

STRUCTURAL NOTES

CONTRACTOR NOTE:

THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. O'DONNELL, NACCARATO, MIGNOGNA & JACKSON, INC. IS NOT RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY PRECAUTIONS AND PROGRAMS.

010 CODES AND STANDARDS

1. WIND LOADS AS PER:

- A. SECTION 1609 OF THE FLORIDA BUILDING CODE 7TH EDITION (2020) WITH AN ULTIMATE WIND SPEED $V_{ULT} = 170$ MPH (NOMINAL WIND SPEED $V_{ASD} = 132$ MPH), FOR RISK CATEGORY II, EXPOSURE C AND INTERNAL PRESSURE COEFFICIENT ± 0.18 .
- B. THIS BUILDING IS DESIGNED AS AN ENCLOSED BUILDING.

2. DESIGN LOADS:

A. LIVE LOADS - COMMERCIAL:

- 1.1 ROOF 20 PSF
- B. ROOF SUPERIMPOSED DEAD LOADS:
- 2.1 MEP / MISC 5 PSF
- 2.2 CEILING 2 PSF
- 2.3 ROOFING 5 PSF

3. THE PROJECT WAS DESIGNED IN ACCORDANCE WITH THE:

- A. FLORIDA BUILDING CODE 7TH EDITION (2020).
- B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318 LATEST EDITION).
- C. MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (ACI 315 LATEST EDITION).
- D. MANUAL OF STANDARD PRACTICE FOR WELDING REINFORCING STEEL, INSERTS & CONNECTIONS IN REINFORCED CONCRETE CONSTRUCTION. AWS, D1.4 LATEST EDITION.
- E. SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS, (AMERICAN INSTITUTE OF STEEL CONSTRUCTION) AISC STEEL CONSTRUCTION MANUAL.
- F. SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301 LATEST EDITION.
- G. BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530, 530.1/ASCE 5, 6/TMS 402, 602 LATEST EDITIONS).

4. ARCHITECTURAL AND MECHANICAL DRAWINGS:

- A. THE STRUCTURAL DRAWINGS ARE PART OF THE CONTRACT DOCUMENTS AND DO NOT BY THEMSELVES PROVIDE ALL THE INFORMATION REQUIRED TO PROPERLY COMPLETE THE PROJECT STRUCTURE. THE GENERAL CONTRACTOR SHALL CONSULT THE ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL AND EVERY OTHER DRAWING CREATED TO CONSTRUCT THIS PROJECT AND COORDINATE THE INFORMATION CONTAINED IN THESE DRAWINGS WITH THE STRUCTURAL DRAWINGS TO PROPERLY CONSTRUCT THE PROJECT.
- B. REFER TO ARCHITECTURAL, MECHANICAL OR ELECTRICAL DRAWINGS FOR ADDITIONAL OPENINGS, DEPRESSIONS, FINISHES, INSERTS, BOLTS, SETTINGS, DRAINS, REGLETS, ETC.
- C. BEFORE ORDERING ANY MATERIALS OR DOING ANY WORK, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS TO PROPERLY SIZE OR FIT THE WORK. NO EXTRA CHARGE OR COMPENSATION WILL BE ALLOWED BY THE OWNER RESULTING FROM THE CONTRACTOR'S FAILURE TO COMPLY WITH THIS REQUIREMENT.
- D. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH ANY WORK.
- E. ALL STRUCTURES HAVE BEEN DESIGNED TO RESIST THE DESIGN LOADS LISTED ONLY AS COMPLETED STRUCTURES. THE GENERAL CONTRACTOR SHALL FULLY BRACE AND OTHERWISE PROTECT WORK IN PROGRESS UNTIL THE STRUCTURES ARE COMPLETED. THE GENERAL CONTRACTOR SHALL ALSO ENSURE THAT ITS OPERATIONS AND PROCEDURES PROVIDE NO LOADING GREATER THAN THE DESIGN LOADS LISTED ON ANY MEMBER.

5. SECTIONS AND DETAILS:

ALL DETAILS, SECTIONS AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE UNLESS OTHERWISE SHOWN.

6. MATERIALS AND ASSEMBLY TEST AS FOLLOWS:

- A. EXTERIOR WINDOWS, SLIDING AND PATIO GLASS DOORS GLASS BLOCK, AND ANY OTHER PRODUCT USED IN THE EXTERIOR OF THE BUILDING, SHALL BE TESTED BY AN APPROVED INDEPENDENT TESTING LABORATORY, AND SHALL BE LABELED WITH AN APPROVED LABEL IDENTIFYING THE MANUFACTURER, PERFORMANCE CHARACTERISTICS AND APPROVED PRODUCT CERTIFICATION AGENCY, TESTING LABORATORY, EVALUATION ENTITY OR FLORIDA STATE WIDE PRODUCT APPROVAL NUMBER TO INDICATE COMPLIANCE WITH THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:
- AMMADOMA/CSA 1011.5.2/A440 OR TAS202 (HVHZ SHALL COMPLY WITH TAS202 AND ASTM E1300 OR FBC SECTION 2404)
- B. EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED FOR STRUCTURAL INTEGRITY IN ACCORDANCE WITH ASTM E330 OR TAS202 (HVHZ SHALL COMPLY WITH TAS202) AT A LOAD OF 1.5 TIMES THE REQUIRED DESIGN PRESSURE LOAD. THE LOAD SHALL BE SUSTAINED FOR 10 SECONDS WITH NO PERMANENT DEFORMATION OF ANY MAIN FRAME OR PANEL MEMBER IN EXCESS OF 0.4 PERCENT OF ITS SPAN AFTER THE LOAD IS REMOVED. HVHZ SHALL COMPLY WITH TAS 202. AFTER EACH SPECIFIED LOADING, THERE SHALL BE NO GLASS BREAKAGE, PERMANENT DAMAGE TO FASTENERS, HARDWARE PARTS, OR ANY OTHER DAMAGE, WHICH CAUSES THE DOOR TO BE INOPERABLE.
- C. SECTIONAL GARAGE DOORS SHALL BE TESTED FOR DETERMINATION OF STRUCTURAL PERFORMANCE UNDER UNIFORM STATIC AIR PRESSURE DIFFERENCE IN ACCORDANCE WITH ANSI/DASMA 108, ASTM E330 PROCEDURE A OR TAS 202 (HVHZ SHALL COMPLY WITH TAS 202).
- D. CUSTOM (ONE OF A KIND) EXTERIOR DOOR ASSEMBLIES SHALL BE TESTED BY AN APPROVED TESTING LABORATORY OR BE ENGINEERED IN ACCORDANCE WITH ACCEPTED ENGINEERING PRACTICES.
- E. WINDOW AND DOOR ASSEMBLIES SHALL BE ANCHORED IN ACCORDANCE WITH THE PUBLISHED MANUFACTURER'S RECOMMENDATIONS TO ACHIEVE THE DESIGN PRESSURE SPECIFIED. SUBSTITUTE ANCHORING SYSTEM USED FOR SUBSTRATES NOT SPECIFIED BY THE FENESTRATION MANUFACTURER SHALL PROVIDE EQUAL OR GREATER ANCHORING PERFORMANCE AS DEMONSTRATED BY ACCEPTED ENGINEERING PRACTICE.
- F. EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FLORIDA BUILDING CODE 7TH EDITION (2020) BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS.

7. ALL FASTENERS DESIGNATED, AS STAINLESS STEEL SHALL CONFORM TO AISI 316 STAINLESS STEEL.

011 DELEGATED ENGINEERED PRODUCTS

1. THE GENERAL CONTRACTOR IS RESPONSIBLE TO COORDINATE THE PROPER SUBMISSION OF SPECIALTY ENGINEERED/DELEGATED DRAWINGS WHICH SHALL BE SIGNED AND SEALED BY AN ENGINEER REGISTERED IN THE STATE OF FLORIDA. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO ASSURE THAT THE DELEGATED ENGINEERED DRAWINGS ARE SUBMITTED IN A TIMELY MANNER SO AS TO ALLOW REVIEWS AND REMISSIONS AS REQUIRED. ALL ITEMS NOTED BELOW AND SIMILAR ITEMS SHALL BE SUPPLIED AND INCLUDED IN THE CONTRACTOR'S BID. ALL DELEGATED ENGINEERED PRODUCTS SHALL BE DESIGNED FOR THE APPROPRIATE GRAVITY LOADS AND WIND LOADS INCLUDING UPLIFT AND LATERAL LOADS. DELEGATED ENGINEERED PRODUCTS SHALL BE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
- A. LIGHT GAUGE METAL, INCLUDING BUT NOT LIMITED TO, SOFFITS, CLADDING, CEILING, ETC.
- B. MISCELLANEOUS METALS INCLUDING STEEL STAIRS, HANDRAILS AND SAFETY RAILS, MECHANICAL EQUIPMENT SUPPORTS, FRAMES THAT SUPPORT MACHINES, HANGERS, PIPES OR OTHER STRUCTURAL METAL USED FOR SUPPORT OF MECHANICAL SYSTEMS.
- C. TRELLIS, ARBORS, CHANDELIERS, CABINETS, ARTWORK SUPPORTS, VIDEO OR SOUND EQUIPMENT SUPPORT, METAL FRAMES, LADDERS, RIGGING, HANGING WALLS, RAILINGS, GLAZING FRAMES, CLADDING SUCH AS STONE, PRECAST CONCRETE, ALUMINUM, METAL PANELS, CABLE BARRIER SYSTEMS, ETC. OR ANY OTHER MISCELLANEOUS PRODUCT REQUIRED BY ANY OF THE CONSTRUCTION DOCUMENTS.
- D. IN ADDITION TO THE LOADS SHOWN IN THE DESIGN LOAD SCHEDULE, THE DELEGATED ENGINEER SHALL DESIGN FOR THE WEIGHT OF ALL MECHANICAL, PLUMBING AND ELECTRICAL EQUIPMENT AND FIXTURES, AS WELL AS CHANDELIER FIXTURES, BAR CABINETS, AND ARTWORK/MOBILES.

GENERAL CONTRACTOR TO INCLUDE IN THEIR BID THE COST OF THE ABOVE NOTED DELEGATED ENGINEERING.

012 PRE-ENGINEERED STRUCTURES AND METAL BUILDINGS

1. STRUCTURAL DELEGATED ENGINEERING DOCUMENTS SHALL IDENTIFY THE PROJECT AND LIST LATERAL AND UPLIFT LOADS FROM THE DESIGN DELEGATED ENGINEERING DOCUMENTS SHALL INCLUDE FABRICATION AND ERECTION DRAWINGS WHICH INDICATE IN DETAIL THE CONSTRUCTION OF THE STANDARD STRUCTURE USED OR AS MODIFIED TO COMPLY WITH THE REQUIREMENTS OF THE

STRUCTURE USED OR AS MODIFIED TO COMPLY WITH THE REQUIREMENTS OF THE PARTICULAR PROJECT. THEY SHALL INDICATE ALL CONNECTION DETAILS, OPENINGS AND OTHER SPECIAL DETAILS. THEY SHALL SHOW THE MAGNITUDE AND LOCATION OF BUILDING REACTIONS ON THE FOUNDATION UNDER ALL DESIGN CONDITIONS. CALCULATIONS SUPPORTING THE DESIGN SHALL BE SUBMITTED.

2. PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA.

013 SHOP DRAWINGS

1. THE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT OF THE CONTRACT DRAWINGS ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY COMPLIANCE WITH THE CONTRACT DOCUMENTS AS TO QUALITY, LENGTH, ELEVATIONS, DIMENSIONS, ETC.
2. ALL SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMITTAL TO THE ARCHITECT/ENGINEER. DRAWINGS SUBMITTED WITHOUT REVIEW WILL BE RETURNED UNCHANGED.
3. IN ALL INSTANCES, THE CONTRACT DOCUMENTS WILL GOVERN OVER THE SHOP DRAWINGS UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
4. PRE-ENGINEERED ITEMS SHALL BE SUBMITTED SIGNED AND SEALED BY A SPECIALTY ENGINEER REGISTERED IN THE STATE OF FLORIDA.
5. ALL SHOP DRAWINGS SHALL BE SUBMITTED VIA ELECTRONIC FORMAT, UNLESS OTHERWISE REQUIRED FOR A SPECIFIC COMPONENT OR SYSTEM.
6. DETAILER SHALL BE RESPONSIBLE FOR CHECKING ALL ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS FOR OPENINGS AND EMBEDS, EFFECTING STRUCTURAL MEMBERS.

016 SHORING AND RESHORING

1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SHORING, BRACING AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE THE STABILITY OF THE STRUCTURE DURING CONSTRUCTION. SUBMIT SIGNED AND SEALED SHOP DRAWINGS PREPARED BY A DELEGATED ENGINEER/ENGINEER IN SUCH WORK AND LICENSED IN THE STATE OF FLORIDA. SUBMIT DRAWINGS TO THE ARCHITECT, ENGINEER, SPECIAL INSPECTOR, AND BUILDING OFFICIAL FOR RECORD ONLY. SHORING AND RESHORING DESIGN AND CONSTRUCTION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND THE ENGINEER IN HIS EMPLOY.
2. THE DELEGATED ENGINEER WHO PREPARES THE SHORING AND RESHORING DRAWINGS SHALL INSPECT THE SHORING AND RESHORING. THEY SHALL PROVIDE A FIELD REPORT OF EACH INSPECTION TO THE CONTRACTOR AND ARCHITECT.

3. THE BRACING DETAILS OF THE EXTERIOR WALLS OF WHICH IN SOME CASES, THE ROOF DECK DIAPHRAGM AND ROOFING MEMBERS WILL BE REMOVED LEAVING THE EXTERIOR WALLS UNBRACED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO HIRE A SPECIALTY SHORING AND BRACING ENGINEER TO PROVIDE THE REQUIRED DOCUMENTS FOR THIS EFFORT.

020 FOUNDATION

1. ALL SITE PREPARATION AND EXCAVATION WORK IS TO BE PERFORMED IN STRICT ACCORDANCE WITH THE:

- A. RECOMMENDATIONS ON SOILS AND FOUNDATIONS INVESTIGATION PREPARED BY A FLORIDA LICENSED GEOTECHNICAL ENGINEER PRIOR TO COMMENCING ANY WORK OR ORDERING OF MATERIALS. THE GENERAL CONTRACTOR SHALL INCLUDE THE COST OF THE GEOTECHNICAL ENGINEERING AND ALL OTHER SURVEYS, TESTS, AND OTHER REQUIREMENTS OF THE GOVERNING AUTHORITIES IN THEIR BID OR ARRANGE WITH AND NOTIFY THE OWNER OF ALL SUCH COSTS.

THE GENERAL CONTRACTOR SHALL SUBMIT THE FINAL GEOTECHNICAL REPORT SIGNED AND SEALED TO THE BUILDING OFFICIAL WHEN SUBMITTING FOR PERMIT.

2. THE BUILDING SITE SHOULD BE EXCAVATED TO THE DEPTH AND EXTENT INDICATED IN THE SOILS REPORT. ALL SUBGRADES SHALL BE APPROVED IN WRITING BY THE SOILS ENGINEER PRIOR TO BACKFILLING. THE GENERAL CONTRACTOR SHALL SUPPLY SURVEYOR'S FLOOD PLAN CERTIFICATION THAT THE FLOOR SLAB ELEVATION IS ABOVE THE GOVERNING AUTHORITY'S REQUIRED FLOOR ELEVATION BEFORE COMMENCING ANY WORK OR ORDERING ANY MATERIALS.
3. BOTTOM OF FOOTINGS ASSUMED TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2500 PSF.
4. SOILS SUPPORTING ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE COMMENCING WORK, ORDERING MATERIALS, OR MOVING FORWARD IN ANY WAY. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN SPECIFIED SOIL BEARING PRESSURE.

5. EXCAVATION & BACKFILL:

- A. ALL EXCAVATION SHALL BE KEPT DRY. DE-WATERING WILL BE REQUIRED AND SHALL BE PROVIDED BY THE CONTRACTOR. THE DE-WATERING SHALL BE PROVIDED SO ALL EXCAVATIONS ARE DRY AND THE TESTING AGENCY CAN TAKE THE APPROPRIATE DENSITY TESTS AND ALL OTHER REQUIREMENTS OF THE GEOTECHNICAL REPORT AND IN CONNECTIONS SECTION DOCUMENTS ARE MET. EXCAVATE TO DEPTHS AND DIMENSIONS INDICATED. TAKE EVERY PRECAUTION TO GUARD AGAINST ANY MOVEMENT OR SETTLEMENT OF ADJACENT STRUCTURES, UTILITIES, PIPING, ETC.
- B. PROVIDE ANY BRACING OR SHORING NECESSARY TO AVOID SETTLEMENT OR DISPLACEMENT OF EXISTING FOUNDATION OR STRUCTURES.
- C. CENTERLINE OF FOOTINGS: SHALL COINCIDE WITH CENTERLINE OF COLUMNS UNLESS OTHERWISE NOTED ON DRAWINGS.
7. DIMENSIONS: ALL DIMENSIONS AND ELEVATIONS SHOWN ON THE STRUCTURAL DRAWINGS MUST BE VERIFIED AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS BY THE CONTRACTOR BEFORE PROCEEDING WITH THE CONSTRUCTION. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR ENGINEER IN WRITING BEFORE PROCEEDING WITH ANY WORK.

030 CONCRETE

1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:

- A. FOUNDATIONS 3000 PSI
- B. SLAB-ON-GRADE 3000 PSI
- C. MASONRY GROUT 3000 PSI

ALL OTHER CONCRETE TO BE 4000 PSI UNLESS NOTED OTHERWISE.

2. ALL CONCRETE SHALL BE READY MIX AND MEET THE FOLLOWING REQUIREMENTS:

- A. A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS
- B. A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS
- C. SLUMPS SHALL BE 3" MINIMUM AND 6" MAXIMUM.
- D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55.
- E. JOBSITE WATER SHALL NOT BE ADDED.

- F. CEMENT SHALL CONFORM WITH ASTM C150 TYPE 1. SLAG, ASTM C989 SHALL BE LIMITED TO 50% (BY WEIGHT OF CEMENTITIOUS MATERIAL) AND FLY ASH, ASTM C518, CLASS F, SHALL BE LIMITED TO 25% (BY WEIGHT) OF CEMENTITIOUS MATERIAL.

3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318 LATEST EDITION), THE ACI DETAILING MANUAL (ACI 312 1994 EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301 LATEST EDITION).

CONTRACTOR TO PROVIDE CONCRETE AND ALL OTHER CONCRETE BASED PRODUCTS THAT COMPLY WITH LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING RADON GASSING.

4. CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY ACI SPECIFICATIONS. ALL EXTERIOR CONCRETE SLABS SHALL BE SLOPED TO PROVIDE ADEQUATE DRAINAGE.

5. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A1064/A1064M, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C.

6. REQUIREMENTS:

- A. REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A 615 GRADE 60.
- B. WWF SHALL COMPLY WITH ASTM A1064/A1064M.
- C. PROVIDE 10 MIL VAPOR BARRIER COMPLIANT WITH ASTM E1745 BELOW ALL SLAB ON GRADE.
7. LAP ALL BARS WITH CLASS B TENSION LAP SPICE UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWF A MINIMUM OF 12 INCHES UNLESS OTHERWISE NOTED).

8. REINFORCING BARS:

- A. AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL FOOTINGS, PROVIDE MATCHING HORIZONTAL BENT BARS FOR EACH HORIZONTAL BAR DEVELOPED AT EACH FACE. SEE WALL CORNER DETAIL (5'-0" MINIMAL LENGTH).
- B. WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS.
- C. ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE AS RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.
- D. CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 1 TON OF ADDITIONAL REINFORCING STEEL, INCLUDING DETAILING, FABRICATION, BENDING, FURNISHING, AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECTS AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S ACCOUNT.

040 MASONRY

1. MASONRY UNITS SHALL BE:

- A. LOAD BEARING ASTM C90
- B. TYPE II NON-MOISTURE CONTROLLED
- C. NORMAL WEIGHT
- D. ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR IN RUNNING BOND (U.N.O.).
2. THE COMPRESSIVE STRENGTH OF MASONRY (FM) SHALL BE 2,000 PSI AS CALCULATED IN ACCORDANCE WITH ASTM C1314 WITH TYPE M OR S MORTAR AS REQUIRED.
3. ALL MORTAR SHALL BE IN ACCORDANCE WITH ASTM SPECIFICATION C270.
4. GROUT SHALL BE A HIGH SLUMP MIX

- A. IN ACCORDANCE WITH ASTM SPECIFICATION C476
- B. HAVING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI
5. ALL CONCRETE MASONRY BEARING AND SHEAR WALLS SHALL BE:

A. CONSTRUCTED

IN ACCORDANCE WITH THE "BUILDING CODE REQUIREMENT FOR MASONRY STRUCTURES" (ACI 530/ASCE 5/TSM 402) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1/ASCE 6/TSM 602) LATEST EDITIONS.

6. PROVIDE 8" x 8" MASONRY BEAM WITH 2 #5 CONT. AT EVERY WINDOW SILL. EXTEND BEAM 8" BEYOND EDGE OF OPENING.

7. ALL BRICK MASONRY UNITS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AND BONDED TOGETHER WITH TYPE S MORTAR.

8. PROVIDE HOT DIPPED GALVANIZED LADDER TYPE HORIZONTAL JOINT REINFORCEMENT (B GA) AT 16" ON CENTER VERTICAL ALL MASONRY WALLS. PROVIDE DOVE TAIL SLOT ANCHORS AT CONCRETE COLUMNS.

FOR JOINT REINFORCEMENT, WALL TIES, ANCHORS AND INSERTS, APPLY A MINIMUM COAT OF 1.5 OUNCES PER SQUARE FOOT (PSF) (#68/GM2) COMPLY WITH THE REQUIREMENTS OF ASTM A153, CLASS B.

9. PROVIDE CONTROL JOINTS IN MASONRY WALLS AT A SPACING OF 25' +/- O.C. AND ALIGN WITH ARCHITECTURAL CONTROL JOINTS.

10. EPOXY GROUT SHALL BE NON-SHRINK HIGH CREEP RESISTANT, AND SHALL HAVE THE FOLLOWING MINIMUM ALLOWABLE PROPERTIES: TENSILE STRENGTH, ASTM C 307: 1,500 PSI FLEXURAL STRENGTH, ASTM C 580: 4,000 PSI COMPRESSIVE STRENGTH, ASTM C 515: 1,600 PSI/7 DAYS.

11. MINIMUM LAP SPICES FOR REINFORCED CMU AS FOLLOWS:

- BAR SIZE (480#)
- #4 #6 #8 #7 #9
- 24" 30" 36" 42" 48"

- A. LAP SPICES SHALL OCCUR DIRECTLY ABOVE FOOTINGS AND SLABS. NO SPICES ARE ALLOWED AT MID-HEIGHT OF WALL.

- B. LAP SPICE THAT OCCUR AT MID HEIGHT OF WALL SHALL BE INCREASED BY 50% TO 72 BAR DIAMETERS.

- C. LAP SPICES THAT OCCUR AT CANTILEVERED WALLS SUCH AS: PARAPETS, RETAINING WALLS, ETC. SHALL HAVE LAP SPICE LENGTHS INCREASED BY 50% TO 72 BAR DIAMETERS.

12. MASONRY LINTELS:

- A. A PRECAST CONCRETE LINTEL #8 - 1B BY CASTCRETE OR EQUAL MAY BE PROVIDED OVER MASONRY WALL OPENINGS UNLESS A CAST-IN-PLACE LINTEL IS REQUIRED IN THE CONCRETE LINTEL NOTES. THE LINTEL SHALL BE FULLY GROUTED.

- B. LINTELS TO HAVE 4" MINIMUM BEARING AT EACH END.

- C. SHORE PRECAST LINTEL PER MANUFACTURER'S INSTRUCTIONS.

13. MASONRY JAMBS

- A. ADJACENT TO ANY EXTERIOR/INTERIOR WALL OPENING, PLACE (1) MATCHING VERTICAL BARS IN CELLS GROUTED SOLID FULL HEIGHT UNLESS NOTED OTHERWISE PER THE DRAWINGS.

050 STEEL

1. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST AISC CODE. STRUCTURAL STEEL SHALL CONFORM TO:

- A. ASTM SPECIFICATION A 992 GRADE 50 FOR ALL WIDE FLANGE BEAMS.
- B. ASTM SPECIFICATION A 36 FOR MISCELLANEOUS STEEL SHAPES (ANGLES, PLATES, ETC.).
- C. ALL STEEL TO HAVE A SHOP COAT OF RUST INHIBITIVE PAINT.
- D. DELETE PAINT ON ALL STEEL TO RECEIVE SPRAYED ON FIREPROOFING OR CONCRETE ENCASEMENT.
- E. ALL EXTERIOR STRUCTURAL STEEL SHALL BE HOT DIPPED GALVANIZED.

2. ALL SHOP AND FIELD WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED, AS DESCRIBED IN "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" (AWS D1.1), TO PERFORM THE TYPE OF WORK REQUIRED.

3. ALL ALUMINUM AND STEEL MEMBERS TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.

4. ALL STEEL WELDING RODS SHALL BE E70XX ELECTRODES.

CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 200 POUNDS OF ADDITIONAL STRUCTURAL STEEL (MEMBERS OVER 10 LBS. PER FOOT) AND 200 POUNDS OF MISCELLANEOUS STEEL (MEMBERS 10 LBS. PER FOOT OR LESS) INCLUDING FURNISHING, DETAILING, FABRICATION, CLEANING, PAINTING, DELIVERY AND ERECTION. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECTS AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S ACCOUNT.

060 CONCRETE

1. CONCRETE ELEMENTS TO HAVE THE FOLLOWING STRENGTHS:

- A. FOUNDATIONS 3000 PSI
- B. SLAB-ON-GRADE 3000 PSI
- C. MASONRY GROUT 3000 PSI

ALL OTHER CONCRETE TO BE 4000 PSI UNLESS NOTED OTHERWISE.

2. ALL CONCRETE SHALL BE READY MIX AND MEET THE FOLLOWING REQUIREMENTS:

- A. A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI @ 28 DAYS
- B. A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS
- C. SLUMPS SHALL BE 3" MINIMUM AND 6" MAXIMUM.
- D. ALL CONCRETE TO HAVE MAXIMUM WATER/CEMENT RATIO OF 0.55.
- E. JOBSITE WATER SHALL NOT BE ADDED.

- F. CEMENT SHALL CONFORM WITH ASTM C150 TYPE 1. SLAG, ASTM C989 SHALL BE LIMITED TO 50% (BY WEIGHT OF CEMENTITIOUS MATERIAL) AND FLY ASH, ASTM C518, CLASS F, SHALL BE LIMITED TO 25% (BY WEIGHT) OF CEMENTITIOUS MATERIAL.

3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE ACI BUILDING CODE (ACI 318 LATEST EDITION), THE ACI DETAILING MANUAL (ACI 312 1994 EDITION), AND THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301 LATEST EDITION).

CONTRACTOR TO PROVIDE CONCRETE AND ALL OTHER CONCRETE BASED PRODUCTS THAT COMPLY WITH LOCAL, STATE AND FEDERAL REQUIREMENTS REGARDING RADON GASSING.

4. CONCRETE COVER FOR REINFORCING STEEL SHALL BE AS REQUIRED BY ACI SPECIFICATIONS. ALL EXTERIOR CONCRETE SLABS SHALL BE SLOPED TO PROVIDE ADEQUATE DRAINAGE.

5. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A1064/A1064M, UNLESS OTHERWISE SPECIFIED. PLACE FABRIC 2" CLEAR FROM TOP OF THE SLAB IN SLAB ON GRADE AND SUPPORT ON SLAB BOLSTERS SPACED AT 3'-0" O.C.

6. REQUIREMENTS:

- A. REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A 615 GRADE 60.
- B. WWF SHALL COMPLY WITH ASTM A1064/A1064M.
- C. PROVIDE 10 MIL VAPOR BARRIER COMPLIANT WITH ASTM E1745 BELOW ALL SLAB ON GRADE.
7. LAP ALL BARS WITH CLASS B TENSION LAP SPICE UNLESS OTHERWISE NOTED ON DRAWINGS. LAP ALL WWF A MINIMUM OF 12 INCHES UNLESS OTHERWISE NOTED).

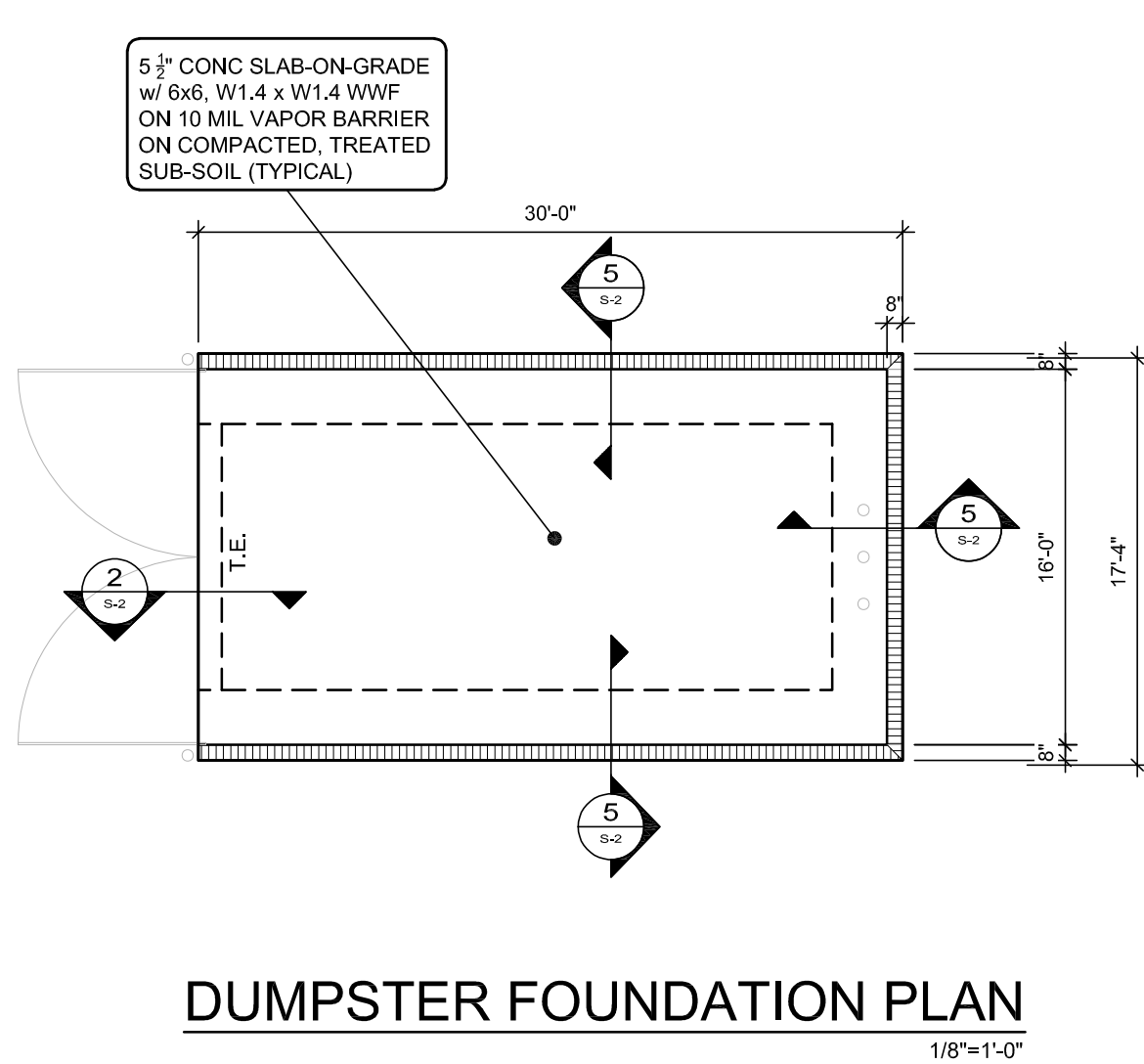
8. REINFORCING BARS:

- A. AT CORNERS OF CONCRETE WALLS, BEAMS AND CONTINUOUS WALL FOOTINGS, PROVIDE MATCHING HORIZONTAL BENT BARS FOR EACH HORIZONTAL BAR DEVELOPED AT EACH FACE. SEE WALL CORNER DETAIL (5'-0" MINIMAL LENGTH).
- B. WHERE COLUMNS ARE AN INTEGRAL PART OF CONCRETE WALLS, WALL REINFORCEMENT SHALL BE CONTINUOUS THRU THE COLUMNS.
- C. ALL HOOKS SHOWN IN REINFORCEMENT SHALL BE AS RECOMMENDED HOOKS UNLESS OTHERWISE NOTED.
- D. CONTRACTOR SHALL INCLUDE IN HIS BASE BID THE COST OF 1 TON OF ADDITIONAL REINFORCING STEEL, INCLUDING DETAILING, FABRICATION, BENDING, FURNISHING, AND PLACING. THIS EXTRA STOCK SHALL BE FURNISHED AND USED FOR SPECIAL CONDITIONS AS DIRECTED BY THE ARCHITECT, THE ARCHITECTS AGENT OR BY THE OWNER'S CONSTRUCTION SUPERVISOR. THE PRICE OF THE UNUSED EXTRA STOCK SHALL BE CREDITED TO THE OWNER'S ACCOUNT.

SECTION 5

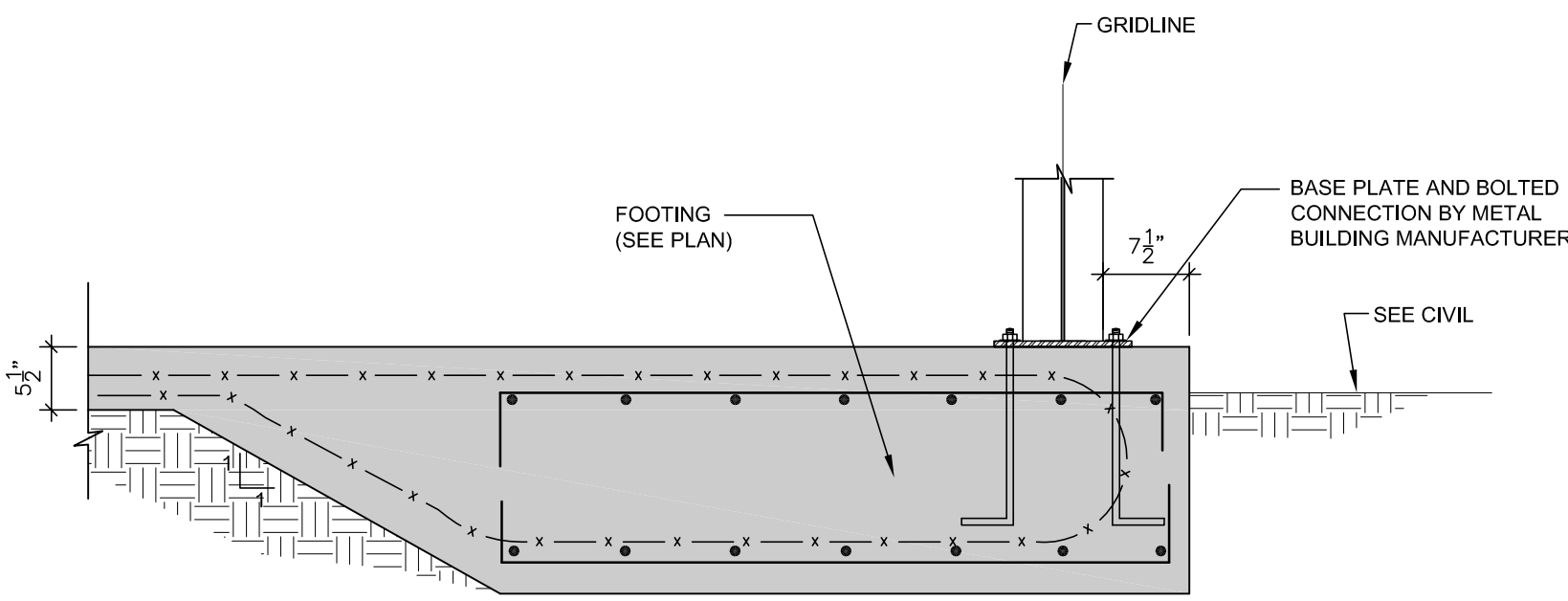
3/4"=1'-0"

S-2



DUMPSTER FOUNDATION PLAN

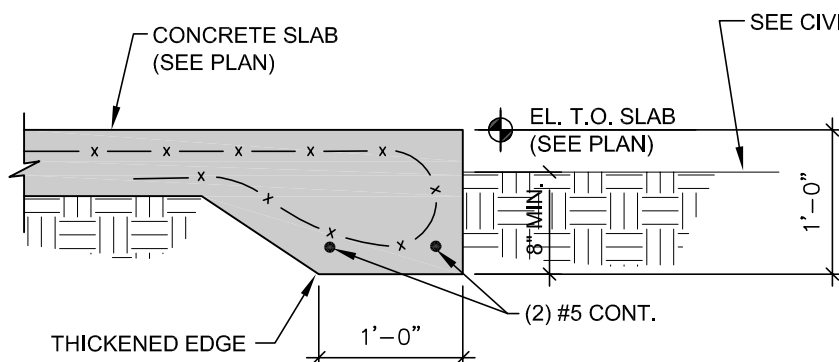
1/8"=1'-0"



SECTION 1

3/4"=1'-0"

S-2



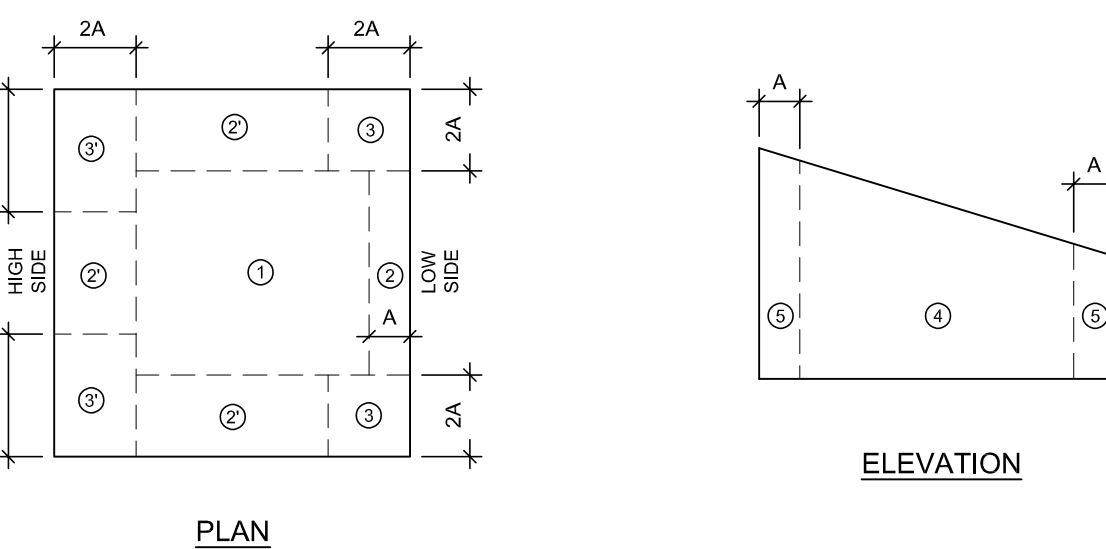
SECTION 2

3/4"=1'-0"

S-2

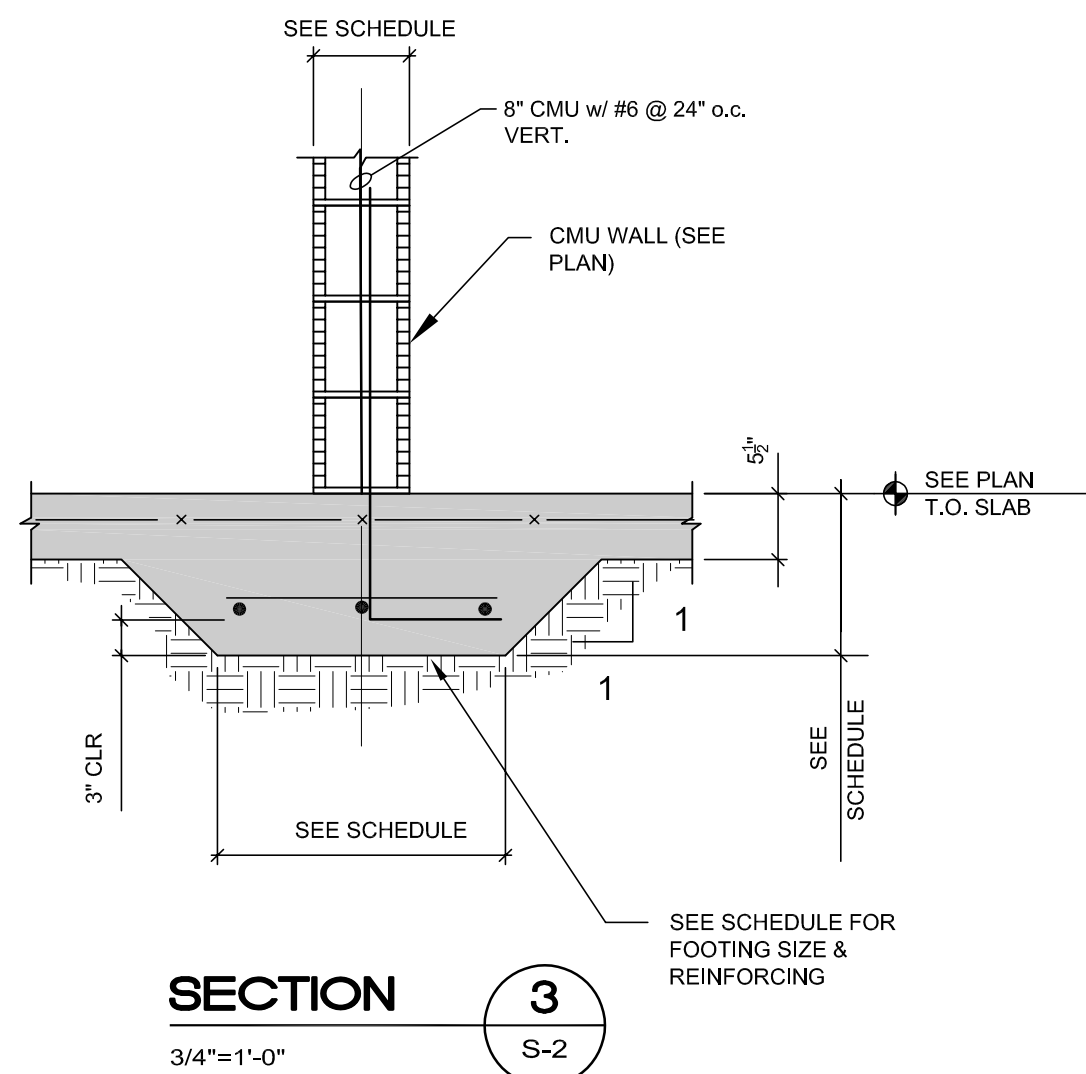
ALLOWABLE									
COMPONENT & CLADDING WIND DESIGN PRESSURES									
PRESSURES BASED ON V ...	ROOF WIND LOADS					WALL WIND LOADS			
	ROOF AREA (10 SF)					WALL AREA (10 SF)			
	1	2	2'	3	3'	4	5		
Kd IS INCLUDED	28	28	28	28	28	47	47		
PRESSURE (PSF)	-54	-60	-70	-77	-103	-50	-59		
SUCTION (PSF)									

1. EXTERIOR GLAZED OPENINGS IN BUILDINGS SHALL COMPLY WITH FLORIDA BUILDING CODE 7TH EDITION (2020) BY EITHER BEING DESIGNED FOR IMPACT RESISTANCE OR BEING PROTECTED BY IMPACT PROTECTIVE SYSTEMS.
2. REFER TO STRUCTURAL NOTES FOR ALL WIND LOAD PARAMETERS.
3. CORNER DISTANCE, A = 3 FEET



FOOTING SCHEDULE

MARK	SIZE	REINFORCING
MF16.16	1'-4" x CONT. x 16"	3 #5 @ BOTTOM
MF40.16	4'-0" x CONT. x 16"	4 #5 CONT. BOTTOM
MF45.16	4'-0" x CONT. x 16"	5 #5 CONT. BOTTOM
MF65	6'-0" x 6'-0" x 24"	7 #7 EACH WAY TOP AND BOTTOM
MF80	8'-0" x 8'-0" x 32"	8 #8 EACH WAY TOP AND BOTTOM
MF110	11'-0" x 11'-0" x 32"	11 #8 EACH WAY TOP AND BOTTOM



SECTION 3