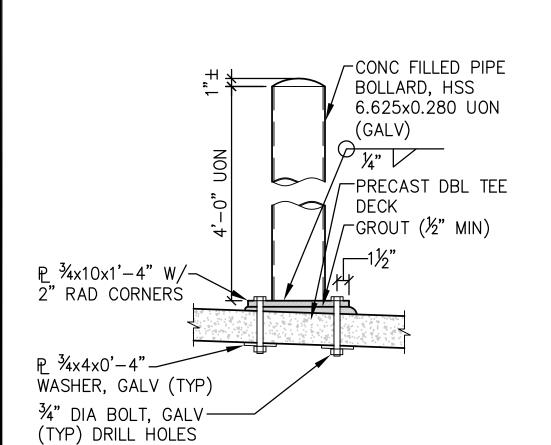
STEEL FRAMING (4 PER



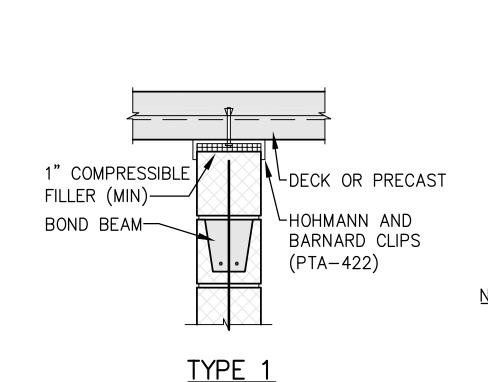
**BOLLARD ON GRADE** 



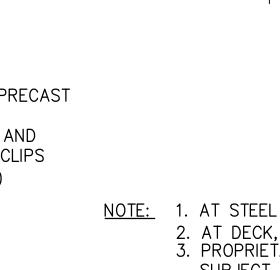
1'=1'-0"



BOLLARD TO DOUBLE TEE 1'=1'-0"



DECK SPAN PERPENDICULAR TO WALL



(PTA-422) PLANS NOTE: 1. AT STEEL BEAMS, WELD 3/6" PLATE TO BEAM. 2. AT DECK, ATTACH 3/6" PLATE W/ TECK SCREWS (4 PER CONNECTION) 3. PROPRIETARY MASONRY PRODUCTS FOR THIS PURPOSE MAY BE ACCÉPTABLE SUBJECT TO SUBMITTAL AND APPROVAL

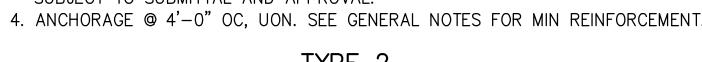
1" COMPRESSIBLE

FILLER (MIN) ——

BOND BEAM —

NOTE: FOR SLAB

CONST, SEE



TYPICAL MASONRY HEAD ANCHORAGE DETAILS 1'=1'-0"

TYPE 2 AT DOUBLE TEE <sup>1</sup>√3/6" PLATE CHOHMANN AND BARNARD CLIPS (PTA-422)

CONC FILLED PIPE

BOLLARD, HSS

TYPE 3 AT STEEL BEAM

1" COMPRESSIBLE-

FILLER (MIN)