

FOUNDATION & GROUND FLOOR PLAN

PLAN NOTES:

- 1. FINISH FLOOR ELEVATION, +0'-0", U.O.N. COORDINATE W/ARCHITECTURAL DRAWINGS.
- 2. COORDINATE W/ARCHITECTURAL & OTHER DRAWINGS FOR INFORMATION NOT SHOWN ON THIS PLAN.
- 3. COORDINATE ALL WINDOW, DOOR AND OPENING LOCATIONS WITH ARCHITECTURAL DRAWINGS.
- 4. TYPICAL WALL FOOTING ELEVATION = TO MATCH. EXISTING. U.O.N.
- 6. ALL FOOTINGS SHALL BE CENTERED UNDER WALLS & COLUMNS, U.O.N. & SHALL BE A MIN. 8" BELOW GRADE PER FBC.
- 7. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS, DRAINS, DRAINAGE SLOPE, ETC. NOT SHOWN.
- 8. ALLOWABLE SOIL BEARING PRESSURE IS 2000 PSF. REFER TO GENERAL NOTES AND SOIL STATEMENT.
- 9. GROUND FLOOR SLAB SHALL BE 4" CONCRETE SLAB-ON-GRADE REINF. W/6x6-W1.1.4 W.W.F. OVER 6 MIL VAPOR BARRIER SUPPORTED ON CÓMPACTED LIMEROCK BASE 98% MODIFIED PROCTOR PER ASTM D1557 & FBC REQUIREMENTS.

TERMITE PROTECTION STATEMENT:

ALL BUILDINGS SHALL HAVE PRE-CONSTRUCTION TREATMENT PROTECTION AGAINST SUBTERRANEAN TERMITES AS PER 2010 FBC SECTION 1816. A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH THE RULES & LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES".

SOIL STATEMENT:

BASED UPON VISUAL INSPECTION BY THIS ENGINEER TO THE PROJECT SITE, THE SOIL CONSISTS OF UNDISTURBED LIMEROCK BASED MIXED WITH SAND OR SAND ROCK WITH A MAXIMUN ALLOWABLE BEARING CAPACITY OF 2000 PSF AS PER 2010 FBC SECTION 1804. AT TIME OF EXCAVATION FOR FOUNDATIONS, THIS ENGINEER SHALL SUBMIT TO THE BUILDING OFFICIAL A SIGNED AND SEALED LETTER ATTESTING THAT THE SITE HAS BEEN OBSERVED AND THE SOIL CONDITIONS ARE SIMILAR TO THOSE UPON WHICH THE DESIGN IS BASED.

TEMPORARY SHORING/BRACING NOTES:

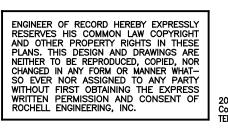
- 1. SHORE REQ'D AREAS FROM ROOF TO TOP OF EXISTING GROUND LEVEL GRADE/SLAB.
- 2. DEMOLITION FOR THIS PROJECT SHALL INCLUDE INTERIOR STRUCTURAL & NON-STRUCTURAL DEMOLITION AS SHOWN ON ARCHITECTURAL DWGS.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE BRACING OF ALL STRUCTURAL MEMBERS, WALLS AND NON-STRUCTURAL ITEMS DURING DEMOLITION AND CONSTRUCTION.
- 4. FOR ANY TEMPORARY BRACING AND SHORING REQ'D DURING DEMOLITION, THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A SPECIALTY ENGINEER AND SUBMIT REQ'D SIGNED AND SEALED SHOP DWGS. AND SUPPORTING CALCULATIONS FOR ALL SHORING & BRACING OF THE EXISTING STRUCTURE FOR A/E REVIEW & APPROVAL PRIOR TO PROCESSING THROUGH THE BUILDING DEPARTMENT.
- 5. AREAS OF THE ROOF STRUCTURE THAT ARE SUPPORTED BY TEMPORARY SHORING ELEMENTS SHALL NOT BE UTILIZED AS CONSTRUCTION STAGING AREAS.
- CONTRACTOR SHALL PROVIDE LATERAL BRACING FOR ALL TEMPORARY SHORING ELEMENTS, INCLUDING PROVISIONS FOR WIND UPLIFT AT EXPOSED AREAS OF CONSTRUCTION.
- TEMPORARY STRUCTURES WHICH SUPPORTS EXISTING CONCRETE & MASONRY CONSTRUCTION THAT IS DESIGNATED TO REMAIN SHALL BE DESIGNED & INSTALLED TO SATISFY THE DEFLECTION CRITERIA OF ACI 530, LATEST EDITION. 8. AREAS OF THE ROOF/FLOOR STRUCTURE THAT ARE SUPPORTED BY TEMPORARY SHORING SHALL BE POSITIVELY DRAINED
- WHILE THE SHORING IS IN PLACE. TEMPORARY SHORING SHALL REMAIN IN PLACE UNTIL ALL NEW STRUCTURAL ELEMENTS ARE IN PLACE AND ALL CONNECTIONS

ARE COMPLETE & INSPECTED BY BOTH THE SPECIAL INSPECTOR & BLDG. DEPT. INSPECTOR.

<u>LEGEND</u> MEW CMU WALLS EXISTING CMU WALLS CONCRETE COLUMNS/WALLS EXISTING CONCRETE COLUMNS/SHEAR WALL) NEW FOOTING EXIST. FOOTING (TO REMAIN)

TO THE BEST OF MY KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2010, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

SLAB EDGE



ALEXANDER ROCHELL FL P.E. #60735 205 Santillane Avenue, Coral Gables, Florida 33134 EL: 305.649.4049 — FAX: 305.649.4149



04.30.14 ISSUE FOR BID

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AGL RESOURCES

10 PEACHTREE PLACE ATLANTA, GA 30309 Tel: - 404-584-4000

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> Tel: 973.624.1100 Fax: 973.624.2426

NEW CORPORATE OFFICES FOR FLORIDA CITY GAS

> 4045 NW 97th Ave. Doral, Florida

Drawing Title

Seal & Signature

Job No.:

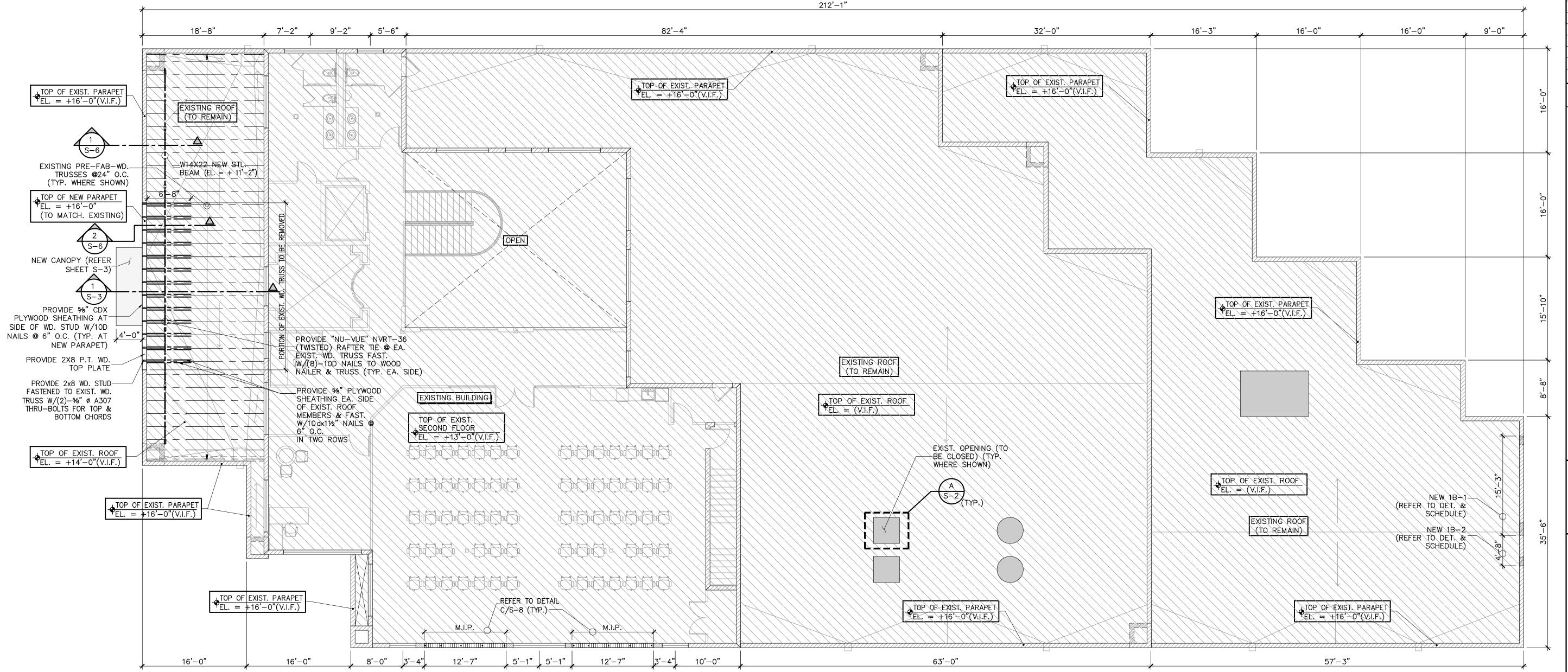
M.V. Checked: A.R. Drawing No.

S-1

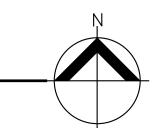
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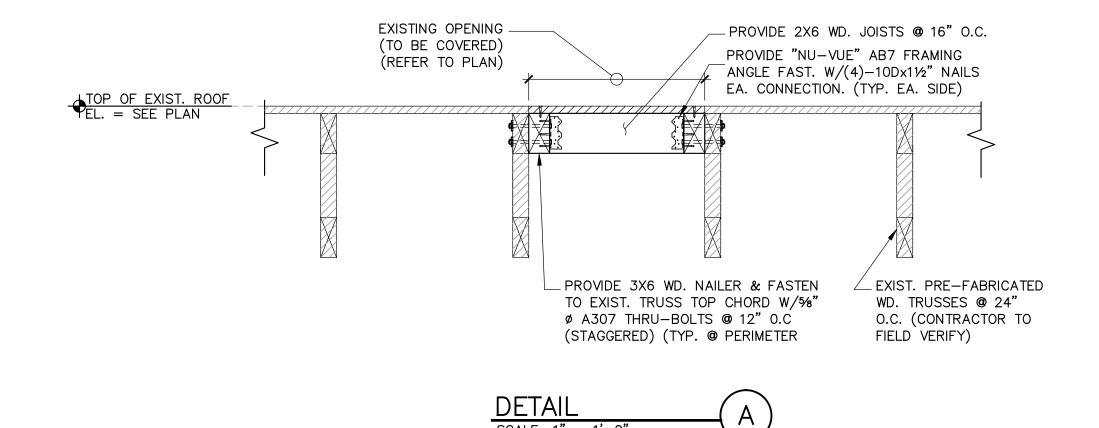
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CAD File:



SECOND FLOOR PLAN





PLAN NOTES:

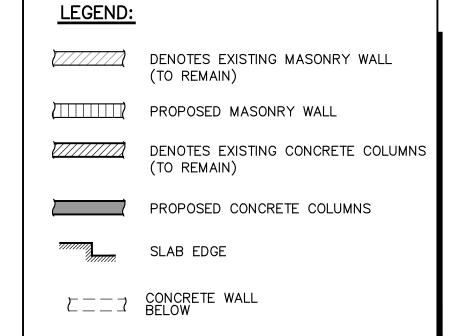
- 1. FINISH FLOOR & TIE-BEAM ELEVATION = +13'-0, U.O.N. ON PLANS. COORDINATE W/ARCHITECTURAL DRAWINGS.
- 2. DATUM ELEVATION, +0'-0", U.O.N. ON PLANS.
- 3. EXIST. SECOND FLOOR FRAMING CONSIST OF FLAT WD. TRUSSES (TO REMAIN) (REFER TO PLAN).
- 4. COORDINATE ALL WINDOW, DOOR AND OPENING LOCATIONS WITH ARCHITECTURAL DRAWINGS.
- 5. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS, DRAINS, DRAINAGE SLOPE, ETC. NOT SHOWN.
- 6. COORDINATE W/ARCHITECTURAL & OTHER DRAWINGS FOR INFORMATION NOT SHOWN ON THIS PLAN.
- CONTRACTOR TO COORDINATE W/ARCHITECTURAL AND MEP DRAWINGS FOR A/C, MECHANICAL & PLUMBING OPENINGS.
- 8. REFER TO ROOF ANCHOR & CONNECTOR SCHEDULE ON SHEET S-3 FOR TRUSS CONNECTORS USED FOR THE ROOF FRAMING CONNECTIONS TO SUPPORTING WALLS, COLUMNS & BEAMS.
- 9. ALL ANCHORS, CONNECTORS & FASTENERS USED TO SECURE THE ROOF FRAMING TO CONCRETE SHALL BE GALVANIZED.

ROOF SHEATHING NOTES:

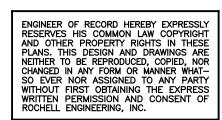
ALL ROOFING ACCESSORIES AND MATERIALS SHALL HAVE MIAMI-DADE COUNTY PRODUCT CONTROL APPROVAL AND MUST BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS AND DIRECTIVES OF THE NOTICE OF ACCEPTANCE (NOA) ISSUED FOR EACH INDIVIDUAL PRODUCT OF THE SYSTEM, PER FBC REQUIREMENTS.

ROOF SHEATHING SHALL BE A.P.A. RATED, NOT LESS THAN 5/8" (19/32") EXTERIOR GLUE TYPE PLYWOOD SHEATHING AND SHALL HAVE MANUFACTURER'S PRODUCT STAMP CLEARLY VISIBLE, INSTALL SHEATHING IN ACCORDANCE WITH REQUIREMENTS OF FBC SECTION 2322.2. SHEATHING SHALL BE NAILED TO ROOF TRUSSES TO FORM A DIAPHRAGM USING 10d GALV. RING-SHANK NAILS (3"x0.135 MIN. SHANK DIA. AND RING OF 0.012 DIA. OR LARGER) @ 6" O.C. (U.O.N.).

BLOCKED & UNBLOCKED PLYWOOD DIAPHRAGM SHALL CONSIST OF 5/8" (19/32") STRUCTURAL GRADE I PLYWOOD CONTINUOUS OVER TWO OR MORE SPANS, FACE GRAIN PERPENDICULAR TO SUPPORTS, FASTENED WITH 10d GALV. RING-SHANK NAILS, 11/2" MIN. PENETRATION IN 2" MIN. NOMINAL FRAMING MEMBERS SPACED AT 4" O.C. AT ROOF DIAPHRAGM BOUNDARY PANELS & AT 6" O.C. AT ALL OTHER PLYWOOD PANEL EDGES AND ALONG INTERMEDIATE FRAMING MEMBERS.



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ALEXANDER ROCHELL FL P.E. #60735 ROCHELL ENGINEERING 205 Santillane Avenue, Coral Gables, Florida 33134 EL: 305.649.4049 — FAX: 305.649.4149 STRUCTURAL CONSULTING ENG CERT. OF AUTHORIZATION No.

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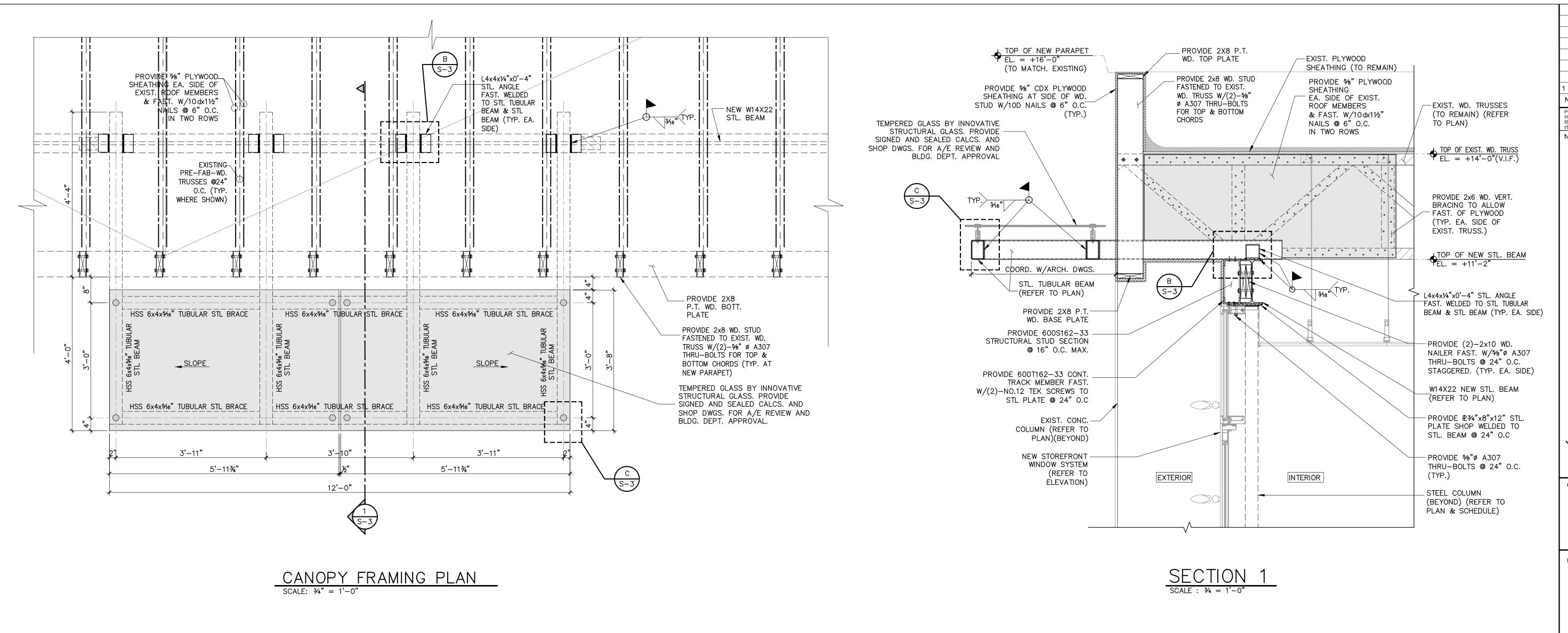
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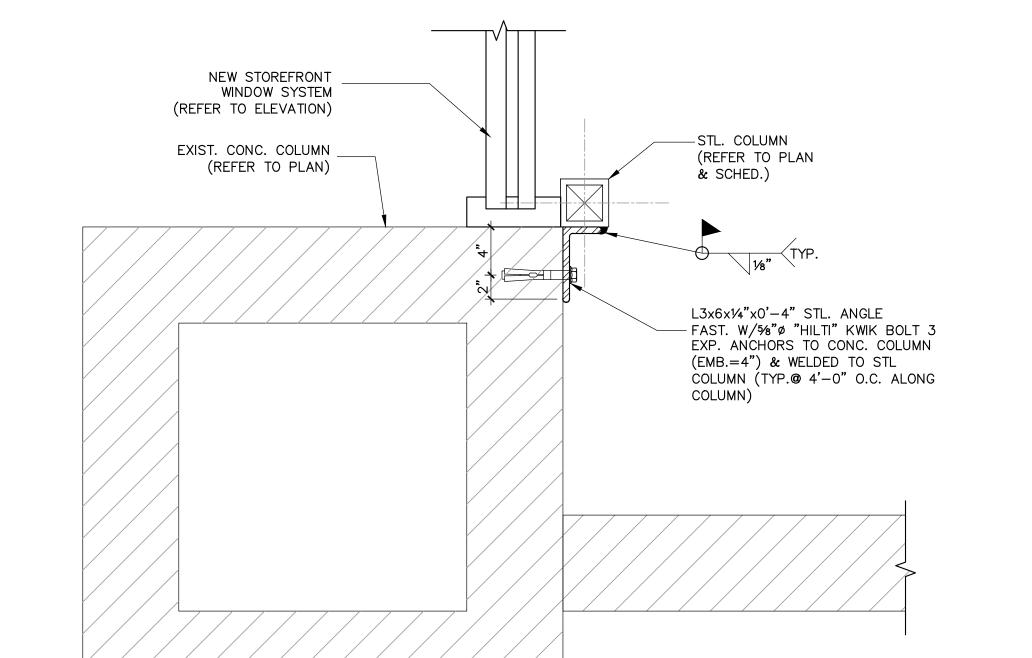
> 4045 NW 97th Ave. Doral, Florida

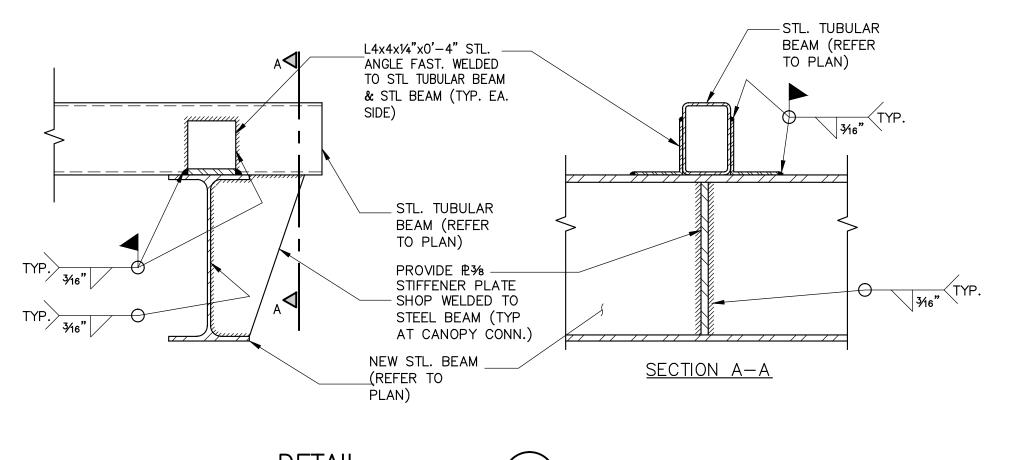
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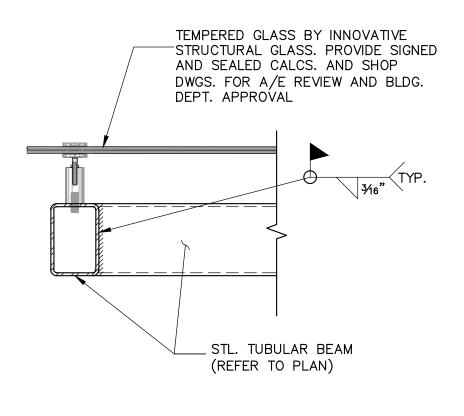
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		Drawn:	M.V.
		Checked:	A.R.
G, INC		Drawing No.	
GINEERS . 27054			S-2

CAD File:

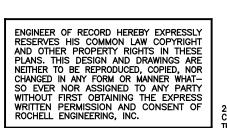








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ROCHELL ENGINEERING, INC STRUCTURAL CONSULTING ENGINEERS CERT. OF AUTHORIZATION No. 27054

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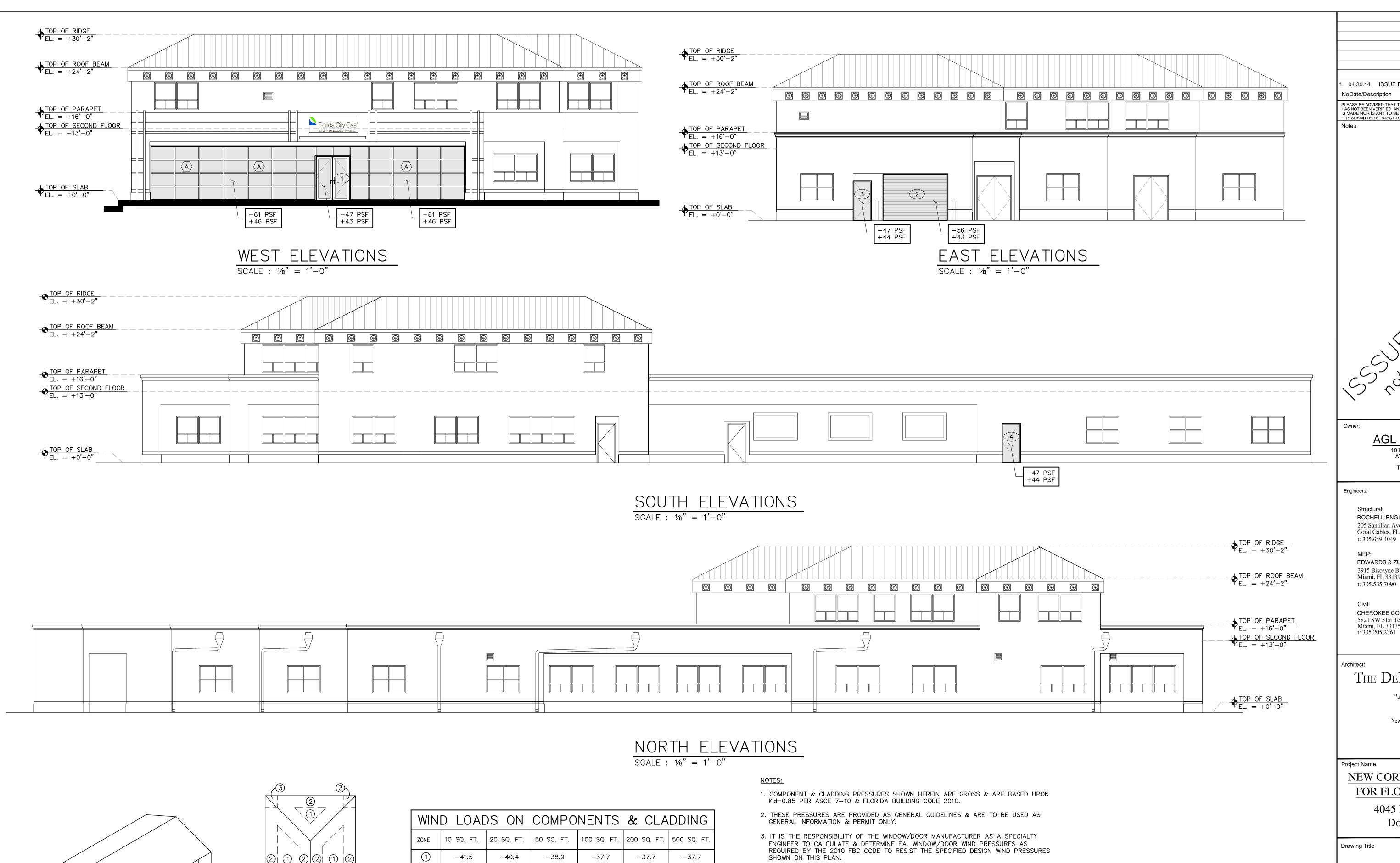
NEW CORPORATE OFFICES FOR FLORIDA CITY GAS

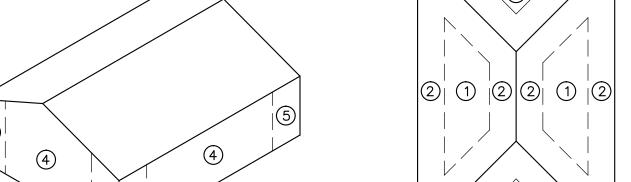
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Drawing Title

04.30.14 Seal & Signature Job No.: 1322 M.V. Checked: A.R. Drawing No. S-3





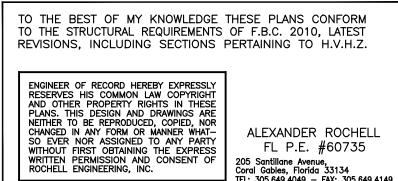
a = 10'-0"

WIN	D LOAD	S ON	COMPO	NENTS	& CLA	DDING
ZONE	10 SQ. FT.	20 SQ. FT.	50 SQ. FT.	100 SQ. FT.	200 SQ. FT.	500 SQ. FT.
1	-41.5	-40.4	-38.9	-37.7	-37.7	-37.7
2	-72.2	-66.5	-59.2	-53.1	-53.1	-53.1
3	-106.7	-99.9	-91.1	-83.8	-83.8	-83.8
4	-49.2	-47.2	-44.6	-42.2	-40.3	-37.7
5	-60.7	-56.6	-51.5	-46.7	-42.8	-37.7
4 &5	+45.3	+43.3	+40.8	+38.4	+36.4	+33.8

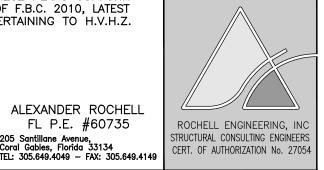
- 4. ROCHELL ENGINEERING, INC. WILL NOT BE RESPONSIBLE FOR ANY DEFICIENCIES CREATED BY IMPROPER DESIGN, ERECTION, INSTALLATION OR OTHER OPERATIONS RELATED TO THE WINDOW/DOOR SYSTEM PART OF THIS PROJECT.
- 5. ALL EXTERIOR WINDOW & DOOR ASSEMBLY PRODUCT APPROVALS (NOA) SHALL BE SUBMITTED ALONG WITH THE CONTRACT DRAWINGS TO THE AGENCY HAVING JURISDICTION FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

WIND LOADS PER ASCE 7-10 & 2010 FBC

THIS STRUCTURE HAS BEEN DESIGNED AS "ENCLOSED" & REQUIRES IMPACT RESISTANT GLASS OR SHUTTERS TO COMPLY WITH FBC SECTIONS 2410 & 2413.



FL P.E. #60735



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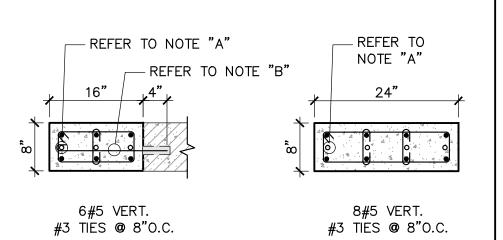
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Seal & Signature

04.30.14 Job No.: 1322 M.V. Checked: A.R. Drawing No.

CAD File:

S-4



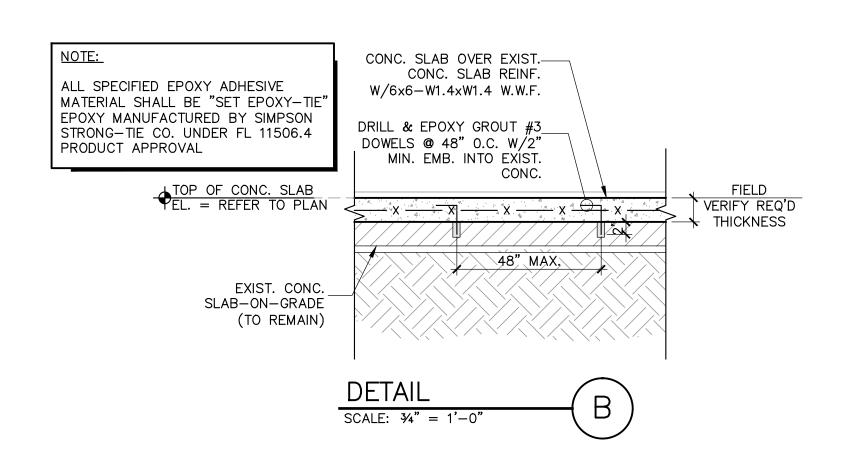
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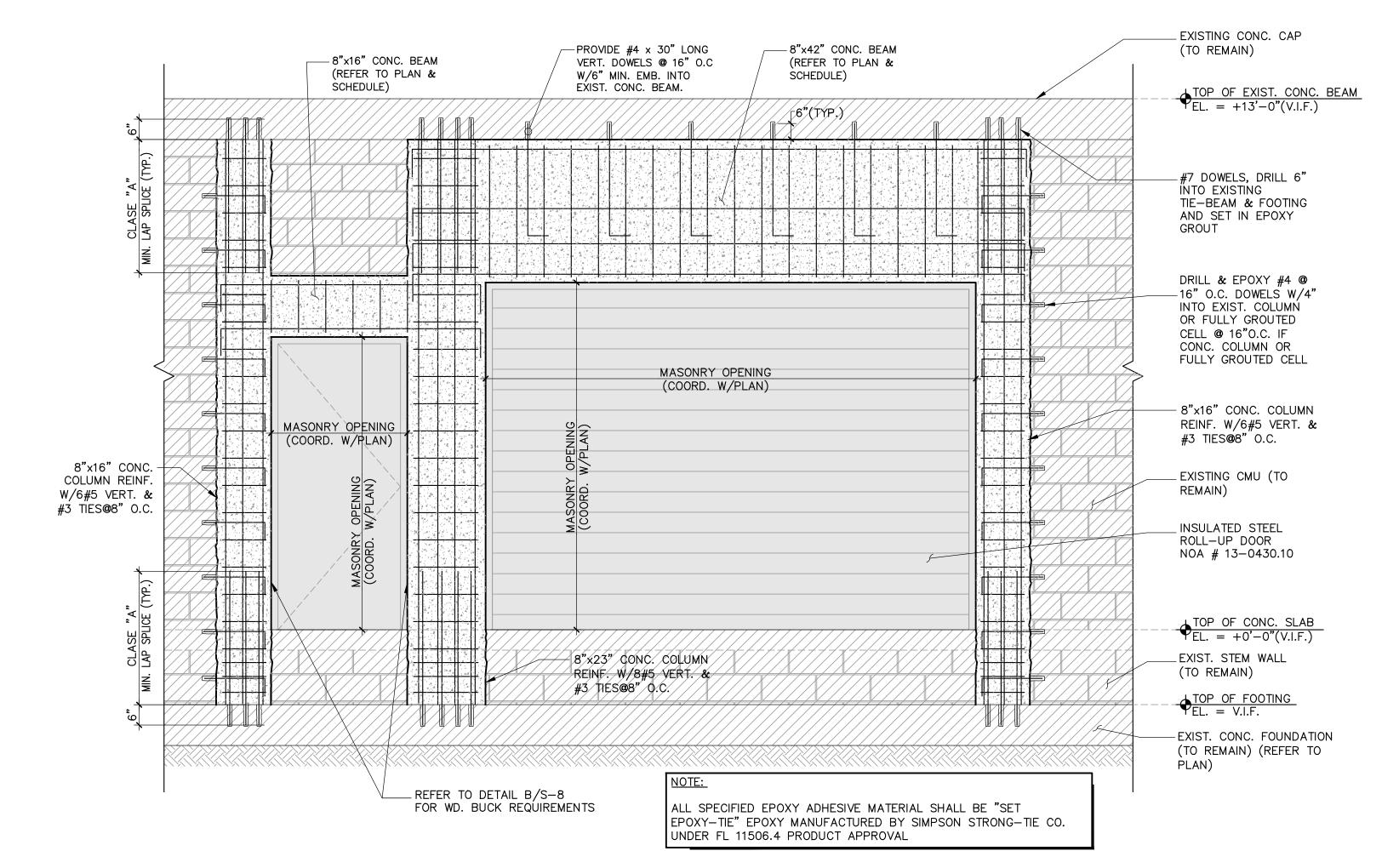
CONC. COLUMN NOTES

- A. PROVIDE #7 DOWELS x 3'-6" LONG. DRILL
 & EPOXY GROUT 6" MIN. INTO FOUNDATION AND CONC. BEAM
- B. PROVIDE #4 DOWELS @ 16" O.C. DRILL & EPOXY GROUT 4" MIN. INTO FULLY GROUTED CELL OR COLUMN.
- C. ALL SPECIFIED EPOXY ADHESIVE MATERIAL SHALL BE "SET EPOXY—TIE" EPOXY MANUFACTURED BY SIMPSON STRONG—TIE CO. UNDER FL 11506.4 PRODUCT APPROVAL.

CONCRETE COLUMN DETAILS SCALE: 3/4" = 1'-0"

<u>C-2</u>







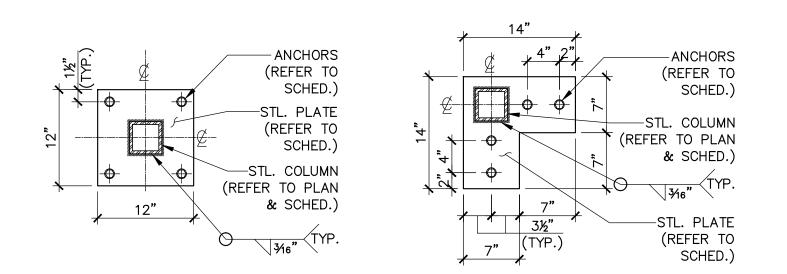
CONCRETE BEAM SCHEDULE										
MARKS	SIZ	ZE	ELEV. TOP	-	REINF	ORCING			#3 TIES U.O.N.	REMARKS
WANTO	W	D	OF BEAM	BOTT.	TOP	"S"	"E"	"C"	SPACING	
1B-1	8	42	+12'-0"	2#7	2#7	4#5*			@ 10" O.C.	* 2#5 EA. FACE REFER TO DET. C/S-5
1B-2	8	16	+8'-6"	2#5	2#5				@ 8" O.C.	REFER TO DET. C/S-5

NOTE: DATUM ELEVATION, +0'-0"

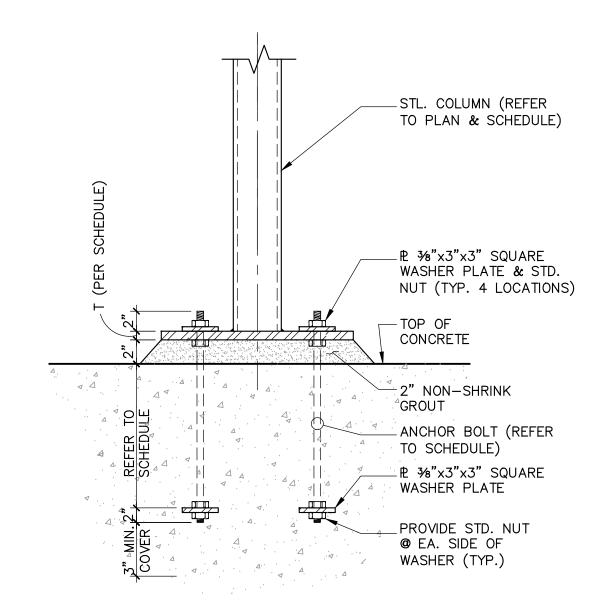
STEEL COLUMNS SCHEDULE					
MARK	SIZE	BASE PL	CAP PL		
SC-1	HSS 4x4x1/4	PE ¾4"x12"x1'-0" STL. PLATE W/(4)-5%"ø A307 THREADED RODS x 8" LONG W/WASHER PLATE	R¾"x8"x12" STL. PLATE FIELD WELDED TO STL. BEAM		
SC-2	HSS 4x4x1/4	P ¾4"x7x14"x1'-2" STL. PLATE W/(4)-%"ø A307 THREADED RODS x 8" LONG W/WASHER PLATE	比¾"x8"x12" STL. PLATE FIELD WELDED TO STL. BEAM		

NOTE:

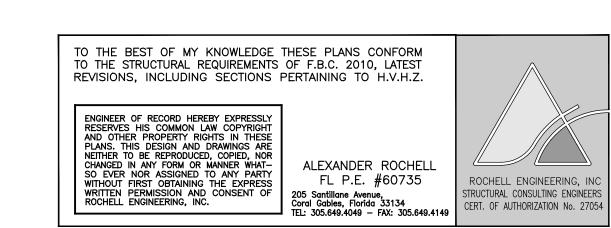
- 1. ALL STEEL COLUMNS SHALL BE GROUT FILLED. ALLOW A 2"x2" OPENING ON CAP
- 2. PROVIDE PRESSURE RELIEF HOLES AT BOTTOM, TOP AND AT MID—HEIGHT.
- 3. SHOP WELD BASE AND CAP PLATES.4. Fy= 46 KSI.
- 5. PROVIDE 2"x2" OPENING ON CAP PLATE FOR GROUT PLACEMENT.







STL. COLUMN DETAILS

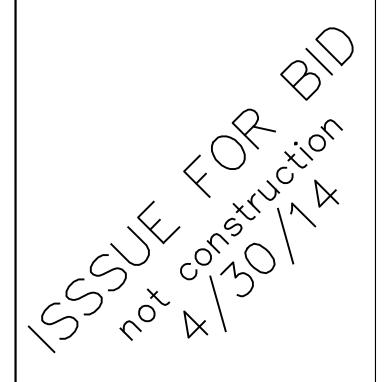


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Notes

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Owner:

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Structural:

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Drawing Title

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Job No.: 1322

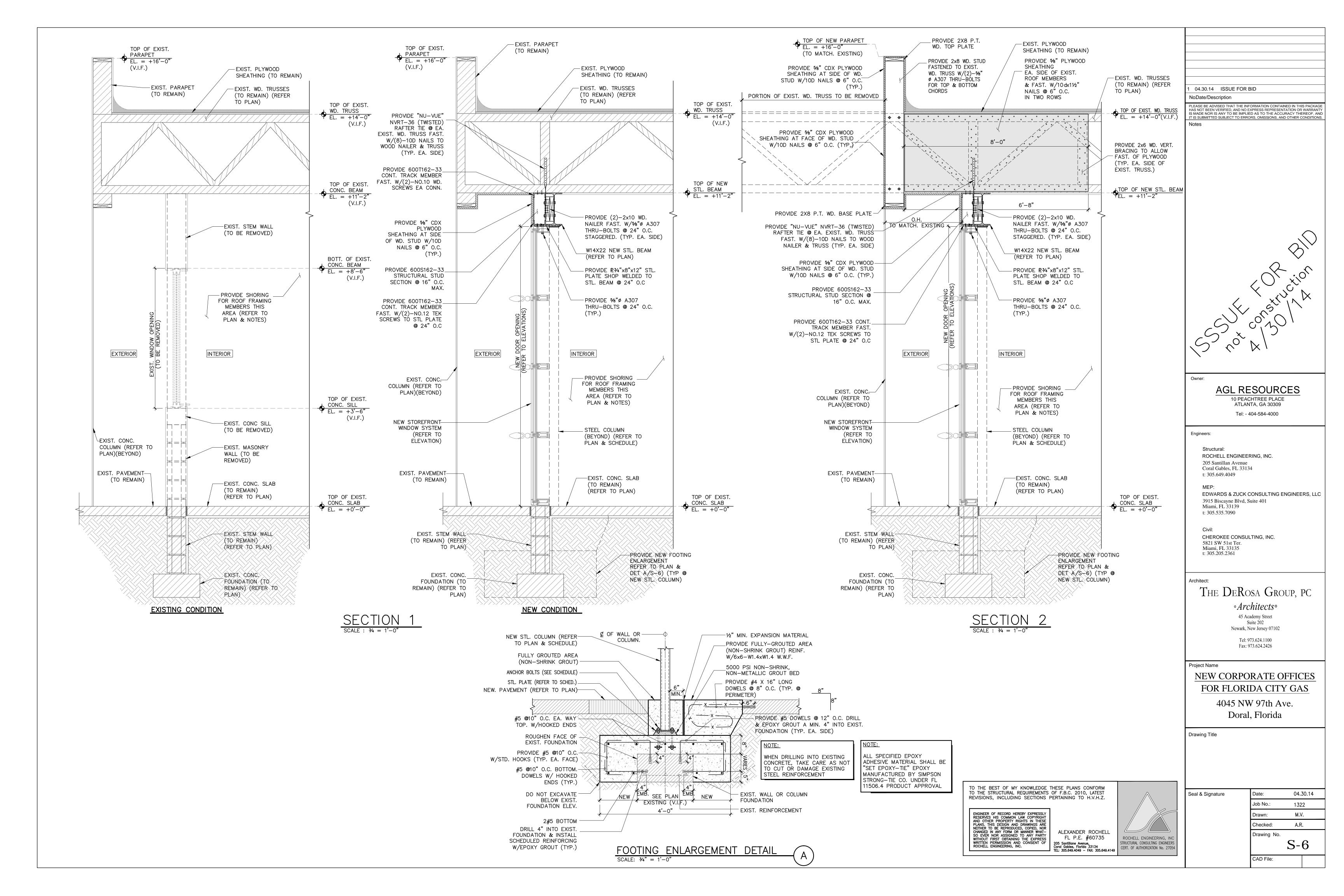
Drawn: M.V.

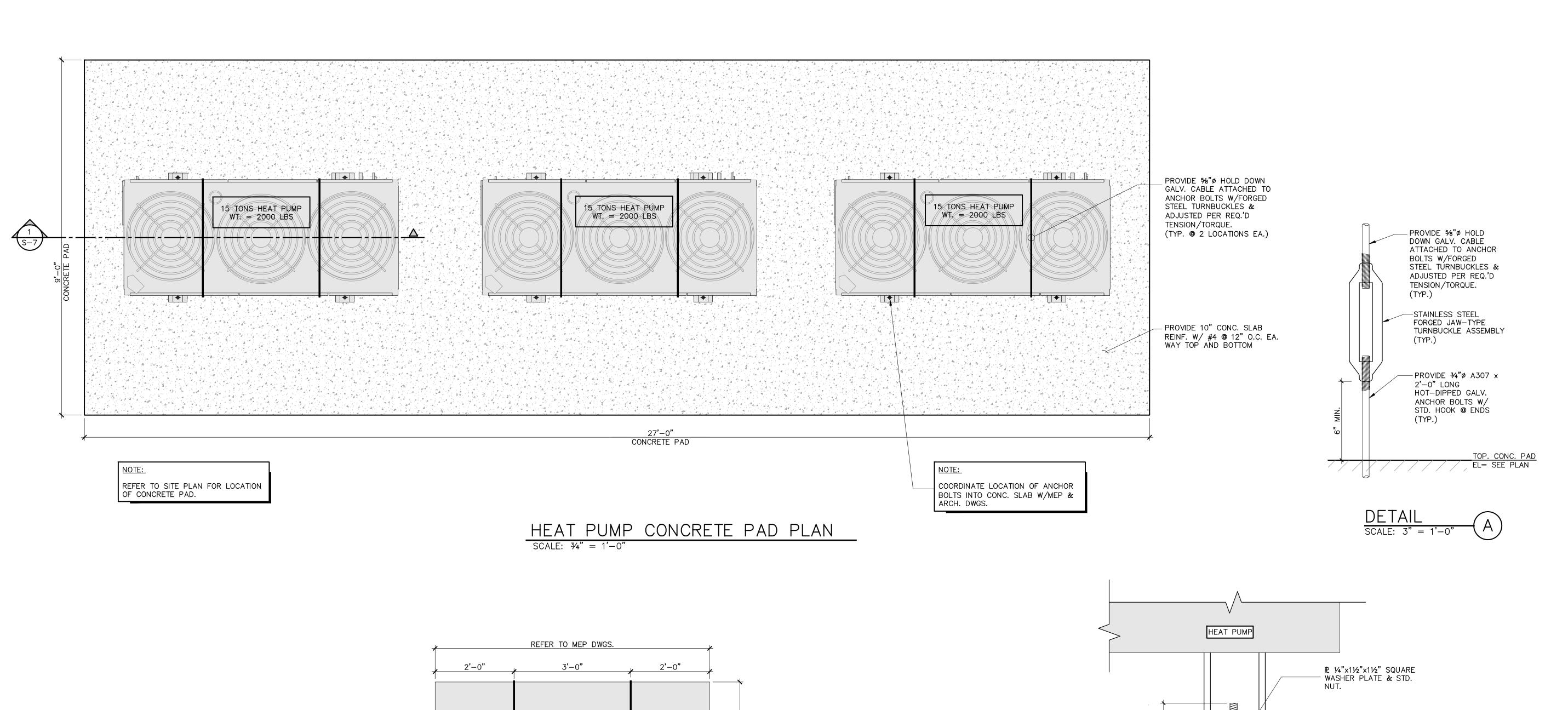
Checked: A.R.

Drawing No.

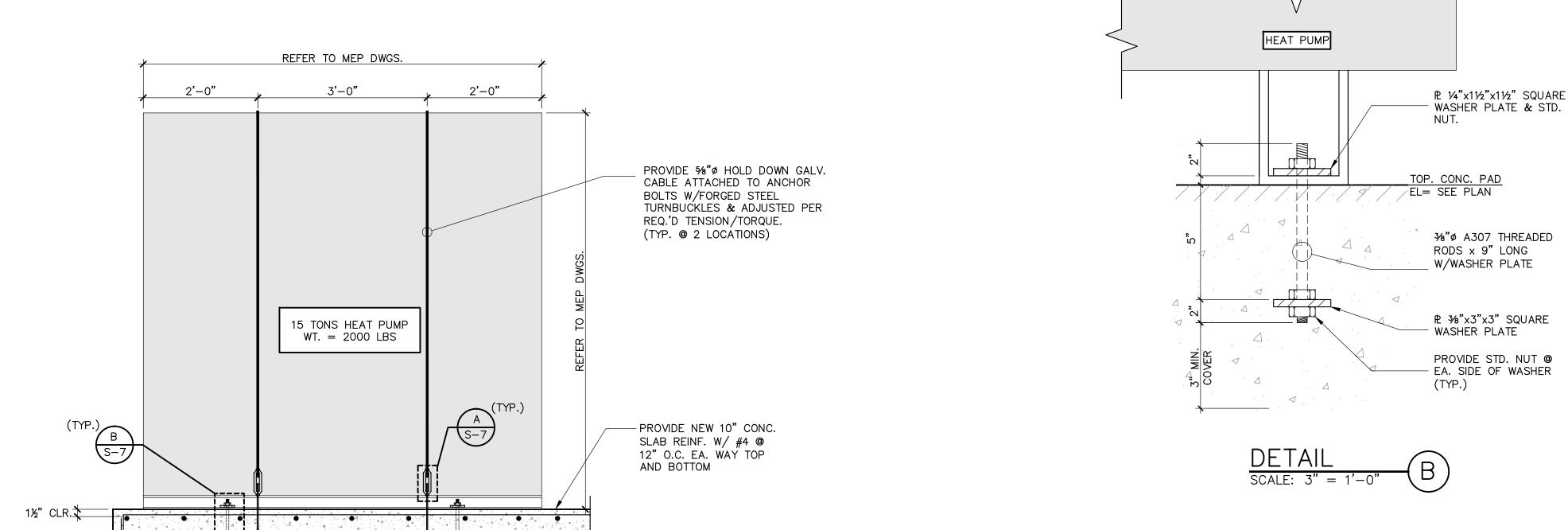
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CAD File:





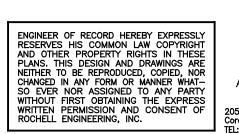
PROVIDE #4 @12" O.C. EA, WAY TOP & BOTTOM.



PROVIDE COMPACTED LAYER OF SOIL BELOW

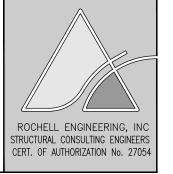
CONC. SLAB

TO THE BEST OF MY KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2010, LATEST REVISIONS, INCLUDING SECTIONS PERTAINING TO H.V.H.Z.



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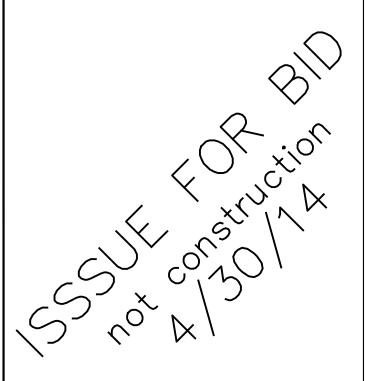


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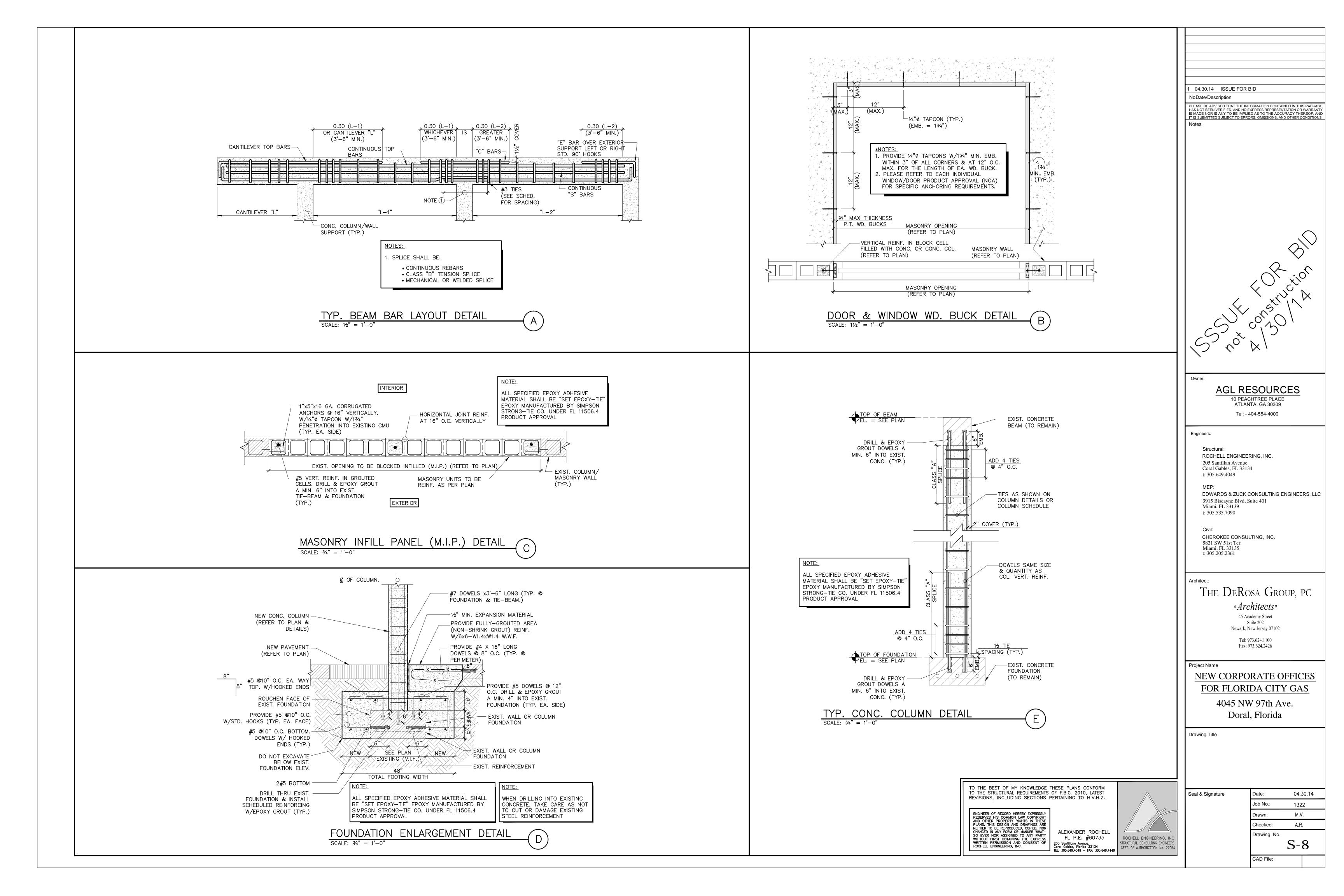
NEW CORPORATE OFFICES
FOR FLORIDA CITY GAS

4045 NW 97th Ave. Doral, Florida

Drawing Title

Project Name

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STRUCTURAL NOTES

1. GENERAL:

- A. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL GRADES, DIMENSIONS AND CONDITIONS AT THE JOB SITE PRIOR TO COMMENCING WORK. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY IN WRITTING ANY ERRORS, INCONSISTENCIES, OR OMISSIONS ON THE DRAWINGS TO THE ENGINEER FOR CLARIFICATION, PRIOR TO FABRICATION & INSTALLATION OF ANY STRUCTURAL MEMBERS.
- B. THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLY WITH THE REQUIREMENTS OF THE 2010 FLORIDA BUILDING CODE AND ALL LOCAL, STATE AND FEDERAL LAWS.
- C. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT LIMITED TO: BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. INSPECTION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.
- D. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR UPDATING HIS CONSTRUCTION DOCUMENTS WITH ANY REVISED DRAWINGS AND SPECIFICATIONS, OR CLARIFICATION SKETCHES ISSUED DURING THE COURSE OF CONSTRUCTION.
- E. THE CONTRACTOR SHALL ADEQUATELY PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC, AND BE RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLECT.
- F. NO STRUCTURAL MEMBER SHALL BE CUT. NOTCHED OR OTHERWISE REDUCED IN SIZE OR STRENGTH WITHOUT PRIOR APPROVAL IN WRITING FROM THE STRUCTURAL ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS INCURRED.
- G. CONTRACTOR SHALL COORDINATE STRUCTURAL AND OTHER DRAWINGS WHICH ARE PART OF THE CONTRACT DOCUMENTS FOR ANCHORED, EMBEDDED OR SUPPORTED ITEMS WHICH MAY AFFECT THE STRUCTURAL DRAWINGS.
- H. THESE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTLY DIAGRAMMATIC. THESE DRAWINGS ARE NOT INTENDED TO BE SCALED OR TO SERVE AS SHOP DRAWINGS OR PORTIONS THEREOF
- I. ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSTRUED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL IS SHOWN.
- J. DEFICIENT WORK SHALL BE REPLACED OR REPAIRED, AS DETERMINED BY THE ENGINEER, AT NO COST TO THE OWNER, INCLUDING ENGINEERING COSTS INCURRED.
- K. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL SAFETY PRECAUTIONS AND REGULATIONS DURING THE DURATION OF THE PROJECT WORK. THE STRUCTURAL ENGINEER WILL NOT ADVISE ON NOR ISSUE DIRECTION AS TO SAFETY PRECAUTIONS.
- L. ALL STRUCTURAL ELEMENTS OF THE PROJECT HAVE BEEN DESIGNED BY THE STRUCTURAL ENGINEER TO RESIST THE CODE-REQUIRED VERTICAL AND LATERAL FORGES THAT COULD OCCUR IN THE FINAL COMPLETED STRUCTURE ONLY. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ALL REQUIRED BRACING DURING CONSTRUCTION TO MAINTAIN THE STABILITY & SAFETY OF ALL STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PROCESS UNTIL THE LATERAL-LOAD RESISTING OR STABILITY-PROVIDING SYSTEM IS COMPLETELY INSTALLED AND THE STRUCTURE IS COMPLETELY TIED TOGETHER.
- M. CONSTRUCTION MATERIALS SHALL BE SPREAD OUT WHEN PLACED ON FLOOR OR ROOF. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ACHIEVED DESIGN STRENGTH.
- N. THESE NOTES SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS ISSUED BY THE ARCHITECT, DISCREPANCIES SHALL BE BROUGHT TO ATTENTION TO THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK.
- O. ANY MATERIALS OF PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THOSE SPECIFIED IN THE STRUCTURAL PLANS WILL BE REVIEWED AND APPROVED ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:
- 1. A COST SAVINGS TO THE OWNER IS DOCUMENTED & SUBMITTED WITH THE REQUEST. 2. THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE FLORIDA BUILDING CODE AND THE PRODUCT APPROVAL REPORT IS SUBMITTED WITH THE REQUEST
- SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.
- P. WHEN PERFORMING WORK BELOW GRADE, CARE SHALL BE TAKEN TO AVOID DAMAGING ANY EXISTING UTILITIES. ALL UNKNOWN UTILITIES DISCOVERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPORTED TO ALL AFFECTED PARTIES, INCLUDING THE ARCHITECT/ENGINEER.
- Q. THE CONTRACTOR SHALL USE EXTREME CAUTION IN THE DEMOLITION OF EXISTING STRUCTURES. SUCH DEMOLITION SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE STRUCTURAL INTEGRITY OF ALL EXISTING STRUCTURES TO REMAIN. PROVIDE TEMPORARY SHORING WHERE REQUIRED.
- R. THE CONTACTOR SHALL VISIT THE SITE AND BECOME FULLY AWARE OF THE EXISTING CONDITIONS & EXTENT OF WORK REQUIRED TO COMPLETE THE PROJECT PRIOR TO THE START
- S. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY WORK PERMITS AND APPROVALS REQUIRED BY THE LOCAL AGENCY HAVING JURISDICTION TO PERFORM THE WORK

2. CONCRETE:

- A. CONCRETE DESIGN AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 318-08) AND "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301), PRODUCTION OF CONCRETE, DELIVERY, PLACING AND CURING TO BE IN ACCORDANCE WITH "HOT WEATHER CONCRETING" (ACI 305).
- B. ALL CONCRETE SHALL BE NORMAL WEIGHT CONCRETE (145 PCF) & ACHIEVE A 28-DAY COMPRESSIVE STRENGTH (F'c) OF 3000 PSI, THE DESIGN MIX SHALL HAVE A MAXIMUM WATER-CEMENT RATIO OF 0.50 BY WEIGHT. & A MAXIMUM OF 5 BAGS OF CEMENT IN EA. CUBIC YARD OF CONCRETE. SUBMIT PROPOSED MIX DESIGN FOR REVIEW PRIOR TO FIELD POURING. MIX SHALL BE IDENTIFIED BY MIX NUMBER OR OTHER POSITIVE IDENTIFICATION.
- C. ALL CEMENT SHALL CONFORM TO ASTM C150, TYPE 1. MAXIMUM AGGREGATE SIZE SHALL BE 11/2" FOR FOOTINGS & 3/4" FOR WALLS, BEAM & SLABS CONFORMING TO ASTM C33.
- D. FOR ALL CONCRETE TO BE PLACED IN SLABS (INCLUDING SLABS ON GRADE) AND WALL PANELS, THE SLUMP SHALL NOT EXCEED 4" (±1"). NO WAIVERS OF THIS REQUIREMENT SHALL BE CONSIDERED. SLUMP FOR OTHER CONCRETE SHALL NOT EXCEED 5".
- E. PLACING OF CONCRETE IN ALL REINFORCED COLUMNS AND WALLS SHALL BE IN EQUAL LIFTS NOT EXCEEDING 7'-6" IN HEIGHT. ALL DOWELS FOR COLUMNS AND WALLS SHALL BE SECURED IN POSITION PRIOR TO CONCRETING.
- F. ALL CONCRETE STRUCTURAL COMPONENTS SHALL HAVE ITS STRENGTH TESTED IN ACCORDANCE WITH ASTM STANDARDS & ACI 318-08. MINIMUM FOUR TEST CYLINDERS MUST BE TAKEN EVERY 50 CUBIC YARDS OR LESS OF CONCRETE PRIOR TO POURING. TESTS SHALL BE MADE FOR 7 DAYS, TWO AT 28 DAYS & ONE HELD IN RESERVE. CONTRACTOR SHALL PROVIDE THE STRUCTURAL ENGINEER'S OFFICE COPIES OF THE CONCRETE TEST RESULTS FOR REVIEW, AS WELL AS COPIES OF THE CONCRETE MIX DESIGN TO BE APPROVED PRIOR TO USE.
- G. MINIMUM CONCRETE COVER TO REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ACI 318-08 AND SHALL BE AS FOLLOWS:

ELEMENT:	BOTTOM:	TOP:	SIDES:
FOUNDATION:	· 3"·	· 2"·	· 2"
BEAMS. ·	· 11⁄2"·	1½"·	· 1½"
COLUMNS/WALLS ·	· — ·	·11⁄2 " ·	· 11⁄2"
SLAB ON GRADE	· 2"·	· 1" ·	· 1"
INTERIOR STRUCT. SLAB	· 3/4" ·	· 3⁄4"	· 1"
EXTERIOR STRUCT. SLAB	·1½"·	·1½"·	· 1"

H. SLAB OPENING SHALL BE MADE BY BLOCKING OUT PRIOR TO PLACING CONCRETE OR BY CORE DRILLING, NO CHIPPING OF ANY TYPE WILL BE PERMITTED. THE LOCATION OF ALL OPENINGS SHALL BE COORDINATED WITH THE PLUMBING, ELECTRICAL & MECHANICAL PLANS.

- PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT. NOTIFY THE STRUCTURAL ENGINEER IN ADVANCE OF CONDITIONS NOT SHOWN ON THE DRAWINGS.
- J. CONCRETE ON EXPOSED BALCONIES, SLABS, BEAMS AND STAIRS SHALL HAVE THE TOP SURFACE COATED WITH "ALKYL—ALKYOXY SILANE SEALER" OR ENGINEER—APPROVED EQUAL.
- K. THE CONTRACTOR SHALL EVACUATE ALL WATER FROM WITHIN FORMWORK BEFORE PLACEMENT OF ANY CONCRETE. AFTER DEWATERING AND BEFORE PLACING CONCRETE, RINSE THE REINFORCING STEEL CLEAN AND FREE OF ALL DELETIRIOUS MATERIAL.
- THE MAXIMUM TIME ALLOWED FROM THE TIME THE MIXING WATER IS ADDED UNTIL IT IS DEPOSITED IN ITS FINAL POSITION SHALL NOT EXCEED 11/2 HOURS. IF FOR ANY REASON THERE IS A LONGER DELAY, THE CONCRETE MUST BE DISCARDED.

3. MASONRY:

- A. ALL MASONRY CONSTRUCTION TO BE IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND SPECIFICATIONS FOR MASONRY STRUCTURES AND COMMENTARIES" (ACI 530/530.1-08), AND THE 2010 EDITION OF THE FLORIDA BUILDING CODE. ALL MASONRY WALLS TO BE CONSTRUCTED OF UNITS CONFORMING TO ASTM C-90-03 AND REINFORCED WITH #9 GAGE HORIZONTAL REINFORCING LOCATED AT 16" O.C., LADDER TYPE. ALL MASONRY TO BE LAID IN TYPE "M" MORTAR (2500 PSI) WITH FULL HEAD AND BED JOINTS.
- B. BLOCK CELLS AT WALL ENDS, CORNERS, INTERSECTIONS AND ADJACENT TO ALL OPENINGS SHALL BE FILLED WITH GROUT AND REINFORCED WITH MINIMUM ONE #5 VERTICAL REINFORCING BAR. DOWELS SHALL BE USED TO PROVIDE CONTINUITY INTO THE STRUCTURE.
- MASONRY NET AREA COMPRESSIVE STRENGTH (F'm) SHALL BE 1500 PSI AND THE NET AREA COMPRESSIVE STRENGTH OF THE MASONRY UNITS SHALL BE 1950 PSI, PER ACI 530/530.1-08.
- ALL REINFORCED MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE PROVISIONS OF CONCRETE REINFORCEMENT, CAST-IN-PLACE CONCRETE AND CONCRETE MASONRY. VERTICAL REINFORCING SHALL ANCHOR INTO SUPPORTING CONCRETE MEMBERS A CLASS "C" LAP LENGTH PLUS 3" OR FULL DEPTH, PLUS A STANDARD HOOK. LAPS IN REINFORCED MASONRY SHALL BE 48 BAR DIAMETERS. ALL VERTICAL CELLS WITH REINFORCING SHALL BE FILLED WITH COARSE GROUT CONSISTING OF 3000 PSI CONCRETE WITH #8 COARSE AGGREGATE. WHERE HEIGHT OF MASONRY WALL EXCEEDS 4'-0", USE HIGH-LIFT GROUTING TECHNIQUE WHICH REQUIRES A CLEAN-OUT OPENING AT THE BOTTOM OF ALL CELLS AND PLACING THE GROUT IN MAXIMUM 4'-O" LIFTS WITH A 30 TO 60 MINUTE DELAY BETWEEN LIFTS. GROUT SHALL CONFORM TO ASTM C476. SLUMP SHALL BE BETWEEN 8" AND 10".
- E. MORTAR SHALL COMPLY WITH ASTM C-270-07, TYPE "M", WITH A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI.
- F. HORIZONTAL REINFORCEMENT SHALL BE DUR-O-WALL STANDARD (9 GA.), ASTM CLASS B-2, HOT DIPPED GALVANIZED OR APPROVED EQUAL.
- G. VERTICAL REINFORCEMENT SHALL CONFORM TO ASTM A615/A615M-04, GRADE 60. FILL ALL REINFORCED CELLS WITH 3000 PSI CONCRETE OR GROUT. SEE PLAN FOR SIZE AND SPACING OF VERTICAL REINFORCING.
- H. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF MASONRY WALLS DURING CONSTRUCTION. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO PREVENT INJURY TO PERSONS RESULTING FROM MASONRY WALL FAILURE.

4. STRUCTURAL STEEL:

- A. ALL STRUCTURAL STEEL SHALL CONFORM TO THE THIRTEENTH EDITION OF THE ALLOWABLE STRESS DESIGN (ASD) "MANUAL OF STEEL CONSTRUCTION" OF THE AISC, PUBLISHED IN 2005.
- B. UNLESS OTHERWISE NOTED, ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING ASTM SPECIFICATIONS:

<u>MEMBER</u>	ASTM	MIN. STRENGTH
STRUCTURAL TUBING (HSS) STEEL PIPE W SHAPES OTHER ROLLED PLATES/SHAPES	A500 (GRADE B) A53 (GRADE B) A992 A36	· 46 KSI · 35 KSI · 50 KSI · 36 KSI
CONNECTION BOLTS ANCHOR BOLTS	· A325· · F1554·	· 92 KSI · 58 KSI

- HEADED STUDS SHALL BE NELSON GRANULAR FLUX-FILLED HEADED ANCHOR STUDS AND SHALL BE MADE FROM C-1015 COLD ROLLED STEEL AND SHALL CONFORM TO ASTM SPECIFICATION A-108, GRADES 1015-1020 WITH MINIMUM TENSILE STRENGTH OF 60 KSI.
- UNLESS OTHERWISE NOTED. ALL CONNECTIONS SHALL BE SHEAR TYPE CONNECTIONS AND DESIGNED BY THE FABRICATOR FOR THE FACTORED SHEAR FORCES INDICATED ON PLAN IN ACCORDANCE WITH THE ASTM SPECIFICATIONS FOR ALLOWABLE DESIGN. ALL BOLTS SHALL BE SHEAR/BEARING TYPE BOLTS AND BE "SNUG-TIGHT".
- E. ALL WELDING SHALL BE IN ACCORDANCE WITH AWS D1.1 USING E70-XX ELECTRODES. (SMAW) UNIESS OTHERWISE NOTED, PROVIDE CONTINUOUS MINIMUM SIZED FILLET WELDS AS PER AISC REQUIREMENTS. ALL FILLER MATERIAL SHALL HAVE A MINIMUM YIELD STRENGTH OF 58 KSI. ALL WELDING TO BE PERFORMED BY CERTIFIED WELDERS AS REQUIRED BY AWS & 2010 FBC. SLAG SHALL BE REMOVED FROM ALL WELDS FOR INSPECTION.
- F. HOLES IN STEEL SHALL BE DRILLED OR PUNCHED. ALL SLOTTED HOLES SHALL BE PROVIDED WITH SMOOTH EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NOT PERMITTED.
- ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO VIEW SHALL BE SHOP PAINTED WITH ONE COAT OF SSPC 15-68, RED OR GRAY OXIDE-TYPE PAINT.
- H. COLUMNS, ANCHOR BOLTS, BASE PLATES, ETC. HAVE BEEN DESIGNED FOR THE FINAL COMPLETED CONDITION AND HAVE NOT BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING STEEL ERECTION AND CONSTRUCTION. ANY INVESTIGATION OF THE COLUMNS, ANCHOR BOLTS, BASE PLATES, ETC. FOR ADEQUACY DURING THE STEEL ERECTION AND CONSTRUCTION PROCESS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- STEEL FABRICATORS SHALL BE AN AISC CERTIFIED SHOP FOR CATEGORY I STEEL STRUCTURES AND MAINTAIN DETAILED QUALITY CONTROL PROCEDURES AS REQUIRED TO SATISFY THE SPECIAL INSPECTION REQUIREMENTS OF THE 2010 FBC.
- ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO WEATHER, SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153-05 AND A123/A123M-04. PROVIDE GALVANIZED BOLTS FOR STEEL PERMANENTLY EXPOSED TO WEATHER. GALVANIZING SHALL BE DONE BY BOLT MANUFACTURER.
- FIELD CUTTING OF STRUCTURAL STEEL IS NOT PERMITTED EXCEPT WHERE ACCEPTED BY THE ENGINEER OF RECORD IN WRITING. CUTTING OR ENLARGEMENT OF BOLT HOLES WITH TORCHES IS STRICTLY PROHIBITED.

CONTRACTOR TO OBTAIN ALL FIELD MEASUREMENTS REQUIRED FOR PROPER FABRICATION

- AND INSTALLATION OF WORK PRIOR TO DETAILING. PRECISE MEASUREMENTS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- M. FOR FIREPROOFING REQUIREMENTS AND ASSEMBLIES REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
- N. A REGISTERED PROFESSIONAL ENGINEER SHALL INSPECT THE WELDING AND BOLTING OF STRUCTURAL STEEL FRAMINGS AS PER SECTION R4408.5 OF THE 2010 FLORIDA BUILDING
- O. GROUT FOR COLUMN BASE PLATES AND PRESET BEARING PLATES SHALL BE NON-SHRINK, NON-METALLIC GROUT WITH A COMPRESSIVE STRENGTH OF AT LEAST 5,000 PSI IN 28 DAYS.

5. WOOD/TIMBER:

- A. ALL STRUCTURAL WOOD PRODUCTS USED SHALL CONFORM TO THE NDS, LATEST EDITION AND THE 2010 EDITION OF THE FBC.
- B. ALL WOOD FRAMING MEMBERS SHALL BE NO. 2 SOUTHERN PINE OR BETTER WITH A MINIMUM ALLOWABLE BENDING STRESS OF 1,250 PSI, MODULUS OF ELASTICITY OF 1,600,000 PSI, MINIMUM ALLOWABLE SHEAR STRESS OF 175 PSI AND 19% MOISTURE CONTENT IN ACCORDANCE WITH NDS AND AITC STANDARDS.
- C. ALL WOOD MEMBER SIZES SHOWN ON THESE PLANS REFER TO STANDARD NOMINAL.
- D. ALL MECHANICAL METAL CONNECTORS USED IN THE CONNECTIONS OF WOOD MEMBERS SHALL HAVE A PRODUCT APPROVAL FROM MIAMI-DADE COUNTY OR THE 2010 FBC. ALL FASTENERS SHALL BE ADHERED TO AS STATED AND SHOWN ON THESE PLANS AND THE MIAMI-DADE NOTICE OF ACCEPTANCE (NOA) OR FBC APPROVAL FOR ALL CONNECTORS.
- E. PRESSURE TREATMENT WHERE REQUIRED HEREIN SHALL CONFORM TO AWPI SPECIFICATIONS. A TREATMENT WITH A MINIMUM RETENTION IN POUNDS PER CUBIC FOOT OF 0.40 FOR TIMBER ABOVE GROUND AND WATER 0.60 FOR TIMBER IN DIRECT CONTACT WITH THE GROUND. ALL PRESSURE TREATED WOOD SHALL BE SOUTHERN PINE, MEETING NATIONAL FOREST PRODUCTS ASSOCIATION GROUP 3 BOLT DESIGN VALUES.
- F. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PREASSURE TREATED (P.T.).

6. REINFORCING STEEL:

- A. TO BE NEW BILLET STEEL CONFORMING TO THE LATEST ASTM A615 GRADE 60 SPECIFICATIONS, FABRICATED IN ACCORDANCE WITH MANUAL OF STANDARD PRACTICE OF THE CRSI & PLACED IN ACCORDANCE WITH ACI 315 & ACI MANUAL OF STANDARD PRACTICE.
- B. COLUMN REINFORCEMENT: DOWELS TO BE SAME SIZE AND NUMBER AS VERTICALS ABOVE. LAP 36 BAR DIAMETER OR MINIMUM OF 18" U.O.N. PROVIDE STANDARD HOOKS FOR ALL VERTICAL REINFORCEMENT AT NON-CONTINUOUS COLUMNS.
- C. ALL REINFORCING STEEL SHALL BE TIED DOWN AND INDEPENDENTLY SUPPORTED ON CHAIRS AND SUPPORT BARS. REINFORCEMENT SHALL BE FREE OF MUD OIL OR OTHER NONMETALLIC COATINGS THAT ADVERSELY AFFECT BONDING CAPACITY.
- D. ALL DOWELS FOR COLUMNS AND WALLS TO BE SECURED IN POSITION PRIOR TO CONCRETING. DRILLING OR PUSHING THE DOWELS INTO POSITION IN WET CONCRETE IS NOT PERMITTED.
- WELDED WIRE FABRIC (W.W.F.) SHALL CONFORM TO ASTM A-185. MINIMUM LAP OF W.W.F. SHALL BE 6 IN. OR ONE FULL MESH, WHICHEVER IS GREATER.
- F. ALL REINFORCING BARS MARKED "CONTINUOUS" SHALL BE LAPPED 36 DIA. AT SPLICES AND CORNERS UNLESS OTHERWISE NOTED. LAP CONTINUOUS TOP BARS AT CENTER BETWEEN SUPPORTS AS REQUIRED. TERMINATE CONTINUOUS BARS AT NON-CONTINUOUS ENDS WITH STANDARD HOOKS. U.O.N.
- G. ALL WALLS AND COLUMNS SHALL BE DOWELED INTO FOOTINGS, WALLS, BEAMS, OR SLABS WITH BARS OF THE SAME SIZE AND SPACING AS THE BARS ABOVE. USE A (30) BAR DIAMETER LAP EXCEPT WHERE SPECIFICALLY INDICATED.
- H. FOR EXTERIOR SLABS SUCH AS BALCONIES, THAT ARE EXPOSED TO WEATHER, TOP REINFORCING SHALL BE EPOXY COATED IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR EPOXY COATED REINFORCING STEEL BARS, ASTM A775. MINIMUM COVER FOR THESE BARS SHALL BE 11/2". (CONCRETE WATER CEMENT RATIO SHALL NOT EXCEED 0.40 BY WEIGHT AND ALSO A SURFACE PENETRANT OF THE ALKYL-ALKYOXY SILANE CLASSIFICATION OR APPROVED EQUAL SHALL BE APPLIED AFTER PROPER SURFACE PREPARATION AT THE ABOVE MENTIONED AREAS). AS AN ALTERNATE TO EPOXY-COATING THE GENERAL CONTRACTOR MAY SUBMIT FOR APPROVAL BY THE ARCHITECT/ENGINEER A CONCRETE MIX DESIGN CONTAINING AN APPROVED CORROSION INHIBITOR ADMIXTURE IN CONFORMANCE TO ASTM C494 TYPE C.
- ALL REINFORCEMENT SHALL BE BENT COLD, UNLESS OTHERWISE PERMITTED BY THE PROFESSIONAL ENGINEER IN WRITING. ALL TIES SHALL HAVE A 135 DEGREE HOOKS.
- J. ALL NEW REINFORCING STEEL THAT WILL BE WELDED SHALL MEET THE REQUIREMENTS OF ASTM A706 GRADE 60 DEFORMED BARS.

7. FOUNDATION:

- A. FOUNDATIONS ARE DESIGNED TO BEAR ON LIMEROCK FILL WITH AN ALLOWABLE BEARING CAPACITY OF 2000 PSF IN ACCORDANCE WITH THE PROVISIONS OF THE 2010 FLORIDA BUILDING CODE.
- B. SHOULD ANY DISCREPANCIES BE FOUND WITH THE EXISTING SOIL CONDITIONS, DURING SITE PREPARATION AND/OR FOUNDATION EXCAVATIONS, ALL WORK SHALL IMMEDIATELY STOP AND THE ARCHITECT AND ENGINEER OF RECORDS SHALL BE NOTIFIED OF SUCH DISCREPANCIES BEFORE ANY FURTHER WORK IS TO CONTINUE.
- C. UPON EXCAVATION, BACKFILLING AND COMPACTION, THE SOIL SHALL BE TREATED FOR SUBTERRANEAN TERMITE PREVENTION AS REQUIRED BY THE FBC, SECTION 1816.
- CONTRACTOR SHALL PROVIDE FOR DEWATERING OF EXCAVATION FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE.
- ALL EXCAVATIONS SHALL BE PROPERLY BRACED AND/OR SHORED TO COMPLY WITH FLORIDA STATUTE SECTION 553.60 AND 2010 FBC REQUIREMENTS.
- CONTRACTOR SHALL EXCAVATE FOOTINGS TO THE REQUIRED DEPTH, INSPECT THE BOTTOM OF THE EXCAVATIONS FOR SOIL SUITABILITY AND STABILITY. IF UNSUITABLE MATERIAL SUCH AS ORGANIC SOIL OR SOFT CLAYS IS ENCOUNTERED IT MUST BE REMOVED AND REPLACED WITH SUITABLE STRUCTURAL FILL OR GRADED AGGREGATES AND RE-COMPACTED.
- G. ALL STRUCTURAL FILL SHOULD BE PLACED IN 8 TO 12 INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% OF THE MATERIALS MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D1557) AND BE FREE OF ORGANICS, ROOTS OR OTHER DELETERIOUS MATERIALS.
- H. THE CONCRETE FOR EACH ISOLATED FOOTING SHALL BE PLACED IN ONE CONTINUOUS POUR. THE CONCRETE FOR WALL FOOTINGS SHALL BE PLACED IN ONE CONTINUOUS POUR OR PROVIDE CONSTRUCTION JOINT REINFORCEMENT AT DIFFERENT AND/OR INTERRUPTED POURS. PER DETAILS SHOWN ON THESE DRAWINGS.

8. STRUCTURAL DESIGN CRITERIA:

- A. THIS STRUCTURE HAS BEEN DESIGNED TO COMPLY WITH THE LOAD REQUIREMENTS OF THE FLORIDA BUILDING CODE (2010 EDITION) AND OTHER REFERENCED CODES & SPECIFICATIONS.
- B. THE STRUCTURE IS DESIGNED FOR THE FOLLOWING LOADING:

		SUPERIMPOSED DEAD LOADS	<u>LIVE</u> LOADS
ROOF ·		· 25 PSF ·	· 30 PSF
SECOND FLR.		· 35 PSF ·	· 50 PSF
GROUND FLR.		· 35 PSF ·	· 50 PSF
STAIRS ·	•	· 15 PSF ·	· 80 PSF

C. WIND LOADS ARE BASED ON ASCE 7-10 & 2010 FBC REQUIREMENTS, 3 SECOND SUSTAINED WIND GUSTS OF 175 MPH AT HURRICANE OCEAN LINE, EXPOSURE "C" & IMPORTANCE FACTOR OF 1.0, INTERNAL PRESSURE COEFFICIENTS (GCPI)=±0.18, WIND DIRECTIONALITY FACTOR, Kd = 0.85 & CATEGORY II BLDG. CLASSIFICATION.

THIS STRUCTURE HAS BEEN DESIGNED AS "ENCLOSED" & REQUIRES IMPACT RESISTANT GLASS OR SHUTTERS TO COMPLY WITH FBC SECTIONS 2410 & 2413

9. SHOP DRAWINGS:

- A. SUBMIT SHOP DRAWINGS FOR A/E REVIEW & APPROVAL BEFORE STARTING FABRICATION. ALL SHOP DRAWINGS SHALL BE APPROVED BY BUILDING DEPARTMENT PRIOR TO ANY INSTALLATION OR FABRICATION OF SUCH ELEMENTS.
- B. NO SHOP DRAWINGS SHALL SUBMITTED FOR A/E REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE CONTRACTOR AND STAMPED WITH THE CONTRACTOR'S APPROVAL SEAL. ENGINEER ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS.
- C. ALL CHANGES AND ADDITIONS MADE ON RE-SUBMITTALS MUST BE CLEARLY FLAGGED AND NOTED. SHOP DRAWING REVIEW IS LIMITED TO A MAXIMUM OF 2 REVIEWS, THEREAFTER; ADD'L FEES SHALL BE PAID BY OWNER/CONTRACTOR TO ENGINEER FOR ADD'L REVIEWS.
- D. THE REVIEW OF ALL STRUCTURAL SUBMITTALS BY THE STRUCTURAL ENGINEER OF RECORD SHALL BE TO INSURE THAT HIS INTENT HAS BEEN UNDERSTOOD AND THAT THE SPECIFIED CRITERIA HAS BEEN USED. A COPY OF ALL SHOP DRAWING SUBMITTALS WILL BE RETAINED
- E. THE CONTRACTOR SHALL SUPPLY THE ENGINEER OF RECORD A MINIMUM OF THREE (3) COPIES OF SHOP DRAWINGS AND CALCULATIONS.
- F. SHOP DRAWINGS SUBMITTALS TO STRUCTURAL ENGINEER SHALL INCLUDE. BUT NOT LIMITED TO THE FOLLOWING:
 - CONCRETE TEST REPORT FOR CAST-IN-PLACE CONCRETE.
 - MASONRY TEST REPORT AND CUT-SHEETS FROM SUPPLIER.
 - REINFORCING STEEL SHOP DRAWINGS.
 - PRE-FABRICATED ROOF TRUSSES SHOP DRAWINGS AND CALCULATIONS.
 - STRUCTURAL STEEL SHOP DRAWINGS.
 - PRE-CAST CONCRETE JOISTS SHOP DRAWINGS AND CALCULATIONS.
 - BRACING AND SHORING SHOP DRAWINGS AND CALCULATIONS.
 - RAILINGS/SAFEGUARDS SHOP DRAWINGS AND CALCULATIONS.

10. CONC. SLAB-ON-GRADE

- A. SHALL BE PLACED ON CLEAN, SAND OR ROCK, FREE OF DEBRIS OR OTHER DELETERIOUS MATERIALS, NON ORGANIC, GRANULAR SOIL, COMPACTED TO 95% MODIFIED PROCTOR DENSITY AT OPTIMUM MOISTURE CONTENT, IN LIFTS, NOT EXCEEDING 12" IN DEPTH, AS PER ASTM D1557 REQUIREMENTS AND 2010 FBC SECTION R4404.4.
- B. THE MAXIMUM SIZE OF ROCK WITHIN 12" INCHES BELOW THE FLOOR SLAB IN COMPACTED FILL SHALL BE 3 INCHES IN DIAMETER.
- C. CONCRETE SLAB SHALL BE PLACED ON VAPOR BARRIER/ RETARDER CONFORMING TO ASTM E-96 & ACI 302.1 REQUIREMENTS. VAPOR BARRIER SHALL BE CONTINUOUS FREE OF HOLES. ALL LAPS AND HOLES (IF ANY) IN THE MEMBRANE SHALL BE PROPERLY SEALED.
- D. FILL MATERIAL SHALL BE THOROUGHLY MOISTENED IMMEDIATELY BEFORE POURING CONCRETE.
- E. REINFORCING IN SLABS SHALL BE 6x6-W1.4xW1.4 W.W.F., U.O.N., CONFORMING TO ASTM A185 AND SHALL BE GALVANIZED AND SUPPORTED ON 2"x2"x2" CONC. BLOCKS AT A GRID OF $3'-0" \times 3'-0"$.
- F. ALL CONCRETE SLAB EDGES SHALL BE PLACED ON 1/2" MIN. EXPANSION MATERIAL AGAINST

TO THE BEST OF MY KNOWLEDGE THESE PLANS CONFORM TO THE STRUCTURAL REQUIREMENTS OF F.B.C. 2010, LATEST

REVISIONS. INCLUDING SECTIONS PERTAINING TO H.V.H.Z.

ALEXANDER ROCHELL

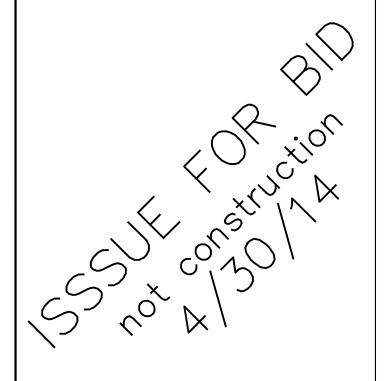
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