

NEW AMPHITHEATER CANOPIES FOR THE
Transylvania County Library
BREVARD, NORTH CAROLINA

GENERAL NOTES:

1. REMOVE ALL GRASS AND ORGANIC MATERIALS IN EXCAVATED AREAS REQUIRED TO PROVIDE NEW CONCRETE SLABS AND SITE GRADING TO PROVIDE POSITIVE DRAINAGE TO CATCH BASINS/DROP INLETS. ALL EXCESS DIRT IS TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND DISPOSED OF PROPERLY. ANY FILL DIRT REQUIRED IS TO BE PROVIDED BY THE CONTRACTOR. OWNER TO DIRECT CONTRACTOR TO BORROW AREAS.
2. GC TO COORDINATE ALL WORK ON THE SITE TO INSURE THAT SOIL IS NOT DISTURBED UNNECESSARILY DURING VARIOUS EXCAVATION ACTIVITY. WATER TABLE IS RELATIVELY HIGH AND CAN RESULT IN DAMAGE TO SUB-GRADE IF EXCESSIVE ACTIVITY IS NOT CONTROLLED.
3. ALL GRADES SHALL SLOPE AWAY FROM BUILDING A MINIMUM OF 6" IN TWELVE FEET AND TO CATCH BASINS/DROP INLETS TO PROVIDE POSITIVE DRAINAGE.
4. ALL COLUMN FOOTINGS SHALL BE PROVIDED BY THE CANOPY/SHELTER VENDOR (CAROLINA RECREATION & DESIGN - ICON UNDER A DESIGNATED DESIGN REQUIREMENT). A SOIL BORING REPORT HAS BEEN PROVIDED BY THE OWNERS AND IS INCLUDED IN THE PROJECT MANUAL TO ASSIST WITH INFORMATION REGARDING SITE SOIL CONDITIONS.
5. CONTRACTOR SHALL VERIFY NEW CONSTRUCTION LOCATIONS WITH OWNER AND ARCHITECT PRIOR TO COMMENCEMENT OF ANY WORK. CONSULT ARCHITECT/OWNER WITH ANY CONFLICTS AND/OR VARIATIONS TO BE BEFORE PROCEEDING.
6. AT THE COMPLETION OF CONSTRUCTION, REFORM ALL FINISH GRADE LINES AS REQUIRED TO INSURE GOOD DRAINAGE WITHOUT PUDDLING OR PONDING AREAS. SPREAD EXCESS TOPSOIL AS DIRECTED BY ARCHITECT TO BLEND NEW GRADE INTO EXISTING GRADES AND RESEED AREA DISTURBED DURING CONSTRUCTION.
7. ANY SPOT AND/OR GRADE LINE ELEVATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY CONTRACTOR.
8. CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS. CONSULT ARCHITECT FOR ANY CONFLICTS.
9. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE DELIVERING OF MATERIALS AND THE WORK OF ALL SUBCONTRACTORS.
10. GENERAL CONTRACTOR IS RESPONSIBLE FOR OBTAINING SMOOTH TRANSITIONS BETWEEN ALL CONCRETE WORK. ABRUPT CHANGES IN CONCRETE FINISHES WILL NOT BE ACCEPTABLE. ANY AND ALL WORK IS REQUIRED TO PRODUCE A SMOOTH TRANSITION AND WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
11. ALL UL DESIGN NUMBERS ARE TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE UNDERWRITERS LABORATORY FIRE RESISTANCE DIRECTORY.
12. THE DESIGN INTENT OF THE CONSTRUCTION DRAWINGS AND PROJECT MANUAL IS TO COMPLY WITH ALL BUILDING CODES OR ORDINANCES THAT HAVE JURISDICTION OVER THIS PROJECT. CONTRACTOR IS TO CONSULT WITH OWNER/ARCHITECT REGARDING ANY PORTIONS OF THE DOCUMENTS THAT DO NOT COMPLY WITH SUCH CODES OR ORDINANCES.
13. GC IS CAUTIONED TO COORDINATE WITH ALL SUBCONTRACTORS AND REVIEW ALL STRUCTURAL DRAWINGS THAT ARE PROVIDED BY CAROLINA RECREATION & DESIGN - ICON.
14. NO SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE GENERAL CONTRACTOR. SHOP DRAWINGS ARE TO BE SIGNED AND STAMPED WITH THE GC APPROVED SEAL. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS SHALL BE RECTIFIED BY THE GC, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY ARCHITECT REGARDLESS IF WORK HAS BEEN COMPLETED IN ACCORDANCE WITH SUCH DRAWINGS.



APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS

Name of project: CANOPY/SHELTERS FOR THE TRANSYLVANIA COUNTY LIBRARY
Address: 212 S. GASTON ST., BREVARD, NC 28712
Proposed Use: CANOPY/SHELTER STRUCTURE
Owner/Agent: MR. LARRY REESE Phone: 828.883.8765
Owned By: ☒ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☒ City BREVARD ☒ County TRANSYLVANIA

LEAD DESIGN PROFESSIONAL:

DESIGNER	FIRM NAME	DESIGNER'S NAME	LICENSE#	TELEPHONE#
Architectural	RICHARD L. WORLEY, AIA	RICHARD L. WORLEY	3600	828.881.7389
Civil	N/A	N/A	N/A	N/A
Electrical	SIMS GROUP, PC	DEREK STEWART	42145	828.251.2025
Fire Alarm	N/A	N/A	N/A	N/A
Plumbing	N/A	N/A	N/A	N/A
Mechanical	N/A	N/A	N/A	N/A
Sprinkler	NA	NA	NA	NA
Structural	DELEGATED DESIGN	TBD	TBD	TBD
Ret. Walls > 5'	NA	NA	NA	NA
Other	NA	NA	NA	NA

YEAR EDITION OF CODE: NC BUILDING CODE 2018
☒ New Construction ☐ Renovation (Existing Bldg) ☐ Upfit ☐ Alteration

BUILDING DATA:

Construction Type: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B
☐ IV ☐ V-A ☒ V-B
Mixed Construction: ☐ No ☐ Yes Types _____

Sprinklers: ☒ No ☐ Yes ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ☒ No ☐ Yes ☐ CLASS I ☐ CLASS II ☐ CLASS III ☐ WET ☐ DRY
Fire District: ☒ No ☐ Yes
Building Height: 20 ft. No. of Stories: 1 ☐ Unlimited per N/A
Mezzanine: ☒ No ☐ Yes IN EXISTING BUILDING
High Rise: ☒ No ☐ Yes Central Reference Sheet # (if provided) N/A

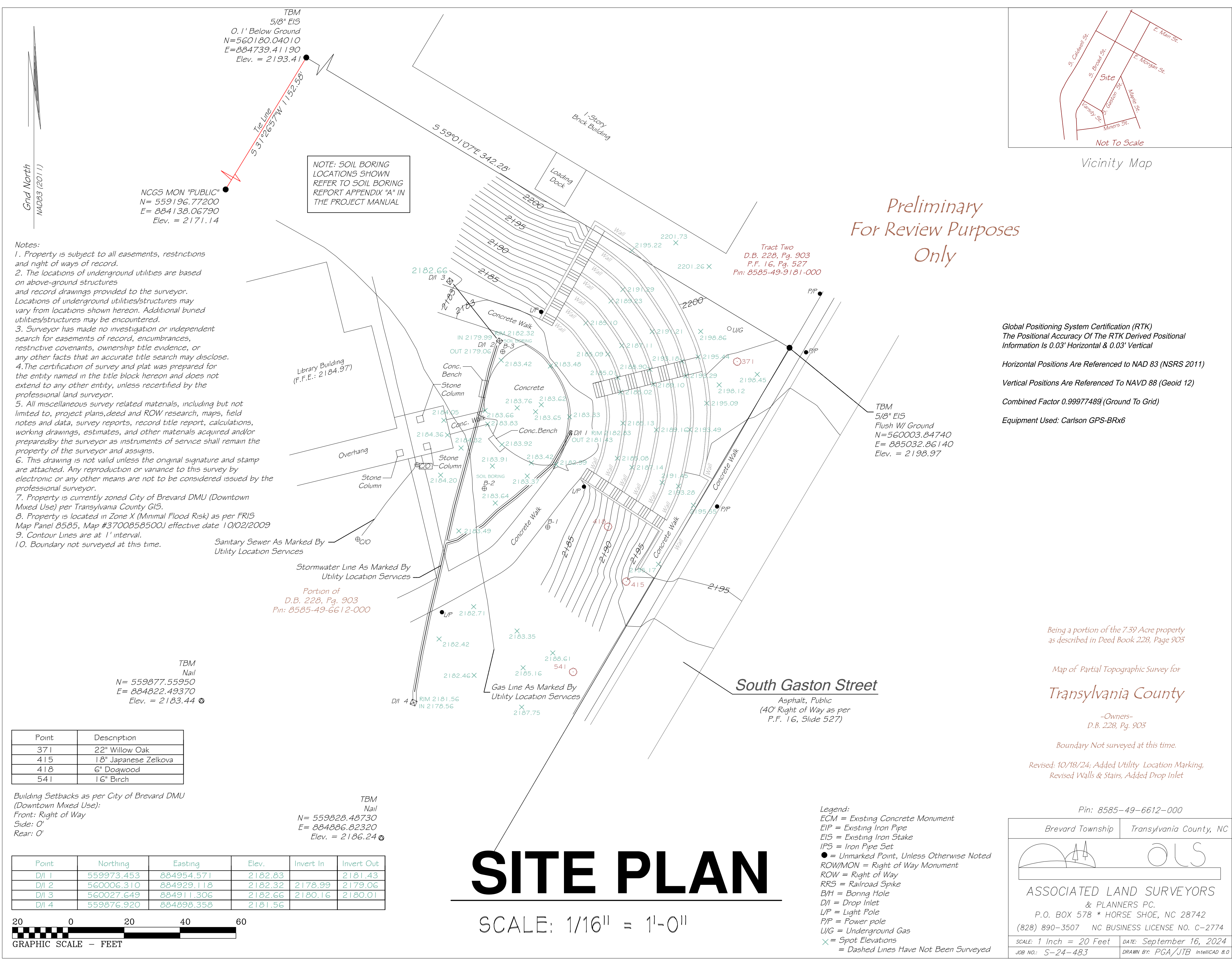
Gross Building Area:

Floor	Existing (Sq.Ft.)	New (Sq.Ft.)	Sub-Total
4th Floor	N/A	N/A	N/A
3rd Floor	N/A	N/A	N/A
2nd Floor	N/A	N/A	N/A
Mezzanine	N/A	N/A	N/A
1st Floor	N/A	1,428	1,428
Basement	N/A	N/A	N/A
TOTAL :	N/A	1,428	1,428

DRAWING INDEX

- TS TITLE, GENERAL NOTES & APPENDIX "B"
C1 SITE SURVEY
A1 DEMOLITION/FOUNDATION/DRAINAGE PLAN
A2 CONCRETE PLAN & DETAILS
A3 ROOF PLAN, DETAILS & CANOPY NOTES
E101 ELEC - PARTIAL SITE PLAN - POWER
E102 ELEC - PARTIAL SITE PLAN - LIGHTING
E201 ELEC - SCHEDULES AND LEGEND
E301 ELEC - SPECIFICATIONS/REQUIREMENTS





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EARTHWORK NOTES:

- A SOILS REPORT FROM S&ME [DATED 09/05/23] IS INCLUDED IN THE PROJECT MANUAL AS APPENDIX "A". ALL FOUNDATION AND SUBSURFACE IMPROVEMENTS ARE REQUIRED TO SUPPORT THE CANOPY STRUCTURES, SLABS, DRAINAGE DEVICES, ETC. AS INDICATED ON THE CONSTRUCTION DRAWINGS. CAROLINA RECREATION & DESIGN IS RESPONSIBLE AS DESIGNATED DESIGNERS (REGISTERED NC STRUCTURAL ENGINEERS - SEE PROJECT MANUAL) TO PROVIDE STRUCTURAL DESIGN FOR THE CANOPY STRUCTURES IN STRICT ACCORDANCE WITH THE SOILS REPORT. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING OF ALL WORK INCLUDED BUT NOT LIMITED TO THE STRUCTURAL ENGINEERING TO ACHIEVE ADEQUATE FOUNDATION/SUBSURFACE IMPROVEMENTS.
- CLEARING AND GRUBBING AREA IS LIMITED AND CONSISTS OF CLEARING GRASS AND SOIL AS REQUIRED TO ACHIEVE SUB-GRADE TO SUPPORT NEW GRASS AREAS AND CONCRETE SLAB SYSTEMS AS SHOWN ON THE DRAWINGS. SEE PLAN FOR ADDITIONAL INFORMATION.
- TOPSOIL TO BE PROVIDED IN NEW GRASS AREAS.
- STORM DRAINAGE PIPE TO BE PLACED ON A FIRM BOTTOM OF HAND TAMPED SOIL WELL COMPACTED TO SUPPORT PIPE.
- COORDINATE ALL UNDERGROUND UTILITIES AND DOWNSPOUT DRAINAGE, STORM WATER PIPING, CATCH BASINS/DROP INLET, ETC. WITH ALL OTHER TRADES.
- CONTRACTOR IS REQUIRED TO COORDINATE WORK TO INSURE EXISTING DRAINAGE SYSTEM IS FUNCTIONAL. DURING INSTALLATION OF NEW SYSTEM ELIMINATING FLOODING OF THE SITE DURING CONSTRUCTION. TIMING AND ATTENTION TO WEATHER FORECAST IS CRITICAL.
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THIS IS A TEMPORARY SEDIMENT BARRIER PLACED AROUND A STORM DRAIN DROP INLET. THE PURPOSE: TO PREVENT SEDIMENT FROM ENTERING THE STORM DRAINAGE SYSTEM. THE PROTECTION SHOWN IS TO BE APPROVED BY THE CITY OF BREVARD BEFORE PROCEEDING WITH INSTALLATION. OTHER DEVICES MAY BE ACCEPTABLE (SUCH AS FILTREXX INLET PROTECTION) IF APPROVED BY CITY OF BREVARD. IN ANY EVENT, THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL THE INLETS FROM SOIL AND DEBRIS ENTERING THE STORM DRAINAGE SYSTEM UNTIL GRASS HAS BEEN FULLY ESTABLISHED ON THE PROJECT.

INSTALLATION:
- INSTALL ACCORDING TO APPROVED PLAN
- DO NOT INSTALL WHERE VEHICULAR TRAFFIC WILL BE AFFECTED.
- INSTALL AT OR AROUND ALL STORM DRAIN DROP INLETS THAT RECEIVE RUN OFF FROM DISTURBED AREAS
- CONSTRUCT ON NATURAL GROUND SURFACE, EXCAVATED SURFACE OR ON MACHINE COMPACTED FILL.

MAINTENANCE:
- INSPECT, CLEAR AND/OR REPAIR TRAP AT THE END OF EACH WORKING DAY
- DO NOT REMOVE INLET PROTECTION AND WASH SEDIMENT INTO STORM DRAIN
- REMOVE SEDIMENT FROM TRAP AND STABILIZE IT WITH VEGETATION
- REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL ONCE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED.
- APPROPRIATELY STABILIZE ALL BEAR AREAS AROUND INLET.

INLET PROTECTION
NOT TO SCALE

Extension
A Weight
6" 94 Lbs.
12" 188 Lbs.
18" 281 Lbs.

NOTE: EXTENSIONS AS REQUIRED FOR COORDINATION WITH FINAL GRADE AND STORM SEWER PIPING ELEVATIONS.

NOTE: PRE-CAST CONC. BOXES W/ EXTENSIONS AND CAST IRON GRATE STRUCTURES ARE SHOWN AS THE BASIS OF DESIGN. ALTERNATE DESIGN MAY BE SUBMITTED FOR APPROVAL, ASSUMING BASIS OF DESIGN IS MAINTAINED AND STRUCTURES WILL SUPPORT TYPICAL EQUIPMENT AND LIGHT VEHICULAR TRAFFIC.

BOLLARD DETAIL
NTS FOR 12" & 18" DROP INLETS

Notes:
1. Bedding Shall be 6" Cement Stabilized Sand or Select Material.

NOTE: EXACT DIM. TO BE REVIEWED IN SHOP DRAWING PHASE OF THE PROJECT.

6" DIA. SCH. 40 STL. PIPE FILLED W/ 3000 PSI CONC. W/ SLOPED TOP AND SMOOTH YELLOW PLASTIC COVER.

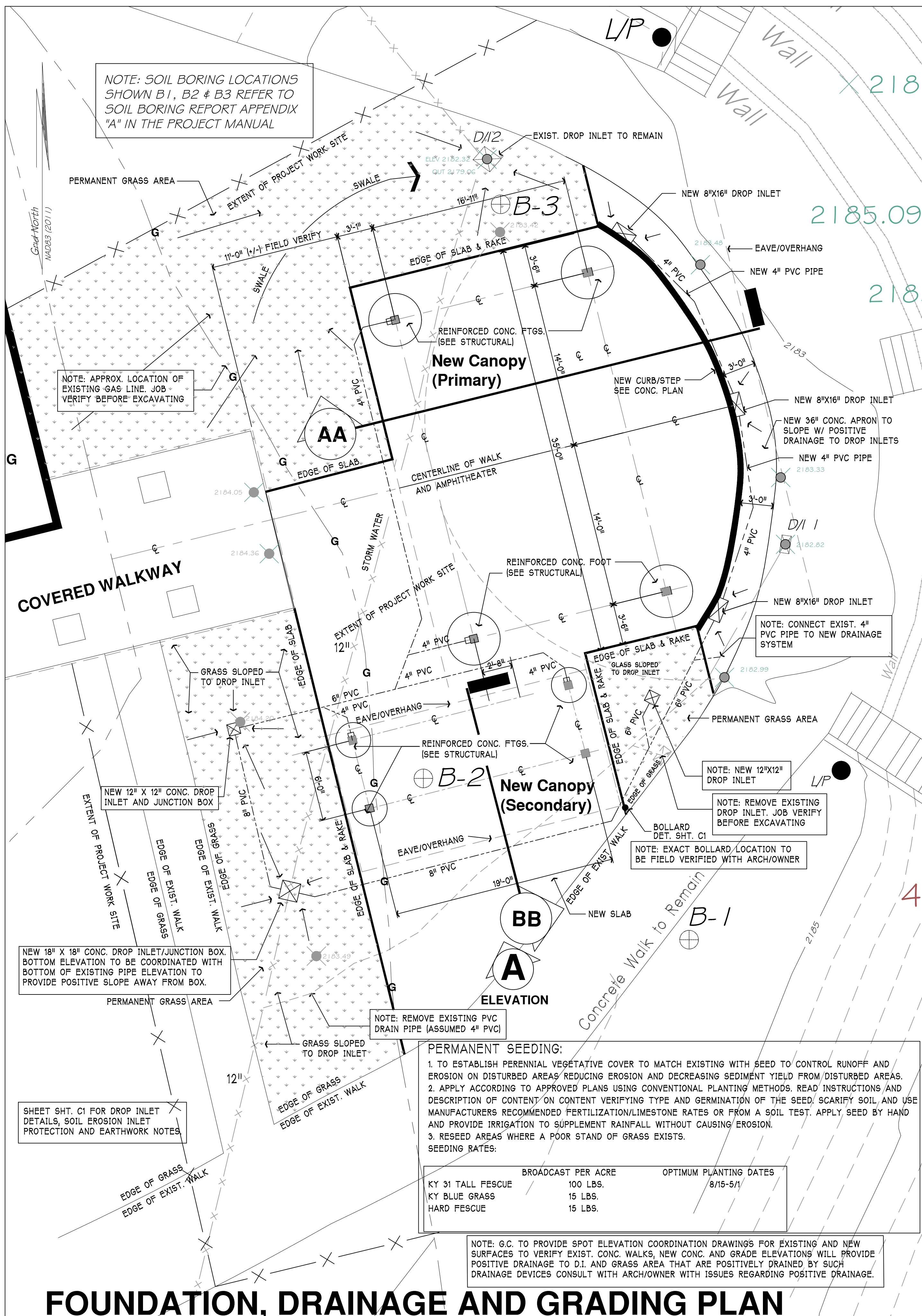
CONC. SLAB ON STONE FILL

3000 PSI CONC.

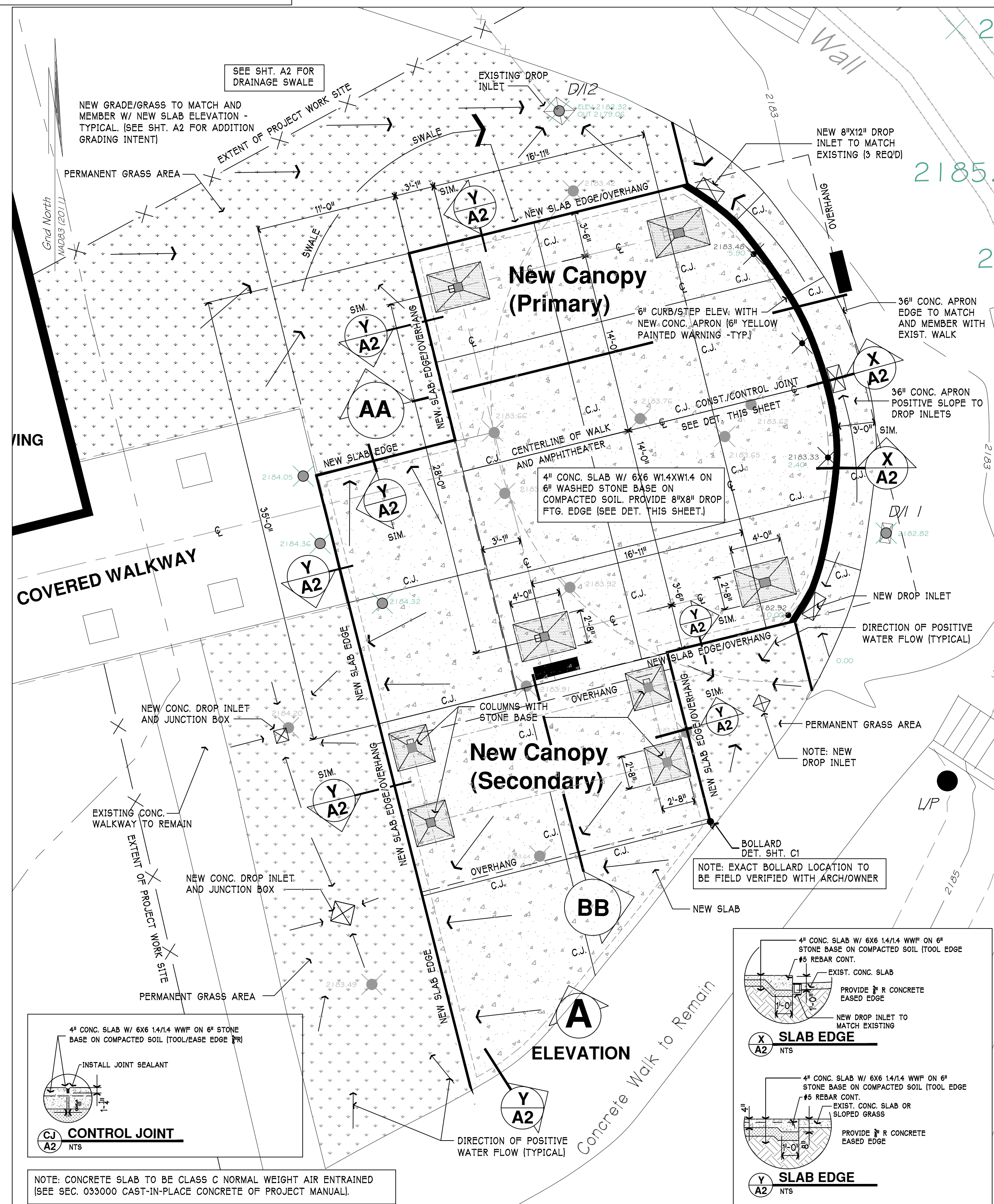
SCALE: 1/2" = 1'-0"

BOLLARD DETAIL
SCALE: 1/2" = 1'-0"

FILE NAME: RLW98.dwg



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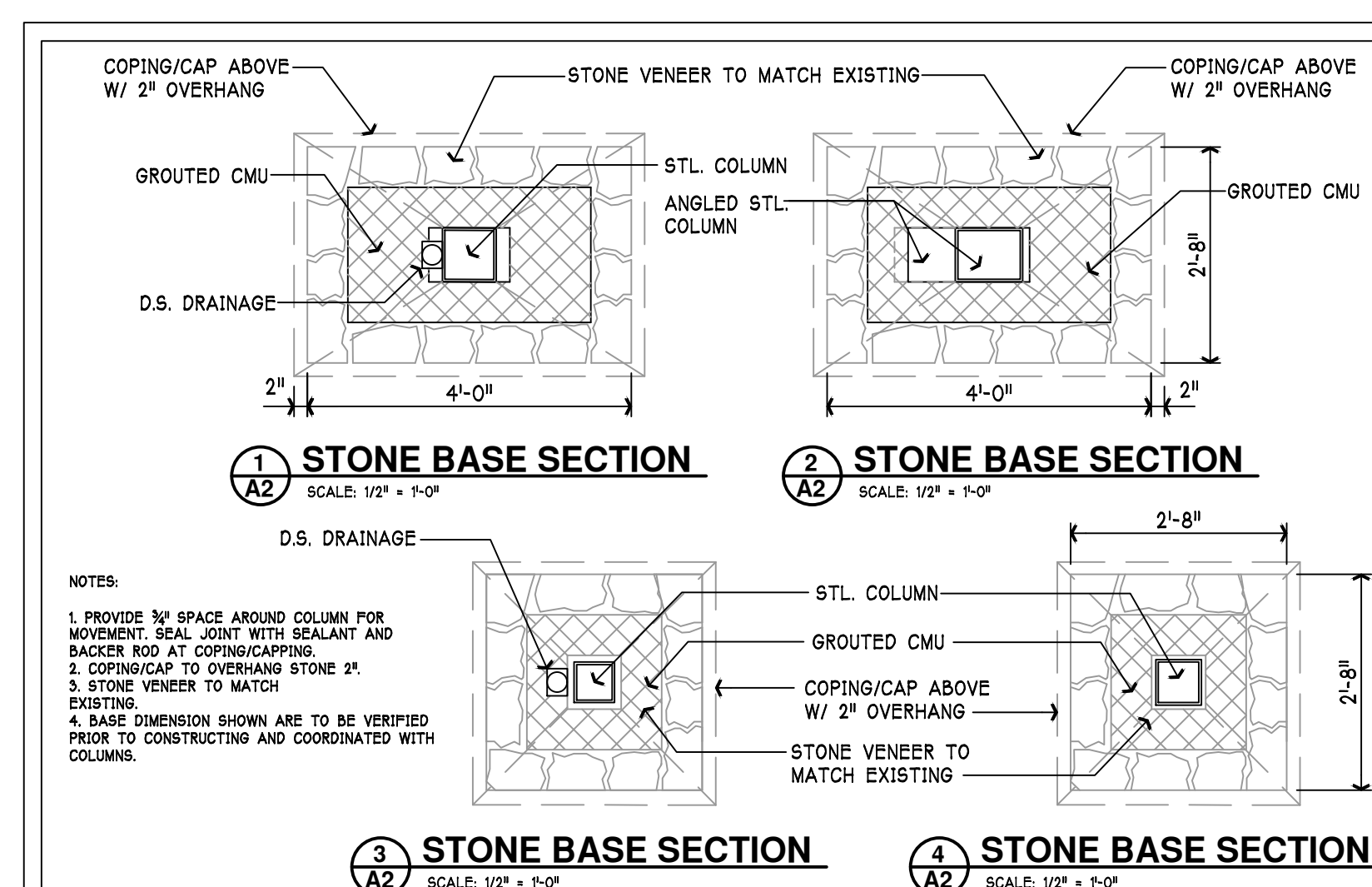
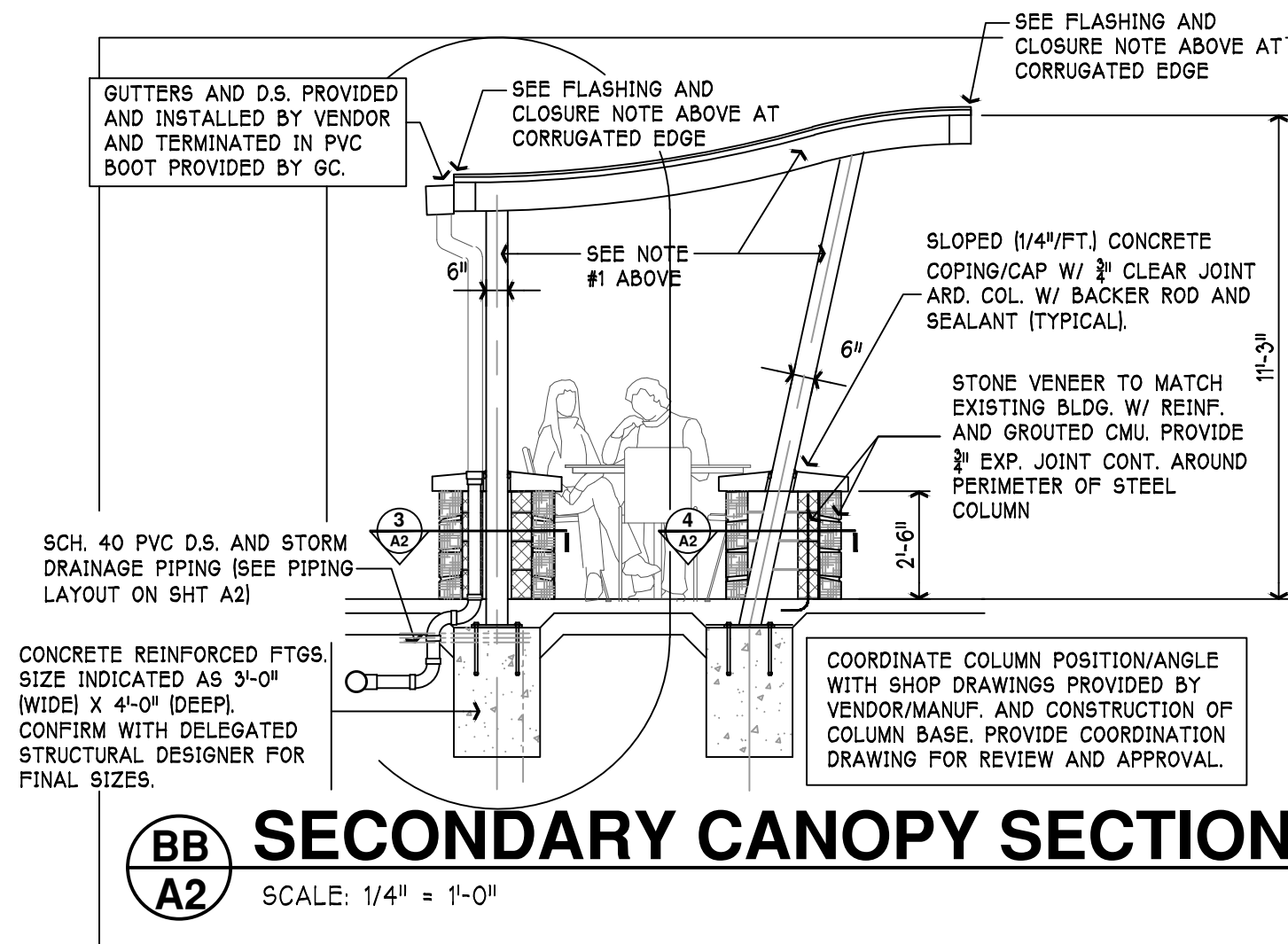
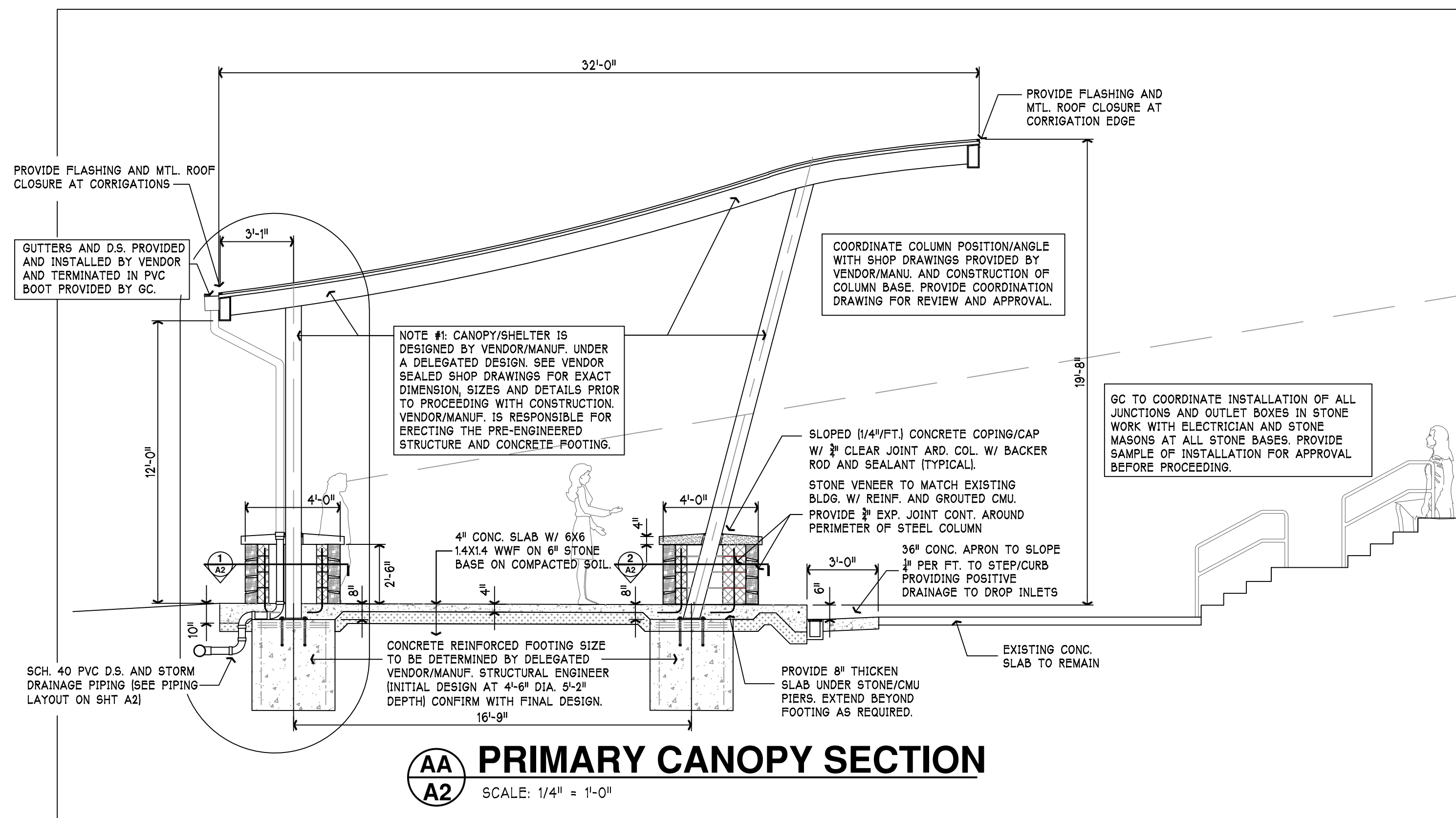
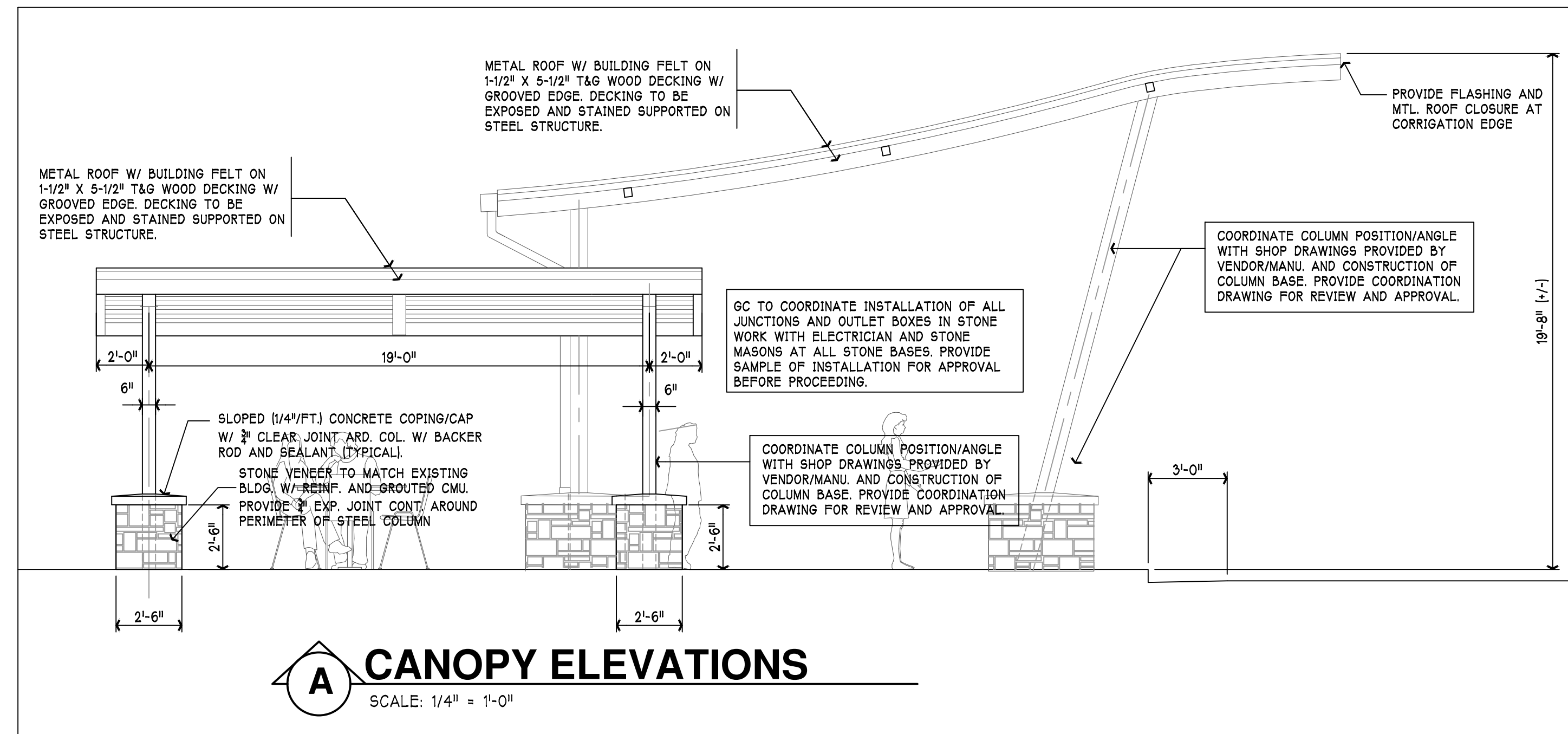


CONCRETE LAYOUT PLAN

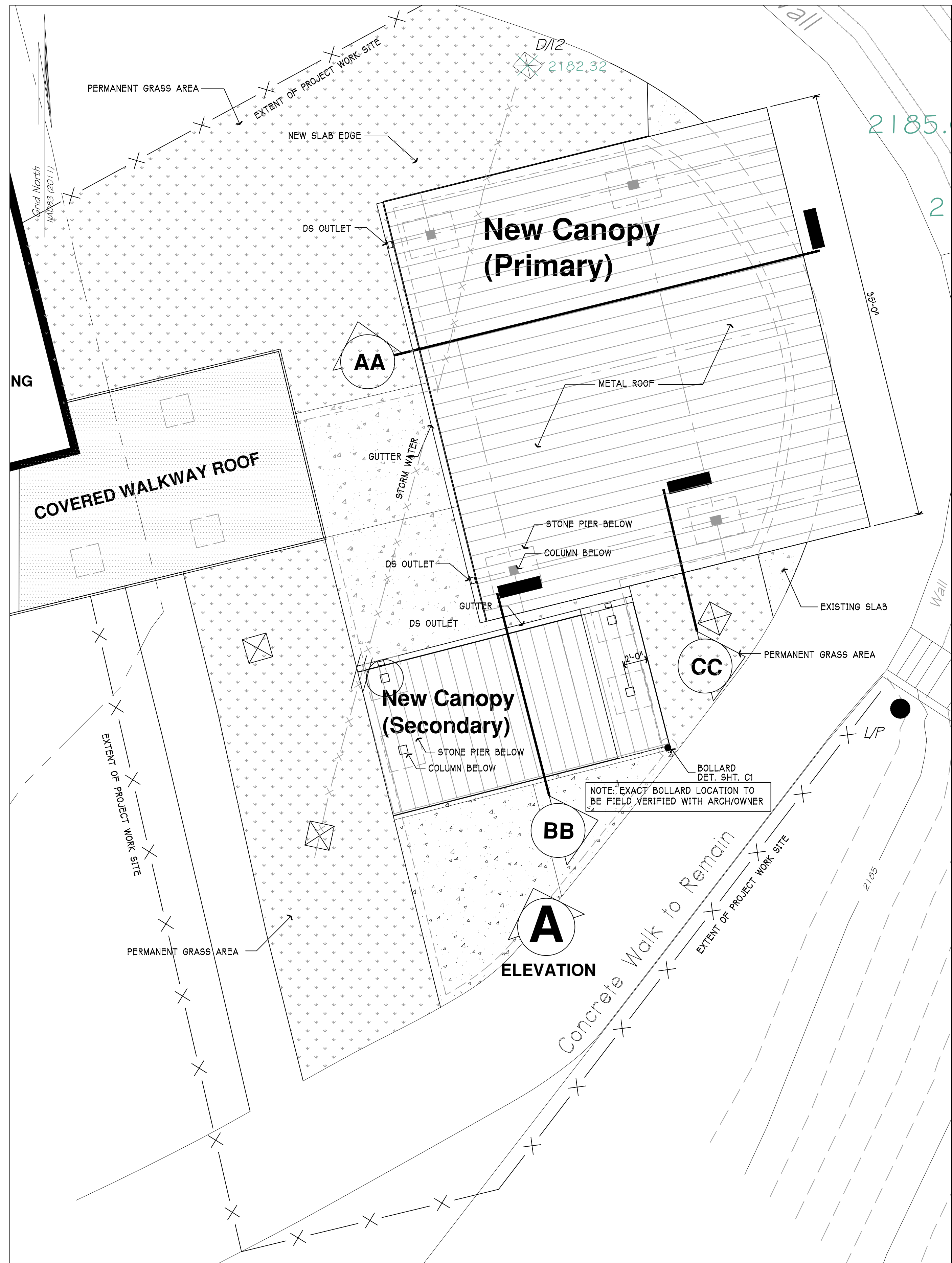
SCALE: 3/16 = 1'-0'

SLAB ELEVATIONS AND GRADING NOTES:

1. SLOPE FOR GRADE AND NEW SLABS ON THIS PROJECT ARE MINIMAL AND WILL REQUIRE EXTREME CARE TO PROVIDE POSITIVE WATER DRAINAGE AS INTENDED.
2. TOPOGRAPHY AND SPOT ELEVATIONS SHOWN ARE APPROXIMATE AND ARE TO BE COORDINATED WITH EXISTING SLABS THAT ARE TO REMAIN AS WELL AS ANY OTHER EXISTING CONDITIONS. GC IS TO VERIFY/CONFIRM THAT FINAL ELEVATIONS PROVIDE POSITIVE WATER DRAINAGE FOR GRADE, SLAB AND DROP INLETS AS INDICATED AND SHOWN WITH ARROWS ON THE DRAWINGS.
3. GC TO PROVIDE SHOP DRAWING SUBMITTAL INDICATING FINAL GRADE AND ELEVATIONS FOR REVIEW BEFORE PROCEEDING WITH WORK ON GRADING AND SLAB ELEVATION WORK.



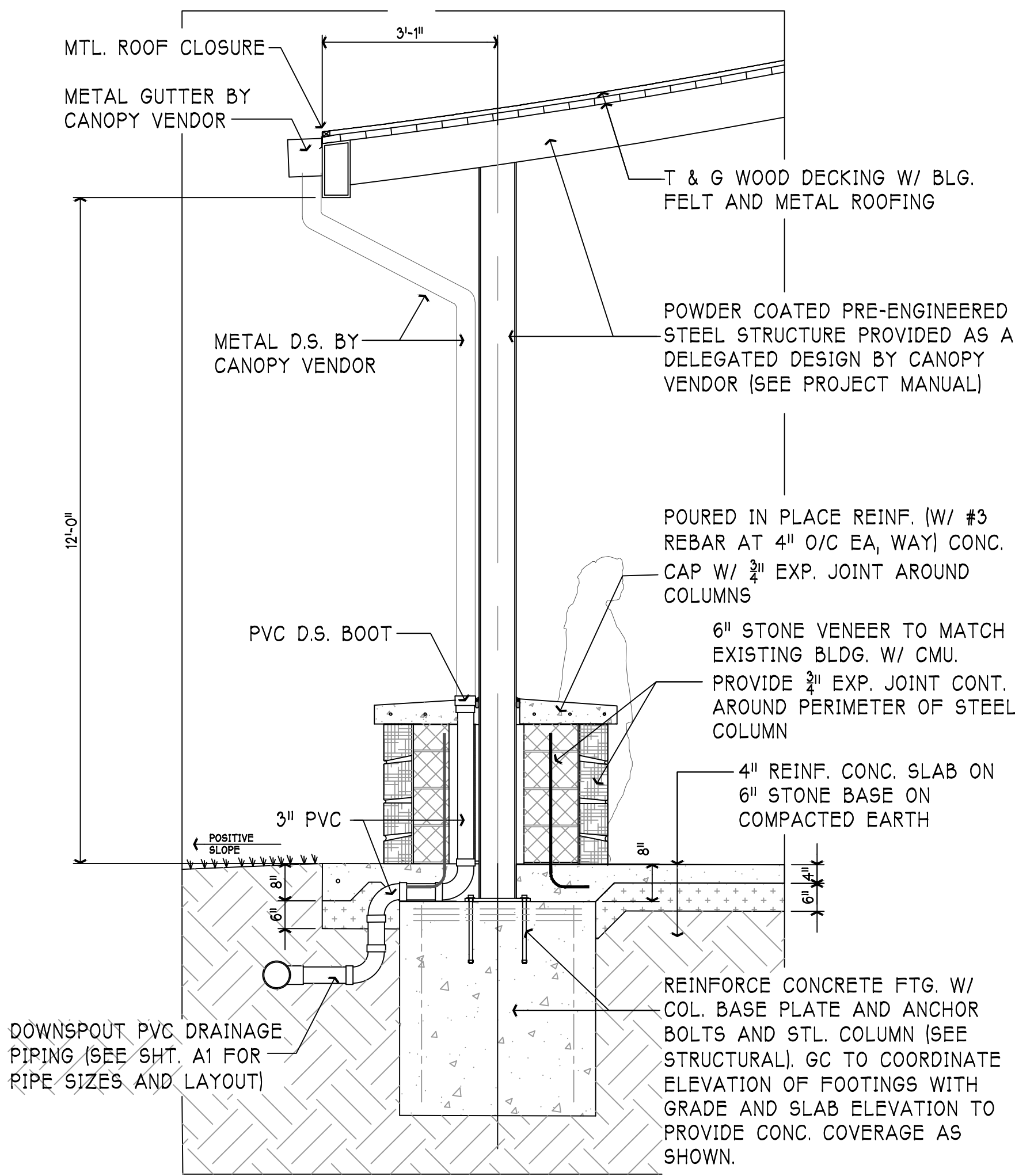
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ROOF PLAN

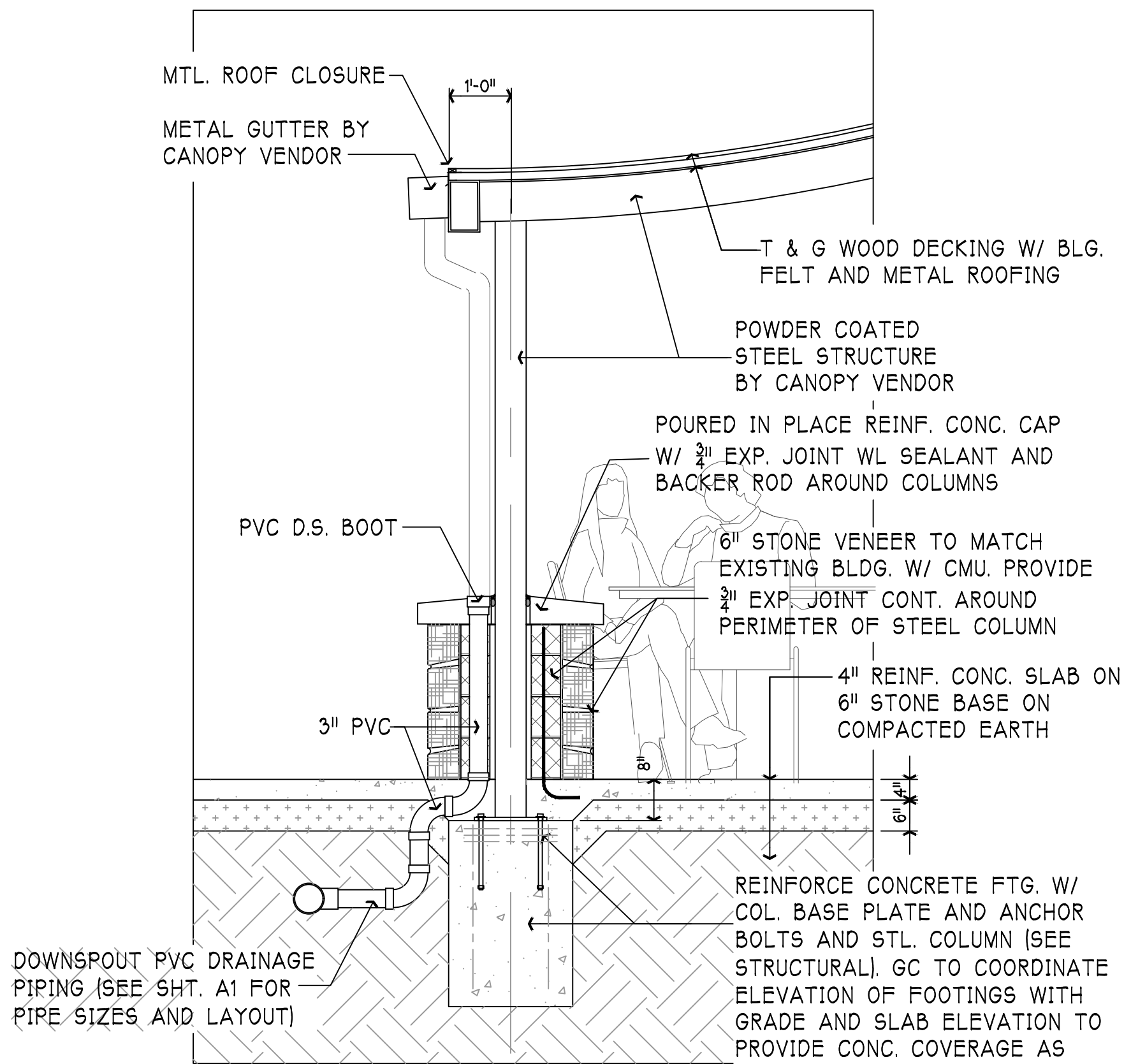
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X A2 COLUMN/BASE SECTION

SCALE: 1/2" = 1'-0"



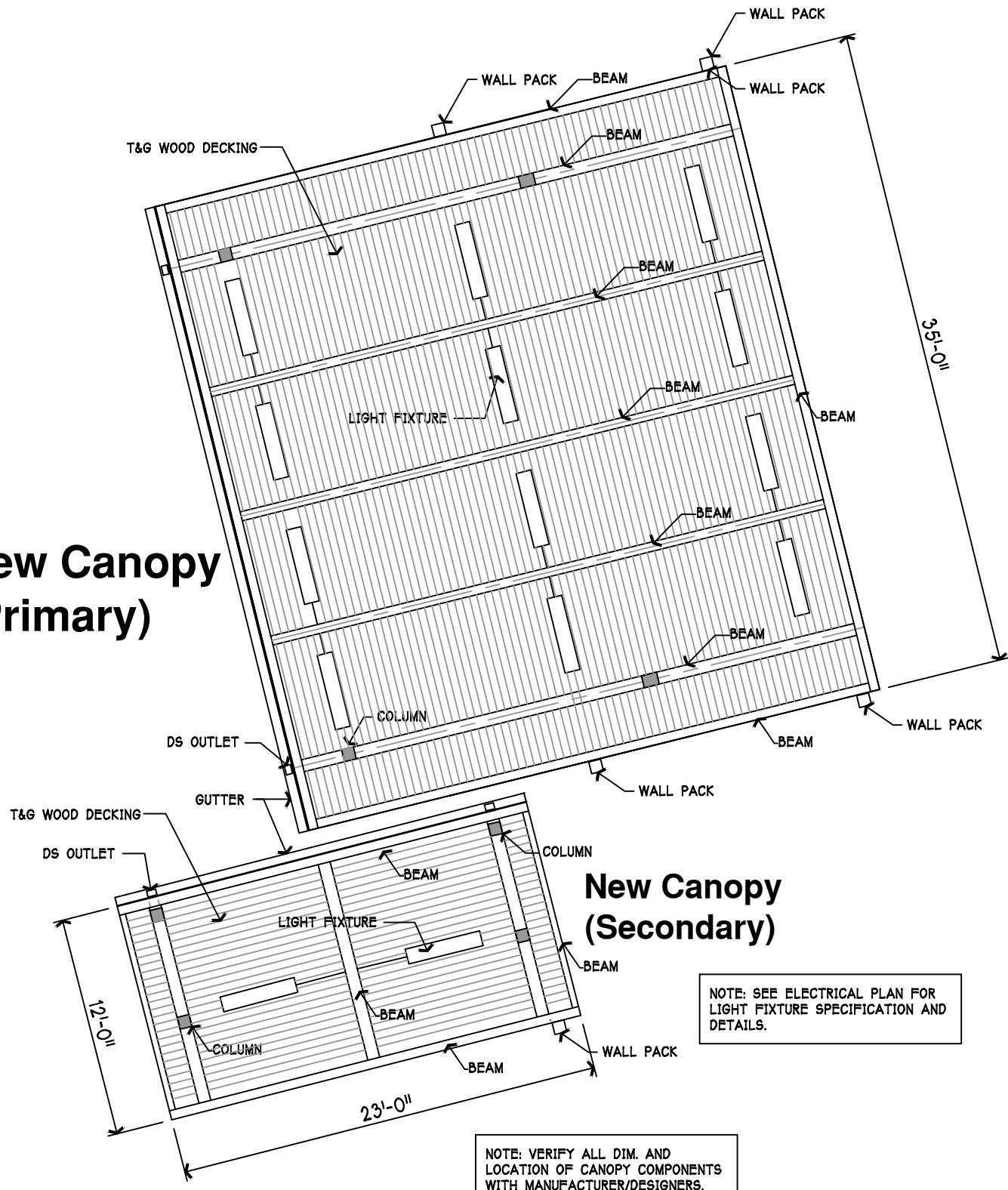
Y A2 COLUMN/BASE SECTION

SCALE: 1/2" = 1'-0"

CANOPY/SHELTERS NOTES:

- CANOPY/VENDOR AND MANUFACTURER (CAROLINA RECREATION & DESIGN - ICON) ARE TO PROVIDE ALL REQUIRED STRUCTURAL ENGINEERING FOR THE CANOPY/SHELTERS UNDER A DELEGATED-DESIGN INCLUDING SIGNED AND SEALED DRAWINGS/SUBMITTALS PREPARED BY A RESPONSIBLE N.C. LICENSED AND INSURED STRUCTURAL ENGINEER. SUBMITTAL IS TO LIST CODES, LOADS AND ANY OTHER FACTORS USED IN PERFORMING THESE SERVICES AS REQUIRED BY THE BUILDING INSPECTION DEPARTMENT (SUCH AS BUT NOT LIMITED TO: CONCRETE STRENGTH, STEEL STRENGTH, CONNECTIONS, FASTENERS, ETC.). DESIGN IS TO INCLUDE STRUCTURE REINFORCED FOOTINGS BASED UPON REQUIRED N.C. BUILDING CODES TAKING INTO ACCOUNT THE SOILS REPORT THAT IS INCLUDED IN THE APPENDIX "A" OF THE PROJECT MANUAL. ALSO SEE PROJECT MANUAL FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- CANOPY/SHELTER VENDOR (CAROLINA RECREATION & DESIGN - ICON) ARE TO PROVIDE THE PRE-MANUFACTURED POWDER COATED STEEL FRAME CANOPY/SHELTER AND CONCRETE FOOTINGS AS INDICATED IN THIS DRAWING PACKAGE. ROOF PROFILE DESIGN TO PROVIDE POSITIVE DRAINAGE OF RAIN WATER WITHOUT PONDING ON THE ROOF. IN ADDITION, THE VENDOR IS TO PROVIDE THE LABOR/ERECTION OF THE STRUCTURE WITH CONCRETE FOUNDATIONS AND MOUNTING OF ALL COMPONENTS THAT ARE PROVIDED BY THIS VENDOR. G.C. IS REQUIRED TO COORDINATE AND SCHEDULE ALL WORK WITH THIS AND OTHER TRADES ON THIS PROJECT.
- CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS AND ELEVATIONS OF STRUCTURAL COMPONENTS WITH VENDOR'S ENGINEER AND SHOP DRAWINGS. CONSULT ARCHITECT FOR ANY CONFLICTS.
- IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE DELIVERING OF MATERIALS AND THE WORK OF ALL SUBCONTRACTORS.
- CONTRACTOR AND VENDORS/SUBCONTRACTORS ARE RESPONSIBLE FOR COMPLYING WITH ALL LOCAL CODES AND ORDINANCES DURING THE CONSTRUCTION OF THIS PROJECT. THE DESIGN INTENT OF THE CONSTRUCTION DRAWINGS AND PROJECT MANUAL IS TO COMPLY WITH ALL BUILDING CODES AND ORDINANCES THAT HAVE JURISDICTION OVER THIS PROJECT. CONTRACTOR IS TO CONSULT WITH OWNER/ARCHITECT REGARDING ANY PORTIONS OF THE DOCUMENTS THAT DO NOT COMPLY WITH SUCH CODES OR ORDINANCES.
- NO SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW UNTIL AFTER THEY HAVE BEEN REVIEWED AND NOTED FOR CONSTRUCTION METHOD, DIMENSIONING AND OTHER TRADE REQUIREMENTS BY THE GENERAL CONTRACTOR. SHOP DRAWINGS ARE TO BE SIGNED AND STAMPED WITH THE GC APPROVED SEAL. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ERRORS OR OMISSIONS AS A RESULT OF CHECKING AND REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS SHALL BE RECTIFIED BY THE GC, IRRESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY ARCHITECT REGARDLESS IF WORK HAS BEEN COMPLETED IN ACCORDANCE WITH SUCH DRAWINGS.
- REFER TO VENDORS SIGNED AND SEALED STRUCTURAL DRAWINGS FOR ALL STRUCTURAL WORK ASSOCIATED WITH FOOTINGS AND CANOPY/SHELTER STRUCTURES.
- REFER TO ELECTRICAL WORK FOR ELECTRICAL POWER/LIGHTING/DATA REQUIREMENTS.
- CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS. CONSULT ARCHITECT FOR ANY CONFLICTS.
- COORDINATE ALL UNDERGROUND UTILITIES AND DOWNSPOUT DRAINAGE, STORM WATER PIPING, CATCH BASINS/DROP INLET, ETC., WITH ALL OTHER TRADES.
- GC TO COORDINATE THE INSTALLATION OF ELECTRICAL PULL WIRES, ELECTRICAL LOW VOLTAGE AND HIGH VOLTAGE WIRING PROVIDED BY THE ELECTRICIAN WITH CANOPY MANUFACTURER/SUPPLIER AND THE VENDORS ERECTION CREW. GC TO REVIEW AND APPROVAL CANOPY SHOP DRAWINGS ALONG WITH OPENINGS IN THE CANOPY STEEL STRUCTURE TO ACCOMMODATE WIRE INSTALLATION WITHIN THE STRUCTURAL TUBING.

New Canopy (Primary)



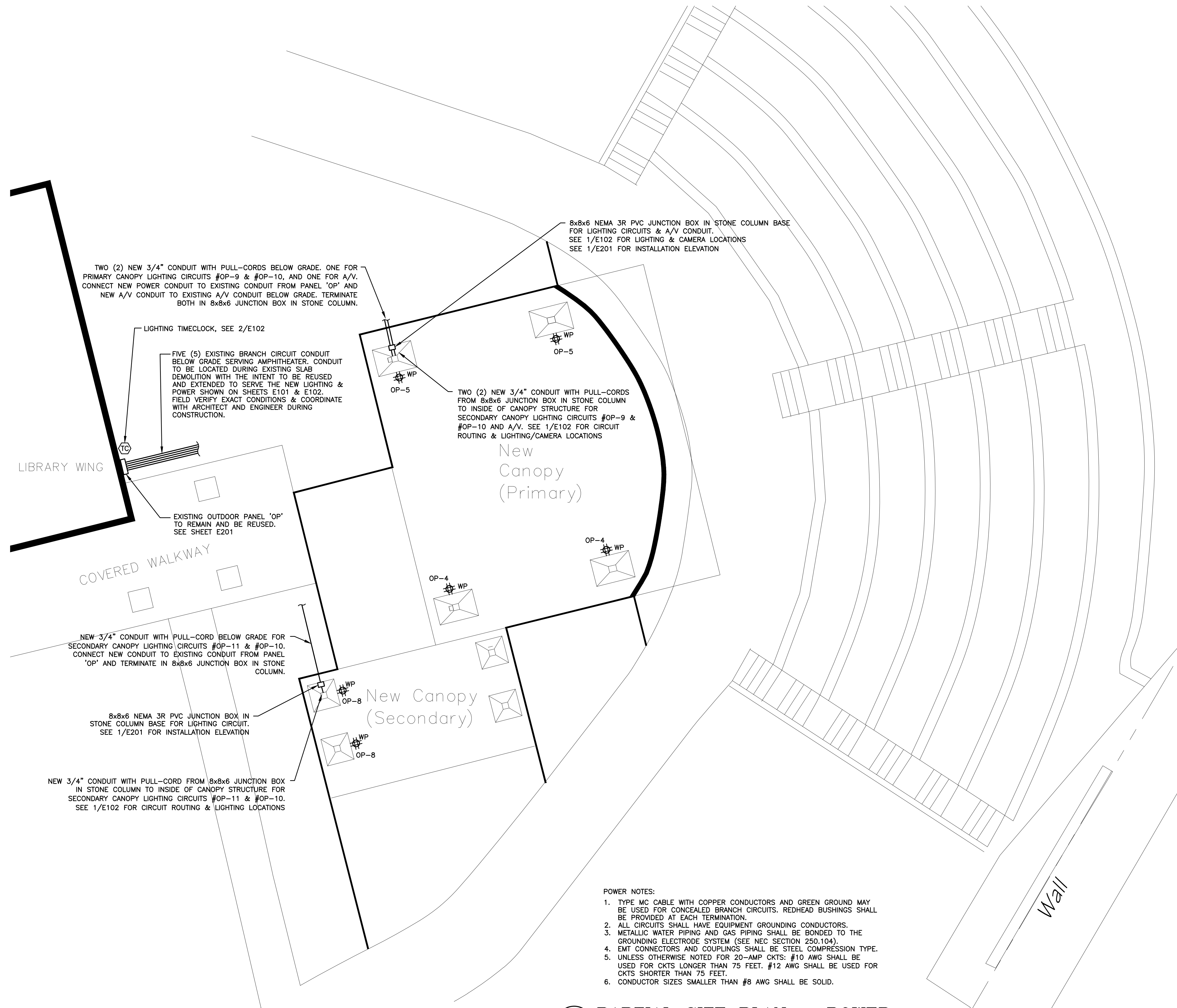
New Canopy (Secondary)

REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

NOTE: VERIFY ALL DIM. AND LOCATION OF CANOPY COMPONENTS WITH MANUFACTURER/DESIGNERS.

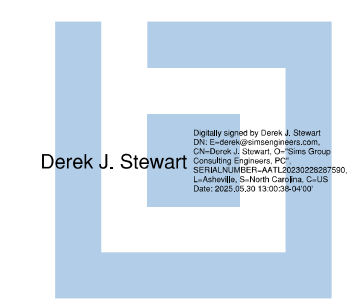
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- POWER NOTES:
1. TYPE MC CABLE WITH COPPER CONDUCTORS AND GREEN GROUND MAY BE USED FOR CONCEALED BRANCH CIRCUITS. REDHEAD BUSHINGS SHALL BE PROVIDED AT EACH TERMINATION.
 2. ALL CIRCUITS SHALL HAVE EQUIPMENT GROUNDING CONDUCTORS.
 3. METALLIC WATER PIPING AND GAS PIPING SHALL BE BONDED TO THE GROUNDING ELECTRODE SYSTEM (SEE NEC SECTION 250.104).
 4. EMT CONNECTORS AND COUPLINGS SHALL BE STEEL COMPRESSION TYPE.
 5. UNLESS OTHERWISE NOTED FOR 20-AMP CKTS: #10 AWG SHALL BE USED FOR CKTS LONGER THAN 75 FEET. #12 AWG SHALL BE USED FOR CKTS SHORTER THAN 75 FEET.
 6. CONDUCTOR SIZES SMALLER THAN #8 AWG SHALL BE SOLID.

1 PARTIAL SITE PLAN - POWER
E101 SCALE: 3/16" = 1'-0"

10 JUNE 2025



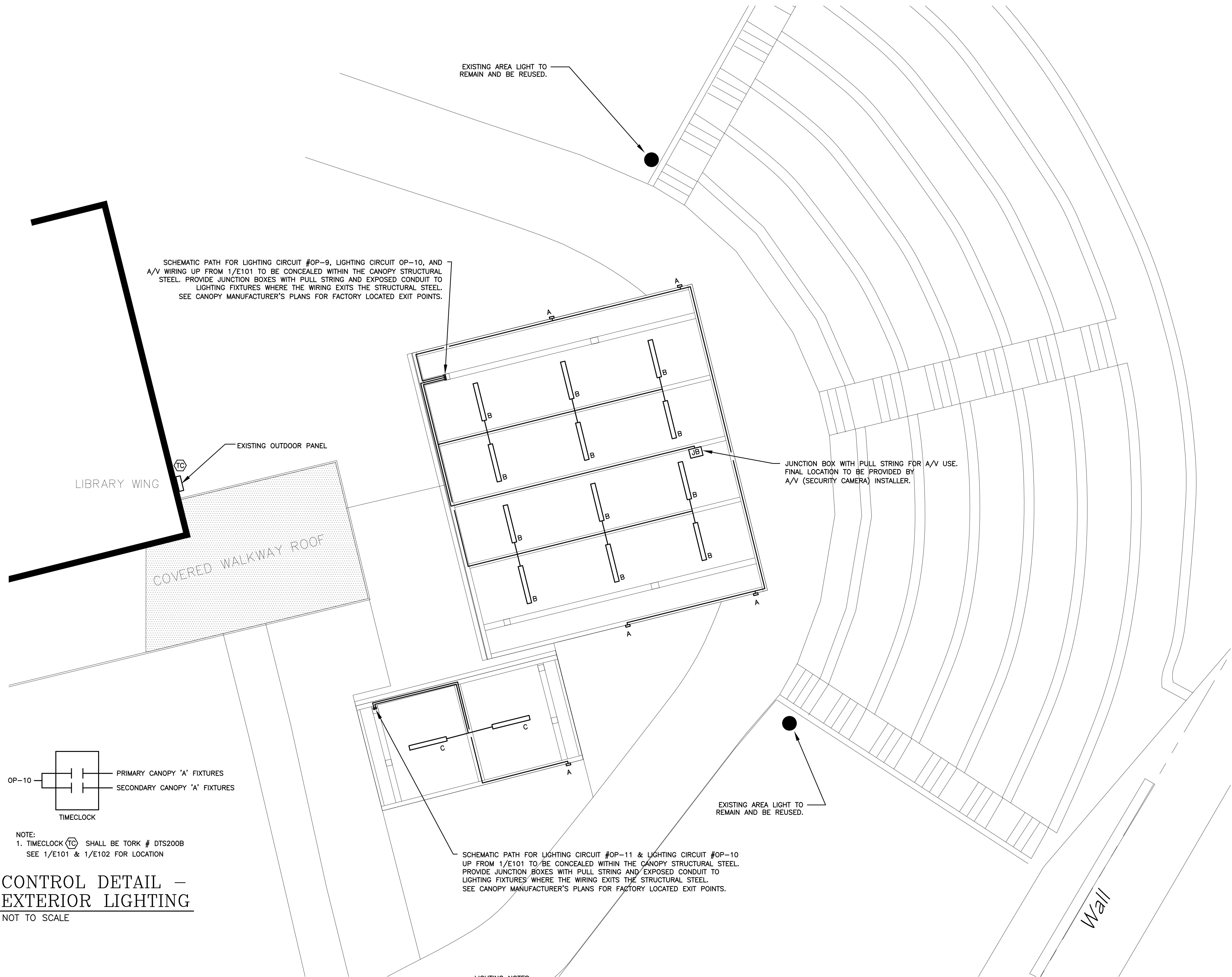
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A NEW AMPHITHEATER CANOPY FOR
TRANSLYVANIA COUNTY LIBRARY
BREVARD, NORTH CAROLINA

RICHARD L. WORLEY AIA,
ARCHITECT AIA,
4078 HAYWOOD ROAD - MILLS RIVER, NORTH CAROLINA 28759

DATE 30 MAY 2025
SHEET E101



SCHEMATIC PATH FOR LIGHTING CIRCUIT #OP-9, LIGHTING CIRCUIT OP-10, AND A/V WIRING UP FROM 1/E101 TO BE CONCEALED WITHIN THE CANOPY STRUCTURAL STEEL. PROVIDE JUNCTION BOXES WITH PULL STRING AND EXPOSED CONDUIT TO LIGHTING FIXTURES WHERE THE WIRING EXITS THE STRUCTURAL STEEL. SEE CANOPY MANUFACTURER'S PLANS FOR FACTORY LOCATED EXIT POINTS.

EXISTING AREA LIGHT TO REMAIN AND BE REUSED.

JUNCTION BOX WITH PULL STRING FOR A/V USE. FINAL LOCATION TO BE PROVIDED BY A/V (SECURITY CAMERA) INSTALLER.

EXISTING AREA LIGHT TO REMAIN AND BE REUSED.

SCHEMATIC PATH FOR LIGHTING CIRCUIT #OP-11 & LIGHTING CIRCUIT #OP-10 UP FROM 1/E101 TO BE CONCEALED WITHIN THE CANOPY STRUCTURAL STEEL. PROVIDE JUNCTION BOXES WITH PULL STRING AND EXPOSED CONDUIT TO LIGHTING FIXTURES WHERE THE WIRING EXITS THE STRUCTURAL STEEL. SEE CANOPY MANUFACTURER'S PLANS FOR FACTORY LOCATED EXIT POINTS.

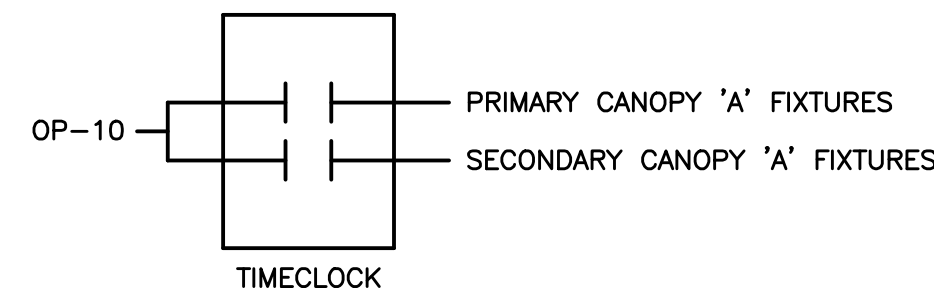
LIGHTING NOTES:

1. UNLESS OTHERWISE NOTED FOR 120-VOLT, 20-AMP CKTS: #10 AWG SHALL BE USED FOR CKTS LONGER THAN 75 FEET. #12 AWG SHALL BE USED FOR CKTS SHORTER THAN 75 FEET.

LIBRARY WING

EXISTING OUTDOOR PANEL

COVERED WALKWAY ROOF



NOTE:
1. TIMECLOCK (TC) SHALL BE TORK # DTS200B
SEE 1/E101 & 1/E102 FOR LOCATION

CONTROL DETAIL —
EXTERIOR LIGHTING

NOT TO SCALE

PARTIAL SITE PLAN — LIGHTING

SCALE: 3/16" = 1'-0"

10 JUNE 2025



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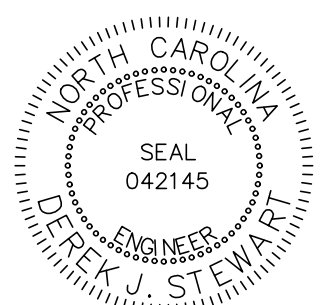
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BREVARD, NORTH CAROLINA

ARCHITECT

RICHARD L. WORLEY AIA,
ARCHITECT
4078 HAYWOOD ROAD - MILLS RIVER, NORTH CAROLINA 28759

derek@simseengineers.com



DATE 30 MAY 2025

SHEET E102

(EXISTING CONDITIONS) PANEL SCHEDULE – FIELD IDENTIFICATION REQUIRED PER 2020 NFPA 70 408.4											
PANEL DESIGNATION: EXISTING OUTDOOR PANEL				LOCATION: SEE PLAN							
VOLTAGE RATING: 120/240		BUS RATING: 60 AMPS		MLO		PHASE: 1		NO. OF WIRES: 3		NEMA 3R ENCLOSURE	
TYPE: EXISTING		INTERRUPTING RATING: 22,000 AMPS RMS FULLY RATED		SPECIAL FEATURES: ** F = FACP CIRCUIT BREAKER: PAINT HANDLE RED AND PERMANENTLY LABEL WITH THE FOLLOWING WORDS "FIRE ALARM CIRCUIT". HANDLE SHALL BE EQUIPPED WITH A LOCKING ATTACHMENT KEEPING IT IN THE "ON" POSITION.				OTHER REQTS: 1. COPPER BUS. 2. BOLT-ON C/B.			
CIRC. NO.	LOAD			CB	PHASE A VA	PHASE B VA	CB	LOAD			CIRC. NO.
1	CENTER LIGHTS			20A	—	—	20A	RIGHT LIGHTS			2
3	TOP CENTER RECEPTACLES			20A	—	—	20A	RIGHT RECEPTACLES			4
5	LEFT RECEPTACLES			20A	—	—	20A	LEFT LIGHTS			6
7	UNLABELED			20A	—	—	20A	RIGHT RECEPTACLES			8
9	SPACE ONLY			—	—	—	—	SPACE ONLY			10
11	SPACE ONLY			—	—	—	—	SPACE ONLY			12

NOTES:
1. COLOR/FINISH OPTIONS SHALL BE SELECTED BY ARCHITECT.

(PROPOSED CONDITIONS) PANEL SCHEDULE – FIELD IDENTIFICATION REQUIRED PER 2020 NFPA 70 408.4											
PANEL DESIGNATION: EXISTING OUTDOOR PANEL				LOCATION: SEE PLAN							
VOLTAGE RATING: 120/240		BUS RATING: 60 AMPS		MLO	PHASE: 1	NO. OF WIRES: 3		NEMA 3R ENCLOSURE		SURFACE MOUNT	
TYPE: EXISTING	INTERRUPTING RATING: 22,000 AMPS RMS FULLY RATED		SPECIAL FEATURES: ** F = FACP CIRCUIT BREAKER: PAINT HANDLE RED AND PERMANENTLY LABEL WITH THE FOLLOWING WORDS "FIRE ALARM CIRCUIT". HANDLE SHALL BE EQUIPPED WITH A LOCKING ATTACHMENT KEEPING IT IN THE "ON" POSITION.				OTHER REQTS: 1. COPPER BUS. 2. BOLT-ON C/B.				
CIRC. NO.	LOAD			CB	PHASE A VA	PHASE B VA	CB	LOAD			CIRC. NO.
1	CENTER LIGHTS			20A	—	—	20A	RIGHT LIGHTS			2
3	TOP CENTER RECEPTACLES			20A	—	—	20A	RIGHT RECEPTACLES – PRIMARY CANOPY			4
5	LEFT RECEPTACLES – PRIMARY CANOPY			20A	—	—	20A	LEFT LIGHTS			6
7	UNLABELED			20A	—	—	20A	RECEPTACLES – SECONDARY CANOPY			8
9	PRIMARY CANOPY LIGHTING			20A	—	—	20A	TIMECLOCK FOR 'A' FIXTURES			10
11	SECONDARY CANOPY LIGHTING			20A	—	—	—	SPACE ONLY			12

NOTES:
1. ALL CIRCUIT BREAKERS SERVING LIGHTING CIRCUITS SHALL BE SWITCH DUTY RATED, REPLACE EXISTING AS NEEDED.

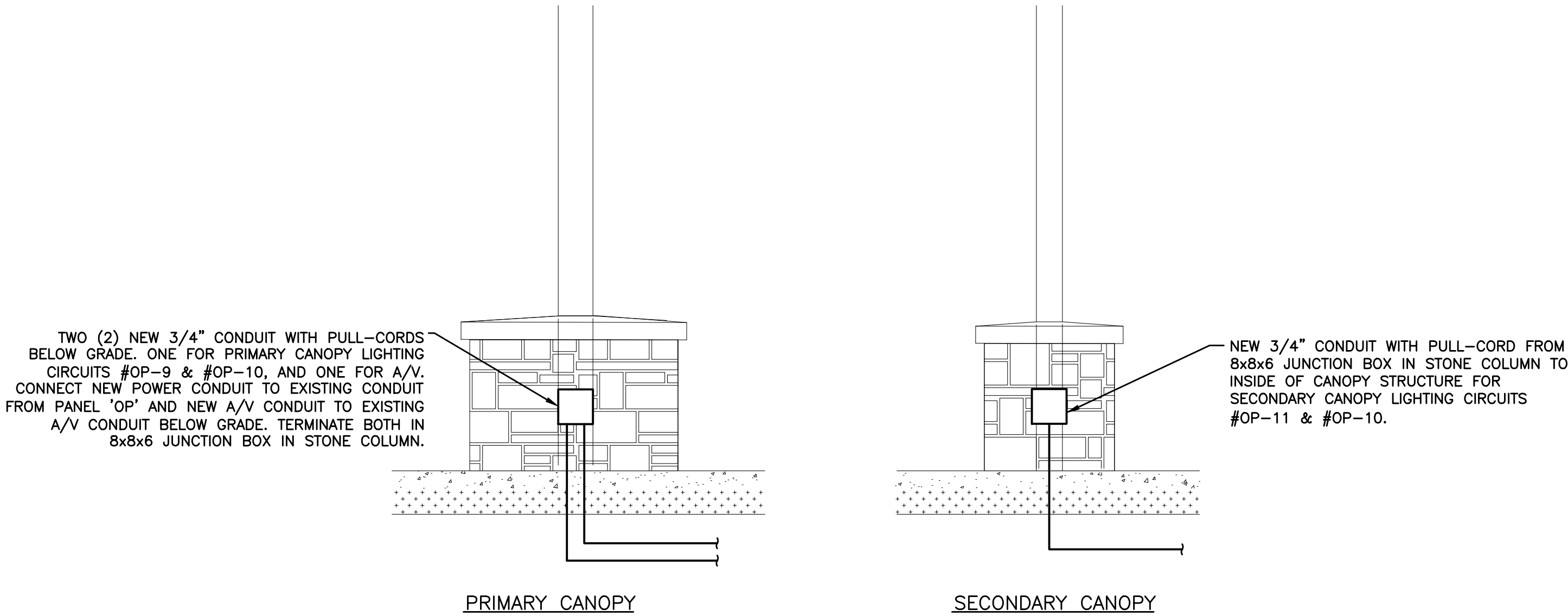
LIGHTING FIXTURE SCHEDULE					
MARK	VOLT-AMPS PER FIXTURE	DESCRIPTION	LAMPS		
			CODE	COLOR TEMP (K)	*CRI
A	18-45	LED SELECTABLE FULL CUT OFF WALL PACK SELECTABLE LUMENS AND COLOR TEMP SLO # WPV L570 G2 FSK	LED	SELECTABLE	80+
B	30	OUTDOOR RATED LED READY T8 VAPOR TIGHT, 2 LAMPS PREMIUM QUALITY LIGHTING # RVT1W42T8 (FIXTURE ONLY, NO BULBS) REQUIRES TWO 4'-0" BULBS: SATCO # S21763	LED	SELECTABLE	80+
C	45	OUTDOOR RATED LED READY T8 VAPOR TIGHT, 3 LAMPS PREMIUM QUALITY LIGHTING # RVT1W42T8 (FIXTURE ONLY, NO BULBS) REQUIRES THREE 4'-0" BULBS: SATCO # S21763	LED	SELECTABLE	80+

NOTES:
1. COLOR/FINISH OPTIONS SHALL BE SELECTED BY ARCHITECT.
2. SEE ARCHITECT'S REFLECTED CEILING PLAN FOR PRECISE FIXTURE LOCATIONS.

*CRI = COLOR RENDERING INDEX

ELECTRICAL LEGEND	
SYMBOL	DESCRIPTION
	TWO WEATHER RESISTANT GFCI DUPLEX RECEPTACLES LOCATED IN A RECESSED 4x4 BOX WITH WP IN USE COVER. RECEPTACLES: PASS & SEYMOUR COMMERCIAL GRADE RECESSED BOX: TWO-GANG WITH EXTRA-DUTY WEATHERPROOF IN-USE COVER DESIGNED FOR INSTALLATION IN TEXTURED SURFACES ARLINGTON "IN-BOX" #DBVM2C

NOTES:
1. THIS LEGEND REPRESENTS A STANDARD EQUIPMENT LIST. SOME DEVICES LISTED ABOVE MAY NOT APPLY TO THIS PROJECT.
2. FINISHES FOR DEVICES AND WALLPLATES SHALL BE SELECTED BY ARCHITECT U.O.N.
3. EC SHALL VERIFY THAT LIGHTING CONTROL DEVICES ARE COMPATIBLE WITH THE FIXTURES BEING CONTROLLED.



1 8x8 JUNCTION BOX INSTALLATION DETAIL
E201 1/2" = 1'-0"

10 JUNE 2025



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NC FIRM LICENSE #C-4284



Derek J. Stewart
Professional Engineer
State of North Carolina
Seal 042145

A NEW AMPHITHEATER CANOPY FOR
TRANSYLVANIA COUNTY LIBRARY
BREVARD, NORTH CAROLINA

DATE 30 MAY 2025

SHEET E201

derek@simsengineers.com

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SECTION 16010

BASIC ELECTRICAL REQUIREMENTS

1. PART 1 GENERAL

1.1 SECTION INCLUDES

A. Basic Electrical Requirements specifically applicable to Division 16 in addition to Division 1 – General Requirements.

1.2 SCOPE OF WORK

- A. Provide electric meter, electric service, power distribution equipment, conductors, luminaires, wiring devices, fire alarm system, and other required materials and labor to produce a complete and operating electrical system. Coordinate service with utility and advise owner of service application procedure. Provide conductors and conduit for all equipment in project. Provide conduit with pull cords for HVAC control circuits.
- B. Obtain all permits, pay all fees, and request inspection from authority having jurisdiction.
- C. All work and materials shall be guaranteed for one year from date of substantial completion.
- D. Provide temporary power during construction.

1.3 WORK SEQUENCE

- A. Coordinate construction and utility outages (if any) with Owner, all other trades, and utility companies. After-hours work may be required to interrupt service.
- B. Notify Engineer of discrepancies in the Contract Documents.
- C. E-Mail questions or comments to derek@simsengineers.com or fax (828-251-1933) in lieu of telephone calls.

1.4 REGULATORY REQUIREMENTS

- A. Conform to applicable State and Local Building Codes.
- B. Fire Alarm: NFPA 72.
- C. Electrical: NFPA 70.
- D. Life Safety Code, NFPA 101.
- E. The Contractor shall install all materials in accordance with State and Local Building Code. Any work that does not comply shall be made to comply at the contractor's expense.
- F. All equipment shall be UL or ETL listed for purpose specified.

1.5 PROJECT/SITE CONDITIONS

- A. Install Work in locations shown on Drawings, unless prevented by Project conditions.
- B. Prepare record drawings showing proposed rearrangement of Work to meet Project conditions, including changes to Work specified in other Sections. Obtain permission of Architect/Engineer before proceeding. Submit all changes on Record Documents as a requirement of Project Closeout.
- C. Refer to Architectural Drawings for dimensions, locations, cabinets, etc. Do not scale Electrical Drawings.
- D. Conceal all materials except where the Architect grants specific permission to do otherwise.
- E. Arrange electrical work in a neat, well organized manner. Conduit shall run parallel with primary lines of the building construction.
- F. Locate operating and control equipment with adequate access for operation and maintenance.
- G. Give right-of-way to piping which must slope for drainage.
- H. Advise other trades of openings required in their work for the subsequent move-in of large electrical equipment.

I. Coordination Drawings: For locations where several elements of electrical (or combined mechanical and electrical) work must be sequenced and positioned with precision in order to fit into the available space, prepare coordination drawings showing the actual dimensions required for the installation.

1.6 SUBSTITUTIONS:

The purpose of specifying equipment by catalog number is to establish quality standards, not necessarily to limit submittals. Substitutions may be accepted if approved as equivalent. Contact engineer prior to bid with any questions. If substitutes are not submitted within 14 days after the bid is accepted, then the equipment shall be provided as specified. Contractor submitting substitutions shall be responsible for any additional cost resulting from the substitution.

1.7 EXCAVATING FOR ELECTRICAL WORK

- A. General: The work of this article is defined to include whatever excavating and backfilling is necessary to install the electrical work. The contractor shall coordinate the work with other excavating and backfilling in the same area, including dewatering, floor protection provisions, and other temporary facilities. Coordinate the work with other work in the same area, including other underground services, landscape development, paving, and floor slabs on grade. Coordinate with weather conditions and provide temporary facilities needed for protection and proper performance of excavating and backfilling.
- B. General Standards: Except as otherwise indicated, comply with the applicable provisions of the Division 2 sections, for plumbing work excavating and backfilling. Refer instances of uncertain applicability to the Engineer for resolution before proceeding.
- C. Rock Excavation shall be defined as the removal of a formation that cannot be excavated without systematic drilling and blasting or without the use of pneumatic tools. All rock excavation/removal shall be performed by the General Contractor. The Electrical subcontractor shall lay out his work and perform all normal excavation. If rock is encountered, it shall be removed by the General Contractor. The General Contractor shall be responsible for providing backfill material.
- D. Sequencing: Delay backfill and encasement of conduit until testing of conductors has been completed.

2. PART 2 GENERAL DESCRIPTION OF WORK

2.1 Coordinate work with other Trades.

2.2 General:

- A. Provide all luminaires, wiring devices, conductors, switches, disconnects, fuses, fire alarm system, and other required materials. Coordinate electrical requirements for equipment supplied by other trades prior to ordering electrical materials.
- B. Provide U.L. listed Fire-Stop penetrations through rated assemblies. See Architectural life safety plans to locate rated assemblies.
- C. Identify major equipment with engraved Lamacoid labels.
- D. Provide typed panelboard directories.
- E. Gang mount switches. Provide continuous switchplate.
- F. Electrical Contractor shall provide all penetrations and patching required to install electrical work.
- G. Support all luminaires, materials, and equipment from building structure.
- H. Install all materials and equipment in accordance with manufacturer's instructions.
- I. Telephone service shall meet the requirements of and be coordinated with Utility.
- J. Electrical service shall meet the requirements of and be coordinated with Utility.
- K. Panelboards shall have copper bus unless otherwise noted.
- L. Electrical circuits shall not share neutrals unless otherwise noted.

2.3 Design Requirements vs. Code Minimum Requirements.

- A. Some of the design requirements stated for this project exceed the minimum requirements of the NEC. These decisions are usually made in order to:
1. Increase reliability of the system.
 2. Increase service life of system components.
 3. Enhance system safety beyond the minimum requirements of the NEC.

- B. Design requirements that may exceed NEC minimum are most often associated with the following:
1. Insulation type.
 2. Conductor size.
 3. Conduit type.
 4. Conduit couplings.
 5. Size of equipment grounding conductor. See NEC section 250.4A5.

3. PART 3 CONDUCTORS & CONDUIT

3.1 Conductors:

- A. Unless otherwise noted on plans:
1. Conductors above grade shall be THWN-2 copper.
 2. Conductors underground or under slab shall be XHHW copper.
- B. All conductors shall be in conduit or other approved raceway.
- C. Provide EGC (equipment grounding conductor) with all circuits. Some EGCs are sized larger than the NEC minimum. This is done in order to reduce the probability of EGCs being damaged during ground faults.
- D. Conductors smaller than #8 AWG shall be solid.
- E. Approved manufacturers. (No other manufacturer's products are permitted.)
ENCORE WIRE
SOUTHWIRE
AFC
GENERAL CABLE
OKONITE
CERROWIRE

- F. Line-voltage conductors shall not be smaller than #12 AWG.
- G. Branch circuits longer than 75 feet shall be wired with conductors #10 AWG or larger.

3.2 Conduit and Raceway:

- A. Above grade: EMT with compression-type steel couplings and connectors.
- B. Below grade: Schedule 40 PVC with Schedule 80 PVC risers.
- C. Raceway Seal: Where a raceway enters a building or structure from an underground distribution system, it shall be sealed in accordance with NEC 300.5(G). Spare or unused raceways shall also be sealed. Sealant shall be American Polywater FST or equivalent.
- D. Conduit shall be trade size 3/4" minimum unless otherwise noted. Exceptions: control wiring, 120V receptacles, and switches may use trade size 1/2" if sized per NEC.
- E. Type MC Cable with copper conductors and green ground may be used for concealed branch circuits. Redhead bushings shall be provided at each termination.
- F. Support conduit from building structure with threaded rods and hangers, trapeze hangers, channel and clamps, or other approved method.

4. PART 4 DOCUMENTS AND SUBMITTALS

4.1 SUBMITTALS

- A. Submit under provisions of Contract Documents.
- B. Identify items with marks to match those shown on drawings.
- C. Architect shall approve all colors.
- D. All submittals shall have the Contractor's stamp with approval signature.
- E. Highlight deviations from specified materials.
- F. Product Data: 6 sets, including 3 sets for maintenance manuals. Data shall include the following:
- Luminaires
Wiring Devices
Panelboards
Safety Switches
Surge Protective Devices (SPDs)
Fire Alarm System
- G. Test Reports (if required): 3 copies
- H. Warranties: 6 copies, including 3 for maintenance manuals.
- I. Maintenance Manuals: 3 complete sets in loose-leaf 3-ring binders, with rigid permanent vinyl covered back and front. Separators with index tabs shall be provided. One set shall have all sheets individually encased in clear, plastic document protectors.

4.2 CONTROL DATA: Provide control diagrams and wiring diagrams where applicable; include description of control systems, catalog data, and calibration instructions for all components. Provide name and address of Controls manufacturer and installer.

4.3 MAINTENANCE INSTRUCTION: Typewritten instructions for maintenance of the systems in itemized form and with time schedule shall be furnished. The instructions shall list each item of equipment requiring inspection, lubrication, or other service. The operating personnel shall be instructed regarding each maintenance procedure.

5. PART 5 ELECTRICAL WORK CLOSEOUT

5.1 General: Refer to the Division 1 sections for general closeout requirements. Maintain a daily log of operational data on electrical equipment and systems through the closeout period; record hours of operation, assigned personnel, fuel consumption, etc. Submit copy to Owner.

5.2 Record Drawings: Give special attention to the complete and accurate recording of underground circuits, and other concealed or non-accessible work. Record change orders where not shown accurately by contract documents. Submit to Architect/Engineer at end of project one set of reproducible sepias that show all changes in the electrical work.

5.3 Closeout Equipment/Systems Operations: Contractor shall demonstrate sustained, satisfactory performance of all equipment and systems in a test run of appropriate duration. The Owner's operating personnel shall be present. Adjust or correct equipment as required for proper performance. Clean equipment and luminaires.

5.4 Operating Instructions: Conduct a walk-through instruction seminar for the Owner's personnel. Explain the identification system, operation diagrams, emergency and alarm provisions, and sequencing requirements. Also explain requirements related to: seasonal provisions, security, safety, and efficiency.

5.5 Training: Contractor shall provide training on all major equipment, controls, etc, as part of the contract.

5.6 Turn-Over of Operations: At the time of substantial completion, turn over the prime responsibility for operation of the electrical equipment and systems to the Owner's operating personnel. However, until the time of final acceptance, provide one electrician, who is completely familiar with the work, to consult with and continue training the Owner's personnel.

END OF SECTION

10 JUNE 2025



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