

GENERAL

1. STRUCTURAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. FOR INCONSISTENCIES BETWEEN STRUCTURAL DRAWINGS, THE SPECIFICATIONS, AND ANY CODE OF STANDARD PRACTICE, THE STRICTER REQUIREMENT SHALL APPLY, AND THE ENGINEER SHALL BE NOTIFIED PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
2. STRUCTURAL CONSTRUCTION DOCUMENTS SHALL BE USED WITH OTHER CONSTRUCTION DOCUMENTS, INCLUDING MECHANICAL, MEP, AND SITE DOCUMENTS. COORDINATE WITH THESE DOCUMENTS FOR LOCATIONS AND DIMENSIONS OF OPENINGS, CHASES, INSERTS, REGLETS, SLEEVES, DEPRESSIONS, ETC., NOT INDICATED ON THE STRUCTURAL DOCUMENTS. ALL DIMENSIONS AND CONDITIONS, EXISTING AND NEW, SHALL BE FIELD VERIFIED. THE ENGINEER SHALL BE NOTIFIED OF DISCREPANCIES PRIOR TO PROCEEDING WITH THE AFFECTED PORTION OF THE WORK.
3. THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AFTER THE BUILDING IS COMPLETE. IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCE TO ENSURE STABILITY AND SAFETY DURING CONSTRUCTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF SHEETING, SHORING, TEMPORARY BRACING, GUYS, AND TIEDOWNS. THE CONTRACTOR SHALL PROVIDE SHORING AND BRACING NECESSARY TO PROTECT EXISTING AND ADJACENT SECTIONS.
4. SECTIONS AND DETAILS SHOWN ON ANY STRUCTURAL DOCUMENTS SHALL BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS THAT DO NOT HAVE A SPECIFIC SECTION INDICATED, AND SHALL BE PROVIDED AT NO ADDITIONAL COST TOP THE OWNER.
5. APPLICABLE FEDERAL, STATE AND MUNICIPAL REGULATIONS SHALL BE FOLLOWED, INCLUDING THE FEDERAL DEPARTMENT OF LABOR OSHA.
6. THE CONTRACTOR IS RESPONSIBLE FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURE. CONSTRUCTION LOADS SHALL NOT EXCEED THE SPECIFIED DESIGN LIVE LOADS. CONCRETE SLABS AND TOPPINGS SHALL NOT BE LOADED UNTIL THE CONCRETE HAS REACHED AT LEAST 75% OF THE SPECIFIED DESIGN COMPRESSIVE STRENGTH.
7. THE CONTRACTORS CONSTRUCTION SEQUENCES SHALL ALLOW FOR THE EFFECTS OF THERMAL MOVEMENTS DURING THE CONSTRUCTION PERIOD, PRIOR TO THE BUILDING BEING ENCLOSED AND TEMPERATURE CONTROLLED. NEGATIVE EFFECTS OF SUCH THERMAL MOVEMENTS, SUCH AS MATERIAL CRACKING, FROST HEAVE, ETC., SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
8. IN THE ABSENCE OF SPECIFIC INSTRUCTIONS TO THE CONTRARY IN THE CONTRACT DOCUMENTS, THE TRADE PRACTICES THAT ARE DEFINED IN ANY CODE OF STANDARDS PRACTICE SHALL GOVERN.

EXISTING CONSTRUCTION

1. BEFORE PROCEEDING WITH ANY WORK WITHIN THE EXISTING FACILITY, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING STRUCTURAL AND OTHER CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL NECESSARY BRACING, SHORING AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK WHICH ARE TO REMAIN.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, AND CONDITIONS NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE WORK. THE CONTRACTOR SHALL MAKE ALL MEASUREMENTS NECESSARY FOR FABRICATION AND ERECTION OF STRUCTURAL MEMBERS. ANY DISCREPANCY SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER.
3. WELDING TO AND WITHIN AN EXISTING FACILITY REPRESENTS POTENTIAL HAZARDS, INCLUDING:
 - A. FIRE HAZARD - DUE TO EXISTING CONSTRUCTION AND COMBUSTIBLE BUILDING CONTENTS.
 - B. STRUCTURAL LIQUEFACTION - DUE TO WELDING ACROSS THE FULL SECTION OF STRUCTURAL STEEL MEMBERS.
4. RECOMMENDATIONS TO MINIMIZE THESE HAZARDS INCLUDE:
 - A. FIRE HAZARD - PROTECT EXISTING COMBUSTIBLES PRIOR TO WELDING. KEEP A SEPARATE WATCHMAN & SEVERAL FIRE EXTINGUISHERS ON HAND.
 - B. STRUCTURAL LIQUEFACTION - WELD IN SMALL INCREMENTS. ALLOW WELDS TO HARDEN BEFORE CONTINUING ON TO THE NEXT INCREMENT.
 - C. DO NOT LEAVE THE SITE WHILE THE RISK OF FIRE HAZARD IS STILL PRESENT
5. INFORMATION USED IN PREPARING THESE DRAWINGS WAS TAKEN FROM DRAWINGS PREPARED BY F. TOBISSSEN & ASSOCIATES, DATED AUGUST 28 1961 AND OCTOBER 2 1964, AND DRAWINGS PREPARED BY DAVID LYNCH & ASSOCIATES DATED SEPTEMBER 7 1995.

STRUCTURAL DESIGN CRITERIA

1. DESIGN LOADS ARE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE, ASCE 7-16 AND LOCAL CODE.
2. OCCUPANCY GROUP E (EDUCATIONAL)
3. RISK CATEGORY III
4. LIVE LOADS ARE AS FOLLOWS. LIVE LOADS REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE. UNO.
 - ROOFS 30 PSF
 - CLASSROOMS 60 PSF
 - CORRIDORS 80 PSF
 - LOBBIES 100 PSF
 - STAIRS 100 PSF
 - MECHANICAL ROOM 150 PSF
5. SNOW LOADING IS BASED ON THE FOLLOWING. DRIFTING OR SLIDING SNOW LOADS HAVE BEEN CONSIDERED WHERE APPROPRIATE.
 - GROUND SNOW LOAD (Pg) 25 PSF
 - FLAT-ROOF SNOW LOAD (P)
 - SNOW EXPOSURE FACTOR (Ce) 1.0
 - SNOW LOAD IMPORTANCE FACTOR (Iz) 1.1
6. WIND LOADING IS BASED ON THE FOLLOWING.
 - ULTIMATE WIND SPEED (3 SEC GUST) 121 MPH
 - BASIC WIND SPEED 93.7 MPH
 - IMPORTANCE FACTOR 1.0
 - WIND EXPOSURE C
 - INTERNAL PRESSURE COEFF. ±0.18
 - COMPONENTS & CLADDING (ULTIMATE PRESSURES, 105F)
 - WALLS +28.1, -30.5 PSF
 - WALL CORNERS +28.1, -36.6 PSF
 - ROOF ZONE I +16.0, -51.2 PSF
 - ROOF ZONE II +16.0, -29.4 PSF
 - ROOF ZONE I +29.4, -67.5 PSF
 - ROOF ZONE II +29.4, -67.5 PSF
7. SEISMIC LOADING IS BASED ON THE FOLLOWING:
 - SEISMIC IMPORTANCE FACTOR 1.0
 - SPECTRAL RESPONSE ACCEL. (Ss) 0.189g
 - SPECTRAL RESPONSE ACCEL. (S1) 0.048g
 - SITE CLASS C
 - SPECTRAL RESPONSE COEFF. (Sds) 0.164g
 - SPECTRAL RESPONSE COEFF. (Sd1) 0.048g
 - SEISMIC DESIGN CATEGORY, A
 - BASIC SEISMIC RESISTING SYSTEM ORDINARY REINFORCED MASONRY SHEAR WALLS
 - SEISMIC RESPONSE COEFF. (Ca) 0.070
 - RESPONSE MODIFICATION FACTOR (R) EQUIVALENT LATERAL FORCE
8. DESIGN RELATIONS AND SUPPORT DETAILS FOR ELEVATOR, ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING EQUIPMENT IS BASED UPON AVAILABLE MANUFACTURER INFORMATION. SUPPORT CONDITIONS MAY NEED TO BE REVISED BASED UPON ACTUAL SUPPLIED EQUIPMENT AND SUPPORT DETAILS.

MECHANICAL ROOFTOP EQUIPMENT CURBS, OPENINGS, & ROOF ACCESS

1. PROVIDE FRAMING FOR ALL ROOFTOP EQUIPMENT CURBS AND OPENINGS, AND ROOF ACCESS, IN NEW AND EXISTING CONSTRUCTION ACCORDING TO TYPICAL DETAILS, UNO.
2. COORDINATE SIZES AND LOCATIONS OF CURBS AND OPENINGS WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR AND ROOF ACCESS OPENINGS WITH ARCHITECTURAL DRAWINGS. CURBS AND OPENINGS SHALL BE CENTERED BETWEEN AND ACROSS NEW AND EXISTING ROOF MEMBERS.
3. ALL ROOF JOISTS AND TRUSSES (NEW AND EXISTING) SHALL BE REINFORCED FOR OFF-PANEL POINT LOADS ACCORDING TO TYPICAL DETAIL.
4. RE-USE EXISTING OPENINGS WHERE POSSIBLE.

TYPICAL DETAILS

1. TYPICAL DETAILS APPLY AT ALL APPROPRIATE LOCATIONS.
2. TYPICAL DETAILS ARE GENERALLY NOT CUT OUT ON THE PLANS.
3. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL TYPICAL DETAIL APPLICATIONS.

FOUNDATIONS

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEERS REPORT PREPARED FOR BY EARTH ENGINEERING INCORPORATED DATED APRIL 14 2023.
2. SPREAD FOOTINGS SHALL BEAR ON UNDISTURBED SOIL OR COMPACTED STRUCTURAL FILL HAVING A MINIMUM SAFE BEARING CAPACITY OF 3,000 PSF.
3. THE BOTTOMS OF EXTERIOR FOOTINGS SHALL BE 36 IN. MINIMUM BELOW FINISHED GRADE. THE BOTTOMS OF INTERIOR FOOTINGS SHALL BE 24 IN. MINIMUM BELOW GRADE.
4. EDGES OF FOOTINGS SHALL NOT BE PLACED AT A GREATER THAN 1 (VERTICAL) TO 2 (HORIZONTAL) SLOPE WITH RESPECT TO ANY ADJACENT FOOTING OR EXCAVATION.
5. ADJACENT COLUMN FOOTINGS THAT ABUT SHALL BE SEPARATED BY A PAPER JOINT.
6. PROVIDE AIR-ENTRAINMENT IN ALL CONCRETE EXPOSED TO FREEZE-THAW CONDITIONS DURING THE CONSTRUCTION PERIOD AND/OR IN THE COMPLETED STRUCTURE.
7. VERTICAL CRACK CONTROL AND/OR CONSTRUCTION JOINTS IN CONCRETE WALLS SHALL BE PROVIDED AT 30 FT. O/C MAX. EXPANSION JOINTS SHALL BE PROVIDED AT 90 FT. O/C MAX.

FOUNDATION SUBGRADE PREPARATION REQUIREMENTS

1. THE BUILDING SITE SHALL BE STRIPPED OF ANY TOPSOIL, ORGANIC MATTER, VEGETATION, FILL MATERIALS, AND OTHERWISE UNSUITABLE OR SOFT SUBGRADE MATERIALS.
2. THESE UNSUITABLE MATERIALS SHALL BE EXCAVATED DOWN TO RESIDUAL SOIL ELEVATIONS, UNDER THE DIRECTION OF THE APPROVED INSPECTION AGENCY, AND THE EXCAVATION BACKFILLED WITH COMPACTED STRUCTURAL FILL. SOIL BEARING CAPACITY SHALL BE VERIFIED BY THE APPROVED INSPECTION AGENCY PRIOR TO BACKFILLING EXCAVATIONS.
3. COMPACTED STRUCTURAL FILL SHALL CONSIST OF ML OR BETTER MATERIAL (ASTM D2497) WITH A MAXIMUM PARTICLE SIZE OF 3 INCHES, AND SHALL BE PLACED ON APPROVED SUBGRADE IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE THICKNESS, AND SHALL BE COMPACTED TO AT LEAST 98% OF THE MAX. DRY DENSITY ACCORDING TO ASTM D698, STANDARD PROCTOR.
4. AT SLAB-ON-GRADE AREAS, FOLLOWING STRIPPING, THE SUBGRADES SHALL BE PROFFROOLED WITH A LOADED TANDEM AXLE DUMP TRUCK OR TEN-TON ROLLER UNDER OBSERVATION OF THE APPROVED INSPECTION AGENCY. AREAS WHICH EXHIBIT EXCESSIVE PUMPING OR WEAVING AS DETERMINED BY THE APPROVED INSPECTION AGENCY SHALL BE REMOVED AND REPLACED WITH NEW COMPACTED STRUCTURAL FILL. COMPACTED FILL SHALL BE USED TO RAISE EXISTING GRADES TO THE PROPOSED NEW ELEVATION, WHERE REQUIRED.
5. A 4-INCH WASHED GRAVEL OR CRUSHED STONE DRAINAGE LAYER CORRESPONDING TO AASHTO SIZE NO. 57 AGGREGATE SHALL BE USED BENEATH THE SLAB-ON-GRADE.

METAL DECKING

1. METAL DECKING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:
 - ROOF DECK ASTM A653, GRADE 33
2. METAL DECK SHALL CONFORM TO AISI'S SPECIFICATION FOR THE DESIGN OR COLD FORMED STEEL STRUCTURAL MEMBERS', TO SD15 DESIGN MANUAL FOR FLOOR AND ROOF DECKS, AND TO SD15, MANUAL OF CONSTRUCTION WITH STEEL DECK.
3. WELDING SHALL CONFORM TO AWS D1.3-98 STRUCTURAL WELDING CODE - SHEET STEEL.
4. SPECIFIED ROOF DECK HAS BEEN DESIGNED TO BE CONTINUOUS OVER 3 SPANS MINIMUM. FOR ONE OR TWO SPAN CONDITIONS, PROVIDE HEAVIER GAGE DECK AS REQUIRED TO SUPPORT APPLICABLE LOADS.
5. METAL DECK SHALL HAVE THE FOLLOWING MINIMUM POSITIVE PROPERTIES PER FOOT OF WIDTH:
 - 1-1/2 IN ROOF DECK, WIDE RIB, 20 GAGE.
 - I_y = 0.201 IN⁴, S_y = 0.234 IN³
 - I_x = 0.222 IN⁴, S_x = 0.247 IN³
 - 6. FASTEN ROOF DECK PANELS 50 SUPPORTING STEEL MEMBERS WITH 5/8" DIA PUDDLE WELDS AT 12" O/C (36/4 PATTERN), UNO. FASTEN TO PERIMETER STEEL MEMBERS AT 12" O/C UNO.
 - 7. MECHANICALLY FASTEN ROOF DECK SIDE LAPS WITH SELF DRILL N. 10 SCREWS AT MIDSPAN OR 36" (MAX) O/C UNO.
 - 8. PROVIDE DECK CLOSURE @ DECK ENDS.

MECHANICAL UNIT, DUCTWORK, AND PIPING SUPPORT FROM JOISTS

1. THE FOLLOWING CRITERIA SHALL BE FOLLOWED FOR HANGING NEW MECHANICAL UNITS, DUCTWORK, AND PIPING (MECHANICAL AND PLUMBING) ON STEEL JOISTS IN NEW AND EXISTING CONSTRUCTION.
2. SUPPORTS FOR MECHANICAL UNITS AND DUCTWORK SHALL BE PROVIDED SUCH THAT HANGER LOADS ARE LIMITED TO 250 LBS., WITH A MAXIMUM OF 2 HANGERS PER JOIST.
3. SUPPORTS FOR MULTIPLE RUNS OF PIPING 4" TO 6" IN DIAMETER SHALL BE STAGGERED SUCH THAT ONE JOIST SUPPORTS NO MORE THAN TWO PIPES. SPACING OF PIPE SUPPORTS SHALL BE ACCORDING TO INDUSTRY STANDARDS, BUT NO MORE THAN 8 FT. O/C.
4. SUPPORTS FOR MULTIPLE RUNS OF PIPING 8" TO 10" IN DIAMETER SHALL BE STAGGERED SUCH THAT ONE JOIST SUPPORTS NO MORE THAN ONE PIPE. SPACING OF PIPE SUPPORTS SHALL BE ACCORDING TO INDUSTRY STANDARDS, BUT NO MORE THAN 8 FT. O/C.
5. FOR PIPING LARGER THAN 10" IN DIAMETER, OR FOR CASES WHERE THE ABOVE CRITERIA CANNOT BE MET, SUPPLEMENTARY FRAMING SHALL BE PROVIDED TO SUPPORT THE PIPES ON NEW OR EXISTING STEEL GIRDERS AND BEARING WALLS.
6. SUPPORTS FOR MECHANICAL UNITS, DUCTWORK, AND PIPING SHALL NOT OCCUR ON THE SAME JOIST.
7. IN NO CASE SHALL THE TOTAL WEIGHT SUPPORTED BY A SINGLE JOIST EXCEED 500 LBS., UNLESS THE JOIST IS SPECIFICALLY NOTED AND DESIGNED FOR HIGHER LOADS.
8. ALL SUPPORT POINTS SHALL BE LOCALLY REINFORCED ACCORDING TO TYPICAL DETAILS.

STRUCTURAL STEEL

1. STRUCTURAL STEEL FABRICATION, ERECTION AND CONNECTION DESIGN SHALL CONFORM TO AISC'S SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, 13TH EDITION."
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING DESIGNATIONS
 - STRUCTURAL STEEL WF SHAPES ASTM 992
 - OTHER STRUCTURAL STEEL SHAPES ASTM 36, UNO
 - STEEL BARS, ANGLES AND PLATES ASTM A36, UNO
 - STIFF PLATES IN MOMENT CONNECTIONS ASTM 572, GRADE 50
 - SQUARE AND RECTANGULAR TUBING ASTM A500, GRADE B
3. BOLTS SHALL BE MINIMUM 3/4 IN. DIA. AND SHALL CONFORM TO THE FOLLOWING DESIGNATIONS, UNO:
 - HIGH STRENGTH BOLTS ASTM A325
 - ANCHOR BOLTS ASTM F1554, GRADE 36
4. BOLTED CONNECTIONS SHALL CONFORM TO RCSC'S SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS.
5. WELDING, WELDING ELECTRODES, AND FLUXES SHALL CONFORM TO AWS D1.1-04 "STRUCTURAL WELDING CODE - STEEL". ELECTRODES SHALL HAVE A MINIMUM TENSILE STRENGTH OF 70 KSI.
6. GROUT UNDER STEEL COLUMN OR POST BASEPLATES SHALL BE NONMETALLIC, SHRINKAGE-RESISTANT GROUT CONFORMING TO ASTM C227 HAVING A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 5000 PSI. GROUT UNDER STEEL BEAM BEARING PLATES SHALL HAVE A MINIMUM DESIGN COMPRESSIVE STRENGTH OF 3000 PSI, AND SHALL CONFORM TO ASTM C476.
7. HIGH STRENGTH BOLTED CONNECTIONS SHALL BE TIGHTENED TO THE SNUG-TIGHT CONDITION, UNO.
8. HIGH STRENGTH BOLTS IN CONNECTIONS USED FOR KICKERS AND BRACING MEMBERS THAT ARE FABRICATED WITH SLOTTED HOLES SHALL BE SLP-CRITICAL. IF STANDARD HOLES ARE USED, BOLTS SHALL BE FULLY PRE-TENSIONED.
9. CONNECTIONS SHALL BE DESIGNED PER AISC TO CARRY FULL CAPACITY OF UNIFORMLY LOADED MEMBER, UNLESS THE ACTUAL REACTION IS NOTED ON DRAWINGS.
10. PROVIDE FULL DEPTH CONNECTIONS AT BEAM OR GIRDER TO COLUMN CONNECTION.
11. PROVIDE MIN. 3/8" FULL DEPTH THRU-PLATE CONNECTIONS AT PIPE AND TUBE COLUMNS.
12. PROVIDE COLUMN CAP PLATE AS FOLLOWS, UNO:
 - FOR DECK BEARING: 1/4" THICK (PROVIDE WHERE BEAMS DO NOT FRAME INTO BOTH SIDES OF WEB.)
 - FOR BEAM BEARING: SEE TYPICAL DETAILS, 3/4" THICK MIN.
 - FOR MOMENT CONNECTIONS: SEE TYPICAL DETAILS.
 - PROVIDE COLUMN CAP PLATES AT ALL SQUARE, RECTANGULAR AND ROUND HSS COLUMNS.
13. WEB STIFFENERS SHALL BE PROVIDED IN WF SHAPES AS FOLLOWS:
 - COLUMN WEB: AT FULLY-DEVELOPED MOMENT CONNECTIONS. STIFFENERS SHALL BE COMPLETE-PENETRATION GROOVE WELDED, SAME THICKNESS AND GRADE AS BEAM FLANGES, WHERE MOMENT CONNECTIONS OCCUR ON COLUMN FLANGES AND COLUMN WEBS, STIFFENER THICKNESS SHALL EQUAL THE VECTOR SUMMATION OF THE RESPECTIVE BEAM FLANGE THICKNESSES.
 - BEAM WEBS: WHERE BEAM BEARS ON COLUMN, SAME THICKNESSES AND STRENGTH AS COLUMN FLANGES.
 - BEAM WEBS: WHERE COLUMN BEARS ON BEAM, SAME THICKNESSES AND STRENGTH AS COLUMN FLANGES.

CONCRETE REINFORCING

1. REINFORCED CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 318-19.
2. CONCRETE REINFORCING SHALL CONFORM TO THE FOLLOWING DESIGNATIONS:
 - DEFORMED BARS ASTM A615, GRADE 60
 - WELDED WIRE-FABRIC ASTM A185
3. LAP DEFORMED BARS 40 DIA., UNO. PROVIDE CORNER AND L BARS AT CORNERS AND INTERSECTIONS. REINFORCING INDICATED AS CONTINUOUS SHALL BE LAPED. HOOKS SHALL BE STANDARD HOOKS, UNO. LAP WELDED WIRE FABRIC SUCH THAT THE OVERLAP OF THE OUTERMOST CROSS-WIRES OF EACH ADJOINING SHEET IS NOT LESS THAN THE SPACING OF THE CROSS-WIRES PLUS TWO IN. UNO.
4. CONCRETE PROTECTION FOR REINFORCEMENT:
 - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3 IN CONCRETE EXPOSED TO EARTH OR WEATHER.
 - NO. 6 THROUGH NO. 18 BARS: 2 IN
 - NO. 5 BAR AND SMALLER: 1-1/2 IN
5. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:
 - SLABS, WALLS, JOISTS: 3/4 IN
 - NO. 14 AND NO. 18 BARS: 1-1/2 IN
 - NO. 11 BAR AND SMALLER: 3/4 IN
 - BEAMS, COLUMNS, PIERS: 1-1/2 IN
5. REINFORCING FOR SLABS ON GRADE, WHERE NOT OTHERWISE SPECIFIED, SHALL BE AS FOLLOWS:
 - REINFORCING BARS: SEE FOUNDATION AND TYPICAL DETAILS. AT SLAB BLOCKOUT AND RE-ENTRANT CORNERS, PROVIDE 2#5 x 4'-0" DIAGONALS.
 - WIRE MESH: 6x6-W2.9 x W2.9 WWF. REINFORCING SHALL BE SUPPORTED AT MID-DEPTH OF SLAB.
6. REINFORCING FOR CONCRETE TOPPING, WHERE NOT OTHERWISE SPECIFIED, SHALL BE AS FOLLOWS:
 - REINFORCING BARS: SEE FRAMING AND TYPICAL DETAILS. AT SLAB OPENINGS AND RE-ENTRANT CORNERS, PROVIDE 2/5 x 4'-0" DIAGONALS.
 - WIRE MESH: 6x6-W2.9 x W2.9 WWF. REINFORCING SHALL BE SUPPORTED 1 IN. BELOW TOP OF SLAB.
7. DETAILING OF CONCRETE REINFORCING AND ACCESSORIES SHALL CONFORM TO ACI DETAILING MANUAL SP-66, AND WITH ACI 315, MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.

COLD FORMED STEEL FRAMING

1. ALL COLD FORMED STEEL FRAMING INDICATED ON THE DRAWINGS IS FOR BID PURPOSES ONLY. THE COLD-FORMED FRAMING SUBCONTRACTOR SHALL RETAIN THE SERVICES OF A LICENSED PROFESSIONAL ENGINEER TO DESIGN ALL COLD FORMED FRAMING IN ACCORDANCE WITH THE SPECIFIED DESIGN CRITERIA AND SIGNED AND SEALED SHOP DRAWINGS SHALL BE SUBMITTED. INDICATED COLD-FORMED FRAMING SIZES AND GAGES ARE MINIMUMS, AND SHALL NOT BE REDUCED WITHOUT APPROVAL OF THE ARCHITECT/ENGINEER.
2. COLD FORMED STEEL FRAMING SHALL CONFORM TO ASTM C955 AND C1007, AND TO THE FOLLOWING:
 - 12, 14 AND 16 GAGE STUDS ASTM A653, 50, GRADE 50, CLASS I
 - 18 AND 20 GAGE STUDS ASTM A653, CO, GRADE 33
 - 18 AND 20 GAGE STUDS ASTM A653, CO, GRADE 33
3. WELDING SHALL CONFORM TO AWS D1.3-98 "STRUCTURAL WELDING CODE - SHEET STEEL".
4. COLD FORMED STEEL FRAMING PROPERTIES SHALL CONFORM TO MARINOWARE OR EQUIVALENT.
5. PROVIDE BRIDGING AND BRACING AS SPECIFIED BY MANUFACTURER OR AS REQUIRED BY DESIGN.
6. THE EXTENT OF WORK FOR COLD-FORMED FRAMING IS DETAILED ON THE ARCHITECTURAL DRAWINGS, AND PARTLY ON THE STRUCTURAL DRAWINGS. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER.
7. PROVIDE COLD-FORMED ACCESSORIES AS REQUIRED FOR A COMPLETE FRAMING SYSTEM, INCLUDING, BUT NOT LIMITED TO, TRACKS, BLOCKING, CLIP ANGLES, SLIDE CLIPS, SHOES, RUNNERS, REINFORCEMENTS, COLD-FORMED TO COLD-FORMED FASTENERS AND WELDS, AND COLD-FORMED TO STRUCTURE FASTENERS AND WELDS.
8. LOAD BEARING STUDS SHALL HAVE CONTINUITY THROUGH THE FLOOR SYSTEM, AND SHALL BE VERTICALLY ALIGNED THROUGHOUT THE STRUCTURE HEIGHT.
9. LOAD BEARING STUDS SHALL NOT BE SPLICED.
10. TRACK SHALL BE SPLICED WITH A SECTION OF STUD AND FASTENED TO DEVELOP THE TENSILE CAPACITY OF THE TRACK.
11. BUILT-UP HEADERS SHALL HAVE WEB STIFFENERS AT BEARING POINTS.
12. FOR FLOOR AND ROOF JOISTS, PROVIDE FULL DEPTH SOLID BLOCKING AT 8 FT. O/C MAX, WITH A MINIMUM OF ONE LINE OF BLOCKING.
13. DO NOT BEAR OR CONNECT COLD-FORMED MEMBERS WITHIN 12 INCHES OF PUNCHED WEB OPENINGS UNLESS MEMBERS ARE REINFORCED WITH AN 18 IN. (MIN) LONG MEMBER. FASTEN REINFORCING MEMBER WITH A MIN. OF 8 SCREWS.
14. PLACE STUDS AT UNIFORM SPACING INDICATED WITH FULL BEARING AGAINST INSIDE WEB OF RUNNERS. ALIGN WITH ALL FLANGES FACING SAME DIRECTION.
15. LOCATE STUDS NOT MORE THAN 2 IN. FROM ABUTTING WALL.
16. CONSTRUCT CORNERS USING MIN. 3 STUDS. PROVIDE DOUBLE STUDS AT WALL OPENINGS, AND AT WINDOW AND DOOR JAMBS, UNO.
17. INSTALL INTERMEDIATE JACK STUDS (CRIPPLES) ABOVE AND BELOW OPENINGS TO MATCH WALL STUD SPACING.
18. METAL DECK SHALL BE INSTALLED ON MAIN ROOF MEMBERS PRIOR TO THE INSTALLATION OF OVERFRAMING MEMBERS.
19. ALL CONNECTIONS SHALL BE SCREWED OR POWDER FASTENED, UNLESS WELDING IS INDICATED.
- A. SCREWS: #10 (UN) HEX HEAD SELF-DRILLING SCREWS. MIN. 1/2 IN. LENGTH FOR COLD-FORMED TO COLD-FORMED CONNECTIONS. MIN 1-1/2 IN. LENGTH FOR COLD-FORMED TO TIMBER CONNECTIONS. MIN SPACING AND EDGE DISTANCE SHALL BE 1/2 MINIMUM NUMBER OF LINES.
- B. POWDER ACTUATED FASTENERS (PAF) IN CONCRETE: 0.145 IN (UNO) SHANK DIA. MIN. SPACING SHALL BE 4 IN. AND MIN. EDGE DISTANCE SHALL BE 3 IN.
- C. POWDER ACTUATED FASTENERS (PAF) IN STEEL: 0.145 IN (UNO) KNURLED SHANK DIA. MIN. SPACING SHALL BE 1-1/2 IN. AND MIN. EDGE DISTANCE SHALL BE 1/2 IN.
20. HEADERS AT NON LOAD BEARING CONDITIONS SHALL BE AS FOLLOW, UNO:
 - 3625 _ WALLS
 - OPENINGS UP TO 9'-0" (2) 4005 162-33 VERT & (2)362T1 25-33 HOR.
 - 4005 _ WALLS
 - OPENINGS UP TO 9'-0" (2) 4005 162-33 VERT & (2)400T1 25-33 HOR.
 - 6005 _ WALLS
 - OPENINGS UP TO 9'-0" (2) 6005 162-33 VERT & (2)600T1 25-33 HOR.

21. BASIS OF DESIGN FOR FIXED CLIP ANCHORS SHALL BE SAMPSON F59 OR EQUIVALENT.

STEEL JOISTS AND JOIST GIRDERS

1. STEEL JOISTS, JOISTS GIRDERS, AND BRIDGING SHALL CONFORM TO AISI'S STANDARD SPECIFICATIONS FOR K, KCS, VS, LH, DLH, AND 5H1 SERIES JOISTS AND SJ1'S "RECOMMENDED CODE OF STANDARD PRACTICE FOR STEEL JOISTS AND JOIST GIRDERS".
2. PROVIDE AND ANCHOR BRIDGING LINES ACCORDING TO SJ1 SPECIFICATIONS. BRIDGING INDICATED ON DRAWINGS IS SCHEMATIC, AND MAY NOT REFLECT THE SJ1 REQUIRED MINIMUM NUMBER OF LINES.
3. JOIST AND JOIST GIRDER TO COLUMN CONNECTIONS SHALL HAVE BOTTOM CHORD EXTENSIONS. BOTTOM CHORD EXTENSIONS SHALL HAVE POSITIVE ATTACHMENT TO SUPPORT BY BOLTING OR BY WELDING. BOTTOM CHORD EXTENSIONS SHALL BE CONNECTED ONLY AFTER ALL DEAD LOADS ARE APPLIED.
4. PROVIDE SLOPED BEARING SEATS WHEN SLOPE EXCEEDS 1/4:1.2.
5. K-SERIES JOIST EXTENSIONS SHALL BE TYPE R-1, UNO.
6. PROVIDE JOIST CAMBER ACCORDING TO SJ1 SPECIFICATION, UNO.
7. REFER TO STRUCTURAL DESIGN CRITERIA FOR NET UPLIFT LOADING REQUIREMENTS FOR ROOF JOISTS AND JOIST GIRDERS. PROVIDE ADDITIONAL WIND UPLIFT BRIDGING LINES AT MEMBER ENDS.
8. DUCTWORK/CONFLICTS WITH DIAGONAL JOIST BRIDGING: ALL DIAGONAL BRIDGING SHALL BE INSTALLED AND ANCHORED ACCORDING TO AJI REQUIREMENTS. AFTER ROOF DECK IS INSTALLED, DIAGONAL BRIDGING MAY BE RE-WORKED INTO HORIZONTAL BRIDGING TO ACCOMMODATE MECHANICAL DUCTWORK RUNS, WITH THE FOLLOWING LIMITATIONS:
 - A. DIAGONAL BRIDGING SHALL BE MAINTAINED ON ONE SIDE OF A JOIST.
 - B. DO NOT REMOVE DIAGONAL BRIDGING IN MORE THAN ONE LOCATION AT A TIME BEFORE RE-WORKING INTO HORIZONTAL BRIDGING.
- IF THE ABOVE LIMITATIONS CANNOT BE MET, THE JOIST MANUFACTURER SHALL BE CONTACTED FOR DIRECTION. COORDINATE WITH MEP

CONCRETE MASONRY

1. CONCRETE MASONRY CONSTRUCTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" ACI 530-08, AND "SPECIFICATIONS FOR MASONRY STRUCTURES", ACI 530, 1-08.
2. MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY, FM SHALL BE 1500 PSI. (MIN NET AREA COMPRESSIVE STRENGTH OF UNIT = 1900 PSI.)
3. CONCRETE MASONRY SHALL CONFORM TO ASTM C90.
3. CONCRETE MASONRY REINFORCING SHALL BE DEFORMED BARS CONFORMING TO ASTM A615, GRADE 60.
5. GROUT SHALL CONFORM TO ASTM C476, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. PROVIDE FINE AND COARSE GROUTS APPROPRIATE R SIZE OF VOID BEING FILLED. GROUT SHALL HAVE A MINIMUM SLUMP OF 8 INCHES PROVIDED BY SUFFICIENT WATER CONTENT. WATER-REDUCING ADMIXTURES ARE NOT PERMITTED.
6. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR 5, FCL OR MORTAR CEMENT. MASONRY CEMENT NOT PERMITTED.
7. REINFORCED VOIDS, AND NON-REINFORCED VOIDS SPECIFIED TO BE GROUTED IN CONCRETE MASONRY SHALL BE FILLED SOLID WITH GROUT IN 5 FT. MAXIMUM LIFTS. STOP POURIS 1-1/2 INCHES BELOW THE BED JOINT TO FORM A KEY AT POUR JOINTS.
8. LAP DEFORMED BARS 48 DIA., UNO.
9. CONCRETE MASONRY SHALL BE LAID IN RUNNING BOND, UNO. PILASTERS SHALL BE BONDED, UNO.
10. LOAD BEARING CMU SHALL HAVE FULL MORTAR BED JOINTS.
11. PROVIDE HORIZONTAL LADDER-TYPE WALL REINFORCEMENT, HOT-DIPPED GALVANIZED, WITH 3/16" DIA SIDE RODS AND 2" GA. CROSS RODS AS FOLLOWS:
 - TYPICAL: 16 IN. C/C MAX, UNO.
 - AT BELOW GRADE WALLS: PROVIDE AT 8 IN. C/C.
 - AT PARAPETS: PROVIDE AT 8 IN. C/C.
 - AT WALL OPENINGS: PROVIDE ADDL REINF. NOT MORE THAN 8 IN ABOVE AND BELOW OPENING. TERMINATE 2 FT. BEYOND OPENING. PROVIDE CONTINUITY AT INTERSECTIONS USING PREFABRICATED T-SHAPED AND L-SHAPED UNITS.
12. VERTICAL CRACK CONTROL JOINTS IN WALLS SHALL BE PROVIDED AT 30 FT. O/C MAX. UNO.
13. ALL CMU WALLS SHALL BE DOWELED TO SUPPORTING SLABS WITH MINIMUM #4 @ 48 HOOKED DOWELS, UNO. ALL CMU WALLS SUPPORTED DIRECTLY ON STEEL MEMBERS SHALL BE ANCHORED WITH 1/2" DIAMETER x 4" STUDS @ 32" O/C, OR WITH #4 x 2'-0" BARS AT 48" O/C, UNO.
14. THE TOPS OF ALL NON-LOAD BEARING CMU WALLS SHALL BE BRACED ACCORDING TO "SPECIFIC SECTIONS AND / OR TYPICAL DETAILS.
15. ALL MASONRY BELOW GRADE SHALL BE GROUTED SOLID.

LINTELS

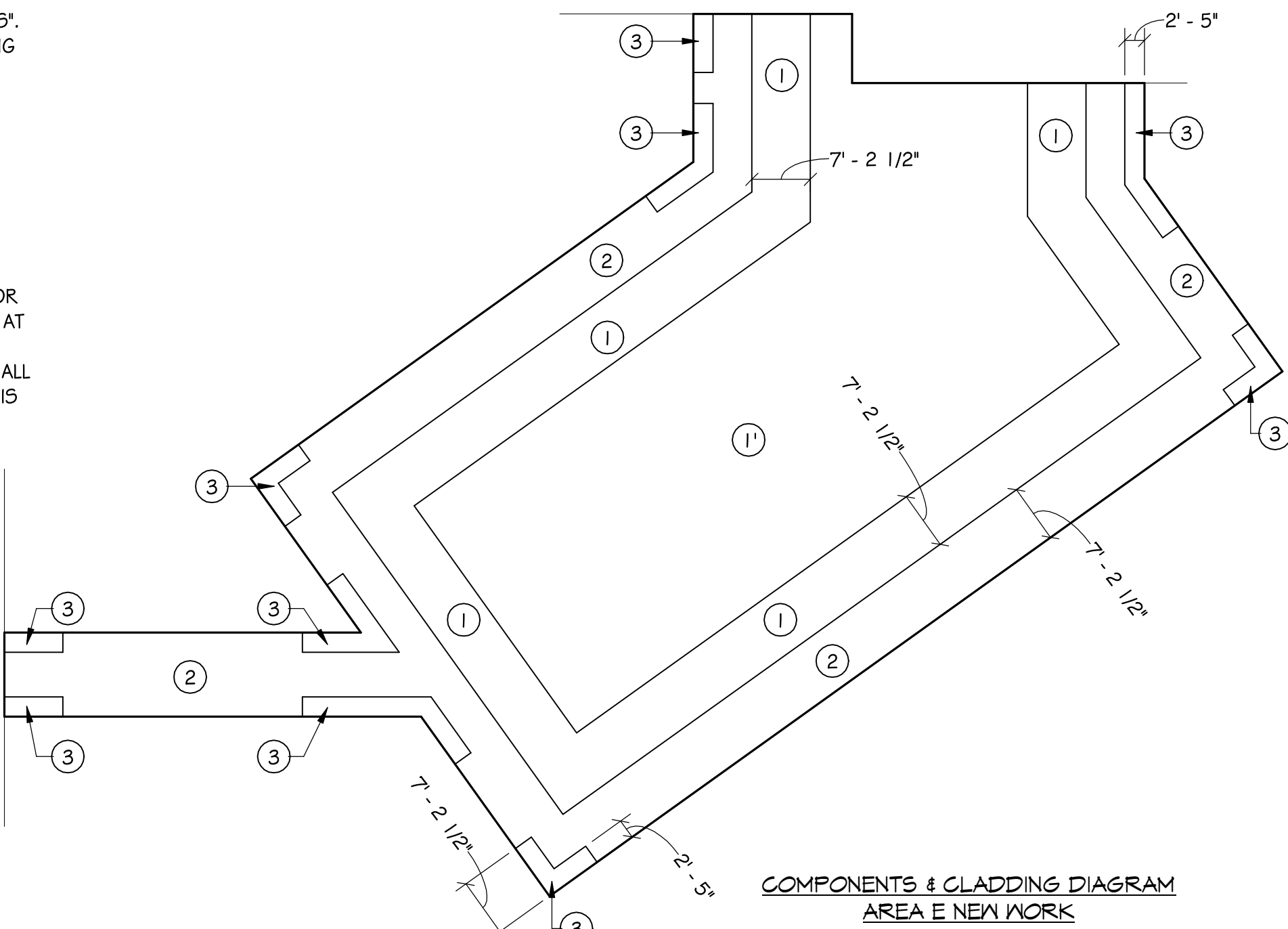
1. PROVIDE LINTELS OVER OPENINGS IN WALLS AT DOORS, WINDOWS, MECHANICAL AND ELECTRICAL SERVICES AND EQUIPMENT, WALLS IN FRONT OF RECESSED ENTRIES, ETC., UNO.
2. CONTRACTOR IS RESPONSIBLE FOR COORDINATION BETWEEN ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS FOR LOCATIONS OF ALL LINTELS. LINTEL LOCATIONS ARE NOT GENERALLY SHOWN ON PLAN.
3. REFER TO THE LINTEL SCHEDULE FOR LINTEL SIZES.
4. LINTEL TYPES MAY BE STEEL, PRECAST CONCRETE OR CAST-IN-PLACE CONCRETE MASONRY LINTELS. REFER TO ARCHITECTURAL DRAWINGS FOR TYPE OF LINTEL REQUIRED AT EACH LOCATION.
5. STEEL MATERIALS: REFER TO STRUCTURAL STEEL NOTES. STEEL LINTELS AT EXTERIOR WALL SHALL BE HOT-DIPPED GALVANIZED.
6. PRECAST CONCRETE LINTELS SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI. REINFORCEMENT SHALL CONFORM TO ASTM A615, GRADE 60. WELDED REINFORCEMENT SHALL CONFORM TO ASTM A706.
7. CAST-IN-PLACE MASONRY LINTELS SHALL BE CONSTRUCTED USING UO-SHAPED CMU UNITS. SPECIFIED HEIGHT OF MASONRY LINTEL SHALL BE SHORED A MINIMUM OF 7 DAYS AFTER GROUTING. REFER TO MASONRY NOTES FOR MATERIAL INFORMATION.
8. ALL LINTELS SHALL BEAR 8 IN. MIN. ON A FULL MORTAR BED. GROUT SOLID 2 COURSES BELOW BEARING, UNO.
9. WHEN LINTEL HAVE LESS THAN SPECIFIED BEARING LENGTH DUE TO AN ADJACENT STEEL COLUMN:
 - A. FOR STEEL LINTELS, FRAME LINTEL TO COLUMN.
 - B. FOR PRECAST OR CAST-IN-PLACE LINTELS, PROVIDE 16x6x3/8 x WIDTH OF LINTEL WELDED TO COLUMN FOR LINTEL BEARING. WHERE BEARING IS EXPOSED, NOTCH LINTEL SO BOTTOM OF ANGLE AND LINTEL ARE FLUSH.
10. PROVIDE MASONRY ANCHORS AT ALL STEEL BEAMS BEARING ON MASONRY WALLS. ANCHORS SHALL BE LOCATED CLOSE TO BEAM TOP FLANGE.
11. PROVIDE PRECAST CONCRETE LINTELS BEARING 8" MINIMUM ON A FULL MORTAR BED AS FOLLOWS: (6'-8" MAX. MASONRY OPENING)
 - 4 IN. WALLS 4 IN. X 8 IN. (NOMINAL), REINF W/ #4 T&B
 - 6 IN. WALLS 6 IN. X 8 IN. (NOMINAL), REINF W/ #4 T&B
 - 8 IN. WALLS 8 IN. X 8 IN. (NOMINAL), REINF W/ #4 T&B
 - 12 IN. WALLS 12 IN. X 8 IN. (NOMINAL), REINF W/ #4 T&B
12. PROVIDE ONE STEEL ANGLE FOR EACH 4 IN. OF MASONRY THICKNESS BEARING 8 IN. MINIMUM ON A FULL MORTAR BED AS FOLLOWS:
 - MASONRY OPENINGS UP TO 4'-0" L&X 1/2 X 5/16, LLV
 - MASONRY OPENINGS >4'-0" TO 6'-8" L&X 1/2 X 5/16, LLV
 - MASONRY OPENINGS >6'-8" TO 8'-0" L&X 1/2 X 5/16, LLV
 - FOR 6 IN. CMU, PROVIDE AS FOLLOWS:
 - MASONRY OPENINGS UP TO 4'-0" (2)13 1/2 X 2 1/2 X 5/16, LLV
 - MASONRY OPENINGS >4'-0" TO 6'-8" WT&X13
 - MASONRY OPENINGS >6'-8" TO 8'-0" WT&X13

SUBMITTALS

1. THE APPLICABLE CONTRACTOR SHALL SUBMIT THE FOLLOWING FOR APPROVAL:
 - CONCRETE MIX DESIGNS FOR STRENGTHS INDICATED
 - CONCRETE REINFORCING SHOP DRAWINGS
 - STRUCTURAL STEEL SHOP DRAWINGS
 - JOIST AND JOIST GIRDER SHOP DRAWINGS
 - MASONRY REINFORCING SHOP DRAWINGS
 - MASONRY GROUT AND MORTAR MIX DESIGNS
 - DETAIL DECK SHOP DRAWINGS
 - COLD-FORMED FRAMING SHOP DRAWINGS

DRILLED ANCHORS

1. EXPANSION ANCHORS SHALL BE 3/4" DIA, UNO. LENGTH OF ANCHOR SHALL PROVIDE 5" MIN. EMBEDMENT, UNO.
2. ADHESIVE ANCHORS SHALL BE 3/4" MIN DIA., UNO. LENGTH OF ANCHOR SHALL PROVIDE 6 5/8" MIN. EMBEDMENT, UNO.
3. BASIS OF DESIGN FOR EXPANSION ANCHORS SHALL BE HILTI KWIK BOLT T2Z OR EQUIVALENT.
4. BASIS OF DESIGN FOR ADHESIVE ANCHORS SHALL BE HILTI HIT SYSTEM OR EQUIVALENT.
5. BASIS OF DESIGN FOR MASONRY SCREWS SHALL BE HILTI KWIK CON 114 OR EQUIVALENT.
6. GROUT CMU COURSES CONTINUOUS AT ANCHOR LOCATIONS FOR MINIMUM 8" ABOVE & BELOW THE ANCHOR LINES.
7. ANCHORS IN EXTERIOR APPLICATIONS SHALL BE HOT-DIPPED GALV.



CONCRETE MATERIAL SCHEDULE

ELEMENT	UNIT WEIGHT (PCF)	Fc (psi)	V/C RATIO (MAX)		SLUMP (1")	AIR ENTRAINMENT	
			NON AIR-ENTR.	AIR-ENTR.		% MIN.	% MAX
SPREAD FOOTINGS	145	3,000	0.68	---	3	5	7
WALLS & PIERS	145	4,000	---	0.50	4	5	7
SLAB ON GRADE (INTERIOR)	145	4,000	0.57	---	4	1	3
SLAB ON GRADE (EXTERIOR)	145	4,500	---	0.48	4	5	7

COLUMN SCHEDULE

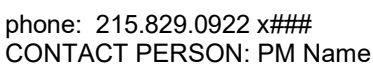
MARK	TYPE	BASE PLATE	# ANCHOR RODS
C-1	H556x3x3/8"	12x7x5/8"	(2)5/8"Ø ADHESIVE ANCHOR (6" EMBED)

DECK SCHEDULE

MARK	DESCRIPTION
DECK D-1	1-1/2" - 20 GA., TYPE B GALV. ROOF DECK
DECK D-2	5/8" TONGUE & GROOVE PLYWOOD

WALL FOOTING SCHEDULE

MARK	WIDTH	THICKNESS	REINFORCING (BOTTOM)
WF2.0	2' - 0"	1' - 0"	2 - #5 CONT. #5 @ 48" o/c TRANSVERSE
WF2.5	2' - 6"	1' - 0"	3 - #5 CONT. #5 @ 48" o/c TRANSVERSE
WF3.0	3' - 0"	1' - 0"	3 - #5 CONT. #5 @ 48" o/c TRANSVERSE
WF5.0	5' - 0"	1' - 0"	5 - #5 CONT. #5 @ 48" o/c TRANSVERSE



OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL (IBC 21 TABLE 1705.2.2)	FREQUENCY	REFERENCED STANDARD
INSPECTION TASKS PRIOR TO WELDING (AISC 360-10 TABLE N5.4.2)		
1. MATERIAL VERIFICATION OF COLD-FORMED STEEL DECK	PERIODIC	
a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	PERIODIC	
b. MANUFACTURER'S CERTIFIED TEST REPORTS		
2. INSPECTION OF WELDING		
a. COLD-FORMED STEEL DECK		
1. FLOOR AND ROOF DECK	PERIODIC	AWSD 1.3

SOILS: (IBC 21 TABLE 1705.G)	FREQUENCY	REFERENCED STANDARD
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	GEOTECHNICAL ENGINEERING REPORT
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	GEOTECHNICAL ENGINEERING REPORT
3. PERFORM CLASSIFICATIONS AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	GEOTECHNICAL ENGINEERING REPORT
4. VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	GEOTECHNICAL ENGINEERING REPORT
5. PRIOR TO PLACEMENT OF CONTROLLED FILL, OBSERVE SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC	GEOTECHNICAL ENGINEERING REPORT

INSPECTION TASKS PRIOR TO BOLTING (AISC 360-16 TABLE N5.6-1)		
INSPECTION TASKS PRIOR TO BOLTING	QUALITY CONTROL	QUALITY ASSURANCE
MANUFACTURER'S CERTIFICATIONS AVAILABLE FOR FASTENER MATERIALS	OBSERVE	PERFORM
FASTENERS MARKED IN ACCORDANCE WITH ASTM REQUIREMENTS.	OBSERVE	OBSERVE
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL (GRADE, TYPE, BOLT LENGTH IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE)	OBSERVE	OBSERVE
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL	OBSERVE	OBSERVE
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND GORE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENTS	OBSERVE	OBSERVE
PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL OBSERVED AND DOCUMENTED FOR FASTENER ASSEMBLIES AND METHODS USED	PERFORM	OBSERVE
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS.	OBSERVE	OBSERVE

INSPECTION TASKS DURING BOLTING (AISC 360-16 TABLE N5.6-2)		
INSPECTION TASKS DURING BOLTING	QUALITY CONTROL	QUALITY ASSURANCE
FASTENERS ASSEMBLIES, OF SUITABLE CONDITION, PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED.	OBSERVE	OBSERVE
JOINT BROUGHT TO THE SNUG-TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION.	OBSERVE	OBSERVE
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING	OBSERVE	OBSERVE
FASTENERS ARE PRETENSIONED IN ACCORDANCE WITH RCSC SPECIFICATION, PROGRAMMING SYSTEMATICALLY FROM THE MOST RIDID POINT TOWARD THE FREE ENDS	OBSERVE	OBSERVE

INSPECTION TASKS AFTER BOLTING (AISC 360-16 TABLE N5.6-3)		
INSPECTION TASKS AFTER BOLTING	QUALITY CONTROL	QUALITY ASSURANCE
DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS	PERFORM	PERFORM

OTHER INSPECTION TASKS (AISC 360-16 TABLE N.7)	
	FREQUENCY
1. VERIFY COMPLIANCE OF FABRICATED STEEL WITH THE DETAILS SHOWN ON THE APPROVED SHOP DRAWINGS.	PERIODIC
2. VERIFY COMPLIANCE OF THE ERECTED STEEL FRAME WITH THE DETAILS SHOWN ON THE APPROVED ERECTION DRAWINGS, INCLUDING BRACES, STIFFENERS, AND MEMBER LOCATIONS AND DETAILS.	PERIODIC
3. ANCHOR RODS AND OTHER EMBEDMENTS SUPPORT STRUCTURAL STEEL.	PERIODIC
a. VERIFY THE DIAMETER, GRADE, TYPE, AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM.	PERIODIC
b. VERIFY THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE.	PERIODIC

CONCRETE: (1.705.3)		
NOT APPLICABLE TO ISOLATED/SPREAD FOOTINGS OR NON-STRUCTURAL SLABS ON GROUND	FREQUENCY	REFERENCED STANDARD
1. INSPECTION OF REINFORCING STEEL AND PLACEMENT	PERIODIC	ACI 318:3.5.7,1-7.7
2. INSPECTION OF REINFORCING STEEL WELDING IN ACCORDANCE WITH TABLE 1.705.2.2, ITEM 2b.	PERIODIC	AWS D1.4 ACI 318:3.5.2
3. INSPECTION OF ANCHORS CAST IN CONCRETE PRIOR TO AND DURING OF CONCRETE WHERE ALLOWABLE LOADS HAVE BEEN INCREASED OR WHERE STRENGTH DESIGN IS USED.	PERIODIC	ACI 318: 8.1.3, 21.2.8
4. INSPECTION OF ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS.	CONTINUOUS	ACI 318: 3.8.6, 8.1.3, 21.2.8
5. VERIFYING USE OF REQUIRED DESIGN MIX.	PERIODIC	ACI 318: 3.8.6, 8.1.3, Ch.4, 5.2-5.4
6. AT THE TIME FRESH CONCRETE IS SAMPLED TO FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE TEMPERATURE OF THE CONCRETE	CONTINUOUS	ASTM C 172 ASTM C 31 ACI 318: 5.6, 5.8
7. INSPECTION OF CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	ACI 318: Ch. 5.9, 5.10
8. INSPECTION FOR MAINTENANCE OF SPECIFIED CURING, TEMPERATURE AND TECHNIQUES.	PERIODIC	ACI 318: 5.11-5.13
9. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	ACI 318: 6.1.1

MINIMUM TESTS				
VERIFICATION OF SLUMP FLOW AND VISUAL SYABIITY INDEX (VSI) AS DELIVERED TO THE PROJECT SITE IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.5B.1.b.3 FOR SELF CONSOLIDATING AGENT.				
VERIFICATION OF $f'_{m,1}$ AAC IN ACCORDANCE WITH SPECIFICATION ARTICLE 1.4B PRIOR TO CONSTRUCTION, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THIS CODE				
MINIMUM INSPECTION				
INSPECTION TASK	FREQUENCY		REFERENCED STANDARD	
	CONTINUOUS	PERIODIC	TMS 402/ ACI 530/ ASCE 5	TMS 602/ ACI 530.1/ ASCE 6
1. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS		X		Art 1.5
2. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE				
a. PROPORTIONS OF SITE-PREPARED MORTAR		X		Art 2.1 2.6 A
b. CONSTRUCTION OF MORTAR JOINTS		X		Art 3.3B
c. GRADE & SIZE OF PRESTRESSING TENDONS AND ANCHORAGES		X		Art 2.4B, 2.4 H
d. LOCATIONS OF REINFORCEMENT, CONNECTORS, & PRESTRESSING TENDONS & ANCHORAGES		X		Art 3.4, 3.6 A
e. PRESTRESSING TECHNIQUE		X		Art 3.6B
f. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X ^(b)	X ^(d)		Art 2.1 C
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
a. GROUT SPACE		X		Art 3.2 D, 3.2 F
b. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS, AND PRESTRESSING TENDONS AND ANCHORAGES.		X	Sec 1.1 G	Art 2.4, 3.4
c. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND PRESTRESSING TENDONS AND ANCHORAGES.		X	Sec 1.1 G	Art 3.2 E, 3.4, 3.6 A
d. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS		X		Art 2.6 B, 2.4 G.1.b
e. CONSTRUCTION OF MORTAR JOINTS		X		Art 3.3 B
4. VERIFY DURING CONSTRUCTION				
a. SIZE AND LOCATION OF STRUCTURAL ELEMENTS		X		Art 3.3 F
b. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION		X	Sec 2.1.7.7.2, 3.3.3.4.(c) 3.3.3.4.(b)	
c. WELDING OF REINFORCEMENT	X		Sec 1.1 G	
d. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F (4.4°C)) OR HOT WEATHER (TEMPERATURES ABOVE 90°F (32.3°C))		X		Art 1.8 C, 1.8 D
e. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X			Art 3.6 B
f. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X			Art 3.5, 3.6 C
g. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X ^(b)	X ^(d)		Art 3.3, B.8
5. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS		X		Art 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3, 1.4 B.4

a. FREQUENCY REFERS TO THE FREQUENCY OF INSPECTION, WHICH MAY BE CONTINUOUS DURING THE TASK LISTED OR PERIODICALLY DURING THE LISTED TASK, AS DEFINED IN THE TABLE.

b. REQUIRED FOR THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.

c. REQUIRED AFTER THE FIRST 5000 SQUARE FEET (465 SQUARE METERS) OF AAC MASONRY.

Project:
Mary C. Howse
Elementary

Project Address:
641 Boot Road
West Chester, PA 19380

Sheet Title:

**SPECIAL
INSPECTIONS**

Seal

Brian D. McGlade, PE
Pennsylvania PE #35277

DUTY TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:
Any party who relies in part or whole on the content of these Construction Documents shall, before beginning any work, be responsible for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, scope of work, and suitability for constructing the project. Each party to these documents shall represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and therefore are qualified to fully evaluate and interpret the contract documents. After relying on these documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. **All parties who begin work** have a duty to document their activities for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

[illegible]

BI&A Job Number: H14848-23

Scale: $1/8" = 1'-0"$

Drawn By:

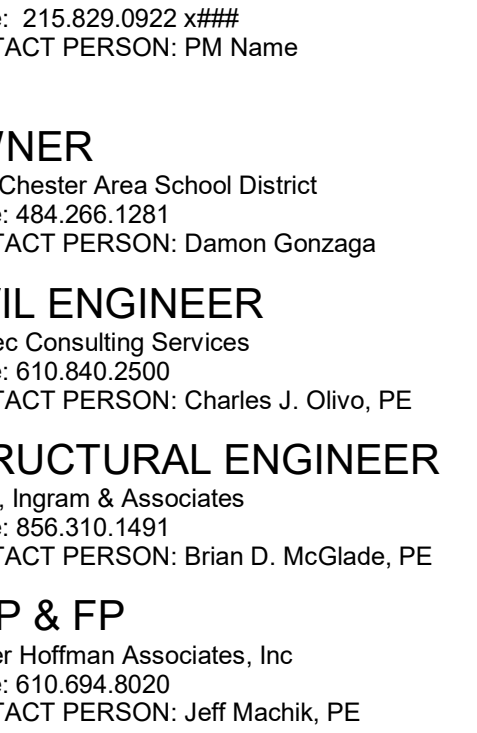
Checked B

Approved By _____

Sheet No.

S0.02

© Copyright 2023 Blackney Hayes Architects.



NER
Chester Area School District
: 484.266.1281
ACT PERSON: Damon Gonzaga

CIVIL ENGINEER
 Consulting Services
 : 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Ingram & Associates
856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

P & FP
Hoffman Associates, Inc
: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

ry C. Howse
mentary

Address:
 800 Road
 Chester, PA 19380

Title:
FOUNDATION PLAN -
AREA 'B'

Brian D. McGlade, PE
Pennsylvania PE #35277

INSPECT CONTRACT DOCUMENTS PRIOR TO WORK: The Contractor shall, before beginning construction, personally inspect the complete Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, and suitability for constructing the Project. The Contractor shall ensure that the Contractor's representatives have expertise in the area of their responsibility knowledgeable regarding industry standards, requirements and code requirements and shall ensure that they can evaluate and interpret the Contract Documents. All parties relying on the Contractor's expertise must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. All parties who begin work shall be deemed to have accepted the documents for purposes unless noted in specific exception beforehand.

Actual conditions may vary from conditions shown in this drawing. Confirm all information in the field before proceeding with any work and notify the Architect if a variation is discovered.

Nothing is to be copied or transmitted in any form without the express written authorization of J. Hayes Architects. All ideas and concepts shown or suggested in this drawing are the property of J. Hayes Architects.

	Comments	△
2023	SCHEMATIC DESIGNN	
2023	DESIGN DEVELOPMENT	
2023	60% CD SET	
2023	90% CD SET	
2023	ISSUED FOR BID	

Job Number: H14848-23

As indicated

By: JBW

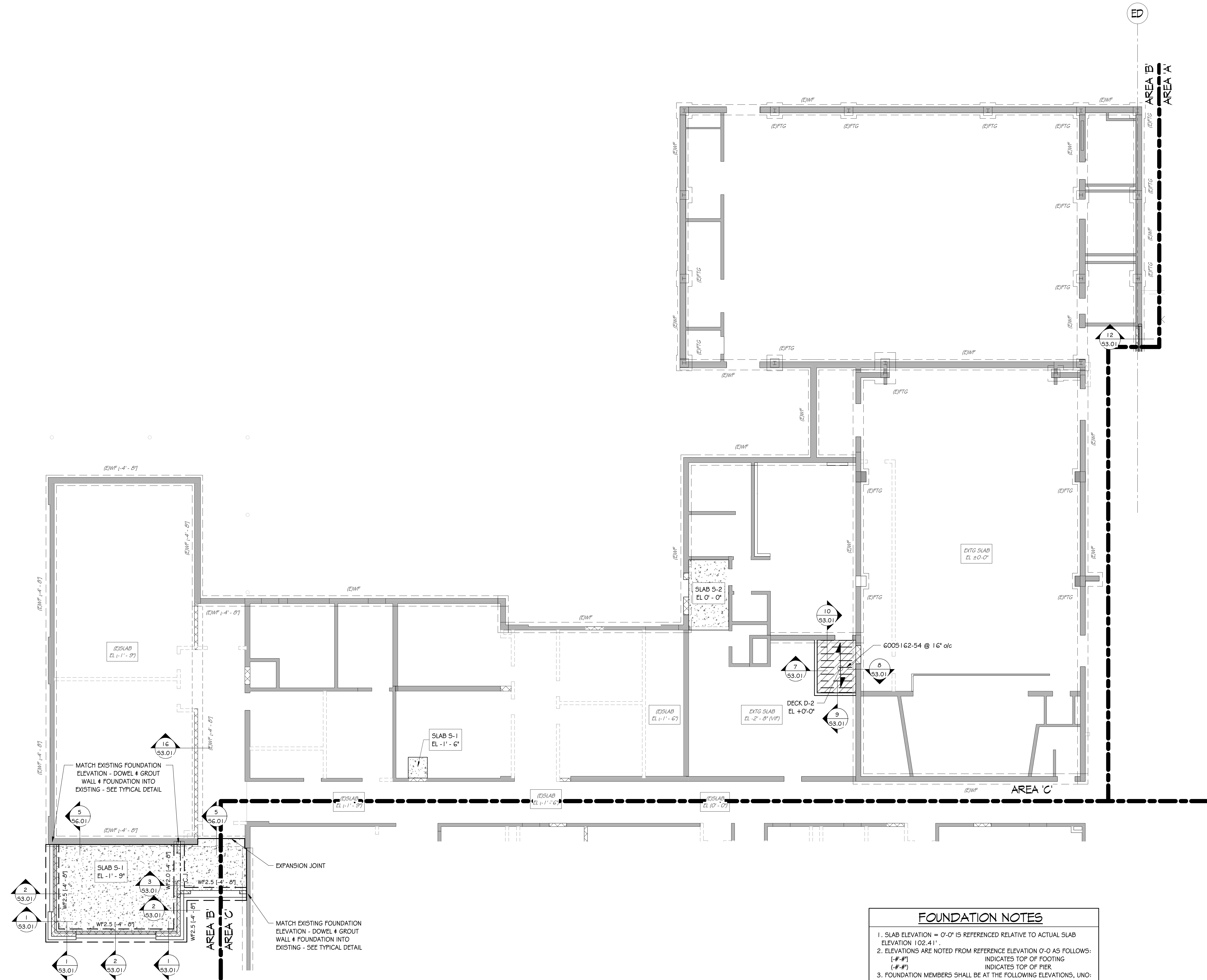
ed By: BDM

ed By: BDM

No.

1. INTRODUCTION

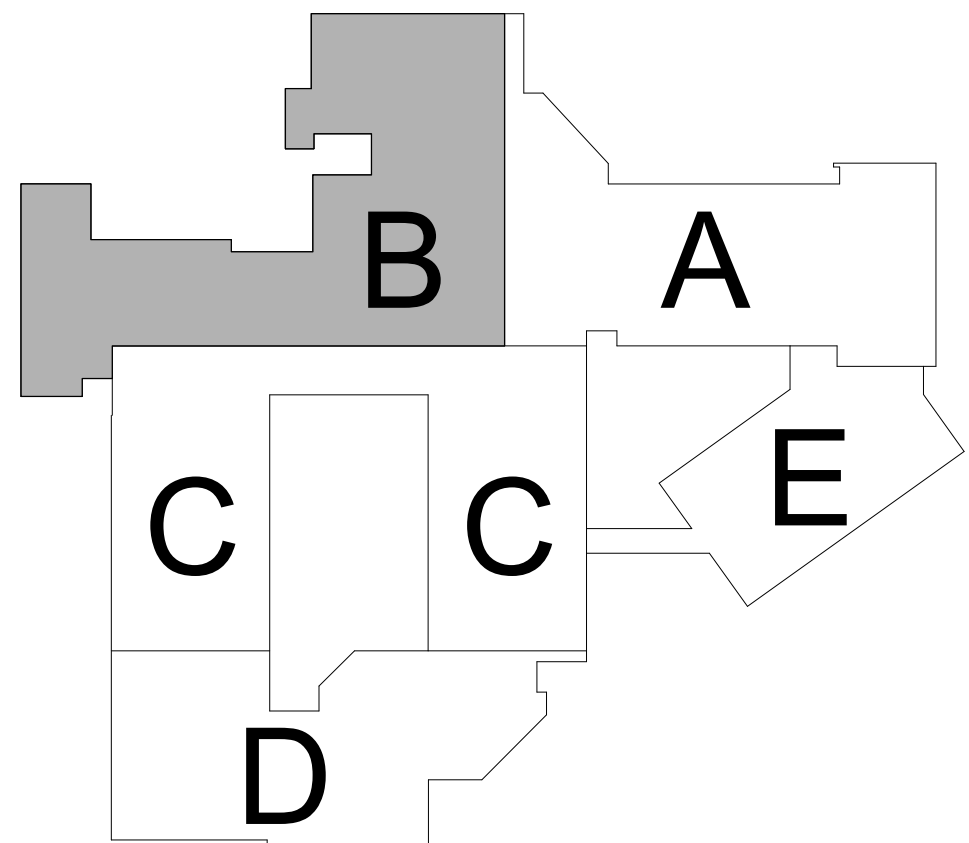
© 2023 Blackney Hayes Architects



FOUNDATION PLAN - AREA 'B'

FOUNDATION NOTES

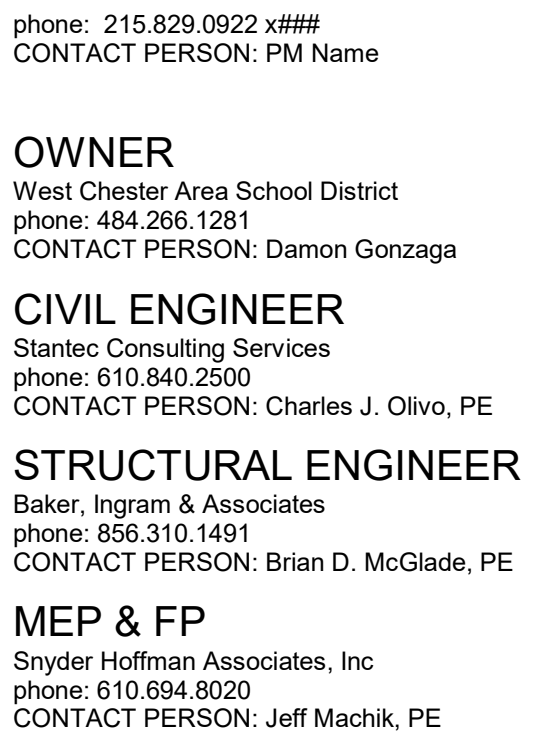
1. SLAB ELEVATION IS 0'-0" IF REFERENCED RELATIVE TO ACTUAL SLAB ELEVATION 102.24' 1.
2. ELEVATIONS ARE OBTAINED FROM REFERENCE ELEVATION 0'-0" AS FOLLOWS:
 (1) "F" INDICATES TOP OF FOOTING
 (2) "F#F" INDICATES TOP OF FLOOR
3. FOUNDATION MEMBERS SHALL BE AT THE FOLLOWING ELEVATIONS, UNLESS NOTED OTHERWISE:
 FOOTING (0'-0")
 FLOOR SLAB (0'-0")
4. FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS:
 (1) "F#" FOOTING MARK - SEE SCHEDULE.
5. "S#" INDICATES FOOTING STEP. SEE TYPICAL DETAIL ON DRAWING S3.1. FOR ADDITIONAL INFORMATION.
6. COORDINATE WITH ARCH, MECH, ELEC. AND PLUMB DRAWINGS FOR SLOPES, DRAINS, OPENINGS, BLOCK-OUTS, EMBED ITEMS, & DEPRESSIONS, ETC.
7. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
8. REFER TO STRUCTURAL NOTES DRAWING S1.1.
9. REFER TO FOUNDATION DETAILS ON DRAWING S3.1.
10. "L#" INDICATES LINTEL. SEE LINTEL SCHEDULE.
11. "E#" INDICATES EXISTING MEMBERS. VERIFY SIZE AND LOCATION IN FIELD.
12. "C#" INDICATES CONCRETE. SEE CONCRETE SCHEDULE.
13. "M.C.J." INDICATES MASONRY CONTROL JOINT. SEE TYPICAL DETAILS.
14. "C.J." INDICATES SLAB CONTROL JOINT. SEE TYPICAL DETAIL.
15. "W.C.J." INDICATES CONCRETE CONTROL JOINT. SEE TYPICAL DETAILS.



NOT FOR CONSTRUCTION

1.01B

10/30/2023 1:51:36 PM



OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

Project Address:
641 Boot Road
West Chester, PA 19380

Seal

RIGHT TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:

Any party who relies in part or whole on the content of these Construction Documents shall, before beginning work, be given the opportunity to inspect the content of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, omissions, and errors. The parties shall be deemed to represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and shall therefore accept, fully review and interpret the contract documents. All issues relating to the contract documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. All parties who begin work shall be deemed to certify that they have accepted their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

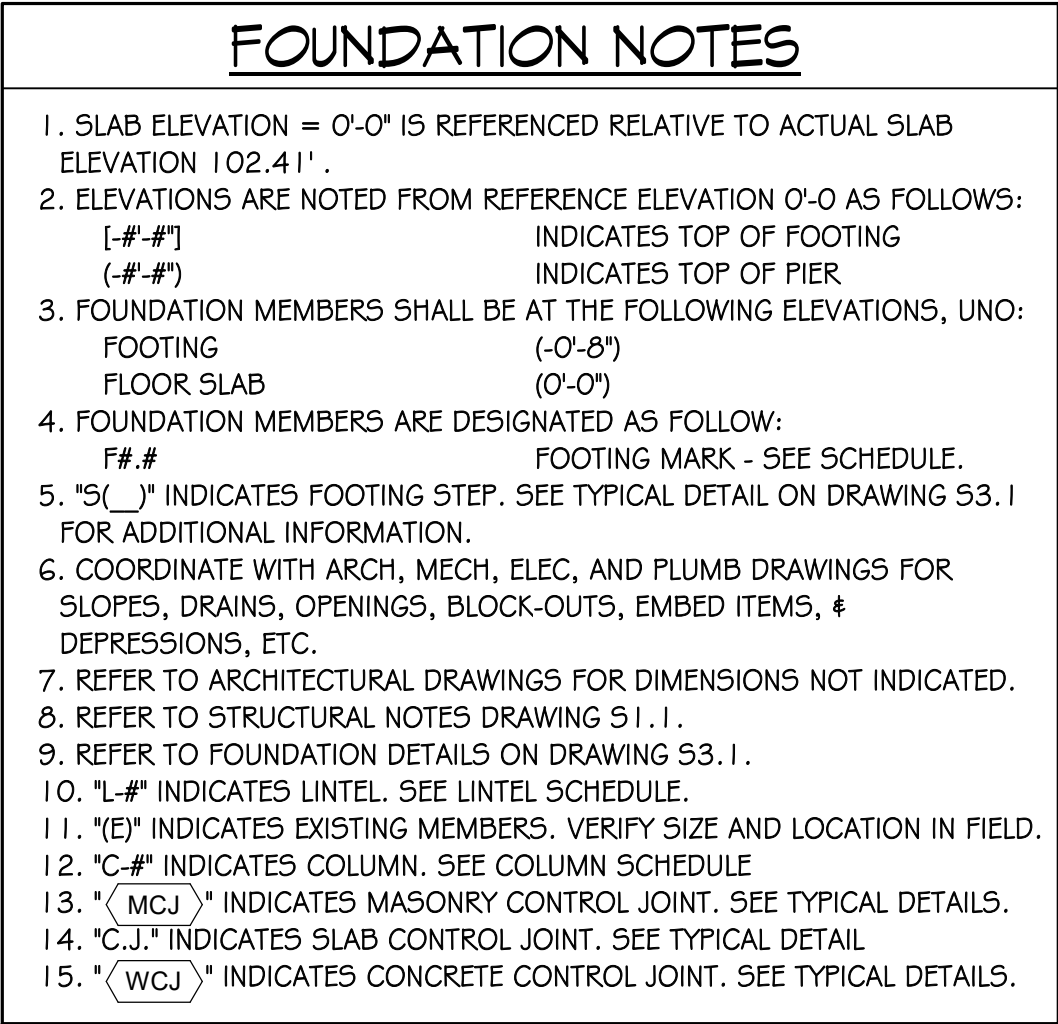
This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

[illegible]

Approved By: BDM

S1.01C

© Copyright 2023 Blackney Hayes Architects



A diagram of a complex polygon with several internal holes. The polygon is divided into five labeled regions: A, B, C, D, and E. Region C is shaded gray. The regions are defined by the following boundaries: Region A is the top-right area; Region B is the top-left area; Region C is a central horizontal strip, shaded gray; Region D is the bottom-left area; and Region E is a protrusion on the right side of the central strip.

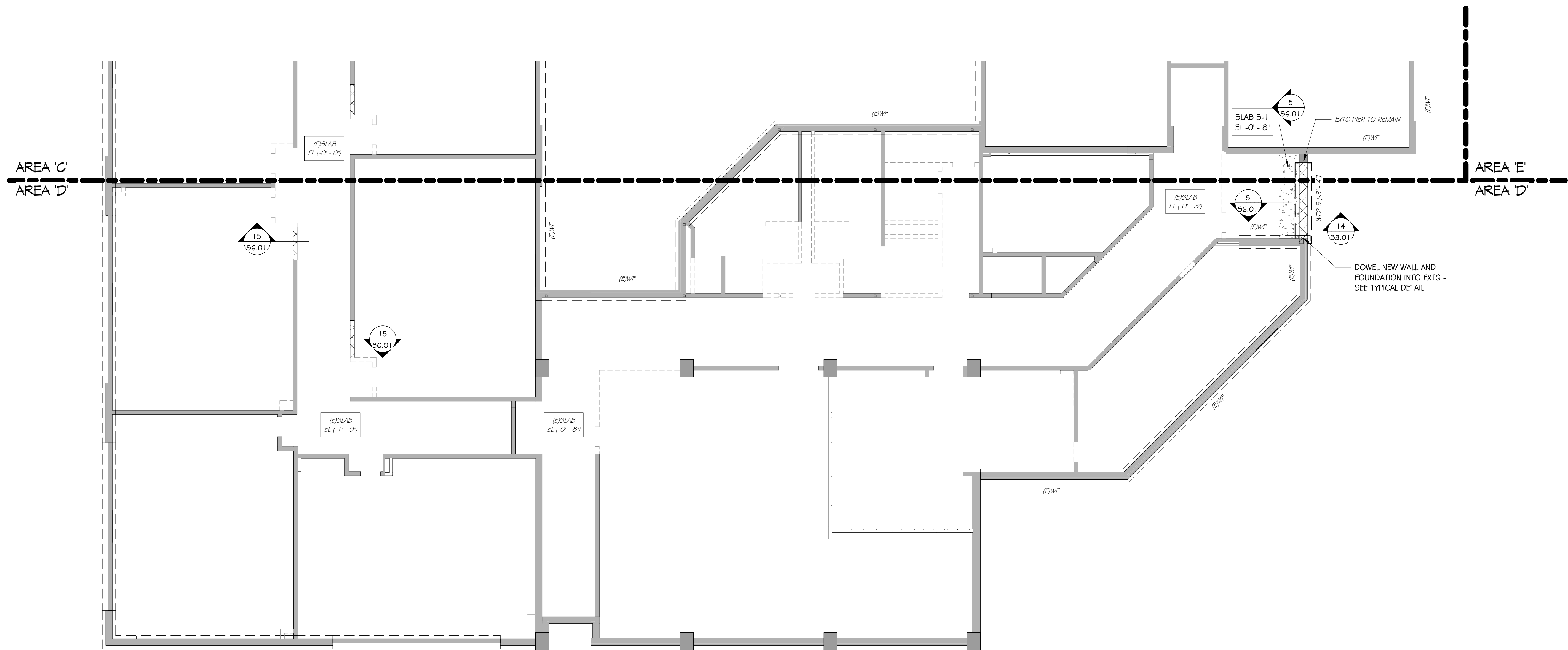
NOT FOR CONSTRUCTION



OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc.
phone: 610.694.8020
CONTACT PERSON: Jeff Mach



Project:
Mary C. Howse
Elementary

Project Address:
641 Boot Road
West Chester, PA 19380

Sheet Title:
FOUNDATION PLAN -
AREA 'D'

Seal

Brian D. McGlade, PE
Pennsylvania PE #35277

GO TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:

Any party who relies in part or whole on the content of these Construction Documents shall, before beginning work, be responsible for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, and omissions. The Architect represents that the Architect has the experience in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and that they have been qualified to fully evaluate and interpret the contract documents. The Architect represents that the contract documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. All parties who begin work under these contract documents are deemed to be responsible for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

[illegible]

BI&A Job Number: H14848-23

Scale: As indicate

Drawn By: JBV

Checked By: BDM

Approved By: BDM

Sheet No.

S1.01D

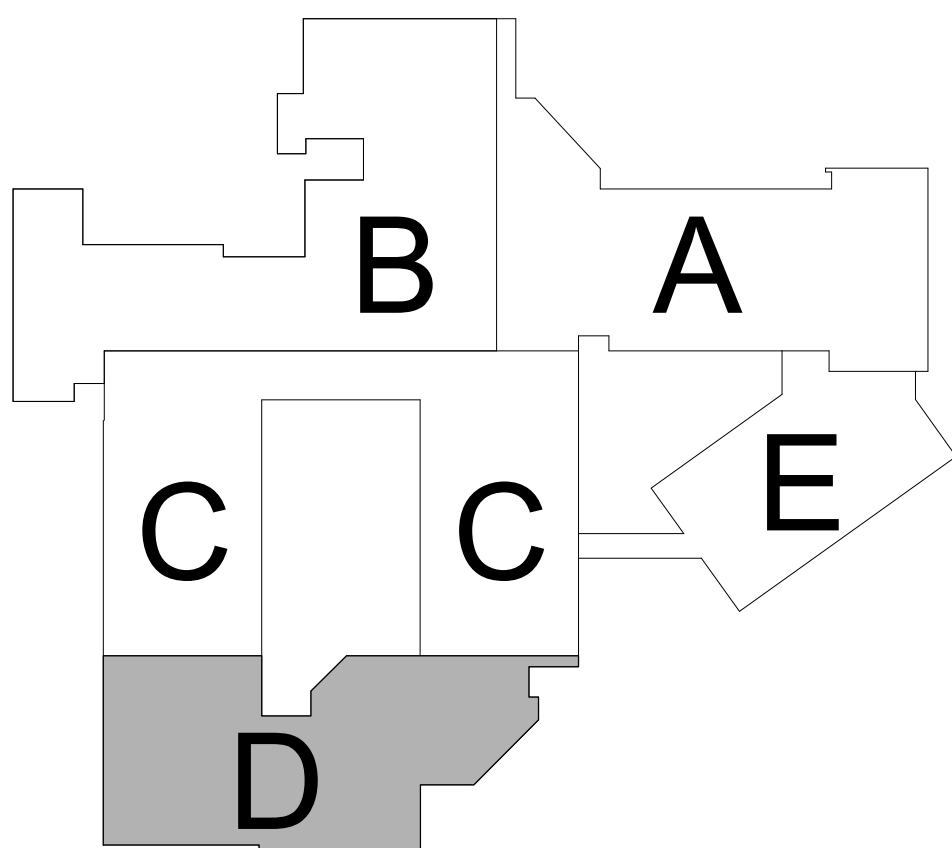
© Copyright 2023 Blackney Hayes Architect

10/30/2023 1:51:39 PM

FOUNDATION PLAN - AREA 'D'

FOUNDATION NOTES

1. SLAB ELEVATION IS 0'-0" IS REFERENCED RELATIVE TO ACTUAL SLAB ELEVATION 102.41'.
2. ELEVATIONS ARE NOTED FROM REFERENCE ELEVATION 0-0 AS FOLLOWS:
 (F-#) INDICATES TOP OF FOOTING
 (F) INDICATES TOP OF RIER
3. FOUNDATION MEMBERS SHALL BE AT THE FOLLOWING ELEVATIONS, UNO:
 FOOTING (0-8)
 FLOOR SLAB (0-0)
4. FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS:
 #F# FOOTING MARK, SEE SCHEDULE.
5. "SC" INDICATES FOOTING STEP. SEE TYPICAL DETAIL ON DRAWING 53.I FOR ADDITIONAL INFORMATION.
6. COORDINATE WITH ARCH, MECH, ELEC, AND PLUMB DRAWINGS FOR SLOPES, DRAINS, OPENINGS, BLOCK-OUTS, EMBED ITEMS, & DEPRESSIONS, ETC.
7. REFER TO STRUCTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.
8. REFER TO STRUCTURAL NOTES DRAWING 51. I.
9. REFER TO FOUNDATION DETAILS ON DRAWING 53. I.
10. "L-#" INDICATES LINTEL. SEE LINTEL SCHEDULE.
11. "E#" INDICATES EXISTING MEMBERS. VERIFY SIZE AND LOCATION IN FIELD.
12. "C#" INDICATES COLUMN. SEE COLUMN SCHEDULE.
13. "W#" INDICATES WALL. SEE WALL SCHEDULE. SEE TYPICAL DETAILS.
14. "S#" INDICATES SLAB CONTROL JOINT. SEE TYPICAL DETAIL.
15. "WJ#" INDICATES CONCRETE CONTROL JOINT. SEE TYPICAL DETAILS.



NOT FOR CONSTRUCTION



phone: 215.829.0922 x###
CONTACT PERSON: PM Name

OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc.
phone: 610.684.8020
CONTACT PERSON: Jeff Machik, PE

Project:
Mary C. Howse Elementary

Project Address:
**641 Boot Road
West Chester, PA 19380**

Sheet Title:
**FOUNDATION PLAN
AREA 'E'**

Seal

Brian D. McGlade, PE
Pennsylvania PE #35277

DUTY TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK
Any party who relies in part or whole on the content of these Contract Documents shall, before beginning any work, be responsible for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, scope of work, and suitability for constructing the building. All parties relying on these documents represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and therefore are qualified to fully evaluate and interpret the contract documents. All parties relying on these documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. All parties who begin work hereby certify that the documents are suitable for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

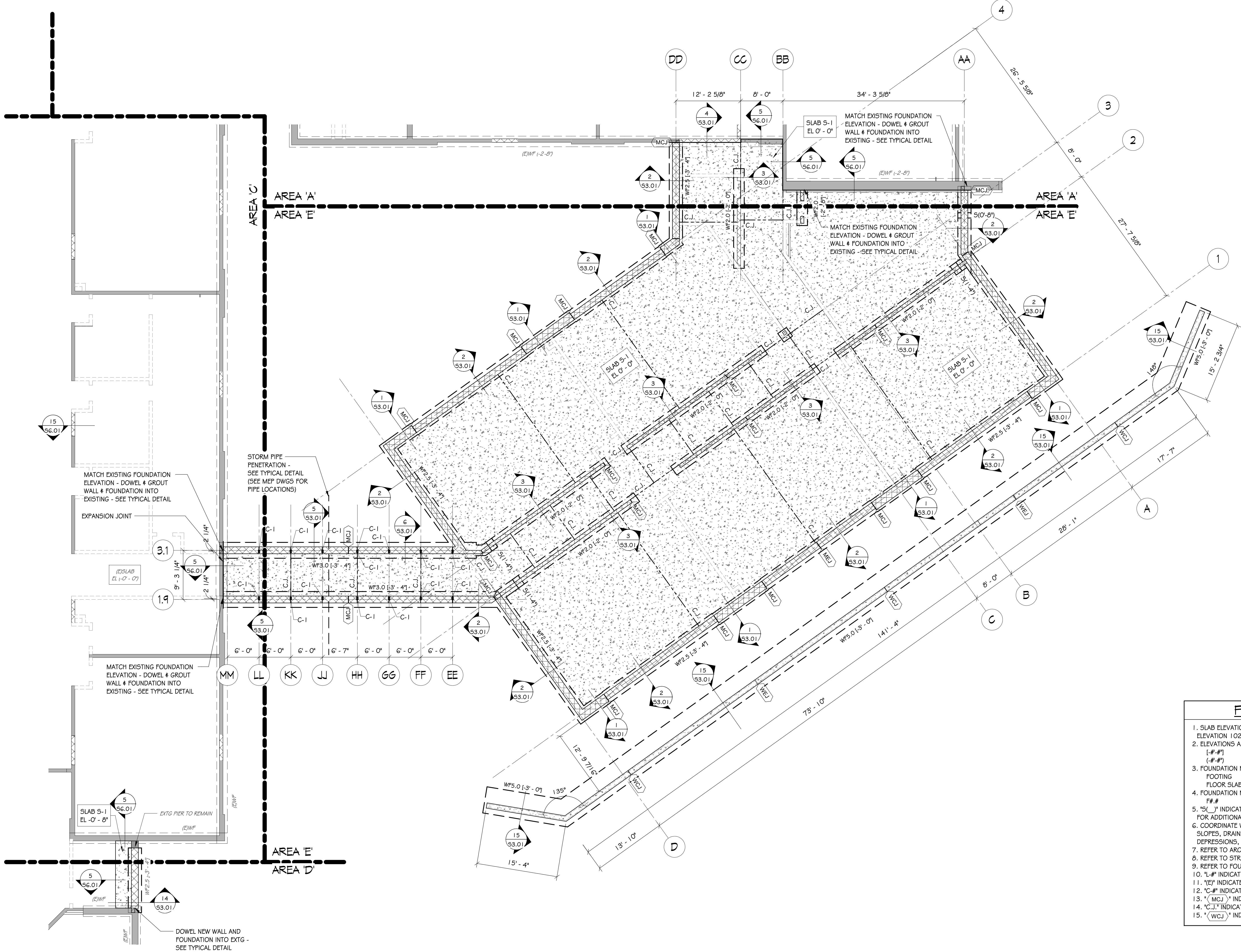
This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

Release	Date	Comments	△
	03.24.2023	SCHEMATIC DESIGN	
	05.28.2023	DESIGN DEVELOPMENT	
	07.28.2023	80% CD SET	
	09.19.2023	90% CD SET	
	10.30.2023	ISSUED FOR BID	

BI&A Job Number: H14848-23
Scale: As indicated
Drawn By: JBW
Checked By: BDM
Approved By: BDM
Sheet No.

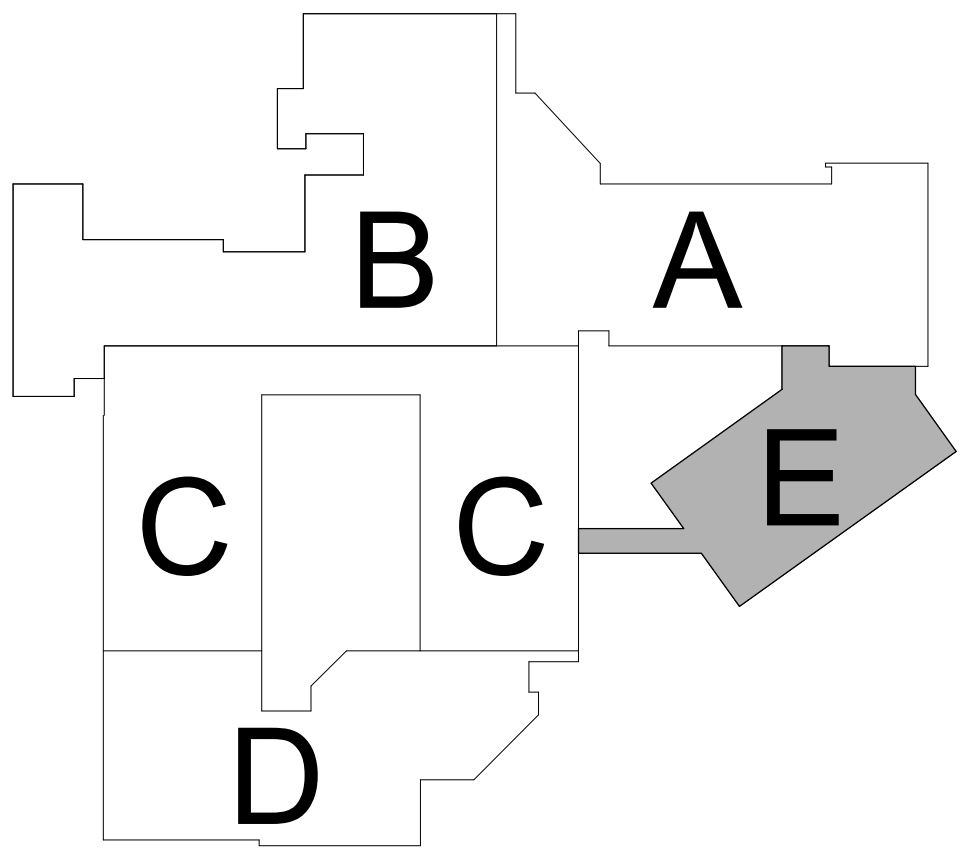
S1.01E

© Copyright 2023 Blackney Hayes Architects

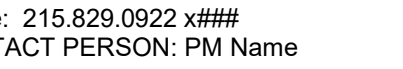


FOUNDATION NOTES	
1. SLAB ELEVATION = 0'-0" IS REFERENCED RELATIVE TO ACTUAL SLAB ELEVATION 102.41'.	
2. ELEVATIONS ARE NOTED FROM REFERENCE ELEVATION 0'-0" AS FOLLOWS: [-#'-#"] INDICATES TOP OF FOOTING [-#'-#"] INDICATES TOP OF PIER	
3. FOUNDATION MEMBERS SHALL BE AT THE FOLLOWING ELEVATIONS, UNO: FOOTING (0'-0") FLOOR SLAB (0'-0")	
4. FOUNDATION MEMBERS ARE DESIGNATED AS FOLLOWS: F#.# FOOTING MARK - SEE SCHEDULE.	
5. "S#.#" INDICATES FOOTING STEP. SEE TYPICAL DETAIL ON DRAWING 53.1 FOR ADDITIONAL INFORMATION.	
6. COORDINATE WITH ARCH, MECH, ELEC, AND PLUMB DRAWINGS FOR SLOPES, DRAINS, OPENINGS, BLOCK-OUTS, EMBED ITEMS, & DEPRESSIONS, ETC.	
7. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT INDICATED.	
8. REFER TO STRUCTURAL NOTES DRAWING 51.1.	
9. REFER TO FOUNDATION DETAILS ON DRAWING 53.1.	
10. "L-#" INDICATES LINTEL. SEE LINTEL SCHEDULE.	
11. "EX" INDICATES EXISTING MEMBERS. VERIFY SIZE AND LOCATION IN FIELD.	
12. "C#.#" INDICATES COLUMN. SEE COLUMN SCHEDULE.	
13. "MCJ" INDICATES MASONRY CONTROL JOINT. SEE TYPICAL DETAILS.	
14. "CJ" INDICATES SLAB CONTROL JOINT. SEE TYPICAL DETAIL.	
15. "WCJ" INDICATES CONCRETE CONTROL JOINT. SEE TYPICAL DETAILS.	

1 FOUNDATION PLAN - AREA 'E'
51.01E SCALE: 1/8" = 1'-0"



NOT FOR CONSTRUCTION



NER
Chester Area School District
: 484.266.1281
FACT PERSON: Damon Gonzaga

IL ENGINEER
ic Consulting Services
: 610.840.2500
ACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Ingram & Associates
856.310.1491
CONTACT PERSON: Brian D. McGlade, P.E.

P & FP
Hoffman Associates, Inc
610.694.8020
CONTACT PERSON: Jeff Machik, PE

ry C. Howse
mentary

Address:
 800 Road
 Chester, PA 19380

Title:
OF FRAMING PI
REA 'A'

Brian D. McGlade, PE
Pennsylvania PE #35277

INSPECT CONTRACT DOCUMENTS

“KINDLY WORK”: Any party who relies in part or whole on the contents of the Construction Documents shall, before beginning work, be responsible for fully inspecting the contents of the Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, coordination, and suitability for constructing the Work. All parties relying on these documents represent and warrant that they have expertise in the area of their responsibility and possess knowledge regarding industry standards, codes, requirements and code requirements and that they are qualified to fully evaluate and interpret the documents. All parties relying on these documents must, prior to beginning work, submit a written statement for clarifications and additional information to the Architect in writing. All parties who begin work on the project hereby certify that the documents are suitable for the intended purposes unless noted in specific exceptions beforehand.

Nothing is to be copied or transmitted in any form without the express written authorization of Hayes Architects. All ideas and concepts suggested in this drawing are the property of Hayes Architects.

[illegible]

Job Number: H14848-23

As indicated

By: JBW

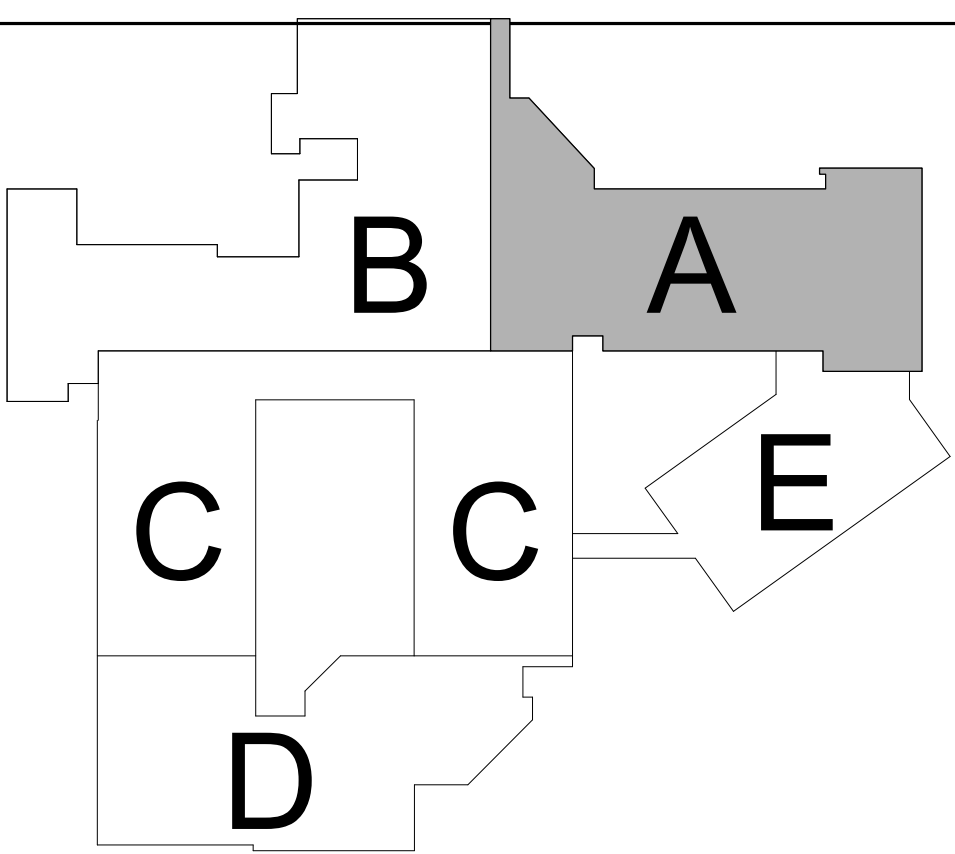
ed By: BDM

ed By: BDM

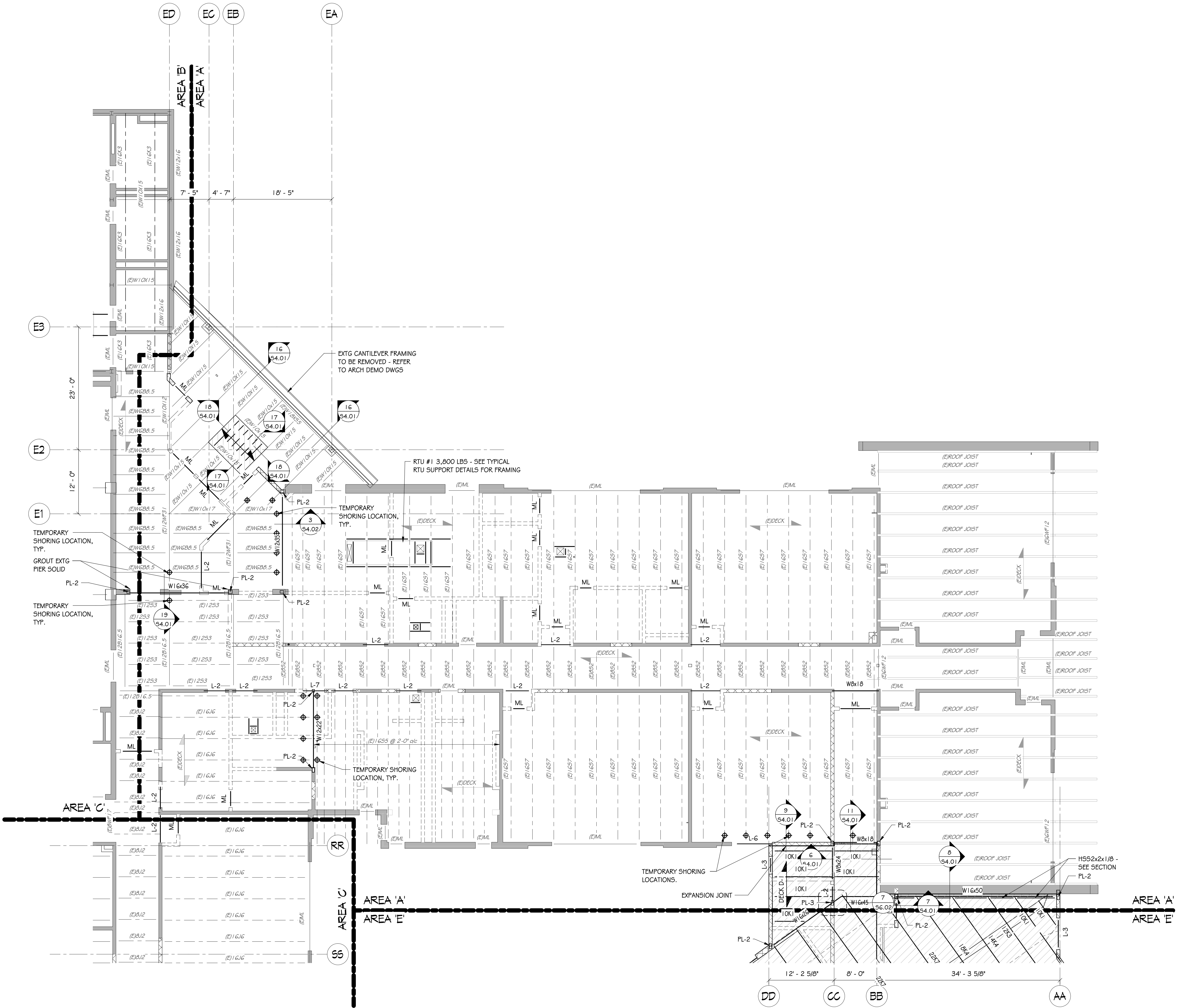
No.

1.02A

© 2023 Blackney Hayes Architects



NOT FOR CONSTRUCTION



ROOF FRAMING PLAN NOTES

1. TOP OF ST ELEVATIONS NOTED ON PLAN (+, -) ARE REFERENCED TO DATUM ELEVATION +0'-0".
2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION NOT INDICATED.
3. REFER TO STRUCTURAL NOTES DRAWINGS S 1-51.
4. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS E 54.01.
5. REFER TO "TYPICAL ROOF DETAILS ON DRAWINGS 96.02.
6. ALL JOIST SPACING IS EQUAL, UNLESS NOTED OTHERWISE.
7. "L" INDICATES LINTEL - SEE SCHEDULE
8. "Y" INDICATES EXISTING MEMBER - VERIFY SIZE AND LOCATION IN FIELD.
9. ALL BEAMS BEARING ON MASONRY SHALL HAVE BEARING PLATE TYPE "X" UNLESS OTHERWISE NOTED ON PLAN OR IN FIELD.
10. "M" INDICATES LOOSE MASONRY LINTEL - SEE LINTEL GENERAL NOTES.
11. "MEL" DENOTES EXISTING MASONRY LINTEL - VERIFY IN FIELD.
12. "SLO" DENOTES SLOPED MEMBER.
13. "d" DENOTES APPROXIMATE TEMPORARY SHORING LOCATIONS.
14. TEMPORARY SHORING IS TO BE INSTALLED PRIOR TO ANY DEMO. IF NOT COORDINATED ON PLAN, REFER TO SECTION FOR LOCATIONS.
15. COORDINATE DUCT OPENINGS IN MASONRY WITH MECHANICAL PLANS. SEE STRUCTURAL LINTEL NOTES FOR MASONRY LINTEL SIZE.

2 ROOF PLAN - AREA 'A'
51.02A SCALE: 1/8" = 1'-0"

OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

Project:

Mary C. Howse
Elementary

Project Address:
641 Boot Road
West Chester, PA 19380

ROOF FRAMING PLAN - AREA 'B'

Seal

Brian D. McGlade, PE
Pennsylvania PE #35277

DUTY TO INSPECT CONTRACT DOCUMENTS PRIOR

TO STARTING WORK:
Any party who relies in part or whole on the content of any of the documents must, before beginning work, be responsible for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflict of scope of work, and suitability for constructing the building. All parties relying on these documents represent and warrant that they have read and understood the documents and acknowledge regarding industry standards, product requirements and code requirements and therefore are qualified to fully evaluate and interpret the contract documents. All parties relying on these documents must, prior to beginning work, submit all requests for clarification and/or interpretation to the architect before starting. All parties who begin work hereby certify that the documents are suitable for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

Release

[illegible]

BI&A Job Number: H14848-2

Scale: As indicated

Drawn By: JBV

Checked By: BDM

Approved By: BDM

Sheet No.

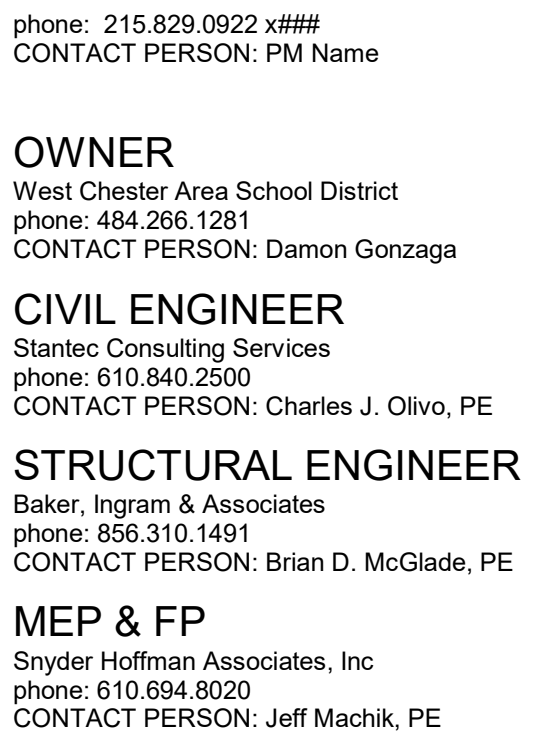
S1.02B



10/30/2023 1:51:41 PM

NOT FOR CONSTRUCTION

The diagram shows a 2D shape composed of unit squares. The shape is labeled with letters A through E. The shape is composed of 14 unit squares. The top row has 4 squares, the second row has 3 squares, the third row has 3 squares, the fourth row has 2 squares, and the fifth row has 2 squares. The labels are placed as follows: A is in the top right square, B is in the second square of the second row, C is in the first and third squares of the third row, D is in the first square of the fourth row, and E is in the first square of the fifth row.



OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

Project Address:
641 Boot Road
West Chester, PA 19380

Seal

WARRANTY TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:

Any party who is relied in part or whole on the content of the Contract Documents shall, before beginning work, be responsible for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, and scope of work, and suitability for constructing the project. The undersigned hereby certifies that the undersigned has that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and that the undersigned are aware of the contents of the contract documents. All parties relying on these documents must, prior to beginning work, submit all requests for clarifications and additional information to the undersigned. The undersigned hereby certifies that the undersigned hereby certifies that the documents are suitable for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

BI&A Job Number:	H14848-23
Scale:	As indicated
Drawn By:	JBW
Checked By:	BDM
Approved By:	BDM
Sheet No.	

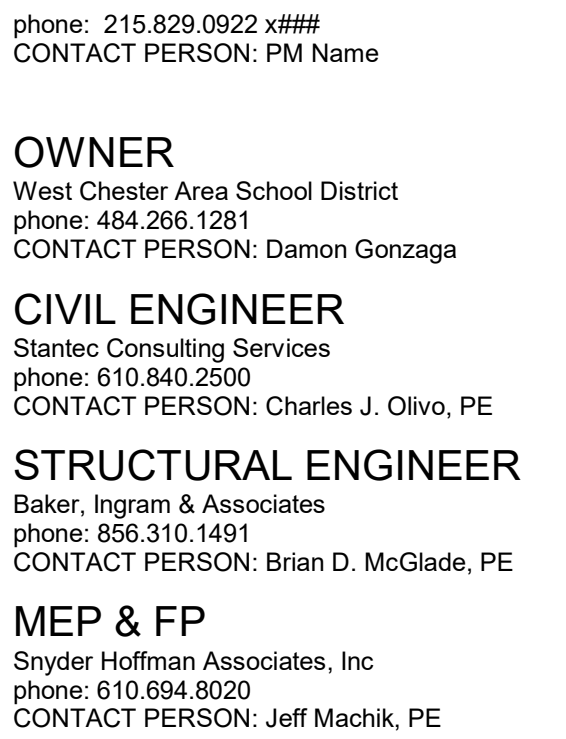
Sheet No. _____

S1.02C

© Copyright 2023 Blackney Hayes Architects



1. TOP OF STEEL ELEVATIONS NOTED THIS ("+...") ARE REFERENCED TO DATUM ELEVATION +0'-0".
2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION NOT INDICATED.
3. REFER TO STRUCTURAL NOTES DRAWING 51.01.
4. REFER TO ELECTRICAL AND COMMUNICATIONS DRAWING 54.01.
5. REFER TO TYPICAL ROOF DETAILS ON DRAWINGS 56.02.
6. ALL JOIST SPACING IS EQUAL, UNLESS NOTED OTHERWISE.
7. "L#" INDICATES LINTEL - SEE SCHEDULE
8. "EY" INDICATES EXISTING MEMBER - VERIFY SIZE AND LOCATION IN FIELD
9. ALL BEAR BEARING ON MASONRY SHALL HAVE BEARING PLATE IN PLACE, UNLESS OTHERWISE NOTED ON OTHER SECTIONS
10. "ML" INDICATES LOOSE MASONRY LINTEL. SEE LINTEL GENERAL NOTES.
11. "EMD" DENOTES EXISTING MASONRY LINTEL. VERIFY IN FIELD.
12. "SL" DENOTES SLOPED MEMBER.
13. "♦" DENOTES APPROXIMATE TEMPORARY SHORING LOCATIONS.
14. TEMPORARY SHORING IS TO BE EXTRACTED PRIOR TO ANY DEMO. IF NOT INDICATED, REFER TO SECTION FOR LOCATIONS.
15. COORDINATE DUCT OPENINGS IN MASONRY WITH MECHANICAL PLANS. SEE STRUCTURAL LINTEL NOTES FOR MASONRY LINTEL SIZE.



OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

Project Address:
641 Boot Road
West Chester, PA 19380

Seal

RIGHT TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:

Any party who relies in part or whole on the content of the contract documents must, before beginning any work, be responsible for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, omissions, and errors. It is the responsibility of the party who relies on the contract documents to represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and that they are aware of the specific requirements presented in the contract documents. All parties relying on these documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. The Architect does not warrant or hereby certify that the documents are suitable for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

[illegible]

Approved By: BDM

Sheet No. _____

01005

\$1020

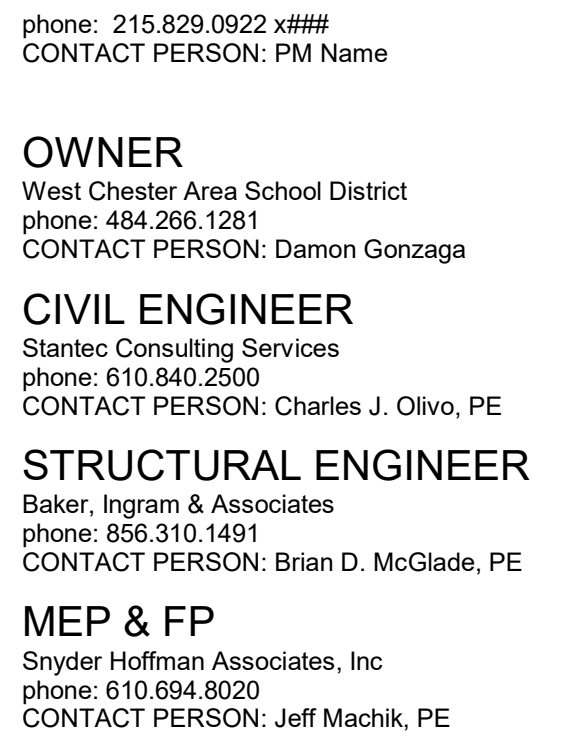
© Copyright 2023 Blackney Hayes Architects



1. TOP OF STEEL ELEVATIONS NOTED PLUS (+) OR MINUS (-) ARE REFERENCED TO DATUM ELEVATION +0'-0".
2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSION NOT INDICATED.
3. REFER TO STRUCTURAL NOTES DRAWING 51.01.
4. REFER TO STRUCTURAL NOTES DRAWING 52.01 FOR SECTION 54.01.
5. REFER TO "TYPICAL ROOF" DETAILS ON DRAWINGS 56.02.
6. ALL JOIST SPACING IS EQUAL, UNLESS NOTED OTHERWISE.
7. "L" INDICATES LINTEL - SEE SCHEDULE
8. "EY" INDICATES EXISTING MEMBER - VERIFY SIZE AND LOCATION IN FIELD
9. ALL BEAMS BEARING ON MASONRY SHALL HAVE BEARING PLATE LAYOUT.
10. "U" INDICATES UNIFORM OTHER THAN SECTION OR SECTION
11. "ML" INDICATES LOOSE MASONRY LINTEL. SEE LINTEL GENERAL NOTES.
11. "EM" DENOTES EXISTING MASONRY LINTEL. VERIFY IN FIELD.
12. "SL" INDICATES SLOPED MEMBER.
13. "d" DENOTES APPROXIMATE TEMPORARY SHORING LOCATIONS.
14. TEMPORARY SHORING IS TO BE INSTALLED PRIOR TO ANY DEMO. IF NOT NOTED OTHERWISE, REFER TO SECTION FOR LOCATIONS.
15. COORDINATE DUCT OPENINGS IN MASONRY WITH MECHANICAL PLANS. SEE STRUCTURAL LINTEL NOTES FOR MASONRY LINTEL SIZE.



10/30/2023 1:51:47 PM



Project Address:
641 Boot Road
West Chester, PA 19380

Seal

Brian D. McGlade, PE
Pennsylvania PE #35277

DUTY TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:
Any party who relies in part or whole on the content of these Construction Documents shall be responsible for their responsibility for fully inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, scope of work, and suitability for constructing the project. The Architect represents that the documents represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and that the documents are qualified. Fully evaluate and interpret the contract documents. All parties relying on the contract documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. All parties who begin work must certify that they have examined the documents for their intended purposes unless noted in specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

[illegible]

BI&A Job Number: H14848-23

Scale: As indicated

Drawn By: JBW

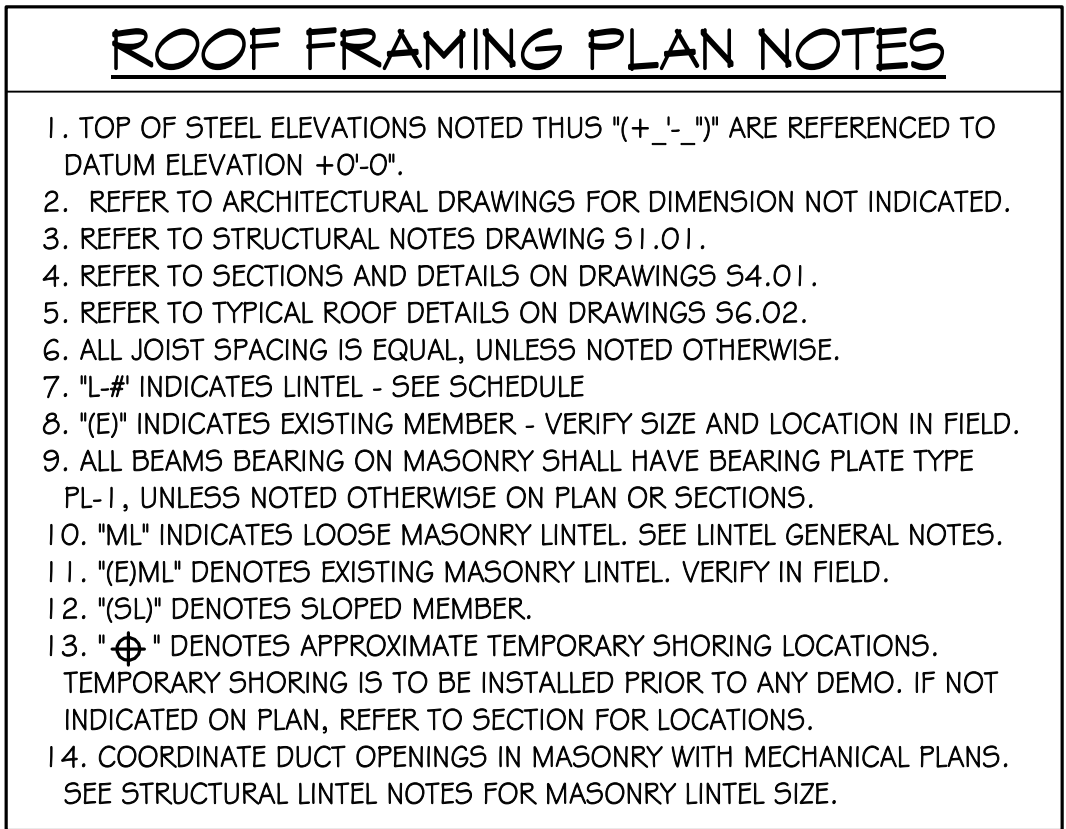
Checked By: BDM

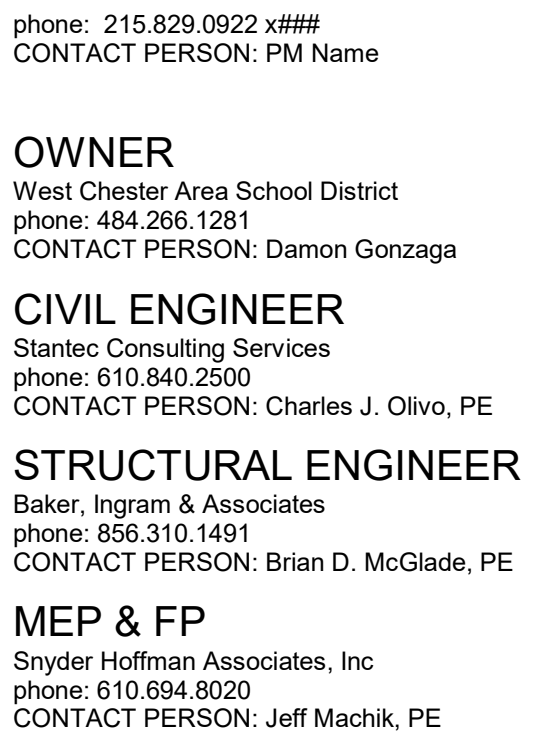
Approved By: BDM

Sheet No. _____

S1.02E

© Copyright 2023 Blackney Hayes Architects

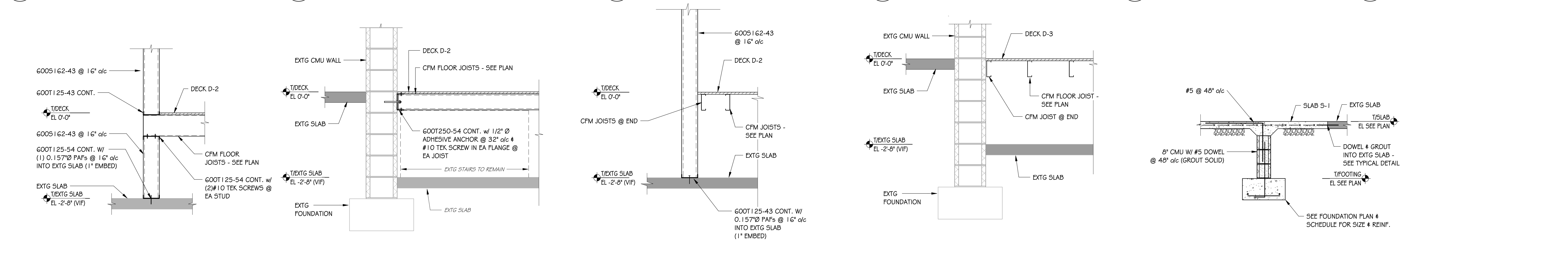




OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE



Project Address:
641 Boot Road
West Chester, PA 19380

Seal

RIGHT TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:

Any party who relies in part or whole on the content of these Construction Documents shall, before beginning work, be given the opportunity to inspect the content of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, omissions, and errors. The parties shall be deemed to represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and shall therefore accept, fully review and interpret the contract documents. All parties relying on the contract documents must, prior to beginning work, submit all requests for clarifications and additional information to the Architect in writing. All parties who begin work without the certainty that the documents are correct for their intended purposes unless noted in specific written exception beforehand.

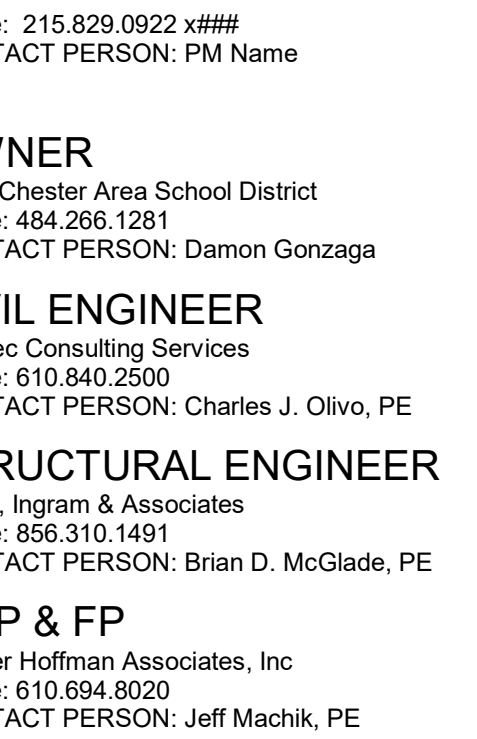
Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

BI&A Job Number:	H14848-23
Scale:	As indicated
Drawn By:	JBW
Checked By:	BDM
Approved By:	BDM
Sheet No.	

S3.01

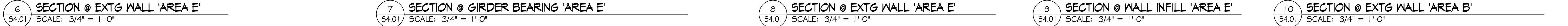
NOT FOR CONSTRUCTION



NER
Chester Area School District
: 484.266.1281
ACT PERSON: Damon Gonzaga

STRUCTURAL ENGINEER
Ingram & Associates
P: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

P & FP
Hoffman Associates, Inc
610.694.8020
CONTACT PERSON: Jeff Machik, PE



Address:
 800 Road
 Chester, PA 19380

FRAMING DETAILS

Brian D. McGlade, PE
Pennsylvania PE #35277

INSPECT CONTRACT DOCUMENTS PRIOR TO BIDDING WORK: The contractor, who relies in part or whole on the content of the Instruction Documents shall, before beginning work, inspect and verify the accuracy of the Instruction Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, omissions, and suitability for constructing the project. The contractor shall not rely on the Engineer to represent have expertise in the area of their responsibility or knowledgeable regarding industry standards, codes, requirements and code requirements and shall be responsible for the quality of the work. The contractor shall interpret the Instruction Documents. All parties relying on these documents must, prior to beginning work, submit all requests for clarifications and additional information to the Engineer in writing. All parties who begin work without certainty that the documents are suitable for the intended purposes unless noted in the specific exception beforehand.

Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect if a variation is discovered.

Nothing is to be copied or transmitted in any form without the express written authorization of Hayes Architects. All ideas and concepts suggested in this drawing are the property of Hayes Architects.

[illegible]

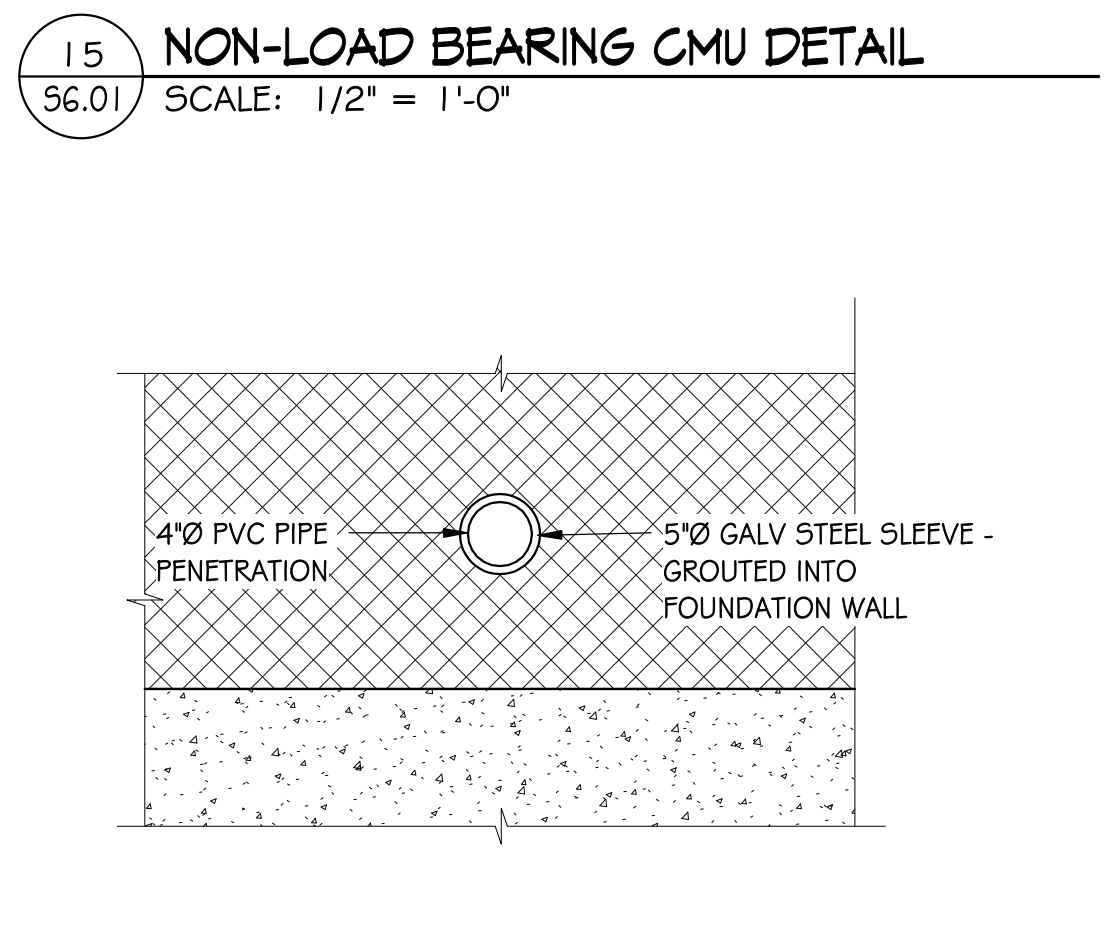
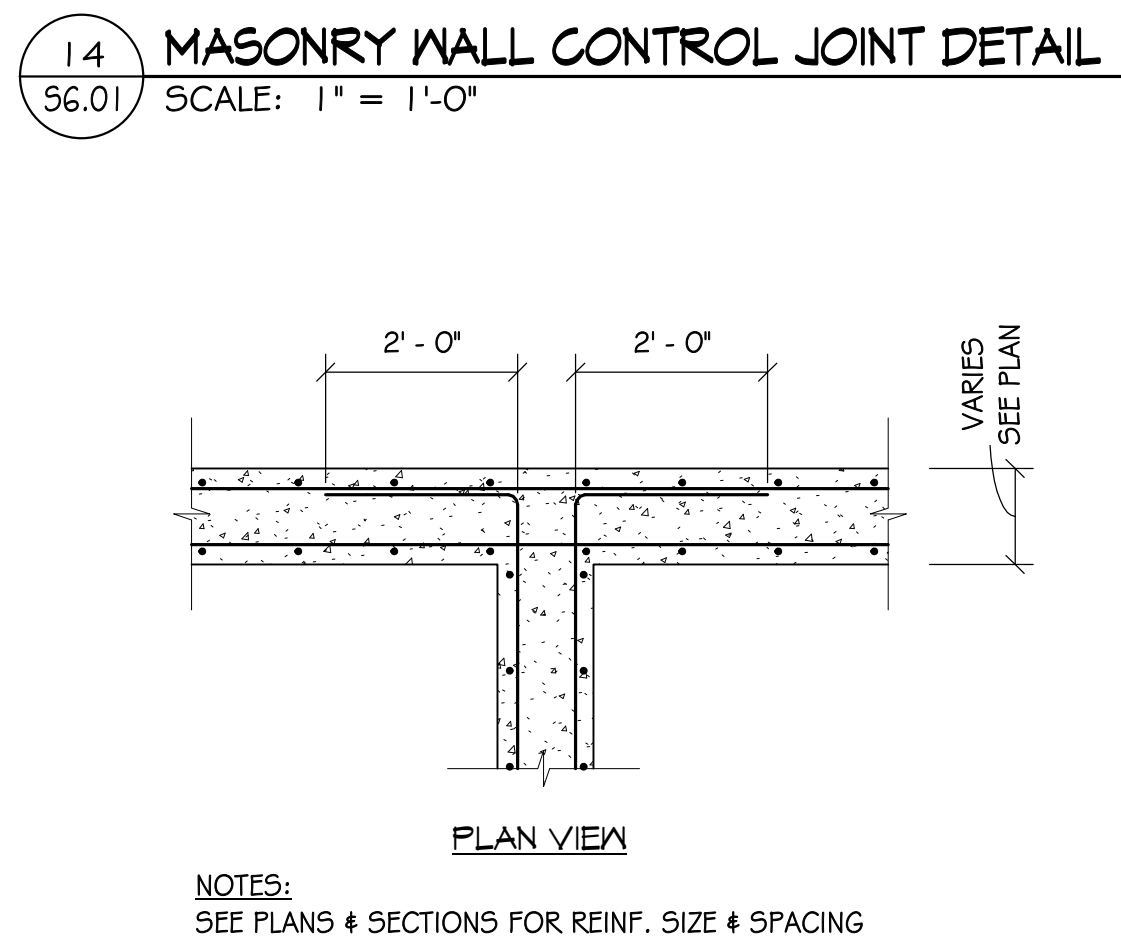
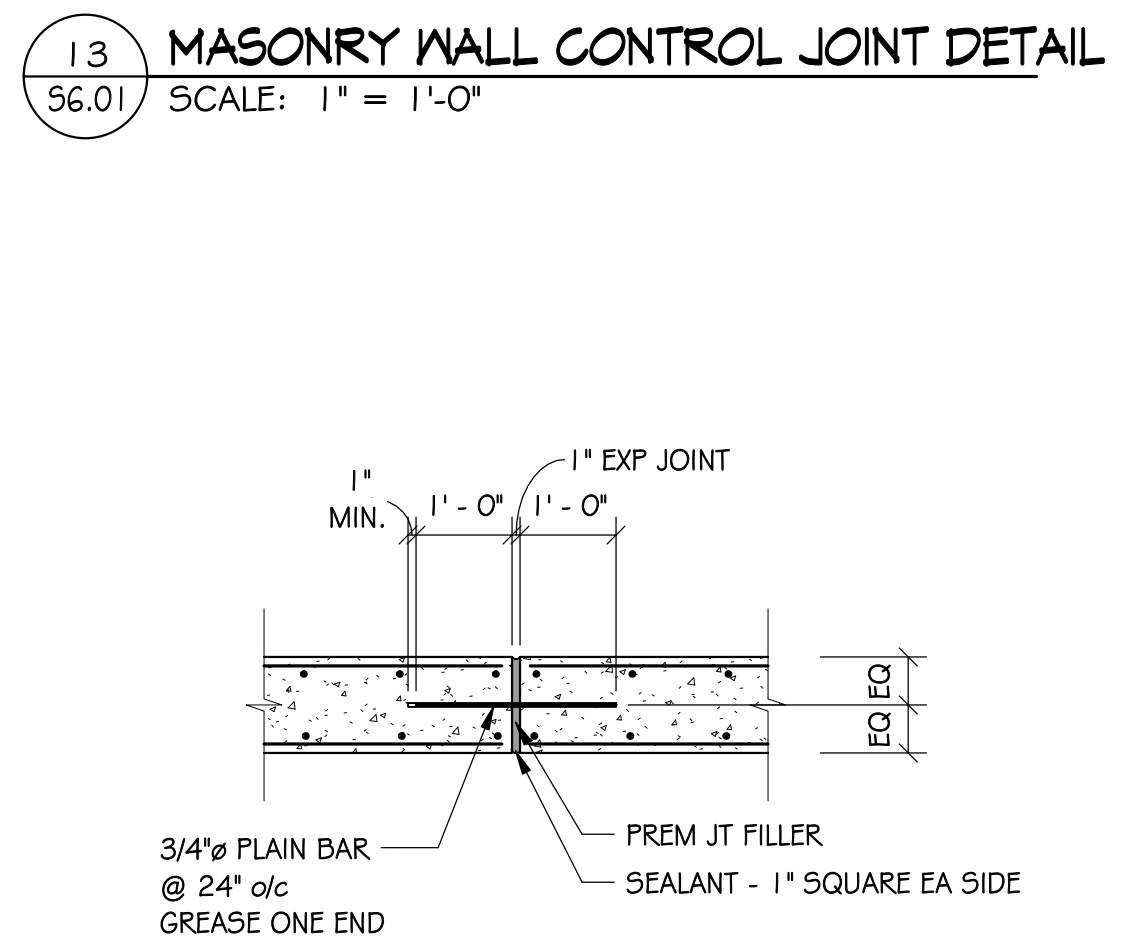
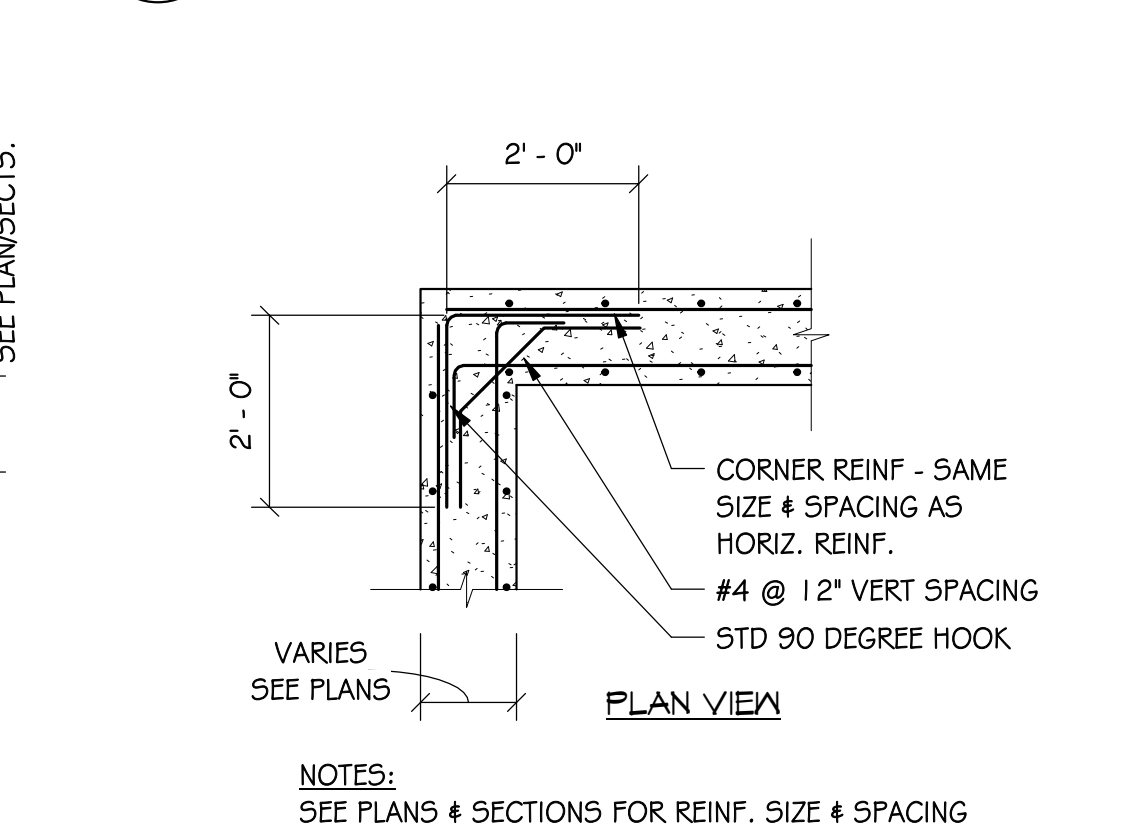
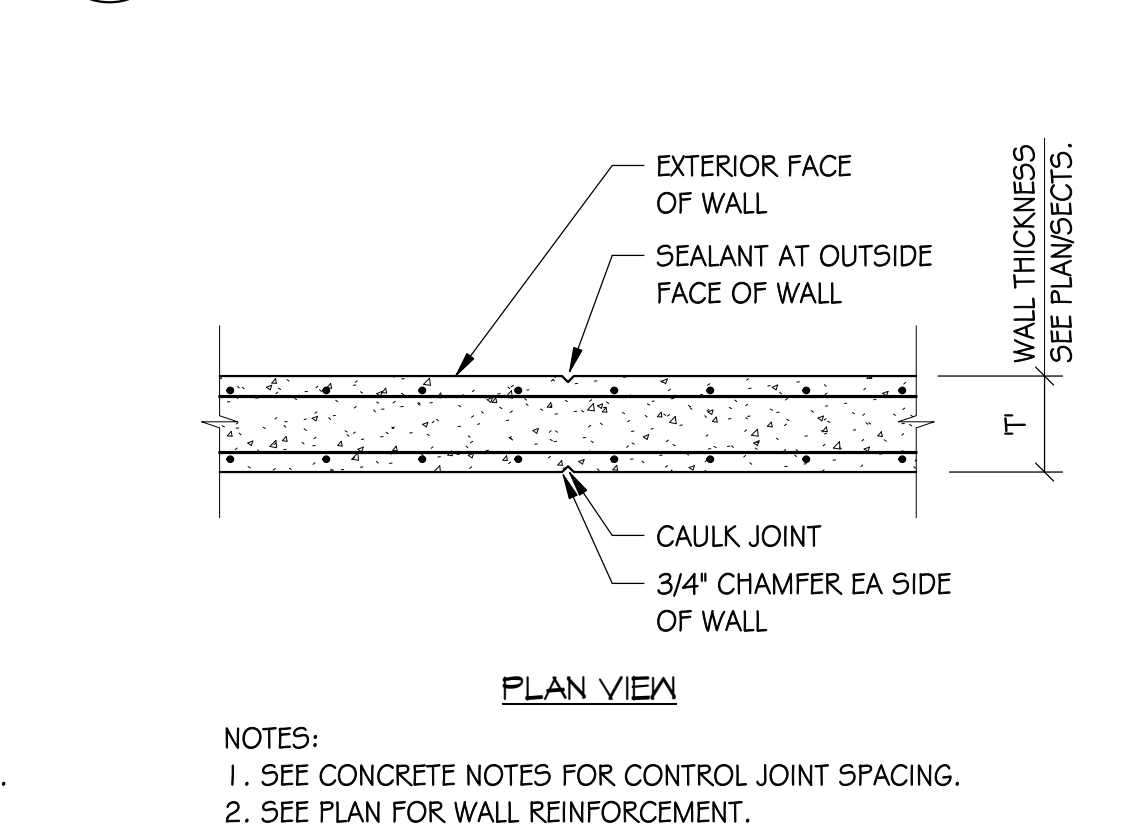
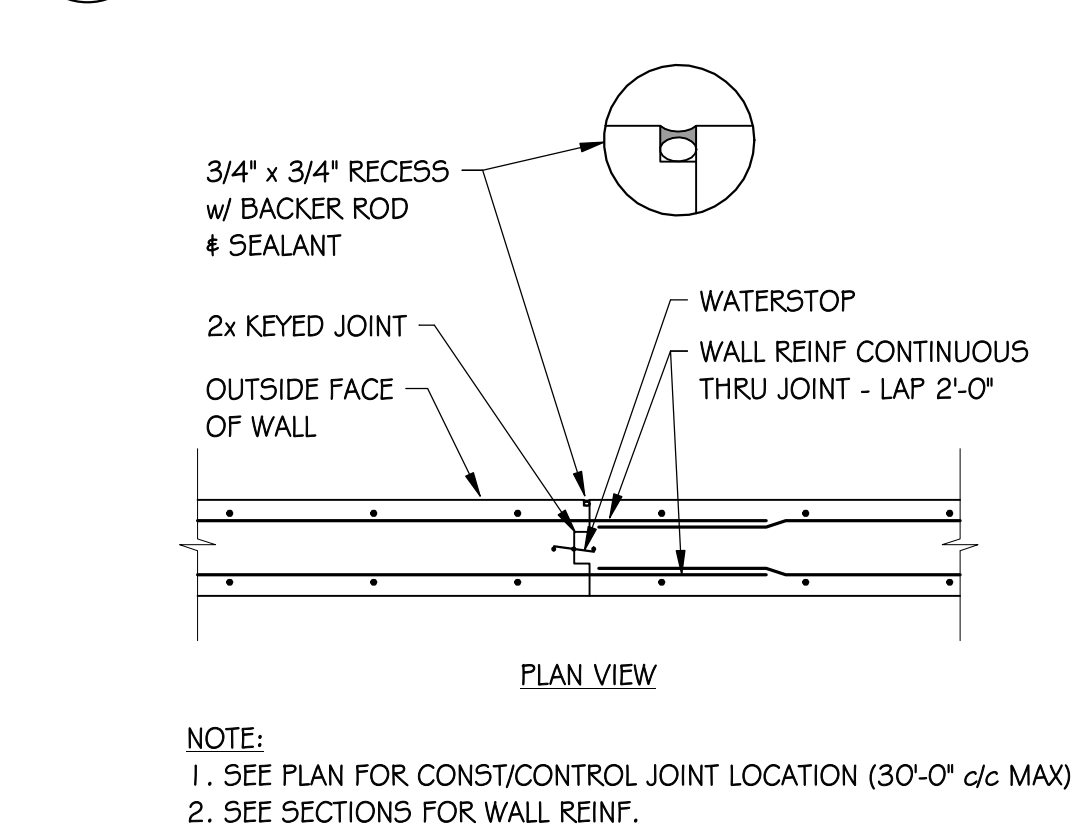
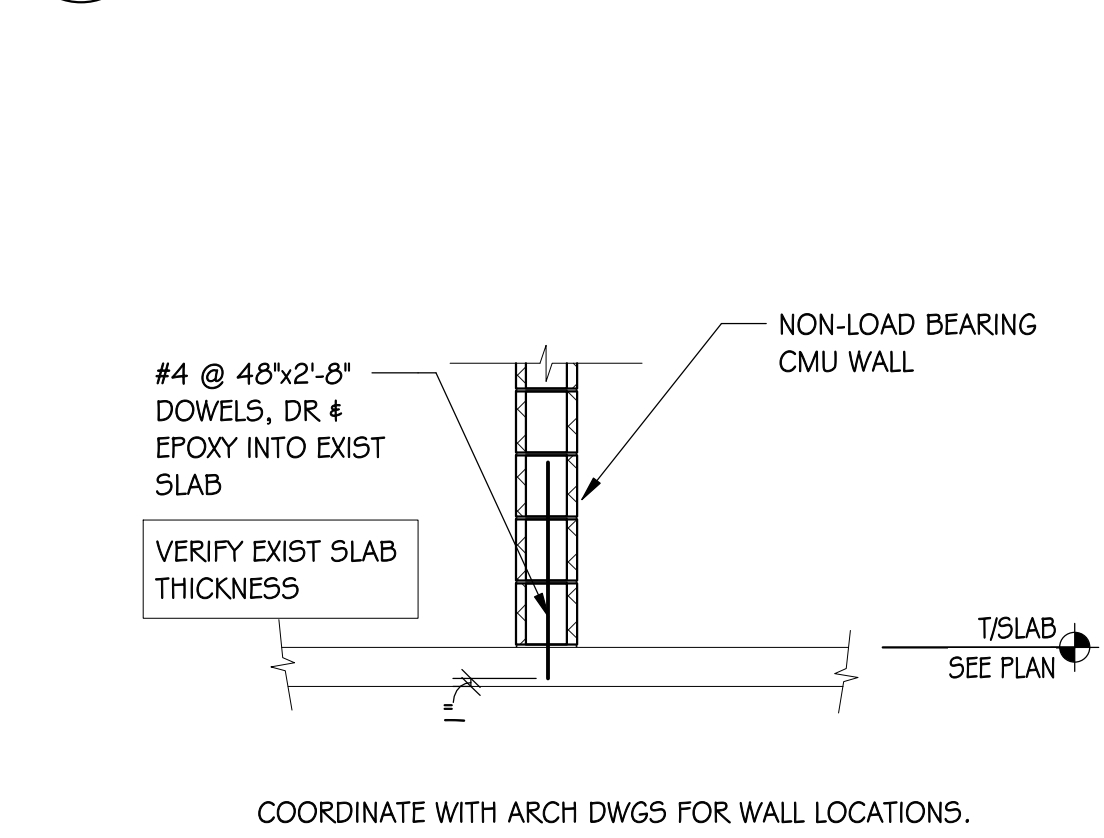
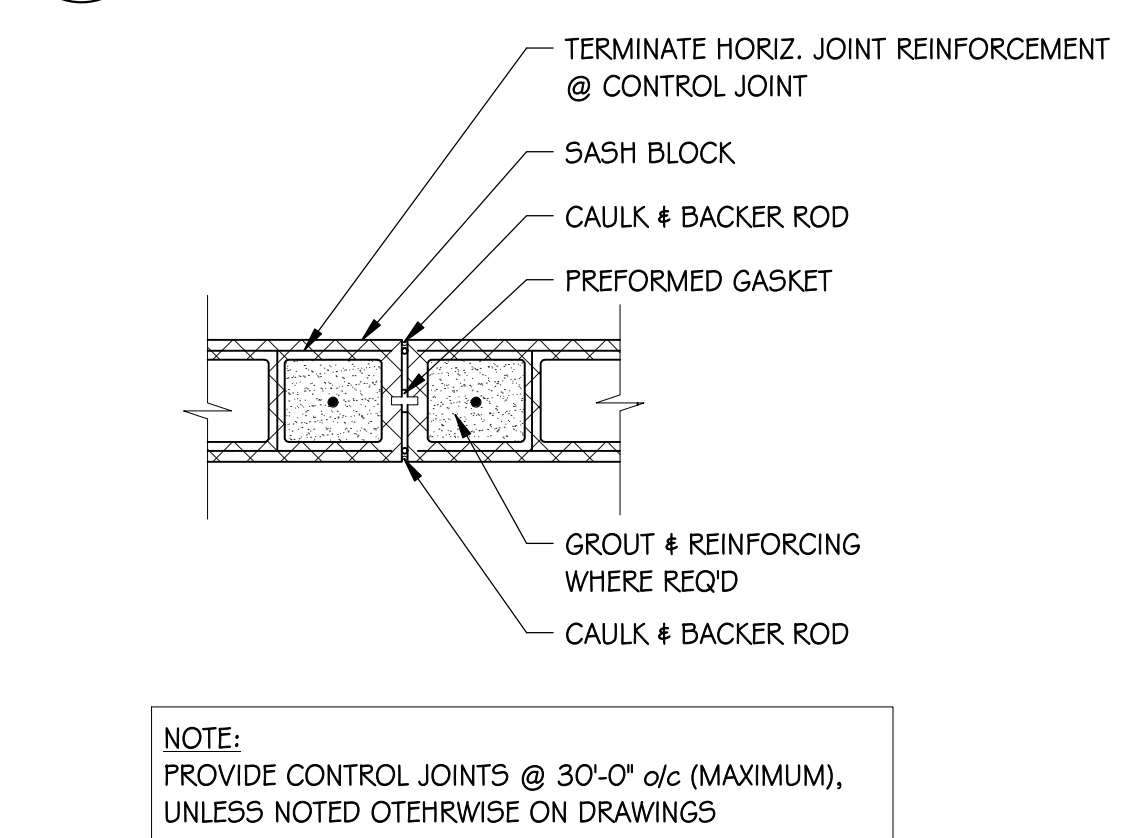
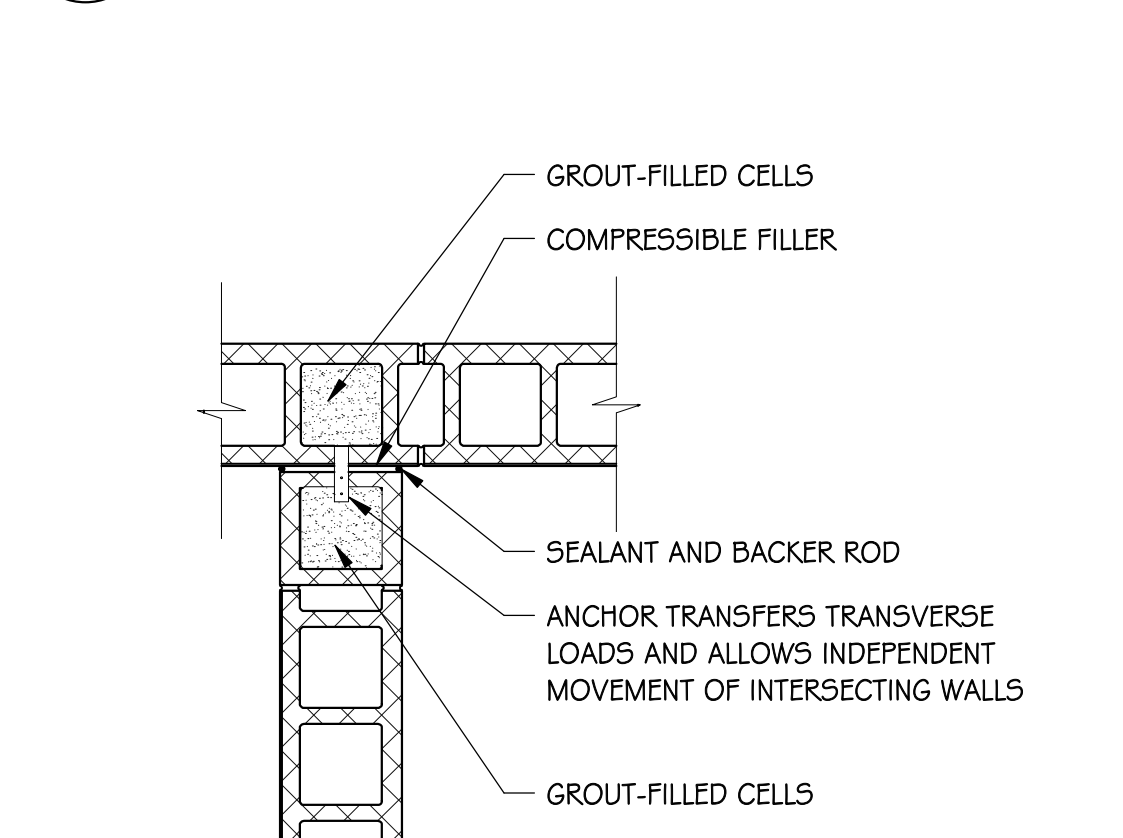
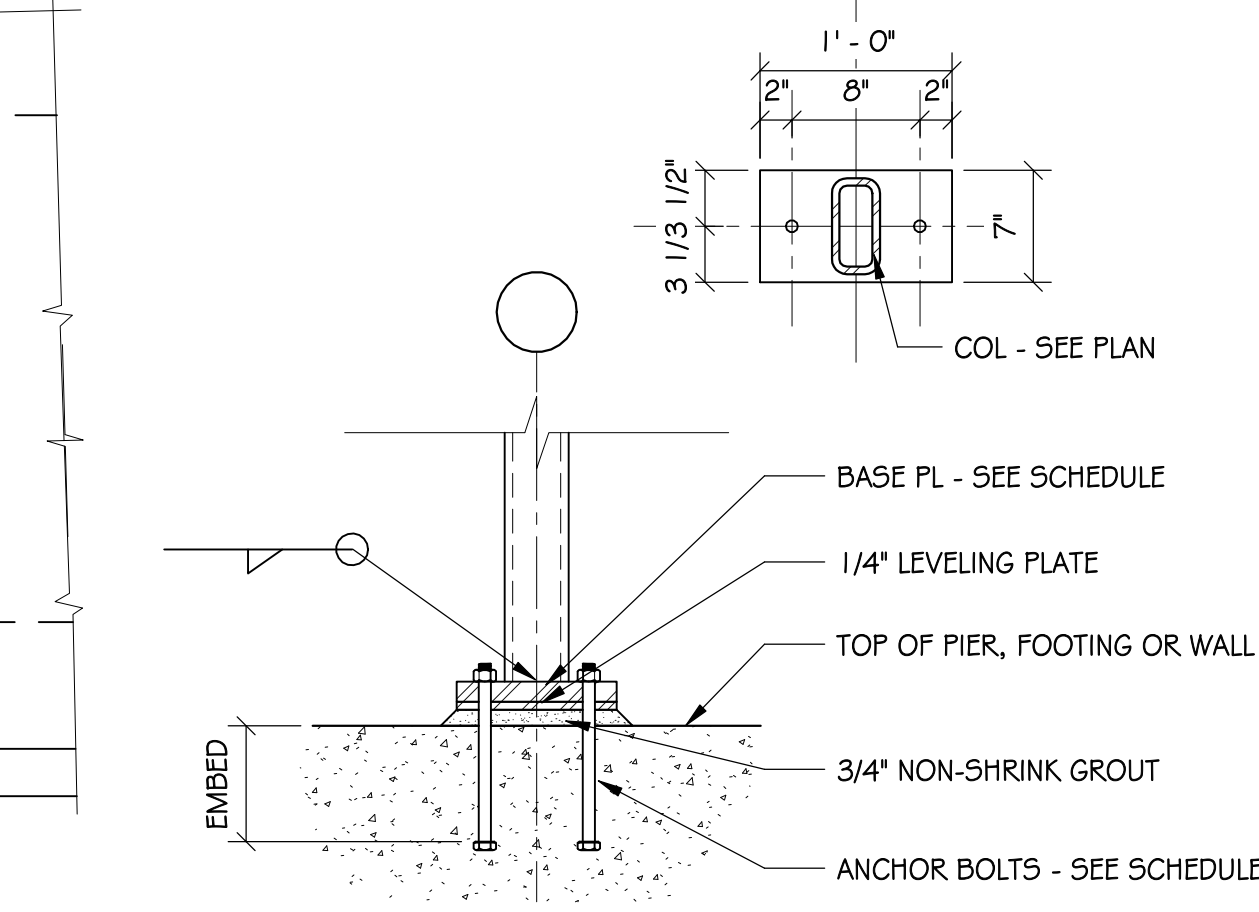
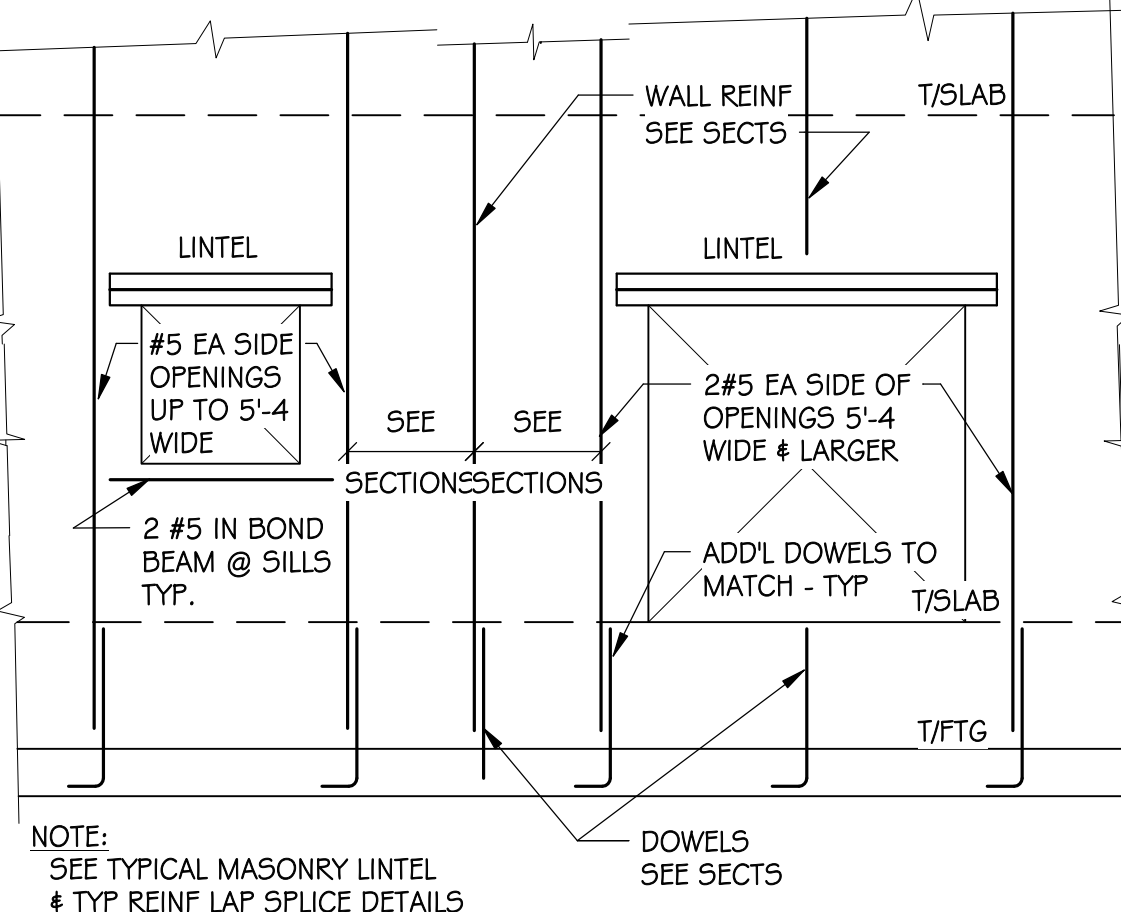
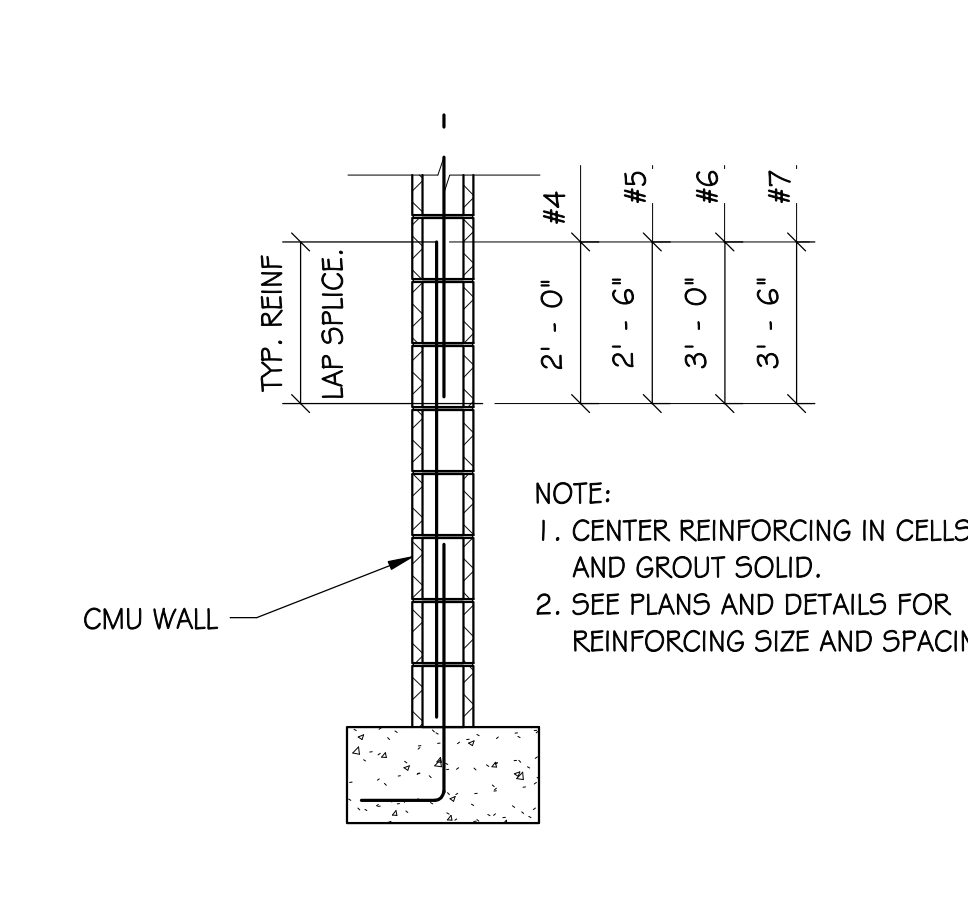
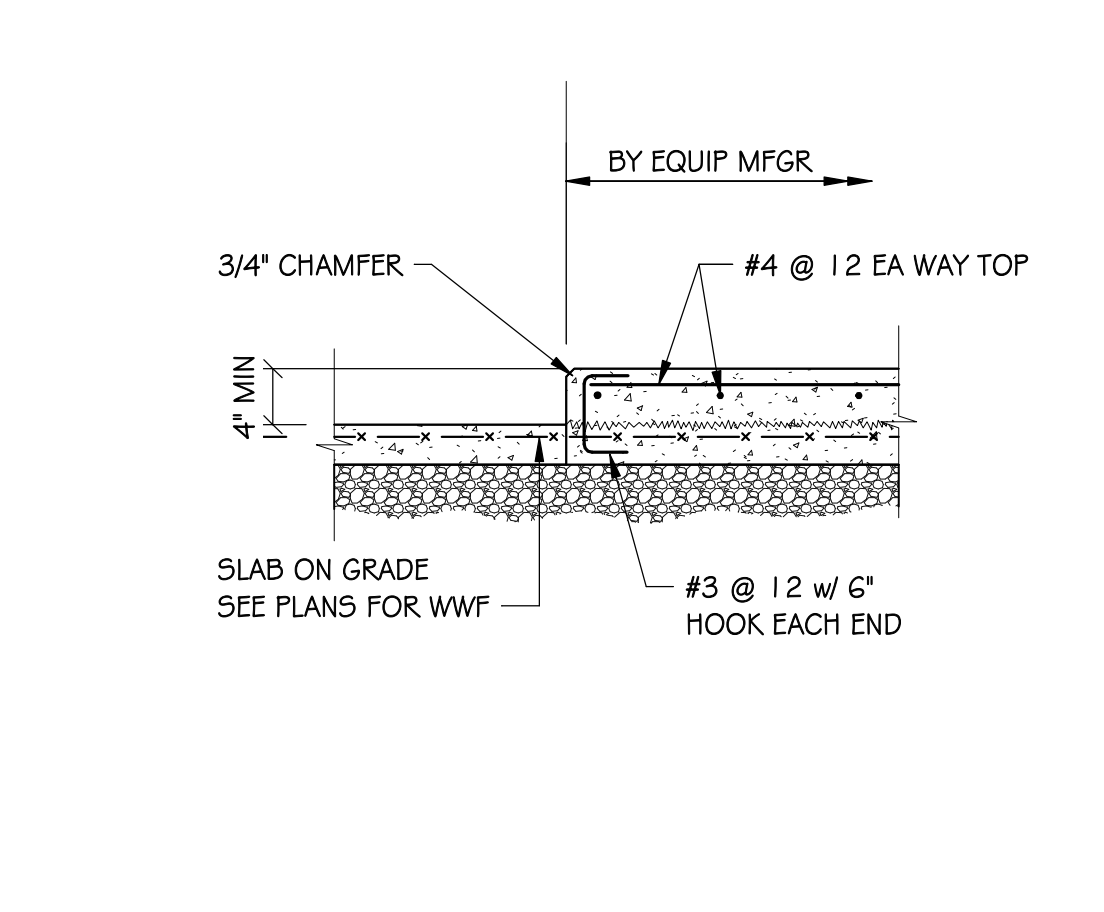
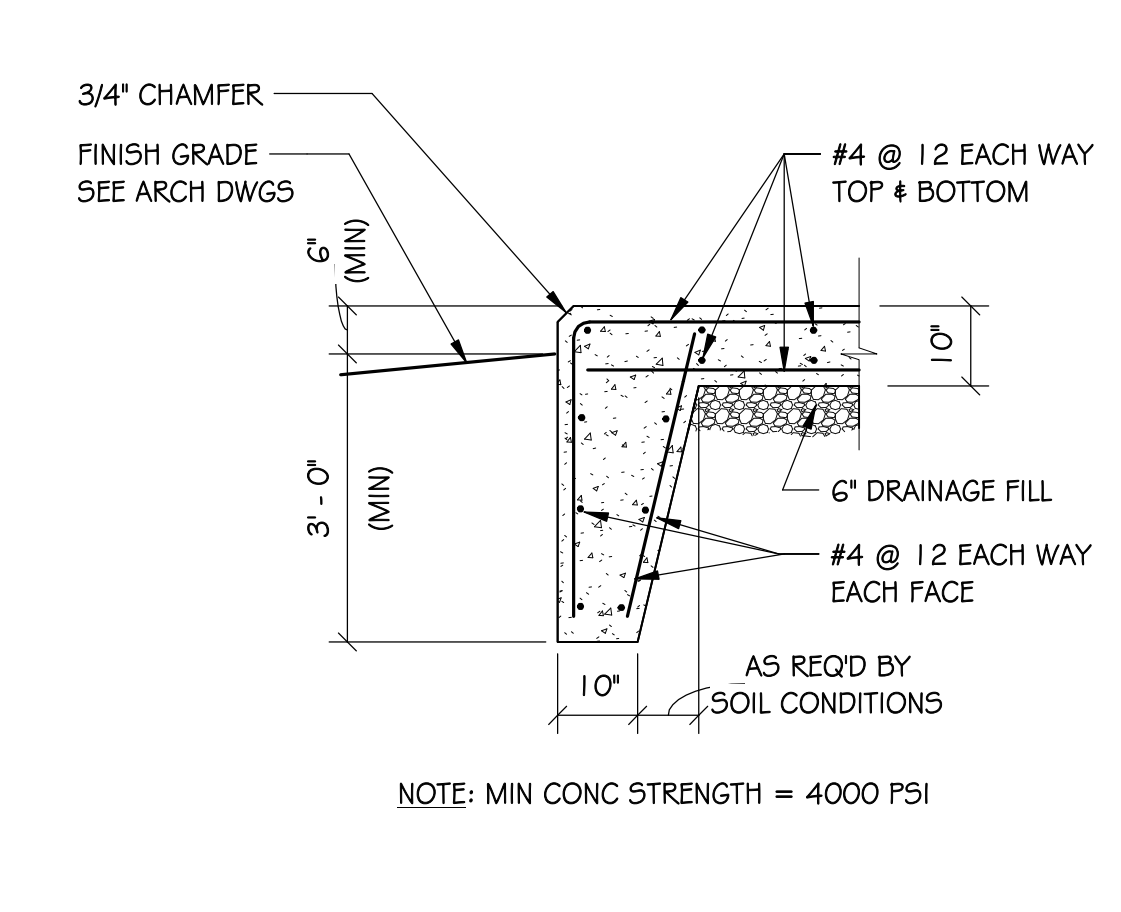
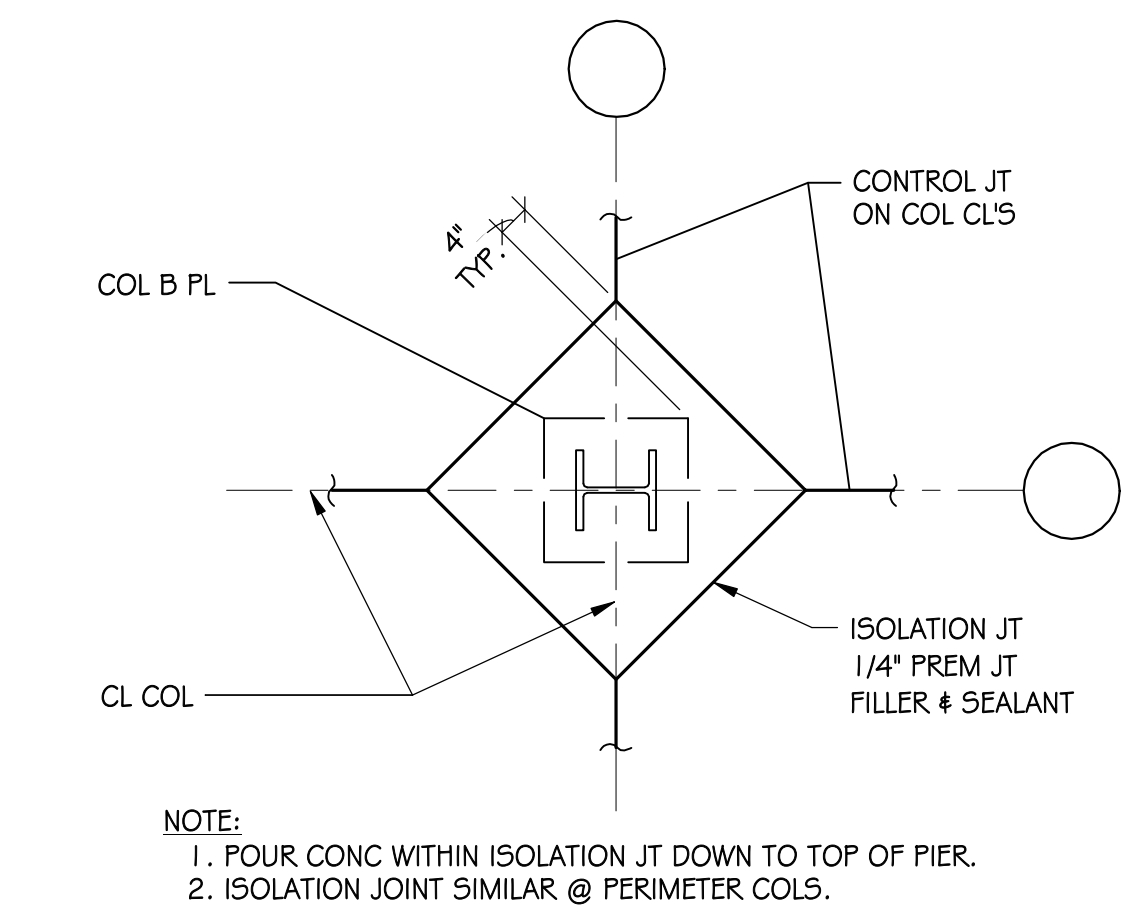
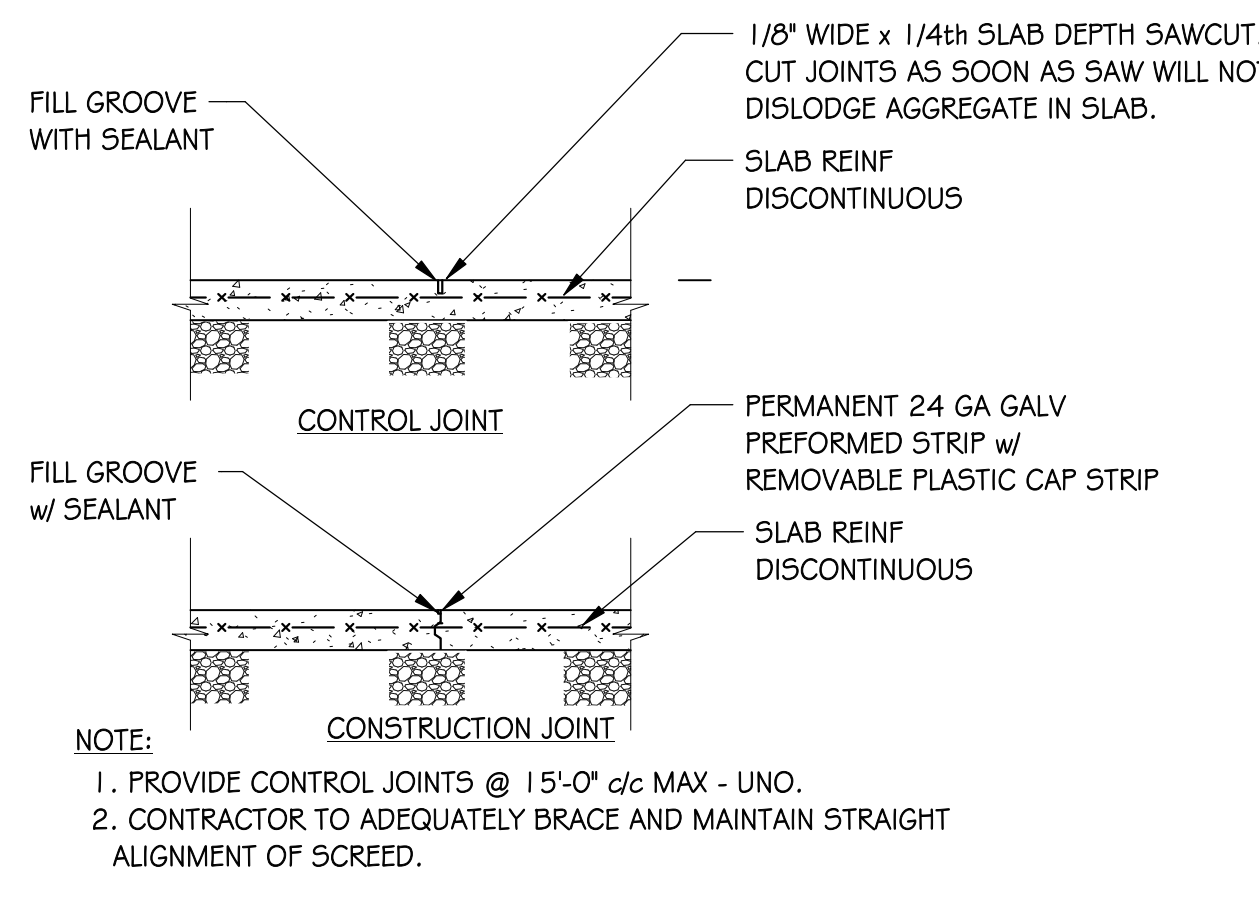
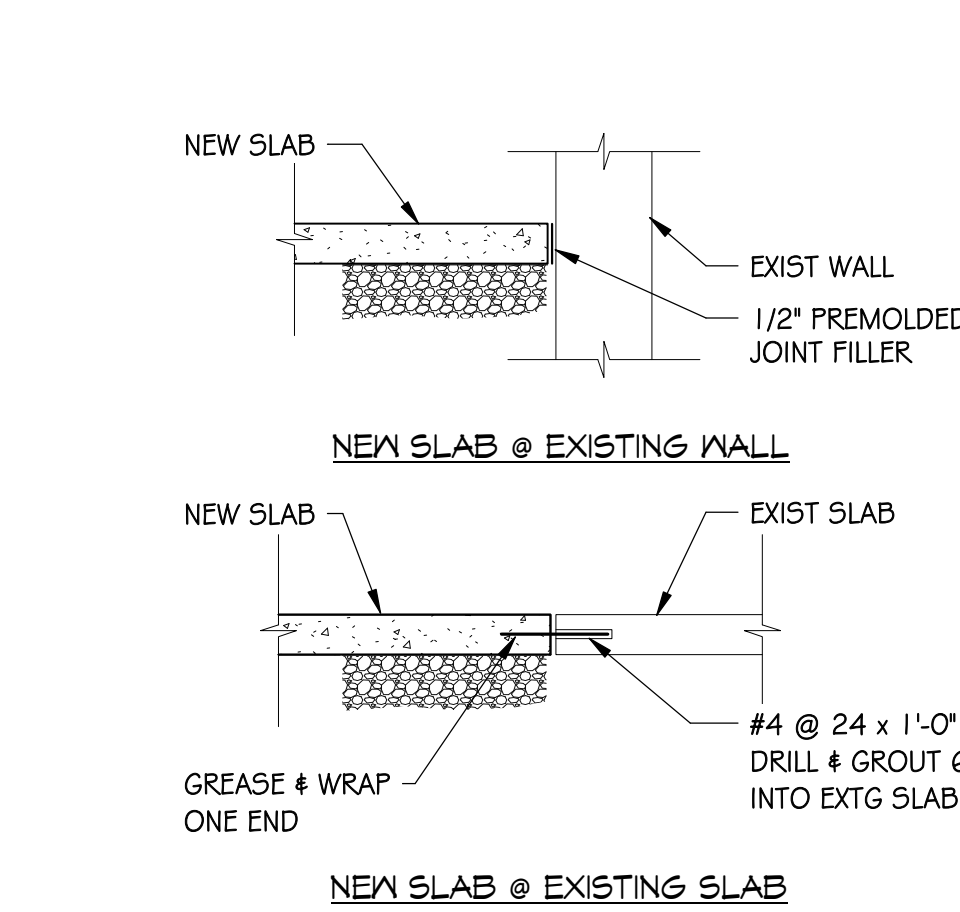
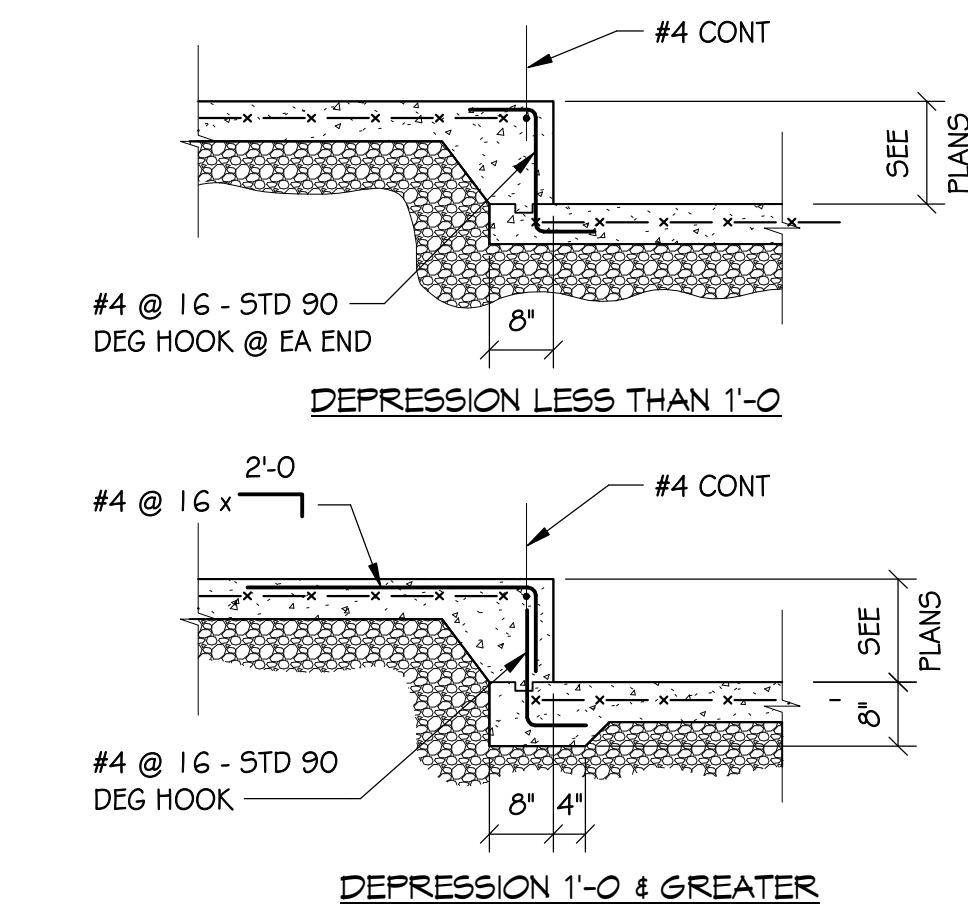
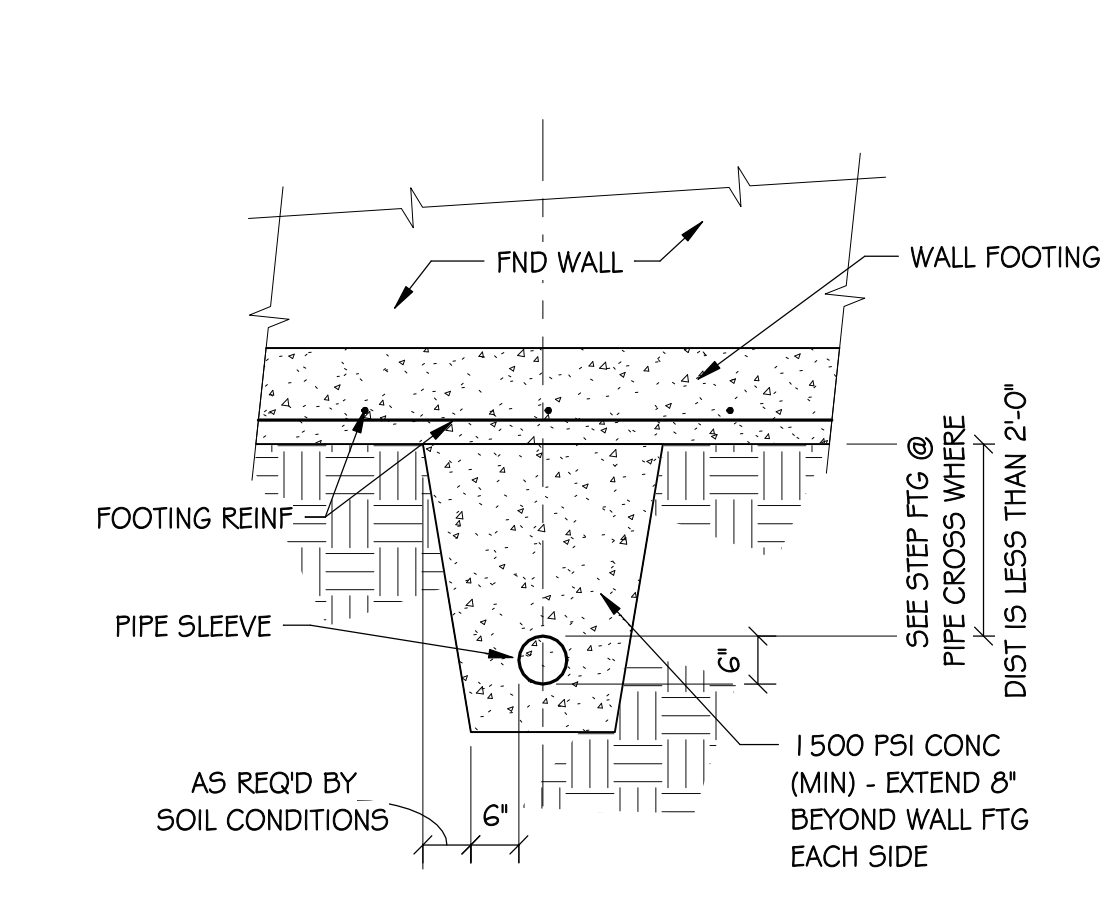
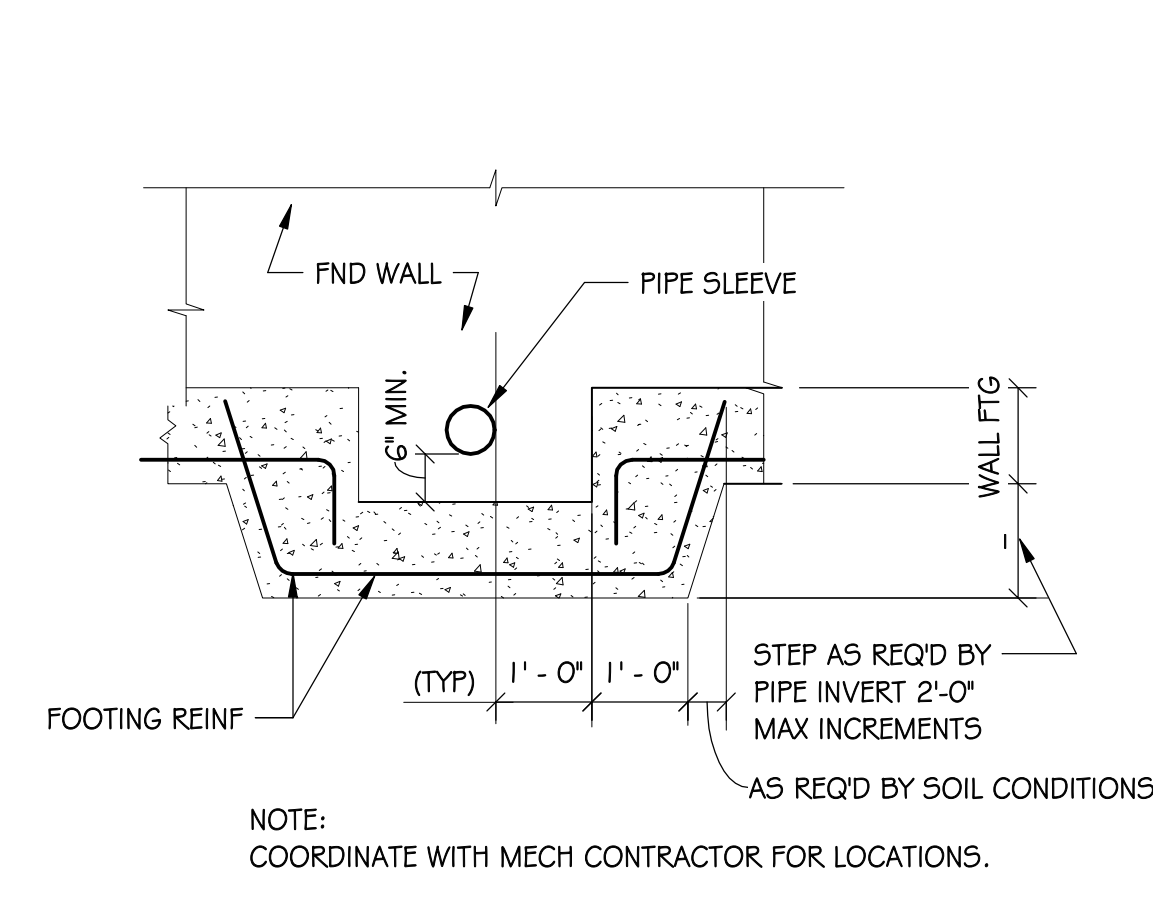
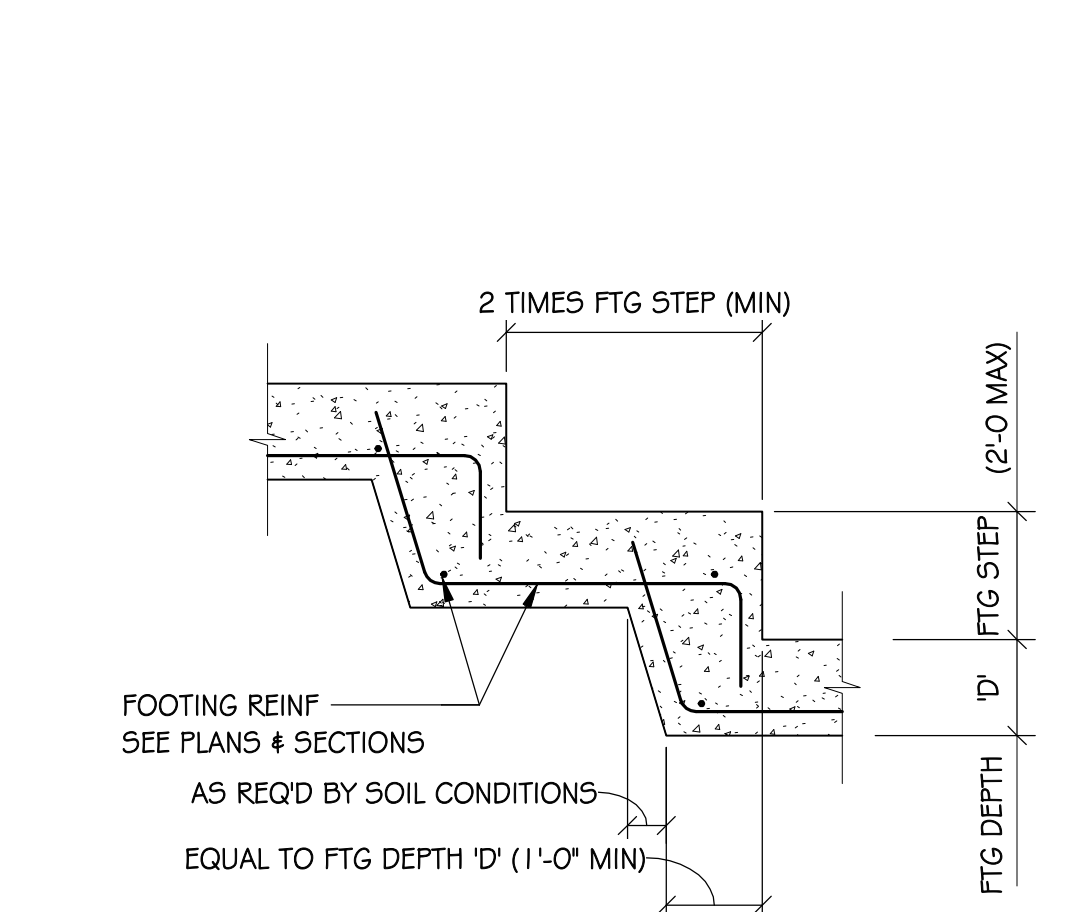
Job Number:	H14848-23
	3/4" = 1'-0"
By:	JBW
Checked By:	BDM
Designed By:	BDM
Scale:	No.

34.01

© 2023 Blackney Hayes Architects

NOT FOR CONSTRUCTION

10/30/2023 1:51:49 PM



phone: 215.829.0922 x####
CONTACT PERSON: PM Name

OWNER
West Chester Area School District
phone: 484.266.1281
CONTACT PERSON: Damon Gonzaga

CIVIL ENGINEER
Stantec Consulting Services
phone: 610.840.2500
CONTACT PERSON: Charles J. Olivo, PE

STRUCTURAL ENGINEER
Baker, Ingram & Associates
phone: 856.310.1491
CONTACT PERSON: Brian D. McGlade, PE

MEP & FP
Snyder Hoffman Associates, Inc
phone: 610.694.8020
CONTACT PERSON: Jeff Machik, PE

Project:
Mary C. Howse
Elementary

Project Address:
641 Boot Road
West Chester, PA 19380

Sheet Title:
TYPICAL FOUNDATION
DETAILS

Seal

Brian D. McGlade, PE
Pennsylvania PE #35277

DUTY TO INSPECT CONTRACT DOCUMENTS PRIOR TO STARTING WORK:
Any party who relies in part or whole on the content of these Construction Documents shall, before beginning any work, have a responsibility for inspecting the complete set of Contract Documents, including all Drawings, Specifications, and Addenda, for completeness, conflicts, scope of work, and suitability for constructing the project. Parties who rely on these documents to represent that they have expertise in the area of their responsibility and are knowledgeable regarding industry standards, product requirements and code requirements and therefore are qualified to interpret and implement the contract documents. All parties relying on these documents must, prior to beginning work, submit all drawings for clarifications and additional information to the Architect in writing. All parties who begin work hereunder certify that the documents are suitable for their intended purposes unless noted in the specific written exception beforehand.

Warning: Actual conditions may vary from conditions shown on this drawing. Confirm all information in the field before proceeding with any work and notify the Architect in writing if a variation is discovered.

This drawing is not to be copied or transmitted in any form without the express written authorization of Blackney Hayes Architects. All ideas and concepts depicted or suggested in this drawing are the property of Blackney Hayes Architects.

[illegible]

BI&A Job Number: H14848-23

Scale: As indicated

Drawn By: JBW

Checked By: BDM

Approved By: BDM

Sheet No. _____

S6.01

© Copyright 2023 Blackney Hayes Architects

NOT FOR CONSTRUCTION

