April 23, 2021

Routt County Regional Building Department
Attn: Todd Carr, Building Official
136 Sixth Street
PO Box 773840
Steamboat Springs, CO 80477
(970) 870-5566

RE: SSRC – Steamboat Gondola Relocation Project (B-21-204)
ESA Project Number: 20034.00

Todd,

Attached you will find the proposed Addendum to the Permit for the Steamboat Gondola Relocation Project (B-21-204). This addendum includes the following changes:

Snow making and electrical vault:

- Added the snow making and electrical vault. The vault will be located where the former Ski School Building was previously. It will house the snow making water and air piping that previously came into the Ski School Building. There will also be a separate vault for the electrical that serves the base area that was formerly mounted to the Ski School Building.
- Value of the work / project valuation: $180,000

Revisions to the Steamboat Gondola Relocation elevator:

- To accommodate the freight, the elevator cab needs to be wider than originally specified. The elevator has gone from a 3500 lb to 4000 lb unit. The elevator shaft now projects into the Boiler Room slightly.

Please let me know any questions or comments you have on this scope revision to permit B-21-204.

Thanks,

K. Leggett

Kate Leggett
ESA

DIVISION 08 – OPENINGS

08 12 00 METAL FRAMES:
DOOR LOCATION IS INDICATED ON DRAWINGS AND IN SCHEDULE.

BASIS-OF-DESIGN FOR HOLLOW METAL DOORS & FRAMES
CECO DOOR (ASSA ABLOY) OR APPROVED EQUAL
www.cecordoor.com
888-264-7474

PRODUCT:
FIRE RATED AND NON FIRE RATED STEEL FRAMES
SERIES SU STEEL FRAMES (UNEQUAL RABBET)
FOR 1 3/4" THICK DOORS
STANDARD WALL APPLICATION, HANDED
KNOCK DOWN CORNER AT EXISTING WALLS, WELDED CORNERS AT NEW WALLS
16 GA STEEL, FACTORY PRIMED.

SUBMITTALS:
- PRODUCT DATA: DOOR MANUFACTURER'S TECHNICAL DATA FOR EACH TYPE OF FRAME.
- SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING LOCATION AND SIZE OF EACH DOOR, FRAME, ELEVATION OF EACH KIND OF DOOR, HAND OF EACH COMPONENT, DETAILS OF CONSTRUCTION, LOCATION AND EXTENT OF HARDWARE BLOCKING, FIRE RATINGS, REQUIREMENTS FOR FACTORY FINISHING AND OTHER PERTINENT DATA.

WARRANTY
LIFETIME LIMITED.

08 13 00 METAL DOORS:
DOOR LOCATION IS INDICATED ON DRAWINGS AND IN SCHEDULE.

BASIS-OF-DESIGN FOR HOLLOW METAL DOORS & FRAMES
CECO DOOR (ASSA ABLOY) OR APPROVED EQUAL
www.cecordoor.com
888-264-7474

PRODUCT:
FIRE RATED AND NON FIRE RATED METAL DOORS
REGENT (RI) OR OMEGA (OI) HONEYCOMB CORE DOORS
(FLUSH AND EMBOSSED PANEL STEEL DOORS, BEVELED LOCK EDGE)
SIZE: 1 3/4" THICK
18 GA STEEL DOOR PANEL FACE, FACTORY PRIME.
PREP DOOR FOR HARDWARE

EXTERIOR METAL DOOR
VERSADOOR (VU) POLYURETHANE FOAM CORE
(FLUSH AND EMBOSSED PANEL STEEL DOORS, NON-HANDED)
SIZE: 1 3/4" THICK
18 GA STEEL DOOR PANEL FACE, FACTORY PRIME.
PREP DOOR FOR HARDWARE

SUBMITTALS:
- PRODUCT DATA: DOOR MANUFACTURER'S TECHNICAL DATA FOR EACH TYPE OF DOOR, INCLUDING DETAILS OF CORE AND EDGE CONSTRUCTION, TRIM FOR OPENINGS AND FACTORY FINISHING SPECIFICATIONS.
- SHOP DRAWINGS: SUBMIT SHOP DRAWINGS INDICATING LOCATION AND SIZE OF EACH DOOR, ELEVATION OF EACH KIND OF DOOR, HAND OF EACH COMPONENT, DETAILS OF CONSTRUCTION, LOCATION AND EXTENT OF HARDWARE BLOCKING, FIRE RATINGS, REQUIREMENTS FOR FACTORY FINISHING AND OTHER PERTINENT DATA.

Provide tempered glass as required by code, and all weather-stripping, jamb extensions, adjustable thresholds, nailing fins, drip caps, etc. Attach door units as recommended by manufacturer. Doors shall be hung and shimmed, plumb and square, providing smooth operation and even closing.

WARRANTY
LIFETIME LIMITED.

08 31 00 ACCESS DOORS AND PANELS
Basis of Design - The Williams Brothers Corporation of America (www.wbdoors.com)

WB-FR 800 Series Standard Insulated Metal Fire Rated Access Door:
2-hour rated for floor/ceiling, 1-1/2 hour rated for wall assembly. Size as appropriate. Keep size as small as possible.

Paint all doors to match adjacent surface.

WB-DW 400 Series for Drywall Access Door:
Non-Rated Wall Assembly: size as appropriate. Keep size as small as possible. Paint all doors to match adjacent surface.

Accessories, connectors, and related materials shall be as per manufacturer's instructions and building code requirements. Install per manufacturers recommendations.

08 70 00 DOOR HARDWARE:
WORK INCLUDED:

The work in this section shall include furnishing of all items of finish hardware as hereinafter specified or obviously necessary to complete the building, except those items, which are specifically excluded from this section of the specification.

RELATED WORK SPECIFIED ELSEWHERE:
Metal Frames: Section 08 12 00
Metal Doors: Section 08 13 00

REFERENCES:
A. ANSI/NFPA 80 - Fire Doors and Windows
B. AWI - Architectural Woodwork Institute
C. BHMA - Builders' Hardware Manufacturers Association
D. DHI - Door and Hardware Institute
E. NAAMM - National Association of Architectural Metal Manufacturers
F. NFPA 101 - Life Safety Code
G. ANSI/BHMA A156.17

DESCRIPTION OF WORK:
Furnish material to complete hardware work indicated, as specified herein, or as may be required by actual conditions at building. Include all necessary screws, bolts, expansion shield, other devices, if necessary as required for proper hardware application. The hardware supplier shall assume all responsibility for correct quantities.

All hardware shall meet the requirements of Federal, State, and Local codes and laws having jurisdiction over this project, notwithstanding any real or apparent conflict therewith in these specifications.

Fire-Rated Openings
Provide hardware for fire-rated openings in compliance with NFPA 80 and NFPA Standards No. 101. This requirement takes precedence over other requirements for such hardware. Provide hardware that has been tested and listed by UL for the types and sizes of doors required and complies with the requirements of the door and door frame labels.

Fasteners
Hardware as furnished shall conform to published template generally prepared for machine screw installation. Furnish each item complete with all screws required for installation. Typically, all exposed screw installation. Insofar as practical, furnish concealed type fasteners for hardware that is exposed. Screws shall be furnished with Phillips flat head, finished to match adjacent hardware.

Door closures and exit devices to be installed on wood or composite fire doors shall be attached with closed head through bolts (hex bolts).

SUBMITTALS
Prior to ordering hardware, prepare and submit for review of hardware schedule covering all items required for entire job. Schedule to identify manufacturer of each item and shall give type numbers and finish symbols; including catalog cuts for each item. No horizontal schedule will be accepted. Review of the hardware schedule shall not relieve contractor from furnishing all necessary hardware specified in this section.

Furnish suitable templates, together with finish hardware schedule to contractor, for distribution to necessary trades. Furnish three sets of operating and maintenance manuals for all hardware.

Submit samples as requested of any items of hardware to be furnished for the project for final review. Architect-Engineer is sole judge of equality.

Submit keying schedule as directed by Owner or Architect/Engineer.

General Contractor to Submit copy of final approved hardware schedule to Building Department.
unction.

DIVISION 08 – OPENINGS

08 70 00 DOOR HARDWARE (CONT):
General Contractor to Submit copy of final approved hardware schedule to Building Department.

PRODUCTS
Basis of Design hardware products for door hardware listed below (or equal):
Products: Manufacturer:
Hinges (MC) McKinney / Sargent / Ives
Cylinders (CR) Corbin/Russwin
Locks/Latches (CR) Corbin/Russwin
Exit Devices (CR) Corbin/Russwin
Electronic Door Locks (AA) Assa Abloy VingCard Flex
Closers (AA) Assa Abloy
Exit Devices (AA) Assa Abloy
Overhead Stop/Holders (RW) Rockwood
Miscellaneous Door Trim (RW) Rockwood
(Silencers, door stops, etc.)
Weatherstripping (PE) Pemco
Overlapping Astragal (PE) Pemco
Electric Strikes (AR) Adams Rite
Magnetic Holders (RI) Rixson
Furnish all items in US26D Brushed Satin Chrome except as indicated in the Hardware Schedule.
Use 2 pair of hinges or 2 each intermediate pivots at doors 7'-6" high and over.
Use 5" x 4-1/2" hinges at doors 3'-6" wide and over.
Furnish glass bead kits at exit devices where required.
Fasten all exit devices and closers with SNB's.
Furnish all brackets required to mount closers, as required by frame or door details.

QUALITY ASSURANCE
Hardware furnished in connection with doors and frames requiring fire rated labels shall be approved for such use and have such labels as required.

Hardware shall meet the requirements of all applicable labeling authorities and shall complement the NFPA 80 and NFPA 101 requirements of Division 8.

Items not specifically listed, but incidental to or required for completion of project, shall be provided and shall conform in class, quality, and type as required for particular use or as specified in like and similar locations. All fastenings, templates, and all accessory items scheduled and/or required to complete project shall be provided.

Supplier:
A. Manufacturers: Companies specializing in manufacturing door hardware with minimum ten years experience.
B. Hardware Supplier: Company specializing in supplying commercial door hardware who has maintained an office and has been furnishing hardware in the project's vicinity for a period of at least ten (10) years. Hardware supplier must be an authorized distributor of the products specified.
Hardware supplier shall have in his employment, at least one experienced Architectural Hardware Consultant (AHC) who is available at reasonable times during business hours for consultation about project's hardware and requirements to Owner, Architect and Contractor.

WARRANTY:
All items, except overhead closers, shall be warranted in writing by the manufacturer against failure due to defective materials and workmanship for a period of one (5) years commencing on the Date of Final Completion and Acceptance. In the event of product failure, promptly repair or replace item with no additional cost to the Owner.

Closers shall be warranted in writing by the manufacturer against failure due to defective materials and workmanship for a period of ten (10) years commencing on the Date of Final completion and Acceptance. In the event of product failure, promptly repair or replace item with no additional cost to the Owner.

CERTIFICATIONS:
A. Architectural Hardware Consultant shall inspect complete installation and certify that hardware has been furnished and installed in accordance with manufacturer's instructions and as specified herein.
B. Provide two copies of certifications to Architect.
Return to project one month after occupancy and adjust hardware for proper operation and function.

DIVISION 09 – FINISHES

SECTION 09 22 16 NON-STRUCTURAL MEAL FRAMING
Framing Members: Comply with ASTM C 754 for conditions indicated.

Steel Sheet Components: Comply with ASTM C 645 requirements for metal, unless otherwise indicated.
Protective Coating: Coating with equivalent corrosion resistance of ASTM A 653/A 653M, G40 (Z120), hot-dip galvanized, unless otherwise indicated.

Studs: Manufacturer's standard profile for repetitive members, corner and end members, and fireresistance-rated assembly indicated on drawings.

Runner Tracks: Manufacturer's standard J-profile track with long-leg length as standard with Auxiliary Material.

Deflection: Limit H/360

Furring Channels (Furring Members): Hat-Shaped, Rigid Furring Channels: ASTM C 645, 7/8 inch (22.2 mm) deep.

Minimum Requirements: 25 gauge, hemmed edge detail required on all 25 gauge furring channel.
Meets or exceeds SSMA requirements.
Depth: 7/8 inch
Width Bottom: 2-1/2 inch wide minimum.
Width Top: 1-1/4 inch wide

Steel Drill Screws: ASTM C 1002, unless otherwise indicated.

Track Fasteners: Power-driven fasteners of size and material required to withstand loading conditions imposed on assemblies without exceeding allowable design stress of track, fasteners, or structural substrates in which anchors are embedded.

Power-Actuated Anchors: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with capability to sustain, without failure, a load equal to 10 times design load, as determined by testing per ASTM E 1190 conducted by a qualified testing agency.

Products: Subject to compliance with requirements, provide the following: Dietrich Metal Framing or approved equal.

Studs to be designed by manufacturer. Submit shop drawings for review and approval.

Install per manufacturers recommendations.

09 29 00 GYPSUM BOARD
TYPE-X gypsum board - "USG 5/8" Sheetrock" fire code "X" or (approved equal)
Refer to sound isolation and noise reducing assemblies for additional requirements. Seal all penetrations with approved fire resistant sealant.

Exterior Sheathing - 5/8" Georgia-Pacific DensGlass GOLD Sheathing or equal. Verify sheathing system with exterior finish systems.

Exterior Soffit - 5/8" USG Sheetrock Exterior Gypsum Ceiling Board with Firecode C Core at fire rated soffits with soffit finish (board or other finish) over the top.

Shaft Walls: 1" gypsum board shaft liner - "USG Sheetrock Brand Gypsum Liner Panels" or approved equal. Refer to fire rated assembly details for more information.

Joint Treatment: "USG Durabond 90" joint compound.

Panel Fastening Method: Screw all walls and ceilings at required spacing. Provide non-corrosive fasteners at all wet locations.

Accessories: "USG" metal square corner beads (26 GA, Zinc Coated), casing beads, tape and reinforcement, unless shown otherwise in drawings.

Finish: GYPSUM BOARD WALLS AND CEILING FINISHES ARE TO BE LEVEL 4.

Provide a sample (3'-0" x 3'-0") for Owner review and approval before construction.

DIVISION 09 – FINISHES (CONT)

09 91 13 EXTERIOR PAINTING
Provide the following paint systems for the various substrates, as indicated. The systems are based on Benjamin Moore and Co. and ICI, unless noted.

Exterior Railings - Pre-Finish
Provide pre-finished Kynar Finish (Or Approved Equal) on metal railings. Color: Black.

Exterior Metal Finish - Benjamin Moore
(i.e. flashing, exposed piping, louvers, vents, steel lintels, etc. Any non-pre finished exposed metal locations)
(A) PRIMER:"BENJAMIN MOORE" IRONCLAD RETARDO RUST INHIBITIVE PAINT (163)
(B) 1ST COAT:"BENJAMIN MOORE" MOORE'S SEMI-GLOSS EXTERIOR LATEX HOUSE PAINT (105)
(C) 2ND COAT: SAME AS FIRST COAT"

Submit product literature and color selections, color to be similar to adjacent wall material.

Sand and prep all interior and exterior metal receiving field finish prior to applying finishes to produce a very smooth finish.

Install per manufacture's requirements.

09 91 23 INTERIOR PAINTING:
PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE VARIOUS SUBSTRATES, AS INDICATED. THE SYSTEMS ARE BASED ON BENJAMIN MOORE AND CO, AND ICI, UNLESS NOTED.

GYPSUM BOARD OR CONCRETE TYPICAL PAINT
(A) PRIOR TO DRYWALL TEXTURE (IF USED) APPLY ONE COAT OF "HAMILTON PREP COAT PLUS".
PAINTER TO APPLY THIS COAT AS REQUIRED.
PATCH CONCRETE AS REQUIRED.
(B) PRIMER: "BENJAMIN MOORE" REGAL CLASSIC PREMIUM INTERIOR LATEX PRIMER (N216).
DRY FILM THICKNESS OF NOMINAL 1.5-1.6 MILS (0.038 mm - 0.040 mm)
(C) 1ST COAT: "BENJAMIN MOORE" REGAL CLASSIC PREMIUM INTERIOR 100% ACRYLIC EGGSHELL FINISH (N319). DRY FILM THICKNESS OF NOMINAL 1.2-1.5 MILS (0.030 mm - 0.038 mm).
(D) 2ND COAT: SAME AS FIRST COAT

EXPOSED BRICK OR CMU PAINT
(A) PRIOR TO PRIMER: "BENJAMIN MOORE" SUPER SPEC MASONRY INTERIOR/EXTERIOR HI-BUILD BLOCK FILLER (206) AS NEEDED FOR PITS IN EXISTING MASONRY. PAINTER TO APPLY THIS COAT AS REQUIRED.
(B) PRIMER (MINIMUM TWO COATS PRIMER, DRY FILM THICKNESS OF NOMINAL 8-12 MILS (0.20mm - 0.30 mm):
"BENJAMIN MOORE" REGAL CLASSIC PREMIUM INTERIOR LATEX PRIMER (N216)
(C) 1ST COAT:"BENJAMIN MOORE" REGAL CLASSIC PREMIUM INTERIOR 100% ACRYLIC EGGSHELL FINISH (N319).
DRY FILM THICKNESS OF NOMINAL 1.2 - 1.5 MILS (0.030 mm - 0.038 mm)
(D) 2ND COAT: SAME AS FIRST COAT

INTERIOR EXPOSED METAL/FERROUS
(A) PRIMER: "BENJAMIN MOORE" SUPER SPEC HP ACRYLIC METAL PRIMER (P04) OR SUPER SPEC HP ALKYL METAL
PRIMER (P06)
(B) 1ST COAT: 1ST COAT:"BENJAMIN MOORE" REGAL CLASSIC PREMIUM INTERIOR 100% ACRYLIC EGGSHELL FINISH
(N319)
(C) 2ND COAT: SAME AS FIRST COAT

PAINT COLOR SELECTIONS:
PAINT COLORS PER OWNER.

CONCRETE SLAB SEALANT:
BASIS OF DESIGN: WR MEADOWS SEALTIGHT.
VOCOMP-30, WATER-BASED, ACRYLIC, CONCRETE CURING AND SEALING COMPOUND.
INSTALL PER MANUFACTURES RECOMMENDATIONS.

PROVIDE SAMPLES AS NOTED UNDER SUBMITTALS BELOW FOR REVIEW BY OWNER AND ARCHITECT BEFORE PROVIDING ALL PAINT FOR PROJECT.

09 91 23 INTERIOR PAINTING (CONT)
GENERAL
Patch as needed, fill cracks and nail holes and correct any defects in substrate.

Examine surfaces to receive paint/stain and report any deficiencies that might impair the performance of the installation. Work indicates acceptance of substrate.

Remove all hardware, fixtures and accessories from surfaces to receive finish.

Caulk/fill all interior trim work to walls.

Paint black all framing and exposed materials behind screened vent openings and grills including soffit vents and ventilation chimney locations.

Samples at the site of all exterior and all interior colors and finishes shall be provided for approval by Owners/Architect prior to any ordering or staining or painting of any of the materials.

Follow manufacturer's directions for proper spreading rate, thickness and acceptable temperature and humidity range. Finishes must be applied evenly; sags, runs and uneven finishes will not be accepted.

Set all nail heads and fill holes with filler to match material. Filler to be compatible with finish. Paint all interior piping and mechanical and electrical equipment which is not prefinished and is exposed in finished spaces. Paint miscellaneous vents, louvers, trim to match adjacent wall color or material.

SUBMITTALS
Product Data: Submit manufacturer's technical information including paint label analysis and application instructions for each material proposed for use.

Samples: Submit samples for Architect's review and color and texture only. Provide a listing of material and application for each coat of each finish sample.

On 4" x 8" hardboard, provide two samples of each color and material, with texture to simulate actual conditions. Resubmit samples as requested by Architect until acceptable sheen, color, and texture is achieved.

On concrete masonry, provide two 4" x 8" samples of masonry for each type of finish and color, defining filler, prime and finish coat.

On actual wall surfaces and other exterior and interior building components, duplicate painted finishes of prepared samples. On at least 100 sq. ft. of surface as directed, provide full coat finish samples until required sheen, color and texture is obtained; simulate finished lighting conditions for review of in place work.

DIVISION 10 – SPECIALTIES

10 14 00 SIGNAGE:
SIGNAGE IS TO BE PROVIDED PER IBC 2018, ANSI A117.1 AND IN ACCORDANCE WITH ADA 2010 SECTION 216 AND SHALL COMPLY WITH ADA 2010 SECTION 703.

LOCATION:
SIGNAGE TO BE PROVIDE FOR BUT IS NOT LIMITED TO THESE LOCATIONS:
DIRECTIONAL SIGNAGE
EGRESS SIGNAGE
MISCELLANEOUS IDENTIFICATION SIGNAGE
FIRE EXTINGUISHER, FIRE ALARM RELATED SIGNAGE

PROVIDE AN ALLOWANCE OF FIVE THOUSAND DOLLARS ($5,000.00) FOR SIGNAGE.

SIGNAGE PACKAGE TO BE PROVIDED BY CONTRACTOR FOR REVIEW BY OWNER AND ARCHITECT.

10 44 16 FIRE PROTECTION SPECIALTIES
FIRE EXTINGUISHERS AND CABINETS
Provide fire extinguishers, cabinets, accessories manufactured by FIRE END & CROKER CORPORATION (www.croker.com) or approved equal.

LOCATIONS:
Boiler Room
Actual locations and types of extinguishers to be determined/approved by local Fire Department.

INSTALL PER MANUFACTURERS REQUIREMENTS

3

DIVISION 14 – CONVEYING EQUIPMENT

14 20 00 ELEVATORS
HYDRAULIC PASSENGER ELEVATOR
RATED LOAD - 4000 LB
RATED SPEED - 100 TO 150 FPM
DOORS - 4'-0" WIDE X 7'-0" HIGH
HOISTWAY - 9'-4" WIDE X 7'-0" DEEP
PIT DEPTH - 4'-0"
SUMP PIT - REQUIRED
TOTAL TRAVEL DISTANCE: 9'-6"
LANDINGS - 2 FRONT OPENING, CENTERED
OPERATION SYSTEM - AUTOMATIC OPERATION AS DEFINED IN ASME A17.1
AUXILIARY OPERATIONS - BATTER-POWERED LOWERING

QUALITY ASSURANCE:
IN ADDITION TO LOCAL GOVERNING REGULATIONS AND INTERNATIONAL BUILDING CODE 2018, COMPLY WITH APPLICABLE PROVISIONS OF ASME A17.1 SAFETY CODE FOR ELEVATORS AND ESCALATORS AND AMERICANS WITH DISABILITIES ACT (ADA), ACCESSIBILITY GUIDELINES (ADAAG).

FINISHES:
CEILING - EXPOSED FRAME WITH LAY-IN PANELS, SC02
LIGHTING - COMPACT FLUORESCENT DOWNLIGHTS
HANDRAILS - STAINLESS STEEL (PROVIDE ON 3 WALLS OF CAB)
CAB - DECORATIVE WALLS PANELS TO BE BRUSHED STAINLESS STEEL
DOORS AND FRAMES - STAINLESS STEEL
SILL - EXTRUDED METAL WITH GROOVED SURFACE ON NONSHRINK, NONMETALLIC GROUT.
FLOORING - DIAMOND PLATE STEEL FLOORING

ADDITIONAL REQUIREMENTS:
PROVIDE INSPECTION CERTIFICATE MOUNTED UNDER ACRYLIC OVER WITH STAIN STAINLESS-STEEL FRAME.
PROVIDE PROTECTIVE BLANKET HOOKS AND TWO COMPLETE SETS OF FULL-HEIGHT BLANKETS.
PROVIDE ALL CODE REQUIRED COMMUNICATION AND SIGNAL EQUIPMENT INCLUDING BUT NOT LIMITED TO: CAR CONTROL STATIONS, EMERGENCY COMMUNICATIONS SYSTEM, FIRE DEPARTMENT COMMUNICATION SYSTEM, CAR POSITION INDICATOR WITH TRAVEL DIRECTION ARROWS, HALL PUSH-BUTTON STATIONS, HALL LANTERNS, ETC.

TEMPERATURE CONTROL:
MINIMAL HEAT AND COOLING TO BE PROVIDED TO THE ELEVATOR MACHINE ROOM AND ELEVATOR HOISTWAY. MANUFACTURER TO PROVIDE MAX HEAT LOAD OF MACHINERY AND ALLOWABLE TEMPERATURE RANGES FOR MACHINE ROOM AND HOISTWAY TO USE FOR DESIGN OF HEATING/COOLING SYSTEM.

FREIGHT: VERIFY THAT ELEVATOR CAN ACCOMMODATE FREIGHT AS WELL AS PASSENGERS.
FREIGHT CARTS ARE 52" X 24" WIDE AND WEIGH +/- 600 LBS WHEN LOADED.
EXPECT (2) CARTS AND (2) STAFF MEMBERS IN THE LIFT AT ONE TIME.

ELEVATOR MACHINE ROOM:
PROVIDE SEPARATE ELEVATOR MACHINE ROOM (NO MACHINE ROOM-LESS APPLICATIONS DUE TO WEATHER RESTRICTIONS).

AVAILABLE MANUFACTURERS:
SCHINDLER ELEVATOR CORP (BASIS OF DESIGN)
OTIS ELEVATOR CO
THYSSEN-KRUPP ELEVATOR GROUP OF NORTH AMERICA
(OR EQUAL)

DIVISION 22 – PLUMBING

Plumbing specifications per Plumbing Engineer.

DIVISION 23 – HEATING, VENTILATING AND AIR CONDITIONING

HVAC specifications per Mechanical Engineer.

DIVISION 26 – ELECTRICAL

Electrical specifications per Electrical Engineer.

DIVISION 26 – COMMUNICATIONS

Communications, Audio-Video, etc. specifications per Owner.

CONSTRUCTION SET 03/29/2021

4/20/2021 4:35:11 PM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1193
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION
Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD Record Set TC 04/27/2021

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
SPECIFICATIONS

Sheet Number
AG004

BBQ BUILDING PATIO

GONDOLA PLAZA

GONDOLA PLAZA STAGE

LOWER GONDOLA BUILDING

ONE STEAMBOAT PLACE

EXISTING LANDSCAPE TO REMAIN

EXISTING LANDSCAPE TO REMAIN.

BURGESS CREEK

PROMENADE

EXISTING GRAVEL PATH TO REMAIN

VAULT

1 A402

3

+/- 22' - 0"

+/- 56' - 0"

DISTURBED AREAS AROUND NEW GONDOLA/PLATFORM ARE TO BE RE-VEGETATED

RETAINING WALL

PROPOSED FREIGHT AT ADA ACCESSIBLE PATH TO PLATFORM ELEVATOR (5% SLOPE MAX)

GONDOLA MAZING PLATFORM

EXISTING TOWER 2

GONDOLA TERMINAL

PROPOSED TOWER 1

PROPOSED TOWER 3

PROPOSED TOWER 2

RETAINING WALL

EXISTING LANDSCAPE TO REMAIN

EXISTING BRIDGE OVER BURGESS CREEK TO REMAIN. ADD SNOWMELT.

PROPERTY LINE

1 A112 Sim

SAND FILTER DETENTION POND RE: CIVIL

DISTURBED AREAS AROUND NEW GONDOLA/PLATFORM ARE TO BE RE-VEGETATED

EXISTING GRAVEL PATH TO REMAIN

PROPERTY LINE

THE PTARMIGAN INN

CHATEAU CHAMONIX

1 AS001 ARCHITECTURAL SITE PLAN
1" = 20'-0"

0' 10' 20' 40'

CONSTRUCTION SET 03/29/2021

4/20/2021 4:35:16 PM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1192
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

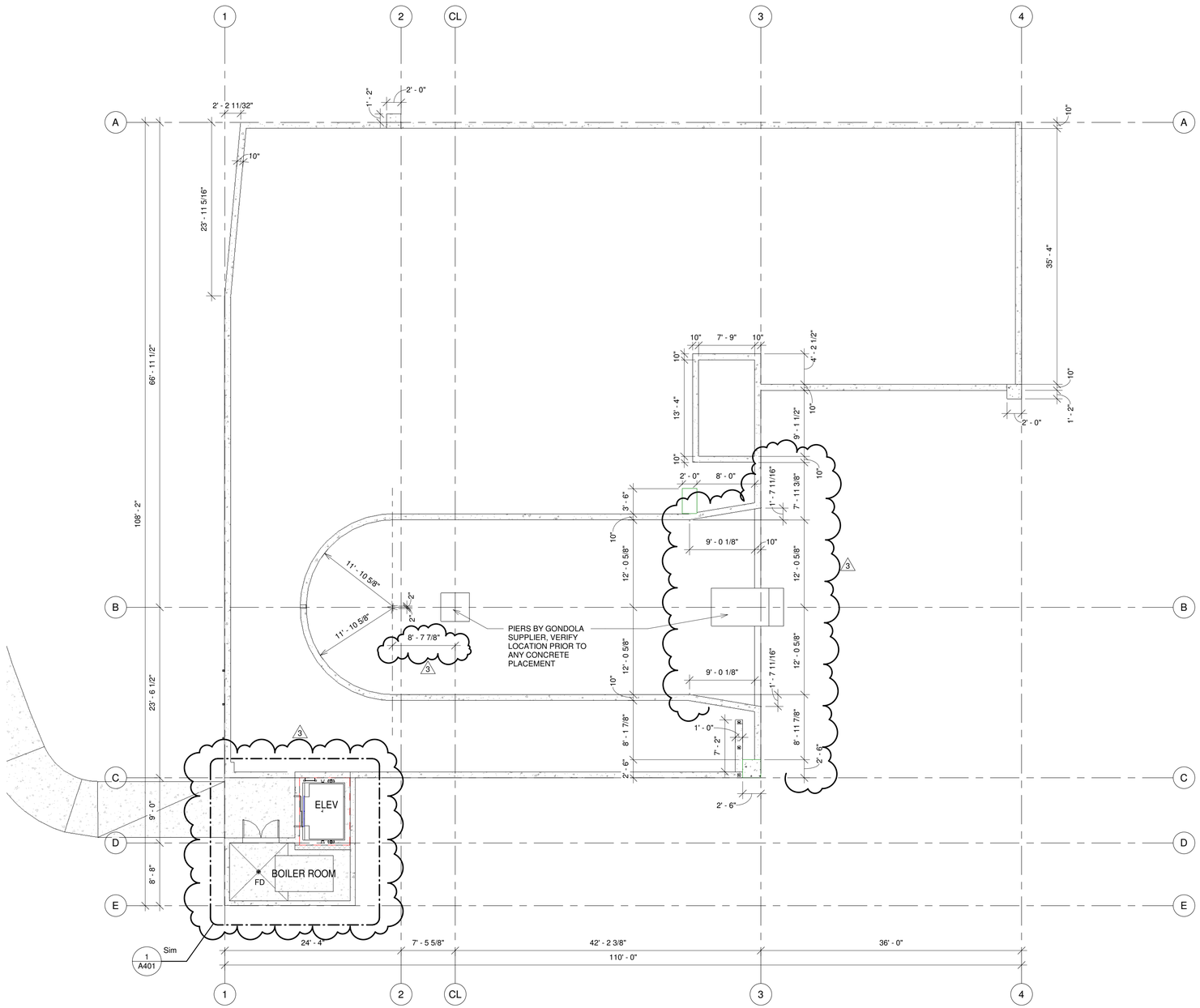
ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ARCHITECTURAL SITE PLAN

Sheet Number
AS001



1 A101 LOWER LEVEL
1/8" = 1'-0"

0' 4' 8' 16' 32'

CONSTRUCTION SET 03/29/2021

4/23/2021 11:53:36 AM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1172
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

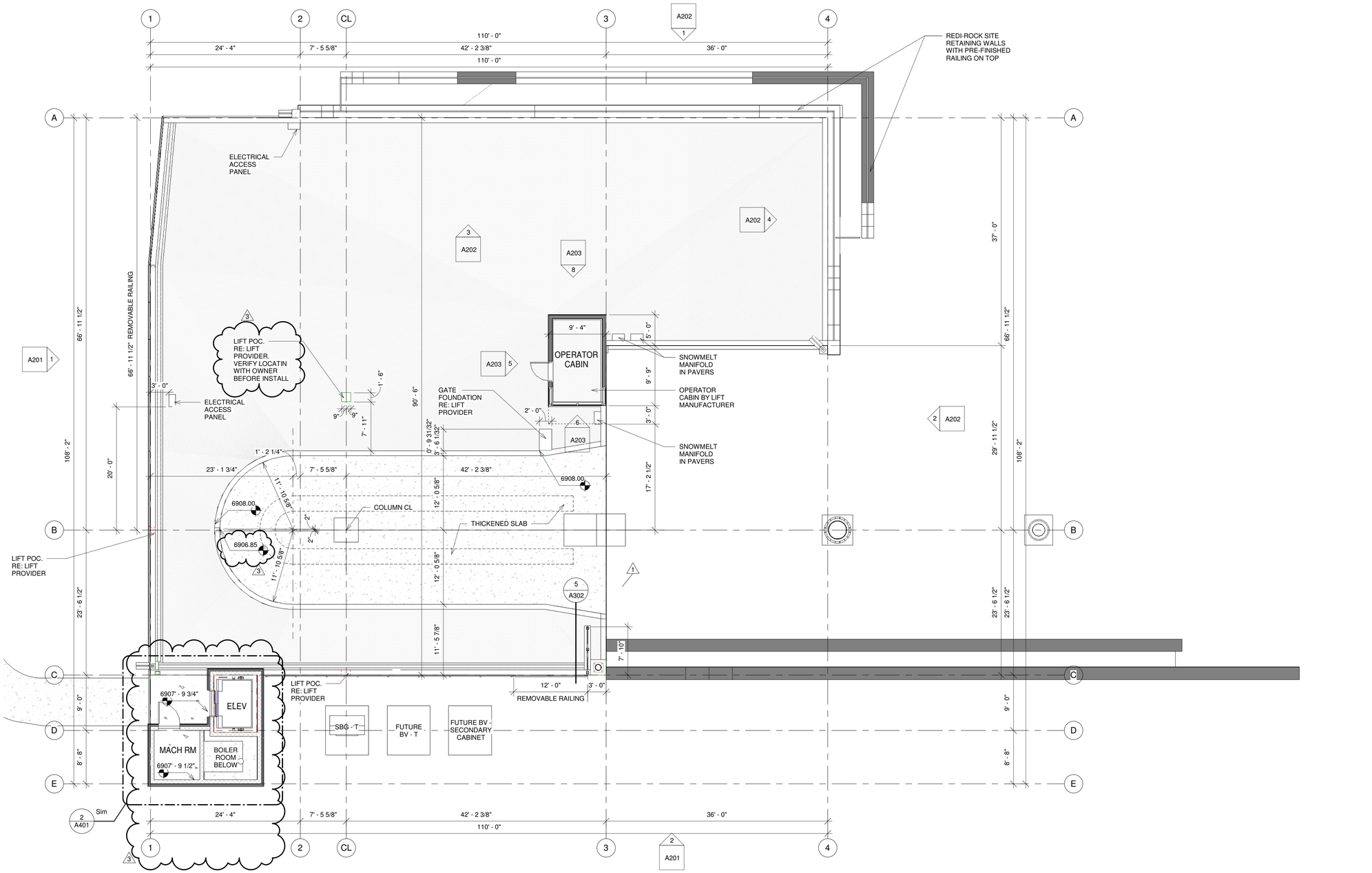
ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5458, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
LOWER LEVEL PLAN

Sheet Number
A101



1 A111 **FIRST LEVEL**
1/8" = 1'-0"

0' 4' 8' 16' 32'

CONSTRUCTION SET 03/29/2021

4/23/2021 11:53:37 AM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1172
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION

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REVISIONS

No.	Description	Date
1	Addendum #1	3-12-2021
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

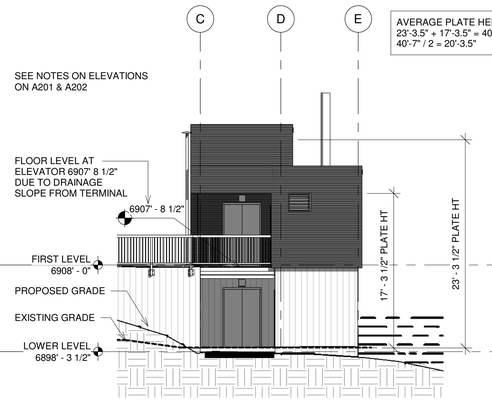
ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-3456, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

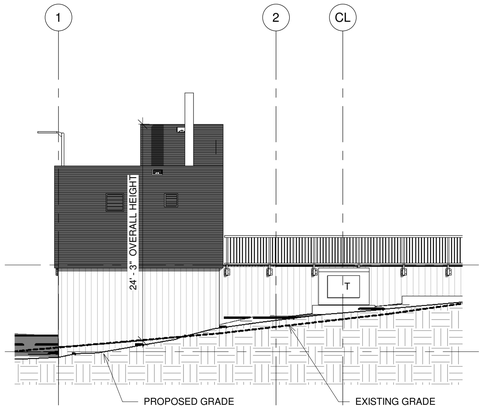
Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
FIRST LEVEL PLAN

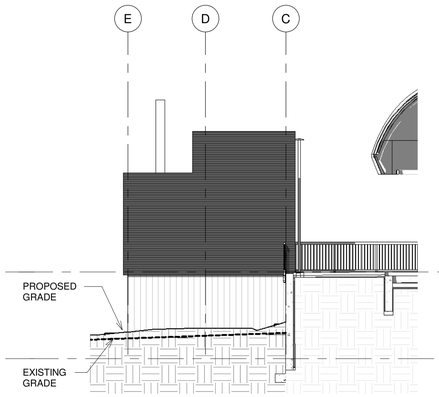
Sheet Number
A111



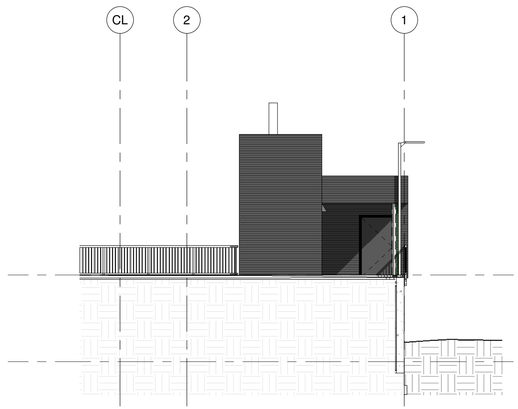
1 A203 ELEVATOR - WEST
1/8" = 1'-0"



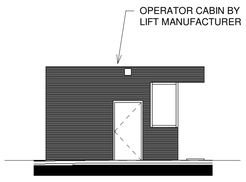
2 A203 ELEVATOR - SOUTH
1/8" = 1'-0"



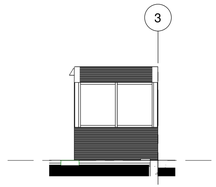
3 A203 ELEVATOR - EAST
1/8" = 1'-0"



4 A203 ELEVATOR - NORTH
1/8" = 1'-0"

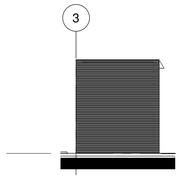


5 A203 OP CABIN - WEST
1/8" = 1'-0"



6 A203 OP CABIN - SOUTH
1/8" = 1'-0"

7 A203 OP CABIN - EAST
1/8" = 1'-0"



8 A203 OP CABIN - NORTH
1/8" = 1'-0"

CONSTRUCTION SET 03/29/2021

4/20/2021 4:35:02 PM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1193
APR 20 2021
LICENSED ARCHITECT

REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

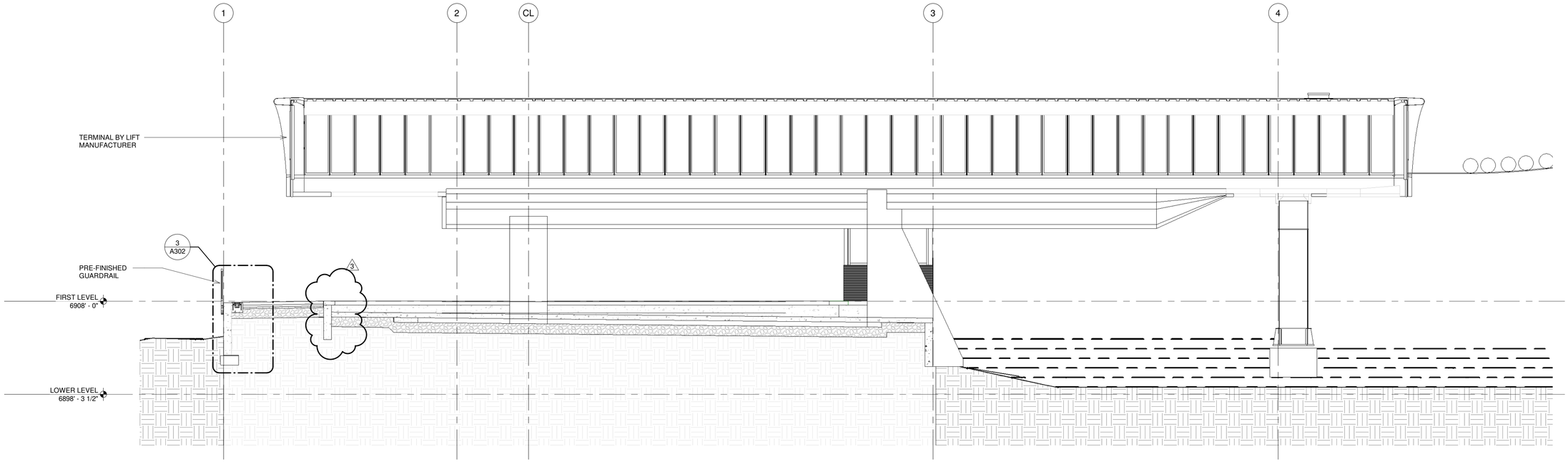
Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

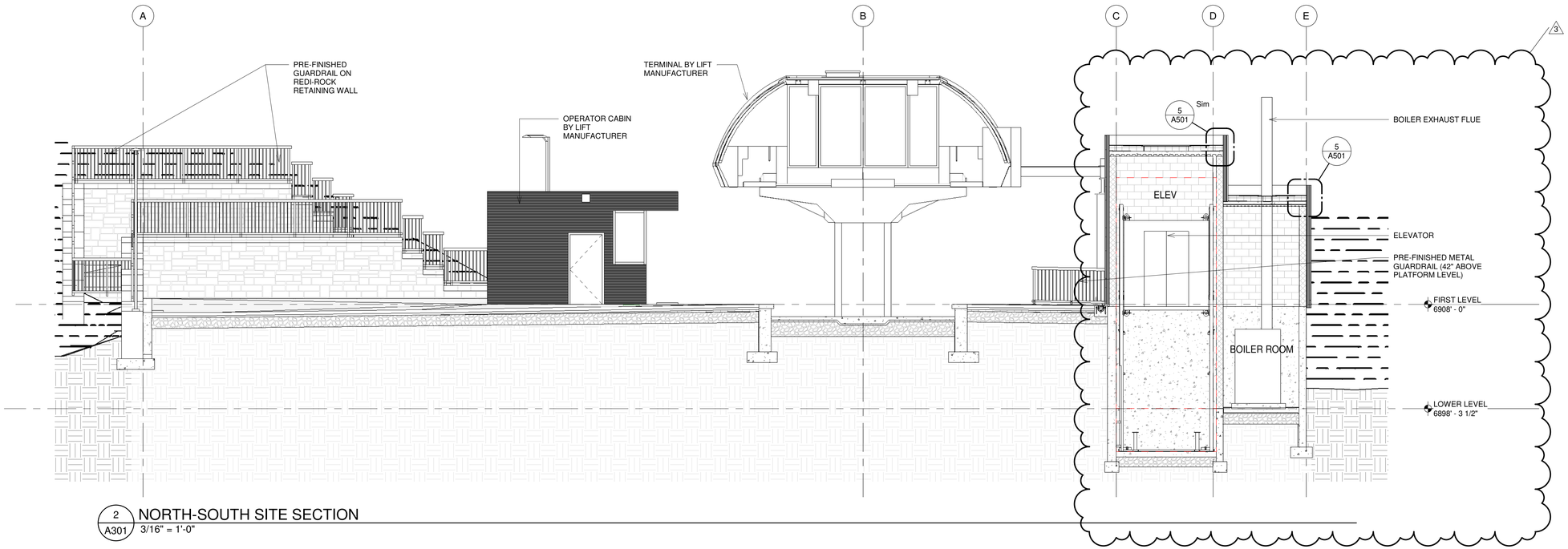
Sheet Title
EXTERIOR ELEVATIONS & BLDG SECTIONS

Sheet Number
A203

RCRBD
Record Set
TC
04/27/2021



1 A301 EAST-WEST SITE SECTION
3/16" = 1'-0"



2 A301 NORTH-SOUTH SITE SECTION
3/16" = 1'-0"

CONSTRUCTION SET 03/29/2021

4/20/2021 4:35:05 PM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1192
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION

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REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

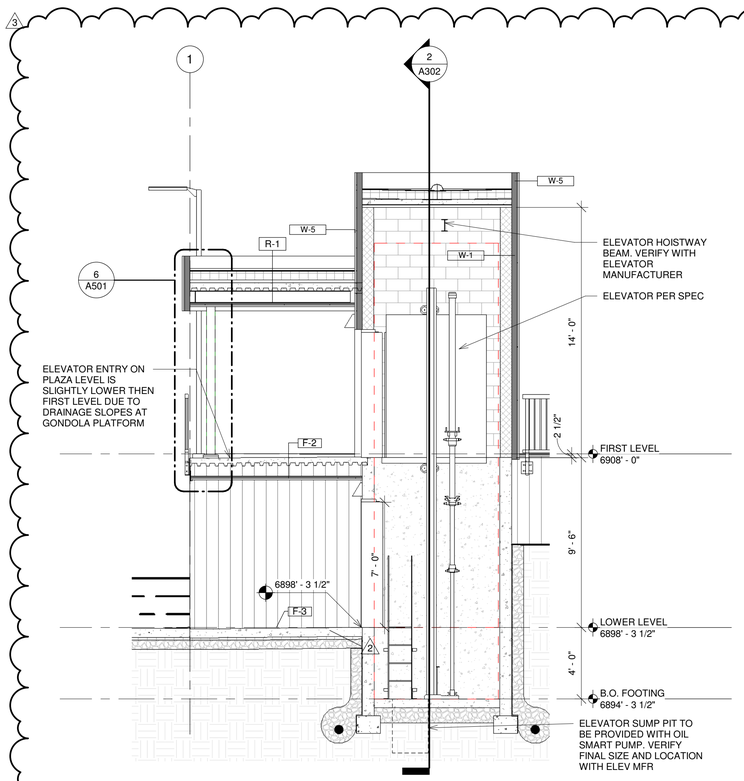
ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

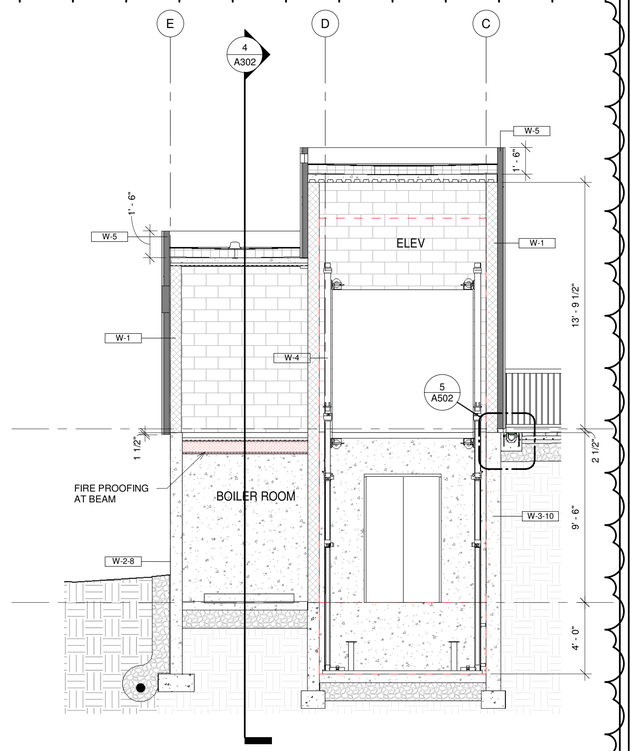
Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
SITE SECTIONS

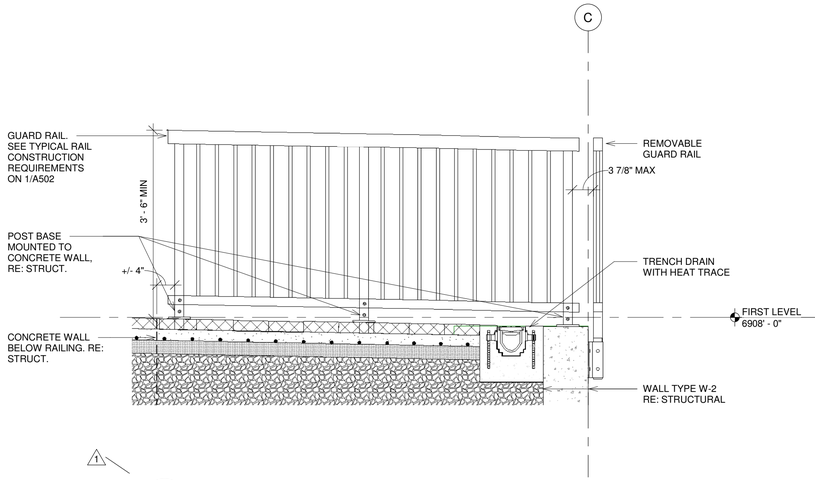
Sheet Number
A301



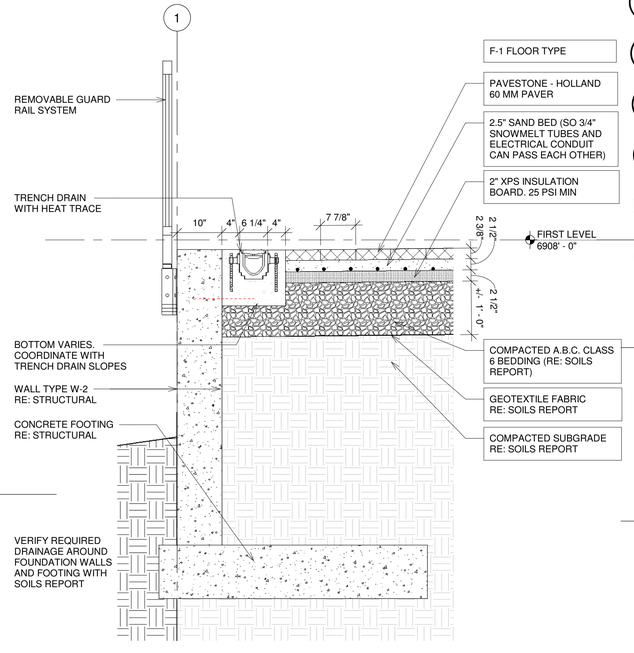
1 A302 ELEVATOR SECTION (EW)
1/4" = 1'-0"



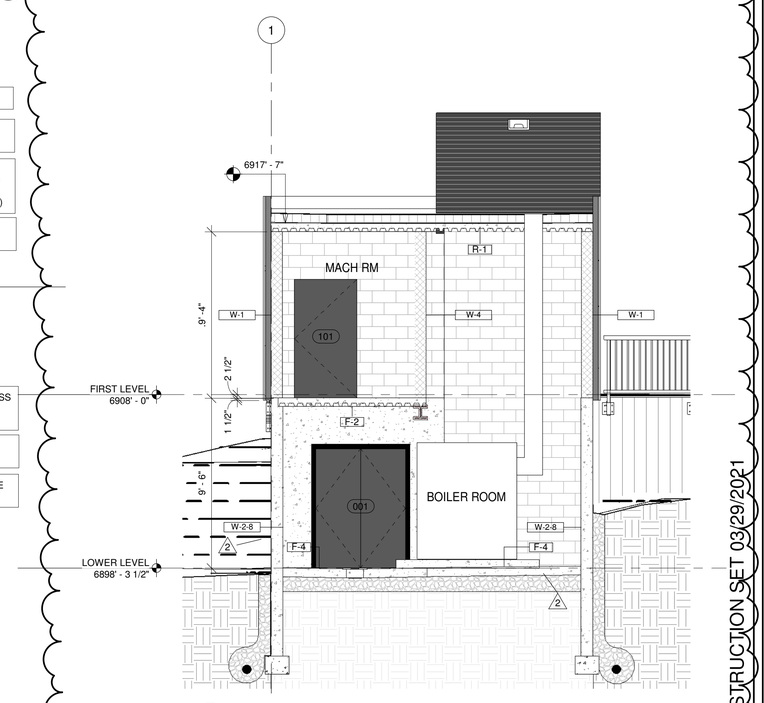
2 A302 ELEVATOR SECTION (NS)
1/4" = 1'-0"



5 A302 SURFACE MOUNTED RAILING DETAIL
3/4" = 1'-0"



3 A302 WALL SECTION 1
3/4" = 1'-0"



4 A302 BUILDING SECTION 1
1/4" = 1'-0"

CONSTRUCTION SET 03/29/2021

4/20/2021 4:35:07 PM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1152
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION

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REVISIONS

No.	Description	Date
1	Addendum #1	3-12-2021
2	Addendum #2	3-26-2021
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
BUILDING AND WALL SECTIONS

Sheet Number
A302

Elevator/Boiler Building Door Schedule

Door Number	Door							Frame					Comments
	Width	Height	Thickness	Material	Finish	Under Cut	Fire Rating	Hardware	Material	Finish	Jamb	Head	
103	3' - 0"	6' - 6"	0' - 2"										
101	3' - 6"	6' - 8"	0' - 1 3/4"	HM	PT	NO	45 MIN	HG-1	HM	PT			
001	5' - 0"	6' - 8"	0' - 1 3/4"	HM	PT	NO	45 MIN	HG-2	HM	PT			

HG-1 (001) Boiler Room (45 min)

6	Hinges - 4 1/2" X 4 1/2" 5BB1 5 Knuckle, Ball Bearing Full Mortise Hinge	US26D	IVES
1	Closer - DC516-3 HEAVY DUTY PARALLEL		ASSA ABLOY
1	Pre-wire for future RFID Card Reader adjacent to door (latch side active door).		HID Proximity ProxPro
1	Latchset - Storage Function, L type Lever	US26D	SARGENT
1	Threshold		
1	Manual Flush Bolt for inactive metal door FB458	US26D	IVES
2	Wall Stop - 409 Concave	US26D	ROCKWOOD
2	Smoke Seal - Self-Adhesive Silicone Gasketing/Weatherstrip		NGP
2	12" Kick plate, mount on push side of door		

HG-2 (101) Elevator Machine Room (45 min)

3	Hinge - 4 1/2" X 4 1/2" 5BB1 5 Knuckle, Ball Bearing Full Mortise Hinge	US26D	IVES
1	Closer - DC516-3 HEAVY DUTY PARALLEL		ASSA ABLOY
1	Pre-wire for future RFID Card Reader adjacent to door (latch side).		HID Proximity ProxPro
1	Latchset - Storage Function, L type Lever	US26D	SARGENT
1	Threshold		
1	Wall Stop - 409 Concave	US26D	ROCKWOOD
1	Smoke Seal - Self-Adhesive Silicone Gasketing/Weatherstrip		NGP
1	12" Kick plate, mount on push side of door		

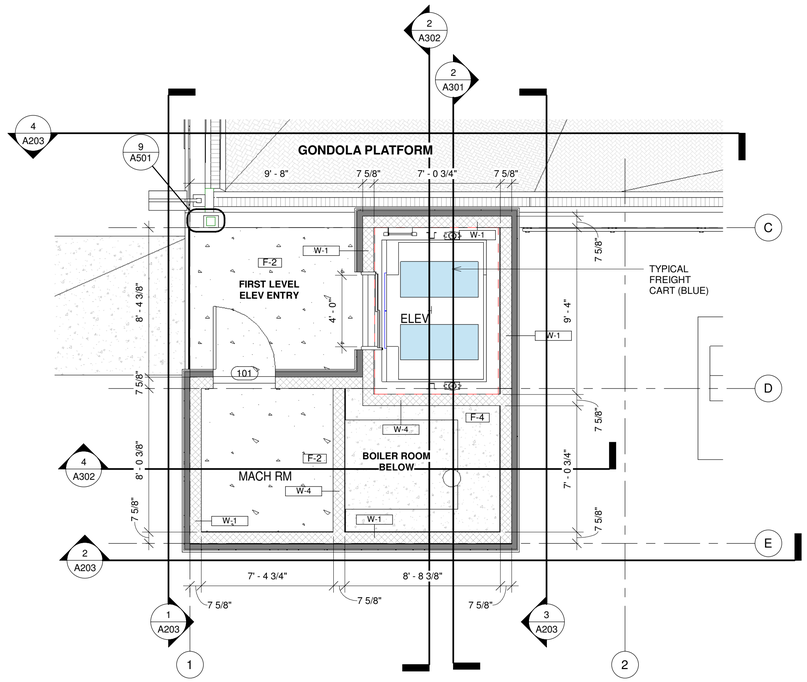
DOOR AND HARDWARE SCHEDULE NOTES:

1. GENERAL CONTRACTOR TO COORDINATE THE NUMBER OF DOORS, SWING AND THE NUMBER OF ITEMS WITHIN EACH HARDWARE GROUP WITH EACH SPECIFIC DOOR AT TIME OF DOOR AND HARDWARE SUBMITTAL.

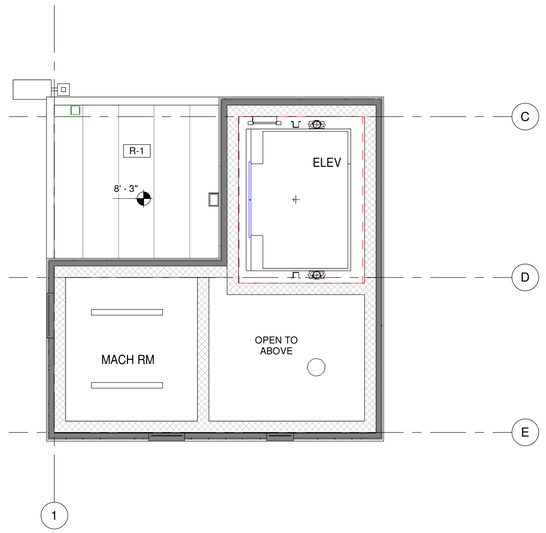
2. DOOR HARDWARE IS BASIS-OF-DESIGN PER SPECIFICATIONS. REVIEW HARDWARE WITH OWNER, INCLUDING FUTURE RFID REQUIREMENTS.

3. DOOR OPENING PRESSURE: THE OPENING DOOR FORCE REQUIRES TO BE 5 LBF MAX. ALTERNATIVELY, PROVIDE AN AUTOMATIC DOOR OPENER WITH STANDBY POWER TO OPERATE DOOR. 2010 ADA (404.2.9)1.

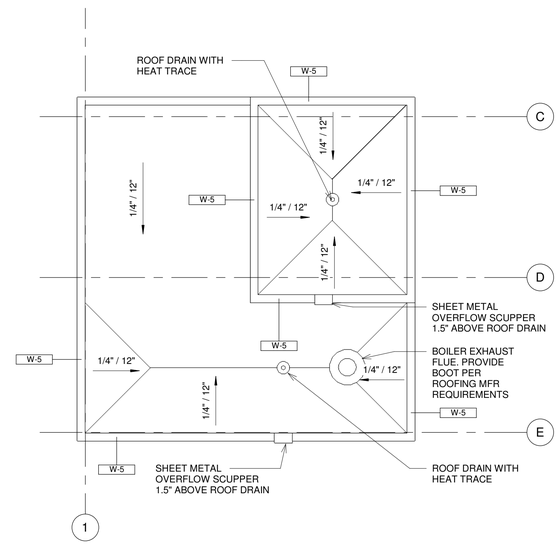
4. COORDINATE ALL KEYING WITH OWNER. CORBIN RUSSWIN RU46.



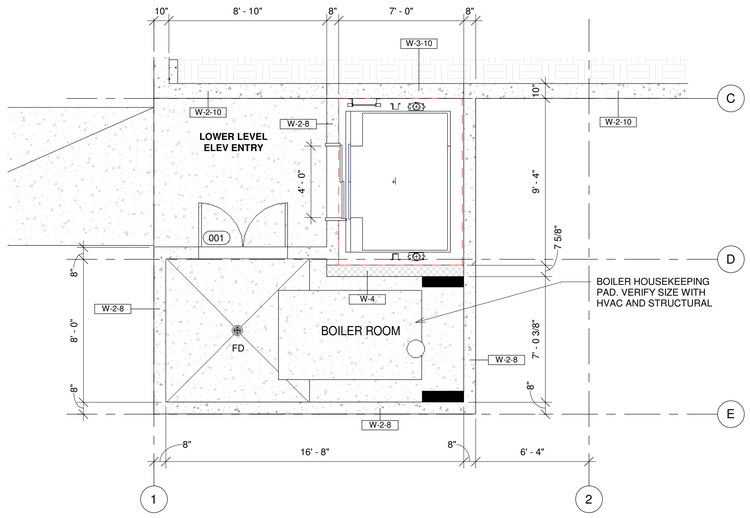
2 A401 PLAZA LEVEL PLAN
1/4" = 1'-0"



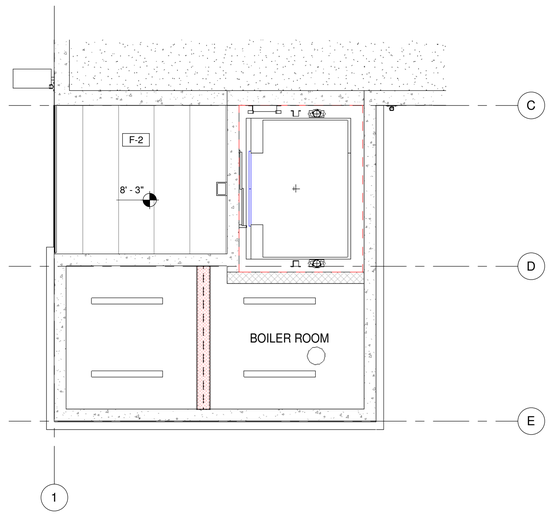
6 A401 PLAZA LEVEL R.C.P.
1/4" = 1'-0"



3 A401 ROOF PLAN
1/4" = 1'-0"



1 A401 LOWER LEVEL PLAN
1/4" = 1'-0"



7 A401 LOWER LEVEL R.C.P.
1/4" = 1'-0"

CONSTRUCTION SET 03/29/2021

4/20/2021 4:35:10 PM FILE: 20034 SBG PLATFORM v19.rvt

STATE OF COLORADO
ERIC P. SMITH
B-1152
LICENSED ARCHITECT
APR 20 2021

NOTICE: DUTY OF COOPERATION

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REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

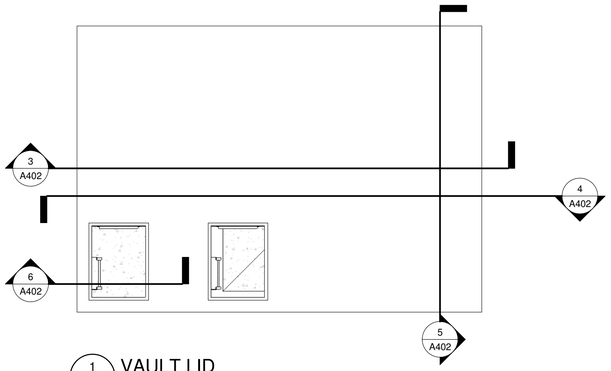
ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5458, (303) 442-4745 FAX

Job Number:	20034
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

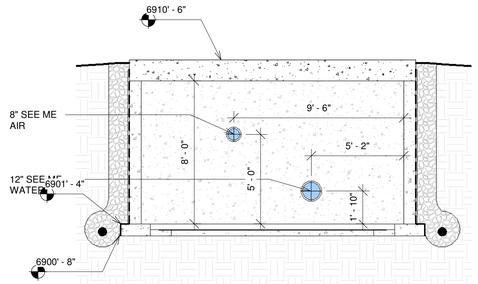
Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
FLOOR AND CEILING PLANS

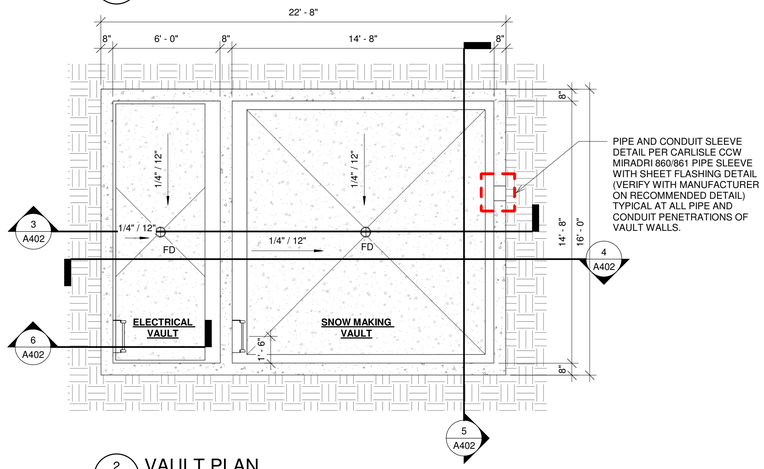
Sheet Number
A401 / 3



1 A402 VAULT LID
1/4" = 1'-0"



5 A402 VAULT - EAST
1/4" = 1'-0"



PIPE AND CONDUIT SLEEVE DETAIL PER CARLISLE CCW MIRADRI 860/861 PIPE SLEEVE WITH SHEET FLASHING DETAIL (VERIFY WITH MANUFACTURER ON RECOMMENDED DETAIL) TYPICAL AT ALL PIPE AND CONDUIT PENETRATIONS OF VAULT WALLS.

2 A402 VAULT PLAN
1/4" = 1'-0"

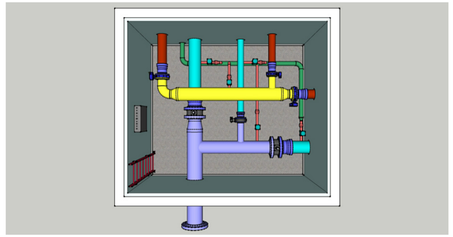
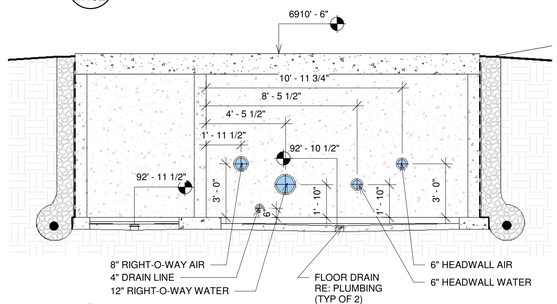
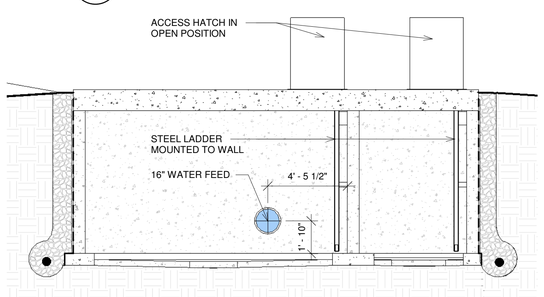


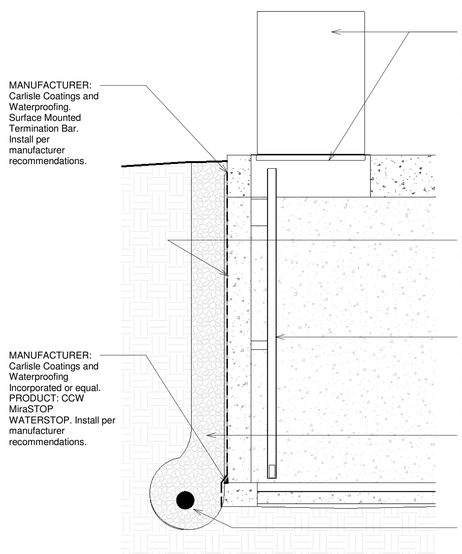
IMAGE ABOVE BY PROVIDED OWNER SHOWING SNOW MAKING PIPING LAYOUT.
ALL SNOW MAKING PIPING SCOPE TO BE BY OWNER INCLUDING PIPE RE-ALIGNMENT, ACTUATOR VALES AND PIPING SPECIFIC DRAIN LINE (GREEN DRAIN LINE). CONTRACTOR TO COORDINATE DIRECTLY WITH OWNER TEAM ON SNOW MAKING SCOPE COORDINATION.



3 A402 VAULT - NORTH
1/4" = 1'-0"



4 A402 VAULT - SOUTH
1/4" = 1'-0"



MANUFACTURER:
Carlisle Coatings and Waterproofing.
Surface Mounted Termination Bar.
Install per manufacturer recommendations.

MANUFACTURER:
Carlisle Coatings and Waterproofing
Incorporated or equal.
PRODUCT: CCW MiraSTOP WATERSTOP. Install per manufacturer recommendations.

Access Hatch, Basis-of-Design - Floor Door, floodtight, BA-A-FPS
www.BestAccessDoors.com
Material: Aluminum door and frame; Type 316 Stainless steel hinges & hardware.
Door: 1/4" aluminum diamond plate reinforced for live load 625 pounds per square foot.
Frame: 3/8" aluminum with 4" high raised frame for bolting to concrete.
Hinge: Type 316 stainless steel but hinges with tamper proof stainless steel bolts and nuts.
Gasket: 3/8" neoprene gasket
Opening Device: Automatic hold open arm with red vinyl grip allows door to open 90 degrees, locking door in open position and allowing for easy control when closing door panel. Stainless steel compression springs provide lift assistance.
Standard Latch: Type 316 stainless steel pressure lock system and exterior staple for padlock
Finish: mill finish with bituminous coating on the exterior frame.

MANUFACTURER: Carlisle Coatings and Waterproofing Incorporated or equal.
PRODUCT: CCW MiraDRI Carlisle 860/861 - a self-adhesive membrane of not less than 60 mils thickness, consisting of a 56 mil rubberized-asphalt membrane laminated to 4 mil cross-laminated polyethylene film and CCW MiraDRAIN drainage composite. All details per manufacturer recommendations. See also specification Section 07 13 26 for more information.

Wall Mounted Ladder, Basis-of-Design - BA-LAD-08-AL
www.BestAccessDoors.com
Material: Aluminum wall mounted ladder. 15/16" square extruded aluminum climbing rungs spaced on 12" centers.
Loading: 300 LBS at midspan
3/8" x 2 1/2" aluminum side members
7" stand-off brackets
Finish: Mill finish

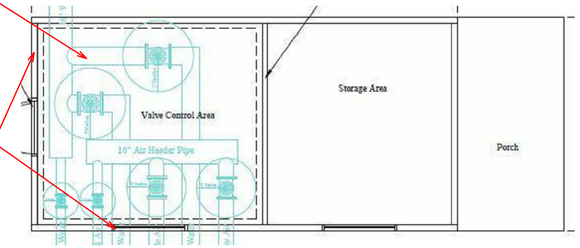
12" MIN FREE DRAINING GRAVEL ON ALL SIDES OF VAULT

PERIMETER DRAIN SYSTEM PER SOILS REPORT REQUIREMENTS

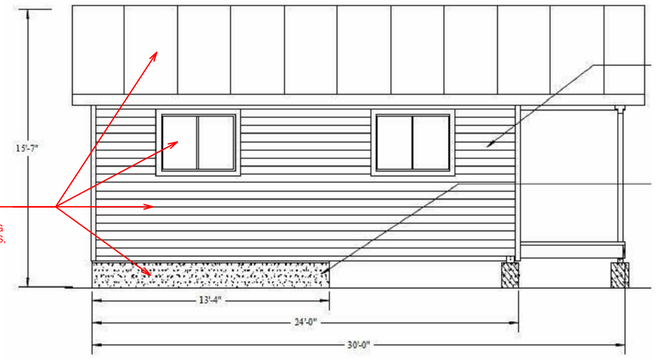
6 A402 VAULT SECTION
1/2" = 1'-0"

OWNER TO RELOCATE EXISTING SNOW MAKING PIPING DURING DEMO AND CONSTRUCTION AND TO REINSTALL SNOW MAKING PIPING INTO NEW BLOCK HOUSE VAULT.

REMOVE EXISTING SCHOOL HOUSE COMPLETE INCLUDING WALLS, FOUNDATIONS, ROOF, WINDOWS, DOORS, ETC.



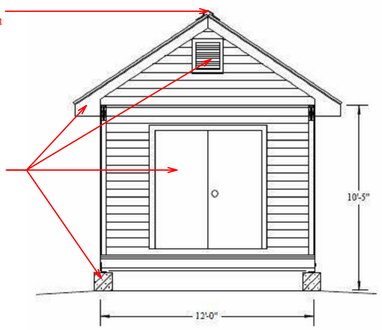
REMOVE EXISTING SCHOOL HOUSE COMPLETE INCLUDING WALLS, FOUNDATIONS, ROOF, WINDOWS, DOORS, ETC.



SIDE ELEVATION

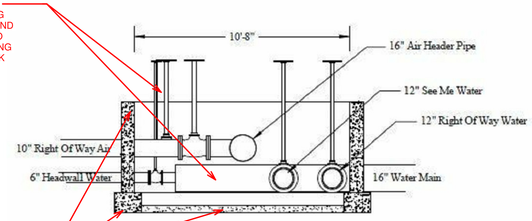
COORDINATE WITH OWNER ON ANY ITEMS THAT OWNER MAY WANT TO HAVE TURNED BACK OVER TO THEM INCLUDING BUT NOT LIMITED TO CUPOLA, BELL, SIGNAGE, EQUIPMENT, ETC.

REMOVE EXISTING SCHOOL HOUSE COMPLETE INCLUDING WALLS, FOUNDATIONS, ROOF, WINDOWS, DOORS, ETC.



FRONT ELEVATION

OWNER TO RELOCATE EXISTING SNOW MAKING PIPING DURING DEMO AND CONSTRUCTION AND TO REINSTALL SNOW MAKING PIPING INTO NEW BLOCK HOUSE VAULT.



REMOVE EXISTING SCHOOL HOUSE COMPLETE INCLUDING WALLS, FOUNDATIONS, ROOF, WINDOWS, DOORS, ETC.

EXISTING SCHOOL HOUSE AND BLOCK HOUSE DEMOLITION SCOPE

STATE OF COLORADO
ERIC F. SMITH
B-11??
APR 20 2021
LICENSED ARCHITECT

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

No.	Description	Date
3	ASI #1	4-19-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

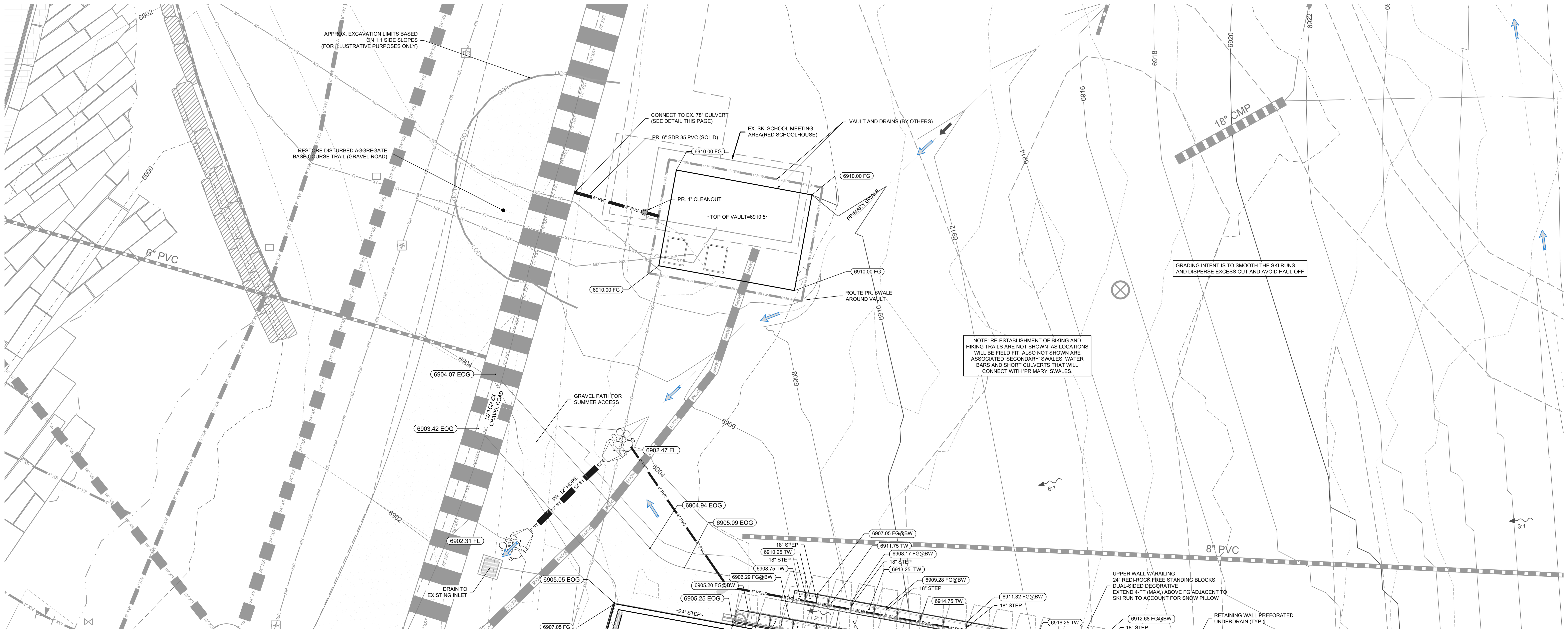
Job Number:	20054
Date:	12/30/20
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
SNOW MAKING & ELECTRICAL VAULT

Sheet Number
A402

4/20/2021 4:33:18 PM FILE: 20034 SBG PLATFORM v19.rvt



NORTH

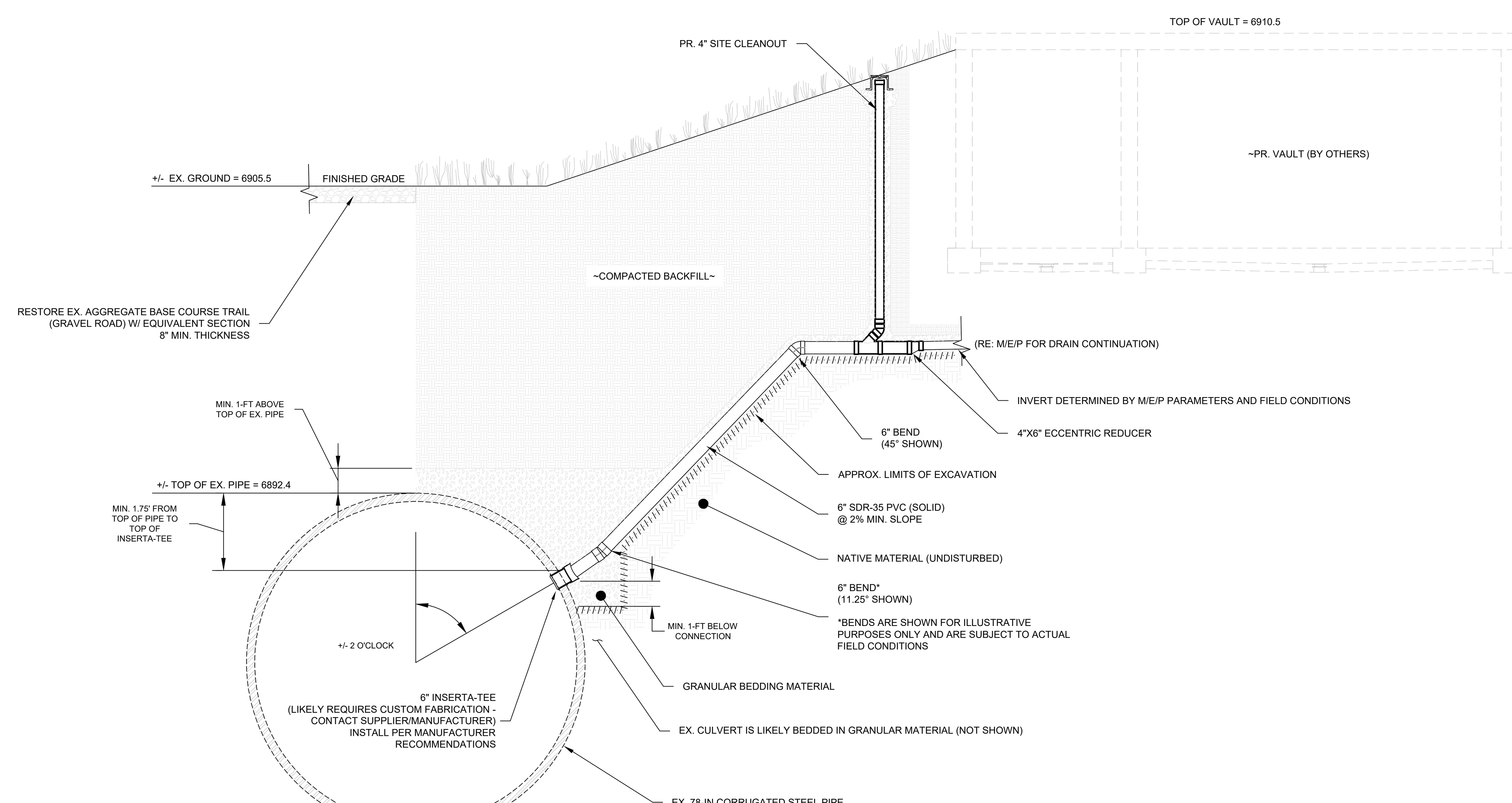
10 0 10 20 30 Feet
(IN FEET)
1 inch = 10 ft.

LEGEND:

EXISTING STORM SEWER	
PROPOSED STORM SEWER	
PROPOSED STORM INLET (CURB & AREA)	
PROPOSED MAJOR CONTOUR	6805
PROPOSED MINOR CONTOUR	
EXISTING MAJOR CONTOUR	6805
EXISTING MINOR CONTOUR	
PROPOSED SWALE	
PROPOSED CURB & GUTTER	
PROPERTY BOUNDARY	
PROPOSED LOT LINE	
EXISTING RIGHT OF WAY	
FLOOD HAZARD LIMITS	
PROPOSED SPOT ELEVATION	00.10
EXISTING SPOT ELEVATION	00.10 X
PROPOSED OVERLAND FLOW DIRECTION W/SLOPE	2.0%
PROPOSED CHANNELIZED FLOW DIRECTION W/ SLOPE	2.0%
EXISTING CHANNELIZED FLOW DIRECTION	

NOTES:

1. THE SIZE, TYPE AND LOCATION OF ALL KNOWN UNDERGROUND UTILITIES ARE APPROXIMATE WHEN SHOWN ON THESE DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO VERIFY THE EXISTENCE OF ALL UNDERGROUND UTILITIES IN THE AREA OF THE WORK. BEFORE COMMENCING NEW CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ALL UNKNOWN UNDERGROUND UTILITIES.
2. ALL PROJECT DATA IS ON VERTICAL DATUM; NAVD 88. SEE NOTES SHEET FOR BENCHMARK REFERENCES.
3. ELEVATIONS FOR IMPROVEMENTS THAT ARE CONTROLLED BY ADJACENT EXISTING FACILITIES (SUCH AS PROPOSED GUTTERS ALONG EXISTING ASPHALT) MAY REQUIRE ADJUSTMENT BASED ON ACTUAL CONDITIONS. COORDINATE WITH ENGINEER TO ENSURE A CONSISTENT SECTION WITH SMOOTH TRANSITIONS WHERE NECESSARY.
4. SEE SOILS REPORT FOR PAVEMENT, SUBGRADE AND MATERIAL PREPARATION, DESIGN AND RECOMMENDATIONS.
5. ALL CURB SPOTS SHOWN ARE FLOWLINE ELEVATIONS, UNLESS NOTED OTHERWISE. ALL OTHER SPOTS ARE FINISHED GRADE ELEVATIONS.



CONNECTION TO BURGESS CREEK CULVERT DETAIL
N.T.S.

RCRBD
Record Set
TC
04/27/2021

CALL UTILITY NOTIFICATION CENTER OF COLORADO
811
Know what's below. Call before you dig.
CALL 2 BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

COLORADO LICENSED PROFESSIONAL ENGINEER
ERIK GRIEPENTROG
33280
3/26/21
NOT VALID WITHOUT ORIGINAL SIGNATURE AND DATE

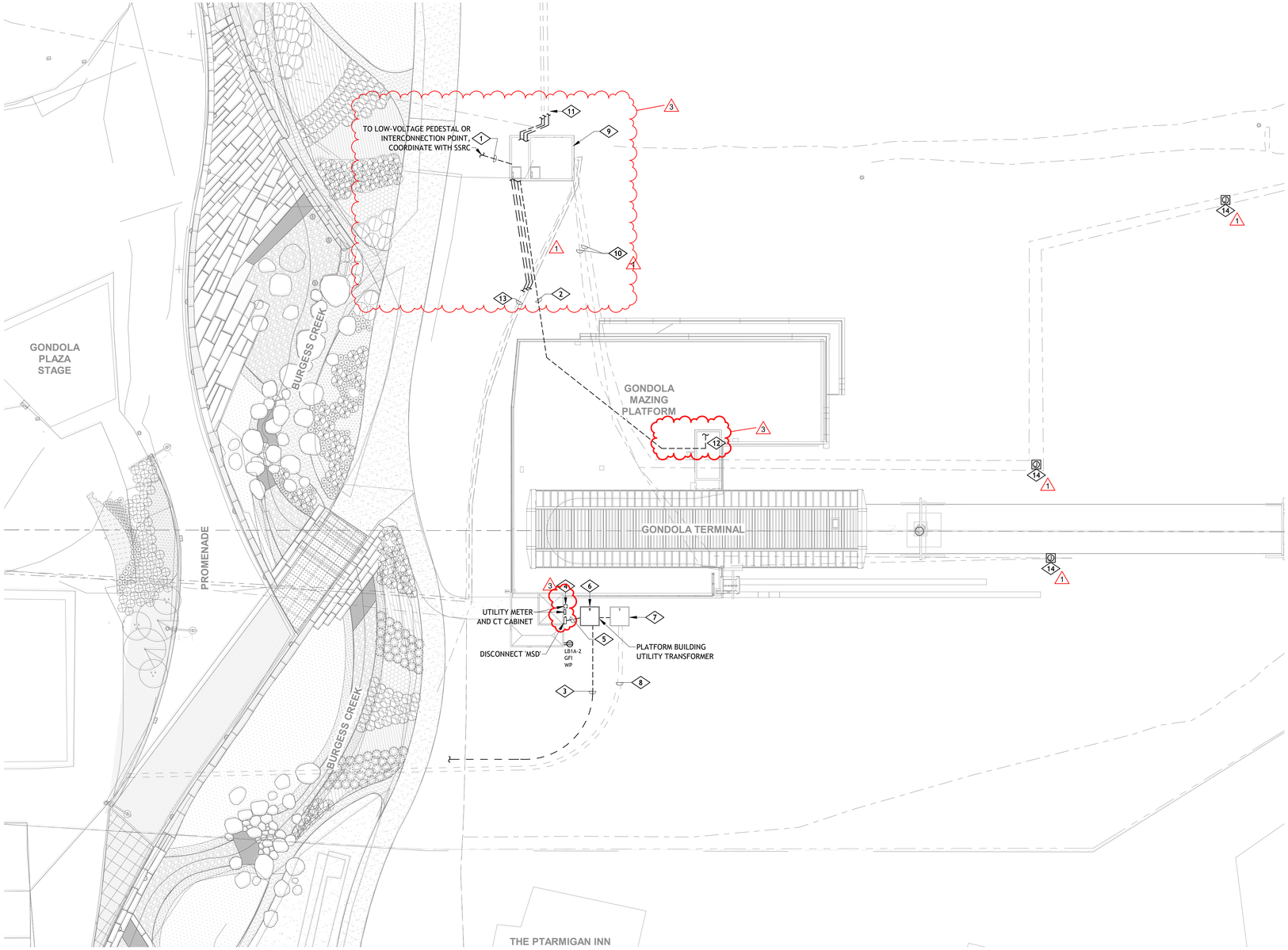
CIVIL ENGINEERS | SURVEYORS
141 9th Street ~ P.O. Box 774943
Steamboat Springs, Colorado 80477
(970) 871-9494
www.LANDMARK-CO.com
LANDMARK CONSULTANTS, INC.

NO.	DATE:	BY:	DESCRIPTION:
2	3-26-21	Grip	Addendum #2
3	4-19-21	Grip	ASI #1

PROJECT: 1012-047
DATE: 3/5/2021
CONTACT: Erik Griepentrog
EMAIL: erikg@landmark-co.com

Steamboat Gondola Relocation
Detailed Grading & Drainage Plan (Block House Vault)

SHEET
C.303



2 | FIRST LEVEL-ELECTRICAL SITE PLAN

E010 | 1" = 20'-0"

SITE GENERAL NOTES

A.	ALL EXTERIOR LIGHTING CIRCUITS SHALL UTILIZE A MINIMUM WIRE SIZE OF #8AWG COPPER, UON.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE (3) 3" CONDUITS FOR FIBER OPTIC AND COMMUNICATIONS SERVICE CABLING ROUTED FROM SERVICE INTERCONNECTION POINT INTO NEW UNDERGROUND ELECTRICAL VAULT FOR ROUTING TO OPERATOR CABIN AND CHRISTIE PEAK CHAIR LIFT. EC SHALL COORDINATE EXACT LOW-VOLTAGE CONDUIT ROUTING AND SIZING REQUIREMENTS WITH CIVIL SITE UTILITY DRAWINGS AND OWNER (SSRC) PRIOR TO COMMENCING WORK. REFER TO VAULT ELECTRICAL PLAN, SHEET E300, AND LOW-VOLTAGE RISER DIAGRAM, SHEET E600 , FOR ADDITIONAL INFORMATION.
2	PROVIDE (2) 3" CONDUITS FOR FIBER OPTIC AND COMMUNICATIONS SERVICE CABLING ROUTED THROUGH NEW UNDERGROUND ELECTRICAL VAULT TO OPERATORS CABIN. REFER TO CIVIL SITE UTILITY DRAWINGS FOR EXACT ROUTING AND SIZING REQUIREMENTS. REFER TO LOW-VOLTAGE RISER DIAGRAM, SHEET E600 , FOR ADDITIONAL INFORMATION.
3	APPROXIMATE ROUTING OF NEW UNDERGROUND UTILITY PRIMARY FROM NEW UTILITY TRANSFORMER TO UTILITY INTERCONNECTION POINT WITHIN EXISTING UTILITY EASEMENT. COORDINATE EXACT ROUTING AND REQUIREMENTS WITH ELECTRICAL UTILITY (YAMPA VALLEY ELECTRIC ASSOCIATION) AND GENERAL CONTRACTOR PRIOR TO COMMENCING WORK. COORDINATE FINAL ROUTING WITH ALL OTHER NEW/EXISTING UNDERGROUND UTILITIES INCLUDING FUTURE BASE BUILDING ELECTRICAL UTILITY PRIMARY/SECONDARY ROUTING PRIOR TO EXCAVATING.
4	THE EC SHALL FURNISH AND INSTALL THE REQUIRED METER HOUSING AS COORDINATED WITH YVEA. UTILITY SHALL FURNISH, INSTALL, AND CONNECT THE METER IN THAT HOUSING. ALL COSTS FOR WORK DESCRIBED ABOVE TO BE PERFORMED BY UTILITY SHALL BE CARRIED AS PART OF THE PROJECT BUDGET AND SHALL BE PAID BY THE CONTRACTOR. TRANSFORMER CONCRETE PAD BY GC, COORDINATE PAD AND CLEARANCE REQUIREMENTS WITH UTILITY ELECTRICAL SERVICE INSTALLATION MANUAL.
5	APPROXIMATE ROUTING OF NEW UNDERGROUND ELECTRICAL SECONDARY FEEDER FROM UTILITY TRANSFORMER TO NEW BUILDING ELECTRICAL SERVICE CT CABINET AND MAIN DISCONNECT LOCATED ON BUILDING EXTERIOR. REFER TO ELECTRICAL ONE-LINE DIAGRAM FOR MORE INFORMATION.
6	ANTICIPATED LOCATION OF NEW 480/277V, 3-PHASE PAD MOUNTED UTILITY TRANSFORMER. IT IS ANTICIPATED THAT UTILITY (YVEA - YAMPA VALLEY ELECTRIC ASSOCIATION) WILL PROVIDE BORING/TRENCHING FOR ALL PRIMARY CONDUIT BETWEEN UTILITY CONNECTION AND THE TRANSFORMER. UTILITY SHALL PROVIDE ALL PRIMARY CONDUIT AND WIRING TO THE TRANSFORMER, INCLUDING TRENCHING BETWEEN THE NEAREST UTILITY CONNECTION POINT AND THE PRIMARY CONNECTION AT THE TRANSFORMER. THE EC SHALL COORDINATE ROUTING AND TERMINATION IN THE FIELD AS TO ACHIEVE BUILDING POWER ACTIVATION. THE EC SHALL PERFORM ALL TRENCHING AND BACKFILLING ON THE SECONDARY SIDE OF THE TRANSFORMER. UTILITY SHALL MAKE ALL CONNECTIONS OF PRIMARY AND SECONDARY CABLING AT THE TRANSFORMER LANDINGS.
7	APPROXIMATE LOCATION OF BASE BUILDING UTILITY TRANSFORMER (BY OTHERS) TO BE LOCATED ADJACENT TO NEW PLATFORM BUILDING UTILITY TRANSFORMER (SHOWN FOR REFERENCE ONLY). REFER TO SEPARATE BASE BUILDING DESIGN DOCUMENTS AND PERMIT PACKAGE FOR ADDITIONAL INFORMATION AS NECESSARY.
8	APPROXIMATE ROUTING OF BASE BUILDING UTILITY PRIMARY AND SECONDARY UNDERGROUND DUCT BANK BY OTHERS (SHOWN FOR REFERENCE ONLY). REFER TO SEPARATE BASE BUILDING DESIGN DOCUMENTS AND PERMIT PACKAGE FOR ADDITIONAL INFORMATION AS NECESSARY.
9	NEW UNDERGROUND VAULT STRUCTURE. EXISTING SKI SCHOOL BLOCKHOUSE ? TO BE DEMOLISHED AS REQUIRED TO ACCOMMODATE NEW VAULT CONSTRUCTION. NEW VAULT TO HOUSE NEW/RELOCATED ELECTRICAL EQUIPMENT AND SNOW MAKING EQUIPMENT. REFER TO NEW VAULT ELECTRICAL ONE-LINE DIAGRAMS AND ENLARGED PLANS, SHEET E300, FOR ADDITIONAL INFORMATION.
10	EXISTING UNDERGROUND ELECTRICAL AND TELECOMMUNICATIONS CONDUITS AND CABLING FROM BLOCKHOUSE TO DEMOLISHED SKI CARPET LIFT EQUIPMENT SHALL BE REMOVED IN THEIR ENTIRETY BACK TO SOURCE AS REQUIRED TO ACCOMMODATE NEW PLATFORM BUILDING CONSTRUCTION.
11	EXISTING UNDERGROUND POWER AND TELECOMMUNICATIONS SERVICES (CONDUIT AND CABLING) SUPPLYING DEMOLISHED BLOCKHOUSE FROM CHRISTIE PEAK CHAIR LIFT. EXISTING POWER CONDUIT AND WIRING ANTICIPATED TO BE REMOVED AND REPLACED AS REQUIRED TO PROVIDE NEW UNDERGROUND POWER FEEDER FROM CHRISTIE PEAK CHAIR LIFT TO NEW VAULT ELECTRICAL PANEL HV1. CONTRACTOR SHALL PROVIDE NEW TRENCH FROM EXISTING CHRISTIE PEAK CHAIR LIFT TO NEW VAULT LOCATION AS NECESSARY TO ACCOMMODATE NEW CONDUIT INSTALLATION. REFER TO VAULT ELECTRICAL ONE-LINE DIAGRAM, SHEET E300, FOR ADDITIONAL INFORMATION. EXISTING POWER AND TELECOMMUNICATIONS CONDUIT ANTICIPATED TO BE RE-ROUTED/EXTENDED AS NECESSARY TO TERMINATE IN NEW VAULT ELECTRICAL ROOM FOR NEW PATHWAY AS REQUIRED. EC SHALL VERIFY EXISTING CONDUIT SIZING AND ROUTING IN FIELD. COORDINATE EXACT NEW COMMUNICATIONS CONDUIT SIZING/REQUIREMENTS AND ROUTING WITH OWNER PRIOR TO COMMENCING WORK.
12	ALL NEW UNDERGROUND CONDUIT ROUTED TO OPERATOR CABIN SHALL BE ROUTED THROUGH NEW STRUCTURAL BLOCK OUT IN OPERATOR CABIN FOUNDATION. EC SHALL COORDINATE EXACT BLOCK OUT LOCATION AND INSTALLATION REQUIREMENTS OF ALL ASSOCIATED CONDUIT/WIRING FOR OPERATOR CABIN POWER/TELECOMMUNICATIONS WITH DOPPELMAYR AND STRUCTURAL DRAWINGS PRIOR TO COMMENCING WORK. REFER TO ELECTRICAL FIRST LEVEL POWER PLAN, #1/E111, FOR ADDITIONAL INFORMATION.
13	APPROXIMATE ROUTING OF EXISTING TO REMAIN POWER AND COMMUNICATIONS CONDUITS TO EXISTING TO REMAIN BUCKAROO SKI CARPET LIFT. MAINTAIN ANY EXISTING CONDUIT/WIRING CONNECTIONS AND RE-CONNECT POWER TO NEW/RELOCATED PANEL IN NEW VAULT ELECTRICAL ROOM. EC SHALL RE-ROUTE EXISTING CONDUIT/WIRING AS NECESSARY TO RE-CONNECT POWER. REFER TO VAULT ELECTRICAL ONE-LINE DIAGRAMS, SHEET E300, FOR ADDITIONAL INFORMATION.
14	APPROX. LOCATION OF EXISTING CHAIR LIFT POWER/COMMUNICATIONS TERMINATION POINT TO BE REMOVED. COORDINATE EXACT LOCATION IN FIELD AND VERIFY TIMING OF REMOVAL WITH OWNER PRIOR TO COMMENCING WORK.

RCRBD

RECORD SET

ELECTRICAL

CONSTRUCTION SET 03/29/21

AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #: 5155.00

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
4/20/21

REVISIONS

No.	Description	Date
1	ADDENDUM #1	3/12/2021
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	03/29/21
Drawn By:	BDJ, MAE
Checked By:	TPK

Project Phase

CONSTRUCTION DOCUMENTS

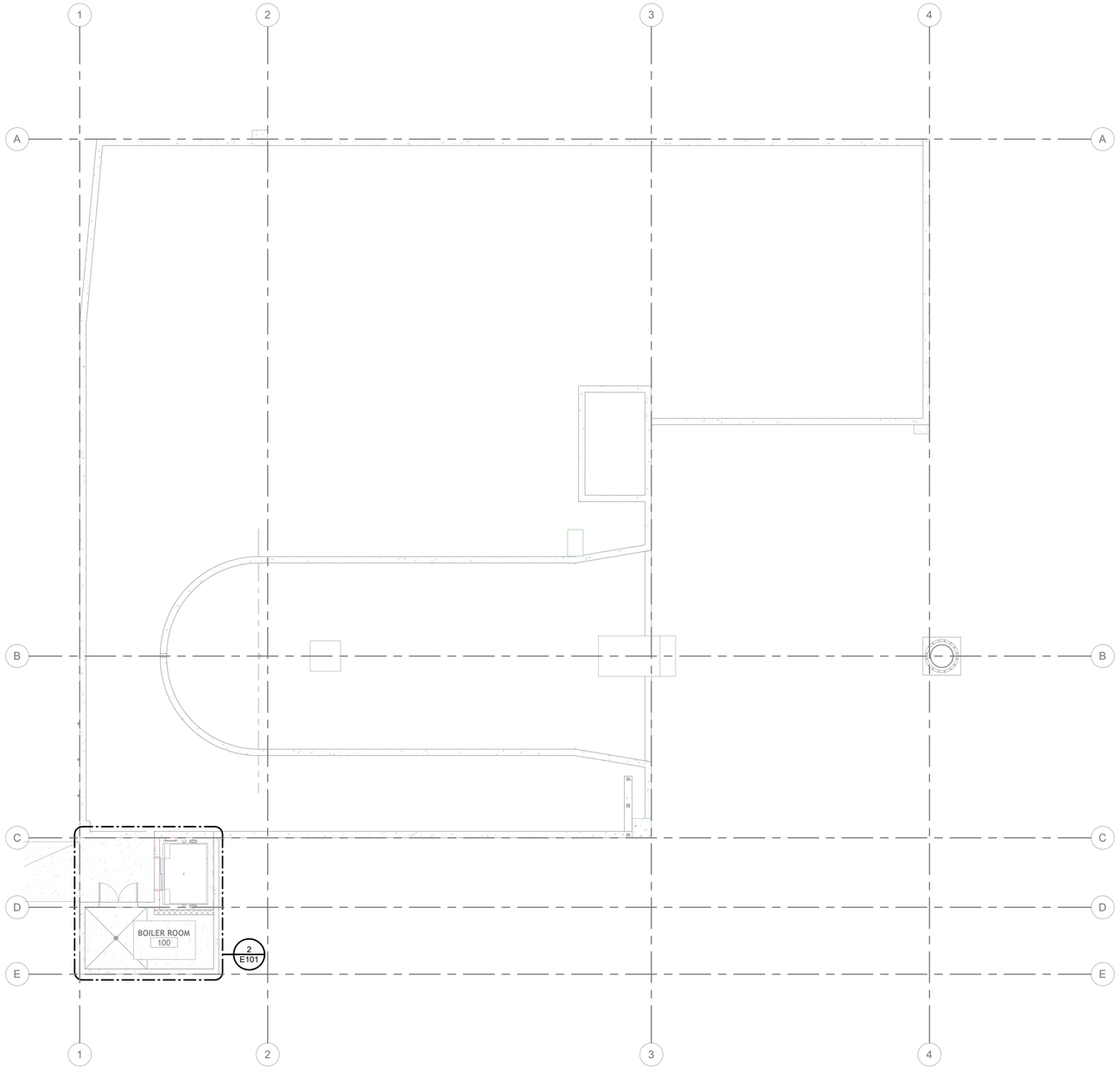
Sheet Title

ELECTRICAL SITE PLAN

Sheet Number

E010

4/20/2021 12:20:32 PM FILE: SBG PLATFORM v19.rvt

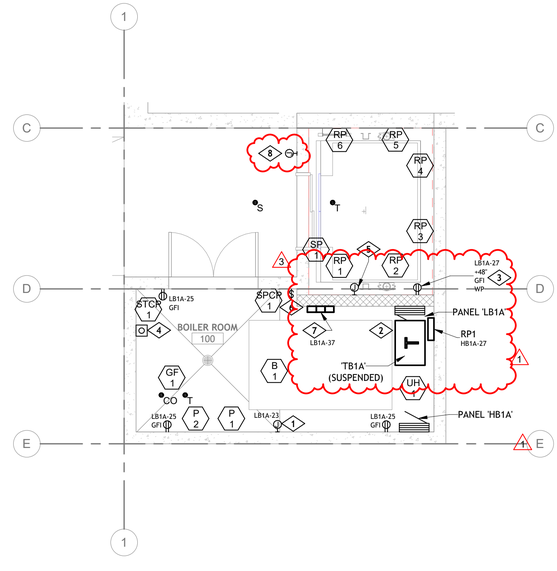


1 | LOWER LEVEL - ELECTRICAL POWER PLAN
E101 | 1/8" = 1'-0"

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE 120V, 20-AMP CIRCUIT FOR MECHANICAL CONTROLS. COORDINATE EXACT CONTROL EQUIPMENT LOCATION AND MOUNTING HEIGHT PRIOR TO ROUGH-IN. RUN 2#12+#12G-3/4"C.
2	EC SHALL COORDINATE EXACT ELECTRICAL PANEL LOCATIONS AND NEC REQUIRED WORKING CLEARANCES WITH MECHANICAL CONTRACTOR AND NEW MECHANICAL EQUIPMENT IN BOILER ROOM IN-FIELD PRIOR TO COMMENCING WORK. ALL FINAL INSTALLED ELECTRICAL PANEL CLEARANCES SHALL COMPLY WITH NEC REQUIREMENTS. EC SHALL SUSPEND ELECTRICAL TRANSFORMER FROM STRUCTURE AS REQUIRED. REFER TO DETAIL #1/E600 FOR MORE INFORMATION.
3	EC SHALL COORDINATE ELEVATOR SHAFTPIT RECEPTACLE LOCATION WITH APPROVED MANUFACTURER'S ELEVATOR EQUIPMENT SHOP DRAWINGS PRIOR TO ROUGH-IN.
4	PROVIDE EPO SWITCH FOR SHUTDOWN OF MECHANICAL BOILER(S) AS REQUIRED. COORDINATE EXACT LOCATION IN-FIELD WITH MECHANICAL CONTRACTOR. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
5	24V THERMOSTAT WITH REMOTE SENSOR PROVIDED BY TCC. EC SHALL PROVIDE LINE-VOLTAGE CONTROLS TO RADIANT HEATER AS NECESSARY. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR AND REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION.
6	EC SHALL PROVIDE TOGGLE SWITCH WITH INDICATOR LIGHT FOR TRENCH DRAIN HEAT TRACE CONTROL. COORDINATE AND CONFIRM EXACT LOCATION WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN. REFER TO FIRST LEVEL POWER PLAN FOR ADDITIONAL HEAT TRACE INFORMATION.
7	PROVIDE 120V, 20-AMP POWER CONNECTION TO NEW RFID TICKET GATE LOW-VOLTAGE TRANSFORMER/POWER SUPPLY. COORDINATE EXACT LOCATIONS, QUANTITY, AND REQUIREMENTS WITH OWNER (STEAMBOAT SKI AND RESORT) IN FIELD PRIOR TO COMMENCING WORK.
8	EC SHALL PROVIDE WALL RECESSED JUNCTION BOX AND 3/4"C TO OPERATOR CABIN TELECOMMUNICATIONS HEAD END EQUIPMENT/CABINET FOR ELEVATOR LANDING TWO-WAY COMMUNICATIONS CALL STATION AND LOW-VOLTAGE CABLING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.

RCRBD
RECORD SET
ELECTRICAL



2 | ENLARGED ELECTRICAL POWER PLAN - BOILER ROOM
E101 | 1/4" = 1'-0"

CONSTRUCTION SET 03/29/21

AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #: 5155.00

4/20/2021 12:20:33 PM FILE: SBG PLATFORM v19.rvt

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
4/20/21

REVISIONS

No.	Description	Date
1	ADDENDUM #1	3/12/2021
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

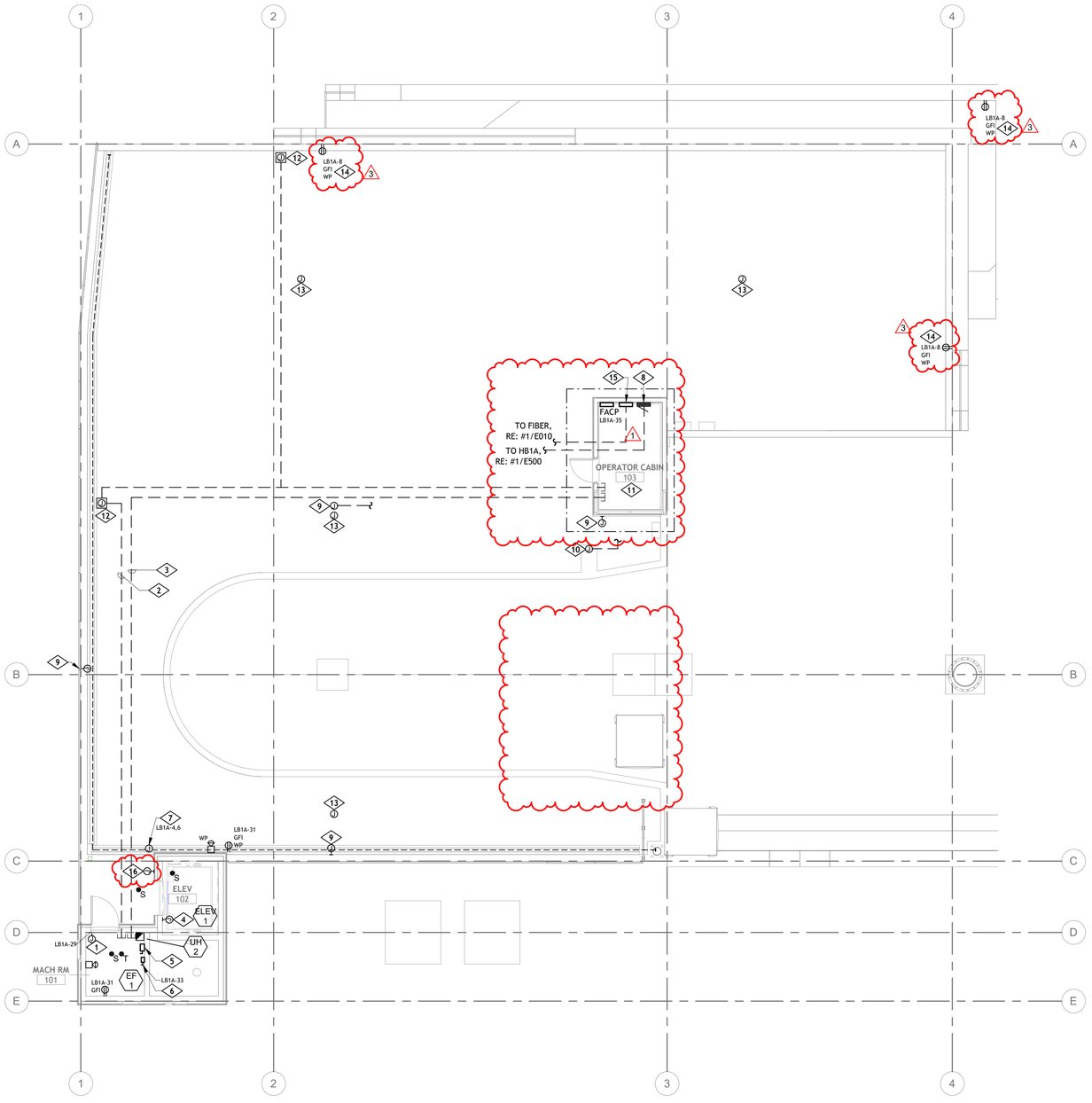
ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5456, (303) 442-4745 FAX

Job Number:	20054
Date:	05/29/21
Drawn By:	BDJ, MAE
Checked By:	TPK

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ELECTRICAL LOWER LEVEL POWER PLAN

Sheet Number
E101



1 | FIRST LEVEL - ELECTRICAL POWER PLAN

E111 | 1/8" = 1'-0"

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE 120V, 20-AMP CONNECTION FOR LINE VOLTAGE THERMOSTAT AND MOTORIZED DAMPER FOR EF-1. REFER TO MECHANICAL DRAWINGS FOR MORE INFORMATION, INCLUDING EXACT CONNECTION REQUIREMENTS AND LOCATION. RUN 2#12, 1#12G, 3/4"C.
2	PROVIDE (2) 2"C ROUTED UP THROUGH CRAWL SPACE AS NECESSARY AND THEN ROUTED BELOW GRADE/FINISHED PAVERS BETWEEN PANEL LB1A IN LOWER LEVEL BOILER ROOM AND IT EQUIPMENT IN UPPER LEVEL OPERATOR CABIN FOR ENTRY GATE AND TICKET SCANNER POWER/DATA CABLING PATHWAY. CONDUIT SHALL BE ROUTED TO JUNCTION BOXES AS SHOWN FOR FINAL TERMINATIONS TO ENTRY GATE AND TICKET SCANNER EQUIPMENT. COORDINATE EXACT LOCATIONS AND ROUTING WITH OWNER PRIOR TO COMMENCING WORK.
3	PROVIDE (1) 2"C WITH PULL-STRING FOR DATA CABLING AND (2) SPARE 2"C WITH PULL-STRING FOR FUTURE POWER/DATA, ROUTED BELOW GRADE/FINISHED PAVERS FROM BOILER ROOM ON LOWER LEVEL TO OPERATOR CABIN FOR POWER/DATA CABLING PATHWAY(S). REFER TO LOW VOLTAGE RISER DIAGRAM, #2/E600, FOR MORE INFORMATION.
4	PROVIDE 3/4"C CONDUIT ROUTED FROM TELECOMMUNICATIONS HEAD END EQUIPMENT LOCATION TO ELEVATOR CONTROLLER FOR LOW-VOLTAGE TELEPHONE CABLING RACEWAY. CONTRACTOR SHALL PROVIDE (1) CAT6 CABLE FOR CONNECTION TO ELEVATOR CONTROL PANEL. EC SHALL COORDINATE EXACT LOCATIONS AND REQUIREMENTS WITH APPROVED ELEVATOR MANUFACTURER SHOP DRAWINGS PRIOR TO INSTALLATION.
5	PROVIDE ELEVATOR FUSED DISCONNECT EQUIPMENT IN ELEVATOR MACHINE ROOM. PROVIDE EATON ELEVATOR CONTROL SWITCH #ES SERIES WITH FIRE SAFETY INTERFACE RELAY, VOLTAGE MONITORING RELAY, AND AUXILIARY CONTACTS AS REQUIRED FOR FIRE ALARM SHUNT TRIP OPERATION OF ELEVATOR POWER. EC SHALL COORDINATE EXACT DISCONNECT LOCATION, SIZING AND FIRE ALARM RELAY SPECIFICATION WITH THE APPROVED ELEVATOR SUBMITTALS AND FIRE ALARM SYSTEM SUBMITTALS PRIOR TO ORDERING.
6	PROVIDE LOCKABLE 120V, 20-AMP CIRCUIT FOR POWER CONNECTION TO ELEVATOR CAB. EC SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS WITH APPROVED MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGH-IN.
7	EC SHALL PROVIDE 208V, SINGLE-PHASE, 20A/2P ELECTRICAL CONNECTION WITH 30MA GFEP PROTECTION FOR HEAT TRACE SYSTEM CONTROL PANEL LOCATED IN BOILER ROOM AND HEAT TRACE CABLING LOCATED WITHIN TRENCH DRAIN AS INDICATED WITH DASHED LINE. EC SHALL COORDINATE EXACT LOCATIONS AND INSTALLATION REQUIREMENTS OF HEAT TRACE CABLE, CONTROL PANEL, THERMOSTATS, SENSORS, POWER CONNECTION KITS, INDICATOR LIGHTS, AND OTHER ACCESSORIES WITH MECHANICAL CONTRACTOR PRIOR TO COMMENCING WORK. REFER TO ENLARGED BOILER ROOM PLAN FOR CONTROLLER LOCATION. BASIS OF DESIGN SHALL BE RAYCHEM GM-2X CABLE, PROVIDED BY MECHANICAL CONTRACTOR. EC SHALL PROVIDE ANY ADDITIONAL ELECTRICAL BRANCH CIRCUIT POWER WIRING, CONDUIT, AND JUNCTION BOXES REQUIRED FOR A COMPLETE SYSTEM. EC SHALL COORDINATE EXACT ELECTRICAL CONNECTIONS AND REQUIREMENTS WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL INFORMATION AND CONTROL SYSTEM REQUIREMENTS.
8	APPROXIMATE LOCATION OF NEW TERMINAL ELECTRICAL CABINET EQUIPMENT 'DMEC', PROVIDED BY DOPPELMAYR USA. REFER TO ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATION.
9	NEW POC (CONTROL STATION) SHOWN FOR REFERENCE ONLY. ALL DEVICE JUNCTION BOXES, CONDUIT, AND WIRING/TERMINATIONS PROVIDED BY OTHERS.
10	NEW GATE ACCESS CONTROL STATION SHOWN FOR REFERENCE ONLY. ALL DEVICE JUNCTION BOXES, CONDUIT, AND WIRING/TERMINATIONS PROVIDED BY OTHERS.
11	NEW OPERATOR CABIN PRE-MANUFACTURED BUILDING SHALL BE PRE-WIRED FOR ALL INTERIOR AND EXTERIOR BUILDING MOUNTED POWER, LIGHTING, AND COMMUNICATIONS DEVICES. EC SHALL PROVIDE CONDUIT AND WIRING FOR NEW POWER FEEDER TO LIFTER TERMINAL ELECTRICAL CABINET 'DMEC' (PANEL PROVIDED BY OTHERS), AND NEW COMMUNICATIONS SERVICE TO OPERATOR CABIN (SEE ELECTRICAL SITE PLAN FOR MORE INFORMATION). ALL NEW UNDERGROUND CONDUIT ROUTED TO OPERATOR CABIN SHALL BE ROUTED THROUGH NEW STRUCTURAL BLOCK OUT IN OPERATOR CABIN FOUNDATION. EC SHALL COORDINATE EXACT BLOCK OUT LOCATION AND INSTALLATION REQUIREMENTS OF ALL ASSOCIATED CONDUIT/WIRING FOR OPERATOR CABIN POWER/TELECOMMUNICATIONS WITH DOPPELMAYR AND STRUCTURAL DRAWINGS PRIOR TO COMMENCING WORK.
12	PROVIDE 12"X24"X18.5 HUBBELL QUAZITE PG SERIES IN-GRADE PULL-BOX WITH (2) PVC OUTDOOR RATED, WATER-TIGHT JUNCTION BOXES MOUNTED INSIDE PULL-BOX ENCLOSURE, (1) FOR POWER AND (1) FOR DATA CONNECTIONS TO NEW ENTRY GATE AND TICKET SCANNER EQUIPMENT. COORDINATE EXACT LOCATIONS WITH OWNER PRIOR TO ROUGH-IN. COORDINATE INSTALLATION WITHIN FINISHED PAVERS WITH GENERAL CONTRACTOR.
13	PROVIDE 3/4"C FROM SNOW/ICE DETECTOR TO BOILER ROOM SNOWMELT CONTROL PANEL FOR SENSOR CONTROL WIRING AS NECESSARY. COORDINATE EXACT ZONES/QUANTITIES, LOCATIONS AND INSTALLATION REQUIREMENTS WITH MECHANICAL CONTRACTOR PRIOR TO COMMENCING WORK.
14	PROVIDE NEW 120V, 20-AMP DUPLEX RECEPTACLE MOUNTED WITHIN NEW RETAINING WALL. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH ARCHITECT AND RETAINING WALL CONSTRUCTION AS REQUIRED FOR FLUSH RECESSED DEVICE AND BOX/COVER MOUNTING. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT IN FIELD WITH OWNER PRIOR TO ROUGH-IN.
15	APPROXIMATE LOCATION OF TELECOMMUNICATIONS CABINET IN OPERATOR CABIN. REFER TO SITE PLAN AND LOW-VOLTAGE SERVICE ENTRANCE CONDUIT ROUTING FOR MORE INFORMATION.
16	EC SHALL PROVIDE WALL RECESSED JUNCTION BOX AND 3/4"C TO OPERATOR CABIN TELECOMMUNICATIONS HEAD END EQUIPMENT/CABINET FOR ELEVATOR LANDING TWO-WAY COMMUNICATIONS CALL STATION AND LOW-VOLTAGE CABLING. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN.

RCRBD

RECORD SET

ELECTRICAL

CONSTRUCTION SET 03/29/21

AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #: 5155.00

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
4/20/21

NOTICE: DUTY OF COOPERATION

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REVISIONS

No.	Description	Date
1	ADDENDUM #1	3/12/2021
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
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(303) 442-5458, (303) 442-4745 FAX

Job Number:	20054
Date:	03/29/21
Drawn By:	BDJ, MAE
Checked By:	TPK

Project Phase

CONSTRUCTION DOCUMENTS

Sheet Title

ELECTRICAL FIRST LEVEL POWER PLAN

Sheet Number

E111

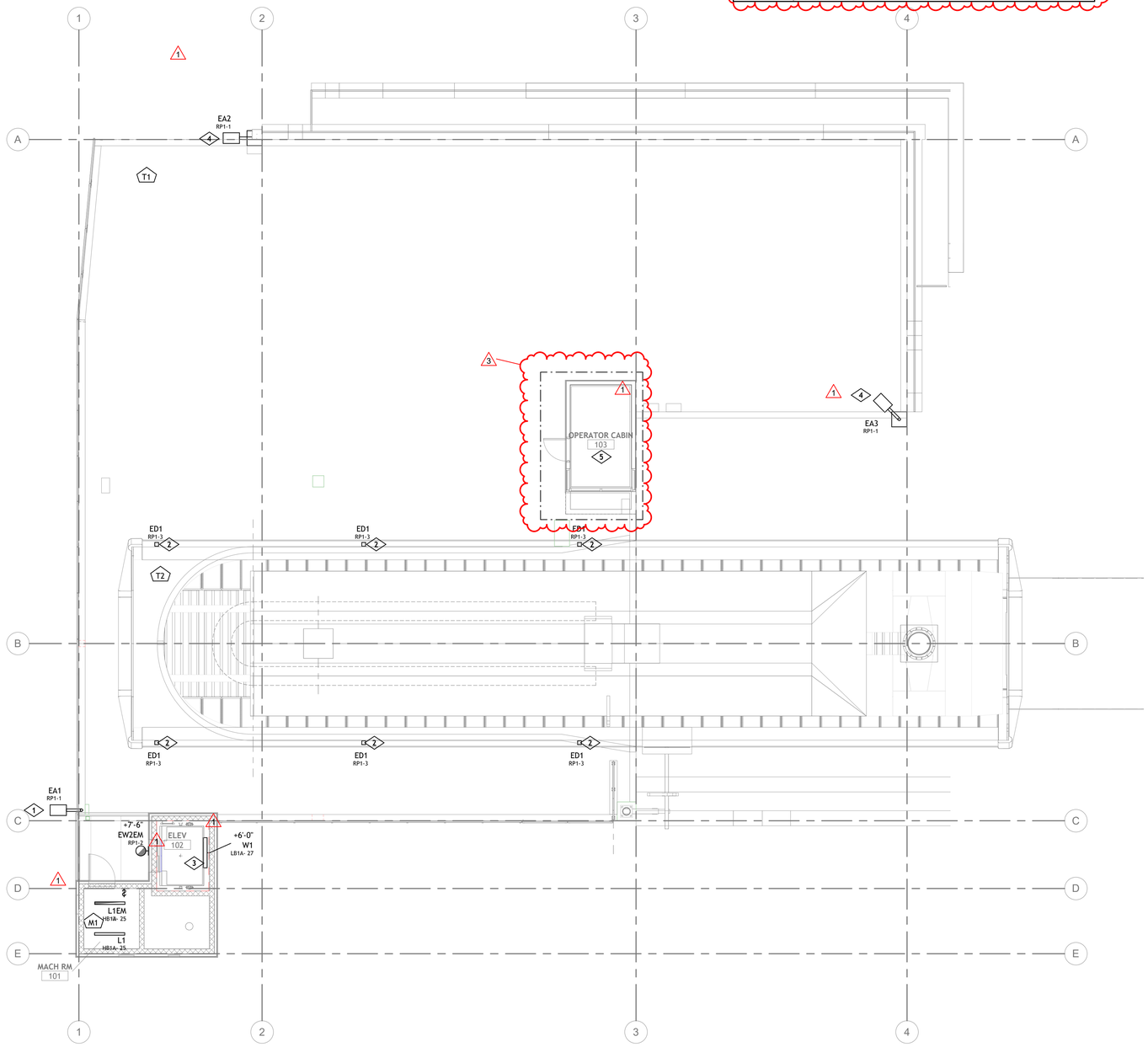
4/20/2021 12:20:33 PM FILE: SBG PLATFORM v19.rvt

LIGHTING GENERAL NOTES

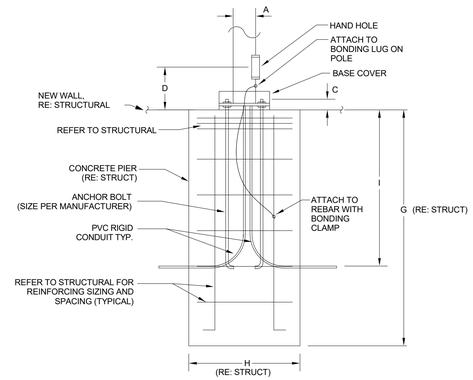
A.	ALL FIXTURES WITH HATCHING AND/OR DESIGNATED AS 'EM' SHALL BE PROVIDED WITH INTEGRAL BATTERY BACKUP. BATTERY SHALL ENGAGE ONLY AFTER COMPLETE LOSS OF POWER TO THE CIRCUIT.
B.	CIRCUIT ALL EMERGENCY LIGHTING UNITS AND EXIT SIGNS TO NEAREST LINE VOLTAGE CIRCUIT, AHEAD OF ALL SWITCH LEGS.

KEYNOTE LEGEND

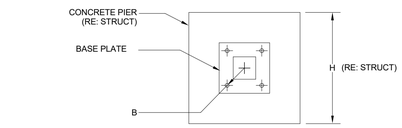
KEY VALUE	KEYNOTE TEXT
1	LIGHT POLE TO BE MOUNTED IN CONCRETE RETAINING WALL. COORDINATE MOUNTING WITH STRUCTURAL DRAWINGS.
2	TYPE 'ED1' SURFACE MOUNTED DOWNLIGHT FIXTURE SHALL BE MOUNTED TO UNDERSIDE OF TERMINAL CANOPY STRUCTURE AND DIRECTED DOWNWARD. FIXTURES SHALL BE PROVIDED/INSTALLED BY EC. EC SHALL PROVIDE CONDUIT/WIRING FROM LIGHTING FIXTURES TO OPERATOR CABIN TERMINAL ELECTRICAL CABINET 'DMEC' AS REQUIRED FOR POWER AND CONTROLS. COORDINATE EXACT POWER AND CONTROL CONDUIT/WIRING REQUIREMENTS FOR TERMINAL CANOPY LIGHTING WITH DOPPELMAYR PRIOR TO COMMENCING WORK.
3	HEIGHT LISTED FOR FIXTURE IS FROM FIRST LEVEL ELEVATION. FIXTURE TO BE CONTROLLED ON SWITCH ON LOWER LEVEL.
4	FIXTURE HEIGHTS ARE TO BE DETERMINED FROM FINISHED PLATFORM LEVEL SUCH THAT THE OVERALL POLE HEIGHTS ABOVE PLATFORM SHALL MATCH. REFER TO LIGHTING FIXTURE SCHEDULE FOR MORE INFO.
5	NEW OPERATOR CABIN PRE-MANUFACTURED BUILDING SHALL BE PRE-WIRED FOR ALL INTERIOR AND EXTERIOR BUILDING MOUNTED POWER, LIGHTING, AND COMMUNICATIONS DEVICES. REFER TO FIRST LEVEL POWER PLAN #1/E111, FOR ADDITIONAL INFORMATION.



1 | FIRST LEVEL - ELECTRICAL LIGHTING PLAN
E211 | 1/8" = 1'-0"



ELEVATION



TOP VIEW

POLE KEY	OVERALL HEIGHT	A	ANCHOR BOLT DATA B	SIZE	C	D	E	F	G	H	I
EA1/2/3	15'0"	4"	PER MANUFACTURER			N/A	N/A	RE: STRUCT		36"	

NOTE:
LIGHTING POLE SHALL BE INSTALLED INTO CAST-IN-PLACE STRUCTURAL CONCRETE PIER INTEGRATED WITH STRUCTURAL WALL/FOUNDATION SYSTEM. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION REGARDING CONCRETE PIER AND FOUNDATION INSTALLATION REQUIREMENTS INCLUDING CONCRETE PIER SIZING, LOCATIONS, AND REINFORCING SIZING. ELECTRICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF POLE ELECTRICAL CONNECTIONS, BONDING, AND CONDUIT WITH STRUCTURAL DRAWINGS AND GENERAL CONTRACTOR PRIOR TO COMMENCING WORK.

2 | EA1, EA2, EA3 POLE BASE DETAIL
E211 | N.T.S.

RCRBD
RECORD SET
ELECTRICAL

AE DESIGN
Integrated Lighting and Electrical Solutions
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Project #: 5155.00

CONSTRUCTION SET 03/29/21

4/20/2021 12:20:35 PM FILE: SBG PLATFORM v19.rvt

COLORADO REGISTERED 35717 4/20/21 PROFESSIONAL ENGINEER

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STEAMBOAT SPRINGS, CO

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(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	03/29/21
Drawn By:	BDJ, MAE
Checked By:	TPK

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ELECTRICAL FIRST FLOOR LIGHTING PLAN

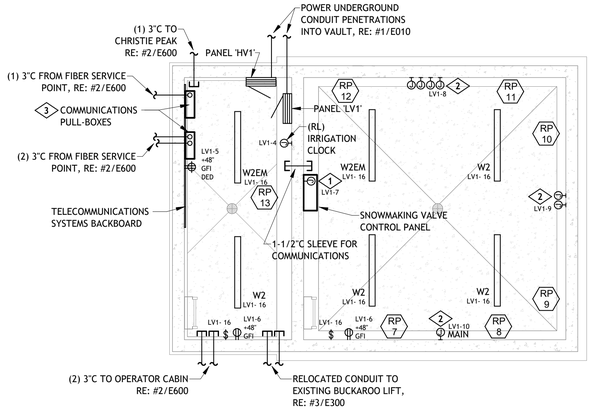
Sheet Number
E211

DEMOLITION REQUIREMENTS

A.	THE CONTRACTOR IS RESPONSIBLE FOR THE COMPLETE DEMOLTION, REPAIR AND REPLACEMENT AS REQUIRED. THE CONTRACTOR, AND ITS SUBCONTRACTORS, ARE SOLELY RESPONSIBLE FOR DETERMINING THE EXTENT OF DEMOLITION AND REPLACEMENT OF EXISTING ELECTRICAL INFRASTRUCTURE OR EQUIPMENT IN AREAS WHERE HIDDEN WORK IS INDICATED IN THE DOCUMENTS (SUCH AS UNDERGROUND WORK) OR CAN BE INFERRED AS BEING REQUIRED DUE TO THE NATURE OF THE WORK. THE DOCUMENTS ARE INTENDED TO BE A GUIDE, AND ARE NOT INTENDED TO PROVIDE DEFINITIVE SCOPE REQUIREMENTS FOR EXACT EXISTING CONDITIONS. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL NECESSARY COVERINGS, PROTECTIVE ENCLOSURES, TEMPORARY PARTITIONS AND BARRIERS TO PROVIDE SECURITY AND PROTECTION TO ALL OCCUPANTS, EQUIPMENT, AND NEW/EXISTING WORK. REPAIR AND REPLACE ANY DAMAGE CAUSE BY IMPROPER PROTECTION AT NO ADDITIONAL COST TO OWNER. NEW OR EXISTING INSTALLATIONS DAMAGED DURING CONSTRUCTION/DEMOLITION OR NOT CONFORMING TO SPECIFIED STANDARDS, TOLERANCES OR MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION SHALL BE REPLACED AT NO ADDITIONAL COST TO OWNER.
B.	THE BASIS OF THESE DRAWINGS WERE SITE OBSERVATIONS, ORIGINAL BUILDING DRAWINGS AND VARIOUS OTHER SOURCES. EVERY ATTEMPT HAS BEEN MADE TO DOCUMENT THE ACTUAL CONDITIONS. HOWEVER, THE CONTRACTOR SHALL CAREFULLY EXAMINE THE CONTRACT DOCUMENTS, VISIT THE SITE, AND THOROUGHLY BECOME FAMILIAR WITH THE BUILDING STANDARDS, AND THE EXISTING SITE CONDITIONS RELATING TO THE WORK. FAILURE TO DO SO WILL NOT RELIEVE THE CONTRACTOR OF THE OBLIGATIONS OF THE CONTRACT.
C.	THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER/OWNER OF ANY MATERIALS OR APPARATUS BELIEVED TO BE INADEQUATE, UNSUITABLE, IN VIOLATION OF LAWS, ORDINANCES, RULES OR REGULATIONS OF AUTHORITIES HAVING JURISDICTION.
D.	THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS COST THE REMOVAL OF ALL EXISTING ELECTRICAL DEVICES, CONDUITS, FIXTURES AND EQUIPMENT AS NOTED AND REQUIRED TO ACCOMMODATE SCOPE OF WORK. COORDINATE REMOVAL AND DISCARDING OF ALL EQUIPMENT WITH OWNER.
E.	EXISTING EQUIPMENT NOT NOTED AS EXISTING (E) OR INDICATED ON PLANS SHALL REMAIN, AS THEY PRESENTLY EXIST.
F.	THE DEMOLITION OF SOME DEVICES OR EQUIPMENT MAY INTERRUPT POWER TO DEVICES DOWN STREAM. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR RE-WORKING THESE CIRCUITS TO MAINTAIN POWER TO THE DOWN STREAM DEVICES AND EQUIPMENT WHICH WILL REMAIN.
G.	ALL UNENERGIZED/DEMOLISHED CIRCUITRY SHALL HAVE THE CONDUCTORS REMOVED FROM THE CONDUIT AND THE CONDUIT SHALL BE MARKED "EMPTY" WITH INDELIBLE MARKER.

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1	PROVIDE 120V, 20-AMP POWER CONNECTION TO NEW VALVE CONTROL PANEL FOR SNOW-MAKING EQUIPMENT VALVE/ACTUATOR CONTROLS. EC SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS WITH NEW OWNER (STEAMBOAT SKI AND RESORT) IN FIELD PRIOR TO COMMENCING WORK.
2	EC SHALL PROVIDE 120V, 20-AMP POWER CONNECTIONS TO EACH SNOW-MAKING VALVE ACTUATOR/MOTOR AS REQUIRED. EC SHALL ANTICIPATE APPROXIMATELY (6) OUTLET VALVE ACTUATOR CONNECTIONS AND (1) MAIN-SUPPLY VALVE ACTUATOR CONNECTION IN THE SNOW-MAKING VAULT. EC SHALL COORDINATE EXACT LOCATION AND REQUIREMENTS WITH NEW OWNER (STEAMBOAT SKI AND RESORT) IN FIELD PRIOR TO COMMENCING WORK.
3	PROVIDE 18"X24"X6"D WALL-MOUNTED TELECOMMUNICATIONS ENCLOSURE/PULL-BOX WITH 3" CONDUIT KNOCKOUTS LOCATED IN NEW UNDERGROUND ELECTRICAL VAULT FOR FIBER OPTIC AND COMMUNICATIONS CABLING ROUTED THROUGH VAULT TO NEW GONDOLA PLATFORM BUILDING OPERATOR CABIN AS SHOWN. ASSEMBLY AND ALL COMPONENTS SHALL BE UL LISTED AND NEMA 3R RATED FOR OUTDOOR LOCATIONS. PROVIDE "COMMUNICATIONS" LABEL ON COVER. COORDINATE EXACT LOCATION OF PULL-BOX ENCLOSURE WITH OWNER PRIOR TO COMMENCING WORK. REFER TO ELECTRICAL SITE PLAN, SHEET E010, AND LOW-VOLTAGE RISE DIAGRAM, SHEET E600, FOR ADDITIONAL INFORMATION.



1 | LOWER LEVEL - ELECTRICAL POWER PLAN - VAULT

E300 | 1/4" = 1'-0"

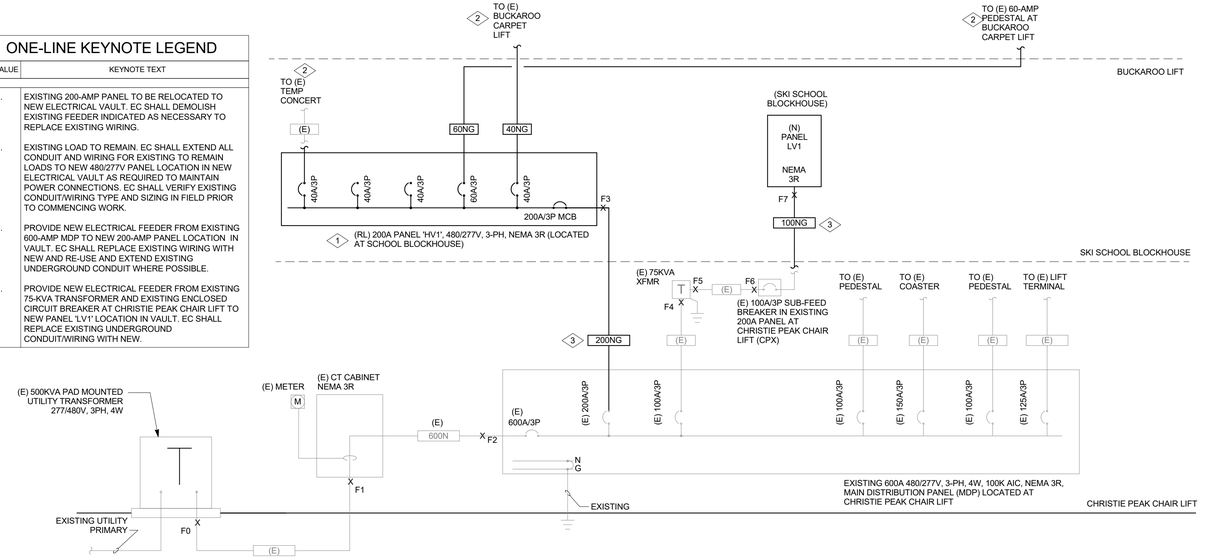
LOAD SUMMARY			
EXISTING MAIN DISTRIBUTION PANEL (MDP) (600A, 480/277V, 3PH, 4W)			
NEW LOAD ON PANEL 'LV1'	15.2 KVA	42.2	AMPS
REMOVED LOAD ON PANEL 'HV1' (DEMOLISHED LOAD CENTER)	-5.0 KVA	-13.9	AMPS
REMOVED LOAD ON PANEL 'HV1' (REMOVED CARPET LIFTS)	-49.8 KVA	-138.3	AMPS
NET REMOVED LOAD AT 480/277V, 3PH	-40 KVA	-47.6	AMPS(**)

(**)TOTAL REMOVED LOAD IS GREATER THAN ADDED/NEW LOAD ON EXISTING PANEL 'MDP', THEREFORE THE LOAD IS JUSTIFIED.

NOTES

ONE-LINE KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1.	EXISTING 200-AMP PANEL TO BE RELOCATED TO NEW ELECTRICAL VAULT. EC SHALL DEMOLISH EXISTING FEEDER INDICATED AS NECESSARY TO REPLACE EXISTING WIRING.
2.	EXISTING LOAD TO REMAIN. EC SHALL EXTEND ALL CONDUIT AND WIRING FOR EXISTING TO REMAIN LOADS TO NEW 480/277V PANEL LOCATION IN NEW ELECTRICAL VAULT AS REQUIRED TO MAINTAIN POWER CONNECTIONS. EC SHALL VERIFY EXISTING CONDUIT/WIRING TYPE AND SIZING IN FIELD PRIOR TO COMMENCING WORK.
3.	PROVIDE NEW ELECTRICAL FEEDER FROM EXISTING 600-AMP MDP TO NEW 200-AMP PANEL LOCATION IN VAULT. EC SHALL REPLACE EXISTING WIRING WITH NEW AND RE-USE AND EXTEND EXISTING UNDERGROUND CONDUIT WHERE POSSIBLE.
4.	PROVIDE NEW ELECTRICAL FEEDER FROM EXISTING 75-KVA TRANSFORMER AND EXISTING ENCLOSED CIRCUIT BREAKER AT CHRISTIE PEAK CHAIR LIFT TO NEW PANEL 'LV1' LOCATION IN VAULT. EC SHALL REPLACE EXISTING UNDERGROUND CONDUIT/WIRING WITH NEW.



3 | VAULT NEW ELECTRICAL ONE-LINE DIAGRAM

E300 | NTS

2 | VAULT DEMO ELECTRICAL ONE-LINE DIAGRAM

E300 | NTS

FAULT CURRENT CALCULATION SCHEDULE

POINT	LOCATION DESCRIPTION	LENGTH (L) (ft)	VOLTAGE (EL-L)	VOLTAGE (EL-N)	PHASE	WIRE SIZE	CONDUCTOR MATERIAL	CONDUCTOR TYPE	CONDUIT MATERIAL	VOLTAGE CLASS	C VALUE	# OF PARALLEL RUNS	Isc AVAILABLE UPSTREAM	Isc AT EQUIP (3ph) OR (IL-L)	POINT
F0	500 KVA UTILITY XFMR												–	100,000	F0
F1	(E) CT CABINET	10	480	277	3	350	COPPER	THREE SINGLE CONDUCTORS	NONMAGNETIC	600V	22736	2	100,000	92,648	F1
F2	(E) 600A MDP	5	480	277	3	350	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	19703	2	92,648	88,878	F2
F3	PANEL 'HV1'	150	480	277	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	12843	1	88,878	18,728	F3
F4	(E) 75KVA XFMR PRI	10	480	277	3	1	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	7292	1	18,728	17,140	F4
F5	(E) 75KVA XFMR SEC	1	208	120	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	12843	1	5,572	5,552	F5
F6	(E) PANEL AT CXP	5	208	120	3	3X	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	12843	1	5,552	5,454	F6
F7	(N) PANEL 'LV1'	150	208	120	3	1	COPPER	THREE SINGLE CONDUCTORS	STEEL	600V	7292	1	5,454	2,820	F7

NOTES:

1. ALL CALCULATIONS WERE DONE USING BUSSMAN "POINT-TO-POINT" METHOD.
2. REFER TO PLANS FOR ASSUMED UTILITY TRANSFORMER SIZE UTILIZED FOR CALCULATIONS. EXACT TRANSFORMER SIZE, IMPEDANCE, AND AVAILABLE SHORT CIRCUIT CURRENT SHALL BE VERIFIED WITH UTILITY PRIOR TO ORDERING ELECTRICAL EQUIPMENT. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
3. DISTRIBUTION TRANSFORMER IMPEDANCES USED IN THE CALCULATIONS WERE TAKEN FROM EATONS PUBLISHED IMPEDANCES FOR DOE 2016 DRY-TYPE TRANSFORMERS.
4. CONDUCTOR SIZES AND LENGTHS INDICATED IN THIS SCHEDULE ARE FOR THE PUROPOSES OF FAULT CURRENT CALCULATIONS ONLY. THESE LENGTHS ASSUME WORST CASE SHORTEST DISTANCE CONDITIONS AND SHOULD NOT BE UTILIZED BY THE ELECTRICAL CONTRACTOR FOR BIDDING PURPOSES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND MEASURING ACTUAL FIELD CONDITIONS, SIZES, AND LENGTHS.

RCRBD
RECORD SET
ELECTRICAL

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3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
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(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	05/29/21
Drawn By:	Author
Checked By:	Checker

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ELECTRICAL VAULT PLAN

Sheet Number
3 E300

4/20/2021 12:20:35 PM FILE: SBG PLATFORM v19.rvt

KEYNOTE LEGEND

KEY VALUE	KEYNOTE TEXT
1.	NEW (2) 3" PVC CONDUIT ROUTED 30" BELOW GRADE FOR CONNECTION TO SITE FIBER/TELEPHONE SERVICE INTERCONNECTION POINT (ROUTED THROUGH ELECTRICAL VAULT). ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT SIZING AND QUANTITY WITH SERVICE PROVIDER AND/OR OWNER (SSRC) PRIOR TO INSTALLATION. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION.
2.	NEW (1) 3" PVC CONDUIT ROUTED 30" BELOW GRADE FOR CONNECTION TO FIBER OPTIC SERVICE INTERCONNECTION POINT (ROUTED THROUGH ELECTRICAL VAULT) AND TO EXISTING CHRISTIE PEAK CHAIR LIFT. ELECTRICAL CONTRACTOR SHALL VERIFY CONDUIT SIZING AND QUANTITY WITH SERVICE PROVIDER AND/OR OWNER (SSRC) PRIOR TO INSTALLATION. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION.
3.	MAIN TELECOMMUNICATIONS DEMARC POINT AND OWNER (SSRC) IT/MDF EQUIPMENT CABINET. EC SHALL PROVIDE MAIN TELEPHONE TERMINAL BOARD 'MTTB' AS NECESSARY AND REQUIRED BY OWNER (SSRC). IF REQUIRED, TELEPHONE BOARD SHALL CONSIST OF 3/4", FIRE-RETARDANT PAINTED AND TREATED PLYWOOD INSTALLED IN ROOM. EC SHALL COORDINATE EXACT LOCATION AND INSTALLATION REQUIREMENTS WITH OWNER (SSRC) AND IT INSTALLER PRIOR TO COMMENCING WORK. ALL RECEPTACLE DEVICES SHOWN IN BACKBOARD ON PLANS SHALL BE FLUSH MOUNT, UON.
4.	PROVIDE #6AWG GREEN COPPER GROUNDING CONDUCTOR (TYPICAL) BETWEEN GROUNDING BUSSES AS INDICATED.
5.	ROUTE (1) 1/2" CONDUIT FOR FIRE ALARM CONTROL PANEL COMMUNICATIONS CABLING RACEWAY.
6.	ROUTE (1) 1/2" CONDUIT FOR SECURITY ALARM CONTROL PANEL COMMUNICATIONS CABLING RACEWAY.
7.	PROVIDE (2) 2" CONDUIT FROM OPERATOR CABIN TO BOILER ROOM FOR OPTICAL FIBER AND COPPER CABLING RACEWAY.
8.	PROVIDE (1) 3/4"C WITH PULL WIRE TO ELEVATOR CONTROL PANEL FOR ELEVATOR COMMUNICATIONS CABLING RACEWAY. CABLING SHALL BE FURNISHED BY OTHERS.
9.	PRINCIPAL GROUND POINT NEAR ELECTRICAL SERVICE EQUIPMENT.
10.	TELECOMMUNICATIONS MAIN GROUNDING BAR 'TCMGB' FUNCTIONING AS INTERSYSTEM BONDING TERMINATION DEVICE, COMPLYING WITH NEC 250.94.
11.	NEW TYPICAL WORK AREA COMMUNICATIONS OUTLET FOR STRUCTURED CABLE TERMINATIONS. PROVIDE 2" DEEP, 2-GANG BOX WITH 1-GANG PLASTER RING. PROVIDE 1" CONDUIT BACK TO 'MTTB'. RECEPTACLE FACEPLATE, JACK, CABLING, AND TERMINATIONS BY OTHERS.
12.	EXISTING UNDERGROUND CONDUIT TO BUCKAROO CARPET LIFT. EC SHALL RE-ROUTE AND EXTEND CONDUIT TO NEW ELECTRICAL VAULT FOR COMMUNICATIONS CABLING PATHWAY. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING CONDUIT SIZING AND QUANTITY IN FIELD WITH OWNER (SSRC) PRIOR TO INSTALLATION. REFER TO ELECTRICAL PLANS FOR MORE INFORMATION.

GENERAL NOTES

A. PROVIDE EMT FOR ALL CABLING ROUTED THROUGH AREAS WITH EXPOSED STRUCTURAL CEILINGS AND THROUGH INACCESSIBLE CEILINGS, COORDINATE CONDUIT SIZE REQUIREMENTS WITH CABLE INSTALLER.

B. ALL EXPOSED CONDUIT SHALL BE CONCEALED TO THE GREATEST EXTENT POSSIBLE, AND SHALL BE INSTALLED PARALLEL AND CLOSE TO STRUCTURAL MEMBERS, PAINT CONDUIT TO MATCH ADJACENT FINISHES.

C. PROVIDE PULLCORD FOR ALL CONDUIT INSTALLED FOR CABLE.

D. PROVIDE PULLBOXES AS REQUIRED BY ABLE INSTALLER FOR RUNS EXCEEDING MAXIMUM PULL DISTANCE, AS IDENTIFIED BY CABLE INSTALLER.

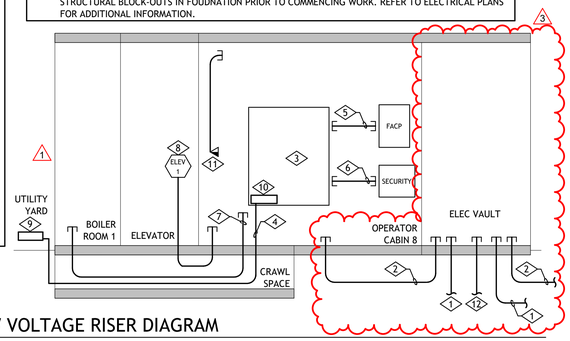
E. FOR ALL FREELY RUN ARMORED METALLIC FIBER OPTIC CABLING, CONTRACTOR SHALL GROUND CABLING ARMOR TO THE NEAREST PBB OR SBB.

F. PROVIDE SLEEVES AND CONDUIT BETWEEN FLOORS FOR ROUTING OF CABLE. COORDINATE CONDUIT SIZE WITH CABLE INSTALLER. COORDINATE LOCATION OF RACEWAY WITH ARCHITECT AND CABLE INSTALLER.

G. ALL CONDUIT AND CABLING IN CRAWL SPACE IS TO BE SUPPORTED BY AND TIGHT TO STRUCTURE ABOVE WHERE CONDUIT TRANSITIONS FROM BEING SUPPORTED BY STRUCTURE INTO SOIL. ADD LOOP AND/OR FLEXIBLE CONDUIT FOR ANTICIPATED SOIL MOVEMENT.

H. NOTE THAT ALL UNDERGROUND CONDUIT BENDS ARE TO BE GALVANIZED RIGID CONDUIT. UNDERGROUND CONDUIT EXTENDING ABOVE SLAB IS ALSO TO BE GALVANIZED RIGID CONDUIT. REFER TO SPECIFICATIONS FOR FULL CONDUIT REQUIREMENTS.

I. EC SHALL COORDINATED UNDERGROUND CONDUIT ROUTING TO OPERATOR CABIN WITH NEW STRUCTURAL BLOCK-OUTS IN FOUDNATION PRIOR TO COMMENCING WORK. REFER TO ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.

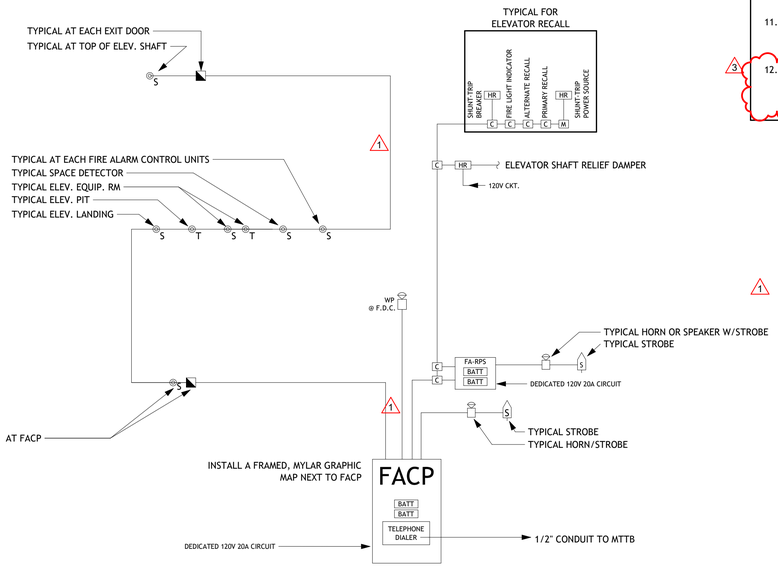


2 | LOW VOLTAGE RISER DIAGRAM
E600 | NTS

FIRE ALARM SHOP DRAWING REQUIREMENTS

THE FIRE ALARM DEVICES SHOWN ARE FOR GENERAL LAYOUT AND GUIDELINES ONLY. THE AWARDED FIRE ALARM CONTRACTOR IS TO PROVIDE A COMPLETE SET OF SHOP DRAWINGS FOR SUBMITTAL AND APPROVAL BY THE AUTHORITY HAVING JURISDICTION. THESE DOCUMENTS ARE TO INCLUDE THE FOLLOWING INFORMATION:

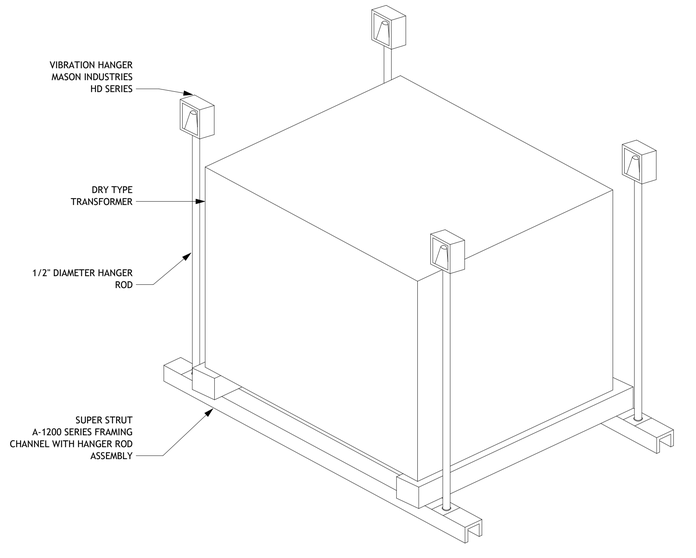
1. SHOP DRAWINGS MUST BE PREPARED AND SIGNED BY A MINIMUM OF A NICET FIRE ALARM LEVEL III CERTIFIED INDIVIDUAL.
2. COMPLETE RISER DIAGRAM SHOWING ALL DEVICES BY FLOOR/AREA AS CONNECTED TO THE CIRCUIT, DEVICE ADDRESSES, WIRE COLOR CODING SCHEDULE, WIRE COUNT, WIRE TYPE AND CONDUIT FILL WITH CALCULATIONS SHOWN.
3. PROVIDE A SEQUENCE OF OPERATION (INPUT/OUTPUT MATRIX) IN COMPLIANCE WITH THE NFPA 72 ANNEX MATERIAL. THE INFORMATION PROVIDED IN THE SEQUENCE OF OPERATION MUST BE SPECIFIC TO THE PROJECT. GENERIC SEQUENCE OF OPERATIONS WILL NOT BE ACCEPTED.
4. IDENTIFY THE TYPE OF SYSTEM, I.E. CENTRAL, REMOTE, PROPRIETARY, ETC.
5. IDENTIFY THE TYPE OF AUDIBLE NOTIFICATION: TEMPORAL, STEADY, CODED, VOICE, ETC.
6. IDENTIFY THE TYPE OF VISUAL NOTIFICATION: PUBLIC OR PRIVATE MODE.
7. PROVIDE A WIRING LEGEND SPECIFIC TO TYPES USED FOR THE PROJECT. IDENTIFY IF WIRING IS ENCLOSED IN CONDUIT, OPEN WIRING, PLENUM WIRING, POWER LIMITED OR NON-POWER LIMITED
8. PROVIDE AN EQUIPMENT LIST WITH MANUFACTURER, PART NUMBER, BACK BOX AND SYMBOL USED TO IDENTIFY THE COMPONENT. IF THERE IS INSUFFICIENT SPACE FOR WIRING LEGEND, EQUIPMENT LIST AND SYMBOL LEGEND ON THE TITLE SHEET, THAN INSERT AN ADDITIONAL SHEET.
9. COMPLETE RISER DIAGRAM SHOWING ALL DEVICES BY FLOOR/AREA AS CONNECTED TO THE CIRCUIT, DEVICE ADDRESSES, WIRE COLOR CODING SCHEDULE, WIRE COUNT, WIRE TYPE AND CONDUIT FILL WITH CALCULATIONS SHOWN.
10. DETAIL SHEET INCLUDING THE FOLLOWING; CIRCUIT WIRING DIAGRAM, DEVICE/APPLIANCE MOUNTING HEIGHT PROFILE, TYPICAL DEVICE AND ANCILLARY DEVICE WIRING, AND THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.
11. PROVIDE VOLTAGE DROP CALCULATIONS FOR EACH CIRCUIT SHOWING WIRE SIZE, CIRCUIT LOAD AND VOLTAGE DROP.
12. PROVIDE AUDIO CIRCUIT POWER LOSS CALCULATIONS
13. VOLTAGE DROP CALCULATIONS MUST BE PERFORMED USING THE OUTPUT CIRCUIT VOLTAGE WHEN THE INPUT VOLTAGE TO THE CONTROL PANEL IS 85% OF ITS NAME PLATE VOLTAGE. (NFPA 72, 2002 ED., SECTION 4.4.4.1(1))
14. PROVIDE RESISTANCE VALUES WITH SUPPORTING DATA SHEETS OR PROVIDE NEC VALUES AND REFERENCE.
15. INDICATE METHOD USED AND SHOW ALL FORMULAS/EQUATIONS.
16. PROVIDE STAND-BY BATTERY CALCULATIONS FOR EACH CONTROL PANEL, SUB PANEL, MONITORING STATION TRANSMITTER, POWER SUPPLY OR ANY COMPONENT REQUIRING SECONDARY POWER.
17. SHOW LOCATION OF ALL FIRE ALARM INITIATING DEVICES AND NOTIFICATION APPLIANCES WITH TEMPERATURE, DECIBLE AND CANDELA RATINGS, WHEN APPLICABLE.



FIRE ALARM GENERAL NOTES:

1. THIS IS A FULLY ADDRESSABLE SYSTEM WITH EACH DEVICE HAVING A DISTINCT 'ADDRESS'.
2. PROVIDE NON-POWER LIMITING, PLENUM RATED WIRING. INSTALL IN EMT WHERE WIRING IS ROUTED THROUGH HAZARDOUS LOCATIONS, EXPOSED STRUCTURAL CEILINGS, INACCESSIBLE CEILINGS, AND BETWEEN AREAS SEPARATED BY MULTI-STORY ATRIUMS. ALL RACEWAY COMPONENTS SHALL BE PAINTED RED.
3. NOT USED.
4. SPRINKLER SYSTEM IS A DESIGN-BUILD CONTRACT. COORDINATE WITH SPRINKLER CONTRACTOR FOR QUANTITIES AND LOCATIONS OF ALL FLOW AND TAMPER SWITCHES, AND FOR LOCATION OF FIRE HORN/LIGHT AT EXTERIOR OF BUILDINGS. INSTALL WITH A MINIMUM OF 20% SPARE CAPACITY ON ALL INITIATING AND INDICATING APPLIANCE CIRCUITS.
5. PROVIDE 120V CIRCUIT AND LOW-VOLTAGE FIRE ALARM CONTROL CIRCUIT TO ALL SMOKE DAMPERS. COORDINATE LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO BID.
6. COORDINATE ALL SEQUENCING OF OPERATIONS WITH LOCAL FIRE DEPARTMENT.
7. ALL DEVICES INSTALLED IN DAMP, WET OR EXTERIOR LOCATIONS SHALL BE FURNISHED WITH WP HOUSINGS. ALL DEVICES INSTALLED IN GYMNASIUMS SHALL BE FURNISHED WITH WIRE GUARD.
8. SYSTEM SHALL TRANSMIT REQUIRED FIRE ALARM SIGNALS TO CENTRAL MONITORING AGENCY (SELECTED BY OWNER) VIA DIALER PROVIDED IN FIRE ALARM CONTROL PANEL.
10. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID AN ADDITIONAL 10% SPARE STROBES AND HORN/STROBES, INCLUDING INSTALLATION, AS MAY BE REQUIRED BY AHJ.
11. NOT USED.
12. SEQUENCE OF OPERATION FOR ELEVATOR RECALL:
    - 12.1. WHEN THE SMOKE DETECTORS IN THE LOBBIES, ELEVATOR SHAFT OR EQUIPMENT ROOM GO INTO ALARM, THE RESPECTIVE ELEVATOR WILL RETURN TO THEIR PRIMARY LEVEL OR SECONDARY LEVEL AND LOCK-OUT; THE LEVEL WILL DEPEND UPON IF THE ELEVATOR LOBBY DETECTOR SENSES ANY SMOKE AT THE RESPECTIVE LOBBY.
    - 12.2. SUBSEQUENTLY, IF THE THERMAL DETECTOR IN THE ELEVATOR ROOM GOES INTO ALARM, THE POWER TO THE ELEVATOR CONTROLLER WILL BE DISCONNECTED VIA A SHUNT TRIP CIRCUIT BREAKER.

3 | FIRE ALARM RISER DIAGRAM
E600 | 1/8" = 1'-0"



NOTES:
1. FASTEN VIBRATION HANGER RIGIDLY TO STRUCTURE ABOVE. SIZE TO ACCOMMODATE TRANSFORMER WEIGHT. BOT TRANSFORMER TO STRUT.
2. INSTALL FLEXIBLE CONDUIT BETWEEN PRIMARY AND SECONDARY CONDUIT AND TRANSFORMER HOUSING.

1 | SUSPENDED TRANSFORMER DETAIL
E600 | NTS

RCRBD
RECORD SET
ELECTRICAL

CONSTRUCTION SET 03/29/21

AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #: 5155.00

4/20/2021 12:20:37 PM FILE: SBG PLATFORM v19.rvt

COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
4/20/21

REVISIONS

No.	Description	Date
1	ADDENDUM #1	3/12/2021
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5458, (303) 442-4745 FAX

Job Number:	20034
Date:	05/29/21
Drawn By:	BDJ, MAE
Checked By:	TPK

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ELECTRICAL DIAGRAMS

Sheet Number
E600

PANEL: LV1

LOCATION:
SUPPLY FROM:
MOUNTING: Surface
ENCLOSURE: Type 3R

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10,000 AIC
MAINS TYPE: MCB
MAINS RATING: 150 A
MCB RATING: 100 A

Notes:

CKT	CCT TYPE	LOAD DESCRIPTION	TRIP	POLES	A		B		C		POLES	TRIP	LOAD DESCRIPTION	CCT TYPE	CKT
1	--	(E) BUCKAROO CARPET	40	2	2500	1000					1	20	'(E) IRRIGATION HEAT TAPE (*)	--	2
3	--	--	--	--			2500	200			1	20	(RL) IRRIGATION CLOCK (*)	E	4
5	R	DED GFCI QUAD RECEPT	20	1					360	360	1	20	GFCI CONV. RECEPTS	R	6
7	E	SNOWMAKING VALVE CONTROL PANEL	20	1	500	400					1	20	QTY (4) NORTH VALVE ACTUATORS	E	8
9	E	QTY (2) EAST VALVE ACTUATORS	20	1			200	200			1	20	MAIN VALVE ACTUATOR	E	10
11	E	RADIANT PANEL RP-7,8	20	1					1512	1512	1	20	RADIANT PANEL RP-9,10	E	12
13	--	SPARE	20	1	0	0					1	20	SPARE	--	14
15	E	RADIANT PANEL RP-11,12	20	1			1512	114			1	20	VAULT LIGHTING (**)	L	16
17	--	SPARE	20	1					0	756	1	20	RADIANT PANEL RP-13,14	E	18
19	--	SPARE	20	1	0	0					1	20	SPARE	--	20
21	--	SPARE	20	1			0	0			1	20	SPARE	--	22
23	--	SPARE	20	1					0	0	1	20	SPARE	--	24
25	--	SPARE	20	1	0	0					1	20	SPARE	--	26
27	--	SPARE	20	1			0	0			1	20	SPARE	--	28
29	--	SPARE	20	1					0	0	1	20	SPARE	--	30
31	--	SPARE	20	1	0	0					1	20	SPARE	--	32
33	--	SPARE	20	1			0	0			1	20	SPARE	--	34
35	--	SPARE	20	1					0	0	1	20	SPARE	--	36
37	--	BUSSED SPACE	--	--	0	0					--	--	BUSSED SPACE	--	38
39	--	BUSSED SPACE	--	--			0	0			--	--	BUSSED SPACE	--	40
41	--	BUSSED SPACE	--	--					0	0	--	--	BUSSED SPACE	--	42
				Total Load:	4400 VA		4726 VA		4500 VA						
				Total Amps:	37 A		40 A		38 A						

LEGEND

CCT TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	114 VA	143 VA		
RECEPTACLE:	720 VA	720 VA	**TOTAL CONN. LOAD:**	13626 VA
MOTOR:			**TOTAL EST. LOAD:**	13655 VA
EQUIPMENT:	6792 VA	6792 VA	**TOTAL CONN.:**	38 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	38 A

NOTES:
(*) PROVIDE GFEP CIRCUIT BREAKER WITH 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
(**) PROVIDE GFCI CIRCUIT BREAKER WITH 5mA GROUND FAULT CIRCUIT INTERRUPTER PROTECTION FOR PERSONNEL

PLATFORM MECHANICAL EQUIPMENT SCHEDULE

KEY		EQUIPMENT DESCRIPTION	LOAD	ELECTRICAL	MOCP/MFS	FEEDER	DISCONNECT	PANEL	CIRCUIT	NOTES
B	1	HEATING WATER BOILER	30.2 FLA	208 V/3-10881 VA	40A	3#8, 1#10G, 1"C	60A/3P	LB1A	1,3,5	
EF	1	EXHAUST FAN	818 W	120 V/1-818 VA	20A	2#12, 1#12G, 3/4"C	30A/1P	LB1A	7	1
ELEV	1	ELEVATOR	25 HP 34 FLA	480 V/3-28266 VA	70A	3#4, 1#8G, 1-1/4"C	100A/3P	HB1A	1,3,5	
GF	1	GLYCOL FEEDER	50 W	120 V/1-50 VA	20A	2#12, 1#12G, 3/4"C	NEMA 5-20R	LB1A	11	2
P	1	PUMP	7.5 HP 11 FLA	480 V/3-9144 VA	20A	3#12, 1#12G, 3/4"C	30A/3P	HB1A	7,9,11	
P	2	PUMP	7.5 HP 11 FLA	480 V/3-9144 VA	20A	3#12, 1#12G, 3/4"C	30A/3P	HB1A	13,15,17	
RP	1	RADIANT CEILING PANEL	750 W	120 V/1-750 VA	20A	2#12, 1#12G, 3/4"C	20A/1P	LB1A	17	3
RP	2	RADIANT CEILING PANEL	750 W	120 V/1-750 VA	20A	2#12, 1#12G, 3/4"C	20A/1P	LB1A	17	3
RP	3	RADIANT CEILING PANEL	750 W	120 V/1-750 VA	20A	2#12, 1#12G, 3/4"C	20A/1P	LB1A	19	3
RP	4	RADIANT CEILING PANEL	750 W	120 V/1-750 VA	20A	2#12, 1#12G, 3/4"C	20A/1P	LB1A	19	3
RP	5	RADIANT CEILING PANEL	750 W	120 V/1-750 VA	20A	2#12, 1#12G, 3/4"C	20A/1P	LB1A	21	3
RP	6	RADIANT CEILING PANEL	750 W	120 V/1-750 VA	20A	2#12, 1#12G, 3/4"C	20A/1P	LB1A	21	3
SP	1	PLUMBING PUMP	4/10 HP	120 V/1-1176 VA	20A	2#12, 1#12G, 3/4"C	30A/1P	LB1A	9	
SPCP	1	SUMP PUMP CONTROL PANEL	3 FLA	120 V/1-360 VA	20A	2#12, 1#12G, 3/4"C	20A/1P TOGGLE	LB1A	11	
STCP	1	STORAGE TANK CONTROL PANEL	3 FLA	120 V/1-360 VA	20A	2#12, 1#12G, 3/4"C	20A/1P TOGGLE	LB1A	11	
UH	1	UNIT HEATER	7.5 KW 9.0 FLA	480 V/3-7482 VA	20A	3#12, 1#12G, 3/4"C	30A/3P	HB1A	19,21,23	
UH	2	UNIT HEATER	5.0 KW 6.0 FLA	480 V/3-4989 VA	20A	3#12, 1#12G, 3/4"C	30A/3P	HB1A	19,21,23	

VAULT MECHANICAL EQUIPMENT SCHEDULE

KEY		EQUIPMENT DESCRIPTION	LOAD	ELECTRICAL	MOCP/MFS	FEEDER	DISCONNECT	PANEL	CIRCUIT	NOTES
RP	7	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	11	
RP	8	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	11	
RP	9	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	12	
RP	10	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	12	
RP	11	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	15	
RP	12	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	15	
RP	13	RADIANT PANEL	6.3 FLA	120 V/1-756 VA	20A	2#12, 1#12G, 3/4"C	20A/1P STO	LV1	18	

MECHANICAL GENERAL NOTES

A.	REFER TO MECHANICAL PLANS FOR SPECIFIC EQUIPMENT LOCATIONS AND REQUIREMENTS.
B.	PRIOR TO ROUGH-IN, COORDINATE ALL MECHANICAL EQUIPMENT POWER AND CONNECTION REQUIREMENTS WITH MECHANICAL CONTRACTOR'S FINAL SHOP DRAWINGS.
C.	PROVIDE ALL 120V CONTROL WIRING, REFER TO SPECIFICATIONS FOR FURTHER CONTROL WIRING CLARIFICATION.
D.	FOR ANY VAV SYSTEM COORDINATE POWER REQUIREMENTS WITH MECHANICAL CONTRACTOR AND PROVIDE 120V CONNECTIONS AT EACH VAV BOX, OR AT CENTRAL CONTROL PANEL LOCATION(S) AS REQUIRED. IF EXACT QUANTITIES AND LOCATIONS FOR CONTROL PANELS ARE NOT KNOWN AT BID TIME, E.C. IS TO INCLUDE ONE 120V CONNECTION AT EACH VAV DEVICE IN THE BASE BID PRICE AND PROVIDE A CREDIT DURING CONSTRUCTION IF LESS CONNECTIONS ARE REQUIRED.
E.	EXTERIOR DISCONNECT SWITCHES ARE TO BE PROVIDED AS NEMA 3R EQUIPMENT UNLESS OTHERWISE NOTED.
F.	PROVIDE WEATHERPROOF 120 VOLT GFCI RECEPTACLES WITHIN 25' OF ALL ROOFTOP HEATING, VENTILATING, AND AIR CONDITIONING EQUIPMENT. CIRCUIT TO SPARE CIRCUIT ON NEAREST 120V PANELBOARD OR AS INDICATED ON PLANS.
G.	PROVIDE DUCT DETECTION ON ALL RETURN AIR SYSTEMS OF 2,000 CFM OR GREATER, AND FOR ALL SUPPLY AIR SYSTEMS 15,000 CFM OR GREATER, INCLUDING THOSE SYSTEMS SERVING MULTIPLE FLOORS. PROVIDE ADDITIONAL DUCT DETECTORS AND INSTALL REMOTE INDICATOR LIGHTS AS REQUIRED BY LOCAL AUTHORITY HAVING JURISDICTION.
H.	FOR ANY BOILER MECHANICAL SYSTEM, E.C. IS TO PROVIDE AN EMERGENCY PUSHBUTTON OFF AND ANY CONTROL WIRING REQUIRED. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL CONTRACTOR AND EQUIPMENT PRIOR TO INSTALLATION.
I.	EC TO PROVIDE HAND/OFF/AUTO STARTERS FOR ALL MOTORS WHEN NOT INDICATED AS TO BE PROVIDED BY THE MECHANICAL CONTRACTOR ON THE MECHANICAL PLANS. SIZE OF STARTER TO BE BASED UPON SIZE OF MOTOR HORSEPOWER INDICATED.

MECHANICAL SPECIFIC NOTES

1.	VERIFY THAT ELECTRICAL DISCONNECT IS PROVIDED BY MANUFACTURER AND INSTALL IN ACCESSIBLE LOCATION.
2.	EC SHALL PROVIDE DEDICATED 120V DUPLEX GFCI RECEPTACLE WITHIN 3 FEET OF AND BEHIND UNIT. RECEPTACLE TO BE CIRCUITED PER MECHANICAL EQUIPMENT SCHEDULE.
3.	MOUNT RADIANT PANEL IN ELEVATOR SHAFT WITH BOTTOM OF PANEL AT 18" ABOVE BOTTOM OF PIT. CONFIRM ALL MOUNTING LOCATIONS WITH ELEVATOR INSTALLER.

PANEL: HB1A

LOCATION: BOILER ROOM 100
SUPPLY FROM:
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

VOLTS: 480/277 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 65K AIC FULLY RATED
MAINS TYPE: MLO
MAINS RATING: 400 A
MCB RATING: N/A

Notes:

CKT	CCT TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	CCT TYPE	CKT
1	M	ELEVATOR 'ELEV-1'	70	3		9422	0						--	--	BUSSED SPACE	--	2
3	--	--	--	--				9422	0				--	--	BUSSED SPACE	--	4
5	--	--	--	--						9422	0		--	--	BUSSED SPACE	--	6
7	M	PUMP (P-1)	20	3		3048	0						--	--	BUSSED SPACE	--	8
9	--	--	--	--				3048	0				--	--	BUSSED SPACE	--	10
11	--	--	--	--						3048	0		--	--	BUSSED SPACE	--	12
13	M	PUMP (P-2)	20	3		3048	0						--	--	BUSSED SPACE	--	14
15	--	--	--	--				3048	0				--	--	BUSSED SPACE	--	16
17	--	--	--	--						3048	0		--	--	BUSSED SPACE	--	18
19	E	UNIT HEATERS (UH-1, UH-2)	20	3		4157	0						--	--	BUSSED SPACE	--	20
21	--	--	--	--				4157	0				--	--	BUSSED SPACE	--	22
23	--	--	--	--						4157	0		--	--	BUSSED SPACE	--	24
25	L	PLATFORM AND BOH LTG	20	1		774	0						--	--	BUSSED SPACE	--	26
27	E	LTG CONTROL RELAY PANEL 'RP1'	20	1				500	0				--	--	BUSSED SPACE	--	28
29	--	SPARE	20	1						0	0		--	--	BUSSED SPACE	--	30
31	--	SPARE	20	1		0	32333						3	150	DOPPELMAYR PANEL	E; M	32
33	--	BUSSED SPACE	--	--				0	32333				--	--	--	--	34
35	--	BUSSED SPACE	--	--						0	32333		--	--	--	--	36
37	--	BUSSED SPACE	--	--		0	8065						3	70	PANEL 'LB1A' VIA XFMR 'TB1A'	L; E; R...	38
39	--	BUSSED SPACE	--	--				0	8721				--	--	1	--	40
41	--	BUSSED SPACE	--	--						0	8597		--	--	--	--	42
				Total Load:		60847 VA		61229 VA		60605 VA							
				Total Amps:		220 A		221 A		219 A							

CB TYPE LEGEND
GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND
N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

CCT TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	812 VA	1015 VA		
RECEPTACLE:	1800 VA	1800 VA	**TOTAL CONN. LOAD:**	182682 VA
MOTOR:	54872 VA	61939 VA	**TOTAL EST. LOAD:**	189952 VA
EQUIPMENT:	125198 VA	125198 VA	**TOTAL CONN.:**	220 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	228 A

NOTES:

PANEL: LB1A

LOCATION: BOILER ROOM 100
SUPPLY FROM: TB1A
MOUNTING: SURFACE
ENCLOSURE: NEMA 1

VOLTS: 120/208 Wye
PHASES: 3
WIRES: 4

A.I.C. RATING: 10K AIC FULLY RATED
MAINS TYPE: MCB
MAINS RATING: 150 A
MCB RATING: 150 A 1

Notes:

CKT	CCT TYPE	LOAD DESCRIPTION	TRIP	POLES	CB TYPE	A		B		C		CB TYPE	POLES	TRIP	LOAD DESCRIPTION	CCT TYPE	CKT
1	E	BOILER (B-1)	40	3		3627	180						1	20	UTILITY YARD RECEPT	R	2
3	--	--	--	--				3627	1200			GFEP	2	20	HEAT TRACE SYSTEM	E	4
5	--	--	--	--						3627	1200	4					6
7	M	EXHAUST FAN (EF-1)	20	1		818	540						1	20	RETAINING WALL RECEPTS	R	8
9	E	PLUMBING PUMP (SP-1)	20	1				1176	0				1	20	SPARE	--	10
11	E	CTRL PANELS AND GLYCOL FEEDER	20	1						770	0		1	20	SPARE	--	12
13	--	SPARE	20	1		0	0						1	20	SPARE	--	14
15	--	SPARE	20	1				0	0				1	20	SPARE	--	16
17	E	RP-1, RP-2	20	1						1500	0		1	20	SPARE	--	18
19	E	RP-3, RP-4	20	1		1500	0						1	20	SPARE	--	20
21	E	RP-5, RP-6	20	1				1500	0				1	20	SPARE	--	22
23	E	MECHANICAL CONTROLS	20	1						500	0		1	20	SPARE	--	24
25	R	BOILER ROOM RECEPTS	20	1		540	0						1	20	SPARE	--	26
27	L; R	ELEVATOR SHAFT RECEPT	20	1				218	0				1	20	SPARE	--	28
29	M	THERMOSTAT AND MOTOR DAMPER	20	1						500	0		1	20	SPARE	--	30
31	R	MACHINE ROOM RECEPT	20	1		360	0						--	--	BUSSED SPACE	--	32
33	E	ELEVATOR CAB CONNECTION	20	1				1000	0				--	--	BUSSED SPACE	--	34
35	E	FIRE ALARM CONTROL PANEL	20	1						500	0		--	--	BUSSED SPACE	--	36
37	E	RFID GATE XFMR POWER SUPPLY	20	1		500	0						--	--	BUSSED SPACE	--	38
39	--	SPARE	20	1				0	0				--	--	BUSSED SPACE	--	40
41	--	SPARE	20	1						0	0		--	--	BUSSED SPACE	--	42
				Total Load:		8065 VA		8721 VA		8597 VA							
				Total Amps:		67 A		73 A		72 A							

CB TYPE LEGEND
GFCI: 5mA GROUND FAULT CIRCUIT INTERRUPTER
GFEP: 30mA GROUND FAULT PROTECTION FOR EQUIPMENT
AFCI: ARC FAULT CIRCUIT INTERRUPTER
CAFCI: COMBINATION ARC FAULT & 5mA GROUND FAULT CIRCUIT INTERRUPTER
HC(-ON/OFF): HANDLE CLAMP FOR LOCKING IN ON/OFF POSITION
HT#: HANDLE TIE WITH GROUPING #
ST: SHUNT TRIP
LOCK: PERMANENTLY LOCKABLE BREAKER

CIRCUIT PHASE CODE LEGEND
N1. EXISTING LOAD ON EXISTING CIRCUIT BREAKER.
N2. NEW LOAD ON EXISTING CIRCUIT BREAKER.
N3. NEW LOAD ON NEW CIRCUIT BREAKER. CIRCUIT BREAKER AND AIC RATING TO MATCH EXISTING.

CCT TYPE:	LOAD	DEMAND LOAD	PANEL TOTALS	
LIGHTING:	38 VA	48 VA		
RECEPTACLE:	1800 VA	1800 VA	**TOTAL CONN. LOAD:**	25383 VA
MOTOR:	1318 VA	1523 VA	**TOTAL EST. LOAD:**	25597 VA
EQUIPMENT:	22227 VA	22227 VA	**TOTAL CONN.:**	70 A
KITCH EQUIP:			**TOTAL EST. DEMAND:**	71 A

NOTES:

RCRBD
RECORD SET
ELECTRICAL

AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #: 5155.00

CONSTRUCTION SET 03/29/21

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COLORADO REGISTERED
ERIC SMITH
35717
4/20/21
PROFESSIONAL ENGINEER

REVISIONS

No.	Description	Date
1	ADDENDUM #1	3/12/2021
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

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Job Number:	20054
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Drawn By:	BDJ, MAE
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Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ELECTRICAL SCHEDULES

Sheet Number
E700

LIGHTING CONTROL NOTES

GENERAL CONTROL NOTES

G1	THE LIGHTING CONTROL SYSTEM CONSISTS OF THE FOLLOWING: a. STAND-ALONE CONTROLS b. ROOM CONTROLLER CONTROLS c. NETWORKED RELAY BASED LIGHTING CONTROL PANEL SYSTEM OR NETWORKED DISTRIBUTED LIGHTING CONTROLS OR NETWORKED WIRELESS DISTRIBUTED LIGHTING CONTROLS
G2	ALTERNATE MANUFACTURER'S WILL BE REVIEWED ACCORDING TO THE NOTES PROVIDED IN THE LIGHTING FIXTURE SCHEDULE.
G3	ALL WIRING DIAGRAMS WITHIN THESE DRAWINGS ARE PROVIDED TO COMMUNICATE THE DESIGN INTENT. SYSTEM SHALL BE WIRED ACCORDING TO THE APPROVED SHOP DRAWINGS.
G4	ALL STRUCTURED CABLE WIRING SHOWN ON RISER DIAGRAMS IS INTENDED TO BE BY CONTROL MANUFACTURER APPROVED STANDARD STRUCTURED CABLING, UNLESS OTHERWISE NOTED. EC SHALL PROVIDE ALL CABLING WITHIN THE LIGHTING CONTROL SYSTEM, CABLING BETWEEN THE NETWORKED HEAD-END AND THE BUILDINGS COMMUNICATION NETWORK SHALL BE PROVIDED BY THE LOW VOLTAGE CONTRACTOR/OWNER.
G5	ALL MANUALLY DIMMED LIGHT LOADS SHALL BE CAPABLE OF DIMMING LIGHTS TO OFF SETTING. DIMMING COMPATIBILITY BETWEEN THE CONTROLS AND LIGHT FIXTURES SHALL BE COORDINATED BY THE EC TO ENSURE THAT LIGHTING IS ABLE TO DIM TO LEVEL NOTED ON LIGHTING FIXTURE SCHEDULE.
G6	LIGHTING CONTROL SYSTEM SHALL INCLUDE A MINIMUM OF (4) HOURS OF MANUFACTURER'S REPRESENTATIVE TIME ON SITE FOR SYSTEM CHECK-OUT AND OWNER TRAINING. ELECTRICAL CONTRACTOR SHALL VIDEO RECORD TRAINING SESSION AND PROVIDE COPY OF VIDEO TO OWNER AS PART OF PROJECT COMPLETION SUBMITTALS.
G7	ALL DIGITAL SWITCHES FOR OVERRIDE CONTROL OF LIGHTING CONTROL SYSTEM(S) SHALL HAVE A MAXIMUM SETTING OF 2 HOURS PER IECC REQUIREMENTS.
G8	FINAL OCCUPANCY AND DAYLIGHT SENSOR LOCATION SHALL BE PROVIDED BY MANUFACTURER AND LOCATED PER APPROVED SHOP DRAWINGS AND DEVICE REQUIREMENTS. LOCATIONS INDICATED IN THESE DRAWINGS SHALL BE REVIEWED AND ALTERED AS NECESSARY FOR CORRECT OPERATION BY MANUFACTURER. IF OPERATIONS OF SENSORS DOES NOT MEET THE INTENT OUTLINED IN THESE DOCUMENTS THE MANUFACTURER REPRESENTATIVE SHALL PROVIDE FIELD RECTIFICATION SERVICES AS NECESSARY IN ORDER TO RECONFIGURE SYSTEM TO MEET OUTINED INTENT.

STANDALONE LIGHTING CONTROL GENERAL NOTES

S1	APPROVED STANDALONE LIGHTING CONTROLS TO BE PROVIDED BY ONE OF THE FOLLOWING PRE-APPROVED MANUFACTURERS: a. LEVITON b. nLIGHT/SENSORSWITCH c. LUTRON d. GREENGATE e. WATTSTOPPER f. DOUGLAS

ROOM CONTROLLER GENERAL NOTES

R1	APPROVED ROOM CONTROLLER LIGHTING CONTROLS TO BE PROVIDED BY ONE OF THE FOLLOWING PRE-APPROVED MANUFACTURERS: a. CRESTRON b. nLIGHT c. LUTRON d. GREENGATE e. WATTSTOPPER f. DOUGLAS
R2	REFER TO ELECTRICAL LIGHTING LAYOUTS FOR LAYOUT OF DEVICES CONNECTED TO ROOM CONTROLLERS. ROOM CONTROLLER COMPONENTS ARE INDICATED IN THE "LIGHTING CONTROL DEVICE" SCHEDULE, THESE COMPONENTS START WITH THE DESIGNATION 'R'.
R3	ROOM CONTROLLER HEAD END EQUIPMENT LOCATIONS ARE INDICATED IN SPACES, HOWEVER DRAWINGS ARE DIAGRAMMATIC AND EXACT QUANTITY OF ROOM CONTROLLER HEAD END EQUIPMENT PIECES VARIES FROM MANUFACTURER TO MANUFACTURER BASED ON DIMMING UTILIZATION, QUANTITY OF RELAYS, NUMBER OF INPUT DEVICES, QUANTITY OUTPUT ZONES AND RECEPTACLE CONTROL.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	LAMP QUAN.	LAMP WATTAGE	LAMP / CCT / CRI	MAX WATTAGE	LUMEN OUTPUT	DIMMING	FIXTURE FINISH	LOCATION	BOF/RFD/OFH	NOTES
EA1	AREA TYPE IV LED POLE	HUBBELL	ALT4-P70-96L-3K-277-BL	277 V	1	224 W	3000K 80 CRI LED	224 VA	19582	--	BLACK	POLE	15'-0" OFH	1,2
EA2	AREA TYPE V LED POLE	HUBBELL	ALT5-P35-96L-3K-277-BL	277 V	1	104 W	3000K 80 CRI LED	104 VA	11644	--	BLACK	POLE	15'-0" OFH	1,2
EA3	EXTERIOR LED AREA POLE LIGHT, SINGLE HEAD TYPE III	HUBBELL	ALT4-P35-96L-3K-277-BL	277 V	1	104 W	3000K 80 CRI LED	104 VA	9902	--	BLACK	POLE	15'-0" OFH	1,2
ED1	15" X 15" SQUARE LED CANOPY DOWNLIGHT	CREE	CPY250-DM-F-C-UL-BK-30K-DIM	277 V	1	31 W	3000K 80 CRI LED	31 VA	4210	--	BLACK	CANOPY SURFACE	2" RFD	1,3
EW2EM	9"H x 11.5"W LED WALL MOUNT WITH -20 DEGREES C RATED EMERGENCY BATTERY BACKUP	LITHONIA	WDGE2 LED-P1-30K-80CRI-VW-MVOLT-E20WC-DBLXD	277 V	1	18 W	3000K 80 CRI LED	18 VA	1163	--	BLACK	SURFACE WALL	SEE PLANS	1
L1	4' LED STRIP LIGHT	LITHONIA	CLX-L48-3000LM-SEF-L/LENS-MVOLT-GZ10-30K-80CRI-WH	277 V	1	20 W	3000K 80 CRI LED	20 VA	2631	0-10V	WHITE	SURFACE CEILING	1" RFD	1
L1EM	4' LED STRIP LIGHT WITH EMERGENCY	LITHONIA	CLX-L48-3000LM-SEF-L/LENS-MVOLT-GZ10-30K-80CRI-E10WLCP-WH	277 V	1	20 W	3000K 80 CRI LED	20 VA	2631	0-10V	WHITE	SURFACE CEILING	1" RFD	1
L2	4' LED STRIP LIGHT SUSPENDED WITH AIRCRAFT CABLE	LITHONIA	CLX-L48-3000LM-SEF-L/LENS-MVOLT-GZ10-30K-80CRI-WH-ZACVH	277 V	1	20 W	3000K 80 CRI LED	20 VA	2631	0-10V	WHITE	SUSPENDED	12'-0" BOF	1
L2EM	4' LED STRIP LIGHT SUSPENDED WITH AIRCRAFT CABLE AND WITH EMERGENCY	LITHONIA	CLX-L48-3000LM-SEF-L/LENS-MVOLT-GZ10-30K-80CRI-WH-ZACVH-E10WLCP	277 V	1	20 W	3000K 80 CRI LED	20 VA	2631	0-10V	WHITE	SUSPENDED	12'-0" BOF	1
W1	4' LED STRIP LIGHT ELEVATOR SHAFT	CREE	C-STRIP-A-LIN4-22L-30K-WH	120 V	1	19 W	3000K 80 CRI LED	19 VA	2200	--	--	SURFACE WALL	SEE PLANS	1
W2	WET RATED LED STRIP LIGHT FIXTURE WITH SILICONE GASKETED LENS, IP 65 RATED OR EQUAL ON GFCI CIRCUIT BREAKER	LITHONIA	FEM-L48-LPPCL-MD-MVOLT-GZ10-35K-80CRI	120 V	1	19 W	3000K 80 CRI LED	19 VA	2000LM	--	--	SURFACE	SEE PLANS	1
W2EM	WET RATED LED STRIP LIGHT FIXTURE WITH EM BATTERY, SILICONE GASKETED LENS, IP 65 RATED OR EQUAL ON GFCI CIRCUIT BREAKER	LITHONIA	FEM-L48-LPPCL-MD-MVOLT-GZ10-35K-80CRI-E10WMCP	120 V	1	19 W	3000K 80 CRI LED	19 VA	2000LM	--	--	SURFACE	SEE PLANS	1

LIGHTING FIXTURE GENERAL NOTES

A.	ALL FRONT OF HOUSE LED LAMPS TO BE 3000K COLOR TEMPERATURE AND A MINIMUM OF 90CRI, UON.
B.	ALL REFLECTOR LAMPS TO BE PROVIDED AS WIDE FLOOD DISTRIBUTION, UON.
C.	LUMENS LISTED ARE DELIVERED LUMENS, NOT INITIAL.
D.	FOR ALL SPECIFIED LUMINAIRES, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL MOUNTING HARDWARE, ACCESSORIES, COMPONENTS, LEADER/JUMPER CABLES, WIRE FEED, CONNECTORS, END CAPS, REMOTE POWER SUPPLIES, AND ANY OTHER NECESSARY COMPONENT AS REQUIRED FOR INSTALLING A SECURE AND FULLY FUNCTIONAL SYSTEM.
E.	THE CONTRACTOR SHALL VERIFY THE CEILING TYPE BEFORE ORDERING LIGHT FIXTURES TO ENSURE COMPATIBILITY WITH SPECIFIED FIXTURES. NOTIFY SPECIFIER OF ANY DISCREPANCIES.
F.	ALL FINISH SELECTIONS SHALL BE VERIFIED BE ARCHITECT/INTERIOR DESIGNER/OWNER AS PART OF THE SUBMITTAL PROCESS. UNLESS OTHERWISE NOTED, EC SHALL ASSUME STANDARD LUMINAIRE FINISH OPTION FOR PRICING.
G.	ALL MOUNTING HEIGHTS SHALL BE VERIFIED WITH ARCHITECTURAL ELEVATIONS PRIOR TO ANY ROUGH-IN.

LIGHTING FIXTURE SPECIFIC NOTES

1.	ARCHITECT TO VERIFY COLOR FINISH PRIOR TO ORDERING.
2.	OVERALL FIXTURE HEIGHT DTERMINED FROM PLATFORM LEVEL ELEVATION (LEVEL 1) TO BOTTOM OF FIXTURE LENS. EC SHALL PROVIDE POLE LENGTHS AS REQUIRED FOR OVERALL FIXTURE HEIGHT INDICATED. COORDINATE EXACT POLE HEIGHT REQUIRED WITH OVERALL HEIGHT AND ELEVATION OF POLE BASE. COORDINATE EXACT HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
3.	FIXTURE TO BE MOUNTED ON UNDERSIDE OF GONDOLA CANOPY. COORDINATE EXACT LOCATION AND MOUNTING REQUIRMENTS WITH GONDOLA VENDOR PRIOR TO ROUGH-IN.

LIGHTING CONTROLS NAMING CONVENTION

SYSTEM TYPE
N = NETWORKED
R = ROOM CONTROLLER
(THE ABSENCE OF LETTERS ABOVE UNDER 'SYSTEM TYPE' INDICATE A STANDALONE SYSTEM)

AUTOMATIC MEANS OF SHUTOFF
L = LIGHT LEVEL (VIA PHOTOCELL)
M = MANUAL
O = OCCUPANCY
T = TIMECLOCK
V = VACANCY

DEVICES
C = CONTROLLED RECEPTACLE
D = DIMMER
E = EXTERIOR
P = PHOTOCELL
S = SENSOR
U = UNIQUE DEVICE TYPE
W = SWITCH MOUNTED DEVICE

NUMBERING
1,2,3... = QUANTITY AS REQUIRED FOR DIFFERENT PROGRAMMING SCENARIOS, DEVICE CHARACTERISTICS OR MOUNTING CONDITIONS

LIGHTING SEQUENCE OF OPERATION

CONTROL SEQUENCE	ON	OFF	SENSOR TYPE	TIME OUT	DIMMING	DAYLIGHT HARVESTING	TARGET ILLUMINANCE (FC)	NOTES
M1	MANUAL ON	MANUAL OFF	NONE	N/A	0-10V	NO	--	
T1	TIMECLOCK AUTOMATIC ON 30 MINUTES PRIOR TO BUSINESS HOURS	TIMECLOCK AUTOMATIC OFF 30 MINUTES AFTER CLOSE OF BUSINESS	NONE	N/A	N/A	NO	--	
T2	TIMECLOCK AUTOMATIC ON 30 MINUTES PRIOR TO BUSINESS HOURS	TIMECLOCK AUTOMATIC OFF 30 MINUTES AFTER CLOSE OF BUSINESS	NONE	N/A	SWITCHING	NO	--	

LIGHTING RELAY SCHEDULE - RP1

RELAY ID	RELAY DESCRIPTION	DIMMING / SWITCHING	VOLTAGE	PANEL-CIRCUIT	CONTROL SEQUENCE
RP1-1	PLATFORM POLES	--	277 V	HB1A-25	TIMECLOCK
RP1-2	WALL/ELEVATOR SCONCES	--	277 V	HB1A-25	TIMECLOCK
RP1-3	GONDOLA DOWNLIGHTS	--	277 V	HB1A-25	TIMECLOCK
RP1-4	SPARE				
RP1-5	SPARE				
RP1-6	SPARE				
RP1-7	SPARE				
RP1-8	SPARE				

RCRBD
RECORD SET
ELECTRICAL

CONSTRUCTION SET 03/29/21

AE DESIGN
Integrated Lighting and Electrical Solutions
1900 Wazee Street #205 | Denver, CO 80202 | 303.296.3034
aedesign-inc.com
Project #: 5155.00

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COLORADO REGISTERED PROFESSIONAL ENGINEER
35717
4/20/21

NOTICE: DUTY OF COOPERATION
Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arising out of such changes.

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Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
ELECTRICAL LIGHTING SCHEDULES

Sheet Number
E800

PLUMBING LEGEND

ABBV.	SYMBOL	DESCRIPTION
TS		TRAP SEAL
SP		SUMP PUMP
G	G	NATURAL GAS
W		SANITARY WASTE BELOW FLOOR
W		SANITARY WASTE ABOVE FLOOR
V		SANITARY VENT
RDL	RDL	ROOF DRAIN ABOVE FLOOR OR GRADE
SD		STORM DRAIN BELOW FLOOR OR GRADE
GCO		GRADE CLEANOUT
WCO	OR	WALL CLEANOUT
		PLUG VALVE
		GAS COCK
VTR		VENT THRU ROOF
FD		FLOOR DRAIN
RD/OD		ROOF DRAIN/OVERFLOW DRAIN
DSN		DOWNSPOUT NOZZLE
		SPLASH BLOCK
		SPLASH BLOCK WITH DOWNSPOUT NOZZLE

GENERAL LEGEND

ABBV.	SYMBOL	DESCRIPTION
G.C.		GENERAL CONTRACTOR
M.C.		MECHANICAL CONTRACTOR
P.C.		PLUMBING CONTRACTOR
E.C.		ELECTRICAL CONTRACTOR
T.C.C.		TEMPERATURE CONTROL CONTRACTOR
A.F.F.		ABOVE FINISHED FLOOR
A.F.G.		ABOVE FINISHED GRADE
B.F.F.		BELOW FINISHED FLOOR
B.F.G.		BELOW FINISHED GRADE
N.C.		NORMALLY CLOSED
N.O.		NORMALLY OPEN
(N)		NEW
SF		SQUARE FOOTAGE
		CONTROL WIRING
		DIRECTION OF FLOW IN PIPE
		PITCH PIPE DOWN IN DIRECTION OF ARROW
		PIPE CAP
		GAUGE
		PRESSURE GAUGE WITH COCK
		FLOW METER FITTING
		PIPE UNION
		FLEXIBLE PIPE CONNECTION
		STRAINER WITH BLOWDOWN VALVE
		STRAINER
CV		CHECK VALVE
BV		BALANCING VALVE
		BALL VALVE
		BUTTERFLY VALVE
		MANUAL AIR VENT
		AUTOMATIC AIR VENT
		PRESSURE RELIEF VALVE
P/T		PRESSURE/TEMPERATURE TEST PLUG
		PIPE ELBOW DOWN
		PIPE ELBOW UP
		TEE OFF BOTTOM OF PIPE
		TEE OFF TOP OF PIPE
		THERMOMETER

SPECIFICATION (PLUMBING)

PIPING:
A. WASTE, VENT, DRAIN AND STORM PIPING SHALL BE SCHEDULE 40 PVC "SOLID CORE" WITH SOLVENT WELDED FITTINGS.

B. FOUNDATION DRAINAGE PIPING SHALL BE PERFORATED PVC SDR 35. WITH SOLVENT WELDED FITTINGS.

3

INSULATION:
A. STORM PIPING INSULATION SHALL BE 1".

B. WATER PIPING INSULATION BE 1" THICK & EQUAL TO .21 TO .28 BTU· IN/h· FT2/· °F CONDUCTIVITY.

EQUIPMENT:

A. GRADE CLEANOUT (GCO): CAST IRON BODY & FRAME, CLEANOUT PLUG, ADJUSTABLE, ROUND, CAST IRON TOP. H2O RATED ZURN OR EQUAL.

B. WALL CLEANOUT (WCO): CAST IRON BODY ADAPTABLE TO PIPE W/ CAST BRONZE OR CAST BRASS CLEANOUT PLUG. STAINLESS STEEL COVER INCLUDING SCREWS. ZURN OR EQUAL.

VALVES:

A. GAS PLUG VALVE:
  a. 2" AND SMALLER: 150 PSI, CAST-IRON BODY, STRAIGHTAWAY PATTERN, SQUARE BRONZE HEAD, THREADED ENDS.
    1. DEZURIK #PEC.
    2. HOMESTEAD: 611.

B. GAS COCKS:
  a. GAS COCKS 3" AND SMALLER: 250 PSI NON-SHOCK CWP, BRONZE BALL VALVE WITH CHROME PLATED BALL, THREADED ENDS, UL LISTED.
    1. 1) NIBCO, INC. T-580-70-UL-842.
    2. 2) APOLLO 80-100.

C. GAS PRESSURE REGULATORS:
  a. PRESSURE REGULATORS (SERVICE OR LINE): "NATURAL GAS" COMPLY WITH ANSI Z21.80. SUBJECT TO COMPLIANCE WITH REQUIREMENTS, PROVIDE AS INDICATED ON THE DRAWINGS.
    1. END CONNECTIONS: THREADED FOR REGULATORS 2" AND SMALLER; FLANGED FOR REGULATORS 2-1/2" AND LARGER.
    2. BODY AND DIAPHRAGM CASE: CAST IRON OR DIE-CAST ALUMINUM.
    3. SPRINGS: ZINC-PLATED STEEL; INTERCHANGEABLE.
    4. DIAPHRAGM PLATE: ZINC-PLATED STEEL.
    5. SEAT DISC: NITRILE RUBBER RESISTANT TO GAS IMPURITIES, ABRASION, AND DEFORMATION AT THE VALVE PORT.
    6. ORIFICE: ALUMINUM; INTERCHANGEABLE.
    7. SEAL PLUG: ULTRAVIOLET-STABILIZED, MINERAL-FILLED NYLON.
    8. SINGLE-PORT, SELF-CONTAINED REGULATOR WITH ORIFICE NO LARGER THAN REQUIRED AT MAXIMUM PRESSURE INLET, AND NO PRESSURE SENSING PIPING EXTERNAL TO THE REGULATOR.
    9. PRESSURE REGULATOR SHALL MAINTAIN DISCHARGE PRESSURE SETTING DOWNSTREAM, AND NOT EXCEED 150 PERCENT OF DESIGN DISCHARGE PRESSURE AT SHUTOFF.
    10. ATMOSPHERIC VENT: FACTORY- OR FIELD-INSTALLED, STAINLESS STEEL SCREEN IN OPENING IF NOT CONNECTED TO VENT PIPING. REGULATOR MAY INCLUDE VENT LIMITING DEVICE INSTEAD OF VENT CONNECTION IF APPROVED BY AUTHORITIES HAVING JURISDICTION.
    11. MAXIMUM INLET PRESSURE: SEE DRAWINGS.
    12. OUTLET PRESSURE: SEE DRAWINGS AND EQUIPMENT SCHEDULES.
    13. APPROVED MANUFACTURERS:
      a. i. AMERICAN METER COMPANY.
      b. ii. FISHER CONTROL VALVES AND REGULATORS; DIVISION OF EMERSON PROCESS MANAGEMENT.
      c. iii. TRON, INC.

HVAC LEGEND

ABBV.	SYMBOL	DESCRIPTION
SMS	SMS	SNOW MELT SUPPLY
SMR	SMR	SNOW MELT RETURN
SMS-HT	SMS-HT	SNOW MELT SUPPLY HIGH TEMPERATURE
SMS-LT	SMS-LT	SNOW MELT SUPPLY LOW TEMPERATURE
MCD	M	MOTORIZED CONTROL DAMPER
	B	BACKDRAFT DAMPER
	T	THERMOSTAT
	VFD	VARIABLE FREQUENCY DRIVE
	#	ANALOG OUTPUT
	#	ANALOG INPUT
	#	DIGITAL OUTPUT
	#	DIGITAL INPUT
		ROUND SUPPLY DUCT UP & DOWN
		STANDARD RADIUS ELBOW
	10x8	NEW RECTANGULAR DUCTWORK - WIDTH x DEPTH
UH		UNIT HEATER
P		PUMP
B		BOILER
AS		AIR SEPARATOR
ET		EXPANSION TANK
LVR		LOUVER

PLUMBING GENERAL NOTES

1. FIELD VERIFY EXACT LOCATION OF ALL CONNECTIONS PRIOR TO CONSTRUCTION.
2. ROUGH-IN AND FINAL CONNECT ALL FIXTURES, EQUIPMENT, ETC.
3. CONTRACTOR SHALL INSPECT SITE TO THOROUGHLY FAMILIARIZE HIMSELF WITH THE AREA OF WORK. ANY DISCREPANCES BETWEEN THESE DOCUMENTS AND ACTUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION PRIOR TO BID PRICING. NO EXTRAS WILL BE ALLOWED DUE TO LACK OF KNOWLEDGE OF EXISTING CONDITIONS.
4. ALL WORK SHALL BE PER LOCAL BUILDING AND HEALTH DEPARTMENT REQUIREMENTS.
5. REFERENCE HVAC DRAWINGS FOR EXACT LOCATION OF ALL HVAC EQUIPMENT REQUIRING PLUMBING CONNECTIONS. COORDINATE WITH HVAC CONTRACTOR EXACT PLUMBING CONNECTION REQUIREMENTS PRIOR TO COMMENCING WORK.
6. ALL STORM DRAINAGE PIPING WITHIN THE BOUNDARIES OF THE BUILDING SHALL BE SLOPED AT 1/8" PER FOOT UNLESS OTHERWISE NOTED.
7. ALL VENTS THROUGH THE ROOF (VTR) SHALL BE POSITIONED A MINIMUM OF 15'-0" FROM ANY OUTSIDE AIR INTAKE.
8. REFERENCE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL FIRE RATED WALLS. ALL PIPE PENETRATIONS THROUGH FIRE RATED WALLS SHALL BE SEALED IN ACCORDANCE WITH THE BUILDING CODE.
9. OFFSET ALL PIPING AS REQUIRED TO AVOID STRUCTURAL MEMBERS, CANTS, FLASHING, MECHANICAL, OR ELECTRICAL EQUIPMENT.
10. PROVIDE CHROME PLATED SET SCREW TYPE ESCUTCHEONS AT ALL EXPOSED PIPE PENETRATIONS THROUGH WALLS AND CASEWORK.
11. PORTIONS OF THIS BUILDING WILL BE OCCUPIED DURING THIS CONSTRUCTION PROJECT. THE MECHANICAL CONTRACTOR SHALL COORDINATE THE SCHEDULING OF THEIR WORK WITH THE GENERAL CONTRACTOR. CLEAN UP AT THE END OF EACH DAY.
12. PROVIDE EQUIPMENT LABELS FOR ALL MAJOR EQUIPMENT, INCLUDING WATER HEATERS, PUMPS, CONTROL PANELS, ETC. LABELS SHALL BE AFFIXED OR ADHERED DIRECTLY TO EQUIPMENT. EQUIPMENT TO BE LABELED WITH ENGRAVED PLASTIC LAMINATE SIGNS.
13. SUBMIT TO THE ARCHITECT/ENGINEER ELECTRONIC PDF FILES OF MECHANICAL SUBMITTALS FOR REVIEW OF ALL MAJOR EQUIPMENT AS LISTED ON DRAWING EQUIPMENT SCHEDULES, AS WELL AS PRODUCTS SHOWN IN SPECIFICATIONS. ENGINEER ASSUMED NO RESPONSIBILITY FOR EQUIPMENT OR INSTALLATION COORDINATION THAT HAS NOT BEEN SUBMITTED FOR REVIEW.
14. CONTRACTOR SHALL WARRANTY WORK, EQUIPMENT, FIXTURES, MATERIALS, AND PROPER OPERATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF BUILDING BY OWNER. THIS GUARANTEE SHALL NOT INCLUDE NORMAL MAINTENANCE REQUIRED BY THE OWNER AS DESCRIBED IN THE OPERATION AND MAINTENANCE MANUALS.
15. PROVIDE TWO SETS OF OPERATION AND MAINTENANCE (O&M) MANUALS FOR OWNER AT COMPLETION OF PROJECT TO THE ARCHITECT/ENGINEER FOR REVIEW. MANUALS TO INCLUDE INSTALLATION INSTRUCTIONS, REPLACEMENT PART LISTS, AND MAINTENANCE INFORMATION ON ALL MECHANICAL EQUIPMENT, FIXTURES, ETC. SUBMITTED.
16. CONTRACTOR SHALL MAINTAIN A COMPLETE AND ACCURATE SET OF RECORD DRAWINGS SHOWING ACTUAL INSTALLED LOCATIONS OF WORK. SUBMIT THESE DRAWINGS AS PART OF THE OPERATION AND MAINTENANCE MANUALS AT COMPLETION OF PROJECT.

RADIANT HEAT GENERAL NOTES

1. FURNISH ALL LABOR, MATERIALS TRANSPORTATION, EQUIPMENT, AND SERVICES TO INSTALL A HYDRONIC RADIANT HEAT SYSTEM WHERE INDICATED ON THE DRAWINGS.
2. SHOP DRAWINGS, OR DESCRIPTIONS OF MATERIALS, AND DETAILS OF INSTALLATION SHALL BE SUBMITTED FOR APPROVAL. NO FABRICATION SHALL BE PERFORMED UNTIL APPROVAL IS OBTAINED.
3. TUBE SHALL CARRY A 25-YEAR NON-PRORATED WARRANTY AGAINST FAILURE DUE TO DEFECT IN MATERIAL AND/OR WORKMANSHIP.
4. TUBE SHALL BE CROSS-LINKED POLYETHYLENE WITH AN OXYGEN DIFFUSION BARRIER, RATED AT 180°F MAXIMUM WORKING TEMPERATURE, AND 100 PSI WORKING PRESSURE. THE TUBE SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM STANDARD SPECIFICATION F 876.
5. TUBING LAYOUT SHALL BE BY THE TUBING MANUFACTURER'S APPROVED REPRESENTATIVE. TUBING MANUFACTURER'S REPRESENTATIVE SHALL PROVIDE A WRITTEN STATEMENT THAT THE TUBING LAYOUT WILL OPERATE CORRECTLY WITH THE SPECIFIED PUMP AND CONTROL SYSTEM. WHEN THE TUBING LAYOUT DOES NOT WORK WITH THE SPECIFIED PUMP, THE MANUFACTURER'S REPRESENTATIVE SHALL SELECT AND SUBMIT ON THE CORRECT PUMP. SUBMIT TUBE FLOW AND PRESSURE DROP DATA FOR EACH ZONE FOR REVIEW.
6. THE TUBE DIMENSIONS SHALL BE: 3/4" NOMINAL DIAMETER UNLESS SCHEDULED OTHERWISE.
7. THE MINIMUM BEND RADIUS FOR COLD BENDING OF THE TUBE SHALL NOT BE LESS THAN SIX TIMES THE OUTSIDE DIAMETER. BENDS WITH A RADIUS LESS THAN STATED SHALL REQUIRE THE USE OF A BEND SUPPORT AS SUPPLIED BY THE TUBE MANUFACTURER.
8. MANIFOLDS: MANIFOLDS SHALL BE OF CAST BRASS OR COPPER CONSTRUCTION, MANIFOLDS SHALL HAVE INTEGRAL CIRCUIT BALANCING VALVES. MANIFOLDS SHALL BE ABLE TO VENT AIR AND DRAIN WATER FROM THE SYSTEM. MANIFOLDS SHALL BE PROVIDED WITH SUPPORT BRACKETS AND TUBE BEND SUPPORT. MANIFOLDS SHALL BE ISOLATED FROM SUPPLY AND RETURN TUBING WITH VALVES THAT ARE SUITABLE FOR ISOLATION AND BALANCING.
9. FITTINGS SHALL BE MANUFACTURED OF DEZINCIFICATION RESISTANT BRASS. THESE FITTINGS MUST BE SUPPLIED BY THE TUBE MANUFACTURER. THE FITTINGS SHALL CONSIST OF A BARBED INSERT, A COMPRESSION RING, AND A COMPRESSION NUT.
10. INSTALL MANIFOLDS IN UPONOR WALL CABINETS OR YARD BOXES. WHERE POSSIBLE COMBINE MANIFOLDS INTO ONE CABINET, AT THE LOCATIONS AS SHOWN. COORDINATE WALL CABINET LOCATIONS, SIZES AND FRAMING REQUIREMENTS WITH THE GENERAL CONTRACTOR.
11. ACCEPTABLE MANUFACTURERS: REHAU AND UPONOR.

HVAC PIPING NOTES AND SPECIFICATIONS

1. PROVIDE SCHEDULE 40 PVC PIPING SLEEVES AT ALL WALL PENETRATIONS.
2. SNOWMELT PIPE SIZE 2 1/2" AND LARGER: BLACK STEEL PIPE; ASTM A-53; SCHEDULE 40; 150 WROUGHT-STEEL BUTTWELDING FITTINGS WITH WELDED JOINTS.
3. SNOWMELT PIPE SIZE 2" AND SMALLER: COPPER PIPE; ASTM B-88, TYPE L, HARD-DRAWN TEMPER; WROUGHT-COPPER FITTINGS WITH SOLDERED JOINTS.
4. DIRECT BURIED PIPING (ALL SIZES): PEX-A SERVICE TUBING PRE-INSULATED WITH HDPE SEAMLESS CORRUGATED OUTER JACKET. UPONOR ECOFLEX OR EQUIVALENT.
5. PROVIDE ALL PIPE HANGERS WITH THERMAL HANGER SHIELDS AND HIGH DENSITY INSERTS MSS TYPE 40; CONSTRUCTED OF AN INSERT OF HIGH DENSITY, 100 PSI, WATER-PROOFED CALCIUM SILICATE MEETING, ASTM C-533 TYPE 1. ENCASE INSERT IN A GALVANIZED SHEET METAL SHIELD. HIGH DENSITY INSERT AND SHIELD SHALL SURROUND THE BOTTOM 180° OF THE SUPPORTED PIPE AT A MINIMUM WITH TOP 180° VOID SPACE FILED WITH SEGMENTS OF INSULATION.
6. CLEANING, FLUSHING AND INSPECTING GENERAL: CLEAN EXTERIOR SURFACES OF SUPERFLUOUS MATERIALS, AND PREPARE FOR APPLICATION OF SPECIFIED COATINGS (IF ANY). FLUSH OUT SYSTEMS WITH CLEAN WATER BEFORE PROCEEDING WITH REQUIRED TESTS. INSPECT EACH RUN OF EACH SYSTEM FOR COMPLETION OF JOINTS, SUPPORTS AND ACCESSORY ITEMS. INSPECT PRESSURE PIPING IN ACCORDANCE WITH PROCEDURES OF ASME B31. PROVIDE A PRE-START UP LIQUID ALKALINE DISPERSANT CLEANER FOR ALL THE FLUSHING AND CLEANING OF ALL HVAC WATER SYSTEMS.
7. PIPING TESTS
   TEST PRESSURE PIPING IN ACCORDANCE WITH ASME B31. GENERAL: PROVIDE TEMPORARY EQUIPMENT FOR TESTING, INCLUDING PUMP AND GAUGES. TEST PIPING SYSTEM BEFORE INSULATION IS INSTALLED WHEREVER FEASIBLE, AND REMOVE CONTROL DEVICES BEFORE TESTING. TEST EACH NATURAL SECTION OF EACH PIPING SYSTEM INDEPENDENTLY BUT DO NOT USE PIPING SYSTEM VALVES TO ISOLATE SECTIONS WHERE TEST PRESSURE EXCEEDS VALVE PRESSURE RATING. FILL EACH SECTION WITH WATER AND PRESSURIZE FOR INDICATED PRESSURE AND TIME. AIR MAY BE USED IF ALLOWED BY CODE. AIR CANNOT BE USED FOR PLASTIC PIPING.
   A. REQUIRED TEST PERIOD IS 8 HOURS.
   B. TEST EACH PIPING SYSTEM AT 150% OF OPERATING PRESSURE INDICATED, BUT NOT LESS THAN 100 PSI TEST PRESSURE.
   C. TEST FORCE DRAINAGE (PUMPED) PIPING AT 50 PSI.
   D. OBSERVE EACH TEST SECTION FOR LEAKAGE AT END OF TEST PERIOD. TEST FAILS IF LEAKAGE IS OBSERVED OR IF PRESSURE DROP EXCEEDS 5% OF TEST PRESSURE.

   REPAIR PIPING SYSTEMS SECTIONS WHICH FAIL REQUIRED PIPING TEST, BY DISASSEMBLY AND RE-INSTALLATION, USING NEW MATERIALS TO EXTENT REQUIRED TO OVERCOME LEAKAGE. DO NOT USE CHEMICALS, STOP-LEAK COMPOUNDS, MASTICS, OR OTHER TEMPORARY REPAIR METHODS. DRAIN TEST WATER FROM PIPING SYSTEMS AFTER TESTING AND REPAIR WORK HAS BEEN COMPLETED.

SHEET INDEX

SHEET NUMBER	MECHANICAL & PLUMBING SHEET TITLE	SHEET SCALE
MP000	MECHANICAL COVER SHEET	NONE
M101	LOWER LEVEL HVAC PLAN	VARIES
M111	FIRST LEVEL HVAC PLAN	1/8"=1'-0"
M300	HVAC SCHEDULES	NONE
M400	HVAC DETAILS AND CONTROL DRAWINGS	NONE
P100	PLUMBING SITE PLAN	1/8"=1'-0"
P101	LOWER LEVEL PLUMBING PLAN	VARIES
P301	PLUMBING SCHEDULES & DETAILS	NONE

MECHANICAL GENERAL NOTES AND SPECIFICATIONS

1. THESE DOCUMENTS ARE DIAGRAMMATIC IN NATURE AND ARE NOT INTENDED TO BE UTILIZED AS SHOP DRAWINGS NOR NECESSARILY SCALED FOR EXACT MEASUREMENTS. ANY DISCREPANCIES BETWEEN THESE DOCUMENTS AND THE ACTUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT/ENGINEER FOR RESOLUTION PRIOR TO INSTALLATION.
2. MECHANICAL WORK SHALL COMPLY WITH ALL APPLICABLE CODES. VERIFY ALL REQUIREMENTS PRIOR TO SUBMITTING BID OR COMMENCING WORK.
3. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ADDITIONAL COORDINATION OR MODIFICATIONS THAT MAY BE REQUIRED DUE TO THE USE OR INSTALLATION OF EQUIPMENT OTHER THAN THAT OF THE BASIS OF DESIGN MANUFACTURERS LISTED ON THE DRAWINGS.
4. THE MECHANICAL CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES PRIOR TO AND DURING CONSTRUCTION. THE MECHANICAL SYSTEMS SHOWN SHALL BE RUN AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.
5. REFER TO THE ARCHITECTURAL DRAWINGS FOR ROOFING DETAILS SPECIFIC TO THIS PROJECT.
6. THE MECHANICAL CONTRACTOR SHALL COORDINATE THERMOSTAT, SENSOR, AND SWITCH LOCATIONS WITH ARCHITECT/ENGINEER PRIOR TO INSTALLATION. ALL THERMOSTATS, SENSORS, AND SWITCHES SHALL BE LOCATED 48" AFF UNLESS INDICATED OTHERWISE. WHERE EXISTING CONDITIONS REQUIRE EXPOSED CONTROL WIRING, SUCH WIRING SHALL BE CONCEALED WITH WIRE MOLD. WIRE MOLD COLOR SHALL BE SELECTED BY THE ARCHITECT.
7. PROVIDE EQUIPMENT LABELS FOR ALL MAJOR EQUIPMENT, INCLUDING BUT NOT LIMITED TO AIR HANDLING SYSTEMS, FANS, CONTROLS, AND DAMPERS. LABELS SHALL BE AFFIXED OR ADHERED DIRECTLY TO EQUIPMENT. EQUIPMENT TO BE LABELED WITH ENGRAVED PLASTIC LAMINATE SIGNS.
8. PROVIDE PIPE MARKER IDENTIFICATION INCLUDING ARROWS TO INDICATE DIRECTION OF FLOW. LOCATE PIPE MARKER AND ARROWS WHEREVER PIPING IS EXPOSED TO VIEW IN OCCUPIED SPACES, MECHANICAL ROOMS, AND ACCESSIBLE MAINTENANCE AREAS (SHAFTS, TUNNELS, PLENUMS). MARKERS SHALL BE SNAP-ON TYPE OR PRESSURE-SENSITIVE TYPE AT INSTALLER'S OPTION. COLORS TO COMPLY WITH ANSI A13.1.
9. PROVIDE VALVE TAGS ON EVERY VALVE, AND CONTROL DEVICE IN EACH PIPING SYSTEM. LIST EACH TAGGED VALVE IN VALVE SCHEDULE FOR EACH PIPING SYSTEM. MOUNTED FRAMED VALVE SCHEDULE IN MAIN MECHANICAL ROOM. VALVE TAGS 1-1/2" DIAMETER OF PLASTIC LAMINATE OR BRASS WITH PIPING SYSTEM ABBREVIATION IN 1/4" HIGH LETTERS AND SEQUENCED VALVE NUMBERS IN 1'2" HIGH LETTERS.
10. BALANCE HYRONIC SYSTEMS TO THE QUANTITIES SHOWN AND SUBMIT BALANCE REPORT TO THE ARCHITECT/ENGINEER FOR REVIEW. FAN AND PUMP SYSTEMS TO BE BALANCED WITHIN PLUS 10 PERCENT OR MINUS 5 PERCENT OF LISTED VALUES. AIR INLETS AND OUTLETS TO BE BALANCED WITH PLUS 10 PERCENT TO MINUS 5 PERCENT OF LISTED VALUES.
11. SUBMIT TO THE ARCHITECT/ENGINEER ELECTRONIC PDF FILES OF MECHANICAL SUBMITTALS FOR REVIEW OF ALL MAJOR EQUIPMENT AS LISTED ON DRAWING EQUIPMENT SCHEDULES, AS WELL AS DUCTWORK ACCESSORIES AND CONTROLS. ENGINEER ASSUMES NO RESPONSIBILITY FOR EQUIPMENT OR INSTALLATION COORDINATION THAT HAS NOT BEEN SUBMITTED FOR REVIEW.
12. CONTRACTOR SHALL WARRANTY WORK, EQUIPMENT, MATERIALS, AND PROPER OPERATION FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF BUILDING BY OWNER. THIS GUARANTEE SHALL NOT INCLUDE NORMAL MAINTENANCE REQUIRED BY THE OWNER AS DESCRIBED IN O&M MANUALS.
13. PROVIDE TWO SETS OF OPERATION AND MAINTENANCE (O&M) MANUALS FOR OWNER AT COMPLETION OF PROJECT TO THE ARCHITECT/ENGINEER FOR REVIEW. DOCUMENTATION SHALL CONSIST OF MANUFACTURER'S INFORMATION, SPECIFICATIONS AND RECOMMENDATIONS, PROGRAMMING PROCEDURES AND DATA POINTS, NARRATIVES, AND OTHER MEANS OF ILLUSTRATING TO THE OWNER HOW THE BUILDING, EQUIPMENT, AND SYSTEMS ARE INTENDED TO BE INSTALLED, MAINTAINED, AND OPERATED. REQUIRED REGULAR MAINTENANCE ACTIONS FOR EQUIPMENT AND SYSTEMS SHALL BE CLEARLY STATED ON A READILY VISIBLE LABEL. THE LABEL SHALL INCLUDE THE TITLE OR PUBLICATION NUMBER FOR THE OPERATION AND MAINTENANCE MANUAL FOR THAT PERTICULAR MODEL AND TYPE OF PRODUCT.
14. CONTRACTOR SHALL MAINTAIN A COMPLETE AND ACCURATE SET OF RECORD DRAWINGS SHOWING ACTUAL INSTALLED LOCATIONS OF WORK. SUBMIT THESE DRAWINGS AS PART OF THE OPERATION AND MAINTENANCE MANUALS AT COMPLETION OF PROJECT.

MECHANICAL HVAC INSULATION NOTES AND SPECIFICATIONS

1. COMBUSTION AIR DUCTWORK SHALL BE WRAPPED WITH 2" DUCT WRAP WITH VAPOR BARRIER JACKET, MINIMUM R-8. NO DUCT LINER ALLOWED.
2. ALL EXHAUST DUCTWORK SHALL NOT BE REQUIRED TO BE INSULATED, UNLESS NOTED OTHERWISE.
3. INSULATE SNOWMELT WATER PIPING 1-1/2" AND SMALLER WITH 1-1/2" FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET. INSULATE SNOWMELT WATER PIPING 2" AND LARGER WITH 2" PIPE INSULATION WITH ALL SERVICE JACKET.

MECHANICAL HVAC NOTES AND SPECIFICATIONS

1. PROVIDE DUCT TRANSITIONS FROM EQUIPMENT CONNECTIONS TO DUCT SIZES INDICATED AS REQUIRED.
2. PROVIDE A FLEXIBLE CONNECTION TO THE INTAKE AND DISCHARGE OF ALL MECHANICAL EQUIPMENT HAVING ROTATING PARTS. FLEXIBLE CONNECTION SHALL COMPLY WITH ALL APPLICABLE CODES.
3. MAINTAIN A MINIMUM OF 15'-0" FROM OUTSIDE AIR INTAKES TO PLUMBING VENTS.
4. ALL ELBOWS, BOTH HORIZONTAL AND VERTICAL, SHALL BE LONG RADIUS ELBOWS WHEREVER POSSIBLE, OR SHALL HAVE TURNING VANES WHERE SHOWN.
5. ALL JOB SITE DUCTWORK PRIOR TO INSTALLATION SHALL BE COVERED AND PROTECTED FROM DIRT, DUST, AND DAMAGE PER SMACNA STANDARDS. OPENINGS IN INSTALLED DUCTWORK DURING CONSTRUCTION SHALL BE SEALED CLOSED WITH PLASTIC TO PREVENT DUST AND DEBRIS INTRUSION INTO DUCTWORK SYSTEMS.
6. COORDINATE LOUVER, WALL CAP, AND AIR DEVICE PLACEMENT WITH BRICK OR BLOCK COURSING WHERE APPLICABLE.
7. FLUES FOR BOILERS, SHALL BE ENGINEERED BY THE FLUE MANUFACTURER, BASED ON ACTUAL EQUIPMENT, AND SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.
8. SNOWMELT CONTROLLERS AND DEVICES TO BE DISTECH INSTALLED BY LONG BUILDING ENVIRONMENTS. BASE BID: PROVIDED CONTROLLERS MUST BE CAPABLE OF OPERATING IN STAND-ALONE WITHOUT EXTERNAL BAS INTERFACE. ADJUSTABLE SET POINTS SHALL BE PROVIDED VIA LOCAL/TEMPORARY HARDWIRED CONNECTION. ADD-ALTERNATE: ETHERNET NETWORK CONNECTION PROVIDED BY OTHERS, TCC TO PROVIDE A BAS COMPUTER GATEWAY AND INTEGRATE GRAPHICS AND CONTROL POINTS FROM SNOWMELT SYSTEM TO NIAGRA FRAMEWORK.

CONSTRUCTION SET 03/29/2021

04-19-2021 PROFESSIONAL ENGINEER

REVISIONS

No.	Description	Date
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD Record Set TC 04/27/2021

ERIC SMITH ASSOCIATES, P.C.
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Job Number:	20034
Date:	03/29/21
Drawn By:	EAB
Checked By:	TVS

Project Phase
CONSTRUCTION SET

Sheet Title
MECHANICAL COVER SHEET

Sheet Number
MP000

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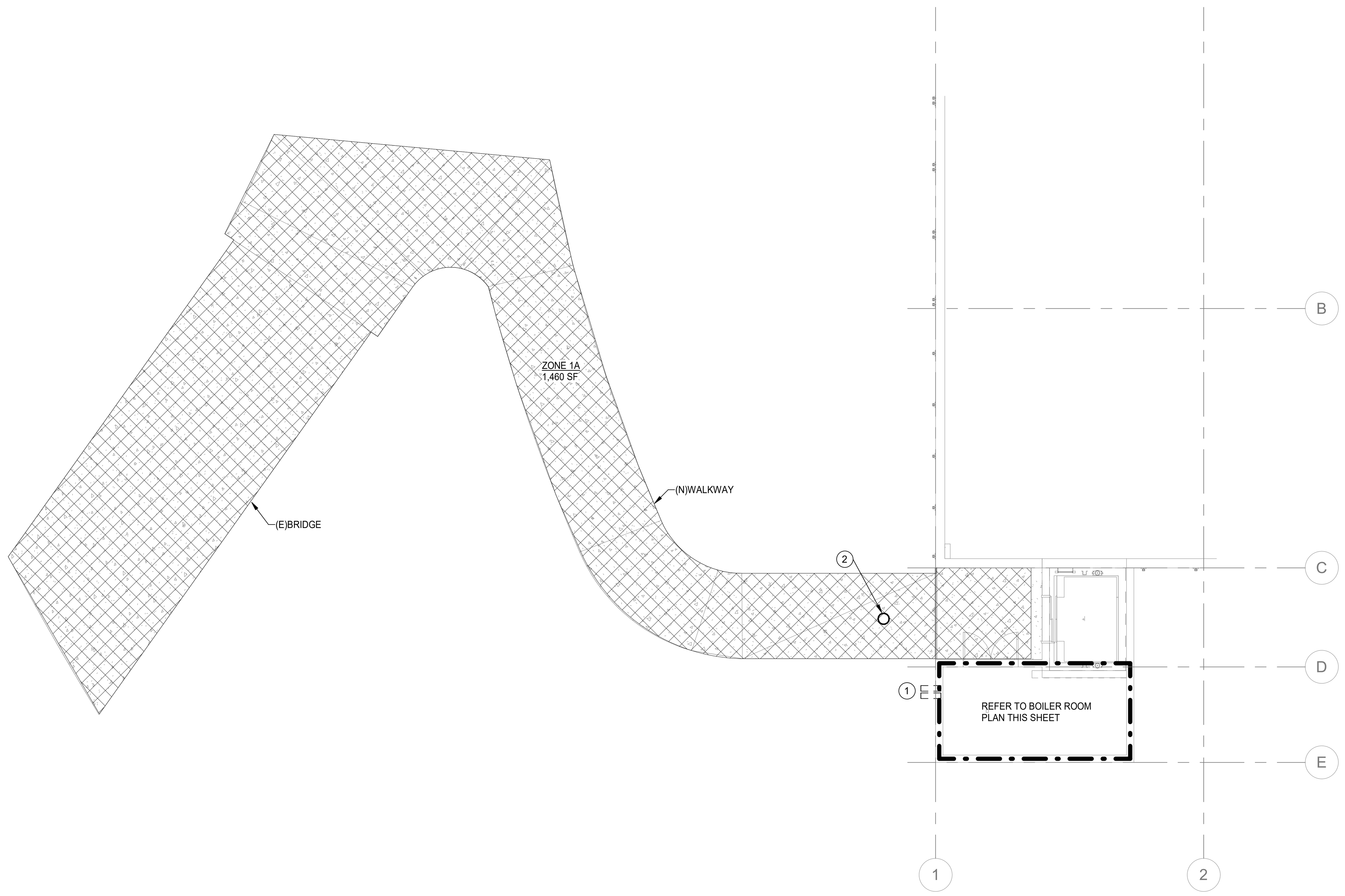
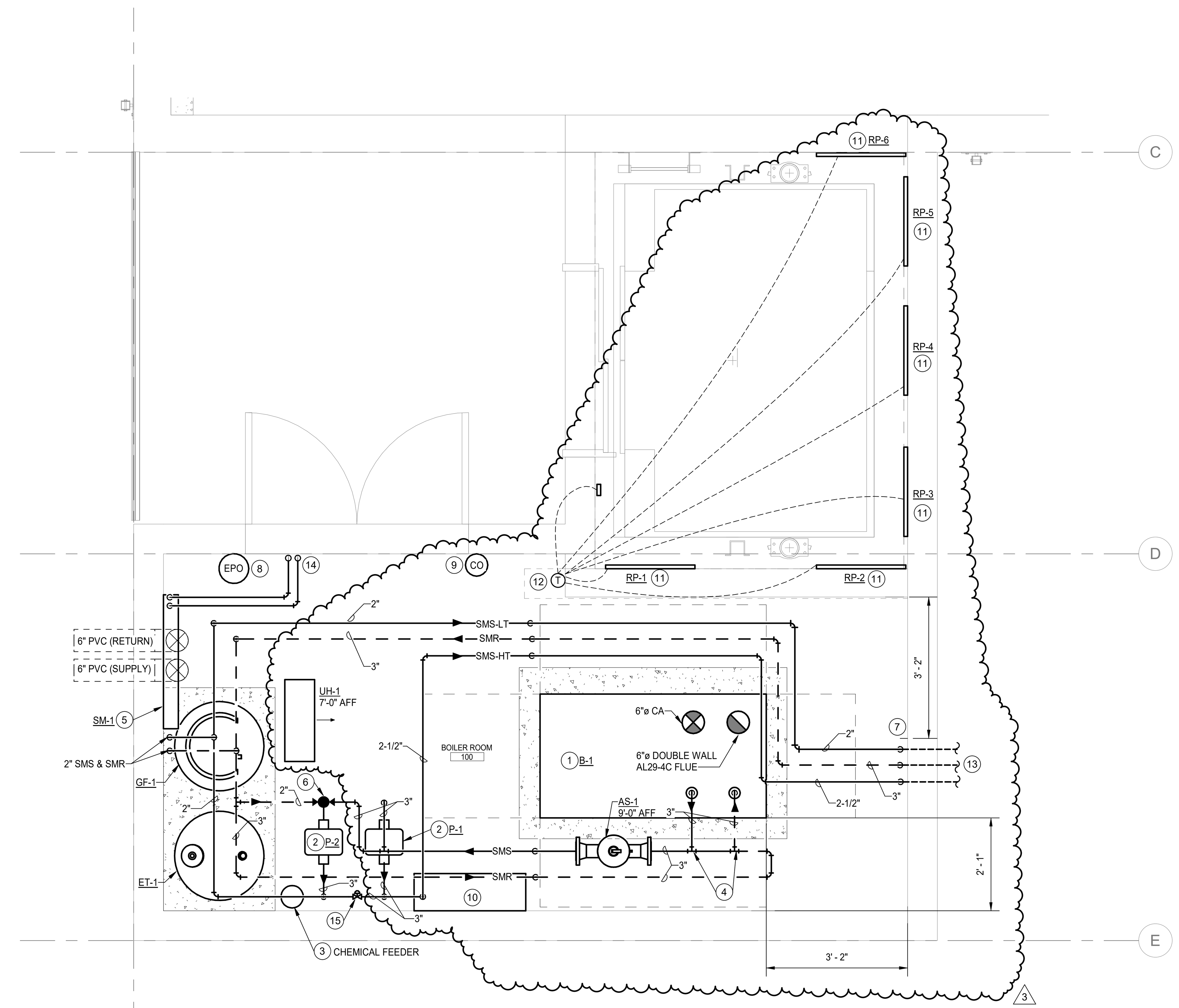


PARTIAL HVAC SITE PLAN

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

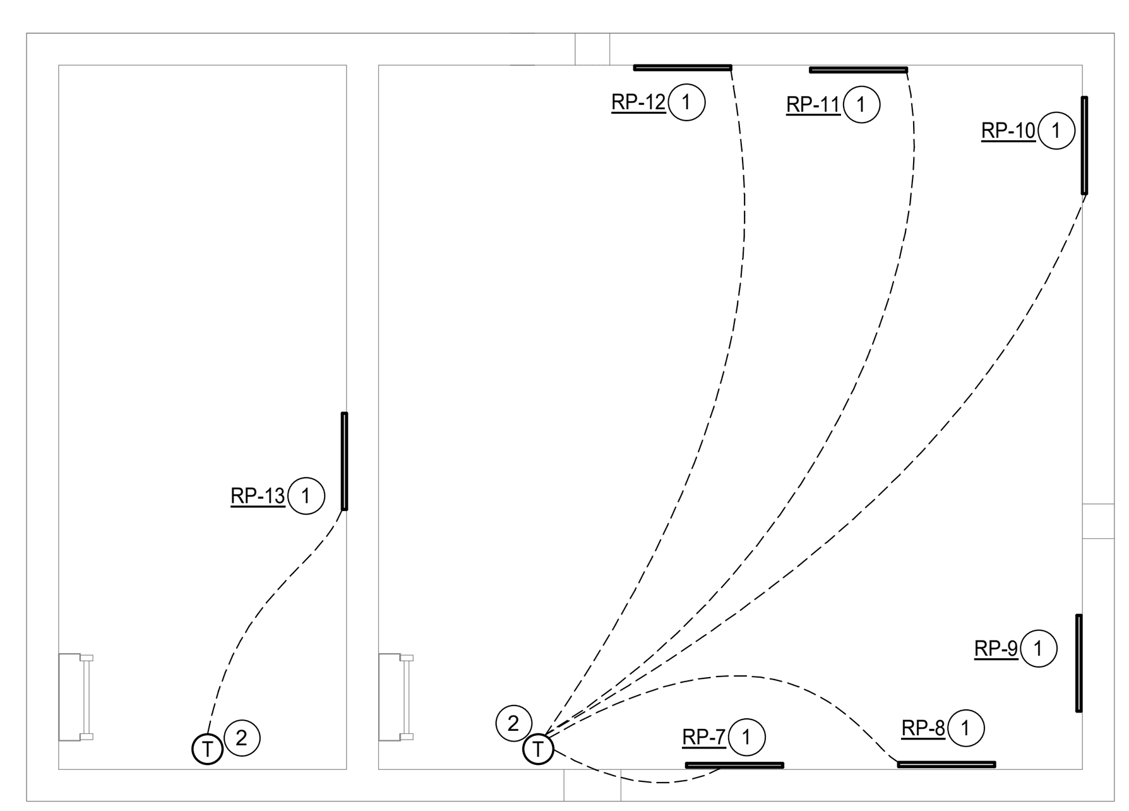
HVAC KEYNOTES:

1. SMS & SMR LOOPS FROM PVC CONDUITS TO ZONE 1. REFER TO SNOWMELT TUBING SUBMITTAL DRAWINGS FOR LOOP ROUTING.
2. SNOWMELT SLAB TEMPERATURE AND MOISTURE SENSOR MOUNTED IN SLAB AND WIRED BY TO CONTROLLER IN BOILER ROOM. COORDINATE LOCATION WITH OWNER PRIOR TO INSTALLATION TO AVOID VEHICLE TRAFFIC.



LOWER LEVEL HVAC PLAN

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



VAULT HVAC PLAN

SCALE: 1/4" = 1'-0"

HVAC KEYNOTES:

1. MOUNT RADIANT PANEL ON WALL AT 30" AFF. CONFIRM ALL MOUNTING LOCATIONS WITH SNOW MAKING PIPING ROUTING.
2. 24V THERMOSTAT WITH REMOTE SENSOR BY TCC WIRED TO POWER RELAY TERMINAL AT RADIANT HEATERS. MOUNT SENSOR IN SHAFT AT 54" AFF. CONFIRM ALL MOUNTING LOCATIONS WITH SNOW MAKING PIPING ROUTING. HEATING SETPOINT 50ºF.

HVAC KEYNOTES:

1. MOUNT BOILER ON 4" CONCRETE PAD THAT IS 6" LARGER THAN BOILER FOOTPRINT IN ALL DIRECTIONS.
2. MOUNT PUMPS ON SLAB WITH 6" TALL UNISTRUT MOUNTING STAND AND WAFFLE PAD.
3. CHEMICAL FEEDER MOUNTED ON WALL WITH MANUFACTURERS WALL BRACKET. PROVIDE AXIOM CBF-2 OR EQUIVALENT BY NEPTUNE.
4. TEE'S FOR PRIMARY SUPPLY AND RETURN CONNECTIONS TO BOILER TO BE SPACED BETWEEN 9" AND 15" APART.
5. SNOWMELT SUPPLY AND RETURN MANIFOLDS MOUNTED ON WALL APPROXIMATELY 4'-0" AFF. ROUTE SUPPLY AND RETURN LOOPS DOWN FROM MANIFOLD AND THROUGH SLAB IN 6" PVC CONDUITS (SUPPLY AND RETURN LOOPS IN SEPARATE CONDUIT). PROVIDE SPRAY FOAM TYPE SEALANT AROUND PIPING THROUGH PVC OPENING. CONDUITS TO EXTEND 36" BELOW GRADE AND ELBOW FOUNDATION WALL, REFER TO PARTIAL HVAC SITE PLAN THIS SHEET FOR CONTINUATION.
6. 1-1/2" THREE-WAY, MODULATING, 24V BALL TYPE CONTROL VALVE. COMMON PIPING DOWN, NORMALLY CLOSED TO SMR, NORMALLY OPEN TO SMS. SIZE FOR 108 GPM, MAX PRESSURE DROP 10 PSI. VALVE WILL NORMALLY OPERATE AT 38 GPM. PROVIDED BY TCC, MANUFACTURER TO BE BELIMO, HONEYWELL, OR GRISWOLD.
7. SMS-HT, SMS-LT, & SMR DOWN ON WALL TO APPROXIMATELY 1'-0" AFF. TRANSITION TO HDPE DIRECT BURIED PIPING AND ROUTE THROUGH WALL WITH LINK-SEAL AT EACH WALL PENETRATION.
8. 24V EPO PROVIDED AND WIRED TO BOILER SHUTDOWN CIRCUIT BY TCC. PILLA BSD120 OR EQUAL.
9. 24V CARBON MONOXIDE DETECTOR WITH AUDIBLE ALARM BY TCC.
10. SNOWMELT CONTROLLER IN NEMA 1 PANEL ENCLOSURE, PROVIDE 120V POWER TO CONTROLLER. REFER TO CONTROL DRAWINGS.
11. MOUNT RADIANT PANEL IN ELEVATOR SHAFT WITH BOTTOM OF PANEL AT 18" ABOVE BOTTOM OF PIT. CONFIRM ALL MOUNTING LOCATIONS WITH ELEVATOR INSTALLER.
12. 24V THERMOSTAT WITH REMOTE SENSOR BY TCC WIRED TO POWER RELAY TERMINAL AT RADIANT HEATERS. MOUNT SENSOR IN SHAFT AT 54" AFF.
13. DIRECT BURIED SMS-HT, SMS-LT, & SMR (UPONOR ECOFLEX SINGLE OR EQUIVALENT). REFER TO FIRST LEVEL HVAC PLAN FOR CONTINUATION.
14. 3/4 SMS-LT & SMR LOOP FROM SNOWMELT MANIFOLD 1 UP INTO FIRST LEVEL SLAB AND NORTH TO ZONE 1B ABOVE.
15. TWO-POSITION, LINE SIZE, NORMALLY CLOSED, BUTTERFLY TYPE CONTROL VALVE WITH 24V ACTUATOR. PROVIDED BY TCC, MANUFACTURER TO BE BELIMO, HONEYWELL, OR GRISWOLD.

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COLORADO LICENSED PROFESSIONAL ENGINEER 38020 04-19-2021

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

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3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

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1919 SEVENTH STREET
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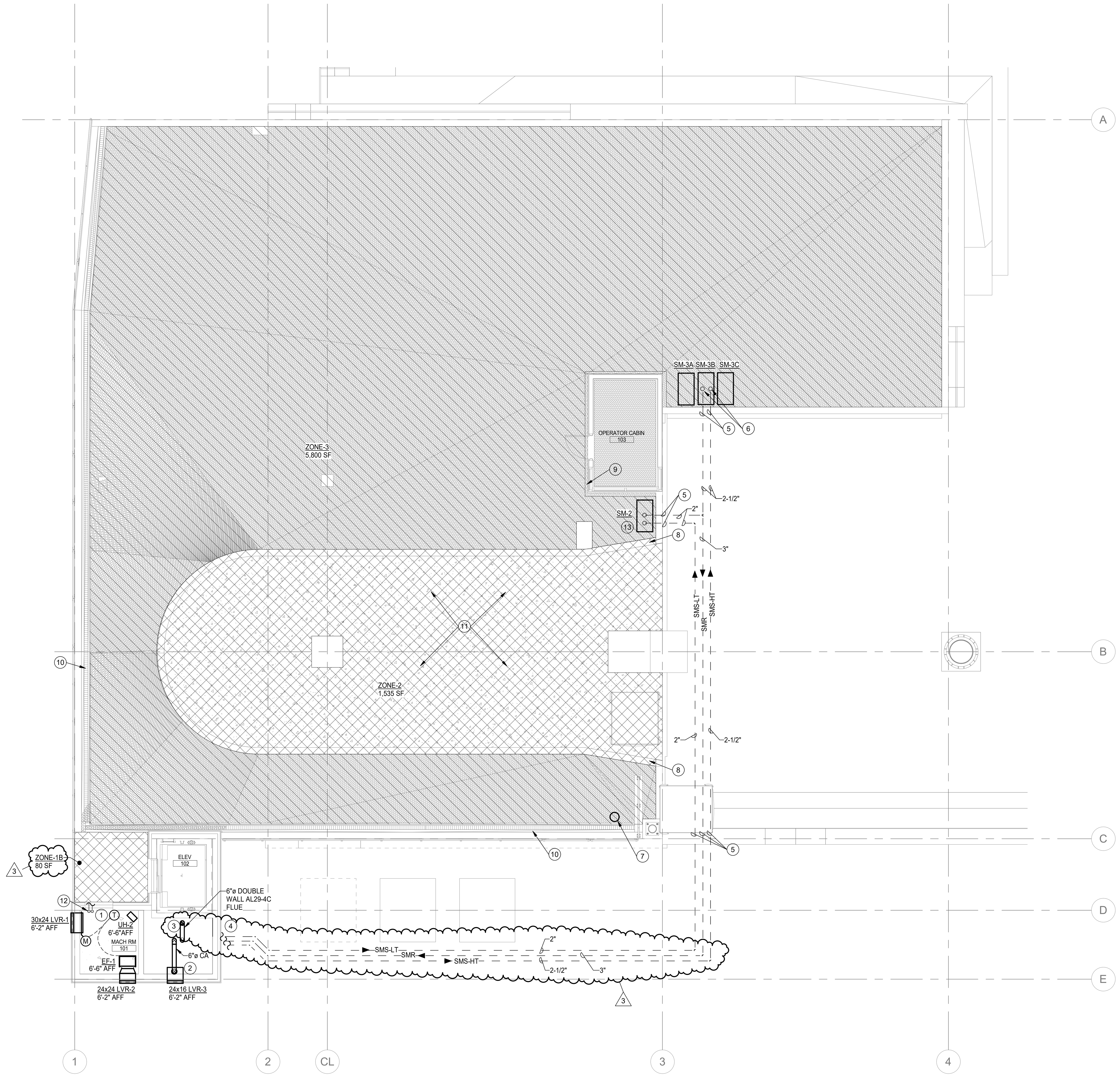
Job Number:	20034
Date:	03/29/21
Drawn By:	EAB
Checked By:	TVS

Project Phase
CONSTRUCTION SET

Sheet Title
LOWER LEVEL HVAC PLAN

Sheet Number
M101



FIRST LEVEL HVAC PLAN

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

HVAC KEYNOTES:

1. 120V REVERSE ACTING THERMOSTAT TO POWER 120V MOTORIZED DAMPER ACTUATOR (N.C.) AND EXHAUST FAN. COORDINATE REQUIREMENTS WITH EC.
2. PROVIDE LOUVER WITH 18" DEEP INSULATED SHEETMETAL PLENUM BOX, PROVIDE CONICAL TAKE OFF FROM TOP OF BOX AND INSULATED SHEETMETAL COMBUSTION AIR DOWN TO BOILER CONNECTION.
3. DOUBLE WALL AL29-4C FLUE UP FROM BOILER BELOW AND OFFSET NEAR ELEVATOR HOISTWAY WALL. FLUE TO CONTINUE ABOVE ROOF, SUPPORTED WITH WALL CLAMPS FROM ELEVATOR HOISTWAY WALL AND TERMINATE 3'-0" ABOVE TOP OF ELEVATOR ROOF WITH BOILER MANUFACTURER RECOMMENDED FLUE CAP.
4. DIRECT BURIED SM-LT, SMS-HT, & SMR PIPING FROM BOILER ROOM ROUTE IN SAME TRENCH TO MANIFOLDS A MINIMUM OF 24" BELOW GRADE, COORDINATE WITH OTHER UTILITIES AND GONDOLA EQUIPMENT REQUIREMENTS.
5. PROVIDE PVC SLEEVES FOR PIPING THROUGH FOUNDATION WALL, COORDINATE EXACT LOCATIONS WITH GC IN FIELD.
6. 2-1/2" SMS-HT & SMR UP FROM BELOW GRADE, PROVIDE PIPING TEE'S BELOW GRADE AND ROUTE 2" SMS-HT & SMR TO EACH SM-3A, SM-3B, AND SM-3C. SUPPPLY AND RETURN MANIFOLDS TO BE MOUNTED IN INDIVIDUAL YARD BOXES MOUNTED IN SNOWMELT ZONE FLUSH WITH PAVERS. COORDINATE YARD BOX SIZE WITH SIZE OF MANIFOLDS PROVIDED. ROUTE SNOWMELT TUBING FROM MANIFOLDS TO ZONE 3. YARD BOXES TO BE OLD CASTLE PRECAST POLYMER CONCRETE BOXES WITH LOCKABLE POLYMER COVER.
7. SNOWMELT SLAB TEMPERATURE AND MOISTURE SENSOR MOUNTED IN SLAB AND WIRED BY TO CONTROLLER.
8. PROVIDE SUPPLY AND RETURN SNOWMELT TUBING WITHIN 10" WIDE ELEVATED CURB AROUND ZONE 2. TUBING TO BE LOCATED APPROXIMATELY 3" BELOW TOP OF CONCRETE CURB COORDINATE EXACT LOCATION WITH GONDOLA EQUIPMENT INSTALLER
9. PROVIDE 6" CLEAR SPACE WITHOUT TUBING AROUND FUTURE OPERATOR CABIN.
10. 6" WIDE TRENCH DRAIN LOCATED AT PAVER PERIMETER.
11. COORDINATE SNOWMELT TUBING ROUTING IN FIELD WITH GONDOLA EMBED CORE DRILLS SO TUBING IS NOT DAMAGED. TYPICAL ALL SNOWMELT TUBING LOCATIONS AND ANY CORE DRILL LOCATIONS, SLEEVE THESE LOCATIONS WHERE POSSIBLE. COORDINATE CLOSELY WITH GONDOLA RAIL SYSTEM WITHIN THIS AREA IT WILL BE INSTALLED AFTER CONCRETE IS SET.
12. SNOWMELT LOOP UP IN FIRST FLOOR SLAB AND TO ZONE 1B.
13. 2" SMS-LT & SMR UP FROM BELOW GRADE TO SM-2. MANIFOLDS TO BE MOUNTED IN YARD BOX MOUNTED IN SNOWMELT ZONE FLUSH WITH PAVERS. COORDINATE YARD BOX SIZE WITH SIZE OF MANIFOLD PROVIDED. ROUTE SNOWMELT TUBING FROM MANIFOLD TO BELOW GRADE AND INTO ZONE 2. YARD BOXES TO BE OLD CASTLE PRECAST POLYMER CONCRETE BOXES WITH LOCKABLE POLYMER COVER.

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Job Number:	20034
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Project Phase
CONSTRUCTION SET

Sheet Title
FIRST LEVEL HVAC PLAN

Sheet Number
M111

HEATING WATER BOILER SCHEDULE

PLAN CODE	MANUFACT. & MODEL NO.	MBH INPUT S.L.	MBH OUTPUT (7,000')	NO. OF MODULES	MBH PER MODULE	FLOWRATE PER MODULE	BOILER FLOWRATE (GPM)	DESIGN EWT (°F)	DESIGN LWT (°F)	TURN-DOWN	ELECTRICAL		DIMENSIONS			OPER WT. (LBS)	REMARKS
											V/ø/HZ	FLA	L	W	H		
B-1	RIELLO AR 2000	2,000	1,509	4.0	500.0	25.0	100.0	120.0	170.0	40:1	230/3/60	30.2	73"	35"	83"	3,500	NOTES: 1,2,3,4

NOTES:
1. INLET GAS PRESSURE TO BE BETWEEN 3.5" W.C. AND 14" W.C.
2. EACH BOILER MODULE PROVIDED WITH INTEGRAL CIRCULATION PUMP AND AUTOMATIC FLUE ISOLATION DAMPER.
3. MANUFACTURER PROVIDED 3" INLET STRAINER.
4. PROVIDE MANUFACTURER'S CONDENSATE NEUTRALIZATION KIT.

*APPROVED ALTERNATE MANUFACTURER'S: PRIOR APPROVED

PUMP SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO.	TYPE	SERVICE	GPM	TDH (FT)	% EFF.	ELECTRICAL			SIZE (IN)			WT. (LBS)	REMARKS
							HP (BHP)	V/ø/Hz	RPM	L	W	H		
P-1	GRUNDFOS CRE 45-1	VERTICAL INLINE	SNOWMELT	110.0	90.0	82.0	7.5	460/3/60	3,600	15"	14"	38"	250	NOTE: 1,2,3,4
P-2	GRUNDFOS CRE 45-1	VERTICAL INLINE	SNOWMELT	110.0	90.0	82.0	7.5	460/3/60	3,600	15"	14"	38"	250	NOTE: 1,2,3,4

NOTES:
1. SNOWMELT SYSTEM UTILIZES 50% PROPYLENE GLYCOL.
2. PROVIDE MANUFACTUER'S INTEGRAL VFD.
3. PROVIDE MANUFACTUER'S SUCTION DIFFUSER SIZED FOR SYSTEM FLOW INDICATED.
4. SELECT PUMP FOR CONDITIONS INDICATED. REFER TO M400 FOR BALANCED FLOW RATES.

*APPROVED ALTERNATE MANUFACTURER'S: ARMSTRONG

AIR/DIRT SEPARATOR SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO.	SYSTEM	GPM	WPD (FT)	PIPE CONN. SIZE	MAX. PRESS. (PSI)	DIMENSIONS (NOTE: 1)			OPER. WEIGHT	REMARKS
							HEIGHT	DIA.	LENGTH		
AS-1	SPIROTHERM VDN300	SNOWMELT	110	1.0	3"	150.0	32"	14"	22"	250	NOTE: 1,2

NOTES:
1. LENGTH DIMENSION IS FLANGE TO FLANGE CONNECTION DISTANCE.
2. SYSTEM UTILIZES 50% PROPYLENE GLYCOL.

*APPROVED ALTERNATE MANUFACTURER'S: NONE

EXPANSION TANK SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO.	SERVICE	TANK VOLUME	ACCEPT. VOLUME	SYSTEM VOLUME	FILL TEMPERATURE	MAX. AVERAGE TEMPERATURE	MIN. OPER. PRESSURE	MAX. OPER. PRESSURE	TANK SIZE		OPER. WEIGHT	REMARKS
										DIA.	HT.		
ET-1	B&G B-300	SNOWMELT	80.0	80.0	1,000.0	40.0	170.0	20.0	45.0	24"	52"	1,000	NOTE: 1,2

NOTES:
1. SNOWMELT WATER SYSTEMS CONTAINS 50% PROPELYNE GLYCOL.
2. ASME PRESSURE RATING EQUALS 125 PSI.

*APPROVED ALTERNATE MANUFACTURER'S: ARMSTRONG

GLYCOL FEEDER SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO.	SERVICE	SYSTEM PUMP			TANK SIZE (GAL)	UNIT "ON" PRESSURE (PSI)	UNIT "OFF" PRESSURE (PSI)	SYSTEM ELECTRICAL REQUIREMENTS	TANK P.G. (%)	UNIT SIZE		OPER. WT. (LBS)	REMARKS
			FLOW (GPM)	HEAD (PSI)	MOTOR HP						DIA.	HT.		
GF-1	AXIOM SF-100	SNOWMELT	1.3	25.0	50 W	55.0	12.0	15.0	NOTE: 1	50.0	24"	50"	160	NOTE: 1,2,3

NOTES:
1. PROVIDE A DEDICATED 120/1/60 20 AMP CIRCUIT WITH A GFI RECEPTACLE LOCATED WITHIN 3 FEET OF AND BEHIND UNIT.
2. PROVIDE FLOAT SWITCH FOR LOW LEVEL PUMP SHUTOFF AND ALARM TO THE DDC SYSTEM.
3. PROVIDE NEMA 4X UNIT CONTROL PANEL.

*APPROVED ALTERNATE MANUFACTURER'S: NEPTUNE

FAN SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO.	TYPE	SERVICE	SONES	CFM	T.S.P. @ 5,300'	RPM @ 5,300'	MOTOR		WT (LBS)	VIB. ISOL.	CONTROL	DAMPER TYPE	REMARKS
								W	V/ø/Hz					
EF-1	GREENHECK SP-A1550	INLINE	ELEVATOR MACHINE	10.0	1,500	0.15	1,610	818	120/1/60	70	NOTE: 4	NOTE: 3	NOTE: 2	NOTE: 1

NOTES:
1. PROVIDE MANUFACTURER'S ELECTRICAL DISCONNECT.
2. MANUFACTURER PROVIDED BACKDRAFT DAMPER AT FAN OUTLET.
3. FAN CONTROLLED THROUGH REVERSE ACTING, LINE VOLTAGE THERMOSTAT.
4. PROVIDE SPRING ISOLATION HANGERS FOR FAN MOUNTING.

*APPROVED ALTERNATE MANUFACTURER'S: PENN BARRY

LOUVER SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO.	SERVICE	FREE AREA (SQ. FT.)	CFM	VEL. (FPM)	A.P.D. (IN. W.C.)	MATERIALS	SIZE (INCHES)			REMARKS
								W	H	D	
LVR-1	GREENHECK SED-501	ELEVATOR MACHINE INTAKE	2.2	1,500	670	0.09	ALUMINUM	24"	24"	5"	NOTE: 1,2,3,4
LVR-2	GREENHECK SED-501	ELEVATOR MACHINE EXHAUST	2.2	1,500	670	0.09	ALUMINUM	24"	24"	5"	NOTE: 1,2,3,4
LVR-3	GREENHECK SED-501	BOILER INTAKE	1.5	-	-	-	ALUMINUM	24"	16"	5"	NOTE: 1,2,3,4

NOTES:
1. PROVIDE SIGHTPROOF LOUVER WITH 5/8" BIRD SCREEN.
2. PROVIDE WITH A 70% PVDF (OR EQUIVALENT) FINISH.
3. COLOR SELECTION BY ARCHITECT.
4. PROVIDE LOUVER WITH FLANGED FRAME.

*APPROVED ALTERNATE MANUFACTURER'S: RUSKIN

UNIT HEATER SCHEDULE (ELECTRIC)

PLAN CODE	MANUFACTURER & MODEL NO.	SERVICE	CAP. (MBH)	ELEMENT			CFM	EAT	FLA	CONTROL	REMARKS
				KW	VOLTS	ø					
UH-1	BERKO MUH 07	BOILER ROOM	25.6	7.5	460	3	400	55.0	9.0	NOTE: 1	NOTE: 2,3,4
UH-2	BERKO MUH05	ELEVATOR MACHINE	17.1	5.0	460	3	400	55.0	6.0	NOTE: 1	NOTE: 2,3,4
RP-1,2,3,4,5,6	BERKO CP751F	ELEVATOR HOISTWAY	2.6	0.75	120	1	-	-	6.3	NOTE: 5	NOTE: 6 (3)
RP-7,8,9,10,11,12,13	BERKO CP751F	VAULT	2.6	0.75	120	1	-	-	6.3	NOTE: 5	NOTE: 6

NOTES:
1. UNIT MOUNTED THERMOSTAT PROVIDED BY UNIT HEATER MANUFACTURER.
2. FLA (FULL LOAD AMPS) INCLUDES HEATING ELEMENT AND MOTOR CURRENT REQUIREMENTS.
3. UNIT TO BE MOUNTED FROM CEILING.
4. PROVIDE WITH HORIZONTAL DISCHARGE.
5. 24V THERMOSTAT BY TC, OUTPUT WIRED TO POWER RELAY AT HEATER.
6. 48"x24" PANEL WITH SURFACE MOUNTING KIT.

*APPROVED ALTERNATE MANUFACTURER'S: QMARK

SNOWMELT ZONE MANIFOLD SCHEDULE

PLAN CODE	MANUFACTURER & MODEL NO. (3)	EFFECTIVE AREA (SF)	BTUH PER SF	TOTAL BTUH	EWT (°F)	LWT (°F)	GPM	TUBE SIZE	TUBE CENTERS	NUMBER OF LOOPS	P.D. (MAX)(FT)	REMARKS
SM-1	UPONOR - ZONES 1A,B	1,540	160	246,400	145	115	19.0	3/4"	9"	7	35.0	NOTE: 1,2,3,4
SM-2	UPONOR - ZONE 2	1,535	160	245,600	145	115	19.0	3/4"	9"	7	35.0	NOTE: 1,2,3,4
SM-3A	UPONOR - ZONE 3	1,933	160	309,280	170	140	24.0	3/4"	6"	9	35.0	NOTE: 1,2,3,4
SM-3B	UPONOR - ZONE 3	1,933	160	309,280	170	140	24.0	3/4"	6"	9	35.0	NOTE: 1,2,3,4
SM-3C	UPONOR - ZONE 3	1,933	160	309,280	170	140	24.0	3/4"	6"	9	35.0	NOTE: 1,2,3,4
TOTALS		8,874		1,419,840			110.0					

NOTES:
1. SNOWMELT SYSTEM CONTAINS 50% PROPYLENE GLYCOL.
2. MANIFOLD SELECTION TO PROVIDE REQUIRED NUMBER OF LOOPS AND BE INCLUDED IN PRESSURE LOSS CALCULATION BELOW MAX INDICATED.
3. MANIFOLD PROVIDED WITH BALL TYPE BALANCING/ISOLATION VALVE, MANUAL AIR VENT, PRESSURE GAUGES, AND FLOWRATE INDICATORS.
4. NUMBER OF LOOPS MAY VARY DEPENDING ON SPECIFIC MANUFACTURER TUBING LAYOUT.

*APPROVED ALTERNATE MANUFACTURER'S: REHAU

RCRBD
Record Set
TC
04/27/2021

COLORADO LICENSED PROFESSIONAL ENGINEER 38020 04-19-2021

REVISIONS

No.	Description	Date
3	ASI #1	4/19/2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5458, (303) 442-4745 FAX

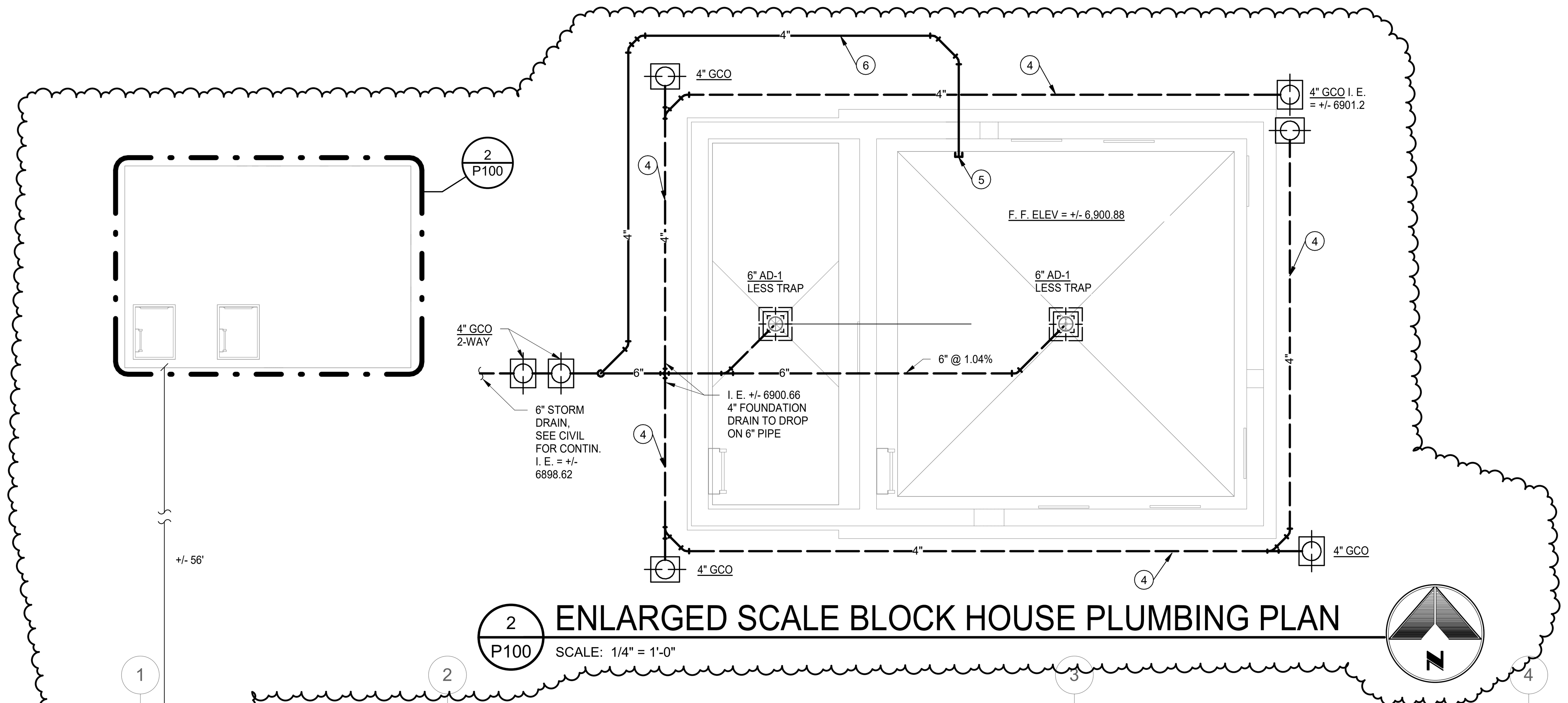
Job Number:	20034
Date:	03/29/21
Drawn By:	EAB
Checked By:	TVS

Project Phase: CONSTRUCTION SET

Sheet Title: HVAC SCHEDULES

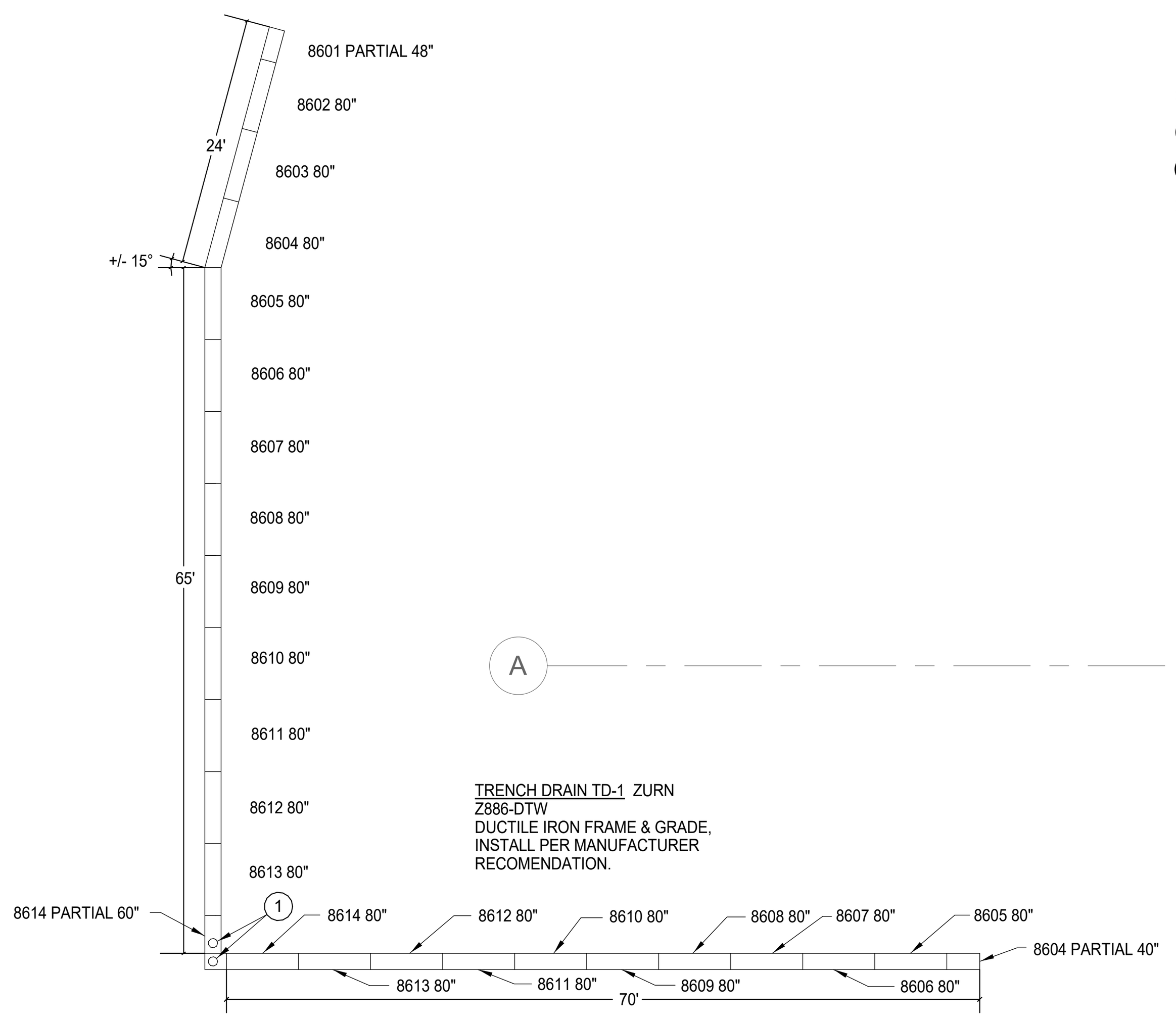
Sheet Number: M300

CONSTRUCTION SET 03/29/2021



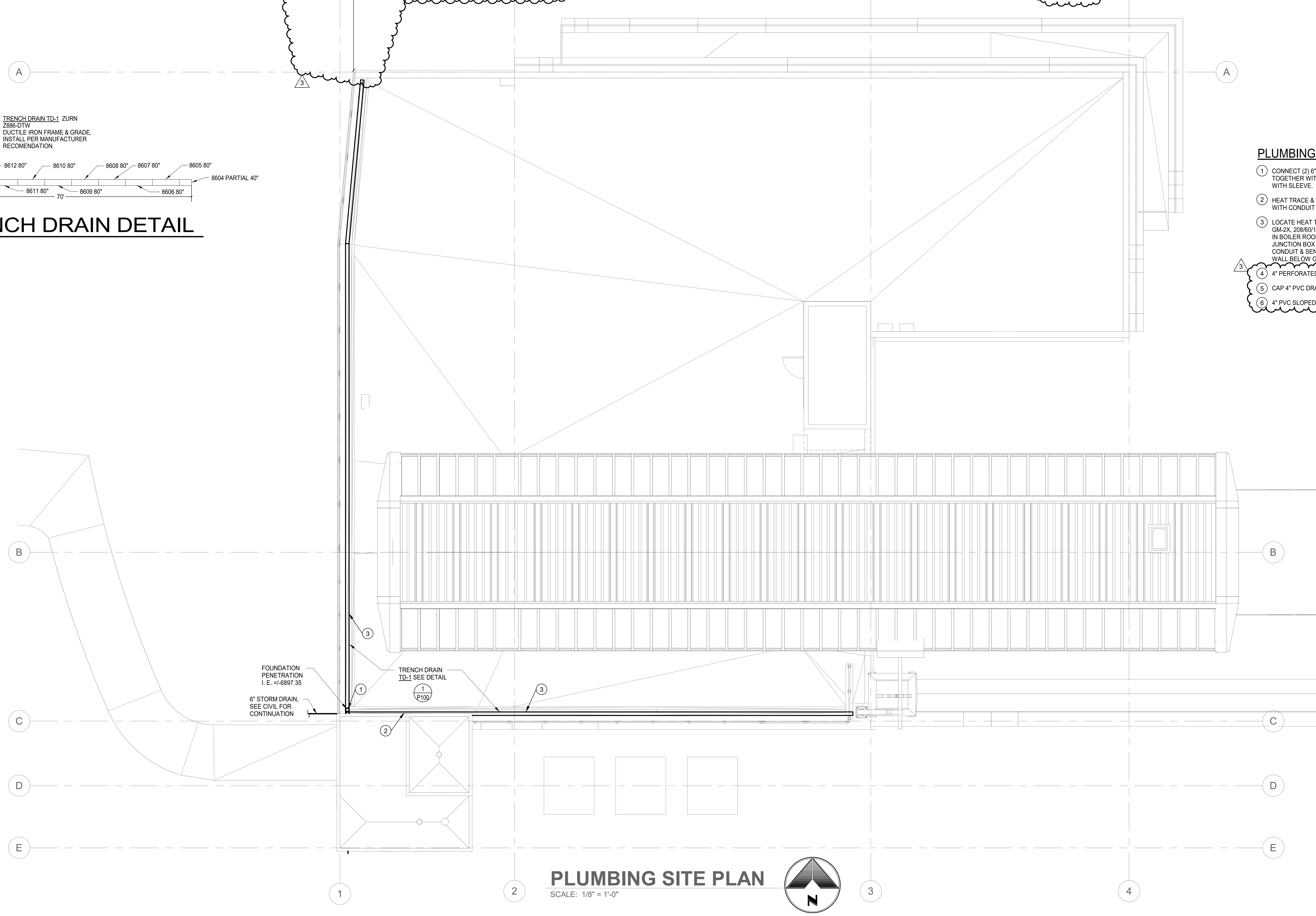
2 P100 ENLARGED SCALE BLOCK HOUSE PLUMBING PLAN

SCALE: 1/4" = 1'-0"



1 P100 TRENCH DRAIN DETAIL

SCALE: NONE



PLUMBING SITE PLAN

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

PLUMBING KEYNOTES:

1. CONNECT (2) 6" STORM DRAIN TO EACH TD-1 SECTION, CONNECT TOGETHER WITH 6" STORM DROP & OFFSET THRU FOUNDATION WALL WITH SLEEVE.
2. HEAT TRACE & SNOW MOISTURE SENSOR TO ENTER TRENCH SIDEWALL WITH CONDUIT @ THIS LOCATION.
3. LOCATE HEAT TRACE IN & SNOW MOISTURE SENSOR TRENCH DRAIN. RAYCHEM GM-2X, 208/60/1 200'x12 WATTS/LF = 2400 WATTS, PROVIDE CONTROLLER IN BOILER ROOM & ROUTE TO POWER CONNECTION KIT IN ELECTRICAL JUNCTION BOX @ TRENCH DRAIN IN ELEVATOR EXTERIOR WALL. ROUTE CONDUIT & SENSOR WIRING FROM JUNCTION BOX DOWN IN EXTERIOR WALL BELOW GRADE THRU TRENCH DRAIN SIDEWALL. ROUTE WITH SPLICE KIT AS REQUIRED.
4. 4" PERFORATED PVC SLOPED @ 1.04%.
5. CAP 4" PVC DRAIN LINE @ 6" ABV. FIN. FOR FUTURE OWNER CONNECTIONS.
6. 4" PVC SLOPED @ 1.04%.

CONSTRUCTION SET 03/29/2021

4/20/2021 9:38:51 AM FILE: SBG PLATFORM v19.rvt

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

No.	Description	Date
3	ASI #1	4/19/2021

RCRBD Record Set TC 04/27/2021

STEAMBOAT GONDOLA RELOCATION

STEAMBOAT SPRINGS, CO

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
BOULDER, COLORADO, 80302
(303) 442-5458, (303) 442-4745 FAX

Job Number:	20034
Date:	03/29/21
Drawn By:	TRH/SK
Checked By:	TRH

Project Phase
CONSTRUCTION SET

Sheet Title
PLUMBING SITE PLAN

Sheet Number
P100

STRUCTURAL GENERAL NOTES

GOVERNING CODE: 2018 INTERNATIONAL BUILDING CODE (IBC) AND ALL LOCAL AMENDMENTS.

DESIGN LOADS:

RISK CATEGORY:	II, Standard
ROOF LIVE LOADS:	
Roof Live Load:	20 psf
Ground Snow Load (p_g):	116 psf
Flat Roof Snow Load (p_f):	90 psf
Snow Exposure Factor (C_e):	1.0
Snow Load Importance Factor (I_s):	1.0
Thermal Factor (C_t):	1.1
Slope Factor (C_s):	1.0
Snow Drifting and Unbalanced Loads:	In accordance with ASCE 7-16 and as depicted on the roof plans.
FLOOR LIVE LOADS:	
Occupancy or Use:	
Storage Areas:	125 psf
Vault Lid Total Live Load:	450 psf (includes 258 psf SnowCAT load + 192 psf additional snow load
ROOF AND FLOOR DEAD LOADS:	
Roof - Metal Roof Deck:	20 psf
Roof - M/E/P:	5 psf
Floor - Concrete Topping:	Varies with thickness
Floor - M/E/P:	3 psf
Vault, Concrete Lid:	175 psf (14" thick normal weight concrete)
WIND LOADS (ASCE 7-10):	
Ultimate Wind Speed, 3-second gust (V_{ult}):	115 mph
Allowable Stress Design Wind Speed (V_{asd}):	90 mph
Occupancy Risk Category:	II
Internal Pressure Coefficient (GC_{pi}):	+/-0.18
Wind Exposure:	C

COMPONENTS AND CLADDING DESIGN WIND PRESSURES (PSF) (ASCE 7-16):

Wall Zone (Fig. 30.3-1): USING TRIBUTARY AREA OF 50 SF	
5 Within 3'-0" of corners:	+17.1 psf, -21.5 psf
4 Internally:	+17.1 psf, -18.7 psf
Roof Zone (Fig. 30.3-2A): USING TRIBUTARY AREA OF 25 SF	
3 Within 3'-0" of corners:	+16.0 psf, -52.3 psf
3' Overhangs within 3'-0" of corners and ridges:	+16.0 psf, -47.8 psf
2 Within 3'-0" of edges and ridges:	+16.0 psf, -40.1 psf
2' Overhangs:	+16.0 psf, -35.7 psf
1 Internally:	+16.0 psf, -30.3 psf

Note: All Component and Cladding pressures are Ultimate pressures. To convert to Allowable Stress Design pressures, multiply Ultimate pressures by 0.6.

SEISMIC LOADS:	
Occupancy Risk Category:	II, Standard
Seismic Importance Factor (I_e):	1.0
Spectral Response Acceleration Coefficients	
One Second	S_{D1}:0.133g S_{DS}:0.333g
Soils Site Class:	D
Seismic Design Category:	C per local Amendment
Basic Seismic-Force-Resisting System(s):	Ordinary reinforced masonry shear walls
Design Base Shear:	25 kips factored (17.5 kips service)
Seismic Response Coefficient(s) (C_s):	0.17
Response Modification Factor(s) (R):	2.0
Analysis Procedure:	Equivalent Lateral Force Procedure

FOUNDATION DESIGN:

Foundation design is in accordance with recommendations contained in soils investigation Report Number 20-12047 prepared by NWCC dated December 18, 2020

Soil conditions shall be verified by the Geotechnical Engineer prior to placement of formwork or concrete. If different soil conditions exist the structural engineer shall be notified to re-evaluate the foundation design at additional expense to the owner.

FOOTINGS:

Footings, selected by the owner shall bear on the natural undisturbed soils or approved compacted structural fill.

Exterior footings shall bear below frost depth; minimum frost depth shall be 4'-0" below adjacent exterior finished grade.

Design of footings is based on:

Maximum allowable bearing pressure:	3500 psf assuming on site soil
Minimum dead load pressure:	1100 psf at Non-retaining wall elements

EARTH RETAINING STRUCTURES:

Earth equivalent fluid lateral pressure:

Walls restrained at top (at rest):	60 pcf assuming on site soil
Cantilevered walls (active):	50 pcf assuming on site soil
Passive resisting:	275 pcf assuming on site soil
Coefficient of sliding friction:	0.4

REINFORCED CONCRETE:

Concrete design is based on the American Concrete Institute "Building Code Requirements for Reinforced Concrete" (ACI 318) and shall be constructed in accordance with the "Standard Specifications for Structural Concrete" (ACI 301).

STRUCTURAL CONCRETE SHALL HAVE THE FOLLOWING PROPERTIES (normal weight concrete unless noted otherwise):

Minimum 28 day compressive strength (f'_c) as follows:

Cement Type:	I/II
Maximum Aggregate Size:	3/4"
Footings:	3,000 psi (Max W/C Ratio 0.52); Entrained Air 1.5% (± 1.5%); Slump 5 inches (± 1")
3 Walls:	4,000 psi (Max W/C Ratio 0.50); Entrained Air 3.0% (± 1.5%); Slump 4 inches (± 1")
Exposed Walls and Vault walls:	4,500 psi (Max W/C Ratio 0.45); Entrained Air 6.0% (± 1.5%); Slump 4 inches (± 1")
	Maximum 28-day shrinkage = 0.05% per ASTM C157
Structural Bridge Slab:	4,500 psi (Max W/C Ratio 0.50); Entrained Air 6.0% (+/- 1.5%); Slump 4 inches (+/-1")
Structural Slab on Deck:	3,500 psi (Max W/C Ratio 0.50); Entrained Air 3.0% (± 1.5%); Slump 4 inches (± 1")
Exterior Wear Slab at Bridge and Vaults:	5,000 psi (Max W/C Ratio 0.40); Entrained Air 6.0% (± 1.5%); Slump 4 inches (± 1")
Interior Slabs-on-Grade:	3,500 psi (Max W/C Ratio 0.50); Entrained Air 3.0% (± 1.5%); Slump 4 inches (± 1")

Reinforcing steel shall be fabricated and placed in accordance with ACI 315 "Details and Detailing of Concrete Reinforcement."

When cold weather conditions exist, place and cure concrete in accordance with ACI 306.

Welded wire fabric shall conform to ASTM A185.

Deformed reinforcement shall be domestic new billet steel conforming to ASTM A615, Grade 60 including stirrups and ties, except that reinforcing which is required to be welded shall conform to ASTM A706.

Unless otherwise noted on the structural drawings, lap bars 50 diameters (50" Bar Diameter minimum).

Epoxy coated reinforcing bars shall conform to ASTM A775.

Zinc coated (galvanized) reinforcing bars shall conform to ASTM A767.

Unless otherwise noted on the structural drawings, lap bars per lap splice schedule.

Reinforcing at all abutting concrete (including footings) shall be continuous through or around all corners and intersections OR use matching corner bars of equal size and spacing to reinforcing in the abutting members.

Install 2-#5 bars (minimum) around all sides of all openings in concrete and extend 2'-0" past edges of openings, unless otherwise noted.

In continuous members, splice top bars at mid-span between supports and splice bottom bars over supports.

Form intermittent shear keys at all construction joints and as shown on the structural drawings.

Unless otherwise noted on the drawings, minimum concrete cover over reinforcing shall be as follows:

Unformed surface cast against and permanently exposed to earth:	3"
Formed surface exposed to earth or weather:	
#6 through #18 bars	2"
#5 bar, w31 or d31 wire, and smaller	1-1/2"
Formed surface not exposed to weather or in contact with ground:	
Slabs, walls, joists: #11 bars and smaller	3/4"
Beams and columns:	
Primary reinforcement	1-1/2"
Stirrups, ties, spirals	1-1/2"

Install chairs, bolsters, additional reinforcement, and accessories necessary to support reinforcement at position shown on drawings. Support of reinforcement on wood, brick, or other unacceptable materials shall not be permitted.

Keep reinforcement clean and free of dirt and oil. Oil forms prior to placing reinforcement.

Fiber admixture shall be 100% virgin polypropylene, fibrillated fibers, type 111 4.1.3, performance level one, per ASTM C1116.

Properly place, accurately position and maintain securely in place all embedded items prior to and during concrete placement.

Anchor bolts and rods for beam and column-bearing plates shall be placed with setting templates.

Unless otherwise shown in the architectural drawings, provide 3/4" chamfers at all column, wall, slab or beam edges that are exposed to view in the finished structure.

STRUCTURAL STEEL:

Structural steel shall be detailed, fabricated and erected in accordance with the "Specification for Structural Steel Buildings" (AISC 360) and the "Code of Standard Practice for Steel Buildings and Bridges" (AISC 303) by the American Institute of Steel Construction (AISC).

All structural steel shall conform to the ASTM Standards and grades indicated below, unless noted otherwise on the drawings or details.

Structural steel wide flange beams and WTs:	ASTM A992, 50 ksi yield
Rolled steel floor plates:	ASTM A786, Commercial grade
Other rolled shapes, including plates, channels, and angles:	ASTM A36, 36 ksi yield.
Hollow structural section (HSS) rectangular shapes:	ASTM A500, Grade B, 46 ksi yield
HSS round shapes:	ASTM A500, Grade B, 42 ksi yield
Pipe shapes:	ASTM A53, Grade B, 35 ksi yield.
Adjustable pipe columns:	
3" diameter 11 gauge, shall be certified by the manufacturer for a safe load capacity of 13,500 lbs at 7'-6".	
3" diameter "Heavy Duty" schedule 40 shall be certified for a safe load capacity of 28,000 lbs at 7'-6".	

Unless otherwise noted, framed beam connections shall be bearing-type with 3/4" diameter, snug tight, ASTM F3125, Grade A325 bolts, detailed in conformance with the structural drawings and the "Steel Construction Manual" by the AISC, 14th edition. Install bolts in accordance with AISC's "Specification for Structural Joints Using High-Strength Bolts".

All beams shall have full depth web stiffeners each side of webs above and below columns (1/4" plate or as noted).

Anchor rods shall conform to ASTM F1554, Grade 55 as noted on the structural drawings with weldability supplement S1.

Headed anchor studs (HAS) shall conform to ASTM A108 and shall be connected to structural steel with equipment approved by the stud manufacturer according to the stud manufacturer's recommendations.

Welding shall be done by a certified welder in accordance with the AISC documents listed above, the American Welding Society (AWS) D1.1: 2010 Structural Welding Code, and the recommendations for use of E70XX electrodes. Where not specifically noted, minimum weld shall be 3/16" fillet by length of contact edge.

All post-installed anchors shall have current International Code Council Evaluation Service (ICC-ES) reports and shall be installed in accordance with the manufacturer's requirements.

Expansion anchors shall be approved "wedge" type unless specifically noted to be "sleeve" type as noted on the structural drawings.

Chemical anchors shall be approved epoxy or similar adhesive type as appropriate for installation in solid and non-solid base materials.

Grout beneath column base and beam bearing plates shall have a minimum 28-day, compressive strength of <7,500><5,000> psi and shall be non-shrink, non-metallic, and tested in accordance with ASTM C1107.

See S0.02 for Special Inspection requirements. QA inspections are permitted to be waived if steel fabricator or erector is AISC certified or the Authority Having Jurisdiction approves. At completion of fabrication, fabricator shall submit certificate of compliance stating materials supplied and work performed is in accordance to the Construction Documents.

STEEL DECKING:

Steel roof, non-composite floor (or 'form'), and composite floor deck shall be manufactured and erected in accordance with the standard deck specifications and the "Manual of Construction with Steel Deck" (SDI No. MOC1) as prepared by the Steel Deck Institute (SDI).

Roof deck shall be connected to supporting members and interconnected to develop the diaphragm shears and net uplift pressures due to lateral forces as noted on the structural drawings.

Non-composite and composite floor deck shall be connected to supporting members and interconnected as required to satisfy SDI minimum requirements except as noted on the structural drawings.

Welding patterns, screw patterns, and details shall be indicated on the deck supplier's shop drawings.

SHOP DRAWINGS:

The structural drawings are copyrighted and shall not be copied for use as erection plans or shop details. Use of Anthem's electronic files as the basis for shop drawings requires prior approval by Anthem, a signed release of liability by the general contractor and/or his subcontractors, and deletion of Anthem's name and logo from all sheets so used.

The general contractor shall submit in writing any requests to modify the structural drawings or project specifications.

All shop and erection drawings shall be checked and stamped (after having been checked) by the general contractor prior to submission for structural engineer's review; shop drawing submittals not checked by the general contractor prior to submission to the structural engineer will be returned without review.

Furnish two (2) prints of shop and erection drawings to the structural engineer for review prior to fabrication for:

reinforcing steel,
structural steel,
steel form, floor, and roof deck,
CMU product data, unit strength testing,

Submit in a timely manner to permit 10 working days for review by the structural engineer.

Shop drawings submitted for review do not constitute "request for change in writing" unless specific suggested changes are clearly marked, in any event, changes made by means of the shop drawing submittal process become the responsibility of the one initiating the change.

FIELD VERIFICATION OF EXISTING CONDITIONS:

The general contractor shall thoroughly inspect and survey the existing structure to verify conditions that affect the work shown on the drawings.

The general contractor shall report any variations or discrepancies to the architect and structural engineer before proceeding.

STRUCTURAL ERECTION AND BRACING REQUIREMENTS:

The structural drawings illustrate and describe the completed structure with elements in their final positions, properly supported, connected, and/or braced.

The structural drawings illustrate typical and representative details to assist the general contractor. Details shown apply at all similar conditions unless otherwise indicated. Although due diligence has been applied to make the drawings as complete as possible, not every detail is illustrated and not every exceptional condition is addressed.

All proprietary connections and elements shall be installed in accordance with the manufacturers' recommendations.

All work shall be accomplished in a workmanlike manner and in accordance with the applicable codes and local ordinances.

The general contractor is responsible for coordination of all work, including layout and dimension verification, materials coordination, shop drawing review, and the work of subcontractors. Any discrepancies or omissions discovered in the course of the work shall be immediately reported to the architect and structural engineer for resolution. Continuation of work without notification of discrepancies relieves the architect and structural engineer from all consequences.

Unless otherwise specifically indicated, the structural drawings do not describe methods of construction.

The general contractor, in the proper sequence, shall perform or supervise all work necessary to achieve the final completed structure, and to protect the structure, workmen, and others during construction. Such work shall include, but not be limited to temporary bracing, shoring for construction equipment, shoring for excavation, formwork, scaffolding, safety devices and programs of all kinds, support and bracing for cranes and other erection equipment.

Do not backfill against basement or retaining walls until supporting slabs and floor framing are in place and securely anchored, unless adequate temporary bracing is installed.

Temporary bracing shall remain in place until all floors, walls, roofs and any other supporting elements are in place.

The architect and structural engineer bear no responsibility for the above items, and observation visits to the site do not in any way include inspections of these items.

These plans have been engineered for construction at one specific building site. Builder assumes ALL responsibility for use of these plans at ANY OTHER building site. Plans shall not be used for construction at any other building site without specific review by the engineer.

STRUCTURAL MASONRY:

Design is based on ACI 530/ASCE 5/TMS 402, "Building Code Requirements for Masonry Structures,"

Masonry work shall conform to ACI 530.1/ASCE 6/TMS 602 "Specification for Masonry Structures".

Compressive strength of masonry assembly used for design is 2000 psi (f'm = 2000 psi), based on net-bedded area.

Except at masonry lintels using standard lintel units, bond beam units shall be produced from standard vertically voided units with pre-cut knockout cross walls.

Hollow load-bearing concrete masonry units (CMU) shall be lightweight, 85 to 105 pcf density, conforming to ASTM C90, with a minimum compressive strength of 2,800 psi based on average net area.

Facing brick shall conform to ASTM C216 Grade SW.

Building brick shall conform to ASTM C62-04 Grade SW.

Hollow brick shall conform to ASTM C652 Grade SW.

Mortar shall be type "S" conforming to ASTM C270. Mortar SHALL NOT be substituted for grout.

Masonry cement shall not be used unless part of a pre-packaged mortar or grout mix approved by the structural engineer.

Provide full shoved mortar in all head and bed joints.

Admixtures shall not be used unless approved by the architect and/or structural engineer.

Grout used in masonry walls and block cells shall be coarse grout, as defined by ASTM C476, with a minimum cube strength = 2,000 psi or 3,000 psi concrete using 3/8" diameter aggregate and placed by vibrating unless an approved self-consolidating mix is used.

'Low-Lift' grouting shall not exceed 5 feet in height unless ACI 530.1 'high-lift' grouting procedures are reviewed and approved by the architect and structural engineer.

Vertically space continuous horizontal joint reinforcing at 16" maximum in all CMU walls. Joint reinforcing shall be welded type with 9 gage side rods and 9 gage trussed or ladder cross rods.

In exterior walls, joint reinforcement shall be stainless steel or hot-dip galvanized.

All other joint reinforcement shall be mill galvanized, hot-dip galvanized, or stainless steel. Horizontal joint reinforcing shall be lapped no less than 6" all splices.

Wire ties for veneer shall be 9 gage diameter for cavity widths 2" or less.

Where nominal cavity width exceeds 2 inches, veneer ties shall be 1/4" diameter. Ties shall be spaced a maximum of 16" in each direction.

Reinforcing bars shall be as for reinforced concrete except as noted.

Unless otherwise noted on the structural drawings, lap bars 50 diameters (50"Bar Diameter minimum) at splices.

Reinforcement shall be secured against displacement prior to grouting by wire bar locators or other suitable devices at intervals not exceeding 200 bar diameters or 10 feet.

Reinforce and fully grout vertical cells at corners, ends of walls, jambs of openings, each side of vertical control joints, and at spacing shown on drawings.

Vertical reinforcing bars shall have a minimum clearance of 3/4" from masonry.

Foundation dowels shall match vertical reinforcing, unless otherwise noted on the drawings.

Where noted on the drawings, provide clearance between masonry and structural elements, or wrap steel with polyethylene film.

Locate vertical control joints in all masonry walls as shown on the architectural drawings, structural drawings, or spaced horizontally at 25'-0" maximum spacing where not shown.

Cold weather construction shall conform to guide specifications from the International Masonry Industry All-Weather Council (IMIAWC), latest version.

LOOSE LINTELS:

Unless noted otherwise, provide loose lintels as follows: (one angle for each 4" of wall thickness to bear 4" minimum each end)

Opening	Angle
0'-8" to 4'-0"	L3 1/2x3 1/2x1/4
4'-1" to 5'-4"	L5x3 1/2x1/4 (LLV)
5'-5" to 10'-0"	L6x3 1/2x5/16 (LLV)

PRECAUTIONARY NOTES ON STRUCTURAL BEHAVIOR:

Interior architectural finish detailing must accommodate the relative differential movements of supporting structural elements.

Where the roof framing element spans are long, applied loading will naturally cause substantial deflection. Interior elements hung from the roof structure will deflect with the roof.

The floor is a floating concrete slab-on-grade and may experience movements independent of the structural foundations. Interior elements supported on the slab-on-grade floor will move with the floor. Interior elements supported on foundations and columns will not experience similar or measurable movements.

Exterior/perimeter wall assemblies hung from the edge of the building structure will be directly affected (to some degree) by changes in external temperature and floor deflection.

Exterior/perimeter and interior architectural finish details should allow for relative movements between elements with different support conditions.

The foundation design shown assumes that the owner/builder is aware of the presence of expansive soils, and that he has read the previously referenced soils report. Use of these plans is indication that the owner/builder accepts the risks associated with building on this site, especially those related to slab on grade construction in finished areas. Anthem, LLC will not be held liable for damages caused by slab movement.

DEFERRED SUBMITTALS:

Portions of the structure have elements of proprietary design and fabrication, which shall be submitted by the supplier for approval after award of contract.

These items shall conform to the load, capacity, size, geometry, connection, and support criteria noted on the structural drawings.

Shop drawings and calculations shall be prepared by an engineer registered in the State of Colorado. Final shop drawing submittals shall be stamped and signed.

Submittals will be reviewed by the structural engineer of record for compliance with the specified design requirements, stamped as "Reviewed," and forwarded to the local building authority for review as required.

Final issue of the building permit may, at the approval authority's option, be contingent on its approval of the deferred submittal documents.

Deferred submittal items shall not be installed until their design calculations and drawings have been reviewed by the architect, structural engineer, and/or local building authority as required.

LETTERS OF CONSTRUCTION COMPLIANCE:

The general contractor shall determine from the local building authority, at the time the building permit is obtained, whether any letters of construction compliance will be requested from the structural engineer.

The contractor shall notify the structural engineer of all such requirements in writing prior to the start of construction.

Two day advance notice shall be given when requesting site visits necessary as the basis for the compliance letter.

The general contractor shall provide copies of all third-party testing and inspection reports to the architect and structural engineer a minimum of one week prior to the date that the compliance letter is needed.

SPECIAL INSPECTIONS (valid for IBC 2018):

The following Special Inspections and Testing shall be performed by a qualified Special Inspector, retained by the Owner, in accordance with the following sections of IBC Chapter 17:

Section 1704
1704.2.5 Special inspections of fabricated items and fabricators
Section 1705 Special inspections and the following sub-sections:
1705.2 Steel Construction including 1705.2.1 Structural Steel, 1705.2.2 Cold-formed steel deck
1705.3 Concrete Construction including 1705.3.1 Welding of reinforcing bars, 1705.3.2 Material tests
1705.4 Masonry Construction, level B
1705.6 Soils
1705.10 Fabricated items
Section 1705.12 Special Inspections for seismic resistance with the following sub-sections:
1705.12.1 Structural Steel
1705.12.1.1 Seismic force-resisting system
1705.12.1.2 Structural steel elements (struts, collector, chords and foundation elements)
1705.12.4 Designated seismic systems
1705.12.5 Architectural components
1705.12.6 Plumbing, mechanical and electrical components
Section 1705.13 Structural Testing for Seismic Resistance and the following sub-sections:
1705.13.1 Structural Steel
1705.13.1.1 Seismic force-resisting systems
1705.13.1.2 Structural steel elements (struts, collectors, chords and foundation elements)
1705.13.2 Nonstructural components
1705.13.3 Designated seismic systems
Section 1706 Design Strengths of Materials
Section 1707 Alternative Test Procedures
Section 1708 In-Situ Load Tests
Section 1709 Preconstruction Load Tests

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.

Duties and responsibilities of the Special Inspector shall be to inspect and/or test the work outlined above and within the Statement of Special Inspections in accordance with Chapter 17 of the IBC for conformance with the approved construction documents. All discrepancies shall be brought to the immediate attention of the contractor for correction.

Per section 1704.2.4 the Special Inspector shall furnish regular reports to the building official and the structural engineer. Progress reports for continuous inspection shall be furnished weekly. Individual reports of periodic inspections shall be furnished within one week of inspection dates. The reports shall note uncorrected deficiencies, correction of previously reported deficiencies, and changes to the approved construction documents authorized by the Structural Engineer of Record.

The Special Inspector shall submit a final signed report within 10 days of the final special inspection stating whether the work requiring special inspection was, to the best of the inspector's knowledge, in conformance with the approved construction documents and the applicable workmanship provisions of the IBC. Work not in conformance shall be noted in the report.

The contractor shall submit a statement of responsibility to the building official and the owner prior to the commencement of work on a main wind- or seismic-force-resisting system, designated seismic system or a wind- or seismic-resisting component listed in the Statement of Special Inspections per section 1704.5.

Except as noted, the special inspections outlined above are in addition to, and beyond the scope of, periodic Structural Observations as defined in section 1704.6. Structural Observations are included in the structural engineering design and construction administration services provided by the structural engineer.

PJ4680-3
Fire Prevention
In: 04/27/2021
Out:

ABBREVIATIONS KEY

AB	Anchor Rod (Bolt)	E-E	End to End	LVL	Laminated Veneer Lumber (generic)	RMO	Rough Masonry Opening
ADDL	Additional	EF	Each Face	LW	Light Weight	RO	Rough Opening
AFF	Above Finished Floor	EJ	Expansion Joint	MASY	Masonry	SC	Slip Critical
ALT	Alternative	EL	Elevation	MATL	Material	SCH	Schedule
AMT	Amount	EN	Edge Nailing	MAX	Maximum	SDST	Self Drilling Self Tapping
APPROX	Approximate	ENGR	Engineer	MECH	Mechanical	SECT	Section
ARCH	Architect, Architectural	EQ	Equal	MEZZ	Mezzanine	SF	Square Feet
ASD	Allowable Stress Design	EQUIP	Equipment	MFR	Manufacture, -er, -rd	SHT	Sheet
AVG	Average	EQUIV	Equivalent	MIN	Minimum	SHTG	Sheathing
BC	Bottom of Concrete	ES	Each Side	MTL	Metal	SIM	Similar
BL	Brick Ledge	EST	Estimate	<N>	"New"	SL	Sloped
BLK	Block	E-W	East to West	NIC	Not In Contract	SOG	Slab On Grade
BLKG	Blocking	EXC	Excavate	N-S	North to South	SP	Space,-s
BM	Beam	EXP	Expansion	NTS	Not to Scale	SPEC	Specifications
BOT	Bottom	EXT	Exterior	OD	Outside Diameter	SQ	Square
BRG	Bearing	FDN	Foundation	OF	Outside Face	STD	Standard
CANT	Cantilever	FF	Finished Floor	OH	Opposite Hand	STL	Steel
CF	Cubic Foot	FIG	Figure	OPNG	Opening	STIFF	Stiffener
CFS	Cold Form Steel	FL	Flush	OPP	Opposite	STRUCT	Structure (Structural)
CIP	Cast In Place	FLR	Floor	OSB	Oriented Strand Board	SY	Square Yard
CJ	Construction Joint (Control Joint)	FP	Full Penetration	PAF	Powder Actuated Fastener	SYM	Symmetrical
CLG	Ceiling	FTG	Footing	PC	Precast	T&B	Top and Bottom
CLR	Clear	GA	Gage (Gauge)	PE	Pre-engineered (trusses)	T&G	Tongue and Groove
CMU	Concrete Masonry Unit	GALV	Galvanized	PEN	Penetration	TB	Top of Beam
COL	Column	GC	General Contractor	PERP	Perpendicular	TC	Top of Concrete
COM	Common	GEN	General	PKT	Pocket	TJ	Top of Joist
CONC	Concrete	GL	Glue Laminated (Glu-lam)	PL	Property Line	TL	Total Load, Top of Ledge
CONN	Connection	GR	Grade	PLF	Pounds per Linear Foot	TM	Top of Masonry
CONT	Continue (Continuous)	GT	Girder Truss	PSF	Pounds per Square Foot	T.O	Top of
CONSTR	Construction	GYP BD	Gypsum Board	PSI	Pounds per Square Inch	TRANS	Transverse
COORD	Coordinate, Coordination	HAS	Headed Anchor Stud	PSL	Parallel Strand Lumber (generic)	TYP	Typical
CS	Countersink	HNGR	Hanger	PT	Pressure Treated	ULT	Ultimate
CTR	Center	HORIZ	Horizontal	P.T	Post Tensioned	UNO	Unless Noted Otherwise
CY	Cubic Yard	HT	Height or Heavy Timber	PV	Photovoltaic	VERT	Vertical
DAB	Deformed Anchor Bar	ID	Inside Diameter	QTY	Quantity	VIF	Verify In Field
DIAG	Diagonal	INT	Interior	<R>	To be Removed	WA	Wedge Anchor
DIM	Dimension	K	Kip (1,000 lbs)	R	Radius	WF	Wide Flange
DL	Dead Load	LGS	Light Gage Stud	RE	Reference (refer to)	WP	Work Point
DN	Down	LL	Live Load	RECT	Rectangle	WT	Weight
DP	Drilled Pier	LLH	Long Leg Horizontal	REINF	Reinforcement	WWF	Welded Wire Fabric
DWG	Drawing	LLV	Long Leg Vertical	REQ	Required	XS	Extra Strong
<E>	Existing	LSH	Long Side Horizontal	REQMT	Requirement	XSECT	Cross Section
EA	Each	LSV	Long Side Vertical	RET	Retaining Wall	XXS	Double Extra Strong
ECC	Eccentric	LT	Light	RM	Room		

LEGEND

XK, YT	"X" King studs, "Y" Trimmer studs, studs to match wall thickness		CMU
C	Indicates column continuous through level shown		Concrete
B	Indicates bottom of column at level shown, see next level framing plan for size; install squash blocking in floor cavity of equal size and equal column size below to foundation - unless noted otherwise		Earth fill
XXXX, STUB	Indicates top of column and type below framing level STUB indicates shorter column that extends vertically between beams		Porous fill (i.e. gravel)
XX'-XX"	Indicates top of concrete slab or wood subfloor elevation		Interior wood bearing wall below framing
	Indicates step in floor elevation		Wood shear wall below framing
SLOPE	Indicates direction of slope		Structural wall above framing
FD	Indicates floor drain	WXXXX	Indicates Wood Stud wall type, see schedule
(XX'-XX") (XX'-XX")	Indicates top of footing or pier elevation Indicates minimum pier penetration into bedrock	BWX	Indicates Building Wall type, see schedule
FXX	Continuous spread footing. See schedule for size and reinforcing	SWX	Indicates shear wall. See schedule for sheathing type and nailing
FX.X	Isolated pad footing. See schedule for size and reinforcing	HDX	Indicates holdown. See schedule for description
TC=XX'-XX" BC=XX'-XX"	Indicates top of concrete elevation Indicates bottom of concrete elevation		Joist, or Truss bears on wall or beam below
STEP BC	Indicates step in bottom of concrete elevation		Beam, Joist, or Truss connected to support with metal hanger
TL=XX'-XX"	Indicates top of concrete ledge elevation		Beam, Joist, or Truss connected to support with concealed hanger
PKT XxYxZ XX'-XX"	Indicates beam pocket in concrete wall (X=width, Y=height, Z= ledge depth in inches) with bottom of pocket elevation		Indicates steel deck or concrete slab span direction
	Indicates step in top of concrete wall or ledge elevation. Arrow points toward lower elevation	[XX'-XX"]	Indicates top of steel beam elevation
	Indicates shoring		Indicates location of bend in bent beam
(E)	Indicates 'existing'	BX	Indicates braced frame
(N)	Indicates 'new'		Indicates brace location
(R)	Indicates 'to be removed'	MFX	Indicates rigid frame
BPX	Indicates Baseplate		Moment connection

SHEET LIST

SHEET NUMBER	SHEET NAME
S 0.01	STRUCTURAL COVER SHEET
S 0.02	SPECIAL INSPECTIONS
S 1.01	FOUNDATION PLAN
S 1.02	MAIN AND ROOF LEVEL FRAMING PLAN
S 1.03	BURGESS CREEK BRIDGE PLAN
S 1.04	VAULT
S 5.01	TYPICAL DETAILS
S 5.02	DETAILS
S 5.03	DETAILS AND SCHEDULES

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NOTICE: DUTY OF COOPERATION

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REVISIONS

No.	Description	Date
1	PERMIT SET	3-5-2021
2	ADDENDUM #2	3-26-2021
3	ASI #1	4-20-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

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Job Number:	20054
Date:	3/5/2021
Drawn By:	KLM
Checked By:	CBR

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
STRUCTURAL COVER SHEET

Sheet Number
S 0.01

CONSTRUCTION SET 03/29/2021

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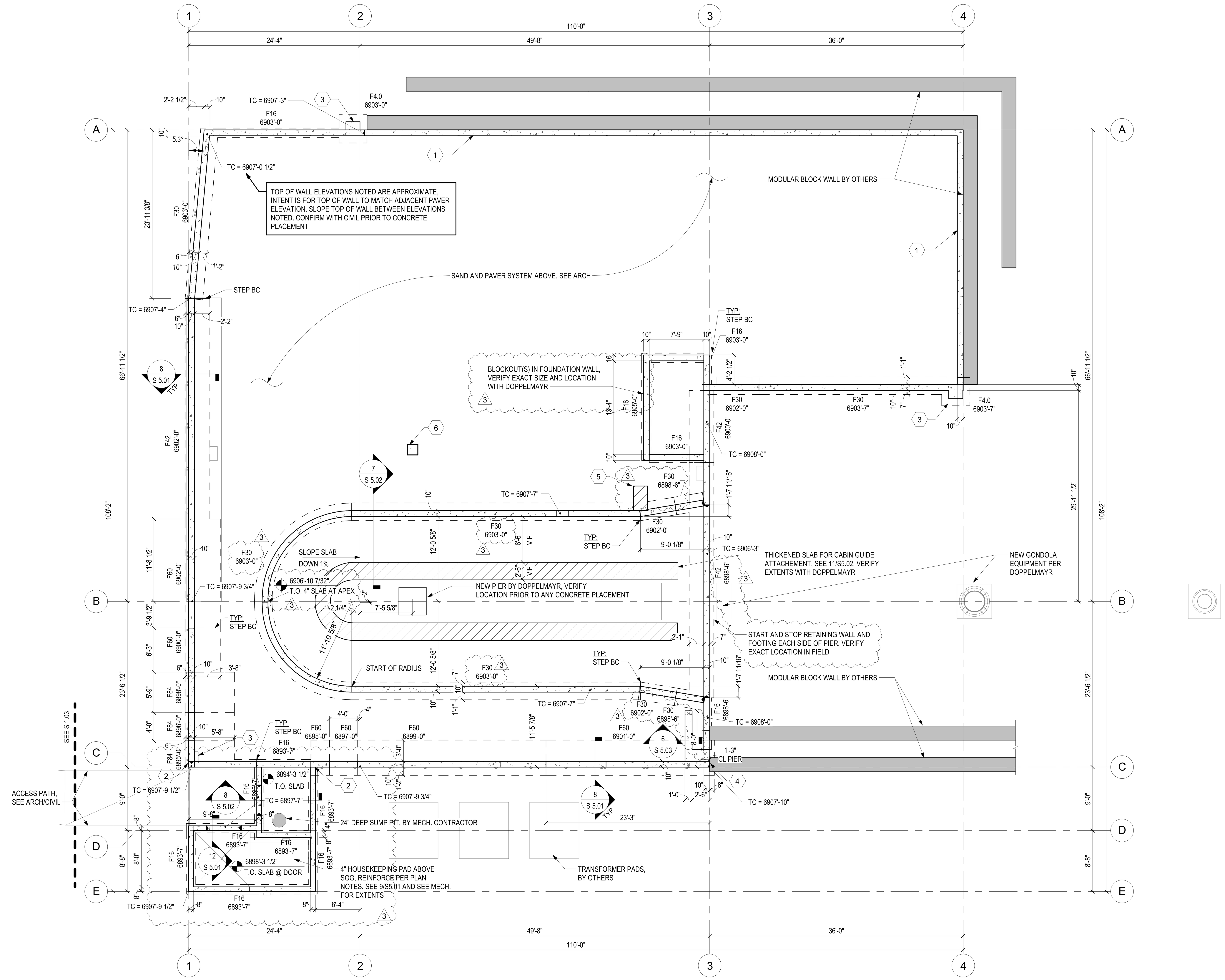

FOUNDATION PLAN
1/8" = 1'-0"
PLAN NORTH

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303-848-8497 970-300-3338
Anthem Job #20-163

FOUNDATION PLAN NOTES:

1. SEE S0.01 FOR GENERAL STRUCTURAL NOTES, ABBREVIATIONS AND LEGEND
2. SEE S5.01 FOR TYPICAL DETAILS
3. SEE S5.03 FOR SCHEDULES
4. CONCRETE FOUNDATION GRADE WALL (UNO):
   - 8" THICK CONCRETE WALLS REINFORCED WITH #5 @ 18" EACH WAY CENTERED IN WALL. ALSO INSTALL (2) #5 BARS TOP AND BOTTOM.
   - 10" RETAINING WALLS, SEE SCHEDULE AND 8/S5.01 FOR WALL REINFORCING.
   - 12" THICK CONCRETE WALLS REINFORCED WITH #4 @ 18" VERT EACH FACE AND #4 @ 16" HORIZ EACH FACE.
5. CONCRETE SLAB ON GRADE: 5" THICK CONCRETE SLAB ON PREPARED SUB-GRADE PER SOILS REPORT. REINFORCE WITH #4 @18" EA WAY PLACED AT MID-DEPTH. SAWCUT OR TOOLED 1/8"x1" CONTROL JOINTS @ 10'-0" MAX EACH WAY. INSTALL (3) #4 x 5'-0" DIAGONAL BARS AT MID-DEPTH OF SLAB AT ALL RE-ENTRANT CORNERS
6. INDICATES MODULAR BLOCK RETAINING WALL TO BE DESIGNED BY OTHERS, SEE ARCH
7. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF RAMPS, SLAB SLOPES, AND OTHER INFORMATION NOT SHOWN.

FOUNDATION PLAN KEYNOTES

X	DESCRIPTION
1	10" WIDE x 24" DEEP CONCRETE BORDER WALL. REINFORCE W/#4 BARS @ 12" EACH WAY CENTERED IN WALL. PLACE WALL TIGHT TO MODULAR BLOCK WALL.
2	PROVIDE #5 HORIZONTAL CORNER BARS @ 6" OC CENTERED IN WALL AT THIS CORNER PER DETAIL 2/S5.01. EXTEND EACH LEG OF CORNER BAR MINIMUM OF 4'-0" EACH WAY.
3	24"x24" CONCRETE PIER FOR LIGHT POLE CAST INTEGRAL W/ WALL W/ (8) #6 VERTICALS; #4 TIES AT 12" ,(3) TIES @ 3" TOP. SEE ELECTRICAL FOR ANCHOR BOLTS AND CONDUIT LAYOUT
4	30"x30" CONCRETE PIER FOR SPUR RAIL SUPPORT CAST INTEGRAL W/ WALL W/ (12) #8 VERTICALS; #4 TIES AND CROSSTIES AT 12" ,(3) TIES @ 3" TOP. SEE DOPPELMAYR FOR ANCHOR BOLT LAYOUT
5	12" THICKENED SLAB FOR PARKING RAIL SUPPORT, REINFORCE W/ #4 @ 12" EACH WAY TOP AND BOT OF SLAB. SEE DOPPELMAYR FOR EMBED IN TOP
6	MIN 12"x12" CONCRETE PIER W/(4)-#5 VERT AND #3 TIES @ 12"; (3) TIES @3" TOP. COORDINATE LOCATION WITH DOPPELMAYER. MIN DEPTH = 4'-0".

CONCRETE FOOTING SCHEDULE (CONT)

MARK	WIDTH	THICKNESS	REINFORCEMENT
F16	1'-4"	1'-0"	(2) #5's BOT
F20	1'-8"	1'-0"	(3) #4 CONT
F28	2'-4"	1'-0"	(4) #4 CONT
F30	2'-6"	1'-0"	SEE 8/S5.01
F42	3'-6"	1'-0"	SEE 8/S5.01
F60	5'-0"	1'-0"	SEE 8/S5.01
F84	7'-0"	1'-0"	SEE 8/S5.01

REVISIONS

No.	Description	Date
	PERMIT SET	3-5-2021
1	ADDENDUM #1	3-12-2021
2	ADDENDUM #2	3-26-2021
3	ASI #1	4-20-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD Record Set TC 04/27/2021

CONSTRUCTION SET 03/29/2021

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Job Number: 20034
Date: 3/5/2021
Drawn By: KLM
Checked By: CRR

Project Phase: CONSTRUCTION DOCUMENTS
Sheet Title: FOUNDATION PLAN
Sheet Number: S 1.01

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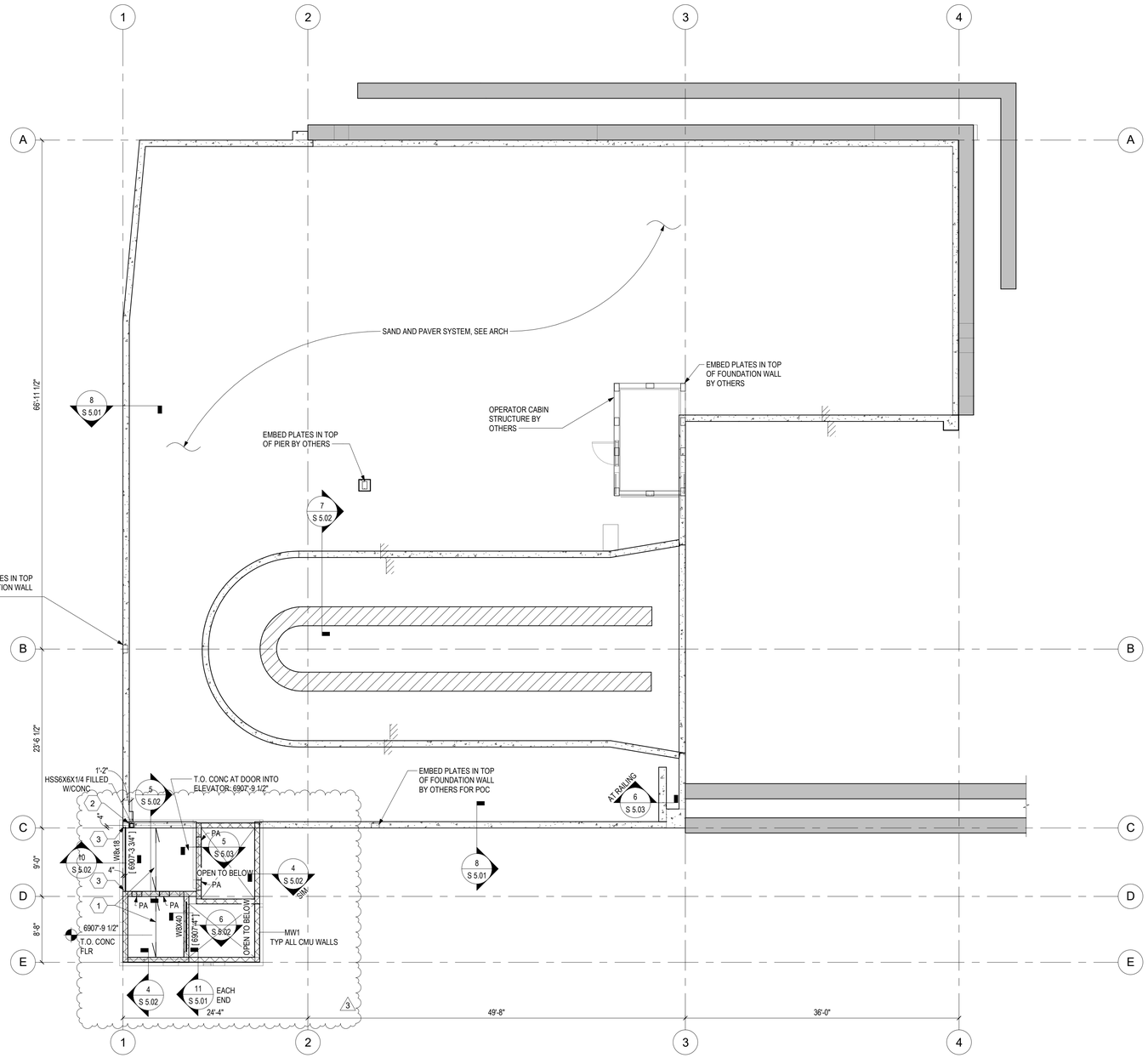


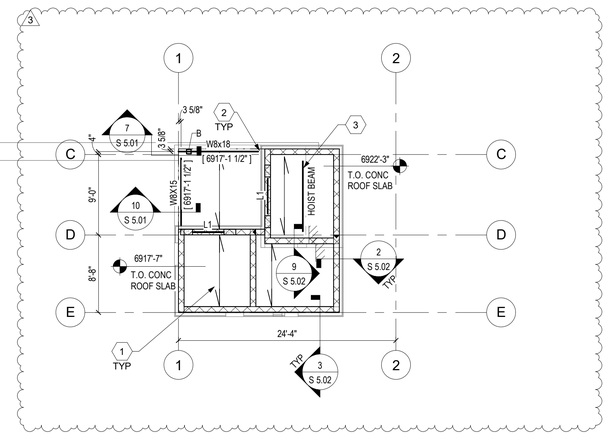
MAIN LEVEL FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

MAIN LEVEL PLAN NOTES:

1. SEE S0.01 FOR GENERAL STRUCTURAL NOTES, ABBREVIATIONS AND LEGEND
2. SEE S5.01 FOR TYPICAL DETAILS AND S5.03 FOR CMU WALL, PIER AND LINTEL SCHEDULES
3. SEE S1.01 FOR TOP OF FOUNDATION WALL ELEVATION.
4. TYPICAL CMU WALL IS 8" CMU WITH 'MW1' REINFORCING PER S5.03. PROVIDE 5'-0" DOWELS AT TOP OF CONCRETE FOUNDATION WALL TO MATCH MASONRY WALL REINFORCING SIZE AND SPACING. PROJECT 30" ABOVE TOP OF FOUNDATION WALL.
5. UNLESS NOTED OTHERWISE, TYPICAL TOP OF SLAB = 6907'-9 1/2"



ROOF FRAMING PLAN

1/8" = 1'-0"

PLAN NORTH

ROOF PLAN NOTES:

1. SEE S0.01 FOR GENERAL STRUCTURAL NOTES, ABBREVIATIONS AND LEGEND
2. SEE S5.01 FOR TYPICAL DETAILS AND S5.03 FOR CMU WALL, PIER AND LINTEL SCHEDULES
3. AT ROOF DRAINS, ACCEPTABLE TO CORE DRILL MAXIMUM 8" HOLE THROUGH COMPOSITE ROOF DECK. NOTIFY ANTHEM IF LARGER OPENING IS REQUIRED PRIOR TO POURING DECK.
4. LOCATE MECHANICAL OPENINGS IN WALLS MIN. 1'-4" FROM BEAM BEARING LOCATIONS. PROVIDE 'L1' LINTEL OVER MECHANICAL OPENINGS UP TO 6'-0" IN LENGTH.
5. UNLESS NOTED OTHERWISE, TYPICAL T/SLAB = 6917'-7".

MAIN LEVEL FRAMING PLAN KEYNOTES

X	DESCRIPTION
1	2"x18GA COMPOSITE STEEL DECK (VULCRAFT VLI OR EQUIV) W/3-1/2" NORMAL WEIGHT CONCRETE TOPPING (5-1/2" TOTAL THICKNESS). REINFORCE WITH 4LBS/CUBIC YARD MACRO FIBER REINFORCING OR #4 BARS @18" EACH WAY CENTERED IN SLAB. WELD DECK TO STEEL SUPPORT WITH 5/8" PUDDLE WELD AT 36/4 PATTERN. FASTEN SIDE LAPS W/#10 TEK SCREWS @ 18". SEE DETAILS FOR CONNECTION TO WALLS.
2	10"x1/2"x0'-10" EMBED PLATE W/(4)-1/2"Øx5"HEADED STUDS @ 8" GAGE CAST INTO TOP OF CONCRETE WALL. WELD COLUMN TO EMBED PLATE W/ 3/16" FILLET ALL AROUND.
3	PROVIDE EMBED PLATE IN CONCRETE WALL PER 11/S5.01 FOR BEAM CONNECTION.

ROOF FRAMING PLAN KEYNOTES

X	DESCRIPTION
1	2"x18GA COMPOSITE STEEL DECK (VULCRAFT VLI OR EQUIV) W/3-1/2" NORMAL WEIGHT CONCRETE TOPPING (5-1/2" TOTAL THICKNESS). REINFORCE WITH 4LBS/CUBIC YARD MACRO FIBER REINFORCING OR #4 BARS @18" EACH WAY CENTERED IN SLAB. WELD DECK TO STEEL SUPPORT WITH 5/8" PUDDLE WELD AT 36/4 PATTERN. FASTEN SIDE LAPS W/#10 TEK SCREWS @ 18". SEE DETAILS FOR CONNECTION TO WALLS.
2	SEE 1/S5.02 FOR BEAM BEARING PLATE REQUIREMENTS IN CMU WALL
3	MIN. W8x15 ELEVATOR HOIST BEAM. COORDINATE LOCATION AND ELEVATION WITH ELEVATOR SUPPLIER.

CONSTRUCTION SET 03/29/2021

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BRANDON K. SMITH
54868
PROFESSIONAL ENGINEER

REVISIONS

No.	Description	Date
	PERMIT SET	3-5-2021
1	ADDENDUM #1	3-12-2021
2	ADDENDUM #2	3-26-2021
3	ASI #1	4-20-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD
Record Set
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04/27/2021

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Job Number:	20034
Date:	3/9/2021
Drawn By:	KLM
Checked By:	CBR

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
MAIN AND ROOF LEVEL FRAMING PLAN

Sheet Number
S 1.02

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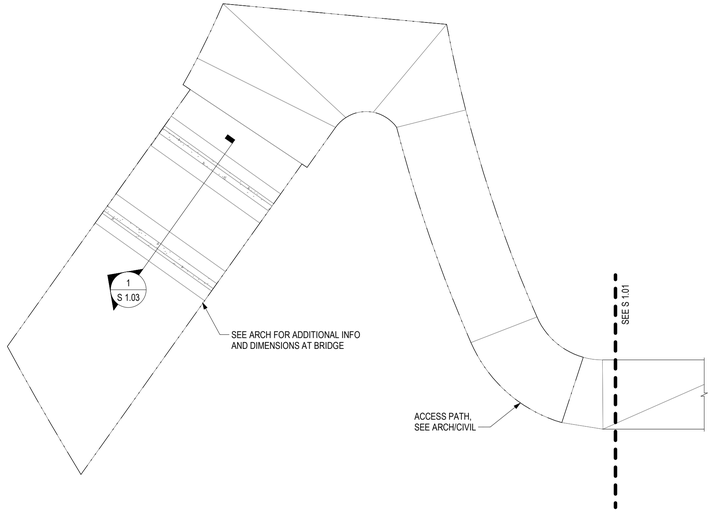
Anthem Job #20-163

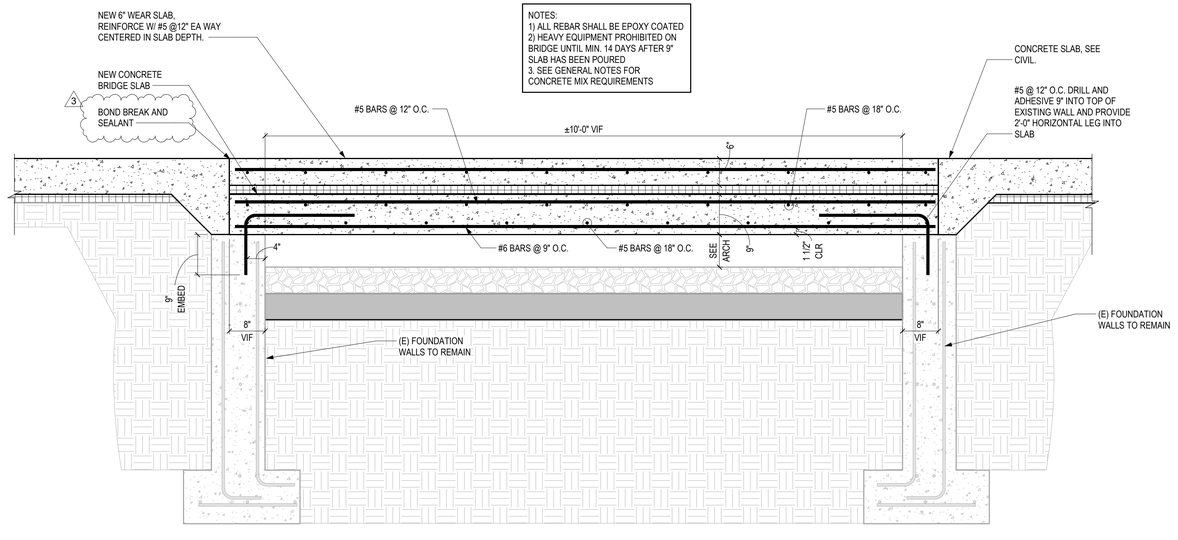


BURGESS CREEK BRIDGE PLAN

1/8" = 1'-0"

PLAN NORTH

NOTES:
1) ALL REBAR SHALL BE EPOXY COATED
2) HEAVY EQUIPMENT PROHIBITED ON BRIDGE UNTIL MIN. 14 DAYS AFTER 9" SLAB HAS BEEN POURED
3. SEE GENERAL NOTES FOR CONCRETE MIX REQUIREMENTS



1 BURGESS CREEK BRIDGE

NOT TO SCALE

CONSTRUCTION SET 03/29/2021

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BRANDON K. RUSSELL
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STEAMBOAT SPRINGS, CO

RCRBD
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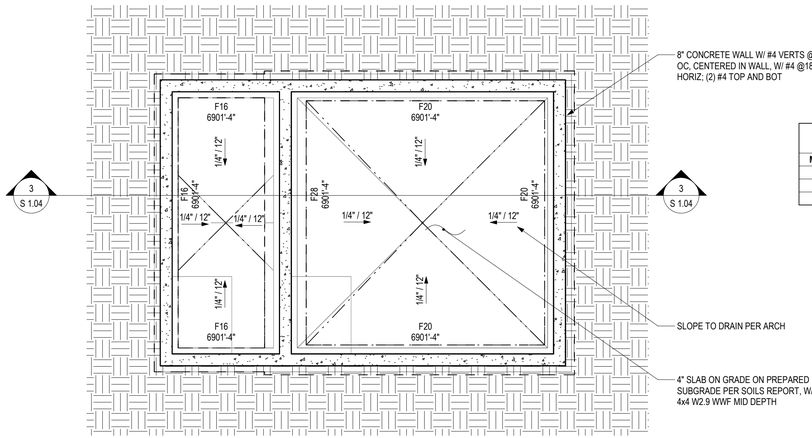
Date:	3/5/2021
Drawn By:	KLM
Checked By:	CBR

Project Phase
CONSTRUCTION DOCUMENTS

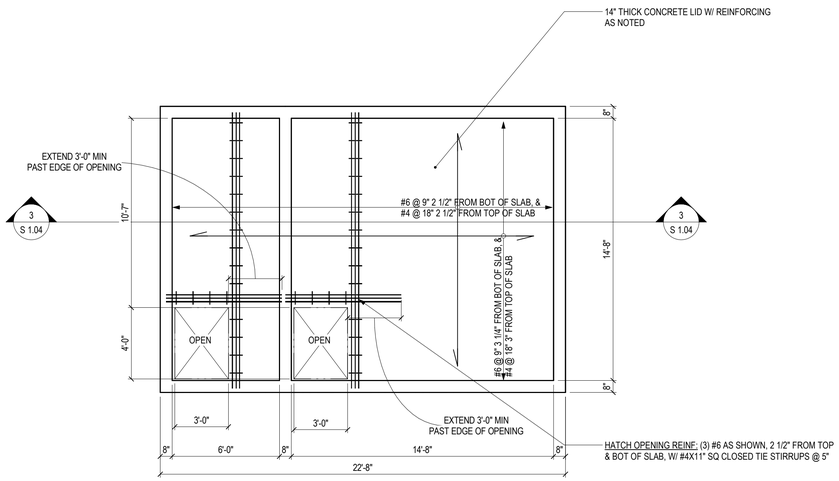
Sheet Title
BURGESS CREEK BRIDGE PLAN

Sheet Number
S 1.03



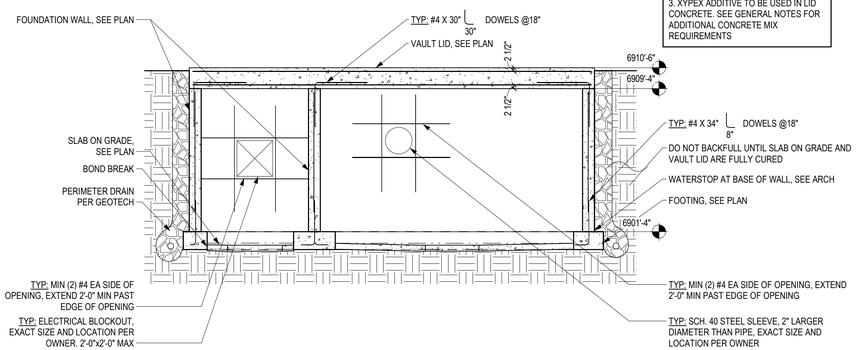
CONCRETE FOOTING SCHEDULE (CONT)VAULT				
MARK	WIDTH	THICKNESS	REINFORCEMENT	TRANS REINF
F16	1'-4"	1'-0"	(2) #5's BOT	N/A
F20	1'-8"	1'-0"	(3) #4 CONT	N/A
F28	2'-4"	1'-0"	(4) #4 CONT	N/A

1 VAULT FOUNDATION PLAN
1/4" = 1'-0"



2 VAULT LID PLAN
1/4" = 1'-0"

NOTES:
1) ALL REBAR SHALL BE EPOXY COATED
2) HEAVY EQUIPMENT PROHIBITED ON LID UNTIL MIN. 28 DAYS AFTER LID SLAB HAS BEEN POURED
3. XYPEX ADDITIVE TO BE USED IN LID CONCRETE. SEE GENERAL NOTES FOR ADDITIONAL CONCRETE MIX REQUIREMENTS



3 VAULT SECTION
1/4" = 1'-0"

anthem structural engineers
BOULDER | STEAMBOAT SPRINGS
303-848-8497 970-300-3338
Anthem Job #20-163

COLORADO LICENSED
BRANDON K. KLEIN
54868
PROFESSIONAL ENGINEER

NOTICE: DUTY OF COOPERATION

Release of these plans contemplates further cooperation among the owner, his contractor and the architect. Design and construction are complex. Although the architect and his consultants have performed their services with due care and diligence, they cannot guarantee perfection. Communication is imperfect and every contingency cannot be anticipated. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to the architect. Failure to notify the architect compounds misunderstanding and increases construction costs. A failure to cooperate by a simple notice to the architect shall relieve the architect from responsibility for the consequences. Changes made from the plans without consent of the architect are unauthorized and shall relieve the architect of responsibility for all consequences arriving out of such changes.

REVISIONS

No.	Description	Date
3	ASI #1	4-20-2021

STEAMBOAT GONDOLA RELOCATION
STEAMBOAT SPRINGS, CO

RCRBD
Record Set
TC
04/27/2021

ERIC SMITH ASSOCIATES, P.C.
1919 SEVENTH STREET
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(303) 442-5456, (303) 442-4745 FAX

Job Number:	20034
Date:	3/5/2021
Drawn By:	JES
Checked By:	KLM

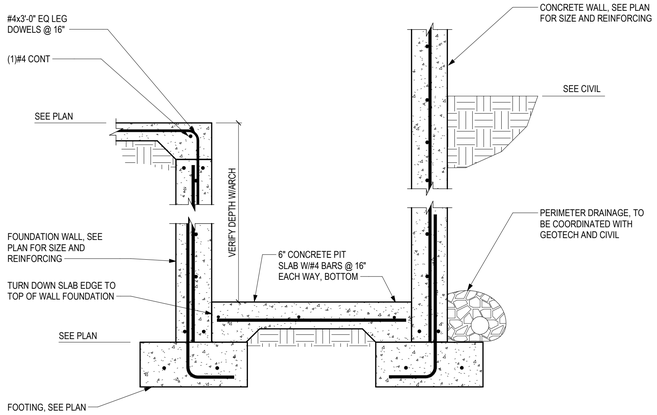
Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
VAULT

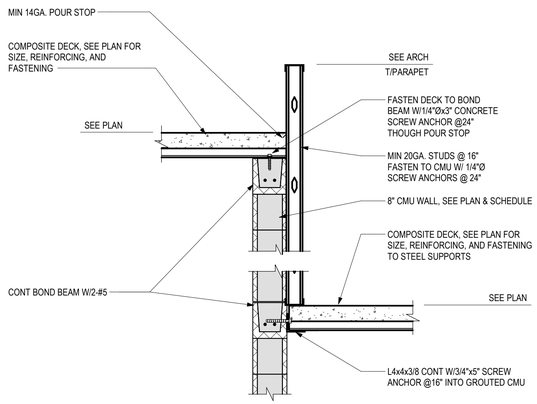
Sheet Number
3
S 1.04

4/20/2021 4:36:18 PM FILE: 20034 SBG PLATFORM v19.rvt

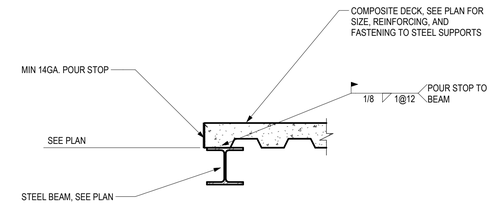
anthem
structural engineers
BOULDER | STEAMBOAT SPRINGS
303-848-8497 970-300-3338
Anthem Job #20-163



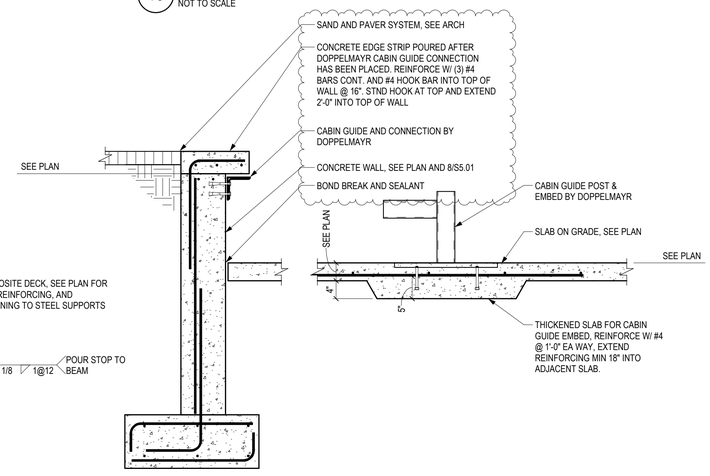
8 ELEVATOR PIT
NOT TO SCALE

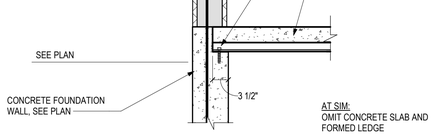


9 ROOF DECK AT CMU
NOT TO SCALE

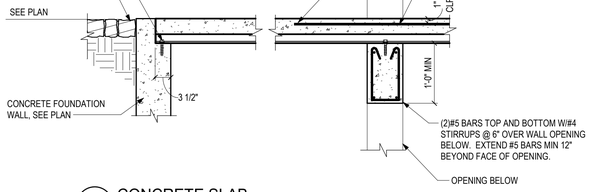


10 DECK EDGE WITH RAILING
NOT TO SCALE

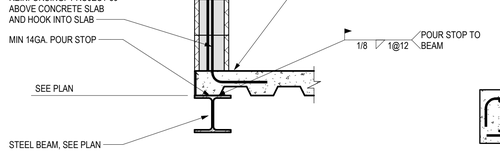




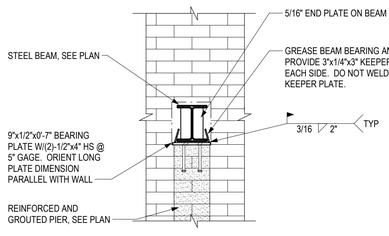
4 CMU TO CONCRETE
NOT TO SCALE



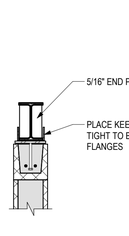
5 CONCRETE SLAB
NOT TO SCALE



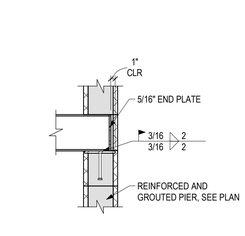
6 WALL ON BEAM
NOT TO SCALE



A BEAM PERPENDICULAR TO WALL



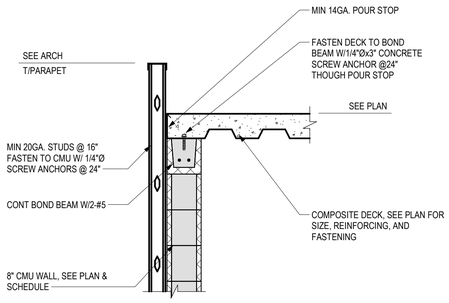
B BEAM PARALLEL TO WALL



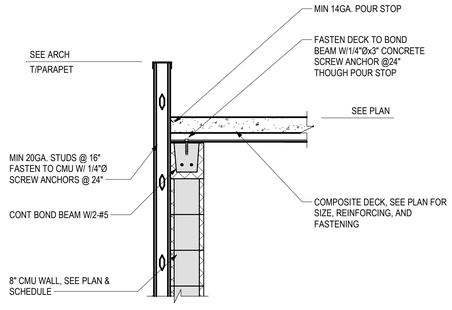
C BEAM ATTACHED END

NOTES:
1) WHERE BEAM BEARS ON CMU EACH END, PROVIDE SLIPPED CONNECTION TO BEARING PLATE PER DETAILS A OR B. FASTEN OPPOSITE END OF BEAM PER DETAIL C.
2) DO NOT WELD BEAM TO BEARING PLATE AT SLIPPED CONNECTION (DETAIL A OR B)

1 TYPICAL BEARING PLATE
NOT TO SCALE



2 ROOF DECK AT CMU
NOT TO SCALE



3 ROOF DECK AT CMU
NOT TO SCALE

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REVISIONS

No.	Description	Date
	PERMIT SET	3-5-2021
2	ADDENDUM #2	3-26-2021
3	ASI #1	4-20-2021

STEAMBOAT GONDOLA RELOCATION
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Job Number:	20034
Date:	3/5/2021
Drawn By:	KLM
Checked By:	CRR

Project Phase
CONSTRUCTION DOCUMENTS

Sheet Title
DETAILS

Sheet Number
S 5.02

CONSTRUCTION SET 03/29/2021

4/20/2021 4:32:00 PM FILE: 20034 SBG PLATFORM v19.rvt