



2400 5th Avenue S, Suite 200 | Birmingham, Alabama 35233
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TRANSMITTAL COVER SHEET

DATE: SEPTEMBER 5, 2023

TO: ALL PLAN HOLDERS OF RECORD

FROM: HUNTER SWATEK, PROJECT MANAGER

PROJECT: ALABAMA COMMUNITY COLLEGE SYSTEM WORKFORCE SKILLS TRAINING CENTER
GMC PROJECT NO. ABHM210048

RE: ADDENDUM NO. 1 AND
ACKNOWLEDGEMENT OF RECEIPT OF ADDENDUM NO. 3

ACKNOWLEDGEMENT OF RECEIPT:

PLEASE PRINT RECIPIENT'S NAME, FIRM, AND DATE RECEIVED.

THEN E-MAIL BACK TO alyssa.martin@gmcnetwork.com FOR OUR RECORDS AND
TO ACKNOWLEDGE YOU'RE RECEIPT OF THIS ADDENDUM.

NAME (PLEASE PRINT)

FIRM (PLEASE PRINT)

DATE RECEIVED (PLEASE PRINT)

If there are any problems with this transmittal, please contact sender, at the number listed above.

ADDENDUM NUMBER 03

September 5, 2023

**PROJECT: ALABAMA COMMUNITY COLLEGE SYSTEM WORKFORCE SKILLS TRAINING CENTER
GMC PROJECT NO. ABHM210048**

AD1-1 GENERAL:

- A. The following revisions and/or additions to the Drawings and Project Manual are hereby made a part of same, and shall be incorporated in the Work of the Contract the same as if originally included in the Bid and Construction Documents.
- B. Bidders shall acknowledge receipt of this Addendum in writing, as provided on the Proposal Form.
- C. When a revision and/or addition is called for to the Drawings or Project Manual, they shall be fully coordinated with and carried through all applicable Drawings and portions of the Project Manual, including in part, all related Civil, Landscaping, Architectural, Structural, Plumbing, Mechanical, Electrical, and other Documents.

AD1-2 PROJECT MANUAL AND SPECIFICATIONS

- 1. ACCS Form 5-E Accounting of Sales Tax: Updated to match proposal form formatting.
- 2. Specification Section 31 2000 Earth Moving Specification – See bolded line regarding additional excavation parameters.

AD1-3 DRAWINGS:

- 1. ARCHITECTURAL:
 - a. Reference Revised Sheet G1.23 for updated parapet details
 - b. Reference Revised Sheet A3.01 for updated canopy information.
 - c. Reference Revised Sheet A3.02 for updated parapet details.

AD1-4 MISCELLANEOUS:

- A. Bidding RFI Log

AD1-5 ATTACHMENTS:

- A. Bidding RFI Log
- B. Revised ACCS Form 5-E
- C. Revised Specification Section 31 2000
- D. Revised Sheet G1.23
- E. Revised Sheet A3.01
- F. Revised Sheet A3.02

END OF ADDENDUM NUMBER 03

PREPARED BY



2400 5th Avenue S, Suite 200 | Birmingham, Alabama 35233
Tel 205.879.4462 | GMCNETWORK.COM
Goodwyn Mills Cawood, LLC.

(MUST be submitted with ACCS Form 5-E)

ACCOUNTING OF SALES TAX

Attachment to ACCS Form 5-E: Proposal Form

To: Alabama Community College System
(OWNER)

Date: _____, 2023.

NAME OF PROJECT Calhoun Community College Advanced Technology Center Addition for Workforce in Tanner, AL.

SALES TAX ACCOUNTING

Pursuant to Act 2013-205, Section 1(g) the Contractor accounts for the sales tax NOT included in the bid proposal form as follows:

ESTIMATED SALES TAX AMOUNT

A: Calhoun Community College Advanced Technology Center Addition for Workforce(Tanner, AL)
Advanced Technology Center Addition for Workforce:

_____ Dollars (\$ _____)

Remote Storm Shelter:

_____ Dollars (\$ _____)

Total Base Bid:

_____ Dollars (\$ _____)

Alternates –

A: Lightning Protection System:

_____ Dollars (\$ _____)

Failure to provide an accounting of sales tax shall render the bid non-responsive. Other than determining responsiveness, sales tax accounting shall not affect the bid pricing nor be considered in the determination of the lowest responsible and responsive bidder.

Legal Name of Bidder _____

Mailing Address _____

***By (Legal Signature)** _____

***Name (type or print)** _____ (Seal)

***Title** _____

Telephone Number _____

Email Address _____

Note: A completed ACCS Form 5-H: Accounting of Sales Tax must be submitted with ACCS Form 5-E: Proposal Form. A proposal shall be rendered non-responsive if an Accounting of Sales Tax is not provided.

SECTION 31 2000 EARTH MOVING

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
- B. Related work specified elsewhere includes:
- C. Section 01 2200 - "Unit Prices"
- D. Section 01 7800 - "Closeout Submittals"
- E. Section 02 3213 - "Subsurface Investigation"
- F. Section 31 1000 - "Site Clearing", "Report of Geotechnical Investigation"
- G. Section 32 1313 - "Concrete Paving"
- H. Section 03 3100 - "Concrete"
- I. Division 22 - "Plumbing"
- J. Division 23 - "Heating, Ventilating, and Air Conditioning"
- K. Division 26 - "Electrical"

1.02 SUMMARY

- A. This Section includes unclassified excavation, grading and fill as follows:
 - 1. Preparing of subgrade for building slabs, walks, and pavements; and additional work indicated on the Drawings and in the Project Manual.
 - a. Comply with recommendations in the Owner's "Report of Geotechnical Exploration", this Section, and other Division 31 Sections; Refer also to Civil and Structural Drawings for additional information and requirements.
 - b. Perform excavation by hand within 5'-0" of existing buildings and structures to remain. Design and provide all necessary supports, shoring, etc., as required to prevent settlement, collapse, and/or other damage to existing buildings and structures to remain.
 - 1) **DO NOT EXCAVATE BELOW THE EFFECTIVE BEARING AREA OF FOUNDATIONS OF EXISTING BUILDINGS AND STRUCTURES.** In the event of conflict during construction, notify Architect prior to proceeding with work in the effected area.
 - c. Compaction of backfill at any basement and below grade walls shall only be by hand-directed compaction equipment. Heavy construction equipment and/or heavy trucks shall not be allowed within 10-feet of any basement walls, and within 5-feet of foundation walls.
 - 2. Excavating and backfilling of trenches within building control areas and on site.
 - 3. Stripping and stockpiling of topsoil (if any) is specified in Section 31 1000 - Site Clearing.
 - 4. The extent of earthwork is indicated on the Drawings. This earthwork is to be included in the base bid as unclassified excavation, regardless of material encountered. All work required in delivering the undercut, as indicated on the drawings, shall also be unclassified and in the base bid.
 - 5. Removal of existing improvements may also be specified under various Division 31 Sections.
- B. Excavating and Backfilling for Plumbing, HVAC, and Electrical Work: Refer to Divisions 22, 23, and 26 sections for excavation and backfill required in conjunction with underground mechanical and electrical utilities and buried mechanical and electrical appurtenances, not work of this Section.
 - 1. However, construction materials and execution for Plumbing, HVAC, and Electrical work shall comply with requirements of this Section, and related Division 31 Sections, when the work and/or materials required are not indicated or only partially indicated in Divisions 22, 23, and 26.
- C. Placement and compaction of at least 4-inches of topsoil up to finish grades is included in the work of this Section.
 - 1. Allow for thickness of topsoil and sod.

1.03 DEFINITIONS

- A. "Excavation" consists of removal of materials and existing improvements encountered to subgrade elevations indicated, and subsequent disposal of materials removed.
- B. "Unauthorized" excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of Owner's Geotechnical Engineer. Unauthorized excavation, as well as remedial work directed by Owner's Geotechnical Engineer, shall be at Contractor's expense.
1. Under footings, foundation bases, or retaining walls, fill unauthorized excavation by extending indicated bottom elevation of footing or base to excavation bottom, without altering required top elevation. Lean concrete fill may be used to bring elevations to proper position, when acceptable to Owner's Geotechnical Engineer.
 2. In locations other than those above, backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by Owner's Geotechnical Engineer.
- C. "Additional Excavation": When excavation has reached required subgrade elevations, notify Owner's Geotechnical Engineer, who will make an inspection of conditions. If Owner's Geotechnical Engineer determines that bearing materials at required subgrade elevations are unsuitable, continued excavation may be required. If additional excavation is required, replace excavated material as directed by Owner's Geotechnical Engineer.
1. **The Contract Sum will be adjusted by Change Order, or as provided in General Conditions, for additional excavation, measured in place (Bank Measure), and its replacement appropriately authorized in writing prior to beginning the work, and for which the Contractor is due payment from the owner.**
- D. "Subgrade": The undisturbed earth or the compacted soil layer immediately below pavement base course, select drainage fill, bottom of indicated undercut areas, or topsoil materials.
- E. "Structure": Buildings, foundations, slabs, tanks, curbs, or other man-made stationary features occurring above or below ground surface.
- F. "Building Control Area" and/or "Controlled Area": Below and at least 10-feet beyond building foot print or exterior walls, and below roofs, to include covered porches and canopies, and below and at least 5-feet beyond all walks and pavements subject to bearing vehicular traffic.
- G. "Mud Footings" (if any): The at least 2-inches to 4-inches of lean 2,500 psi (minimum) concrete placed in the bottom of footing and foundation trenches and excavations, which is required if permanent or structural concrete cannot be placed the same day they are excavated.
1. Unless mud footings are indicated on Structural Drawings, their depth shall be compensated for by over-excavation.
 2. Mud footings (if any) shall be completely clean prior to placement of any reinforcing and/or permanent or structural concrete.
 3. Refer to the Owner's "Geotechnical Investigation" Report, and Structural Drawings for additional information and requirements for other "mud footings" (or "mud mats", or "mud seals").
- H. Rock: Rock material in beds, ledges, unstratified masses, and conglomerate deposits and boulders of rock material exceeding 1 cu. yd. (0.76 cu. m) for bulk excavation or 3/4 cu. yd. (0.57 cu. m) for footing, trench, and pit excavation that cannot be removed by rock excavating equipment equivalent to the following in size and performance ratings, without systematic drilling, ram hammering, ripping, or blasting, when permitted:
1. Excavation of Footings, Trenches, and Pits: Late-model, track-mounted hydraulic excavator; equipped with a 42-inch- (1065-mm-) wide, short-tip-radius rock bucket; rated at not less than 120-hp (89-kW) flywheel power with bucket-curling force of not less than 25,000 lbf (111 kN) and stick-crowd force of not less than 19,000 lbf; measured according to SAE J-1179.
 2. Bulk Excavation: Late-model, track-mounted dozer equipped with a single tooth ripper; rated at not less than 250-hp flywheel power and developing a minimum of 45,000-lbf (200-kN) breakout force; measured according to SAE J-732.
 3. Refer to "Owner's Report of Geotechnical Exploration" for additional information regarding recommendations when rock is encountered.

1.04 SUBMITTALS

- A. Test Reports: Submit the following reports directly to Architect, Civil Engineer, Structural Engineer, and the Owner, directly from the testing service, with copy to Contractor:
- B. Test reports on fill and borrow material.
- C. Verification of suitability of each foundation, floor slab and subgrade condition and material, in accordance with specified requirements.
- D. Field reports; and in-place soil density tests.

1.05 QUALITY ASSURANCE

- A. Codes and Standards: Perform excavation work on site and in right-of-ways in compliance with applicable requirements of authorities having jurisdiction.
- B. Testing and Inspection Service: All required soil testing and inspection services during earthwork operations shall be performed by a qualified independent geotechnical testing laboratory.
 - 1. Refer to Section 01 0150 - "Special Conditions", for additional information and requirements.

1.06 PROJECT CONDITIONS

- A. Site Information: Refer to Section 31 1000 - "Site Clearing", and Civil Drawings, for additional information and recommendations.
- B. Existing Utilities: Locate existing underground utilities in areas of excavation work. If utilities are to remain in place, provide adequate means of support and protection during earthwork operations in the vicinity, and as may also be required for other construction work.
 - 1. Notify the Alabama Line Location Center at 1-800-292-8525 at least 2-full working days (48 hours), excluding weekends and holidays, prior to any excavation work. This organization will contact its member utility companies to locate and mark all of their own underground facilities.
 - a. Notify non-member companies directly, for them to perform this service.
- C. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions and record locations on as-built record drawings. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility owner.
- D. Do not interrupt existing utilities serving facilities occupied by Owner or others, during occupied hours, except when permitted in writing by Architect and then only after acceptable temporary utility services have been provided.
 - 1. Provide minimum of 48-hour notice to Owner and copy Architect, and receive written notice to proceed before interrupting any utility.
- E. Demolish and completely remove from the site any existing underground utilities to be removed, and all existing underground utilities in "controlled areas". Coordinate with utility companies for shutoff of services if lines are active.
- F. Use of Explosives: Use of explosives is not permitted.
- G. Protection of Persons and Property:
 - 1. Barricade open excavations occurring as part of this work and post with warning lights.
 - 2. Operate warning lights as recommended by authorities having jurisdiction.
 - 3. Comply with requirements of current regulations of OSHA, applicable Codes, ordinances, and authorities having jurisdiction.
 - 4. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
 - 5. Perform excavation by hand within 5'-0" of existing buildings and structures to remain, and within dripline of large trees to remain. Protect root systems from damage or dryout to the greatest extent possible. Maintain moist condition for root system and cover exposed roots with moistened burlap. Paint root cuts of 1-inch and larger with emulsified asphalt tree paint.
 - a. Do not under-mine or excavate below footings and/or foundations which are to remain.

PART 2 - PRODUCTS**2.01 SOIL MATERIALS - DEFINITIONS**

- A. Satisfactory soil materials are defined as clean, non-saturated, non-organic sections of earth taken from acceptable sources, and complying with ASTM D2487 soil classification groups included in recommendations of the Owner's "Report of Geotechnical Exploration", or if not included, as directed at the time of earthwork operations and/or acceptance resulting from acceptable test results obtained on soil materials proposed by the Contractor and tested by the project Geotechnical Engineer, as required by the Bid and Contract Documents.

Liquid Limit (LL)	Less than 50%
Plasticity Index (PI)	Less than 25%
Maximum Dry Density (ASTM D-698)	Greater than 95 pcf
Maximum Particle Size	3 inches or less
Organic Matter	Less than 5%

- B. Unsatisfactory soil materials are defined as those complying with ASTM D2487 soil classification groups other than those indicated above and as following:
1. Highly plastic fat clays within the upper 18 inches of building and pavement control areas.
- C. Drainage Fill (or "porous fill" or "drainage aggregate"): Clean, washed, evenly graded mixture of free-draining pea gravel, coarse sand, or crushed stone, with not more than 50 percent passing a No. 50 sieve and not more than 5 percent passing a No. 200 sieve, and subject to approval by the project geotechnical engineer and testing laboratory; Minimum 4-inches compacted completed thickness.
- D. Backfill and Fill Materials (Grassed areas only; Cuts and fills outside "controlled areas", during general grading): Satisfactory soil materials from on-site excavations, free of clay, rock or gravel larger than 2-inches in any dimension, debris, waste, frozen materials, vegetation and other deleterious material.
1. All fill soils must be compatible with existing soils, so they can bond together.
- E. Topsoil: Refer to Section 31 1000 - "Site Clearing."
- F. Rock Fill: Refer to Owner's "Report of Geotechnical Investigation" for recommendations regarding placement and compaction requirements.

PART 3 - EXECUTION**3.01 PROOFROLLING**

- A. Areas throughout significant slopes and beneath and 10'-0" beyond new building and covered areas, and beneath and 5'-0" beyond new pavement areas (back-of-curb or other paving edge termination) shall be designated as "controlled areas." Prior to placement of fill earth and following removal of cut earth, the controlled areas shall be proofrolled. Areas to be filled shall be proofrolled prior to any fill placement; cut areas shall be proofrolled after they are brought to subgrade level. Proofrolling shall be performed with a loaded tandem axle dump truck or similar approved equipment. The proofroller shall make at least two passes over each section in perpendicular directions over the "controlled areas". If any areas fail the proofroll, repair these areas as directed by the Owner's Geotechnical Engineer.
1. Proofrolling shall be conducted in the presence of testing lab's Geotechnical Engineer.
 2. Do not proofroll when the ground surface is wet or saturated with water.

3.02 EXCAVATION

- A. Earth Excavation includes excavation of pavements and other obstructions visible on surface; underground structures, utilities, and other items indicated to be demolished and removed; together with earth and other materials encountered that are not classified as structures, foundations, rock or unauthorized excavation.
- B. Perform excavation by hand within 5'-0" of existing buildings and structures to remain.
1. Do not under-mine or excavate below footings and/or foundations which are to remain.
- C. Refer to "Definitions" paragraph above for any "mud footings" required.

3.03 STABILITY OF EXCAVATIONS

- A. General: Comply with local codes, ordinances, and requirements of agencies having jurisdiction.

- B. Slope sides of excavations to comply with local codes, ordinances, and requirements of agencies having jurisdiction. Shore and brace where sloping is not possible because of space restrictions or stability of material excavated. Maintain sides and slopes of excavations in safe condition until completion of backfilling.
- C. Shoring and Bracing: Provide materials for shoring and bracing, such as sheet piling, uprights, stringers, and cross braces, in good serviceable condition. Maintain shoring and bracing in excavations regardless of time period excavations will be open. Extend shoring and bracing as excavation progresses.

3.04 DEWATERING

- A. Prevent surface water and Geotechnical or ground water from flowing into excavations and from flooding project site and surrounding area.
 - 1. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Contractor to provide and maintain, at their expense, pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.
 - 2. Establish and maintain temporary drainage ditches and other diversions outside excavation limits to convey rain water and water removed from excavations to collecting or runoff areas. Do not use trench excavations as temporary drainage ditches.
 - 3. Due to the types of soil that exist on site, seepage and/or springs may occur. If excessive seepage or springs are discovered, notify Owner's Geotechnical Engineer and Architect immediately.

3.05 STORAGE OF EXCAVATED MATERIALS

- A. Stockpile excavated materials acceptable for backfill and fill only within the limits of the area under construction. No stockpiling will be allowed in areas that are not under construction. If there is not room for stockpiling, then the contractor will be responsible for legally disposing of the material and will not get additional compensation for the replacement of that material if fill is needed. Place, grade, and shape stockpiles for proper drainage.
 - 1. Locate and retain soil materials away from edge of excavations.
 - 2. Dispose of excess excavated soil material by removal and legal disposal off-site.

3.06 EXCAVATION FOR STRUCTURES

- A. Conform to elevations and dimensions shown within a tolerance of plus or minus 0.10 foot, and extending a sufficient distance from footings and foundations to permit placing and removal of concrete formwork, installation of services, and other construction and for inspection.
 - 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before concrete reinforcement is placed. Trim bottoms to required lines and grades to leave solid base to receive other work.
 - 2. Excavation for Underground Tanks, Basins, and Mechanical or Electrical Structures: Conform to elevations and dimensions indicated within a tolerance of plus or minus 0.10 foot; plus, a sufficient distance to permit placing and removal of concrete formwork, installation of services, and other construction and for inspection. Do not disturb bottom of excavations, intended for bearing surface.

3.07 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Cut surface under pavements to comply with cross-sections, elevations and grades as indicated.

3.08 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to uniform width, sufficiently wide to provide ample working room and a minimum of 6-inches to 9-inches of clearance on both sides of pipe or conduit.
- B. Excavate trenches and conduit to depth indicated or required to establish indicated slope and invert elevations and to support bottom of pipe or conduit on minimum of 4-inches of compacted "select fill" bedding. Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
- C. Except as otherwise indicated, excavate for exterior water-bearing piping (water, steam, condensate, drainage, etc.) so top of piping is not less than 3'-0" below finished grade and/or paving.
- D. Where rock or concrete is encountered, carry excavation 6" below required elevation and backfill with a 6" layer of dense graded aggregate, prior to installation of pipe.

3.09 COLD WEATHER PROTECTION

- A. Protect excavation bottoms against freezing when atmospheric temperature is less than 35 degrees F.

3.10 BACKFILL AND FILL

- A. General: Place soil material in layers to required subgrade elevations, for each area classification listed below, using materials specified in Part 2 of this Section.
1. Under all areas, use satisfactory excavated or borrow material. Refer to Owner's "Report of Geotechnical Exploration", and this Section, for minimum testing requirements.
 2. Within parking lot area, place and compact acceptable compacted structural fill as directed by the Owner's Geotechnical Engineer.
 3. Under building slabs, use drainage fill material of compacted and finished depth indicated, or if not indicated, at least 4-inches compacted and completed thickness.
- B. Backfill trenches with concrete where trench excavations pass within 18-inches of column or wall footings and that are carried below bottom of such footings or that pass under wall footings. Place concrete to level of bottom of adjacent footing.
1. Concrete is specified in Division 3.
 2. Do not backfill trenches until inspections and any required testing have been made and backfilling is authorized by Architect based on test results. Use care in backfilling to avoid damage or displacement of pipe systems.
 3. Utility trenches shall be backfilled with acceptable borrow or dense graded crushed stone in 6" loose lifts compacted with mechanical piston tampers to the project requirements.
- C. Backfill excavations as promptly as work permits, but not until completion of the following:
1. Acceptance of construction below finish grade including, where applicable, dampproofing, waterproofing, etc.
 2. Inspections, testing, approval, and recording locations of underground utilities have been performed and recorded.
 3. Removal of concrete formwork, if any.
 4. Removal of shoring and bracing, and backfilling of voids with satisfactory materials.
 - a. Cut off temporary sheet piling driven below bottom of structures and remove in manner to prevent settlement of the structure or utilities, or leave in place if required.

3.11 REMOVAL OF TRASH AND DEBRIS FROM EXCAVATION.

1. Permanent or temporary horizontal bracing is in place on horizontally supported walls, where necessary.

3.12 PLACEMENT AND COMPACTION - GENERAL

- A. Ground Surface Preparation:
1. Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow strip, or break up sloped surfaces steeper than 1-vertical to 4-horizontal so that fill material will bond with existing surface.
 2. Prior to placement of fill earth and following removal of cut earth, the controlled areas shall be proofrolled. Areas to be filled shall be proofrolled prior to any fill placement; cut areas shall be proofrolled after they are brought to subgrade level. Proofrolling shall be performed with a loaded tandem axle dump truck or similar approved equipment. The proofroller shall make at least two passes over each section in perpendicular directions over the "controlled areas". If any areas fail the proofroll, repair these areas as directed by the Owner's Geotechnical Engineer.
 - a. Proofrolling shall be conducted in the presence of testing lab's Geotechnical Engineer.
 - b. Do not proofroll when the ground surface is wet or saturated with water.
- B. Place backfill and fill materials in layers not more than 8-inches in loose depth for material compacted by heavy compaction equipment, and not more than 4-inches in loose depth for material compacted by hand-operated tampers.
- C. Before compaction, moisten or aerate each layer as necessary to provide optimum moisture content. Compact each layer to required percentage of maximum dry density or relative dry density for each area classification. Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.

- D. Place backfill and fill materials evenly adjacent to structures, piping, or conduit to required elevations. Prevent wedging action of backfill against structures or displacement of piping or conduit by carrying material uniformly around structure, piping, or conduit to approximately same elevation in each lift.
- E. General Fill Embankment Construction
 - 1. Embankment construction shall commence at the toe of the proposed slope and continue upwards as additional fill is placed. The engineered fill placed shall be benched into the natural slopes.
 - 2. The embankment is to be overfilled and then cut back to the required geometry to remove the uncompacted material that is usually present on the face of fill slopes.
 - 3. The face of slopes shall be promptly vegetated according to the Erosion Control Plan, and the CBMPP to prevent erosion after construction. Prior to vegetation 4" minimum topsoil is to be placed and tracked in by a dozer moving up and down the slope to create horizontal track lines.
- F. Rock Fill:
 - 1. Rock Fill is not to be used unless acceptable to the Owner's Geotechnical Engineer. Break larger particles down to 4" or less and treat as soil fill.
 - 2. Fills containing abundant rock shall be constructed of sound, durable rock. If weathered rock is integrated into structural fills, it is to be broken down to form a dense fill arrangement.
 - 3. A sufficient amount of compacted soil fines shall surround the rock fragments, particularly when shale is placed as structural fill. All voids between the larger rock fragments shall be completely filled with compacted gravel-size rock and soil during the fill placement and compaction process. Fills containing rock shall contain a minimum of 40 percent soil fines (passing #4 sieves). The soils are to be blended with the rock, or created by the blasting or compaction process.
 - 4. The majority of the rock shall be reduced to a maximum size of 6 inches (depending on the fill area) to be incorporated in to a dense fill. Filling in lifts must be maintained and shall be conducted under the observation of the Owner's Geotechnical Engineer or his representative.
 - 5. It is not permissible to place isolated large boulders (in excess of 12 inches).
 - 6. The rock/soil fill shall be placed in layers, sufficiently worked, and moisture conditioned to create a tight, stable fill. The entire lift shall be moisture conditioned, not just the surface of the lift. Adequate moisture conditioning of rocky fills will require a piece of equipment that is dedicated to blending added water with the fill in order to achieve uniform moisture conditioning of the entire fill lift.
 - 7. The soil between the individual rock fragments shall be compacted and moisture conditioned to the project fill requirements. Provisions for the addition of water to the rock/soil fill is necessary to "lubricate" any edge-to-edge contacts, making it easier for the rock to assume a denser particle arrangement. In addition, repeated passes by large placement and compaction equipment (such as a Caterpillar 815 or 825 compactor) will be required to adequately work the fill and crush the rock fragments into a dense arrangement.
 - 8. The upper layer of rock fills shall be topped with a layer of compacted soil not less than 48 inches beneath the proposed building and pavement areas (compacted depths). The soil cap shall be compacted to no less than 98 percent of the Standard Proctor maximum dry density (ASTM D698). Careful materials management will be required to ensure that sufficient material is available to construct the soil "cap" above rock fills.
- G. Control soil and fill compaction, providing minimum percentage of density specified for each area classification indicated below. Correct improperly compacted areas or lifts as directed by Owner's Geotechnical Engineer if soil density tests indicate inadequate compaction.
 - 1. Percentage of Maximum Density Requirements: Compact soil to not less than the following percentages of maximum density, in accordance with ASTM D 698 A:
 - a. Under structures, building foundations and slabs, and 10' beyond those perimeters, compact full depth of fill placement and scarify, moisture condition and re-compact in accordance with the recommendations made in the Owner's "Report of Geotechnical Exploration".
 - 1) Cut areas shall be proof rolled prior to and during scarification efforts and observed by the Owner's Geotechnical Engineer.
 - b. Under steps, covered areas, sidewalks, mechanical/utility and in all "controlled areas", compact in accordance with the recommendations made in the Owner's "Report of Geotechnical Investigation".

- c. Under pavements and at least 5-feet beyond (measured from back-of-curb or edge of paving, where occurs), remove loose soils as described in this and replace with suitable material that is compacted to 98% standard proctor.
- d. Under lawn or unpaved areas beyond “controlled areas”, compact each layer of backfill or fill material in accordance with the recommendations made in the Owner’s “Report of Geotechnical Investigation”.
- e. On-site Borrow (where allowed): In accordance with the recommendations made in the Owner’s “Report of Geotechnical Investigation”.
- f. Select and/or Structural Fill: In accordance with the recommendations made in the Owner’s “Report of Geotechnical Investigation”.
- g. Porous Fill (drainage course): In accordance with the recommendations made in the Owner’s “Report of Geotechnical Investigation”.
- h. Basement area of former building beneath new building control area should be backfilled with a dense graded base in accordance with the recommendations made in the Owner’s “Report of Geotechnical Investigation”.

H. Moisture Control:

- 1. Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade or layer of soil material. Apply water in minimum quantity as necessary to prevent free water from appearing on surface during or subsequent to compaction operations.
- 2. Remove and replace, or scarify and moisture condition, soil material that is too wet to permit compaction to specified density.
- 3. Stockpile or spread soil material that has been removed because it is too wet to permit compaction. Assist moisture conditioning by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory value.
- 4. At the time of densification, the moisture content of “engineered fill”, “structural fill”, and “select fill” should be within -3% to +3% of the materials’ ASTM D-698 optimum moisture content.
- 5. Structural fill areas exposed to excessive wetting, drying or otherwise disturbed by the construction following acceptance for moisture and density should be retested followed by the correction of deficient areas just prior to the installation of additional fill or structures.
- 6. In no instance should placement of structural fill or ground supported structures be permitted if the ground surface soils contain a moisture content in excess of 2% of the material’s optimum moisture content.
- 7. In no case shall porous drainage backfill (except as specifically indicated at foundation drains only) or masonry sand material be used adjacent to foundations. Care shall be taken to prevent masonry brick/block debris from falling or being pushed into foundation excavations.

3.13 GRADING

- A. General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are indicated or between such points and existing grades.
- B. Grading Outside Building Lines: Grade areas adjacent to building lines to drain away from structures and to prevent ponding. Finish surfaces free from irregular surface changes and as follows:
 - 1. Lawn or Unpaved Areas: Finish areas to receive topsoil to within not more than 0.10-foot above-or-below required subgrade elevations.
 - 2. Walks: Shape surface of areas under walks to line, grade, and cross-section, with finish surface not more than 0.10-foot above-or-below required subgrade elevation.
 - 3. Pavements: Shape surface of areas under pavement to line, grade, and cross-section, with finish surface not more than 1/2-inch above or below required subgrade elevation.
 - 4. Connection of Existing and New Work: Provide flush transition, unless specifically indicated otherwise.
- C. Grading Surface of Fill under Building Slabs and “Building Control Areas”: Grade smooth and even, free of voids, compacted as specified, and to required elevation. Provide final grades within a tolerance of 1/2-inch when tested with a 10-foot straightedge.

- D. Compaction: After grading, compact subgrade surfaces to the depth and indicated percentage of maximum or relative density for each area classification.

3.14 FIELD QUALITY CONTROL

- A. Quality Control Testing During Construction:
1. Allow testing service to inspect and approve each subgrade and fill layer before further backfill or construction work is performed.
 2. Perform field density tests in accordance with ASTM D 698 (sand cone method), or acceptable ASTM methods or nuclear testing method, as applicable.
 3. New Paved Areas, New Building Slab and “Building Control Areas” Subgrade: Perform at least one field density test of subgrade for every 5,000-square feet of fill area for each foot of vertical thickness of fill placed in “controlled areas”, with a minimum of one (1) test per lift.
 4. Foundation Wall Backfill: Perform at least 2-field density tests at locations and elevations as directed.
 5. Trenches: Perform at least one field density test for every 50-linear feet for each 8 inches of vertical thickness of fill placed in utility or similar trenches, which extend through the “controlled areas”.
 - a. Retaining walls, if any, same as for “Trenches”, as indicated above.
 6. A laboratory soil particle size, Atterberg limit, and Proctor moisture density relationship test shall be performed on each different type of fill soil used in the “controlled areas”.
 7. Based on the Project Geotechnical Engineer’s testing reports, inspections, and recommendations, subgrade or fills that are below specified density, additional earthwork, compaction, and/or other operations, and re-testing, shall be performed until specified density is obtained.

3.15 EROSION CONTROL

- A. Provide erosion control methods in accordance with requirements of authorities having jurisdiction.

3.16 MAINTENANCE

- A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
- C. Repair edges of existing pavements, sidewalks, etc., and other existing and/or new improvements flush with and to match existing materials and thicknesses, subject to acceptance by Owner and Architect.
- D. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape, and compact to required density prior to further construction.
- E. Settling: Where settling is measurable or observable at excavated areas during general project warranty period, remove surface (pavement, lawn, or other finish), add backfill material, compact, and replace surface treatment. Restore appearance, quality, and condition of surface or finish to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.17 DISPOSAL OF EXCESS AND WASTE MATERIALS

- A. Removal from Owner’s Property:
1. Remove excess and waste materials, including unacceptable excavated material, trash, debris, and waste materials, and legally dispose of off Owner’s property.

END OF SECTION

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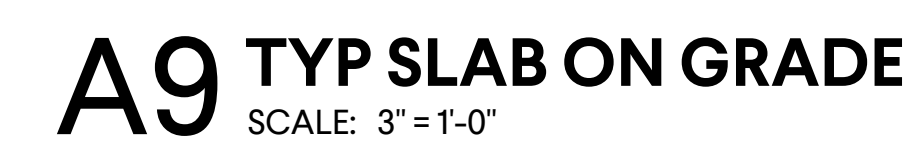
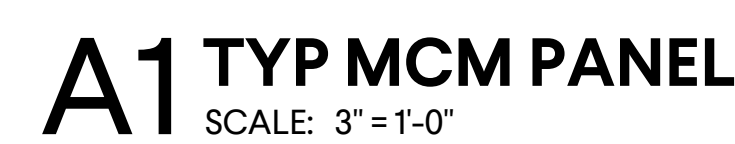
NO.	Asker	Question	ADD #	Response
<i>Questions received during the week of *DATE</i>				
1	BH	Please reference sheet C1.0. Please provide specs, details etc. for the Contech Pedestrian Bridge.	1	Specification to be provided in AD 01.
2	BH	Has any portion of this project been creating in Revit or any other 3D Modeling software? And if so, can the model be provided to the GCs prior to bid for use during the bidding process? Also, can the model be provided to the GC for use during construction and creation of coordination drawings.	1	3D Models will not be available during bidding, but will be provided during construction as requested.
3	BH	Can CAD files for Civil be provided to GCs?	1	CAD files will not be available during bidding, but will be provided during construction as requested.
4	BH	Please reference sheet A5.31 and spec section 057316 Steel Cable Railing System. Lobby Stair A3/A5.31 states R1 Cable Guardrail per Railing Schedule while details for R1 on A1,A4/A5.33 showing 5/8" diameter bar guardrail system. Please advise which railing system is correct steel cable railing or 5/8" diameter bar guardrail system.	1	Steel cable railing is correct. A5.33 to be amended in AD 01.
5	F	Due to this building only being a 2-stop low rise building, will providing a machine roomless hydraulic elevator be acceptable?	1	A machine roomless hydraulic elevator is not accepted.
6	F	Please see attached for substitution request.	1	Anemostat VAV Not Approved
7	F	Can we use type L copper on 2" pipe and smaller instead of schedule 40 black steel pipe?	1	Approved . Dielectric unions required at all connections of dissimilar metals
8	F	What size pipe is going to each chiller 4" or 6"? M5.01 shows 6" and M2.01B shows 4". Please advise.	1	Install per M2.01B
9	F	Please see attached for substitution request.	2	Substitution requests will be outlined in AD 02.
10	F	Please see attached explaining RFI for ACM Panels. The architect has these panels at over 5'-1" vertical centers and over 6'-0" horizontal centers. The absolute maximum width for an ACM panel is 4'-11 1/4" in one direction; meaning the panel can exceed the 4'-11" in one direction but not both directions. A 4'-11" x 15'-11" is possible, but a 5'-0" x 5'-0" or a 6'-0" x 8'-0", or etc. panel is not possible due to sheet/CNC/fabrication limitations.	1	ACM Panel layout has been modified on A4.01 to meet industry standards for manufacturing. CW mullion layout has also been revised on A6.11. Joint width on the wall sections can be disregarded. A standard joint width is acceptable to be used throughout.
11	BH	May the AISC Certification be omitted as mentioned in section 051200 Structural Steel Framing?	2	This requirement can be omitted with 5 years of experience of similar sized projects.
12	BH	Continuous Footing on Frame Line C is noted at 1/S3.01, but scales out to be 3-0 wide. Same for Frame Line 6/J intersection continuing around to Frame line G/7 interaction.	2	Footing is 30" wide. The 36" wide footing shown on plan is a modeling error and will be corrected in model prior to being shared during construction.
13	BH	AED cabinets are referenced in spec section 10 4300 but their locations are not in the drawings. Please advise on cabinet locations and quantity.	2	2 AED Cabinets are required. Locations to be coordinated with owner during construction.
14	BH	On detail 3/S3.07, it shows HSS tube steel between the joints. Should this be used as a typical detail between all joists bearing on wide flange beams or just at grid line 6?	2	Detail applies only to gridline 6.

Pre-Bid RFI Log

NO.	Asker	Question	ADD #	Response
15	BH	In General notes on page G1.02, 5.01 mentions that all embedded steel and edge angle is to be hot dipped galvanized. Is this correct? This would include all composite slab edge angle, deck edge angle, and every embed or bearing plate on this job. This will impact certain embed plates that require welded connections, please advise.	2	Only exposed steel is required to be galvanized.
16	BH	Note on addendum 1, sheet C1.0 states foundation for bridge to be by contractor. If we are to be responsible for foundation design it will be required prior to bid geo tech foundation recommendations, borings at the bridge construction and recommended foundation bearing capacity by geo-tech and/or the project's <u>engineer of record</u> .	2	The bridge contractor shall be responsible for the design. The geotechnical information provided in the geotechnical report can be utilized as a basis of design, but the bridge contractor will need to confirm all site conditions with their own geotechnical report during construction.
17	BH	Spec Section 323413 Fabricated Pedestrian Bridge, item 1.05 requires a bridge mock up. <u>May this requirement be omitted?</u>	2	This requirement may be omitted.
18	BH	We understand that the areas highlighted in GREEN on the attached sheet C1.0 document will be the entire project limits for our work. The GC will have access to all parking lots, roadways, etc. within the limits for the complete duration of the project and no access to the parking lots by the owner or owner access to other areas within the GREEN highlighted area and no phasing requirements. If the comments and highlighted plan attached are not correct, please provide a project limit drawing and/or phasing plan. (see file saved)	2	See updated C1.1 Site Phasing plan in AD 02.
19	BH	Please reference Sheet C0.3. Will the existing Disc Golf targets noted for removal be removed by owner or GC? If removed by GC are we dispose of the items or hand over to owner? If handed over to owner will owner come pick up at job site or will we have to deliver to a location and if GC delivers, how far?	2	Owner will remove these baskets. Scope has been removed from the demo plan in AD 02.
20	F	In General notes on page G1.02, 5.01 mentions that misc. embedded steel including edge angle and embedded plate is to be hot dipped galvanized. Can you please verify what this is including?	2	Refer to RFI 15.
21	F	Are we to figure a Schluter nosing for the hard tile treads at monumental stairs? If so, please clarify which one.	2	A schulter nosing will not be required. See updated finish legend in AD 02 for direction regarding a grooved nosing in the tile.
22	BH	General note 8.1 on sheet S1.01 calls for slab on grade concrete to be 3500psi. Spec section 033010, 2.05, 2a calls for slabs on grade for exposed concrete to be 4000psi. Please clarify which is correct.	2	3500 psi is correct.
23	F	There is a spec section for impact security windows but there does not seem to be any in the drawings. Please confirm that there are no impacted rated windows.	2	This section may be omitted.
24	F	Where can Cherokee Sedge Seed be found and how many lbs per acre is needed for this project?	2	This has been replaced in AD 02. See updated planting schedule.

Pre-Bid RFI Log

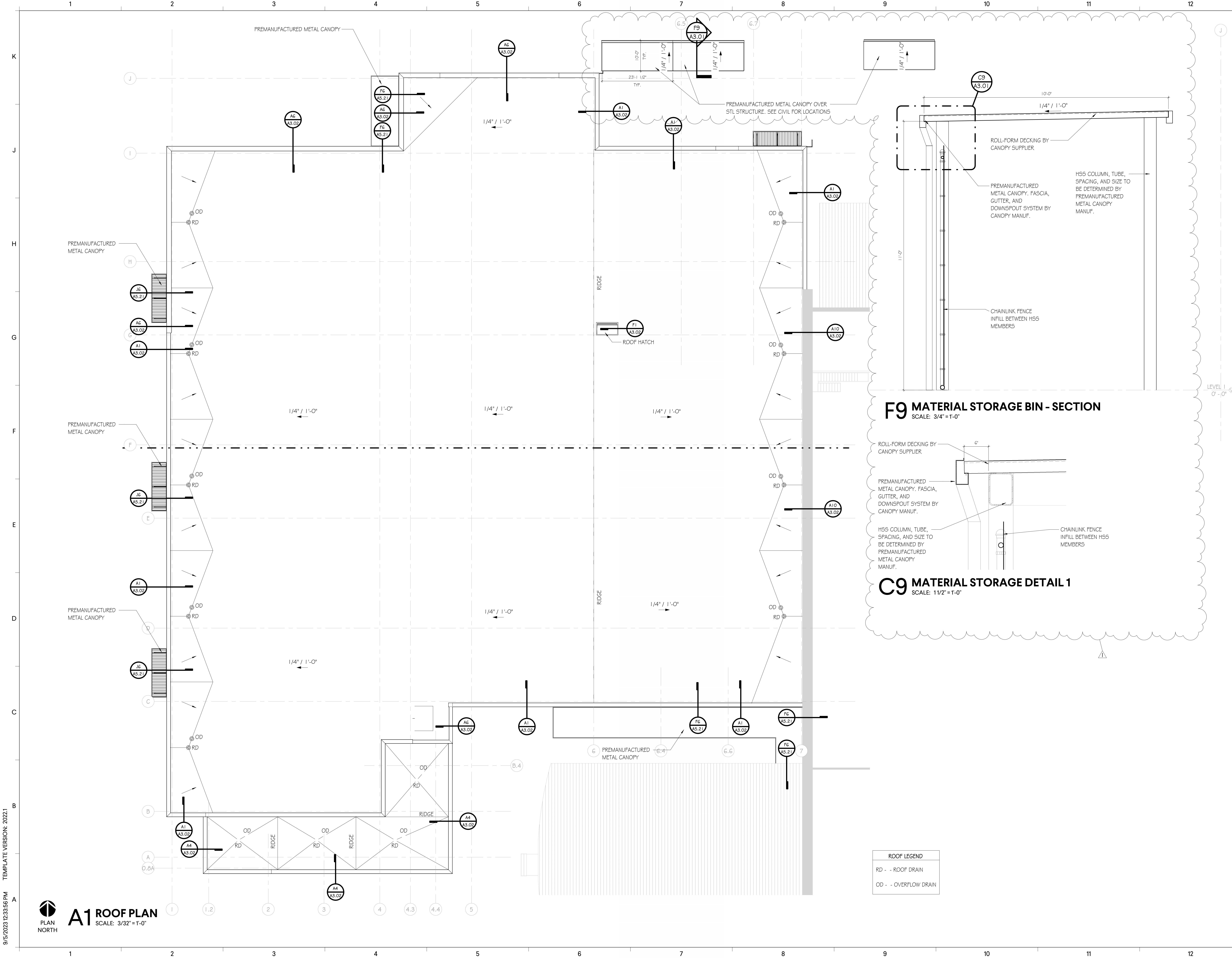
NO.	Asker	Question	ADD #	Response
25	F	What type of ductwork (single wall or double wall, liner thickness for both round and rectangular) is expected for the exposed areas. Also, can we use industry standard for single wall fittings, not welded (both round and rectangular)?	2	Exposed ductwork needs to be double walled with 1.5" liner. Industry standard is acceptable for single wall fittings.
26	F	Detail 1/S3.01 shows the following in the descriptions. 8" - 18GA metal stud framing 16" o.c. (600S200 - 43 or equal) Please confirm that it should be: (or not) 8" - 18GA metal stud framing 16" o.c. (800S200 - 43 or equal)	2	800S200-43 or equal is correct.
27	F	Addendum 1 references the wet well depth changing, but the elevations are the same. Please advise.	2	Elevations are correct in AD 01.
28	F	Per architectural RCP ceiling plan in the finish legend is ACB-1 Turf Straight Blades, but none are called out within the drawings. Are these to be involved in a specific area and if so, will you be providing an updated drawing to show where they are to be located?	2	See drawings. ACB-1 baffles are called out on RCP sheets A2.01 and A2.02.
29	F	The specs call for type 4 membrane which is hot applied, but typically type 4 is not used where there are turn-up sections. Please confirm type 4 is wanted at the turn up areas, and if not then what type of membrane is wanted there? Please provide a list of manufacturers.	3	Roof parapet details to be revised in AD 03 on 09.05.2023.
30	BH	Are we required to only use Ready Mix USA?	3	No. It can be an approved equal.



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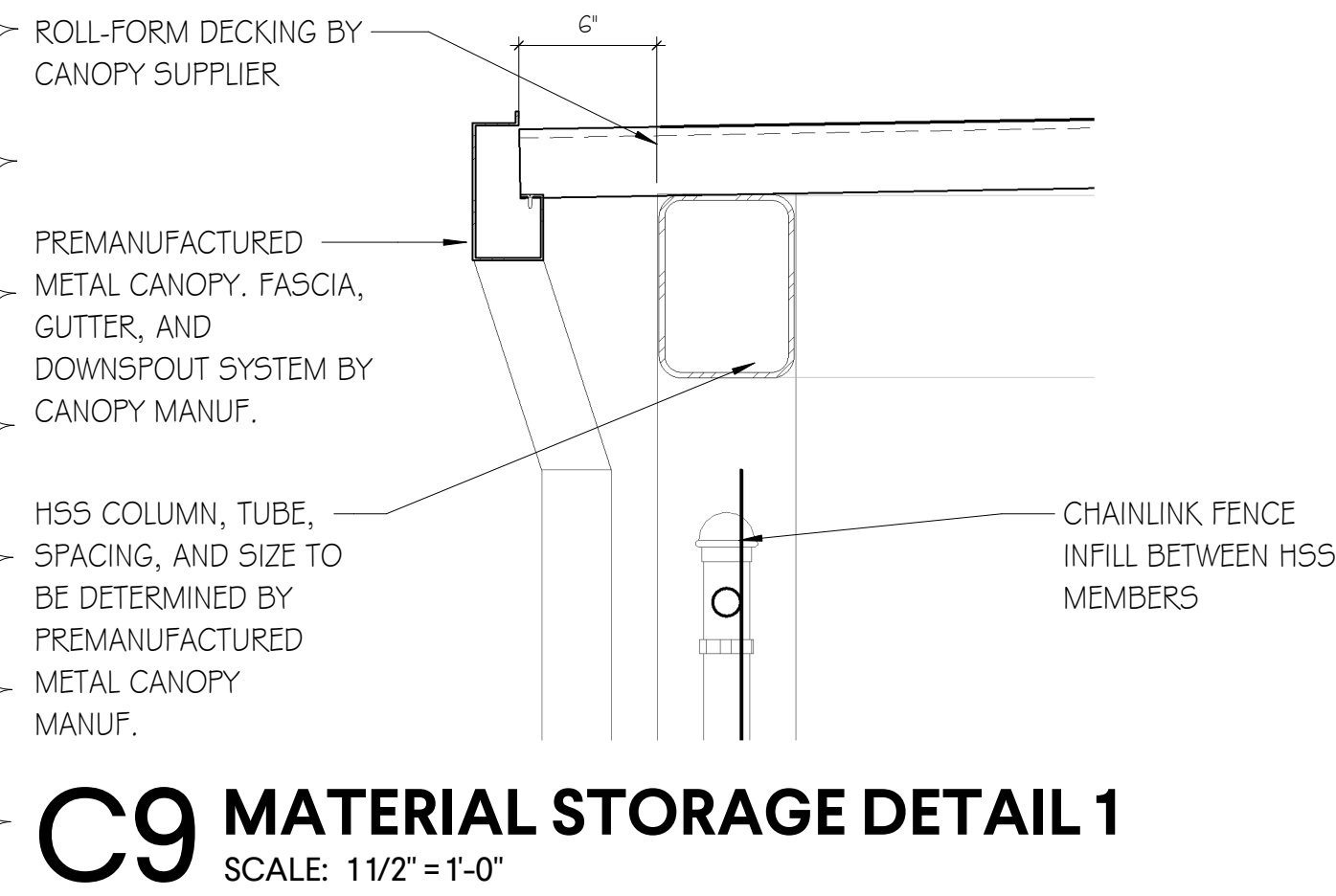


A1 ROOF PLAN
SCALE: 3/32"=1'-0"

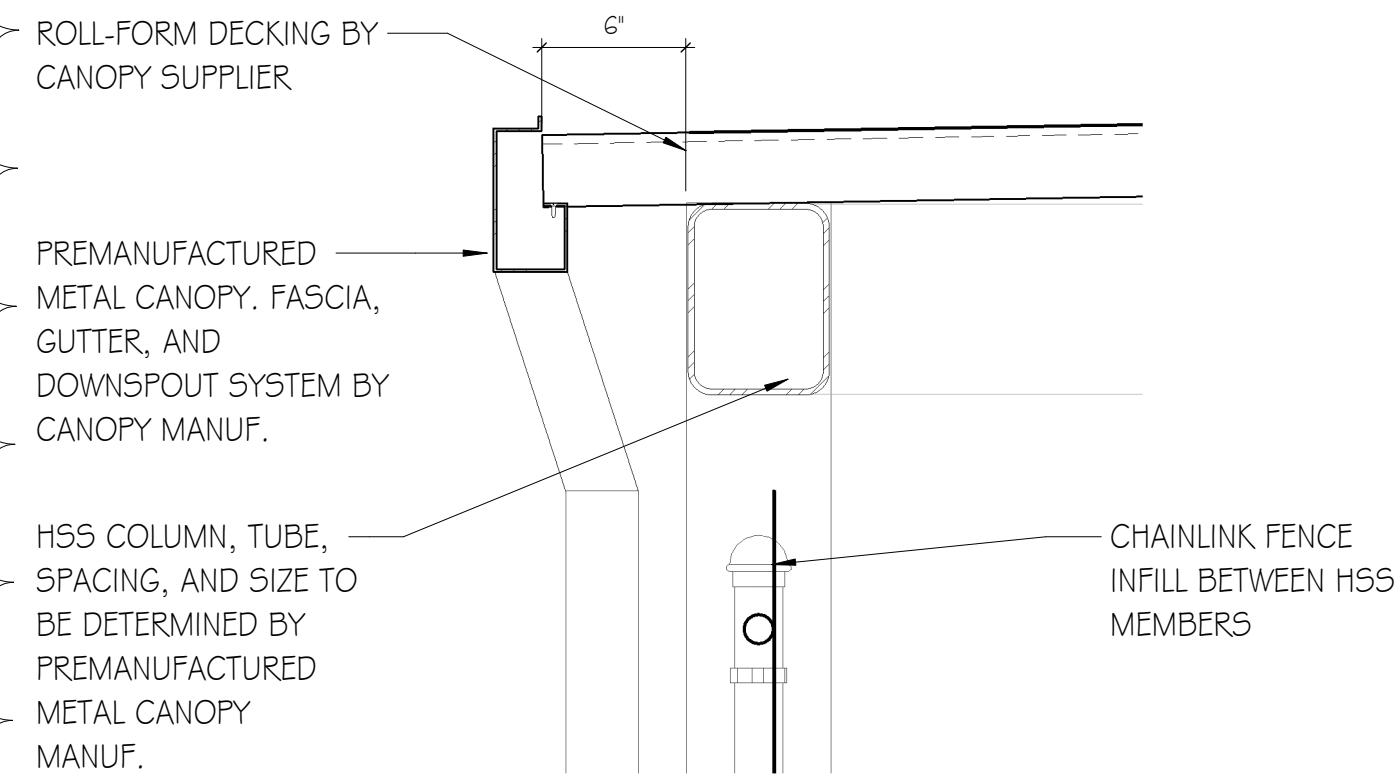


ROOF LEGEND	
RD -	ROOF DRAIN
OD -	OVERFLOW DRAIN

F9 MATERIAL STORAGE BIN - SECTION
SCALE: 3/4"=1'-0"



C9 MATERIAL STORAGE DETAIL 1
SCALE: 11/2"=1'-0"



ROOF PLAN

CALHOUN COMMUNITY COLLEGE WORKFORCE SKILLS TRAINING CENTER

ISSUE DATE

IFB SET 08.14.2023

AD 03 09.05.2023

