

Prestige
TILT-UP
CONSULTING, INC.

Prestige Tilt-Up Consulting, Inc.

Masonry Wall Bracing Design

Contractor: Brick Works Construction

Dealer: White Cap

Project: Eagle Mountain

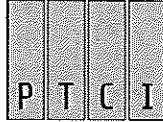
Location: 1100 West McLeroy Saginaw, Texas 76179

Job No. (PTCI): 132-M

Salesperson: Jerry Jetton

NOTE: The panel contractor must review the project plans and specifications to ensure that the panel dimensions shown in the Prestige Tilt-Up Consulting booklet are correct prior to casting the panels.

***Panel Contractor must also refer to manufacturing product's handbook for instructions and information on proper use of products prior to construction of precast concrete Tilt-Up wall panels.**



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GENERAL NOTES

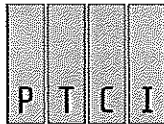
1. Structural design is based on the International Building Code, 2006 Edition.
2. The contractor shall verify dimensions, conditions and elevations before starting work. The engineer shall be notified immediately if any discrepancies are found.
3. The typical notes and details shall apply in all cases unless specifically detailed elsewhere. Where no detail is shown, the construction shall be as shown for other similar work and as required by the building code.
4. These calculations are limited to the structural members shown in these calculations only. The connection of the members shown in these calculations to the existing structure shall be by others.
5. The contractor shall be responsible for compliance with local construction safety orders. Approval of shop drawings by the architect or structural engineer shall not be construed as accepting this responsibility.

STRUCTURAL STEEL

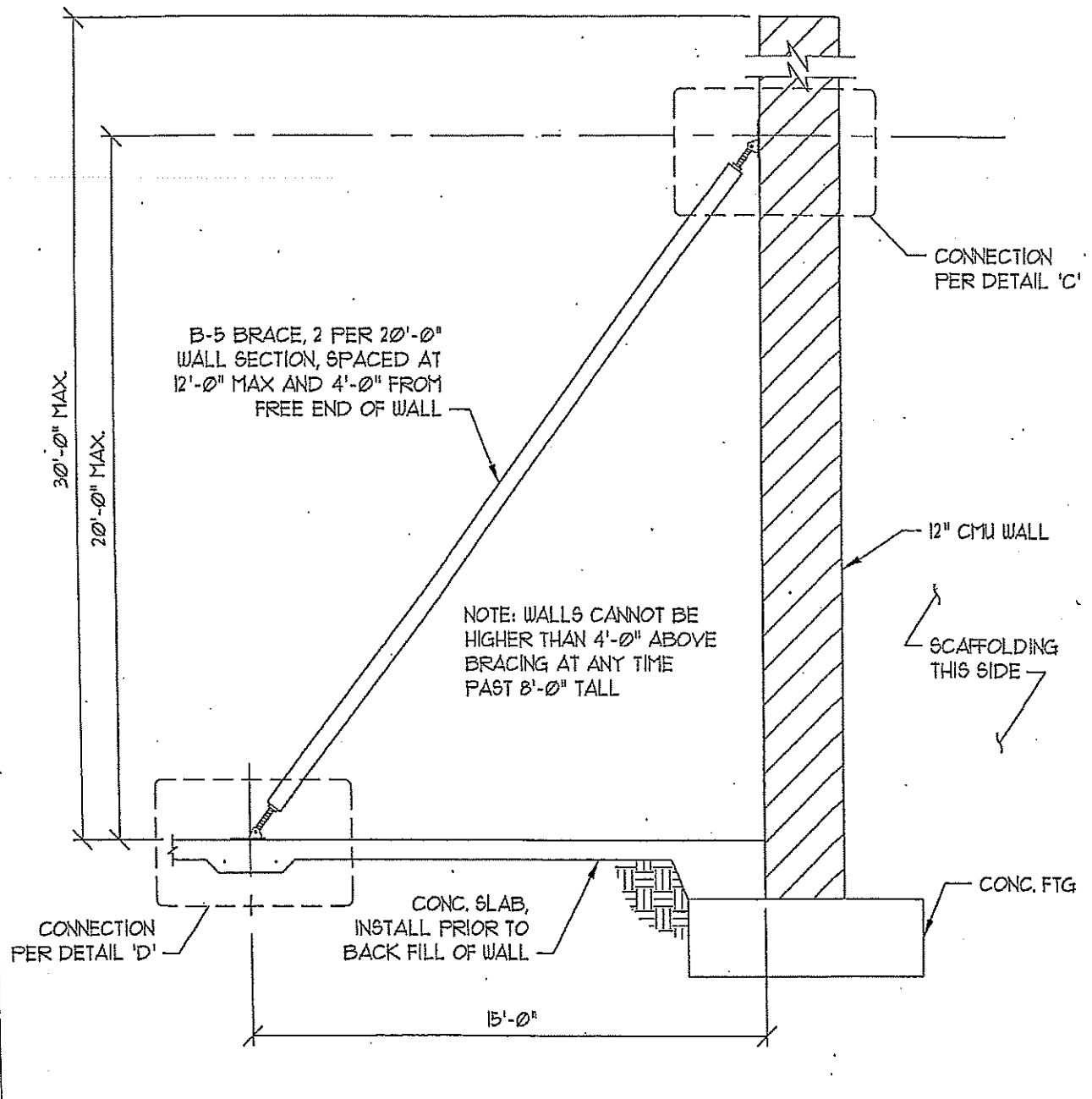
1. All structural steel angles and plates shall be per ASTM A36.
2. All anchor bolts and threaded rods shall be per ASTM A307, u.n.o.
3. All welding shall be performed with E70XX low hydrogen electrodes in an approved fabrication shop.

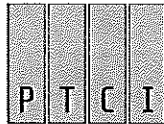
BRACING AND SHORING

1. Bracing shall be Dayton Superior B-5, u.n.o.

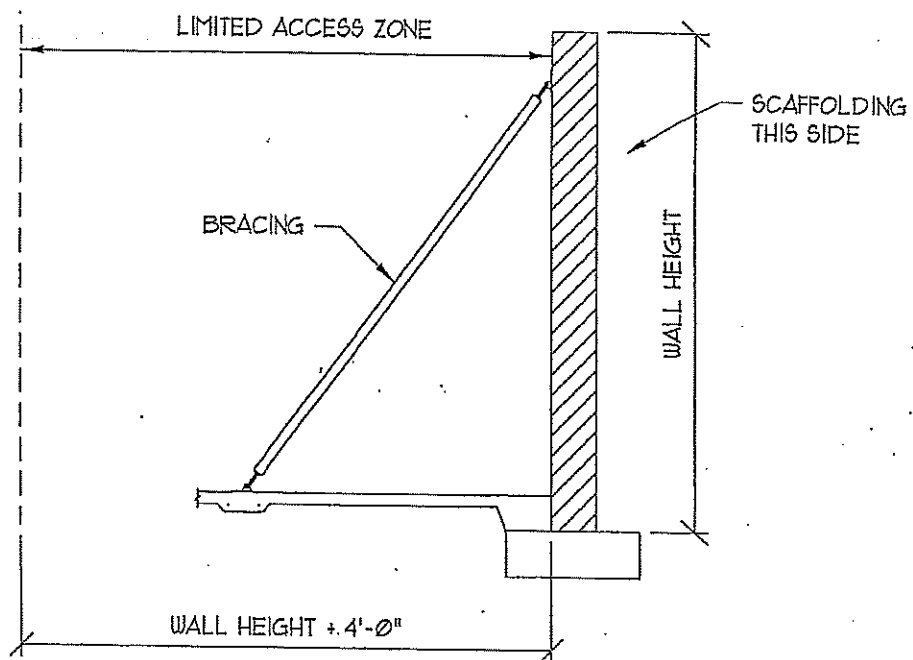


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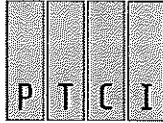




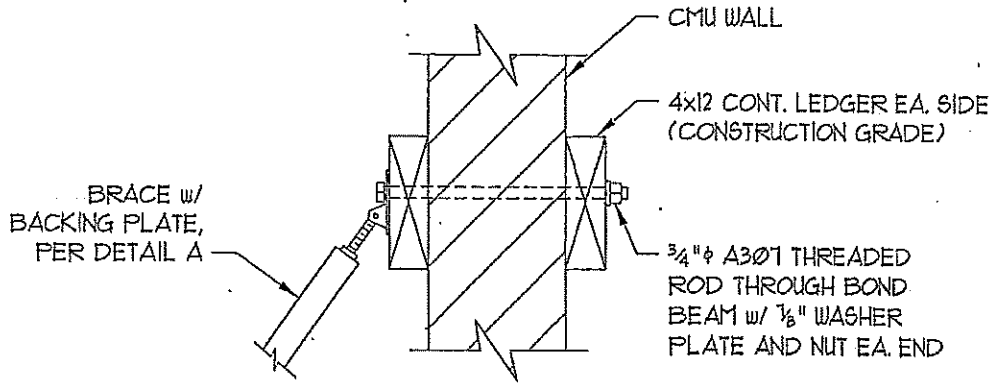
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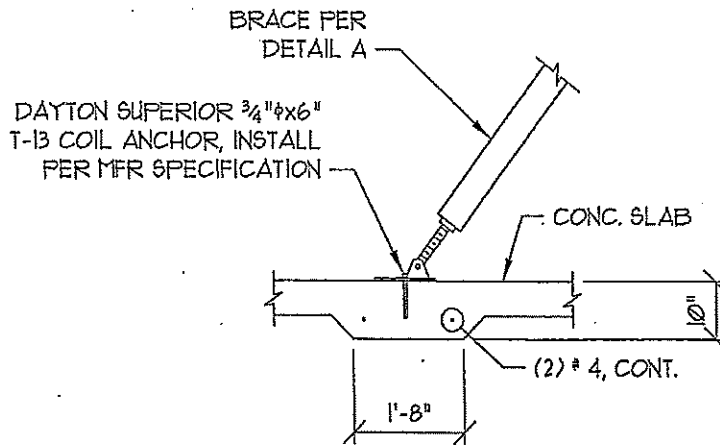
1. ONLY EMPLOYEES OF MASONRY CONTRACTOR ALLOWED IN LIMITED ACCESS ZONE UNTIL DIAPHRAGMS ARE INSTALLED AND TEMPORARY BRACING & SHORING REMOVED.
2. THE ZONE SHALL BE EVACUATED WHEN WINDS EXCEED 35 mph. WORKERS SHALL NOT BE PERMITTED BACK UNTIL BRACING CONNECTIONS ARE RE-TIGHTENED.



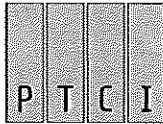
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DETAIL C



DETAIL D

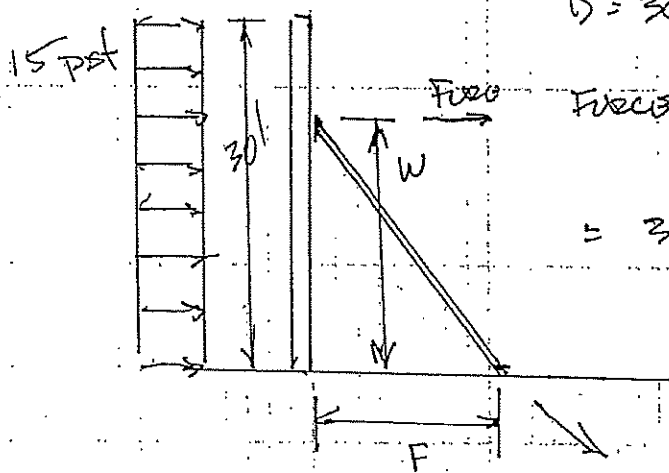


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WALL BRACING

TRY B-5 HEAVY DUTY BRACE.

(2) MINIMUM FOR 20'-0" SECTION

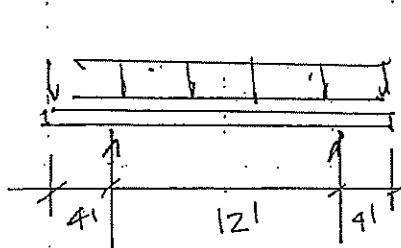


$$D = 30' \quad W = 20' \quad F = 15'$$

$$F_{WALL} = \frac{15 \text{ psf} \left(\frac{20'}{2} \right) (20' + 10')^2}{2 (20')} = 3,330 \text{ K}$$

USE: B-5
F ALLOW = 4,125 K

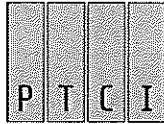
LEDGERS:



$$W = 3,330 \left(\frac{2}{20} \right) = 333 \text{ plf}$$

$$M^- = \frac{333(4')^2}{2} = 2,7 \text{ K-ft}$$

$$M^+ = 333 \left[\frac{(12')^2}{8} - \frac{(4')^2}{4} \right] = 4,7 \text{ K-ft}$$



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For $F_b = 1500$

$$S_y = A_1 F_{k-FT} (12") / 1500 = 38 / 2 \text{ SIDES} = 19$$

USE: 4X12 CONSTRUCTION GRADE GA. SIDG

THROUGH BURR

try $\frac{1}{2}$ " A307 $T_{allow} = 22.5 \text{ ksi} (.20) = 4.5 \text{ K}$

OK

Anchor in concrete:

USE T-6 OR

$\frac{3}{4}$ " TITAN HD