

Addendum 02

DOCUMENT 00 91 00

DATE: March 25, 2026

PROJECT: Cedar Cliff Schools Connector Addition and Renovation
194 Walnut St.
Cedarville, Ohio 45314

PROJECT #: 25056.00

OWNER: Cedar Cliff Local Schools
Contact: Brian Masser
194 Walnut St
Cedarville, Ohio 45314

ARCHITECT: Garmann Miller
38 South Lincoln Drive
P.O. Box 71
Minster, Ohio 45865

TO: Prospective Bidders

This addendum form is a part of the Contract Documents and modifies the Construction Documents dated March 02, 2026, with amendments and additions noted below.

Acknowledge receipt of this Addendum on the Bid Form. Failure to do so may disqualify the Bidder.

This addendum consists of 2 pages, 2 specifications and 1 re-issued drawing sheet.

FOR INFORMATION ONLY

CHANGES TO THE PROJECT MANUAL

1. Section 00 11 13 – Advertisement for Bids:
 - a. Bid date revised to April 1, 2026.
2. Section 27 51 23 – Central Sound and Paging
 - a. Adding entire specification to project.



CHANGES TO THE DRAWINGS

1. Drawing Sheet S0.1 – Structural Notes
 - a. Structural notes on S0.1 include deep foundation system in the delegated design system. Helical piles are shown in Section C/S2.0 but other deep foundation systems, such as rammed aggregate piers or drilled caissons are also acceptable upon review. The design intent is for the column reactions to bear on rock 15' below the surface in the most economical method. Boring log 18 from 2010 is included on sheet S0.1 for reference.

ATTACHMENTS

The following attachments are included and are part of this addendum:

Specifications: 00 11 13, 27 51 23

Drawing Sheets: S0.1

END OF ADDENDUM



Public Notice

Sealed bids will be received by the Cedar Cliff Local School District Board of Education as provided in this notice for the South Connector Renovation Project. Questions may be directed to and electronic copies of the Contract Documents, which include additional details, are on file and available by contacting Curt South, Garmann Miller, at csouth@creategm.com.

Bids shall be enclosed in a sealed envelope addressed to the Cedar Cliff Local School District Board of Education, ATTN Brian Masser, Superintendent, 248 N. Main Street, Cedarville, Ohio 45314, and plainly marked on the outside "SOUTH CONNECTOR RENOVATION PROJECT BID." Bids will be received until 1:00 p.m., local time April 1, 2026 and immediately after the deadline the bids will be opened and publicly read aloud at the Cedar Cliff Local School District Board of Education located at 248 N. Main Street, Cedarville, Ohio 45314.

A pre-bid conference will be held on March 10, 2026 at 1:00 p.m. at the Cedar Cliff Local School District Board of Education located at 248 N. Main Street Cedarville, Ohio 45314.

All bids must include a Bid Guaranty, as described in the Instructions to Bidders. Prevailing wage rates do NOT apply. No bidder may withdraw its bid within 60 days after the opening; the Board reserves the right to waive irregularities, reject any or all bids, and conduct necessary investigations to determine bidder responsibility.

**SECTION 27 51 23
CENTRAL SOUND AND PAGING SYSTEM**

PART 1 GENERAL

1.01 RELATED SECTIONS

- A. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section as though bound herein.
- B. Refer to Section 01 2300 for Alternates that may affect the Work of this Section.

1.02 DESCRIPTION OF WORK

- A. The work described in this section includes the furnishing of all materials, equipment, labor, service and the performance of all operations necessary for the extension of a existing microprocessor controlled classroom paging and central sound system and components, complete and in operating condition as indicated on the Drawings and/or described herein.
- B. Modes of communication shall include:
 - 1. Loudspeaker or group of loudspeakers from a program source.
- C. All programming shall be menu driven for ease of operation.
- D. System shall provide and support a 802.3 Ethernet port for communications with an external computer. It shall be possible to both create, manage and save (backup) system programming from a network connected external computer through a Microsoft Windows graphical user interface (Windows 7 up to the current release shall be supported).
- E. The system shall include programmable tones for emergency and civil emergency pages.
- F. The system shall provide 2,3, or 4 digit alpha/numeric architectural room numbering.
- G. The integral system master clock shall have 16 schedules, thirty two (32) zones, and 1536 time events.

1.03 SUBMITTALS

- A. Prior to commencement of work.
 - 1. Shop Drawings - Refer to Section 01 3000 - Administrative Requirements, for submittal procedures. Submit shop Drawings including product data sheets and wiring diagrams and shall include the following:
 - a. A complete bill of materials with model and part numbers and reference to the Specification paragraph number.
 - b. A complete set of detailed manufacturers Specifications describing and illustrating all standard and special components and materials.
 - c. Provide 1/8 inch = 1'-0" Drawings stipulating devices and wiring for review.
- B. Post Construction
 - 1. Provide signed (by attendees & trainer) & dated training syllabus for each completed training session to the Architect/Engineer Technology Designer.
 - 2. Operation & Maintenance Manuals
 - a. Provide complete O & Ms. One hard copy and PDF format.
 - b. Both formats shall be fully indexed by Section Name/System/Device.
 - 3. The Architect/Engineer Technology Designer may require operational demonstration of any products and systems to verify Execution/Installation/Configuration requirements are met.

1.04 ADMINISTRATIVE REQUIREMENTS

- A. Technology Kick-Off Meeting: Participate in a technology kick-off meeting at least two (2) weeks prior to the start of the work of this section.
 - 1. Attendance required
 - a. Contractor and contractor's on-site project manager
 - b. Related Subcontractors
 - c. Garmann/Miller Technology Designer
 - d. Construction Manager
 - e. Cedar Cliff Local Schools - Technology Coordinator
- B. Refer to Division 1 Front-End documents for additional requirements.

1.05 QUALITY ASSURANCE

- A. Equipment and components within the equipment shall be approved by UL, and shall meet National, State, and Local Requirements including the 2023 National Electrical Code.
- B. NFPA 70 - National Electric Code.
- C. Underwriter's Laboratory.
- D. ANSI/TIA/EIA-606-B for system records and labeling
- E. ANSI J-STD-607-C Telecommunications Bonding & Grounding.
- F. BICSI 14th Edition TDMM (Telecommunications Distribution Methods Manual)
- G. Americans with Disabilities Act.
- H. Federal Communications Commission Part 15.
- I. Sound System Engineering (Davis & Patronis) - 4th Edition 2013
- J. Audio Systems Design and Installation (Giddings) 1990

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. The equipment specified herein and shown on the Drawings is based upon the Bogen - Class Connect.

2.02 EQUIPMENT

- A. Central Equipment
 - 1. The central equipment shall be mounted in a floor mounted open equipment rack provided by others. The central equipment shall consist of:
 - a. A power supply to provide operating DC power for the circuitry contained within the central equipment housing and Administrative Control Consoles (ACC's).
 - b. A central microprocessor unit with 60 watt power amplifiers or as required.
 - c. Zone circuit boards as required for remote stations and/or communications linkage.
 - d. The provision for terminating the cabling from up to two hundred (200) stations and two (2) Administrative Control Consoles.
 - e. The unit shall be a Bogen - Class Connection Series as basis of design.
 - 2. Classroom Equipment
 - a. The ceiling loudspeaker shall be a 1' x 2' lay-in grid type speaker system. 12 watt RMS, 92 dB-SPL - 1W/1M average sensitivity, 25 and 70.7 volt lines, 5 taps at -3 dB levels, and 65Hz - 17kHz frequency response. Speaker shall be white in color. Provide quantities as shown on plans. The standard of quality shall be Quam System 5. Equals: Clarity S-521, Bogen CSD1x2/U

- b. The horn type paging speaker for mechanical/storage areas shall be wall mounted type with 16 watt power handling capacity, a sensitivity of 110 dB, 1W/1M, frequency response of 300-15kHz, and built-in 25/70 volt line transformer. Quantity as shown on plans. The standard of quality shall be Quam QH16T. Equals: Clarity S-615, Bogen HS15EZ
 - c. The wall speakers in the public/academic areas shall be a wall mounted unit equal to Quam System 2. Equals: Clarity S-504, Bogen MB8TSL
 - d. In high bay rooms and in open/cloud ceiling rooms, provide pendant mount speakers per drawings equal to a Bogen MPS2B with CK10B hanging kits (Black is the default color unless noted otherwise). Equals by Clarity, Soundtube.
3. Cable
- a. 20/2 stranded copper conductors shielded with overall jacket plenum rated mic and speaker wire: 7x28 stranding, 0.008" nominal flex plenum PVC insulation material, 100% Aluminum Polyester Foil shield, Stranded Tin Copper drain, 0.015" nominal flex plenum PVC jacket material, -10 to 60 degree C temperature rating, 300V RMS operating voltage rating, 60 pf/ft maximum capacitance @ 1 kHz between conductors, 108 pf/ft capacitance between conductors to shield @ 1kHz, 10.5 ohm/1M' DC resistance @ 20deg C.
 - 1) Approved Manufacturers: West Penn, Belden, Coleman, Windy City.
 - b. All open cabling must be plenum rated.
 - c. Shielded cables shall be bonded to the TGB/TMGB via the rack bonding busbar in the Telecommunication Room of origination.
4. Miscellaneous Equipment
- a. 10 Watt Attenuators, quantity as shown on plans. The standard of quality shall be Quam QC10. Equals: Clarity S560, Bogen AT10A
 - b. Call-in switch, quantity as shown on plans. The standard of quality shall be Quam C1B3. Class Connection V-2972PK, Bogen CA10A
 - c. Intercom station with speaker and call button for two way communication, quantity as shown on plans. The standard of quality shall be Telecor ICS-2A. Valcom VIP-172L-ST, Bogen ADP1
 - d. Microphone wall plates: single gang, stainless steel, single female XLR connector.
 - 1) Approved Manufacturers: Pro Co, Crown, Lowell.

PART 3 INSTALLATION

3.01 WIRING

- A. Circuits: Room speaker locations shall be on separate circuits and new corridor speakers shall be on one circuit.
- B. Room circuits shall be routed through classroom sound reinforcement system for auto mute.
- C. Wiring shall conform to recommendations of the subcontractor and shall be installed in accordance with the Specifications and as indicated on the Drawings.
- D. Interface central sound system with telephone system. Provide necessary transformers or relays to accomplish this.
- E. Interface with the District designated NTP server for clock signal.
- F. Contractor shall ground the AM and FM antennas using a No. 2 AWG and a 5/8" x 10 foot ground rod and the appropriate location on the nearest TGB/TMGB.
- G. Balance the levels of the loudspeaker units in the area to assure adequate coverage and level of sound throughout all areas as detailed hereinafter.
- H. Establish the normal settings for all controls for all systems and record same for future reference. All levels shall be set for optimum signal to noise ratio and signal balance.

END OF SECTION

SPECIAL INSPECTION NOTES

- 1 - The OWNER shall employ one or more special inspectors to provide inspections during construction on the types of work itemized below.
2 - Only the required STRUCTURAL Special Inspections have been listed on this sheet.
3 - The special inspector shall be a qualified person who shall demonstrate competence, to the satisfaction of the building official, for inspection of the particular type of construction or operation requiring special inspection.
4 - Upon request, Shell + Meyer can provide a list of local agencies providing these inspection services.
5 - Numbered and lowercase lettered special inspection items may not be listed. These items are not required on this project.
6 - Additional information regarding inspections and tests may be found in the project specifications, on the drawings, and in the building code and referenced standards.
7 - The Special Inspections table and other contract documents indicate the special inspections anticipated at the time the documents were approved by the Building Official.
8 - Special inspection and site observation personnel are not responsible for job site safety or means and methods of construction unless noted specifically in the contract.

REQUIRED STRUCTURAL SPECIAL INSPECTIONS

Table with columns: Soils - OBC Table 1705.6, Continuous, Periodic, Referenced Standard, Additional OBC Requirements, Remarks. Includes rows for Geotechnical Investigations and Concrete Construction, Cast-In-Place - OBC Table 1705.3.

Table with columns: Concrete Construction, Cast-In-Place - OBC Table 1705.3, Continuous, Periodic, Referenced Standard, Additional OBC Requirements, Remarks. Includes rows for Fabricator Inspections and various inspection items.

Table with columns: LEVEL 1 Masonry Construction - OBC Table, Continuous, Periodic, Referenced Standard, Additional OBC Requirements, Remarks. Includes rows for compliance with inspection provisions and various masonry construction details.

Table with columns: UNIT STRENGTH METHOD, PRISM TEST METHOD, COMPRESSIVE STRENGTH OF MORTAR, COMPRESSIVE STRENGTH OF GROUT. Includes references to ASTM standards and inspection frequency.

Structural Steel

STRUCTURAL STEEL SPECIFICATIONS SHALL BE IN ACCORDANCE WITH THE QUALITY ASSURANCE INSPECTION REQUIREMENTS OF AISI 360-16 (CHAPTER N) IF STRUCTURAL STEEL SPECIFICATIONS ARE INCLUDED IN THE CONSTRUCTION DOCUMENTS REFER TO SECTION 051200 "STRUCTURAL STEEL FRAMING"

Table with columns: Screw Anchors, Continuous, Periodic, Referenced Standard, Additional OBC Requirements, Remarks. Includes row for installation of screw anchors.

Table with columns: Rammed Aggregate Piers (RAP), Continuous, Periodic, Referenced Standard, Additional OBC Requirements, Remarks. Includes rows for material verification and capacity testing.

DESIGN CRITERIA NOTES

REFERENCED DESIGN CODE: OHIO BUILDING CODE (2024)

ENVIRONMENTAL LOADS: GROUND SNOW LOAD, Pg = 20 PSF; FLAT ROOF SNOW LOAD, Pf = 20 PSF; SNOW EXPOSURE FACTOR, Ce = 1.0; SNOW LOAD IMPORTANCE FACTOR, Is = 1.1; THERMAL FACTOR, Ct = 1.0

WIND LOAD: BASIC WIND SPEED (3 SECOND GUST) = 114 MPH; RISK CATEGORY = II; WIND EXPOSURE = C; INTERNAL PRESSURE COEFFICIENT = +0.18; MEAN ROOF HEIGHT = 10 FT

WHERE NO P.E. IS INVOLVED IN THE DESIGN OF THE COMPONENT/CLADDING THE FOLLOWING SERVICE LEVEL WIND LOADS (0.6W) SHALL BE USED: ROOFS = +20 PSF / -64 PSF; WALLS = +20 PSF / -27 PSF

EARTHQUAKE LOAD: SEISMIC IMPORTANCE FACTOR, Is = 1.25; MAPPED SPECTRAL ACCELERATION, Ss = 0.136; S1 = 0.067; SITE CLASS = D (ASSUMED); DESIGN SPECTRAL ACCELERATION, Sds = 0.145

PER 'OHIO EXISTING BUILDING CODE' 803.3 EXCEPTION, THE EXISTING LATERAL LOAD CARRYING STRUCTURE ELEMENTS WILL HAVE A DEMAND/CAPACITY INCREASE OF NO MORE THAN 10% AND SHALL BE PERMITTED TO REMAIN UNALTERED.

DESIGN UNIFORM LOADS: ROOF LIVE LOAD: 20 PSF (MINIMUM PER OBC SECTION 1607.14.1); UNIFORM FLOOR LIVE LOAD:

GENERAL STRUCTURAL NOTES

GENERAL (ALL TRADES) IN ACCORDANCE WITH SECTION 1704 OF THE OHIO BUILDING CODE, SPECIAL INSPECTIONS WILL BE REQUIRED FOR THIS PROJECT. SPECIAL INSPECTIONS SHALL BE PERFORMED IN ACCORDANCE WITH THE "SPECIAL INSPECTION REQUIREMENTS" SCHEDULE. ALL FABRICATORS SHALL SATISFY THE "FABRICATOR APPROVAL" PROVISIONS IN SECTION 1704.2.5.1 WHICH REQUIRED THE FABRICATOR TO MAINTAIN AN AGREEMENT A BOARD RECOGNIZED INDUSTRY TRADE ASSOCIATION.

3. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE DRAWINGS AND SPECIFICATIONS OF ALL OTHER DISCIPLINES. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO ELEVATIONS, CHANGES, HANGERS, INSERTS, ANCHORS, HOLES, AND OTHER ITEMS TO BE PLACED OR SET IN THE STRUCTURAL WORK.

6. FOR THE PURPOSES OF UL FIRE ASSEMBLY RATINGS E119 AND UL 263, THE STRUCTURE SHALL BE CONSIDERED "UNTESTED" UNLESS SPECIFICALLY NOTED IN THE CONSTRUCTION DOCUMENTS PER OBC SECTION 703.2.1.3.

POST-INSTALLED ANCHORS: 1. INSTALL ALL ANCHORS PER THE MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS (MPI). 2. WHERE NOT INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC.

3. CONCRETE SUBSTRATE: U.N.O. USE 3/4" DIAM. HILTI HAS THREADED RODS OR HIT-Z ANCHOR RODS WITH HIT-HY 200/3 SAFE SET SYSTEM, ICC ESR-4988, MINIMUM EMBEDMENT 0.8-34". 4. REINFORING INTO CONCRETE: U.N.O. USE HILTI HIT-RE 500 V3 EPOXY, ICC ESR-3814.

5. GROUDED CONCRETE MASONRY (INSTALLED IN WALL FACE) MIN. 8" GROUT AROUND ALL ANCHORS - U.N.O. USE 3/4" DIAM. HILTI KWIK HUS E2 SCREW ANCHORS, ICC ESR-3855, MINIMUM EMBEDMENT 4.0". 6. GROUDED CONCRETE MASONRY (INSTALLED VERTICALLY IN TOP COURSE OF WALL) - U.N.O. USE 3/4" DIAM. HILTI KWIK HUS E2 SCREW ANCHORS, ICC ESR-3855, MINIMUM EMBEDMENT 4.0".

7. UNGROUTED CONCRETE MASONRY: USE THE HILTI HY-270 SLAGGESS SYSTEM ICC ESR-1444. U.N.O. STEEL ANCHORS SHALL BE 1/2" DIAM. HILTI HAS-E CONTINUOUSLY THREADED ROD 1/2" MINIMUM EMBEDMENT. USE TWO APPROPRIATELY SIZED MESH SLEEVES PER ANCHOR.

DIVISION 3 - FOUNDATIONS AND CONCRETE: 1. MAXIMUM ALLOWABLE BEARING PRESSURE = 100,000 PSF AT SOUND INTACT LIMESTONE BEDROCK, REF. GEOTECHNICAL REPORT DATED JULY 12, 2010 BY PROFESSIONAL SERVICE INDUSTRIES REPORT NO. 016526. DEEP FOUNDATIONS SHALL BEAR ON BEDROCK 15 FT BELOW GRADE. SEE BORING LOG 18.

2. ALL EXCAVATIONS SHALL BE INSPECTED BY A GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE. 3. CONCRETE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST "AMERICAN CONCRETE INSTITUTE" INCLUDING THE REQUIREMENTS OF ACI 301. "SPECIFICATION FOR STRUCTURAL CONCRETE BUILDINGS". CONCRETE MIXES SHALL BE DESIGNED PER ACI 301, USING PORTLAND CEMENT CONFORMING TO ASTM C150 OR C95, AGGREGATE CONFORMING TO ASTM C33, AND ADMIXTURES CONFORMING TO ASTM C494, C1017, C618, C898 AND C820. CONCRETE SHALL BE READY-MIXED IN ACCORDANCE WITH ASTM C94.

4. HOT WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 305. COLD WEATHER CONCRETING SHALL BE IN ACCORDANCE WITH ACI 308. 5. CONCRETE SHALL ATTAIN THE FOLLOWING ULTIMATE 28 DAY COMPRESSIVE STRENGTHS: 3,000 P.S.I. FOR FOOTINGS; 4,000 P.S.I. FOR INT. SLABS ON GRADE, WALLS, WALL PIERS; 4,500 P.S.I. FOR EXT. SLABS ON GRADE, SLUMP SHALL BE 4" +/- 1"

6. ALL CONCRETE TO BE PERMANENTLY EXPOSED TO WEATHER SHALL BE AIR ENTRAINED (4.5 TO 7.75%) WITH AN ADMIXTURE THAT CONFORMS TO ASTM C260. MAXIMUM W/C RATIO = 0.45. 7. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615 OR ASTM A996, GRADE 60. 8. TOP OF FOOTING ELEVATIONS SHALL BE AS SHOWN ON THE FOUNDATION PLAN. THESE ELEVATIONS ARE A MAXIMUM AND SHALL BE LOWERED AS REQUIRED TO OBTAIN THE REQUIRED DESIGN BEARING PRESSURE PER THE GEOTECHNICAL ENGINEER'S SPECIFICATION. REFER TO SCHEDULES AND DETAILS FOR MINIMUM FOOTING THICKNESSES.

DIVISION 4 - MASONRY: 1. MASONRY CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR MASONRY STRUCTURES" (IMS 600-16), PUBLISHED BY THE MASONRY SOCIETY. 2. HOLLOW LOAD BEARING MASONRY UNITS SHALL CONFORM TO ASTM C90. COMPRESSIVE STRENGTH OF THE BLOCK SHALL BE A MINIMUM 2650 PSI.

3. FILL ALL BOND BEAMS AND REINFORCED CELLS SOLIDLY WITH GROUT. GROUT SHALL CONFORM TO ASTM C494 AND SHALL BE AIR ENTRAINED 4.5 TO 7.75% WITH AN ADMIXTURE THAT CONFORMS TO ASTM C260. MAXIMUM W/C RATIO = 0.45. 4. ALL MORTAR SHALL MEET THE "PROPORTION SPECIFICATION" OF ASTM C-270 AND BE MADE WITH PORTLAND CEMENT/LIME (NON AIR ENTRAINED). THE USE OF MASONRY CEMENT MORTAR IS STRICTLY PROHIBITED. USE TYPE 'S' FOR WALLS BELOW GRADE AND TYPE 'M' FOR ALL OTHER WALLS.

5. THE MINIMUM 28 DAY NET COMPRESSIVE STRENGTH OF THE MASONRY ASSEMBLY (1" m) SHALL BE 2000 P.S.I. AS DETERMINED BY THE UNIT STRENGTH METHOD OF ACI 530.1. 6. PROVIDE STEEL JOIST AND BEAM BRACING AS REQUIRED TO OBTAIN THE REQUIRED DESIGN BEARING PRESSURE PER THE GEOTECHNICAL ENGINEER'S SPECIFICATION. REFER TO SCHEDULES AND DETAILS FOR MINIMUM FOOTING THICKNESSES.

7. HOOK VERTICAL BARS INTO CONTINUOUS BOND BEAMS AT TOP OF WALLS (BELOW JOIST/TRUSS BEARING). 8. A PRE CONSTRUCTION MEETING SHALL BE HELD ON-SITE PRIOR TO MASONRY CONSTRUCTION TO REVIEW THE MASONRY REQUIREMENTS OF THE PROJECT. A REPRESENTATIVE FROM SHELL + MEYER ASSOCIATES, INC., THE SPECIAL INSPECTOR, THE MASONRY CONTRACTOR, AND THE GENERAL CONTRACTOR SHALL BE PRESENT.

STRUCTURAL COMPONENTS, ASSEMBLIES, AND SYSTEM DELEGATED TO THE CONTRACTOR INCLUDE THE FOLLOWING: 1. COLD-FORMED STEEL FRAMING; 2. HELICAL PILES OR OTHER DEEP FOUNDATION SYSTEM; 3. HELICAL PILES ARE SHOWN IN SECTION C/S2.0 BUT OTHER DEEP FOUNDATION SYSTEMS, SUCH AS RAMMED AGGREGATE PIERS OR DRILLED CAISSONS ARE ALSO ACCEPTABLE UPON REVIEW. THE DESIGN INTENT IS FOR THE COLUMN REACTION TO BEAR ON ROCK 15' BELOW THE SURFACE IN THE MOST ECONOMICAL METHOD.

BORING LOG 18 FROM 2010 IS INCLUDED ON SHEET S0.1 FOR REFERENCE.

DIVISION 5 - METALS

STRUCTURAL STEEL SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH THE LATEST AISI RECOMMENDATIONS AND CONFORM TO ANSIS/AISC 360-16 AND AISI C150-10 INCLUDED IN THE 14TH EDITION OF THE "STEEL CONSTRUCTION MANUAL". STEEL FABRICATORS SHALL BE AN AISI CERTIFIED SHOP AND SHALL SATISFY GENERAL (ALL TRADES) NOTE 1. OTHERWISE SHOP SPECIAL INSPECTIONS WILL BE REQUIRED.

3. UNLESS NOTED OTHERWISE, ALL MATERIALS SHALL BE IN ACCORDANCE WITH THE FOLLOWING ASTM SPECIFICATIONS: STRUCTURAL STEEL: A572 GR. 50 (36 KSI) AND TEES ASTM A582 (50 KSI); STEEL PIPE: A53 GR. C (48 KSI); PLATE: SHAPES: A36 (36 KSI); UNLESS NOTED OTHERWISE, BASE PLATE ANCHOR RODS SHALL BE ASTM F1554 (36 KSI); UNLESS NOTED OTHERWISE, USE SHEAR PLATE CONNECTIONS TO THE FABRICATOR FOR THE FACTORED UNFACTORED SHEAR FORCES INDICATED ON PLAN IN ACCORDANCE WITH THE AISI SPECIFICATIONS FOR ALLOWABLE STRESS DESIGN LOAD AND RESISTANCE FACTOR DESIGN, U.N.O. USE 5/16" THICK DOUBLE ANGLE CONNECTIONS (AS DETAILED IN THE AISI "MANUAL OF STEEL CONSTRUCTION"), U.N.O. ON STRUCTURAL DRAWINGS.

6. UNLESS NOTED OTHERWISE, PROVIDE CONTINUOUS 1/4" FILLET WELDS PER AISI REQUIREMENTS. 7. TYPICAL UNLETS FOR MASONRY OPENINGS SHALL BE AS FOLLOWS: U.N.O. ON PLANS: L3 1/2 x 3 1/2 x 5/16" ANGLES, EACH 4" WALL WIDTH; 4-0" OPENINGS OR LESS (8" MINIMUM END BEARING, TYP. EACH END); L3 1/2 x 3 1/2 x 5/16" ANGLES, L3 1/2 x 3 1/2 x 5/16" ANGLES, L3 1/2 x 3 1/2 x 5/16" WALL WIDTH; 4-11" TO 6-8" OPENINGS (8" MINIMUM END BEARING, TYP. EACH END); 6-9" TO 12-0" CMU OPENINGS; 1/2" MIN. BRG. E.E.

8. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL PERMANENTLY EXPOSED TO THE WEATHER, INCLUDING ALL BRICK UNLETS, ANGLES AND PLATES, SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153. 9. COORDINATE ALL ROOF AND FLOOR OPENING SIZES AND LOCATIONS WITH ARCHITECTURAL AND MECHANICAL DRAWINGS. FRAME OPENINGS WITH L3x3x1/4" ANGLES TYPICAL. U.N.O. CONTRACTOR TO VERIFY UNIT SIZES, WEIGHTS AND LOCATIONS BEFORE ERECTION.

STEEL JOISTS: 1. ALL STEEL JOISTS SHALL BE FABRICATED AND ERRECTED IN ACCORDANCE WITH SJI 100-20 AND SJI 200-15 STANDARD SPECIFICATIONS, 2010 EDITION AND DESIGNED FOR THE FOLLOWING: "BEND CHECK" 200A TOP & BOTTOM CHORD, U.N.O. JOIST SHOE ROLL OVER (K-LH SERIES JOISTS) - PLF. 2. UNLESS NOTED AS AN 'SP' JOIST, THE SNOW DRIFT LOADS INDICATED ON PLAN HAVE BEEN INCLUDED IN THE JOIST SIZE USING THE EQUIVALENT UNIFORM LOAD METHOD.

3. JOIST BRIDGING SHALL CONFORM TO SJI SPECIFICATIONS. PROVIDE DIAGONAL BRIDGING AT ALL BEAMS AND END BAYS. FIELD WELD BRIDGING AT ENDS AND INTERSECTIONS. ALL JOISTS FORTH 16 FEET AND LONGER REQUIRE A ROW OF BOLTED CROSS BRIDGING TO BE IN PLACE BEFORE SLACKENING OF HOISTING LINES. A. X-BRIDGING WHERE SHOWN ON PLAN IS IN EXCESS OF THE MINIMUM REQUIRED BY SJI. THIS IS TO ACCOUNT FOR ERECTION SEQUENCING, LIMITING END ANCHORAGE FORCES, MEP COORDINATION, AND FUTURE 'X-BRIDGES'. BAR JOIST SUPPLIER SHALL NOT OMIT THESE ADDITIONAL 'X-BRIDGES'. 4. PROVIDE AN ADDITIONAL ROW OF CONTINUOUS 1/4" DIAGONAL CHORD BRIDGING AT THE FIRST PANEL POINT LOCATION AT EACH END OF ALL ROOF JOISTS TO RESIST WIND UPLIFT. UPLIFT BRIDGING SHALL TERMINATE WITH DIAGONAL BRIDGING AT ALL END BAYS. MAX NET UPLIFT = 15 PSF U.N.O. STEEL DECK.

1. STEEL ROOF DECK SHALL BE 1-1/2" - 20 GA. WR TYPE B GALVANIZED G90 PER ASTM A653, U.N.O. 2. FLOOR DECK SHALL BE 2" - 20 GA. FORM DECK GALVANIZED G90 PER ASTM A653, U.N.O. 3. WELD DECK TO SUPPORTS WITH MINIMUM 5/8" INCH PUDDLE WELDS AT 12" o.c. (3/64) AND PROVIDE 10 TEK SCREW SEPARATE FASTENERS AT 36" O.C. UNLESS SUPERCEDED BY SPECIFICATION OR A TYPICAL DECK ATTACHMENT DETAIL.

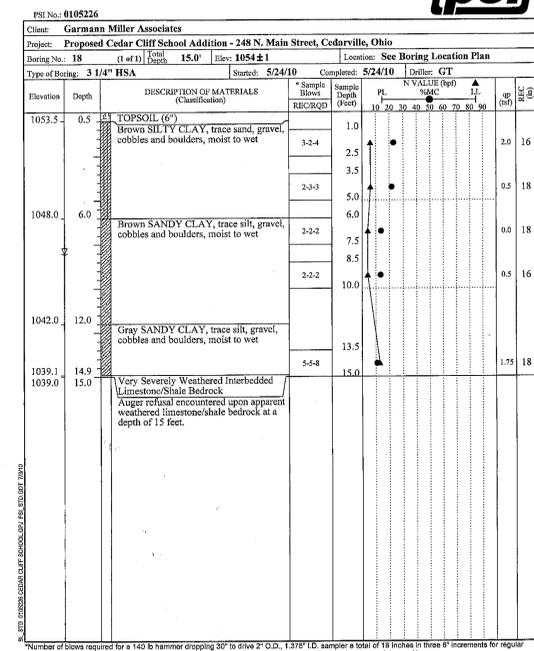
DIVISION 5 - METALS: COLD FORM STEEL FRAMING (CFS): 1. DESIGN, FABRICATION, AND ERECTION OF ALL COLD FORMED STEEL FRAMING MEMBERS SHALL CONFORM TO THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS AISI S100-16 (2010) W5.20. 2. ALL CFS MEMBERS AND CONNECTIONS SHALL CONFORM TO THE CFS SPECIFICATION CONFORMING TO ASTM A1003 WITH A MINIMUM YIELD STRENGTH AS FOLLOWS: 54 mbs (16 GA.) AND HEAVIER MEMBERS Fy= 50 KSI (GRADE ST50H) / 43 mbs (16 GA.) AND LIGHTER MEMBERS Fy= 30 KSI (GRADE ST38).

3. ALL MEMBERS SHALL BE GALVANIZED WITH A COATING MEETING THE REQUIREMENTS OF ASTM A653, USE G90 OR EQUIVALENT FOR STUDS WITH A BRICK VENEER, G90 FOR ALL OTHER FRAMING MEMBERS AND ACCESSORIES. 4. CFS UNLETS SHALL BE UNPLUNCHED. 5. PROVIDE BRIDGING FOR STUDS AT A MAXIMUM SPACING NOT TO EXCEED 4'-0" AND PER MFR. REQUIREMENTS FOR JOISTS AND RAFTERS. ALL BRIDGING SHALL BE INSTALLED PRIOR TO THE ADDITION OF ANY LOADING. CONNECT BRIDGING TO EACH MEMBER BY WELDING, CLIP ANGLES OR OTHER APPROVED METHOD PER THE MANUFACTURER'S REQUIREMENTS.

EXISTING CONSTRUCTION NOTES

- 1. BEFORE PROCEEDING WITH ANY WORK IN THE EXISTING STRUCTURE, THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH EXISTING STRUCTURAL CONDITIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY BRACING, SHORING, AND OTHER SAFEGUARDS TO MAINTAIN ALL PARTS OF THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION AND TO PROTECT FROM DAMAGE THOSE PORTIONS OF THE EXISTING WORK WHICH ARE TO REMAIN. 2. REVIEW THE SHORING, PROVIDE AND MAINTAIN SHORING, BRACING, AND STRUCTURAL SUPPORTS AS REQUIRED TO PRESERVE STABILITY AND PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF CONSTRUCTION AND FINISHES TO REMAIN, AND TO PREVENT UNEXPECTED OR UNCONTROLLED MOVEMENT OR COLLAPSE OF CONSTRUCTION BEING DEMOLISHED. 3. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS, ELEVATIONS, ETC. NECESSARY FOR THE PROPER CONSTRUCTION AND ALIGNMENT OF THE NEW PORTIONS OF THE WORK TO THE EXISTING 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. 4. INFORMATION USED IN PREPARING THESE DRAWINGS WAS TAKEN FROM DRAWINGS PREPARED BY THE ORIGINAL STRUCTURE PROVIDED TO SHELL + MEYER ASSOCIATES. SHELL + MEYER SHALL NOT BE RESPONSIBLE FOR DISCREPANCIES BETWEEN EXISTING PLANS AND AS-BUILT CONDITIONS AND IS NOT RESPONSIBLE FOR THE EXISTING WORK IN A SAFE CONDITION DURING THE PROCESS OF DEMOLITION AND CONSTRUCTION. 5. NEATLY CUT OPENINGS AND HOLES PLUMB, SQUARE, AND TRUE TO DIMENSIONS REQUIRED. USE CUTTING METHODS LEAST LIKELY TO DAMAGE CONSTRUCTION TO REMAIN OR ADJOINING CONSTRUCTION. USE HAND TOOLS OR SMALL POWER TOOLS DESIGNED FOR SAWING OR GRINDING, NOT HAMMERS AND CHOPPING, TO MINIMIZE DISTURBANCE OF ADJACENT SURFACES. TEMPORARILY COVER OPENINGS TO REMAIN. LOCATE SELECTIVE DEMOLITION EQUIPMENT AND REMOVE DEBRIS AND MATERIALS AS NOT TO IMPOSE EXCESSIVE LOADS ON SUPPORTING WALLS, FLOORS, OR FRAMING.

BORING LOG



DELEGATED DESIGN ITEMS

- A. ENGAGE A QUALIFIED PROFESSIONAL ENGINEER LEGALLY LICENSED IN THE OF OHIO TO DESIGN AND DETAIL THE ELEMENTS NOTED BELOW.
B. DELEGATED DESIGN ENGINEER SHALL DESIGN MEMBERS, CONNECTION DETAILS AND DETERMINE FASTENER TYPES AND SIZES.
C. CONNECTIONS ARE NOT TO IMPOSE ECCENTRIC LOADS, NOR INDUCE TWISTING OR WARPING TO SUPPORTING STRUCTURE.
D. DESIGN CONNECTIONS TO ACCOMMODATE POTENTIAL AND ACTUAL MISALIGNMENT OF ADJACENT WORK WITHIN TOLERANCES SPECIFIED IN OTHER SECTIONS.
E. SUBMIT ENGINEERING CALCULATIONS DEMONSTRATING COMPLIANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND OF THE AUTHORITIES HAVING JURISDICTION.
F. PROVIDE LEGIBLE CALCULATIONS THAT INCORPORATE SUFFICIENT CROSS REFERENCES TO SHOP DRAWINGS TO MAKE CALCULATIONS EASILY UNDERSTANDABLE AND REVIEWABLE.
G. STRUCTURAL CALCULATIONS SHALL INCLUDE THE FOLLOWING: ANALYSIS OF FRAMING MEMBERS, ANALYSIS OF ANCHORS INCLUDING ANCHORS EMBEDDED IN CONCRETE OR MASONRY WITH ALL APPLICABLE LOAD REDUCTIONS CONSIDERED, AND SIGNATURE AND SEAL OF THE QUALIFIED PROFESSIONAL ENGINEER RESPONSIBLE FOR THEIR PREPARATION AND LICENSED IN THE STATE OF OHIO.
H. TEST REPORTS ARE NOT ACCEPTABLE AS A SUBSTITUTE FOR CALCULATIONS.

SHEET LIST

Table with columns: Sheet Number, Sheet Name. Lists sheets S0.1 through S3.0 including Structural Notes, Foundation Plan, Foundation Sections, and Roof Framing Plan.



NEW BUILDING OR
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Table with columns: Issuance/Revisions, Construction Documents, Addendum 01, Addendum 02, Dates.

Table with columns: Project Number, Drawn By, Checked By, Values: 25056.00, TE, PR.

SHEET TITLE:
STRUCTURAL NOTES

SHEET NUMBER:
S0.1

