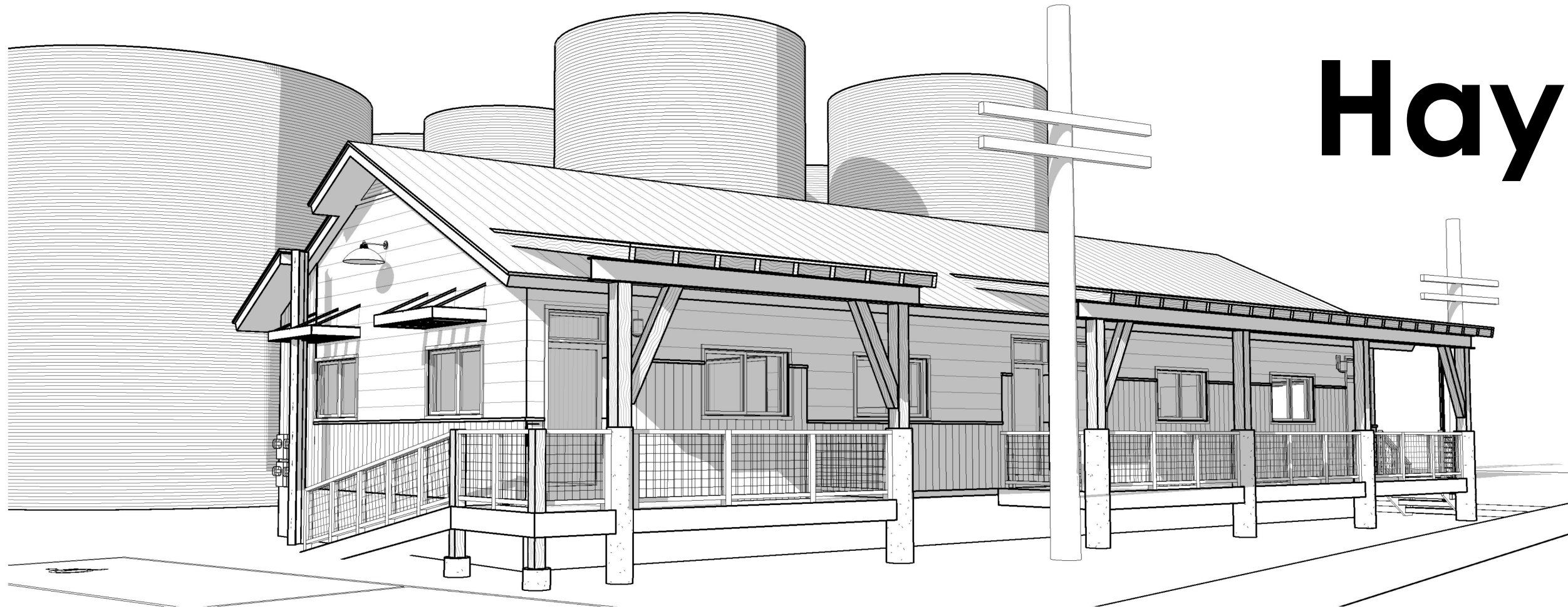




Hayden Granary Salt Shed Flats

East Lincoln Avenue, Hayden, CO

Building Permit- 10.23.2020

Axial Arts

PO Box 774292
Steamboat Springs, CO 80477
Tel 970.276.7295
Kevin@AxialArts.com
Wendy@AxialArts.com

STAMP

CODE ANALYSIS

PROJECT DESCRIPTION

THIS PROJECT INVOLVES RENOVATING AN EXISTING STRUCTURE, REFERRED TO AS THE "SALT SHED," INTO FOUR RESIDENTIAL UNITS OF APPROXIMATELY 415 SF. THE SALT SHED IS ONE OF SEVERAL EXISTING FREESTANDING BUILDINGS AT THE HAYDEN GRANARY SITE, 198 LINCOLN AVENUE, HAYDEN, COLORADO. THE EXISTING STRUCTURE IS A WOOD FRAMED STRUCTURE ON A CONCRETE FOUNDATION.

THIS EXISTING STRUCTURE HAS BEEN EVALUATED BY A LICENCED STRUCTURAL ENGINEER, AND THE RESULTING ADDITION DESIGN TAKES THIS INFORMATION INTO ACCOUNT.

TAX AREA 35 H
SCHOOL DISTRICT RE1

CODE COMPLIANCE

2015 INTERNATIONAL BUILDING CODE
2015 INTERNATIONAL EXISTING BUILDING CODE || 2009 NATIONAL ELECTRIC CODE
INTERNATIONAL CODE COUNCIL ELECTRIC CODE, ADMINISTRATIVE PROVISIONS 2006
2015 INTERNATIONAL ENERGY CONSERVATION CODE || 2015 INTERNATIONAL MECHANICAL CODE
2015 INTERNATIONAL FUEL GAS CODE || 2015 INTERNATIONAL PLUMBING CODE
2009 EDITION OF ICC A117.1 ACCESSIBILITY REQUIREMENTS

CLASSIFICATIONS

USES:

- RESIDENTIAL GROUP R-2
OCCUPANCIES CONTAINING SLEEPING UNITS OR MORE THAN TWO DWELLING UNITS

CONSTRUCTION TYPE:

- CONSTRUCTION TYPE: V-A
(PROTECTED)

WALL SEPARATION

PER IBC TABLE 508.4
R-2 -> R-2: 1 HR WALL SEPARATION (INTERIOR WALLS B/W DWELLING UNITS)

GENERAL NOTES

- THE SCOPE OF WORK REPRESENTED HERE IS FOR DESIGN SERVICES ONLY. THE ACTUAL METHODS OF CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND/OR ENGINEERS.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH ALL APPLICABLE CODES, ORDINANCES, PERMITS, AND CONTRACT DOCUMENTS
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ACCURATE PLACEMENT OF ALL NEW CONSTRUCTION ON THE SITE.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND SITE CONDITIONS BEFORE STARTING WORK. SHOULD A DISCREPANCY APPEAR IN THE CONTRACT DOCUMENTS, OR BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS, THE G.C. SHALL NOTIFY THE OWNER AT ONCE FOR INSTRUCTIONS HOW TO PROCEED.
- THE CONTRACTOR SHALL CONFINE HIS/HER OPERATIONS TO THE SITE AND TO THE AREAS PERMITTED BY THE OWNER AND/OR THE PERMITTING COUNTY.
- THE JOB SITE SHALL BE MAINTAINED IN A CLEAN AND ORDERLY CONDITION, FREE OF DEBRIS AND LITTER, AND SHALL NOT BE UNREASONABLY ENCUMBERED WITH ANY MATERIALS OR EQUIPMENT. EACH SUB-CONTRACTOR IMMEDIATELY UPON COMPLETION OF EACH PHASE OF HIS/HER, WORK SHALL REMOVE ALL TRASH AND DEBRIS AS A RESULT OF HIS/HER OPERATION.
- ALL MATERIAL STORED ON THE SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE AND DETERIORATION. FAILURE TO PROTECT MATERIALS MAY BE CAUSE FOR REJECTION OF WORK.
- NO PORTION OF THE WORK REQUIRING A SHOP DRAWING OR SAMPLE SUBMISSION SHALL BE COMMENCED UNTIL THE SUBMISSION HAS BEEN REVIEWED BY THE ARCHITECT AND/OR ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY MISCELLANEOUS BLOCKING AND BACKING SUPPORT FOR BUILDING COMPONENTS SUCH AS LIGHT FIXTURES, TOWEL BARS, ET.AL.

LEGAL DESCRIPTION

LEGAL DESCRIPTION: PER GORDON DOWLING SURVEYORS

A TRACT OF LAND LOCATED IN THE NORTH HAYDEN ADDITION AND A VACATED PORTION OF LINCOLN AVENUE ADJACENT TO NORTH HAYDEN ADDITION, ALL WITHIN THE NE1/4 NE1/4 OF SECTION 9 AND WITHIN THE NW1/4 NW1/4 OF SECTION 10, T6N R88W, 6TH P.M., TOWN OF HAYDEN, ROUTT COUNTY, COLORADO,

BEGINNING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE NORTHWEST CORNER OF SAID NORTH HAYDEN ADDITION;
THENCE N 81°30'22" E ALONG SAID NORTH LINE A DISTANCE OF 440.90 FEET, TO THE NORTHEAST CORNER OF SAID NORTH HAYDEN ADDITION; THENCE N 81°30'22" E ALONG THE PROJECTION OF SAID NORTH LINE A DISTANCE OF 104.11 FEET;
THENCE S 69°47'43" W A DISTANCE OF 136.77 FEET; THENCE S 67°57'00" W A DISTANCE OF 393.13 FEET, TO A POINT ON THE EAST LINE OF WALNUT STREET;
THENCE N 22°03'00" W ALONG SAID EAST LINE A DISTANCE OF 123.35 FEET, TO THE POINT OF BEGINNING, CONTAINING 0.730 ACRES, MORE OR LESS.

IN THE TOWN OF HAYDEN, ROUTT COUNTY, COLORADO, UNDER THE NAME AND STYLE OF HAYDEN GRANARY FINAL PLAT, HAS LAID OUT, PLATTED AND SUBDIVIDED SAME AS SHOWN ON THIS PLAT AND PURSUANT TO ALL ACCOMPANYING DOCUMENTS REFERENCED HERON, AND DO HEREBY IRREVOCABLY DEDICATE TO AND FOR THE PERPETUAL USE OF THE PUBLIC BY AND THROUGH THE TOWN OF HAYDEN, STATE OF COLORADO, THE OVERHEAD PUBLIC ELECTRIC EASEMENT AND PUBLIC WATERLINE EASEMENT AS SHOWN HEREON.

SYMBOL KEY

DRAWING TITLE & SCALE	1 PLAN A2.1 1/4" = 1'-0"	EARTH
EXTERIOR ELEVATION	1 A3.0	CONCRETE
INTERIOR ELEVATION	1 9.3	GRAVEL
WALL SECTION	1 A4.0	WOOD STUD WALL
BUILDING SECTION	1 A4.0	STONE
DETAIL	1 D9.7	WOOD (ROUGH)
DETAIL ENLARGEMENT (Plan or Section) OR AREA ENLARGEMENT	1 6.2	WOOD (FINISHED)
COLUMN CENTER LINE, GRID & REFERENCE	1	PLYWOOD
ROOM NAME ROOM NUMBER	LIVING T01	PLASTER/GWB/STUCCO
DRAWING NUMBER DETAIL NUMBER	1 D8.1	BATT INSULATION
DRAWING NUMBER SHEET NUMBER	1 A3.0	RIGID INSULATION
		C.M.U.
		DOOR NUMBERS FOR SCHEDULING ARE A COMBINATION OF THE DOOR TAG AND THE ROOM NUMBER INTO WHICH THE DOOR SWINGS (IE: 121A NOT 110A) SELECT EXCEPTIONS: CLOSETS
		CORRIDOR 110
		LOBBY 121
		WINDOW NUMBER 2
		REVISION NUMBER 3
		ELEVATION (Sections) ELEV 100'-0"
		ELEVATION (Floor Systems) ELEV 100'-0" F2
		INTERIOR PARTITION TYPE P2
		EXTERIOR WALL SYSTEM W2

INDEX

A0.0	COVER SHEET
-	SURVEY
A0.1	OUTLINE SPECIFICATIONS
A1.1	SITE PLAN
A2.0	MAIN FLOOR PLAN
A2.1	ROOF PLAN
A2.2	REFLECTED CEILING PLAN
A3.0	EXTERIOR ELEVATIONS, BUILDING SECTION DOOR & WINDOW SCHEDULES
E-1	LIGHTING & SWITCHING PLAN
S-1	STRUCTURAL
S-2	STRUCTURAL
S-3	STRUCTURAL
1	UTILITY PLAN
E1-1	ELECTRICAL
M0.0	MECHANICAL COVER SHEET
M1.0	MECHANICAL SCHEDULES
M2.0	MECHANICAL PLAN
M3.0	MECHANICAL SCHEMATICS
M4.0	MECHANICAL
P2.0	UNDER SLAB PLUMBING PLAN
P2.1	MAIN LEVEL PLUMBING PLAN

SITE DATA

DEVELOPMENT CRITERIA	PROJECT PROVIDED
EXISTING ZONING:	COMMERCIAL (C)
MIN. LOT AREA PER ZONING:	0
SITE SCOPE	3,800 SF
MAX. LOT AREA PER ZONING/PROVIDED:	0
LAND USE DESIGNATION	EXISTING
BUILDING AREA-EXISTING:	1,270 SF
BUILDING AREA-PROPOSED:	1,705 SF
MAX BUILDING HEIGHT-ALLOWED/PROPOSED:	35'-0"/17'-6"
BUILDING SETBACKS PER ZONING	0' ON ALL SIDES
MIN. LANDSCAPE AREA OF 15%: PROPOSED LANDSCAPE AREA:	570 SF 570 SF
PARKING REQUIRED:	4 SPACES
PARKING PROVIDED:	5 ONSITE SPACES INCLUDING 1 ADA SPACE



VICINITY MAP 200 N. Walnut Street. Hayden, Colorado

AREA

INTERIOR RESIDENTIAL SPACE: 1,705 SF
COMPRISED OF 4 RESIDENTIAL UNITS OF APPROX. 415 SF

NOTE:

FIELD VERIFY ALL MEASUREMENTS
PRIOR TO AND DURING
CONSTRUCTION

DIRECTORY

OWNER	HAYDEN GRANARY, LLC PAUL BRINKMAN, POINT OF CONTACT
ARCHITECT	AXIAL ARTS, LLC KEVIN & WENDY LIND P.O. BOX 774292, STEAMBOAT SPGS, CO 80477 970.331-7573 970.471.2789
STRUCTURAL ENGINEER	STEAMBOAT ENGINEERING AND DESIGN CARYN W. MIELKE, PE 2740 ACRE LN #205, STMBT SPGS, CO 80487 (970) 871-9101
MECHANICAL ENGINEER	RADER ENGINEERING, INC DREW RAIDER/CHRIS CELANO BOX 8610, AVON, CO 81620 970-845-7910 RADERENGINEERING.COM
ELECTRICAL ENGINEER	WILDER ENGINEERING LLC, ANDREW WILDER, PE 1170 BLUE SAGE DRIVE, STMBT SPGS, CO 80487 970-819-7848
SURVEYOR	DOWLING LAND SURVEYORS 300 W JEFFERSON AVE, HAYDEN, CO 81639 (970) 276-3613

HAYDEN GRANARY
SALT SHED FLATS
198 LINCOLN AVENUE, HAYDEN, COLORADO

ISSUED FOR:		
No.	Date	Remarks
A	10/10/2019	PROGRESS SET
B	10/28/2019	OWNER REVIEW
C	11/14/2019	SALT SHED-OPT 2
D	06/03/2020	SALT SHED-OPT 3
E	08/24/2020	MAILOR SITE-PLAN SUBMITTAL
F	09/18/2020	SUB-CONSULTANT SET
G	10/10/2020	SD REVIEW SET
H	10/19/2020	PERMIT CHECK SET
H	10/23/2020	BUILDING PERMIT APPLICATION

PROJECT NO: 1988
PHASE: CD

COVER SHEET

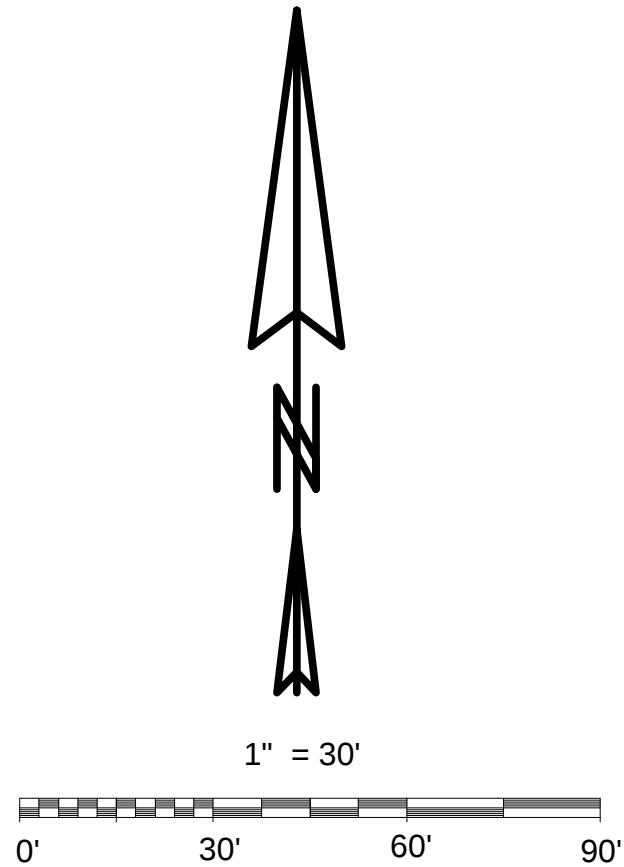
SHEET NAME

A0.0

SHEET NUMBER

HAYDEN GRANARY FINAL PLAT

A REPLAT OF PORTIONS OF NORTH HAYDEN ADDITION TO THE TOWN OF HAYDEN AND VACATED PORTION OF LINCOLN AVENUE, ALL WITHIN NE1/4 NE1/4 SECTION 9 AND NW1/4 NW1/4 SECTION 10, T6N R88W, 6th P.M., ROUTT COUNTY, COLORADO



- DENOTES MONUMENT FOUND AS NOTED
○ DENOTES MONUMENT SET AS NOTED
(100.00') DENOTES RECORD CALL

NOTES:

1. THE SHOWN RIGHT-OF-WAY OF THE RAILROAD WAS DETERMINED BY FIELD OBSERVATIONS.
2. BASIS OF BEARING - THE MONUMENTED NORTH LINE OF BLOCK 4, ORIGINAL TOWN OF HAYDEN, THE NORTHWEST CORNER BEING A REBAR AND CAP (TS&T) AND THE NORTHEAST CORNER BEING A REBAR AND ILLEGIBLE CAP -N67°57'00"E

CERTIFICATE OF OWNERSHIP AND DEDICATION

BE IT HEREBY MADE KNOWN: That 200 Walnut Granary, LLC and Hayden Granary, LLC, being the owners of the land described as follows:

A tract of land located in the North Hayden Addition and a vacated portion of Lincoln Avenue adjacent to North Hayden Addition, all within the NE1/4 NE1/4 of Section 9 and within the NW1/4 NW1/4 of Section 10, T6N R88W, 6th P.M., Town of Hayden, Routt County, Colorado, being more particularly described as follows:
BEGINNING at the Northwest Corner of said North Hayden Addition; thence N 81°30'22" E along said North line a distance of 440.90 feet, to the Northeast Corner of said North Hayden Addition; thence N 81°30'22" E along the projection of said North line a distance of 104.11 feet; thence S 69°47'43" W a distance of 136.77 feet; thence S 67°57'00" W a distance of 393.13 feet, to a point on the East line of Walnut Street; thence N 22°03'00" W along said East line a distance of 123.35 feet, to the POINT OF BEGINNING, containing 0.730 Acres, more or less.

in the Town of Hayden, Routt County, Colorado, under the name and style of HAYDEN GRANARY FINAL PLAT, has laid out, platted and subdivided same as shown on this plat and pursuant to all accompanying documents referenced herein, and do hereby irrevocably dedicate to and for the perpetual use of the public by and through the Town of Hayden, State of Colorado, the overhead public electric easement and public waterline easement as shown hereon.

In witness whereof:

Paul Brinkman, Manager, 200 Walnut Granary, LLC
Paul Brinkman, Manager, Hayden Granary, LLC

have caused their name to be here unto subscribed this _____ day of _____, 20____.

STATE OF _____ } ss.
COUNTY OF _____ }

The foregoing instrument was acknowledged before me this _____ day of _____, 2020 by PAUL BRINKMAN, as manager of 200 Walnut Granary, LLC and Hayden Granary, LLC.

WITNESS my hand and official seal.

My commission expires: _____

Notary Public

TOWN OF HAYDEN APPROVAL

This Plat of HAYDEN GRANARY FINAL PLAT is approved for filing this _____ day of _____, 20____, by the Town Council, Town of Hayden, Colorado. This approval is conditioned for all expenses involving necessary improvements for all utility services, paving, grading, landscaping, curbs, gutters, street light, street signs, trails and sidewalks shall be financed by others and not the Town. The dedication of the overhead public electric easement and public waterline easement as shown hereon is hereby accepted.

Joseph Timothy Redmond, Mayor

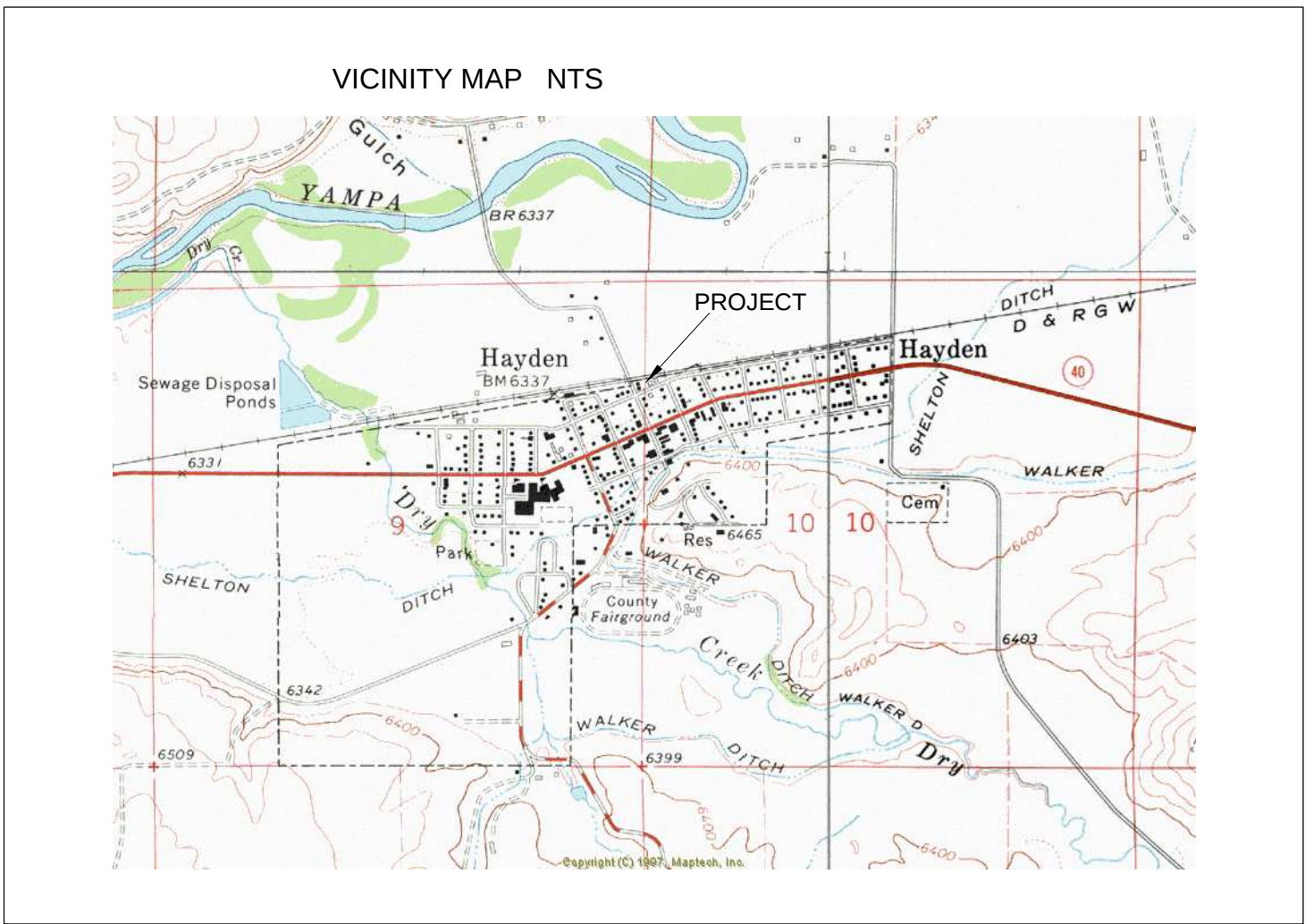
Attest: Sharon Johnson, Town Clerk

SURVEYOR'S CERTIFICATE

I, GORDON R. DOWLING, PLS #30090, a duly registered land surveyor in the State of Colorado, do hereby certify that this Plat of HAYDEN GRANARY MINOR SUBDIVISION was performed by me or under my direct supervision, and that this plat has been prepared in compliance with all applicable laws of the State of Colorado at the time of this survey and within my control and is accurate to the best of my knowledge, information and belief.

GORDON R. DOWLING, PLS #30090

Dated this _____ day of _____, 2020



ROUTT COUNTY SURVEYOR'S ACCEPTANCE

This plat was (filed and) indexed as File No. SP _____ on _____, 2020, at _____m in the land survey plat records file and index system maintained in the office of the Routt County Clerk and Recorder pursuant to C.R.S. 38-50-101.

Routt County Surveyor

By: Thomas H. Effinger, Jr., PLS #17651

ROUTT COUNTY CLERK AND RECORDERS' ACCEPTANCE

This Plat was accepted for filing in the Office of the Routt Clerk and Recorder on this _____ day of _____, 2020, A.D.

File No. _____ Reception No. _____ Time _____m.

KIM BONNIER, ROUTT COUNTY CLERK & RECORDER

200 WALNUT GRANARY, LLC
HAYDEN GRANARY, LLC

PORTIONS OF
NORTH HAYDEN ADDITION
TO THE TOWN OF HAYDEN

ROUTT COUNTY,
COLORADO

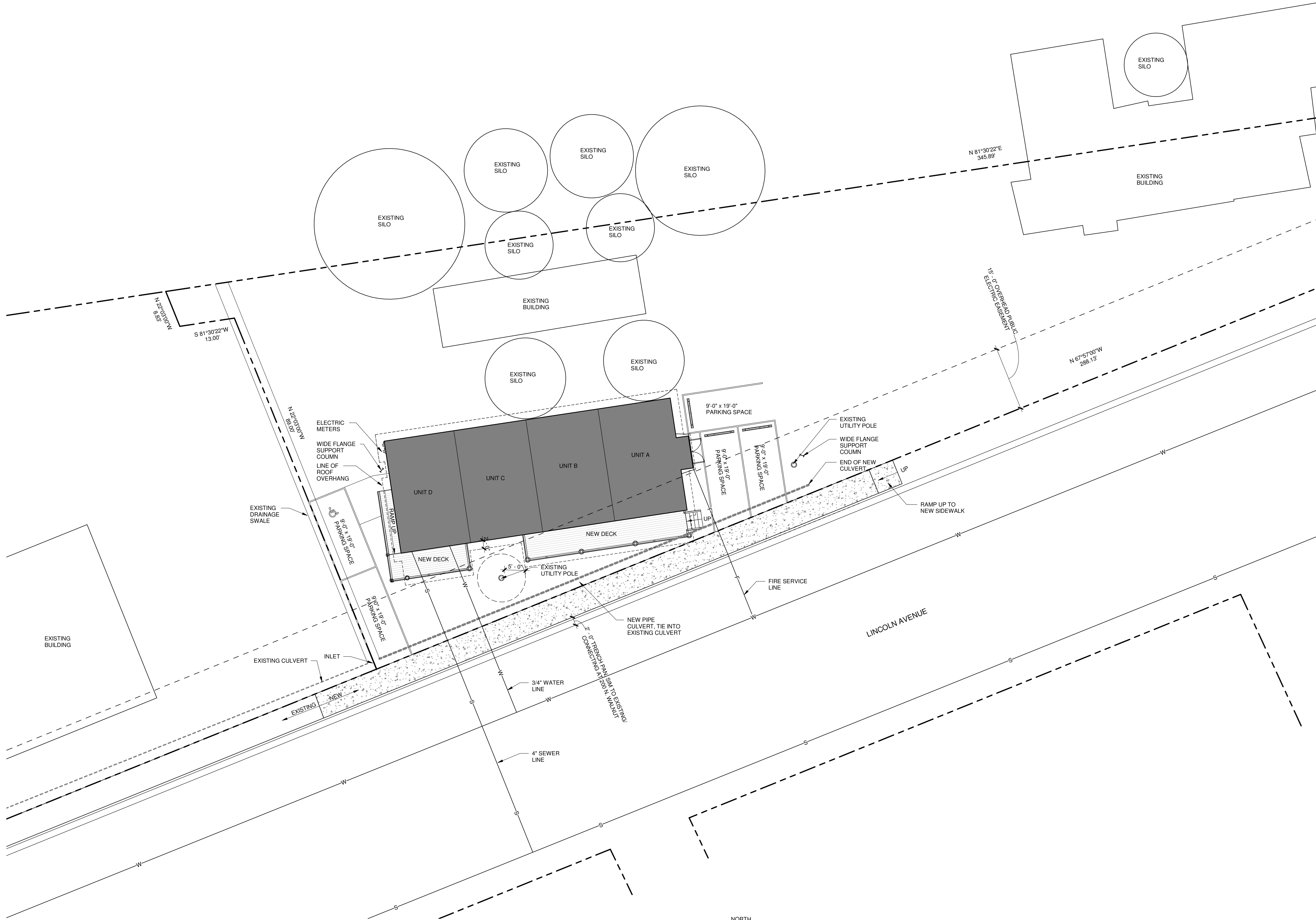
SCALE	DWG	DATE	REV	FILE
1" = 30'	GRD	1/10/20	3/24/20 3/25/20	GRAN202P

FINAL PLAT

DOWLING
LAND SURVEYORS
P.O. BOX 954
HAYDEN, CO. 81639
(970) 276-3613
FAX 276-4595

NOTICE OF RESEARCH
Pursuant to C.R.S. § 38-51-106 (1) (b) (i), research regarding the Rights-of-Way and easements as shown hereon was obtained by Title Commitments No. ABS30023814-2 and No. ABS30021315-2, as prepared by OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY both as of February 28, 2020 and not from the personal search of Gordon R. Dowling, a Professional Land Surveyor in the State of Colorado.

NOTICE: ACCORDING TO COLORADO LAW, YOU MUST COMMENCE ANY LEGAL ACTION BASED ON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT, IN NO EVENT MAY ANY ACTION BE COMMENCED MORE THEN TEN YEARS FROM THE DATE OF CERTIFICATION SHOWN HEREON.



AxialArts

PO Box 774292
Steamboat Springs, CO 80477
Tel 970.276.7295
Kevin@AxialArts.com
Wendy@AxialArts.com

STAMP

HAYDEN GRANARY

SALT SHED FLATS

198 LINCOLN AVENUE, HAYDEN, COLORADO

ISSUED FOR:

No.	Date	Remarks
A	10/10/2019	PROGRESS SET
B	10/28/2019	OWNER REVIEW
C	11/14/2019	SALT SHED-OPT 2
D	08/03/2020	SALT SHED-OPT 3
E	08/24/2020	MAJOR SITE PLAN SUBMITTAL
F	09/18/2020	SUB-CONSULTANT SET
G	10/16/2020	SD REVIEW SET
-	10/16/2020	PERMIT CHECK SET
H	10/23/2020	BUILDING PERMIT APPLICATION

PROJECT NO: 1988

PHASE: CD

DRAWN BY: AxA

CHECKED BY: AxA

SALT SHED

SITE PLAN

SHEET NAME

A1.1

SHEET NUMBER

OUTLINE SPECIFICATIONS

Nothing written in these notes shall have precedence over the General Structural Notes.

DIVISION 1 - GENERAL REQUIREMENTS

PROJECT CLOSE OUT

The General Contractor is also the Owner of the project, and will therefore take responsibility for all General Requirements.

DIVISION 2 - SITE WORK

GENERAL NOTES

All vehicular and foot traffic necessary for completion of this project shall be confined to the immediate building site. Any damage to areas outside this immediate project area shall be fully restored to it's natural state before final payment will be made to the Contractor. No dogs shall be allowed on site. Generally, the Contractor shall be extremely sensitive to the well being of the indigenous plants and wildlife in this area.

EARTHWORK

- 1. Site inspection is necessary prior to bidding or commencing work.
- 2. Secure all permits necessary for all site work.
- 3. Utility line excavations and back fill will conform to this Division.
- Also see Divisions 15 and 16 and the drawings for specific locations and requirements.
- 4. The Structural Engineer shall examine the excavation prior to placement of footings.
- 5. Back fill and fill material are to be imported or existing material from the site, free of debris, topsoil and vegetation.
- 6. Topsoil for planted areas to be clean, organic material locally available, or stored from on-site excavation.
- 7. All foundation walls except those noted on drawings as "No Foundation Drain Necessary" shall be drained with 4" PVC perforated foundation drain pipe, positively sloped to daylight, and located lower than the top of footings. Pipe shall be packed in and covered with 2" minus washed river gravel. Gravel surface shall be protected from silt with a cover of Mirafi 500x cloth (or equivalent) before back fill.
- 8. Brace building wall structure adequately to withstand the stresses caused by back filling and compacting.
- 9. Moisture content of fill shall be maintained to achieve optimum compaction. Do not permit the use of any frozen materials in the fill.
- 10. Fine grade all cut and filled areas to achieve the surface grading shown on the drawings, or as specified by the Owner. Slope back fill away from the building at 1" in 12" for a minimum of 10 feet from the wall line.

DIVISION 3 - CONCRETE

CAST IN PLACE CONCRETE

- 1. Structural notes take precedence over these specifications.

DIVISION 4 - MASONRY

- 1. Stone veneer masonry shall be adequately supported with not less than one masonry tie per two square feet of masonry. Mortar joints are to be tight, deep struck type. Final stone type to be determined by Owner/Builder.
- 2. Any masonry supported by wood, if any, shall be Robinson "Thin Rock" veneer, 40 P.S.F, installed per manufacturers specifications.
- 3. All structural members shall be separated from masonry by 1/2" minimum.
- 4. All full thickness stone veneer over 5 feet in height shall have continuous support to foundation or footings. See building sections for other support details.

DIVISION 5 - METALS

FRAMING CONNECTIONS

- 1. Please refer to Structural Drawings for all framing connections.
- 2. All metal work shall be performed using the highest professional standards and all steel exposed to weather is to be primed and painted prior to installation.

DIVISION 6 - WOOD AND PLASTICS

ROUGH CARPENTRY

- 1. Wood for structural framing shall be visually stress-graded, "No. 2," dried douglas fir/larch, conforming to "National Design Specifications for Wood Construction" by the National Forest Products Association, unless otherwise noted.
- 2. All micro lam members are denoted "ML" or "LVL" on the drawings, and shall be standard sizes as fabricated by "Trusjoists Corporation." Other similar members of equal size and strength may be substituted for micro lam members, if approved by the Architect or Engineer.
- 3. Shop fabricated joists and rafters shall be "I" type members fabricated by "Trusjoists Corporation" or and approved equal.
- 4. Provide cross-bridging at center of any span over 8'-0" for all wood joists and rafters, and solid 2x blocking between joists and rafters at supports.
- 5. Provide double joists under all partitions running parallel to joists and solid blocking between joists under all partitions running perpendicular.
- 6. Timber connectors called for on the drawings are as manufactured by Simpson Company. Connectors by other manufacturers may be used if the load capacity is equal to or greater than the connector specified, if approved by the Engineer.
- 7. Fasten all wood members with common nails according to the I.R.C Schedule, unless otherwise noted. See General Structural Notes.
- 8. Plywood for roof and floor sheathing shall be DFPA grade-tradmarked C-D Exterior and shall conform to standard PS 1-66 of the Engineered Wood Association, or as specified by the Engineer. See General Structural Notes. Floor sheathing: 3/4" T&G, roof 5/8" min. CDX.
- 9. Adhesive for installing plywood floor shall be of type approved by engineered wood association and applied as recommended by the manufacturer.
- 10. Wall sheathing to be 1/2" plywood or OSB, or as specified on drawings.
- 11. Install bridging and blocking as work progresses. Frame openings for pipes or ducts so as not to cut or damage any structural member.
- 12. Install plates, blocking fire stops, headers, etc., with adequate spikes and nails to provide a rigid installation. Notch and frame around plumbing, heating, electrical installations and required recesses. Provide blocking and backing as required for cabinets, accessories, shelving, etc.
- 13. Nothing written in these notes shall have precedence over the General Structural Notes.

FINISH CARPENTRY

- 1. Refer to Exterior Elevations for Exterior Materials and locations.
- 2. Fascia and shadow board shall be flashed with galvanized steel.
- 3. Exterior decking shall be drip through with 2x6 pine. Composite material to be considered.
- 4. Interior trim shall be wood species selected by the Owner/Builder.
- 5. Cabinets shall be securely fastened to walls using appropriate methods. Provide necessary backing, blocking, anchors, bases, cleats, etc.
- 6. All railings and guardrails to be minimum 36" height by code. The exterior guardrails consist of 8x8 wood newel posts, with a 3x4 top rail and a 2x4 bottom rail, and welded wire in-fill with a minimum 4" open square pattern. The height of the top rail shall be not less than 36" based on the IRC Section R312.1.
- 7. All interior stairs are closed tread, designed to fit the space with a 7" rise and a 10" tread.
- 8. All shelving selected by Owner/Builder.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

GENERAL (See attached documents for more information on Energy Efficiencies.)

Standard for this work will be manufacturer's standards and recommended procedures.

- 1. Refer to the IECC Code Compliance Chart on this sheet.
- 2. All insulation products shall have shown on the product or packaging: "R" or "U" value and fire classification.
- 3. Insulation types selected by Owner/Builder.

ROOFING

- 1. Roof to include complete finished application from clean plywood deck, application flashing and roofing material.
- 2. All roof is to be cold surface type with 3" minimum circulating air space. Utilize adequate vents at top and bottom of all cold air spaces to make certain that all areas of the roof are kept well vented.
- 3. All valley sleepers shall be cut short of valleys. All air spaces shall be vented to doghouse or gable end vent.
- 4. Entire roof underlayment to be ice and water shield as manufactured by W.R. Grace Company or equal bituthane.
- 5. Roof shingles and ice and water shield to be installed per manufacturer's specifications, and applicable county code requirements.
- 6. See Division 10, louver and vents, for plumbing vent note.
- 7. See roof plan and elevations for materials and location.
- 8. Install any corten roofing over 15# felt over bituthene approved for metal roofing.

SEALANTS

- 1. Sealant to be General Electric Silicone Construction Sealant, manufactured by General Electric Company, Waterford, N.Y., or approved equal.
- 2. Color to match adjacent surfaces and as selected by the Architect.
- 3. Prepare all surfaces to receive sealant so they are clean and free of frost, dirt and other debris. Apply sealant per manufacturer's current instructions, leaving a smooth and weather tight joint. Apply sealant to all edges of window, corner trim, etc. Silicone seal under all exterior door thresholds as they are installed.
- 4. All spaces too small for batt or blown insulation shall be filled with foam and or caulk.

DIVISION 8 - DOORS AND WINDOWS

DOORS

- 1. See Window and Door Schedules.
- 2. Any door separating the garage area from any living area shall be a solid core 1 3/4" or thicker, or rated 20 minutes. See Window and Door Schedules and plans for door locations.

WINDOWS

- 1. Wood windows to be Jeldwen Windows or approved equal, and to be of sizes as indicated on the Window Schedule. Install windows per manufacturer's instructions and recommendations. All windows to fit properly and tight, with all edges of frame packed with fiberglass or foam insulations, and all edges caulked.
- 2. All windows to be double-glazed with insulation glass (U value of 0.32 or less). Provide windows with all necessary hardware and screens. Bid all windows with low E glass, High Altitude, and simulated divided lights, color to be determined by Owner/Builder.
- 3. Refer to Sheet 6.1 for Window and Door Schedules.

HARDWARE

- 1. All door hardware chosen and installed by Owner/Builder.

DIVISION 9 - FINISHES

SCOPE

Standards for this work will be manufacturer's standards and recommended procedures. All materials will be stored out of the weather and kept completely dry. Any damaged material will be rejected. Consult room finish schedule, the floor plans, and the Owner for each room's finish.

GYPSUM WALLBOARD

- 1. Regular gypsum wallboard shall be 5/8" thick. Long edges shall be tapered. All gypsum board is to be screwed, not nailed. Gypsum board is to be applied per manufacturer's specifications including proper temperature and ventilation for installation.
- 2. Fire-shield 5/8", long edges shall be tapered. Wallboard shall be delivered to job bundled and bearing identification as to the correct design number for these drawings and specifications.
- 3. Corner beads shall be galvanized steel. Casing beads and trim shall be galvanized steel.
- 4. Textures: Refer to Room Finish Schedule and Owners for wallboard finishes.

FLOORING

- 1. Provide all labor, material, equipment and supplies to perform the complete tile work as shown on drawings and described herein. This includes the tile and adhesive. Install all floor tile materials per manufacturer's specifications and instructions. Prepare surfaces of floors for tile installation by sanding joints smooth and cleaning floor of all debris and dust. All tile floors shall have adequate underlayment.
- 2. Clean adjacent surfaces stained by carpet installation.
- 3. All tile is to be installed in full compliance with recommendations presented in the latest edition of "The Handbook for Ceramic Tile Installation," published by the Tile Council of North America, Inc.
- 4. Wood floors selected by Owner/Builder.

PAINTING

- 1. Deliver all paint materials to the job site in original containers that identify the product manufacturer and quality. Store materials in a well ventilated room, and remove soiled rags and materials daily.
- 2. Inspect work done by others prior to start of painting work. Rectify any damage to surfaces such as scratches, abrasions, checks, burrs, dents, soil marks, etc. in a manner that will make the surface acceptable for field painting and finish. Replace any surfaces that are damaged beyond repair.
- 3. Skilled workmen will be required to provide a neat and even application of paint and stain work. Surface (interior and exterior) to be under adequate illumination, have adequate ventilation and satisfactory temperature to assure an even application and suitable drying conditions. Refer to manufacturer's specifications for application of each product. Protect surfaces adjacent to paint areas from damage due to spraying, dripping or spilling. Mask as necessary and use drop clothes as needed. Clean up all paint spots on other surfaces at the completion of the paint work. Wash metal surfaces with mineral spirits to remove oil, grease, or rust. Repair damage to painted surfaces caused by subsequent construction activity and restore to acceptable finish condition.
- 4. Back prime built-in millwork, trim, siding, etc. prior to installation at exterior locations. Remove fitting doors from frames for sealing and rehang when dry.
- 5. Sand wood surfaces smooth and remove any stains prior to the application of sealers or primers to the wood surfaces. On "painted" wood surfaces, fill holes, checks, and joints with wood spackle and sand smooth with adjacent surfaces. Sand painted surfaces between coats to assure good bond and eliminate buildup and blemishes. Apply wall and ceiling paints with a brush, roller or sprayer, two coats minimum. On "natural" wood surfaces, fill holes, checks, etc. with color matching putty after stain and seal application to the wood surface. Wipe wood stain application uniformly, sand lightly after first coat of varnish finish.

DIVISION 10 - SPECIALTIES

LOUVERS AND VENTS

- 1. Bath exhaust fan vents to be Nutone, Broan or equal.
- 2. All vents should be installed as fully operable, of material and type approved by the I.R.C. Prime and paint vents to match siding.
- 3. All roofs are to be cold surface type. It is critical that the Contractor insures adequate air space and venting to provide a functional cold roof system. See Division 7, Roofing, for specifications.
- 4. All plumbing vents are to be combined into minimum roof penetrations.
- 5. Any HVAC supplies to be wrapped w/R-8 insulation, returns wrapped w/R-6, unless completely inside insulated envelope. Seal all joints w/duct tape.

TOILET AND BATH ACCESSORIES

- 1. Provide all labor material, equipment and supplies required for the complete bath accessories portion of the work as shown on the drawings, and specified by the Owners, (towel bars, medicine cabinets, etc.).

DIVISION 11 - EQUIPMENT

Not applicable.

DIVISION 12 - FURNISHINGS

Not applicable.

DIVISION 13 - SPECIAL CONSTRUCTION

Not applicable.

DIVISION 14 - CONVEYING SYSTEMS

Not applicable.

DIVISION 15 - MECHANICAL

- 1. All Mechanical work is design-build, and specifications provided by selected mechanical contractor.
- 2. Any Mechanical piping capable of carrying water at a temperature above 105 degrees F shall be insulated with R-3 pipe insulation.
- 3. Heating system will be radiant in-floor heating.

DIVISION 16 - ELECTRICAL

- 1. All Electrical work is design-build, and specifications provided by electrical contractor.
- 2. Verify locations of all fixtures and outlets before work commences. All fixtures shall be chosen by the Owner/Builder.
- 3. All smoke detectors shall be line voltage interconnected, with battery backup. A smoke detector shall be located in each bedroom, the access to each bedroom (i.e. hallways) and on each floor, including the basement. See the latest I.R.C. for further requirements and special conditions.
- 4. It is the responsibility of the electrical, mechanical, and plumbing Contractors to adhere to all national and local codes.

INTERNATIONAL ENERGY CONSERVATION CODE COMPLIANCE (IECC) 2015 :

(Prescriptive Path Method to be used for IECC Compliance)

IECC CLIMATE ZONE: 7 SI Units 5000<HDD18°Cs7000 IP Units 9000<HDD65°Fs12600

Window U-Factor: .32 or less Ceiling R-Value: 49 Minimum Wood Frame R-Value: 20+5 or 13+10 Mass Wall R-Value: 19/21 Floor R-Value: 38 Basement Wall R-Value: 15/19 Slab R-Value: 10 (Frost Depth 4'-0") Crawl Space R-Value: 15/19

NOTES:

- 1. Structural Sheathing must be supplemented with insulating sheathing. Minimum R-Value: 2.
- 2. Supply and Return Ducts shall be insulated with R8 minimum.
- 3. Mechanical contractor shall install ducts and devices per IECC Section 403. See also Division 10 above.
- 4. HVAC contractor must submit head load calculations prior to permit.
- 5. Regarding project fenetration, refer to Sheet 6.1 for Window and Door Schedule.
- 6. All code requirements shall be met for Leakage, based on Air Leakage Section 402.4.
- 7. Regarding Moisture Control, a building wrap shall be applied between sheathing and wood siding. If any stone veneer covers framing, a double layer of black felt shall be applied with weep holes one course above finish grade and flashing/angle support at grade.
- 8. All mechanical and electrical shall be design-build and shall meet the minimum IECC requirements.
- 9. This project shall receive an in-floor radiant heating system. No air conditioning will be included. Electrical Contractor shall refer to the IECC for wattage and curcuit sizes for living areas.

- 10. Radiant piping utilized in slab-on-grade applications shall be provided with insulating materials installed beneath the piping having a minimum R-value of 5 as per IMC 1209.5.1 Slab-on-grade installation.

Axial Arts

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STAMP

HAYDEN GRANARY
SALT SHED FLATS
198 LINCOLN AVENUE, HAYDEN, COLORADO

ISSUED FOR:

No.	Date	Remarks
A	10/10/2019	PROGRESS SET
B	10/29/2019	OWNER REVIEW
C	11/14/2019	SALT SHED-OPT 2
D	06/03/2020	SALT SHED-OPT 3
E	08/24/2020	MAJOR SITE PLAN SUBMITTAL
F	09/18/2020	SUB-CONSULTANT SET
G	10/10/2020	SD REVIEW SET
--	10/19/2020	PERMIT CHECK SET
H	10/23/2020	BUILDING PERMIT APPLICATION

PROJECT NO: 1988

PHASE: CD

DRAWN BY: AxA

CHECKED BY: AxA

OUTLINE
SPECS

SHEET NAME

A0.1

SHEET NUMBER

[illegible]

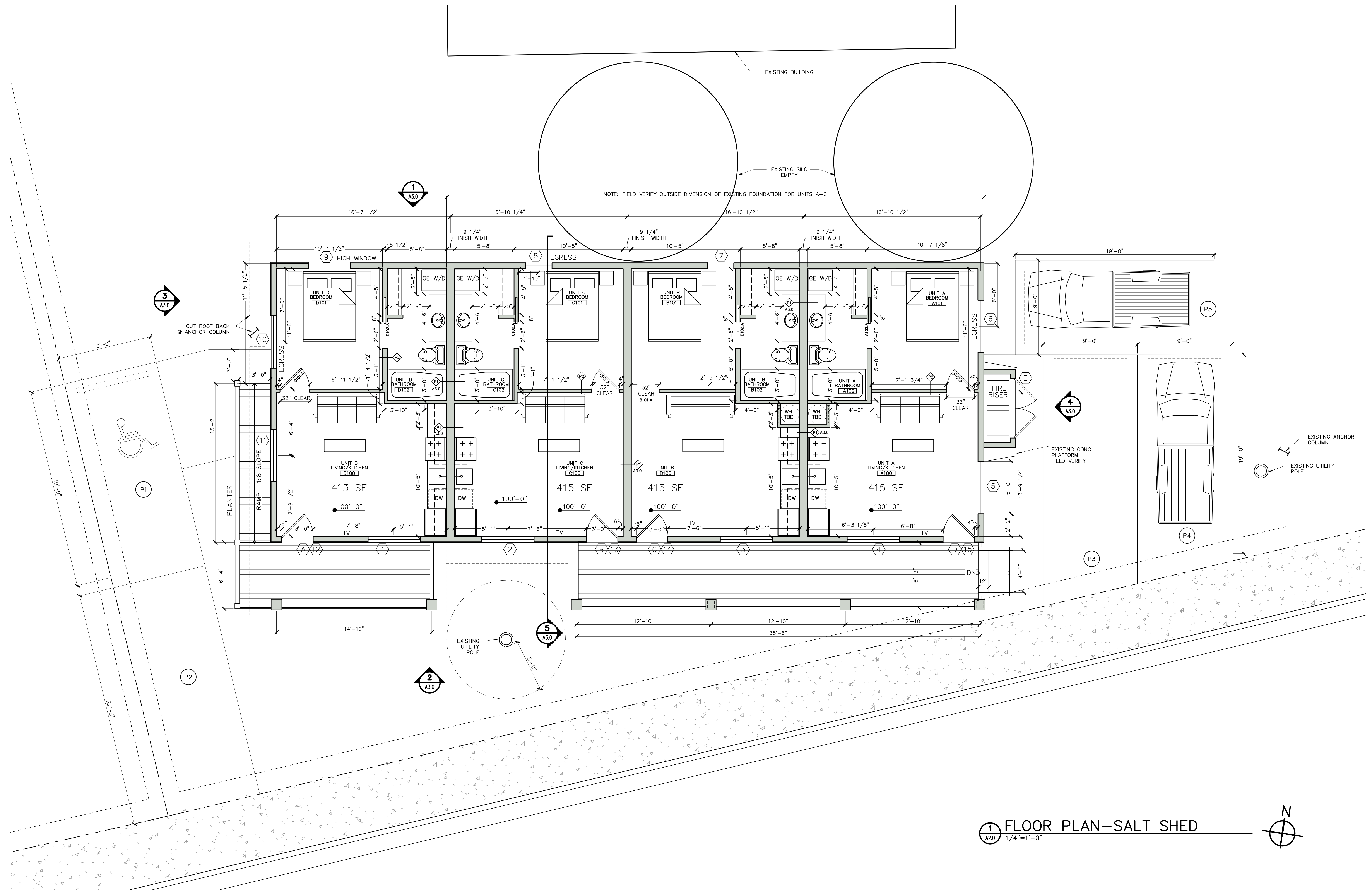
PROJECT NO: 1988
 PHASE: CD
 DRAWN BY: AxA
 CHECKED BY: AxA

SALT SHED FLOOR PLAN

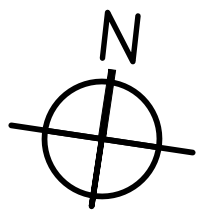
SHEET NAME

A2.0

SHEET NUMBER



1 FLOOR PLAN—SALT SHED
A2.0 1/4"=1'-0"



STAMP

HAYDEN GRANARY
SALT SHED FLATS
198 LINCOLN AVENUE, HAYDEN, COLORADO

ISSUED FOR:

No.	Date	Remarks
A	10/10/2019	PROGRESS SET
B	10/28/2019	OWNER REVIEW
C	11/14/2019	SALT SHED-OPT 2
D	06/03/2020	SALT SHED-OPT 3
E	08/24/2020	MAJOR SITE PLAN SUBMITTAL
F	09/18/2020	SUB-CONSULTANT SET
G	10/10/2020	SD REVIEW SET
--	10/19/2020	PERMIT CHECK SET
H	10/23/2020	BUILDING PERMIT APPLICATION

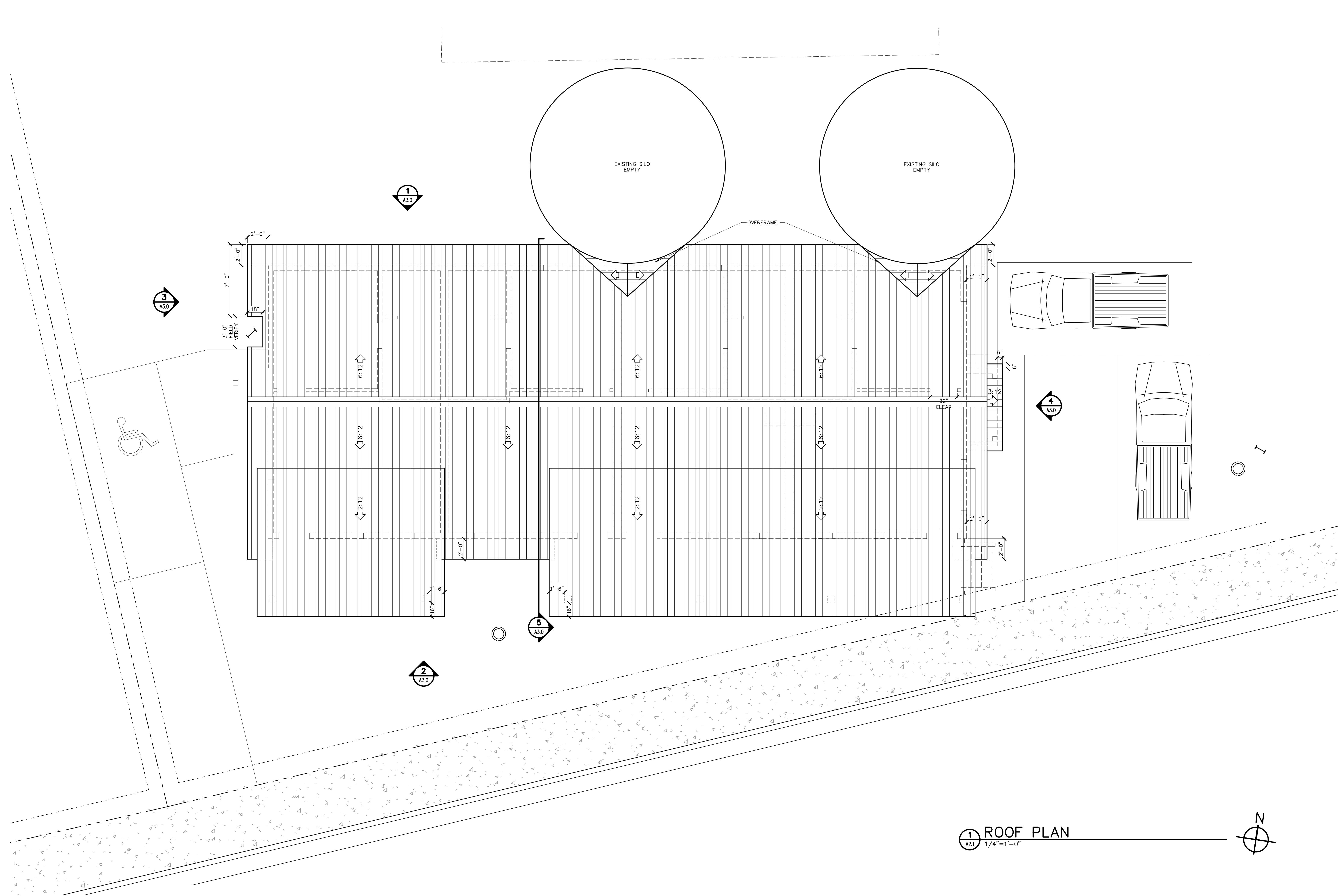
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PHASE: CD
DRAWN BY: AxA
CHECKED BY: AxA

SALT SHED
ROOF PLAN

SHEET NAME

A2.1

SHEET NUMBER



STAMP

HAYDEN GRANARY
SALT SHED FLATS
198 LINCOLN AVENUE, HAYDEN, COLORADO

ISSUED FOR:

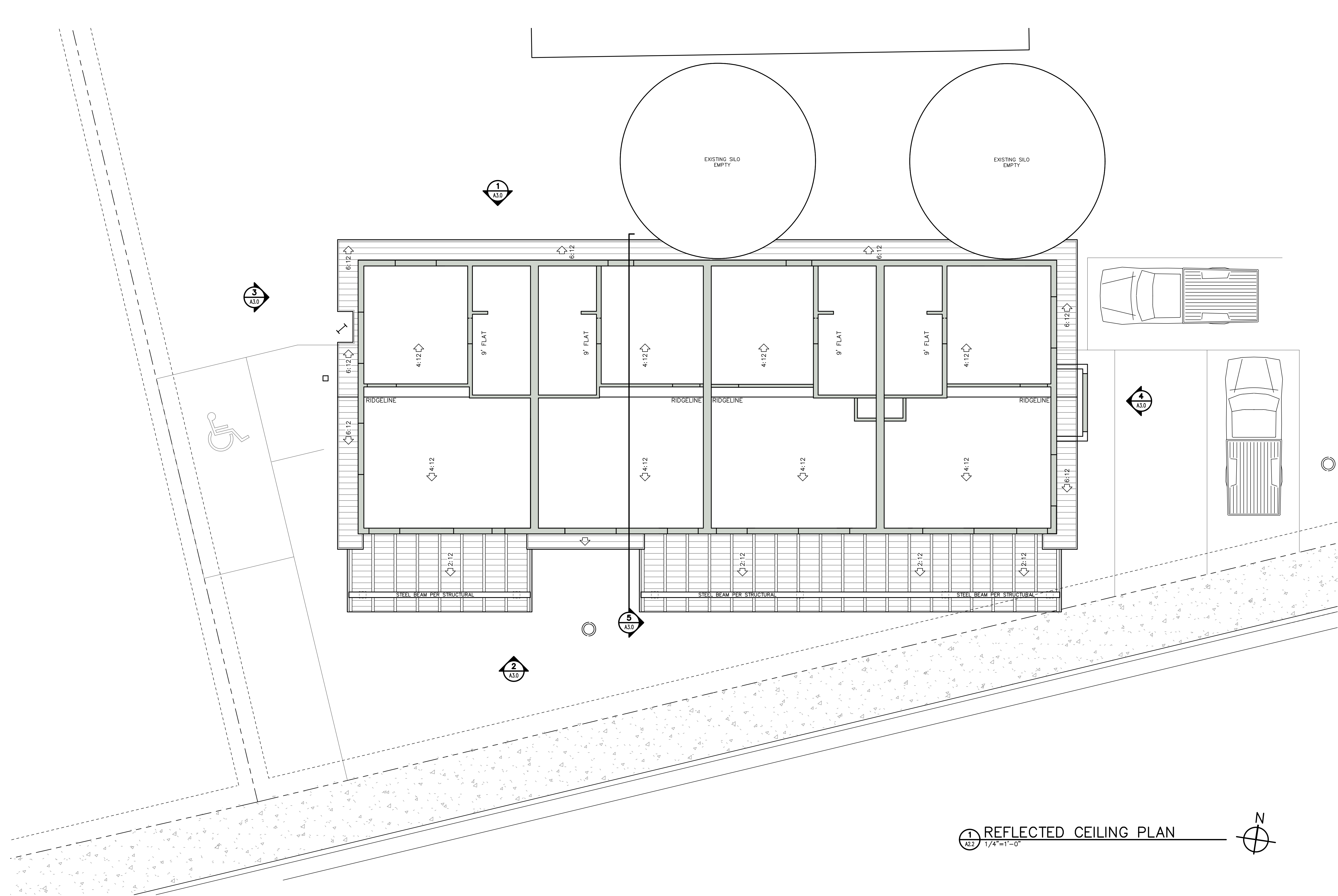
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A	10/10/2019	PROGRESS SET
B	10/28/2019	OWNER REVIEW
C	11/14/2019	SALT SHED-OPT 2
D	06/03/2020	SALT SHED-OPT 3
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G	10/10/2020	SD REVIEW SET
--	10/19/2020	PERMIT CHECK SET
H	10/23/2020	BUILDING PERMIT APPLICATION

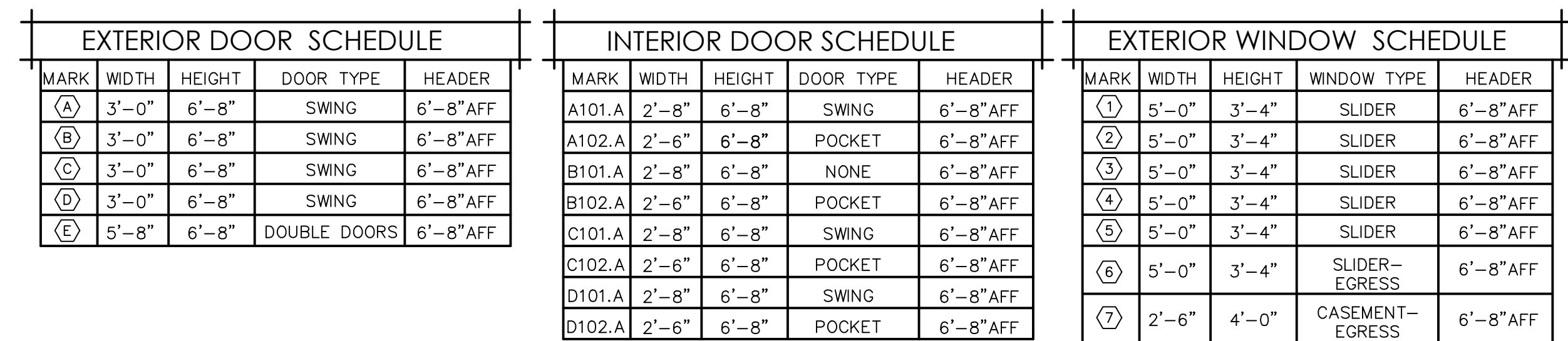
PROJECT NO: 1988
PHASE: CD
DRAWN BY: AxA
CHECKED BY: AxA

SALT SHED
REFLECTED
CEILING PLAN
SHEET NAME

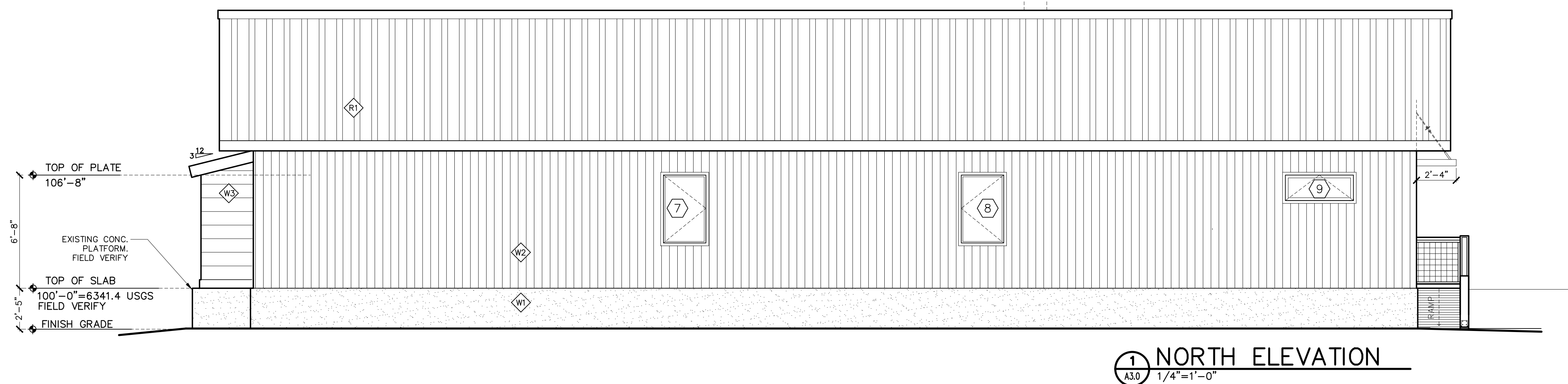
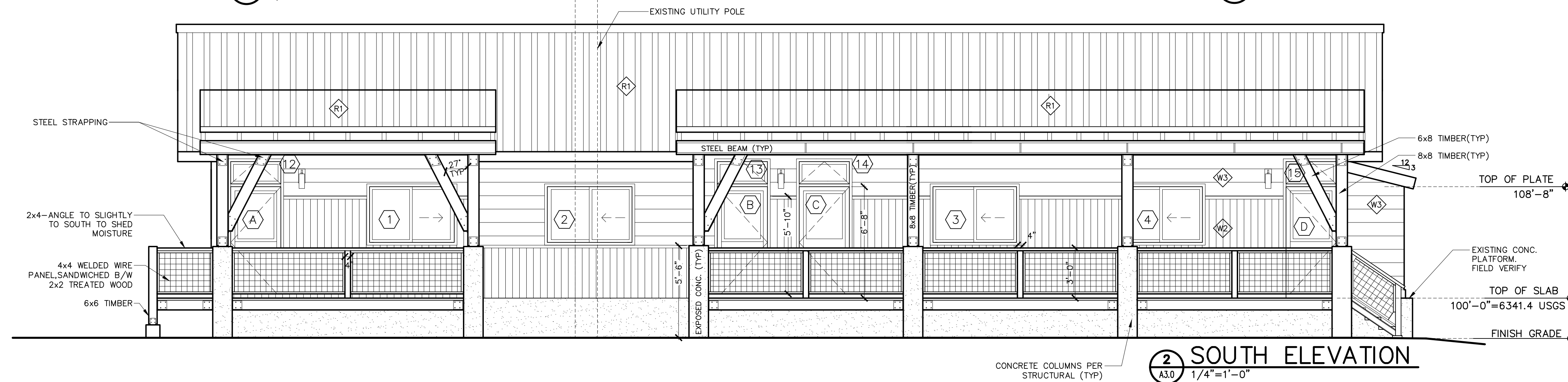
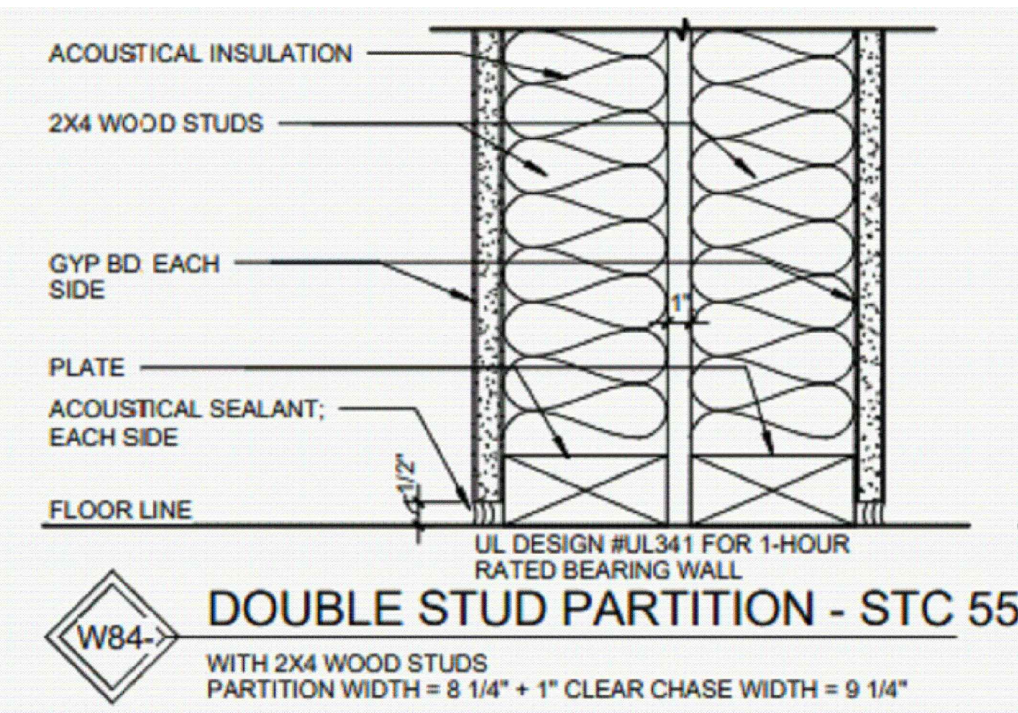
A2.2

SHEET NUMBER





W1	CORRUGATED GALVANIZED SIDING PANELS
W2	CONCRETE FOUNDATION—EXISTING
W3	WOOD SIDING
R1	CORRUGATED GALVANIZED ROOF PANELS



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STAMP

HAYDEN GRANARY

SALT SHED FLATS

138 LINCOLN AVENUE, HAYDEN, COLORADO

ISSUED FOR:

No.	Date	Remarks
A	10/10/2019	PROGRESS SET
B	10/29/2019	OWNER REVIEW
C	11/14/2019	SALT SHED-OPT 2
D	06/03/2020	SALT SHED-OPT 3
E	08/24/2020	MAJOR SITE PLAN SUBMITTAL
F	09/18/2020	SUB-CONSULTANT SET
G	10/10/2020	SD REVIEW SET
--	10/19/2020	PERMIT CHECK SET
H	10/23/2020	BUILDING PERMIT APPLICATION

PROJECT NO: 1988

PHASE: *CD*

DRAWN BY: AxA

CHECKED BY: **AxA**

SALT SHED FLATS

SHEET NAME

A3.0

SHEET NUMBER



HAYDEN GRANARY

SALT SHED FLATS

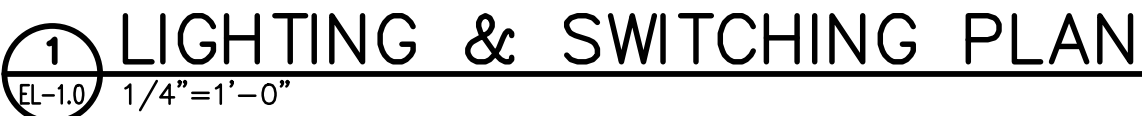
198 LINCOLN AVENUE, HAYDEN, COLORADO

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SALT SHED LIGHTING & SWITCHING

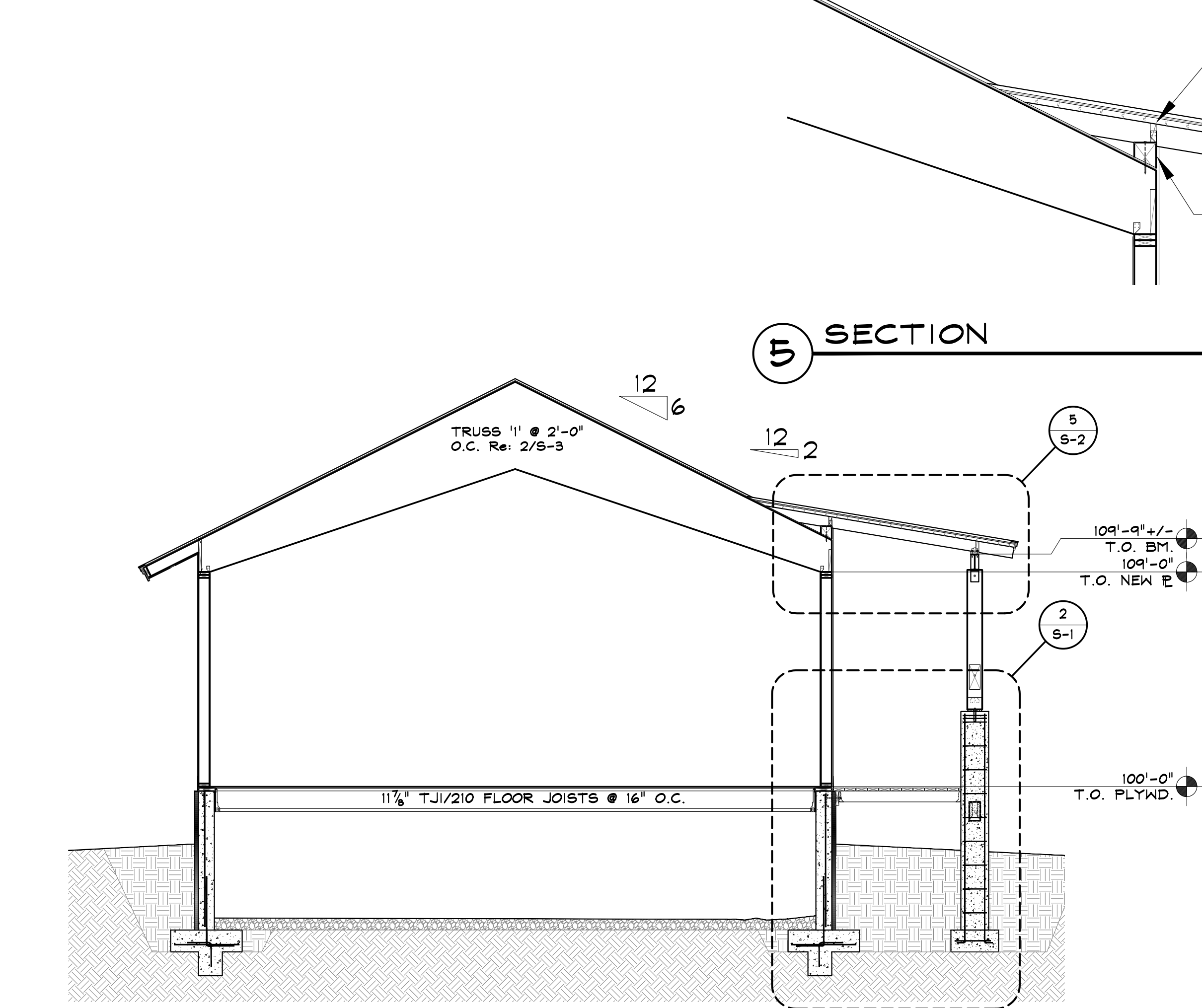
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SHEET NUMBER



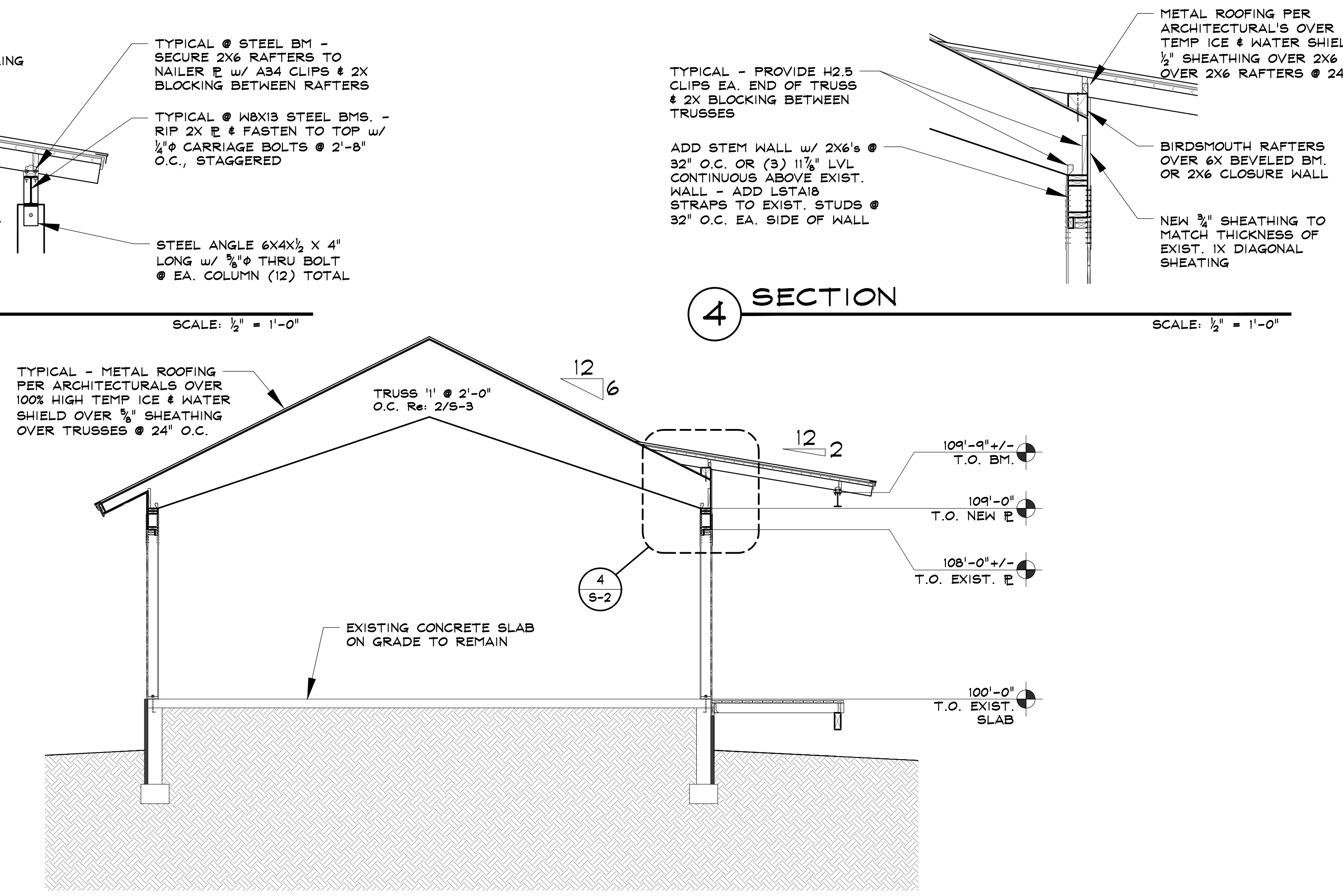
LIGHTING FIXTURE SCHEDULE

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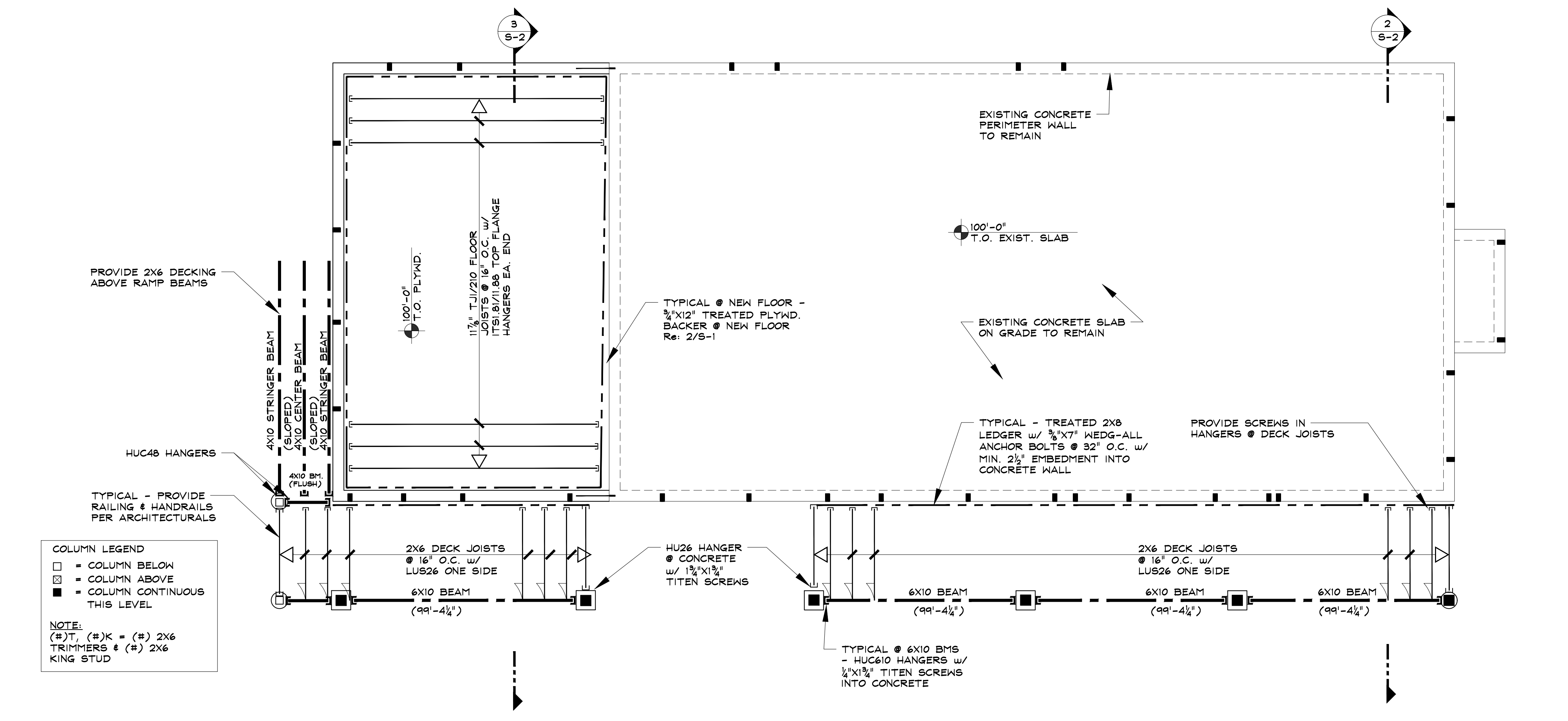
3 NEW BUILDING SECTION

SCALE: $\frac{1}{4}'' = 1'-0''$



2 EXISTING BUILDING SECTION

SCALE: $\frac{1}{4}'' = 1'-0''$



1 DECK & FLOOR FRAMING PLAN

SCALE: $\frac{1}{4}'' = 1'-0''$

TYPICAL - 3/4" APA RATED EXPOSURE 1 T&G STURD-I-FLOOR SHEATHING

TYPICAL - ELEVATION @ TOP OF BEAM INDICATED THUS: (ELEV.)

TYPICAL - COLUMNS THAT BEGIN THIS LEVEL ARE INDICATED ON PLAN



SEAD

Steamboat Engineering And Design, Inc.

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E-mail: Jake@seadinc.com

HAYDEN GRANARY SALT SHED FLATS

LINCOLN AVENUE

HAYDEN, COLORADO

A RENOVATION INTO 3 RESIDENTIAL UNITS

ISSUE DATES

PROGRESS SET

10.02.20

PERMIT SET

10.22.20

DRAWN BY: CWM

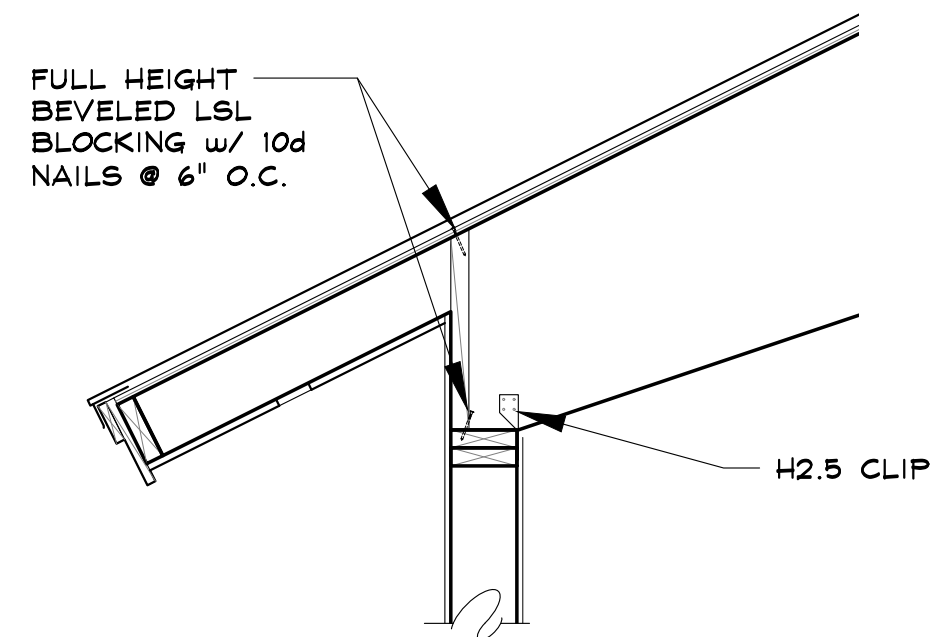
REVIEWED BY: JEM

PROJECT # 20111

DECK & FLOOR FRAMING PLAN & BUILDING SECTIONS

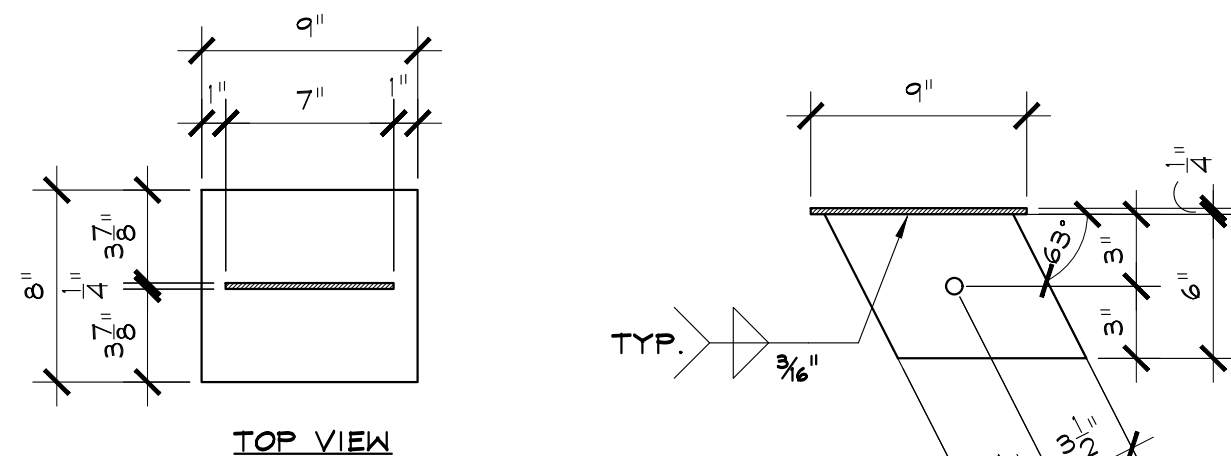
S-2

SHEET 2 of 3



3 TRUSS w/ DIAPHRAGM BLOCKING

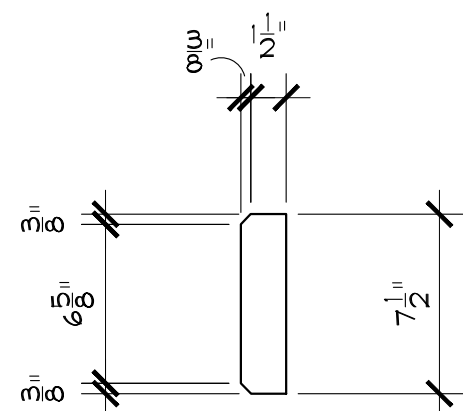
SCALE: $\frac{3}{4}" = 1'-0"$



6 CUSTOM KNIFE PLATE

$\frac{1}{4}"$ STEEL P
 $\frac{1}{8}"$ ϕ HOLE FOR $\frac{3}{8}"$ ϕ BOLT
(4) TOTAL

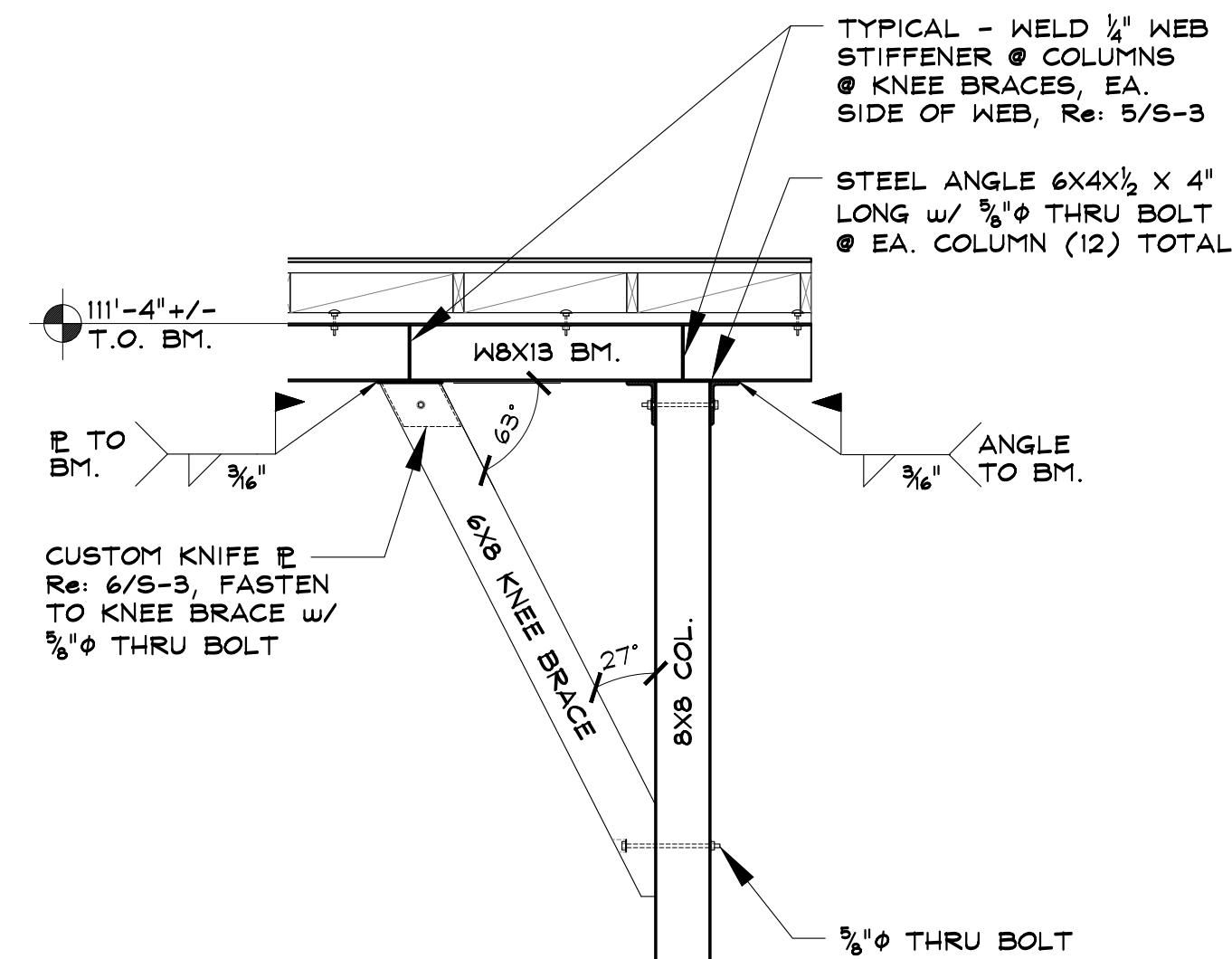
SCALE: $1\frac{1}{2}" = 1'-0"$



5 WEB STIFFENER

TYPICAL - $\frac{1}{4}"$ STEEL P
(20) TOTAL
TYPICAL @ 28X13 BEAMS EA. SIDE OF WEB @ BEARING

SCALE: $1\frac{1}{2}" = 1'-0"$



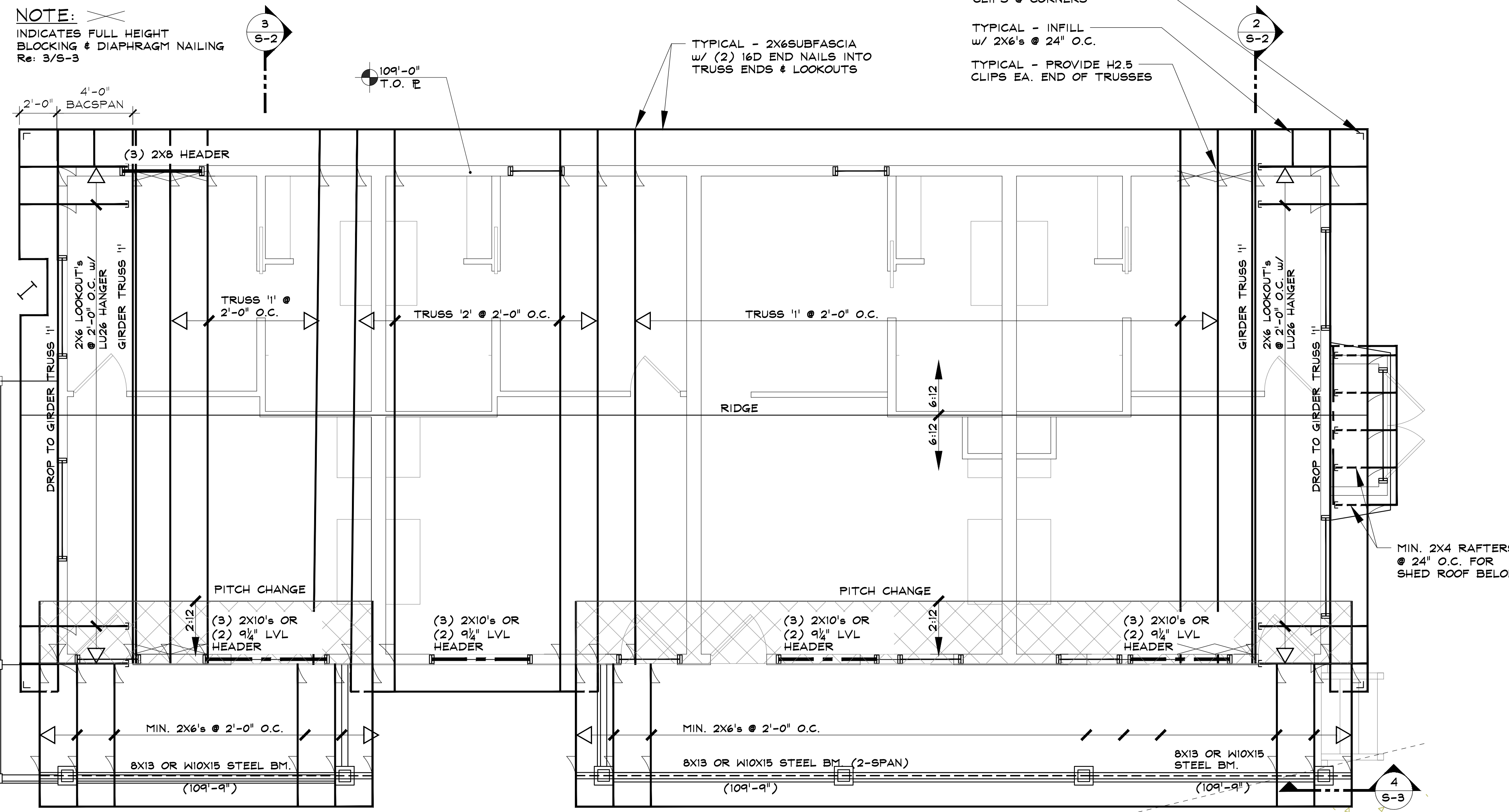
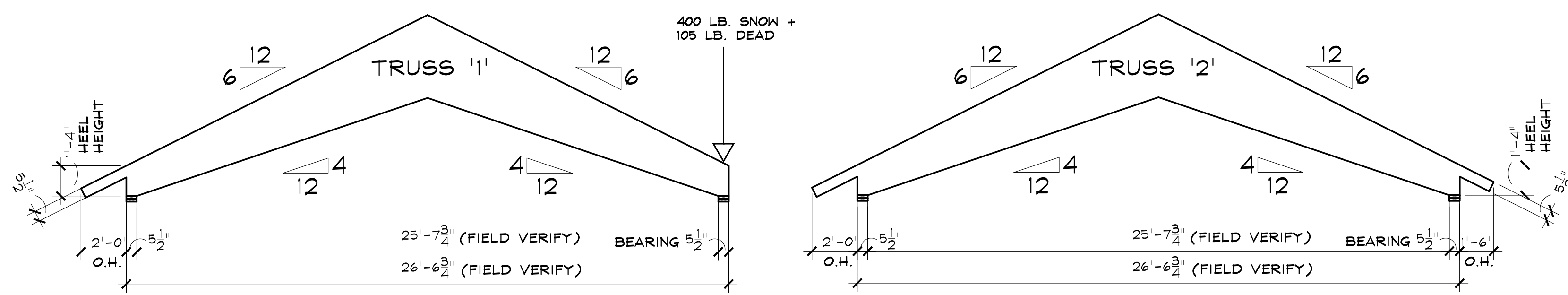
4 KNEE BRACE SECTION

SCALE: $\frac{1}{2}" = 1'-0"$

2 MANUFACTURED TRUSS SCHEMATICS

TYPICAL - 20 PSF DEAD LOAD & 55 PSF SNOW LOAD
TYPICAL - 3FT TRIBUTARY WIDTH @ GIRDER TRUSSES

SCALE: $\frac{1}{4}" = 1'-0"$



1 ROOF FRAMING PLAN

TYPICAL - $\frac{5}{8}"$ APA RATED EXPOSURE 1 40/20 SHEATHING
TYPICAL - ELEVATION @ TOP OF BEAMS INDICATED THUS: (ELEV.)
TYPICAL HEADER THIS PLAN - (2) 2X8's, w/ (1) TRIMMER & (1) KING STUD EA. END, U.N.O.
Re:2/S-3 FOR MANUFACTURED TRUSS SCHEMATICS

SCALE: $\frac{1}{4}" = 1'-0"$



HAYDEN GRANARY SALT SHED FLATS
LINCOLN AVENUE
HAYDEN, COLORADO
A RENOVATION INTO 3 RESIDENTIAL UNITS

ISSUE DATES	
PROGRESS SET	10 . 02 . 20
PERMIT SET	10 . 22 . 20

DRAWN BY: CWM
REVIEWED BY: JEM
PROJECT # 20111
ROOF FRAMING
PLAN &
SECTIONS

S-3
SHEET 3 of 3

DESIGN CONDITIONS		
WINTER DESIGN TEMPERATURES:	INDOOR:	70°F DB
	OUTDOOR:	-20°F DB
SUMMER DESIGN TEMPERATURES:	INDOOR:	72°F DB
	OUTDOOR:	90°F DB
ELEVATION		6,350 FEET
WALL R-VALUE (AVG)	ABOVE GRADE: 21 (CAV)	
ROOF R-VALUE (AVG)	49 (CAV)	
GLASS U-VALUE (AVG)	0.35	
GLASS SHADING COEFFICIENT (AVG)	0.4	
ELECTRICAL POWER AVAILABLE	120/1, 240/1	

SHEET INDEX	
SHEET	DESCRIPTION
M0.0	MECHANICAL COVER SHEET
M1.0	MECHANICAL SCHEDULES
M2.0	MECHANICAL PLAN
P2.0	BELOW SLAB PLUMBING PLAN
P2.1	MAIN LEVEL PLUMBING PLAN
M3.0	MECHANICAL SCHEMATICS
M4.0	MECHANICAL SPECIFICATIONS AND SEQUENCE OF OPERATION

DUCTWORK LEGEND		
SINGLE LINE	DESCRIPTION	DOUBLE LINE
	90° ELBOW DOWN	
	90° ELBOW UP	
	OFFSET TO CHANGE ELEVATION (AT 30° WHEN POSSIBLE, ARROW SLOPES DN.)	
	ROUND RADIUS ELBOW	
	90° STRAIGHT TEE	
	90° CONICAL TEE	
	45° BRANCH	
	45° CONICAL TEE	
	SIZE OR SHAPE TRANSITION	
	ROUND FLEXIBLE DUCT	
	90° ELBOW DOWN	
	90° ELBOW UP	
	OFFSET TO CHANGE ELEVATION (AT 30° WHERE POSSIBLE). ARROW IN DIRECTION OF AIRFLOW. INDICATE DROP OR RISE.	
	ROUND RADIUS ELBOW	
	RECTANGULAR ELBOW WITH TURNING VANES	
	SPLIT BRANCH TAKE-OFF WITH SQUARE ELBOW & SPLITTER DAMPER	
	SPLIT BRANCH TAKE-OFF WITH RADIUS ELBOW & SPLITTER DAMPER	
	BRANCH TAKE-OFF WITH RADIUS HEEL AND DAMPER	
	BRANCH TAKE-OFF WITH AIR EXTRACTOR	
	LINED DUCTWORK (UNLESS NOTED OTHERWISE)	
	SQUARE NECK CEILING DIFFUSER UNLESS INDICATED OTHERWISE	
	ROUND NECK CEILING DIFFUSER 4-WAY DIRECTIONAL THRU UNLESS INDICATED OTHERWISE	
	SIDEWALL SUPPLY GRILLE OR REGISTER WITH AIR EXTRACTOR	
	STATIC PRESSURE CLASS OR STATIC PRESSURE CLASS CHANGE (INCHES WATER COLUMN)	
	SUPPLY DUCT RISER	
	RETURN, EXHAUST OR OUTSIDE AIR DUCT RISER	
	CEILING RETURN AIR GRILLE OR REGISTER	
	DOOR GRILLE	
	MANUAL BALANCING DAMPER	
	MOTORIZED DAMPER	
	SMOKE DAMPER	
	FIRE DAMPER	
	COMBINATION FIRE AND SMOKE DAMPER	
	CEILING RADIATION DAMPER	
	GRAVITY BACKDRAFT DAMPER	
	DUCT MOUNTED SMOKE DETECTOR	
	CEILING ACCESS PANEL	
	WALL CAP - BATH OR DRYER EXHAUST WITH INTEGRAL BACKDRAFT DAMPER	

PIPING LEGEND	
	GATE VALVE
	CHECK VALVE
	BALL VALVE
	BUTTERFLY VALVE
	PLUG VALVE
	CIRCUIT SETTER WITH GPM
	GLOBE VALVE
	STRAINER (Y-TYPE) WITH BLOW-DOWN
	TWO-WAY AUTOMATIC CONTROL VALVE
	THREE-WAY AUTOMATIC DIVERTING VALVE
	SOLENOID VALVE
	PRESSURE REGULATOR (OR REDUCING VALVE)
	TWO-WAY MODULATING CONTROL VALVE
	THREE-WAY MODULATING MIXING VALVE
	THERMOSTATIC MIXING VALVE (TMV)
	DIFFERENTIAL PRESSURE VALVE
	PRESSURE RELIEF VALVE
	MANUAL AIR VENT
	AUTOMATIC AIR VENT
	VACUUM BREAKER
	PRESSURE GAUGE WITH GAUGE COCK
	PRESSURE SENSOR
	PRESSURE / TEMPERATURE TEST PORT
	TEMPERATURE SENSOR
	THERMOMETER WELL
	THERMOMETER
	BTU METER (FLOW & TEMPERATURE DIFFERENCE)
	FLOW METER
	FLOW SWITCH
	AQUASTAT
	BRAIDED TYPE FLEXIBLE PIPE CONNECTOR
	ELASTOMERIC PIPING ISOLATOR (WITH KEVLAR)
	PIPE UNION
	QUICK CONNECT (GAS) OR HOSE BIB (WATER)
	RADIANT OR SNOWMELT MANIFOLD WITH ACCESS
	PIPE UP OR PIPE UP & DOWN
	PIPE DOWN
	FLOOR DRAIN
	FLOOR SINK
	HORIZONTAL CLEANOUT
	FLOOR CLEAN-OUT
	METER
PIPING DESIGNATIONS	
CWS/R	CHILLED WATER SUPPLY/RETURN
CS/R	CONDENSER WATER SUPPLY/RETURN
HWS/R	HEATING WATER SUPPLY/RETURN
HWS/R/HT	HEATING WATER SUPPLY/RETURN HIGH TEMP
HWS/R/LT	HEATING WATER SUPPLY/RETURN LOW TEMP
SS/R	SNOWMELT SUPPLY/RETURN
RS & RL	REFRIGERANT SUCTION & REF. LIQUID
DCW	DOMESTIC COLD WATER (DCW)
DHW	DOMESTIC HOT WATER (DHW)
DHR	DOMESTIC HOT WATER RECIRC. (DHR)
DHW-T	DOMESTIC HOT WATER (TEMPERED)
W	WASTE
V	VENT
GW	GREASE WASTE
FUW	PRESSURIZED WASTE
IW	INDIRECT WASTE
BD	BUILDING DRAIN
BS	BUILDING SEWER
SD	STORM DRAIN
OD	OVERFLOW DRAIN (STORM)
SOD	SEDIMENT & OIL DRAIN
G	NATURAL GAS
MFG	MEDIUM PRESSURE NATURAL GAS
LPG	PROPANE GAS
D	DRAIN
CD	CONDENSATE DRAIN
F	FIRE SPRINKLER
CA	COMPRESSED AIR
GEO	GEOEXCHANGE SOURCE
SWS/R	SOLAR WATER SUPPLY/RETURN
E	EXISTING
(UG)	UNDERGROUND
PUMP SYMBOLS	
	INLINE WET ROTOR PUMP
	INLINE WET ROTOR PUMP (W/ INTEGRAL CHECK)
	INLINE CLOSE-COUPLED PUMP
	BASE MOUNTED END SUCTION PUMP

GENERAL LEGEND	
	CARBON MONOXIDE SENSOR
	CARBON DIOXIDE SENSOR
	HUMIDISTAT
	DEHUMIDISTAT
	NITROGEN DIOXIDE SENSOR
	OCCUPANT SENSOR (RE: ELECTRICAL)
	ERV PUSH BUTTON CONTROLLER (LIGHTED)
	ERV PERCENT TIMER CONTROLLER (LIGHTED)
	SENSOR
	SNOWMELT SENSOR (TEKMAR 091/094)
	STATIC PRESSURE SENSOR
	THERMOSTAT
	WALL ON/OFF CONTROL SWITCH
	WALL TIMER SWITCH
	VARIABLE SPEED CONTROL
AIR DEVICE DESIGNATION KEY:	
SIZE (INCHES) NOTE: FOR STANDARD MODULE SIZE REGISTERS, SIZE GIVEN IS NECK SIZE. REFER TO AIR DEVICE SCHEDULE SHEET FOR MODULE SIZE. 12/6 CD-1 250 * - AIR QUANTITY (CFM) CA - COMB. AIR OA - OUTSIDE AIR RA - RETURN AIR EA - EXHAUST AIR MA - MIXED AIR MUA - MAKE-UP AIR TYPE OF AIR DEVICE. RE: SCHEDULE SHEET	
RISER DESIGNATION KEY:	
DUCTING: OA - OUTSIDE AIR EA - EXHAUST AIR GENERAL: US - UTILITY SHAFT PIPING: CW - CHILLED WATER DW - DOMESTIC WATER HW - HEATING WATER G - GAS R - REFRIGERANT SD - STORM DRAIN SM - SNOWMELT OD - OVERFLOW DRAIN WV - WASTE & VENT RISER NUMBER	
AIR TERMINAL UNIT DESIGNATION KEY:	
TERMINAL TYPE: CV - CONSTANT VOLUME BOX (SERIES) FF - FAN POWERED BOX (PARALLEL) VV - VARIABLE VOLUME VR - VARIABLE VOLUME w/ REHEAT COOLING AIR QUANTITY (CFM) MINIMUM AIR QUANTITY (CFM) FOR VENTILATION OR HEATING. PRIMARY AIR VALVE SIZE	

REMODEL LEGEND	
	POINT OF DISCONNECTION
	POINT OF NEW CONNECTION
(A)	ABANDON
(D)	DEMO
(E)	EXISTING
(F)	FUTURE
(N)	NEW
(R)	RELOCATE

PLAN ABBREVIATIONS	
AAV	AIR ADMITTANCE VALVE (STUDOR OR EQUAL)
AFF	ABOVE FINISHED FLOOR
ABV	ABOVE
BLW	BELOW
CFM	CUBIC FEET PER MINUTE (AIR QUANTITY)
CLG	CEILING
CO	CLEANOUT
CONC	CONCRETE
COTG	CLEAN-OUT TO GRADE
DN	DOWN
DMPR	DAMPER
EA	EXHAUST AIR
EC	ELECTRICAL CONTRACTOR
ER / EG	EXHAUST REGISTER / EXHAUST GRILLE
ETR	EXISTING TO REMAIN
EXH	EXHAUST
FCO	FLOOR CLEAN-OUT
FD	FIRE DAMPER OR FLOOR DRAIN
FFC	FIRE PROTECTION CONTRACTOR
GPM	GALLONS PER MINUTE (WATER FLOW RATE)
LD	SUPPLY DIFFUSER (LINEAR)
MC	MECHANICAL CONTRACTOR
MOD	MOTOR OPERATED DAMPER
OA/ OSA	OUTSIDE AIR
QED	OPEN END DUCT
PC	PLUMBING CONTRACTOR
FR	PIPE RISER
RA	RETURN AIR
RR	RETURN REGISTER
RG	RETURN AIR GRILLE
SA	SUPPLY AIR
S. DMPR	SMOKE DAMPER
SR	SUPPLY REGISTER (SIDEWALL OR DUCT MOUNTED)
SV	STUDOR VENT (SIZED BY CONTRACTOR)
TYP	TYPICAL
TRANS	TRANSITION
TA	TRANSFER AIR
UNO	UNLESS NOTED OTHERWISE
US	UTILITY SHAFT
VTR	VENT THROUGH ROOF
W	WITH
WCO	WALL CLEAN-OUT
XFER	TRANSFER
EQUIPMENT ABBREVIATIONS	
AHU	AIR HANDLING UNIT
AS	AIR SEPARATOR
B	BOILER (HOT WATER)
CH	CHILLER
CC	COILING COIL
CH	CABINET HEATER
CT	COOLING TOWER CELL
CV	CONSTANT VOLUME BOX
DEF	DISHWASHER EXHAUST FAN
EBH	ELECTRIC BASEBOARD HEATER
ECU	EVAPORATIVE COOLING UNIT
EF	EXHAUST FAN
ERV	ENERGY RECOVERY VENTILATOR (AIR TO AIR HX)
ET	EXPANSION TANK
FC	FAN COIL
FP	FAN POWERED BOX
GF	GLYCOL FEEDER
HC	HEATING COIL
HP	HEAT PUMP
HX	HEAT EXCHANGER
H	HUMIDIFIER
KEF	KITCHEN EXHAUST FAN
MY	MIXING VALVE
P	PUMP (SEE PIPING LEGEND FOR DETAILS)
RF	RETURN/RELIEF AIR FAN
SF	SUPPLY FAN
TEF	TOILET EXHAUST FAN
TMV	THERMOSTATIC MIXING VALVE
UH	UNIT HEATER
VV	VARIABLE VOLUME BOX
VR	VARIABLE VOLUME BOX W/ REHEAT
WH	WATER HEATER

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PROFESSIONAL ENGINEER
30290
10/23/20

**HAYDEN GRANARY
SALT SHED FLATS**
LINCOLN AVENUE
HAYDEN, COLORADO

Issued For

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MECHANICAL
COVER SHEET

NORTH

Project No. 20036.00	Scale: 1/4" = 1'-0"
Drawn By: CGC	Checked By: JDR

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ELECTRIC COVE HEATERS					
SYM.	DESCRIPTION	CAPACITY	ELECTRIC	MANUF. & MODEL	REMARKS
ECH-1	ELECTRIC COVE HEATER	1536 BTU/HR	120/1, 450 W	TPI CV4512X 3.5' LENGTH	WALL MOUNT THERMOSTAT
ECH-2	ELECTRIC COVE HEATER	2560 BTU/HR	120/1, 750 W	TPI CV7512X 6' LENGTH	WALL MOUNT THERMOSTAT
ECH-3	ELECTRIC COVE HEATER	3072 BTU/HR	120/1, 900 W	TPI CV9012X 7' LENGTH	WALL MOUNT THERMOSTAT
ECH-4	ELECTRIC COVE HEATER	3754 BTU/HR	120/1, 1100 W	TPI CV11012X 9' LENGTH	WALL MOUNT THERMOSTAT

ELECTRIC BASEBOARD SCHEDULE					
SYM.	DESCRIPTION	CAPACITY	ELECTRIC	MANUF. & MODEL	REMARKS
EBB-1	ELECTRIC BASEBOARD	4266 BTU/HR	120/1, 1250 W, 10.4 A	FAHRENHEAT F15BU 5' LENGTH	BUILT IN THERMOSTAT T42AW

EQUALS: BERKO, MARLEY, OUELLET.

FANS & ERV'S											
SYM.	DESCRIPTION	FAN					MANUFACTURER & MODEL NO.	DAMPER	SUPPORT	DUCT CONV.	CONTROL
		CFM	SP @ SL	W/A/HP	VOLT	SONES					
EF-1	BATH EXHAUST	53	0.25"	7.2 W	115/1	0.4	PANASONIC FV-0511VQ1	A	1	A	1
EF-2	KITCHEN EXHAUST	111	0.25"	16.4 W	115/1	0.9	PANASONIC FV-0511VQ1	A	1	A	1
DAMPER: A. INTEGRAL GRAVITY BACKDRAFT DAMPER B. EXTERNAL GRAVITY BACKDRAFT DAMPER INSTALLED AT FAN DISCHARGE C. MOTORIZED DAMPER D. NONE		SUPPORT: 1. RIGID SUPPORT 2. HANG UNIT WITH NEOPRENE ISOLATORS 3. HANG UNIT WITH SPRING VIBRATION ISOLATORS 4. SUPPORT FROM FLOOR WITH METAL STAND AND SPRING VIBRATION ISOLATORS		DUCT CONNECTION: A. RIGID B. FLEX DUCT C. FLEXIBLE CANVAS DUCT CONNECTORS D. FANTECH FC CLAMPS			CONTROL: 1. RE: SEQUENCE				

EQUALS: BROAN, NUTONE, PANASONIC.

ELECTRIC WATER HEATERS					
SYM.	DESCRIPTION	CAPACITY	ELECTRIC	MANUF. & MODEL	REMARKS
EUH-1	ELECTRIC WATER HEATER	43 GALLONS	4.5 KW, 240/1	RHEEM XE41S06ST45U1	
EUH-2	ELECTRIC WATER HEATER	45 GALLONS	4.5 KW, 240/1	RHEEM XE50T06ST45U1	

EQUALS: BRADFORD WHITE, RHEEM, STATE, A.O. SMITH

PLUMBING FIXTURE CONNECTION SCHEDULE							
SYM/ ABBREV.	FIXTURE	WASTE (W)	TRAP	VENT (V)	DOMESTIC COLD WATER (DCW)	DOMESTIC HOT WATER (DHW)	NOTES
CWR1	CLOTHES WASHER ROUGH-IN	2"	2"	1-1/2"	1/2"	1/2"	CONNECT WASTE TO MINIMUM 3"ø BRANCH DRAIN OR STACK
FS-1	FLOOR SINK	2"	2"	1-1/2"	--	--	RE: M3.0/E
FD-1	FLOOR DRAIN	2"	2"	1-1/2"	--	--	RE: M3.0/G
HB-1	HOSE BIB	--	--	--	1/2"	--	
KS	KITCHEN SINK W/ DW & DISPOSER	1-1/2"	1-1/2"	1-1/2"	1/2"	1/2"	
LAV	LAVATORY	1-1/2"	1-1/4"	1-1/2"	1/2"	1/2"	
SH	SHOWER/ TUB	2"	2"	1-1/2"	1/2"	1/2"	
WC	WATER CLOSET (FLUSH TANK)	3"	INT.	2"	1/2"	--	

NOTE: INSTALL MINIMUM 3/4" DHW, 3/4" DCW, & 1/2" DHW WATER PIPING TO EACH BATHROOM GROUP.

PLUMBING EQUIPMENT				
SYM.	DESCRIPTION	CAPACITY	MANUF. & MODEL	REMARKS
BFP-1	BACKFLOW PREVENTER	233 GPM 5 PSI DROP 1"	WATTS LF00TMIQT-S (1")	REDUCED PRESSURE ZONE ASSEMBLY, INCLUDE TWO QUARTER TURN SHUT-OFF BALL VALVES, INCLUDE AIR GAP DEVICE
WM-1	WATER METER	233 GPM 4 PSI DROP 3/4"	SENSUS IFERL	
CO-1	CLEAN OUT (WALL)	88 SHALLOW COVER, 88 CENTER SCREW	ZURN CO-2530-88X	SEE PLANS FOR PIPE SIZE
COTG-1	CLEAN OUT (GRADE, 2-WAY)	GALVANIZED CAST IRON, VANDAL PROOF TOP, DOUBLE FLANGED HOUSING	ZURN Z-1400-HD-K	SEE PLANS FOR PIPE SIZE, CONTRACTOR TO INSTALL REQUIRED PIPING FOR TWO-WAY COTG
FS-1	FLOOR SINK	12" SQUARE, 6" DEEP, ANCHOR FLANGE, STABILIZER ASSEMBLY	ZURN ZN1900-NH-K-SA-2-11	SEE PLANS FOR PIPE SIZE, 1/2 GRATE, VANDAL PROOF, INSTALL 16-1 TRAP GUARD AT ALL LOC'S.
FD-1	FLOOR DRAIN	5"ø POLISHED NICKEL BRONZE ROUND STRAINER	ZURN ZN415-2NH-5B	2"ø PIPE SIZE, INSTALL 18-1 TRAP SEAL AT ALL LOCATIONS (UNO.)
TG-1	TRAP GUARD	INSTALL AT FS-1 FLOOR SINK	PROSET SYSTEMS TRAP GUARD	SEE PLANS FOR LOCATIONS AND PIPE SIZES, MAKE WATERTIGHT SEAL WITH ADHESIVE TYPE CAULK PER MANUF.
TS-1	TRAP SEAL	INSTALL AT ALL FD-1 FLOOR DRAINS	PROSET SYSTEMS TRAP GUARD	SEE PLANS FOR LOCATIONS AND PIPE SIZES, MAKE WATERTIGHT SEAL WITH ADHESIVE TYPE CAULK PER MANUF.
HB-1	HOSE BIB	AUTOMATIC DRAINING INTEGRAL BACKFLOW DEVICE 1/2" INLET	WOODFORD MODEL 19	FREEZELESS DOWNWARD PITCH FOR AUTOMATIC DRAINING

EQUALS: ZURN, JOBAM, JAY R. SMITH, WATTS, WADE, WOODFORD, LEONARD, FEBCO.
NOTE: COORDINATE EXACT FINISH WITH ARCHITECT PRIOR TO ORDER.

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Professional Engineer Stamp



HAYDEN GRANARY
SALT SHED FLATS
LINCOLN AVENUE
HAYDEN, COLORADO

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MECHANICAL SCHEDULES



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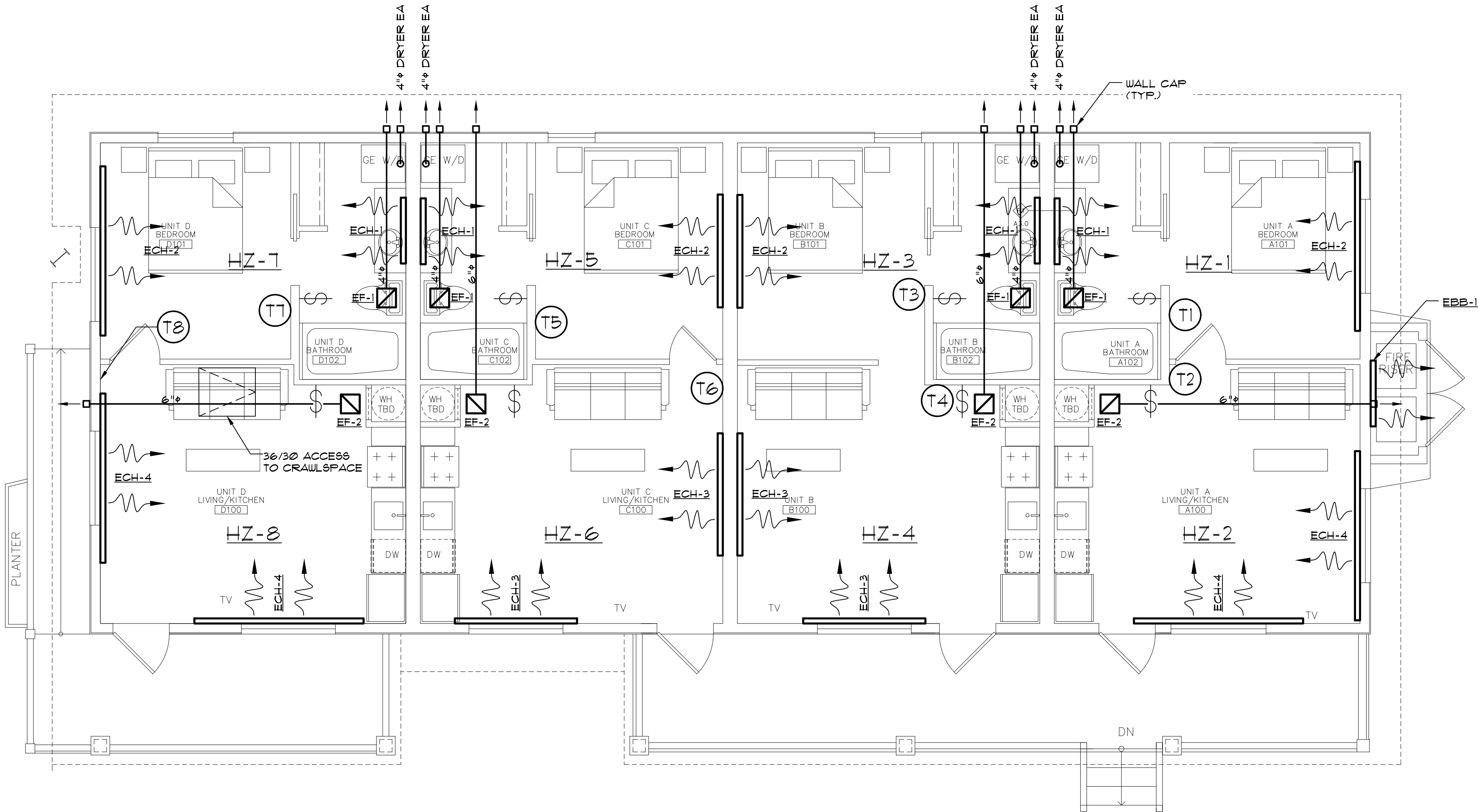
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SHEET LEGEND		
(H)	DEHUMIDISTAT	COVE HEAT ZONE
(H)	HUMIDISTAT	
(T)	THERMOSTAT/ WALL SENSOR	
\$	WALL SWITCH	AIR ZONE
(FB)	PUSH BUTTON CONTROL WITH DELAY OFF	
(PT)	PERCENT TIMER CONTROL	
HZ	HEATING ZONE	

THERMOSTAT TAG	AREA SERVED	HEAT I
T1	UNIT A BEDROOM, BATHROOM	HZ-1
T2	UNIT A LIVING/KITCHEN	HZ-2
T3	UNIT B BEDROOM, BATHROOM	HZ-3
T4	UNIT B LIVING/KITCHEN	HZ-4
T5	UNIT C BEDROOM, BATHROOM	HZ-5
T6	UNIT C LIVING/KITCHEN	HZ-6
T7	UNIT D BEDROOM, BATHROOM	HZ-7
T8	UNIT D LIVING/KITCHEN	HZ-8

COORDINATE THERMOSTAT & SENSOR LOCATION WITH OWNER PRIOR TO INSTALLING. THERMOSTAT TYPE TO BE APPROVED BY OWNER.



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LINCOLN AVENUE
HAYDEN, COLORADO**

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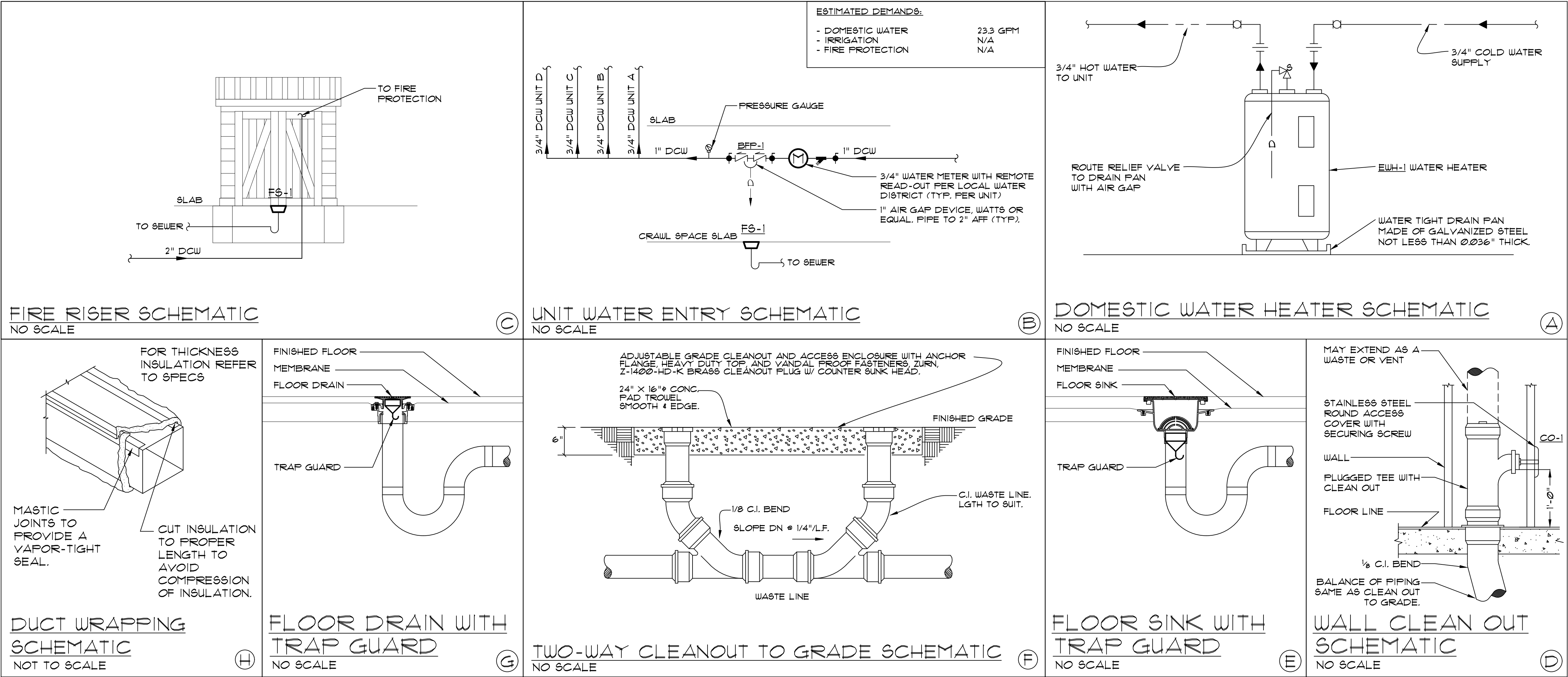
MECHANICAL
PLAN



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Mechanical Specifications

General

1. Immediately notify the Engineer of any discrepancies.
2. It shall be assumed that all subcontractors are experienced and thoroughly knowledgeable in their respective areas of the construction industry and shall perform in a responsible manner in an appropriate construction sequence.
3. Do not scale drawings. Verify dimensions in field prior to commencement of work.
4. It is the intent of these drawings and specifications to establish a standard of quality. The Engineer reserves the right to take exceptions to approve methods and materials not reflected herein.
5. Failure to order, or release order, for materials and/or equipment will not be accepted as a reason to substitute alternate materials, equipment, or installation methods.
6. Work shall be performed in a workmanlike manner to the satisfaction of the Architect & the Engineer.
7. Labor, materials, and equipment shall conform to the latest applicable editions of local, State of Colorado, and National Codes and ordinances. If conflict between those publications exists, the most stringent requirement shall apply.
8. Provide record drawings to architect. Drawings shall include all addendum items, change orders, alterations, re-routings, etc.
9. The drawings show the intent of the mechanical systems but do not show all details required. It is the responsibility of the Contractors to install complete & operable systems, which conform to the manufacturers' installations instructions & industry standards.
10. Systems shall be tested for proper operation. If tests show work is defective, Contractor shall make corrections necessary at no cost to Owner.
11. It is the Contractors' and manufacturers' responsibility to assure themselves that the code authorities will approve any product to be installed on the project.
12. Provide necessary trenching, backfill, excavation, supports, piping, insulation, saw cutting and patching, concrete/paving, etc., as required. Backfill trenches in 6" layers and to 90% compaction and patch to match existing grade.
13. See architectural reflected ceiling plan for all ceiling penetrations.
14. Coordinate architectural, structural, electrical, landscaping, fire protection, and interior design drawings with mechanical drawings prior to installation.
15. Offset piping, ductwork, etc. as necessary to accommodate structure, beams, columns, and existing equipment.
16. Verify exact locations of existing and new underground utilities, piping, and raceway systems prior to trenching. Contractor shall obtain and verify exact utility company drawings and requirements.

Electrical

17. Contractor must carefully verify electrical service voltage and phase available before ordering any equipment.
18. The following are to be furnished by MC and wired by EC: equipment motors, magnetic starters, line voltage thermostats, factory disconnect switches (if specified as part of factory wired equipment) resistance heaters, fire and smoke detectors.
19. The following are to be furnished and wired by EC: disconnect switches, thermal overload switches, manual operating switches and contactors.
20. The following are to be furnished and wired by MC: low voltage thermostats, control transformers, control relays, control panels, motorized valves, motorized dampers, pilot lights, multi-speed switches and interlocks.

Shop Drawings

21. Submit entire HVAC and plumbing shop drawing submittal data at one time. Submittal to be indexed in a neat and orderly manner. Partial submittals will not be accepted. Submittals shall include, but not be limited to: equipment, fixtures, insulation, diffusers, fans, piping, and valves.

Insulation

22. Piping Insulation Schedule:

Service	Thickness (in.)
HWS/R (less than 1.5" pipe)	1.5
HWS/R (1.5" pipe and greater)	2.0
Domestic Hot Water	1.0
Domestic Cold Water	0.5
Domestic Hot Water Recirculation	1.0
Storm Drain	1.0
Overflow Drain	1.0
Refrigeration Suction	0.5
Refrigerant Liquid	0.5
Condensate Drain	0.5

Piping insulation shall be Closed cell foam insulation, AP Armacell Armaflex or approved equal. Provide submittal. Surround with 4" of clean sand.

23. Insulation for all types of piping shall be carried full size through pipe hangers or pipes shall be supported with vibration clamps.

24. Insulate the final 5' of all exhaust ductwork at exterior terminations with 2" thick insulation with a continuous vapor barrier. Minimum R-Value of 6.0.

Piping

25. Domestic Hot, Cold & Recirculation piping inside building - Buried lines type 'K' copper water tube, wrought copper fittings and 1100F solder. Non-buried lines, type 'L' copper water tube, wrought copper fittings and no lead solder. Provide alternate pricing for PEX tubing (no oxygen diffusion barrier necessary). Unless otherwise noted, piping on plans has been sized for copper, and if ASTM PEX piping is used, increase size of piping one nominal size from size shown on plans, ie. Plans call for a ¾" line & PEX is to be substituted, a 1" PEX line shall be installed.

26. Water service pipe outside building - Polyethylene (PE) plastic pipe (ASTM D2239) or tubing (ASTM D2737) and fittings (ASTM D2609) shall conform to NSF 61 and have a minimum working pressure of 200 psi at 73.4°F or pressure rating to exceed maximum working pressure.

27. Waste & Vent piping inside building:

Waste and vent lines for residential may be Schedule 40 ABS-DWV plastic pipe and fittings (ASTM D2661) or Schedule 40 PVC-DWV plastic pipe and fittings (ASTM D2665). All pipe and fittings shall bear NFS-DWV mark and shall be joined with solvent weld joints as recommended by the manufacturer.

28. PEX piping shall be supported by continuous cradles supplied by the manufacturer.

29. Copper pipe Valves and Specialties:

Gate Valves: Bronze, Class 125, 200 lb. W.O.G.
Ball Valves: Bronze, Class 125, 200 lb. W.O.G.
Check Valves: Bronze, Class 125, 200 lb. W.O.G.
Balancing Valves: 125 psig w.p. for 250F service tight shut-off, Illinois dual-purpose, balancing/shut-off valve, Hoffman, Sarco, or equivalent.

30. Refer to Fixture Connection Schedule for pipe sizes to individual fixtures.

31. Dielectric Unions - Furnish and install a dielectric union at all connections where non-ferrous material is in contact with ferrous material and fluid is not protected with corrosion inhibitors.

32. Install plumbing clean-outs as required by applicable codes.

Ductwork

33. Duct sizes shown on drawings are outside (sheet metal) duct dimensions.

34. All ductwork shall be sealed airtight with duct mastic. Where duct tape is used, it shall be listed and labeled in accordance with UL 181.

35. Seal all ductwork joints and vapor barrier penetrations at all exterior walls.

36. Ducts and piping penetrating through roof shall have roof flashing with caulk type counter flashing sleeve or by method acceptable by roofing manufacturer. Installation shall be watertight.

37. All dryer vents and bathroom exhaust ducts from fan/light fixtures shall be 4" galvanized round (unless noted otherwise).

38. Sheet metal and fittings to be pursuant to SMACNA and ASHRAE standards.

39. All ducts shall be 26 gauge minimum. Duct gauge and construction shall conform to SMACNA HVAC Duct Construction Standards.

40. Contractor to coordinate exact location of grilles and registers before installation.

41. Seal off all ducts during construction.

Controls

42. Mount all thermostats 5'-0" above finished floor.

43. All thermostats shall have a temperature range suitable for the application and have adjustable set points. The thermostats shall be able to display temperature setpoint and room temperature. All thermostats shall be approved by the Owner.

44. See Sequence of Operation for additional control information.

Sequence of Operation

1. **EWB-1 Water Heater**
a. Upon a call for domestic hot water, EWB-1 (set at 125°F, adj) shall supply domestic hot water.
2. **ECH-X**
a. Upon a call for heat, ECH-X shall turn on and heat associated space.
3. **EBB-1**
a. Upon a call for heat, EBB-1 shall turn on and heat associated space.
4. **Fans**
a. EF-1 bath exhaust fans shall each be controlled by an on/off wall switch.
b. EF-2 bath exhaust fans shall each be controlled by an on/off wall switch.

END OF SEQUENCE OF OPERATION.

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HAYDEN, COLORADO

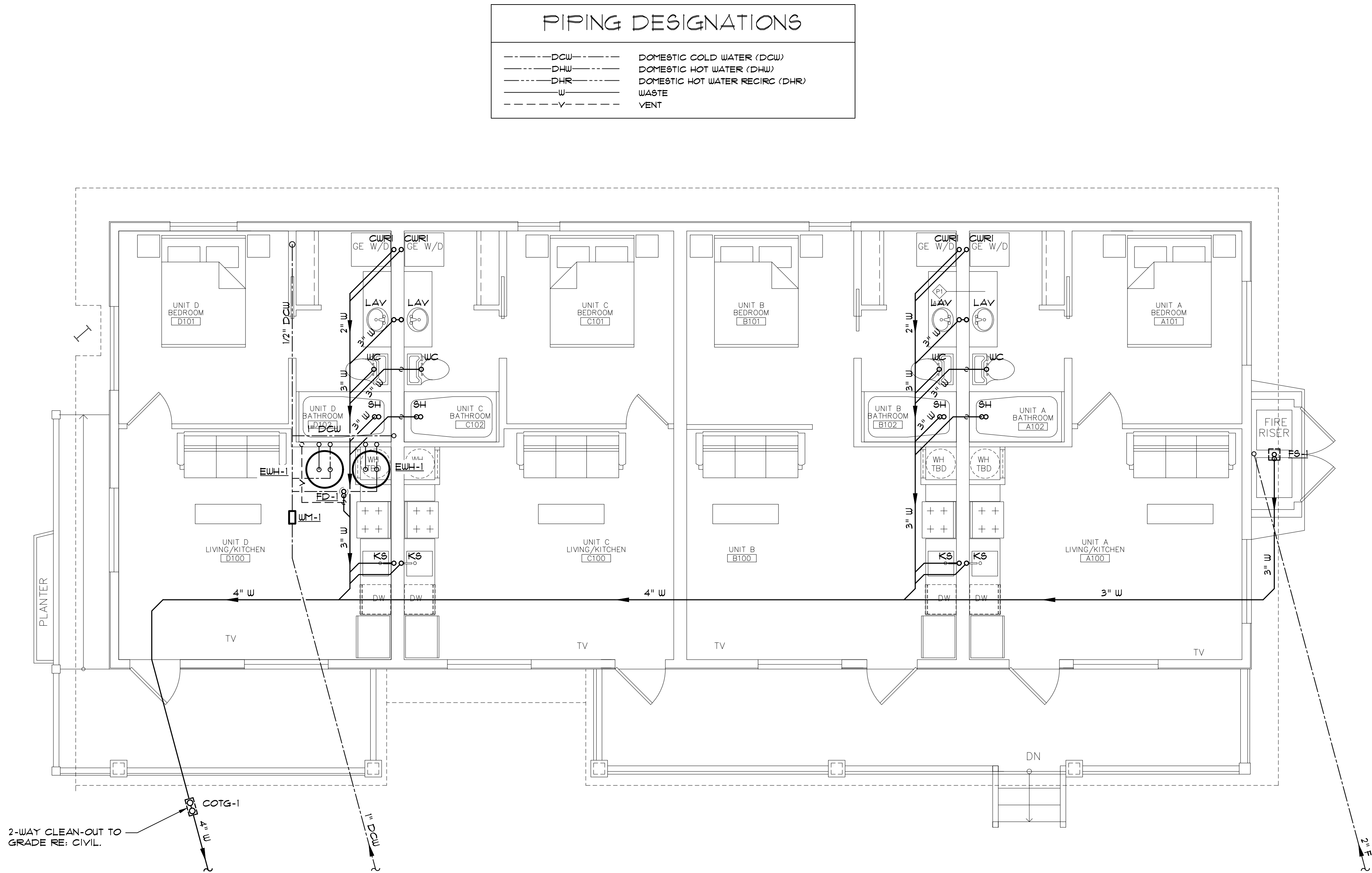
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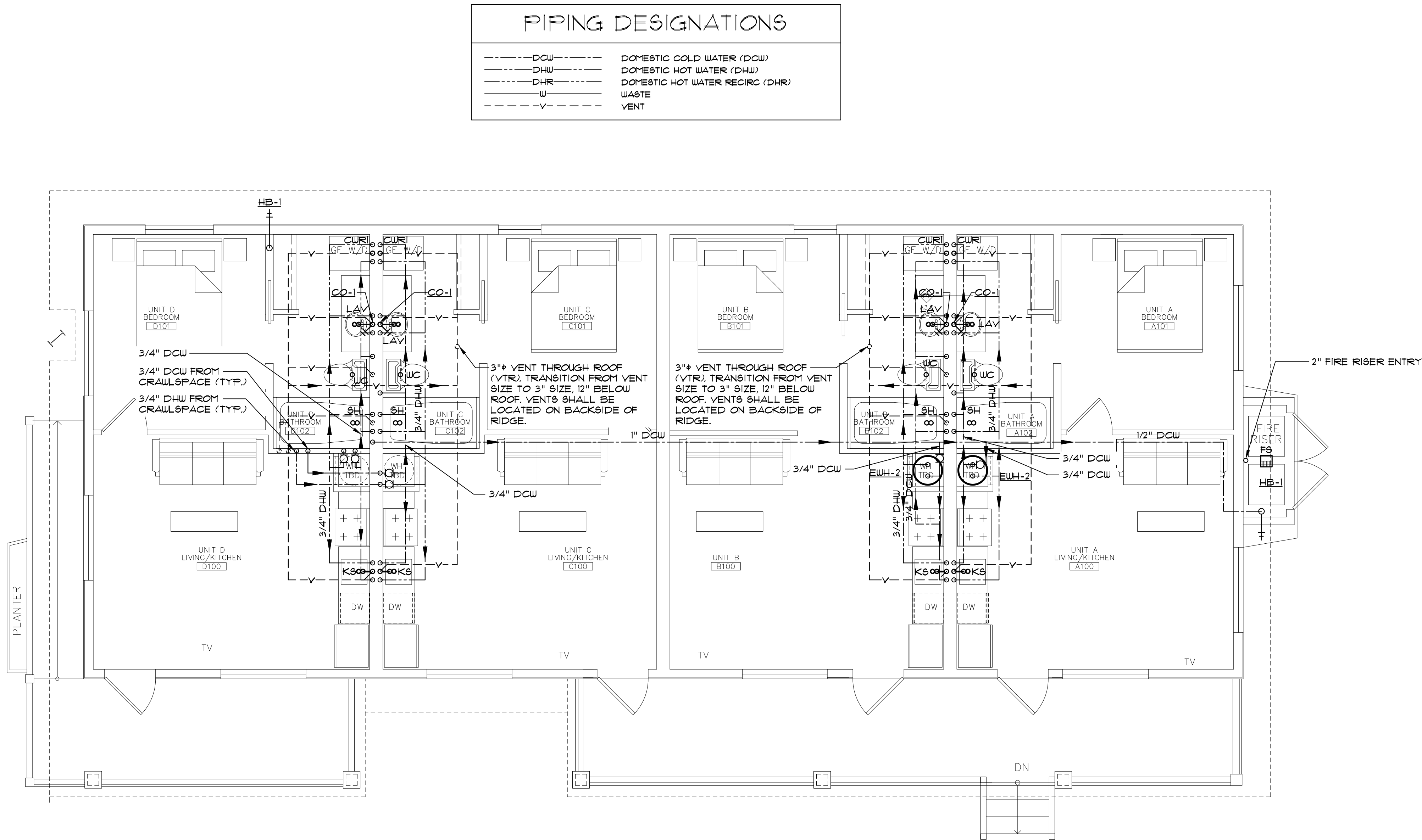
BELOW SLAB
PLUMBING PLAN



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MAIN LEVEL
PLUMBING PLAN



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