1. Design, fabrication, and erection of all structural steel shall be in accordance with the AISC Manual of Steel Construction, ASD, Thirteenth Edition.

2. Foundations shall bear on residual soils or engineered fill capable of supporting an allowable pressure of 3000 psf for column footings.

3. Product Subsamples:
   a. Each shipment of reinforcing bars shall be accompanied by a certification of test results issued by the supplier.

4. Floor deck shall be 2", 20 gage, factory primed steel deck. Attach to supports at 12" o.c. using 5/8" puddle welds. Sidelap connections detailed for Seismic Reinforcing.

5. Steel Deck:
   a. Design, fabrication, and erection of all steel deck shall be in accordance with the Steel Deck Institute (SDI).

6. The Testing Agency shall field sample concrete. The following tests should be performed for each day's first load and each 100 cubic yards:
   1. Slump, ASTM C 143,
   2. Compressive strength of 5000 psi at 28 days.

7. The Contractor shall notify the Structural Engineer of Record (EOR) of any below grade structure which may affect the foundation performance.

8. The Contractor shall obtain Certificates of Compliance for bolts, nuts, and washers for all types used.

   a. Foundation walls shall have a 28 day compressive strength of 4000 psi and shall have an air entraining admixture.
   b. Walls and slab edges, where permanently exposed to view, shall be free of honeycombing and shall be rubbed with a mixture of sand and cement wetting as needed.
   c. Exterior slabs (under roof or floor) shall have air entraining admixture to provide 6% entrained air. Chamfer all exposed slab edge corners (3/4").
   d. Slabs shall be wet cured for a period of seven days. Maintain moisture by ponding, fogging, or by overlaying with polyethylene coated burlap, wetting as needed.

10. The Testing Agency shall observed curing of slabs, noting weather, techniques, and time of sawcutting slab control joints.

11. The Testing Agency shall inspect all purlin and girt bolted connections to ensure snug tight condition.

12. The Contractor shall engage a special inspection coordinator. Below represents the inspections required for structural elements by Chapter 17 and additional testing needed to accompany all shop drawings. The Owner shall engage a special inspection coordinator.
Composite Beam End Reaction Schedule

<table>
<thead>
<tr>
<th>Beam</th>
<th>End Shear</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>W18</td>
<td>25 kips</td>
<td></td>
</tr>
<tr>
<td>W21</td>
<td>300 kips</td>
<td></td>
</tr>
<tr>
<td>W24</td>
<td>350 kips</td>
<td></td>
</tr>
<tr>
<td>W27</td>
<td>400 kips</td>
<td></td>
</tr>
</tbody>
</table>

Notes:
- 1. Fabricator to design beam shear connections for the minimum reaction listed above.
- 2. Edges - Typical slab edge to be bent plate 1/4" w/ 3/4" x 8" H.S. @ 12" O.C. Provide L2 kickers @ 4'-0" O.C. for bent plate support.
- 3. Openings in beams for conduit routing.

---

**SECOND FLOOR FRAMING PLAN**

1. Floor plan to be 3" 300# concrete with 20" overhang and 6" with 300# concrete fill. (Plan view)

---

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- 3. Openings in beams for conduit routing.

---

**SECOND FLOOR FRAMING PLAN**

1. Floor plan to be 3" 300# concrete with 20" overhang and 6" with 300# concrete fill. (Plan view)
FLOOR SLAB TO BE 5" (3000 PSI) CONCRETE WITH WWF 6x6-w2.9Xw2.9 WITH (X) = X NUMBER OF 3/4"x5" HEADED STUDS. SEE S204 PRICING NOTES.

COMPOSITE BEAM END REACTION SCHEDULE

LEADS:
1. Composite beam end reaction
2. Beam connection size
3. Vertical brace, size
4. End moment for moment connection design
5. Beam plate support

PRICING NOTES:
1. Composite beam end reaction
2. Beam connection size
3. Vertical brace, size
4. End moment for moment connection design
5. Beam plate support

NOTES:
1. All dimensions and locations are approximate. Actual dimensions and locations may vary. Final dimensions and locations will be determined during construction.
2. All design and engineering work is the responsibility of the design engineer.
3. All materials listed in this drawing are subject to availability and may be subject to change without notice.

DRAWN BY: CHECKED BY:

ARCHITECTURALvisions, Inc.

CIVIL ENGINEERING:

FROM LS3P ASSOCIATES LTD.

GREENVILLE, SOUTH CAROLINA 29601

11.05.2014

12.9.2014
### Interior Column Footing

- **3" CLR.**
- **#4 Closed Tie @ 6"**
- **2"  CLR.**
- **4" Cover**
- **1' - 4"**
- **Turn Down Slab**
- **2x4 Key**
- **4" Stone Base**
- **Vapor Barrier**
- **1/2" Isolation Joint**
- **4" STONE BASE**
- **VAPOR BARRIER**
- **ELEVATOR PIT WALLS TO BE TIED INTO PIER.**
- **10"**

### Pier And Footing Detail

- **1" = 1'-0"**
- **Concrete Column Footing, See Plan & Schedule For Size & Reinforcing**
- **4' - 0"**
- **3" CLR.**
- **3" CLR.**
- **4' - 0"**
- **Interior Column Footing**
- **ELEVATOR PIT SECTION**
- **2'-0" Deep Sump Pit**
- **CL COLUMN & FOOTTING**
- **LEG. (2) #5xCONT.**
- **LEG. (4) #5xCONT.**
- **PRECAST WAINSCOT PANEL**
- **FILL w/CONCRETE AFTER MATERIAL (TYP.)**
- **Expansion Joint**
- **ISOLATION POCKET AROUND COLUMN**
- **1/2" ISOLATION JOINT MATERIAL (TYP.).**
- **Z-BAR SIZE TO MATCH ARCH. DRAWINGS**
- **LONGITUDINAL REINFORCING IN FOOTING COVER**
- **(4) #4 (EACH FACE)**
- **#4 @ 24" O.C. (EACH FACE)**
- **#5 @ 9" O.C.**
- **#4x48" @ 45º TO CORNER, PLACE IN TOP OF SLAB**
- **CONCRETE COLUMN**
- **TOP OF FOOTING ELEV. (SEE PLAN)**
- **TOP OF PIER ELEV. (-1'-0")**
- **CONCRETE COLUMN FOOTING, SEE PLAN & SCHEDULE FOR SIZE & REINFORCING**

### Sections & Details

- **Section**
- **Footing @ Precast Panel**
- **Thickened Edge Slab**
- **Turn Down Slab**
- **Curb Section**
- **Step Footing Detail**
- **Corner Reinforcing Detail**

---

**LS3P**

IN THE STATE OF SOUTH CAROLINA, WHERE THIS DESIGNSHOWN IS TO BE BUILT, A LICENSED ARCHITECT OR ENGINEER MUST REVIEW THE DESIGNSHOWN AND MUST SIGN AND SEAL THE DESIGNSHOWN AS REQUIRED BY LAW.
C.9

1 1/2" STEEL DECK

2" STEEL DECK, SEE PLAN

HSS3x3x1/4 @ 8'-0" O.C.

HSS6x6 POST UP TO ROOF ABOVE

WEB STIFFENER (1/2")

1' - 2"

1/4" PLATE

50' - 2"

1/2" EOD

1' - 4 7/8" 1' - 3" EOD

HSS8x4x1/4xCONT.

8" DEEP JOIST EXTENSION

1' - 4"

57' - 10"

C.8

Curtain Wall

VERTICALLY SLOTTED CONNNECTION BY PRECASTER

L2x2X1/4 BENT PLATE 5/16" (HOLD VERTICAL LEG DOWN 1/4" FOR WELDING OF L2)

EXTEND PRECAST PANEL PLATE 1/2x8 @ 32" O.C.

L5x5x3/8 w/ 3/4x8" H.S. @ 16" O.C.

H.S. 3/4"x8" @ 16" O.C.

PLATE 1/2x8 @ 2'-8" O.C.

1' - 3" EOD @ BEAM CENTERLINE

Precast Panel

LATERAL SUPPORT BY C.W. SUPPLIER

L5x5x1/4 w/ 3/4x8" H.S. @ 16" O.C.

LATERAL SUPPORT

BY C.W. SUPPLIER

L5x5x3/8xCONT. w/ 3/4"x8" H.S.

L3x3x1/4xCONT

W12x14 @ 6'-0" O.C.

4' - 11" EOD

4' - 4" EOD

4' - 5"

6' - 4 1/2" 5' - 0 1/2"

CHECKED BY:

DRAWN BY:

DATE:

PROJECT:

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ISSUE FOR FOUNDATION PERMIT   12.9.14

12-LS3P-17

11.05.2014

Author

Checker

SECTIONS & DETAILS