

LAKE CITY WEST



Lake City, FL

33475



OWNER: LAKE CITY
CONSTRUCTION, LLC
8117 PRESTON ROAD, ST#400
DALLAS, TEXAS - 75225
PHONE: 469.828.3375
CONTACT: LUKE PETERS

TENANT: FRESENIUS MEDICAL CARE
NORTH AMERICA
4953 VAN DYKE ROAD
LUTZ, FL - 33558
PHONE: 813.961.1217 EXT. 212
CONTACT: AL ALLEN

APPROVED SEARCH IN RECORDS
WITH SERVICE BY THE ARCHITECT
FOR THE COUNTY OF FLORIDA
RECEIVED FOR RECORDS
DATE: 11-29-14



ARCHITECT OF RECORD: CALLAWAY ARCHITECTURE, LLC
1207 HAMPSHIRE LANE, ST#105
RICHARDSON, TEXAS - 75080
PHONE: 214.368.2525
CONTACT: SCOTT STONE



STRUCTURAL ENGINEER: ARMSTRONG-DOUGLASS
PARTNERS, LLC
6060 N. CENTRAL EXPY, ST#360
DALLAS, TEXAS - 75206
PHONE: 214.237.7022
CONTACT: SCOTT ARMSTRONG



MECHANICAL ENGINEER: DC ENGINEERING P.C.
440 E CORPORTATE DR, ST#103
MERIDIAN, IDAHO - 83642
PHONE: 208.288.2181
CONTACT: GINA HENNING



ELECTRICAL ENGINEER: DC ENGINEERING P.C.
440 E CORPORTATE DR, ST#103
MERIDIAN, IDAHO - 83642
PHONE: 208.288.2181
CONTACT: GINA HENNING



GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE REVIEW AND CONFORMANCE TO ALL CONTRACT DOCUMENTS. IN THE CASE OF APPARENT CONFLICTS AND DISCREPANCIES IN THE CONTRACT DOCUMENTS THEMSELVES, THE CONTRACTOR SHALL NOTIFY ARCHITECT IN WRITING OF SUCH APPARENT CONFLICTS AND REQUEST CLARIFICATION FROM THE ARCHITECT. NO ADDITIONAL COSTS OR DELAYS IN SCHEDULE WILL BE ACCEPTED DUE TO CONTRACTORS' MISINTERPRETATIONS AND/OR DELAYS TO REQUEST CLARIFICATIONS.

2. DO NOT SCALE DRAWINGS. IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF SUCH APPARENT DIMENSIONAL DISCREPANCIES AND REQUEST CLARIFICATION FROM THE ARCHITECT. NO ADDITIONAL COSTS OR DELAYS IN SCHEDULE WILL BE ACCEPTED DUE TO CONTRACTORS' MISINTERPRETATIONS AND/OR FAILURES TO REQUEST CLARIFICATION OF DIMENSION QUESTIONS.

3. "TYPICAL" NOTES APPLY TO ALL SIMILAR CONDITIONS. TYPICAL DETAILS ARE COMMON CONSTRUCTION CONDITIONS AND APPLY TO ALL CIRCUMSTANCES UNLESS NOTED OTHERWISE.

4. THE CONTRACTOR AND SUBCONTRACTOR SHALL VISIT THE PROJECT SITE, INVESTIGATE AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO BIDDING THE PROJECT. ADDITIONAL COSTS WILL NOT BE AWARDED FOR CHANGES CAUSED BY EXISTING CONDITIONS, WHICH ARE VISIBLE AND/OR CAN BE REASONABLY ANTICIPATED.

5. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS, SITE GRASSES, ETC. PRIOR TO CONSTRUCTION AND NOTIFYING THE ARCHITECT OF ANY DISCREPANCIES THAT COULD AFFECT THE DESIGN AND FINISH OUT OF THE PROJECT. BIDDING LAYOUT IS TO BE VERIFIED BY A LICENSED SURVEYOR WITH WRITTEN VERIFICATION FORWARDED TO THE OWNER AND ARCHITECT.

6. ALL CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE CITY, STATE AND NATIONAL CODES AND STANDARDS INCLUDING D.S.H.A. AND ACCESSIBILITY CODES.

7. THE CONTRACTOR & SUBCONTRACTOR SHALL PAY FOR AND OBTAIN ALL REQUIRED PERMITS, TAX FEES AND CERTIFICATES OF OCCUPANCY. HAZARDOUS MATERIALS MAY NOT BE STORED, USED OR DISPENSED AT THE SITE.

8. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ASPECTS OF THIS PROJECT, INCLUDING BUT NOT LIMITED TO THE CONTRACT DOCUMENTS WITH ALL SUBCONTRACTORS. THIS COORDINATION APPLIES FROM THE BIDDING PHASE THROUGH FINAL CONSTRUCTION.

9. THE CONTRACTOR IS RESPONSIBLE FOR ALL SITE WORK INDICATED IN THE CONTRACT DOCUMENTS.

10. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL UTILITY COMPANIES AND VERIFYING ALL WORK REQUIRED BY THEM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR THE FILING AND COMPLETION OF ALL UTILITY COMPANY TRENCHES BOTH EXTERIOR AND INTERIOR OF BUILDINGS TO THE SPECIFICATIONS IN THE GEOTECHNICAL REPORT AND IN THE CIVIL ENGINEERING DRAWINGS.

11. ALL EXCAVATION, TRENCHING, ETC. REQUIRED IN ROCK SUBGRADE IS TO BE PART OF THE CONTRACT. THE CONTRACTOR SHOULD REFER TO THE GEOTECHNICAL REPORT TO VERIFY APPLICABILITY.

12. SHORE AND BRACE ALL EXCAVATIONS IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND AUTHORITIES.

13. TRANSFORMER PADS AND CONCRETE FILLED STEEL PIPE BOLLARDS AT TRANSFORMERS AND METER LOCATIONS ARE TO BE PART OF THE CONTRACT. CONSTRUCTION SHALL BE PER UTILITY COMPANY REQUIREMENTS.

14. ALL PENETRATIONS THROUGH RATED PARTITIONS, CEILING AND OTHER ASSEMBLIES SHALL BE INSTALLED AND THOROUGHLY SEALED IN A MANNER APPROPRIATE TO MAINTAIN ALL REQUIRED RATINGS.

15. ALL SIDEWALKS AND CROSSWALKS SHALL BE SLOPED 4.75% MAXIMUM IN THE DIRECTION OF TRAVEL AND 1.75% MAXIMUM ON CROSS SLOPES. ALL LANDINGS AND ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 1.75% SLOPE IN ANY DIRECTION.

16. PROVIDE ADEQUATE BLOCCING IN WALLS AS REQUIRED TO SUPPORT ALL WALL MOUNTED EQUIPMENT, FIXTURES, ACCESSORIES, AND SIGNAGE. BLOCCING SHALL BE PRESSURE TREATED AND FIRE RATED IF REQUIRED BY THE BUILDING TYPE.

17. THE CONTRACTOR IS TO REFER TO THE M.E.P. DRAWINGS AND SPECIFICATIONS FOR ANY HINGED ACCESS PANELS AND COVERS NOT INDICATED IN ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL ACCESS PANEL LOCATIONS RATINGS AND SIZES FOR ALL WALLS WITH ALL TRADES.

18. ALL DOOR HARDWARE IS TO COMPLY WITH APPLICABLE CODES, REGULATIONS, AND AUTHORITIES, WHETHER OR NOT SPECIFICALLY INDICATED IN THE DRAWINGS OR SPECIFICATIONS.

19. ALL EXPOSED EXTERIOR WALL MOUNTED CONDUITS, BUS GUTTERS, JUNCTION BOXES, PANEL BOXES, METERS, PIPES, ETC. ARE TO BE PAINTED TO MATCH EXTERIOR FINISH COLOR OF ADJACENT SURFACE.

20. WHERE MOUNTING HEIGHTS ARE NOT INDICATED, INSTALL COMPONENTS AT MOUNTING HEIGHTS REQUIRED BY THE MOST RECENT ISSUE OF THE AMERICANS WITH DISABILITIES ACT AND APPLICABLE STATE REGULATIONS FOR ANY PARTICULAR APPLICATION INDICATED. REFER ANY QUESTIONABLE MOUNTING HEIGHT DECISIONS TO THE ARCHITECT FOR FINAL DECISION.

21. EXTERIOR MASONRY WALL SURFACES ARE TO RECEIVE THEIR FINAL COATINGS AND SEALERS PRIOR TO THE INSTALLATION OF ALL SHEET METAL WORK SURFACE MOUNTED UTILITIES, METAL FABRICATIONS, ETC.

22. ALL MATERIALS SHALL BE INSTALLED ACCORDING TO INDUSTRY STANDARDS, BEST PRACTICES, RELEVANT AGREEMENTS AND STANDARDS RECOMMENDATIONS REFERENCED IN THE SPECIFICATIONS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES, WHICHEVER IS THE MOST STRINGENT, IN ORDER TO DELIVER A COMPLETE AND HIGH-QUALITY PRODUCT.

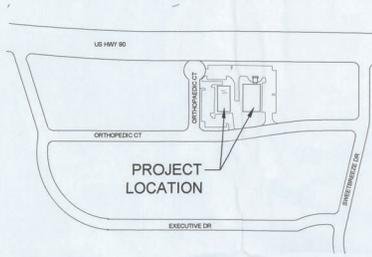
ABBREVIATIONS

ABB.	DESCRIPTION
A.B.	AMERICANS WITH DISABILITIES ACT
A.D.A.	ABOVE FINISHED FLOOR
A.F.F.	ALUMINUM
AW.	ACOUSTICAL WALL
B.O.	BOTTOM OF
B.U.R.	BUILT UP ROOF
C.L.	CEILING
C.C.	CORNER GUARD
C.M.	CONSTRUCTION MANAGER
C.O.C.	CONCRETE
D.E.D.	DEDICATED
E.Q.	EQUAL
F.C.	FURRING CHANNELS
F.E.B.	FIRE EXTINGUISHER BRACKET W/FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET W/FIRE EXTINGUISHER
GA.	GAUGE
G.B.	GYP/SUM BOARD
G.C.	GENERAL CONTRACTOR
H.M.	HOLLOW METAL
L.B.	LANDSCAPING
MDF.	MEDIUM DENSITY FIBERBOARD
MFR.	MANUFACTURER
M.O.	MASONRY OPENING
MNL.	MINIMUM
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.D.	OVERFLOW DRAIN
O.F.C.	OWNER FURNISHED CONTRACTOR INSTALLED
O.F.O.I.	OWNER FURNISHED OWNER INSTALLED
P.E.M.B.	PREENGINEERED METAL BLDG.
P.L.M.	PLASTIC LAMINATE
R.F.M.	ROOF DRAIN
R.F.M.	RECESSED FLOOR MAT
R.O.	ROUGH OPENING
S.B.	SPASH BLOCK
S.O.	SLAB OPENING
T.F.C.I.	TENANT FURNISHED CONTRACTOR INSTALLED
T.F.T.I.	TENANT FURNISHED TENANT INSTALLED
T.O.	TOP OF
U.N.O.	UNLESS NOTED OTHERWISE
V.V.C.	VINYL WALL COVERING
W.H.	WATER HEATER
W.P.	WORK POINT

LOCATION PLAN



REFERENCE PLAN



Building Location

NOT TO SCALE

CODE INFORMATION

LOCATION: LAKE CITY, FLORIDA

APPLICABLE CODES:
 2010 FLORIDA BUILDING CODE BUILDING
 2010 FLORIDA BUILDING CODE EXISTING BUILDING
 2010 FLORIDA BUILDING CODE ENERGY CONSERVATION
 2010 FLORIDA BUILDING CODE FUEL GAS
 2010 FLORIDA BUILDING CODE PLUMBING
 2010 FLORIDA BUILDING CODE MECHANICAL
 2010 FLORIDA ACCESSIBILITY CODE
 ACCESSIBILITY ANSI A117.1

NUMBER OF STORES: 1
 CONSTRUCTION TYPE: IIB (UNPROTECTED)

OCCUPANCY TYPE: BUSINESS (MEDICAL OFFICE)
 TABLE 503
 ALLOWABLE BUILDING HEIGHT: 55 FT
 BUILDING HEIGHT SHOWN: 33' - 2"
 ALLOWABLE BUILDING AREA: 23,000 SF
 WITH STRUTS INCREASE: 69,000 SF
 AFFECTED BUILDING AREA SHOWN: 10,337 SF

TABLE 1004.1.1
 OCCUPANT LOAD:
 BUSINESS: 100 SF (GROSS)/PP 10,337/100 = 104

TABLE 1005.1:
 MIN REQUIRED EXIT WIDTH: GREATER OF 104 x .2' = 20.8' OR 32"
 SECTION 1015: ~49 OCCUPANTS: 2 EXITS REQUIRED
 4 EXITS PROVIDED

PARKING
 PARKING REQUIRED FOR SHELL: 1 SPACE/150 SF 10,337/150 = 69 SPACES REQUIRED
 ACCESSIBLE SPACES: 1 SPACE/25 SPACES 69/25 = 3 SPACES REQUIRED
 69/25 = 3 SPACES REQUIRED
 7 SPACES PROVIDED

SUMMARY OF WORK

10,337 SQFT SHELL ONLY MEDICAL CARE FACILITY LOCATED IN LAKE CITY, FLORIDA.

SHEET LIST

NO.	DATE	BY	CHECKED	DATE	BY	DATE	SHEET NO.	SHEET NAME
1							0	COVER SHEET
LANDSCAPE								
ARCHITECTURAL								
0							0	GENERAL SHEET
AC01							AC01	ACCESSIBILITY STANDARDS
AC02							AC02	ACCESSIBILITY STANDARDS
AC03							AC03	ACCESSIBILITY STANDARDS
AC04							AC04	ACCESSIBILITY STANDARDS
AB1							AB1	SPECIFICATIONS
AB2							AB2	SPECIFICATIONS
SB01							SB01	ARCHITECTURAL SITE PLAN
SD0							SD0	SITE PLAN DETAILS
A1.2							A1.2	FLOOR PLAN
A2.1							A2.1	REFLECTED CEILING PLAN
A3.0							A3.0	ROOF PLAN
A4.0							A4.0	EXTERIOR ELEVATIONS
A5.1							A5.1	WALL SECTIONS
A5.2							A5.2	WALL SECTIONS
A5.3							A5.3	WALL SECTIONS
A6.0							A6.0	DETAILS
A6.1							A6.1	DETAILS
A7.0							A7.0	SCHEDULES
STRUCTURAL								
S1.1							S1.1	STRUCTURAL INFORMATION
S2.1							S2.1	FOUNDATION PLAN
S2.2							S2.2	2ND FLOOR FRAMING PLAN
S3.1							S3.1	STRUCTURAL DETAILS
S3.2							S3.2	STRUCTURAL DETAILS
MECHANICAL								
M1.1							M1.1	MECHANICAL DEMO PLAN
M2.1							M2.1	MECHANICAL FLOOR PLAN
M3.1							M3.1	MECHANICAL ROOF PLAN
M4.1							M4.1	MECHANICAL SCHEDULES
M5.1							M5.1	MECHANICAL SPECIFICATIONS
ELECTRICAL								
E0.0							E0.0	ELECTRICAL SYMBOLS, SCHEDULES, SPEC'S
E1.00							E1.00	ELECTRICAL DEMO PLAN
E1.1							E1.1	ELECTRICAL PLAN
E1.2							E1.2	ELECTRICAL ROOF PLAN
E2.0							E2.0	PANELS, SINGLE LINE, LOAD CALCULATIONS
PLUMBING								
P1.1							P1.1	PLUMBING DEMO PLAN
P2.1							P2.1	PLUMBING FLOOR PLAN
P3.1							P3.1	PLUMBING SPECIFICATIONS

Calaway
 architecture
 1207 HAYSHIRE LN, ST#105, RICHARDSON, TX-75080
 PHONE: 214.368.2525



LAKE CITY WEST
 FMC DIALYSIS CLINIC
 FREEMAN'S
 MEDICAL CARE
 Lake City, FL
 ##### Orthopaedic Ct.

REVISIONS:
 JOB NO: 14013
 GENERAL SHEET
 G
 DATE: 09.11.14

301 General
301.1 Scope. The provisions of Chapter 3 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

302 Floor or Ground Surfaces
302.1 General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 305.

302.2 Carpet. Carpet or carpet tile shall be securely attached and shall have a firm cushion, pad, or backing no cushion or pad. Carpet or carpet tile shall have a level foot, reduced loop, level cut, or level cut/loop pile texture. Pile height shall be 1/2 inch (13 mm) maximum. Exposed edges of carpet shall be fastened to floor surfaces and shall have trim on the entire length of the exposed edge. Carpet edge trim shall comply with 303.

302.3 Openings. Openings in floor or ground surfaces shall not allow passage of a sphere more than 1/2 inch (13 mm) diameter except as allowed in 407.4.3, 409.4.3, 410.4.3, 410.5.3 and 410.10.3. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.

302.4 Elongated Openings in Floor or Ground Surfaces
302.4.1 General. Changes in level are permitted in floor or ground surfaces, they shall comply with 303.
EXCEPTIONS:
 1. Animal containment areas shall not be required to comply with 303.
 2. Areas of sport activity shall not be required to comply with 303.
 302.4.3 Vertical. Changes in level of 1/4 inch (6.4 mm) high maximum shall be permitted to be vertical.

302.5 Ramps. Changes in level greater than 1/2 inch (13 mm) high shall be permitted, and shall comply with 405 or 406.

302.6 Turning Spaces
302.6.1 General. Turning space shall comply with 304.

302.7 Floor or Ground Surfaces. Floor or ground surfaces of a turning space shall comply with 302. Changes in level are not permitted.
EXCEPTION: Slopes not steeper than 1:48 shall be permitted.
Advisory 304.2 Floor or Ground Surfaces Exception. As used in this section, the phrase "changes in level" refers to surfaces with slopes and to surfaces with abrupt changes in level that are permitted in Section 303. Such changes in level are prohibited in required clear floor and ground spaces, turning spaces, and in similar spaces where people using wheelchairs and other mobility devices must park their mobility aids such as wheelchairs, spaces, or maneuver to use elements such as doors, fixtures, and telephones. The exception permits slopes not steeper than 1:48.

302.8 Circular Space. The turning space shall be a space of 60 inches (1525 mm) diameter minimum. The space shall be permitted to include knee and toe clearance complying with 306.

302.9 T-Shaped Space. The turning space shall be a T-shaped space within a 60 inch (1525 mm) square minimum with arms and base 36 inches (915 mm) wide minimum. Each arm of the T shall be clear of obstructions 12 inches (305 mm) minimum in each direction and the base shall be clear of obstructions 24 inches (610 mm) minimum. The space shall be permitted to include knee and toe clearance complying with 306 only at the end of either the base or one arm.

302.10 Door Swing. Doors shall be permitted to swing into turning spaces.

303 Clear Floor or Ground Space
303.1 General. Clear floor or ground space shall comply with 305.

303.2 Floor or Ground Surfaces. Floor or ground surfaces of a clear floor or ground space shall comply with 302. Changes in level shall be permitted.
EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

303.3 Size. The clear floor or ground space shall be 30 inches (762 mm) minimum by 48 inches (1220 mm) minimum.

303.4 Knee and Toe Clearance. Unless otherwise specified, clear floor or ground space shall be permitted to include knee and toe clearance complying with 306.

303.5 Position. Unless otherwise specified, clear floor or ground space shall be positioned for either forward or parallel approach to an element.

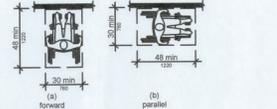


Figure 305.5 Position of Clear Floor or Ground Space

305.6 Approach. One full unobstructed side of the clear floor or ground space shall adjoin an accessible route or adjoin another clear floor or ground space.

305.7 Maneuvering Clearance. Where a clear floor or ground space is located in an alcove or otherwise confined on all or part of three sides, additional maneuvering clearance shall be provided in accordance with 305.7.1 and 305.7.2.

305.7.1 Forward Approach. Alcoves shall be 36 inches (915 mm) wide minimum where the depth exceeds 24 inches (610 mm).

305.7.2 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

305.7.3 Forward Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

305.7.4 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

305.7.5 Forward Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

305.7.6 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

306 Knee and Toe Clearance
306.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with 306. Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

306.2 Toe Clearance. Space under an element between the finish floor or ground and 6 inches (200 mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2.

306.2.1 Maximum Depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

306.2.2 Minimum Required Depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (430 mm) minimum under the element.

306.2.3 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance or 9 inches (230 mm) above the finish floor or ground shall not be considered toe clearance.

306.2.4 Width. Toe clearance shall be 30 inches (762 mm) wide minimum.

306.3 Knee Clearance. Space under an element between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3.

306.3.1 Minimum Required Depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (280 mm) minimum under the element.

306.3.2 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance or 9 inches (230 mm) above the finish floor or ground shall not be considered knee clearance.

306.3.3 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

306.3.4 Clearance Reduction. Between 11 inches (280 mm) and 27 inches (685 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (150 mm) in height.

306.3.5 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

307 Protruding Objects
307.1 General. Protruding objects shall comply with 307.

307.2 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

307.3 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) above the finish floor or ground shall be permitted to protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

307.4 Limits of Protruding Object
307.4.1 General. Protruding objects shall comply with 307.

307.4.2 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

EXCEPTION: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

307.5 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

EXCEPTION: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

307.6 Vertical Clearance. Vertical clearance shall be 80 inches (2030 mm) high minimum. Guards or other barriers shall be provided where the vertical clearance is less than 80 inches (2030 mm) high. The leading edge of each guardrail or barrier shall be located 27 inches (685 mm) maximum above the finish floor or ground.

EXCEPTION: Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

307.7 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

307.8 Forward Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

307.9 Parallel Approach. Alcoves shall be 60 inches (1525 mm) wide minimum where the depth exceeds 15 inches (380 mm).

308 Knee and Toe Clearance
308.1 General. Where space beneath an element is included as part of clear floor or ground space or turning space, the space shall comply with 306. Additional space shall not be prohibited beneath an element but shall not be considered as part of the clear floor or ground space or turning space.

308.2 Toe Clearance. Space under an element between the finish floor or ground and 6 inches (200 mm) above the finish floor or ground shall be considered toe clearance and shall comply with 306.2.

308.2.1 Maximum Depth. Toe clearance shall extend 25 inches (635 mm) maximum under an element.

308.2.2 Minimum Required Depth. Where toe clearance is required at an element as part of a clear floor space, the toe clearance shall extend 17 inches (430 mm) minimum under the element.

308.2.3 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance or 9 inches (230 mm) above the finish floor or ground shall not be considered toe clearance.

308.2.4 Width. Toe clearance shall be 30 inches (762 mm) wide minimum.

308.3 Knee Clearance. Space under an element between 9 inches (230 mm) and 27 inches (685 mm) above the finish floor or ground shall be considered knee clearance and shall comply with 306.3.

308.3.1 Minimum Required Depth. Where knee clearance is required under an element as part of a clear floor space, the knee clearance shall be 11 inches (280 mm) minimum under the element.

308.3.2 Additional Clearance. Space extending greater than 6 inches (150 mm) beyond the available knee clearance or 9 inches (230 mm) above the finish floor or ground shall not be considered knee clearance.

308.3.3 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

308.3.4 Clearance Reduction. Between 11 inches (280 mm) and 27 inches (685 mm) above the finish floor or ground, the knee clearance shall be permitted to reduce at a rate of 1 inch (25 mm) in depth for each 6 inches (150 mm) in height.

308.3.5 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

309 Protruding Objects
309.1 General. Protruding objects shall comply with 307.

309.2 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

309.3 Protrusion Limits. Objects with leading edges more than 27 inches (685 mm) above the finish floor or ground shall be permitted to protrude 4 inches (100 mm) maximum horizontally into the circulation path.

EXCEPTION: Handrails shall be permitted to protrude 4 1/2 inches (115 mm) maximum.

309.4 Limits of Protruding Object
309.4.1 General. Protruding objects shall comply with 307.

309.4.2 Post-Mounted Objects. Free-standing objects mounted on posts or pylons shall overhang circulation paths 12 inches (305 mm) maximum when located 27 inches (685 mm) minimum and 80 inches (2030 mm) maximum above the finish floor or ground. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (685 mm) maximum or 80 inches (2030 mm) minimum above the finish floor or ground.

EXCEPTION: The sloping portions of handrails serving stairs and ramps shall not be required to comply with 307.3.

309.5 Operable Parts
309.5.1 General. Operable parts shall comply with 306.

309.5.2 Clear Floor Space. A clear floor or ground space complying with 303 shall be provided.

309.5.3 Height. Operable parts shall be placed within one or more of the reach ranges specified in 306.

309.5.4 Operation. Operable parts shall be operable with one hand and shall not require tight grasping, pinching, or twisting of the wrist. The force required to activate operable parts shall be 5 pounds (22.2 N) maximum.

EXCEPTION: Gate pumps and door stops shall not be required to provide operable parts that have an activating force of 5 pounds (22.2 N) maximum.

401 General
401.1 Scope. The provisions of Chapter 4 shall apply where required by Chapter 2 or where referenced by a requirement in this document.

402.1 General. Accessible routes shall comply with 402.

402.2 Components. Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, doorways, ramps, curb ramps excluding the flared sides, elevators, and platform lifts. All components of an accessible route shall comply with the applicable requirements of Chapter 4.

403 Walking Surfaces
403.1 General. Walking surfaces that are a part of an accessible route shall comply with 403.

403.2 Floor or Ground Surface. Floor or ground surfaces shall comply with 302.

403.3 Slope. The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.

403.4 Changes in Level. Changes in level shall comply with 303.

403.5 Clearances. Walking surfaces shall provide clearances complying with 403.5.

EXCEPTION: Within employee work areas, clearances on common use circulation paths shall be permitted to be decreased by signage and equipment provided that the decrease is essential to the function of the work being performed.

403.5.1 Clear Width. Except as provided in 403.5.2 and 403.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

EXCEPTION: The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced clearances are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

403.5.2 Obstructed High Reach. Where a high forward reach is over an obstruction, the clear floor space shall extend beyond the element for a distance not less than the required reach depth over the obstruction. The high forward reach shall be 48 inches (1220 mm) maximum and the reach depth shall be 30 inches (762 mm) maximum. Where the reach depth exceeds 20 inches (510 mm), the high forward reach shall be 44 inches (1120 mm) maximum and the reach depth shall be 25 inches (635 mm) maximum.

403.5.3 Width. Knee clearance shall be 30 inches (762 mm) wide minimum.

403.6 Side Reach.
403.6.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 40 inches (1020 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

EXCEPTIONS:
 1. An obstruction shall be permitted between the clear floor or ground space and the element where the depth of the obstruction is 10 inches (255 mm) maximum.
 2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

403.6.2 Obstructed High Forward Reach
403.6.2.1 Unobstructed. Where a clear floor or ground space allows a parallel approach to an element and the side reach is unobstructed, the high side reach shall be 40 inches (1020 mm) maximum and the low side reach shall be 15 inches (380 mm) minimum above the finish floor or ground.

EXCEPTIONS:
 1. The top of wearing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.
 2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

403.6.3 Obstructed High Side Reach
403.6.3.1 Unobstructed Side Reach. Where a clear floor or ground space allows a parallel approach to an element and the high side reach is over an obstruction, the high side reach shall be 34 inches (865 mm) maximum and the depth of the obstruction shall be 24 inches (610 mm) maximum. The high side reach shall be 48 inches (1220 mm) maximum for a reach depth of 10 inches (255 mm) maximum. Where the reach depth exceeds 10 inches (255 mm), the high side reach shall be 46 inches (1170 mm) maximum for a reach depth of 24 inches (610 mm) maximum.

EXCEPTIONS:
 1. The top of wearing machines and clothes dryers shall be permitted to be 36 inches (915 mm) maximum above the finish floor.
 2. Operable parts of fuel dispensers shall be permitted to be 54 inches (1370 mm) maximum measured from the surface of the vehicular way where fuel dispensers are installed on existing curbs.

403.6.4 Clear Width at Turns. Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, the clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn, and 42 inches (1065 mm) minimum leaving the turn.

EXCEPTION: Where the clear width at the turn is 60 inches (1525 mm) minimum, compliance with 403.5.2 shall not be required.

404 Doors, Doorways, and Gates
404.1 General. Doors, doorways, and gates that are part of an accessible route shall comply with 404.

EXCEPTION: Doors, doorways, and gates designed to be operated only by personnel shall not be required to comply with 404.1.7, 404.1.8, 404.2.0, 404.3.2 and 404.3.4 through 404.3.7.

404.2 Manual Doors, Doorways, and Gates. Manual doors and doorways and manual gates intended for user passage shall comply with 404.2.

404.2.1 Revolving Doors, Doors, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

404.2.2 Double-Leaf Doors and Gates. At least one of the active leaves of doorways with two leaves shall comply with 404.2.1 and 404.2.4.

404.2.3 Clear Width. Door openings shall provide a clear width of 32 inches (815 mm) minimum. Clear openings of doorways with swinging doors shall be measured between the face of the door and the stop, with the door open 90 degrees. Clearings more than 24 inches (610 mm) deep shall provide a clear opening of 36 inches (915 mm) minimum. There shall be no projections into the required clear opening with less than 34 inches (865 mm) above the finish floor or ground. Projections into the clear opening width between 34 inches (865 mm) and 80 inches (2030 mm) above the finish floor or ground shall not exceed 4 inches (100 mm).

EXCEPTIONS:
 1. The top of a projection of 5/8 inch (16 mm) maximum into the required clear width shall be permitted for the side step.
 2. Door closers and door stops shall be permitted to be 78 inches (1980 mm) minimum above the finish floor or ground.

404.2.4 Clear Width of Doorways
 (a) hinged door
 (b) sliding door
 (c) folding door

404.2.5 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.6 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.7 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.8 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.9 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.10 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.11 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.12 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.13 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.14 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.15 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.16 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.17 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.18 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.19 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.20 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.21 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.22 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.23 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.24 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.25 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.26 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.27 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.28 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

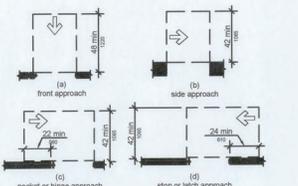
404.2.29 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.30 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.31 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.32 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.

404.2.33 Clearing Space. Clearing space shall be provided for the door to swing into the clearing space.



404.2.1 Door and Gate Surfaces. Swing door and gate surfaces within 10 inches (254 mm) of the finish floor or ground measured vertically shall have a smooth surface on the push side extending the full width of the door or gate. Any existing horizontal or vertical joints in these surfaces shall be within 1/16 inch (1.6 mm) of the same plane as the other. Cavities created by added kick plates shall be capped.

EXCEPTIONS:

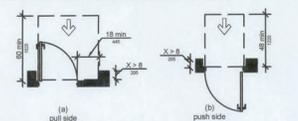
- Sliding doors shall not be required to comply with 404.2.1.
- Tempered glass doors without sashes and having a bottom sill or shoe with the top leading edge tapered at 60 degrees minimum from the horizontal shall not be required to meet the 10 inch (254 mm) bottom smooth surface height requirement.
- Doors and gates that do not extend to within 10 inches (254 mm) of the finish floor and shall not be required to comply with 404.2.1.
- Existing doors and gates without smooth surfaces within 10 inches (254 mm) of the finish floor or ground shall not be required to comply with 404.2.1.
- Edge protection shall not be required on the sides of ramp landings serving a vertical drop of 1/4 inch (6.4 mm) or less.
- Edge protection shall not be required on the sides of ramp landings having a vertical drop of 1/4 inch (6.4 mm) or less.

404.2.1.1 Visibility. Lights, doors, gates, and side lights adjacent to doors or gates, containing one or more glazing panels that permit viewing through the panels shall have the bottom of at least one glazed panel located 43 inches (1093 mm) maximum above the finish floor.

EXCEPTION: Vision lights with the lowest part more than 66 inches (1676 mm) from the finish floor or ground shall not be required to comply with 404.2.1.1.

Figure 404.2.1 Maneuvering Clearances at Doorways Without Doors, Sliding Doors, Gates, and Folding Doors

404.2.4.3 Recessed Doors and Gates. Maneuvering clearances for forward approach shall be provided when any obstruction within 18 inches (457 mm) of the latch side of a doorway projects more than 3 inches (76 mm) beyond the face of the door, measured perpendicular to the face of the door or gate.



404.3.1 Clear Width. Doorways shall provide a clear opening of 32 inches (813 mm) minimum in power-on and power-off mode. The minimum clear width shall be provided in the power-on mode and shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearance. Clearances at automatic doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates shall not be required to comply with 404.2.4.

EXCEPTION: Where automatic doors and gates remain open in the power-off condition, compliance with 404.2.4 shall not be required.

404.3.3 Thresholds. Thresholds and changes in level at doorways shall comply with 404.2.5.

404.3.4 Doors in Series and Gates in Series. Doors in series and gates in series shall comply with 404.2.5.

404.3.5 Controls. Manually operated controls shall comply with 309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

404.3.6 Break Out Opening. Where doors and gates without standby power are a part of a means of egress, the clear break out opening at egress or sliding doors and gates shall be 32 inches (813 mm) minimum when operated in emergency mode.

EXCEPTION: Where manual swinging doors and gates comply with 404.2 and serve the same means of egress compliance with 404.3.6 shall not be required.

404.3.7 Revolving Doors, Revolving Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

405 Ramps

405.1 General. Ramps on accessible routes shall comply with 405.

405.2 General. In assembly areas, aisle ramps adjacent to seating and not serving elevators, shall be 36 inches (915 mm) minimum and shall not be required to comply with 405.

405.3 Slope. Ramp runs shall have a running slope not steeper than 1:12. **EXCEPTION:** In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2.2 where such slopes are necessary due to space limitations.

405.4 Cross Slope. Cross slopes of ramp runs shall not be steeper than 1:48.

405.5 Floor or Ground Surfaces. Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

405.6 Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

EXCEPTION: Within employee work areas, the required clear width of ramps that are a part of a common use circulation path shall be permitted to be decreased by means of equipment provided that the decrease is essential to the function of the work being performed.

405.7 Rise. The rise for any ramp run shall be 30 inches (762 mm) maximum.

405.8 Landings. Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 405.7.

404.2.7 Door and Gate Hardware. Handles, pull latches, locks, and other operating parts on doors and gates shall comply with 309.4. Operate parts of such hardware shall be 34 inches (863 mm) minimum and 48 inches (1219 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTIONS:

- Existing locks shall be permitted in any location at existing glazed doors without sashes, existing overhead rolling doors or gates, and similar existing doors or gates that are designed with locks that are actuated only at the top or bottom rail.
- Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operate parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finish floor or ground provided the self-latching devices are not also self-latching devices and operated by means of a key, electronic opener, or integral combination lock.

404.2.8 Closing Speed. Door and gate closing speed shall comply with 404.2.8.

404.2.9 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 6 seconds minimum.

404.2.10 Spring Hinges. Door and gate spring hinges shall be adjusted so that from an open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for opening or putting open a door or gate other than fire doors shall be as follows:

- Interior hinged doors, 5 pounds (2.2 N) maximum.
- Sliding or rolling doors, 5 pounds (22.1 N) maximum.

These forces do not apply to the force required to retract latched bolts or disengage other devices that hold the door or gate in a closed position.

405.7.1 Ramp Landings.

405.7.1.1 Slope. Landings shall comply with 302. Changes in level not permitted. Slopes not steeper than 1:48 shall be permitted.

405.7.1.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.1.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.1.4 Change in Direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) wide.

405.7.1.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing.

404.3 Automatic and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with 403.4. Full-powered automatic doors shall comply with ANSI/HFMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/HFMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

404.3.1 Clear Width. Doorways shall provide a clear opening of 32 inches (813 mm) minimum in power-on and power-off mode. The minimum clear width shall be provided in the power-on mode and shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearance. Clearances at automatic doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates shall not be required to comply with 404.2.4.

EXCEPTION: Where automatic doors and gates remain open in the power-off condition, compliance with 404.2.4 shall not be required.

404.3.3 Thresholds. Thresholds and changes in level at doorways shall comply with 404.2.5.

404.3.4 Doors in Series and Gates in Series. Doors in series and gates in series shall comply with 404.2.5.

404.3.5 Controls. Manually operated controls shall comply with 309. The clear floor space adjacent to the control shall be located beyond the arc of the door swing.

404.3.6 Break Out Opening. Where doors and gates without standby power are a part of a means of egress, the clear break out opening at egress or sliding doors and gates shall be 32 inches (813 mm) minimum when operated in emergency mode.

EXCEPTION: Where manual swinging doors and gates comply with 404.2 and serve the same means of egress compliance with 404.3.6 shall not be required.

404.3.7 Revolving Doors, Revolving Gates, and Turnstiles. Revolving doors, revolving gates, and turnstiles shall not be part of an accessible route.

405 Ramps

405.1 General. Ramps on accessible routes shall comply with 405.

405.2 General. In assembly areas, aisle ramps adjacent to seating and not serving elevators, shall be 36 inches (915 mm) minimum and shall not be required to comply with 405.

405.3 Slope. Ramp runs shall have a running slope not steeper than 1:12. **EXCEPTION:** In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 405.2.2 where such slopes are necessary due to space limitations.

405.4 Cross Slope. Cross slopes of ramp runs shall not be steeper than 1:48.

405.5 Floor or Ground Surfaces. Floor or ground surfaces of ramp runs shall comply with 302. Changes in level other than the running slope and cross slope are not permitted on ramp runs.

405.6 Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.

EXCEPTION: Within employee work areas, the required clear width of ramps that are a part of a common use circulation path shall be permitted to be decreased by means of equipment provided that the decrease is essential to the function of the work being performed.

405.7 Rise. The rise for any ramp run shall be 30 inches (762 mm) maximum.

405.8 Landings. Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 405.7.

404.2.7 Door and Gate Hardware. Handles, pull latches, locks, and other operating parts on doors and gates shall comply with 309.4. Operate parts of such hardware shall be 34 inches (863 mm) minimum and 48 inches (1219 mm) maximum above the finish floor or ground. Where sliding doors are in the fully open position, operating hardware shall be exposed and usable from both sides.

EXCEPTIONS:

- Existing locks shall be permitted in any location at existing glazed doors without sashes, existing overhead rolling doors or gates, and similar existing doors or gates that are designed with locks that are actuated only at the top or bottom rail.
- Access gates in barrier walls and fences protecting pools, spas, and hot tubs shall be permitted to have operate parts of the release of latch on self-latching devices at 54 inches (1370 mm) maximum above the finish floor or ground provided the self-latching devices are not also self-latching devices and operated by means of a key, electronic opener, or integral combination lock.

404.2.8 Closing Speed. Door and gate closing speed shall comply with 404.2.8.

404.2.9 Door Closers and Gate Closers. Door closers and gate closers shall be adjusted so that from an open position of 90 degrees, the time required to move the door to a position of 12 degrees from the latch is 6 seconds minimum.

404.2.10 Spring Hinges. Door and gate spring hinges shall be adjusted so that from an open position of 70 degrees, the door or gate shall move to the closed position in 1.5 seconds minimum.

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for opening or putting open a door or gate other than fire doors shall be as follows:

- Interior hinged doors, 5 pounds (2.2 N) maximum.
- Sliding or rolling doors, 5 pounds (22.1 N) maximum.

These forces do not apply to the force required to retract latched bolts or disengage other devices that hold the door or gate in a closed position.

405.7.1 Ramp Landings.

405.7.1.1 Slope. Landings shall comply with 302. Changes in level not permitted. Slopes not steeper than 1:48 shall be permitted.

405.7.1.2 Width. The landing clear width shall be at least as wide as the widest ramp run leading to the landing.

405.7.1.3 Length. The landing clear length shall be 60 inches (1525 mm) long minimum.

405.7.1.4 Change in Direction. Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) wide.

405.7.1.5 Doorways. Where doorways are located adjacent to a ramp landing, maneuvering clearances required by 404.2.4 and 404.3.2 shall be permitted to overlap the required landing.

405.8 Handrails. Ramp runs with a rise greater than 6 inches (150 mm) shall have handrails complying with 305.

EXCEPTION: Within employee work areas, handrails shall not be required where ramps that are part of a common use circulation path are designed to permit the installation of handrails complying with 305. Ramps not subject to the exception to 405.8 shall be designed to maintain a 36 inch (915 mm) minimum clear width when handrails are installed.

405.9 Edge Protection. Edge protection complying with 405.9.1 or 405.9.2 shall be provided on each side of ramp runs and at each side of ramp landings.

- Edge protection shall not be required on ramps that are not required to have handrails and shall not be required to comply with 405.9.
- Edge protection shall not be required on the sides of ramp landings serving a vertical drop of 1/4 inch (6.4 mm) or less.
- Edge protection shall not be required on the sides of ramp landings having a vertical drop of 1/4 inch (6.4 mm) or less.

405.9.1 Extended Floor or Ground Surface. The floor or ground surface of the ramp run or landing shall extend 12 inches (305 mm) minimum beyond the inside face of a handrail complying with 305.

405.9.2 Curbs or Barriers. A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

406 Counter Slope. Counter slopes of adjoining gates and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surface at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

406.1 General. Curb ramps on accessible routes shall comply with 406, 405.2 through 405.5, and 406.5.10.

406.2 Counter Slope. Counter slopes of adjoining gates and road surfaces immediately adjacent to the curb ramp shall not be steeper than 1:20. The adjacent surface at transitions at curb ramps to walks, gutters, and streets shall be at the same level.

406.3 Sides of Curb Ramps

406.3.1 Landings. Landings shall be provided at the top of curb ramps. The landing clear length shall be 36 inches (915 mm) minimum. The landing clear width shall be at least as wide as the curb ramp, excluding flared sides, leading to the ramp. **EXCEPTION:** In alterations, where there is no landing at the top of curb ramps, curb ramp flares shall be provided and shall not be steeper than 1:12.

406.3.2 Flared Sides. Flared sides 1:10 max slope.

406.3.3 Slopes. Slopes shall be 1:12 maximum.

406.3.4 Visible Signs. Visible signs shall be provided at 72 inches (1830 mm) minimum above the finish floor or ground. The visible sign elements shall be 2 1/2 inches (64 mm) minimum measured along the vertical centerline of the element. Signs shall be visible from the floor area adjacent to the hall call button.

406.3.5 Audible Signals. Audible signals shall be provided at 72 inches (1830 mm) minimum above the finish floor or ground. The audible signal elements shall be 2 1/2 inches (64 mm) minimum measured along the vertical centerline of the element. Signs shall be visible from the floor area adjacent to the hall call button.

406.3.6 Directional Indicators. Directional indicators shall be provided to show the direction of travel. Directional indicators shall be visible from the floor area adjacent to the hall call button.

406.3.7 Tactile Indicators. Tactile indicators shall be provided to show the direction of travel. Tactile indicators shall be visible from the floor area adjacent to the hall call button.

406.3.8 Braille. Braille shall be provided to show the direction of travel. Braille shall be visible from the floor area adjacent to the hall call button.

406.3.9 Contrast. Contrast shall be provided to show the direction of travel. Contrast shall be visible from the floor area adjacent to the hall call button.

406.3.10 Color. Color shall be provided to show the direction of travel. Color shall be visible from the floor area adjacent to the hall call button.

406.3.11 Shape. Shape shall be provided to show the direction of travel. Shape shall be visible from the floor area adjacent to the hall call button.

406.3.12 Size. Size shall be provided to show the direction of travel. Size shall be visible from the floor area adjacent to the hall call button.

406.3.13 Orientation. Orientation shall be provided to show the direction of travel. Orientation shall be visible from the floor area adjacent to the hall call button.

406.3.14 Location. Location shall be provided to show the direction of travel. Location shall be visible from the floor area adjacent to the hall call button.

406.3.15 Material. Material shall be provided to show the direction of travel. Material shall be visible from the floor area adjacent to the hall call button.

406.3.16 Color. Color shall be provided to show the direction of travel. Color shall be visible from the floor area adjacent to the hall call button.

406.3.17 Shape. Shape shall be provided to show the direction of travel. Shape shall be visible from the floor area adjacent to the hall call button.

406.3.18 Size. Size shall be provided to show the direction of travel. Size shall be visible from the floor area adjacent to the hall call button.

406.3.19 Orientation. Orientation shall be provided to show the direction of travel. Orientation shall be visible from the floor area adjacent to the hall call button.

406.3.20 Location. Location shall be provided to show the direction of travel. Location shall be visible from the floor area adjacent to the hall call button.

406.3.21 Material. Material shall be provided to show the direction of travel. Material shall be visible from the floor area adjacent to the hall call button.

406.3.22 Color. Color shall be provided to show the direction of travel. Color shall be visible from the floor area adjacent to the hall call button.

406.3.23 Shape. Shape shall be provided to show the direction of travel. Shape shall be visible from the floor area adjacent to the hall call button.

406.3.24 Size. Size shall be provided to show the direction of travel. Size shall be visible from the floor area adjacent to the hall call button.

406.3.25 Orientation. Orientation shall be provided to show the direction of travel. Orientation shall be visible from the floor area adjacent to the hall call button.

406.3.26 Location. Location shall be provided to show the direction of travel. Location shall be visible from the floor area adjacent to the hall call button.

406.3.27 Material. Material shall be provided to show the direction of travel. Material shall be visible from the floor area adjacent to the hall call button.

406.3.28 Color. Color shall be provided to show the direction of travel. Color shall be visible from the floor area adjacent to the hall call button.

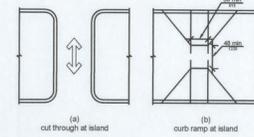


Figure 407.2.2.2 Curb Ramps

407 Elevators

407.1 General. Elevators shall comply with 407 and with ASME A17.1 (incorporated by reference, see "Referenced Standards" in Chapter 1). They shall be passenger elevators as classified by ASME A17.1. Elevator operation shall be automatic.

407.2 Elevator Landing Requirements. Elevator landings shall comply with 407.2.

407.2.1 Call Buttons. Where elevator call buttons or keypads are provided, they shall comply with 407.2.1 and 309.4. Call buttons shall be raised or flared.

EXCEPTION: Existing elevators shall be permitted to have recessed call buttons.

407.2.1.1 Height. Call buttons and keypads shall be located within one of the reach ranges specified in 308, measured to the centerline of the highest operable part.

EXCEPTION: Existing call buttons and existing keypads shall be permitted to be located at 54 inches (1370 mm) maximum above the finish floor, measured to the centerline of the highest operable part.

407.2.1.2 Size. Call buttons shall be 3/4 inch (19 mm) min. in the smallest dimension.

EXCEPTION: Existing elevator call buttons shall not be required to comply with 407.2.1.2.

407.2.1.3 Clear Floor or Ground Space. A clear floor or ground space complying with 305 shall be provided at call controls.

407.2.1.4 Location. The call button that designates the up-direction shall be located above the call button that designates the down direction.

EXCEPTION: Destination-oriented elevators shall not be required to comply with 407.2.1.4.

407.2.1.5 Signals. Call buttons shall have visible signals to indicate when each call is registered and when each call is answered.

EXCEPTIONS:

- Destination-oriented elevators shall not be required to comply with 407.2.1.5 provided that visible and audible signals complying with 407.2.2 indicating which elevator car is serving are provided.
- Existing elevators shall not be required to comply with 407.2.1.5.

407.2.1.6 Keypads. Where keypads are provided, keypads shall be in a standard telephone keypad arrangement and shall comply with 407.4.2.

407.2.2 Hall Signals. Hall signals, including in-car signals, shall comply with 407.2.2.

407.2.2.1 Visible and Audible Signals. Visible and audible signal shall be provided at each hoistway entrance to indicate which car is answering a call and the car's direction of travel. Where in-car signals are provided, they shall be visible from the floor area adjacent to the hall call buttons.

EXCEPTIONS:

- Visible and audible signals shall not be required at each destination-oriented elevator where a visible and audible signal complying with 407.2.2 is provided indicating the elevator car designation information.
- In existing elevators, a signal indicating the direction of car travel shall not be required.

407.2.2.2 Visible Signs. Visible signal fixtures shall be provided at 72 inches (1830 mm) minimum above the finish floor or ground. The visible sign elements shall be 2 1/2 inches (64 mm) minimum measured along the vertical centerline of the element. Signs shall be visible from the floor area adjacent to the hall call button.

EXCEPTIONS:

- Destination-oriented elevators shall be permitted to have signals visible from the floor area adjacent to the hoistway entrance.
- Existing elevators shall not be required to comply with 407.2.2.2.

407.2.2.3 Audible Signals. Audible signals shall sound once for the up direction and twice for the down direction, or shall have verbal announcements that indicate the direction of elevator car travel. Audible signals shall have a frequency of 1500 Hz maximum. Verbal announcements shall have a frequency of 300 Hz minimum and 3000 Hz maximum. The audible signal and verbal announcer shall be 10 dB minimum above ambient, but shall not exceed 80 dB, measured at the hall call button.

EXCEPTIONS:

- Destination-oriented elevators shall not be required to comply with 407.2.2.3 provided that the audible tone and verbal announcement are the same as those given at the call button or call button landing.
- Existing elevators shall not be required to comply with the requirements for frequency and dB range in 407.2.2.3.

407.2.2.4 Differentiation. Each destination-oriented elevator in a bank of elevators shall have audible and visible means for differentiation.

407.2.3 Hoistway Signs. Signs at elevator hoistways shall comply with 407.2.3.

407.2.3.1 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.2 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.3 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.4 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.5 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.6 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.7 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.8 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.9 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations shall be provided in both tactile characters and braille. Tactile characters shall be 2 inches (51 mm) high minimum. A tactile dot shall be provided both jambs at the main entry level.

407.2.3.10 Floor Designation. Floor designations complying with 702.2 and 703.4.1 shall be provided on both jambs of elevator hoistway entrances. Floor designations

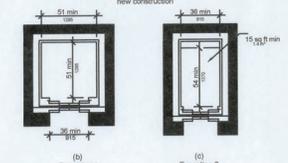
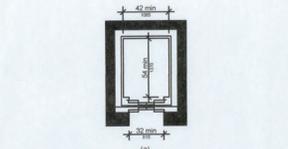


Figure 408.4.1 Limited-Use/Limited-Application (LULA) Elevator Car

408.4.2 Floor Surfaces. Floor surfaces in elevator cars shall comply with 302 and 303.

408.4.3 Platform to Hoistway Clearance. The platform to hoistway clearance shall comply with 407.4.3.

408.4.4 Levelling. Elevator car levelling shall comply with 407.4.4.

408.4.5 Illumination. Elevator car illumination shall comply with 407.4.5.

408.4.6 Car Controls. Elevator car controls shall comply with 407.4.6. Control panels shall be centered on a side wall.

408.4.7 Designations and Indicators of Car Controls. Designations and indicators of car controls shall comply with 407.4.7.

408.4.8 Emergency Communications. Car emergency signaling devices complying with 407.4.8 shall be provided.

408.4.9 Elevator Enclosures - Section omitted

410.1 General. Platform lifts shall comply with ASME A18.1 (1999 edition) or 2003 edition (incorporated by reference, see "References" in Chapter 1).

410.1.1 Platform lifts shall not be attended/operated and shall provide unassisted entry and exit from the lift.

410.1.2 Floor Surfaces. Floor surfaces in platform lifts shall comply with 302 and 303.

410.1.3 Clear Floor Space. Clear floor space in platform lifts shall comply with 305.

410.1.4 Platform to Runway Clearance. The clearance between the platform and all edges of any runway landing shall be 1 inch (25 mm) minimum.

410.1.5 Operable Parts. Controls for platform lifts shall have low-energy power-operated doors and gates.

410.1.6 Doors and Gates. Platform lifts shall have low-energy power-operated doors or gates complying with 404.3. Doors shall remain open for 20 seconds minimum.

End doors and gates shall provide a clear width of 42 inches (1065 mm) minimum. Side doors and gates shall provide a clear width of 42 inches (1065 mm) minimum.

EXCEPTION: Platform lifts serving two landings maximum and having doors or gates on opposite sides shall be permitted to have self-closing manual doors or gates.

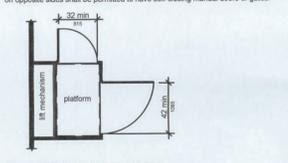


Figure 503.3 Passenger Loading Zone Access Aisle

503.4 Floor and Ground Surfaces. Vehicle pull-up spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the platform and shall provide a clear width of 32 inches (813 mm) minimum.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

503.4.1 Vertical Clearance. Vehicle pull-up spaces, access aisles serving them, and a vehicle route from an entrance to the passenger loading zone, and from the passenger loading zone to a vehicle pull-up space shall provide a vertical clearance of 14 inches (355 mm) minimum.

504 Stairways

504.1 General. Stairs shall comply with 504.

504.2 Treads and Risers. All steps on a flight of stairs shall have uniform rise heights and uniform tread depths. Risers shall not be 4 inches (102 mm) high minimum and 7 inches (180 mm) high maximum. Treads shall be 11 inches (280 mm) deep minimum.

504.3 Open Risers. Open risers are not permitted.

504.4 Tread Surfaces. Stair treads shall comply with 302. Changes in level are not permitted.

EXCEPTION: Treads shall be permitted to have a slope not steeper than 1:48.

504.5 Handing. The radius of curvature at the leading edge of the tread shall be 1/2 inch (13 mm) minimum. Nosings that project beyond risers shall have the underside of the leading edge rounded or beveled. Risers shall be permitted to project beyond the tread at an angle of 30 degrees maximum from vertical.

The permitted projection of the nosing shall extend 1 1/2 inches (38 mm) maximum over the tread below.



Figure 504.5 Stair Nosings

504.6 Handrails. Stairs shall have handrails complying with 505.

504.7 Tread Conditions. Stair treads and nosings are subject to wet conditions shall be designed to prevent the accumulation of water.

505 Handrails

505.1 General. Handrails provided along walking surfaces complying with 404 shall comply with 505.

505.2 Where Required. Handrails shall be provided on both sides of and

EXCEPTION: In assembly areas, handrails shall not be required on both sides of

505.3 Access Aisle. Access aisles serving parking spaces shall comply with 502.3. Access aisles shall adjoin an accessible route. Two parking spaces shall be permitted to share a common access aisle.

EXCEPTION: In assembly areas, handrails on ramps shall not be required to be provided along the leading edge.

505.4 Height. Top of gripping surfaces of handrails shall be 34 inches (865 mm) minimum and 38 inches (965 mm) maximum vertically above walking surfaces, and nosings, and ramp surfaces. Handrails shall be at a consistent height above walking surfaces, stair nosings, and ramp surfaces.

505.5.1 Bottom Handrail Extension. At the bottom of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beyond the top and bottom of ramp runs. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

505.5.2 Top Handrail Extension. At the top of a stair flight, handrails shall extend horizontally above the landing for 12 inches (305 mm) minimum beginning directly above the first riser nosing. Extensions shall return to a wall, guard, or the landing surface, or shall be continuous to the handrail of an adjacent stair flight.

505.5.3 Bottom Handrail Extension at Stairs

601 General. The provisions of Chapter 6 shall apply where required by Chapter 2.

601.1 Scope. The provisions of Chapter 6 shall apply where required by Chapter 2.

602 Drinking Fountains

602.1 General. Drinking fountains shall comply with 307 and 602.

602.2 Clear Floor Space. Units shall have a clear floor or ground space complying with 305 positioned for a full approach and centered on the unit. Knees and toe clearance complying with 308 shall be provided.

EXCEPTION: A full approach complying with 305 shall be permitted at units for children's use where the spout is 30 inches (760 mm) maximum above the finish floor or ground.

602.3 Operable Parts. Operable parts shall comply with 309.

602.4 Spout Height. Spout outlets shall be 36 inches (915 mm) maximum above the finish floor or ground.

602.5 Spout Location. The spout shall be 15 inches (380 mm) minimum from the vertical support and 5 inches (125 mm) maximum from the front edge of the unit, including bumpers.

602.6 Gripping Surfaces. Handrail gripping surfaces shall be continuous along the entire length of the unit. Handrails shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall not exceed 1 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

EXCEPTIONS:



Figure 505.4 Handrail Height

505.5 Clearance. Clearance between handrail gripping surfaces and adjacent surfaces shall be 1 1/2 inches (38 mm) minimum.

505.6 Handrail Clearance

505.6.1 Gripping Surface. Handrail gripping surfaces shall be continuous along the entire length of the unit. Handrails shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall not exceed 1 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

EXCEPTIONS:

1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.

2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch (3 mm) for each 1/2 inch (13 mm) of additional handrail perimeter dimension that exceeds 4 inches (102 mm).

505.6.2 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.3 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.4 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.5 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.6 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.7 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.8 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.9 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.10 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.11 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.12 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.13 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.14 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.15 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.16 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.17 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.18 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.19 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.20 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.21 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.22 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.23 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.24 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.25 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.26 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.27 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.28 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.29 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.30 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.31 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.32 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.33 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.34 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.35 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.36 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.37 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.38 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.39 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.40 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.41 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.42 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.43 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.44 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.45 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.46 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.47 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.48 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.49 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.50 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.51 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.52 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.53 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.54 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.55 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.56 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.57 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.

505.6.58 Floor or Ground Surfaces. Parking spaces and access aisles serving them shall comply with 302. Access aisles shall be at the same level as the parking spaces they serve. Changes in level are not permitted.

EXCEPTION: Slopes not steeper than 1:48 shall be permitted.

505.6.59 Vertical Clearance. Parking spaces for vans and access aisles and vehicle routes serving them shall provide a vertical clearance of 68 inches (1727 mm) minimum.

505.6.60 Identification. Parking space identification signs shall include the International Symbol of Accessibility complying with 703.7.2.1. Signs identifying van parking spaces shall contain the designation "van accessible." Signs shall be 60 inches (1525 mm) minimum above the finish floor or ground surface measured to the bottom of the sign.



Figure 602.4 Handrail Height

602.4 Handrail Height. Handrail gripping surfaces shall be continuous along the entire length of the unit. Handrails shall not be obstructed along their tops or sides. The bottoms of handrail gripping surfaces shall not be obstructed for more than 20 percent of their length. Where provided, horizontal projections shall not exceed 1 1/2 inches (38 mm) minimum below the bottom of the handrail gripping surface.

EXCEPTIONS:

1. Where handrails are provided along walking surfaces with slopes not steeper than 1:20, the bottoms of handrail gripping surfaces shall be permitted to be obstructed along their entire length where they are integral to crash rails or bumper guards.

2. The distance between horizontal projections and the bottom of the gripping surface shall be permitted to be reduced by 1/8 inch (3 mm) for each 1/2 inch (13 mm) of additional handrail perimeter dimension that exceeds 4 inches (102 mm).

602.5 Drinking Fountain Spout Location

602.5.1 Water Flow. The spout shall provide a flow of water 4 inches (102 mm) high minimum and shall be located 5 inches (125 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (75 mm) from the front of the unit, the angle of the water stream shall be 30 degrees maximum.

Where spouts are located between 3 inches (75 mm) and 5 inches (125 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum.

602.5.2 Overflow. Required clear floor spaces, clearance at footings, and turning space shall be permitted to overlap.

602.5.3 Overflow. Required clear floor spaces, clearance at footings, and turning space shall be permitted to overlap.

602.5.4 Overflow. Required clear floor spaces, clearance at footings, and turning space shall be permitted to overlap.

602.5.5 Overflow. Required clear floor spaces, clearance at footings, and turning space shall be permitted to overlap.

602.5.6 Overflow. Required clear floor spaces, clearance at footings, and turning space shall be permitted to overlap.

602.5.7 Overflow. Required clear floor spaces, clearance at footings, and turning space shall be permitted to overlap.

CONDITIONS OF CONTRACT

The following Conditions of Contract are included as if bound with this document:

- Owner Contractor Agreement:
1. AIA A191-1997, Stipulated Sum, For Construction Projects of Limited Scope.

- General Conditions:
1. AIA A201-1997, for Construction.

DIVISION 1 - GENERAL REQUIREMENTS

SECTION 01000 - PROJECT REQUIREMENTS

- Summary:
1. The Project consists of a single story wood frame masonry and stone veneer shell building consisting of 10,337 square feet

- Project Requirements:
1. Concurrent Work by Owner or Others: Tenant finish out work.

- Permits:
1. Apply for, obtain, and pay for building permits, other permits, and utility company back charges required to perform the work. Submit copies to Owner/Landlord.

- Inter:
1. Drawings and specifications are intended to provide the basis for the proper completion of the Project suitable for the intended use of the Owner.
2. Items not expressly set forth but which are reasonably implied or necessary for the proper performance of this work shall be included.

- Coordination:
1. Coordinate the work of all trades.
2. Prepare coordination drawings for areas above ceilings where close tolerances are required between building elements and mechanical and electrical work.
3. Verify location of utilities and existing conditions. Notify Architect of conditions differing from those indicated on the Drawings.
4. Verify dimensions on Drawings with dimensions at the Project. Do not scale Drawings.

- Cutting and Patching:
1. Provide cutting and patching work to properly complete the Project.
2. Do not remove or alter structural components without written approval.
3. Cut with tools appropriate for materials to be cut.
4. Patch with materials and methods to produce patch which is not visible from a distance of five feet.
5. Do not cut and patch in a manner that would result in a failure of the work to perform as intended, decrease life performance, decrease acoustical performance, decrease energy performance, decrease operational life, or decrease safety factors.

- Field Engineering:
1. Verify and locate utilities, existing facilities, and equipment.
2. Survey and layout improvements, utilities, structures, and components.

- Project Meetings:
1. Arrange for a preconstruction conference prior to start of construction. Meeting shall be attended by Owner, Architect, Contractor, and major subcontractors.
2. Arrange for progress meetings and/or conference calls every week during construction. Record minutes and distribute promptly.

- Submittals:
1. Submit a project schedule and update at least monthly. Submit for approval all submittals listed in individual sections with the following number of copies: Shop drawings, reviewed and annotated by the Contractor, 3 copies; product data, 3 copies; samples, 3 sets plus range samples where applicable; test reports, 3 copies; warranties, 3 copies; other submittals, 3 copies.
2. Include details of construction and adjacent construction in shop drawings. Clearly indicate any deviations from requirements of the contract documents. Fabricate materials from approved shop drawings only.

- Quality Assurance:
1. Comply with applicable codes, regulations, ordinances and requirements of authorities having jurisdiction, including accessibility guidelines where applicable. Submit copies of inspection reports, notices and similar documents to Architect.
2. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years.
3. Use experienced installers. Furnish evidence of experience if requested.
4. Deliver, handle, and store materials in strict accordance with manufacturer's instructions.
5. List of any supplier or subcontractor is subject to Owner's approval.
6. Engage and pay for testing agencies as required. Refer to individual sections for additional requirements.

- Temporary Facilities:
1. Provide temporary facilities and connections as required for the proper completion of the project.
2. Provide and maintain temporary utility services.
3. Owner will pay for utility service consumed. Do not waste.
4. Provide temporary protection for adjacent areas to prevent contamination by construction dust and debris.
5. Provide temporary barricades as necessary to ensure protection of the public.
6. Provide suitable waste disposal units and empty regularly. Do not permit accumulation of trash and waste materials.
7. Provide temporary sanitary facilities.
8. Maintain egress within and around construction areas.
9. Provide fire extinguishers in work areas during construction.
10. Provide temporary protection for adjacent construction. Promptly repair any damage at no additional cost to the Owner.

- Products and Substitutions:
1. Provide products and materials specified. Request Architect's selection of colors and accessories in sufficient time to avoid delaying progress of the work.
2. Submit requests for substitutions shall be in writing, including reasons. Submit sufficient information for Architect to evaluate proposed substitution.
3. Remove and replace work which does not conform to the contract documents at no additional expense to the Owner.

- Installation:
1. Inspect substrates and report unsatisfactory conditions in writing.
2. Do not proceed until unsatisfactory conditions have been corrected.
3. Take field measurements prior to fabrication where practical. Form to required shapes and sizes with true lines, lines and angles. Provide inserts and templates as needed for work of other trades.
4. Install materials in exact accordance with manufacturer's instructions and approved submittals.
5. Install materials in proper relation with adjacent construction and with proper appearance.
6. Restore units damaged during installation. Replace units which cannot be restored at no additional expense to the Owner.
7. Refer to additional installation requirements and tolerances specified under individual specification sections.

- Closeout:
1. Prepare punch list for remaining work for review by the Architect.
2. Complete punch list items promptly at no additional expense to the Owner.
3. Submit accurate record documents of building and site to comply with landlord's lease requirements.
4. Submit operating manuals, maintenance manuals, and warranty information to comply with landlord's lease requirements.
5. Obtain and submit copy of occupancy permits.
6. Train Owner's personnel in use of building systems.
7. Remove temporary facilities and provide final cleaning and touch-up.
8. Restore portions of building, site improvements, landscaping and other items damaged by construction operations to the satisfaction of the Architect at no additional expense to the Owner.

SECTION 01030 - ALLOWANCES - NOT USED

SECTION 01033 - ALTERNATES - NOT USED

DIVISION 2 - SITEWORK

SECTION 02230 - SITE CLEARING - REFERENCE CIVIL DOCUMENTS

SECTION 02300 - EARTHWORK

- Summary:
1. Provide excavation, filling, compaction, and grading for buildings, site improvements, and utilities.
2. Provide materials as specified for sub-base, drainage fill, and backfill for slabs, pavements, and improvements.
3. Provide rock excavation without blasting unless authorized.
4. Provide additional materials from offsite if required.
5. Provide removal and legal disposal of excavated materials.
6. Provide erosion control and control of runoff during earthwork operations.

- Submittals:
1. Submit list and source of materials from offsite, and submit proposed location for disposal of excess materials.
1. Submit product data, shop drawings.

- Products:
1. Sub-base Material: Graded mixture of natural or crushed gravel, crushed stone or slag, and natural or crushed sand.
2. Drainage Fill: Washed, evenly graded mixture of crushed stone or gravel, with 100 percent passing a 1-1/2 inch sieve and not more than 5 percent passing a No. 200 sieve.
3. Backfill and Fill Materials: Satisfactory soil materials free of clay, rock or gravel larger than 2 inches in any dimension, debris, waste, frozen materials, vegetation, and other unsuitable materials.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Provide compaction under structures, building slabs, steps, pavements, and walkways: 95 percent maximum density, ASTM D 698, standard Proctor.
3. Provide compaction under lawns or unpaired areas: 90 percent maximum density, ASTM D 698, standard Proctor.
4. Provide grading tolerance for lawns, unpaired areas, and walks of plus or minus 1 inch.
5. Provide grading tolerance for pavements of plus or minus 1/2 inch.
6. Provide grading tolerance for fill under building slabs of plus or minus 1/2 inch measured with 10 foot straightedge.

DIVISION 3 - CONCRETE- REFERENCE STRUCTURAL

DIVISION 4 - MASONRY

SECTION 04800 - UNIT MASONRY

- Summary:
1. Provide Unit Masonry Construction:
a. Masonry block.
2. Repair damaged masonry and repoint damaged joints.

- Submittals:
1. Submit product data, samples, shop drawings, 4 foot by 4 foot mockup, test reports.

- Products:
1. Products: As selected by Architect complying with the following.
2. Products: Refer to Section 01030 - Allowances.
3. a. Face Brick:
1) Standard modular size, 3-5/8 inches thick by 2-1/4 inches high by 7-5/8 inches long.
2) Grade: ASTM C 216, Grade SW, severe weathering type areas subject to freeze, thaw and ASTM C 216, Grade MW, moderate weathering type elsewhere.
3) Type: ASTM C 216, Type FBS, for general exposed use.
4) Spacial Shapes: As required by building configuration.
5) Bond Pattern: Running.
b. Stone Veneer:

- 4. Mortar and Grout:
a. Mortar Mix: ASTM C 270, Type S, for reinforced masonry, masonry below grade and masonry in contact with earth and ASTM C 270, Type N, for above grade loadbearing and nonloadbearing walls and parapet walls and for interior loadbearing and nonloadbearing partitions.
b. Mortar Materials: Portland cement, ASTM C 150, Type I or II
c. Mortar Materials: Masonry cement, ASTM C 91
d. Mortar Materials: Ready mixed, ASTM C 207, Type S materials.
e. Mortar Aggregate: Natural, ASTM C 144.
f. Mortar Aggregate: White, ASTM C 144.
g. Mortar Aggregate: Special color, ASTM C 144.
h. Grout Aggregate: ASTM C 404.
i. Hydrated Lime: ASTM C 207, Type S.
j. Color: Natural
k. Color: Colored pigmented mortar.

- 8. Ties and Anchors:
a. Bolt Wire Ties: Galvanized steel.
b. Right Anchors: Galvanized steel straps.
c. Adjustable Masonry Veneer Anchors: Screw-attached two-piece galvanized triangular or rectangular wire tie and metal anchor.
d. Dowel Stds: Galvanized steel sheet.
e. Anchor Bolts: ASTM A 307, Grade A, galvanized.
f. Post Installed Anchors: Chemical or expansion anchors.
9. Masonry Accessories:
a. Nonmetallic expansion joint strips.
b. Preformed control joint gaskets.
c. Bond breaker strips.
d. Weep sash and tubes.
e. Mortar net.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with PCA Recommended Practices for Laying Concrete Block, Brick Institute of America Tech Notes, and NCMCA T&E Bulletins.
3. Comply with cold weather and warmer weather protection procedures as recommended in BIA Tech Notes.
4. Provide fire-rated assemblies complying with ASTM E 119.
5. Sawcut units when required. Maintain uniform joint width. Provide full bed, head and collar joints except at weepholes.
6. Install lintels and accessories in masonry construction.
7. Coordinate installation of flashings.
8. Comply with applicable codes and regulations for spacing of ties and horizontal reinforcing.
9. Provide expansion and control joints in accordance with referenced publications.
10. Remove and replace damaged units.
11. Clean brick using bucket and brush method, BIA Tech Note 20.
12. Clean concrete masonry by dry brushing, NCMCA T&E No. 28.

DIVISION 5 - METALS

SECTION 05500 - METAL FABRICATIONS

- Summary:
1. Provide metal fabrications:
a. Rough hardware.
b. Ladders.
c. Loose steel lintels.
d. Miscellaneous steel trim.
e. Dumpster enclosure gates.
2. Tolerances: Fabrication tolerance 1/8 inch in 10 feet, erection tolerance, 1/16 inch.

- Submittals:
1. Submit product data, shop drawings.

- Products:
1. Steel Plates, Shapes and Bars: ASTM A 36.
2. Steel Tubing: ASTM A 500 or A 501.
3. Steel Pipe, Black Finish: ASTM A 53.
4. Stainless Steel Bar Stock: ASTM A 276, Type 302 or 304.
5. Stainless Steel Plate: ASTM A 666, Type 302 or 304.
6. Stainless Steel Tubing: ASTM A 554, Grade TP 304 or TP 316.
7. Aluminum Extruded Bars and Shapes: ASTM B 221 aluminum alloy.
8. Steel Finish: Prime.
9. Fasteners: non-corrosive, suitable for service intended.
10. Zinc-Coating: Hot-dip galvanized coating for materials in exterior assemblies or exterior walls.
11. Aluminum Finish: Clear anodized.
12. Installation:

- 1. Comply with requirements of Section 01000 - Project Requirements.
2. Comply with ASTM E 985 for handrail and railing structural performance.
3. Comply with AISC codes and specifications and with AWS Structural Welding Code.

DIVISION 6 - WOOD AND PLASTICS - REF.STRUC.

DIVISION 7 - THERMAL AND MOISTURE PROTECTIONS

SECTION 07210 - BUILDING INSULATION

- Summary:
1. Provide Building Insulation and Vapor Barriers:
a. Thermal insulation in exterior walls, blanket type.
b. Thermal insulation at underside of roofs, over heated spaces and over soffits, blanket type.
c. Thermal insulation over unheated areas, blanket type.
d. Sheet vapor retarders.

- Submittals:
1. Submit product data.

- Products:
1. Blanket/Batt Insulation:
a. Glass fiber or mineral slag fiber, ASTM C 665, Type 1 (unfaced).
2. Vapor Retarder (Not Integral with Insulation):
a. Polyethylene, ASTM D 4397, 6 mils, 0.13 perm vapor transmission rating.
b. Reinforced 2_ply polyethylene, 6 to 8 mils.
c. Reinforced 3_ply polyethylene, 10 to 12 mils.
d. Metal foil/polyester film, 0.5 mil polyester film laminated to 1.0 mil aluminum foil.
3. Accessories:
a. Adhesives and mechanical anchors.
b. Protection board.
c. Crack sealers and tapes.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Install insulation and vapor barriers with continuous coverage to provide optimum performance.

SECTION 07300 - SINGLE-PLY MEMBRANE ROOFING

- Summary:
1. Provide single_ply membrane roofing and roof insulation.
2. Membrane Roofing Warranty: Manufacturer's 15 year NDL warranty.

- Submittals:
1. Submit product data, shop drawings, 15 year NDL warranty, maintenance data.

- Products:
1. Products: As selected by Architect complying with the following.
2. Membrane Roofing: Mechanically fastened.
3. TPO Membrane: TPO, 60mil, ASTM D 6678, grade TBD by architect.
4. 1/4" DensDeck coverboard or approved equal.
5. Insulation: Polyisocyanurate
6. Sheet Metal Accessories: SMACNA and NRCA recommendations & compatible with membrane
7. Walkway Protection Board: Compatible with membrane.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Coordinate membrane roofing installation with flashings and metal accessories to shed water properly.

SECTION 07600 - FLASHING AND SHEET METAL

- Summary:
1. Provide Flashing and Sheet Metal:
a. Metal counterflashing and base flashing.
b. Exterior wall flashing and expansion joints.
c. Built-in metal valleys, gutters, and scuppers.
d. Gutters and downspouts.
e. Exposed metal trim and fascia units.
f. Elastic flashing.
g. Elastic roof and wall expansion joint systems.
h. Laminated composition flashing.
i. Sheet metal accessories.
j. Soffit vents.
k. Coated metal.

Submittals:
1. Submit product data, samples, shop drawings.

- Products:
1. Sheet Metal Flashing and Trim:
a. Zinc-Coated Steel: ASTM A 528, G90 hot_dip galvanized, 20 gage (0.359 inch).
b. Stainless Steel: AISI Type 302/304, ASTM A 666, 2D annealed finish, 28 gage (0.156 inch).
c. Copper: ASTM B 370, 18 ounces per square foot.
d. Lead-Coated Copper: ASTM B 370, copper, 16 ounces per square foot, and 0.06 pounds per square foot lead coating both sides.
e. Sheet Aluminum: ASTM B 209, alloy 3003, clear anodized, 20 gage (0.359 inch).
f. Extruded Aluminum: 6063_T52, clear anodized, 0.080 inches for primary leg of extrusion.
2. Flexible Sheet Membrane Flashing: Nonreinforced flexible black elastic sheet, 50 to 65 mils thick, neoprene synthetic rubber sheet.
3. Flexible Sheet Membrane Flashing: Nonreinforced flexible black elastic sheet, 50 to 65 mils thick, butyl synthetic rubber sheet.
4. Flexible Sheet Membrane Flashing: Nonreinforced flexible black elastic sheet, 50 to 65 mils thick, EPDM synthetic rubber sheet.
5. Laminated Composition Sheet Flashing: 3 ounce copper sheet laminated between 2 layers of bituminous impregnated Kraft paper or saturated fabric.
6. Fabricated Units: Compliance with SMACNA Architectural Sheet Metal Manual.
7. Elastic Expansion Joints: Factory fabricated metal flanged edges to fit curbs and curb substrate.
8. Soffit Vents: Continuous aluminum strip vents.
9. Coated Metal: Laminated of TPO membrane & galvanized steel. Membrane laminate color to match roof membrane.

- 10. Auxiliary Materials:
a. Solder compatible with metal.
b. Bituminous isolation coating.
c. Mastic and elastomeric sealants.
d. Epoxy seam sealer.
e. Rosin_sized building paper slip sheet.
f. Polyethylene underlayment.
g. Reglets and metal accessories.
h. Gutter and conductor head guards.
i. Asphaltic roofing cement.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Install flashing and sheet metal with provision for expansion and contraction.
3. Install flashing and sheet metal to shed water properly.
4. Install gutters and downspouts to drain water properly.
5. Isolate dissimilar metals with bituminous coating.

SECTION 07610 - SHEET METAL ROOFING / PANELS

- Summary:
1. Provide Sheet Metal Roofing:
a. Flat_seam type.
b. Metal soffit panel.

- Submittals:
1. Submit product data, samples, shop drawings.

- Products:
1. Aluminum Roofing Sheets:
a. Type: ASTM B 209, alloy 3003_H14.
b. Thickness: 0.032 inches.
c. Thickness: 0.040 inches.
d. Batten Caps: 0.051 inches.
e. Finish: Fluoropolymer.
2. Auxiliary Materials:
a. Rosin_sized building paper.
b. Asphalt saturated organic felt underlayment.
c. Polyester fabric underlayment.
d. Polyethylene underlayment.
e. Rubberized asphalt underlayment.
f. Bituminous isolation coating.
g. Batten bars and strips.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Install sheet metal roofing with provision for expansion and contraction.
3. Install sheet metal roofing to shed water properly.
4. Isolate dissimilar metals with bituminous coating.

SECTION 07600 - JOINT SEALERS

- Summary:
1. Provide joint sealers at interior and exterior vertical and horizontal joints.

- Submittals:
1. Submit product data, mockup of each joint type, adhesion test results for each joint type.
2. Label Joint Sealants:
a. Acrylic Type: Acrylic-emulsion, ASTM C 834.
b. Silicone Type: Silicone emulsion, ASTM C 834, and ASTM C 920.
c. Application: Interior joints in vertical and overhead surfaces with limited movement.

- Installation:
1. Comply with requirements of Section 01000 - Project Requirements.
2. Test sealant adhesion for each substrate required.
3. Install in proper relation with adjacent work.
4. Clean adjacent surfaces soiled with sealant immediately.



Lake City, FL
LAKE CITY WEST
FMC DIALYSIS CLINIC
FRESENIUS MEDICAL CARE
Orthopaedic Ct.

REVISIONS:

JOB NO: 14013

SPECIFICATIONS

A0.1
DATE: 09.11.14

DIVISION 8 - DOORS AND WINDOWS

SECTION 08110 - STEEL DOORS AND FRAMES

- Summary:**
 1. Provide Steel Doors and Frames:
 a. Exterior doors and frames.
- Submittals:**
 1. Submit product data, shop drawings.
- Products:**
 1. Products: As selected by Architect complying with the following.
 2. Standards: ANSISDI-100, Recommended Specifications for Standard Steel Doors and Frames.
 3. Fire-Rated Assemblies: NFPA 80, and acceptable testing agency listing.
 4. Steel Doors: Standard seamless steel doors with hollow or composite construction.
 a. Exterior Doors: ANSISDI-100, Grade III, extra-heavy-duty, minimum 16 gage galvanized sheet steel, 1-3/4 inches thick.
 b. Accessories: Sighproof stationary louvers and glazing stops.
 c. Finish: Factory primed and field painted.
 5. Steel Frames:
 a. Material: Sheet steel, mitered or coped corners.
 1) 14 gage for frames wider than 5 feet.
 2) 16 gage.
 b. Exterior Frames: Welded type.
 c. Material: Galvanized sheet steel, mitered or coped corners.
 1) 16 gage.
 d. Accessories: Door silencers and plaster guards.
 e. Finish: Factory primed and field painted.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with SDI-100, and NFPA 80 for fire-rated assemblies.

SECTION 08120 - ALUMINUM DOOR AND SIDELIGHT FRAMES

- Summary:**
 1. Provide aluminum door and sidelight frames.
- Submittals:**
 1. Submit product data, shop drawings.
- Products:**
 1. Products: Kawneer, Series 260 Insulated or equal.
- Installation:**
 1. Anchor securely in place; install plumb, level and in true alignment.
 2. Coordinate with hardware and fabricate frames to receive specified hardware.
 3. Coordinate with glass and glazing work.
 4. After installation of doors and hardware, adjust clearances and operating parts such that parts will operate properly and not bind.

SECTION 08411 - ALUMINUM-FRAMED STOREFRONTS

- Summary:**
 1. Provide Aluminum Entrances and Storefront:
 a. Exterior entrance doors.
 b. Frames for entrances.
 c. Storefront_type framing system.
 d. Transoms.
 e. Sidelights.
- Submittals:**
 1. Submit product data, shop drawings.
- Products:**
 1. Products: As selected by Architect complying with the following.
 2. Door Style: Medium stile and rail doors.
 3. Storefront Frames: Non Thermal break type.
 4. Aluminum Members: ASTM B 221, B 209 and B 211.
 5. Steel Reinforcement: ASTM A 36, ASTM A 611, and ASTM A 570.
 6. Glass and Glazing: Insulating.
 7. Glass and Glazing: Tempered.
 8. Glazing Color: Tinted.
 9. Door Hanging Devices: Offset pivot sets.
 10. Door Hanging Devices: Center pivot sets.
 11. Door Hanging Devices: Ball_bearing butts.
 12. Closers: Concealed.
 13. Closer Operation: Single acting closers.
 14. Hardware: Push/pulls, door stops, overhead holders, and deadlocks, weatherstripping and thresholds, exit devices.
 15. Aluminum Finish: Clear anodized.
 16. Aluminum Finish: Color anodized.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Anchor securely in place; install plumb, level and in true alignment.
 3. Isolate dissimilar metals.
 4. Coordinate with glazing work and hardware requirements.

SECTION 08520 - ALUMINUM WINDOWS

- Summary:**
 1. Provide aluminum windows.
- Submittals:**
 1. Submit product data, samples, shop drawings, mockup, test reports, warranty, maintenance data.
- Products:**
 1. Products: As selected by Architect complying with the following.
 2. Aluminum Windows:
 a. Window Operation: Fixed.
 b. Window Grade, AAMA 101: Commercial grade.
 c. Glazing: Insulating glass:
 2) 1 inch thick.
 d. Glazing Color: Tinted.
 e. Construction: Thermal_break type.
 f. Aluminum Window Members: Aluminum extrusions.
 g. Anchors, Clips, and Window Accessories: Aluminum, nonmagnetic stainless steel, or galvanized steel.
 h. Aluminum Finish: Clear anodized.
 i. Aluminum Finish: Color anodized.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 08710 - DOOR HARDWARE

- Summary:**
 1. Provide hardware for swinging doors.
 2. Comply with code and accessibility requirements.
- Submittals:**
 1. Submit product data, samples, proposed hardware schedule, maintenance data.
- Products:**
 1. Products: Per Landlord's lease requirement with tenant.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with DH "Recommended Locations for Builder's Hardware" and hardware manufacturers instructions.
 3. Refer to the door schedule for hardware sets.

SECTION 08720 - POWER DOOR OPERATORS

- Summary:**
 1. Provide door operators for power_assisted doors.
- Submittals:**
 1. Submit product data, hardware schedule, maintenance data.
- Products:**
 1. Products: As selected by Architect complying with the following.
 2. Products: Refer to Section 01030 - Allowances.
 3. Power Units: Biparting sliding door type.
 4. Operator: Electromechanical operator.
 5. Operator: Hydraulic operator.
 6. Operator: Pneumatic operator.
 7. Automatic Door Control: Scanning motion detector.
 8. Automatic Door Control: Infrared motion detector.
 9. Automatic Door Control: Photoceil automatic controls.
 10. Manual Door Control: Rail_supported switch.
 11. Auxiliary Materials: Guide rails, wall_punt_plate switch.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.

SECTION 08800 - GLAZING

- Summary:**
 1. Provide glass and glazing for units not factory glazed.
- Submittals:**
 1. Submit product data, samples, shop drawings, warranty, maintenance data.
- Products:**
 1. Products: As selected by Architect complying with the following.
 2. Glass:
 a. Sealed Insulating Glass Units: ASTM E 774, Class A.
 b. High_Performance Coatings: Low_e (low emissivity) type.
 3. Glazing: Elastomeric glazing sealant glazing.
 4. Glazing: Preformed glazing tape glazing.
 5. Setting blocks, spacers, and compressible filler rods.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with FGMA Glazing Manual and manufacturer's recommendations.

DIVISION 9 - FINISHES

SECTION 09260 - GYPSUM BOARD ASSEMBLIES

- Summary:**
 1. Provide Gypsum Board Assemblies:
 a. Interior walls, partitions, and ceilings for tape and joint compound finish.
 2. Gypsum Board Attachment:
 a. Gypsum board screw-attached to steel framing and furring.
- Submittals:**
 1. Submit product data, 4 foot by 4 foot mockup showing joint treatment.
- Products:**
 1. Products: As selected by Architect complying with the following.
 2. Gypsum Board:
 a. Gypsum Wallboard: ASTM C 36, regular, foil-backed, and fire-rated types:
 1) 1/2 inch typical thickness.
 2) 5/8 inch typical thickness.
 b. Water_Resistant Gypsum Backing Board: ASTM C 630, regular and fire_rated types:
 1) 1/2 inch typical thickness.
 2) 5/8 inch typical thickness.
 c. Exterior Gypsum Soffit Board: ASTM C 831, regular and fire_rated types:
 1) 1/2 inch typical thickness.
 2) 5/8 inch typical thickness.
 d. Joint Treatment: ASTM C 475 and ASTM C 840, 3_coat system.
 e. Installation Standard: ASTM C 840.
 3. Trim Accessories:
 a. Material: Metal or plastic.
 b. Types: Cornerbead, edge trim, and control joints.
 4. Steel Framing for Walls and Partitions:
 a. Steel Studs and Runners: ASTM C 645:
 1) 20 gage (.0329 inch)
 2) 22 gage (.0276 inch)
 3) 25 gage (.0179 inch).
 b. Typical Depth:
 1) 3 5/8 inch
 2) 6 inch.
 c. Auxiliary Materials:
 a. Gypsum board screws, ASTM C 1002.
 b. Fastening adhesive.
 c. Concealed acoustical sealant.
 d. Mineral fiber sound attenuation blankets.
 e. Mineral fiber thermal insulation.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Comply with standards referenced above and ASTM C 840 and GA 216.
 3. Install joints only over framing members. Do not allow butt-to-butt joints.
 4. Provide blocking for items such as railings, grab bars, casework, toilet accessories, and similar items.
 5. Provide acoustical sealant at runner tracks, wall perimeters, openings, expansion, and control joints.
 6. Install gypsum board assemblies true, plumb, level and in proper relation to adjacent surfaces.
 7. Where new partitions meet existing construction, remove existing cornerbeads to provide smooth transition.
 8. Provide 3-coat joint treatment such that, after finishing, joints are not visible.
 a. Sand and leave ready for finish painting and wall treatment.

SECTION 09910 - PAINTING

- Summary:**
 1. Provide painting and surface preparation for interior and exterior finished/unfinished surfaces.
- Submittals:**
 2. Submit product data, samples, 4 foot by 4 foot mockup of each color, extra stock consisting of 1 unopened gallon of each type of paint used.
- Products:**
 1. Products: Sherwin Williams or approved equal.
 2. Regulations: Compliance with VOC and environmental regulations.
- Installation:**
 1. Comply with requirements of Section 01000 - Project Requirements.
 2. Provide field-applied mock-ups of each color and finish selected on actual surfaces to be painted.
 3. Test sample area for adhesion for each type of paint.
 4. Remove cover plates and protect hardware and adjacent surfaces.
 5. Sand before painting until smooth and fat and sand between coats.
 6. Apply paint to achieve manufacturer's recommended dry film thicknesses.
 7. Paint entire surface where patch painting is required.
 8. Recoat areas which show bleed-through or defects.
 9. Clean paint spatter from adjacent surfaces and glass.
 10. Touch-up-damaged surfaces at completion of construction.
- Schedule:**
 1. Provide paint systems complying with the following schedule.
 2. Gypsum Drywall Walls:
 a. Glass:
 1) Seal
 b. System:
 1) 1 coat latex primer
 2) 2 coats latex finish
 3. Ferrous Metals:
 a. Glass:
 1) Flat
 b. System:
 1) 1 coat rust-inhibiting primer
 2) 2 coats alkyl enamel
 4. Galvanized Metal:
 a. Glass:
 1) Flat
 b. System:
 1) 1 coat galvanized metal primer
 2) 2 coats alkyl enamel

DIVISION 15 - MECHANICAL - REFERENCE MEP DOCUMENTS

DIVISION 16 - ELECTRICAL - REFERENCE MEP DOCUMENTS

callaway
 architecture

1207 HAMPSHIRE LN, 5TH FLOOR, RICHARDSON, TX 75080
 PHONE: 214-368-2525



LAKE CITY WEST
 FMC DIALYSIS CLINIC
 FRESENIUS MEDICAL CARE

Orthopaedic Ct.
 Lake City, FL

REVISIONS:

JOB NO: 14013

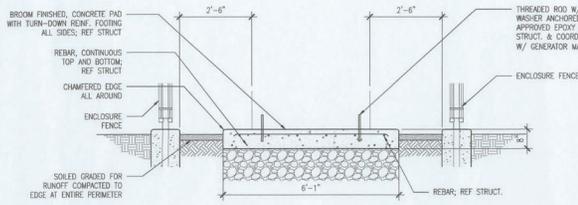
SPECIFICATIONS

A0.2

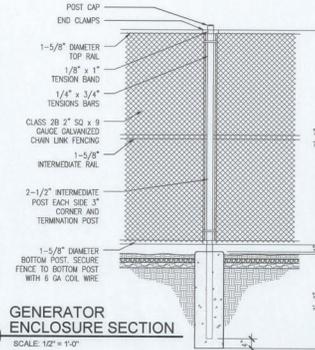
DATE: 09.11.14

NOTES:

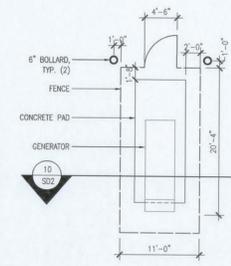
1. PROVIDE DOUBLE LEAF SWING GATE WITH POST LATCH AND LOCK AND KEY. GATE SHALL BE 9'-0" WIDE X 11'-0" HIGH GALVANIZED MATERIAL THROUGHOUT. REFER TO PLAN FOR LOCATION.
2. PROVIDE FULL-HEIGHT WIND PRIVITY SLATS (COLOR-BLACK) WITHIN CHAIN LINK FENCE. VERIFY COLOR AND STYLE WITH LANDLORD AND FMC PROJECT MANAGER.
3. POSTS SHALL BE STANDARD WEIGHT SCHEDULE 40 GALVANIZED STEEL.



11 GENERATOR ENCLOSURE DETAILS
SCALE: 1/2" = 1'-0"

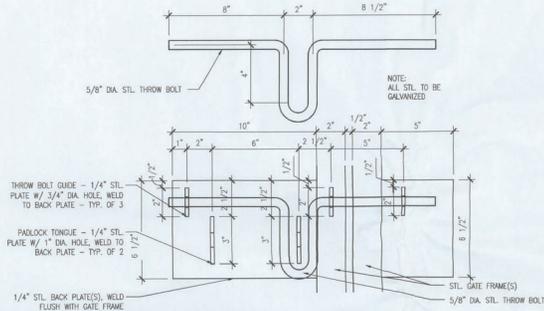


10 GENERATOR ENCLOSURE SECTION
SCALE: 1/2" = 1'-0"

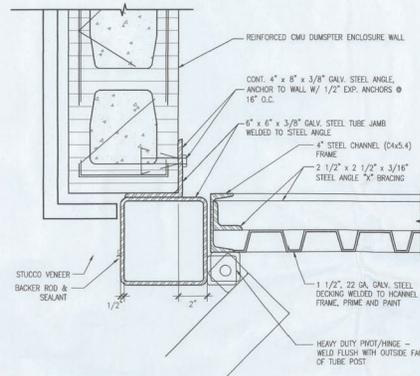


09 GENERATOR PLAN
SCALE: 1/8" = 1'-0"

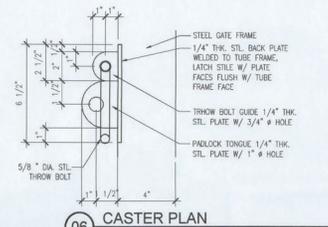
12 GENERATOR NOTES
N/A



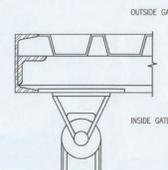
08 THROW BOLT DETAIL
SCALE: 3/4" = 1'-0"



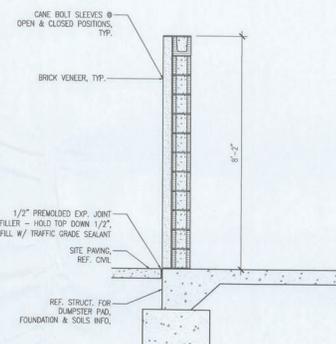
07 ENCLOSURE DETAIL
SCALE: 3/4" = 1'-0"



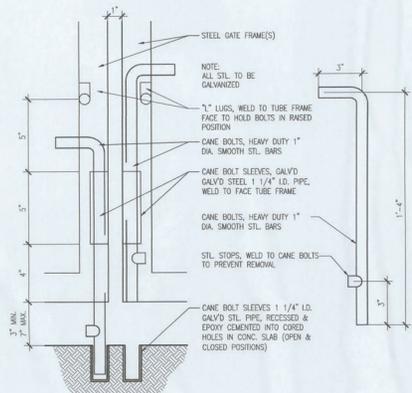
06 CASTER PLAN
SCALE: 3/4" = 1'-0"



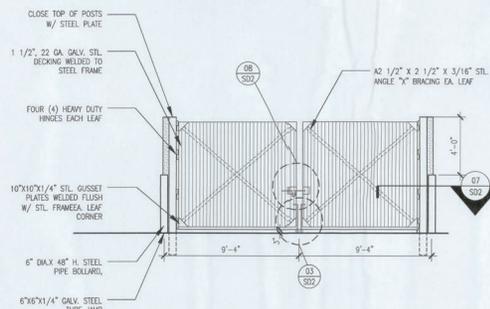
05 CASTER PLAN
SCALE: 3/4" = 1'-0"



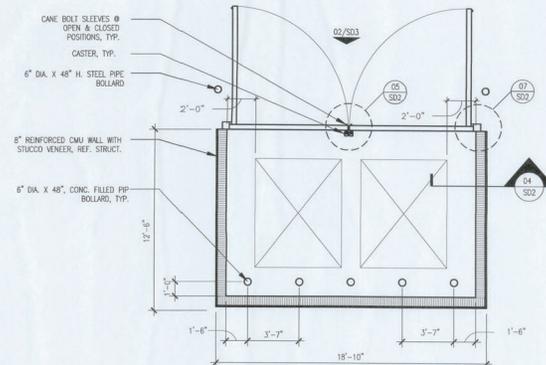
04 ENCLOSURE WALL SECTIONS
SCALE: 1/2" = 1'-0"



03 BOLT DETAIL
SCALE: 3/4" = 1'-0"

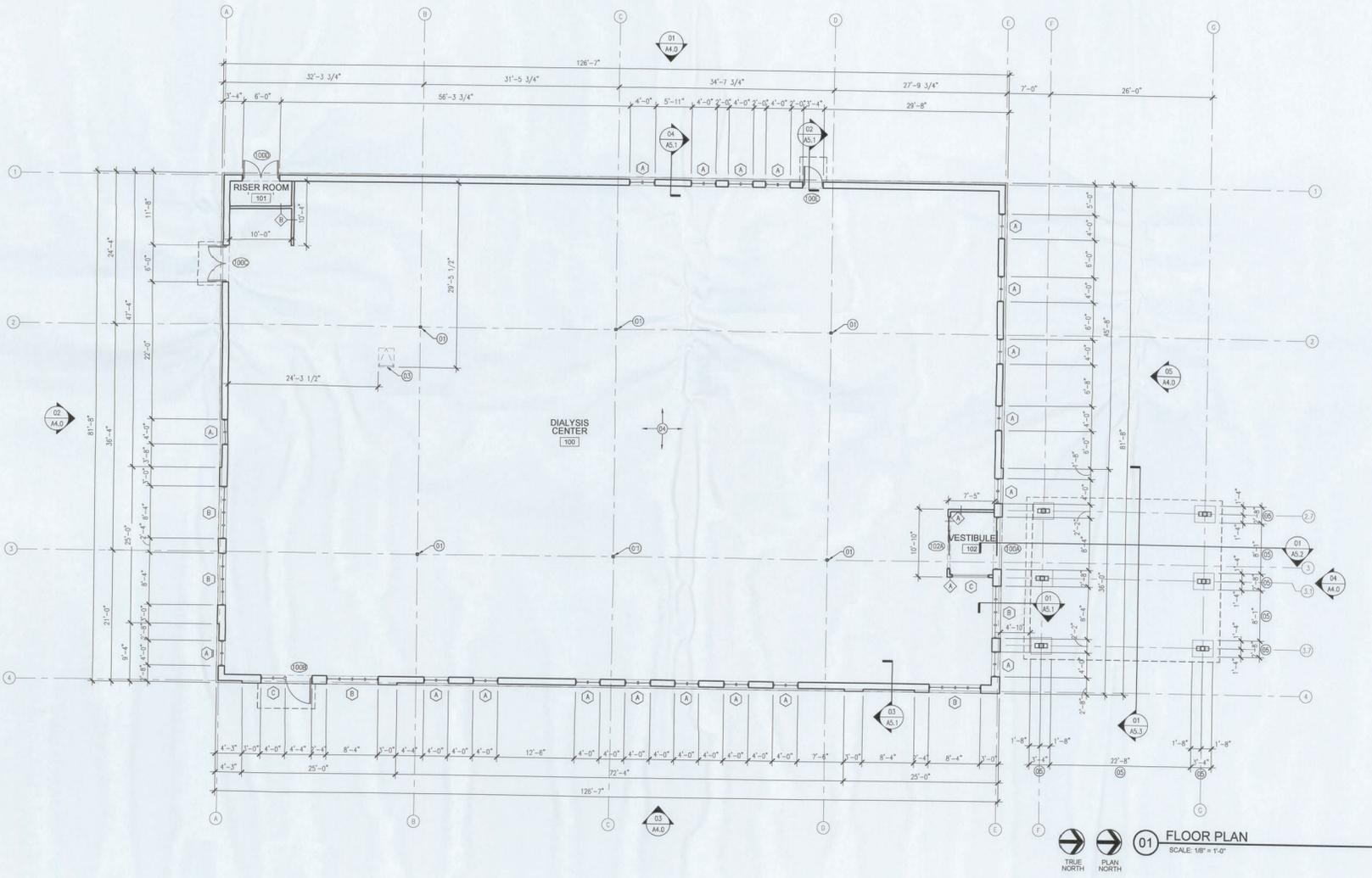


02 ENCLOSURE ELEVATION
SCALE: 1/4" = 1'-0"



01 DUMPSTER PLAN
SCALE: 1/4" = 1'-0"

	<p>KEYED NOTES (DENOTED BY Ⓢ):</p> <p>01. COLUMN TYPICAL, REFER STRUCTURAL.</p> <p>02. 3FORM PANEL.</p> <p>03. ROOF ACCESS LADDER AND HATCH ACCESS LADDER AND ASSOCIATED ANCHORS SHALL MEET ALL APPLICABLE OSHA STANDARDS, AS WELL AS THOSE OF ANY OTHER AIA FOR THIS PROJECT. COORDINATE FINAL ROOF HATCH AND ACCESS LADDER LOCATION WITH TENANT FINISH CUT.</p> <p>04. CONCRETE FLOOR SLAB TO BE TREATED WITH CONCRETE CURING COMPOUND (PRETRESAL CS200).</p> <p>05. DIMENSION FROM FACE OF CMU SUB WALL.</p>	<p>GENERAL NOTES:</p> <p>1. DO NOT SCALE DRAWINGS.</p> <p>2. GRIDLINES INDICATE CENTERLINE OF COLUMNS.</p> <p>3. ALL DOOR THRESHOLDS AND SILL SHALL BE SET IN A FULL BED OF MORTAR.</p> <p>4. SEAL ALL PENETRATIONS IN RATED WALLS WITH SEALANT/SYSTEM APPROPRIATE FOR CONDITION AND RATING REQUIRED.</p> <p>5. ALL INSULATION SHALL MEET ALL REQUIRED CODE RATINGS FOR FLAME SPREAD AND SMOKE DEVELOPMENT, INCLUDING FOR FACINGS.</p> <p>6. DIMENSIONS ON PLAN ARE FROM FACE OF EXTERIOR FINISH MATERIAL (E.O.), FROM CENTERLINE OF COLUMN FROM FACE OF INTERIOR C/P, B.D.</p> <p>7. HOLD C/P, B.D. 1/2" ABOVE FLOOR AS ALLOWED BY CODE, TYPICAL.</p> <p>8. FIELD VERIFY ALL OPENINGS PRIOR TO FABRICATION OF WINDOW UNITS.</p> <p>9. REFER WALL SECTIONS FOR EXTERIOR WALL CONFIGURATION(S).</p> <p>10. ALL EXPOSED EXTERIOR METAL COMPONENTS SHALL BE PAINTED, PRIOR TO FINISHING. METAL SURFACES SHALL BE WORKED/GRIND SMOOTH AS NECESSARY TO ELIMINATE BURRS, SHARP EDGES, OR ANY OTHER CONDITION THAT PSES HAZARD TO GENERAL PUBLIC. CONFIRM REQUIRED TREATMENT WITH ARCHITECT.</p> <p>11. PROVIDE R-30 INSULATION AT ALL EXTERIOR WALL ASSEMBLIES, INCLUDING TOWER WALLS. COORDINATE INSULATION WITH INTERIOR STUD FLOORING. (NOTE: INTERIOR STUD FLOORING IN FIXED LOCATION PER TENANT FINISH CUT).</p>	<p>12. COORDINATE PRE-FABRICATED CANOPY HANGERS WITH ARCHED NICHE ABOVE WINDOWS, HANGERS AND ASSOCIATED ANCHOR PLATES SHALL BE LOCATED ABOVE ARCHES - SHIP BRIMMING SHOWN HANGERS THIS SHALL BE SUBMITTED TO ARCHITECT FOR REVIEW.</p> <p>13. REFER GEOTECHNICAL REPORT PREPARED BY ELLIS & ASSOCIATES, DATED MAY 28, 2014 (E&A PROJECT NO. 4391-0001).</p>	<p>WALL TYPE LEGEND (DENOTED BY Ⓢ):</p> <p>TYPE A 3-5/8" METAL STUDS WITH 5/8" C/P, B.D. BOTH SIDES.</p> <p>TYPE B ONE-HOUR RATED WALL SEALED TO UNDERSIDE OF ROOF DECK; 6" METAL STUDS @ 16" O.C. WITH 5/8" C/P, B.D. EACH SIDE (BASIS OF DESIGN IS UL-1465).</p>
--	--	--	---	---



callaway
architecture

1207 HAMPSHIRE LN, ST#105, RICHARDSON, TX-75080
PHONE: 214-368-2525



LAKE CITY WEST
FMC DIALYSIS CLINIC

FREEMANUS
MEDICAL CARE

Orthopaedic Ct.

Lake City, FL

REVISIONS:

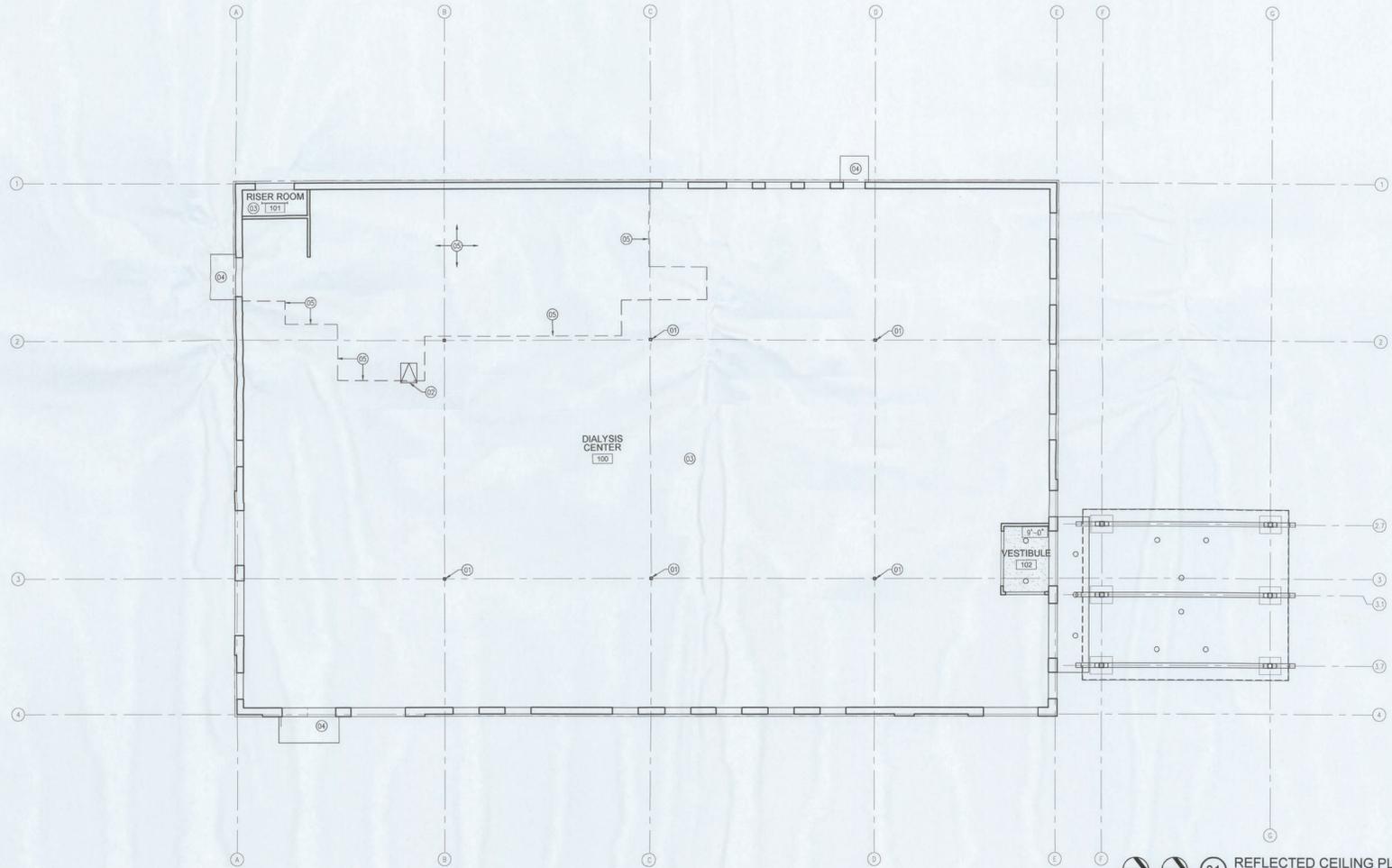
JOB NO: 14013

FLOOR PLAN

A1.1

DATE: 09.11.14

			<p>KEYED NOTES (DENOTED BY "C"):</p> <p>01. COLUMN, TYPICAL.</p> <p>02. ROOF ACCESS LADDER AND HATCH.</p> <p>03. OPEN TO STRUCTURE ABOVE.</p> <p>04. PROVIDE ANNEX OR APPROVED EQUAL - INTEGRATED LIGHTING.</p> <p>05. AREA WITHIN DASHED LINE IS OPEN TO STRUCTURE PER IT PLAN. PROVIDE FOIL-FACED INSULATION & USING BATT AT UNDERSIDE OF DECK TO ACHIEVE REQUIRED R-VALUE. FOIL FACING TO BE FSK TYPE.</p>	<p>GENERAL NOTES:</p> <p>1. DO NOT SCALE DRAWINGS.</p>	<p>REFLECTED CEILING PLAN LEGEND:</p> <p>— 1X4 SUSPENDED FIXTURE</p> <p>○ RECESSED DOWNLIGHT</p> <p>□ G.B. CEILING, 5/8" G.B.</p> <p>[X-XX] CEILING HEIGHT SYMBOL</p>
--	--	--	--	---	--



TRUE NORTH
PLAN NORTH
01 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



REVISIONS:

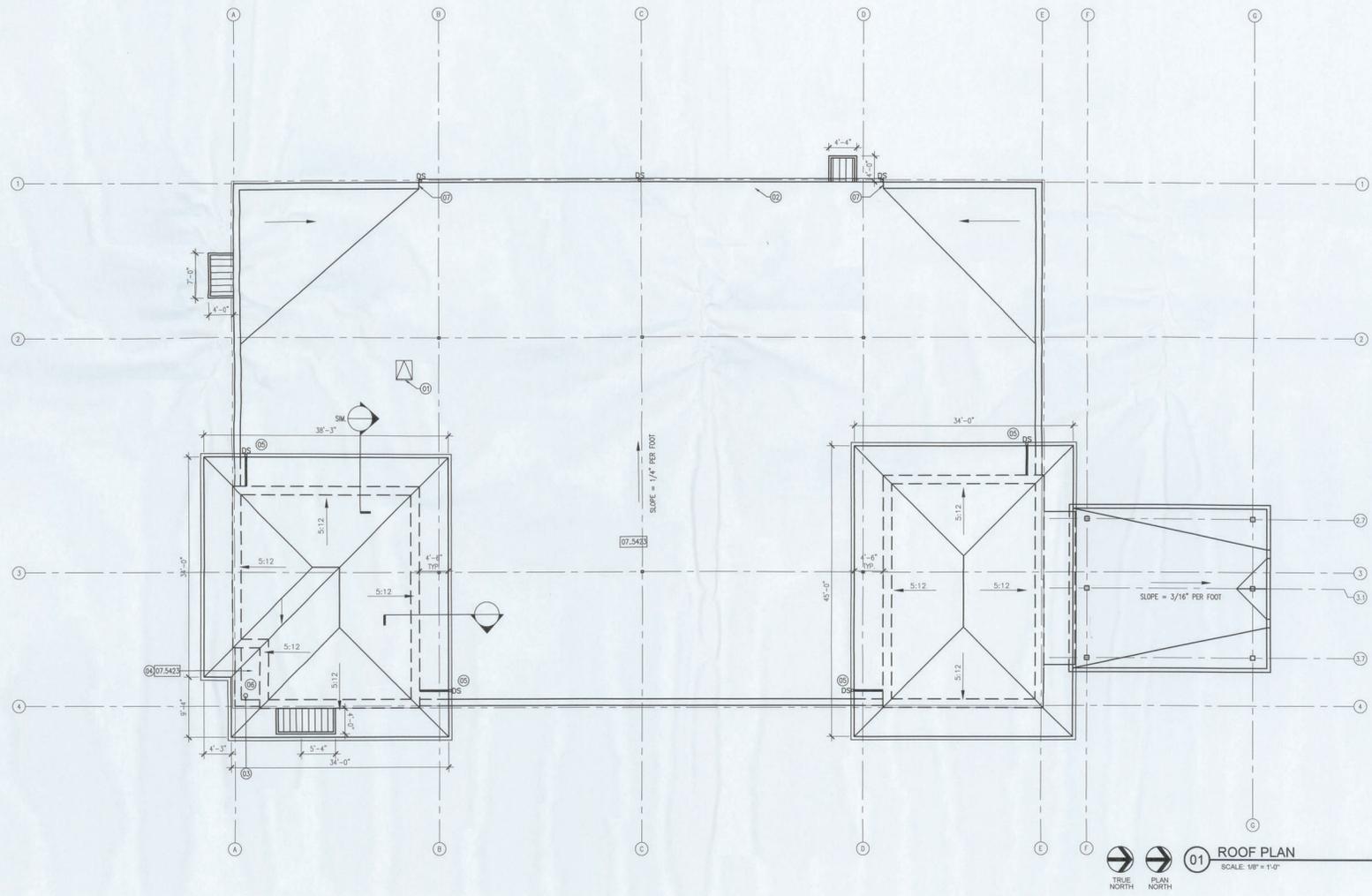
JOB NO: 14013

REFLECTED CEILING PLAN

A2.1

DATE: 09.11.14

			<p>SPECIFICATION NOTES:</p> <p>07.5423 TPO MEMBRANE ROOFING SYSTEM</p>	<p>KEYED NOTES (DENOTED BY ○):</p> <ol style="list-style-type: none"> 1. ROOF ACCESS LADDER AND HATCH. 2. COORDINATE ROOFING TERMINATION AND GUTTER SYSTEM WITH WALL/ROOF FRAMING. 3. 4" x 6" ROOF DRAIN. 4. FLAT ROOF BELOW PITCHED ROOF. 5. DRAINS TO FLAT ROOF, PROVIDE SPLASH BLOCK ON TPO WEAR PADS. 6. PROVIDE OVERFLOW SCUPPER FOR FLAT ROOF AREA (BELOW PITCHED ROOF). 7. PROVIDE CONTINUOUS TERMINATION BAR, ROOFING ADHESIVE AND SEALANT AT TPO EDGE TERMINATIONS, BOTH HORIZONTAL AND VERTICAL. 	<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> 1. DO NOT SCALE DRAWINGS. 2. PROVIDE TPO ROOF SYSTEM WITH A 15-YEAR NO-DOLLAR-LIMIT WARRANTY. 3. PROVIDE A MINIMUM R-40 INSULATION AT ALL ROOF ASSEMBLIES, INCLUDING HIGH ROOF AT CORNER TOWER ELEMENTS. 4. ALL COMPONENTS OF THE GUTTER AND DOWNSPOUTS, INCLUDING FASTENERS, LAPS, EXPANSION JOINTS, AND SUPPORTS SHALL BE FURNISHED AND INSTALLED PER SMACNA STANDARDS AND RECOMMENDATIONS, IN CONJUNCTION WITH DETAILS AS PROVIDED.
--	--	--	---	--	--





01 ROOF PLAN
 SCALE: 1/8" = 1'-0"



REVISIONS:

JOB NO: 14013

ROOF PLAN

A3.0

DATE: 09.11.14

SPECIFICATION NOTES:

- 03.314 SITE-CAST CONCRETE SLAB (RE: STRUCTURAL)
- 03.315 SITE-CAST CONCRETE FOUNDATION (RE: STRUCTURAL)
- 03.488 FIBER REINFORCED CEMENTITIOUS FASCO
- 04.2201 8" CMU (RE: STRUCTURAL)
- 04.2202 12" CMU (RE: STRUCTURAL)
- 05.1201 HSS FRAMING (RE: STRUCTURAL)
- 05.2219 OPEN WEB STEEL JOIST FRAMING (RE: STRUCTURAL)
- 05.3123 STEEL ROOF DECKING (RE: STRUCTURAL)
- 05.4104 4" COLD-FORMED METAL FRAMING 14" O.C. (MAX)
- 05.4108 4" COLD-FORMED METAL FRAMING 16" O.C. (MAX)
- 05.5001 STEEL PLATE (RE: STRUCTURAL)
- 05.5023 STEEL PLATE SADDLE (RE: STRUCTURAL)
- 05.7701 EXTRUDED ALUMINUM BRACKET
- 06.1064 2X WOOD BLOCKING
- 06.1633 1/2" PLYWOOD SHEATHING

- 06.1633 3/4" PLYWOOD SHEATHING
- 07.6202 PRE-FINISHED METAL COUNTERFLASHING
- 07.2113 POLYISOCYANURATE INSULATION
- 07.2119 BLANKET INSULATION (FULL CAVITY DEPTH)
- 07.2618 BELOW GRADE VAPOR BARRIER (15ML)
- 07.2719 PLASTIC SHEET AIR BARRIER
- 07.3101 ARCHITECTURAL DIMENSIONAL SHINGLE SYSTEM
- 07.5423 TPO MEMBRANE ROOFING SYSTEM
- 07.6303 20 GA. PRE-FINISHED METAL COILING
- 07.6311 20 GA. PRE-FINISHED METAL GUTTER SYSTEM
- 07.6330 20 GA. PRE-FINISHED METAL THROUGH-WALL SCUPPER
- 07.9201 CONTINUOUS SEALANT
- 08.4113 ALUMINUM FRAMED ENTRY DOOR/STOREFRONT

- 09.2202 STUCCO SYSTEM DRIP SKEED
- 09.2423 3/4" PORTLAND CEMENT STUCCO SYSTEM
- 02.1623 FINISHED SIDEWALK

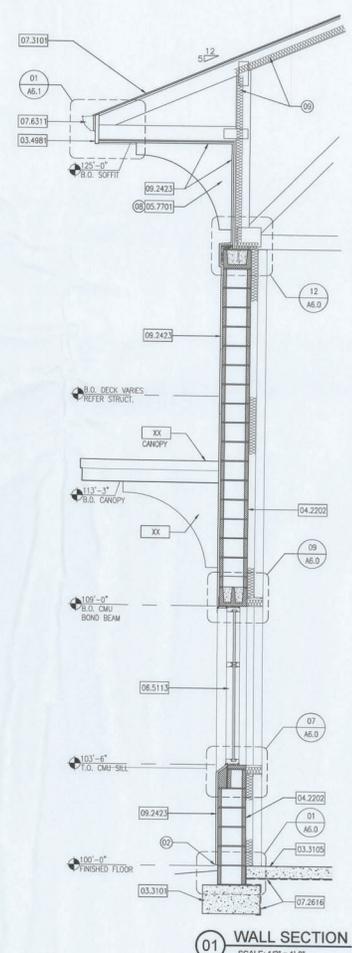
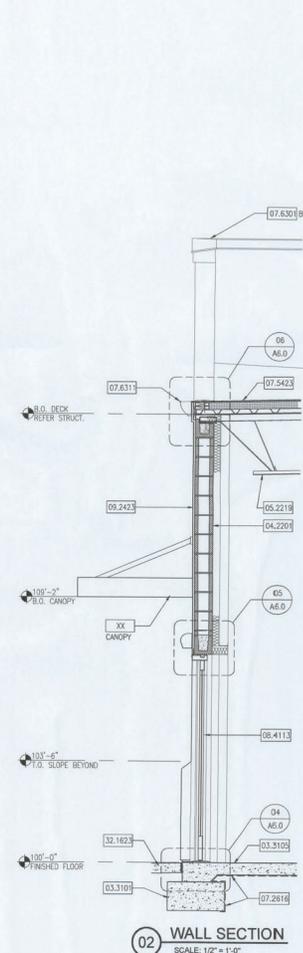
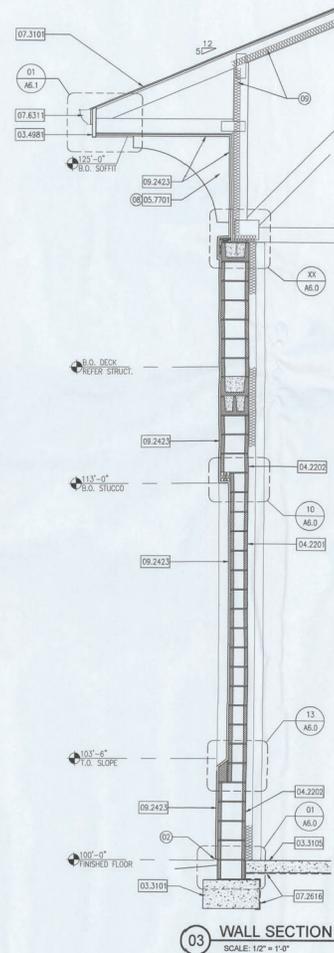
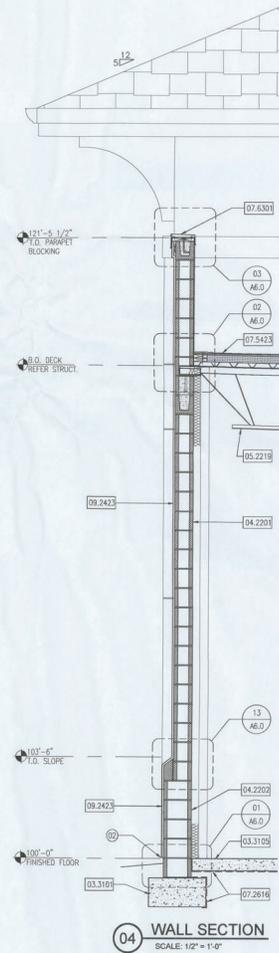
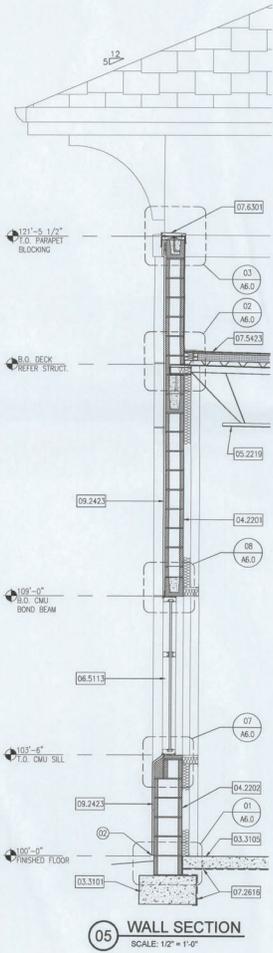
KEYED NOTES (DENOTED BY "XX"):

01. STUD INFILL BETWEEN HSS STUB COLUMNS.
02. COORDINATE WITH MANUFACTURER'S RECOMMENDATION FOR TERMINATION ABOVE GRADE.
03. WELD/FILL HORIZONTAL SEAM/Joint BETWEEN HSS MEMBERS; GRIND SMOOTH SO JOINT NOT VISIBLE UPON PAINTING.
04. WELD/FILL HORIZONTAL JOINT BETWEEN HSS COLUMN AND PLATE FOR WATER-TIGHT CONDITION; GRIND FOR CONSISTENT APPEARANCE WITH ADJACENT COLUMNS @ PLATE.
05. TO OUTSIDE FACE OF STUD FRAMING/HSS PERIMETER BEAM.
06. TO END OF COMPOSITE HSS OUTRIGGER.
07. PROVIDE BLOCKING/BACK-UP IF REQUIRED FOR ANCHORAGE AND/OR STABILITY OF LOWER PORTION OF STUD TRACK INCLUDE BLOCKING/BACK-UP IN BASE BID IF DEEMED NECESSARY.
08. REFER MANUFACTURER'S REQUIREMENTS FOR ANCHORAGE AND ASSOCIATED BLOCKING.
09. CONTINUE INSULATION @ TOWER PERIMETER WALLS AND ROOF; TOWER WALLS AND ROOF INSULATION R-VALUES SHALL BE THE SAME AS MAIN BUILDING STRUCTURE.
10. COORDINATE SCUPPER WITH PARAPET WALL FRAMING AND TPO ROOF SYSTEM.
11. LAP AIR BARRIER OVER FLASHING.

12. COORDINATE COUNTERFLASHING WITH TPO TERMINATION BAR AND STUCCO WEEP SKEEDS
13. REFER CIVIL FOR FLATWORK/DRAINWAY GRADES.

GENERAL NOTES:

1. REFER TO SHEETS A1.1, A2.1, A3.0 AND A4.0 FOR ADDITIONAL GENERAL NOTES.
2. REFER SHEET A4.0 FOR EXTERIOR MATERIAL NOTES.
3. ALL OPEN ENDS OF HSS BEAMS SHALL BE CAPPED WITH STEEL PLATE; WELDED AND GRIND SMOOTH READY FOR PAINTING.

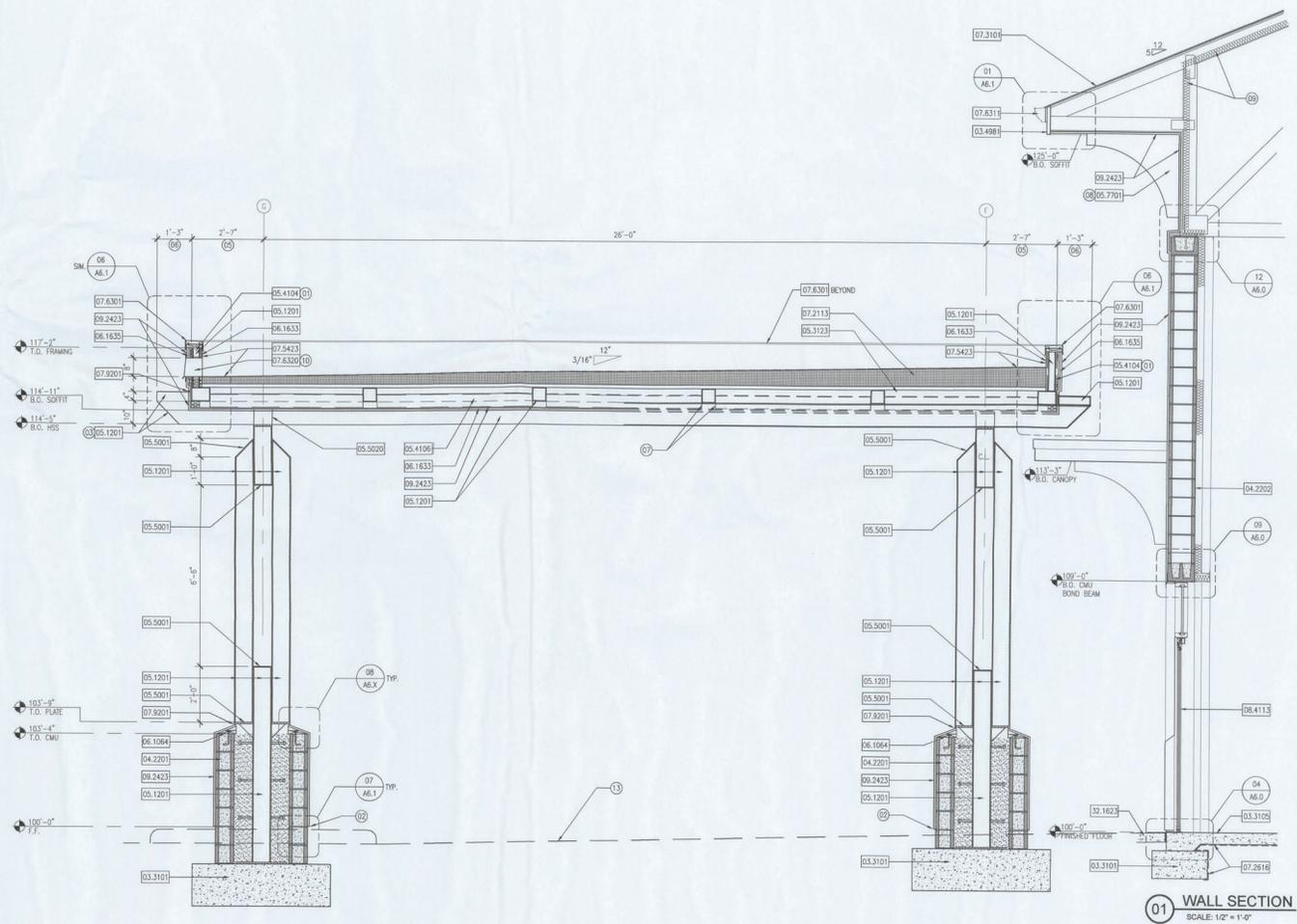
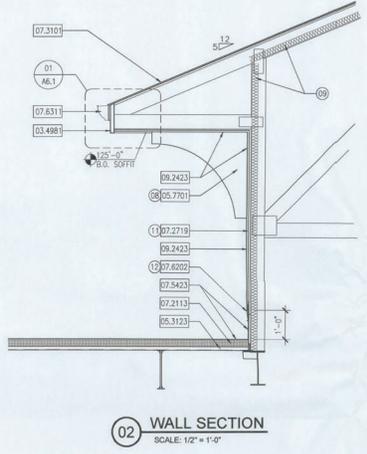


KEYED NOTES (DENOTED BY "XX"):

01. STUD INFILL BETWEEN HSS STUB COLUMNS.
02. COORDINATE WITH MANUFACTURER'S RECOMMENDATION FOR TERMINATION AND/OR FINISH.
03. WELD/FILL HORIZONTAL SEAM/Joint BETWEEN HSS MEMBERS; GRIND SMOOTH SO JOINT NOT VISIBLE UPON PAINTING.
04. WELD/FILL HORIZONTAL JOINT BETWEEN HSS COLUMN AND PLATE FOR WATER-TIGHT CONNECTION; GRIND FOR CONSISTENT APPEARANCE WITH ADJACENT COLUMNS & PLATE.
05. TO OUTSIDE FACE OF STUD FRAMING/HSS PERIMETER BEAM.
06. TO END OF COMPOSITE HSS OUTRIGGER.
07. PROVIDE BLOCKING/BACK-UP IF REQUIRED FOR ANCHORAGE AND/OR STABILITY OF LOWER PORTION OF STUD TRACK; INCLUDE BLOCKING/BACK-UP IN BASE BID IF DEEMED NECESSARY.
08. REFER MANUFACTURER'S REQUIREMENTS FOR ANCHORAGE AND ASSOCIATED BLOCKING.
09. CONTINUE INSULATION @ TOWER PERIMETER WALLS AND ROOF; TOWER WALLS AND ROOF INSULATION R-VALUES SHALL BE THE SAME AS MAIN BUILDING STRUCTURE.
10. COORDINATE SCUPPER WITH PARAPET WALL FRAMING AND TPO ROOF SYSTEM.
11. LAP AIR BARRIER OVER FLASHING.
12. COORDINATE COUNTERFLASHING WITH TPO TERMINATION BAR AND STUCCO KEEP SCREENS.
13. REFER CIVIL FOR FLATWORK/DRIVEWAY GRADES.

GENERAL NOTES:

1. REFER TO SHEETS A1.1, A2.1, A3.0 AND A4.0 FOR ADDITIONAL GENERAL NOTES.
2. REFER SHEET A4.0 FOR EXTERIOR MATERIAL NOTES.
3. ALL OPEN ENDS OF HSS BEAMS SHALL BE CAPED/END WITH STEEL PLATE; WELDED AND GRIND SMOOTH READY FOR PAINTING.



LAKE CITY WEST
FMC DIALYSIS CLINIC
 PRESENTS
 MEDICAL CARE
 Orthopaedic Ct.
 Lake City, FL

REVISIONS:

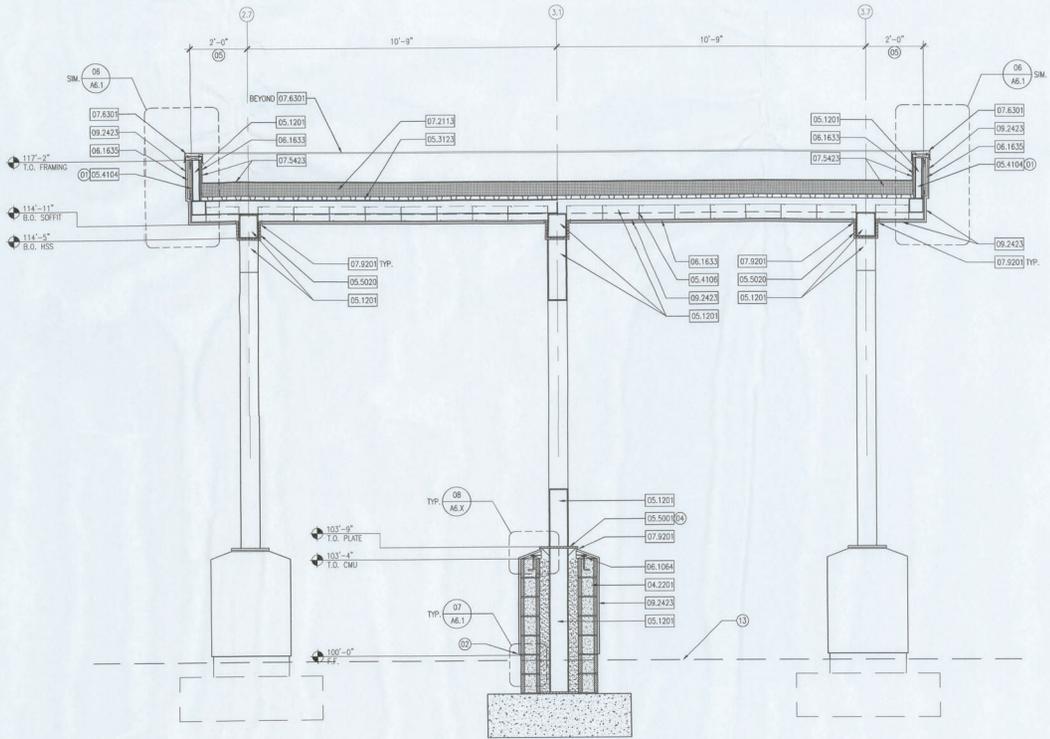
JOB NO: 14013

CANOPY SECTIONS

A5.2

DATE: 09.11.14

	<p>KEYED NOTES (DENOTED BY "XX"):</p> <ol style="list-style-type: none"> STUD INFILL BETWEEN HSS STUB COLUMNS. COORDINATE WITH MANUFACTURER'S RECOMMENDATION FOR TERMINATION ABOVE CEILING. WELD/FILL HORIZONTAL SEAM/Joint BETWEEN HSS MEMBERS; GRIND SMOOTH SO JOINT NOT VISIBLE UPON PAINTING. WELD/FILL HORIZONTAL JOINT BETWEEN HSS COLUMN AND PLATE FOR WATER-TIGHT CONDITION; GRIND FOR CONSISTENT APPEARANCE WITH ADJACENT COLUMNS & PLATE. TO OUTSIDE FACE OF STUD FRAMING/HSS PERIMETER BEAM. TO END OF COMPOSITE HSS OUTRIGGER. PROVIDE BLOCKING/BACK-UP IF REQUIRED FOR ANCHORAGE AND/OR STABILITY OF LOWER PORTION OF STUD TRACK INCLUDE BLOCKING/BACK-UP IN BASE BID IF DEEMED NECESSARY. REFER MANUFACTURER'S REQUIREMENTS FOR ANCHORAGE AND ASSOCIATED BLOCKING. CONTINUE INSULATION @ TOWER PERIMETER WALLS AND ROOF, TOWER WALLS AND ROOF INSULATION R-VALUES SHALL BE THE SAME AS MAIN BUILDING STRUCTURE. COORDINATE SCUPPER WITH PARAPET WALL FRAMING AND TPO ROOF SYSTEM. LAP AIR BARRIER OVER FLASHING. 	<ol style="list-style-type: none"> COORDINATE COUNTERFLASHING WITH TPO TERMINATION BAR AND STUCCO WEEP SLOPED. REFER CIVIL FOR FLATWORK/DRIVEWAY GRADES. 	<p>GENERAL NOTES:</p> <ol style="list-style-type: none"> REFER TO SHEETS A1.1, A2.1, A3.0 AND A4.0 FOR ADDITIONAL GENERAL NOTES. REFER SHEET A4.0 FOR EXTERIOR MATERIAL NOTES. ALL OPEN ENDS OF HSS BEAMS SHALL BE CAPPED WITH STEEL PLATE; WELDED AND GRIND SMOOTH READY FOR PAINTING.
--	---	--	--



**LAKE CITY WEST
FMC DIALYSIS CLINIC**
FRESenius
MEDICAL CARE

Lake City, FL

Orthopaedic Ct.

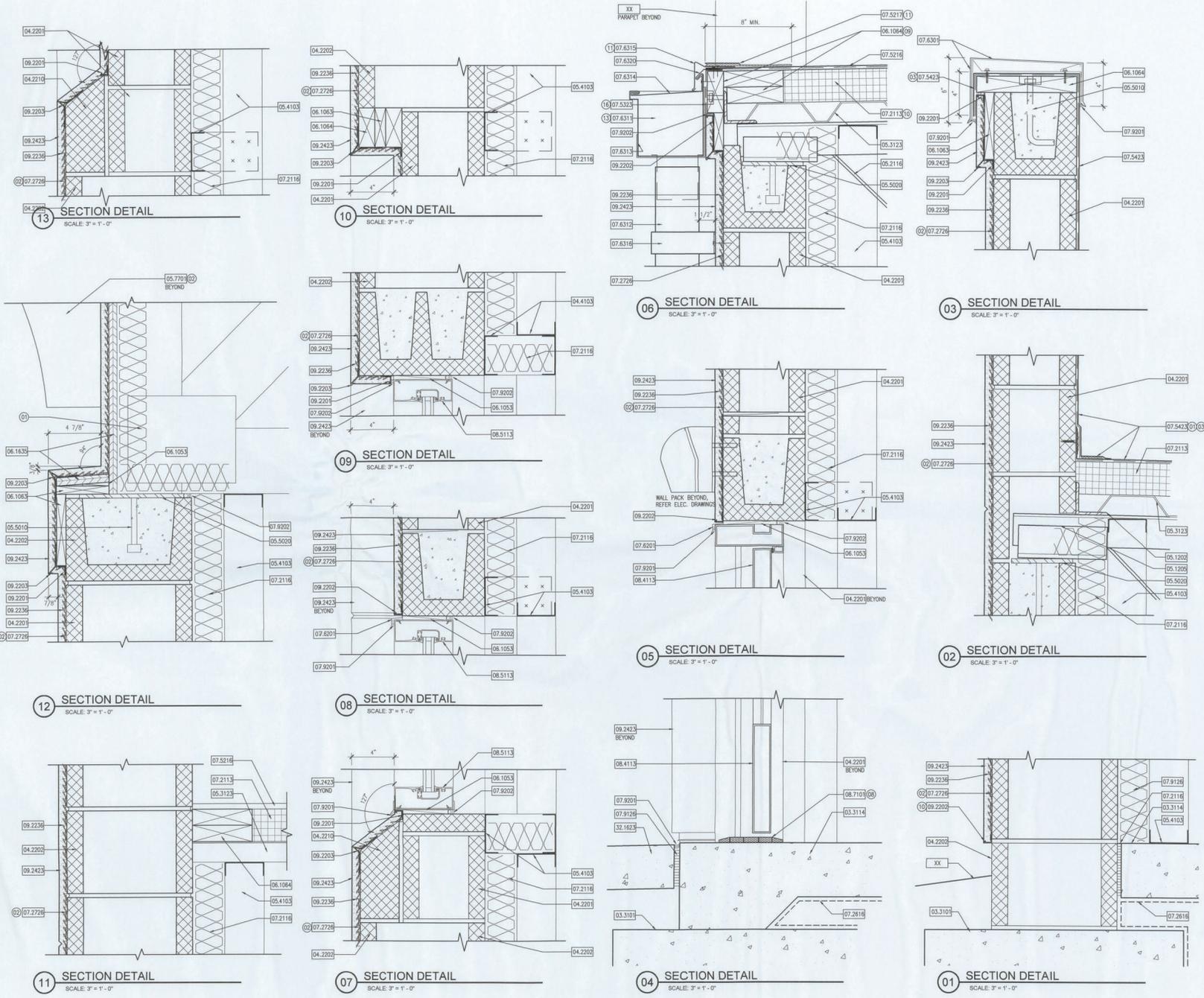
REVISIONS:

JOB NO: 14013

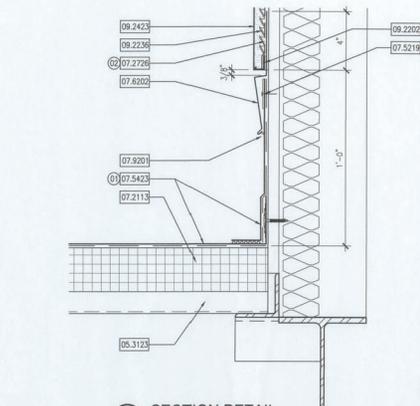
CANOPY
SECTIONS

A5.3

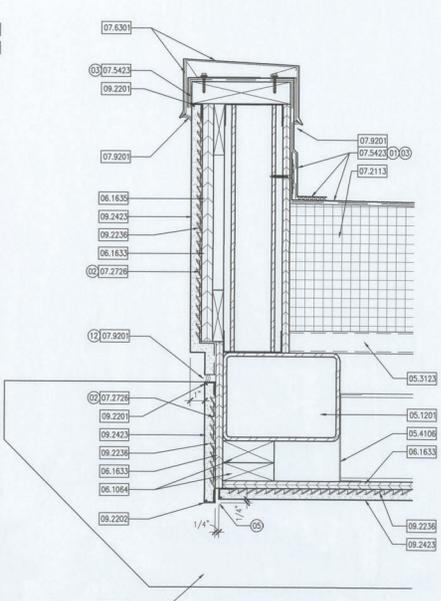
DATE: 09.11.14



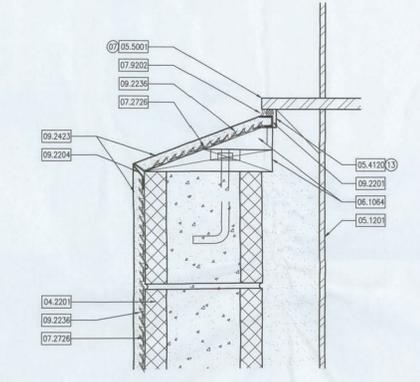
- SPECIFICATION NOTES:**
- 03.3103 SITE-CAST CONCRETE FOUNDATION (RE: STRUCTURAL)
 - 03.3114 SITE-CAST CONCRETE SLAB (RE: STRUCTURAL)
 - 03.4981 FIBER REINFORCED CEMENTITIOUS FASCIA
 - 04.2201 8" CMU (RE: STRUCTURAL)
 - 04.2202 12" CMU (RE: STRUCTURAL)
 - 04.2210 CUSTOM CONCRETE MASONRY UNIT
 - 05.1201 HSS FRAMING (RE: STRUCTURAL)
 - 05.1202 STEEL ANGLE FRAMING (RE: STRUCTURAL)
 - 05.1205 STEEL W-SECTION FRAMING (RE: STRUCTURAL)
 - 05.3123 STEEL ROOF DECKING (RE: STRUCTURAL)
 - 05.4103 3-5/8" COLD-FORMED METAL FRAMING
 - 05.4104 4" COLD-FORMED METAL FRAMING
 - 05.4106 6" COLD-FORMED METAL FRAMING
 - 05.4120 COLD-FORMED METAL ANGLE
 - 05.5001 STEEL PLATE (RE: STRUCTURAL)
 - 05.5010 STEEL THREADED ANCHOR (RE: STRUCTURAL)
 - 05.5020 STEEL PLATE SADDLE (RE: STRUCTURAL)
 - 05.7701 EXTRUDED ALUMINUM BRACKET
 - 06.1053 TAPERED BLOCKING/SHIM
 - 06.1063 1X WOOD BLOCKING
 - 06.1064 2X WOOD BLOCKING
 - 06.1633 1/2" PLYWOOD SHEATHING
 - 06.1635 3/4" PLYWOOD SHEATHING
 - 07.2113 POLYISOCYANURATE INSULATION
 - 07.2116 BLANKET INSULATION (FULL CAVITY DEPTH)
 - 07.2616 BELOW GRADE VAPOR BARRIER (15 MIL)
 - 07.2728 FLUID APPLIED MEMBRANE AIR BARRIER
 - 07.3101 ARCHITECTURAL CONTINUOUS SHINGLE SYSTEM
 - 07.5218 TERMINATION BAR (CONTINUOUS)
 - 07.5423 TPO MEMBRANE ROOFING SYSTEM
 - 07.6201 20 GA. PRE-FINISHED METAL FLASHING
 - 07.6202 20 GA. PRE-FINISHED METAL COUNTERFLASHING
 - 08.6214 PRE-FINISHED METAL ROOF EAVE FLASHING
 - 07.6301 20 GA. PRE-FINISHED METAL COPING
 - 07.6311 20 GA. PRE-FINISHED METAL GUTTER SYSTEM
 - 07.6320 20 GA. PRE-FINISHED METAL THRU-WALL SCOPPER
 - 07.9126 JOINT FILLER
 - 07.9201 CONTINUOUS SEALANT
 - 07.9202 CONTINUOUS SEALANT AND BACKER
 - 08.4113 ALUMINUM FRAMED ENTRY DOOR/STOREFRONT
 - 08.5113 ALUMINUM WINDOW
 - 08.7101 DOOR THRESHOLD/SILL SET IN FULL BED MASTIC
 - 09.2201 STUCCO SYSTEM EDGE SCREED
 - 09.2202 STUCCO SYSTEM DRIP SCREED
 - 09.2203 STUCCO SYSTEM SOFFIT SCREED (WITH DRIP)
 - 09.2236 GALV. SELF-FURRING METAL LATH
 - 09.2423 3/4" PORTLAND CEMENT STUCCO SYSTEM
 - 09.2428 1/8" PORTLAND CEMENT STUCCO FINISH COAT
 - 31.2219 FINISHED GRADE
 - 32.1313 FINISHED SIDEWALK
 - 32.1623 CONCRETE PAVING
- KEYED NOTES (DENOTED BY "00"):**
- 01. FURNISH AND INSTALL WELDS, ADHESIVES, FLASHINGS, LAPS, FASTENERS AND SEALANT PER MANUFACTURER'S RECOMMENDATIONS
 - 02. LAP BARRIER MEMBRANE OVER FLASHING/SCREED.
 - 03. WRAP TPO MEMBRANE UP OVER BLOCKING AND DOWN FRONT FACE OF BLOCKING/SHEATHING/CMU/PLASTER.
 - 04. STUD INFILL BETWEEN CHANNEL FRAMING.
 - 05. PROVIDE PLASTER DRIP AS SHOWN, PAINT SHEATHING UP TO 2" ON OTHER SIDE OF "DROPPED" PORTION.
 - 06. OUTRIGGER FRAMING SHOWN SCREENED FOR CLARITY.
 - 07. PLATE TO BE THOROUGHLY PRIMED AND PAINTED WITH HIGH QUALITY RUST-INHIBITING PAINT SYSTEM. PAINT UNDERSIDE EDGE OF PLATE PRIOR TO APPLICATION OF SEALANT.
 - 08. THRESHOLD CONFIGURATION SHALL MEET ALL APPLICABLE ACCESSIBILITY REQUIREMENTS.
 - 09. PAINT EXPOSED CMU BELOW STUCCO PLASTER SCREED TERMINATION; COLOR TO MATCH STUCCO.
 - 10. COORDINATE SCREED LOCATION WITH MANUFACTURER'S RECOMMENDATION FOR TOLERANCE ABOVE FINISH GRADE.
 - 11. APPLY WITH MANUFACTURER'S RECOMMENDED BONDING AGENT.
 - 12. PROVIDE CONTINUOUS SEALANT ALONG STUCCO/HSS INTERFACE, TYPICAL.
 - 13. ANCHOR COLD-FORMED ANGLE TO BLOCKING FOR BACKER STOP.



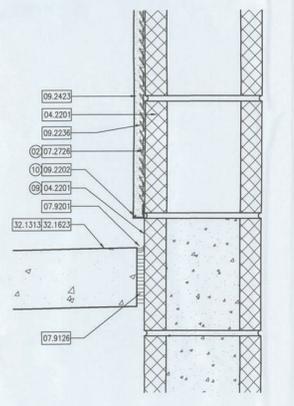
06 SECTION DETAIL
SCALE: 3" = 1'-0"



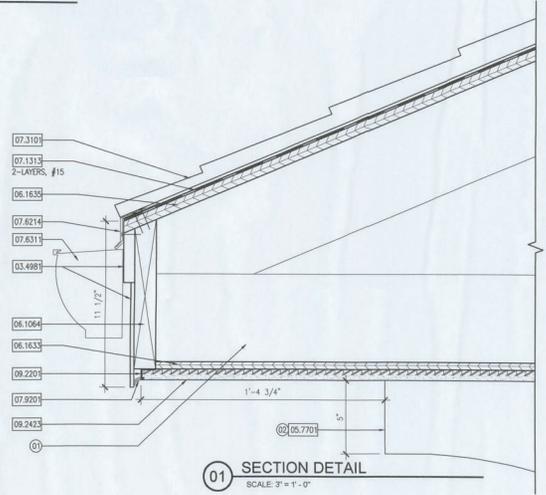
03 SECTION DETAIL
SCALE: 3" = 1'-0"



05 SECTION DETAIL
SCALE: 3" = 1'-0"



04 SECTION DETAIL
SCALE: 3" = 1'-0"



01 SECTION DETAIL
SCALE: 3" = 1'-0"

- SPECIFICATION NOTES:**
- 03.3101 SITE-CAST CONCRETE FOUNDATION (RE: STRUCTURAL)
 - 03.3114 SITE-CAST CONCRETE SLAB (RE: STRUCTURAL)
 - 03.4981 FIBER REINFORCED CEMENTITIOUS FASCIA
 - 04.2201 8" CMU (RE: STRUCTURAL)
 - 04.2210 12" CMU (RE: STRUCTURAL)
 - 04.2210 CUSTOM CONCRETE MASONRY UNIT
 - 05.1201 HSS FRAMING (RE: STRUCTURAL)
 - 05.1202 STEEL ANGLE FRAMING (RE: STRUCTURAL)
 - 05.1205 STEEL W-SECTION FRAMING (RE: STRUCTURAL)
 - 05.3123 STEEL ROOF DECKING (RE: STRUCTURAL)
 - 05.4103 3-5/8" COLD-FORMED METAL FRAMING
 - 05.4104 4" COLD-FORMED METAL FRAMING
 - 05.4106 6" COLD-FORMED METAL FRAMING
 - 05.4120 COLD-FORMED METAL ANGLE
 - 05.5001 STEEL PLATE (RE: STRUCTURAL)
 - 05.5010 STEEL THREADED ANCHOR (RE: STRUCTURAL)
 - 05.5020 STEEL PLATE SADDLE (RE: STRUCTURAL)
 - 05.7701 EXTRUDED ALUMINUM BRACKET
 - 06.1053 TAPERED BLOCKING/SHIM
 - 06.1063 1X WOOD BLOCKING
 - 06.1064 2X WOOD BLOCKING
 - 06.1633 1/2" PLYWOOD SHEATHING
 - 06.1635 3/4" PLYWOOD SHEATHING
 - 07.2113 POLYISOCYANURATE INSULATION
 - 07.2116 BLANKET INSULATION (FULL CAVITY DEPTH)
 - 07.2616 BELOW GRADE VAPOR BARRIER (15 MIL)
 - 07.2729 FLUID APPLIED MEMBRANE AIR BARRIER
 - 07.3101 ARCHITECTURAL DIMENSIONAL SHINGLE SYSTEM
 - 07.5219 TERMINATION BAR (CONTINUOUS)
 - 07.5423 TPO MEMBRANE ROOFING SYSTEM
 - 07.6201 20 GA. PRE-FINISHED METAL FLASHING
 - 07.6202 20 GA. PRE-FINISHED METAL COUNTERFLASHING
 - 06.6214 PRE-FINISHED METAL ROOF EAVE FLASHING
 - 07.6301 20 GA. PRE-FINISHED METAL COPING
 - 07.6311 20 GA. PRE-FINISHED METAL GUTTER SYSTEM
 - 07.6320 20 GA. PRE-FINISHED METAL THRU-WALL SCUPPER
 - 07.9126 JOINT FILLER
 - 07.9201 CONTINUOUS SEALANT
 - 07.9202 CONTINUOUS SEALANT AND BACKER
 - 06.4113 ALUMINUM FRAMED ENTRY DOOR/STOREFRONT
 - 05.5113 ALUMINUM WINDOW
 - 06.7101 DOOR THRESHOLD/SET IN FULL RED MASTIC
 - 09.2201 STUCCO SYSTEM EDGE SCREED
 - 09.2202 STUCCO SYSTEM DRIP SCREED
 - 09.2203 STUCCO SYSTEM SOFFIT SCREED (WITH DRIP)
 - 09.2236 GALV. SELF-FURRING METAL LATH
 - 09.2423 3/4" PORTLAND CEMENT STUCCO SYSTEM
 - 09.2429 1/8" PORTLAND CEMENT STUCCO FINISH COAT
 - 31.2216 FINISHED GRADE
 - 32.1313 FINISHED SIDEWALK
 - 32.1623 CONCRETE PAVING
- KEYED NOTES (DENOTED BY "K"):**
01. FINISH AND INSTALL WELDS, ADHESIVES, FLASHINGS, LAPS, FASTENERS AND SEALANT PER MANUFACTURER'S RECOMMENDATIONS.
 02. LAP BARRIER MEMBRANE OVER FLASHING/SCREED.
 03. WRAP TPO MEMBRANE UP OVER BLOCKING AND DOWN FRONT FACE OF BLOCKING/SHEATHING/CMU/PLASTER.
 04. STUD INFILL BETWEEN CHANNEL FRAMING.
 05. PROVIDE PLASTER DRIP AS SHOWN. PAINT SHEATHING UP TO 2" ON EITHER SIDE OF "EXPOSED" PORTION.
 06. OUTRIGGER FRAMING SHOWN SCREED FOR CLARITY.
 07. PLATE TO BE THOROUGHLY PRIMED AND PAINTED WITH HIGH QUALITY BEST-IN-BRANDING PAINT SYSTEM. PAINT UNDERSIDE EDGE OF PLATE PRIOR TO APPLICATION OF SEALANT.
 08. THRESHOLD CONFIGURATION SHALL MEET ALL APPLICABLE ACCESSIBILITY REQUIREMENTS.
 09. PAINT EXPOSED CMU BELOW STUCCO PLASTER SCREED TERMINATION. COLOR TO MATCH STUCCO.
 10. COORDINATE SCREED LOCATION WITH MANUFACTURER'S RECOMMENDATION FOR TOLERANCE ABOVE FINISH GRADE.
 11. APPLY WITH MANUFACTURER'S RECOMMENDED BONDING AGENT.
 12. PROVIDE CONTINUOUS SEALANT ALONG STUCCO/HSS INTERFACE. TYPICAL.
 13. ANCHOR COLD-FORMED ANGLE TO BLOCKING FOR BACKER STOP.



REVISIONS:

JOB NO: 14013

DETAILS

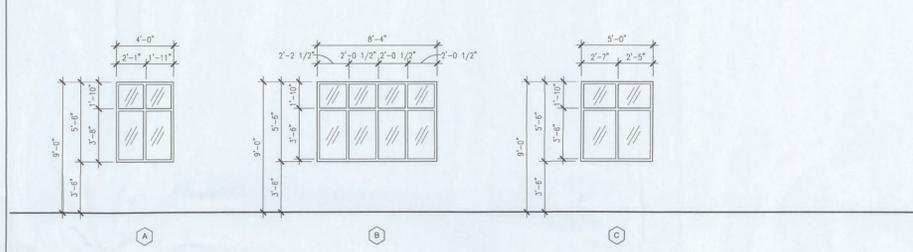
A6.1

DATE: 09.11.14

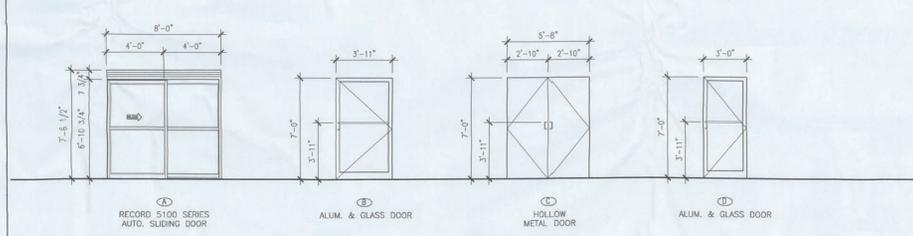
DOOR SCHEDULE

DOOR MARK	LOCATION	DOOR SIZE			DOOR ELEV.	DOOR MAT. FINISH	FRAME TYPE	FRAME MAT. FINISH	FIRE RATING	NOTES	DETAILS		
		WIDTH	HEIGHT	THICK							HEAD	JAMB	SILL
100A	MAIN ENTRY	4'-0"	6'-11"		A	ALUMINUM				1			
100B	EMERGENCY EXIT	4'-0"	7'-0"		B	ALUMINUM				2			
100C	DELIVERY ENTRY	PAIR 2'-10"	7'-0"		C	ALUMINUM				3			
100D	RISER ROOM	PAIR 2'-10"	7'-0"		C	ALUMINUM				4, D			
100E	STAFF ENTRY	3'-11"	7'-0"		D	ALUMINUM				4			
102A	VESTIBULE	4'-0"	7'-0"		A	ALUMINUM				1			

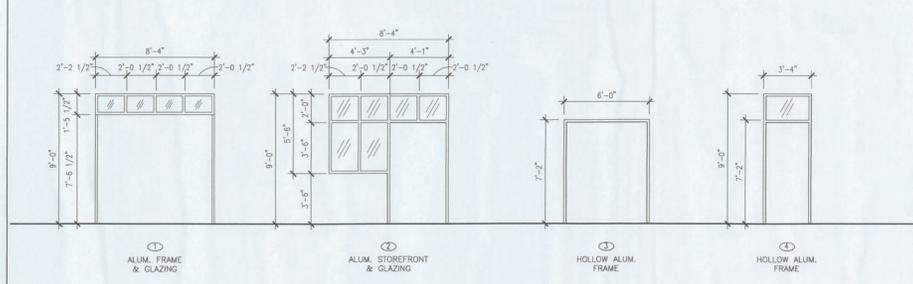
WINDOW TYPES



DOOR ELEVATIONS



DOOR FRAME & STOREFRONT TYPES



HARDWARE SCHEDULE

- SET 1 - EXTERIOR AUTOMATIC SLIDING DOOR
 PROVIDE MFR. STANDARD HARDWARE INCL. PANIC EXIT DEVICE @ BREAKOUT PANEL. CONCEALED SENSOR WEATHERSTRIPPING PER MFR. LOCKING DEVICE PER MFR.
- SET 2 - EXTERIOR DOOR STOREFRONT
 4 EA. BUTT HINGE - NRP
 1 EA. PANIC HARDWARE
 4 EA. RULL
 1 EACH RIM CYLINDER
 1 EA. CONCEALED OVERHEAD CLOSER
 1 EA. SET - WEATHERSTRIPPING
 1 EA. THRESHOLD
- SET 3 - EXTERIOR H.M. EXT. DR.
 3 EA. BUTT HINGE - NRP
 1 EA. PANIC HARDWARE/ PULL
 1 EACH RIM CYLINDER
 1 EA. SURFACE MTD. OVERHEAD CLOSER
 1 EA. DOOR SWEEP
 1 EA. SET - WEATHERSTRIPPING
 1 EA. DRIP CAP
 1 EA. THRESHOLD
- SET 4 - EXTERIOR H.M. DR. - RISER
 3 EA. BUTT HINGE - NRP
 1 EA. LEVER ENTRY LOCKSET
 1 EA. OVERHEAD RESTRICTION ARM
 1 EA. DOOR SWEEP
 1 EA. SET - WEATHERSTRIPPING
 1 EA. DRIP CAP
 1 EA. THRESHOLD
 1 EA. KNOX BOX KEY LOCKER
- SET 5 - EXTERIOR H.M. DR. (PAIR)
 3 EA./DR. BUTT HINGE - NRP
 1 EA. LEVER STORAGE LOCKSET/ DUMMY TRIM
 1 EA. MANUAL FLUSH BOLT - INACTIVE LEAF
 1 EA./DR. SURFACE MTD. OVERHEAD CLOSER
 1 EA./DR. DOOR SWEEP
 1 EA./DR. SET - WEATHERSTRIPPING
 1 EA./DR. DRIP CAP
 1 EA. THRESHOLD

GENERAL NOTES:

- ALL ALUMINUM MULLIONS ARE ASSUMED TO BE 2" UNLESS OTHERWISE NOTED
- ALL EXTERIOR DOORS ARE TO BE PREPARED TO TENANT'S SPECIFICATIONS TO ACCEPT ELECTRIC DOOR STRIKES, CLOSERS AND AUTOMATIC DOOR OPERATORS

KEYED NOTES

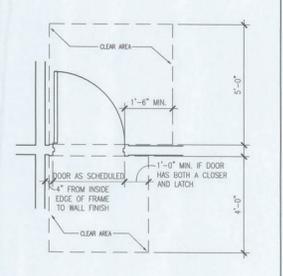
DOOR NOTES

- THRESHOLDS AT DOORWAYS, IF BEVELED, SHALL NOT EXCEED 1/2" IN HEIGHT.
- DOOR HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERATING DEVICES ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, TIGHT FINCHING, OR TWISTING OF THE WRIST TO OPERATE, LEVER-OPERATED MECHANISMS AND U-SHAPED HANDLES ARE ACCEPTABLE. DESIGNS, HARDWARE SHALL BE MOUNTED NO HIGHER THAN 48" AFT.
- DOOR CLOSURES SHALL HAVE AT LEAST 3 SECOND SWEEP TIME FOR CLOSING.
- DOOR OPENING FORCE SHALL BE 5 LBS./FT. MAXIMUM AT INTERIOR DOORS.
- IF AN AUTOMATIC DOOR IS USED, THEN IT SHALL COMPLY WITH ANSI/BHMA A156.10-1985, SUCH DOORS SHALL NOT BACK CHECK FASTER THAN 3 SECONDS AND SHALL REQUIRE NO MORE THAN 15 LBS. TO STOP DOOR MOVEMENT.
- ALL DOORS SHALL HAVE SAFETY PLATE GLASS.
- IF CLOSEST EDGE OF GLASS IS WITHIN 12" OF DOOR, AND THE BOTTOM EDGE OF GLASS IS LESS THAN 60" ABOVE THE WALKING SURFACE, THEN SAFETY GLASS IS REQUIRED.
- IF CLOSEST EDGE OF GLASS IS BEYOND 12" FROM A DOOR AND ALL OF THE FOLLOWING 4 CONDITIONS EXIST, USE SAFETY GLASS:
 - A. THE EXPOSED BOTTOM EDGE IS < 18" ABOVE THE FLOOR.
 - B. THE EXPOSED AREA OF AN INDIVIDUAL PLANE IS > 9 SQ. FT.
 - C. THE EXPOSED TOP EDGE IS > 36" ABOVE THE FLOOR.
 - D. ONE OR MORE WALKING SURFACES IS WITHIN 36" HORIZONTALLY OF THE PLANE OF GLAZING.

WINDOW NOTES

- PROFILES SHOW INDICATE BASIC OUTLINE OF PROPOSED FRAMING, AS PART OF THE CONTRACT, MFR./SUPPLIER OF ALUM. FRAMING SYSTEM WILL BE RESPONSIBLE FOR PROVIDING FULLY ENGINEERED DESIGN INCLUDING MEMBER SIZING, DESIGN FOR WIND/LATERAL LOADS, INTERNAL REINFORCING, ALL CLIPS, ATTACHMENTS, & ANCHORS, SHIMS, ETC. PROVIDE SHOP DRAWINGS OF ALL SYSTEMS FOR REVIEW.

TYPICAL DOOR CLEARANCE



REVISIONS:

JOB NO: 14013

SCHEDULES

A7.0
 DATE: 09.11.14

ABBREVIATIONS	STRUCTURAL DESIGN	CAST-IN-PLACE CONCRETE	STRUCTURAL STEEL																																																
<p>A.B ANCHOR BOLT ADDL ADDITIONAL ADJ ADJUSTMENT AFF ABOVE FINISH FLOOR ANGLE ALT ALTERNATE ARCH ARCHITECT</p> <p>BLDG BUILDING BM BEAM BOT BOTTOM BRK BRICK LEDGE BRG BEARING BTWN BETWEEN</p> <p>CMT CANTILEVER CAF CASI IN PLACE CLR CLEAR C CENTERLINE CMU CONCRETE MASONRY UNIT C.O CUT OFF CONTR CONTRACTOR C.O. (S) COLUMN (S) COMP COMPOSITE CONC CONCRETE CONNX CONNECTION CONST CONSTRUCTION C.J. CONSTRUCTION JOINT CONT CONTINUOUS CTR CENTER</p> <p>DBA DEFORMED BAR ANCHOR DBL DOUBLE DET DETAIL DJA DOUBLE ANGLE DLS DOUBLE LASH LARCH DIA DIAMETER DAG DAGGERS DWS DRAWINGS DWS (S) DOWEL (S)</p> <p>EA EACH EW EACH WAY EF EACH FACE EJ EXPANSION JOINT EL ELEVATION ELVY ELEVATION OR ELEVATION ENGR ENGINEER EQ EQUAL ENGR ENGINEER ID IDENTIFY EXP EXPANSION EXT EXTERIOR FS FAR SIDE FF FINISH FLOOR FEE FINISH FLOOR ELEVATION FV FINISH FLOOR VERT FOOTING FLR FLOOR FND FOUNDATION FTG FOOTING G GAUGE GAL GALVANIZE GR GRADE H HOOK HR HORIZONTAL HT HEIGHT HS HEAD ANCHOR STUD HSS HOLLOW STEEL SECTION ID INSIDE DIAMETER IF INSIDE FACE IN INCH INFO INFORMATION INT INTERIOR JT JOINT JOST JOIST K KIPS K.O. KNOCK OUT</p>	<p>LLH LONG LEG HORIZONTAL LLV LONG LEG VERTICAL LT LIGHT LW LIGHT WEIGHT LVL LEVEL</p> <p>MFR MANUFACTURER MEZZ MEZZANINE MID MIDDLE MIN MINIMUM MISC MISCELLANEOUS M.L. MATCH LINE MATL MATERIAL MAX MAXIMUM MECH MECHANICAL</p> <p>N.S. NEAR SIDE NSG NON-SHRINK GROUT N.W. NORTH WEST NC NOT IN CONTRACT NTS NOT TO SCALE NO. NUMBER</p> <p>O.C. ON CENTER OSNG OSING O.H. OPPOSITE HAND O.D. OUTSIDE DIAMETER O.F. OUTSIDE FACE</p> <p>PS POUNDS PER SQUARE FOOT PL PLATE PC PRECAST PPF PERFORATED LAG PSF POUNDS PER SQUARE FOOT PS POUNDS PER SQUARE INCH</p> <p>R REMAINDER OR RADIUS REF REFER TO OR REFERENCE REIN REINFORCEMENT/REINFORCE REQD REQUIRED RTU ROOF TOP UNIT</p> <p>SA SECTION ANCHOR SECT SECTION SCHED SCHEDULE SH SHEET SHR SHRINKAGE SM SMALLER SPEC SPECIFICATION STIFF STIFFEN STL STEEL SYM SYMMETRICAL S.O.G. SLAB ON GRADE SPA SPACING SS STAINLESS STEEL STD STANDARD SYP SOUTHERN YELLOW PINE</p> <p>TEMP TEMPERATURE TEN TENSION TERM TERMINATE TBS TOP AND BOTTOM T.O.C. TOP OF CONCRETE T.O.F. TOP OF FOOTING T.O.P. TOP OF PER T.O.S. TOP OF SLAB T.O. STEEL TS TUBE STEEL TYP TYPICAL UNO UNLESS NOTED OTHERWISE</p> <p>VAR VARIES VERT VERTICAL W WITH WO WITHOUT WP WORK POINT WT WEIGHT WWF WELDED WIRE FABRIC</p>	<p>1. STRUCTURAL DESIGN STANDARDS 2010 FLORIDA BUILDING CODE 2012 INTERNATIONAL BUILDING CODE ASCE 7-10</p> <p>2. STRUCTURAL DESIGN LOADS ROOF LIVE LOAD 20 psf WIND LOAD WIND SPEED, V_{w1} 120 mph RISK CATEGORY I EXPOSURE CATEGORY MPPS I LATERAL LOADS NET CAC ROOF UP/LT. EDGE 50 psf EDGE STRIP $W = 8$ ft NET CAC ROOF UP/LT. FIELD 34 psf CAC WALL LOAD, EDGE 50 psf EDGE STRIP $W = 8$ ft CAC WALL LOAD, FIELD 40 psf</p> <p>3. GEOTECHNICAL INFORMATION GEOTECHNICAL REPORT BY: ELLIS & ASSOCIATES, INC. REPORT NO. & DATE: 438-005, MAY 28, 2014 SYSTEM TYPE: GROUND-SUPPORTED FLOOR SLAB W/ SPREAD & STRIP FOOTINGS. COMPACT SUBGRADE BENEATH FOOTINGS TO 90% MODIFIED PROCTOR DENSITY AS DETERMINED BY ASTM D-1557 IN ACCORDANCE WITH THE GEOTECHNICAL REPORT. VERIFICATION THAT THE COMPACTION REQUIREMENTS HAVE BEEN MET SHALL BE MADE BY AN INDEPENDENT GEOTECHNICAL ENGINEER.</p> <p>ALLOWABLE BEARING: 2.5 ksf MOISTURE RETARDER: 10 ml, CLASS A</p>	<p>1. STRUCTURAL STEEL SHAPES AND PLATES SHALL CONFORM TO THE FOLLOWING:</p> <table border="1"> <thead> <tr> <th>ITEM</th> <th>ASTM SPECIFICATION</th> </tr> </thead> <tbody> <tr> <td>WIDE FLANGE CHANNEL</td> <td>A992, GRADE 50</td> </tr> <tr> <td>TUBE STEEL, H-SS</td> <td>A500, GRADE B</td> </tr> <tr> <td>STEEL PIPE</td> <td>ASTM A513</td> </tr> <tr> <td>ANGLES, PLATES, MISC. STL.</td> <td>A36</td> </tr> </tbody> </table> <p>2. ALL CONNECTION BOLTS FOR STRUCTURAL STEEL MEMBERS SHALL CONFORM TO THE FOLLOWING:</p> <table border="1"> <thead> <tr> <th>ITEM</th> <th>ASTM SPECIFICATION</th> </tr> </thead> <tbody> <tr> <td>ANCHOR BOLTS</td> <td>F1554, GRADE 36</td> </tr> <tr> <td>CONNECTION BOLTS</td> <td>A325</td> </tr> <tr> <td>EXPANSION ANCHORS</td> <td>B633</td> </tr> <tr> <td>CHEMICAL ANCHORS</td> <td>F1554, GRADE 36</td> </tr> </tbody> </table> <p>3. PROVIDE HARDENED WASHERS FOR ALL AS325 CONNECTION BOLTS.</p> <p>4. HOT-OP GALVANIZE ALL STRUCTURAL STEEL MEMBERS EXPOSED TO WEATHER. WELDED AREAS OF GALVANIZED MEMBERS SHALL BE TOUCHED UP WITH COLD-GALVANIZING PAINT. GALVANIZING OF STEEL MEMBERS SHALL CONFORM TO ASTM A123.</p> <p>5. STEEL MEMBERS SHALL NOT BE SPICED EXCEPT WHERE INDICATED ON THE DRAWINGS UNLESS APPROVED IN WRITING BY THE STRUCTURAL ENGINEER.</p> <p>6. WELDED CONNECTIONS SHALL CONFORM TO THE FOLLOWING AMERICAN WELDING SOCIETY (AISC) STANDARDS.</p> <p>7. ELECTRODES FOR FIELD AND SHOP WELDS SHALL BE E70XX, U.L.O.</p> <p>8. WHEN WELDS ARE NOT CALLED OUT ON THE DRAWINGS, THEY ARE MINIMUM SIZE FILLET WELDS PER AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH ARE CONTINUOUS.</p>	ITEM	ASTM SPECIFICATION	WIDE FLANGE CHANNEL	A992, GRADE 50	TUBE STEEL, H-SS	A500, GRADE B	STEEL PIPE	ASTM A513	ANGLES, PLATES, MISC. STL.	A36	ITEM	ASTM SPECIFICATION	ANCHOR BOLTS	F1554, GRADE 36	CONNECTION BOLTS	A325	EXPANSION ANCHORS	B633	CHEMICAL ANCHORS	F1554, GRADE 36																												
ITEM	ASTM SPECIFICATION																																																		
WIDE FLANGE CHANNEL	A992, GRADE 50																																																		
TUBE STEEL, H-SS	A500, GRADE B																																																		
STEEL PIPE	ASTM A513																																																		
ANGLES, PLATES, MISC. STL.	A36																																																		
ITEM	ASTM SPECIFICATION																																																		
ANCHOR BOLTS	F1554, GRADE 36																																																		
CONNECTION BOLTS	A325																																																		
EXPANSION ANCHORS	B633																																																		
CHEMICAL ANCHORS	F1554, GRADE 36																																																		
	<p>GENERAL NOTES</p> <p>1. PRIOR TO EXECUTING ANY WORK INDICATED IN THESE DOCUMENTS, THE GENERAL CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND SHALL REPORT ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THOSE OF THE ARCHITECT AND ALL PROJECT CONSULTANTS OR ANY ERROR, OMISSION OR DIFFICULTY AFFECTING HIS WORK TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW.</p> <p>2. ALL DETAILS AND SECTIONS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUCTED TO APPLY TO ANY SIMILAR SITUATION UNLESS HERE EXCEPT WHERE A DIFFERENT DETAIL OR SECTION IS SHOWN.</p> <p>3. DIMENSIONS SHOWN ON STRUCTURAL PLANS, SECTIONS, AND DETAILS TAKE PRECEDENT OVER SCALE.</p> <p>4. THE DESIGN LOADS LISTED IN THE STRUCTURAL DESIGN CRITERIA ABOVE SHALL NOT BE EXCEEDED DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR CONSTRUCTION LOADS AND TEMPORARY BRACING TO KEEP ALL ELEMENTS OF THE STRUCTURE PLUMB AND IN THE ALIGNMENT DURING ALL PHASES OF CONSTRUCTION. BRACING MEMBERS SHOWN ON STRUCTURAL DRAWINGS ARE REQUIRED FOR THE COMPLETED STRUCTURE AND MAY NOT BE ADEQUATE DURING CONSTRUCTION.</p> <p>5. PRINCIPAL OPENINGS ARE SHOWN ON THE STRUCTURAL DRAWINGS. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OTHER OPENINGS AND TO VERIFY THE LOCATION AND SIZE OF OPENINGS THAT ARE SHOWN. GENERAL CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DEVIATION IN THE SIZE OR LOCATION OF OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS OR RELATED MATERIALS.</p> <p>6. STRUCTURAL MEMBERS AND FOUNDATIONS SUPPORTING MECHANICAL EQUIPMENT HAVE BEEN DESIGNED FOR THE WEIGHT OF THE UNITS SHOWN ON THE STRUCTURAL DRAWINGS. ANY CHANGES IN SIZE, WEIGHT, OR QUANTITY OF UNITS SHALL BE REPORTED TO THE ARCHITECT PRIOR TO FABRICATION OR INSTALLATION OF STRUCTURAL MEMBERS OR RELATED MATERIALS.</p>	<p>REINFORCING STEEL</p> <p>1. ALL CONCRETE REINFORCEMENT SHALL BE NEW BILLET STEEL CONFORMING TO ASTM A618, GRADE 60.</p> <p>2. ALL REINFORCING BARS SHALL BE LAPPED 40 BAR DIAMETERS (2" MINIMUM AT SPLICES UNLESS NOTED OTHERWISE ON PLANS OR DETAILS. DEVIATIONS IN SPLICE LOCATIONS AND LENGTHS ARE NOT ALLOWED UNLESS APPROVED BY THE STRUCTURAL ENGINEER OR RECORD.</p> <p>3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. ALL LAPS IN WELDED WIRE FABRIC SHALL BE ONE INCH PER TWO INCHES.</p> <p>4. CONCRETE REINFORCEMENT AND ACCESSORIES SHALL BE DETAILED AND FABRICATED IN ACCORDANCE WITH ACS 308.5 AND ACI 318.</p> <p>5. LAP SPLICES OF CONTINUOUS BEAM REINFORCEMENT SHALL BE MADE AT MIDSPAN FOR TOP BARS AND AT SUPPORTS FOR BOTTOM BARS.</p> <p>6. PROVIDE CORNER BARS AT INTERSECTIONS OF WALLS, GRADE BEAMS AND STRIP FOOTINGS IN ACCORDANCE WITH THE TYPICAL DETAILS.</p> <p>7. MINIMUM CONCRETE PROTECTION FOR REINFORCEMENT SHALL BE AS NOTED BELOW. REFER TO ACI 318 SECTION 7.7 FOR CONDITIONS NOT NOTED:</p> <table border="1"> <thead> <tr> <th>CONDITION</th> <th>PROTECTION</th> </tr> </thead> <tbody> <tr> <td>FOOTINGS</td> <td>2"</td> </tr> <tr> <td>SLAB</td> <td>MID-SLAB</td> </tr> <tr> <td>GRADE BEAMS, WALLS</td> <td>2" WOOD-FORMED SIDES 3" EARTH-FORMED SIDES</td> </tr> </tbody> </table>	CONDITION	PROTECTION	FOOTINGS	2"	SLAB	MID-SLAB	GRADE BEAMS, WALLS	2" WOOD-FORMED SIDES 3" EARTH-FORMED SIDES	<p>WELDING</p> <p>1. WELDED CONSTRUCTION SHALL CONFORM TO THE FOLLOWING AMERICAN WELDING SOCIETY STANDARDS:</p> <table border="1"> <thead> <tr> <th>ITEM</th> <th>SPECIFICATION</th> </tr> </thead> <tbody> <tr> <td>STRUCTURAL STEEL</td> <td>AWS D1.1</td> </tr> <tr> <td>REINFORCING STEEL</td> <td>AWS D1.4</td> </tr> </tbody> </table> <p>2. ELECTRODES FOR FIELD AND SHOP WELDS SHALL BE E70XX, U.L.O.</p> <p>3. ELECTRODES FOR WELDING OF REINFORCING STEEL SHALL BE E80XX.</p> <p>4. ELECTRODES FOR WELDING OF METAL DECK SHALL CONFORM TO AWS D1.3.</p> <p>5. WHEN WELDS ARE NOT CALLED OUT ON THE DRAWINGS, THEY ARE MINIMUM SIZE FILLET WELDS PER AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH ARE CONTINUOUS.</p> <p>6. ALL GROOVE WELDS ARE FULL PENETRATION UNLESS NOTED OTHERWISE.</p>	ITEM	SPECIFICATION	STRUCTURAL STEEL	AWS D1.1	REINFORCING STEEL	AWS D1.4																																		
CONDITION	PROTECTION																																																		
FOOTINGS	2"																																																		
SLAB	MID-SLAB																																																		
GRADE BEAMS, WALLS	2" WOOD-FORMED SIDES 3" EARTH-FORMED SIDES																																																		
ITEM	SPECIFICATION																																																		
STRUCTURAL STEEL	AWS D1.1																																																		
REINFORCING STEEL	AWS D1.4																																																		
		<p>CONCRETE MASONRY UNITS</p> <p>1. THE MASONRY DESIGN HAS BEEN BASED ON A PREM STRENGTH, $f_m = 1500$ psi.</p> <p>2. HOLLOW CONCRETE MASONRY UNITS SHALL MEET ASTM C90, NORMAL WEIGHT, TYPE IV, MINIMUM COMPRESSIVE STRENGTH OF 2300 psi ON THE NET AREA OF THE BLOCK.</p> <p>3. CMU MORTAR SHALL MEET ASTM C770 AND SHALL HAVE A COMPRESSIVE CUBE STRENGTH OF 1800 psi AT 28 DAYS. PROVIDE TYPE M MASONRY FOR INTERIOR PARTITIONS ONLY, TYPE S FOR ABOVE-GRADE EXTERIOR WALLS AND TYPE M FOR BELOW-GRADE WALLS.</p> <p>4. CMU GROUT SHALL MEET ASTM C476 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2300 psi AT 28 DAYS. AGGREGATE SIZE SHALL NOT EXCEED 1/2 INCH.</p> <p>5. HORIZONTAL JOINT REINFORCEMENT SHALL CONFORM TO ASTM A62.</p> <p>6. REINFORCE CMU WALLS AND PROVIDE FOUNDATION DOWELS PER DETAILS. LAP VERTICAL BARS WITH CLASS A SPLICES UNLESS NOTED OTHERWISE. LAP HORIZONTAL JOINT REINFORCEMENT MIN. 12 INCHES AND PROVIDE CORNER AND TEE PIECES.</p> <p>7. PLACE REINFORCEMENT PRIOR TO GROUTING, AND SECURE VERTICAL REINFORCEMENT WITH POSITIONERS.</p> <p>8. VERTICAL CELLS, BOND BEAMS AND LINTELS SHALL BE FULLY GROUTED.</p> <p>9. LOCATE VERTICAL CONTROL JOINTS IN CMU WALLS AT MAX. 20' ON CENTER COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR LOCAL CATCH. DISCONTINUE HORIZONTAL JOINT REINFORCEMENT AND BOND BEAM REINFORCEMENT AT CONTROL JOINTS.</p>																																																	
<p>SYMBOL KEY</p> <p>DETAIL MARKER</p> <p>ELEVATION MARKER</p> <p>FINISH FLOOR ELEVATION MARKER</p> <p>SPOT ELEVATION MARKER</p> <p>GRADIENT IDENTIFIER</p> <p>FULL PENETRATION CONNX. TO SUPPORT</p> <p>DIRECTION OF SLAB OR DECK SPAN</p>	<p>SPECIAL INSPECTIONS & TESTING</p> <p>SPECIAL INSPECTIONS ARE REQUIRED TO BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING SECTIONS OR TABLES FROM THE INTERNATIONAL BUILDING CODE:</p> <table border="1"> <thead> <tr> <th>IBC Section</th> <th>SPECIAL INSPECTIONS</th> <th>APPLICABLE</th> <th>NON-APPLICABLE</th> <th>QUALIFICATIONS OF SPECIAL INSPECTOR & FREQUENCY OF INSPECTION</th> </tr> </thead> <tbody> <tr> <td>1704.2</td> <td>INSPECTION OF FABRICATORS (STEEL)</td> <td>X</td> <td></td> <td>Fabricator to provide documentation of certification per 1704.2.2</td> </tr> <tr> <td>1704.3</td> <td>STEEL CONSTRUCTION</td> <td>X</td> <td></td> <td>City - approved agency, periodic per table 1704.3</td> </tr> <tr> <td>1704.4</td> <td>CONCRETE CONSTRUCTION</td> <td>X</td> <td></td> <td>City - approved agency, continuous for fresh concrete sampling, periodic for all other per table 1704.4</td> </tr> <tr> <td>1704.5</td> <td>CMU MASONRY CONSTRUCTION</td> <td>X</td> <td></td> <td>City - approved agency, continuous for grout & specimens, periodic for all other per table 1704.5.1</td> </tr> <tr> <td>1704.6</td> <td>WOOD CONSTRUCTION</td> <td></td> <td>X</td> <td>City - approved agency, inspect per IBC 1704.6.1 & 1704.6.2</td> </tr> <tr> <td>1704.7</td> <td>SOILS</td> <td>X</td> <td></td> <td>City - approved agency, inspect and test per sections 1704.7.1 - 1704.7.3</td> </tr> <tr> <td>1704.8</td> <td>PILE FOUNDATIONS</td> <td></td> <td>X</td> <td>City - approved agency, continuous</td> </tr> <tr> <td>1704.9</td> <td>PIER FOUNDATIONS</td> <td></td> <td>X</td> <td>City - approved agency, continuous</td> </tr> <tr> <td>1704.15</td> <td>SPECIAL CASES (UNUSUAL IN NATURE)</td> <td>X</td> <td></td> <td>Installation of below-slab moisture retarder for conformance to specifications and manufacturer's installation requirements.</td> </tr> </tbody> </table>	IBC Section	SPECIAL INSPECTIONS	APPLICABLE	NON-APPLICABLE	QUALIFICATIONS OF SPECIAL INSPECTOR & FREQUENCY OF INSPECTION	1704.2	INSPECTION OF FABRICATORS (STEEL)	X		Fabricator to provide documentation of certification per 1704.2.2	1704.3	STEEL CONSTRUCTION	X		City - approved agency, periodic per table 1704.3	1704.4	CONCRETE CONSTRUCTION	X		City - approved agency, continuous for fresh concrete sampling, periodic for all other per table 1704.4	1704.5	CMU MASONRY CONSTRUCTION	X		City - approved agency, continuous for grout & specimens, periodic for all other per table 1704.5.1	1704.6	WOOD CONSTRUCTION		X	City - approved agency, inspect per IBC 1704.6.1 & 1704.6.2	1704.7	SOILS	X		City - approved agency, inspect and test per sections 1704.7.1 - 1704.7.3	1704.8	PILE FOUNDATIONS		X	City - approved agency, continuous	1704.9	PIER FOUNDATIONS		X	City - approved agency, continuous	1704.15	SPECIAL CASES (UNUSUAL IN NATURE)	X		Installation of below-slab moisture retarder for conformance to specifications and manufacturer's installation requirements.
IBC Section	SPECIAL INSPECTIONS	APPLICABLE	NON-APPLICABLE	QUALIFICATIONS OF SPECIAL INSPECTOR & FREQUENCY OF INSPECTION																																															
1704.2	INSPECTION OF FABRICATORS (STEEL)	X		Fabricator to provide documentation of certification per 1704.2.2																																															
1704.3	STEEL CONSTRUCTION	X		City - approved agency, periodic per table 1704.3																																															
1704.4	CONCRETE CONSTRUCTION	X		City - approved agency, continuous for fresh concrete sampling, periodic for all other per table 1704.4																																															
1704.5	CMU MASONRY CONSTRUCTION	X		City - approved agency, continuous for grout & specimens, periodic for all other per table 1704.5.1																																															
1704.6	WOOD CONSTRUCTION		X	City - approved agency, inspect per IBC 1704.6.1 & 1704.6.2																																															
1704.7	SOILS	X		City - approved agency, inspect and test per sections 1704.7.1 - 1704.7.3																																															
1704.8	PILE FOUNDATIONS		X	City - approved agency, continuous																																															
1704.9	PIER FOUNDATIONS		X	City - approved agency, continuous																																															
1704.15	SPECIAL CASES (UNUSUAL IN NATURE)	X		Installation of below-slab moisture retarder for conformance to specifications and manufacturer's installation requirements.																																															



Callaway
architecture
1207 HAMPSHIRE LN., #1105, RICHARDSON, TX 75080
PHONE: 214-368-2525



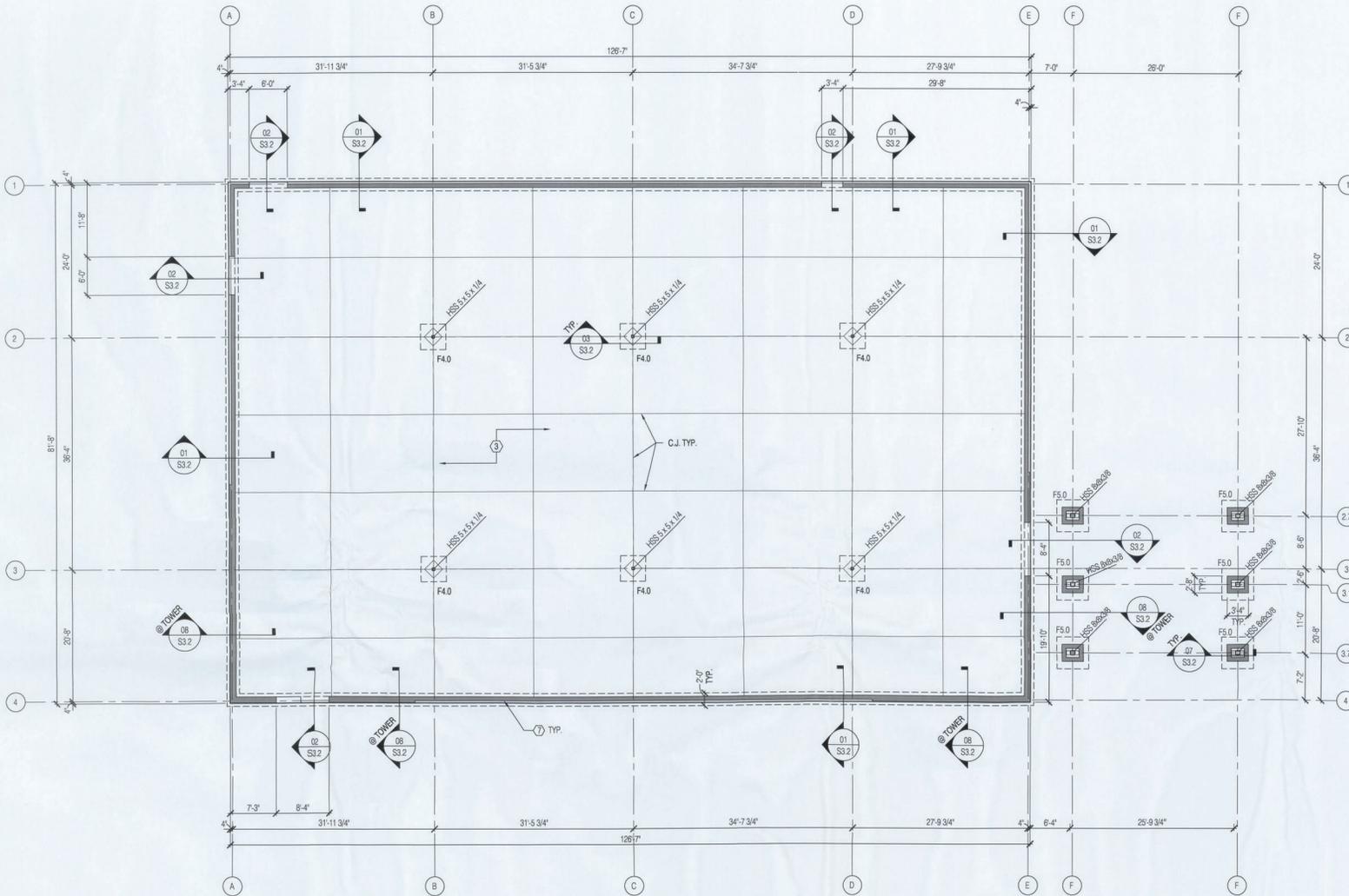
LAKE CITY WEST
PRESENTING
MEDICAL CARE
Lake City, FL

REVISIONS:

JOB NO: 14013

STRUCTURAL NOTES

S1.1
DATE: 09.11.14



01 FOUNDATION PLAN

1/8" = 1'

PLAN NOTES AND KEY

1. REFER TO SHEET S1.1 FOR STRUCTURAL NOTES & GENERAL PROJECT INFORMATION.
2. REFER TO ARCH'L & CIVIL DRAWINGS FOR DATUM ELEVATION OF FINISH FLOOR.
3. 9" GROUND-SUPPORTED SLAB OVER MOISTURE RETARDER PER S1.1 OVER IMPROVED SUBGRADE PER THE GEOTECH-NICAL REPORT. REINFORCE W/ #4 @ 18" O.C.E.W. MIDSLAB. REFER TO DETAILS ON SHEET S3.1 FOR ADD'L REINFORCEMENT & FOR CONTROL JOINTING INFORMATION.
4. REFER TO S1.1 FOR CURING COMPOUND.
5. REFER TO 01B/S3.1 FOR ADD'L REINFORCEMENT @ RE-ENTRANT CORNERS.
6. NEW COLUMNS ARE DESIGNATED THUS:

COLUMN
7. NEW CMU WALL. REFER TO SHEET S1.1 FOR MATERIAL SPECIFICATIONS. REFER TO DETAILS FOR REINFORCEMENT.

ccd
i.scott douglass, pe
Structural Engineer

Callaway
architecture
1207 HAMPSHIRE LN. ST#105, RICHARDSON, TX-75080
PHONE: 214.368.2525



LAKE CITY WEST

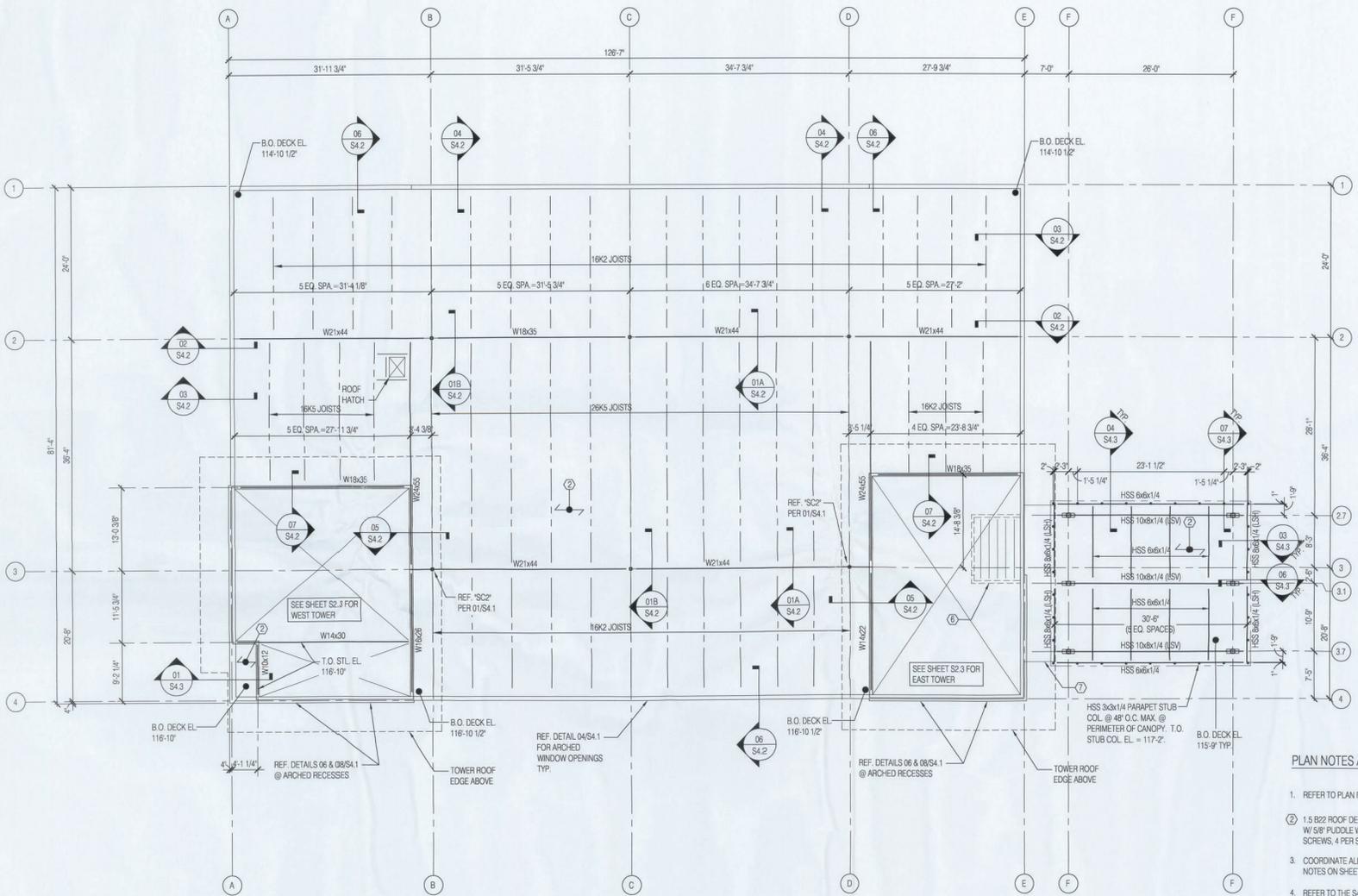
FIRENIUS
MEDICAL CARE
Lake City, FL

REVISIONS:

JOB NO: 14013

FOUNDATION
PLAN

S2.1
DATE: 09.11.14



PLAN NOTES AND KEY

1. REFER TO PLAN FOR B.O. ROOF DECK ELEVATIONS.
2. 1.5 B22 ROOF DECK. ATTACH TO ALL SUPPORTS (EDGE & INTERIOR) W/ 5/8" PUDDLE WELDS @ 12" O.C., & ATTACH SIDELAPS W/ #10 TEK SCREWS, 4 PER SPAN.
3. COORDINATE ALL WORK THIS SHEET WITH THE STRUCTURAL NOTES ON SHEET S1.1 AND WITH PROJECT SPECIFICATIONS.
4. REFER TO THE S4 SHEET SERIES FOR TYPICAL STEEL CONNECTION DETAILS, TYPICAL BAR JOIST CONNECTION DETAILS, AND TYPICAL MECHANICAL EQUIPMENT AND OPENING DETAILS. COORDINATE ROOF DRAIN LOCATIONS WITH THE ARCHITECTURAL ROOF PLAN. VERIFY LOCATIONS OF ROOF-TOP EQUIPMENT WITH THE MEP DRAWINGS.
5. BAR JOIST BRIDGING PER SUPPLIER NOT SHOWN FOR CLARITY.
6. VESTIBULE BELOW. PROVIDE MIN. 18 GA. STUDS @ 16" O.C. (REF. ARCHL. FOR STUD DEPTH). FRAME VESTIBULE CEILING W/ 800S162-43 JOISTS @ 16" O.C. & NOMINAL 1/2" OSB DECKING.
7. PRE-ENGINEERED CANOPY PER CANOPY SUPPLIER.



01 ROOF FRAMING PLAN

1/8"=1'

LAKE CITY WEST



REVISIONS:

JOB NO: 14013

ROOF FRAMING PLAN

S2.2
DATE: 09.11.14



i-scott douglass, pc

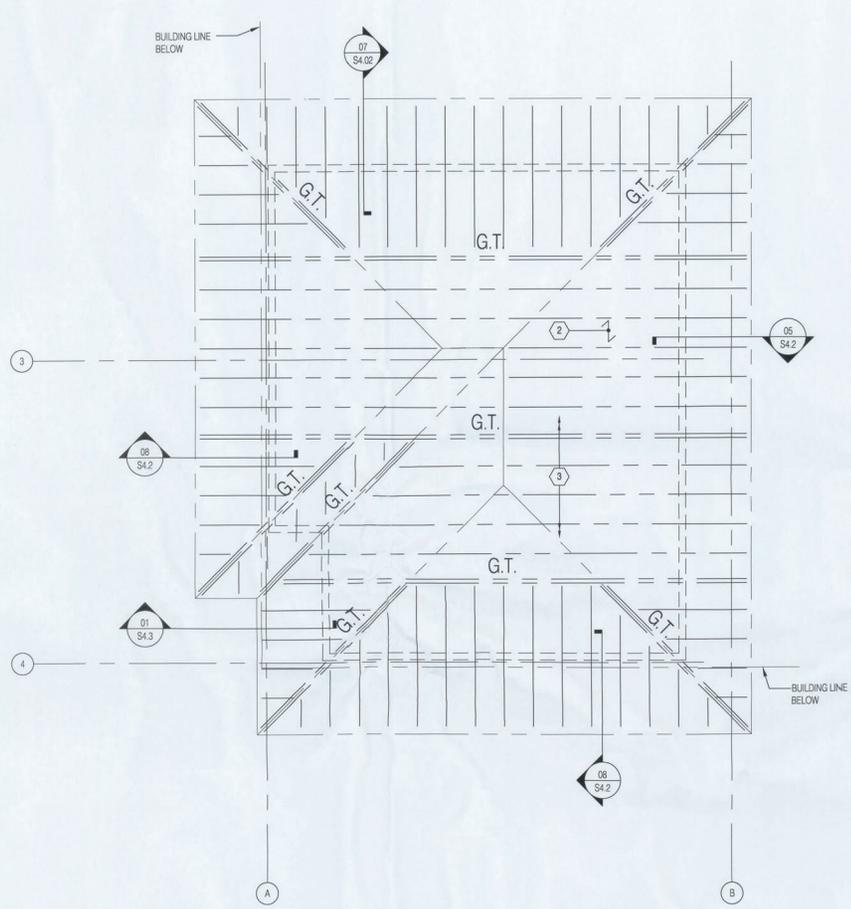
 Structural Engineer

callaway

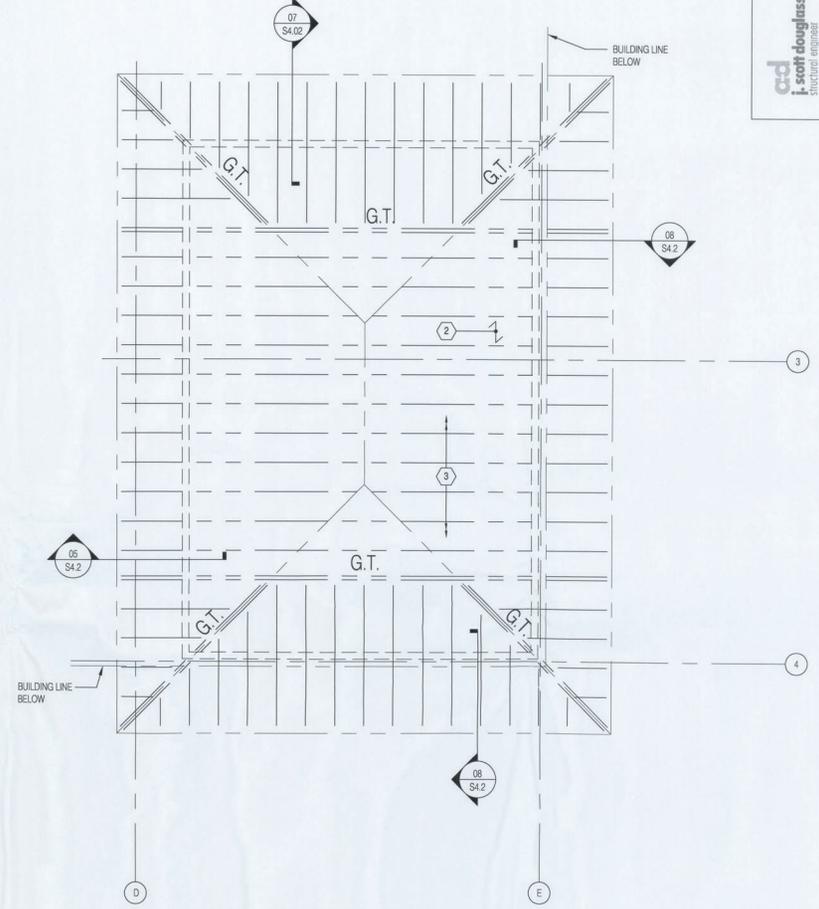
 architecture

1207 HAMPSHIRE LN. ST #195, RICHARDSON, TX - 75080

 PHONE: 214.368.2525



01 WEST TOWER FRAMING PLAN 1/4" = 1'



01 EAST TOWER FRAMING PLAN 1/4" = 1'

PLAN NOTES AND KEY

1. REFER TO PLAN FOR B.O. ROOF DECK ELEVATIONS.
2. NOMINAL 3/4" DIA. WOOD PANEL DECKING, ATTACHED TO TRUSS FRAMING W/ 10d SCREWS @ 8" O.C. PROVIDE MID-SPAN DEFLECTION CLIPS TYP.
3. PRE-ENGINEERED LIGHT-GAUGE STEEL TRUSSES AT 24" O.C.
4. COORDINATE ALL WORK THIS SHEET WITH THE STRUCTURAL NOTES ON SHEET S1.1 AND WITH PROJECT SPECIFICATIONS.
5. "G.T." DESIGNATES GIRDER TRUSS PER TRUSS SUPPLIER.

LAKE CITY WEST



Lake City, FL

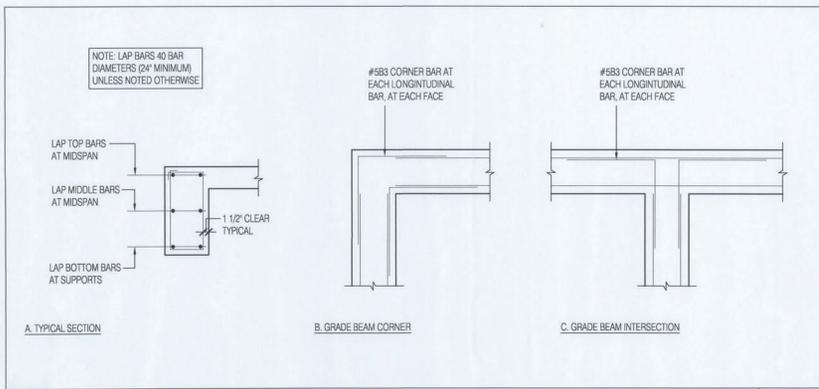
REVISIONS:

JOB NO: 14013

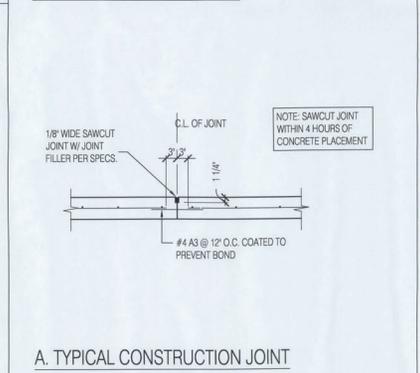
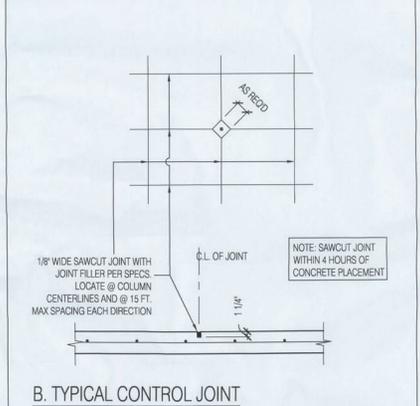
TOWER FRAMING PLAN

S2.3

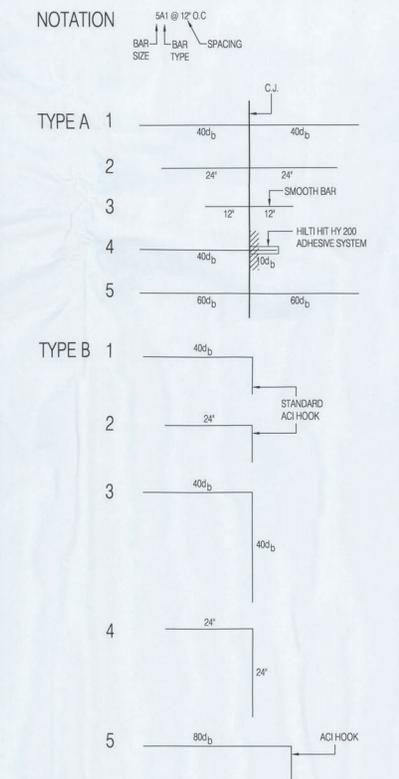
 DATE: 09.11.14



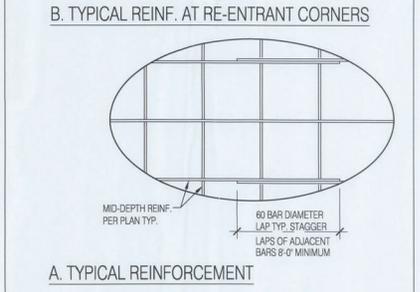
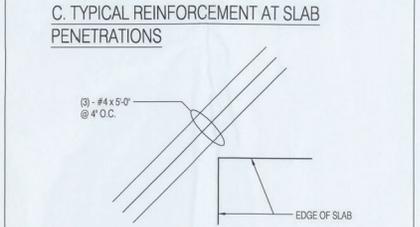
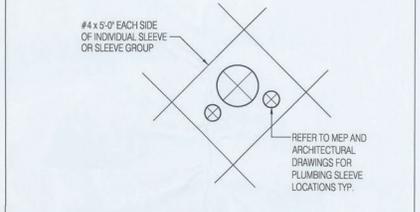
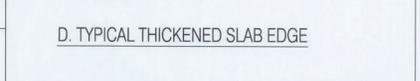
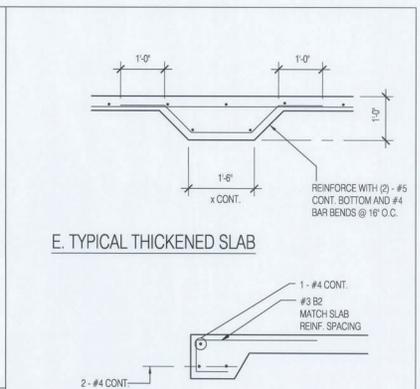
04 TYP. GRADE BEAM REINFORCEMENT DETAILS N.T.S.



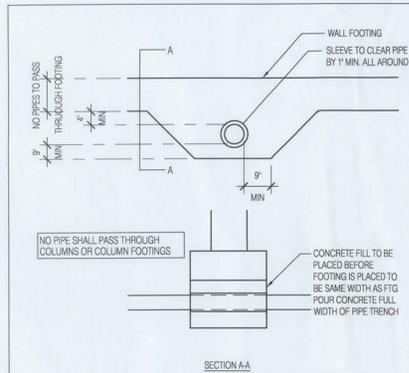
03 TYPICAL SLAB-ON-GRADE DETAILS N.T.S.



02 REBAR DOWEL SCHEDULE N.T.S.



01 TYPICAL SLAB-ON-GRADE DETAILS N.T.S.



05 PIPE BELOW FTG. WALL N.T.S.

REVISIONS:

JOB NO: 14013

TYPICAL FOUNDATION DETAILS

S3.1
DATE: 09.11.14



LAKE CITY WEST



Lake City, FL

REVISIONS:

JOB NO: 14013

FOUNDATION
DETAILS

S3.2
DATE: 09.11.14

	<table border="1"> <thead> <tr> <th>MARK</th> <th>A x B</th> <th>DEPTH</th> <th>REINFORCEMENT</th> </tr> </thead> <tbody> <tr> <td>F2.5</td> <td>2'-6" SQ.</td> <td>PER DETAILS</td> <td>(3) - #4 EA. WAY BOTTOM</td> </tr> <tr> <td>F3.0</td> <td>3'-0" SQ.</td> <td>PER DETAILS</td> <td>(4) - #4 EA. WAY BOTTOM</td> </tr> <tr> <td>F3.5</td> <td>3'-6" SQ.</td> <td>PER DETAILS</td> <td>(4) - #4 EA. WAY BOTTOM</td> </tr> <tr> <td>F4.0</td> <td>4'-0" SQ.</td> <td>PER DETAILS</td> <td>(4) - #5 EA. WAY BOTTOM</td> </tr> <tr> <td>F5.0</td> <td>5'-0" SQ.</td> <td>PER DETAILS</td> <td>(5) - #5 EA. WAY TOP & BOTTOM (HOOKS EACH END)</td> </tr> </tbody> </table>	MARK	A x B	DEPTH	REINFORCEMENT	F2.5	2'-6" SQ.	PER DETAILS	(3) - #4 EA. WAY BOTTOM	F3.0	3'-0" SQ.	PER DETAILS	(4) - #4 EA. WAY BOTTOM	F3.5	3'-6" SQ.	PER DETAILS	(4) - #4 EA. WAY BOTTOM	F4.0	4'-0" SQ.	PER DETAILS	(4) - #5 EA. WAY BOTTOM	F5.0	5'-0" SQ.	PER DETAILS	(5) - #5 EA. WAY TOP & BOTTOM (HOOKS EACH END)	
MARK	A x B	DEPTH	REINFORCEMENT																							
F2.5	2'-6" SQ.	PER DETAILS	(3) - #4 EA. WAY BOTTOM																							
F3.0	3'-0" SQ.	PER DETAILS	(4) - #4 EA. WAY BOTTOM																							
F3.5	3'-6" SQ.	PER DETAILS	(4) - #4 EA. WAY BOTTOM																							
F4.0	4'-0" SQ.	PER DETAILS	(4) - #5 EA. WAY BOTTOM																							
F5.0	5'-0" SQ.	PER DETAILS	(5) - #5 EA. WAY TOP & BOTTOM (HOOKS EACH END)																							
<p>A. SPREAD FOOTING SCHEDULE</p>		<p>B. TYPICAL SPREAD FOOTING</p>																								
<p>05 FOOTING SCHEDULE N.T.S.</p>																										
<p>07 TYP. EXTERIOR CANOPY FTG. SECTION 3/4"=1'</p>	<p>04 TYP. INTERIOR COL. FTG. PLAN 3/4"=1'</p>	<p>02 TYP. DETAIL @ EXTERIOR ENTRANCE 3/4"=1'</p>																								
<p>08 TYP. EXTERIOR 12" CMU @ TOWER 3/4"=1'</p>	<p>06 TYPICAL LIGHT POLE BASE N.T.S.</p>	<p>01 TYP. DETAIL @ EXTERIOR WALL 3/4"=1'</p>																								
<p>09 TYP. EXTERIOR CANOPY FTG. SECTION 3/4"=1'</p>																										
<p>04 TYP. INTERIOR COL. FTG. SECTION 3/4"=1'</p>																										

csd
i-scott douglass, pe
structural engineer

Callaway
architecture
1207 HAMPSHIRE LN., 5TH FLOOR, RICHARDSON, TX 75080
PHONE: 214.368.2575



LAKE CITY WEST



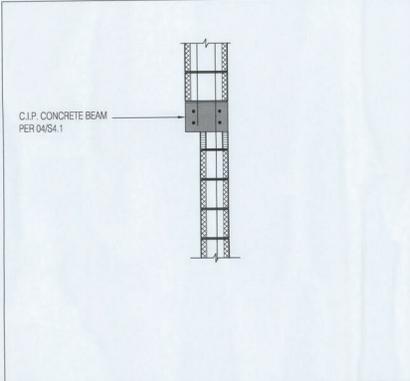
Lake City, FL

REVISIONS:

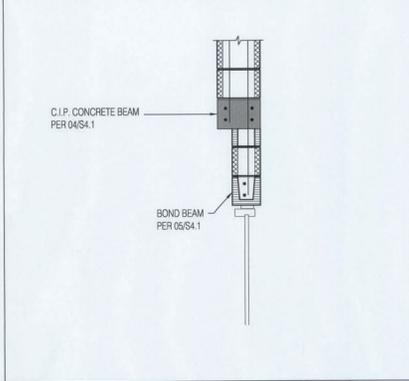
JOB NO: 14013

ROOF FRAMING
DETAILS

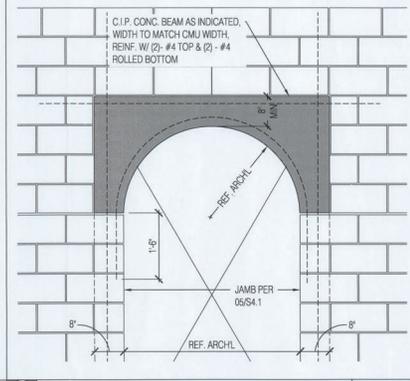
S4.1
DATE: 09.11.14



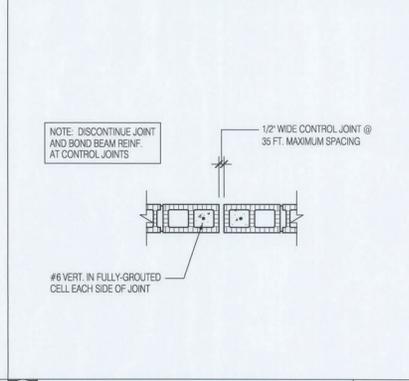
08 DETAIL @ ARCH 3/4"=1'



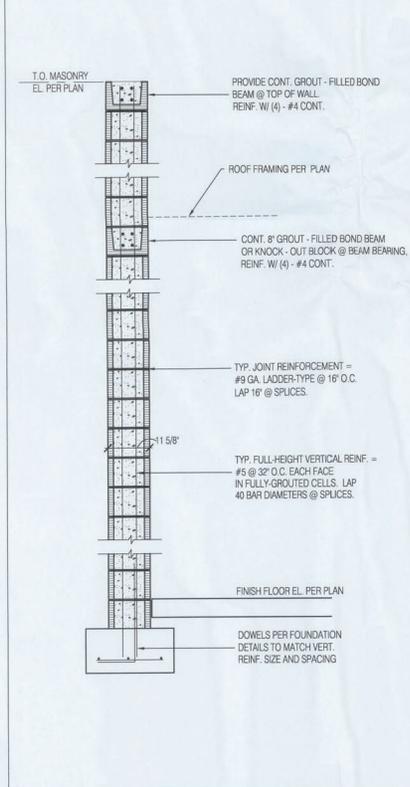
06 DETAIL @ ARCH 3/4"=1'



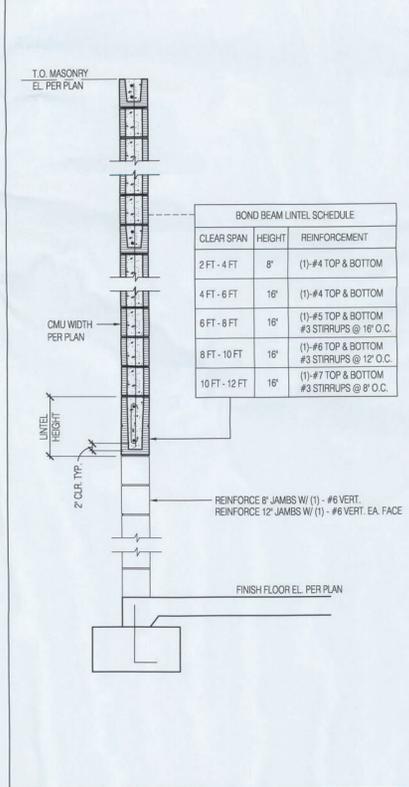
04 TYP. ARCHED WINDOW ELEVATION 3/4"=1'



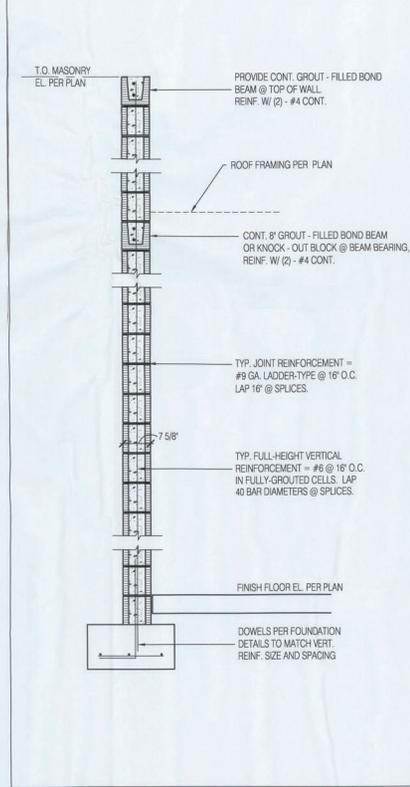
02 TYP. CONTROL JOINT N.T.S.



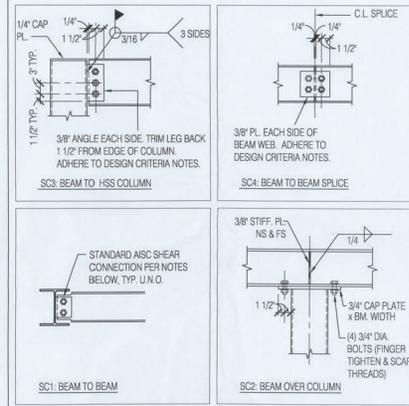
07 TYP. 12" CMU WALL REINFORCEMENT N.T.S.



05 TYP. CMU WALL OPENING N.T.S.



03 TYP. 8" CMU WALL REINFORCEMENT N.T.S.



SC1: BEAM TO BEAM
SC2: BEAM OVER COLUMN
SC3: BEAM TO HSS COLUMN

SHEAR CONNECTION DESIGN CRITERIA

A) DESIGN FOR UNFACTORED REACTIONS NOTED ON PLANS.

B) IF REACTIONS ARE NOT NOTED ON PLANS: DESIGN NON-COMPOSITE BEAM CONNECTIONS FOR 1/2 THE TOTAL DESIGN UNIFORM LOAD FOR THE BEAM SPAN FROM THE AISC - UNIFORM LOAD TABLES. DESIGN COMPOSITE BEAM CONNECTIONS FOR 1.7 TIMES THE BEAM SPAN FROM THE ABOVE - NOTED TABLE.

C) DETAIL CONNECTIONS PER AISC - ASD 13TH EDITION SPECIFICATION USING MIN. 5/16" THICK DOUBLE CLIP ANGLES OR MIN. 3/8" SHEAR PLATE. USE 3/4" DIA A 325-N BOLTS OR LARGER FOR ALL STRUCTURAL CONNECTIONS UNLESS OTHERWISE NOTED. SHEAR PLATE CONNECTIONS SHALL BE BOLTED TO BEAM AND WELDED TO SUPPORT. DOUBLE CLIP ANGLES CAN BE EITHER BOLTED OR WELDED PROVIDED THEY COMPLY WITH LOADING REQUIREMENTS AND AISC STANDARDS.

D) IN ADDITION TO SHEAR CONNECTION DESIGN CRITERIA PER NOTES A - C, PROVIDE A MINIMUM OF THE FOLLOWING NUMBER OF CONNECTION BOLTS AS FOLLOWS:

W8 - W12	2 BOLTS
W14-W16	3 BOLTS
W18-W21	4 BOLTS
W24	5 BOLTS

01 TYPICAL STEEL SHEAR CONNECTIONS N.T.S.

scd
i-scott douglass, pe
Structural Engineer

callaway
architecture
1207 HAMPSHIRE LN. ST#105, RICHARDSON, TX-75080
PHONE: 214.368.2525



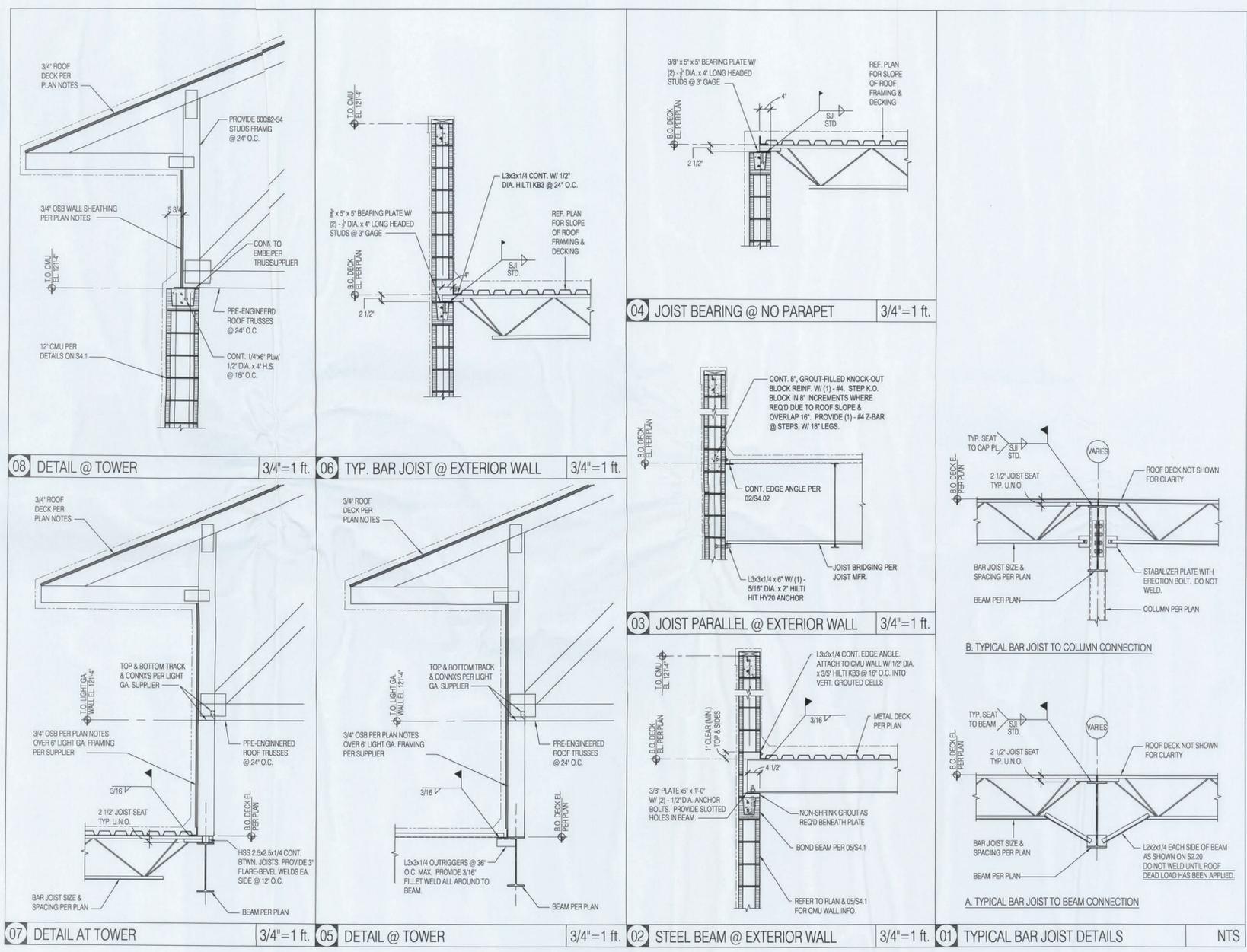
LAKE CITY WEST
PRESENIUS MEDICAL CARE
Lake City, FL

REVISIONS:

JOB NO: 14013

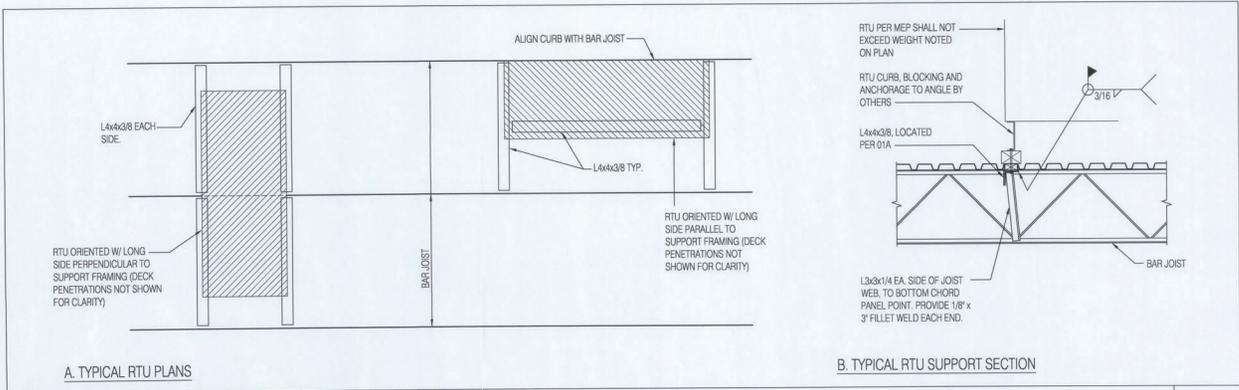
ROOF FRAMING
DETAILS

S4.2
DATE: 09.11.14

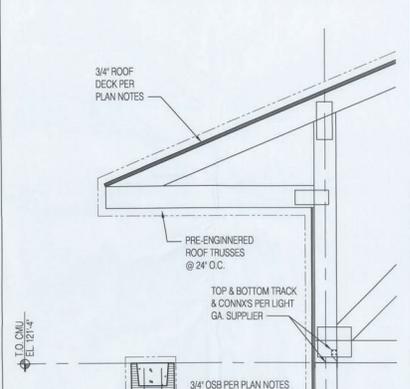
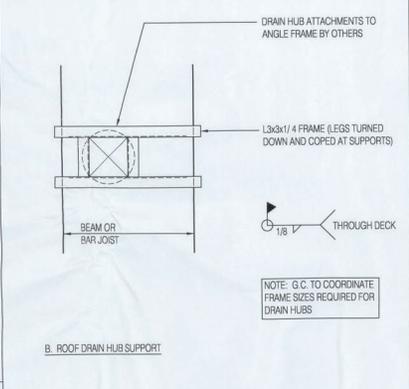
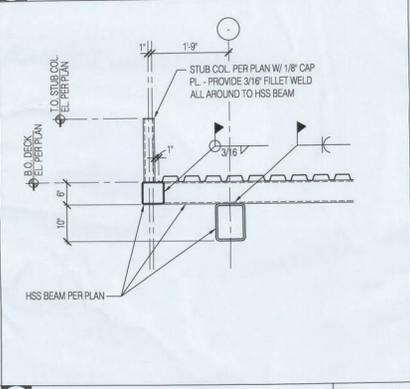
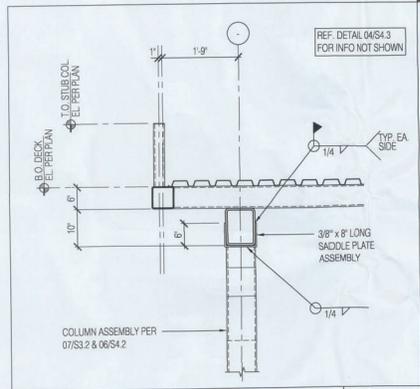


ccid
i-scott douglass, pe
structural engineer

callaway
architecture
1207 HAMPSHIRE LN. ST#105, RICHARDSON, TX - 75080
PHONE: 214.368.2525



05 RTU SUPPORT FRAMING DETAILS N.T.S.

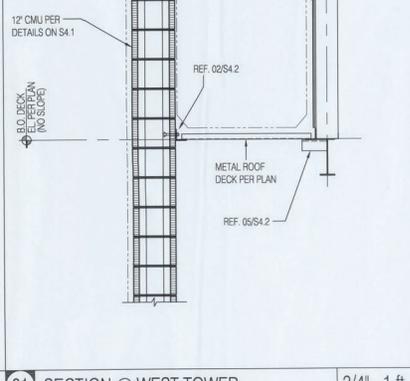
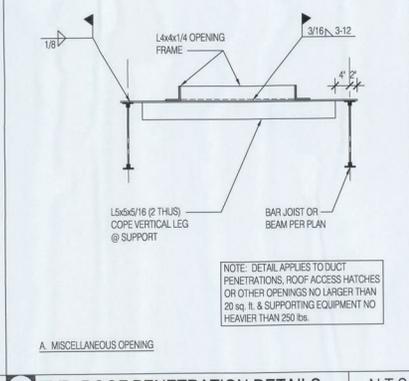
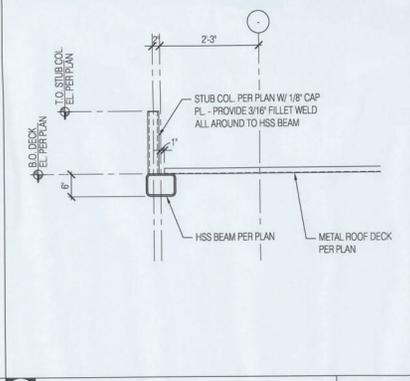
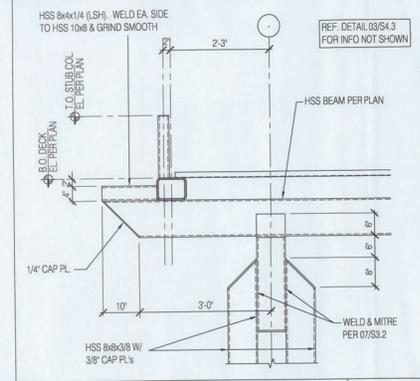


07 DETAIL @ CANOPY COLUMN 3/4" = 1 ft.

04 CANOPY ROOF EDGE 3/4" = 1 ft.

B. ROOF DRAIN HUB SUPPORT

01 SECTION @ WEST TOWER 3/4" = 1 ft.



06 DETAIL @ CANOPY COLUMN 3/4" = 1 ft.

03 CANOPY ROOF EDGE 3/4" = 1 ft.

02 TYP. ROOF PENETRATION DETAILS N.T.S.

01 SECTION @ WEST TOWER 3/4" = 1 ft.

LAKE CITY WEST



Lake City, FL

REVISIONS:

JOB NO: 14013

ROOF FRAMING
DETAILS

S4.3
DATE: 09.11.14

ELECTRICAL LEGEND		(LEGEND IS GENERAL IN NATURE. NOT ALL OF THE SYMBOLS SHOWN ARE USED IN THIS PROJECT.)		ABBREVIATIONS & DESCRIPTIONS			
POWER SIMPLEX OUTLET, +18" AFF UNO. DUPLEX OUTLET, +18" AFF UNO. DUPLEX OUTLET, MOUNTED ABOVE COUNTER UNO. DUPLEX OUTLET, +18" AFF UNO WITH GROUND FAULT INTERRUPTION PROTECTION. DUPLEX OUTLET, MOUNTED ABOVE COUNTER UNO WITH GROUND FAULT INTERRUPTION PROTECTION. SWITCHED DUPLEX OUTLET, +18" AFF UNO. DUPLEX ISOLATED GROUND OUTLET, +18" AFF UNO. DUPLEX ISOLATED GROUND OUTLET, MOUNTED ABOVE COUNTER UNO. DUPLEX 20A OUTLET, +18" AFF UNO. DUPLEX 20A OUTLET, MOUNTED ABOVE COUNTER UNO. SINGLE 50A OUTLET, +18" AFF UNO. FOURPLEX OUTLET, +18" AFF UNO. FOURPLEX OUTLET, MOUNTED ABOVE COUNTER UNO. FOURPLEX ISOLATED GROUND OUTLET, +18" AFF UNO. FOURPLEX ISOLATED GROUND OUTLET, MOUNTED ABOVE COUNTER UNO. SPECIAL PURPOSE OUTLET, VERIFY SIZE AND TYPE WITH EQUIPMENT SUPPLIER. DUPLEX OUTLET, FLUSH, FLOOR MOUNTED. DUPLEX SWITCHED OUTLET, FLUSH, FLOOR MOUNTED. DUPLEX ISOLATED GROUND OUTLET, FLUSH, FLOOR MOUNTED. FOURPLEX OUTLET, FLUSH, FLOOR MOUNTED. SPECIAL PURPOSE OUTLET, FLUSH, FLOOR MOUNTED. WIREMOLD CONNECTION. MOTOR CONNECTION, RE: MECHANICAL EQUIPMENT SCHEDULE. POWERPOLE - DUAL CHANNEL. PAD MOUNT TRANSFORMER.		LIGHTING (SEE LUMINAIRE SCHEDULE FOR EXACT REQUIREMENTS) SINGLE FACE EXIT SIGN, CEILING MOUNTED. DOUBLE FACE EXIT SIGN, CEILING MOUNTED. SINGLE FACE EXIT SIGN, WALL MOUNTED. DOUBLE FACE EXIT SIGN, WALL MOUNTED. SINGLE FACE COMBO EXIT SIGN/EMERGENCY LUMINAIRE, WALL MOUNTED. ARROW INDICATES DIRECTION TO BE SHOWN ON SIGN. LIGHT FIXTURE. LIGHT FIXTURE. SUSPENDED LIGHT FIXTURE. WALL MOUNTED FIXTURE. WALL SCONCE FIXTURE. WALL PACK FIXTURE. UNDERCABINET MOUNTED FIXTURE. TRACKLIGHT. PENDANT LIGHT FIXTURE. ROUND DECORATIVE LIGHT FIXTURE, SURFACE MOUNT. RECESSED LIGHT FIXTURE. RECESSED WALL WASH LIGHT FIXTURE. PORCELAIN LAMP HOLDER. WALL MOUNTED PORCELAIN LAMP HOLDER. CEILING FAN. CEILING FAN WITH LIGHT KIT. POLE LIGHT 2 HEAD ROUND WITH POLE. POLE LIGHT 2 HEAD SQUARE WITH POLE. POLE LIGHT 2 HEAD SQUARE WITH POLE. BOLLARD LIGHT. DECORATIVE POST-TOP LIGHT. SPOT/FLOOD LIGHT. EMERGENCY EGRESS LIGHT, WALL MOUNTED. EMERGENCY EGRESS LIGHT, CEILING MOUNTED.		CIRCUITING SYMBOLS CONDUIT STUBBED, CAPPED, AND MARKED WITH PULL CORD. CONDUIT UP. CONDUIT DOWN. HOMERUN PANEL AND CIRCUIT AS INDICATED. CIRCUIT CONCEALED IN CEILING OR WALL, 3/4" - 2 1/2" @ 12" UNO. CIRCUIT CONCEALED IN FLOOR OR UNDERGROUND, 3/4" - 2 1/2" @ 12" UNO. RACEWAY SIZE: X" - Y" @ Z" @ G CONDUCTOR SIZE CONDUCTOR QUANTITY ONE LINE BRANCH PANEL. CIRCUIT BREAKER, SIZE AND TYPE AS SPECIFIED. CIRCUIT BREAKER, FRAME SIZE (AF) AND TRIP PLUG/RATING (AT), 3 POLE, UNO. FUSE, SIZE AND TYPE AS SPECIFIED, PROVIDE FUSE FOR EACH POLE, 3 POLE, UNO. INTERRUPTER SWITCH, SIZE AS INDICATED, 3 POLE, UNO. FUSED SWITCH, SWITCH SIZE (AS) & FUSE SIZE (AF) AS INDICATED, 3 POLE, UNO. DRAW OUT CIRCUIT BREAKER FRAME (AF) SIZE AND TRIP PLUG RATING (AT), 3 POLE, UNO. HOMERUN BREAKER FRAME (AF) SIZE AND TRIP PLUG RATING (AT), NEMA 1 UNO, 3 POLE UNO. METER. AMMETER. VOLTMETER. NKR KEY LOCK. GROUND FAULT PROTECTION. TRANSIENT VOLTAGE SURGE SUPPRESSION. SHUNT TRIP COIL. KILOWATT HOUR METER. KILOWATT DEMAND METER. TEST BLOCK. OVERHEAD SERVICE DROP. GENERATOR SET, MAIN BREAKER SIZE INDICATED. TRANSFER SWITCH. GUTTER. METER AND BASE. NEUTRAL.		ABBREVIATIONS & DESCRIPTIONS A AMPERES AC ABOVE COUNTER, REFER TO ARCHITECTURAL ELEVATIONS FOR REQUIRED HEIGHT. AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE AFI AMPERE FRAME AJU AUTHORITY JURISDICTION AT AMP TRIP AWG AMERICAN WIRE GAUGE BW BLANKET WARMER C CONDUIT CB CIRCUIT BREAKER CC CRASH CART CCT CRUIT CL CRITICAL LOAD CM CEILING MOUNTED CO CONDUIT ONLY, PROVIDE PULL-LINE D MECHANICAL DUCT-MOUNTED DEVICE DC DIRECT CURRENT DET DETAIL E EMERGENCY/CRITICAL CARE (E) EXISTING EF EXHAUST FAN EL EMERGENCY LIGHT EMC ELECTRIC WATER COOLER EMH ELECTRIC WATER HEATER F FUSE FACP FIRE ALARM CONTROL PANEL FVNR FULL VOLTAGE NON-REVERSING G/ND GROUND GFI GROUND FAULT INTERRUPTION GFP GROUND FAULT PROTECTION H HEAT HH HANDHOLE HI HIGH INTENSITY DISCHARGE HDA HAND OFF AUTO HO HOUSE PHONE HMAC HEATING, VENTILATING, & AIR CONDITIONING I IONIZATION ID IDENTIFICATION IC INTERRUPTING CAPACITY IG ISOLATED GROUND J/JB JUNCTION BOX KW KILOWATT KWH KILOWATT HOUR M MAGNETIC CONTACTOR COIL MB MAIN BREAKER MCC MOTOR CONTROL CENTER MLO MAIN LUGS ONLY MS MOTOR STARTER MH MANHOLE MW MICROWAVE N NEUTRAL NC NORMALLY CLOSED NCL NON CRITICAL LOAD NEC NATIONAL ELECTRICAL CODE NIC NOT IN CONTRACT NO NORMALLY OPEN NTS NOT TO SCALE O/OVERLOAD OS OCCUPANCY SENSOR GFCD DINNER FURNISHED CONTRACTOR INSTALLED P PHOTO PC PHOTOCELL PVC POLYVINYL CHLORIDE RCPPT RECEPTACLE (R) RELEGATED (RO) REPLACED REF REFRIGERATOR SPST SINGLE POLE SINGLE THROW TC TIME CLOCK TOR TIME DELAY RELAY TJB TERMINAL JUNCTION BOX TSP TWISTED SHIELDED PAIR TTB TELEPHONE TERMINAL BOARD TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR TYP TYPICAL UH UNIT HEATER UNO UNLESS NOTED OTHERWISE V VOLT VA VOLT AMPERE WCS PROVIDE PROTECTIVE WIRE GUARD WP WEATHER PROOF/NEMA 3R XFRM TRANSFORMER	
COMMUNICATIONS TELEPHONE OUTLET, FOUR-SQUARE DEEP TYPE BOX WITH SINGLE GANG MUDRING, LOCATED AT +18" AFF UNO. TELEPHONE OUTLET, FOUR-SQUARE DEEP TYPE BOX WITH SINGLE GANG MUDRING, LOCATED ABOVE COUNTER UNO. TELEPHONE/DATA OUTLET, FOUR-SQUARE DEEP TYPE BOX WITH SINGLE GANG MUDRING, LOCATED AT +18" AFF UNO. DATA OUTLET, FOUR-SQUARE DEEP TYPE BOX WITH SINGLE GANG MUDRING, LOCATED AT +18" AFF UNO. DATA OUTLET, FOUR-SQUARE DEEP TYPE BOX WITH SINGLE GANG MUDRING, LOCATED ABOVE COUNTER UNO. TELEPHONE OUTLET, FLUSH, FLOOR MOUNTED. TELEPHONE/DATA OUTLET, FLUSH, FLOOR MOUNTED. DATA OUTLET, FLUSH, FLOOR MOUNTED. SPEAKER, CEILING MOUNTED WITH BACKBOX. SPEAKER, WALL MOUNTED WITH BACKBOX +80" UNO. TELEVISION OUTLET, SINGLE-GANG BOX WITH MUDRING, +18" AFF UNO. TELEVISION OUTLET, SINGLE-GANG BOX WITH MUDRING, CEILING MOUNTED. TELEVISION OUTLET, FLUSH, FLOOR MOUNTED.		SWITCHES SWITCH, TYPE AS INDICATED, +48" AFF, UNO. 2 DOUBLE POLE 3 3-WAY 4 4-WAY D DIMMER K KEYS LV LOW VOLTAGE M MAKE/BREAK CONTACT MM MANUAL MOTOR STARTER OS OCCUPANCY SENSOR P PILOT LIGHT T TIMER TO TERMINAL OVERLOAD V VOLUME CONTROL S SUPERSPRINT INDICATES LIGHTS TO BE SWITCHED TOGETHER SS MULTI-LEVEL SWITCHING TO MEET LIGHT REDUCTION LEVELS PER ENERGY CODE AS SHOWN. PROVIDE ADDITIONAL OR STEP-DIMMING BALLASTS WHERE REQUIRED. OCCUPANCY SENSOR, CEILING MOUNTED. PHOTOCELL, WALL MOUNTED. PHOTOCELL, CEILING MOUNTED. TIMECLOCK, WALL MOUNTED. SINGLE BUTTON, WALL MOUNTED PUSHBUTTON, MOUNT AT SWITCH HEIGHT UNO. THREE BUTTON, WALL MOUNTED PUSHBUTTON, MOUNT AT SWITCH HEIGHT UNO. MOTOR STARTER/CONTACTOR. COMBINATION STARTER AND DISCONNECT. NON-FUSED DISCONNECT SWITCH, SIZE AS INDICATED, NEMA 1 UNO, 3 POLE UNO. FUSED DISCONNECT SWITCH, SIZE AS INDICATED, NEMA 1 UNO, 3 POLE UNO.		SHEET INDEX E0.0 ELECTRICAL COVER SHEET E0.1 ELECTRICAL SPECIFICATIONS E1.0 ELECTRICAL SITE PLAN E1.1 PHOTOMETRIC SITE PLAN E2.0 ELECTRICAL PLAN E3.0 PANEL SCHEDULES GENERAL ELECTRICAL NOTES (RE: ALL ELECTRICAL SHEETS) 1. ALL ELECTRICAL EQUIPMENT AND SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE, INTERNATIONAL FIRE CODE, AND ALL OTHER STATE AND LOCAL CODES. CONTRACTOR SHALL IMMEDIATELY NOTIFY ENGINEER IN WRITING IF PORTIONS OF THE DESIGN SET OR FIELD CONDITIONS DO NOT MEET REQUIRED CODES. 2. PROVIDE FIRESTOPPING FOR ALL FLOOR AND FIREWALL PENETRATIONS FROM ELECTRICAL DEVICE, RACEWAY, AND CABLE PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR FIREWALL LOCATIONS. 3. ELECTRICAL DEVICES AND WIRING ARE SHOWN BOLD FOR NEW, BOLD/DASHED FOR DEMO AND SCREENED FOR EXISTING. 4. FIRE ALARM SYSTEM IS DESIGN BUILD BY ELECTRICAL CONTRACTOR AND SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 72 AND ALL OTHER STATE AND LOCAL CODES. PROVIDE AND INSTALL CONDUIT AND CONDUCTORS FOR ALL FIRE ALARM DEVICES REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION, INCLUDING BUT NOT LIMITED TO HMC SHUTDOWN, FIRE ALARM CONTROL PANEL, INITIATING AND ANNUNCIATING CIRCUITS. FIELD INSPECTION IS REQUIRED TO VERIFY THIS INFORMATION PRIOR TO BID. 5. PROVIDE AND INSTALL 3/4" TO ACCESSIBLE LOCATION ABOVE SUSPENDED CEILING, UNLESS NOTED OTHERWISE FOR DATA, TELEPHONE AND TELEVISION DEVICES. DATA, TELEPHONE AND TELEVISION CABLEING ARE NOT PROVIDED UNDER THIS CONTRACT. 6. EMERGENCY LIGHTING SYMBOLS ARE SHOWN ON THE LIGHTING PLANS. EMERGENCY SOURCE SHALL BE BATTERY BACKED BALLAST WITH MINIMUM 1400 LUMEN OUTPUT FOR A 90 MINUTE PERIOD, UNLESS NOTED OTHERWISE. PROVIDE UNBUNDLED CONDUCTORS FOR CHARGING CIRCUIT AS REQUIRED. 7. DESIGN OF ELECTRICAL REQUIREMENTS IS BASED ON MECHANICAL EQUIPMENT SPECIFIED. ELECTRICAL CONTRACTOR SHALL COORDINATE WITH MECHANICAL CONTRACTOR IF EQUIPMENT PURCHASED IS DIFFERENT FROM THAT SPECIFIED HERE. MEET DESIGN INTENT, INCLUDING BUT NOT LIMITED TO OVER-CURRENT PROTECTION, LOCAL DISCONNECTING MEANS, AND WIRE SIZING.			
MISCELLANEOUS JUNCTION BOX. JUNCTION BOX, WALL MOUNTED. THERMOSTAT, +56" AFF UNO, UNIT CONTROLLED INDICATED. HUMIDISTAT, +56" AFF UNO, UNIT CONTROLLED INDICATED. SURFACE MOUNTED PANELBOARD/ENCLOSURE, SEE SCHEDULE FOR TYPE. FLUSH MOUNTED PANELBOARD/ENCLOSURE, SEE SCHEDULE FOR TYPE. MECHANICAL EQUIPMENT SYMBOL (RE: MECHANICAL DRAWINGS FOR EXACT LOCATION OF UNITS). INDICATES FIXTURE TYPE. REFER TO LUMINAIRE SCHEDULE.		MOUNTING HEIGHTS DETAIL 					



REVISIONS:

JOB NO: 14013

ELECTRICAL COVER SHEET

E0.0

DATE: 09.11.14

ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL

1.1 SCOPE OF WORK

FURNISH AND INSTALL ALL MATERIALS AND EQUIPMENT AND PROVIDE ALL LABOR REQUIRED AND NECESSARY TO COMPLETE THE WORK SHOWN ON THE DRAWINGS AND ALL OTHER WORK AND MISCELLANEOUS ITEMS, NOT SPECIFICALLY MENTIONED, BUT REASONABLY IMPLIED FOR A COMPLETE INSTALLATION, INCLUDING ALL ACCESSORIES AND APPURTENANCES REQUIRED FOR TESTING THE SYSTEM. IT IS THE INTENT OF THE DRAWINGS AND SPECIFICATIONS THAT ALL SYSTEMS BE COMPLETE AND READY FOR OPERATION. THIS PROJECT INCLUDES ELECTRICAL SERVICE, GENERAL POWER, LIGHTING, AND COMMUNICATIONS SYSTEM RACEWAY, FIRE ALARM SYSTEM IS TO BE DESIGN/BUILD BY ELECTRICAL CONTRACTOR, COMMUNICATIONS SYSTEM CABLEING AND HEAD-END EQUIPMENT IS BY OWNER.

1.2 CODE COMPLIANCE

ALL WORK AND MATERIALS SHALL COMPLY WITH LATEST RULES, CODES AND REGULATIONS, INCLUDING, BUT NOT LIMITED TO OSHA, THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING AND FIRE CODES, NFPA, AND OTHER APPLICABLE STATE AND LOCAL LAWS AND REGULATIONS. CODE COMPLIANCE IS MANDATORY NOTHING IN THESE DRAWINGS AND SPECIFICATIONS PERMITS WORK NOT CONFORMING TO THESE CODES. WHERE WORK IS SHOWN TO EXCEED MINIMUM CODE REQUIREMENTS, COMPLY WITH DRAWINGS AND SPECIFICATIONS.

1.3 LICENSE, FEES AND PERMITS

ARRANGE FOR REQUIRED INSPECTIONS AND PAY ALL LICENSE, PERMIT AND INSPECTION FEES.

1.4 CONDITIONS AT SITE

VISIT TO SITE IS REQUIRED OF ALL BIDDERS PRIOR TO SUBMISSION OF BID. ALL WILL BE HELD TO HAVE FAMILIARIZED THEMSELVES WITH ALL DISCERNIBLE CONDITIONS AND NO EXTRA PAYMENT WILL BE ALLOWED FOR WORK REQUIRED BECAUSE OF THESE CONDITIONS, WHETHER SPECIFICALLY MENTIONED OR NOT, UNLESS OTHER SERVICES THAT ARE DAMAGED AS A RESULT OF THIS WORK SHALL PROMPTLY BE REPAIRED AT NO EXPENSE TO THE OWNER TO COMPLETE SATISFACTION OF THE OWNER.

1.5 SAFETY

THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK.

1.6 GUARANTEE

GUARANTEE THE INSTALLATION FREE FROM DEFECTS OF WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR AFTER DATE OF CERTIFICATE OF FINAL PAYMENT AND PROMPTLY REMEDY ANY DEFECTS DEVELOPING DURING THIS PERIOD, WITHOUT CHARGE.

1.7 SUBSTITUTIONS

WHEREVER POSSIBLE, MORE THAN ONE MANUFACTURER HAS BEEN LISTED FOR VARIOUS ITEMS OF EQUIPMENT, ANY ONE OF WHICH WILL BE ACCEPTABLE. BASE THE BID ON USE OF MATERIALS SPECIFIED. IF, AFTER AWARD OF THE CONTRACT, A SUBSTITUTE IS PROPOSED, THE REQUEST FOR PERMISSION TO SUBSTITUTE SHALL BE ACCOMPANIED WITH A STATEMENT OF THE ANTICIPATED MONEY SAVINGS TO THE CONTRACTOR. IF THE SUBSTITUTION IS PERMITTED, THE ENGINEER IS THE SOLE JUDGE OF ACCEPTABILITY OF PROPOSED SUBSTITUTIONS. IF A SUBSTITUTE ITEM IS PERMITTED, AND ANY REDESIGN EFFORT IS THEREBY NECESSITATED, THE REQUIRED REDESIGN SHALL BE AT THE CONTRACTOR'S EXPENSE.

1.8 SHOP DRAWINGS AND MATERIALS LISTS

SUBMIT TO THE ENGINEER SEVEN (7) COPIES OF COMPLETE SHOP DRAWINGS AND MATERIALS LISTS FOR REVIEW WITHIN THIRTY (30) DAYS AFTER AWARD OF CONTRACT. ALL PROPOSED REVISIONS FROM SPECIFICATIONS MUST BE CLEARLY LISTED UNDER A PROMINENT HEADING ENTITLED "REVISIONS".

1.9 WORKMANSHIP

ONLY QUALITY WORKMANSHIP WILL BE ACCEPTED. HAZARDOUS OR POOR INSTALLATION PRACTICE WILL BE CAUSE FOR REJECTION OF WORK.

1.10 COORDINATION

COORDINATE WORK WITH OTHER TRADES TO AVOID CONFLICT AND TO PROVIDE CORRECT ROUGH-IN AND CONNECTION FOR EQUIPMENT FURNISHED UNDER OTHER TRADES THAT REQUIRE ELECTRICAL CONNECTIONS. VERIFY EQUIPMENT DIMENSIONS AND REQUIREMENTS WITH PROVISIONS SPECIFIED UNDER THIS SECTION. CHECK ACTUAL JOB CONDITIONS BEFORE FABRICATING WORK. REPORT NECESSARY CHANGES IN TIME TO PREVENT NECESSARY WORK.

1.11 CUTTING AND PATCHING

ALL CUTTING AND PATCHING REQUIRED FOR WORK OF THIS DIVISION IS INCLUDED HEREIN. COORDINATION WITH GENERAL CONTRACTOR AND OTHER TRADES IS IMPERATIVE.

1.12 SITE CLEANUP

- AFTER ALL OTHER WORK HAS BEEN ACCOMPLISHED, CLEAN ALL EXPOSED CONDUIT, FIXTURES, EQUIPMENT AND SUPPORTS. TOUCH UP PAINT ON ANY EQUIPMENT SCRAPED, SCORCHED OR DAMAGED DURING CONSTRUCTION.
- LEAVE ALL AREAS INVOLVING ELECTRICAL WORK IN A CONDITION SATISFACTORY TO THE OWNER. REMOVE ALL CRATES, CARDBOARD, PACKING MATERIAL, WASTE MATERIAL, AND OTHER DEBRIS LEFT OVER FROM CONSTRUCTION.

PART 2 - PRODUCTS

2.1 MATERIAL APPROVAL

ALL MATERIALS MUST BE NEW AND BEAR U.L. LABEL. MATERIALS THAT ARE NOT COVERED BY U.L. TESTING STANDARDS SHALL BE TESTED AND APPROVED BY AN INDEPENDENT TESTING LABORATORY OF A GOVERNMENTAL AGENCY APPROVED BY THE AUTHORITY HAVING JURISDICTION.

2.2 WIRES AND CABLES

- CONDUCTORS FOR 600V SYSTEMS AND BELOW SHALL BE STRANDED COPPER, #12 AWG MINIMUM.
- INSULATION SHALL BE THIN FOR WET LOCATIONS AND THIN FOR DRY LOCATIONS.

2.3 OUTLET BOXES, JUNCTION AND PULL BOXES

- OUTLET BOXES: HOT-DIPPED, GALVANIZED OR SHERADIZED, SIZE AS REQUIRED WITH 4" SQUARE MINIMUM, FOR FLUSH MOUNTED BOXES AND LIGHTING FIXTURES.
- JUNCTION AND PULL BOXES: HOT-DIPPED, GALVANIZED OR SHERADIZED, SIZED ACCORDING TO CODE. LARGER JUNCTION AND PULL BOXES SHALL BE FABRICATED FROM SHEET STEEL, SIZED ACCORDING TO CODE, WITH SCREW-ON COVERS, FINISHED GRAY BAKED ENAMEL.

2.4 WIRING DEVICES

- ALL WIRING DEVICES OF ANY ONE GENERAL TYPE SHALL BE OF THE SAME MANUFACTURER AND SHALL MATCH THROUGHOUT.
- WIRING DEVICES SHALL BE AS MANUFACTURED BY HUBBELL, GE, LEVITON, P & S, OR BRYANT, NO SUBSTITUTIONS.
- COVER PLATES SHALL BE AS MANUFACTURED BY ARROW HART, SIERRA, LEVITON OR MULLBURY. COORDINATE FINISH WITH ARCHITECT.
- WHERE INDICATED, PROVIDE GENERAL-DUTY, DUPLEX RECEPTACLES, GROUND-FAULT CIRCUIT INTERRUPTERS: GROUNDING TYPE UL-RATED CLASS A, GROUP 1, 20 AMPERES RATING, 120 VOLTS, RING WITH SOLID-STATE GROUND-FAULT SENSING AND SIGNALING; WITH 5 MILLIAMPERES GROUND-FAULT TRIP LEVEL; COORDINATE FINISH WITH ARCHITECT.
- SWITCHES SHALL BE FLUSH WALL TYPE, COORDINATE FINISH WITH ARCHITECT.
- CONVENIENCE RECEPTACLES SHALL BE, FLUSH WALL TYPE, COORDINATE FINISH WITH ARCHITECT.

2.5 WIRE CONNECTORS

- FOR WIRE SIZES #6 AWG AND SMALLER, INSULATED PRESSURE TYPE (WITH LIVE SPRING) RATED 105°C, 600V, FOR BUILDING WIRING AND 1000V IN FIXTURES, SCOTCHLOK OR IDEAL.
- FOR WIRE SIZES #6 AWG AND LARGER: TAB OR EQUIVALENT COMPRESSION TYPE WITH 3M #33+ OR PLYMOUTH "SLIPNOT GREY" TAPE INSULATION.

2.6 PANELBOARD

PANELBOARDS SHALL BE AS MANUFACTURED BY SQUARE D, GENERAL ELECTRIC, SIMONS, OR CUTLER HAMMER. PROVIDE PANELBOARDS AS INDICATED ON SCHEDULES, WITH THE FOLLOWING FEATURES: HARS-DRAWN COPPER BUS (86 PERCENT CONDUCTIVITY), MECHANICAL-TYPE MAIN AND NEUTRAL LUGS, NEUTRAL BUS RATED 100 PERCENT OF PHASE BUS, GROUND BUS BONDED TO ENCLOSURE, BOLT-ON MOLDED-CASE THERMAL-MAGNETIC BREAKERS.

2.7 RACEWAYS

- OUTDOORS:
 - EXPOSED: RIGID STEEL OR INTERMEDIATE METAL CONDUIT
 - CONCEALED: RIGID STEEL OR INTERMEDIATE METAL CONDUIT
 - UNDERGROUND: RIGID NON-METALLIC CONDUIT
 - TO VIBRATING EQUIPMENT: LIQUID-TIGHT FLEXIBLE METAL CONDUIT
- INDOORS:
 - EXPOSED: ELECTRICAL METALLIC TUBING, RIGID STEEL CONDUIT, PVC-COATED RIGID STEEL CONDUIT
 - CONCEALED: ELECTRIC METALLIC TUBING, METAL CLAD DAMP OR WET LOCATIONS: RIGID STEEL CONDUIT
 - TO VIBRATING EQUIPMENT: FLEXIBLE METAL CONDUIT

PART 3 - EXECUTION

3.1 - GENERAL

- ELECTRIC SYSTEM LAYOUTS INDICATED ON THE DRAWINGS ARE GENERALLY DIAGRAMMATIC, BUT SHALL BE FOLLOWED AS CLOSELY AS ACTUAL CONSTRUCTION AND WORK OF OTHER TRADES WILL PERMIT.
- CONSULT ALL OTHER DRAWINGS, VERIFY SCALES AND REPORT ANY DIMENSIONAL DISCREPANCIES OR OTHER CONFLICTS TO ARCHITECT BEFORE SUBMITTING BID.
- ALL HOME RUNS ARE INDICATED AS STARTING FROM THE DEVICE NEAREST THE PANEL AND CONTINUING IN THE GENERAL DIRECTION OF THAT PANEL. CONTINUE SUCH CIRCUITS TO THE PANEL AS THOUGH THE ROUTES WERE COMPLETELY INDICATED.
- AVOID CUTTING AND BORING HOLES THROUGH STRUCTURE OR STRUCTURAL MEMBERS WHEREVER POSSIBLE. OBTAIN PRIOR APPROVAL OF ARCHITECT AND CONFORM TO ALL STRUCTURAL REQUIREMENTS WHEN CUTTING OR BORING THE STRUCTURE IS NECESSARY AND PERMITTED.

3.2 - ELECTRICAL GROUNDING

GROUND ALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NEC. IN ADDITION PROVIDE A SEPARATE GROUND WIRE FOR ALL FEEDERS AND BRANCH CIRCUITS.

3.3 - ELECTRICAL EQUIPMENT INSTALLATION

- HEAD ROOM MAINTENANCE: IF MOUNTING HEIGHTS OR OTHER LOCATION CRITERIA ARE NOT INDICATED, ARRANGE AND INSTALL COMPONENTS AND EQUIPMENT TO PROVIDE THE MAXIMUM POSSIBLE HEADROOM.
- MATERIALS AND COMPONENTS: INSTALL LEVEL, PLUMB, AND PARALLEL AND PERPENDICULAR TO OTHER BUILDING SYSTEMS AND COMPONENTS, UNLESS OTHERWISE INDICATED.
- EQUIPMENT: INSTALL TO FACILITATE SERVICE, MAINTENANCE, AND REPAIR OR REPLACEMENT OF COMPONENTS. CONNECT FOR EASE OF DISCONNECTING, WITH MINIMUM INTERFERENCE WITH OTHER INSTALLATIONS.
- RIGHT OF WAY: COORDINATE INSTALLATION OF ELECTRICAL DEVICES WITH OTHER TRADES.

3.4 - RACEWAY AND CABLE INSTALLATION

- ABOVE GRADE: RIGID STEEL OR IMC IN WET LOCATIONS, WHERE SUBJECT TO MECHANICAL DAMAGE AND IN CONCRETE OR BLOCK WALLS, EMB IN OTHER LOCATIONS WHERE PERMITTED BY CODE. METAL CLAD ONLY WHERE ALLOWED BY LOCAL AUTHORITY HAVING JURISDICTION.
- CONCEAL RACEWAYS AND CABLES WITHIN FINISHED WALLS, CEILING, AND FLOORS, UNLESS OTHERWISE INDICATED.
- INSTALL RACEWAYS AND CABLES AT LEAST SIX (6) INCHES AWAY FROM PARALLEL RUNS OF FLUES AND STEAM OR HOT-WATER PIPES. LOCATE HORIZONTAL RACEWAY RUNS ABOVE WATER AND STEAM PIPING.
- USE TEMPORARY RACEWAY CAPS TO PREVENT FOREIGN MATTER FROM ENTERING.
- MAKE CONDUIT BENDS AND OFFSETS SO INSIDE DIAMETER IS NOT REDUCED. KEEP LEADS OF BENDS IN THE SAME PLANE AND STRAIGHT LEADS PARALLEL, UNLESS OTHERWISE INDICATED.
- USE RACEWAY FITTINGS AND CABLE FITTINGS COMPATIBLE WITH RACEWAYS AND CABLES AND SUITABLE FOR THIS APPLICATION AND LOCATION.

APPLICATION AND LOCATION

- INSTALL RACEWAYS EMBEDDED IN SLABS IN MIDDLE THIRD OF SLAB THICKNESS WHERE PRACTICAL, AND LEAVE AT LEAST 1-INCH OF CONCRETE COVER.
 - SECURE RACEWAYS TO REINFORCING RODS TO PREVENT SAGGING OR SHIFTING DURING CONCRETE PLACEMENT.
 - SPACE RACEWAYS LATERALLY TO PREVENT VOIDS IN CONCRETE.
- INSTALL CONDUIT LARGER THAN 1-INCH TRADE SIZE PARALLEL TO OR AT RIGHT ANGLES TO MAIN REINFORCEMENT. WHERE CONDUIT IS AT RIGHT ANGLES TO REINFORCEMENT, PLACE CONDUIT CLOSE TO SLAB SUPPORT.
- TRANSITION FROM NONMETALLIC TUBING TO RIGID STEEL CONDUIT, OR IMC BEFORE RISING ABOVE FLOOR.
- MAKE EXPOSED BENDS OR BANDED RUNS FROM SAME CENTERLINE IN ORDER THAT BENDS ARE PARALLEL. USE FACTORY ELBOWS ONLY WHERE ELBOWS CAN BE INSTALLED PARALLEL; OTHERWISE, PROVIDE FIELD BENDS FOR EXPOSED PARALLEL RACEWAYS.
- INSTALL PULL WIRES IN EMPTY RACEWAYS. USE NO. 14 AWG ZINC-COATED STEEL OR MONOFILAMENT PLASTIC LINE WITH NOT LESS THAN 200-LB TENSILE STRENGTH. LEAVE AT LEAST 12-INCHES OF SLACK AT EACH END OF PULL WIRE.
- INSTALL TELEPHONE AND SIGNAL SYSTEM RACEWAYS, 2-INCH TRADE SIZE AND SMALLER, IN MAXIMUM LENGTHS OF 150 FEET (45 M) AND WITH A MAXIMUM OF TWO 90-DEGREE BENDS OR EQUIVALENT. SEPARATE LENGTHS WITH PULL OR JUNCTION BOXES WHERE NECESSARY TO COMPLY WITH THESE REQUIREMENTS, IN ADDITION TO REQUIREMENTS ABOVE.
- CONNECT MOTORS AND EQUIPMENT SUBJECT TO VIBRATION, NOISE TRANSMISSION, OR MOVEMENT WITH A MAXIMUM OF 72-INCH FLEXIBLE CONDUIT. INSTALL LMC IN WET OR DAMP LOCATIONS. INSTALL A SEPARATE GROUND CONDUCTOR ACROSS FLEXIBLE CONNECTIONS.
- SET FLOOR BOXES LEVEL AND TRIM AFTER INSTALLATION TO FIT FLUSH TO FINISHED FLOOR SURFACE.
- CONDUCTORS: TYPE THIN/TRIM INSULATED CONDUCTORS IN RACEWAY.
- INSTALL SPLICES AND TAPS THAT ARE COMPATIBLE WITH CONDUCTOR MATERIAL AND THAT POSSESS EQUIVALENT OR BETTER MECHANICAL STRENGTH AND INSULATION RATINGS THAN UNSPLICED CONDUCTORS.
- INSTALL WIRING AT OUTLETS WITH AT LEAST 12 INCHES OF SLACK CONDUCTOR AT EACH OUTLET.
- CONNECT OUTLET AND COMPONENT CONNECTIONS TO WIRING SYSTEMS AND TO GROUND. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, ACCORDING TO MANUFACTURER'S PUBLISHED TORQUE-TIGHTENING VALUES. IF MANUFACTURER'S TORQUE VALUES ARE NOT INDICATED, USE THOSE SPECIFIED IN UL 486A.

3.5 IDENTIFICATION

- PROVIDE ENGRAVED 3 LAYER LAMINATE PLASTIC NAMEPLATES FOR PANELBOARDS, DISCONNECT SWITCHES AND ALL SIMILAR DEVICES.
- COLOR-CODE 200Y/100-VOLT SYSTEM SECONDARY SERVICE, FEEDER, AND BRANCH-CIRCUIT CONDUCTORS THROUGHOUT THE SECONDARY ELECTRICAL SYSTEM AS FOLLOWS:
 - PHASE A: BLACK
 - PHASE B: RED
 - PHASE C: BLUE
 - NEUTRAL: WHITE
 - GROUND: GREEN

3.6 STARTUP SERVICES

CONTRACTOR SHALL ALLOT A MINIMUM OF 2 HOURS FOR STARTUP SERVICES. START AND OPERATE ALL SYSTEMS AS REQUIRED BY THE OWNER. INSTRUCT OWNER'S REPRESENTATIVE ON THE PROPER OPERATION AND MAINTENANCE OF THE SYSTEMS AND EQUIPMENT.

3.7 OPERATING AND MAINTENANCE INSTRUCTIONS (O+M MANUAL)

PREPARE THREE (3) COPIES FOR ALL EQUIPMENT.

3.8 RECORD AS-BUILTS

PROVIDE (1) CLEAN, LEGIBLE COPY OF DRAWINGS TO ENGINEER INDICATING ALL DEVIATIONS FROM INITIAL DESIGN (AS-BUILT CONDITIONS).

END OF SECTION



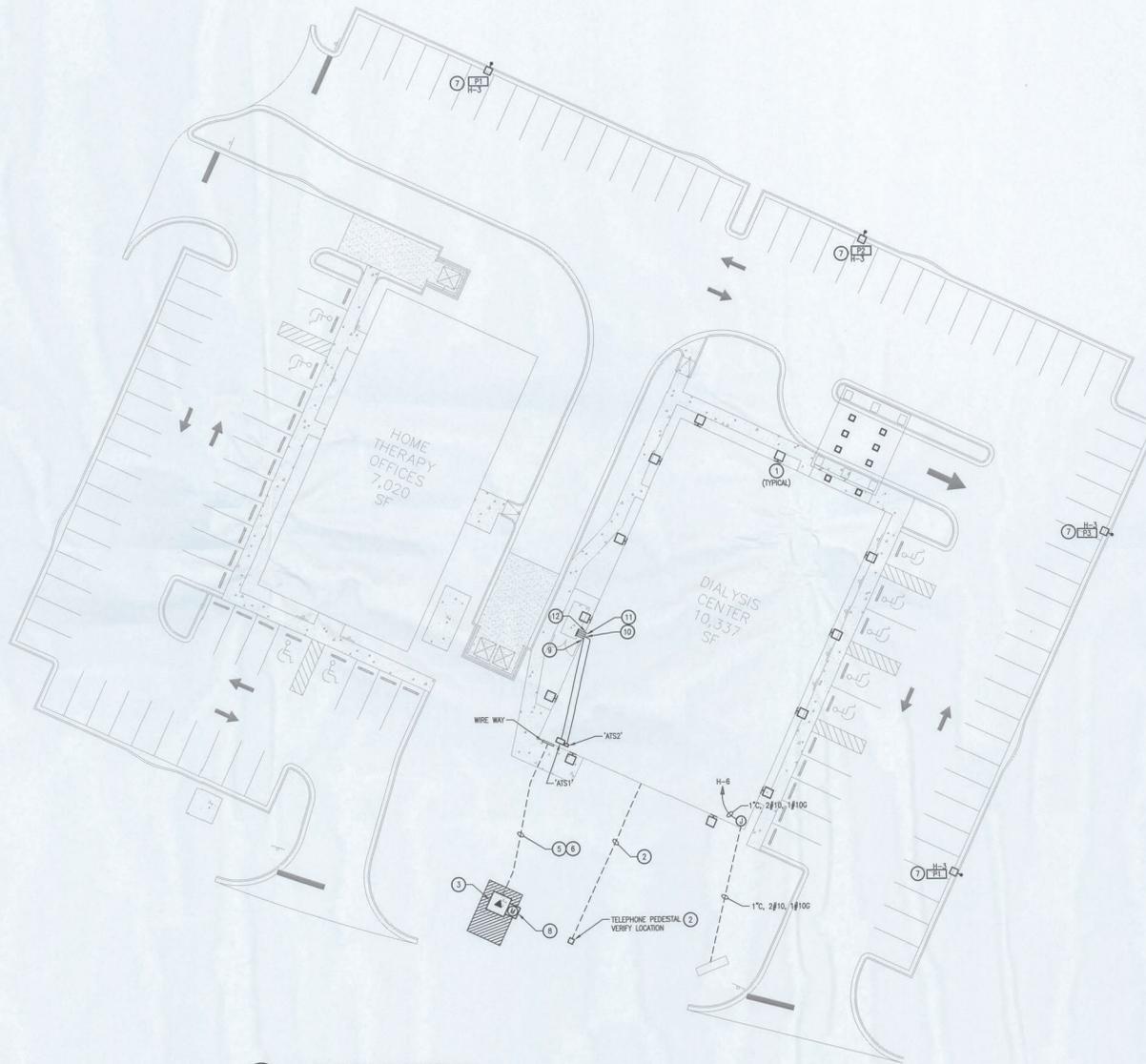
REVISIONS:

JOB NO: 14013

ELECTRICAL
SPECIFICATIONS

E0.1

DATE: 09.11.14



1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

GENERAL POWER NOTES:

1. ALL POWER JUNCTION BOXES TO BE MARKED WITH PANEL NAME AND CIRCUIT NUMBERS WITH PERMANENT BLACK INK MARKS.
2. ALL WIRE SHALL BE STRANDED TYPE THHN/THWN, MINIMUM SIZE #12 UNLESS OTHERWISE INDICATED.
3. ALL HOMERUN JUNCTION BOXES SHALL BE MINIMUM OF 4" SQUARE, 2-1/8" DEEP.
4. ALL CONDUIT FITTINGS SHALL BE STEEL.
5. COORDINATE WORK WITH ALL TRADES PRIOR TO INSTALLATION.
6. PROVIDE ACCURATE AS-BUILT DRAWINGS TO ENGINEER UPON PROJECT COMPLETION.
7. FURNISH AND INSTALL A COMPLETE ELECTRICAL SYSTEM AS DEPICTED FROM THE PLANS AND SPECIFICATIONS. COMPLETE AS NOTED OR IMPLIED, NOT LIMITED TO WHAT IS SHOWN.
8. ALL DRAWINGS ARE SCHEMATIC IN NATURE AND ALL APPURTENANCES NOT INDICATED TO MAKE A WORKING SYSTEM MUST BE INCLUDED IN THE CONTRACTORS BID.
9. IF THERE APPEARS TO BE ANY ITEMS IN CONFLICT WITH THE DRAWINGS, INCONSISTENCIES WITH DESIGN OR INTENT, OR NEED FOR CLARIFICATIONS, IT IS THE CONTRACTORS RESPONSIBILITY TO CLARIFY THESE ITEMS PRIOR TO BID IN WRITING WITH THE ENGINEER. IF THE CONTRACTOR FAILS TO CLARIFY ANY QUESTIONS OR INCONSISTENCY, HE ACCEPTS RESPONSIBILITY TO CORRECT AT HIS COST ANY SUCH ITEM TO MEET INTENT AS DEFINED BY THE ENGINEER.
10. ALL MOUNTING HEIGHTS OF EQUIPMENT SHALL MEET ADA REQUIREMENTS UNLESS OTHERWISE INDICATED.
11. WHERE A GROUND WIRE IS NOT SPECIFIED, CONDUIT AND CONDUCTORS SHALL BE UL APPROVED AS GROUNDING CONDUCTORS OR NEXT SIZE GROUNDING CONDUCTOR SHALL BE INSTALLED. INCREASE CONDUIT SIZE IF REQUIRED.
12. ALL CONDUIT IN WALLS TO BE RUN VERTICAL, MINIMUM SIZE 3/4".
13. ALL PENETRATIONS THROUGH WALL AND/OR CEILING SHALL BE SEALED USING AN APPROVED SEALANT AND HAVE THE SAME FIRE RATING AS ADJOINING WALL AND/OR CEILING.
14. MAINTAIN WIRE SIZE THROUGHOUT CIRCUIT.
15. COORDINATE ALL DEVICE/FIXTURE LOCATIONS AND SPECIFIC REQUIREMENTS WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
16. ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE NEC AND ALL APPLICABLE LOCAL ORDINANCES.
17. ALL CONDUIT RUNS USING PVC CONDUIT SHALL USE RGS OR IMC FOR ANY BEND OVER 45 DEGREES AND ALL 90 DEGREE ELBOWS.
18. EACH LIGHT POLE SHALL HAVE A MINIMUM WIND WITHSTANDING RATING OF 100 MPH AND A 1.3 GUST FACTOR. IF LOCAL JURISDICTION HAS A HIGHER REQUIREMENT, THE MORE STRINGENT REQUIREMENT SHALL BE MET. PROVIDE A WELDING GROUNDING STUD WITH LOCKING NUT INSIDE THE POLE NEAR THE WIRING HAND HOLE.
19. UNDERGROUND CONDUITS SHALL BE SCHEDULE 40 PVC, MINIMUM OF 1" CONDUIT THROUGHOUT UNDERGROUND SYSTEM UNLESS OTHERWISE INDICATED. INSTALL NEW 3" WIDE NON-SHEATHED HOLLOW PIPE 18" ABOVE ALL CONDUIT RUNS. PANDUIT NO. H1U3Y-E OR APPROVED EQUIVALENT.
20. EXPOSED CONDUIT TO A POINT 3" BELOW GRADE AND UNDERGROUND BENDS SHALL BE RIGID GALVANIZED STEEL CONDUIT. MINIMUM BURIAL DEPTH OF CONDUITS IS 24" BELOW GRADE.
21. ALL CONDUITS PENETRATING SLAB IN EXPOSED LOCATIONS SHALL BE RIGID STEEL.

SITE KEY NOTES:

1. EXTERIOR BUILDING WALL MOUNTED LIGHTS ARE SHOWN FOR INTENT ONLY. SEE SHEET E3.0 FOR DETAILS.
2. PROVIDE (1) 4"x3" WITH PULL CORD FOR TELEPHONE SERVICE CABLE, (2) 2"x3" WITH PULL CORD FOR CABLE AND DATA. VERIFY EXACT LOCATION OF CONDUIT WITH TELEPHONE COMPANY.
3. NEW TRANSFORMER BY UTILITY COMPANY, PAD BY CONTRACTOR. COORDINATE WITH UTILITY COMPANY AS REQUIRED FOR CONSTRUCTION SCHEDULE.
4. FUTURE MONUMENT SIGN.
5. REFER TO SHEET E3.0, ONE-LINE (RISER) DIAGRAM FOR CONDUIT AND WIRE REQUIREMENTS.
6. REFER TO SHEET E3.0 FOR TYPICAL TRENCHING DETAIL.
7. REFER TO SHEET E3.0 FOR POLE BASE DETAIL. TYPICAL ALL LIGHT POLE BASES.
8. METER AND CT AT TRANSFORMER. CT AND METER BY UTILITY COMPANY.
9. PROVIDE AND INSTALL (2) 1" CONDUIT WITH PULL CORD, STUBBED UP IN GENERATOR PAD, TO 'ATS1'.
10. PROVIDE AND INSTALL 1" CONDUIT WITH PULL CORD, STUBBED UP IN GENERATOR PAD, TO 'ATS2'.
11. PROVIDE AND INSTALL (2) 3/4" CONDUIT WITH PULL CORD, STUBBED UP IN GENERATOR PAD, TO WALL AND UP TO BOTTOM OF ROOF STRUCTURE.
12. PROVIDE AND INSTALL 1" CONDUIT WITH PULL CORD, STUBBED UP IN GENERATOR PAD, TO WALL AND UP TO BOTTOM OF ROOF STRUCTURE FOR FUTURE USE.



REVISIONS:

JOB NO: 14013

ELECTRICAL
SITE PLAN

E1.0

DATE: 09.11.14

U.S. HIGHWAY 90

SW PROPERTY PLACE

HOME
THERAPY
OFFICES
7,020
SF

DIALYSIS
CENTER
10,000
SF



1 PHOTOMETRIC SITE PLAN
SCALE: 1" = 20'-0"



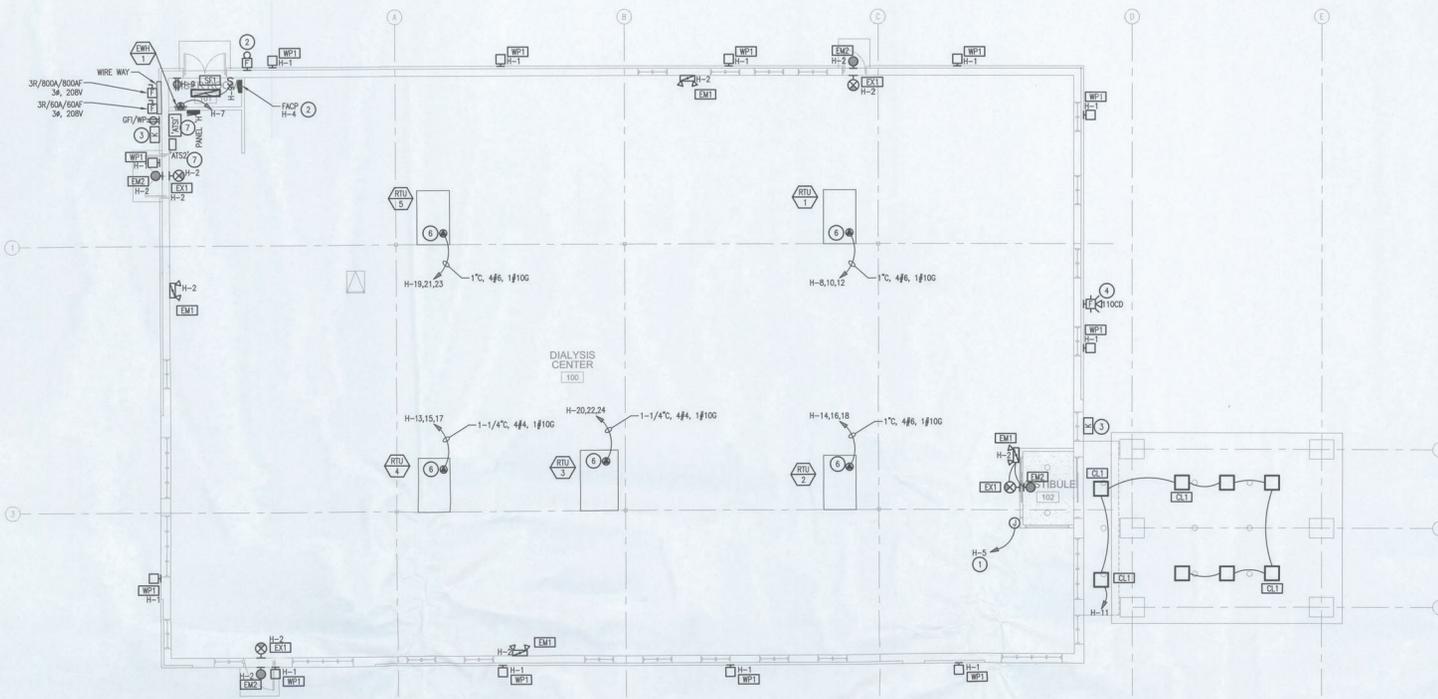


GENERAL POWER NOTES:

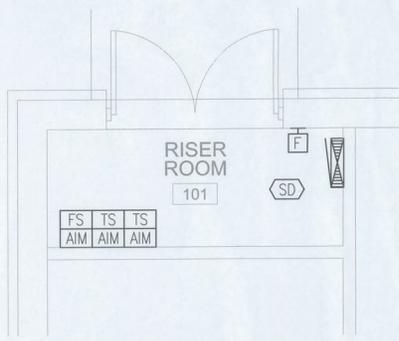
1. REFER TO GENERAL NOTES ON SHEET E1.0.
2. SEE SHEET E3.0 FOR LUMINAIRE SCHEDULE.
3. LIGHTING CONTROLS SHALL BE PROVIDED IN TENANT IMPROVEMENT.

POWER KEY NOTES:

1. PROVIDE POWER FOR AUTO DOOR. POWER PER MANUFACTURER'S INSTRUCTIONS.
2. PROVIDE 120V POWER AS NECESSARY FOR FIRE ALARM SYSTEM.
3. MONITOR KNOX BOX TO REPORT A SUPERVISORY SIGNAL WHEN OPENED.
4. EXTERIOR WALL MOUNT HORN/STROBE TO BE MOUNTED ABOVE THE FIRE DEPARTMENT CONNECTION. COORDINATE EXACT LOCATION WITH THE FIRE SPRINKLER CONTRACTOR.
5. SEE ONE-LINE DIAGRAM ON SHEET E3.0 FOR CONDUIT AND WIRE SIZES.
6. DISCONNECT AND MAINTENANCE RECEPTACLE PROVIDED BY MECHANICAL.
7. ATS IS FURNISHED BY THE OWNER.



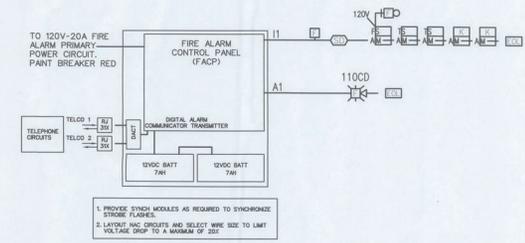
1 ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"



2 FIRE RISER ROOM DETAIL
SCALE: 1/4" = 1'-0"

SYSTEM INPUTS	SYSTEM OUTPUTS																													
	CONTROL UNIT ANNUNCIATION										NOTIFICATION					SUPPLEMENTARY														
1 MANUAL FIRE ALARM BOXES																														
2 SMOKE DETECTOR																														
3 SPRINKLER WATER FLOW SWITCHES																														
4 SPRINKLER TRAPPIST SWITCHES																														
5 FIRE ALARM AC POWER FAILURE																														
6 FIRE ALARM SYSTEM LOW BATTERY																														
7 OPEN CIRCUIT																														
8 GROUND FAULT																														
9 NOTIFICATION APPLIANCE CIRCUIT SHORT																														
10 KNOX BOX ENTRY ALARM																														

3 FIRE ALARM INPUT/OUTPUT MATRIX
SCALE: NTS



4 FIRE ALARM RISER (TYPICAL)
SCALE: NTS

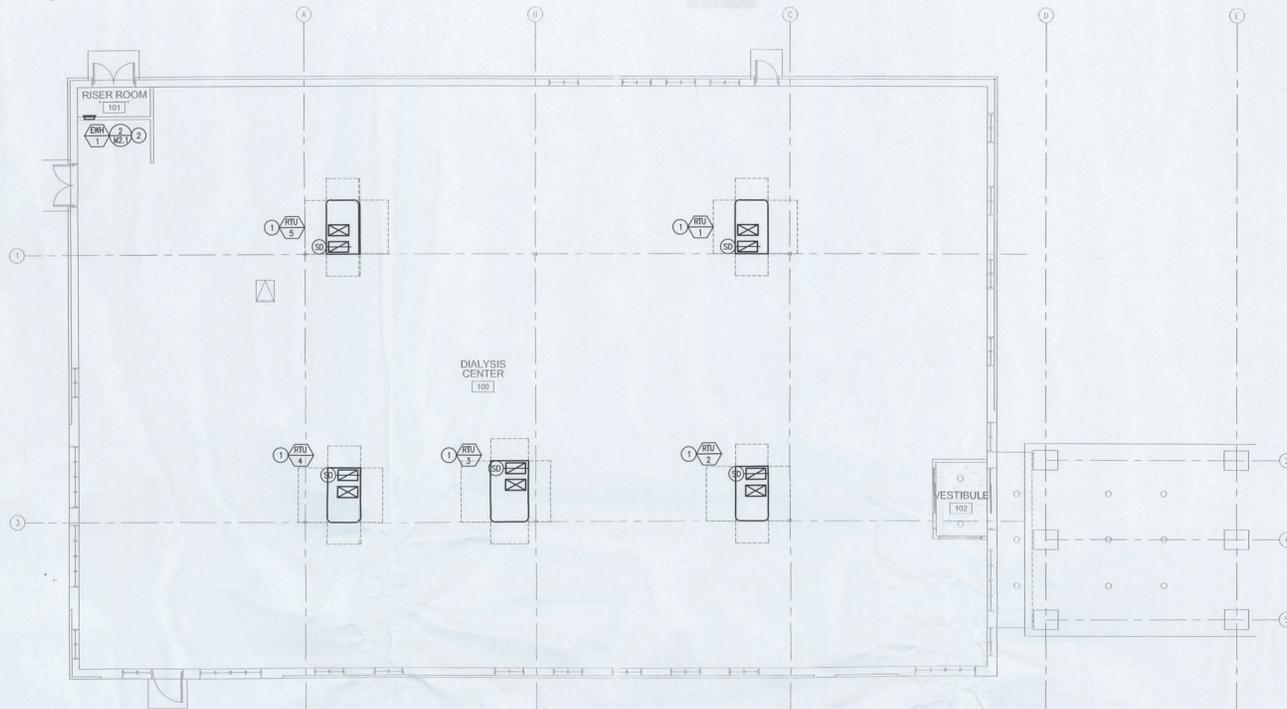
REVISIONS:

JOB NO: 14013

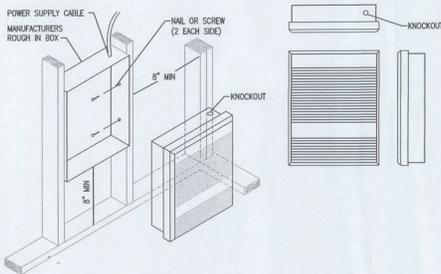
ELECTRICAL PLAN

E2.0

DATE: 09.11.14



1 HVAC FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 ELECTRIC WALL HEATER DETAIL
SCALE: NTS

SPACE	AREA (SQ. FEET)	SENS. COOLING LOAD (BTU/HR)	TOT. COOLING LOAD (BTU/HR)	HEATING LOAD (BTU/HR)
RTU-1, RTU-2	3,061	106,130	140,743	58,290
RTU-3, RTU-4	4,624	158,387	207,704	71,946
RTU-5	2,461	54,591	73,999	34,304
EMH-1	57	-	-	1,981

ELECTRIC WALL HEATER SCHEDULE										
EQUIPMENT NO.	SERVICE	CFM	ELECTRIC				WEIGHT (LBS)	MANUFACTURER & MODEL	OPTIONS-ACCESSORIES	
			WATTS	RPM	MCA	VOLT-PH-CY.				
EMH-1	FIRE RISER	100	750	1060	12.5	120-1-60	6	MARKEL EXOSSTZWB	PROVIDE WITH MANUFACTURERS RECESSED WALL MOUNT KIT AND SINGLE POLE INTEGRAL T-STAT.	

ALTERNATE MANUFACTURERS: OMARK, CHROMALOX, MARLEY, KING, INDECO

NOTES:

ROOFTOP PACKAGED HEAT PUMP SCHEDULE																			
EQUIPMENT NO.	SERVICE	TONS	SUPPLY AIR (CFM)	OUTSIDE AIR (CFM)	E.S.P. (IN. W.G.)	COOLING				HEATING			ELECTRICAL		WEIGHT (LBS)	MANUFACTURER & MODEL	OPTIONS-ACCESSORIES		
						EER/SEER	REFRIGERANT	ENTERING AIR (DB/WB)	SENSIBLE (MBH)	ELEC KW	HEATPUMP (MBH)	STAGES	UNIT	POWER				ESL	
													V-PH-CY.	MCA				MOCP	FLA
RTU-1	SEE PLANS	6	2400	--	0.5	11.4/--	R-410A	80/67	54.5	--	44.5	1	208-3-60	36.3	50	--	980	TRANE WSC072	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
RTU-2	SEE PLANS	6	2400	--	0.5	11.4/--	R-410A	80/67	54.5	--	44.5	1	208-3-60	36.3	50	--	980	TRANE WSC072	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
RTU-3	SEE PLANS	10	4000	--	0.5	11.2/--	R-410A	80/67	90.4	--	68.9	1	208-3-60	51.9	60	--	1490	TRANE WSC120	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
RTU-4	SEE PLANS	7.5	3000	--	0.5	11.1/--	R-410A	80/67	66.8	--	45.5	1	208-3-60	38.4	60	--	1040	TRANE WSC090	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11
RTU-5	SEE PLANS	6	2400	--	0.5	11.4/--	R-410A	80/67	54.5	--	44.5	1	208-3-60	36.3	50	--	980	TRANE WSC072	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11

ALTERNATE MANUFACTURERS: YORK, CARRIER

NOTES:

- UNIT CAPACITIES RATED AT SEA LEVEL AND 94 DEGREES CONDENSER ENTERING AIR.
- PROVIDE WITH FACTORY SMOKE DETECTOR, FIELD INSTALLED.
- PROVIDE WITH DISCONNECT.
- PROVIDE WITH ECONOMIZER.
- PROVIDE WITH PREBARRICADED 14" ROOF CURB.
- PROVIDE WITH SEISMIC CLIP.
- PROVIDE WITH PROGRAMMABLE T-STAT WITH HUMIDITY CONTROL AND 5" DEADBAND AND SETPOINT
- OVERLAP RESTRICTION, T-SHIRT
- PROVIDE WITH SPRING ISOLATORS.
- PROVIDE WITH LOW AMBIENT CONTROLS.
- PROVIDE WITH POWER CHANGEST.
- PROVIDE WITH HUMIDITY CONTROL TO MAINTAIN 40-60% RH.

GENERAL NOTES:

- CONTRACTOR TO COORDINATE ALL EQUIPMENT LOCATIONS AND ROOF PENETRATIONS WITHIN THE SCOPE OF THIS PROJECT. PLUMBING VENTS, REGULATOR VENTS, FLUES, AND EXHAUST AIR OUTLETS TO BE KEPT A MINIMUM OF 10' AWAY FROM OUTSIDE AIR INTAKE LOCATIONS.
- ALL SUPPLY, RETURN AND OUTSIDE AIR DUCT TO BE INSULATED PER 2009 EEC.
- LOCATIONS AND WEIGHTS OF ROOFTOP EQUIPMENT ARE TO BE VERIFIED BY THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.
- MAINTAIN A MINIMUM OF 10'-0" CLEARANCE FROM ANY EXHAUST FAN TO ANY OUTSIDE AIR INTAKE.

KEYED NOTES:

- RTU ON ROOF, COORDINATE WITH TENANT IMPROVEMENT PLANS FOR EXACT LOCATION. ROUTE SUPPLY AND RETURN AIR DUCTS FULL SIZE FROM UNIT DOWN THROUGH ROOF. TERMINATE RETURN AT 12" BELOW ROOF AND SUPPLY A MINIMUM OF 24" BELOW RETURNS TO PROVIDE HEAT TO SPACE. PROVIDE THERMOSTAT WITH 75 FT. OF WIRING FOR FUTURE TENANT IMPROVEMENT. MOUNT THERMOSTAT TO BOTTOM OF ROOF STRUCTURE.
- MOUNT ELECTRIC WALL HEATER HEIGHT PER DETAIL 2 THIS SHEET. COORDINATE WALL HEATER LOCATION WITH LOCATION OF FIRE RISER.



09/11/14

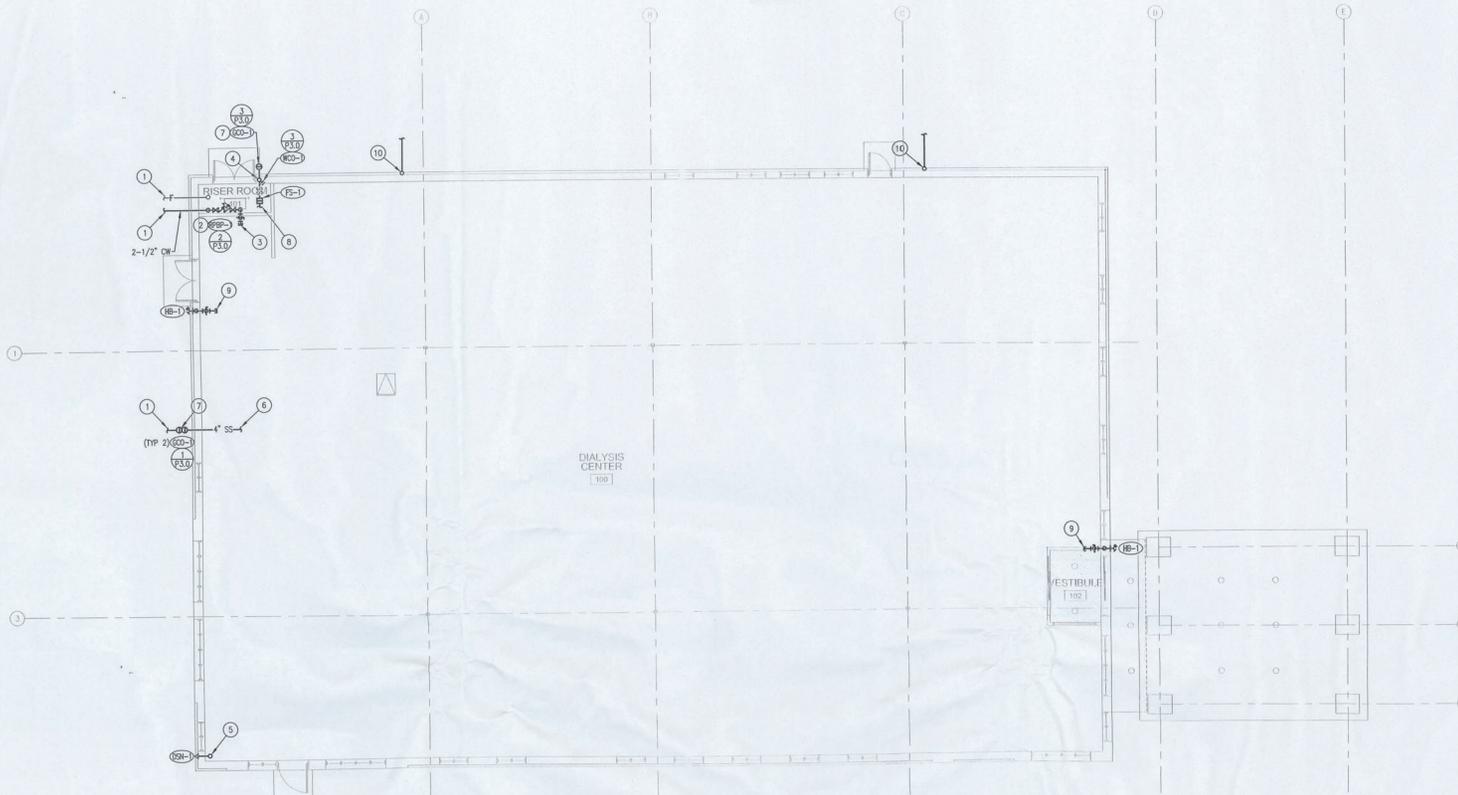
REVISIONS:

JOB NO: 14013

HVAC
PLAN

M2.1

DATE: 09.11.14



1 PLUMBING FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- 01 CERTAIN EQUIPMENT REQUIREMENTS NOTED ON THESE DRAWINGS WERE DERIVED FROM OWNER-FURNISHED COORDINATION DRAWINGS. CONTRACTOR TO VERIFY ACTUAL OWNER-FURNISHED EQUIPMENT CONNECTION REQUIREMENTS AND SCOPE OF WORK. CONTRACTOR TO PROVIDE INSTALLATION OF ALL OWNER SUPPLIED PLUMBING FIXTURES.
- 02 CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING SANITARY, DOMESTIC, AND GAS LINES. VERIFY AVAILABLE INVERT DEPTHS PRIOR TO BEGINNING WORK.
- 03 CONTRACTOR TO VERIFY INVERTS OF MANHOLES AND DOCUMENT WHETHER BACKCHECK VALVE IS REQUIRED.
- 04 MAINTAIN A MINIMUM OF 10'-0" CLEARANCE FROM ANY VTR TO ANY OUTSIDE AIR INTAKE.

KEYED NOTES:

1. EXTEND 5'-0" FROM BUILDING AND CONNECT TO SITE UTILITIES.
2. BACK FLOW DEVICE PER LOCAL JURISDICTION. PROVIDE AND INSTALL IF NOT PROVIDED BY SITE CONNECTION. LOCATE BUILDING SHUT-OFF VALVE AT THE LOCATION. CONTRACTOR TO VERIFY WATER PRESSURE IS GREATER THAN 60 PSI PRIOR TO CONSTRUCTION. NOTIFY ARCHITECT IF PRESSURE IS LESS THAN 60 PSI OR MORE THAN 80 PSI.
3. 2-1/2" CW VALVE AND CAP FOR FUTURE CONNECTION.
4. VENT UP THROUGH ROOF. PROVIDE WITH ROOF PENETRATION KIT AND SEAL WEATHER TIGHT. SEE DETAIL 4, SHEET P3.0.
5. 3" SD TO BE GRADED ON INSIDE SURFACE OF CHU WALL TO DSH-1 AT 12" ABOVE ADJACENT GRADE. SEE PLUMBING ROOF PLAN FOR CONTINUATION.
6. COORDINATE WASTE AND VENT LINES WITH TI ARCHITECTS PLAN.
7. COORDINATE INVERT ELEVATION WITH TI ARCHITECTS PLAN.
8. COORDINATE FUTURE SS CONNECTION TO TI UNDER-FLOOR PLUMBING.
9. 3/4" CW FROM HOSE BIBB. TERMINATE WITH CAP AND VALVE HIGH IN SPACE FOR FUTURE TI CONNECTION.
10. TRANSITION FROM ARCHITECTURAL DOWNSPOUT TO 5" ROOF DRAIN AT 12" ABOVE GRADE. COORDINATE ROOF DRAIN LOCATION WITH ARCHITECTURAL DOWNSPOUT LOCATION. ROUTE 5'-0" FROM BUILDING AND CONNECT TO SITE UTILITIES. COORDINATE WITH SITE/CHL FOR EXACT CONNECTION LOCATIONS AND AVAILABLE INVERTS.



09/11/14

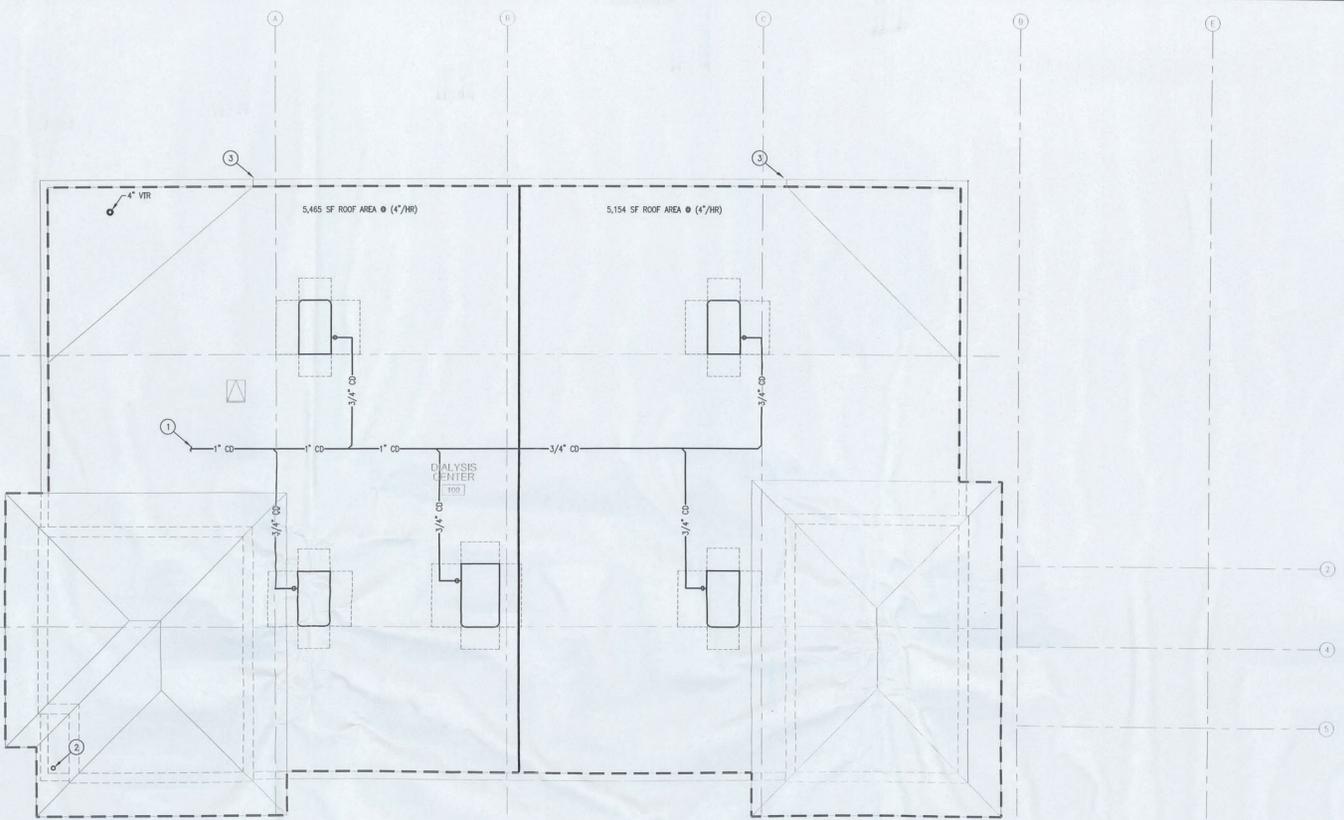
REVISIONS:

JOB NO: 14013

PLUMBING
FLOOR PLAN

P2.1

DATE: 09.11.14



1 PLUMBING ROOF PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

- G1 CERTAIN EQUIPMENT REQUIREMENTS NOTED ON THESE DRAWINGS WERE DERIVED FROM OWNER-FURNISHED COORDINATION DRAWINGS. CONTRACTOR TO VERIFY ACTUAL OWNER-FURNISHED EQUIPMENT CONNECTION REQUIREMENTS AND SCOPE OF WORK. CONTRACTOR TO PROVIDE INSTALLATION OF ALL OWNER SUPPLIED PLUMBING FITTINGS.
- G2 CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING SANITARY, DOMESTIC, AND GAS LINES. VERIFY AVAILABLE INVERT DEPTHS PRIOR TO BEGINNING WORK.
- G3 CONTRACTOR TO VERIFY INVERTS OF MANHOLES AND DOCUMENT WHETHER BACKCHECK VALVE IS REQUIRED.
- G4 MAINTAIN A MINIMUM OF 10'-0" CLEARANCE FROM ANY VTR TO ANY OUTSIDE AIR INTAKE.

KEYED NOTES:

- 1. CONDENSATE TO BE STUBBED TO THE UNDERSIDE OF THE STRUCTURE. ROUTING TERMINATION TO NEAREST APPROVED FEATURE TO BE DONE IN THE SCOPE OF WORK.
- 2. 3" RD TO BE ROUTED ON INSIDE SURFACE OF CMU WALL TO DSH-1 AT 12" ABOVE ADJACENT GRADE. SEE PLUMBING FLOOR PLAN FOR CONTINUATION.
- 3. REFER TO ARCHITECTURAL DRAWINGS FOR ARCHITECTURAL DOWNSPOUT INFORMATION. SEE PLUMBING FLOOR PLAN FOR CONTINUATION.

callaway
architecture
1207 HAMPSHIRE LN, SUITE 105, RICHARDSON, TX 75080
PHONE: 214.388.2525



09/11/14

LAKE CITY WEST
FMC DIALYSIS CLINIC
FRESENIUS MEDICAL CARE
Lake City, FL
Orthopaedic Ct.

REVISIONS:

JOB NO: 14013

PLUMBING ROOF PLAN

P2.2

DATE: 09.11.14

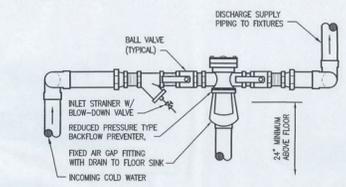
PLUMBING FIXTURE SCHEDULE										WC-1
FIXTURE NO.	DESCRIPTION	MANUFACTURER & CAT. NO.	SIZE	PIPING CONNECTIONS					FEATURES & ACCESSORIES	
				TRAP	WASTE	VENT	C.W.	H.W.		
BPBP-1	BACKFLOW PREVENTER REDUCED PRESSURE	WATTS 009M-01-5	LINE SIZE	---	---	---	---	---	PROVIDE WITH 1/4 TURN BALL VALVE AND BRONZE STRAINER.	
CCO-1	GRADE CLEAN OUT	JAY R. SMITH 42055	LINE SIZE (SEE PLANS)	---	---	---	---	---	CAST IRON TOP, ABS PLUG WITH GASKET SEAL. SIZE TO MATCH WASTE PIPING.	
FS-1	FLOOR SINK	SIOUX CHIEF 861-2P-D-W-2-T	12"x12"x4" DEEP	4	4"	4"	---	---	11-3/16"x11-3/16"x4-3/8" DEEP. SSEL 40 PVC FLOOR SINK. PROVIDE W/ PVC DOME STRAINER, STAINLESS STEEL MESH SCREEN, HALF GRADE COVER, TRAP PRIMER CONNECTION. 2" MINIMUM.	
DSN-1	DOWNSPOUT NOZZLE	JAY R. SMITH 1770-T	LINE SIZE (SEE PLANS)	---	---	---	---	---	PROVIDE CAST BRONZE BODY NOZZLE AND WALL FLANGE.	
WCO-1	WALL CLEAN OUT	JAY R. SMITH 4472	---	---	---	---	---	---	TAPERED BRONZE PLUG AND STAINLESS STEEL COVER. SIZE TO MATCH WASTE PIPING, 2" MINIMUM.	
HB-1	HOSE BEEB (FREEZE-PROOF)	WOODFORD 67	---	---	---	---	3/4"	---	ANTI-SIPHON, AUTOMATIC DRAINING WITH ONE REMOVABLE OPERATING KEY TO BE FURNISHED WITH EACH HYDRANT. FLUSH MOUNT AT 18" ABOVE FINISHED GRADE.	

GENERAL SCHEDULE NOTES

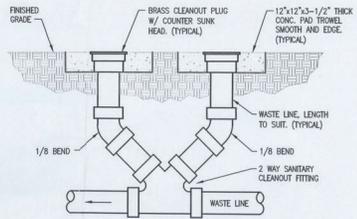
- FIXTURES INDICATED AS ADA MUST COMPLY WITH ICC/ANSI A117.1. VERIFY EXACT NUMBERS, FIXTURE DESIGNATIONS, LOCATIONS, CLEARANCES, AND MOUNTING HEIGHTS WITH ARCHITECTURAL PLANS.
- ALL HW PIPING AND DRAIN LINES BENEATH ADA COMPLIANT LIGHTBOXES MUST BE INSULATED TO PREVENT BURNS. REF. ARCHITECTURAL PLANS. INSULATE WITH MOLDED CLOSED CELL VINYL INSULATION - TRUBERO OR EQUAL.
- PROVIDE TRAP PRIMERS FOR ALL FLOOR DRAINS (PPP INC., OR EQUAL). PROVIDE ACCESS PANELS AS REQUIRED.

EQUIVALENT MANUFACTURERS

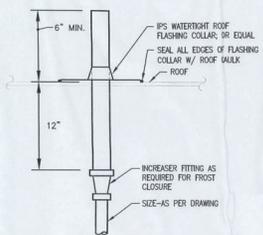
- ENAMELED CAST IRON, VITREOUS CHINA, ACRYLIC
- STAINLESS STEEL SINKS
SERVICE SINKS
FACETS
- SHOWER VALVES, MIXING VALVES
TOILET SEATS
ROOF DRAINS, FLOOR SINKS, FLOOR DRAINS AND TRAPS
BACKFLOW PREVENTION DEVICES, PRESSURE REDUCING VALVES
TRAP PRIMERS AND SHOCK ABSORBERS
- KOHLER, AMERICAN STANDARD, ELIER,
ORNIE, ZURN WAKE, BEST BATH, LASCIO, AQUACLAST
ELJAY, JUST, DAYTON, KOHLER
FMC, BRANLEY, ACORN, STERN & WILLIAMS
DELTA REF, ELWAY, JETI, KOHLER, ZURN,
AMERICAN STANDARD
POWERS, LEONARD, SYMONS, MOEN
CHERCH, OSLOHTE, BEAMS, SMELT,
WATTS, ZURN, WAKE, ZOSAM, WATTS,
WILKENS, FEDCO, APOLLO/CONBRA CO,
PPP, SIOUX CHIEF, SMITH



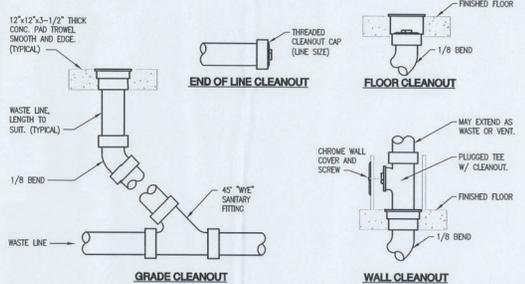
2 REDUCED PRESSURE BACKFLOW PREVENTER
SCALE: NTS



1 DOUBLE GRADE CLEANOUT DETAIL
SCALE: NTS



4 PVC - VENT THROUGH ROOF
SCALE: NTS



3 CLEANOUT DETAILS
SCALE: NTS

callaway
architecture

1007 HAMPSHIRE LN., 5TH FLOOR, RICHMOND, TX 75369
PHONE: 714.383.2525



09/11/14

LAKE CITY WEST
FMC DIALYSIS CLINIC
FRESENIUS
MEDICAL CARE

Lake City, FL
On-Orthopaedic Ct.

REVISIONS:

JOB NO: 14013

PLUMBING
SCHEDULES
AND DETAILS
P3.0

DATE: 09.11.14