



## **CITY OF MORGAN HILL BUILDING DEPARTMENT**

# **DESIGN GUIDELINES FOR OPEN PATIO COVERS**

Submit complete plans, drawn to scale, to [permits@morganhill.ca.gov](mailto:permits@morganhill.ca.gov). The recommended plan size is 11"x17". The plans are required to include:

### **1. Plot/Site Plan**

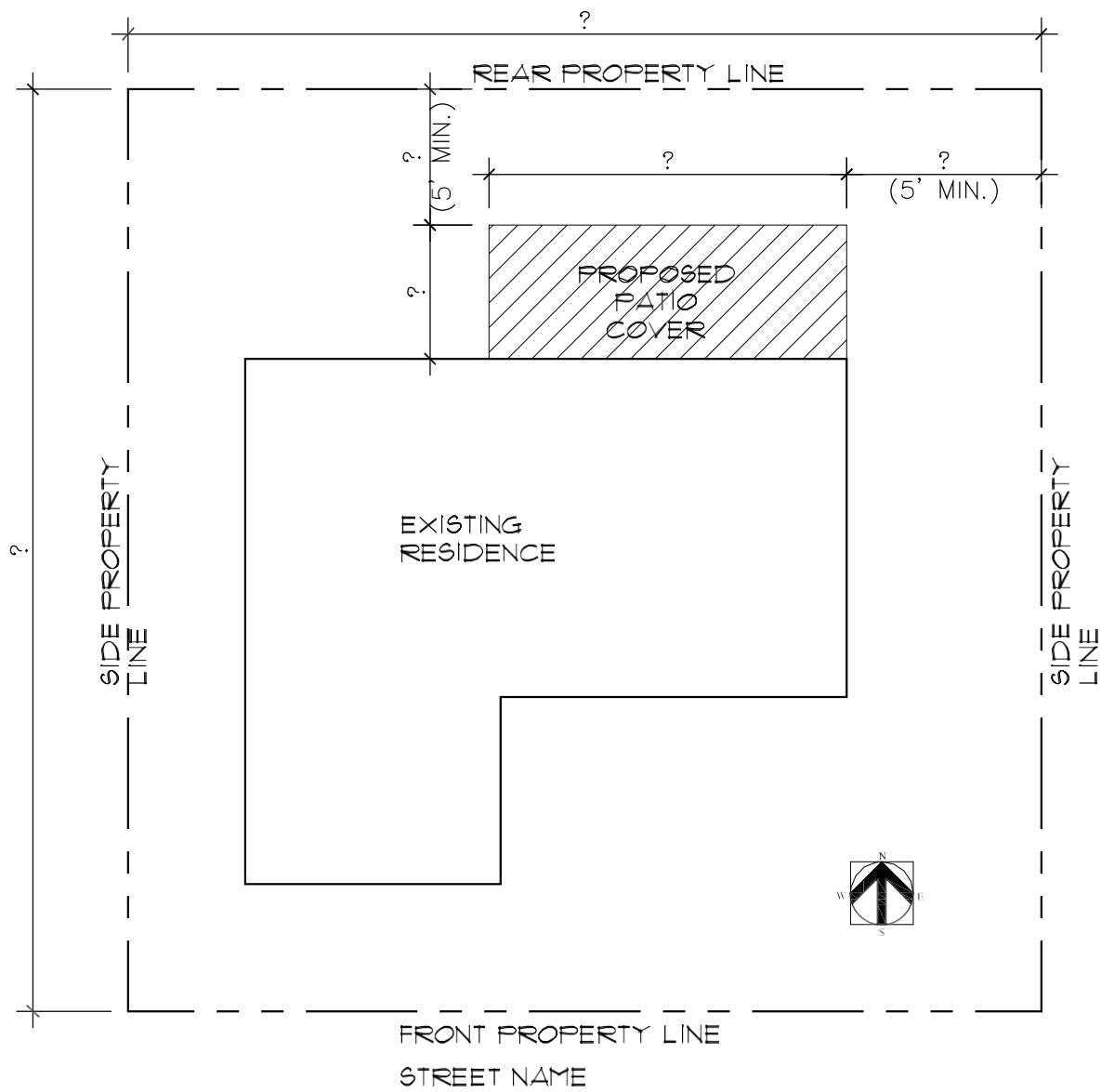
- a. Lot Dimensions and Easements
- b. Existing structures and proposed patio cover and their dimensions
- c. Distance between proposed patio cover, existing structure and property line

### **2. Foundation Plan**

### **3. Framing Plan**

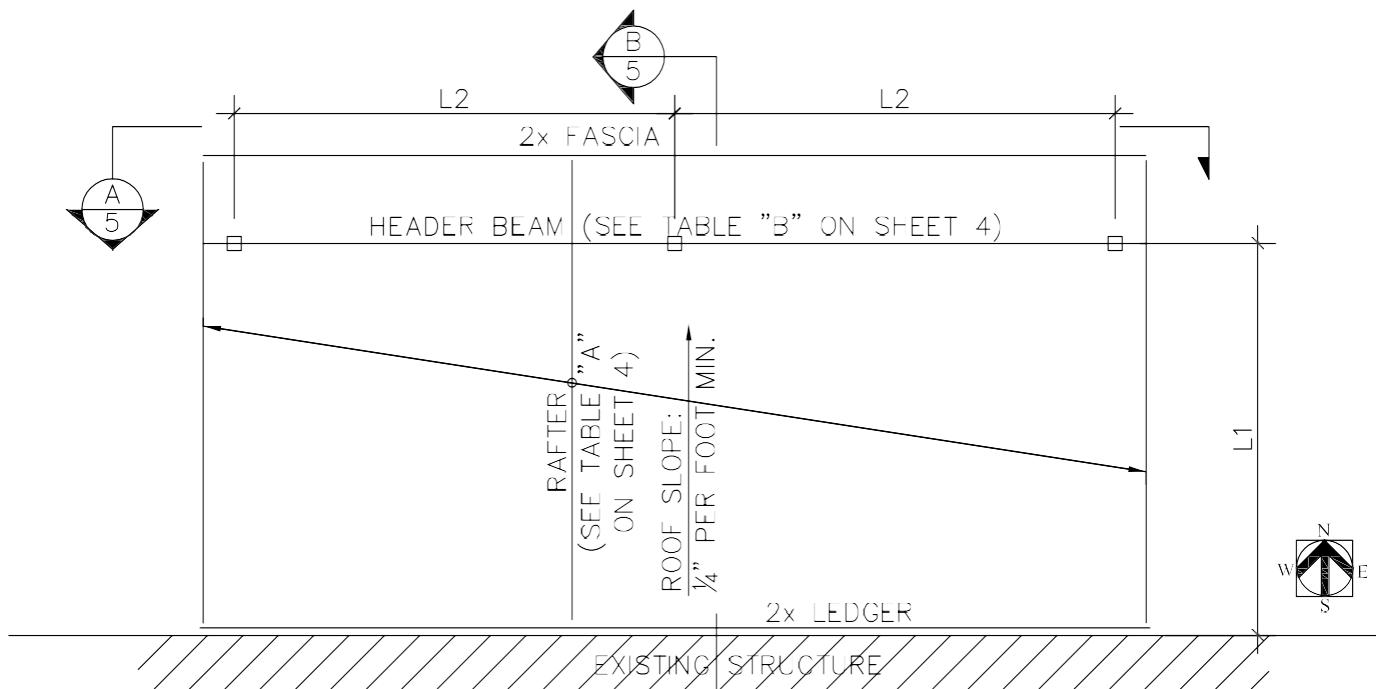
### **4. Elevations**

Contact the Planning Division for height restrictions and setbacks at (408) 778-6480 or [planning@morganhill.ca.gov](mailto:planning@morganhill.ca.gov).



## OPEN PATIO COVER SAMPLE PLOT PLAN

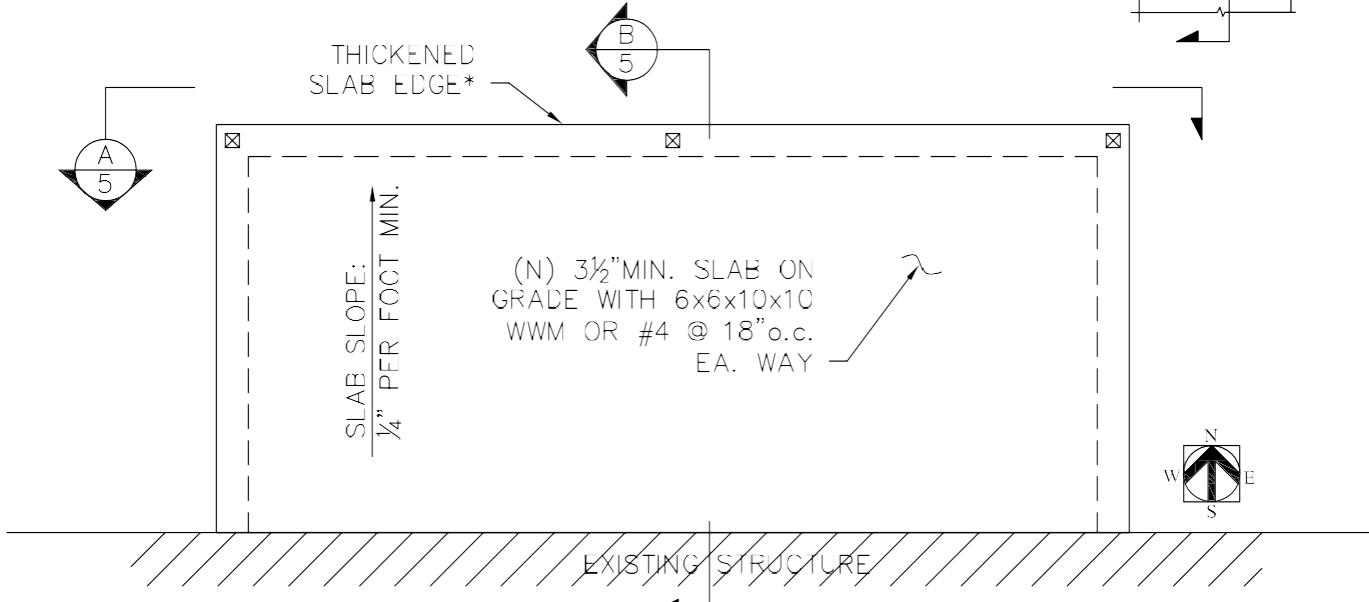
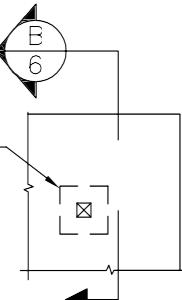
SHEET  
**1**  
OF 8 SHEETS



ROOF FRAMING PLAN

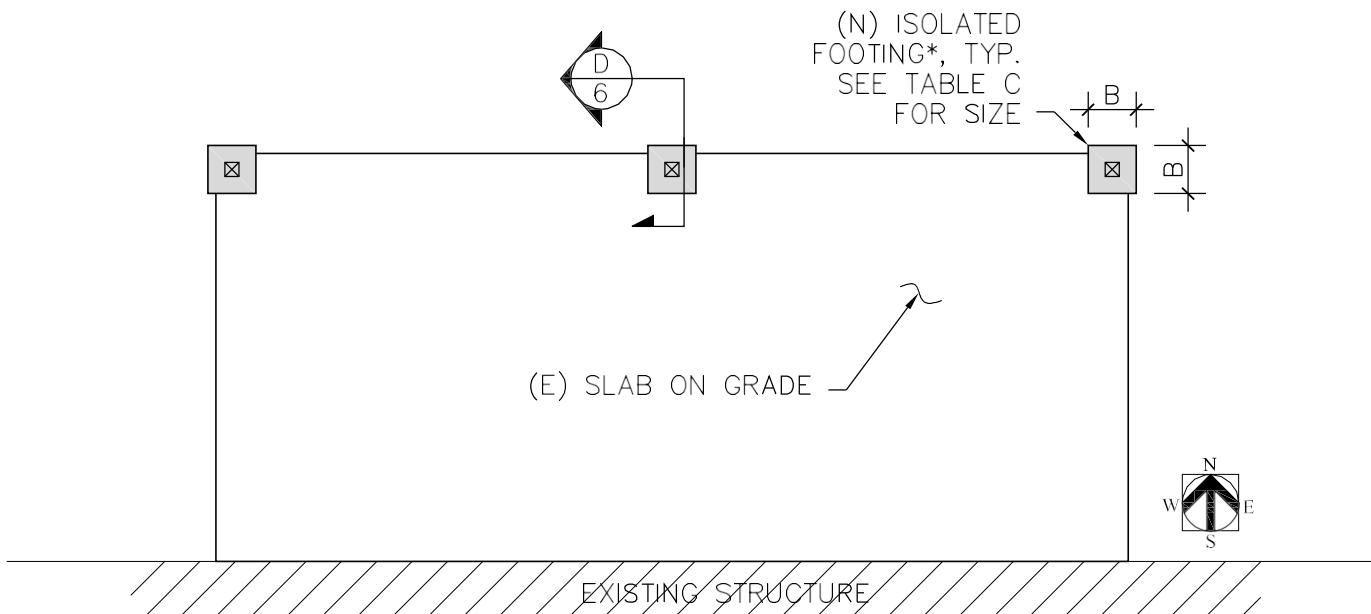
SCALE: N.T.S.

ISOLATED FOOTING\* IS  
REQUIRED WHEN POST IS  
NOT LOCATED AT THE  
THICKENED SLAB EDGE



FOUNDATION PLAN AT (N) PATIO SLAB

SCALE: N.T.S.

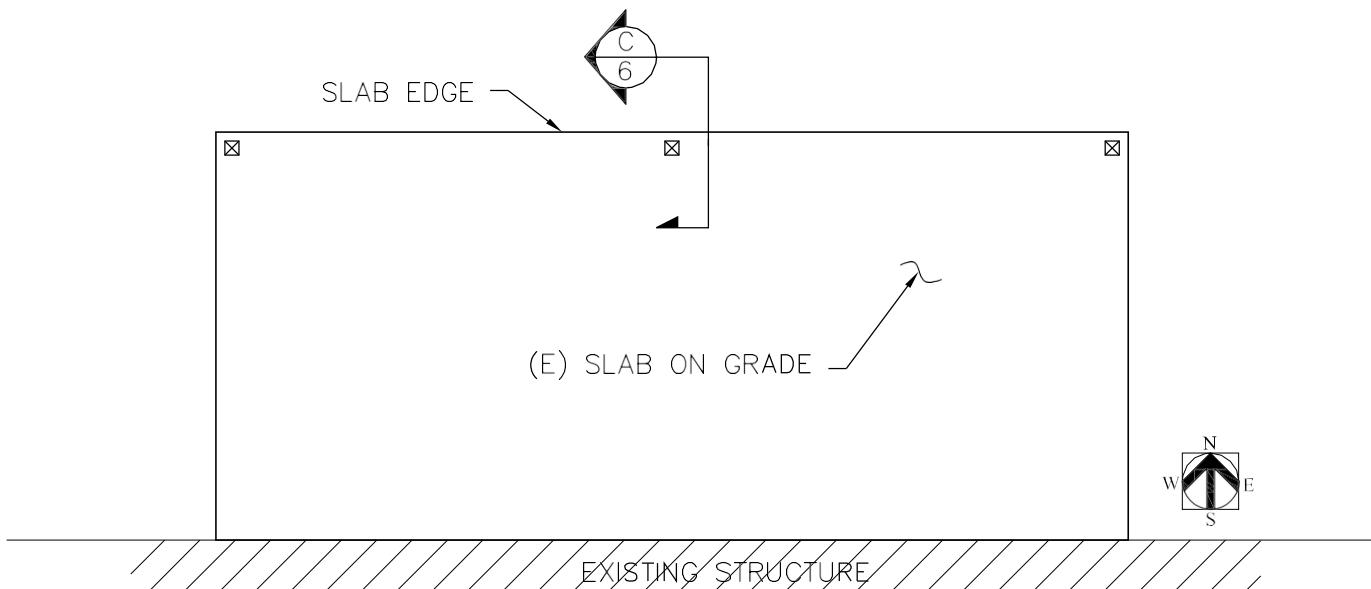


\* (N) FOOTING REQUIRED WHEN ANY ONE OF THE CONDITIONS IN DET. A OCCUR

**B** FOUNDATION PLAN AT (E) PATIO SLAB  
CASE 2: (N) FOOTING REQUIRED SCALE:N.T.S.

CONDITIONS FOR USING (E) SLAB FOR COLUMN SUPPORT:

1. MIN.  $3\frac{1}{2}$ " SLAB THK.
2. SLAB IN GOOD CONDITIONS
3. COLUMN LOAD DOES NOT EXCEED 750 LB ( $\sim 38$  SQ FT TRIB. AREA)



**A** FOUNDATION PLAN AT (E) PATIO SLAB  
CASE 1: NO FOOTING REQUIRED SCALE:N.T.S.

NOTES:

TABLE "A"		
RAFTER SPANS "L1" (DOUGLAS FIR LARCH #2 OR BETTER)		
SIZE	SPACING	SPAN
2x4	12"o.c.	10'-0"
	16"o.c.	8'-9"
	24"o.c.	7'-0"
	32"o.c.*	6'-3"*
2x6	12"o.c.	15'-9"
	16"o.c.	13'-9"
	24"o.c.	11'-3"
	32"o.c.*	9'-6"*
2x8	12"o.c.	20'-0"
	16"o.c.	18'-3"
	24"o.c.	14'-9"
	32"o.c.*	12'-9"*
2x10	12"o.c.	20'-0"
	16"o.c.	20'-0"
	24"o.c.	19'-0"
	32"o.c.*	16'-3"*
2-2x4 OR 4x4	24"o.c.	10'-0"
	32"o.c.*	8'-9"*
	48"o.c.*	7'-0"*
2-2x6 OR 4x6	24"o.c.	15'-9"
	32"o.c.*	13'-9"*
	48"o.c.*	11'-3"*
2-2x8 OR 4x8	24"o.c.	20'-0"
	32"o.c.*	18'-3"*
	48"o.c.*	14'-9"*

\* SPACING AND SPAN DENOTED BY ASTERISKS ARE FOR LATTICE TYPE PATIO COVER ONLY.

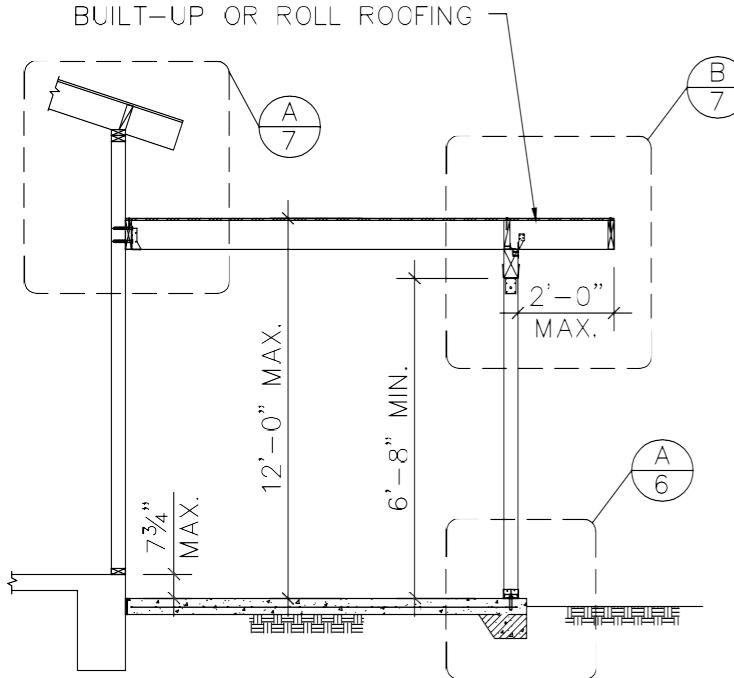
1. LAG SCREWS MUST FULLY ENGAGE A WOOD STUD OR RIM JOIST AND BE PROVIDED WITH APPROPRIATE WASHERS.
2. THESE TABLES ARE APPLICABLE TO OPEN PATIO COVER ONLY, NOT FOR ENCLOSED PATIO ENCLOSURE.
3. PATIO COVER IN HILLSIDE AREAS SHALL BE DESIGNED BY CALIFORNIA LICENSED ARCHITECT OR ENGINEER FOR A 3-SECOND GUST MINIMUM NOMINAL DESIGN WIND SPEED (V<sub>asd</sub>) OF 95 MPH AND EXPOSURE C
4. ALL WEATHER EXPOSED WOOD MEMBERS SHALL BE NATURALLY DURABLE OR PRESSURE TREATED.
5. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL.
6. WOOD POSTS, RAFTERS AND BEAMS SHALL BE DOUGLAS FIR LARCH NO. 2 OR BETTER.
7. CONCRETE COMPRESSIVE STRENGTH SHALL BE 2500psi MIN. AND REINFORCEMENT YIELD STRENGTH SHALL BE 40ksi MIN.
8. ALL METAL CONNECTORS AND HARDWARE SHALL MEET AN APPROVED STANDARD FOR ITS INTENDED USE AND BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS.
9. THIS GUIDELINE IS FOR MAX. COLUMN LOAD NOT TO EXCEED 750 POUNDS.
10. THE INFORMATION PROVIDED IN THIS DESIGN GUIDE CARRIES NO IMPLIED OR INFERRED GUARANTEE AGAINST FAILURE OR DEFECTS. BY USING THIS DESIGN GUIDE, THE CONTRACTOR/OWNER ACCEPTS THE FULL RESPONSIBILITY OF RISK. ALTERNATE DESIGN MAY BE USED WHEN PROVIDED WITH WET STAMPED AND SIGNED STRUCTURAL CALCULATIONS & DETAILS BY A CALIFORNIA LICENSED ENGINEER OR ARCHITECT.

RAFTER SPAN	TABLE "B"		FOOTING SIZE	THRU' BOLTS	LEDGER LAG SCREW			
	HEADER SIZE & SPANS "L2" (DOUGLAS FIR LARCH #2 OR BETTER)							
	HEADER							
	SPAN	SIZE						
UP 10 12'-0"	9'-3"	2-2x6 OR 4X6	12"SQ. x 12"DP.	(2)-1/2"Ø @ 1 1/2"o.c.	(1)-1/2"Ø x 6 1/2" LONG @ 16"o.c. STAGG.			
	12'-0"	2-2x8 OR 4X8	13"SQ. x 12"DP.	(2)-5/8"Ø @ 2 1/2"o.c.				
	15'-6"	2-2x10 OR 4X10	14"SQ. x 12"DP.	(2)-5/8"Ø @ 3 1/2"o.c.				
	18'-0"	2-2x12 OR 4X12	15"SQ. x 12"DP.	(2)-3/4"Ø @ 4 1/2"o.c.				
12'-1" IC 20-0"	7'-0"	2-2x6 OR 4X6	14"SQ. x 12"DP.	(2)-1/2"Ø @ 1 1/2"o.c.	(2)-3/8"Ø x 4 1/2" LONG @ 16"o.c.			
	9'-3"	2-2x8 OR 4X8	15"SQ. x 12"DP.	(2)-5/8"Ø @ 2 1/2"o.c.				
	12'-0"	2-2x10 OR 4X10	16"SQ. x 12"DP.	(3)-1/2"Ø @ 2 1/2"o.c.				
	14'-6"	2-2x12 OR 4X12	18"SQ. x 12"DP.	(3)-5/8"Ø @ 3"o.c.				

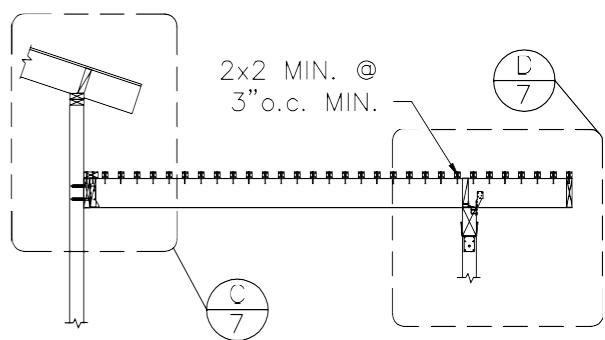
**OPEN PATIO COVER  
SAMPLE SPAN TABLE**

**SHEET  
4  
OF 8 SHEETS**

$\frac{1}{2}$ " PLYWOOD WITH 8c @ 6"o.c.  
E.N. & @ 12"o.c. F.N. WITH  
BUILT-UP OR ROLL ROOFING



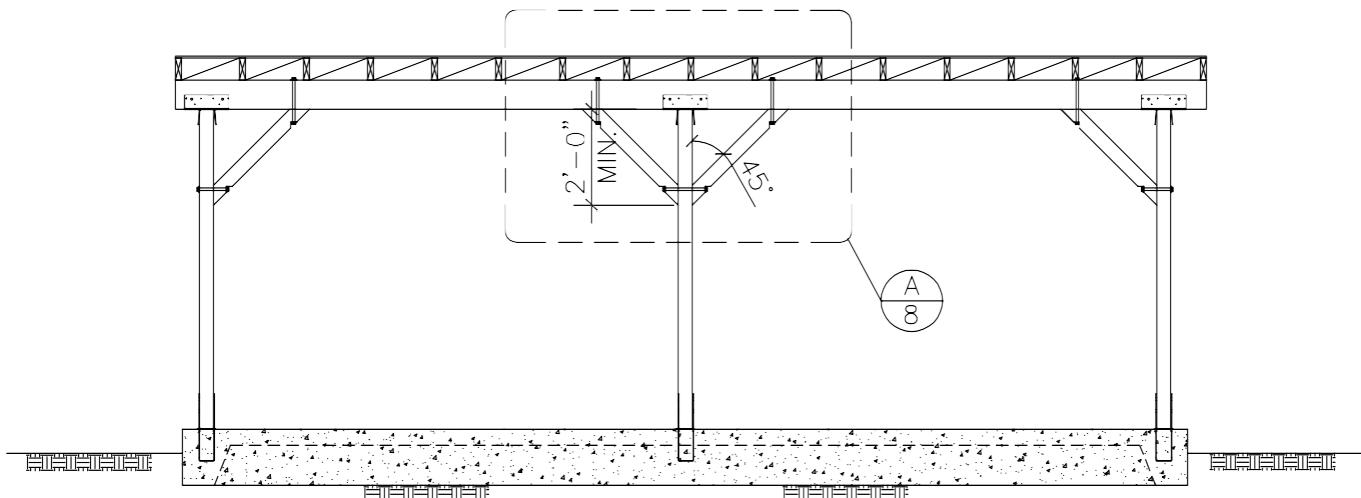
SOLID COVER OPTION



LATTICE COVER OPTION

(B) PATIO COVER SECTION

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

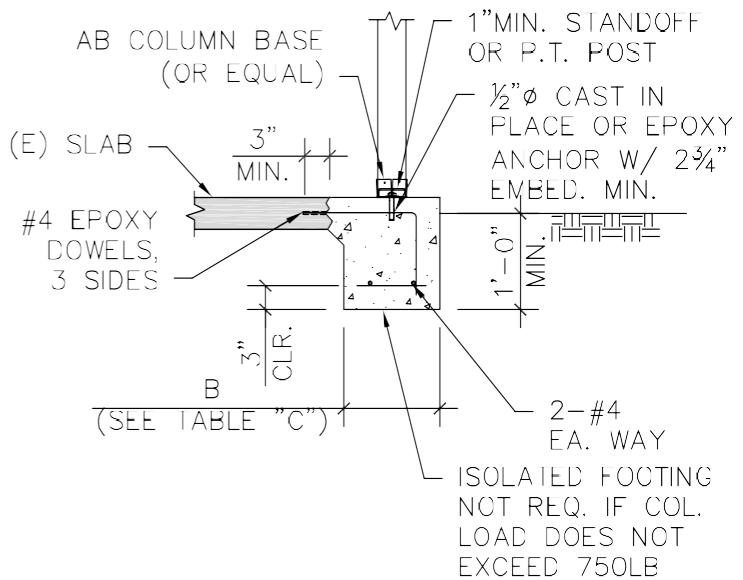
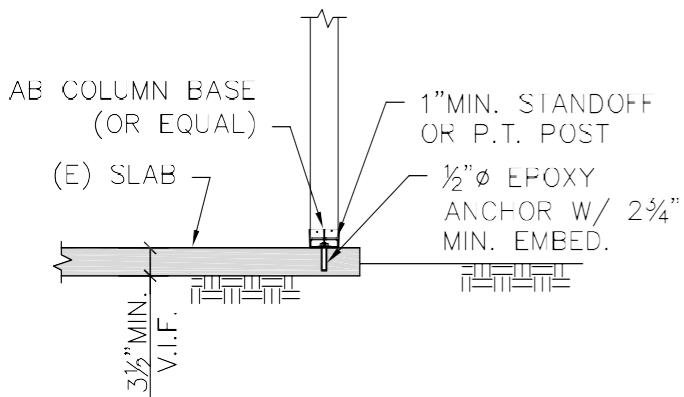


(A) PATIO COVER ELEVATION

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

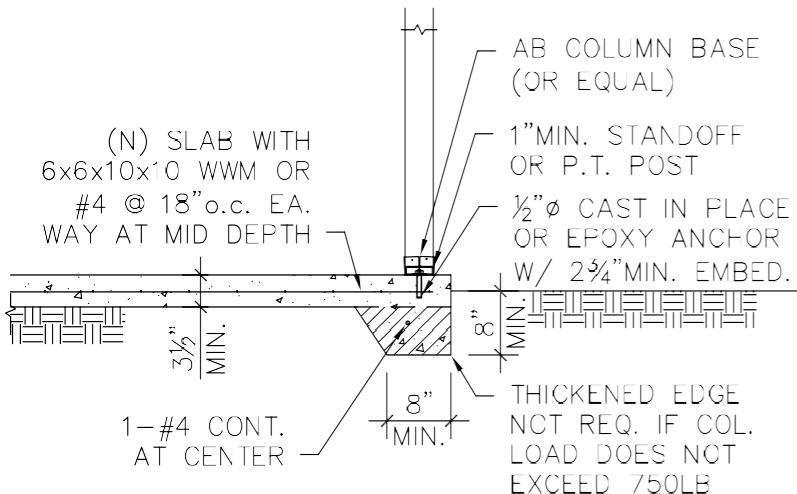
## OPEN PATIO COVER SAMPLE SECTIONS AND ELEVATION

SHEET  
5  
OF 8 SHEETS

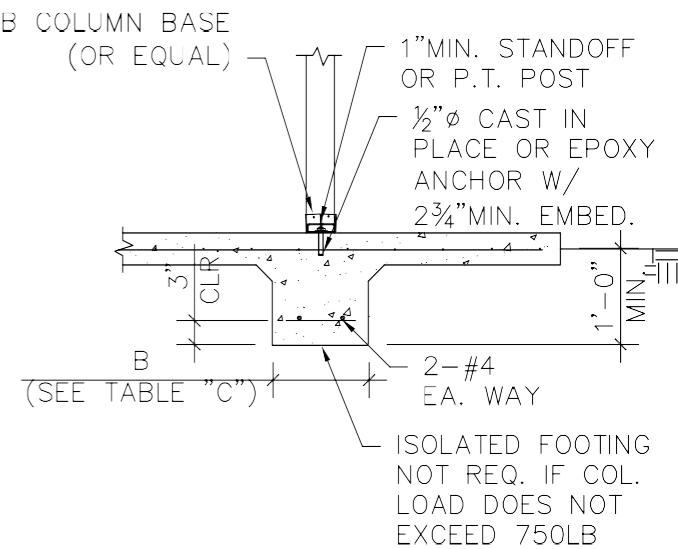


**C** (N) POST TO (E) SLAB DETAIL SCALE: 1/2" = 1'-0"

**D** (N) ISOLATED FOOTING AT (E) SLAB DETAIL SCALE: 1/2" = 1'-0"



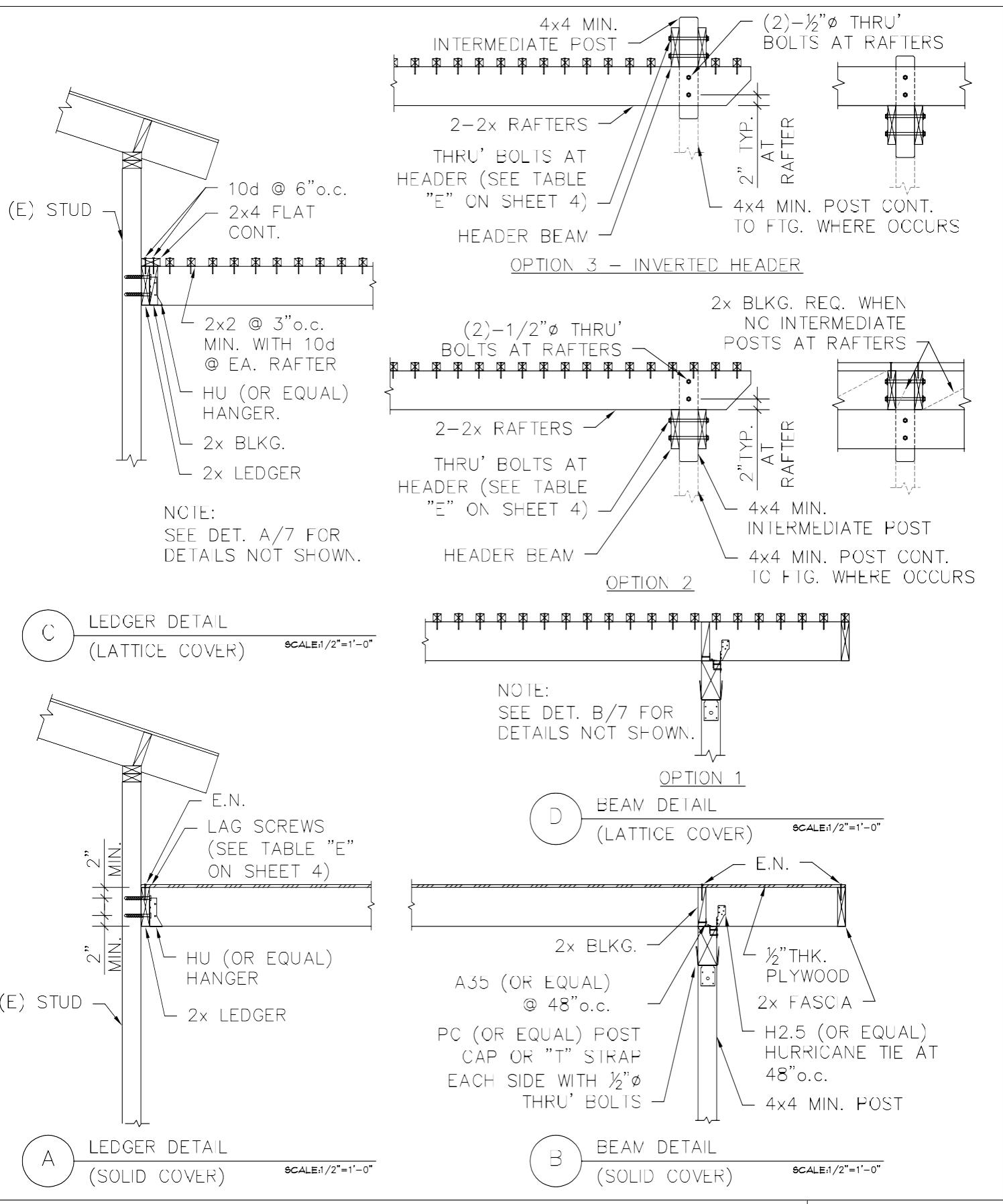
**A** (N) PATIO SLAB THICKENED EDGE DETAIL SCALE: 1/2" = 1'-0"

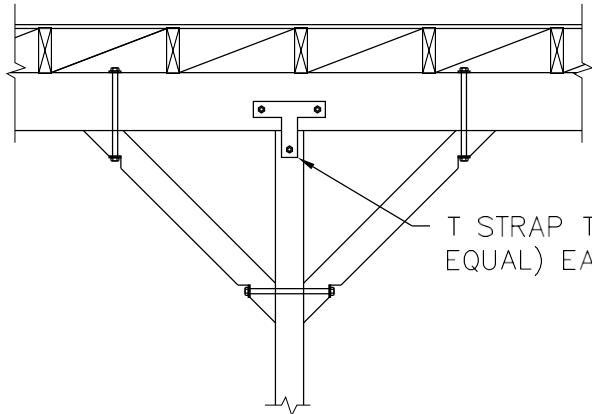


**B** (N) ISOLATED FOOTING IN (N) PATIO SLAB SCALE: 1/2" = 1'-0"

## OPEN PATIO COVER SAMPLE DETAILS

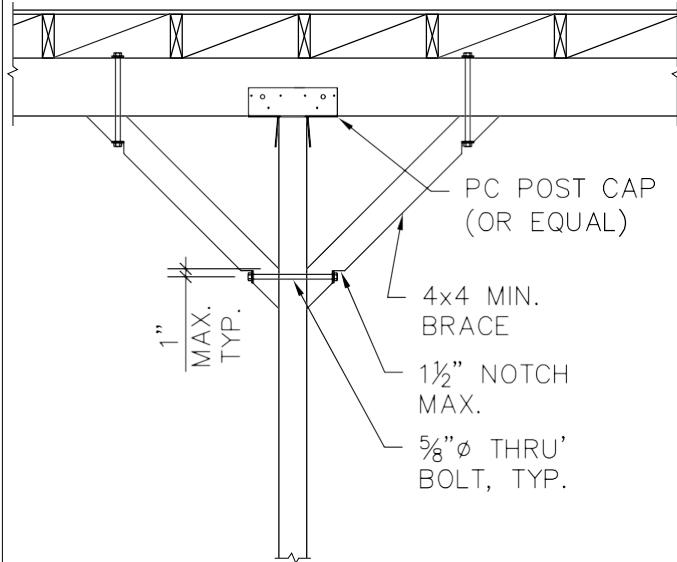
**SHEET  
6  
OF 8 SHEETS**





T STRAP TIE (OR EQUAL) EACH SIDE

T STRAP TIE OPTION

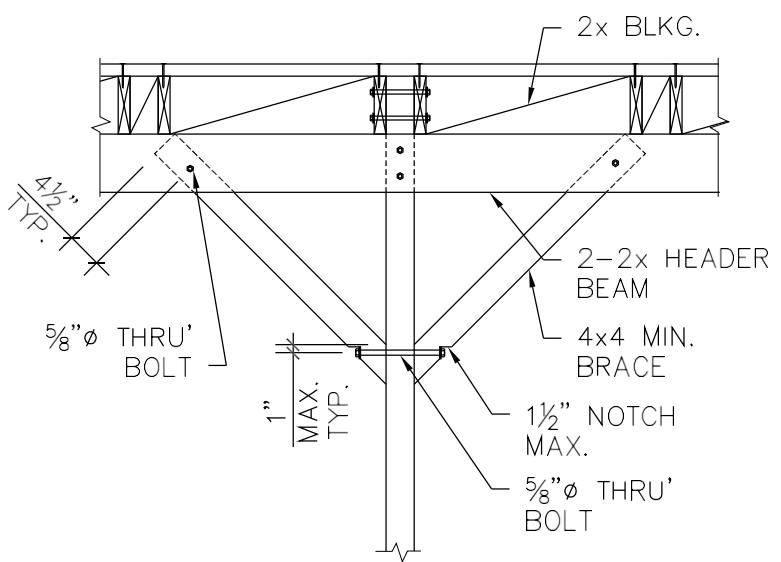


PC POST CAP (OR EQUAL)

4x4 MIN.  
BRACE

1 1/2 NOTCH  
MAX.

5/8" Ø THRU'  
BOLT, TYP.



ALTERNATIVE OPTION



BRACE DETAIL

SCALE: 1/2" = 1'-0"