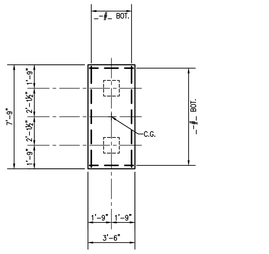
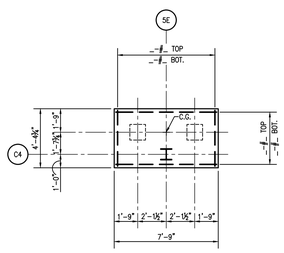


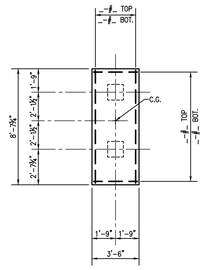
DEPTH: X'-X"

1 S1.0 DETAIL–2 PILE CAP (2PA) 1/4"=1'-0"



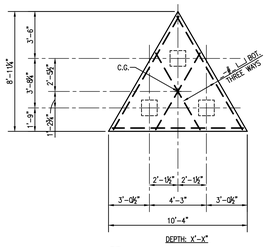
DEPTH: X'-X"

2 S1.0 DETAIL–2 PILE CAP (2PB) 1/4"=1'-0"



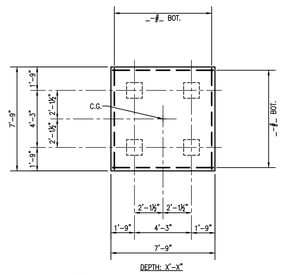
DEPTH: X'-X"

3 S1.0 DETAIL–2 PILE CAP (2PC) 1/4"=1'-0"



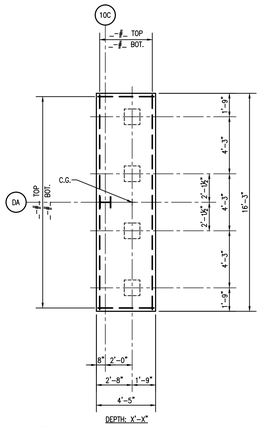
DEPTH: X'-X"

4 S1.0 DETAIL–3 PILE CAP (3PA) 1/4"=1'-0"



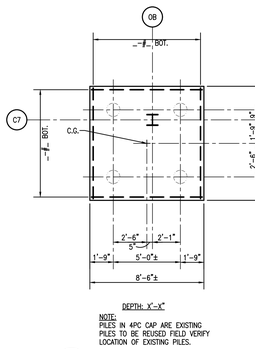
DEPTH: X'-X"

5 S1.0 DETAIL–4 PILE CAP (4PA) 1/4"=1'-0"



DEPTH: X'-X"

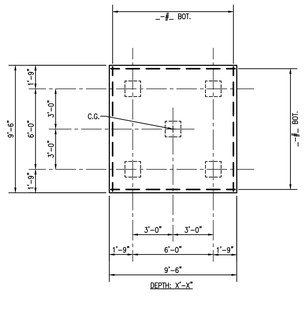
6 S1.0 DETAIL–4 PILE CAP (4PB) 1/4"=1'-0"



DEPTH: X'-X"

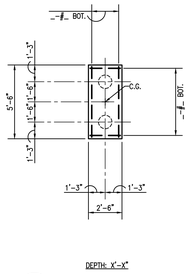
NOTE:
PILES IN 4PC CAP ARE EXISTING
PILES TO BE REUSED FIELD VERIFY
LOCATION OF EXISTING PILES.

7 S1.0 DETAIL–4 PILE CAP (4PC) 1/4"=1'-0"



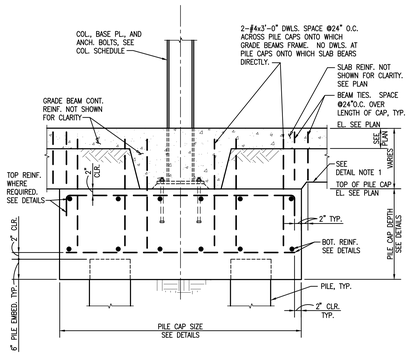
DEPTH: X'-X"

8 S1.0 DETAIL–5 PILE CAP (5PA) 1/4"=1'-0"



DEPTH: X'-X"

9 S1.0 DETAIL–2 PILE CAP (2PT) 1/4"=1'-0"



NOTES:
1. WHERE BOTTOM OF GRADE BEAM IS ABOVE TOP OF PILE CAP, POUR DOWN, AT FACE OF PILE CAP, GRADE BEAM TO TOP OF CAP.
2. ALL SIDES OF PILE CAP TO BE FORMED.

10 S1.0 DETAIL–TYPICAL PILE CAP AT STEEL COLUMNS NTS

11 S1.0 GENERAL NOTES

1. EXISTING CONDITIONS:
ALL DIMENSIONS AND CONDITIONS TYING INTO OR GOVERNED BY EXISTING CONSTRUCTION ARE APPROXIMATE AND ARE NOT PURPORTED TO BE CORRECT. ALL SUCH DIMENSIONS AND CONDITIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE PREPARATION OF SHOP DRAWINGS. FIRST SUBMITTAL OF SHOP DRAWINGS MUST CONTAIN CORRECT CONDITIONS AND DIMENSIONS OBTAINED FROM THE FIELD. IF CONDITIONS AND DIMENSIONS VARY GREATLY FROM THOSE SHOWN, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT BEFORE PREPARATION OF SHOP DRAWINGS.

2. EXISTING UTILITIES:
IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES PRIOR TO ANY CONSTRUCTION OR FABRICATION. ANY CONFLICTS OR POTENTIAL CONFLICTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE ARCHITECT.

3. SHORING:
SHORE AND BRACE ALL EXISTING FRAMING AS REQUIRED IN ORDER TO ACCOMPLISH WORK SHOWN ON DRAWINGS.

4. DAMAGE TO EXISTING CONSTRUCTION:
ALL WORK SHALL BE DONE IN A MANNER WHICH WILL NOT DAMAGE ADJACENT EXISTING CONSTRUCTION WHICH IS TO REMAIN.

5. DEMOLITION OF EXISTING CONSTRUCTION:
PRIOR TO THE START OF DEMOLITION OR EXPLORATORY WORK, THE OWNER SHALL EMPLOY AN INDEPENDENT TESTING LABORATORY TO SURVEY THE EXISTING SITE CONDITIONS FOR THE PRESENCE OF HAZARDOUS MATERIALS SUCH AS, BUT NOT LIMITED TO, LEAD–BASED PAINT, ASBESTOS, MOLD, ETC. IF THE TESTS RESULTS ARE POSITIVE FOR ANY HAZARDOUS MATERIALS, THE OWNER SHALL EMPLOY A REMEDIATION FIRM TO REMOVE THE HAZARDOUS MATERIALS IN COMPLIANCE WITH THE GUIDELINES AND REGULATIONS OF LOCAL, STATE, AND FEDERAL GOVERNMENTS BEFORE DEMOLITION OR EXPLORATORY WORK MAY COMMENCE.

6. DEMOLITION &/OR CUTTING OF CONCRETE FLOOR CONSTRUCTION:
PRIOR TO DEMOLITION OR CUTTING OF THE CONCRETE FLOOR SLAB, THE CONTRACTOR SHALL DETERMINE THE LOCATION OF UTILITIES IN THE AREA OF WORK. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONDUCT A SURVEY OF THE AREA FOR LOCATING EXISTING UNDER SLAB (OR IN SLAB) UTILITIES. THE CONTRACTOR SHALL VERIFY LOCATIONS BY CAREFULLY CHIPPING THE SLAB TO EXPOSE THE UTILITY. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR DAMAGE TO ANY UTILITIES ENCOUNTERED DURING THE COURSE OF THE SPECIFIED WORK. SHOULD LOCATIONS OF EXISTING UTILITIES HINDER THE WORK, CONTACT THE ARCHITECT PRIOR TO PROCEEDING.

7. CUTTING EXISTING CONVENTIONALLY REINFORCED CONCRETE FLOOR:
A. SAW CUT PERIMETER OF SLAB TO BE REMOVED ¾" DEEP.
B. BREAKOUT FIELD OF SLAB WITH SMALL ELECTRIC OR PNEUMATIC CHISELS.
C. SAW CUT EXISTING REINFORCING AT CENTER OF OPN'G AND BEND OUT OF WAY. WHERE REINF. IS TOO LONG TO BEND, CUT REINF. NEAR FACE OF SLAB SUCH THAT SUFFICIENT LENGTH IS PROVIDED FOR LAPPING WITH REINF. IN NEW SLAB.
D. REINFORCE NEW SLAB AS PER DETAILS.
E. PROVIDE EPOXY BONDING AGENT PRIOR TO CASTING NEW SLAB CONSTRUCTION AGAINST EXISTING SLAB.
F. WHERE EXISTING SLAB IS TO BE CUT AND REMOVED ONLY.
1. AT PERIMETER OF OPENING, CHIP 1½" DEEP POCKET AT EACH REINFORCING BAR, SAWCUT REINFORCING IN POCKET
2. POCKETS ARE TO RECEIVE AN APPLICATION OF A BONDING AGENT PRIOR TO PATCHING POCKETS WITH CEMENT GROUT.
G. AT ELEVATED FLOORS PROVIDE PROTECTION FROM FALLING DEBRIS BELOW AREA WHERE FLOOR IS BEING DEMOLISHED.
H. WHERE SUPPLEMENTAL REINFORCING OR ADDED SUPPORT FRAMING IS SHOWN TO BE INSTALLED AT NEW OPENINGS, NEW SLAB EDGES, ETC., THIS FRAMING IS TO BE INSTALLED PRIOR TO CUTTING SLAB.

8. DRILLING HOLES FOR ANCHORS AND CORING HOLES IN EXISTING CONCRETE:
A. PRIOR TO DRILLING OR CORING HOLES, THE CONTRACTOR SHALL SUBMIT A PROPOSED PENETRATION PLAN TO THE A/E FOR REVIEW.
B. THE CONTRACTOR SHALL LOCATE EXISTING REINFORCING STEEL, POST–TENSIONING, CONDUIT, PIPING, ETC. IN THE AREA WHERE NEW HOLES ARE TO BE INSTALLED THROUGH NON–DESTRUCTIVE TESTING SUCH AS WITH AN X–RAY, RADAR, OR WITH OTHER NON–DESTRUCTIVE DEVICES.
C. MARK THE LOCATION OF ALL REINFORCING STEEL, POST–TENSIONING, CONDUIT, PIPING, AND OTHER EXISTING INTERFERENCES ON THE SURFACE OF THE SLAB.
D. IF NEW HOLE LOCATIONS CONFLICT WITH EXISTING REINFORCING, POST–TENSIONING, CONDUIT, PIPING, ETC., THE CONTRACTOR SHALL NOTIFY THE A/E BEFORE INSTALLING THE NEW HOLES.
E. VERIFY NO CONFLICTS EXIST AT NEW HOLE LOCATIONS BY SMALL DRILLED PILOT HOLES. IF NO CONFLICTS EXIST, COMPLETE THE INSTALLATION. IN THE CASE OF STEEL TO BE FASTENED TO THE CONCRETE WITH MULTIPLE ANCHORS, FABRICATE, FROM A FIELD TEMPLATE, THE STEEL TO BE FASTENED TO THE CONCRETE BY THE ANCHORS AND COMPLETE THE INSTALLATION.
F. WHEN INSTALLING NEW HOLES, CARE SHALL BE EXERCISED SO AS NOT TO NICK OR CUT EXISTING REINFORCING STEEL, POST–TENSIONING, CONDUIT, PIPING, ETC.
G. ALL NEW PENETRATIONS THROUGH EXISTING BEAMS SHALL BE APPROVED BY ENGINEER PRIOR TO DRILLING OR CORING.
H. MAINTAIN MINIMUM 6" CLEAR BETWEEN ALL PENETRATIONS UNLESS APPROVED BY ENGINEER.

9. PILES:
A. PRECAST–PRE STRESSED CONCRETE PILES
A. TIP ELEVATION: EL. (–)82'–0"
(FIRST FLOOR ELEVATION: EL. 0'–0")
B. SIZE: 14 " x 14"
C. PILE SPLICE: NONE ALLOWED
D. STRUCTURAL ASPECTS:
PA = AC (0.33 f'c – 0.27 fpe), WHERE:
PA = PILE DESIGN LOAD, POUNDS
AC = AREA OF CONCRETE, SQ. IN.
f'c = CONCRETE 28 DAY STRENGTH (5000 PSI MIN.)
fpe = EFFECTIVE PRE STRESS ON GROSS SECTION AFTER PRE STRESS LOSSES, 990 PSI MIN.)
E. REINFORCING: SEE SPECS.
F. PREDRILL: 30 IL, 10"ø THREE BLADE BLUE DEMON SH–800 BIT
G. HAMMER: VULCAN 010 (32,500 FT.–LBS.)
I. LOAD TEST: NONE REQUIRED
J. DESIGN LOADS: 50 TONS IN COMPRESSION

PILES:
B. A.S.T.M. D25 (FOR QUALITY) TREATED TIMBER PILES.
A. SYMBOL ON DETAIL: ⬭
B. LENGTH: 55 FEET.
C. MINIMUM TIP DIAMETER: 7"
D. MINIMUM DIAMETER 3'–0" FROM BUTT: 13"
E. TREATMENT: C.C.A: 0.80 LB./PER CU. FT.
RETENTION: A.W.P.A. SPECIFICATIONS.
F. CUT–OFF TREATMENT: BRUSH TREAT TOP OF PILE WITH COPPER NAPTHENATE CONFORMING TO A.W.P.A. SPECIFICATION M4.
G. FOLLOWING: PILES MAY BE FOLLOWED.
ALLOW 1'–0 FOR CUT–OFF.
H. PREDRILL: 15 IL, 7"ø THREE BLADE BLUE DEMON SH–800 BIT
I. HAMMER: NO. 1 VULCAN
J. LOAD TEST: NONE REQUIRED PER 1813.5.2.5 OF AMMENDMENTS TO THE 2009 INTERNATIONAL BUILDING CODE.
K. DESIGN LOAD: (10.0xπx55x150) = 20,000 LBS = 10 TONS.
2

10. CONCRETE:
A. ACI 301–05 SPECIFICATIONS
B. NORMAL WEIGHT CONCRETE: 150 PCF
C. LIGHTWEIGHT CONCRETE: 115 PCF
D. COMPRESSIVE STRENGTH AT 28 DAYS:
1. PILE CAPS: 4,000 PSI
2. GRADE BEAMS AND 1ST FLOOR SLAB: 4,000 PSI
3. CONCRETE ON METAL DECK FLOOR SLAB: 4,000 PSI

11. REINFORCING STEEL:
A. BARS: ASTM A615, GRADE 60
B. WELDED WIRE MESH: ASTM A185
C. CONTRACTOR SHALL INCLUDE IN THE COST OF HIS BID, AN ADDITIONAL 5.0 TONS OF REINFORCING STEEL. THIS COST SHALL INCLUDE FABRICATION, TRANSPORTATION, INSTALLATION, ETC. OF ADDITIONAL REINFORCING STEEL. COST OF ADDITIONAL REINFORCING STEEL NOT UTILIZED DURING CONSTRUCTION WILL BE CREDITED BACK TO THE OWNER VIA CHANGE ORDER AT THE UNIT PRICE PROVIDED ON THE BID FORM.

12. REINFORCING CLEARANCES REQUIRED ARE AS FOLLOWS:
ACI 117 STANDARDS. UNLESS SPECIFICALLY NOTED OR SHOWN ON THE DRAWINGS, REINFORCING CLEARANCES SHALL BE AS FOLLOWS:
A. SLABS: ¾" CLEAR TOP & BOTTOM FORMED,
1" CLEAR BOTTOM, ¾" CLEAR TOP ON GRADE.
B. BEAMS: 1½" CLEAR BOTTOM FORMED, 3" CLEAR BOTTOM CAST ON EARTH, 1½" CLEAR SIDES AND TOP FORMED, 3" CLEAR SIDES EARTH FORMED, 1½" CLEAR TOP.
C. COLUMNS: 1½" CLEAR, TYPICAL.
D. WALLS: 1½" CLEAR, TYPICAL.

13. REINFORCING DETAILS FOR STRUCTURALLY SUPPORTED CONCRETE:
ACI 315 STANDARDS. UNLESS SPECIFICALLY NOTED OR SHOWN ON THE DRAWINGS, BAR LAPS AND CONFIGURATIONS SHALL BE AS FOLLOWS:
A. CONTINUOUS TOP BARS: HOOK AT NON–CONTINUOUS ENDS. LAP 30 DIAS. AT MID–SPAN.
B. CONTINUOUS BOTTOM BARS: LAP 6" AT CENTER OF SUPPORT.
C. TEMPERATURE BARS IN SLAB AND INTERMEDIATE HORIZONTAL BARS IN WALLS AND BEAMS: TENSION LAP SPLICES, SEE TABLE BELOW.
D. SLAB TOP REINFORCING SUPPORT BARS: SLAB TOP REINFORCING BARS LESS THAN 6 FEET IN LENGTH SHALL HAVE 2–#4 CONT. SUPPORT BARS AND SLAB TOP REINFORCING BARS GREATER THAN 6 FEET IN LENGTH SHALL HAVE #4 SUPPORT BARS EQUALLY SPACED AT NO MORE THAN 4'–0"O.C.
E. CORNER BARS: PROVIDE CORNER BARS AT EACH OUTSIDE CORNER FOR EACH HORIZONTAL BAR IN WALLS AND BEAMS, CORNER BARS SHALL LAP WITH HORIZONTAL BARS. PROVIDE "U" BARS AT WALL ENDS. LAP #3 TO #6 BARS 30" EACH WAY AND LAP #7 TO #11 BARS 48" EACH WAY. HOOK INSIDE BARS IN WALLS AT ENDS.
F. LAP SPLICE TABLE:

		LAP SPLICES (INCHES)							
		BAR SIZE							
	LOCATION	#3	#4	#5	#6	#7	#8	#9	#10	#11
SLABS	TOP	15	24	36	48	78	96	117	140	165
	OTHER	12	19	28	37	60	74	90	108	127
OTHER	TOP	24	32	40	48	70	80	91	102	113
	OTHER	19	25	31	37	54	62	70	79	87

14. CONDUITS AND PIPES EMBEDDED IN CONCRETE:
A. CONDUITS, PIPES, AND SLEEVES OF ANY MATERIAL NOT HARMFUL TO CONCRETE SHALL BE PERMITTED TO BE EMBEDDED IN CONCRETE WITH APPROVAL OF THE ENGINEER, PROVIDED THAT REGULATIONS ARE FOLLOWED AS OUTLINED IN THE APPLICABLE ACI CODES.
B. CONDUITS, PIPES, AND SLEEVES PASSING THROUGH A SLAB OR BEAM SHALL NOT SIGNIFICANTLY IMPAIR THE STRENGTH OF CONSTRUCTION AS DETERMINED BY THE ENGINEER.
C. SINGLE CONDUITS AND PIPES OR INTERSECTING CONDUITS AND PIPES SHALL NOT OCCUPY MORE THAN AN 1⅓" OF SLAB THICKNESS AND ⅓ THE OVERALL THICKNESS OF BEAMS IN WHICH THEY ARE EMBEDDED, AND THEY SHALL NOT BE SPACED CLOSER THAN THREE DIAMETERS OR WIDTHS ON CENTER. ANY CONDUIT OR PIPE LARGER SHALL BE LOCATED BELOW THE RESPECTIVE SLAB OR BEAM. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL, A DIAGRAM DEPICTING THE HOME RUNS OF CONDUIT TO ALL PANELS, TYPICAL.
D. IT WILL NOT BE PERMITTED TO CUT, BEND, OR DISPLACE THE REINFORCING STEEL FROM ITS PROPER LOCATION.
E. COORDINATION MUST BE MADE BY THE CONTRACTOR AT HIS EXPENSE TO FOLLOW THE ABOVE GUIDELINES.

15. STRUCTURAL STEEL:
A. A.I.S.C. SPECIFICATIONS; STEEL CONSTRUCTION MANUAL 13TH EDITION; ALL WIDE FLANGE SHAPES ASTM A992 GRADE 50, ALL MISCELLANEOUS SHAPES ASTM A36, HSS SHAPES ASTM A500 GRADE B Fy=46 ksi, STEEL PIPE ASTM A53 GRADE B Fy=35 ksi; HIGH STRENGTH BOLTS A325, ¾"ø MIN. EXCEPT AS NOTED OTHERWISE; ANCHOR RODS AND BOLTS ASTM F1554 GRADE 36 EXCEPT AS NOTED OTHERWISE; AUTOMATICALLY END WELDED STUD SHEAR CONNECTORS (A.E.W.S.C.) AS MANUFACTURED BY NESLSON STUDS OR APPROVED EQUAL; E–70 ELECTRODES.
B. ALL BEAM CONNECTIONS SHALL BE A.I.S.C. STANDARD FRAMED CONNECTIONS. SHOP CONNECTIONS SHALL BE WELDED. FIELD CONNECTIONS SHALL BE BOLTED, EXCEPT CONNECTIONS TO EXISTING CONSTRUCTION SHALL BE WELDED. CONNECTIONS NOT SCHEDULED OR DETAILED OTHERWISE TO BE DESIGNED FOR 1/2 UNIFORM LOAD BEAM CAPACITY FOR PROPER BEAM SPAN AND 2/3 UNIFORM LOAD BEAM CAPACITY FOR PROPER BEAM SPAN FOR COMPOSITE BEAMS.
C. ALL STRUCTURAL STEEL ITEMS AND RESPECTIVE ANCHORS AND FASTENERS PERMANENTLY EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123. PROVIDE VENT HOLES AS REQUIRED. TOUCH UP ALL DAMAGED COATING WITH STICK GALVANIZING. SEE ARCHITECT FOR PAINTING.
D. CONTRACTOR SHALL INCLUDE IN THE COST OF HIS BID, AN ADDITIONAL 5.0 TONS OF STRUCTURAL STEEL. THIS COST SHALL INCLUDE FABRICATION, TRANSPORTATION, INSTALLATION, ETC. OF ADDITIONAL STRUCTURAL STEEL. COST OF ADDITIONAL STRUCTURAL STEEL NOT UTILIZED DURING CONSTRUCTION WILL BE CREDITED BACK TO THE OWNER VIA CHANGE ORDER AT THE UNIT PRICE PROVIDED ON THE BID FORM.

16 METAL DECK FOR FLOORS:
A. 1.5VL20 AS MFG. BY VULCRAFT OR APPROVED EQUAL GALVANIZED STEEL COMPOSITE TYPE DECK, CONTINUOUS OVER 3 OR MORE SPANS; FIELD WELDED TO SUPPORTS AND/OR FASTENED WITH AUTOMATIC END WELDED SHEAR CONNECTORS WHERE INDICATED.
B. DEPTH: 1½ INCHES.
C. GAGE: 20.
D. MIN. SECTION MODULUS (POSITIVE): 0.224 INxNxIN PER FT.
E. MIN. SECTION MODULUS (NEGATIVE): 0.231 INxNxIN PER FT.
F. MIN. MOMENT OF INERTIA: 0.186 INxNxINxIN PER FT.
G. DESIGN THICKNESS: 0.0358"
H. ALLOWABLE STRESS: 50 KSI
I. DECK FASTENING PATTERN
1. SUPPORT FASTENERS: ⅝"ø PUDDLE WELDS
2. FASTENER PATTERN: 36/4
3. SIDELAP FASTENER: #10 SCREWS
4. SIDELAP FASTENERS PER SPAN: 3

17. METAL DECK (AT STEEL ROOFS):
A. 1.5B20 AS MFG. BY VULCRAFT OR APPROVED EQUAL GALVANIZED METAL ROOF DECK, CONTINUOUS OVER THREE OR MORE SPANS; FIELD WELDED TO SUPPORTS.
B. DEPTH: 1½"
C. GAGE: 20.
D. MINIMUM SECTION MODULUS (POSITIVE): 0.234 INxNxIN PER FT.
E. MINIMUM SECTION MODULUS (NEGATIVE): 0.247 INxNxIN PER FT.
F. MINIMUM MOMENT OF INERTIA: 0.212 INxNxNxIN PER FT.
G. ALLOWABLE STRESS: 33 KSI
H. DECK FASTENING PATTERN
1. SUPPORT FASTENERS: ⅝"ø PUDDLE WELDS
2. FASTENER PATTERN: 36/7
3. SIDELAP FASTENER: #10 SCREWS
4. SIDELAP FASTENERS PER SPAN: 3

18. MECHANICAL EQUIPMENT:
A. PRIOR TO THE DETAILING OF ANY STRUCTURAL MATERIALS INVOLVED IN THE SUPPORT OF MECHANICAL EQUIPMENT, THE CONTRACTOR SHALL FURNISH TO THE ARCHITECT ALL INFORMATION RELATIVE TO LOADS, LOAD POINTS, DIMENSIONS, ETC. OF THE ACTUAL EQUIPMENT WHICH IS TO BE FURNISHED.
B. ALL DETAILS AND MEMBER SIZES SHOWN ON THE STRUCTURAL DRAWINGS ARE TENTATIVE UNTIL SUCH TIME AS THIS INFORMATION IS REVIEWED BY THE ARCHITECT.
C. LOCATION OF SUPPORT BEAMS MUST BE COORDINATED WITH MECHANICAL EQUIPMENT LOCATIONS.
D. COORDINATION MUST BE MADE BY THE CONTRACTOR AT HIS EXPENSE TO FOLLOW THE ABOVE GUIDELINES.

19. WELDING PRECAUTIONS:
A. FIRE PREVENTION: AT ALL TIMES DURING WELDING AND TORCH CUTTING IN THE EXISTING BUILDING THE CONTRACTOR SHALL HAVE ADEQUATE FIRE FIGHTING EQUIPMENT READY FOR USE AT THE LOCATION OF THE WELDING. THE WELDING AND TORCH CUTTING PROCESS SHALL BE CLOSELY OBSERVED AND MONITORED BY THE CONTRACTOR SO AS TO PREVENT THE IGNITING OF ANY COMBUSTIBLES IN THE CONSTRUCTION AREA. OBSERVATIONS SHALL CONTINUE FOR AT LEAST 4 HOURS AFTER WELDING IN A PARTICULAR AREA HAS CEASED.
B. PROVIDE ADEQUATE VENTILATION AS TO TOTALLY EXHAUST WELDING FUMES OUT OF THE CONSTRUCTION AREA SO AS NOT TO CONTAMINATE ANY PORTION OF THE EXISTING BUILDING.

20. POST INSTALLED ANCHORS TO HARDENED CONCRETE:
A. IN THE INSTALLATION OF ANCHORS, CARE SHALL BE EXERCISED SO AS NOT TO NICK OR CUT EXISTING REINFORCING, CONDUIT, ETC. SEE GENERAL NOTE #8 FOR PROCEDURE FOR DRILLING HOLES IN EXISTING CONCRETE.
B. ANCHOR TYPES SHALL BE AS FOLLOWS:
1. WEDGE TYPE ANCHORS; "KWIK" BOLTS AS MANUFACTURED BY HILTI FASTENING SYSTEMS OR AN APPROVED EQUAL.
2. ADHESIVE TYPE ANCHORS (CONCRETE & GROUT FILLED CMU); "HAS" RODS AND HIT–HY 150 MAX ADHESIVE SYSTEM AS MANUFACTURED BY HILTI FASTENING SYSTEMS OR AN APPROVED EQUAL.
3. ADHESIVE TYPE ANCHORS (HOLLOW CMU); "HIT–A" RODS AND HIT–HY 20 ADHESIVE SYSTEM AS MANUFACTURED BY HILTI FASTENING SYSTEMS OR AN APPROVED EQUAL.

21. CARBON FIBER REINFORCED POLYMER (CFRP):
CARBON FIBER REINFORCED POLYMER (CFRP) LAMINATES TO BE MBRACE CF160 AS SUPPLIED BY BASF. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CFRP TO BE ADEQUATELY PROTECTED AGAINST FIRE BASED ON MANUFACTURER'S FIRE PROOFING PROCEDURES OF SUCH MATERIALS. CFRP STRIP SPECIFICATIONS: MODULUS OF ELASTICITY 33,000 ksi, THICKNESS 0.013 IN/PLY, DESIGN STRENGTH 550 ksi.

22. DESIGN LOADS AND OTHER PERTINENT DESIGN INFORMATION:
A. BUILDING CODE: INTERNATIONAL BUILDING CODE 2006 / ASCE 7–05
B. FLOOR LIVE LOAD
1. OFFICE AREAS: 50 PSF
2. CORRIDORS: 100 PSF
3. LABORATORIES: 100 PSF
4. ASSEMBLY AREAS–FIXED SEATING: 60 PSF
5. PUBLIC AREAS AND PLACES OF ASSEMBLY: 100 PSF
6. RESTROOMS: 100 PSF
7. STUDIOS: 100 PSF
8. MECHANICAL/ELECTRICAL ROOMS: 125 PSF(MINIMUM)
9. STORAGE AREAS: 125 PSF
10. STAIRS AND EXITWAYS: 100 PSF
C. FLOOR SUPERIMPOSED DEAD LOADS (EXCLUDES STRUCTURE'S SELF WEIGHT, WEIGHT OF SLAB & BEAMS):
1. PARTITIONS: 20 PSF
2. AT 100+ PSF LIVE LOAD AREAS: 10 PSF.
D. ROOF LOADS (UNOCCUPIED AREAS):
1. LIVE LOAD: 20 PSF
2. SUPERIMPOSED DEAD LOAD: 15 PSF
E. ROOF SNOW LOAD
1. GROUND SNOW LOAD (Pg): 0.0 PSF
F. WIND LOAD
1. BASIC WIND SPEED: 130 MPH
2. WIND IMPORTANCE FACTOR (I): 1.00
3. WIND EXPOSURE CATEGORY: B
4. INTERNAL PRESSURE COEFFICIENT (GC_{pi}): ±0.18
5. COMPONENTS & CLADDING PRESSURES:

COMPONENTS AND CLADDING DESIGN PRESSURES (PSF)						
EWA (FT^2) \ ZONE	1	2	3	4	5
≤10						
20						
50						
100						
200						
≥500						

NOTES:
1.) EWA IS THE EFFECTIVE WIND AREA OF A STRUCTURAL COMPONENT.
2.) FOR ZONE DEFINITIONS, SEE ASCE 7–05 FIGURES 6–11A AND 6–11C.
3.) PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.

G. EARTHQUAKE DESIGN DATA
1. SEISMIC IMPORTANCE FACTOR (IE): …
2. OCCUPANCY CATEGORY: …
3. SITE CLASS: …
4. SPECTRAL ACCELERATION PARAMETERS:
a. SDS: …
b. SD1: …
5. SEISMIC DESIGN CATEGORY: …
6. BASIC SEISMIC–FORCE–RESISTING SYSTEM: …
7. DESIGN BASE SHEAR: … KIPS
8. DEFLECTION AMPLIFICATION FACTOR (Cd): …
9. RESPONSE MODIFICATION COEFFICIENT (R): …
10. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

23. OTHER WORK:
COORDINATE ALL OTHER WORK WITH STRUCTURAL, UNLESS DETAILED OR SPECIFIED, THE ARCHITECT IS TO APPROVE ALL OPENINGS, SLEEVES, EMBEDDED ITEMS ETC. INVOLVED IN STRUCTURAL WORK PRIOR TO THEIR BEING SET. DO NOT CUT OR DRILL HOLES IN STRUCTURAL MEMBERS WITHOUT THE APPROVAL OF THE ARCHITECT. ALL SUCH ITEMS SHALL NOT IMPAIR THE STRUCTURAL INTEGRITY OF THE MEMBER AS DETERMINED BY THE ENGINEER OF RECORD.

PRELIMINARY
NOT FOR CONSTRUCTION

No.	Date	Issue	No.	Date	Issue
1	12.23.10	SD PRICING SET			
2	01.18.11	100% SD SET			
3	05.18.11	LNO Meeting			
4	09.15.11	100% DD/ PRICING			

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Project Number	15248.00
Drawn	RAB
Checked	JAS
Proj. Arch./Eng.	JAS

LOYOLA UNIVERSITY NEW ORLEANS

Monroe Hall Renovation

Project Name

GENERAL NOTES AND PILE CAP DETAILS

Sheet Name

Drawing No. **S1-0**