STRUCTURAL DESIGN DATA:

DESIGN CODE:

2015 INTERNATIONAL BUILDING CODE (IBC)

SOIL LOAD:

ALLOWABLE NET SOIL BEARING PRESSURE (ASSUMED)	2,000 PSF
SOILS REPORT AVAILABLE	NO

***SEISMIC LOAD:**

SEISMIC USE GROUP / RISK CATEGORY	IV
SEISMIC LOAD IMPORTANCE FACTOR (I_e)	1.5
SEISMIC SITE CLASS	D (ASSUMED)
MAPPED SPECTRAL RESPONSE ACCELERATION (S_s)	0.057
MAPPED SPECTRAL RESPONSE ACCELERATION (S_1)	0.037
SPECTRAL RESPONSE COEFFICIENT (Sds)	0.061
SPECTRAL RESPONSE COEFFICIENT (Sd1)	0.059
SEISMIC DESIGN CATEGORY	A

***WIND LOAD:**

BASIC WIND SPEED	120 MPH
WIND LOAD IMPORTANCE FACTOR (I_w)	1.0
WIND EXPOSURE	B
INTERNAL PRESSURE COEFFICIENTS	± 0.18

ROOF DESIGN LOAD:

ROOF LIVE LOAD	20 PSF
ROOF DEAD LOAD	15 PSF

***SNOW LOAD:**

DESIGN SNOW LOAD	34 PSF
GROUND SNOW LOAD	40 PSF
SNOW EXPOSURE FACTOR (C_e)	1.0
SNOW IMPORTANCE FACTOR (I_s)	1.0
THERMAL FACTOR (C_t)	1.0
UNBALANCED LOAD:	
WINDWARD	10.1 PSF
LEEWARD	47.8 PSF
DRIFT LOADS	N/A

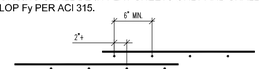
*** SEISMIC, WIND, AND SNOW LOAD CALCULATIONS AND DESIGN DATA SHALL BE PERFORMED AND SUPPLIED BY THE TRUSS MANUFACTURER.**

CONCRETE CAST-IN-PLACE NOTES:

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (MOST CURRENTLY ADOPTED EDITION)
2. CONTRACTOR SHALL NOTIFY ENGINEER AT LEAST 48 HOURS PRIOR TO PLACING CONCRETE TO FACILITATE ON-SITE OBSERVATION OF REBAR.
3. WHEN THE AVERAGE TEMPERATURE FROM MIDNIGHT IS EXPECTED TO DROP BELOW 40 DEGREES FAHRENHEIT FOR THREE SUCCESSIVE DAYS, COLD WEATHER CONCRETING REQUIREMENTS SHALL BE FOLLOWED, REFER TO ACI 306R.
4. WHEN AMBIENT AIR OR CONCRETE TEMPERATURE EXCEEDS 90 DEGREES FAHRENHEIT, STEEL REINFORCING AND/OR FORMING SURFACES ARE ABOVE 120 DEGREES FAHRENHEIT, OR WHEN WIND VELOCITY, HUMIDITY, OR SOLAR RADIATION CREATE CONDITIONS OF ACCELERATED MOISTURE LOSS AND INCREASE RATE OF HYDRATION, HOT WEATHER CONCRETING REQUIREMENTS SHALL BE FOLLOWED. REFER TO ACI 305R.
5. ALL CONCRETE SURFACES SHALL BE FORMED OR APPROVED BY ENGINEER.
6. CONCRETE COLUMNS OR PIERS SHOWN INTEGRAL WITH CONCRETE WALLS SHALL BE POURED MONOLITHICALLY WITH ADJACENT CONCRETE WALLS.
7. CONTROL JOINTS SHALL BE CUT USING A SOFF-CUT SAW OR EQUAL AS SOON AS POSSIBLE AFTER PLACING, PREFERABLY THE SAME DAY AS THE POUR, BUT IN NO CASE SHALL THE CONTROL JOINTS BE CUT MORE THAN 24 HOURS AFTER PLACING THE CONCRETE.
8. PROVIDE WALL CONSTRUCTION JOINTS AS SHOWN IN DETAILS. ALLOW AT LEAST 24 HOURS BETWEEN POURING ADJACENT WALL SECTIONS AT CONSTRUCTION JOINTS.
9. PROVIDE ISOLATION JOINTS WHERE SLABS ABUT VERTICAL SURFACES AS SHOWN.
10. SLEEVES, CONDUITS, OR PIPES THROUGH SLABS AND WALLS SHALL BE PLACED AT THREE DIAMETERS O.C., OR 4" MINIMUM.
11. ALUMINUM CONDUIT OR PIPING SHALL NOT BE CAST IN CONCRETE.

CONCRETE REINFORCEMENT NOTES:

1. REINFORCING SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES (MOST CURRENTLY ADOPTED EDITION)
2. PROVIDE MINIMUM COVER PER ACI 318, 7.7.1 ALSO SEE MILD STEEL PROTECTION NOTES
3. WIRE SPACERS, CHAIRS, TIES, ETC. FOR SUPPORT OF STEEL REINFORCING SHALL BE PROVIDED BY THE CONCRETE CONTRACTOR TO ENSURE REINFORCING IS PLACED AND MAINTAINED IN THE PROPER POSITION DURING CONCRETE PLACEMENT.
4. ALL HOOKS IN STEEL REINFORCING SHALL BE ACI STANDARD HOOKS.
5. TERMINATE NON-CONTINUOUS STEEL REINFORCING WITH AN ACI STANDARD HOOK IF REQUIRED EMBEDMENT SHOWN ON DRAWINGS CANNOT BE OBTAINED.
6. ALL LAPS SHALL BE CLASS "B " PER ACI 318 ON THE DESIGN DRAWINGS, OR UNLESS THE DETAILER TAKES SPECIAL CARE TO PROVIDE STAGGERED LAPS. USE TO BAR LENGTHS FOR ALL HORIZONTAL WALL BARS AND FOR TOP BARS IN SLABS AND BEAMS OVER 12 " DEEP.
7. STEEL REINFORCING SPLICES OF ADJACENT BARS SHALL BE STAGGERED SUCH THAT SPLICES ARE MINIMUM 4 FEET APART.
8. CORNER BARS WITH CLASS "B" LAP PER ACI 318 SHALL BE PROVIDED AT ALL WALL CORNERS AND ALL INTERSECTIONS.
9. PROVIDE STEEL REINFORCING AROUND OPENINGS IN CONCRETE WALLS AND SLABS.
10. PROVIDE STEEL REINFORCING AT FOOTING STEPS.
11. WELDED WIRE REINFORCING SHALL BE IN FLAT SHEETS ONLY AND SHALL BE LAPPED AND/OR ANCHORED TO DEVELOP Fy PER ACI 315.



12. WELDING OF STEEL REINFORCEMENT IS NOT PERMITTED, UNLESS APPROVED BY ENGINEER.
13. BEND REINFORCING STEEL AROUND ALL CORNERS AND LAP A MINIMUM OF 33 BAR DIAMETERS (UNO).
14. MINIMUM STEEL TENSILE STRENGTH SHALL BE 60 KSI.
15. CLEAR DISTANCE BETWEEN BARS OR LAYERS OF BARS SHALL BE ONE FLEXURAL BAR DIAMETER BUT NOT LESS THAN 1" OR LESS THAN 1 1/3 TIMES THE MAXIMUM SIZE OF COURSE AGGREGATE WHICH EVER IS GREATER.
16. ANCHOR BOLTS SHALL BE A MINIMUM 1/2" DIAMETER ASTM F1554 (A307) BOLTS, EMBEDDED A MINIMUM OF 7" INTO CONCRETE, SPACED A MAXIMUM OF 6' (72") OC (UNO) AND LOCATED WITHIN 4"-12" FROM ENDS OF WALL PLATES. ALL INDIVIDUAL WALL PLATE SECTIONS SHALL HAVE A MINIMUM OF TWO ANCHOR BOLTS. ALL ANCHOR BOLTS SHALL INCLUDE A PROPERLY SIZED NUT AND WASHER ATOP WALL PLATES.

STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL CONSTRUCTION SHALL CONFORM TO THE AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS"
2. SHOP DRAWINGS PREPARED IN ACCORDANCE WITH THE "STRUCTURAL STEEL DETAILING MANUAL" OF THE AISC SHALL BE SUBMITTED FOR APPROVAL. NO FABRICATION SHALL BEGIN UNTIL SHOP DRAWINGS ARE COMPLETED AND APPROVED.
3. UNLESS NOTED OTHERWISE, STRUCTURAL STEEL WIDE FLANGES AND TEES SHALL CONFORM TO A992, GRADE 50. ROUND, SQUARE AND RECTANGULAR HSS SECTIONS SHALL CONFORM TO ASTM A500, GRADE B. ROUND PIPES SHALL CONFORM TO ASTM A53, GRADE B. ALL OTHER SHAPES SHALL CONFORM TO ASTM A36 OR A572, GRADE 50.
4. STEEL FRAMING CONNECTIONS SHALL BE BOLTED OR WELDED.
   A. BOLTED JOINTS SHALL CONFORM TO AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM F3125 (A325 OR A490) BOLTS". BOLTS SHALL CONFORM TO ASTM F3125, AND SHALL BE MINIMUM 3/4" DIAMETER, UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE CONSIDERED BEARING TYPE WITH BOLTS PRE-TENSIONED, UNLESS OTHERWISE NOTED. PROVIDE DIRECT TENSION INDICATORS (LOAD INDICATING WASHERS) IN ACCORDANCE WITH ASTM F959 OR TENSION CONTROL BOLTS (TWIST OFF BOLTS) IN ACCORDANCE WITH ASTM F1852 FOR ALL HIGH STRENGTH BOLTS.
   B. WELDS SHALL CONFORM TO THE "STRUCTURAL WELDING CODE" OF THE AMERICAN WELDING SOCIETY, AWS D1.1. USE E70XX ELECTRODES. WELDING PROCESSES AND OPERATORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATIONS PROCEDURES". WELDERS SHALL CARRY PROOF OF QUALIFICATIONS IN THEIR PERSONS.
5. ANCHOR RODS SHALL CONFORM TO ASTM F1554, GR 55, S1, (WELDABLE) UNLESS NOTED OTHERWISE. THE END OF THE ANCHOR ROD INTENDED TO PROJECT FROM THE CONCRETE SHALL BE STEEL DIE STAMPED WITH THE GRADE INDENTIFICATION AS REQUIRED BY SUPPLEMENT S3.
6. DO NOT USE GAS CUTTING TORCHES FOR CORRECTING FABRICATION ERRORS IN THE STRUCTURAL FRAMING.
7. UNLESS NOTED OTHERWISE BEAM END CONNECTIONS SHALL BE PROPORTIONED AS FOLLOWS:
   A. MINIMUM 3/8" THICK X 4" WIDE X FULL DEPTH WEB OF BEAM SHEAR TAB CONNECTION. ATTACH SHEAR TAB TO CONNECTION MEMBER WITH MINIMUM 3/16" FILLET WELD CONTINUOUS AT BOTH SIDES. ATTACH BEAM END TO SHEAR TAB WITH 3/4" DIAMETER BOLTS WITH WASHERS AT MINIMUM 2" O.C. SPACING, AND
   B. WHERE BEAM REACTIONS ARE SHOWN, CONNECTIONS SHALL DEVELOP THE REACTION GIVEN, OR
   C. WHERE BEAM REACTIONS ARE NOT SHOWN, CONNECTIONS SHALL BE PROPORTIONED TO SUPPORT 60% OF THE TOTAL UNIFORM LOAD CAPACITY (ULC) SHOWN IN THE UNIFORM LOAD TABLES OF THE AISC MANUAL, FOR THE SPECIFIED BEAM SIZE, SPAN, AND GRADE OF STEEL SPECIFIED. FOR COMPOSITE BEAMS, PROPORTION CONNECTORS FOR 90% OF THE ULC. CONNECTIONS SHALL BE PROPORTIONED FOR THE ECCENTRICITY BETWEEN THE CONNECTION CENTROID AND THE CENTROID OF THE SUPPORTING MEMBER.
8. PLACE NON-SHRINK, HIGH STRENGTH GROUT (MINIMUM 6,000 PSI) UNDER BASE PLATES AFTER SETTING AND LEVELING, AND PRIOR TO PLACING ELEVATED SLAB CONCRETE.
9. STEEL CONSTRUCTION SHALL BE INSPECTED BY A QUALIFIED SPECIAL INSPECTOR. SEE SCHEDULE OF SPECIAL INSPECTIONS FOR ADDITIONAL INFORMATION.
   A. BOLTED CONNECTIONS SHALL BE INSPECTED IN ACCORDANCE WITH AISC 348 "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS".
   B. ALL FILLET WELDS SHALL BE VISUALLY INSPECTED.
   C. ALL PENETRATION WELDS SHALL BE TESTED IN ACCORDANCE WITH ASTM E164.
   D. WELDING OF HEADED STUD CONCRETE ANCHORS AND DBA'S SHALL BE INSPECTED IN ACCORDANCE WITH AWS D1.1.
   E. TEST 15% OF ALL STUDS. RETEST ALL STUDS AND DBA'S ON ANY MEMBER WHERE STUDS FAILED INITIAL TESTING.
   F. WRITTEN REPORTS SHALL BE SUBMITTED DESCRIBING ALL INSPECTIONS AND INDICATING ANY NON-CONFORMING WORK. RE-INSPECT NON-CONFORMING WORK AFTER IT IS CORRECTED.
10. PROVIDE TEMPORARY BRACING OF STRUCTURAL FRAMING UNTIL ALL PERMANENT BRACING, MOMENT CONNECTIONS AND FLOOR AND ROOF DECKS (DIAPHRAGMS) ARE COMPLETELY INSTALLED. THE STRUCTURAL ELEMENTS ARE UNSTABLE UNTIL THE STRUCTURE IS COMPLETED IN ACCORDANCE WITH THE PLANS.
11. SHEAR CONNECTORS: PROVIDE AWS D1.1, TYPE B, 3/4" DIAMETER, SOLID FLUXED HEADED SHEAR CONNECTOR STUDS AUTOMATICALLY END WELDED THROUGH THE METAL DECK AS SHOWN ON THE DRAWINGS AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MANUFACTURER.
   A. WHERE THE THICKNESS OF THE BEAM FLANGE IS LESS THAN 0.3", STUDS SHALL BE LOCATED DIRECTLY OVER THE WEB.
   B. THE MINIMUM CENTER-TO-CENTER SPACING OF STUDS SHALL BE 4.5" ALONG THE LONGITUDINAL AXIS OF THE BEAM AND 3" TRANSVERSE TO THE LONGITUDINAL AXIS OF THE BEAM. THE MINIMUM DISTANCE TO THE EDGE OF THE BEAM FLANGE SHALL BE 1 1/4" WHERE STUDS ARE PLACED IN PAIRS.
12. DEFORMED BAR ANCHORS (DBA'S): FLUX FILLED BARS AUTOMATICALLY WELDED TO STRUCTURAL STEEL IN ACCORDANCE WITH THE RECOMMENDATION OF THE MANUFACTURER. PROVIDE MATERIAL WITH MINIMUM YIELD STRENGTH OF 50 KSI.
13. PROVIDE CAP PLATES AT ALL COLUMNS, AT BEARING CONDITIONS, PROVIDE 3/4" MINIMUM THICKNESS, AT NON-BEARING CONDITIONS, PROVIDE 1/4" THICKNESS. WELD CAP PLATES ALL AROUND TO COLUMNS.
14. UNLESS NOTED OTHERWISE, ALL EXPOSED STRUCTURAL AND MISCELLANEOUS STEEL, PLATES, BOLTS, AND ANCHORS SHALL BE GALVANIZED OR PAINTED WITH APPROVED RUST INHIBITING PRIMER.
15. THE STRUCTURAL DESIGN OF STEEL STAIRS, LANDINGS AND GUARDRAILS (INCLUDING EMBEDS) SHALL BE PERFORMED BY A STRUCTURAL ENGINEER REGISTERED IN THE PROJECT STATE. CALCULATIONS AND SHOP DRAWINGS WITH THE ENGINEER'S SEAL SHALL BE SUBMITTED FOR APPROVAL, NO FABRICATION SHALL BEGIN UNTIL THE SUBMITTAL IS APPROVED. DESIGN LOADS SHALL BE AS SPECIFIED BY THE CONTRACT DOCUMENTS AND/OR THE APPLICABLE CODES WHICHEVER IS MORE STRINGENT. THE CONTRACTOR SHALL MAKE APPROVED SHOP DRAWINGS AVAILABLE TO THE INSPECTOR AT THE JOB SITE PRIOR TO SPECIAL INSPECTION.

REINFORCED MASONRY:

1. ALL MASONRY UNITS ARE PLACED IN RUNNING BOND FASHION. CORNERS SHALL HAVE A STANDARD BOND BY OVERLAPPING UNITS.
2. SPECIAL SHAPES SHALL BE PROVIDED FOR JAMBS, COLUMNS, PILASTERS, CONTROL JOINTS, CORNERS, AND LINTELS.
3. ALL MASONRY WALLS SHALL HAVE HORIZONTAL JOINT REINFORCING SPACED AT 16 " O.C. HORIZONTAL JOINT REINFORCING SHALL BE LADDER-TYPE OR TRUSS-TYPE AND FABRICATED WITH GALVANIZED NINE-GAUGE WIRE AND SHALL INCLUDE CORNER AND INTERSECTING WALL PIECES. PROVIDE MINIMUM 6" LAPS AT ALL SPLICES.
4. VERTICAL REINFORCING SHALL BE HELD IN PLACE BY REBAR POSITIONERS, CROSSTIES, CHAIRS, OR TYING TO EVERY OTHER LAYER OF HORIZONTAL REINFORCING STEEL. REFER TO THE DETAIL IN THE DRAWINGS FOR VERTICAL REINFORCING BAR LOCATION IN A CORE.
5. PROVIDE CONCRETE COVER OF MINIMUM 1/2" TO FACE SHELL.
6. REFER TO DETAIL IN THE DRAWINGS FOR REINFORCING BAR LAP LENGTHS.
7. EXTEND VERTICAL REINFORCING FROM FOOTINGS TO 2" CLEAR TOP OF WALL OR TO BEAM BEARING. EXTEND VERTICAL REINFORCING INTO THE NEXT LEVEL OF CONSTRUCTION AND LAP IN ACCORDANCE WITH THE LAP SCHEDULE.
8. WHEN TYPICAL VERTICAL WALL REINFORCING IS INTERRUPTED BY LONG WALL OPENINGS, PROVIDE TYPICAL VERTICAL WALL REINFORCING ABOVE AND BELOW OPENING, AND EXTEND INTO HORIZONTAL BOND BEAMS. REFER TO THE SCHEDULE ON THE DRAWINGS, FOR MASONRY WALL OPENING LINTELS. REFER TO THE DETAIL IN THE DRAWINGS FOR MASONRY OPENINGS MINIMUM JAMB REINFORCING.
9. PROVIDE VERTICAL REINFORCING AT THE ENDS OF WALLS AND AT WALL INTERSECTIONS TO MATCH SPECIFIED REINFORCING. RUN REINFORCING FULL HEIGHT OF WALLS.
10. ALL MASONRY UNITS SHALL BE PLACED WITH FULL FACE SHELL MORTAR COVERAGE ON HORIZONTAL AND VERTICAL FACE SHELLS. WEBS SHALL ALSO HAVE FULL MORTAR COVERAGE AROUND ALL GROUTED CELLS.
11. FILL BLOCK CORE AT VERTICAL REINFORCING WITH CONCRETE GROUT. FILLING CORES WITH MORTAR IS NOT ALLOWED. VIBRATE IN PLACE. RODING AND PUDDLING ARE NOT ALLOWED.
12. SEE TABLE 7 OF TMS 402/ACI 530/ ASCE 5 FOR GROUT SPACE REQUIREMENTS FOR MAXIMUM GROUT POUR HEIGHTS. FOR CONCRETE CORE FILL POUR HEIGHT ABOVE 5 '-0" PROVIDE CLEANOUTS.
13. MASONRY CEMENT MORTAR IS NOT ALLOWED.
14. CALCIUM CHLORIDE OR ADMIXTURES CONTAINING CHLORIDE SHALL NOT BE USED IN MORTAR OR GROUT.
15. FOR REINFORCED MASONRY BOND BEAMS, PROVIDE BENT CORNER BARS AT CORNERS AND INTERSECTIONS THAT MATCH REINFORCING. STEP BOND BEAMS AS NECESSARY TO MATCH ROOF SLOPES. LAP REINFORCING BARS PER SCHEDULE.
16. FOR CONSTRUCTION OF MASONRY CONTROL JOINTS REFER TO DETAIL IN DRAWINGS.
17. UNLESS NOTED OTHERWISE ON THE DRAWINGS PLACE CONTROL JOINTS IN MASONRY WALLS SUCH THAT NO STRAIGHT RUN OF WALL EXCEEDS 24'-0" AND WITHIN 4'-0" OF CORNERS. DO NOT PLACE CONTROL JOINTS WITHIN 4'-0" OF A MASONRY OPENING JAMB OR A STEEL BEARING PLATE.
18. PLACE BOND BEAM REINFORCING CONTINUOUSLY THROUGH CONTROL JOINTS. DO NOT SPLICE BOND BEAM REINFORCING WITHIN 6'-0" OF A CONTROL JOINT.
19. PROVIDE BOND BEAM WITH REINFORCING AT ALL FLOOR LINES, ROOF LINES, AND TOP OF WALLS. REFER TO DETAILS IN THE DRAWINGS.
20. GROUT BELOW STEEL BEARING PLATE AND REFER TO THE DRAWINGS FOR ADDITIONAL INFORMATION.
21. REFER TO DRAWINGS FOR REINFORCING SCHEDULE, TOP OF WALL BRACING, THICKENED BEARING SLAB AND LINTEL SCHEDULE FOR NON-BEARING MASONRY WALLS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT.

MASONRY BEAMS (HIGH-LOW BOND BEAMS):

1. FOR ALL MASONRY BEAMS USE LINTEL BLOCKS.
2. MASONRY BEAMS ARE TO BEAR 8 " MINIMUM AT JAMBS. EXTEND VERTICAL REINFORCING THROUGH MASONRY BEAM BEARING.
3. EXTEND HORIZONTAL REINFORCING FULL LENGTH. REFER TO DETAIL IN THE DRAWINGS FOR STIRRUP CONFIGURATION.
4. GROUT MASONRY BEAMS SOLID. MECHANICALLY VIBRATE GROUT IN PLACE.
5. PROVIDE BRICK EXPANSION JOINT VERTICALLY AT THE EDGE OF THE MASONRY OPENING. STOP BRICK ANGLE AT EXPANSION JOINT. REFER TO PLAN FOR WALL ELEVATION DETAIL. LOCATE OTHER BRICK EXPANSION JOINTS PER ARCHITECTURAL DRAWINGS.

MATERIAL DESIGN PROPERTIES:

CONCRETE PROPERTIES:

USE	28 DAY PSI STRENGTH	MAX. RATIO H_2O : CEMENT	SLUMP (INCHES)	MAX. SIZE AGGREGATE	MIN. AIR ENTRAINMENT
WALLS	3,500	.62	3 ± 1	3/4"	4%
FOOTINGS	3,500	.62	3 ± 1	1-1/2"	0%
PIERS	3,500	.62	3 ± 1	3/4"	0%
INTERIOR FLOORS	3,500	.62	3 ± 1	3/4"	0%
EXTERIOR FLOORS	4,000	.48	3 ± 1	3/4"	6%
RETAINING WALLS/FTGS.	4,000	.48	3 ± 1	3/4"	6%

REINFORCING STEEL STRENGTHS:

BARS (ASTM A615, GRADE 60)	fy = 60,000 PSI
WELDED WIRE MESH (ASTM A 185)	fy = 65,000 PSI

STRUCTURAL STEEL STRENGTHS:

STEEL SUPPLIED BY METAL BUILDING MANUFACTURER	PER MTL BLDG SPECS
OTHER:	
W SHAPES (ASTM A992, GR50)	fy = 50,000 PSI
ANGLES, CHANNELS,PLATES, & BARS (ASTM A36)	fy = 36,000 PSI
SQUARE & RECTANGULAR TS OR HSS SECTIONS (ASTM A500 ,GR B)	fy = 42,000 PSI
HIGH STRENGTH BOLTS (ASTM F3125: A325 OR A490)	

MISCELLANEOUS STRUCTURAL NOTES:

1. ENGINEER ASSUMES PIN BASED COLUMNS.
2. **CONNECTORS:**
   A. FOR EXTERIOR AND INTERIOR APPLICATIONS WHERE EXPOSED TO MOISTURE, WHERE PRESSURE TREATED WOOD IS USED, AND FOR INTERIOR CORROSIVE ENVIRONMENTS ALL CONNECTORS SHALL BE HOT DIPPED GALVANIZED PER ASTM A 153A / 153M, OR STAINLESS STEEL, INCLUDING EXPANSION BOLTS, ANCHOR BOLTS, JOIST HANGERS, AND NAILS.
   B. CONNECTION DESIGN TO WOOD OR STEEL FRAMING AND EVALUATION OF STRUCTURAL MEMBERS ADEQUACY BY A REGISTERED PROFESSIONAL ENGINEER SHALL BE PROVIDED BY ALL SUBCONTRACTORS.
   C. INSTALLER OF ANCHORS OR CONNECTIONS TO STRUCTURE IS RESPONSIBLE FOR ANCHOR DESIGN AND DETERMINATION OF STRUCTURAL COMPONENT ADEQUACY. DO NOT CUT REINFORCING BARS OR DAMAGE OTHER EMBEDMENTS.
3. **WORK BY OTHERS:**
   A. ALL SUPPORTS, FRAMING, SUB-FRAMING, LIGHT GAUGE FRAMING, MISCELLANEOUS STEEL FRAMING, METAL FABRICATIONS, BRACING BRACKETS, HANGERS, CONNECTORS, EMBEDMENTS, FASTENERS, AND ATTACHMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS ARE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE ENGINEERED AND PROVIDED BY THE CONTRACTOR REQUIRING THE ITEM, COMPLY WITH GOVERNING CODES.
   B. CONSTRUCTION MEANS AND METHODS ARE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE ENGINEERED AND PROVIDED BY THE CONTRACTOR REQUIRING SUCH, WORK INCLUDES, BUT IS NOT LIMITED TO:
      1. EVALUATION OF STRUCTURE FOR CONSTRUCTION EQUIPMENT LOADS SUCH AS FORKLIFTS, MATERIAL STOCKPILES, ETC.
      2. EVALUATION OF STRUCTURE FOR INSTALLATION OF ANY NECESSARY SHORING FOR MOVING LOADS DURING INSTALLATION OF HEAVY EQUIPMENT.
4. WHERE DIMENSIONS OR WEIGHTS OF EQUIPMENT OR SYSTEMS ARE VARIABLE FROM MANUFACTURER TO MANUFACTURER, VERIFY DIMENSIONS AND WEIGHTS SHOWN ON DRAWINGS WITH SELECTED MANUFACTURER PRIOR TO ORDERING MATERIALS, NOTIFY ENGINEER OF DISCREPANCIES.
5. DO NOT SUSPEND POINT LOADS FROM ROOF SHEATHING OR ROOF PURLINS UNLESS APPROVED BY THE ENGINEER. POINT LOADS INCLUDE, BUT ARE NOT LIMITED TO: HANGERS FOR CEILINGS, PIPES, DUCTS, STEEL STUDS, EQUIPMENT, ETC. CONTRACTOR INSTALLING SUCH POINT LOADS SHALL PROVIDE SUB-FRAMING TO TRANSFER LOAD TO THE STRUCTURE SUPPORTING DECK.
6. TEMPORARY LATERAL RESTRAINT AND DIAGONAL BRACING SHALL BE INSTALLED ACCORDING TO THE PROVISIONS OF BCSI CHAPTERS B1, B2, B7 AND/OR B10 (BUILDING COMPONENT SAFETY INFORMATION, BY TPI AND SBCA

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE YEAR SPECIFIC INTERNATIONAL BUILDING CODE (IBC) WITH STATE AMENDMENTS (IF ANY) AS NOTED IN THE "STRUCTURAL DESIGN DATA" TABLE ON THIS SHEET. REFERENCE TO OTHER STANDARD SPECIFICATIONS OR CODES SHALL MEAN THE BUILDING CODE ADOPTED EDITION OR THE NOTED EDITION, IF NOT BUILDING CODE ADOPTED.
2. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS AND ELEVATIONS AFFECTING NEW CONSTRUCTION BEFORE STARTING WORK. NOTIFY THE ARCHITECT OF ANY DISCREPANCY.
3. NOTIFY THE ARCHITECT IN WRITING OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN IN THE CONTRACT DOCUMENTS.
4. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, ADEQUACY, AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS, TEMPORARY BRACING, ETC. THE STRUCTURAL SYSTEM AND ITS ELEMENTS SHALL NOT BE CONSIDERED STABLE UNTIL THE STRUCTURE IS COMPLETE.
5. COORDINATE STRUCTURAL CONTRACT DOCUMENTS WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND CIVIL DOCUMENTS. NOTIFY THE ARCHITECT OF ANY CONFLICT AND/OR OMISSION.
6. COORDINATE AND VERIFY FLOOR AND ROOF OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS. FOR ADDITIONAL OPENINGS, INSERTS, SLEEVES, CURBS, PADS, ETC. NOT SHOWN ON THE STRUCTURAL DRAWINGS SEE ARCHITECTURAL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF DIMENSIONS SHOWN ON THE STRUCTURAL AND ARCHITECTURAL DRAWINGS. NOTIFY THE ARCHITECT OF ANY DISCREPANCY BEFORE STARTING SHOP DRAWINGS OR ANY WORK. FOR DIMENSIONS NOT SHOWN, SEE ARCHITECTURAL DRAWINGS.
8. REVIEW OF SHOP DRAWINGS AND OTHER SUBMITTALS BY THE ARCHITECT DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL. THE CONTRACTOR REMAINS SOLE RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR IS ALSO RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION.

MILD REINFORCING STEEL PROTECTION NOTES:

THE FOLLOWING MINIMUM DIMENSIONS SHALL BE PROVIDED AS A CLEAR COVER FOR REINFORCING BARS IN STRUCTURAL MEMBERS:

CONCRETE CAST AGAINST EARTH AND PERMANENTLY EXPOSED TO EARTH:	
FOOTINGS	3"
CONCRETE PERMANENTLY EXPOSED TO EARTH, MOISTURE OR WEATHER:	
WALLS, COLUMNS, PIERS:	
UP THROUGH #5 BARS	1-1/2"
#6 THROUGH #18 BARS	2"
CONCRETE NOT EXPOSED TO EARTH, MOISTURE OR WEATHER:	
SLABS, WALLS, AND JOISTS:	
UP THROUGH #11 BARS	3/4"
#14 AND #18 BARS	1-1/2"
BEAMS, GIRDERS, AND COLUMNS:	
PRINCIPAL REINFORCEMENT, TIES, STIRRUPS, OR SPIRALS	1-1/2"

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REVISIONS

NO.	TITLE	DATE

LOCATION:
212 Main Street
Norwalk, WI
Monroe County

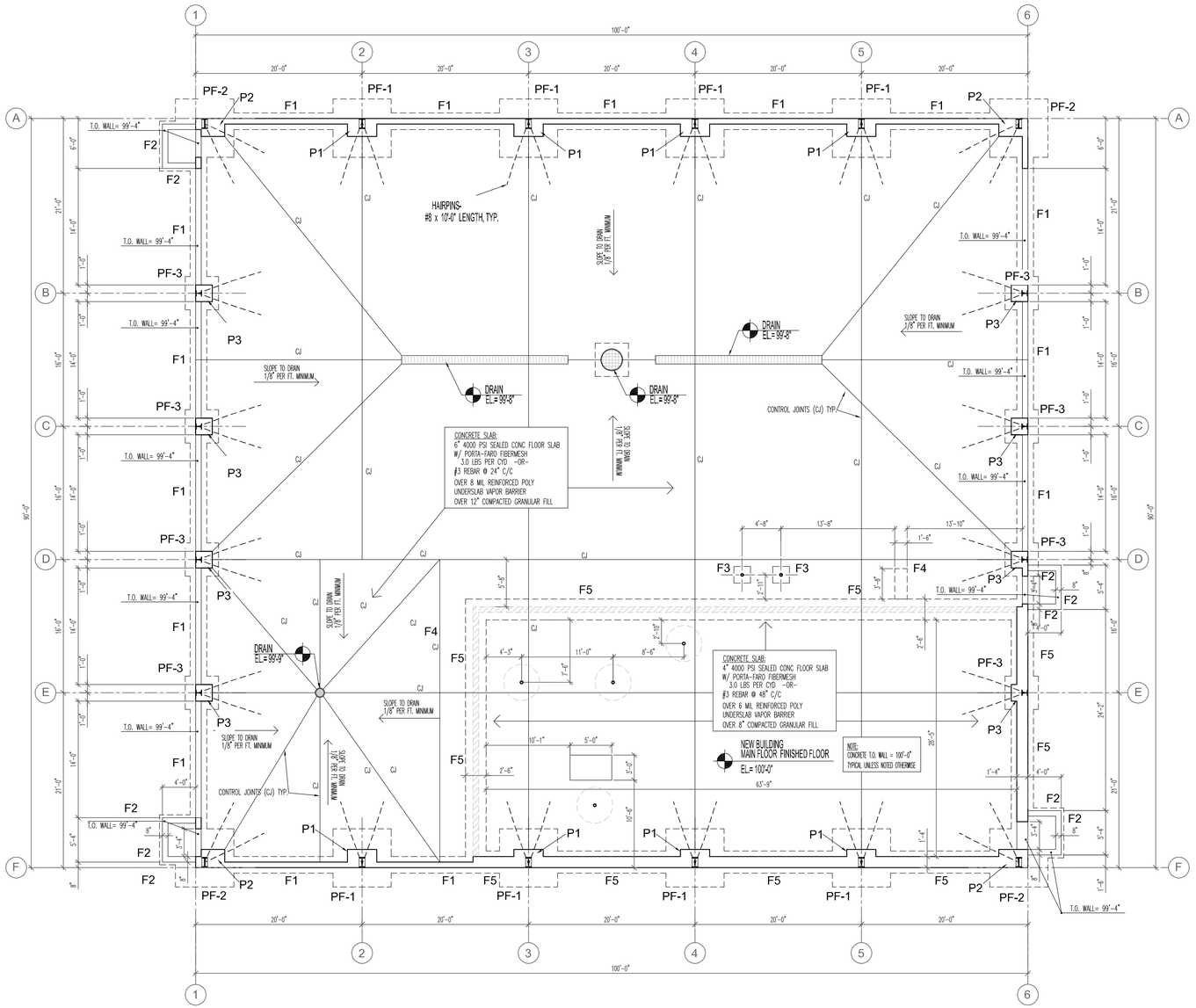
PROJECT OWNER:
Norwalk Area Fire District
212 Main Street
Norwalk, WI 54648

DATE: November 19, 2025

PROJECT:
Norwalk Area Fire District
New Fire Station
212 Main Street Norwalk, WI 54648

SHEET TITLE:
Structural Notes

SHEET NUMBER:
S0.0



FOOTING SCHEDULE					
MARK	DIMENSIONS			REINFORCEMENT	REMARKS
	WIDTH	LENGTH	DEPTH		
F1	24"	CONT.	12"	(2) #5 CONT. REBAR	TYP. FOOTING AT FND. WALL
F2	16"	CONT.	12"	(2) #5 CONT. REBAR	TYP. FOOTING AT EXT. STOOPS
F3	24"	24"	12"	#5 @ 12" O.C.E.W	UNDER-SLAB FOOTING
F4	18"	CONT.	12"	(2) #5 CONT. REBAR	THICKENED SLAB FOOTING
F5	30"	CONT.	12"	(3) #5 CONT. REBAR	THICKENED SLAB FOOTING
PF-1	84"	84"	12"	#5 @ 12" O.C.E.W	PIER FOOTING
PF-2	84"	84"	12"	#5 @ 12" O.C.E.W	PIER FOOTING
PF-3	48"	48"	12"	#5 @ 12" O.C.E.W	PIER FOOTING

PIER SCHEDULE					
MARK	DIMENSIONS			REINFORCEMENT	REMARKS
	WIDTH	LENGTH	DEPTH		
P1	26"	42"	48"	(4) #5 VERT. W/ #3 TIES @ 12" O.C.	PIERS FOR STEEL COLUMNS
P2	26"	42"	48"	(4) #5 VERT. W/ #3 TIES @ 12" O.C.	PIERS FOR STEEL COLUMNS
P3	24"	24"	48"	(4) #5 VERT. W/ #3 TIES @ 12" O.C.	PIERS FOR STEEL COLUMNS

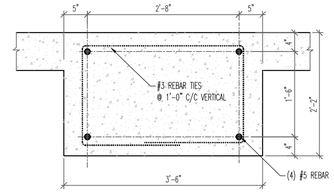
NOTE:
MFG'S BASE PLATE AND ANCHOR BOLT LAYOUTS

NOTE: CONTRACTOR TO PROVIDE ENGINEERING FILL PAD BELOW FOUNDATIONS PER

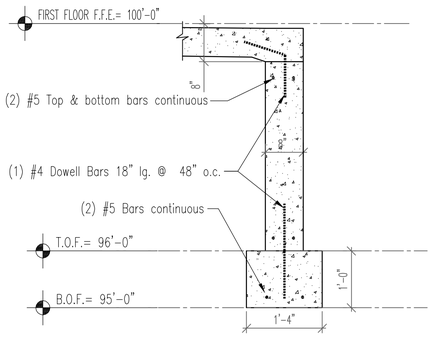
BEARING BENEATH FOUNDATIONS

PLAN NORTH

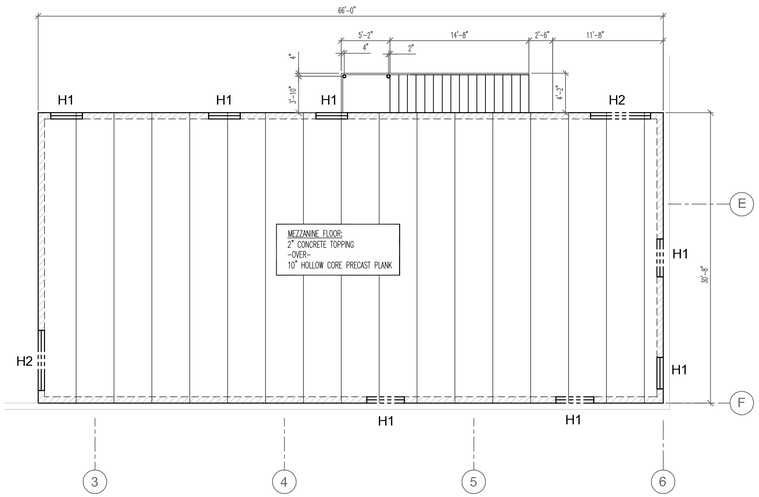
1 S1.0 **Foundation Plan**
1/8" = 1'-0"



3 S1.0 **Typical Pier- Plan Detail**
3/4" = 1'-0"



4 S1.0 **Typical Stoop Detail**
3/4" = 1'-0"



HEADER / BEAM SCHEDULE

H1: 16" CMU HEADER W/ (2) #5 BARS CONT.
H2: 24" CMU HEADER W/ (2) #5 BARS CONT.

NORTH

2 S1.0 **Mezzanine Plan**
1/8" = 1'-0"

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REVISIONS

NO.	TITLE	DATE

PROJECT OWNER:
Norwalk Area Fire District
212 Main Street
Norwalk, WI 54648

LOCATION:
212 Main Street
Norwalk, WI
Monroe County

DATE: November 19, 2025

PROJECT:
Norwalk Area Fire District
New Fire Station
212 Main Street Norwalk, WI 54648

SHEET TITLE:
Foundation Plan

SHEET NUMBER:
S1.0