



#4 REINFORCING BAR @

2'-0"

MINIMUM\*

12" O.C. EACH WAY

4"

4"

- CONCRETE- This concrete design conforms to the building codes listed on page 1.
   All exterior concrete shall be air-entrained from a minimum 4% to maximum 8%.
   Admixtures containing calcium chlorides shall not be added to the concrete.
   Concrete shall have a 28-day cure yielding a minimum strength of 3000 psi.
- 2. REINFORCING BARS- Reinforcing bars shall conform to ASTM A615, Grade 60. Lap splices shall be a minimum of 20" in length for #4 bars
- 3. <u>REINFORCING MESH</u>- Welded Wire Fabric (WWF) shall conform to ASTM A185 and shall be lapped a minimum of 8" at splices.
- 4. <u>CONCRETE SLABS</u>- Slabs-on-grade shall be built over a 4" layer of #57 stone and over a 6 mil polyethylene vapor barrier.
- 5. <u>SUBGRADE FOR FOOTINGS</u>- Footings shall bear on natural undisturbed soil (or tested control fill) with a min. allowable bearing capacity of 2000 pounds per sq. ft.
- 6. SUBGRADE FOR SLABS- Slab-on-grade shall bear on natural undisturbed soil (or tested control fill) with a min. allowable bearing capacity of 2000 pounds per sq. ft. If slabs-on-grade are less than 2'-0" above acceptable undisturbed soil, they may be constructed on up to 2'-0" of compacted aggregate, such as #57 stone, in lieu of tested control fill or being designed as structural slabs.
- 7. CONCRETE SLAB FINISHES- Concrete finish shall be Smooth-Trowel Class A (flat within 1/8" in 10'-0") for foundation pad; and shall be Broom-Finish Class B (flat within 1/4" in 8'-0") for optional perimeter slabs. Foundation pad surface shall be level. Optional perimeter slab shall slope 1" away from building.
- CONSTRUCTION- Concrete materials and methods of construction shall conform to the building code listed on pg. 1. Sawed crack control joints shall be cut in concrete between 8 and 16 hours after concrete is placed.

#57 STONE

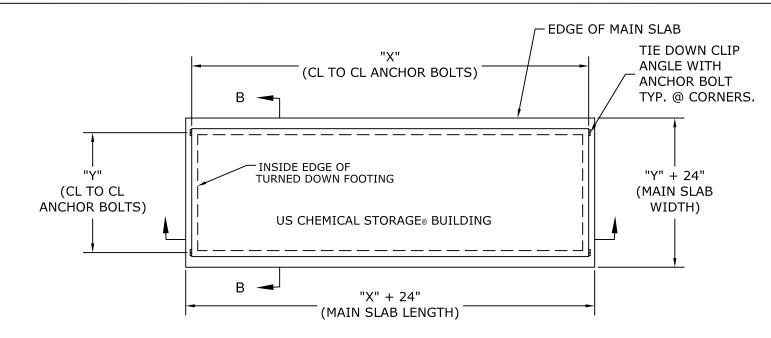
SECTION C
PERIMETER FOOTING DETAIL

6 MIL VAPOR BARRIER

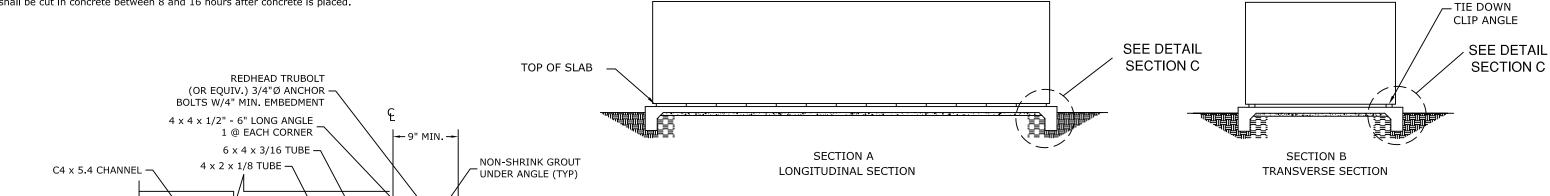
\*OR TO FROST LINE DEPTH (WHICHEVER IS GREATER)

**CLEAR** 

3"



FOUNDATION PAD PLAN



#4 REINFORCING BAR TURNED DOWN BARS @ 12" O.C.

NOTE: MINIMUM FOUNDATION

HEIGHT ABOVE FINISH GRADE

- GRADE LEVEL

MUST BE IN ACCORDANCE WITH LOCAL CODES

-1" CHAMFER

3"

(TYP)

## **FOUNDATION NOTES**

1. THESE FOUNDATION DETAILS ARE ONLY SUGGESTIONS. THE FOUNDATION SYSTEM SHOULD BE PROPERLY DESIGNED BASED ON THE ACTUAL SOIL CONDITIONS AT THE SITE AND IN ACCORDANCE WITH THE STATE REQUIREMENTS AND REGULATIONS.

CHANGES MAY BE NECESSARY DUE TO LOCAL BUILDING REGULATIONS AND SITE CONDITIONS.

- 2. THE FOUNDATION SHALL BE FOUNDED ON NATURAL UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING 2000 psf. THIS SHALL BE DESIGNED TO FULLY RESIST ALL ROTATION AT THE BASE OF THE BUILDING.
- 3. SLAB ON GRADE SHALL BE PLACED ON WELL COMPACTED SOIL CAPABLE OF SUSTAINING 2000 psf WITHOUT APPRECIABLE SETTLEMENT.
- 4. THE MAIN SLAB WIDTH SHALL BE THE CL TO CL ANCHOR BOLT DIMENSION PLUS 24".
- 5. THE MAIN SLAB LENGTH SHALL BE THE CL TO CL ANCHOR BOLT DIMENSION PLUS 24".
- 6. SLAB FOR RAMP MUST BE LEVEL WITH TOP OF BUILDING SLAB.

## Basis of design US Chemical supplied. Following items or approved equal required.

200-10007	AIR CONDITIONER	Air Conditioner, EP Electric Wall Mounted 20,000 BTU
220-10006	FORCED AIR HEATER	STANDARD EP Forced Air Heater - 10KW 34,150 BTU/hr (240V, 1 Phase) EP
260-10002	FLOOR INSULATION	Floor Insulation - R10
260-10003	FIRELOC INSULATION	FIRELoc Insulation - R19 Ceiling & Walls
300-10010	TRANSFORMER PACKAGE	480V Transformer Package
300-10012	LOAD CENTER	Load Center, 240V 1 Phase 125 Amp, 24 Space
320-10001	OUTLET	OUTLET, DUPLEX, INTERIOR, EXPLOSION PROOF
320-10005	FAN OR LIGHT SWITCH	Explosion Proof Fan or Light Switch
320-10010	GFCI DUPLEX RECEPTACLE	Non EP Exterior GFCI Duplex Receptacle
360-10001	INCANDESCENT LIGHT FIXTURE	Explosion Proof Incandescent Light Fixture(s) - Interior
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360-10001	INCANDESCENT LIGHT FIXTURE	Explosion Proof Incandescent Light Fixture(s) - Interior
340-10006	LIGHTING - EXTERIOR	Non EP Vapor Proof Exterior Light Fixture w/ Fluorescent Bulb
400-10018	DOUBLE LEAF DOOR SYSTEM	60" Double Leaf Door System 3 Hour Fire Rated
460-10001	PANIC HARDWARE	Panic Hardware for 36" Door
460-10005	3-POINT KEYED LOCK	3-Point Keyed Lock - Heavy Duty
480-10008	EXPLOSION RELIEF CONSTRUCTION	Explosion Relief Panel- 4'-0" x 7'-0"
500-10007	FIRE SUPPRESSION TANK	Dry Chemical Fire Suppression 45Lb Tank
520-10006	GAS DETECTOR E.P	Gas Detector E.P Combustibles
540-10009	PORTABLE EYEWASH STATION	Portable Eyewash Station
700-10003	STAINLESS STEEL SUMP SHELVING	Stainless Steel Sump Shelving
800-10003	MECHANICAL VENTILATION SYSTEM	Mechanical Ventilation System (EP) With Fire Damper
840-10004	PASSIVE AIR VENT	Passive Air Vent W/ Fire Damper (Buildings with climate control)
940-10012	BUILDING COLOR	Extreme Environment Paint
SL3010	STORAGE BUILDING	30' x 10', 4 Hour Fire Rated Chemical Storage Building