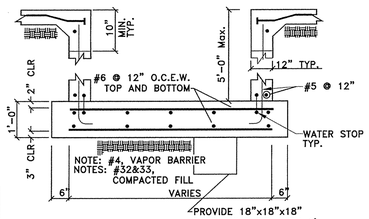
LEGEND

◄—| = Single End Stressing	|—► = Double End Stressing
RECESSED: Highlighted areas may be recessed (See Architectural)	
REBAR: This Beam to be 4 #5 Rebar. (2 Top, 2 Bottom) w/#3 Stirrups Stirrups @ 18" o.c.	
WWF: WWF 6x12–0/1 (Place on top of tendons or at mid–depth of slab)	

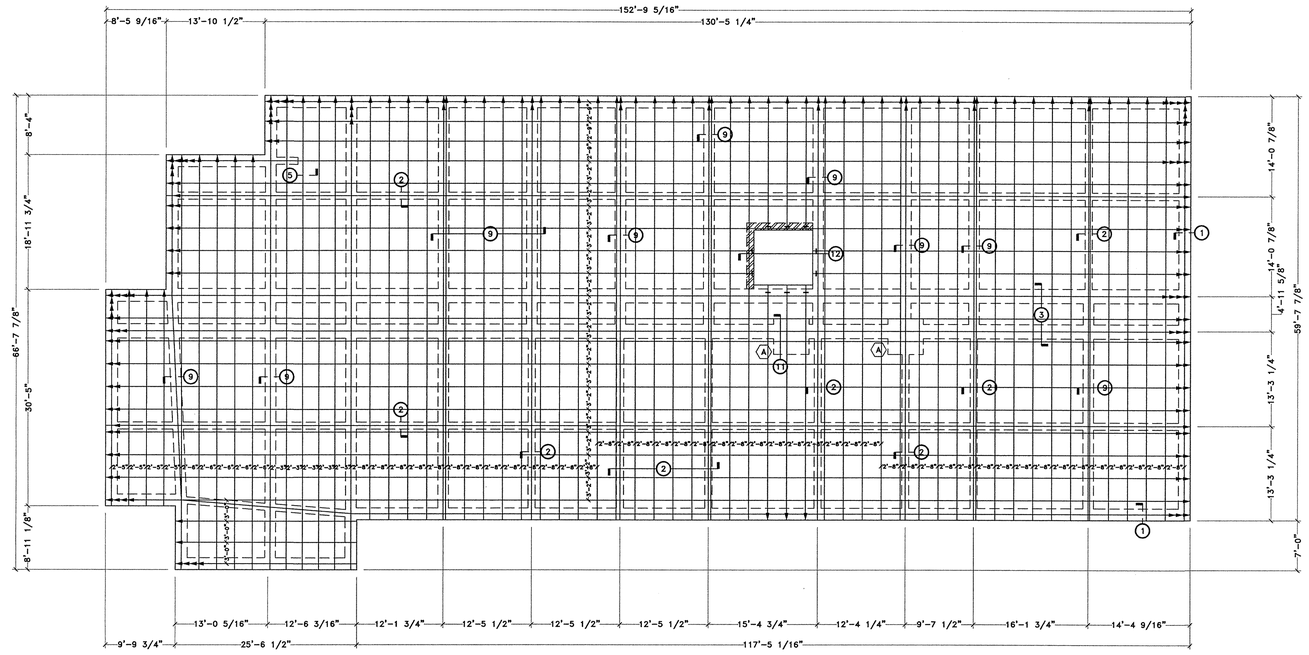
COLUMN FOOTING SCHEDULE

⟨A⟩ = 5'–0"x5'–0"

DESIGN ENGINEER TO REVIEW FINAL STRUCTURAL FRAMING PLANS INCLUDING SHEAR WALL LAYOUT PRIOR TO CONSTRUCTION

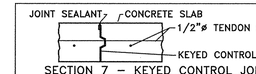


12 ELEVATOR PIT
SCALE: N.T.S.

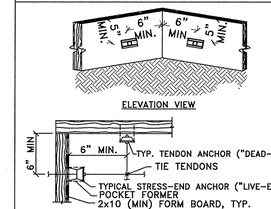


SECTIONS N.T.S.

SEE SECT #1&2 FOR INFO. NOT SHOWN ON ALL OTHER SECTS
SEE PLAN FOR SLAB TENDON SPACING & LOCATIONS, SLAB TENDONS SHOWN IN SECTIONS ARE FOR ILLUSTRATION ONLY

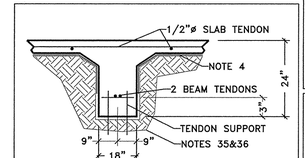


SECTION 7 – KEYED CONTROL JOINT

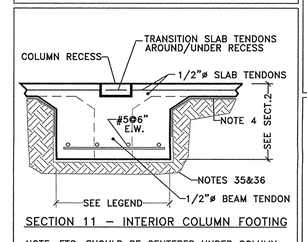


DETAIL 8 – TENDON ANCHORAGE

NOTE: TENDONS SHALL BE PLACED AWAY FROM CORNER EDGES AS SHOWN TO AVOID CONFLICT W/ ANCHOR BOLTS.



SECTION 9 – INTERIOR GRADE BEAM
SEE PLAN FOR SLAB THICKNESS

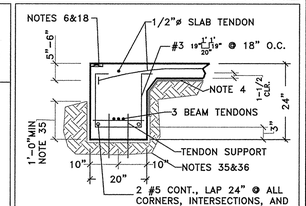


SECTION 11 – INTERIOR COLUMN FOOTING

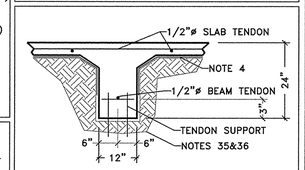
NOTE: FTG. SHOULD BE CENTERED UNDER COLUMN. CONTRACTOR TO VERIFY LOCATION.

SECTIONS N.T.S.

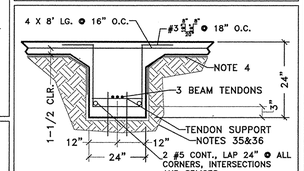
SEE SECT #1&2 FOR INFO. NOT SHOWN ON ALL OTHER SECTS
SEE PLAN FOR SLAB TENDON SPACING & LOCATIONS, SLAB TENDONS SHOWN IN SECTIONS ARE FOR ILLUSTRATION ONLY



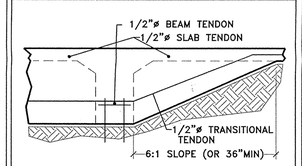
SECTION 1 – EXTERIOR GRADE BEAM



SECTION 2 – INTERIOR GRADE BEAM
SEE PLAN FOR SLAB THICKNESS



SECTION 3 – WIDE INTERIOR GRADE BEAM
NOTE: SLAB TENDONS OMITTED FOR CLARITY



SECTION 5 – TRANSITIONAL GRADE BEAM

FOUNDATION PLAN 3/32"=1'-0"

6" THICK CONCRETE SLAB
(CONCRETE: 4,000 PSI MIN. COMPRESSIVE STRENGTH AT 28 DAYS)
2 LAYERS OF 6 MIL. VAPOR BARRIER
MAX. FILL HEIGHT ALLOWED = 12 INCHES

INSTALLER NOTES

NONE

GENERAL NOTES:

1. No field supervision provided under this seal. Contractor shall perform all work in accordance with all local/federal codes, regulations & requirements. It is recommended that this plan be kept on site at all times during construction for coordinating with other trades and inspections if required by municipalities.
2. This plan is to be used for footing layout and tendon placement only. Contractor shall verify all dimensions of slab per architectual drawings prior to construction.
3. Beam dimensions shown are the minimum required and may not be reduced, or enlarged without approval by the engineer. Dish out around anchor bolts to provide a minimum of 6 inches of concrete cover. Plumbing & conduit shall not fall within slab section or beams shown on this dwg.
4. Polyethylene vapor barrier shall be placed under the entire slab area & should be draped into the grade beams as shown in the details.
5. Coordinate structural drawings with architectural and electrical/mechanical drawings for all openings, inserts, and other related items.
6. The contractor shall verify all dimensions, drops, offsets, brick ledges and block–outs on architectural plans prior to construction.
7. Floor area utilizing decorative stained/scored concrete should be brought to design engineer's attention prior to concrete placement for additional reinforcement and jointing consideration.
8. Metal keyed or tooled control joints should be used at exposed slab areas (patio, garage, porch) to minimize the effect of random slab cracking.
9. n/a
10. Refer to architectural drawings for locations/details/installation/maintenance of expansion/contraction joints in exterior brick/masonry walls. Brick flashing areas must be extended completely to the edge of the concrete in all directions to prevent bonding to the foundation.
11. Installation of the post–tension system shown on this plan shall not begin untill written approval by the post–tension engineer of record.
12. Tendon location may be field adjusted horizontally to avoid block–outs/obstructions per "Construction & Maintenance Procedures Manual for Post–Tension Slab–on–Ground Construction" section 5.0.
13. Loading of the slab prior to tensioning shall not be done without the approval of the post–tension design engineer of record.
14. The foundation shown on this drawing has been designed in accordance with local/federal building code requirements including the PTI (Post–Tensioning Institute) guidelines for design and construction of post–tensioned slabs–on–ground, the American Concrete institute's guidelines for design of slab–on–grade (ACI–360) and good engineering standard practice. This foundation is not designed for vehicle or rack loading unless noted otherwise.

CONCRETE

15. All concrete in foundation beams and slabs shall have a minimum 28–day compressive strength as shown on plan and at least 1,500 p.s.i. at the time of stressing. Concrete mix design and materials shall be in accordance with the ACI–301 requirements (Latest edition, as appropriate).
16. Calcium chlorides shall NOT be allowed.
17. Contractor shall thoroughly consolidate concrete, especially at tendon anchorages.

CONCRETE CURING

18. Contractor shall cure concrete in accordance with ACI–308 (latest edition as appropriate) immediately after finishing to control shrinkage cracking.
19. Contractor shall verify any curing compound used is compatible with flooring materials.

FORMWORK

20. Contractor shall complete all formwork prior to installation (formwork includes brick ledges, drop forms, block outs, depression forms, etc.). Any change after system is installed will require written approval from Coast Engineering Services prior to concrete placement.
21. Contractor shall remove forms no later than 3 days after placement of concrete.

BOND BREAKER AND ELASTOMERIC MATERIAL

22. Contractor shall use a bond breaker membrane between slab and brittle flooring materials (brick, tile, etc.) due to possible flexure of slab.
23. Contractor shall inspect floor areas for shrinkage cracking prior to installation of brittle flooring materials. Flooring Contractor shall treat cracks in concrete slab in accordance with dry set mortar manufacturer's recommendation prior to installation of brittle flooring materials. Flooring contractor shall use an elastic bond breaker between any concrete surface and brittle flooring material to prevent bonding of the brittle flooring materials to the foundation.

DEFORMED REINFORCEMENT (REBAR) & WELDED WIRE FABRIC (WWF)

24. Rebar shall conform to ASTM A615, WWF shall conform to ASTM A185 (flat sheets). All rebar shall be supplied & installed by the contractor/owner.

POST–TENSIONING TENDONS

25. All post–tensioning work & materials shall be per project specification section 03301 "Unbonded Post–Tensioned Foundation Systems on Grade."
26. All pre–stressed steel shall consist of seven wire stress relieved strand conforming to ASTM A–416 Low–Relaxation Strand. Minimum ultimate tensile strength shall be 270,000 p.s.i. Strands shall be coated with a permanent rust preventative lubricant and a plastic sheath. All tendons shall be 1/2"ø u.n.o. Each tendon shall be initially stressed to 33.0 kips and shall be anchored at 28.9 kips.
27. Post–tension system shall be furnished, placed, and stressed by a firm specializing in post–tension systems. Post–tension supplier shall be PTI certified. Post–Tension contractor supervisor and 50% of the installation personnel must be certified as having completed the PTI Level 1 – Field Fundamentals Program. Also, all personnel involved in the stressing operation must be certified as having completed the PTI Level 1 – Field Fundamentals Program.
28. Tendons should be stressed no later than 14 days and no earlier than 6 days after placement of concrete unless concrete compressive strength can be verified sooner.
29. Tendons and bars shall be securely supported to prevent both vertical and horizontal movement during placement of concrete. Tendon supports shall be at 4'–0" max. Tendon supports shall not penetrate the vapor barrier.
30. The tendon location at the end of grade beam shall be 5" minimum to 6" maximum from the top of the slab to central gravity of tendons (see sections this drawing).
31. Exposed stressing recesses shall be filled flush with a non–shrink grout. This work shall be performed as soon as practical after stressing by the contractor, but no later than 7 days after stressing.
32. All tendons in excess of 110' in length are intended to be stressed to 33.0 kips from both sides.
33. Post–Tension tendons may be stressed in any sequence and the dead and live ends of the tendons may be reversed from that shown at the convenience of the post–tension contractor.
34. Installation sequence of conventional and post–tension reinforcing must be coordinated by general contractor & installer. When any conflict occurs between location of tendon and location of mild steel reinforcing, location of tendon shall take precedence.

GEOTECHNICAL

35. Fill and site preparation shall be in accordance with soil report by Ardaman & Associates, Inc. dated 06/22/12. The foundation design on this plan is for a maximum fill height as noted on the plan. Placement of fill in excess of this amount will void engineer's design and hold engineer harmless if differential settlement occurs.
36. Soil compaction is the responsibility of Contractor/Owner. Compaction shall be in accordance with ASTM D698. Owner should obtain soil report to verify conditions prior to construction. Failure to properly test or compact soil will void engineer's design and hold engineer harmless if differential settlement occurs.
37. Contractor/Owner shall protect foundation from the effects of moisture evaporation due to tree's adjacent to the structure. Denying replenishment of moisture to the soil results in a loss and consequent shrinkage of the soil mass. Such shrinkage promotes differential settlement and structure cracking.
38. The contractor/owner shall maintain positive drainage away from the foundation at all times. All runoff water shall be carried away from the slab to prevent saturation of the foundation sub–base fill at all times during construction and throughout the life of the structure. Installation of flowerbeds must not collect water at foundation edges. It is recommended the general contractor inform the owner of these requirements at the time the property title is transferred (see chapters 12 & 13 of "Construction & Maintenance Procedures Manual for Post–Tensioned Slab–on–Ground Construction" by the Post–Tensioning Institute).

PRELIMINARY–FOR PERMIT ONLY

STATE OF LOUISIANA
JEREMY W. DeVILLE
License No. 31317
PROFESSIONAL ENGINEER
CIVIL ENGINEERING
7-16-12

REV	DESCRIPTION	DATE	BY
3	.	.	.
2	.	.	.
1	.	.	.

Dapco Ventures
LaQuinta Inns & Suites
Lot 14/ Sportsman Park
Cabela's Parkway
Ascension Parish
Gonzales, Louisiana

COAST POST-TENSIONED SYSTEMS
29072 Krentel Road, Lacombe, LA 70445
800–641–3690, 985–882–8001, Fax 985–882–1534

Date:	Sq. Ft.	Sales Rep.	Drawn By	Project Number
07/16/12	8,927	AH	DM	12–0467

Sheet Description: **Tendon Plan Notes, Sections, Details**
Sheet Number: **S-01**

American Concrete Institute
ACI 360 Slabs on Grade

POST–TENSIONING INSTITUTE MEMBER

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