

STRUCTURAL DESIGN LOAD DATA

THE FOLLOWING DESIGN LOADS ARE APPLICABLE TO THIS FACILITY IN ACCORDANCE WITH IBC 2018, SECTION 1603.

Table with 2 columns: AREA, LOADING. Rows include OFFICE (50 PSF), MEZZANINES (150 PSF), ROOF (NON-SNOW) (20 PSF).

DESIGN SNOW LOADING DATA

Table with 2 columns: GROUND SNOW LOAD, EXPOSURE FACTOR, SLOPE FACTOR, THERMAL FACTOR, IMPORTANCE FACTOR, FLAT ROOF SNOW LOAD, SLOPED ROOF SNOW LOAD, MINIMUM SNOW LOAD.

DESIGN WIND LOADING DATA

Table with 2 columns: RISK CATEGORY, BASIC WIND SPEED, NOMINAL WIND SPEED, EXPOSURE, MEAN ROOF HEIGHT, DIRECTIONALITY FACTOR, TOPOGRAPHIC FACTOR, MAX VELOCITY PRESSURE COEFFICIENT, INTERNAL PRESSURE COEFFICIENT, MAX VELOCITY PRESSURE.

DESIGN SEISMIC LOADING DATA

Table with 2 columns: RISK CATEGORY, IMPORTANCE FACTOR, MAPPED SHORT PERIOD ACCELERATION, MAPPED 1 SEC ACCELERATION, DESIGN SHORT PERIOD ACCELERATION, DESIGN 1 SEC ACCELERATION, SITE CLASS, SEISMIC DESIGN CATEGORY, ANALYSIS METHOD.

Table with 5 columns: BUILDING AREA, LATERAL FORCE RESISTING SYSTEM, RESPONSE COEFF. (R), SEISMIC RESPONSE COEFF. (C), BASE SHEAR (V).

GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE INTERNATIONAL BUILDING CODE (IBC) 2015, INCLUDING ALL CURRENT REFERENCED STANDARDS PER CHAPTER 36, AND TO ALL OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS INCLUDING BUT NOT LIMITED TO OSHA AND ADA REQUIREMENTS.
2. ANY AND ALL QUESTIONS PERTAINING TO THE WORK DESCRIBED IN THESE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITTEN FORM, IN ACCORDANCE WITH THE ESTABLISHED 'REQUEST FOR INFORMATION' (RFI) PROCEDURES.
3. COORDINATE ALL SPECIFICATION REQUIREMENTS WITH THE INFORMATION SHOWN ON DRAWINGS AND IN THESE STRUCTURAL NOTES.
4. DO NOT SCALE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE ARCHITECT/ENGINEER TO RESOLVE ANY DIMENSIONAL DISCREPANCIES RELATED TO THE DRAWINGS AND/OR EXISTING FIELD CONDITIONS WHERE APPROPRIATE.
5. DO NOT MODIFY SIZE, SHAPE, LOCATION, OR SPACING OF STRUCTURAL ELEMENTS WITHOUT APPROVAL FROM THE ENGINEER.
6. TYPICAL DETAILS ARE NOT INDICATED ON PLANS AND ARE REQUIRED TO BE APPLIED AND INTEGRATED INTO THE CONSTRUCTION WHERE APPLICABLE.
7. CONTRACTOR IS RESPONSIBLE FOR PRECISELY LOCATING ALL EXISTING UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGE INCURRED AS A RESULT OF THE CONTRACTOR'S FAILURE TO DO SO IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
8. THE GC SHALL BE RESPONSIBLE FOR COORDINATING, OBTAINING AND TRANSMITTING ALL GEOMETRY AND REQUIRED FIELD DIMENSIONS TO THE VARIOUS TRADES IN ORDER TO PERFORM THE WORK. THE GC SHALL BE SOLELY RESPONSIBLE FOR COORDINATING WORK AND FIELD DIMENSIONS AMONG THE VARIOUS TRADES.
9. THE CONTRACTOR IS RESPONSIBLE FOR ALL PATCHING, REPAIR, AND RESTORATION OF INSTALLED MATERIALS WHERE SUCH MATERIALS ARE DAMAGED OR DEMOLISHED DURING THE COURSE OF CONSTRUCTION. ALL PATCHING, REPAIR, AND RESTORATION SHALL MATCH THE PREVIOUSLY EXISTING CONDITIONS.
10. ANY ADDITIONAL WORK REQUIRED BY THE ARCHITECT/ENGINEER (DESIGN, SKETCHES, DRAWING DOCUMENTATION, FIELD VISITS, ETC) TO CORRECT OR REVISE CONTRACTOR CONSTRUCTION ERRORS SHALL BE AT THE SOLE EXPENSE OF THE CONTRACTOR.
11. THE COMBINATION OF DRAWINGS AND WRITTEN SPECIFICATIONS REPRESENTS THE DESCRIPTION OF WORK, AND THE CONTRACTOR IS SOLELY RESPONSIBLE TO ENSURE THAT ALL WORK DESCRIBED IS IN ACCORDANCE WITH BOTH THE CONTRACT DRAWINGS AND SPECIFICATIONS. IN THE CASE OF CONFLICT BETWEEN NOTES, DRAWINGS, AND SPECIFICATIONS, THE MOST STRINGENT REQUIREMENT WILL GOVERN.
12. THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS REPRESENTS FINISHED DESIGNS AND IN NO WAY CONSIDER OR CONVEY VARIOUS 'IN CONSTRUCTION' CONDITIONS, CONSTRUCTION PROCEDURES, INCLUDING BUT NOT LIMITED TO MEANS, METHODS, PROTECTION OF BUILDING COMPONENTS, TEMPORARY WORK (INCLUDING BUT NOT LIMITED TO TEMPORARY FORMWORK, BRACING, SHORING, GUYS, ERECTION ATTACHMENTS), VERIFICATION OF ALL EXISTING CONDITIONS AND CONSTRUCTION, COORDINATION AND SAFETY SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. U.N.O. THE CONTRACTOR SHALL ENGAGE A LICENSED PROFESSIONAL ENGINEER TO DESIGN ALL TEMPORARY SUPPORT ELEMENTS AND SYSTEMS. ANY REPAIRS, REPLACEMENTS, REINFORCEMENT OR OTHER ALTERATIONS USED TO CONSTRUCTION PROCEDURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO HAS PERFORMED THEM.
13. SPECIAL INSPECTIONS AND SITE OBSERVATION OF THE STRUCTURAL ASPECTS OF THE PROJECT SHALL BE DONE UNDER THE DIRECT SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER AND IS THE RESPONSIBILITY OF THE OWNER. INSPECTION OR SITE OBSERVATION OF THE WORK BY THE SPECIAL INSPECTOR DOES NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF CONFORMING TO THE DRAWINGS AND SPECIFICATIONS FOR ALL CONSTRUCTION.

EARTHWORK

- 1. REFER TO 'EARTHWORK' SPECIFICATIONS FOR REQUIREMENTS
2. THE BASIS OF FOUNDATION DESIGN IS THE GEOTECHNICAL INVESTIGATIVE REPORT: 'GEO REPORT FOR WEST WHITELAND PUBLIC WORKS' UZMAN ENGINEERING MARCH 16, 2023
3. WHERE NOT SHOWN ON DRAWINGS, THE MINIMUM EMBEDMENT (BELOW FINISHED EXTERIOR GRADE) TO ALL EXTERIOR FOOTINGS SHALL BE: 3 FEET - 0 INCHES
4. FOUNDATIONS SHALL BEAR ON UNDISTURBED, NATURAL SOIL OR ON COMPACTED STRUCTURAL FILL THAT OVERLAYS UNDISTURBED, NATURAL SOIL
5. REFER TO THE SPECIFICATIONS FOR EXCAVATION, BACKFILL AND PREPARATION OF THE FOUNDATION AND SLAB-ON GRADE SUBGRADE, INCLUDING COMPACTION REQUIREMENTS.
6. ALL WORK PERTAINING TO SOIL CONDITIONS (VERIFICATION OF MATERIALS, PLACEMENT OF FILL, COMPACTION, ETC) SHALL BE OVERSEEN BY A LICENSED GEOTECHNICAL ENGINEER.
7. BEARING AND SUBGRADE CONDITIONS SHALL BE OBSERVED AND VERIFIED BY A LICENSED GEOTECHNICAL ENGINEER PRIOR TO INSTALLATION OF ALL FOUNDATION AND ON-GRADE CONCRETE SLAB ELEMENTS.
8. EXCAVATION SHALL BE PERFORMED SO AS NOT TO DISTURB OR UNDERMINE ANY EXISTING ADJACENT BUILDINGS, STREETS, AND UTILITY LINES. VERIFY LOCATIONS OF ALL BELOW GRADE FEATURES AND UTILITIES PRIOR TO COMMENCEMENT OF WORK. HAND EXCAVATE AROUND UTILITIES AS REQUIRED.
9. ALL EXCAVATIONS TO HAVE NEAT CUT BOTTOM CORNERS TO PROVIDE FOR BEARING ON THE FULL BOTTOM AREA OF THE FOOTING.
10. ALL EXCAVATIONS SHALL BE KEPT FREE OF WATER, LOOSE MATERIAL AND DEBRIS PRIOR TO CONCRETE PLACEMENT. CONCRETE SHALL NOT BE PLACED IN ANY WET AREA OR UPON ANY SOFT OR FROZEN MATERIAL. CONTRACTOR SHALL DEWATER EXCAVATIONS AS REQUIRED TO MAINTAIN DRY CONDITIONS.

FOUNDATIONS

- 1. UNLESS SHOWN OTHERWISE, CENTER ALL FOOTING ELEMENTS UNDER WALLS AND AT COLUMN GRID INTERSECTIONS.
2. FOUNDATIONS ARE DESIGNED FOR THE FOLLOWING ALLOWABLE BEARING PRESSURE(S): 2,000 PSF
3. ALL STEPPED FOOTINGS SHALL BE CAST CONTINUOUSLY WITHOUT CONSTRUCTION OR CONTROL JOINTS.
4. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL REQUIREMENTS FOR FOUNDATION WALL PENETRATIONS (PIPE, CONDUIT, DUCTS, ETC) AND PROVIDE SLEEVES, OPENINGS, AND ALL OTHER ACCOMMODATIONS AS REQUIRED TO FACILITATE INSTALLATION OF PIPES, CONDUITS, DUCTS, ETC., AFTER THE FOUNDATION WALL IS IN PLACE.
5. UNLESS SPECIFICALLY DETAILED, PENETRATIONS AND OPENINGS ARE NOT PERMITTED IN PIERS, COLUMNS, OR FOOTINGS.
6. IN ALL LOCATIONS WHERE CONCRETE MASONRY UNIT FOUNDATION WALLS ARE CONSTRUCTED BELOW THE FINISHED EXTERIOR GRADE, THE CONCRETE MASONRY UNITS SHALL BE FULLY GROUTED.
7. WHERE EARTH-FORMED FOOTINGS ARE USED, IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THE SPECIFIED ELEVATIONS AND DIMENSIONS ARE PROVIDED. ANY AND ALL MODIFICATIONS OR CHANGES REQUIRED BY OTHER TRADE CONTRACTORS TO ACCOMMODATE FOOTINGS THAT ARE NOT INSTALLED AT THE SPECIFIED ELEVATIONS AND DIMENSIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR RESPONSIBLE FOR PLACEMENT OF THE FOOTINGS.
8. REFER TO PROJECT SPECIFICATIONS FOR ALL CONCRETE MATERIAL, STRENGTH, MIXTURE, PLACEMENT, AND CURING REQUIREMENTS.
9. CONCRETE FOR FOUNDATIONS SHALL BE PLACED ON THE SAME DAY THE SUBGRADE IS APPROVED BY THE GEOTECHNICAL ENGINEER.
10. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW SPREAD FOOTINGS.

CONCRETE

- 1. CONCRETE SHALL BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS. IF A STANDARD IS LISTED AS A 'REFERENCED STANDARD' WITHIN THE APPLICABLE BUILDING CODE, USE OF NON-REFERENCED EDITIONS IS PROHIBITED. IF A STANDARD IS NOT REFERENCED IN THE BUILDING CODE, THE LATEST EDITION OF THE APPLICABLE STANDARD SHOULD BE USED.
A. ACI 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
B. ACI MANUAL OF CONCRETE PRACTICE - PARTS 1 THROUGH 5
C. ACI 301, SPECIFICATIONS FOR STRUCTURAL CONCRETE
D. ACI 347, GUIDE TO FORMWORK OF CONCRETE
E. ACI 308, GUIDE TO PRECASTING REINFORCING STEEL DESIGN DETAILS
F. ACI 305, GUIDE TO HOT WEATHER CONCRETING
G. ACI 306, GUIDE TO COLD WEATHER CONCRETING
H. CRSI MANUAL OF STANDARD PRACTICE
2. DETAIL, FABRICATE, AND INSTALL ALL STEEL REINFORCEMENT IN ACCORDANCE WITH ACI AND CRSI STANDARDS.
3. POSITION AND SECURELY FASTEN ALL REINFORCEMENT IN LOCATION PRIOR TO PLACING CONCRETE. POST-INSTALLMENT OF REINFORCEMENT ('WET STICKING') IS NOT PERMITTED.
4. THROUGHOUT CONSTRUCTION, THE CONCRETE WORK SHALL BE ADEQUATELY PROTECTED AGAINST DAMAGE DUE TO EXCESSIVE LOADING, CONSTRUCTION EQUIPMENT, MATERIAL OR METHODS, ICE, RAIN, SNOW, EXCESSIVELY HOT OR COLD TEMPERATURES AND ANY OTHER DETRIMENTAL ENVIRONMENTAL FACTORS. ANY REPAIRS, REPLACEMENTS, ALTERATIONS OR OTHER ADDITIONAL WORK DUE TO IMPROPER PROTECTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
5. CURE CONCRETE ELEMENTS IN ACCORDANCE WITH THE SPECIFICATIONS.
6. CHAMFER ALL EXPOSED CONCRETE CORNERS U.N.O. ON THE DRAWINGS.
7. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL LOCATIONS AND DIMENSIONS OF RECESSED SLAB AREAS, PLATFORMS, CURBS, AND MECHANICAL EQUIPMENT PADS.

MASONRY

- 1. MASONRY SHALL BE DETAILED AND CONSTRUCTED IN ACCORDANCE WITH FOLLOWING CODES AND STANDARDS. IF A STANDARD IS LISTED AS A 'REFERENCED STANDARD' WITHIN THE APPLICABLE BUILDING CODE, USE OF NON-REFERENCED EDITIONS IS PROHIBITED. IF A STANDARD IS NOT REFERENCED IN THE BUILDING CODE, THE LATEST EDITION OF THE APPLICABLE STANDARD SHOULD BE USED.
A. TMS 402, BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES
B. TMS 602, SPECIFICATION FOR MASONRY STRUCTURES.
2. GROUT MAY BE EITHER 'FINE' OR 'COARSE' AS APPROPRIATE FOR EACH SPECIFIC APPLICATION.
3. PROVIDE MORTAR IN ACCORDANCE WITH ASTM C270, TYPE AS INDICATED IN PROJECT SPECIFICATIONS FOR APPLICABLE USE.
4. ADMIXTURES IN GROUT AND MORTAR ARE NOT PERMITTED.
5. USE OF MASONRY CEMENT IS NOT PERMITTED.
6. ALL REINFORCING IN CONCRETE MASONRY CONSTRUCTION MUST BE IN PLACE PRIOR TO INSTALLATION OF GROUT. REINFORCING BARS SHALL BE HELD IN PLACE WITH BAR POSITIONERS OR OTHER APPROPRIATE MEANS TO PREVENT DISPLACEMENT. DO NOT WET-SET OR PLUNGE REINFORCING BARS INTO GROUTED AREAS.
7. DO NOT LEAVE UNFINISHED MASONRY WALLS OPEN TO WEATHER AND WATER INTRUSION. ALL UNFINISHED MASONRY SHALL BE TEMPORARILY PROTECTED.
8. LINTELS ARE REQUIRED TO SUPPORT MASONRY ACROSS ALL OPENINGS. TYPICAL DETAILS INDICATE LINTEL TYPES TO BE USED. REFER TO ARCHITECTURAL AND MECHANICAL/ELECTRICAL PLUMBING DRAWINGS FOR ALL MASONRY WALL LOCATIONS AND OPENINGS.
9. NOT ALL LINTELS ARE SHOWN ON STRUCTURAL DRAWINGS. CONTRACTOR IS RESPONSIBLE FOR DEVELOPING LINTEL SUBMITTALS TO INDICATE ALL OPENINGS IN MASONRY WALLS AND CORRESPONDING LINTEL TYPE AND INSTALLATION DETAILS.
10. THE CONTRACTOR SHALL COORDINATE LINTEL TYPE (STEEL, MASONRY, ETC.) AT EACH LOCATION WITH ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS. THE STRUCTURAL CONTRACT DOCUMENTS PROVIDE DESIGN FOR EACH LINTEL TYPE, BUT SHALL NOT BE USED FOR SELECTION OF LINTEL TYPE UNLESS SPECIFICALLY NOTED ON THE DRAWINGS. CONTRACTOR HAS THE OPTION TO PROVIDE ALTERNATE LINTEL CONFIGURATIONS TO ACCOMMODATE CONSTRUCTION. IN DOING SO, CONTRACTOR SHALL SUBMIT ALL PERTINENT LINTEL DATA AND CORRESPONDING ENGINEERING DATA TO THE ENGINEER FOR APPROVAL. PROVIDING ALTERNATES WITHOUT APPROVAL IS PROHIBITED AND REMEDIAL MEASURES FOR UNAPPROVED ALTERNATES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
11. ALL STEEL LINTELS IN EXTERIOR WALLS SHALL BE HOT-DIPPED GALVANIZED.

STRUCTURAL STEEL

- 1. STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE FOLLOWING CODES AND STANDARDS. IF A STANDARD IS LISTED AS A 'REFERENCED STANDARD' WITHIN THE APPLICABLE BUILDING CODE, USE OF NON-REFERENCED EDITIONS IS PROHIBITED. IF A STANDARD IS NOT REFERENCED IN THE BUILDING CODE, THE LATEST EDITION OF THE APPLICABLE STANDARD SHOULD BE USED.
A. AISC MANUAL OF STEEL CONSTRUCTION
B. AISC 360, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND BRIDGES
C. RCSC, SPECIFICATION FOR STRUCTURAL STEEL JOINTS USING HIGH STRENGTH BOLTS
D. AISC 303, CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES
2. PROVIDE STRUCTURAL STEEL SHAPES USING AISC STANDARDS SECTIONS AND GRADES AS FOLLOWS, UNO

SECTION TYPE

Table with 2 columns: SECTION TYPE, MATERIAL GRADE. Rows include W & WT, M, S, MT & ST, HP, DM, C & MC, HSI, STEEL PIPE, PLATES & BARS, BOLTS, HEAVY HEX HEADED ANCHOR RODS.

- 3. WHERE BEAM SPACING IS NOT SHOWN ON DRAWINGS, SPACE BEAMS EQUALLY BETWEEN PRIMARY SUPPORTS (COLUMNS, WALLS, ETC).
4. FIELD MODIFICATIONS TO ALL STRUCTURAL STEEL COMPONENTS INCLUDING, BUT NOT LIMITED TO MEMBERS, CONNECTIONS, ATTACHMENTS, AND REINFORCEMENT ARE PROHIBITED WITHOUT APPROVAL FROM THE ENGINEER AND FABRICATOR. ANY REPAIRS, REPLACEMENTS, ALTERATIONS OR OTHER ADDITIONAL WORK DUE TO UNAPPROVED FIELD MODIFICATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR THAT MADE THE MODIFICATIONS.
5. THE GENERAL CONTRACTOR AND STEEL ERECTOR SHALL NOTIFY THE ENGINEER OF ANY FABRICATION OR ERECTION ERRORS OR DEVIATIONS. FIELD MODIFICATIONS ARE PROHIBITED WITHOUT APPROVAL FROM THE ENGINEER.
6. PRIOR TO COMMENCING STEEL ERECTION, THE GENERAL CONTRACTOR SHALL CONDUCT A FIELD SURVEY OF AS-BUILT FOUNDATION COMPONENTS TO VERIFY QUANTITY, LOCATION, SIZE, SPACING AND ELEVATION OF ANCHOR RODS AND THAT ALL BEARING PLATES, EMBED PLATES, OR LEVELING PLATES ARE IN CONFORMANCE WITH THE CONTRACT DOCUMENTS AND APPROVED SHOP DRAWINGS.
7. FIELD WELDED SURFACES SHALL BE PROPERLY PREPARED, INCLUDING CLEANING AND GRINDING SMOOTH, FOR AN AREA EXTENDING 6 INCHES BEYOND THE LIMITS OF WELDING. AFTER WELDING COAT THE EXPOSED AREA WITH THE APPROPRIATE PRIMER/PANTS AS SPECIFIED. FIELD WELDED SURFACES OF GALVANIZED MEMBERS SHALL BE COATED WITH GALVANIZING REPAIR PAINT PER SPECIFICATIONS.

POST-INSTALLED ANCHORS/FASTENERS

- 1. THESE ANCHOR/FASTENER PRODUCTS ARE SPECIFIED AS 'BASIS OF DESIGN'. CONTRACTORS MAY SUBMIT OTHER MANUFACTURERS PRODUCTS FOR REVIEW AND APPROVAL. INCLUDE ALL CORRESPONDING PRODUCT DATA TO SHOW THAT THE SUBMITTED PRODUCT MEETS OR EXCEEDS THE PERFORMANCE OF THE BASIS OF DESIGN.
EPOXY ANCHORS: PLAIN A36 THREADED ROD W/HLTI HIT-HY 200 ADHESIVE (SIZE AND EMBED PER DETAILS)
EXPANSION ANCHORS: PLAIN CARBON STEEL HLTI KWIK BOLT 3 (SIZE AND EMBED PER DETAILS)
SCREW ANCHORS: PLAIN CARBON STEEL HLTI KWIK HUS (SIZE AND EMBED PER DETAILS)

STRUCTURAL STEEL CONNECTIONS:

- 1. EXCEPT WHERE OTHERWISE SHOWN ON THESE DOCUMENTS, THE DESIGN OF ALL STRUCTURAL STEEL CONNECTIONS IS DELEGATED TO A LICENSED PROFESSIONAL ENGINEER WORKING FOR THE STRUCTURAL STEEL FABRICATOR IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
A. ANY AISC-APPROVED OR AISC-PRE-QUALIFIED CONNECTION MAY BE USED AS DETERMINED BY THE FABRICATOR AND FABRICATOR'S LICENSED PROFESSIONAL ENGINEER.
B. ALL FORCES TO BE USED FOR CONNECTION DESIGN ARE INDICATED ON THESE DRAWINGS.
C. ALL FORCES SHOWN ARE SERVICE-LEVEL (UNFACTORED), AND THE ASD METHOD SHALL BE USED TO SELECT, COMPLETE, AND/OR DESIGN CONNECTION DETAILS.
D. SEALED/SIGNED CALCULATIONS SHALL BE INCLUDED WITH THE APPROVAL DRAWINGS FOR ALL CONNECTIONS DESIGNED AND DETAILED BY THE FABRICATOR'S LICENSED PROFESSIONAL ENGINEER. THIS SHALL INCLUDE ANY TABULATED OR OTHERWISE PRE-DETERMINED DATA FOR ANY PROPOSED AISC-APPROVED OR AISC-PRE-QUALIFIED CONNECTIONS.
2. PRIOR TO THE SUBMISSION OF APPROVAL DRAWINGS, THE FABRICATOR SHALL SUBMIT FOR REVIEW AND ACCEPTANCE REPRESENTATIVE SAMPLES OF THE PROPOSED CONNECTION TYPES AND CORRESPONDING CALCULATIONS.
3. MEMBER REINFORCING AT CONNECTIONS CONTAINED IN THE CONTRACT DOCUMENTS IS CONCEPTUAL. THE CONTRACTOR'S DESIGNER SHALL DETERMINE REINFORCING THICKNESSES, WIDTHS, LENGTHS, ETC. AS REQUIRED AT ALL CONNECTIONS.
4. MINIMUM BOLT FOR STRUCTURAL CONNECTIONS: 3/4" DIAM.
5. ALL BOLTED CONNECTIONS SHALL HAVE MINIMUM 2 BOLTS U.N.O. ON THE CONTRACT DOCUMENTS.
6. ALL BOLTED CONNECTIONS SHALL BE DESIGNED FOR 'SNUG TIGHT' CONDITION U.N.O ON THE CONTRACT DOCUMENTS.

COLD-FORMED METAL FRAMING

- 1. INTENT OF COLD-FORMED METAL FRAMING (CFMF) WORK IS SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
2. ALL CFMF COMPONENTS AND SYSTEMS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE STRUCTURAL LOADING CRITERIA AND CONDITIONS SHOWN AND DETERMINED FROM THE CONSTRUCTION DOCUMENTS.
3. ALL CFMF MEMBERS USED IN EXTERIOR WALL APPLICATIONS AS THE BACKUP STRUCTURE FOR ANY AND ALL MASONRY VENEER SYSTEMS, WHETHER PARTIAL OF FULL HEIGHT, SHALL BE A MINIMUM OF 16 GAUGE MATERIAL.
4. ALL OTHER CFMF MEMBERS USED IN EXTERIOR WALL APPLICATIONS SHALL BE A MINIMUM OF 18 GAUGE MATERIAL.
5. SPECIFIC CFMF INFORMATION (MEMBER SIZES, GAUGES, SPACING, ETC.) SHOWN IN CONTRACT DRAWINGS ARE MINIMUM REQUIREMENTS AND MAY NOT BE REDUCED BY THE DELEGATED DESIGNER'S DESIGN.

POST-INSTALLED ANCHORS/FASTENERS

- 1. THESE ANCHOR/FASTENER PRODUCTS ARE SPECIFIED AS 'BASIS OF DESIGN'. CONTRACTORS MAY SUBMIT OTHER MANUFACTURERS PRODUCTS FOR REVIEW AND APPROVAL. INCLUDE ALL CORRESPONDING PRODUCT DATA TO SHOW THAT THE SUBMITTED PRODUCT MEETS OR EXCEEDS THE PERFORMANCE OF THE BASIS OF DESIGN.
EPOXY ANCHORS: PLAIN A36 THREADED ROD W/HLTI HIT-HY 200 ADHESIVE (SIZE AND EMBED PER DETAILS)
EXPANSION ANCHORS: PLAIN CARBON STEEL HLTI KWIK BOLT 3 (SIZE AND EMBED PER DETAILS)
SCREW ANCHORS: PLAIN CARBON STEEL HLTI KWIK HUS (SIZE AND EMBED PER DETAILS)

STRUCTURAL STEEL CONNECTIONS:

- 1. THESE ANCHOR/FASTENER PRODUCTS ARE SPECIFIED AS 'BASIS OF DESIGN'. CONTRACTORS MAY SUBMIT OTHER MANUFACTURERS PRODUCTS FOR REVIEW AND APPROVAL. INCLUDE ALL CORRESPONDING PRODUCT DATA TO SHOW THAT THE SUBMITTED PRODUCT MEETS OR EXCEEDS THE PERFORMANCE OF THE BASIS OF DESIGN.
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EXPANSION ANCHORS: PLAIN CARBON STEEL HLTI KWIK BOLT 3 (SIZE AND EMBED PER DETAILS)
SCREW ANCHORS: PLAIN CARBON STEEL HLTI KWIK HUS (SIZE AND EMBED PER DETAILS)
2. WHEN INSTALLING MECHANICAL AND ADHESIVE ANCHORS, THE CONTRACTOR SHALL TAKE MEASURES TO AVOID DRILLING OR CUTTING OF ANY EXISTING REINFORCING AND DESTRUCTION OF CONCRETE. HOLES SHALL BE FREE OF DUST, DIRT, WATER AND DEBRIS PRIOR TO INSTALLING MECHANICAL OR ADHESIVE ANCHORS.
3. THE OWNER SHALL ENGAGE AN APPROVED AGENCY TO OVERSEE AND OBSERVE THE IMPLEMENTATION OF ALL REQUIRED STRUCTURAL TESTING AND SPECIAL INSPECTION PROCEDURES AND ACTIVITIES.
4. THE OWNER SHALL ENGAGE A TESTING AND INSPECTION AGENCY TO PERFORM SOIL TESTING AND INSPECTION SERVICES THAT ARE DESIGNATED AS SPECIAL INSPECTIONS, INCLUDING FULL TIME INSPECTION OF THE CONTROLLED COMPACTED FILL AND THE BOTTOMS OF ALL EXCAVATIONS. TESTING AND INSPECTIONS SHALL BE PERFORMED UNDER THE DIRECT SUPERVISION OF A QUALIFIED GEOTECHNICAL ENGINEER, REPORTS, INCLUDING RESULTS OF THE COMPACTION TESTING, SHALL BE SUBMITTED TO ARCHITECT OUTLINE WORK PERFORMED AND TEST RESULTS.
5. PERFORMANCE OF STRUCTURAL TESTS AND SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE IBC DOES NOT RELIEVE CONTRACTOR FROM ANY OTHER QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES AS DEFINED IN THE PROJECT SPECIFICATIONS.
6. COPIES OF ALL REPORTS DEVELOPED BY THE APPROVED AGENCY SHALL BE PROVIDED TO THE ARCHITECT/ENGINEER.
7. THE CONTRACTOR SHALL PROVIDE A SCHEDULE OF SPECIAL INSPECTIONS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES.

STRUCTURAL STEEL CONNECTIONS:

- 1. EXCEPT WHERE OTHERWISE SHOWN ON THESE DOCUMENTS, THE DESIGN OF ALL STRUCTURAL STEEL CONNECTIONS IS DELEGATED TO A LICENSED PROFESSIONAL ENGINEER WORKING FOR THE STRUCTURAL STEEL FABRICATOR IN ACCORDANCE WITH THE FOLLOWING CRITERIA:
A. ANY AISC-APPROVED OR AISC-PRE-QUALIFIED CONNECTION MAY BE USED AS DETERMINED BY THE FABRICATOR AND FABRICATOR'S LICENSED PROFESSIONAL ENGINEER.
B. ALL FORCES TO BE USED FOR CONNECTION DESIGN ARE INDICATED ON THESE DRAWINGS.
C. ALL FORCES SHOWN ARE SERVICE-LEVEL (UNFACTORED), AND THE ASD METHOD SHALL BE USED TO SELECT, COMPLETE, AND/OR DESIGN CONNECTION DETAILS.
D. SEALED/SIGNED CALCULATIONS SHALL BE INCLUDED WITH THE APPROVAL DRAWINGS FOR ALL CONNECTIONS DESIGNED AND DETAILED BY THE FABRICATOR'S LICENSED PROFESSIONAL ENGINEER. THIS SHALL INCLUDE ANY TABULATED OR OTHERWISE PRE-DETERMINED DATA FOR ANY PROPOSED AISC-APPROVED OR AISC-PRE-QUALIFIED CONNECTIONS.
2. PRIOR TO THE SUBMISSION OF APPROVAL DRAWINGS, THE FABRICATOR SHALL SUBMIT FOR REVIEW AND ACCEPTANCE REPRESENTATIVE SAMPLES OF THE PROPOSED CONNECTION TYPES AND CORRESPONDING CALCULATIONS.
3. MEMBER REINFORCING AT CONNECTIONS CONTAINED IN THE CONTRACT DOCUMENTS IS CONCEPTUAL. THE CONTRACTOR'S DESIGNER SHALL DETERMINE REINFORCING THICKNESSES, WIDTHS, LENGTHS, ETC. AS REQUIRED AT ALL CONNECTIONS.
4. MINIMUM BOLT FOR STRUCTURAL CONNECTIONS: 3/4" DIAM.
5. ALL BOLTED CONNECTIONS SHALL HAVE MINIMUM 2 BOLTS U.N.O. ON THE CONTRACT DOCUMENTS.
6. ALL BOLTED CONNECTIONS SHALL BE DESIGNED FOR 'SNUG TIGHT' CONDITION U.N.O ON THE CONTRACT DOCUMENTS.

COLD-FORMED METAL FRAMING

- 1. INTENT OF COLD-FORMED METAL FRAMING (CFMF) WORK IS SHOWN ON THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
2. ALL CFMF COMPONENTS AND SYSTEMS SHALL BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER IN ACCORDANCE WITH THE STRUCTURAL LOADING CRITERIA AND CONDITIONS SHOWN AND DETERMINED FROM THE CONSTRUCTION DOCUMENTS.
3. ALL CFMF MEMBERS USED IN EXTERIOR WALL APPLICATIONS AS THE BACKUP STRUCTURE FOR ANY AND ALL MASONRY VENEER SYSTEMS, WHETHER PARTIAL OF FULL HEIGHT, SHALL BE A MINIMUM OF 16 GAUGE MATERIAL.
4. ALL OTHER CFMF MEMBERS USED IN EXTERIOR WALL APPLICATIONS SHALL BE A MINIMUM OF 18 GAUGE MATERIAL.
5. SPECIFIC CFMF INFORMATION (MEMBER SIZES, GAUGES, SPACING, ETC.) SHOWN IN CONTRACT DRAWINGS ARE MINIMUM REQUIREMENTS AND MAY NOT BE REDUCED BY THE DELEGATED DESIGNER'S DESIGN.

STRUCTURAL ABBREVIATIONS

Table with 2 columns: ABBREVIATION, DESCRIPTION. Rows include AFF, ARCH, BLDG, BOT, BR, BP, BRG, CANT, CIP, CFMF, CMU, COL, CONC, CONT, COORD, DIAM, DIAG, DIM, DWG, EF, ELEV, ENGR, EQPT, EXIST, EXIST or (E)Existing EachWay, FTG, FLR, FND, GA, GALV, HEF, HF, HOF, HORZ, ID, INSIDE DIAMETER, LW, LL, LLH, LLV, MFG, MAX, MIN, MECH, NW, ON CENTER, OPNG, OD, OPP, PERP, PCF, PSF, PSI, REINF, REQD, SECT, SIM, SW, TYP, UNO, VERT, VEF, VOF, W, WITH.

SUBMITTAL REQUIREMENTS - CONCRETE

- 1. CONCRETE MIX DESIGNS FOR EACH TYPE INDICATED OR SPECIFIED
2. REINFORCING BAR SHOP DRAWINGS: REINFORCING BAR SHOP DRAWINGS MUST INCLUDE DETAILED ELEVATION DRAWINGS OF ALL WALLS AND OTHER CAST-IN-PLACE CONCRETE ELEMENTS TO SHOW PLACEMENT, SIZE, LOCATION, AND CONFIGURATION OF ALL REINFORCING STEEL ELEMENTS. REINFORCING BAR SUBMITTALS THAT DO NOT INCLUDE THIS INFORMATION WILL BE REJECTED ON THE BASIS OF BEING INADEQUATE AND INCOMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL DIMENSIONS AND ELEVATIONS AS A PART OF THE SHOP DRAWING REVIEW PROCESS PRIOR TO SUBMITTAL TO THE ENGINEER FOR REVIEW.
3. OVERALL ON-GRADE SLAB PLAN SHOWING ALL LOCATIONS OF CONSTRUCTION AND CONSTRUCTION JOINTS, RECESSED SLAB AREAS, SLAB STEPS, AND THICKENED SLAB LOCATIONS

SUBMITTAL REQUIREMENTS - MASONRY

- 1. MIX DESIGNS AND PROCEDURES FOR ALL MORTAR AND GROUT
2. REINFORCING BAR SHOP DRAWINGS: REINFORCING BAR SHOP DRAWINGS MUST INCLUDE DETAILED ELEVATION DRAWINGS OF ALL WALLS AND OTHER REINFORCED CONCRETE MASONRY ELEMENTS TO SHOW PLACEMENT, SIZE, LOCATION, AND CONFIGURATION OF ALL REINFORCING STEEL ELEMENTS. REINFORCING BAR SUBMITTALS THAT DO NOT INCLUDE THIS INFORMATION WILL BE REJECTED ON THE BASIS OF BEING INADEQUATE AND INCOMPLETE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL DIMENSIONS AND ELEVATIONS AS PART OF THE SHOP DRAWING REVIEW PROCESS PRIOR TO SUBMITTAL TO THE ENGINEER FOR REVIEW. ANY REPAIRS, REPLACEMENTS OR ALTERATIONS DUE TO FABRICATION OR ERECTION PRIOR TO SHOP DRAWING APPROVAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FIELD ALTERATION TO APPROVED COMPONENTS IS PROHIBITED WITHOUT APPROVAL OF THE ENGINEER AND FABRICATOR.
3. STRUCTURAL STEEL CONNECTION CALCULATIONS: THE CONTRACTOR SHALL SUBMIT CONNECTION CALCULATIONS AS REQUIRED PER 'STRUCTURAL STEEL CONNECTIONS' GENERAL NOTES.
4. ALL EXISTING GEOMETRY AND/OR FIELD MEASUREMENTS REQUIRED FOR FABRICATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUBMITTAL TO THE ENGINEER WILL BE FOR REVIEW/RECORD ONLY.

SUBMITTAL REQUIREMENTS - STEEL

- 1. ANCHOR ROD DRAWINGS: PROVIDE DETAILED, DIMENSIONAL LAYOUT OF ALL BASE PLATE, LEVELING PLATE, AND ANCHOR ROD CONDITIONS.
2. STRUCTURAL STEEL AND MISCELLANEOUS STEEL FABRICATIONS SHOP DRAWINGS: STEEL FABRICATION AND ERECTION SHOP DRAWINGS SHALL BE SUBMITTED TO REVIEW GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS. SHOP DRAWINGS SHALL INCLUDE ALL INFORMATION REQUIRED TO FABRICATE AND ERECT STEEL ELEMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CHECK ALL DIMENSIONS AND ELEVATIONS AS PART OF THE SHOP DRAWING REVIEW PROCESS PRIOR TO SUBMITTAL TO THE ENGINEER FOR REVIEW. ANY REPAIRS, REPLACEMENTS OR ALTERATIONS DUE TO FABRICATION OR ERECTION PRIOR TO SHOP DRAWING APPROVAL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. FIELD ALTERATION TO APPROVED COMPONENTS IS PROHIBITED WITHOUT APPROVAL OF THE ENGINEER AND FABRICATOR.
3. STRUCTURAL STEEL CONNECTION CALCULATIONS: THE CONTRACTOR SHALL SUBMIT CONNECTION CALCULATIONS AS REQUIRED PER 'STRUCTURAL STEEL CONNECTIONS' GENERAL NOTES.
4. ALL EXISTING GEOMETRY AND/OR FIELD MEASUREMENTS REQUIRED FOR FABRICATION IS THE RESPONSIBILITY OF THE CONTRACTOR AND SUBMITTAL TO THE ENGINEER WILL BE FOR REVIEW/RECORD ONLY.

COLD-FORMED METAL FRAMING

- 1. PROVIDE DETAILED ELEVATION DRAWINGS FOR ALL AREAS OF COLD-FORMED METAL FRAMING TO SHOW PLACEMENT, SIZE, LOCATION, AND CONFIGURATION OF ALL COMPONENTS. COLD-FORMED METAL FRAMING SUBMITTALS THAT DO NOT INCLUDE THIS INFORMATION WILL BE REJECTED ON THE BASIS OF BEING INADEQUATE AND INCOMPLETE.
2. PROVIDE CALCULATIONS, SEALED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER, TO SHOW THAT ALL COLD-FORMED METAL FRAMING COMPONENTS AND SYSTEMS HAVE BEEN DESIGNED TO WITHSTAND THE LOADS INDICATED ON THE DRAWINGS, ARE IN COMPLIANCE WITH APPLICABLE BUILDING CODES, AND CONFORM TO THE REQUIREMENTS SHOWN IN THE CFMF NOTES.

STRUCTURAL ABBREVIATIONS

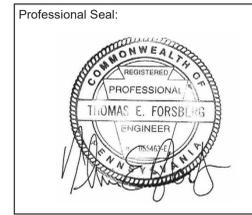
Table with 2 columns: ABBREVIATION, DESCRIPTION. Rows include AFF, ARCH, BLDG, BOT, BR, BP, BRG, CANT, CIP, CFMF, CMU, COL, CONC, CONT, COORD, DIAM, DIAG, DIM, DWG, EF, ELEV, ENGR, EQPT, EXIST, EXIST or (E)Existing EachWay, FTG, FLR, FND, GA, GALV, HEF, HF, HOF, HORZ, ID, INSIDE DIAMETER, LW, LL, LLH, LLV, MFG, MAX, MIN, MECH, NW, ON CENTER, OPNG, OD, OPP, PERP, PCF, PSF, PSI, REINF, REQD, SECT, SIM, SW, TYP, UNO, VERT, VEF, VOF, W, WITH.

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Owner:
West Whiteland Township

101 Commerce Drive
Exton, PA 19341

New Construction of:
WEST WHITELAND PUBLIC WORKS FACILITY
121 VALLEY CREEK BOULEVARD
EXTON, PA 19341

ISSUED FOR:

Table with 3 columns: NO., DESCRIPTION, DATE. Rows include 100% CONSTRUCTION DOCUMENTS (06/30/2023) and BID DOCUMENTS (07/05/2023).

DATE: JULY 5, 2023

SGA PROJECT NUMBER: 21-037

Key Plan:

Drawing Title:

STRUCTURAL NOTES

Drawing Number:

S001

Table with 4 columns: MINIMUM CONCRETE COVER FOR CAST-IN-PLACE CONCRETE MEMBERS, CONCRETE EXPOSURE, MEMBERS, REINFORCEMENT, SPECIFIED COVER, IN. Rows include CAST AGAINST AND PERMANENTLY IN CONTACT WITH GROUND, EXPOSED TO WEATHER OR IN CONTACT WITH GROUND, NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND.

