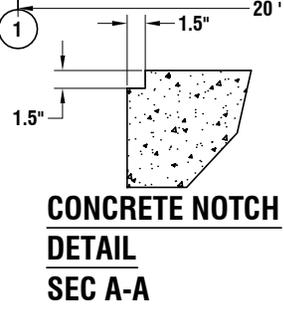
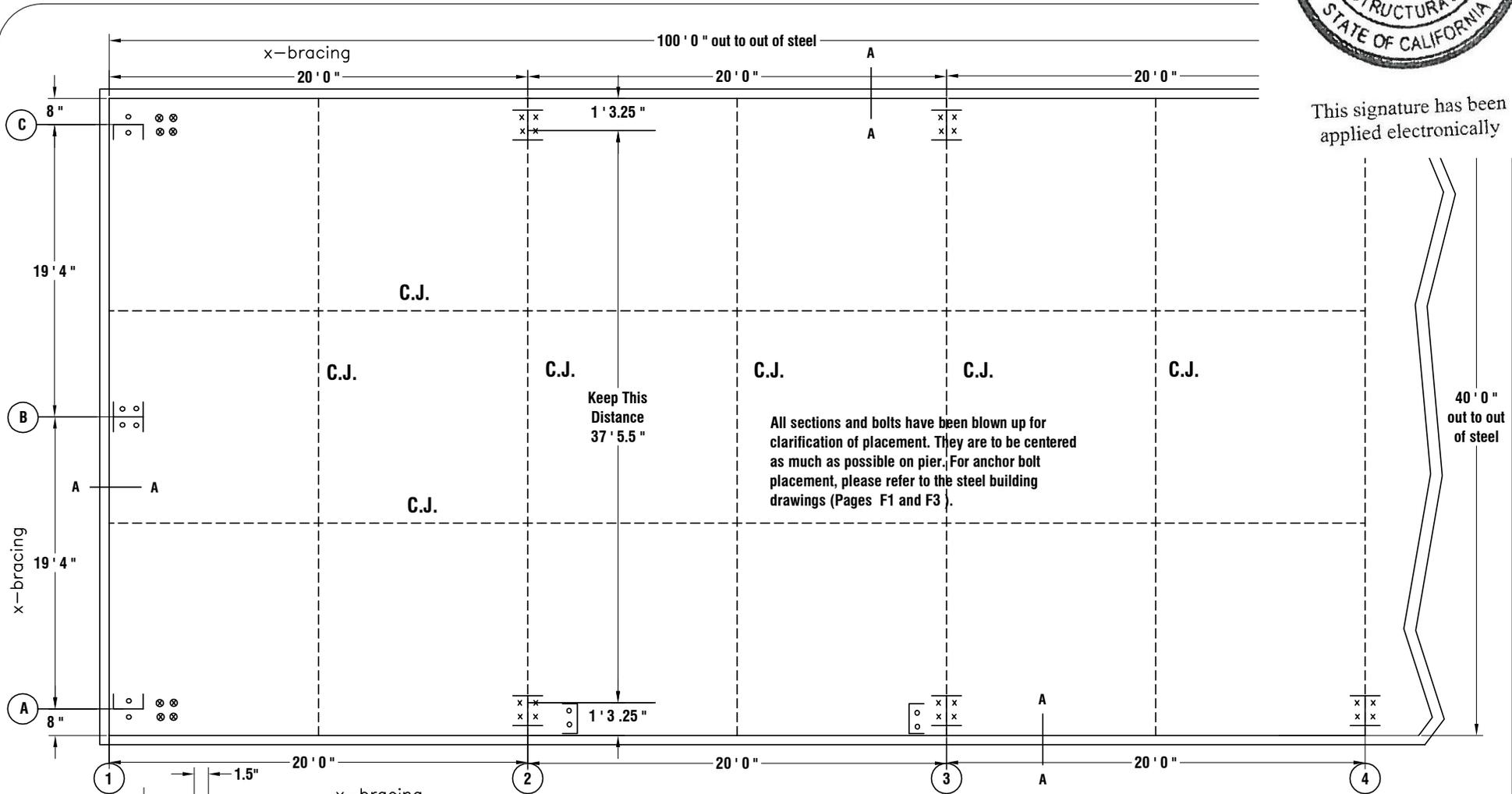




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BOLTS: o - 0.635" diam.  
x - 0.75" diam.  
⊗ - 1.00" diam.

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San Martin, CA.

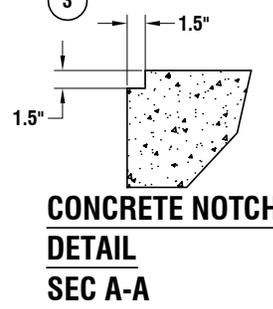
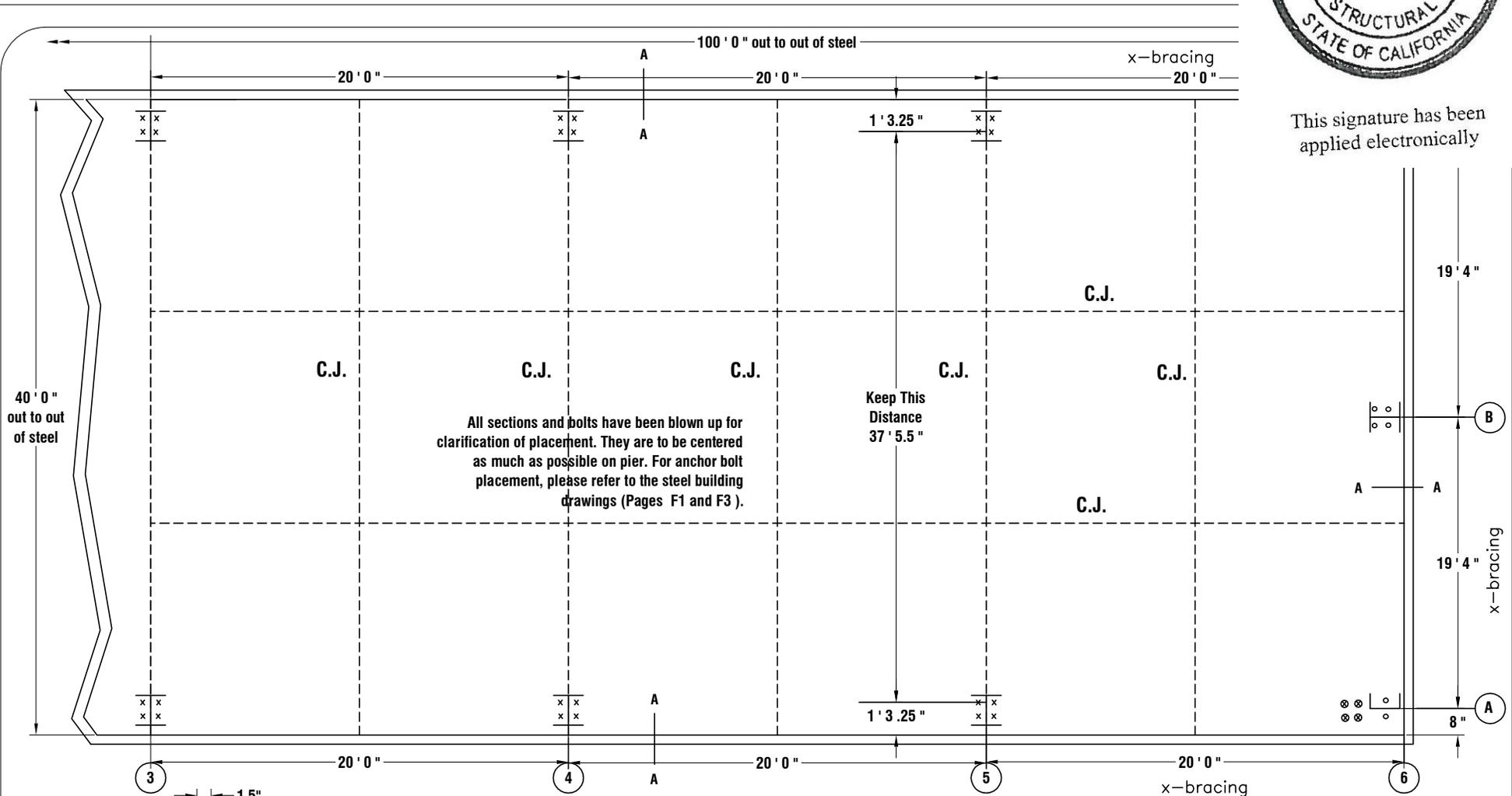
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**C.J. - Control Joints to minimize cracking. (0.5" saw cut)**

FOOTING	
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**C.J. - Control Joints to minimize cracking. (0.5" saw cut)**

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### CONCRETE REBARS

BAR DESIG. # (OLD STD.)	NOMINAL DIAMETER	NEW DESIGN. NUMBER
#3	0.375"	10
#4	0.500"	13
#5	0.625"	16
#6	0.750"	19
#7	0.875"	22
#8	1.000"	25
#9	1.128"	29
#10	1.270"	32
#11	1.410"	36
#14	1.693"	43
#18	2.257"	36

### WELDED WIRE MESH DESIGNATION

OLD DESIGNATION	NEW DESIGNATION
6 x 6 - 6 ga x 6 ga	6 x 6(spacings) - W2.9 x W2.9



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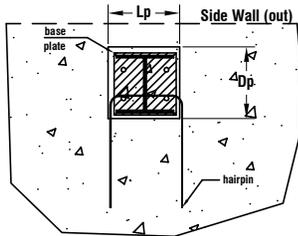


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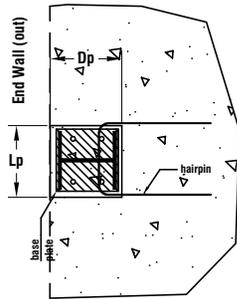
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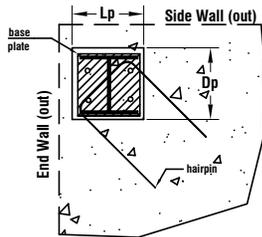
FOOTING	rebars
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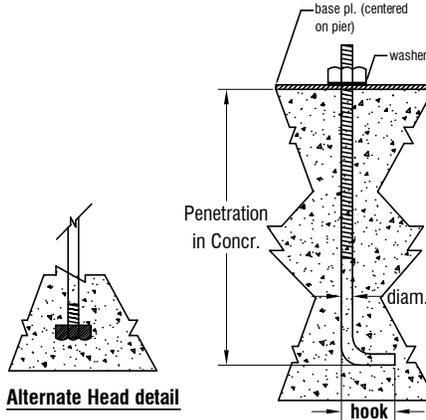
**SIDE WALL HAIRPIN DETAIL (TYP.)**  
16 rebar -72" long (typ.)



**END WALL HAIRPIN DETAIL (TYP.)**  
16 rebar -60" long (typ.)



**CORNER HAIRPIN DETAIL (TYP.)**  
16 rebar -60" long (typ.)



**Bolt detail-Steel Grade A307 - typ.**

ELEMENT	CONC. COVER
FOOTING	3" TYP.
PIER	2" TYP.

**BOLT DETAILS FOR RIGID FRAMES, PORTAL FRAMES AND WIND COLUMNS**

Diam.	Penetration in Concr.	Bolt Hook
0.75"	18.0"	3.0"/Alt.
1.00"	18.0"	3.0"/Alt.
0.625"	18.0"	3.0"/Alt.

**BOLT DETAILS FOR NON-STRUCTURAL APPLICATIONS**

Diam.	Penetration in Concr.	Bolt Hook
0.625"	6.0"	Not Req.
0.75"	6.0"	Not Req.

**SLAB-ON-GRADE SPECIFICATIONS**

6" (Six Inch) Thick Concrete with 6" x 6" MW 18.7 WWF on 6 mil Polyethylene Sheet Barrier with a minimum 6" thick layer of 0-0.75" crushed gravel, compacted to 95% STANDARD PROCTOR DENSITY on UNDISTURBED SOIL.

In order to minimize surface shrinkage cracks in the slab, provide control joints at every 20' approximately (0.5" saw cut).

Estimated Frost Depth : 1' 0"  
Confirm with Local Authorities.



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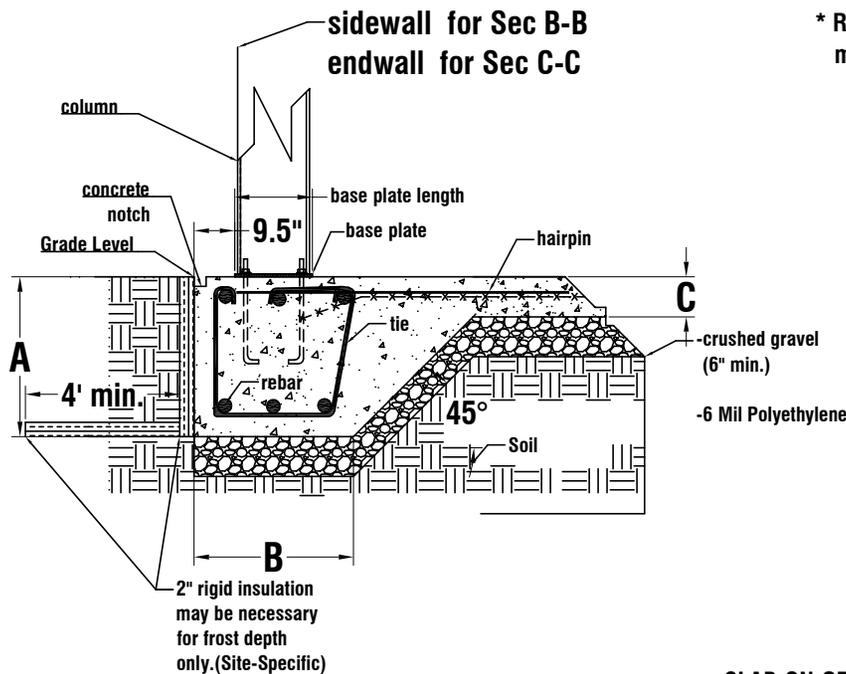
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FOOTING	slab details
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**SCHEDULE & DIMENSIONS**

Section	A	B	C	Rebar	Tie	Tie Spacing	Base Pl. Length	Base Pl. Width
B-B	30.0"	33.0"	6.0 "	6- 19	10	24.0"	*	*
C-C	30.0"	33.0"	6.0 "	6- 19	10	24.0"	*	*

\* Refer to the anchor bolt drawings issued by the steel building manufacturer (Pages F1 and F3) .



Project : San Martin , California Building Width : 40' Building Length : 100'  
 Bay Spacing for Frames : 20'  
 Use of Building : Commercial Hazardous/Corrosive Materials : None Allowed  
 Concrete 28 day Strength : 2500 psi  
 Steel Grade for Concrete Reinforcement : 60 Ksi (420 Mpa)  
 Steel Grade for Threaded Anchor Bolts : A307  
 Minimum Allowable Soil Bearing Capacity Required : 1500 psf (75 Kpa)  
 Foundation must have adequate drainage provided.

**SLAB-ON-GRADE SPECIFICATIONS**

6" (Six Inch) Thick Concrete with 6" x 6" MW 18.7 WWF on 6 mil Polyethylene Sheet Barrier with a minimum 6" thick layer of 0-0.75" crushed gravel, compacted to 95% STANDARD PROCTOR DENSITY on UNDISTURBED SOIL.

In order to minimize surface shrinkage cracks in the slab, provide control joints at every 20' approximately (0.5" saw cut) .



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Float. Slab	floating slab
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### CAST-IN PLACE CONCRETE

1. Conform to the requirements of ACI-318, ACI-211 for concrete mix components, placing, curing, and testing.
2. Cement: Normal (Type 10) Portland Cement conforming to ACI-318.
3. Form-work : Conforming to ACI-318 Treat all form-work surfaces in accordance with the requirements of ACI-318 and ACI-347.
4. All concrete shall have a maximum aggregate of 1" ,a minimum compressive 28 day strength of 2500 psi ( 25 MPa) , and a slump at discharge of 3" +/- 1".No more than 1 gallon of water per cubic yard , shall be added at the site without the approval of the engineer.
5. Reinforcing steel for all reinforcement use deformed bars of Grade 420 MPa (60 Ksi). Comply with the requirements of ACI-318 and ASTM- A615 for all reinforcement.
6. Conform to ASTM-A185 requirements for welded wire fabric. Minimum yield strength: 65 Ksi ( 450 MPa).
7. Dowel all walls and piers to their respective footings, or supports, using dowels of same size, and spacing as the vertical reinforcing steel in the walls, and piers, unless noted otherwise.
8. Detail and bend all reinforcing steel as outlined in the latest issue of the Local Reinforcing Steel Manual of standard practice.
9. Lap continuous reinforcing steel 30 bar diameters at splices and corners, unless otherwise noted.
10. Unless otherwise noted, provide the following clear cover to reinforcing steel:
  - a) Formed piers not exposed to soil and weather : 1.5"
  - b) Formed concrete exposed to soil and weather : 2"
  - c) Concrete on skim slab : 2"
  - d) Concrete placed on soil : 3"
  - e) Top of slab-on-grade to welded wire fabric : 1.5"
11. Air-entrain all concrete exposed to the elements, plus all slabs-on -grade to the requirements of ACI-318 and ACI-302.
12. Provide 0.5" expansion material where slab-on-grade abuts walls, columns, piers, and the vertical face of other structural elements, unless noted otherwise.
13. Chamfer all exposed corners of concrete piers 0.75" x 0.75", to avoid corner damage.
14. Slab on Grade Specifications : 6" thick concrete slab-on-grade, with 152 x 152 - MW 18.7/MW 18.7 WWF( 6" x 6" - 6/6 WWF) on 6 -mil polyethylene sheet barrier, with a minimum of 6" type B granular non-organic backfill, compacted to 98 % standard proctor density, on undisturbed soil.
15. Control joints for slabs to minimize concrete cracking , (C.J.) are recommended along approximately 20' grid lines. Provide 0.5" deep saw cut as per Foundation plan.
16. Install steel frames after the slab has been completed.

### FOUNDATION

1. The foundations have been designed for an assumed minimum allowable soil-bearing capacity of 1500 psf. (75 Kpa) .Found all footings on natural undisturbed inorganic soil.For any other type of soil, the customer shall provide soil reports indicating the allowable net soil-bearing capacity. For foundations on solid rock, remove all fragmented rocks to ensure a solid surface for the foundation to sit on. Drill holes in rock, and use concrete epoxy jacket to anchor rods in place.
2. If the safe net bearing soil pressure is other than the assumed value of 1500 psf (75 Kpa), the design engineer is to be informed , and additional cost for the design and materials may apply.
3. Remove any soft or frozen soil material encountered under footings, and replace with compacted structural fill. If soil under footings has been disturbed ,remove all loose soil prior to placing concrete.



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4. Install the underside of all exterior wall and column footings, below frost line, and the finished new grade. Protect all footings, walls, slab-on grade, and adjacent soil against freezing and frost-action at all times during construction. Refer to local building code for the required frost depth. In case of a floating slab foundation type, provide sufficient insulation underneath slab, and around the building perimeter, to prevent frost damage to the foundation.
5. Center piers under the column centers, unless otherwise noted.
6. If soil softening occurs before footing concrete can be poured, or as required by the soil report, construct the footings on a level 2" thick skim slab having 2000 psi concrete strength at 28 days, placed immediately after the completion of the excavation.
7. Locate footing elevations as required to accommodate buried electrical or mechanical services. Protect existing and adjacent footings from being undermined, and overloaded, by limiting the slope of the line between adjacent footing elevations to 7" to 10" maximum, having a maximum rise of 2'-0". Verify local required frost depth to ensure that the bearing surface of the foundation is located below the level of potential damage resulting from frost heave of soil, and ad-freezing of the concrete. Proper rigid insulation may be required, in accordance to local building codes.
8. Backfill under slab-on grade granular non-vegetative, type B backfill material, compacted in 6" maximum lifts to 98% standard proctor density at optimum moisture content.
9. The slab-on-grade may only be placed on non-vegetative fill. The engineer must examine all fill material. Should the fill be unacceptable, remove this fill down to undisturbed soil, and replace with compacted granular, non-vegetative type B backfill, compacted in 6" maximum lifts, to 98% standard proctor density, at optimum moisture content.
10. Do not place backfill against cantilevered retaining wall, until the concrete has achieved its full 28-day strength.
11. Provide 0.5" expansion joint with filler, where indicated.
12. Landscaping around the entire foundation shall include a 5' wide strip of inert ground cover. Irrigation shall be designed so as not to discharge water on this strip. The slope of the ground surface shall provide adequate drainage away from the building foundation.
13. The foundation design engineer is not the inspecting engineer at the site.

GENERAL

1. Use only the latest issues of any government building codes, standards, or regulations mentioned in the following notes.
2. Except where noted otherwise, provide all materials and workmanship in accordance with the requirements of the latest regulations of the appropriate building code,
3. Verify all dimensions, levels, and elevations provided by the structural drawings with other contract documents, and report any inconsistencies to the engineer, before proceeding with the work.
4. Read the structural drawings in conjunction with specifications, and other contract drawings.
5. Specific notes and details shown on the structural drawings, take precedence over the general notes, and typical details.
6. Co-ordinate with all other trades, where such trades affect the structure.
7. The structural design of the building is based on the full interaction of all its components and parts. No provisions have been made for site-specific conditions. Adequate provisions for construction conditions must be maintained to keep the structure plumb and level, through all its phases.
8. No holes, other than those specified by the engineer may be drilled in any members.
9. Lateral pressure of soil against retaining walls (if applicable), has been calculated for a pressure of 46.00 psf, (assuming drained material).
10. Site Inspection and soil testing (if required by the municipality) is not provided by Toro Steel Buildings nor the foundation design engineer.
11. This foundation has been designed based on the reactions provided by the building manufacturer.



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