ALPINE CITY PLANNING COMMISSION MEETING

NOTICE is hereby given that the **PLANNING COMMISSION** of Alpine City, Utah will hold a **Public Meeting** on **Tuesday, March 16, 2021 at 7:00 pm at City Hall, 20 North Main Street, Alpine, Utah.**

The public may attend the meeting in person or view the meeting via the **Alpine City YouTube Channel**. A direct link to the channel can be found on the home page of the Alpine City website: **alpinecity.org**

I. GENERAL BUSINESS

A. Welcome and Roll Call: Jane Griener
B. Prayer/Opening Comments: Sylvia Christiansen
C. Pledge of Allegiance: Troy Slade

II. PUBLIC COMMENT

Any person wishing to comment on any item not on the agenda may address the Planning Commission. Comments may be submitted to admin@alpinecity.org by 5:00 PM the day of the meeting or given in person at the meeting.

III. ACTION ITEMS

A. Extension of Non-Conforming Building – 1031 E. 300 N. – Carson Home – Chris Hill of Iron Ridge Const.
The Planning Commission will review the proposed addition and make a recommendation to the City Council.

B. Final Plat – Ridge at Alpine Phase 5
The Planning Commission will review the proposed plat and make a recommendation to the City Council.

C. Public Hearing – Ordinance 2021-08 Large Animals
The Planning Commission will review the proposed ordinance and make a recommendation to the City Council.

IV. COMMUNICATIONS

V. APPROVAL OF PLANNING COMMISSION MINUTES: February 16, 2021

ADJOURN

Chair Jane Griener
March 12, 2021

THE PUBLIC IS INVITED TO ATTEND ALL PLANNING COMMISSION MEETINGS. If you need a special accommodation to participate in the meeting, please call the City Recorder's Office at 801-756-6347 ext. 5.

CERTIFICATION OF POSTING. The undersigned duly appointed recorder does hereby certify that the above agenda notice was posted at Alpine City Hall, 20 North Main, Alpine, UT. It was also sent by e-mail to The Daily Herald located in Provo, UT a local newspaper circulated in Alpine, UT. This agenda is also available on the City's web site at www.alpinecity.org and on the Utah Public Meeting Notices website at www.utah.gov/pmn/index.html.

PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE

Please remember all public meetings and public hearings are now recorded.

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- When speaking to the Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, beepers, pagers or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length, and avoiding repetition of what has already been said. Individuals may be limited to two minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the lobby area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

Public Hearing vs. Public Meeting

If the meeting is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: Extension of Non-Conforming Building – 1031 E. 300 N.

FOR CONSIDERATION ON: 16 March 2021

PETITIONER: Chris Hill Of Iron Ridge Construction, Representing the Carson Family

ACTION REQUESTED BY PETITIONER: Review and approve the proposed addition.

BACKGROUND INFORMATION:

The Carson family would like to add a new front porch on their existing home. The old porch would be removed and replaced with the new porch. Extension of a non-conforming building requires a recommendation from Planning Commission and approval by City Council (see Article 3.22 of the Development Code).

The Carson home is an existing non-conforming building which does not meet setback requirements of the CR-40,000 zone. Minimum side setback for the zone is 12 feet, and the home has a setback of 10 feet 4 inches. Plans show the proposed porch within the 12-foot side setback.

According to 3.22.070.1 of the Alpine City Development Code an addition or extension of a non-conforming building must "…conform with all existing setback and location requirements". The proposed addition appears to meet all other requirements outlined in code.

Staff recommends that the proposed extension be approved with the condition that the proposed porch can meet the current setbacks of the CR-40,000 zone.

STAFF RECOMMENDATION:
Approve the proposed extension with the condition that it meet setback requirements of the zone.

SAMPLE MOTION TO APPROVE:
I motion to recommend that Ordinance 2021-06 be approved with the condition that the proposed porch meet all setback requirements of the CR-40,000 zone.

SAMPLE MOTION TO TABLE/DENY:
I motion that Ordinance 2021-06 be tabled/denied based on the following:

- ***Insert Finding***

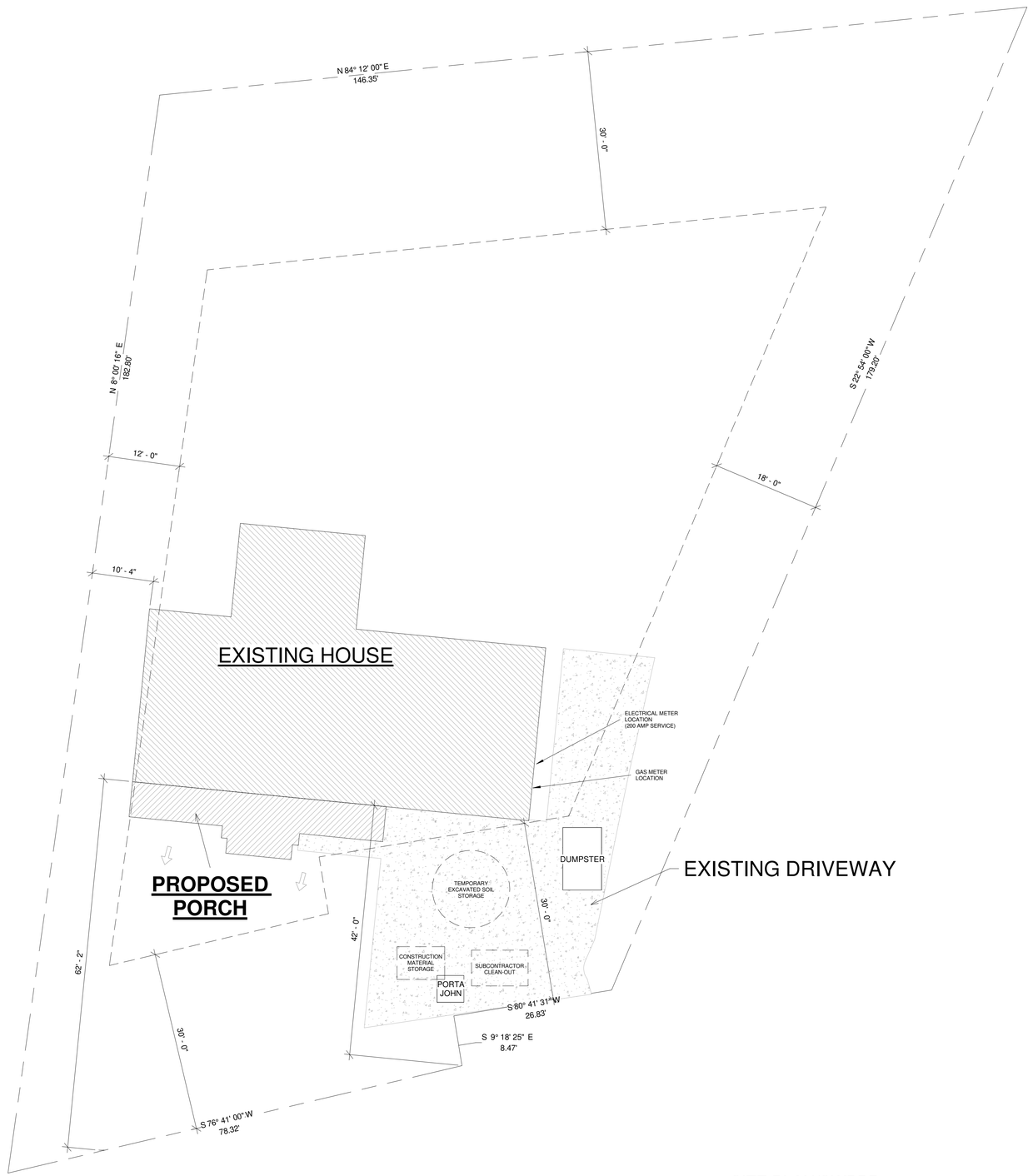
3.22.070 Extension (Enlargement) And Reconstruction Of Non-Conforming Buildings; Conditions

A non-conforming building or structure or a building housing a non-conforming use may be extended or enlarged or reconstructed, subject to the prior approval by the City Council, after recommendation of the Planning Commission and such compliance with the following:

1. The proposed extension or replacement shall be located entirely on the same lot or parcel as the present non-conforming structure and will conform with all existing setback and location requirements.
2. The applicant shall submit a detail site plan showing the location of existing and proposed structures on the site and in the vicinity, existing lot boundaries, roads, driveways, parking areas, utilities and other significant features on the site and in the immediate vicinity.
3. A finding made by a majority vote of the Council that:
    a. The proposed enlargement or extension will not significantly alter the character of the building or use or its impact upon the area.
    b. The building or use, if extended, will not have the effect of diminishing the value of property or the quality of living environment of adjacent properties.
    c. The proposed enlargement will not significantly increase the number of vehicles or pedestrians, or result in the establishment or increase of a safety hazard to the area.
    d. The proposed enlargement will not result in the establishment of a condition incompatible with the neighborhood area and the stated objective of the zone in which it is located.

The Council may attach such conditions to its approval as are necessary to adequately protect the property and uses in the surrounding territory and the intent of the zone, including but not limited to, the providing of off-street parking access ways, landscaping features and additional setback of structures.

(Amended by Ordinance 2015-03 on 03/24/15)



SITE PLAN/SWPPP

SCALE 1" = 10'-0"

North
W E
S

DRAWING INDEX

ARCHITECTURAL

C-1.0	SWPPP/SITE PLAN
A-1.0	MAIN LEVEL FLOOR PLAN
A-2.0	FRONT/RIGHT ELEVATIONS
A-2.1	BACK/LEFT ELEVATIONS
A-3.0	ROOF PLAN
A-4.0	SECTION PLAN

ELECTRICAL

E-1.0	MAIN LEVEL ELECTRICAL PLAN

STRUCTURAL

S1.0	STRUCTURAL PLAN
SN.1	STRUCTURAL NOTES
SD.1	STRUCTURAL DETAILS

SWPPP NOTES:

ALL STORM WATER AND DIRT WILL BE KEPT ON SITE DURING CONSTRUCTION UNTIL FINAL LANDSCAPING IS DONE. THE SITE MUST BE GRADED SO THAT WHEN FINAL LANDSCAPING IS COMPLETE, ALL STORM AND IRRIGATION WATER WILL REMAIN ON SITE.

STREET, CURB, AND GUTTER WILL BE INSPECTED AND CLEANED OF ALL MUD AND DIRT AT THE END OF EVERY DAY. STREET SWEEP AS NEEDED. GRAVEL BAGS TO BE PLACED AND MAINTAINED AROUND ANY STORM DRAIN INLET ADJACENT TO OR IMMEDIATELY DOWNSTREAM FROM THE SITE DURING CONSTRUCTION.

PROVIDE A 3" SEDIMENT CUTBACK BEHIND CURB.

BERMS OR SWALES WILL BE REQUIRED ALONG PROPERTY LINES **OF A SUFFICIENT SIZE** TO PREVENT STORM WATER FLOW ONTO ADJACENT LOTS. FINAL GRADING SHALL BLEND WITH ADJACENT LOTS.

A LINED CONCRETE WASHOUT AREA MUST BE PROVIDED AT THE SITE FOR ALL CONCRETE WORK. WASHOUT INTO THE FOUNDATION OR ON THE GROUND IS PROHIBITED.

SITE DRAINAGE NOTES:

THE FOLLOWING PRECAUTIONS SHALL BE TAKEN TO HELP PREVENT WETTING OF THE FOUNDATION SOILS:

1. ADEQUATE COMPACTION OF BACKFILL SOILS AGAINST THE FOUNDATION SHOULD BE PROVIDED (IE: A MINIMUM OF 90% OF ASTM D 1557). WATER CONSOLIDATION METHODS SHOULD NOT BE USED.

2. THE GROUND SURFACE SHOULD BE GRADED TO DRAIN AWAY FROM THE STRUCTURE IN ALL DIRECTIONS. PROVIDE AT LEAST A MINIMUM SLOPE OF 6" WITHIN THE FIRST 10'-0" AS REREQUIRED BY R401.3.

3. ROOF RUNOFF SHOULD BE COLLECTED IN RAIN GUTTERS WITH DOWN-SPOUTS DESIGNED TO DISCHARGE WELL OUTSIDE OF THE BACKFILL LIMITS AT LEAST 10 FEET FROM STRUCTURES.

4. SPRINKLER HEADS, IF PLANNED, SHOULD BE AIMED AWAY AND KEPT AT LEAST 2 FEET FROM FOUNDATION WALLS. SPRINKLER SYSTEMS SHOULD BE DESIGNED WITH PROPER SLOPE AND DRAINAGE FOR ALL LINES TO PREVENT BREAKS. BREAKS SHOULD BE PROMPTLY REPAIRED. OVER-WATERING SHOULD BE AVOIDED.

5. LONG-TERM DRAINAGE CONTROL PROVIDED BY LANDSCAPING INCLUDING: PLANTS, GRASS, TREES, SHRUBS & AUTOMATIC SPRINKLERS.

6. THE GRADE ADJACENT TO ALL FOUNDATION WALLS SHALL FALL A MINIMUM OF 6 INCHES WITHIN THE FIRST 10 FEET (5%).

7. R401.3 - LANDINGS, RAMPS, PATIOS, PORCHES OR DECKS, ARE REQUIRED TO BE LEVEL OR CAN HAVE A MAXIMUM SLOPE OF " PER FOOT. ALL OTHER IMPERVIOUS SURFACES WITHIN 10 FEET OF THE FOUNDATION WALLS MUST SLOPE A MINIMUM OF 14" PER FOOT. ALL OTHER IMPERVIOUS SURFACES WITHIN 10 FEET OF THE FOUNDATION WALLS MUST SLOPE A MINIMUM OF 14" PER FOOT AWAY FROM WALLS.

8. DIRECT THE DRAINAGE WATER TO AN APPROVED LOCATION OF DISCHARGE AND NOT ONTO NEIGHBORING PROPERTIES OR ACROSS THE CITY SIDEWALKS.

GENERAL NOTES:

1. CONSTRUCTION AND BUILDING METHODS, INCLUDING ELECTRICAL, PLUMBING, AND MECHANICAL ITEMS SHALL FOLLOW THE 2015 IRC OR CURRENT CODE, IF A MORE RECENT CODE AS BEEN ADOPTED.

2. SOILS OBSERVATION REPORT IS RECOMMENDED PRIOR TO POURING FOOTINGS.

3. IN THE GARAGE THERE SHALL BE NO LESS THAN ONE RECEPTACLE OUTLET PER VEHICLE STALL. IRC E3901.9

4. DOORS LEADING FROM DWELLINGS TO THE GARAGE SHALL BE 1- " THICK SOLID CORE OR 20 MINUTE RATED. DORRS 38" THICK SOLID CORE OR 20 MINUTE RATED. DORRS SHALL NOT OPEN INTO A SLEEPING ROOM. DOORS SHALL BE EQUIPPED WITH SELF-LATCHING HARDWARE (INCLUDING A SELF-CLOSING DEVICE) IRC R302.5.1

5. BLOWER DOOR TEST IS REQUIRED AT FINAL.

6. FIREPLACE BY OTHERS. FIREPLACE SPECIFICATIONS DEFERRED UNTIL TIME OF INSPECTION.

7. EXTERIOR SIDING SHALL COMPLY WITH R703.3

8. INSPECTIONS ARE REQUIRED FOR ALL STUCCO AND EIFS SYSTEMS. PROVIDE PRODUCT SPECIFICATIONS AND ICBO EVALUATION REPORT (OR EQUAL) FOR ANY STUCCO OR EIFS SYSTEM USED. IRC R109.1.5

9. COLD STORAGE AREAS REQUIRE EITHER A SEALED EXTERIOR DOOR OR THAT THE ROOM BE INSULATED IN ORDER TO MEET THE BUILDING THERMAL REQUIREMENTS OF N1102.

10. ALL BRANCH CIRCUITS THAT SUPPLY 125 VOLT, SINGLE PHASE, 15 AND 20 AMPERE OUTLETS INSTALLED IN KITCHENS, LAUNDRY, AND BEDROOMS REQUIRE ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION. IRC E3902.16

11. EMERGENCY EGRESS REQUIREMENTS: EXTERIOR DOORS OR WINDOWS SHALL HAVE FINISHED SILL HEIGHT WITHIN 44" OF THE FLOOR, (IRC R310.2.3) SHALL HAVE A MINIMUM NET CLEAR OPENABLE AREA OF 5.7 SF (IRC R310.2.1), AND SHAL HAVE A MINIMUM NET CLEAR OPENABLE WIDTH OF 20" AND MIMUM NET CLEAR OPENABLE HEIGHT OF 24" (IRC R310.2.1)

12. TEMPERED GLASS OR APPROVED SAFETY GLAZING IS REQUIRED ON ALL GLASS IN HAZARDOUS LOCATIONS AS STIPULATED IN IRC R308.4.

13. AUTOMATIC GARAGE DOOR OPENERS, IF PROVIDED, SHALL BE TESTED IN ACCORDANCE WITH UL325. IRC R309.4.

14. ASPHALT SHINGLE ROOF MATERIALS REQUIRE AN ICE BARRIER THAT EXTENDS FROM THE EDGE OF THE EAVES TO A POINT NOT LESS THAN 24" INSIDE THE EXTERIOR WALL LINE OF THE BUILDING. IRC R905.1.2

15. WHERE EXTERIOR VERTICAL SIDING IS USED, PROVIDE 24" ON CENTER BLOCKING. IRC TABLE R703.3 (1) FOOTNOTE J

16. ROOMS CONTAINING FUEL-BURNING APPLIANCES SHALL BE LOCATED OUTSIDE THE BUILDING THERMAL ENVELOPE OR ENCLOSED IN A ROOM. SHUCH ROOMS SHALL BE SEALED AND INSULATED TO R-VALUE OF R-15/R-19. THE MECHANICAL ROOM REQUIRES A SEALED DOOR. THE COMBUSTION AIR DUCT SHALL BE INSULATED WHERE IT PASSES THROUGH CONDITIONED SPACE TO A MINIMUM OF R-8. IRC N1102.4.4

17. SLAB-ON-GRADE FLOORS WITH A FLOOR SURFACE LESS THAN 12 INCHES BELOW GRADE SHALL BE INSULATED, R10 @ 2 FEET OR R15 @ 2 FEET FOR HEATED SLABS. IECC; SECTION 402.2.7

18. ALL WINDOWS/GLASS WITHIN HAZARDOUS LOCATIONS AS DEFINED BY IRC SECTION 308.4 SHALL BE TEMPERED.

Legacy Drafting and Design
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AN ADDITION TO THE CARSON HOME
1031 E 300 N ALPINE, UT

SQUARE FOOTAGE

ENGINEER STAMP

REVISIONS:
1 00-00-00
2 00-00-00
3 00-00-00

SHEET NUMBER:
C-1.0

07/07/2020

PLUMBING NOTE:

ALL PLUMBING INSTALLATIONS SHALL COMPLY WITH THE 2018 IRC.

SHOWERHEADS SHALL HAVE A FLOW RATE OF NOT MORE THAN 2.5 GPM TO COMPLY WITH IRC P2903.2

SMOKE DETECTOR NOTE:

ADD SMOKE DETECTORS THROUGHOUT HOME

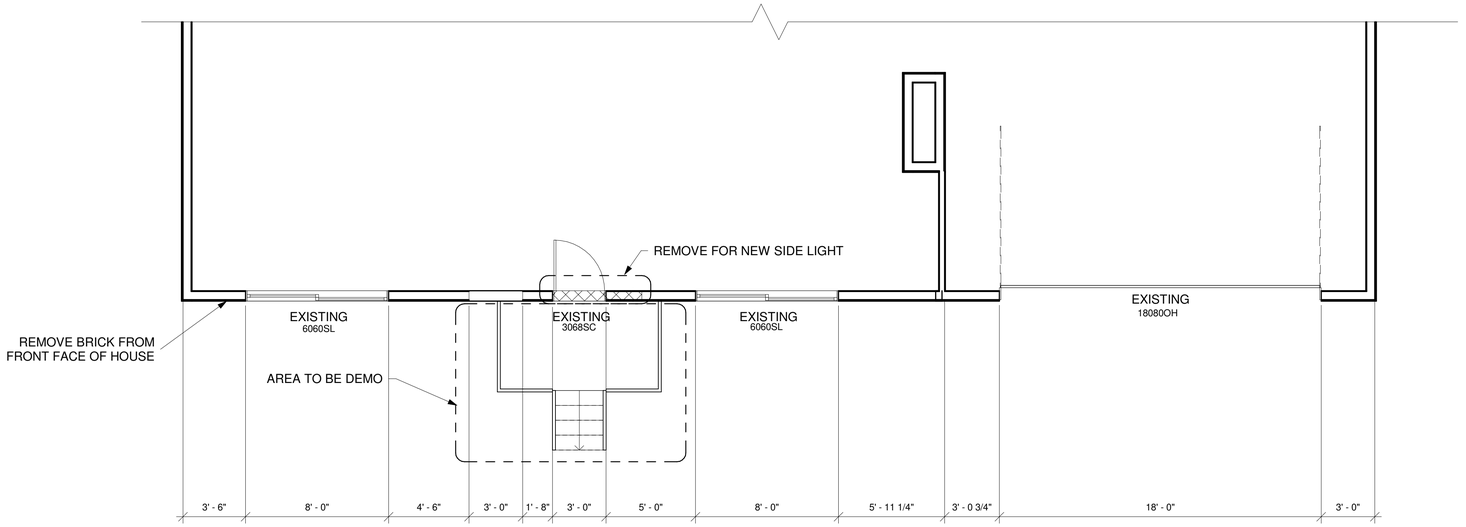
SMOKE DETECTORS SHALL COMPLY WITH SECTION R314 OF THE IRC AND SHALL BE HARD-WIRED, INTERCONNECTED, AND HAVE BATTERY BACKUP.

INSULATION NOTE:

ALL EXTERIOR 2X6 WALLS SHALL HAVE A MINIMUM OF R-20 INSULATION AND ALL ATTICS SPACE SHALL HAVE A MINIMUM OF R-49 INSULATION

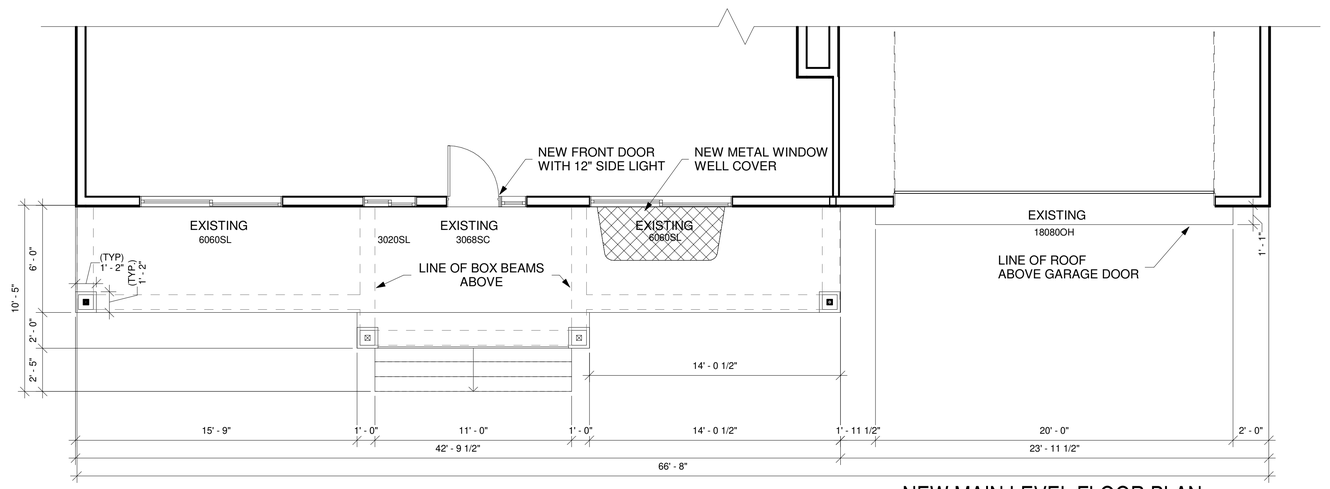
DIMENSION NOTE:

SITE VERIFY ALL DIMENSIONS BEFORE ORDERING MATERIALS AND COMENSING ANY WORK. REPORT ANY SIGNIFICANT DESCREPENCIES TO THE DESIGNER.



EXISTING MAIN LEVEL FLOOR PLAN

SCALE 1/4" = 1'-0"



NEW MAIN LEVEL FLOOR PLAN

SCALE 1/4" = 1'-0"

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AN ADDITION TO THE CARSON HOME
1031 E 300 N ALPINE, UT

SQUARE FOOTAGE

EXISTING	1908 SF
NEW ADDITION	307 SF
TOTAL AREA: 2	2215 SF

ENGINEER STAMP

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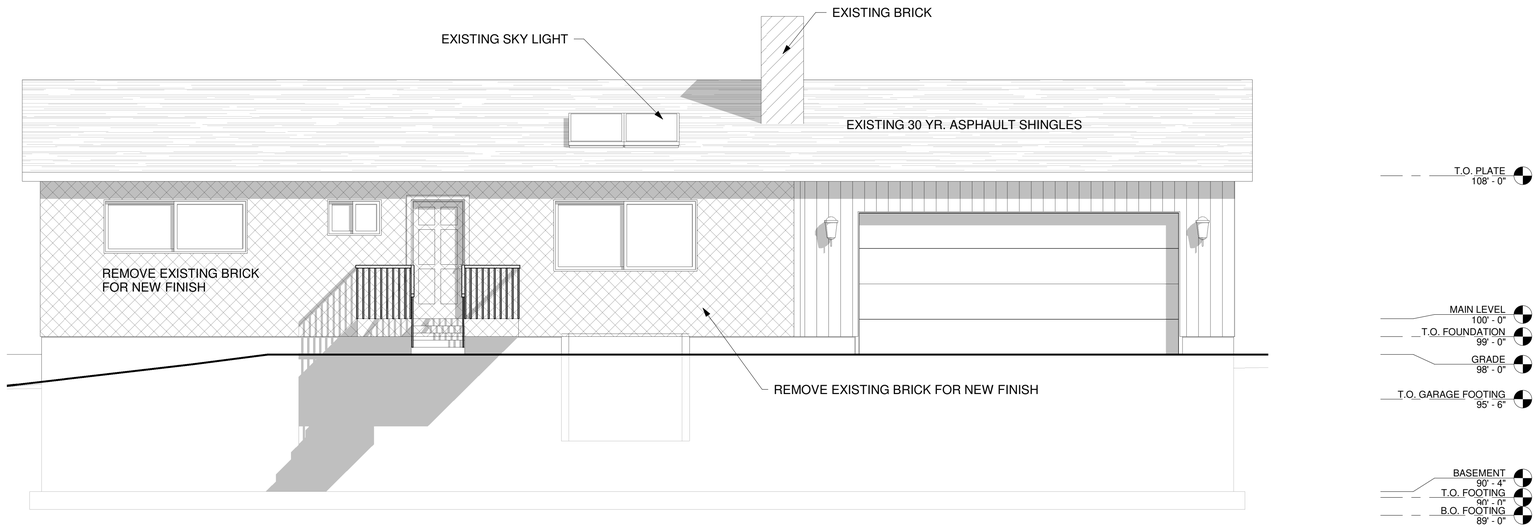
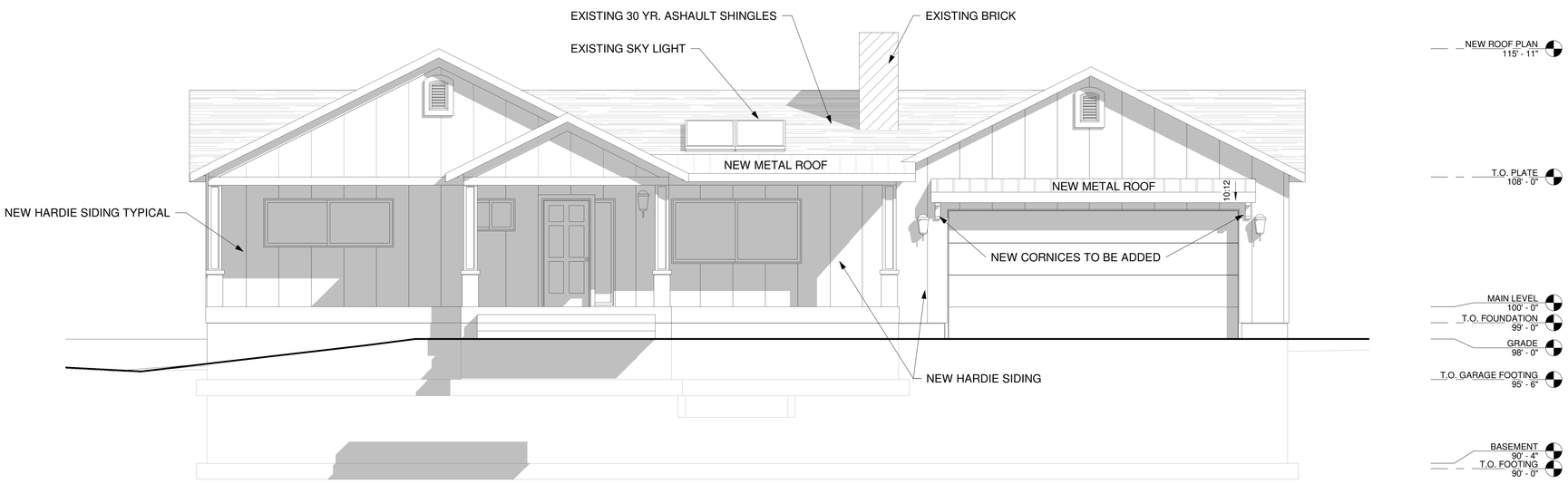
07/07/2020



EXISTING FRONT ELEVATION

SCALE 1/4" = 1'-0"



NEW FRONT ELEVATION

SCALE 1/4" = 1'-0"

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AN ADDITION TO THE CARSON HOME
1031 E 300 N ALPINE, UT

SQUARE FOOTAGE

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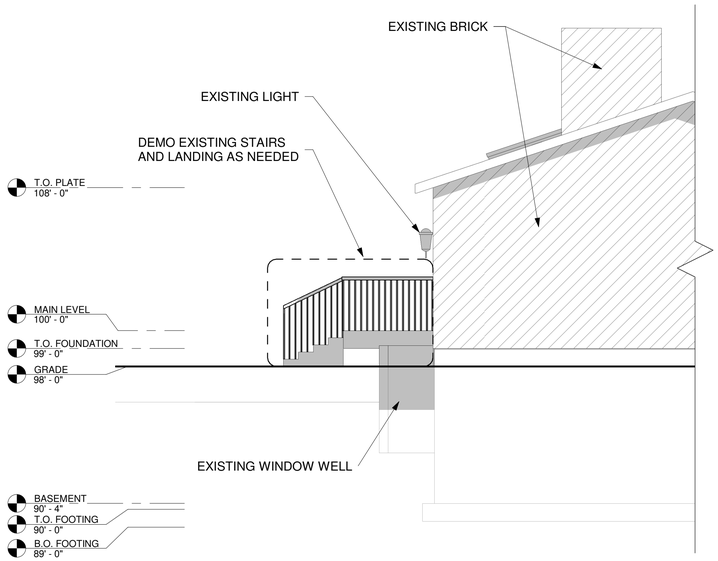
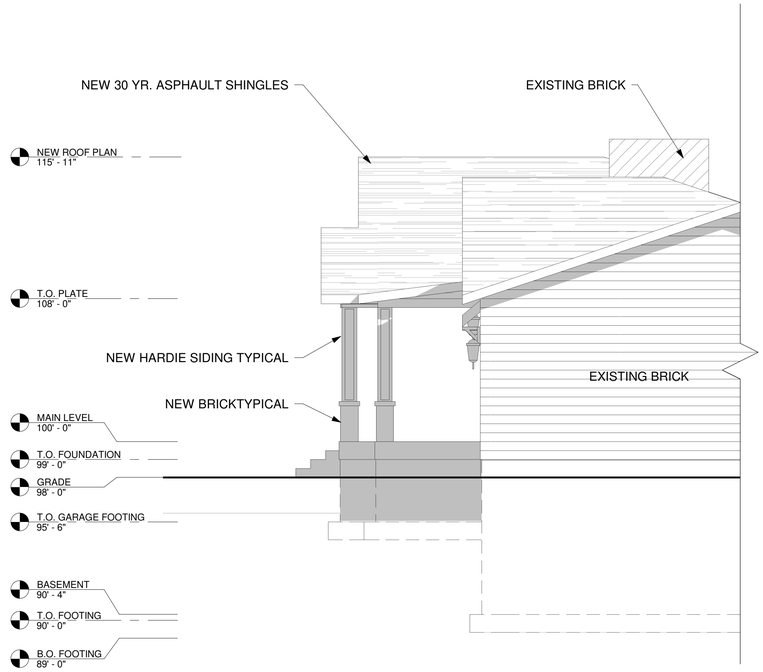


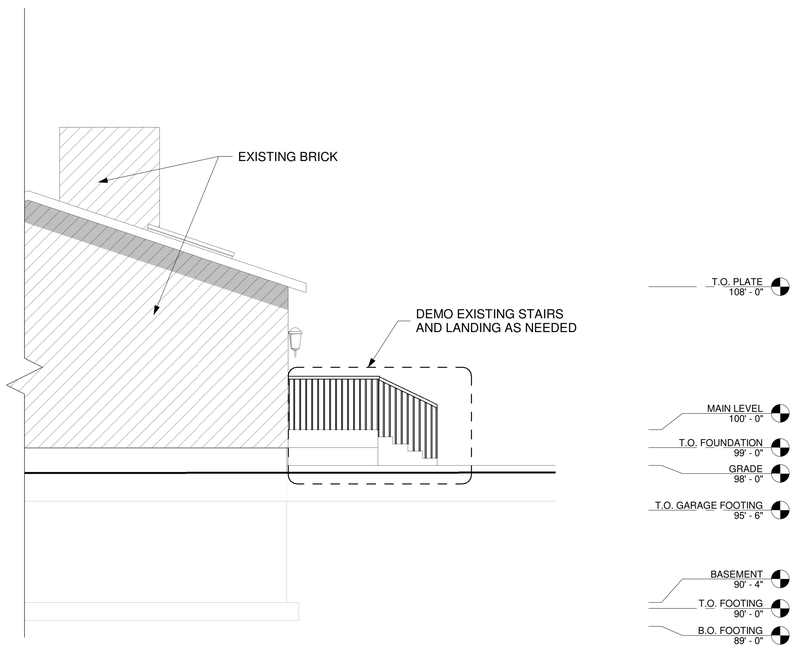
EXISTING RIGHT ELEVATION

SCALE 1/4" = 1'-0"



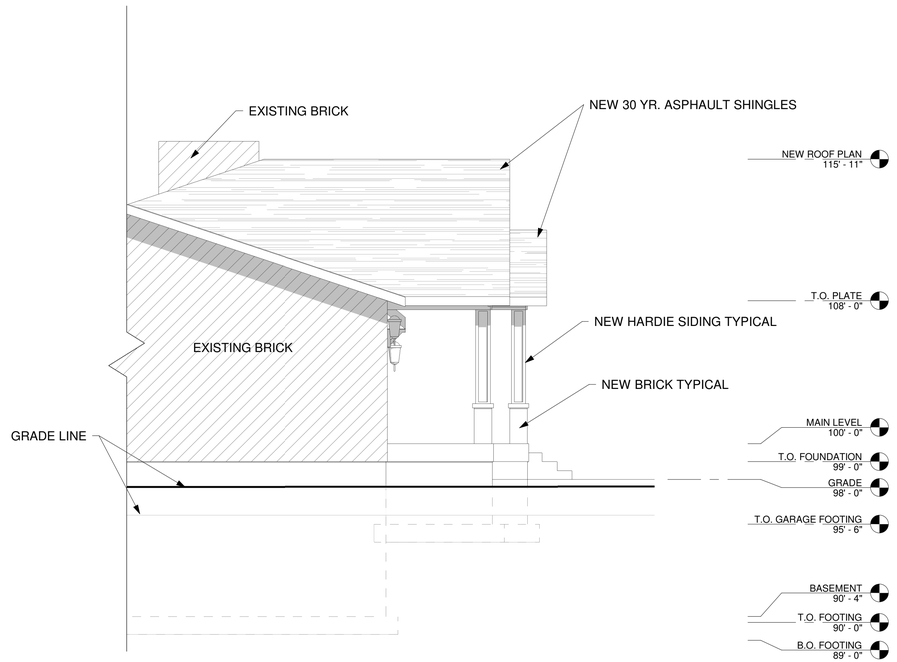
NEW RIGHT ELEVATION

SCALE 1/4" = 1'-0"



EXISTING LEFT ELEVATION

SCALE 1/4" = 1'-0"



NEW LEFT ELEVATION

SCALE 1/4" = 1'-0"

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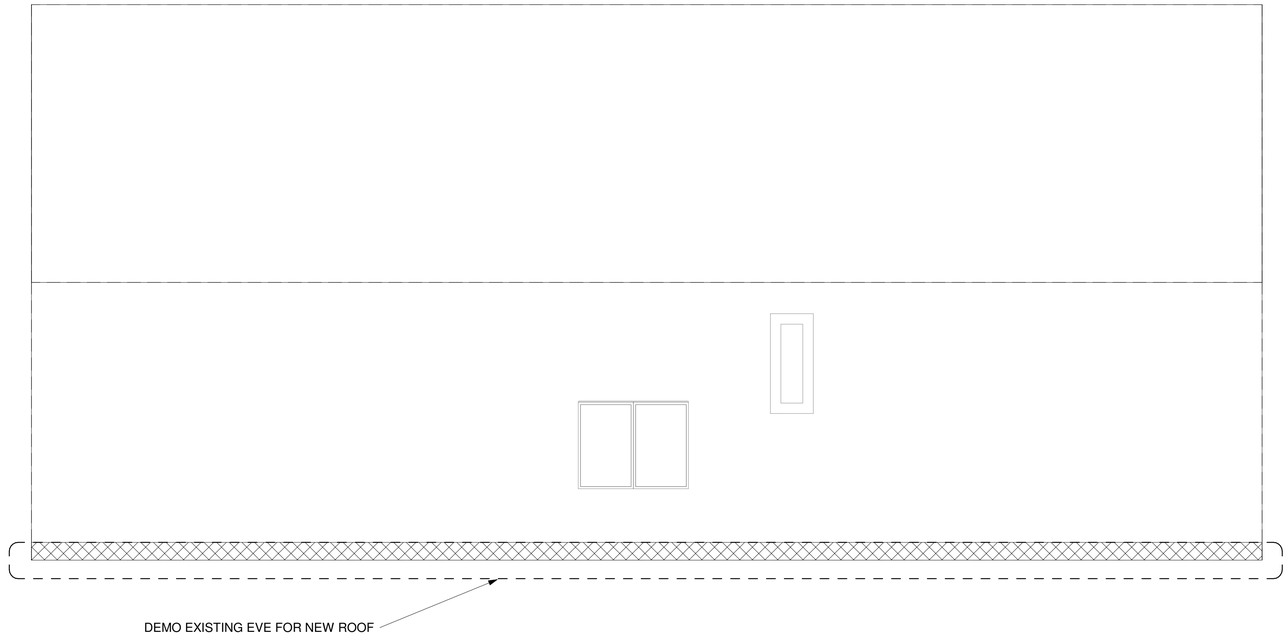
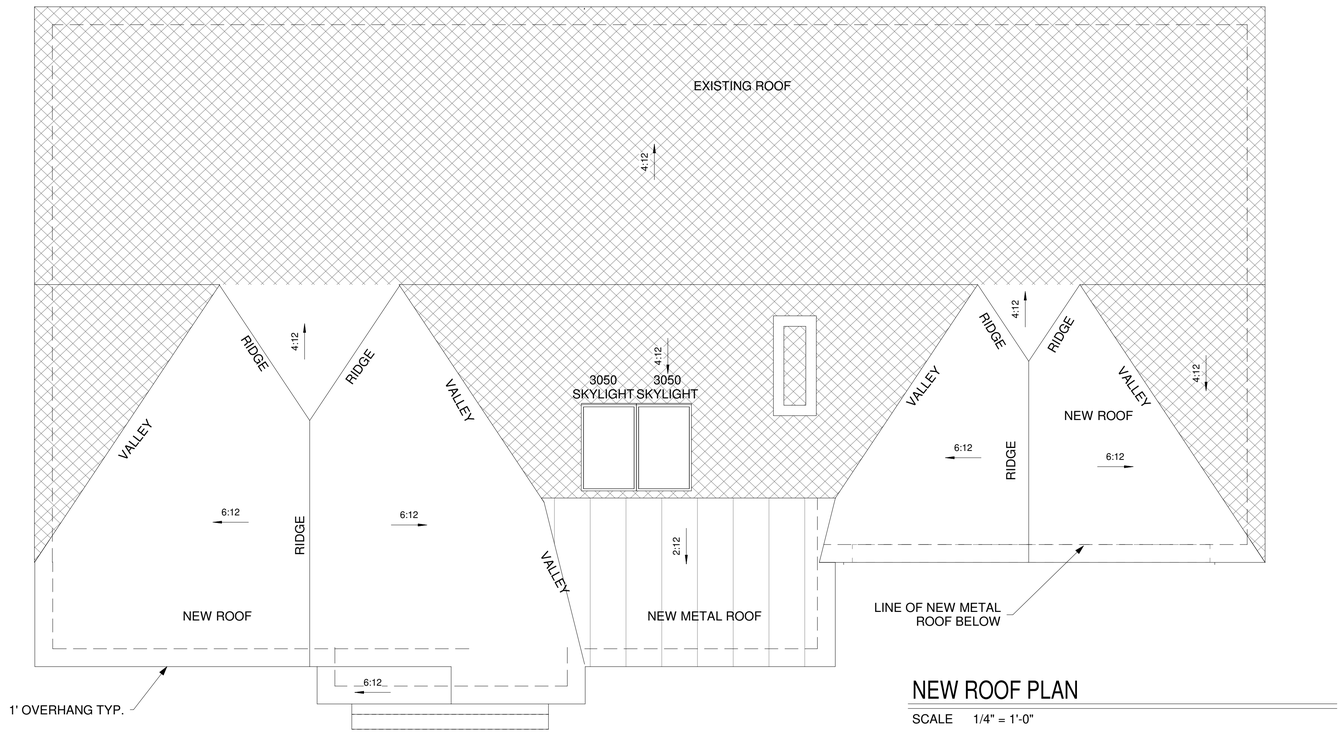


EXISTING ROOF PLAN

SCALE 1/4" = 1'-0"



NEW ROOF PLAN

SCALE 1/4" = 1'-0"

ATTIC VENTILATION CALCULATIONS

ENCLOSED ATTIC SPACE: 767 SF

REQUIRED VENTILATION: 767/300 = 2.6 SF MIN.

PROVIDE: MINIMUM OF -- SF IN VENTED SOFFITS AND MINIMUM OF -- SF IN RIDGE VENTS, TURTLE VENTS, GABLE VENTS, OR A COMBINATION OF EACH.

NOTE THAT ENTIRE BUILDING TO HAVE VENTED ALUMINUM SOFFITS UNLESS NOTED OTHERWISE.

SEE CONTRACTORS SUBMITTAL FOR THE EXACT TYPE OF VENTS TO BE USED.

PRE-ENGINEERED TRUSSES

CONTRACTOR SHALL VERIFY THAT THE TRUSS MANUFACTURER'S LAYOUT AND DESIGN IS ACCORDING TO THE FRAMING PLANS AND PROJECT REQUIREMENTS.

WHERE ATTIC TRUSSES ARE USED, CONTRACTOR SHALL VERIFY THAT THE TRUSS MANUFACTURER'S ATTIC TRUSSES ARE DESIGNED SO THAT THE FLOOR PLAN LAYOUT WITHIN THE TRUSSES WORKS. THIS MAY REQUIRE A HEEL TO BE ADDED TO THE TRUSS TO PROVIDE ADEQUATE HEAD ROOM.

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AN ADDITION TO THE CARSON HOME

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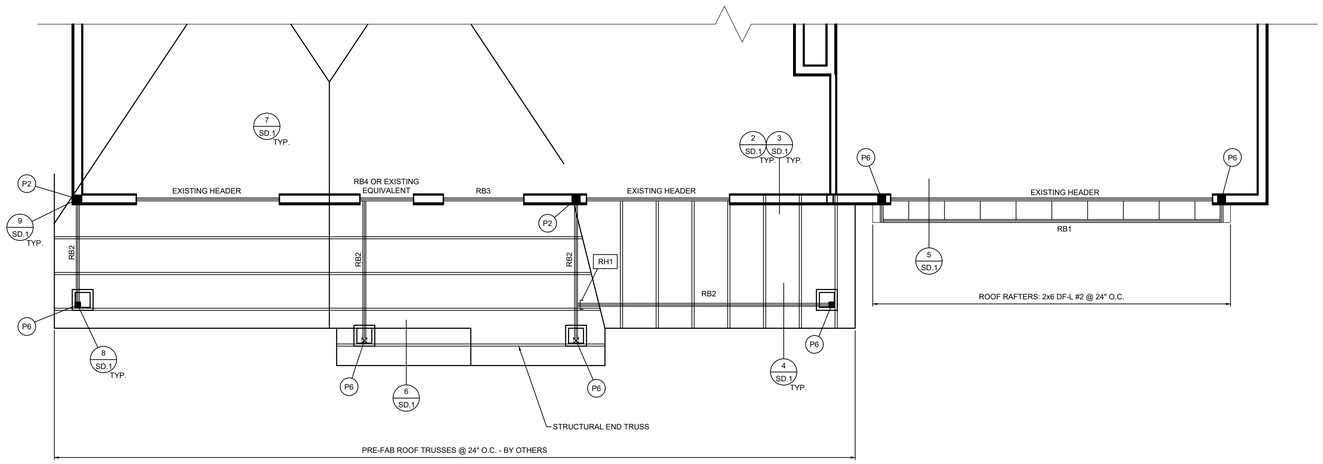
07/07/2020



ROOF FRAMING PLAN

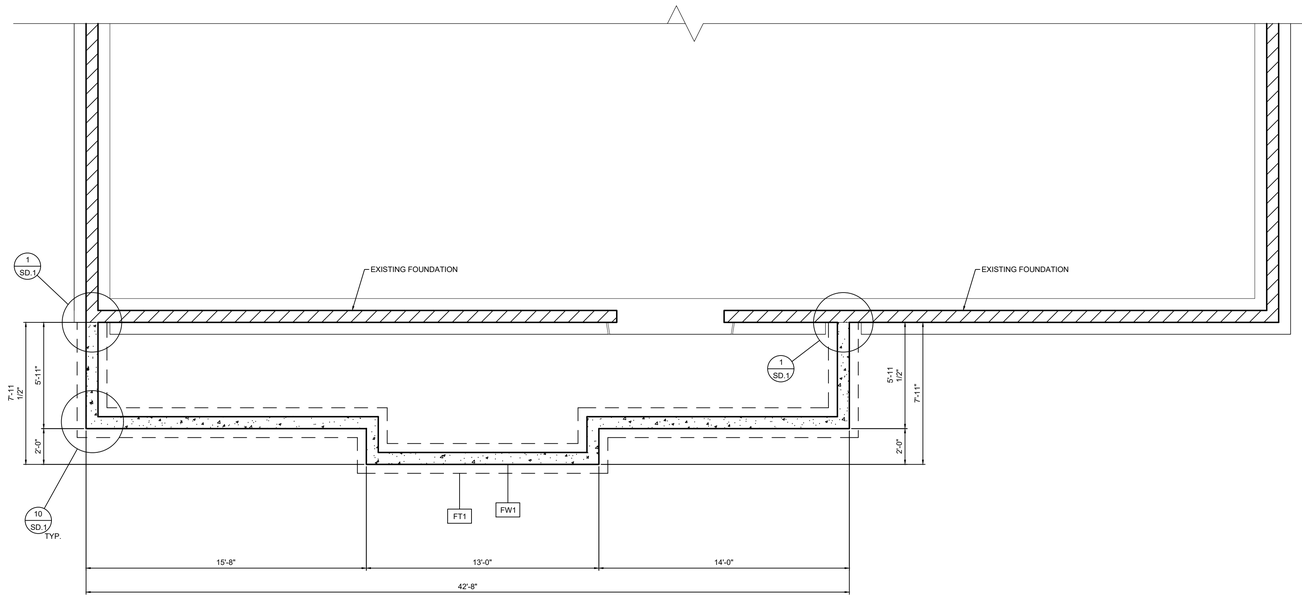
BEAM SCHEDULE	
DESIGNATION	SIZE
RB1	4x8 DF-L #2
RB2	3 1/2" x 9" GLULAM
RB3	(2) 2x8 DF-L #2
RB4	(2) 2x10 DF-L #2

POST SCHEDULE	
DESIGNATION	SIZE
P1	ONE TRIMMER/STUD
P2	TWO TRIMMERS/STUDS
P3	THREE TRIMMERS/STUDS
P4	FOUR TRIMMERS/STUDS
P5	4x4 DF-L #2 POST
P6	6x6 DF-L #2 POST
P7	3 1/2"x5 1/2" PARALLAM
P8	5 1/2"x5 1/2" PARALLAM
P9	8x8 DF-L #2 POST
P10	10x10 DF-L #2 POST

NOTES:
1. SEE GENERAL STRUCTURAL NOTES SHEET (SN.1) FOR TYPICAL BEARING POST REQUIREMENTS.
2. POSTS INDICATE NUMBER OF TRIMMERS WHEN SPECIFIED AS HEADERS. ALL OTHER POST DESIGNATIONS REFER TO FULL HEIGHT KING STUDS.
3. INSTALL (2) TRIMMERS (MIN.) EACH SIDE OF HEADER GREATER THAN 6'-0" IN LENGTH.
4. INSTALL (2) KING STUDS (MIN.) EACH SIDE OF HEADER ON OPENINGS GREATER THAN 4'-0". SEE SHEET SN.1 FOR MIN. KING STUD REQUIREMENTS.
5. INSTALL (2) KING STUDS (MIN.) AT ALL HOLDOWN LOCATIONS OR AS NOTED ON HOLDOWN SCHEDULE. (U.N.O.)

BEAM HANGER SCHEDULE		
DESIGNATION	DESCRIPTION	NOTES
RH1	HU3.25/12	-

ROOF SHEATHING SCHEDULE		
MATERIAL	8d NAILS SPACING	
	EDGE	FIELD
7/16" STRUCTURAL II PLYWOOD OR OSB	6"	12"



FOOTING AND FOUNDATION PLAN

FOOTING SCHEDULE											
	WIDTH	LENGTH	DEPTH	CROSSWISE REINFORCEMENT				LENGTHWISE REINFORCEMENT			
				NO.	SIZE	LENGTH	SPACING	NO.	SIZE	LENGTH	SPACING
FT1	20"	CONT.	10"					2	#4	CONT.	EQ.

NOTES:
1. SEE GENERAL STRUCTURAL NOTES SHEET (SN.1) FOR TYPICAL FOOTING REQUIREMENTS
2. ALL FOOTINGS ARE TO BEAR BELOW THE FROST LINE OF THE LOCALITY (30" MIN. U.N.O.)
3. PROVIDE J-BARS TO MATCH VERTICAL WALL REINFORCEMENT
4. CONTINUOUS FOOTINGS SHALL BE CENTERED UNDER WALLS AND SPOT FOOTINGS SHALL BE CENTERED UNDER COLUMNS (U.N.O.)

FOUNDATION WALL SCHEDULE								
	WIDTH	HEIGHT	VERTICAL REINFORCEMENT			HORIZONTAL REINFORCEMENT		
			SIZE	GRADE	SPACING	SIZE	GRADE	SPACING
FW1	8"	42"	#4	60	24"	#4	60	(4) #4

NOTES:
1. SEE GENERAL STRUCTURAL NOTES SHEET (SN.1) FOR TYPICAL FOUNDATION WALL REQUIREMENTS.
2. PLACE REINFORCEMENT IN CENTER OF WALL OR NEAR EACH FACE, PER PLANS (U.N.O.)
3. PLACE TOP AND BOTTOM REINFORCEMENT WITHIN 4" OF TOP AND BOTTOM OF WALL.

REDWOOD ENGINEERING Inc.
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THE CARSON HOME
1031 E. 300 N., ALPINE, UTAH

STRUCTURAL PLANS

DATE	REVISION

PROJECT NO:	2020-281
DATE:	7-7-20
SCALE:	1/4"=1'-0"
DRAWN BY:	STU
CHECKED BY:	DSU

STAMP

STATE OF UTAH
DANIEL S. URQUHART
No. 10188152
DATE: 7-8-20
PROFESSIONAL ENGINEER

SHEET NO.

S1.0

STRUCTURAL DESIGN CRITERIA

1. GOVERNING BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE
2. ROOF LOADING
   - A. ROOF DEAD LOAD.......... 15.0 psf
   - B. ROOF LIVE LOAD.......... 20.0 psf
   - C. ROOF SNOW LOAD.......... 29.4 psf
     - GROUND SNOW LOAD, P_g.......... 42.0 psf
     - FLAT ROOF SNOW LOAD, P_f.......... 29.4 psf
     - SNOW EXP. FACTOR, C_e.......... 1.0
     - THERMAL FACTOR, C_t.......... 1.0
     - ROOF SLOPE FACTOR, C_s.......... 1.0
     - IMPORTANCE FACTOR, I.......... 1.0
     - DRIFT SURCHARGE.......... AS NOTED ON PLANS
   - D. RAIN INTENSITY, i (in/hr).......... 1.0
3. FLOOR LOADING
   - A. FLOOR DEAD LOAD.......... 15 psf
   - B. FLOOR LIVE LOAD.......... 40 psf
   - C. FLOOR LIVE LOAD (BALCONIES & DECKS).......... 60 psf
4. WALL WEIGHT
   - A. WALL DEAD LOAD (FRAMING ONLY).......... 10 psf
5. SEISMIC PARAMETERS
   - A. SEISMIC RISK CATEGORY II
   - B. SEISMIC DESIGN CATEGORY D
   - C. SPECTRAL RESPONSE ACCELERATIONS
     - S_s.......... 1.36g
     - S_l.......... 0.51g
     - F_a.......... 1.20g
     - F_v.......... 1.79g
     - S_{ds}.......... 1.09g
     - S_{d1}.......... 0.61g
   - D. SEISMIC FORCE RESISTING SYSTEM.......... PLYWOOD SHEAR WALLS
     - R.......... 6.5
     - C_d.......... 4.0
     - Ω.......... 3.0
   - E. IMPORTANCE FACTOR, I.......... 1.0
   - F. DESIGN BASE SHEAR, V.......... 0.127*W
   - G. ANALYSIS PROCEDURE.......... EQUIVALENT LATERAL FORCE
6. WIND PARAMETERS
   - A. BASIC WIND SPEED.......... 110 MPH
   - B. NOMINAL DESIGN WIND SPEED.......... 85 MPH
   - C. WIND RISK CATEGORY.......... II
   - D. WIND EXPOSURE.......... B
   - E. INTERNAL PRESSURE COEFFICIENT.......... 0.18
   - F. COMPONENTS & CLADDING PRESSURE.......... 16 psf
7. SOILS CRITERIA
   - A. SOIL BEARING PRESSURE.......... 1,500 psf
   - B. SOIL SITE CLASS.......... D
   - C. FROST DEPTH.......... 30 INCHES
   - D. GEOTECH STUDY USED.......... NONE: ASSUMED SEISMIC VALUES USED GEOTECHNICAL REPORT IS RECOMMENDED

GENERAL

1. CONSTRUCTION DOCUMENTS ARE VALID FOR A SINGLE USE AT THE PROJECT LOCATION AND SHALL NOT BE REUSED, COPIED, OR REPRODUCED WITHOUT WRITTEN APPROVAL OF THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
2. THE GENERAL CONTRACTOR SHALL:
   - A. FIELD VERIFY ALL SITE CONDITIONS AND IMMEDIATELY NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER REGARDING ANY DISCREPANCIES WITH ACTUAL CONDITIONS AT THE SITE.
   - B. COORDINATE ALL WORK BETWEEN THE VARIOUS TRADES AND SUBCONTRACTORS. REPORT ANY MODIFICATIONS TO THE STRUCTURAL PORTION OF THE BUILDING BY OTHER TRADES TO THE ARCHITECT AND STRUCTURAL ENGINEER.
3. CONTRACT DOCUMENTS:
   - A. DETAILS, SECTIONS AND NOTES SHOWN ON THE STRUCTURAL DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO ALL SIMILAR SITUATIONS ELSEWHERE, UNLESS NOTED OR SHOWN OTHERWISE.
   - B. THE CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
4. BUILDING CODE COMPLIANCE:
   - A. INSPECTION, TESTING, CONSTRUCTION, WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE REQUIREMENTS OF THE GOVERNING BUILDING CODE AND STANDARDS. ASTM AND IBC DESIGNATIONS SHALL BE AMENDED TO LATEST DATE UNLESS NOTED OTHERWISE.
5. CONSTRUCTION SEQUENCE, SHORING, AND BRACING REQUIREMENTS:
   - A. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE METHOD, MEANS, AND SEQUENCE OF ALL STRUCTURAL ERECTION EXCEPT WHEN SPECIFICALLY NOTED OTHERWISE ON THE DRAWINGS. HE SHALL PROVIDE TEMPORARY SHORING AND BRACING AS HIS METHOD OF ERECTION REQUIRES TO PROVIDE ADEQUATE VERTICAL AND LATERAL SUPPORT DURING ERECTION. THIS SHORING AND BRACING SHALL REMAIN IN PLACE UNTIL ALL PERMANENT MEMBERS ARE PLACED AND ALL FINAL CONNECTIONS ARE COMPLETED, INCLUDING ALL ROOF AND FLOOR ATTACHMENTS.
   - B. SHORING AND SUPPORTING FORM WORK FOR SUSPENDED CONCRETE OR MASONRY MATERIAL SHALL REMAIN IN PLACE AND SHALL NOT BE REMOVED UNTIL THE STRUCTURAL MEMBERS HAVE ACQUIRED SUFFICIENT STRENGTH TO SAFELY SUPPORT THEIR OWN WEIGHT AND ANY ADDITIONAL CONSTRUCTION, STORAGE, AND/OR OTHER LOADS TO WHICH THEY MAY BE SUBJECTED. IN NO CASE SHALL THEY BE REMOVED PRIOR TO 7 DAYS. RE-SHORING SHALL BE IMMEDIATELY INSTALLED UPON REMOVAL OF SUCH FORMS AND SHALL REMAIN IN PLACE UNTIL 28 DAYS AFTER PLACING OF MATERIAL OR UNTIL MATERIAL HAS REACHED ITS 28 DAY DESIGN STRENGTH, WHICHEVER IS LONGER. DO NOT REMOVE LARGE AREAS OF SHORING BEFORE STARTING RE-SHORING PROCEDURES.
   - C. NON-BEARING INTERIOR WALLS SHALL BE ADEQUATELY BRACED TO THE STRUCTURE ABOVE WITH ALLOWANCE FOR DEFLECTION OF THE STRUCTURE ABOVE AND/OR BELOW.
   - D. BUILDING WALLS WHICH RETAIN EARTH MUST BE BRACED AT THE TOP. DO NOT BACKFILL UNLESS BRACING IS PROVIDED OR UNTIL THE COMPLETE FLOOR OR ROOF SYSTEM IS IN PLACE, TYPICAL, UNLESS NOTED OTHERWISE.
6. OMISSIONS AND/OR CONFLICTS:
   - A. OMISSIONS IN AND/OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER AND SHALL BE RESOLVED BY THE SAME BEFORE PROCEEDING WITH ANY WORK INVOLVED.
7. REMODEL AND ADDITION PLANS:
   - A. REDWOOD ENGINEERING INC. ASSUMES NO LIABILITY FOR THE DESIGN AND CONSTRUCTION OF THE EXISTING BUILDING.
   - B. NOTIFY REDWOOD ENGINEERING, INC. OF ANY DISCREPANCIES WITH THE EXISTING SITE AND PROPOSED CONSTRUCTION DOCUMENTS PRIOR TO TO ANY DEMOLITION AND CONSTRUCTION.

DEFERRED SUBMITTAL NOTES

1. PRE-FABRICATED METAL PLATE TRUSSES ARE TO BE SUBMITTED SUBSEQUENT TO THE TIME OF APPLICATION.
2. DEFERRED SUBMITTALS SHALL HAVE THE PRIOR APPROVAL OF THE BUILDING OFFICIAL.
3. DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE WHO SHALL REVIEW AND FORWARD THEM TO THE BUILDING OFFICIAL WITH A NOTATION INDICATING THAT THE DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING.
4. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

DETAIL DESIGNATION LEGEND

X / XX.X TYP — USE THIS DETAIL IN ALL SIMILAR (TYPICAL) LOCATIONS ON PLANS (DETAIL MAY BE USED MORE THAN ONCE).

X / XX.X — USE THIS DETAIL IN SPECIFIED LOCATION ONLY. DETAIL IS SPECIFIC TO A CERTAIN LOCATION NOTED ON PLANS.

SITE PREPARATION

1. ARCHITECTURAL AND SITE PLANS FOR THIS PROJECT WERE PREPARED BY OTHERS. REDWOOD ENGINEERING, INC. ASSUMES NO LIABILITY FOR THE ACCURACY, COMPLETENESS, OR CODE COMPLIANCE OF ARCHITECTURAL, ELECTRICAL, MECHANICAL OR DRAINAGE SPECS.
2. SOILS REPORT:
   - A. IF SOILS CONDITIONS VARY FROM THE SOILS REPORT, THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ARCHITECT AND THE STRUCTURAL ENGINEER.
   - B. FOUNDATION DESIGN BASED ON THE NOTED PSF SOIL BEARING CAPACITY. WE RECOMMEND THAT A LICENSED GEOTECHNICAL ENGINEER VERIFY THE SOIL BEARING CAPACITY, SLOPE STABILITY, ETC.
3. REQUIREMENTS:
   - A. DO NOT PLACE FOOTINGS OR FOUNDATIONS ON DISTURBED SOILS, UNDOCUMENTED FILL, DEBRIS, FROZEN SOIL, OR IN PONDED WATER.
   - B. ALL UNSUITABLE SOILS AND VEGETATION, SUCH AS TOPSOIL, ORGANIC SOILS, UNDOCUMENTED FILL, DISTURBED NATIVE SOILS, AND OTHER DELETERIOUS MATERIALS, SHALL BE REMOVED FROM BELOW FOOTINGS, FOUNDATIONS, AND FLOOR SLABS.
   - C. STRUCTURAL FILL SHALL CONSIST OF IMPORTED, WELL GRADED, GRANULAR SOIL WITH A MAXIMUM PARTICLE SIZE OF THREE INCHES, LESS THAN 30 PERCENT RETAINED ON THE ¾" SIEVE, AND LESS THAN 15 PERCENT FINES (MATERIAL PASSING THE NO. 200 SIEVE). THE LIQUID LIMIT OF THE FINES SHALL NOT EXCEED 35 PERCENT AND THE PLASTICITY INDEX SHALL BE BELOW 15.
   - D. STRUCTURAL FILL SHALL BE PLACED IN MAXIMUM EIGHT INCH LOOSE LIFTS AND COMPACTED ON A HORIZONTAL PLANE. MOISTURE SHALL BE MAINTAINED BY PROPER MIXING AT A MOISTURE CONTENT WITHIN TWO PERCENT OF THE OPTIMUM MOISTURE DETERMINED BY ASTM D 1557. COMPACT TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY AS DETERMINED BY ASTM D 1557 BELOW FOOTINGS, FOUNDATIONS, AND FLOOR SLABS.
   - E. ALL STRUCTURAL FILL THAT BECOMES DISTURBED DURING CONSTRUCTION SHALL BE RE-COMPACTED PER THE COMPACTION REQUIREMENTS SPECIFIED ABOVE. IF SOFT OR PUMPING CONDITIONS ARE ENCOUNTERED, THE SUB-GRADE MUST BE PROPERLY STABILIZED. DE-WATERING, PLACEMENT OF GEO-FABRIC, OR OTHER STABILIZATION MAY BE REQUIRED.
   - F. ALL SLABS ON GRADE SHALL BE UNDERLAIN BY FOUR INCHES OF FREE-DRAINING GRANULAR MATERIAL SUCH AS "PEA" GRAVEL OR THREE-QUARTERS TO ONE INCH MINUS CLEAN GRAVEL.
   - G. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL HAVE A 5-PERCENT SLOPE AWAY FROM THE BUILDING FOR A MINIMUM DISTANCE OF 10 FEET MEASURED PERPENDICULAR TO THE FACE OF THE FOUNDATION WALL. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATIVE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. IMPERVIOUS SURFACES WITHIN 10 FEET OF THE BUILDING FOUNDATION SHALL HAVE A MINIMUM 2-PERCENT SLOPE.

CONCRETE

1. CONCRETE MATERIALS, QUALITY CONTROL, AND CONSTRUCTION SHALL COMPLY WITH CURRENT EDITIONS OF IBC AND ACI 318.
2. COMPRESSIVE STRENGTH (MINIMUM SPECIFIED AT 28 DAYS)
   - A. FOOTINGS: 3,000 PSI
   - B. INTERIOR FLOOR SLABS ON GRADE: 4,000 PSI
   - C. EXTERIOR FLOOR SLABS ON GRADE: 4,000 PSI
   - D. SUSPENDED SLABS: 4,000 PSI
   - E. WALLS: 3,000 PSI FOR R-2 AND R-3 OCCUPANCIES, 4,000 PSI FOR OTHER

   NOTE: 2500 PSI CONCRETE USED IN FOOTING DESIGN, HIGHER STRENGTHS SPECIFIED FOR QUALITY CONTROL.
3. MATERIALS
   - A. CEMENTS (ASTM C 150). CONCRETE EXPOSED TO FREEZING AND THAWING OR DEICING CHEMICALS SHALL CONFORM TO THE MAXIMUM WATER-CEMENTITIOUS MATERIAL RATIOS AND MINIMUM COMPRESSIVE STRENGTH REQUIREMENTS OF ACI-318.
   - B. AGGREGATES (ASTM C 33): NOMINAL MAXIMUM SIZE OF COARSE AGGREGATE SHALL NOT BE LARGER THAN ⅕ THE NARROWEST DIMENSION BETWEEN FORMS, NOR ⅓ THE DEPTH OF SLABS, NOR ¾ THE MINIMUM CLEAR SPACING BETWEEN REINFORCING BARS OR WIRES, TENDONS, OR DUCTS.
   - C. WATER USED IN MIXING CONCRETE SHALL BE POTABLE, CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, ORGANIC MATERIALS, OR OTHER SUBSTANCES DELETERIOUS TO CONCRETE OR REINFORCEMENT.
   - D. ADMIXTURES SHALL BE SUBJECT TO PRIOR APPROVAL BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.
   - E. CONCRETE EXPOSED TO FREEZING AND THAWING OR DEICING CHEMICALS SHALL BE AIR-ENTRAINED WITH AIR CONTENT INDICATED IN ACI 318. TOLERANCE ON AIR CONTENT AS DELIVERED SHALL BE PLUS/MINUS 1.5 PERCENT.
4. CONSTRUCTION:
   - A. CONCRETE SHALL BE PROPERLY VIBRATED DURING PLACEMENT.
   - B. PRIOR TO PLACING CONCRETE, CHECK WITH ALL TRADES TO ENSURE PROPER PLACEMENT OF OPENINGS, BLOCK OUTS, SLEEVES, CURBS, CONDUITS, BOLTS, INSERTS, EMBEDS, DOWELS, ETC. ANCHOR BOLTS AND DOWELS SHALL BE PLACED PRIOR TO CASTING CONCRETE.
   - C. CONSTRUCTION JOINTS AND BULKHEADS SHALL BE FORMED WITH A KEYWAY. ALL CONTACT SURFACES, NEW OR EXISTING, AT CONSTRUCTION JOINTS SHALL BE INTENTIONALLY ROUGHENED PRIOR TO CASTING ADJACENT POUR.
   - D. OPENINGS IN FLOORS AND/OR WALLS SHALL HAVE ADDITIONAL REINFORCING AROUND ALL SIDES OF THE OPENING EQUIVALENT TO THE BARS CUT BY THE OPENING WITH HALF ON EACH SIDE OF THE OPENING OR 2-#4 BARS, WHICHEVER IS GREATER, UNLESS NOTED OTHERWISE. BARS PARALLEL TO THE PRINCIPAL REINFORCING SHALL RUN FULL LENGTH OF THE SPAN. BARS IN THE OTHER DIRECTION SHALL RUN 24 INCHES BEYOND THE EDGE OF THE OPENING OR END WITH A STANDARD HOOK. ALSO PROVIDE 2-#4 x 4'-0" DIAGONAL BARS AT EACH CORNER OF EACH OPENING.
   - E. NO PENETRATION SHALL BE ALLOWED THROUGH ANY CONCRETE BEAM, JOIST, COLUMN, PIER, WALL, OR JAMB WITHOUT THE ARCHITECT'S AND STRUCTURAL ENGINEER'S PRIOR WRITTEN APPROVAL. PENETRATIONS SHALL BE RE-ROUTED AS REQUIRED AT THESE LOCATIONS.
5. FOOTINGS:
   - A. FOOTINGS SHALL BEAR ON PROPERLY PREPARED MATERIAL. SEE THE SITE PREPARATION NOTES.
   - B. FOOTINGS SHALL BE CENTERED BELOW THE WALL AND/OR COLUMN ABOVE, TYPICAL UNLESS NOTED OTHERWISE.
   - C. EXTERIOR FOOTINGS SHALL BEAR BELOW THE EFFECTS OF FROST.
   - D. STAGGER FOOTING CONSTRUCTION JOINTS FROM WALL CONSTRUCTION JOINTS ABOVE BY AT LEAST 6 FEET.
   - E. REINFORCING IN CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AT CORNERS AND/OR INTERSECTIONS BY PROVIDING PROPER LAP LENGTHS AND/OR CORNER BARS.
   - F. EXTERIOR CONTINUOUS FOOTINGS WITHOUT CONCRETE FOUNDATION WALLS ABOVE SHALL BE REINFORCED WITH A MINIMUM OF 2-#4 LONGITUDINAL TOP BARS IN ADDITION TO REINFORCING SPECIFIED IN THE FOOTING SCHEDULE.
   - G. NO PENETRATIONS SHALL BE ALLOWED THROUGH ANY CONCRETE FOOTING. WHEN CONFLICTS ARISE BETWEEN UNDERGROUND PLUMBING, UTILITIES, ETC., THE FOOTING SHALL BE STEPPED DOWN BELOW THE CONFLICT AND A CONCRETE WALL, PIER, COLUMN, ETC., SHALL BE EXTENDED TO THE FOOTING AS REQUIRED.
   - H. BEARING SURFACES FOR FOOTINGS WHICH ARE, OR BECOME, UNDERMINED DURING CONSTRUCTION SHALL BE BACKFILLED WITH A LEAN-MIX CONCRETE (1000 PSI MIN.).
6. SLABS ON GRADE:
   - A. INTERIOR SLABS ON GRADE SHALL BE A MINIMUM OF 4 INCHES THICK, SHALL BEAR ON A 4 INCH MINIMUM LAYER OF FREE-DRAINING GRAVEL.
   - B. CONTROL JOINT SPACING RULE OF THUMB IS 24x_ SLAB THICKNESS (4" SLAB = 8'-0" MAX O.C. EACH WAY). PROVIDE CONTROL JOINTS AT APPROX. 15'-0" EACH WAY (MAXIMUM).
   - C. SAW CUT WITHIN 6-18 HOURS OF POURING CONCRETE. CONCRETE MUST BE HARD ENOUGH TO PREVENT RAVELING OF JOINT EDGES OR DISLODGING OF COURSE AGGREGATE.
   - D. LARGE AREAS OF INTERIOR SLABS ON GRADE SHALL BE PLACED IN STRIPS NOT TO EXCEED 120 FEET IN LENGTH NOR 30 FEET IN WIDTH WHICH ARE SUBDIVIDED BY CONSTRUCTION AND/OR CONTRACTION (CONTROL) JOINTS INTO ROUGHLY SQUARES WHOSE SIDES SHALL NOT EXCEED 15 FEET IN EITHER DIRECTION.
7. WALLS:
   - A. PLACE VERTICAL REINFORCING IN THE CENTER OF THE WALL (EXCEPT FOR RETAINING WALLS, OR WHEN EACH FACE IS SPECIFIED).
   - B. VERTICAL REINFORCING SHALL BE DOWELED TO FOOTING OR STRUCTURE BELOW AND TO STRUCTURE ABOVE WITH THE SAME SIZE BAR AND SPACING, TYPICAL, UNLESS NOTED OTHERWISE.
   - C. PROVIDE CORNER BARS AT ALL INTERSECTIONS AND CORNERS. USE SAME SIZE BAR AND SPACING AS THE HORIZONTAL REINFORCING.
   - D. HORIZONTAL REINFORCING SHALL TERMINATE AT THE ENDS OF WALLS AND AT OPENINGS WITH A STANDARD HOOK.
   - E. WHEN TWO CURTAINS OF STEEL ARE REQUIRED, THE SPLICES IN THE HORIZONTAL REINFORCING OF EACH CURTAIN SHALL NOT OCCUR AT THE SAME LOCATION.
   - F. PROVIDE DRAINAGE AT THE BASE OF RETAINING WALLS AND AT THE BASE OF ALL BASEMENT WALLS.
   - G. ANCHOR BOLTS ARE TO HAVE A MIN. 7" EMBEDMENT INTO CONCRETE. PROVIDE 1 BOLT A MIN. OF 4" FROM END OF PLATE & A MAX. OF 12" FROM END OF PLATE. EACH PLATE IS TO HAVE A MIN. OF 2 BOLTS. ANCHOR BOLT SPACING IS NOT TO EXCEED 32" O.C. U.N.O. ON PLANS.
   - H. A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE. ANCHOR BOLTS FOR STRUCTURES LOCATED IN SEISMIC DESIGN CATEGORY D,E, OR F SHALL INCLUDE A 3"x3"x.229" WASHER WITH ROUND OR SLOTTED HOLES.

REINFORCING STEEL

1. CODES AND STANDARDS:
   - A. REINFORCING STEEL SHALL COMPLY WITH:
     - I. CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
     - II. AMERICAN CONCRETE INSTITUTE "DETAILING MANUAL", ACI 315 (OR SP-66).
2. MATERIALS:
   - A. REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS AND SHALL CONFORM TO ASTM A615, GRADE 60, WITH A DESIGN YIELD STRENGTH OF 60,000 PSI, EXCEPT AS NOTED BELOW.
     - I. DOWELS TO BE BENT IN THE FIELD DURING CONSTRUCTION SHALL BE ASTM A615, GRADE 40 OR ASTM A706, GRADE 60, "LOW ALLOY STEEL".
     - II. REINFORCING TO BE WELDED SHALL BE ASTM A706, GRADE 60, "LOW-ALLOY STEEL".
3. CONSTRUCTION:
   - A. REINFORCING SHALL BE DETAILED, BOLSTERED, AND SUPPORTED PER ACI 318 AND IBC.
   - B. REINFORCING STEEL SHALL BE FREE OF LOOSE, FLAKY RUST, SCALE, GREASE, OIL, DIRT, AND OTHER MATERIALS WHICH MIGHT AFFECT OR IMPAIR BOND.
   - C. REINFORCING SHALL BE CONTINUOUS IN WALLS, BEAMS, COLUMNS, SLABS, FOOTINGS, ETC.
   - D. SPLICES IN CONTINUOUS REINFORCING SHALL BE MADE IN AREAS OF COMPRESSION AND/OR AT POINTS OF MINIMUM STRESS, TYPICAL UNLESS NOTED OTHERWISE. LAP SPLICES SHALL BE 40 BAR DIAMETERS LONG IN CONCRETE AND 48 BAR DIAMETERS LONG IN MASONRY. MINIMUM LAP SHALL BE 24 INCHES LONG. DOWELS SHALL HAVE A MINIMUM OF 30 BAR DIAMETERS EMBEDMENT. TENSION SPLICES SHALL BE USED IN CONCRETE WHEN SPECIFICALLY NOTED, USE A CLASS B SPLICE. SPLICES IN TOP BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT MID SPAN. SPLICES IN BOTTOM BARS IN SUSPENDED SLABS AND BEAMS SHALL BE MADE AT SUPPORTS.
   - E. BENDS SHALL BE MADE COLD. DO NOT USE HEAT. BENDS SHALL BE DONE IN THE FABRICATOR'S SHOP UNLESS SPECIFICALLY NOTED FOR THE FIELD. DO NOT UN-BEND OR RE- BEND A PREVIOUSLY BENT BAR.
   - F. REINFORCING STEEL IN CONCRETE SHALL BE SECURELY ANCHORED AND TIED IN PLACE PRIOR TO PLACING CONCRETE AND SHALL BE POSITIONED WITH THE FOLLOWING MINIMUM CONCRETE COVER:
     - CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH.......3"
     - CONCRETE EXPOSED TO EARTH OR WEATHER:
       - #6 AND LARGER.......... 2"
       - #5 AND SMALLER.......... 1 1/2"
     - CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
       - SLABS AND WALLS, #11 AND SMALLER.......... 1 1/2"
       - BEAMS AND COLUMNS, MAIN REINFORCING OR TIES.......... 1 1/2"
       - SLABS ON GRADE.......... CENTER OF SLAB
   - G. NO REINFORCING STEEL SHALL BE WELDED UNLESS SPECIFICALLY NOTED AS SUCH. USE E90XX ELECTRODES AND ASTM A706 REINFORCING. COMPLY WITH AWS REQUIREMENTS.

POST INSTALLED ANCHORS

1. EPOXY ADHESIVE ANCHORING SYSTEMS:
   - A. CONCRETE: HILTI HIT-RE 500-SD OR SIMPSON SET-XP.
   - B. MASONRY (GROUTED): HILTI HIT-HY 150-MAX OR SIMPSON SET.
   - C. STEEL REINFORCEMENT AND RODS SHALL BE EMBEDDED 10 BAR DIAMETERS UNLESS NOTED OTHERWISE IN THE STRUCTURAL DRAWING AND DETAILS. WHERE 10 BAR DIAMETERS EXCEED THE MEMBER THICKNESS MINUS MINIMUM COVER, STEEL REINFORCEMENT SHALL BE EMBEDDED THE MEMBER THICKNESS MINUS MINIMUM COVER WITH A STANDARD HOOK.
   - D. EMBEDDED PORTIONS OF STEEL REINFORCEMENT AND RODS SHALL BE CLEAN, STRAIGHT, AND FREE OF MILL SCALE, RUST AND OTHER COATINGS THAT IMPAIR THE BOND WITH THE ADHESIVE. REINFORCEMENT MUST NOT BE BENT AFTER INSTALLATION.
2. MECHANICAL EXPANSION ANCHORS:
   - A. CONCRETE: HILTI KWIK BOLT TZ.
   - B. MASONRY: HILTI KWIK BOLT 3.
   - C. EXPANSION ANCHORS SHALL NOT BE USED IN TENSILE LOAD APPLICATIONS (E.G. HOLDOWNS, MOMENT FRAMES) AND MAY NOT BE USED TO SUBSTITUTE OTHER ANCHOR SYSTEMS.
3. POST-INSTALLED ANCHORING SYSTEMS SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. HOLE CLEANING METHOD SHALL BE BASED ON DRILLING METHOD AND BORE HOLE CONDITIONS AND SHALL CONFORM TO THE MANUFACTURER'S INSTRUCTIONS.

GENERAL FRAMING NOTES

1. ALL JOISTS, RAFTERS, POSTS AND HEADERS SHALL BE DOUGLAS FIR LARCH NO.2 OR EQUAL U.N.O.
2. ALL JOISTS AND RAFTERS SHALL HAVE SOLID BLOCKING AT THEIR BEARING POINTS.
3. ALL WOOD/LUMBER PLACED ONTO CONCRETE SHALL BE PRESSURE TREATED OR REDWOOD.
4. ALL WOOD CONNECTIONS MUST CARRY THE CAPACITY OF THE MEMBER, CONTRACTOR IS RESPONSIBLE FOR CONNECTIONS. IF OTHER THAN STANDARD CONNECTIONS ARE REQUIRED, SEE PROJECT ENGINEER FOR ADDITIONAL ASSISTANCE. USE SIMPSON OR EQUAL CONNECTIONS FOR WOOD TO WOOD.
5. ALL COLUMNS SHALL EXTEND DOWN THROUGH THE STRUCTURE TO THE FOUNDATION. ALL COLUMNS SHALL BE BRACED AT ALL FLOOR LEVELS. COLUMNS SHALL BE AS WIDE AS THE MEMBER THEY SUPPORT. POSTS SUPPORTED BY SLABS OR FND WALLS TO HAVE SIMPSON CB POST BASE OR EQUIVALENT.
6. ALL FLOOR SHEATHING TO BE ¾" THICK T&G SHEATHING GLUED AND NAILED WITH 8d COMMON NAILS OR EQUAL @ 6" O.C. EDGES AND @ 12" O.C. IN THE FIELD.
7. VERIFY ALL BEAM SIZES WITH ENGINEERING SPECIFICATIONS.
8. ALL BEAMS AND HEADERS OVER 48" SHALL BE SUPPORTED BY DOUBLE TRIMMERS UNLESS NOTED OTHERWISE.
9. TRUSS MANUFACTURER SHALL PROVIDE ENGINEERING SPECS. FOR ALL TRUSSES.
10. 7/16" ROOF NAILING SCHEDULE AS FOLLOWS: (⅝" ROOF SHEATHING TO USE 10d NAILS)
    - 8d NAILS @ 6" O.C. AT EDGES OF ROOF
    - 8d NAILS @ 4" O.C. AT GABLE ENDS
    - SPACE NAILS 12" O.C. ON INTERMEDIATE MEMBERS
    - STAGGER SHEATHING JOINTS
    - SHEATHING PERP. TO RAFTERS AND TRUSSES
11. PROVIDE SQUASH BLOCKING AT RIM JOIST BELOW ALL POSTS FROM ROOF, HEADER OR BEAM POINT LOADS. SQUASH BLOCKING TO BE SAME MATERIAL AS POST ABOVE.
12. PROVIDE DOUBLE FLOOR JOISTS BELOW ALL PARALLEL BEARING WALLS ABOVE.
13. GLULAM BEAMS SHALL BE 24F-V4 DF/DF FOR SINGLE SPANS AND 24F-V8 DF/DF FOR MULTIPLE SPANS, AND CANTILEVERED SPANS. GLULAMS EXPOSED TO WEATHER SHALL BE PRESSURE TREATED OR PROVIDE WEATHER PROTECTIVE COATING.
14. LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING PROPERTIES:E=1900KSI,Fb=2600PSI,Fv=285PSI.
15. ALL RAFTERS AND JOISTS OVER THREE FEET LONG SHALL BE HANGERED IF NOT SUPPORTED BY BOTTOM BEARING. ALL HANGERS AND OTHER WOOD CONNECTIONS MUST BE DESIGNED TO CARRY THE CAPACITY OF THE MEMBER THAT THEY ARE SUPPORTING.
16. FRAMING CONNECTIONS NOTED ON THE DRAWINGS ARE SIMPSON STRONG-TIE OR EQUAL. INSTALL WITH THE CATALOG DESIGNATED CONNECTOR IN EACH HOLE.
17. NO STRUCTURAL MEMBER SHALL BE CUT OR NOTCHED UNLESS SPECIFICALLY SHOWN, NOTED OR APPROVED BY ENGINEER.
18. LAG SCREWS SHALL BE INSERTED IN A DRILLED PILOT HOLE 60%-75% OF THE SHANK DIAMETER BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER. ALL NUTS, BOLTS AND LAG SCREWS SHALL BE PROVIDED WITH AN OVERSIZED WASHER.
19. NAILS TO BE COMMON WIRE UNLESS OTHERWISE NOTED.
20. ALL BOLT HOLES SHALL BE DRILLED WITH A BIT 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.
21. ALL JOINTS IN WALL SHEATHING SHALL OCCUR IN THE MIDDLE OF A PLATE OR BLOCK AND NAILED ON EACH SIDE OF THE JOINT WITH EDGE NAILING PER SHEARWALL SCHEDULE.
22. COLUMNS AND POSTS LOCATED ON CONCRETE OR MASONRY FLOORS OR DECKS EXPOSED TO THE WEATHER OR TO WATER SPLASH OR IN BASEMENTS, AND WHICH SUPPORT PERMANENT STRUCTURES, SHALL BE SUPPORTED BY CONCRETE PIERS OR METAL PEDESTALS PROJECTING ABOVE FLOORS UNLESS APPROVED WOOD OF NATURAL RESISTANCE TO DECAY OR TREATED WOOD IS USED. THE PEDESTAL SHALL PROJECT AT LEAST 6" ABOVE EXPOSED EARTH & AT LEAST 1" ABOVE SUCH FLOORS.
23. ALL FASTENERS IN PRESSURE TREATED LUMBER ARE TO COMPLY WITH CURRENT IBC REQUIREMENTS.
24. ALL STAPLES INTO WOOD DIAPHRAGMS ARE TO BE A MINIMUM OF 1½" 16 GAGE WITH SPACING PER PLANS.
25. CHIMNEY & FIREPLACE FRAMING - PROVIDE FULL HT. 2x6 STUDS (MIN.) FROM BEARING TO TOP OF CHIMNEY. USE (2) ¼"x3½" SDS SCREWS AT EACH STUD TO RAFTER/TRUSS CHORD INTERSECTION.
26. PROVIDE KING STUDS AT THE END OF FRAMED WALL OPENINGS PER TABLE (U.N.O.):

MAX HEADER SPAN (FT.)	NO. OF KING STUDS
4'-0"	1
8'-0"	2
14'-0"	3
20'-0"	4

PRE-FABRICATED METAL PLATE WOOD TRUSS NOTES

1. BOTTOM CHORDS OF TRUSSES, ACTING AS CEILING MEMBERS MUST BE ABLE TO SUPPORT A 10 PSF LIVE LOAD PER IBC REQUIREMENTS.
2. THE TRUSS MANUFACTURER SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF THE PRE-ENGINEERED TRUSSES, INCLUDING ALL TEMPORARY BRACING, PERMANENT LATERAL BRACING, TRUSS TO TRUSS CONNECTIONS AND SHALL DESIGN THE TRUSSES PER ATTACHED ENGINEERING SPECS.
3. THE TRUSSES SHALL BE DESIGNED TO CARRY ANY ADDITIONAL LOADS DUE TO MECHANICAL UNITS, OVERHEAD DOORS, ROOF OVERBUILDS, ETC.
4. THE TRUSSES SHALL ALSO BE DESIGNED PER THE MOST RECENT BUILDING CODE, AND LOCAL ORDINANCES. DESIGN MUST ALSO TAKE INTO ACCOUNT UNBALANCED SNOW LOADS, SNOW DRIFTING, INCREASED SNOW LOADS ON EAVES AND VALLEYS, IMPACT LOADS FROM FALLING SNOW AND ICE, ETC.
5. ALL MEMBERS SHALL BE DESIGNED FOR COMBINED STRESSES, BASED ON WORST CASE CONDITION.
6. ALL DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF THE TRUSSES PER THE TRUSS MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS. NO WEB OR CHORD MEMBERS SHALL BE MODIFIED IN THE FIELD.
8. THE PROJECT ENGINEER, OR ENGINEER OF RECORD, IS NOT RESPONSIBLE FOR THE PRE-ENGINEERED TRUSSES, NOR FOR THE INSTALLATION ETC. OF THE TRUSSES. TRUSS PLANT SHALL PROVIDE LICENSED ENGINEERED PLAN.
9. TRUSSES SPANNING MORE THAN 60' AND/OR TALLER THAN 5'-0" IN HEIGHT REQUIRE SPECIAL INSPECTION ON TEMPORARY & PERMANENT LATERAL BRACING.
10. THE TRUSS DESIGNER SHALL PROVIDE A TRUSS PACKAGE THAT INCLUDES THE FOLLOWING ITEMS:
    - A. DESIGN DRAWINGS OF EACH INDIVIDUAL TRUSS.
    - B. TRUSS PLACEMENT DIAGRAM FOR THE PROJECT.
    - C. TRUSS MEMBER PERMANENT BRACING SPECIFICATION.
    - D. TRUSS TO TRUSS CONNECTIONS.
11. TRANSFER OF LOADS AND ANCHORAGE OF EACH TRUSS TO THE SUPPORTING STRUCTURE SHALL BE APPROVED BY THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

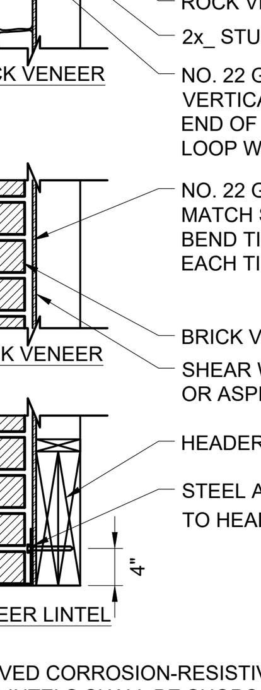
STRUCTURAL STEEL

1. CODES AND STANDARDS:
   - A. STRUCTURAL STEEL WORK SHALL COMPLY WITH CURRENT EDITIONS OF IBC 2205, AISC 341, AISC 358, AND AISC 360.
2. MATERIALS:
   - A. STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A992 GRADE 50 STEEL. STRUCTURAL STEEL PLATES SHALL CONFORM TO ASTM A36.
   - B. STRUCTURAL TUBE STEEL SHALL CONFORM TO ASTM A500, GRADE B, WITH A MINIMUM YIELD STRENGTH Fy=46 KSI.
   - C. STRUCTURAL PIPE SHALL CONFORM TO ASTM A53, WITH A MINIMUM YIELD STRENGTH Fy=36 KSI
   - D. HIGH STRENGTH BOLTS SHALL CONFORM TO ASTM A325. ALL OTHER BOLTS SHALL CONFORM TO ASTM A307 OR BETTER.
3. CONSTRUCTION:
   - A. FABRICATION SHALL BE DONE IN AN APPROVED FABRICATOR'S SHOP.
   - B. CAMBER IN BEAMS SHALL BE AS INDICATED ON PLANS.
   - C. PROVIDE A SHOP COAT OF PAINT ON ALL STEEL ITEMS, EXCEPT AT AREAS OF WELDING AND/OR BOLTING.
4. BOLTED CONNECTIONS:
   - A. BOLT SHALL BE BEARING TYPE CONNECTIONS UNLESS NOTED OTHERWISE.
   - B. STEEL TO STEEL BOLTED CONNECTIONS SHALL BE MADE WITH ASTM A325 HIGH STRENGTH BOLTS AND NUTS, UNLESS NOTED OTHERWISE. BOLTS SHALL CARRY THE IDENTIFYING MARK OF THREE (3) RADIAL LINES.
   - C. ALL OTHER BOLTED CONNECTIONS SHALL BE MADE WITH BOLTS AND NUTS CONFORMING TO ASTM A307 UNLESS NOTED OTHERWISE, INCLUDING ANCHOR BOLTS.
   - D. BOLTED CONNECTIONS SHALL BE TIGHTENED AND SHALL HAVE WASHERS AS REQUIRED BY AISC UNLESS NOTED OTHERWISE.
   - E. ENLARGING OF HOLES SHALL BE ACCOMPLISHED BY MEANS OF REAMING. DO NOT USE A TORCH ON ANY BOLT HOLES.
5. WELDED CONNECTIONS:
   - A. WELDED CONNECTIONS SHALL BE MADE USING LOW HYDROGEN MATCHING FILLER MATERIAL ELECTRODES, UNLESS NOTED OTHERWISE.
   - B. WELDERS SHALL BE CURRENTLY CERTIFIED ACCORDING TO AWS WITHIN THE LAST 12 MONTHS. ALL WELDING PROCEDURES SHALL BE PRE-QUALIFIED. WELDERS SHALL FOLLOW WELDING PROCEDURES.
   - C. WELDING AND GAS CUTTING SHALL BE DONE PER AWS. WELDS SHALL HAVE THE SLAG REMOVED.
   - D. WELDING WORK SHALL COMPLY WITH THE AMERICAN WELDING SOCIETY (AWS) "STRUCTURAL WELDING CODE," EXCLUDING ITEMS CONFLICTING WITH AISC REQUIREMENTS.

MASONRY VENEER ANCHOR TIES

1. MASONRY VENEER MATERIALS, CONSTRUCTION, AND QUALITY SHALL CONFORM TO CURRENT IBC AND ACI 530 CODES.
2. PRODUCTS: MASONRY VENEER ANCHOR TIES SHALL BE ONE OF THE FOLLOWING:
3. INSTALLATION:
   - I. DOVETAIL ANCHORS.
   - II. DX-10 SEISMIC CLIP INTERLOCK SYSTEM BY HOHMANN & BARNARD.
   - III. ARCHITECT AND STRUCTURAL ENGINEER APPROVED TWO PIECE ADJUSTABLE HOT-DIPPED GALVANIZED TIES.
   - A. MAXIMUM SPACING SHALL BE 16" O.C. VERTICAL AND MATCH STUD WALL SPACING HORIZONATAL
   - B. PROVIDE CONTINUOUS HORIZONTAL GALVANIZED #9 WIRE IN CENTER THIRD OF MORTAR JOINTS AT 16" O.C. ENGAGE #9 WIRE WITH ALL ANCHOR TIES. (SEE DETAIL)

VENEER LINTELS		
OPENINGS	ANGLE SIZE (LLV)	MIN. BRG
UP TO 7'-0"	3½"x3½"x¼"	8"
7'-0" TO 9'-0"	4"x3½"x¼"	8"
9'-0" TO 10'-0"	5"x3½"x¼"	10"
>10'-0"	6"x3½"x¼"	12"



NOTES:
1. APPROVED CORROSION-RESISTIVE FLASHING SHALL BE INSTALLED AS REQUIRED BY THE IRC AND IBC.
2. STEEL LINTELS SHALL BE SHOPCOATED WITH A RUST-INHIBITIVE PAINT OR MADE OF CORROSION RESISTANT STEEL OR STEEL TREATED WITH COATINGS TO PROVIDE CORROSION RESISTANCE.

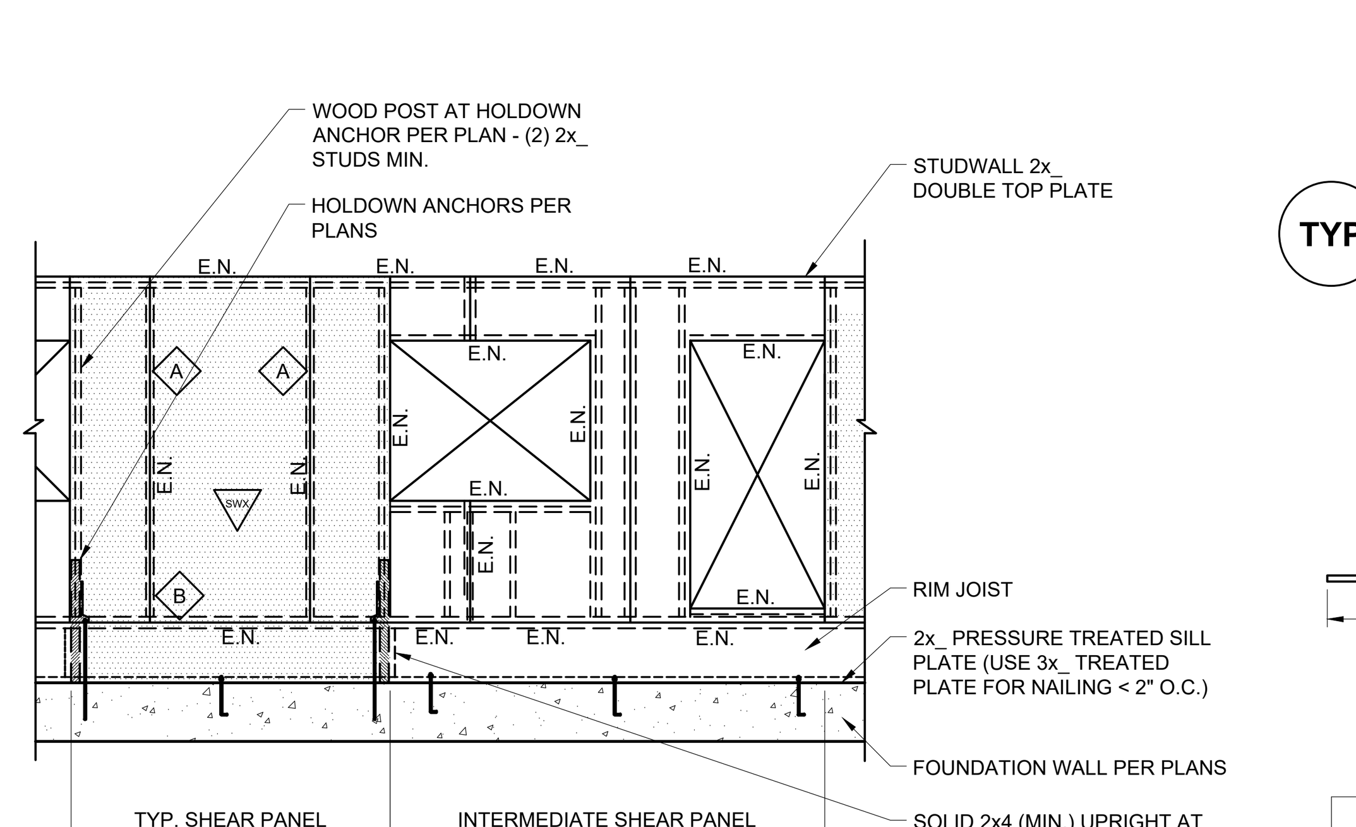
TYP VENEER ANCHORAGE

WOOD SHEAR WALL NOTES

1. ALL EXTERIOR WALLS, INTERIOR WALLS INDICATED ON THE PLANS, AND VERTICAL SURFACES AT STEPS IN ROOF SHALL BE SHEATHED WITH APA RATED 24/0 (OR BTR) CDX SHEATHING. TYPICAL NAILING SHALL BE AS INDICATED IN SHEAR WALL SCHEDULE. NAIL ALL PANELS WITH INDICATED NAIL SIZE AT 12" O.C. ALONG INTERMEDIATE SUPPORTS (6" O.C. NAILING WHEN STUDS ARE SPACED AT 24" O.C.)
2. BLOCK ALL HORIZONTAL PANEL EDGES WITH A 2" NOMINAL OR WIDER FRAMING.
3. ALL SHEATHING SHALL EXTEND CONTINUOUS FROM SILL PLATE TO ROOF OR FLOOR SHEATHING. BLOCK ALL PANEL EDGES AS NOTED ABOVE.
4. SHEATHING SHALL EXTEND CONTINUOUS FROM FLOOR FRAMING TO HIGH ROOF FRAMING ON UPPER LEVEL EXTERIOR WALLS ABOVE A LOW ROOF.
5. NAILS SHALL BE SPACED NOT LESS THAN ⅜" FROM EDGES AND ENDS OF SHEATHING AND SHALL BE DRIVEN FLUSH BUT SHALL NOT FRACTURE THE SURFACE OF THE SHEATHING. GAP ALL SHEATHING ⅛" AT PANEL EDGES.
6. ANCHOR BOLTS FOR ALL SHEAR WALLS SHALL BE SIZED AND SPACED AS INDICATED IN "STUD AND SILL PLATE REQUIREMENTS" DETAIL.
7. STAPLES SHALL BE 16 GA (MIN.) x 1½" MIN. LENGTH W/ 7/16" MIN CROWN WHEN USED AT SHEARWALLS.
8. SHEATHING MAY BE INSTALLED IN VERT. OR HORIZ. ORIENTATION. ⅛" GAP AT END JOINTS AND 1/16" GAP AT SIDE JOINTS.
9. ALL EXTERIOR WALLS AND INTERIOR WALLS INDICATED ON PLANS SHALL BE SHEATHED AND NAILED AS (1) MIN.
10. SHEATHING EDGE NAILING REQUIRED AT ALL HOLDOWN POSTS.

OVERDRIVEN FASTENER NOTES:

SHEAR WALL SHEATHING NAILS SHALL BE DRIVEN FLUSH BUT NOT FRACTURE THE SURFACE OF THE SHEATHING.
1. NO REDUCTION IN SHEAR OR ADDITIONAL FASTENERS PROVIDED THAT:
   - A.FASTENERS UNIFORMLY OVERDRIVEN BY LESS THAN 1/16"
   - B.FASTENERS RECESSED DUE TO SWELLING FROM MOISTURE.
   - C.WHERE < 20% OF FASTENERS ARE OVERDRIVEN BY ⅛" MAX.
2. WHERE > 20% OF FASTENERS ARE OVERDRIVEN, INSTALL ONE ADDITIONAL FASTENER FOR EVERY TWO. SPECIAL CARE SHOULD BE TAKEN SO THAT THE NAIL SPACING IS NOT LESS THAN 2" O.C.



E.N. = EDGE NAILING (PERIMETER)

(A) FOR S.W. TYPES (3) (4) LOCATE 3x_ OR (2) 2x_ STUDS @ ADJOINING PANEL JOINTS, BOTH HORIZONTAL AND VERTICAL. WITHIN SHEAR PANELS. (2) 2x_ STUDS TO BE FACE NAILED W/ 10d EACH FACE STAGGERED. MATCH SHEARWALL PANEL NAIL SPACING.

(B) LOCATE PANEL EDGES AT ALL PLATES, BLOCKING, SOLID RIM JOIST OR OTHER SOLID FRAMING MEMBERS.

TYP SHEAR WALL DETAIL

SHEAR WALL SCHEDULE					
DESIGNATION	MATERIAL	8d NAILS SPACING		1½" 16 GA. STAPLES	
		EDGE	FIELD	EDGE	FIELD
1	7/16" STRUCTURAL II PLYWOOD OR OSB	6"	6" (12")	4"	6"
2	7/16" STRUCTURAL II PLYWOOD OR OSB	4"	6" (12")	2½"	6"
3	7/16" STRUCTURAL II PLYWOOD OR OSB	3"	6" (12")	N/A	N/A
4	7/16" STRUCTURAL II PLYWOOD OR OSB	2"	6" (12")	N/A	N/A

NOTES:
1. FIELD NAILING IS TO BE 12" O.C. WHEN STUD SPACING IS 16" O.C. OR LESS.
2. ALL SHEAR WALLS ARE BLOCKED AT ALL FREE EDGES.
3. ALL ANCHOR BOLTS SHALL BE PER ASTM A307 AND HAVE 7" MIN. EMBEDMENT.
4. WHERE SHEAR WALL PANELS ARE APPLIED TO BOTH FACES OF A WALL, PANEL JOINTS SHALL BE OFFSET TO FALL ON DIFFERENT FRAMING MEMBERS.
5. FOR SHEAR WALLS "SW3" AND "SW4", ABUTTING PANEL EDGES ARE TO HAVE (2) 2x_ STUD STITCHED TOGETHER W/ 10d NAILS @ 6" O.C.

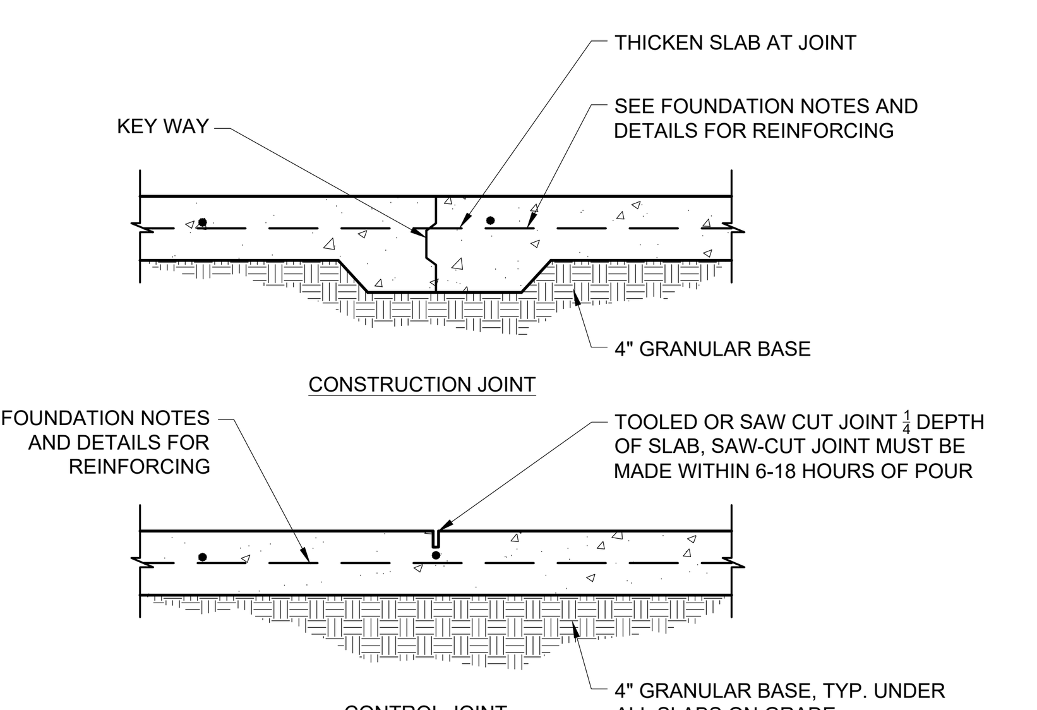
TYP TYPICAL SHEAR WALL SCHEDULE

MINIMUM NAILING SCHEDULE	
CONNECTION	NAILING
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16d @ 1'-4" O.C.
BRIDGING TO JOIST, TOENAIL EACH END	(2) 8d
BLOCKING BETWEEN JOIST OR RAFTERS TO TOP PLATE, TOENAIL	(3) 8d
RIM JOIST TO TOP PLATE, TOE NAIL	8d @ 6" O.C.
COLLAR TIE TO RAFTER, FACE NAIL	(3) 10d
JACK RAFTER TO HIP, TOE NAIL	(3) 10d
FACE NAIL	(2) 16d
ROOF RAFTER TO 2X RIDGE BEAM, TOE NAIL	(2) 16d
FACE NAIL	(2) 16d
JOIST TO BAND JOIST, FACE NAIL	(3) 16d
LEDGER STRIP, FACE NAIL	(3) 16d
TOP PLATE TO STUD, END NAIL	(2) 16d
STUD TO SOLE PLATE, END NAIL	(2) 16d
DOUBLE STUDS, FACE NAIL	16d @ 24" O.C.
DOUBLED TOP PLATES, FACE NAIL	16d @ 16" O.C.
TOP PLATE, LAPS AND INTERSECTION, FACE NAIL	(2) 16d
CONTINUOUS HEADER, TWO PIECES	16d @ 16" O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOE NAIL	(3) 8d
CONTINUOUS HEADER TO STUD, TOE NAIL	(4) 8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	(3) 16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	(3) 16d
RAFTER TO PLATE, TOE NAIL	(3) 8d
1" BRACE TO EACH STUD AND PLATE, FACE NAIL	(2) 8d
BUILT UP CORNER STUDS	16d @ 24" O.C.
BUILT UP GIRDER AND BEAMS	20d @ 32" O.C. AT TOP AND BOTTOM AND STAGGERED. (2) 20d @ ENDS AND AT EACH SPLICE.
PLYWOOD AND OSB*	
SUBFLOOR, ROOF AND WALL SHEATHING (TO FRAMING)	
½" AND LESS	8d
19/32" - ¾"	8d OR 10d
⅞" - 1"	8d OR 10d
1⅛" - 1¼"	8d OR 10d
COMBINATION SUBFLOOR-UNDERLAYMENT (TO FRAMING)	
¾" AND LESS	6d
⅞" -1"	8d
1⅛" - 1¼"	8d OR 10d

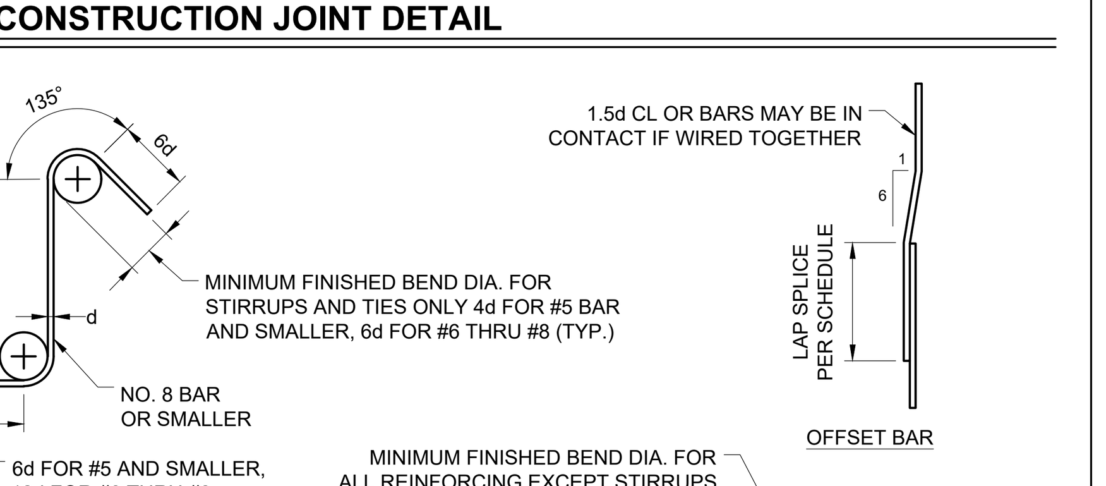
*NAILS SPACED AT 6" O.C. AT EDGES 12" AT INTERMEDIATE SUPPORTS EXCEPT 6" AT ALL SUPPORTS WHERE SPANS ARE 48" OR MORE. REFER TO SHEAR WALL SCHEDULE - ON PLANS.

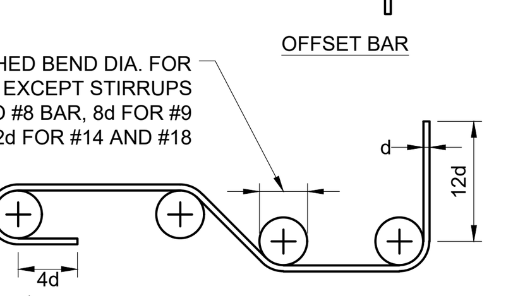
NOTES:
1. NAILING SCHEDULE IS PER CURRENT EDITION OF THE IBC.
2. NAILING REQUIREMENTS SHOWN HERE DO NOT REPLACE HARDWARE SHOWN ON PLANS OR DETAILS.
3. ALL NAILS USED ARE COMMON NAILS.

TYP MINIMUM NAILING SCHEDULE



TYP CONSTRUCTION JOINT DETAIL

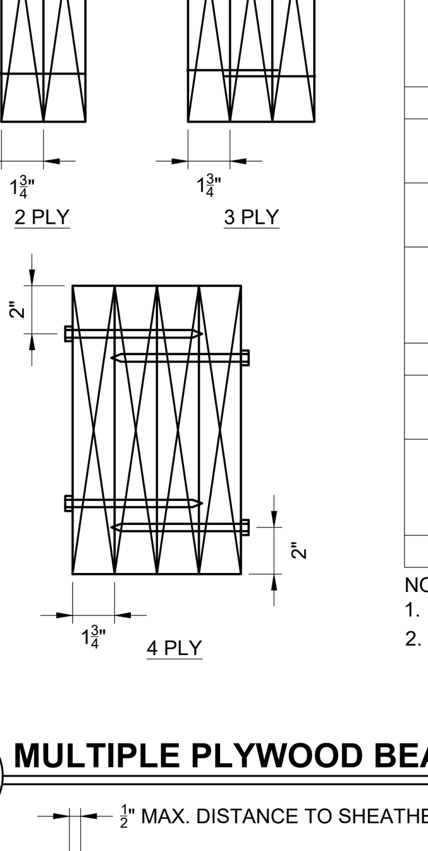




CONCRETE LAP SPLICE SCHEDULE									
BAR SIZE	COMP BARS	TENSION BARS							
		f'c=3000 PSI				f'c=4000 PSI			
		REG.		TOP		REG.		TOP	
	f'c=ALL	CLASS		CLASS		CLASS		CLASS	
		A	B	A	B	A	B	A	B
#3	12"	17"	22"	22"	28"	15"	19"	19"	25"
#4	22"	22"	29"	29"	38"	19"	25"	25"	33"
#5	19"	28"	36"	36"	47"	24"	31"	31"	41"
#6	23"	33"	43"	43"	56"	29"	37"	37"	49"
#7	27"	48"	63"	63"	81"	42"	54"	54"	71"
#8	30"	55"	72"	72"	93"	48"	62"	62"	81"
#9	34"	62"	81"	81"	105"	54"	70"	70"	91"
#10	39"	79"	91"	91"	118"	61"	79"	79"	102"
#11	43"	78"	101"	101"	131"	67"	87"	87"	114"

NOTES:
1. TOP BARS ARE HORIZONTAL BARS, SPLICED SO THAT 12" OR MORE OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE REINFORCING BAR.
2. CLASS A SPLICES MAY BE USED ONLY WHEN 5% OR LESS OF THE BARS ARE SPLICED WITHIN THE LAP SPLICE LENGTH.
3. CLASS B SPLICES SHALL BE USED FOR ALL SPLICES IN BEAMS, SLABS, JOISTS, WALLS, JAMB COLUMNS, AND MOMENT RESISTING FRAMES.

TYP STANDARD REBAR BEND AND LAP SPLICE

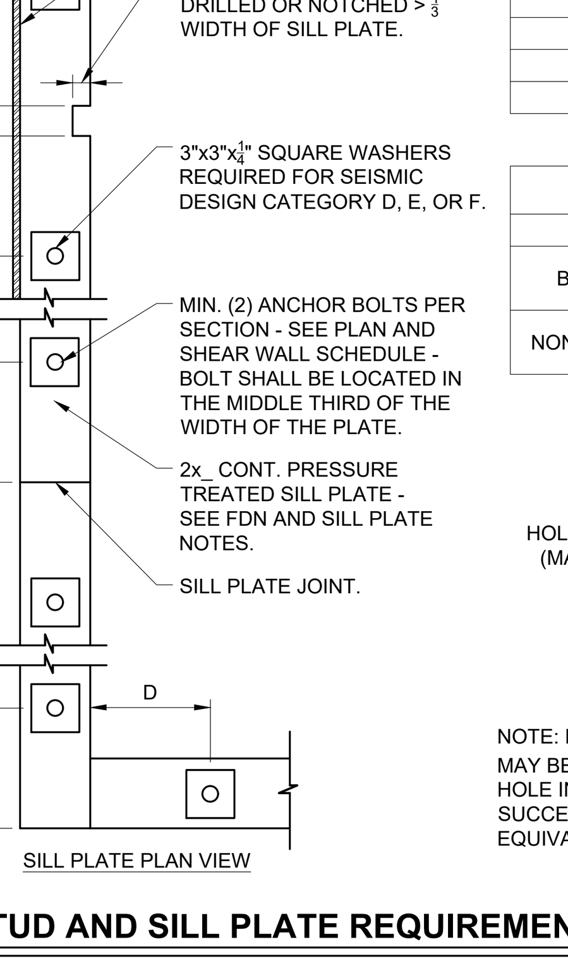


FASTENER	ROWS	SPACING	ALLOWABLE LOAD (PLF)*
2 PLY			
10d (3") NAIL	2	12" O.C.	370
	3	12" O.C.	555
½" A307 THROUGH BOLTS	2	24" O.C.	505
		16" O.C.	760
SDS ¼" x 3½"	2	24" O.C.	680
		19.2" O.C.	850
		16" O.C.	1020
3 PLY			
10d (3") NAIL	2	12" O.C.	280
	3	12" O.C.	415
½" A307 THROUGH BOLTS	2	24" O.C.	380
		16" O.C.	570
SDS ¼" x 3½"	2	24" O.C.	510
		19.2" O.C.	640
		16" O.C.	765
4 PLY			
½" A307 THROUGH BOLTS	2	24" O.C.	340
		16" O.C.	505
SDS ¼" x 6"	2	24" O.C.	455
		19.2" O.C.	565
		16" O.C.	680

* LOAD TRANSFERRED FROM EXTERIOR TO INTERIOR PLY

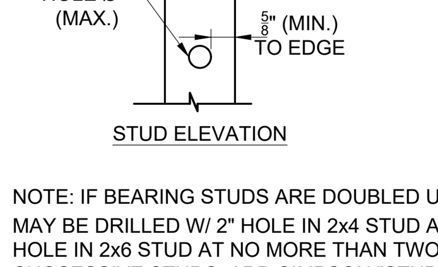
NOTES:
1. SEE PLANS FOR FASTENER REQUIREMENTS.
2. FOR ½" A307 THROUGH BOLTS USE WASHERS AND 9/16" MAX. BOLT HOLE.

TYP MULTIPLE PLYWOOD BEAM CONNECTION (SIDE LOADED)



SILL PLATE		
ANCHOR BOLT DIA.	END DISTANCE (D)	
	MAX.	MIN.
½"	12"	4"
⅝"	12'	4⅜"
¾"	12"	5¼"

STUD NOTCHING/BORING			
STUD USE		NOTCH	HOLE
BEARING	2x4	⅞"	1⅜"
	2x6	1⅜"	2⅛"
NON-BEARING	2x4	1⅜"	2"
	2x6	2⅛"	3¼"



NOTE: IF BEARING STUDS ARE DOUBLED UP, THEY MAY BE DRILLED W/ 2" HOLE IN 2x4 STUD AND A 3¼" HOLE IN 2x6 STUD AT NO MORE THAN TWO SUCCESSIVE STUDS. ADD SIMPSON "STUD SHOE" OR EQUIVALENT WHERE LIMITS OF TABLE ARE EXCEEDED.

TYP STUD AND SILL PLATE REQUIREMENTS

REDWOOD ENGINEERING Inc.
291 E. 950 S. OREM, UTAH 84058
P: 801.426.6500 E: info@redwoodeng.com
www.redwoodeng.com

THE CARSON HOME
1031 E. 300 N., ALPINE, UTAH
GENERAL STRUCTURAL NOTES

DATE	REVISION

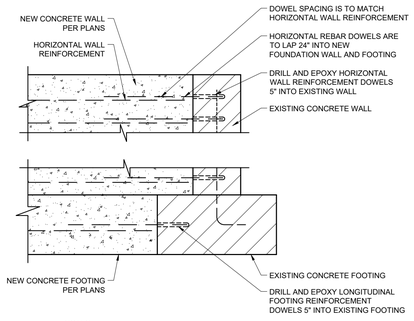
PROJECT NO:	2020-281
DATE:	7-6-20
SCALE:	NTS
DRAWN BY:	CAC
CHECKED BY:	DSU

STAMP

STATE OF UTAH
DANIEL S. URQUHART
DSU
No. 10188152
DATE: 7-8-20
PROFESSIONAL ENGINEER

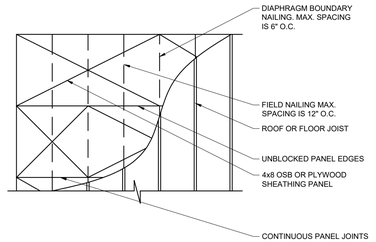
SHEET NO.

SN.1



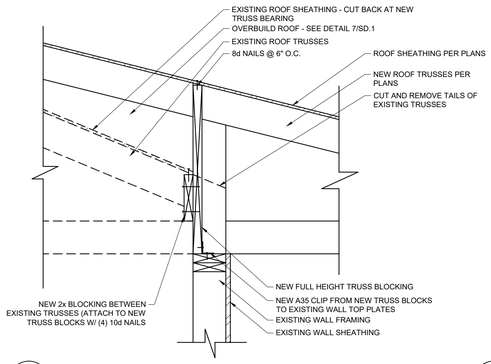
NOTES:
1. VERTICAL REBAR NOT SHOWN FOR CLARITY.
2. EPOXY TO BE SIMPSON SET-XP EPOXY OR EQUAL PER SHEET SN.1.

1 NEW CONCRETE WALL TO EXISTING CONCRETE WALL

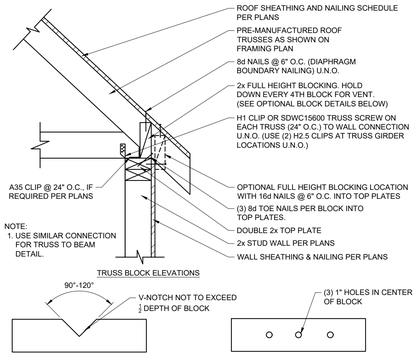


NOTE:
1. FOR BLOCKED DIAPHRAGM OPTIONS, PROVIDE 2x4 BLOCKS AT ALL FREE PANEL EDGES.

2 HORIZONTAL DIAPHRAGM DETAIL



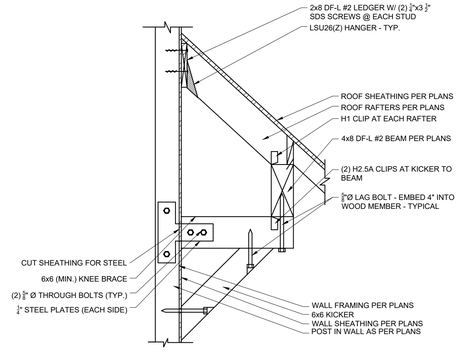
3 NEW ROOF TRUSSES TO EXISTING BEARING WALL DETAIL



NOTE:
1. USE SIMILAR CONNECTION FOR TRUSS TO BEAM DETAIL.

TRUSS BLOCK ELEVATIONS

4 TRUSS TO WALL CONNECTION DETAIL



5 KNEE BRACE DETAIL

6 ROOF DIAPHRAGM ELEVATION CHANGE DETAIL

ROOF SNOW LOAD	RAFTER	BRACES
<40 PSF	2x6	2x4
40-80 PSF	2x6	2x6
>80 PSF	2x8	(2)2x6

NOTE:
1. FULLY SHEATH TRUSSES OVER AND UNDER OVERBUILD SECTIONS.
2. STICK FRAMED OVERBUILD MAY BY REPLACED WITH CONTINUOUS BEARING PRE-FABRICATED WOOD TRUSSES (BY OTHERS).
3. PROVIDE VENTILATION AND ACCESS TO OVERBUILD AREAS AS NECESSARY.

7 ROOF OVERBUILD DETAIL

8 BEAM TO POST CONNECTION DETAIL OPTIONS

9 BEAM TO WALL CONNECTION DETAIL

10 WOOD POST TO FOUNDATION WALL DETAIL

REDWOOD ENGINEERING Inc.
291 E. 950 S. OREM,UTAH 84058
P: 801.426.6500 E: info@redwoodeng.com
www.redwoodeng.com

THE CARSON HOME
1031 E. 300 N., ALPINE, UTAH

STRUCTURAL DETAILS

DATE	REVISION

PROJECT NO:	2020-281
DATE:	7-6-20
SCALE:	NTS
DRAWN BY:	CAC
CHECKED BY:	DSU

STAMP

STATE OF UTAH
DANIEL S. URQUHART
No. 10188152
DATE: 7-8-20
PROFESSIONAL ENGINEER

SHEET NO.

SD.1

REDWOOD ENGINEERING Inc.

Structural Review for:

The Carson Home

Located at:

1031 E. 300 N., Alpine, Utah

Date:

Wednesday, June 24, 2020

Job Identification:
2020-281

STATE OF UTAH
DSU
DANIEL S. URQUHART
No. 10188152
7-8-20
PROFESSIONAL ENGINEER

ENGINEER WET SEAL

Redwood Engineering, Inc: 291 E. 950 S., Orem, Utah 84058
P: 801.426.6500 **E:** info@redwoodeng.com **W:** redwoodeng.com

PLAN SUMMARY

Structural Review for:	**The Carson Home**
Address:	**1031 E. 300 N., Alpine, Utah**
Job Identification:	**2020-281**
Code Used:	**2018 IBC**
Prepared by:	**Z. Larson**

General Notes

This structural report and booklet is valid only for the aforementioned plan and address.
The Engineers wet seal is valid for the bound calculation booklet and may not be copied, reproduced, reused, sold to a third party, or altered in any way without the written consent of Redwood Engineering, Inc. This booklet is not valid if the binding is removed or tampered with in any way.
Notify Redwood Engineering, Inc. if there are any discrepancies with the intended building location and the address provided with this bound booklet.
Redwood Engineering Inc assumes no liability for these structural calculations unless an authorized Contract has been signed by the Client.
This calculation booklet is incomplete without the additional structural drawings that may be intended for this project. See the intended structural plans, structural notes and structural details that correspond to this project.

LOADINGS SUMMARY

Roof		Floor 1		Floor 2	
Snow Load=	29.4	Live Load=	40.0	Live Load=	60.0
Dead Load=	15.0	Dead Load=	15.0	Dead Load=	15.0

Siesmic Category=	D
Ultimate Wind Speed=	110
Exposure=	B
Risk Category=	II

Risk Category (abbreviated)	
I	Buildings w/ low hazard: agricultural, temporary, minor storage
II	All others except as listed
III	Buildings w/ substantial hazard; public, schools, health, jails, etc.
IV	Essential Facilities; Hospital, Emergency Bldg, Emerg. Shelter, etc.

Roof:

Ground Snow Load:

Elevation=	5083	ft
P_g=	42.0	psf

Note = Utah Snow Load to be deteremined by Case Study/Code Amendments

Roof Snow Load:

Exposure of Roof= Partially

Structure Type= House/Other

C_e=	1.0	
C_t=	1.0	
I=	1.0	
p_f=	29.4	psf min.

Exposure	C_e
Fully	0.9
Partially	1
Sheltered	1.2

Thermal Factor - Ct	
House/Other	1.0
Barn	1.2

Roof Dead Load:

Roofing Material= Asphalt Shingles

Dead Load= **15 psf**

Roofing Material - average psf	
Metal	15
Asphalt Shingles	15
Heavy Asphalt	20
Tile	25

Floor:

Floor 1 Live Load:

Occupancy or Use= Residential

Live Load= **40**

Floor 1 Dead Load:

Flooring Design= Typical Subfloor

Dead Load= **15**

Floor 2 Live Load:

Flooring Design= Balconies/Deck

Live Load= **60**

Floor 2 Dead Load:

Flooring Design= Typical Subfloor

Dead Load= **15**

Occupancy or Use - Floor (psf)		Flooring - psf	
Corridors/Public Rooms	100	Typical Subfloor	15
Garages (passenger)	40	Radiant Heating	25
Gymnasium	100	Not Used / Other	0
Office	50		
Office-Lobbies/Corridor	100		
Residential	40		
Balconies/Deck	60		
Not Used / Other	0		

Footing/Foundation Design:

Soil Bearing Capacity=	1500	psf
Frost Depth (min.)	30	in.
Soil Site Class=	D	(assumed)
Footing/Foundation f'c=	2500	psi min.
Footing/Foundation Fy=	60000	psi

Geotechnical Report = No

Site Class	Soil Profile Name
A	Hard Rock
B	Rock
C	Very Dense Soil and Soft Rock
D	Stiff Soil Profile
E	Soft Soil Profile
F	Other/Collapsalbe Soil, etc.

2018 Utah Ground Snow Load Map

Latitude: 40.458
Longitude: -111.760
Elevation: 5,083 ft

Ground Snow Load:
42 psf / 2.03 kPa

*This document is not legally binding. The user is urged to verify ground snow load values with the local authority having jurisdiction.

These ground snow load values represent 50-year ground snow load estimated value at a 2% probability of exceedance for the location given. The grid used in the map is 3350ft by 3350ft. Elevations for these grid cells were estimated by aggregating data from 100ft by 100ft USGS digital elevation models and may not coincide with the actual site elevation. These predictions are calculated using the process outlined in The Utah Snow Load Study.1

Final predictions given are bounded at a lower limit for a minimum ground snow load of 21 psf to meet ASCE 7. Estimated values for snow loads at elevations significantly higher than all nearby stations lead to unreasonably high snow load estimates, therefore, the predictions in the map are not allowed to extend beyond the highest 50-year station ground snow load of 429 psf. Elevations over 9,000 ft are also considered less accurate due to the limited number of stations at these elevations. The results shown in this report have included a warning if the results have reached or exceeded the upper limit.

While great efforts have been made to ensure these predictions are as accurate as possible, designers must use expert judgement to ensure that such predictions are appropriate for their particular project. The SEAU and the authors cannot accept responsibility for prediction errors or any consequences resulting therefrom.

1 Bean, Brennan; Maguire, Marc; and Sun, Yan, "The Utah Snow Load Study" (2018). Civil and Environmental Engineering Faculty Publications. Paper 3589.

madeNicely.com.

Seismic Loadings:

S_s=	1.36
S_1=	0.51
Soil Site Class=	D
Risk Category=	II
I=	1
F_a=	1.20
F_v=	1.79
S_{MS}=	1.63
S_{M1}=	0.91
S_{DS}=	**1.086**
S_{D1}=	**0.609**
Category Based on S_{DS}=	D
Category Based on S_{D1}=	D
Category Check=	N/A

Site Class	Fa
A	0.8
B	0.9
C	1.2
D	1.0
E	1.2

Site Class	Fv
A	0.8
B	0.8
C	1.5
D	1.8
E	2.2

S_{DS}	Category
<0.167g	A
<0.33g	B
<0.5g	C
>0.5g	D

S_{D1}	Category
<0.067g	A
<.0133g	B
<0.2g	C
>0.2g	D

Seismic Design Category= D

Note: Geotechnical Report Recommended, Verify Fa and Fv

Wind Loadings:

Exposure=	B	
Roof Pitch=	6	/12
Topographic Factor K_{zt} =	1	
Basic Wind Speed (V)=	110	mph
Nominal Wind Speed (V_{ASD})=	85	mph
Mean Roof Height (h)=	15	ft
H building (total)=	18	ft
λ=	1	
Angle=	26.6	

Exposure:	
B	Urban and Suburban Areas
C	Open Terrain with Scattered Obstructions
D	Flat, Unobstructed Areas

	A	B	C	D	E	F	G	H
p_s=	**12.9**	**8.8**	**10.2**	**7**	**1**	**-7.8**	**0.3**	**-6.7**

p_{s30}	A	B	C	D	E	F	G	H
0 to 5	11.5	-5.9	7.6	-3.5	-13.8	-7.8	-9.6	-6.1
10	12.9	-5.4	8.6	-3.1	-13.8	-8.4	-9.6	-6.5
15	14.4	-4.8	9.6	-2.7	-13.8	-9.0	-9.6	-6.9
20	15.9	-4.2	10.6	-2.3	-13.8	-9.6	-9.6	-7.3
25	14.4	2.3	10.4	2.4	-6.4	-8.7	-4.6	-7.0
30 to 45	12.9	8.8	10.2	7.0	1.0	-7.8	0.3	-6.7

	λ
15	1.00
20	1.00
25	1.00
30	1.00
35	1.05
40	1.09
45	1.12
50	1.16
55	1.19
60	1.22

Snow Drift Calculations:

Input	**Not Req.**	**Not Req.**
Roof Height Difference=	10	10
Length of Upper Roof lu (ft)=	50	50
Parapet (Y/N) =	No	No
hc (ft)=	8.49	8.49
λ =	19.46	19.46
h_b=	1.51	1.51
Drift Height h_d=	2.75	2.75
w check=	11.0	11.0
Max Drift Width=	67.91	67.91
Output		
w (ft)=	11.0	11.0
Drift Surcharge (psf)=	53.6	53.6

BEAM CALCULATIONS	RB1	RB2	RB2-Check	RB2-Check	RB3	RB4
Roofing Material=	Asphalt Shingles	Asphalt Shingles	Asphalt Shingles	Asphalt Shingles	Asphalt Shingles	Asphalt Shingles
Roof Pitch=	6	6	6	6	6	6
Cs=	1.00	1.00	1.00	1.00	1.00	1.00
Increase for Drift=	1.00	1.00	1.00	1.00	1.00	1.00
Effective Snow Load=	**29.4**	**29.4**	**29.4**	**29.4**	**29.4**	**29.4**
Loading						
Length (ft)=	19	14	7.5	7.5	4.5	3
Roof Trib. (ft)=	1	5	8	14	15.5	15.5
Floor 1 Trib. (ft)=	0	0	0	0	0	0
Floor 2 Trib. (ft)=	0	0	0	0	0	0
Add. Uniform (plf)=	0	0	0	0	0	0
Brick=	No	No	No	No	No	No
Point Load (lb)=	0	0	1600	0	0	2400
Distance of a (ft)=	9.5	7	5.5	3.75	2.25	1.5
b (ft)=	9.5	7	2	3.75	2.25	1.5
Selection						
Beam Type=	Solid Sawn #2	Glulam	Glulam	Glulam	Timber	Timber
Grade=	DF-L #2	24F-V4	24F-V4	24F-V4	DF-L#2	DF-L#2
d (in)=	7.5	9	9	9	7.25	9.25
b (in)=	3.5	3.125	3.125	3.125	3	3
Output						
Size Factor (C_F)=	1.00	1.00	1.00	1.00	1.00	1.00
Volume Factor (C_V)=	1.00	1.00	1.00	1.00	1.00	1.00
Duration Factor (C_D)=	1.00	1.00	1.00	1.00	1.00	1.00
w_{roof} (plf)=	44	222	355	622	688	688
w_{floor1} (plf)=	0	0	0	0	0	0
w_{floor2} (plf)=	0	0	0	0	0	0
$w_{self\ weight}$ (plf)=	5.7	6.7	6.7	6.7	4.7	6.0
w_{total} (plf)=	50.1	229	362	628	693	694
R_L (lb)=	**476**	**1601**	**1784**	**2356**	**1559**	**2241**
R_R (lb)=	**476**	**1601**	**2530**	**2356**	**1559**	**2241**
Location of M_{max} (ft) =	9.5	7.0	4.9	3.8	2.3	1.5
M_{max} (ft-lb)=	2260	5603	4396	4418	1754	2581
Checks						
F'_v (psi)=	170	265	265	265	180	180
f_v (psi)	27	85	135	126	108	121
Shear Check=	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**
F'_b (psi)=	875.0	2400.0	2400.0	2400.0	900.0	900.0
S (in^3)=	32.8	42.2	42.2	42.2	26.3	42.8
S req. (in^3)=	31.0	28.0	22.0	22.1	23.4	34.4
Section Check=	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**
I (in^4)=	123.0	189.8	189.8	189.8	95.3	197.9
E (psi)=	1300000	1800000	1800000	1800000	1600000	1600000
Deflection (in)=	0.918	0.578	0.127	0.131	0.042	0.011
Allow. Deflection (in)=	1.267	0.933	0.500	0.500	0.300	0.200
Location of Max Δ (ft)=	9.5	7	3.75	3.75	2.25	1.5
Deflection Check=	**OK**	**OK**	**OK**	**OK**	**OK**	**OK**

Project: 2020-281_Carson, Jill Addition

Location: Roof Rafters
Roof Rafter

1.5 IN x 5.5 IN x 1.0 FT @ 24 O.C.
#2 - Douglas-Fir-Larch - Dry Use
Section Adequate By: 7938.1%
Controlling Factor: Moment

Zach Larson
Redwood Engineering
291 E. 950 S.
Orem, UT 84058

StruCalc Version 9.0.3.0 6/24/2020 2:16:59 PM

DEFLECTIONS Center

Live Load	0.00	IN L/MAX
Dead Load	0.00	in
Total Load	0.00	IN L/MAX

Live Load Deflection Criteria: L/360 Total Load Deflection Criteria: L/240

RAFTER REACTIONS

	LOADS	REACTIONS
Upper Live Load @ A	15 plf	29 lb
Upper Dead Load @ A	10 plf	20 lb
Upper Total Load @ A	25 plf	49 lb
Lower Live Load @ B	15 plf	29 lb
Lower Dead Load @ B	10 plf	20 lb
Lower Total Load @ B	25 plf	49 lb

RAFTER SUPPORT DATA

	A	B
Bearing Length	0.05 in	0.05 in

RAFTER DATA Interior

Span Length	1 ft
Rafter Pitch	10 :12

Roof sheathing applied to top of joists-top of rafters fully braced.

Roof Duration Factor	1.15
Peak Notch Depth	0.00
Base Notch Depth	0.00

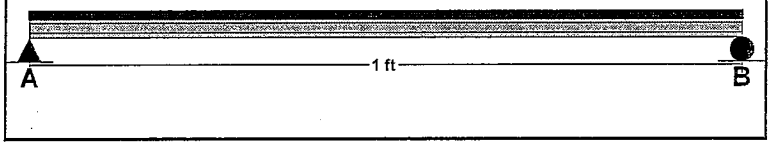
MATERIAL PROPERTIES
#2 - Douglas-Fir-Larch

	Base Values	Adjusted
Bending Stress:	Fb = 900 psi	Fb' = 1547 psi
	Cd=1.15 CF=1.30 Cr=1.15	
Shear Stress:	Fv = 180 psi	Fv' = 207 psi
	Cd=1.15	
Modulus of Elasticity:	E = 1600 ksi	E' = 1600 ksi
Comp. ⊥ to Grain:	Fc - ⊥ = 625 psi	Fc - ⊥' = 625 psi

Controlling Moment: 12 ft-lb
0.499 Ft from left support of span 2 (Center Span)
Created by combining all dead loads and live loads on span(s) 2
Controlling Shear: -11 lb
At a distance d from right support of span 2 (Center Span)
Created by combining all dead loads and live loads on span(s) 2

Comparisons with required sections:	Req'd	Provided
Section Modulus:	0.09 in3	7.56 in3
Area (Shear):	0.08 in2	8.25 in2
Moment of Inertia (deflection):	0.04 in4	20.8 in4
Moment:	12 ft-lb	975 ft-lb
Shear:	-11 lb	1139 lb

LOADING DIAGRAM



RAFTER LOADING
Uniform Roof Loading

Roof Live Load:	LL =	29	psf
Roof Dead Load:	DL =	15	psf

Slope Adjusted Spans And Loads

Interior Span:	L-adj =	1.3	ft
Eave Span:	L-Eave-adj =	0	ft
Rafter Live Load:	wL-adj =	34	plf
Eave Live Load:	wL-Eave-adj =	34	plf
Rafter Dead Load:	wD-adj =	23	plf
Rafter Total Load:	wT-adj =	57	plf
Eave Total Load:	wT-Eave-adj =	57	plf

NOTES

		BRACED POSTS Cd=1.0					UNBRACED POSTS Cd=1.0				
	Post	8ft	9ft	10ft	11ft	12ft	8ft	9ft	10ft	11ft	12ft
P2	(2) 2x4	6340	5165	4240	3535	2985	N/A	N/A	N/A	N/A	N/A
P3	(3) 2x4	9510	7745	6360	5300	4475	N/A	N/A	N/A	N/A	N/A
P4	(4) 2x4	11800	9600	7900	6600	5600	N/A	N/A	N/A	N/A	N/A
P2	(2) 2x6	17935	15950	13935	12105	10515	N/A	N/A	N/A	N/A	N/A
P3	(3) 2x6	26905	23925	20900	18155	15775	N/A	N/A	N/A	N/A	N/A
P4	(4) 2x6	34500	30500	26500	23000	20000	N/A	N/A	N/A	N/A	N/A
P5	4x4	N/A	N/A	N/A	N/A	N/A	6900	5600	4600	3850	3250
P6	6x6	N/A	N/A	N/A	N/A	N/A	17800	16700	15500	14200	12800
P7	3 1/2" x 5 1/4" PLP	32500	28000	23750	20000	17200	N/A	N/A	N/A	N/A	N/A
P8	5 1/4" x 5 1/4" PLP	49000	42000	35500	30200	25700	N/A	N/A	N/A	N/A	N/A
P9	8x8	N/A	N/A	N/A	N/A	N/A	36400	35500	34400	33000	31500
P10	10x10	N/A	N/A	N/A	N/A	N/A	60000	59500	58500	57000	56000

TYPICAL SPOT FOOTING CHART

	Size	Reinforcement	Max. Loading (lbs.)
FT3	24"x24"x10"	(3) #4 bars each way	6000
FT4	30"x30"x10"	(3) #4 bars each way	9300
FT5	36"x36"x10"	(4) #4 bars each way	13500
FT6	42"x42"x12"	(5) #5 bars each way	18300
FT7	48"x48"x12"	(5) #5 bars each way	24000

BEAM SCHEDULE

Notes:

1 Beams may be substituted with beams of the same type with increased dimension sizes for building or architectural purposes
2 All non-designated headers are to be (2) 2x10 DF-L #2 or (1) 4x10 DF-L #2 U.N.O.

Label	Number	Size	Material
RB1	1	4 x 8	DF-L #2
RB2	1	3 1/8" x 9"	Glulam
RB3	2	2 x 8	DF-L #2
RB4	2	2 x 10	DF-L #2

SCHEDULE SUMMARY

Post Schedule

	Size
P1	One Trimmer/Stud
P2	Two Trimmers/Studs
P3	Three Trimmers/Studs
P4	Four Timmers/Studs
P5	4x4 DF-L #2
P6	6x6 DF-L #2
P7	3 1/2" x 5 1/4" Parallam
P8	5 1/4" x 5 1/4" Parallam
P9	8x8 DF-L #2
P10	10x10 DF-L #2

Notes:
1. See general structural notes sheet (SN.1) for typical bearing post requirements.
2. Posts indicate number of trimmers when specified as headers. All other post designations refer to full height king studs.
3. Install (2) trimmers (min.) each side of header greater than 6'-0" in length.
4. Install (2) king studs (min.) each side of header on openings greater than 4'-0". See sheet SN.1 for min. king stud requirements.
5. Install (2) king studs (min.) at all holdown locations or as noted on holdown schedule. (UNO)

Footing Schedule

	Size	Reinforcement	Crosswise
FT1	20"x10"xcont.	(2) #4 bars cont.	None
FT2	18"x10"xcont.	(2) #4 bars cont.	None
FT3	24"x24"x10"	(3) #4 bars each way	
FT4	30"x30"x10"	(3) #4 bars each way	
FT5	36"x36"x10"	(4) #4 bars each way	
FT6	42"x42"x12"	(5) #5 bars each way	
FT7	48"x48"x12"	(5) #5 bars each way	

Notes:
1. See general structural notes sheet (SN.1) for typical footing requirements.
2. All footings are to bear below the frost line of the locality (30" min. UNO).
3. Provide j-bars to match vertical wall reinforcement.
4. Coninuous footings shall be centered under walls and spot footings shall be centered under columns (UNO).

Shearwall Schedule

		8d Nails Spacing		1 1/2" GA. Staples	
	Material	Edge	Field	Edge	Field
SW1	7/16" Struct. II Plywood or OSB	6"	6" (12")	4"	6"
SW2	7/16" Struct. II Plywood or OSB	4"	6" (12")	2 1/2"	6"
SW3	7/16" Struct. II Plywood or OSB	3"	6" (12")	N/A	N/A
SW4	7/16" Struct. II Plywood or OSB	2"	6" (12")	N/A	N/A

Notes:
1. Field nailing is to be 12" o.c. when stud spacing is 16" o.c. or less.
2. All Shear Walls are blocked at all free edges with stud framing at 24" o.c. UNO.
3. All Anchor Bolts shall be per ASTM A307 and have 7" min. embedment.
4. Where Shear Wall panels are applied to both faces of a wall, panel joints shall be offset to fall on different framing members.
5. For Shear Walls "SW3" and "SW4", abutting panel edges are to have (2) 2x_ studs stitched together w/ 16d sinkers @ 6" o.c.

Design Criteria

Governing Code	2018 IBC

Roof Loadings

Ground Snow Load	42.0
Roof Snow Load	29.4
Roof Dead Load	15.0

Floor Loadings

Floor Live Load	40.0
Floor Dead Load	15.0

Soil

Soil Bearing Capacity	1500
Site Class	D

Seismic

Seismic Design Category	D
Importance Factor	1.0

Wind

Ultimate Wind Speed (mph)	110
Exposure	B

Planning Commission Agenda

Application Form

20 North Main Alpine, UT 84004 ● 801-756-6347 (Phone) ● 801-756-1189 (Fax) ● www.alpinecity.org

All materials must be submitted to the City Planner at least **14 days** prior to the Planning Commission meeting for which you want to be scheduled.

Name Chris Hall - IRON RIDGE CO. Date 2-26-2021

Address 9311 S. MAIN. IRIS WAY

Phone 801 750 5551 Fax _____ Email ironridgeconstruction@gmail.com

Subject for Discussion: (The more specific you are, the better prepared the Planning Commission will be to discuss your request.)

Variance for a front porch addition. Currently the home at the front left corner is only approx 11-0 set back. We are proposing a porch addition that will be inline w/ the house and will only be 10-3 setback rather that 12'. We are asking for a variance to allow for this porch.

Location 1031 E. 300 N.

Please attach any necessary maps, plats, documentation, stamped and addressed envelopes for notification, etc.

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: Final Plat – The Ridge at Alpine Phase 5

FOR CONSIDERATION ON: 16 March 2021

PETITIONER: Paul Kroff representing SBC Holdings Inc.

ACTION REQUESTED BY PETITIONER: Review and approve the final plat.

BACKGROUND INFORMATION:

The Ridge at Alpine Subdivision consists of 72 lots on 189.5 acres, with this Phase 5 being 29 lots on 25.91 acres. The development is located in the CR 40,000 zone, west of the Alpine Cove subdivision and north east of Heritage Hills Plat A. A map is attached showing Phase 5 and how it correlates to the rest of the development. The Ridge at Alpine has been approved as a Planned Residential Development (PRD).

Phase 1 of The Ridge at Alpine was approved by the City Council on October 23, 2019. Trails, open space, and conservation easement were approved with the Phase 1 Plat. Phase 2 was approved on August 13, 2019, Phase 3 on May 12, 2020, and Phase 4 on November 24, 2020. The applicant is now seeking approval of Phase 5 of The Ridge at Alpine Subdivision.

STAFF RECOMMENDATION:
Review staff report and findings and make a recommendation to City Council to either approve or deny the proposed subdivision.

SAMPLE MOTION TO APPROVE WITH CONDITIONS:
I motion to recommend approval of the proposed The Ridge at Alpine Phase 5 with the following conditions:

- The Developer:
  - Address setbacks per the rockfall study recommendations;
  - meet the water policy with Alpine Irrigation Co. shares;
  - **insert finding**

SAMPLE MOTION TO TABLE/DENY:
I motion to table (or recommend denial) of the proposed The Ridge at Alpine Phase 5 with the following conditions:

- **Insert finding**

ALPINE CITY
STAFF REPORT
March 12, 2021

To: Alpine City Planning Commission & City Council

From: Staff

Prepared By: Austin Roy, City Planner
Planning & Zoning Department

Jed Muhlestein, City Engineer
Engineering & Public Works Department

Re: **The Ridge at Alpine Phase 5 – Final**

Applicant:	Paul Kroff, representing SBC Holdings Inc.
Project Location:	North of Elk Ridge Lane and west of Alpine Cove
Zoning:	CR-40,000 Zone
Acreage:	25.91 Acres
Lot Number & Size:	29 lots ranging from 0.50 acres to 1.45 acres
Request:	Approve the Final Plat

SUMMARY

The Ridge at Alpine Subdivision consists of 72 lots on 189.5 acres, with this Phase 5 being 29 lots on 25.91 acres. The development is located in the CR 40,000 zone, west of the Alpine Cove subdivision and north east of Heritage Hills Plat A. A map is attached showing Phase 5 and how it correlates to the rest of the development. The Ridge at Alpine has been approved as a Planned Residential Development (PRD).

BACKGROUND

Phase 1 of The Ridge at Alpine was approved by the City Council on October 23, 2019. Trails, open space, and conservation easement were approved with the Phase 1 Plat. Phase 2 was approved on August 13, 2019, Phase 3 on May 12, 2020, and Phase 4 on November 24, 2020. The applicant is now seeking approval of Phase 5 of The Ridge at Alpine Subdivision.

ANALYSIS

Lot Width and Area

Lot width requirements for the CR-40,000 zone are 110 feet for a standard lot as measured at the 30 foot front setback line, and 80 feet for a cul-de-sac lot located on a curve as measured at the

right of way line, and 110 feet as measured at the 30 foot front setback line. All proposed lots meet the width requirements.

Minimum lot size for a lot in a PRD in the CR-40,000 zone is 20,000 square feet, with the smallest proposed lot on the plat being 0.50 acres or 21,629 square feet. The plat meets area requirements.

Use
The developer is proposing that the lots be used for single-unit detached dwellings, which is consistent with the permitted uses of the CR-40,000 zone.

Sensitive Lands (Wildland Urban Interface)
See Engineering and Public Works Review below

Trails
There are no trails in Phase 5. All trails were recorded with Phase 1 of the development.

General Plan
The proposed final plat meets criteria of the City General Plan.

Existing Buildings
There appears to be no existing buildings on the proposed area for Phase 5 development.

NOTICING

Notice has been properly issued in the manner outlined in City and State Code

REVIEWS

PLANNING AND ZONING DEPARTMENT REVIEW
The analysis section in the body of this report serves as the Planning and Zoning Department review.

LONE PEAK FIRE DEPARTMENT REVIEW
See the attached review from the Lone Peak Fire Department.

ENGINEERING AND PUBLIC WORKS DEPARTMENT REVIEW
Streets
Phase 5 of The Ridge at Alpine will complete the roadway system for the development. This includes connecting Oak View Drive to the Alpine Cove area. Road design appears to be in compliance with city ordinances and nothing has changed in that regard from what has been previously reviewed and approved.

Utilities – Culinary Water
The culinary system was discussed at length during Preliminary approval meetings, the details are included below for information only. There is one change from the preliminary submittal

regarding culinary water; the plat shows a twenty (20) foot waterline public utility and drainage easement along the east side of the development. The Developer is reserving this area for potential use of a future waterline. Other than this easement, there has been no change in the culinary design from Preliminary submittal.

The subdivision is very close to the 5,350-foot elevation, which is the highest elevation the existing water system can serve and still provide the minimum 40 psi required by ordinance. The culinary water master plan calls for a new 10-inch main to be installed from the Grove tank to the 90-degree bend in Grove Drive that would provide minimum fire flows to the area. The development agreement specifies it is the responsibility of the developer to bring offsite utilities to the development (section 4.2.1). Discussions have indicated that the size of homes desired in the upper portion of the development may require a larger line to meet the fire protection demands. The developer has elected to install a 16-inch line (instead of the 10-inch) and a 12-inch line extending northward to the end of Dean Court, which increases fire flows to 2,750 gpm. With 2,750 gpm available fire flow, the maximum sized home to be built without the need for fire sprinklers or alternate construction materials would be 11,300 square feet based on the International Fire Code. Because the homes are located within the Urban/Wildland Interface, the Fire Chief may still require fire sprinklers.

The fire flow for this development was dependent upon the completion of the water system improvements in Three Falls and Fort Canyon Road. These improvements are complete and in operation.

1-inch laterals with ¾-inch meters are required, and shown, for each new lot.

An 8-inch main will be installed in Oak View Drive with associated fire hydrant at the intersection of Oak View Drive and Alpine Cove Drive.

The Fire Chief has reviewed and approved the culinary system design.

Utilities – Pressurized Irrigation

The pressurized irrigation system was discussed at length during Preliminary approval meetings. There has been no change in the pressurized irrigation design from Preliminary submittal.

New 1-inch laterals are shown to be installed for each new lot. Horrocks Engineers has modeled the site and recommends 6-inch lines throughout Phase 5.

Utilities – Sewer

All lots within Phase 5 will be fed by a gravity sewer system. 8-inch main lines and 4-inch laterals are shown in the roads and to each new lot, respectively. The main lines connect to Phase 2 of the development. This was reviewed and approved at Preliminary.

Utilities – Storm Drain

The storm drain design for Phase 5 includes catch basins and main pipes in the roadway which connect to the previously built phases of the development. The detention pond, built in Phase 4, was sized to handle the stormwater runoff from this phase.

It was discussed at previous meetings the requirement to pipe the overflow waters of School House Springs through the development with a 30-inch pipe. The majority of this pipe was built in previous phases; this phase includes the completion of piping School House Springs through the development.

A Land Disturbance Permit would be required prior to construction which ensures a Storm Water Pollution Prevention Plan (SWPPP) is followed. All disturbed areas of the site are required to be revegetated after construction.

The storm drain system was discussed at length at Preliminary. For information purposes the details of that are included below.

The storm water system design and drainage report has been submitted, reviewed, and approved with some redline comments. There are four main topics to cover concerning storm water.

1. School House Springs Drainage and Existing Irrigation Ditches.
   The school house springs drainage enters Alpine City on the top west side of Alpine Cove. From there it travels southward until it enters the Zolman property. Section 4.7.19 of the development code requires existing ditches to be piped. A 30-inch pipe is proposed to capture this drainage and route it through the property.
   The Northfield Ditch also runs through the property. This ditch has been abandoned and therefore will not be required to be piped through the property. The plans require welding a metal plate at the upstream head gates to ensure water will not enter the abandoned ditch.
2. Onsite Drainage.
   Onsite drainage consists of a piped system to capture and route water to three different detention basins. Each basin is designed for the 100-yr storm event which releases water to the existing drainages in the area. On Catherine Way there is a low point in the road which would cause flooding problems for events greater than a 10-year storm. Because of this a drainage swale is proposed between lots 44, 45 and 49, 50. The swale would adequately route larger storm event flows to the pond south of Annie Circle without causing a flooding risk for the nearby homes. This swale should remain open, no fences allowed. Notes to be placed on Final Plat for that phase.
3. Hillside/Offsite Drainage.
   The geotechnical report highlighted the issue of debris flows that would enter the development from the west side in the event of post fire flows or heavy rainfall events. The Developer contracted with IGES to design debris flow nets to capture these flows and mitigate the potential problem. The nets are designed to capture the debris, water would be allowed to pass through the nets and continue down the drainage. The water that passes the nets would follow Savannah Cir, Elk Ridge Lane, Zachary Way, and Annie Circle to make its was to the detention pond. Calculations have been done to show that the homes along this route would not be flooded in the event of a post fire situation if they were required to build at least 1.75 feet above the curb. A note will be placed on the final plat for the appropriate phases and checked prior to Final Approval for this requirement. The Drainage Reports and IGES design for debris flow nets were attached to the Preliminary report and can be found there.

4. Low Impact Development.

   March 1, 2016, the State of Utah implemented into the General MS4 Permit (Small Municipal Separate Storm Sewer Systems) the requirement of all developments to evaluate Low Impact Development (aka - LID) for their site. LID is a measure of handling storm water and improving water quality. LID emphasizes conservation and the use of on-site natural features to protect water quality. There are many ways to meet the LID requirement. LID can be met by the use of drainage swales, rainwater harvesting, curb cuts to direct water to smaller local basins, and so on. The developer shows in the storm water calculations that LID will be implemented at the building permit level with each new lot retaining the 90th percentile storm, which equates to about a 2-year, 1-hr rainfall event for Alpine City. This is something Alpine is doing for all new homes within the city as required by the State. This is not done just as a measure of protecting water quality, but also protecting against runoff from one property to another.

Geotechnical Report

The proposed development falls within the Geologic Hazards Overlay Zone as well as the Urban/Wildland Interface. The developer provided a Geotechnical Report, it was included at Preliminary and discussed in depth there. The report mentions an area of mass grading and fill of an existing ravine that ran through the property along the westerly borders. The City has no records of compaction or what type of material was used to fill the ravine. This is classified as undocumented fill which is not suitable for building roads or constructing home foundations on. The report focused attention to this area and has provided recommendations for building there; mainly over excavation and import of engineered fill to remedy any potential settlement. The report is listed on the Phase 5 plat to warn future lot buyers.

Hazard Reports

The Developer contracted with IGES to provide further information regarding certain hazards. The report covers rock fall and debris flow in more depth. This report was discussed at Preliminary approvals. It was determined that there is a low to moderate rock fall hazard for most the lots along the westerly side of the development. Also, ordinance does not allow development "*within fifty (50) feet of slopes in excess of forty (40) percent, areas subject to landsliding, or other high-hazard geologic areas*… (DC 3.12.09.4.E). Phase 5 includes the lots that these reports and ordinance reference. There are (40) forty percent slopes on the north west side of Phase 5. The plat shows buildable areas with appropriate slope setbacks but does not appear to reflect setbacks mentioned in the rockfall study; this will need corrected prior to recording.

Other

The City water policy needs to be met prior to recordation of the plat. The Development Agreement specifically requires Alpine Irrigation Company shares be used to meet the water policy.

A construction cost estimate for Phase 5 shall be turned in to the City Engineer for bonding purposes.

Alpine City specifications require escrow funds for a roadway preservation coat (See Alpine City Construction Standard Specifications 300.030 & 600.020). The amount for this requirement will be calculated based on current preservation coat costs at the time of recording. The funds for this roadway preservation coat will be required of the Developer prior to recording.

STAFF RECOMMENDATION

Review staff report and findings and make a recommendation to City Council to either approve or deny the proposed subdivision. Findings are outlined below.

Findings for a Positive Motion:

A. The plan aligns with previous approvals for The Ridge at Alpine;
B. Proposed roadway construction appears to meet Alpine City design standards and makes an important connection to the Alpine Cove area;
C. The plat and plans reflect important information regarding undocumented fill, the rock fall study, and building within fifty (50) feet of slopes steeper than forty (40) percent.

Findings for Negative Motion:

A. **Insert finding**

MODEL MOTIONS

SAMPLE MOTIONS TO APPROVE

I motion to recommend approval of the proposed The Ridge at Alpine Phase 5 with the following conditions:

- The Developer:
    - Address setbacks per the rockfall study recommendations;
    - meet the water policy with Alpine Irrigation Co. shares;
    - **insert finding**

SAMPLE MOTION TO TABLE or DENY

I motion to table (or recommend denial) of the proposed The Ridge at Alpine Phase 5 with the following conditions:

- **Insert finding**

THE RIDGE AT ALPINE PHASE 5

MARCH 2021

A RESIDENTIAL DEVELOPMENT

ALPINE, UTAH

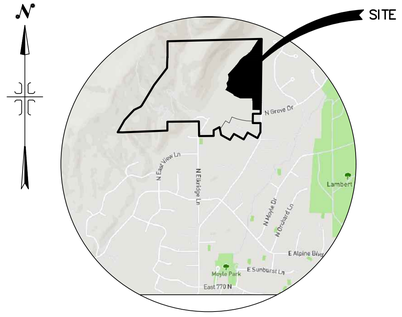
GENERAL

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATIONS AND/OR REQUIREMENTS OF THE ALPINE CITY PUBLIC WORKS DEPARTMENT.
2. A PRE CONSTRUCTION CONFERENCE WILL BE HELD A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO START OF WORK. ALL CONTRACTORS, SUBCONTRACTORS AND/OR UTILITY CONTRACTORS, ALPINE CITY PUBLIC WORKS AND CITY'S ENGINEER SHOULD BE PRESENT.
3. ALL LOT DIMENSIONS, EASEMENTS AND CERTAIN OFF SITE EASEMENTS ARE TO BE TAKEN FROM THE PLAT OF THE RIDGE AT ALPINE PHASE 5.
4. ALL CONSTRUCTION STAKES MUST BE REQUESTED A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO PLANNED USE.
5. CERTAIN CONTROL POINTS WILL BE SET BY THE ENGINEER, OR HIS REPRESENTATIVE, WHICH ARE CRITICAL TO THE CONSTRUCTION STAKING OF THE PROJECT. THESE POINTS WILL BE DESIGNATED AT THE TIME THEY ARE SET AND THE CONTRACTOR SHALL BE NOTIFIED. DESTRUCTION OF THESE POINTS BY THE CONTRACTOR OR HIS SUBCONTRACTORS SHALL BE GROUNDS FOR CHARGING THE CONTRACTOR FOR REESTABLISHING SAID POINTS.
6. ALL CUT & FILL SLOPES NOT INCLUDED IN LOTS TO BE REVEGITATED WITH BROADCAST SEEDS TO MEET CITY STANDARDS UNLESS NOTED OTHERWISE.
7. **THIS SITE CONTAINS LARGE AREAS OF UNDOCUMENTED FILL. PER IGES REPORT DATED 8-23-16, WHEN UNDOCUMENTED FILL IS ENCOUNTERED, OVER EXCAVATE 24 INCHES AND PLACE A-1-a MATERIAL.**

ROADWAY/STORM DRAIN

1. ALL ROADWAY CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF ALPINE CITY'S TECHNICAL SPECIFICATIONS OR AS APPROVED IN THE PLANS HEREIN.
2. WHEN DISCREPANCIES OCCUR BETWEEN PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. UNTIMELY NOTIFICATION SHALL NEGATE ANY CONTRACTORS CLAIM FOR ADDITIONAL COMPENSATION.
3. ALL STORM DRAIN PIPES TO BE RCP CLASS V OR APPROVED EQUAL UNLESS OTHERWISE NOTED.

CONDITIONS OF APPROVAL



VICINITY MAP
-NTS-

-INDEX OF PLAN SHEETS-

SEWER

1. ALL WORK SHALL BE DONE INACCORDANCE WITH THE LATEST ALPINE CITY DESIGN STANDARDS & PUBLIC IMPROVEMENT SPECIFICATIONS DRAWINGS OF ALPINE CITY.
2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY ALPINE CITY.
3. UPON THE COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT 3 SETS OF AS-BUILT PLANS TO ALPINE CITY & (1) SET TO NORTHERN ENGINEERING, INC.
4. HORIZONTAL AND VERTICAL SEPARATION OF CULINARY WATER AND SEWER SHALL BE IN COMPLIANCE WITH ALPINE CITY STANDARDS

WATER

1. THE WATER SYSTEM SHALL BE CONSTRUCTED TO CONFORM WITH THE STANDARDS SET FORTH IN THE "UTAH REGULATIONS FOR PUBLIC DRINKING WATER SYSTEMS", AND THE ALPINE CITY PUBLIC WORKS DEPARTMENT STANDARD SPECIFICATIONS AND DRAWINGS.
2. CONTRACTOR SHALL NOTIFY NORTHERN ENGINEERING, INC. THREE (3) WORKING DAYS BEFORE INITIAL CONSTRUCTION BEGINS AND SHALL ALSO REQUEST ALPINE CITY WATER DEPARTMENT INSPECTION OF WATER LINES AND APPURTENANCES TWENTY-FOUR (24) HOURS IN ADVANCE OF BACKFILLING.
3. CONTRACTOR TO FIELD VERIFY ALL VALVE BOX LID ELEVATIONS TO ASSURE THAT SAID LID ELEVATIONS MATCH FINAL STREET GRADE, AND ALL METER LID ELEVATIONS TO MATCH AN EXTENSION OF THE SIDEWALK GRADE.
4. UPON THE COMPLETION OF WORK, THE CONTRACTOR SHALL SUBMIT 3 SETS OF AS-BUILT PLANS TO ALPINE CITY & (1) SET TO NORTHERN ENGINEERING, INC.
5. WATER VALVE LIDS ARE TO BE LABELED "WATER" FOR CULINARY VALVES
6. HORIZONTAL AND VERTICAL SEPARATION OF CULINARY WATER AND SEWER SHALL BE IN COMPLIANCE WITH ALPINE CITY STANDARDS
7. WATERLINES TO BE BEDDED IN GRANULAR MATERIAL. A MIN. OF 8" COVER OVER TOPS OF PIPE IS REQUIRED TO AVOID PENETRATION OF SUB BASE FROM ABOVE.

Northern ENGINEERING INC
ENGINEERING-LAND PLANNING
CONSTRUCTION MANAGEMENT

1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
05-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
5			
4			
3			
2			
1			

DESIGNED BY:	DATE:
DRAWN BY:	DATE:
CHECKED BY:	DATE:
APPROVED:	DATE:
COGO FILE:	DATE:
REV. COGO FILE:	DATE:

K:\3-20-030-00 Alpine Ridge\CAD\Preliminary\PHASING PLAN.dwg 3/9/2021 7:46 AM

Northern ENGINEERING INC
ENGINEERING—LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

THE RIDGE AT ALPINE PHASE 5

OVERALL PHASING PLAN

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. 2

THE RIDGE AT ALPINE SUBDIVISION PHASE 5

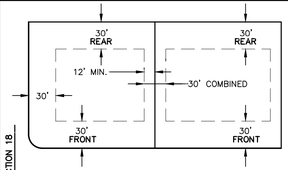
LOCATED IN THE WEST HALF SECTION 18, TOWNSHIP 4 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN

ACCEPTANCE BY LEGISLATIVE BODY

THE CITY COUNCIL OF ALPINE, COUNTY OF UTAH, APPROVES THIS SUBDIVISION AND HEREBY ACCEPTS THE DEDICATION OF ALL STREETS, EASEMENTS, AND OTHER PARCELS OF LAND INTENDED FOR PUBLIC PURPOSES FOR THE PERPETUAL USE OF THE PUBLIC THIS _____ DAY OF _____ A.D. 20___.

APPROVED _____ ATTEST _____

CITY ENGINEER (SEE SEAL) CITY RECORDER (SEE SEAL)

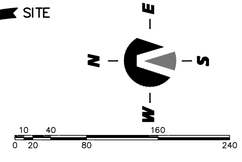


* UNLESS OTHERWISE DIMENSIONED SETBACKS ARE AS FOLLOWS FRONT & REAR = 30', SIDES = 30' COMBINED W/12' MIN. ON ONE SIDE

LEGEND

- FOUND BRASS CAP
- SET 5/8" IRON PIN
- SET 1/2" IRON PIN
- CALCULATED POINT, NOT SET
- PROPERTY BOUNDARY
- CENTERLINE
- RIGHT-OF-WAY LINE
- LOT LINE
- SECTION LINE
- EASEMENT
- EXISTING DEED LINE
- AREA OF UNDOCUMENTED FILL

VICINITY MAP
—NTS—



(24"x36")
SCALE 1" = 80'
(11"x17")
SCALE 1" = 160'

NORTH 1/4 CORNER SECTION 18, T. 4S., R. 2E., SLB&M

S.18 S.7

POINT OF BEGINNING

61.23'

74.50'

474.19'

20.00' WATER LINE, P.U. & D.E. (TYP)

N26°00'28"E 454.20'

10.00' P.U & D.E. (TYP)

N34°55'37"E 115.49'

N32°52'52"E 174.22'

N30°10'23"E 105.66'

N45°12'21"E 85.41'

N51°02'26"E 108.47'

N60°31'41"E 71.69'

N52°59'20"E 62.28'

N43°35'01"E 80.62'

N88°33'07"E 2717.05' (BASIS OF BEARING)

ALPINE COVE C

ALPINE COVE A

MICHAEL D. & SHARON GEURTS 34:117:0005

MICHAEL D. & SHARON GEURTS 34:117:0004

CASSIS LAND COMPANY INC. 34:117:0002

CRAIG J & SHARLENE K SKIDMORE 34:117:0001

TODD SMITH 34:070:0008

GREGORY A & PATRICIA R ZIPPI 34:070:0007

ALEXANDER C & JANICE JOHNSON 34:070:0006

RYAN & CATHERINE JOHNSON 34:070:0001

JAU-FANG LU 34:124:0001

S0°47'30"W 1981.94'

161.81' 160.89' 167.68' 170.48' 142.79' 136.74' 152.59' 172.65' 126.88'

5.00' P.U. & D.E. (TYP)

20.00' WATER LINE, P.U. & D.E. (TYP)

10.00' P.U & D.E. (TYP)

15.00' P.U. & D.E. (TYP)

10	50367 sq. ft.	1.16 ac.
9	30024 sq. ft.	0.69 ac.
8	30839 sq. ft.	0.71 ac.
7	30290 sq. ft.	0.70 ac.
6	30012 sq. ft.	0.69 ac.
5	30001 sq. ft.	0.69 ac.
4	30003 sq. ft.	0.69 ac.
3	30005 sq. ft.	0.69 ac.
2	29997 sq. ft.	0.69 ac.
1	21629 sq. ft.	0.50 ac.
11	63272 sq. ft.	1.45 ac.
12	34966 sq. ft.	0.80 ac.
13	37464 sq. ft.	0.86 ac.
14	37061 sq. ft.	0.85 ac.
15	30579 sq. ft.	0.70 ac.
16	34629 sq. ft.	0.79 ac.
17	43790 sq. ft.	1.01 ac.
18	43707 sq. ft.	1.00 ac.
19	35709 sq. ft.	0.82 ac.
20	30122 sq. ft.	0.69 ac.
21	30061 sq. ft.	0.69 ac.
22	30011 sq. ft.	0.69 ac.
23	30002 sq. ft.	0.69 ac.
24	30003 sq. ft.	0.69 ac.
25	30101 sq. ft.	0.69 ac.
26	30062 sq. ft.	0.69 ac.
27	30010 sq. ft.	0.69 ac.
28	30075 sq. ft.	0.69 ac.
29	30030 sq. ft.	0.69 ac.

N89°16'25"W 159.78' 191.88' 190.41' 154.79' 154.24' 194.32' 220.19' 213.60' 180.26' 171.30' 169.55'

N89°17'27"E 195.24'

OAK VIEW DR. (PUBLIC)

N89°12'30"W

N89°15'11"W

N89°16'25" W 223.55'

N0°43'35"E 291.95'

92.50' 120.90' 78.79' 126.95'

N0°00'00"E 205.40'

DEAN CT. (PUBLIC)

N0°00'00"E 205.06'

175.32'

S43°02'04"E 117.93'

N89°55'21"W 243.78'

N89°55'52"W 334.46'

177.97' 166.18'

S0°43'35"W 207.34'

156.49' 67.02' 13.60'

S23°51'12"E 179.51'

68.39'

N34°39'52"E 68.39'

N37°35'08"E 120.75'

PRIVATE OPEN SPACE

N41°52'53"E 333.60'

N14°16'12"W 75.28'

N4°50'25"E 91.31'

N31°53'17"E 94.58'

N13°02'40"W 35.67'

N28°02'49"E 105.63'

149.14' 184.04' 176.12' 156.08' 180.37' 268.32'

S89°31'29"W 187.19' S89°31'29"E 194.28' S89°31'29"E 178.03' S89°31'29"E 204.20'

S0°28'31"W 173.37' N0°39'40"E 162.30' N0°28'31"E 173.30' N0°28'31"E 171.30'

53.67' 98.52' 195.37' 162.69' 191.39' 169.44' 83.98'

S89°31'29"W 198.52' S89°31'29"W 180.84' S89°31'29"E 169.44'

36.07' 40.84'

10.00' P.U & D.E. (TYP)

5.00' P.U. & D.E. (TYP)

23.83'

N16°22'06"E 131.01'

N88°50'09"W 352.30'

N77°02'59"W 203.69'

N65°51'38"W 162.14'

N37°59'03"W 55.61'

N65°46'47"W 270.08'

S83°50'32"E 280.95'

S88°15'36"W 252.40'

S68°00'10"E 163.43'

N60°53'49"W 237.07'

THE RIDGE AT ALPINE PH.2

C1 C2 C3 C4 C5 C6 C7 C10 C11 C12 C13 C14 C15 C16 C17 C20 C21 C22 C23 C24 C25 C26 C27 C30 C31 C32 C33 C34 C35 C36 C37 C38 C39 C40 C41 C42 C43 C44 C45 C46 C47 C48 C49 C50 C51 C52

27.00' 54.00' 27.80' 27.81'

ADDRESS TABLE

LOT	ADDRESS
1	1554 N. DEAN CT.
2	1582 N. DEAN CT.
3	1612 N. DEAN CT.
4	1638 N. DEAN CT.
5	1664 N. DEAN CT.
6	1692 N. DEAN CT. OR 786 E. OAK VIEW DR.
7	1734 N. DEAN CT. OR 767 E. OAK VIEW DR.
8	1776 N. DEAN CT.
9	1794 N. DEAN CT.
10	1854 N. DEAN CT.
11	1862 N. DEAN CT.
12	1817 N. DEAN CT.
13	1781 N. DEAN CT. OR 1771 E. ELK RIDGE LANE
14	1765 E. ELK RIDGE LANE
15	1759 N. ELK RIDGE LANE
16	1727 N. ELK RIDGE LANE
17	1699 N. ELK RIDGE LANE
18	1677 N. ELK RIDGE LANE
19	1647 N. ELK RIDGE LANE
20	1618 N. ELK RIDGE LANE
21	1644 N. ELK RIDGE LANE
22	1674 N. ELK RIDGE LANE
23	1704 N. ELK RIDGE LANE
24	1730 N. ELK RIDGE LANE
25	1737 N. DEAN CT. OR 1738 E. ELK RIDGE LANE
26	1703 N. DEAN CT.
27	1673 N. DEAN CT.
28	1641 N. DEAN CT.
29	1613 N. DEAN CT.

ELK RIDGE LANE (PUBLIC)

C8 C9 C18 C19 C28 C29 C52

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C1	118.24'	623.00'	118.06'	N5°26'14"W	10°52'26"
C2	170.08'	650.00'	169.59'	N7°29'45"W	14°59'31"
C3	365.62'	650.00'	360.82'	N1°07'21"E	32°13'43"
C4	194.58'	650.00'	193.86'	N8°39'39"E	17°09'07"
C5	115.97'	650.00'	115.82'	N5°01'35"W	10°13'22"
C6	119.80'	650.00'	119.63'	N4°51'29"W	10°33'36"
C7	3.45'	650.00'	3.45'	N0°34'27"E	0°18'16"
C8	4.99'	650.00'	4.99'	S38°26'23"W	0°26'24"
C9	563.48'	650.00'	546.00'	S13°49'31"W	49°40'10"
C10	308.75'	175.00'	270.24'	S39°32'02"W	101°05'13"
C11	94.40'	677.00'	94.33'	N3°59'39"W	7°59'22"
C12	82.74'	677.00'	82.69'	N11°29'29"W	7°00'09"
C13	73.31'	623.00'	73.27'	N11°37'14"W	6°44'32"
C14	137.17'	623.00'	136.89'	N1°58'07"W	12°36'54"
C15	139.97'	623.00'	139.68'	N10°49'34"E	12°52'22"
C16	156.23'	677.00'	155.89'	N10°09'37"E	13°13'21"
C17	22.58'	15.00'	20.51'	N46°41'07"E	86°14'40"
C18	44.77'	623.00'	44.76'	S12°56'00"E	4°07'03"
C19	87.59'	677.00'	87.53'	S11°17'08"E	7°24'46"
C20	171.78'	677.00'	171.32'	S0°18'37"E	14°32'16"
C21	121.45'	677.00'	121.28'	S12°05'52"W	10°16'41"
C22	56.24'	623.00'	56.22'	S14°39'03"W	5°10'19"
C23	163.18'	623.00'	162.71'	S4°33'41"W	15°00'26"
C24	78.24'	623.00'	78.19'	S6°32'24"E	7°11'44"
C25	83.42'	677.00'	83.37'	S6°36'29"E	7°03'36"
C26	22.74'	15.00'	20.62'	S46°30'01"E	86°50'40"
C27	22.72'	15.00'	20.61'	N46°47'40"W	86°46'06"
C28	78.12'	623.00'	78.06'	N6°32'45"W	7°11'03"
C29	40.02'	623.00'	40.01'	S1°06'49"E	3°40'49"
C30	39.77'	50.00'	38.73'	S23°30'47"W	45°34'23"
C31	38.45'	60.00'	37.79'	S27°56'32"W	36°42'53"
C32	77.05'	60.00'	71.86'	N27°12'13"W	73°34'37"
C33	73.90'	60.00'	69.31'	S80°43'36"W	70°34'01"

CURVE TABLE

CURVE	LENGTH	RADIUS	CHORD DIST.	CHORD BRG.	DELTA
C34	94.55'	60.00'	85.07'	S0°17'49"W	90°17'28"
C35	22.26'	50.00'	22.07'	S32°05'38"E	25°30'18"
C36	17.51'	50.00'	17.42'	S9°18'27"E	20°04'05"
C37	79.49'	677.00'	79.45'	N6°46'27"W	6°43'40"
C38	23.39'	15.00'	21.09'	S45°24'07"W	89°21'03"
C39	97.14'	202.00'	96.21'	S76°18'01"W	27°33'15"
C40	256.57'	148.00'	225.63'	N40°24'50"E	99°19'38"
C41	142.88'	202.00'	139.92'	S42°15'37"W	40°31'34"
C42	116.37'	202.00'	114.76'	S5°29'38"W	33°00'24"
C43	4.55'	148.00'	4.55'	N10°07'47"W	1°45'35"
C44	158.74'	677.00'	158.38'	N4°17'32"W	13°26'05"
C45	186.67'	623.00'	185.97'	S2°25'33"E	17°10'02"
C46	176.16'	677.00'	175.66'	N9°52'46"E	14°54'31"
C47	196.40'	623.00'	195.59'	S15°11'20"W	18°03'45"
C48	138.24'	677.00'	138.00'	N23°11'00"E	11°41'57"
C49	113.75'	677.00'	113.61'	N33°50'47"E	9°37'36"
C50	155.57'	623.00'	155.17'	S31°22'27"W	14°18'28"
C51	5.50'	677.00'	5.50'	N17°00'15"E	0°30'20"
C52	11.41'	623.00'	11.41'	N38°08'06"E	1°02'59"

PREPARED FOR:

SBC HOLDINGS INC
PAUL KROFF
185 N. PFEIFFERHORN
ALPINE, UT 84004

NORTHWEST CORNER SECTION 18, T. 4S., R. 2E., SLB&M

S.18 S.12 S.13

N88°33'07"E 67.05'

GENERAL NOTES

1. THERE EXISTS A 10.00 –FT PUBLIC UTILITY AND DRAINAGE EASEMENT ALONG ALL STREET SIDE PROPERTY LINES AND ALONG ALL EXTERIOR PROPERTY LINES, AND A 5.00–FT PUBLIC UTILITY AND DRAINAGE EASEMENT ALONG ALL INTERIOR PROPERTY LINES UNLESS OTHERWISE NOTED.
2. SETBACKS SHALL BE PER THE CR 40,000 ZONE WHICH ARE 30–FT FRONT AND REAR, SIDE YARD SETBACKS TO BE AN AGGREGATE OF 30–FT WITH 12–FT BEING MINIMUM, UNLESS SHOWN OTHERWISE.
3. NO DWELLING OR STRUCTURE ALLOWED IN PUBLIC UTILITY EASEMENTS WITHOUT WRITTEN CONSENT FROM ALL UTILITY PROVIDERS AND OBTAINING A BUILDING PERMIT.
4. ALL STREETS SHOWN ON THIS PLAT ARE PUBLIC RIGHT OF WAY, DEDICATED TO ALPINE CITY.
5. A GEOTECHNICAL INVESTIGATION WAS PERFORMED BY INTERMOUNTAIN GEOENVIRONMENTAL SERVICES INC. THE INVESTIGATION RESULTS AND SPECIFIC RECOMMENDATIONS FOR THE CONSTRUCTION OF FOUNDATIONS AND FLOOR SLABS ARE COMPILED IN A REPORT DATED AUGUST 23, 2016. A COPY OF THE REPORT IS ON FILE WITH UTAH COUNTY. OWNERS, BUILDER AND CONTRACTORS SHOULD BECOME FAMILIAR WITH THIS REPORT AND SHALL COMPLY WITH ITS RECOMMENDATIONS.
6. A DEBRIS–FLOW NET ASSESSMENT WAS PERFORMED BY INTERMOUNTAIN ENVIRONMENTAL SERVICES, INC. THE ASSESSMENT RESULTS AND SPECIFIC RECOMMENDATIONS FOR THE MITIGATION OF DEBRIS–FLOWS FROM BIG HOLLOW DRAINAGE ARE COMPILED IN THE REPORT DATED APRIL 2, 2018. BUILDERS AND CONTRACTORS SHOULD BECOME FAMILIAR WITH THIS REPORT AND SHALL COMPLY WITH ITS RECOMMENDATIONS
7. A GEOLOGICAL HAZARDS REPORT WAS PERFORMED BY WESTERN GEOLOGIC, LLC, DATED SEPTEMBER 4, 2006. A GEOLOGICAL HAZARDS ASSESSMENT PREPARED BY INTERMOUNTAIN GEOENVIRONMENTAL SERVICES INC. DATED DECEMBER 21, 2017. A ROCK FALL HAZARD STUDY PREPARED BY INTERMOUNTAIN GEOENVIRONMENTAL SERVICES INC. DATED AUGUST 6, 2019. OWNERS, BUILDER AND CONTRACTORS SHOULD BECOME FAMILIAR WITH THIS REPORT AND SHALL COMPLY WITH ITS RECOMMENDATIONS.
8. THIS PLAT CONTAINS PROPERTIES LOCATED WITHIN THE URBAN/WILDLAND INTERFACE. PROPERTIES LOCATED WITHIN THIS AREA MAY BE REQUIRED TO INSTALL FIRE SPRINKLERS

NOTE:
THE PROPERTY IS SUBJECT TO THE DECLARATION OF PROTECTIVE COVENANTS FOR THE RIDGE AT ALPINE SUBDIVISION DATED JANUARY 7, 2020. RECORDED ON JANUARY 8, 2020 AS ENTRY 2551–2020 IN THE OFFICIAL RECORDS OF THE UTAH COUNTY RECORDER AS AMENDED BY THE FIRST AMENDMENT AND SUPPLEMENTAL DECLARATION TO DECLARATION OF PROTECTIVE COVENANTS FOR THE RIDGE AT ALPINE SUBDIVISION DATED SEPTEMBER 16, 2020, RECORDED ON OCTOBER 29, 2020, AS ENTRY NO. 170916:2020 IN THE OFFICIAL RECORDS OF THE UTAH COUNTY RECORDER, PURSUANT TO THE SUPPLEMENTAL DECLARATION TO DECLARATION OF PROTECTIVE COVENANTS FOR THE RIDGE AT ALPINE SUBDIVISION DATED SEPTEMBER 16, 2020 AND RECORDED ON OCTOBER 29, 2020, AS ENTRY NO. 170917:2020 IN THE OFFICIAL RECORDS OF THE UTAH COUNTY RECORDER.

SURVEYOR'S CERTIFICATE

I, KENNETH E. BARNEY, DO HEREBY CERTIFY THAT I AM A REGISTERED LAND SURVEYOR, AND THAT I HOLD A LICENSE IN ACCORDANCE WITH TITLE 58, CHAPTER 22, PROFESSIONAL ENGINEERS AND LAND SURVEYORS LICENSING ACT, UTAH CODE ANNOTATED, 1953 AS AMENDED, CERTIFICATE NO. 172762. I FURTHER CERTIFY THAT BY AUTHORITY OF THE OWNERS, I HAVE MADE A SURVEY OF THE TRACT OF LAND SHOWN ON THIS PLAT AND DESCRIBED BELOW, HAVE SUBDIVIDED SAID TRACT OF LAND INTO LOTS, STREETS, AND EASEMENTS, HAVE COMPLETED A SURVEY OF THE PROPERTY DESCRIBED ON THIS PLAT IN ACCORDANCE WITH SECTION 17–23–17, UTAH CODE ANNOTATED, 1953 AS AMENDED, HAVE VERIFIED ALL MEASUREMENTS, AND HAVE PLACED MONUMENTS AS REPRESENTED ON THE PLAT. I FURTHER CERTIFY THAT EVERY EXISTING RIGHT–OF–WAY AND EASEMENT GRANT OF RECORD FOR UNDERGROUND FACILITIES, AS DEFINED IN SECTION 54–8a–2, UTAH CODE ANNOTATED,1953 AS AMENDED, AND FOR OTHER UTILITY FACILITIES, IS ACCURATELY DESCRIBED ON THIS PLAT, AND THAT THIS PLAT IS TRUE AND CORRECT.

_____ _____
DATE KENNETH E. BARNEY, P.L.S.

BOUNDARY DESCRIPTION

A PARCEL OF LAND LOCATED IN THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 4 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN, MORE PARTICULARLY DESCRIBED AS:

COMMENCING AT A BRASS MONUMENT MARKING THE NORTH QUARTER CORNER OF SAID SECTION 18:

AND RUNNING THENCE ALONG THE QUARTER SECTION LINE OF SAID SECTION 18 S.00°47'30"W. A DISTANCE OF 1981.94 FEET MORE OR LESS TO THE NORTHEAST CORNER OF PRIVATE OPEN SPACE PARCEL "A" OF THE RIDGE AT ALPINE SUBDIVISION PHASE 2 RECORDED AS ENTRY # 34131:2020 AS MAP # 16999 IN THE OFFICE OF THE UTAH COUNTY RECORDER, THENCE ALONG THE BOUNDARY OF SAID THE RIDGE AT ALPINE SUBDIVISION PHASE 2 THE FOLLOWING SEVEN (7) COURSES 1) N.89°16'25"W. A DISTANCE OF 223.55 FEET; 2) THENCE N.00°00'00"E. A DISTANCE OF 205.06 FEET TO A POINT OF CURVATURE OF A 623.00–FOOT RADIUS TANGENT CURVE TO THE LEFT; 3) THENCE NORTHWESTERLY ALONG THE ARC OF SAID CURVE 118.24 FEET, HAVING A CENTRAL ANGLE OF 10°52'26" AND A CHORD THAT BEARS N.05°26'14"W. A DISTANCE OF 118.06 FEET; 4) THENCE N.88°50'09"W. A DISTANCE OF 352.30 FEET; 5) THENCE N.65°51'38"W. A DISTANCE OF 162.14 FEET; 6) THENCE N.37°59'03"W. A DISTANCE OF 55.61 FEET; 7) THENCE N.60°53'49"W. A DISTANCE OF 237.07 FEET MORE OR LESS TO THE BOUNDARY LINE OF THE RIDGE AT ALPINE SUBDIVISION PHASE 1 RECORDED AS ENTRY # 69285:2019 AS MAP # 16630 IN THE OFFICE OF THE UTAH COUNTY RECORDER, THENCE ALONG THE BOUNDARY OF SAID THE RIDGE AT ALPINE SUBDIVISION PHASE 1 THE FOLLOWING SIXTEEN (16) COURSES 1) N.28°02'49"E. A DISTANCE OF 105.63 FEET; 2) THENCE N.13°02'40"W. A DISTANCE OF 94.61 FEET; 3) THENCE N.31°53'17"E. A DISTANCE OF 94.58 FEET; 4) THENCE N.04°50'25"E. A DISTANCE OF 91.31 FEET; 5) THENCE N.14°16'12"W. A DISTANCE OF 75.28 FEET; 6) THENCE N.41°52'53"E. A DISTANCE OF 333.60 FEET; 7) THENCE N.37°35'08"E. A DISTANCE OF 120.75 FEET; 8) THENCE N.34°39'52"E. A DISTANCE OF 68.39 FEET; 9) THENCE N.43°35'01"E. A DISTANCE OF 80.62 FEET; 10) THENCE N.52°59'20"E. A DISTANCE OF 62.28 FEET; 11) THENCE N.60°31'41"E. A DISTANCE OF 71.69 FEET; 12) THENCE N.51°02'26"E. A DISTANCE OF 108.47 FEET; 13) THENCE N.45°12'21"E. A DISTANCE OF 85.41 FEET; 14) THENCE N.30°10'23"E. A DISTANCE OF 105.66 FEET; 15) THENCE N.32°52'52"E. A DISTANCE OF 174.22 FEET; 16) THENCE N.34°55'37"E. A DISTANCE OF 115.49 FEET, MORE OR LESS TO THE NORTH LINE OF SAID SECTION 18; THENCE N. 88°33'07" E ALONG SAID NORTH SECTION LINE A DISTANCE OF 74.50 FEET TO THE POINT OF BEGINNING.

CONTAINING 25.96 ACRES OR 1130713 SQ FEET OF LAND MORE OR LESS.

OWNER'S DEDICATION

KNOW ALL MEN BY THESE PRESENTS THAT WE, ALL OF THE UNDERSIGNED OWNERS OF ALL THE PROPERTY DESCRIBED IN THE SURVEYOR'S CERTIFICATE HEREON AND SHOWN ON THIS MAP, HAVE CAUSED THE SAME TO BE SUBDIVIDED INTO LOTS, STREETS, AND EASEMENTS AND DO HEREBY DEDICATE THE STREETS AND OTHER PUBLIC AREAS AS INDICATED HEREON FOR PERPETUAL USE OF THE PUBLIC.

IN WITNESS HEREOF WE HAVE HEREUNTO SET OUR HANDS THIS _____ DAY OF _____, A.D. 20____.

_____

BY: _____

ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF SALT LAKE } S.S.

ON THIS _____ DAY OF _____, IN THE YEAR 20 ____ BEFORE ME, _____, PERSONALLY APPEARED _____, PROVED ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME IS SUBSCRIBED TO IN THIS DOCUMENT, AND ACKNOWLEDGED THAT HE OR SHE EXECUTED THE SAME.

NOTARY PUBLIC _____

NOTARY FULL NAME _____ A NOTARY COMMISSIONED IN UTAH

COMMISSION NUMBER _____ MY COMMISSION EXPIRES _____.

ACKNOWLEDGMENT

STATE OF UTAH }
COUNTY OF SALT LAKE } S.S.

ON THIS _____ DAY OF _____, IN THE YEAR 20 ____ BEFORE ME, _____, PERSONALLY APPEARED _____, WHO DULY ACKNOWLEDGED TO ME THAT (S)HE IS A _____, [MEMBER WITH MANAGEMENT AUTHORITY] [MANAGER] OF _____, A UTAH LIMITED LIABILITY COMPANY, AND IS AUTHORIZED TO EXECUTE THE FOREGOING AGREEMENT IN ITS BEHALF AND THAT HE OR SHE EXECUTED IT IN SUCH CAPACITY.

NOTARY PUBLIC _____

NOTARY FULL NAME _____ A NOTARY COMMISSIONED IN UTAH

COMMISSION NUMBER _____ MY COMMISSION EXPIRES _____.

Northern ENGINEERING INC
ENGINEERING–LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802–8992

SURVEYOR'S SEAL — PROFESSIONAL LAND SURVEYOR — No. 172762 Kenneth E. Barney — STATE OF UTAH

NOTARY PUBLIC SEAL | CITY–COUNTY ENGINEER SEAL | CLERK–RECORDER SEAL

THE RIDGE AT ALPINE SUBDIVISION PHASE 5

LOCATED IN THE WEST HALF SECTION 18, TOWNSHIP 4 SOUTH, RANGE 2 EAST, SALT LAKE BASE AND MERIDIAN

ALPINE UTAH COUNTY, UTAH

SCALE: 1" = 60 FEET

K:\3–20–Alpine Ridge\CAD\Final\Final Plat\FINAL PLAT PH.5.dwg 3/9/2021 1:38 PM

JAU-FANG LU
34:124:0001

MICHAEL D. & SHARON J. GEURTS
34:117:0005

MICHAEL D. & SHARON J. GEURTS
34:117:0004

CASSIS LAND COMPANY INC.
34:117:0002

CRAIG J & SHARLENE K SKIDMORE
34:117:0001

TODD SMITH
34:070:0008

GREGORY A & PATRICIA R ZIPPI
34:070:0007

ALEXANDER C & JANICE JOHNSON
34:070:0006

RYAN & CATHERINE JOHNSON
34:070:0001

ALPINE COVE C

ALPINE COVE A

OAK VIEW DRIVE

DEAN COURT

ELK RIDGE LN

ELIZA CIRCLE

THE RIDGE AT ALPINE PHASE 2

CONST. STOP & STREET SIGN

END OF SIDEWALK SIGNAGE (OM4-3)

CONST. STOP & STREET SIGN

EXISTING CURB & GUTTER SIDEWALK

TIE ON TO EXISTING ASPHALT AND CURB & GUTTER CONTRACT TO MATCH EXISTING.

KNOWN AREA OF UNDOCUMENTED FILL

PRIVATE OPEN SPACE

PHASE 5
PHASE 1

PHASE 5
PHASE 2

PHASE 2
PHASE 1

PHASE 5
PHASE 2

PHASE 2

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 36 37 38 39 40 41

N – E – S – W

10 60 180
0 30 120

(24"x36")
SCALE 1" = 60'
(11"x17")
SCALE 1" = 120'

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
5			
4			
3			
2			
1			

DESIGNED BY: DATE:
DRAWN BY: DATE:
CHECKED BY: DATE:
APPROVED: DATE:
COGO FILE: DATE:
REV. COGO FILE: DATE:

K:\3-20-030-00 Alpine Ridge\CAD\Preliminary\PHASE 5\PH5 SITE PLAN.dwg 3/9/2021 8:17 AM

Northern ENGINEERING INC
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CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

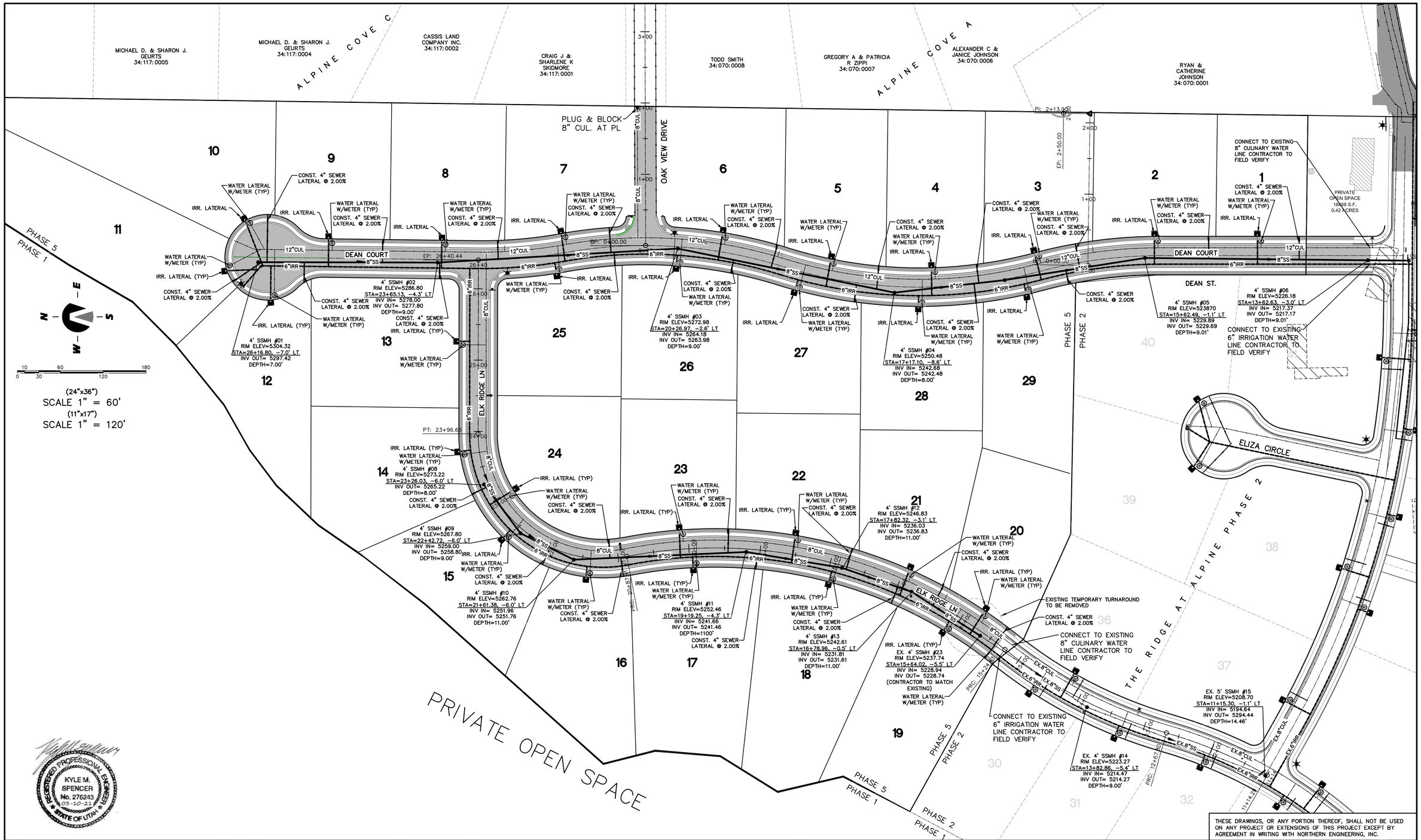
THE RIDGE AT ALPINE PHASE 5

SITE PLAN

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. 4



NO.	REVISIONS	BY	DATE
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K:\3-20-030-00 Alpine Ridge\CAD\Preliminary\PHASE 5\PH5 UTILITY PLAN.dwg 3/10/2021 9:09 AM

Northern ENGINEERING INC
ENGINEERING–LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802–8992

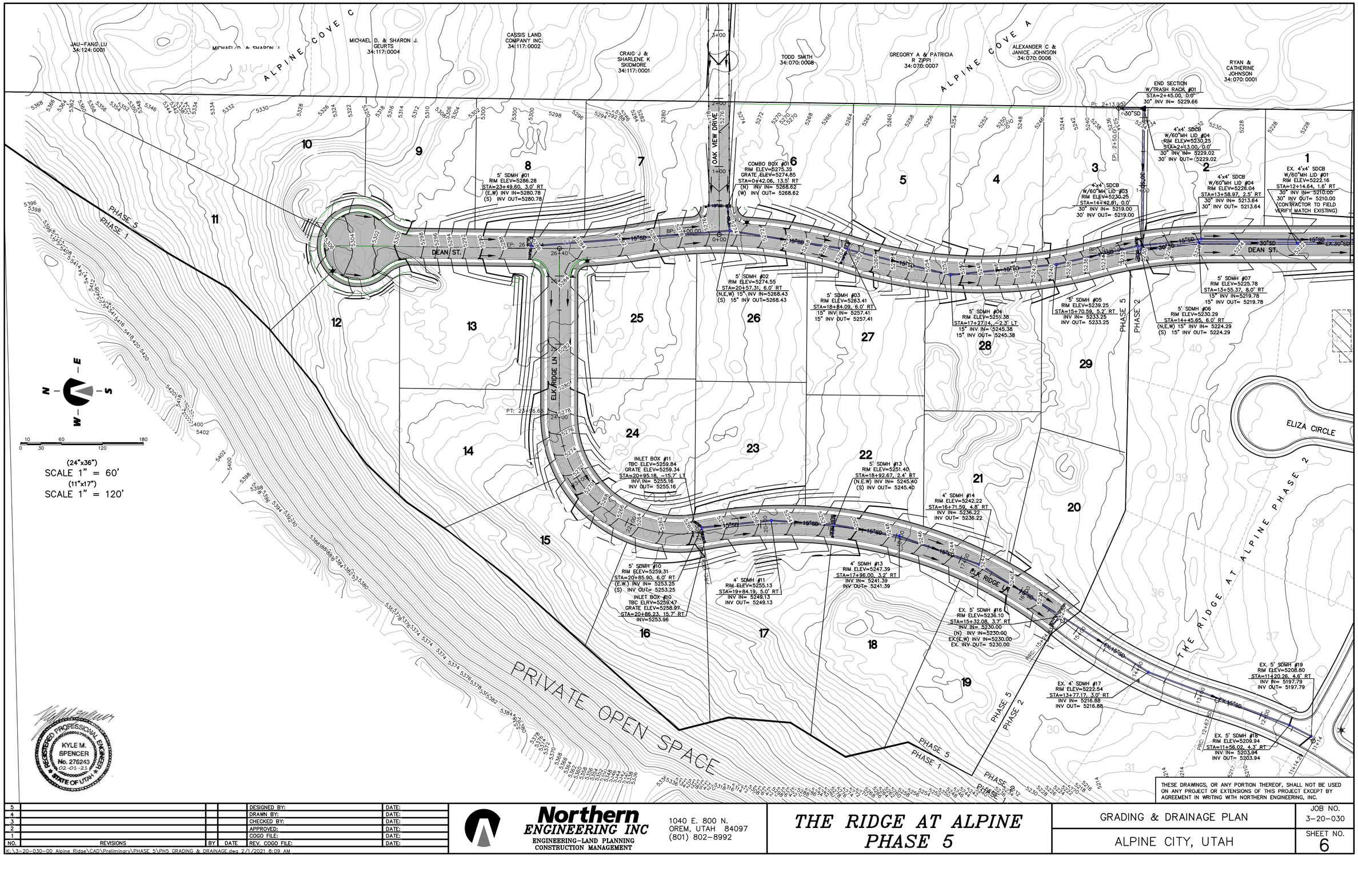
THE RIDGE AT ALPINE PHASE 5

UTILITY PLAN

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. 5



REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
02-01-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
5			
4			
3			
2			
1			

DESIGNED BY: DATE:
DRAWN BY: DATE:
CHECKED BY: DATE:
APPROVED: DATE:
COGO FILE: DATE:
REV. COGO FILE: DATE:

K:\3-20-030-00 Alpine Ridge\CAD\Preliminary\PHASE 5\PH5 GRADING & DRAINAGE.dwg 2/1/2021 8:09 AM

Northern ENGINEERING INC
ENGINEERING–LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

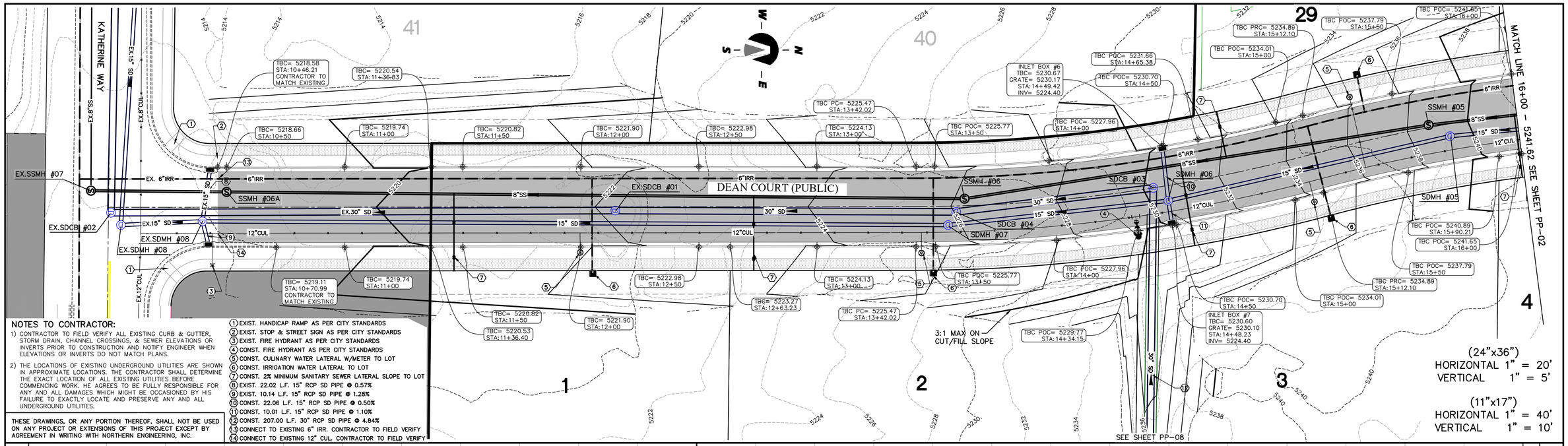
THE RIDGE AT ALPINE PHASE 5

GRADING & DRAINAGE PLAN

ALPINE CITY, UTAH

JOB NO. 3-20-030

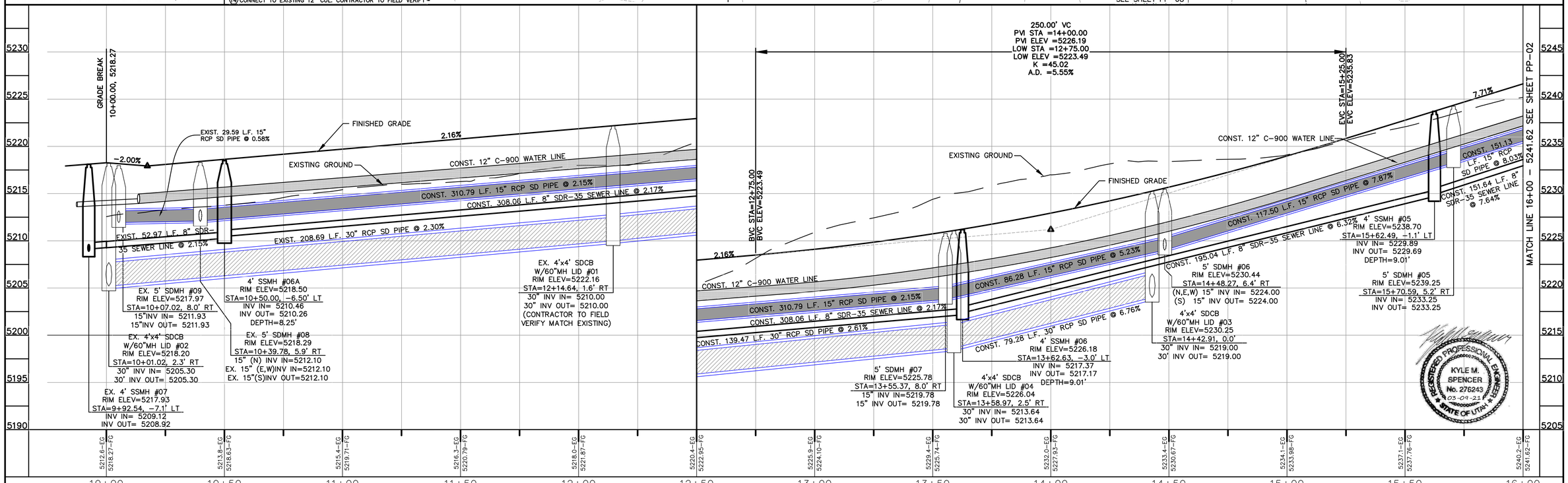
SHEET NO. 6



NOTES TO CONTRACTOR:

1) CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.
2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

1. EXIST. HANDICAP RAMP AS PER CITY STANDARDS
2. EXIST. STOP & STREET SIGN AS PER CITY STANDARDS
3. EXIST. FIRE HYDRANT AS PER CITY STANDARDS
4. CONST. FIRE HYDRANT AS PER CITY STANDARDS
5. CONST. CULINARY WATER LATERAL W/METER TO LOT
6. CONST. IRRIGATION WATER LATERAL TO LOT
7. CONST. 2% MINIMUM SANITARY SEWER LATERAL SLOPE TO LOT
8. EXIST. 22.02 L.F. 15" RCP SD PIPE @ 0.57%
9. EXIST. 10.14 L.F. 15" RCP SD PIPE @ 1.28%
10. CONST. 22.06 L.F. 15" RCP SD PIPE @ 0.50%
11. CONST. 10.01 L.F. 15" RCP SD PIPE @ 1.10%
12. CONST. 207.00 L.F. 30" RCP SD PIPE @ 4.84%
13. CONNECT TO EXISTING 6" IRR. CONTRACTOR TO FIELD VERIFY
14. CONNECT TO EXISTING 12" CUL. CONTRACTOR TO FIELD VERIFY



REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
5			
4			
3			
2			
1			

DESIGNED BY: DATE:
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APPROVED: DATE:
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Northern ENGINEERING INC
ENGINEERING–LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

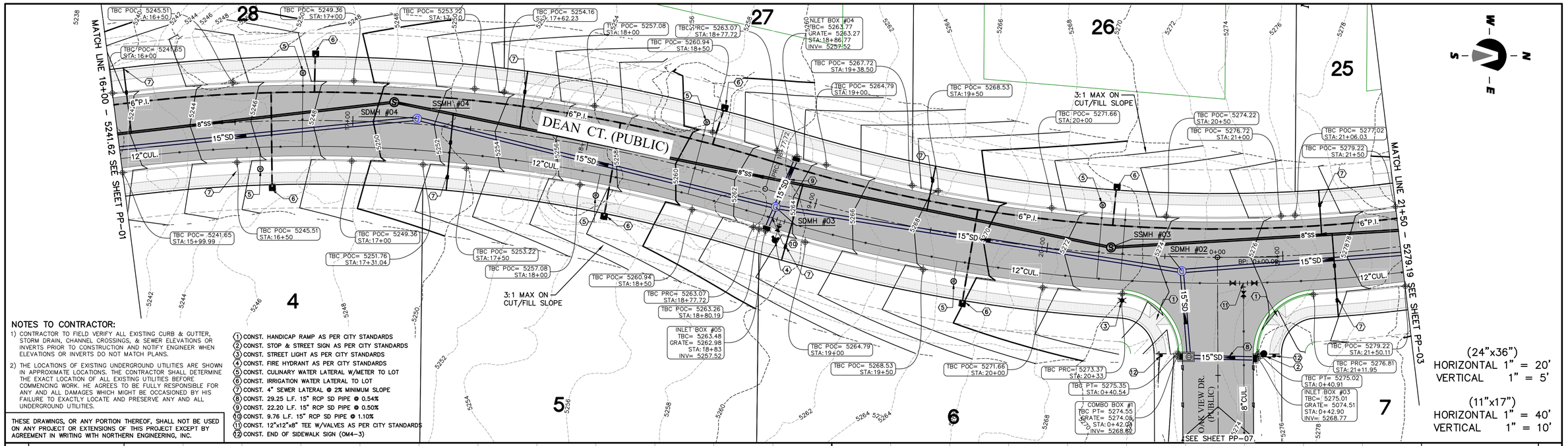
THE RIDGE AT ALPINE PHASE 5

DEAN COURT STA. 10+00 – 16+00

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP-01



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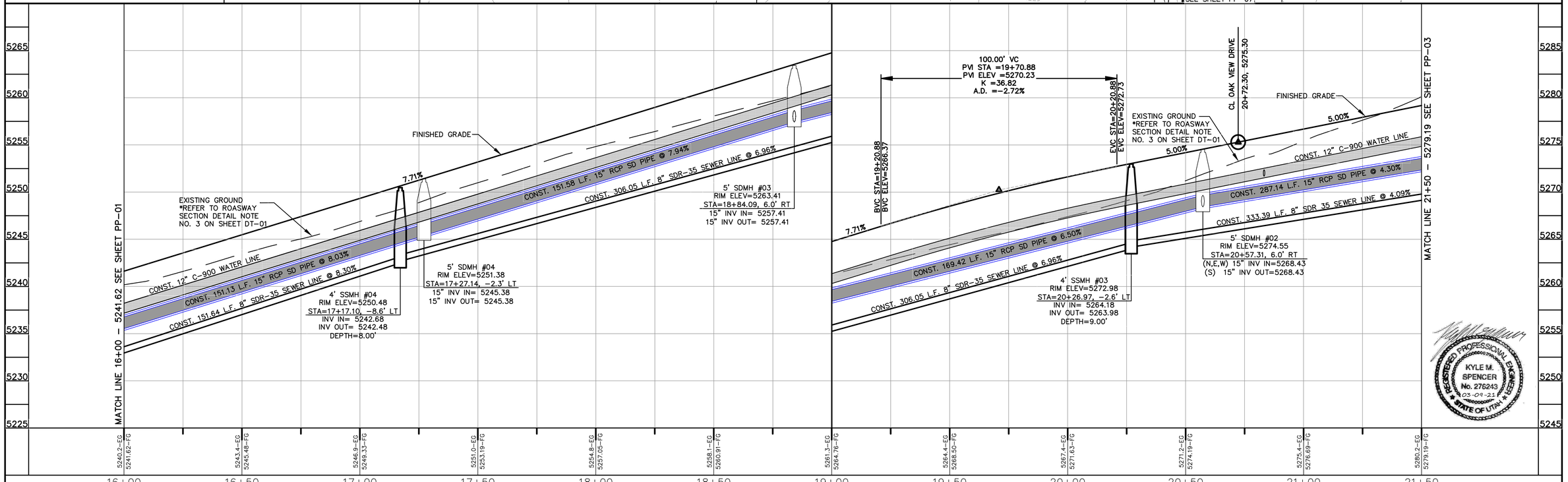
(1) CONST. HANDICAP RAMP AS PER CITY STANDARDS
(2) CONST. STOP & STREET SIGN AS PER CITY STANDARDS
(3) CONST. STREET LIGHT AS PER CITY STANDARDS
(4) CONST. FIRE HYDRANT AS PER CITY STANDARDS
(5) CONST. CULINARY WATER LATERAL W/METER TO LOT
(6) CONST. IRRIGATION WATER LATERAL TO LOT
(7) CONST. 4" SEWER LATERAL @ 2% MINIMUM SLOPE
(8) CONST. 29.25 L.F. 15" RCP SD PIPE @ 0.54%
(9) CONST. 22.20 L.F. 15" RCP SD PIPE @ 0.50%
(10) CONST. 9.76 L.F. 15" RCP SD PIPE @ 1.10%
(11) CONST. 12"x12"x8" TEE W/VALVES AS PER CITY STANDARDS
(12) CONST. END OF SIDEWALK SIGN (OM4-3)

(24"x36")
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



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CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

THE RIDGE AT ALPINE PHASE 5

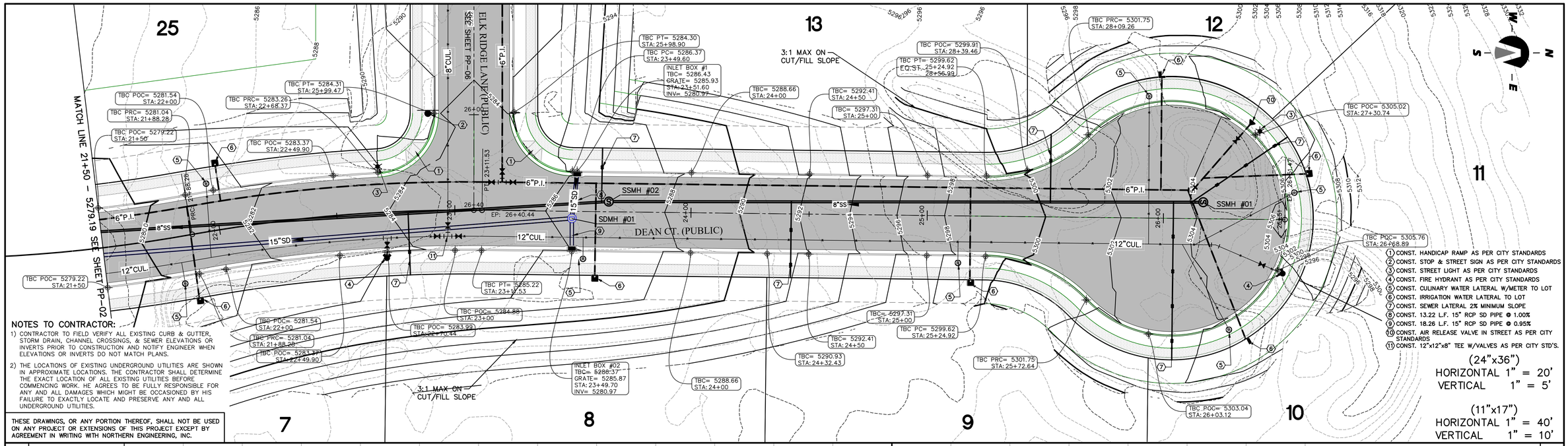
DEAN COURT STA. 16+00 - 22+00

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP-02

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-09-21
STATE OF UTAH



NOTES TO CONTRACTOR:

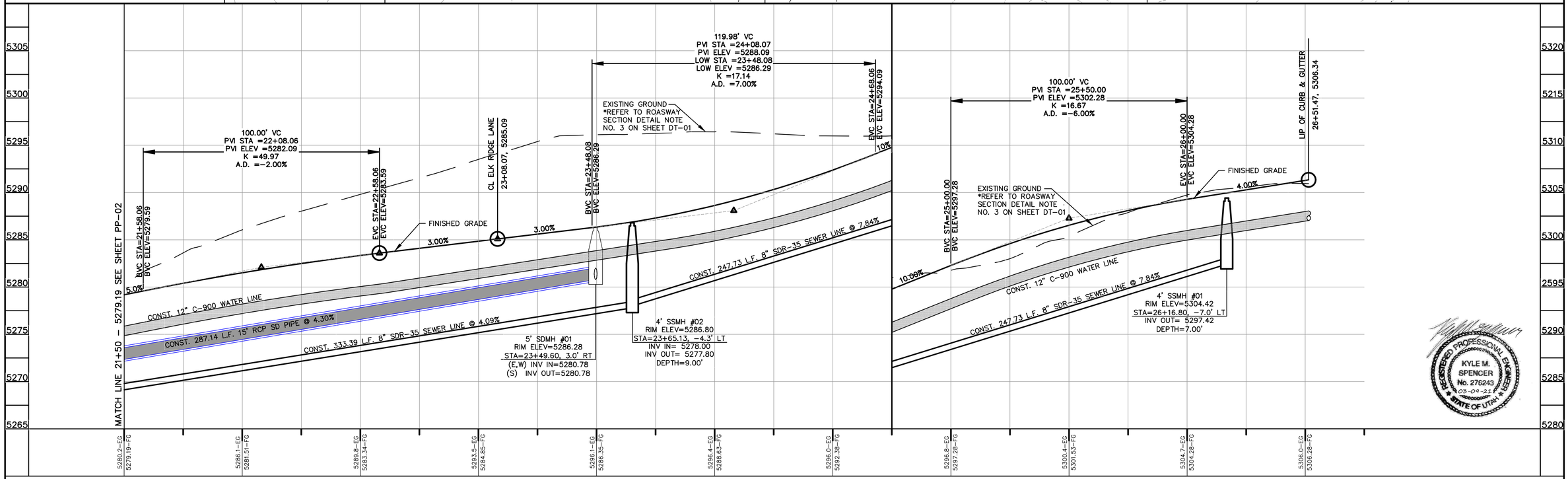
1) CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.

2) THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

1. CONST. HANDICAP RAMP AS PER CITY STANDARDS
2. CONST. STOP & STREET SIGN AS PER CITY STANDARDS
3. CONST. STREET LIGHT AS PER CITY STANDARDS
4. CONST. FIRE HYDRANT AS PER CITY STANDARDS
5. CONST. CULINARY WATER LATERAL W/METER TO LOT
6. CONST. IRRIGATION WATER LATERAL TO LOT
7. CONST. SEWER LATERAL 2% MINIMUM SLOPE
8. CONST. 13.22 L.F. 15" RCP SD PIPE @ 1.00%
9. CONST. 18.26 L.F. 15" RCP SD PIPE @ 0.95%
10. CONST. AIR RELEASE VALVE IN STREET AS PER CITY STANDARDS
11. CONST. 12"x12"x8" TEE W/VALVES AS PER CITY STD'S.

(24"x36")
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 275243
03-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
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ENGINEERING–LAND PLANNING
CONSTRUCTION MANAGEMENT
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OREM, UTAH 84097
(801) 802-8992

THE RIDGE AT ALPINE PHASE 5

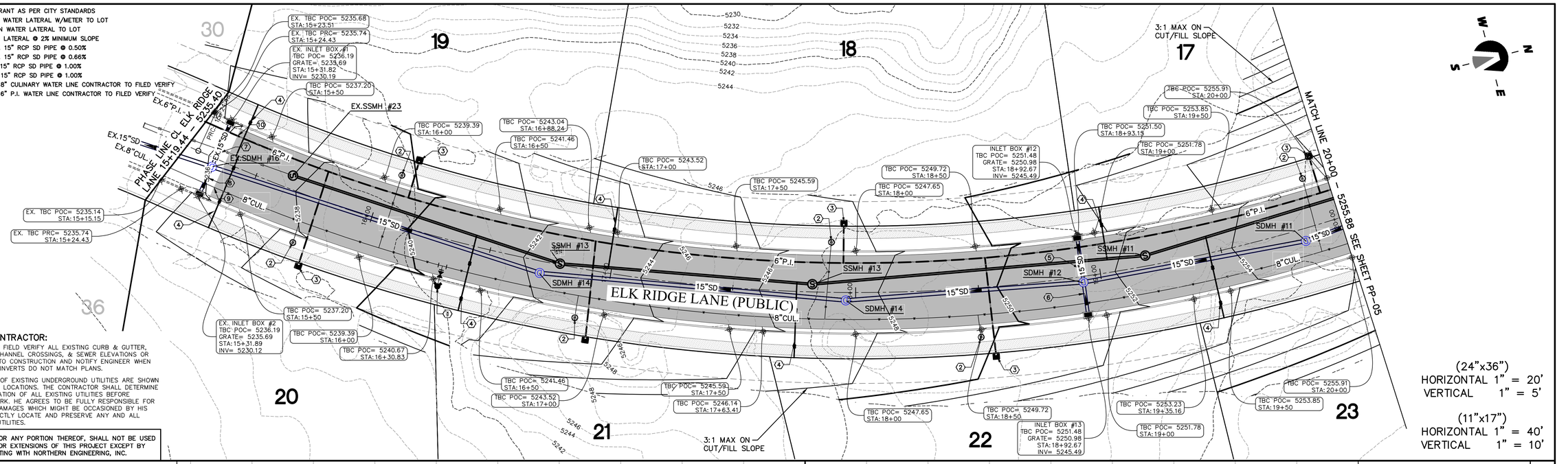
DEAN COURT STA. 21+50 – 26+51.47

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP-03

1. CONST. FIRE HYDRANT AS PER CITY STANDARDS
2. CONST. CULINARY WATER LATERAL W/METER TO LOT
3. CONST. IRRIGATION WATER LATERAL TO LOT
4. CONST. 4" SEWER LATERAL @ 2% MINIMUM SLOPE
5. CONST. 18.25 L.F. 15" RCP SD PIPE @ 0.50%
6. CONST. 13.72 L.F. 15" RCP SD PIPE @ 0.66%
7. EXIST. 19.41 L.F. 15" RCP SD PIPE @ 1.00%
8. EXIST. 12.07 L.F. 15" RCP SD PIPE @ 1.00%
9. CONNECT TO EX. 8" CULINARY WATER LINE CONTRACTOR TO FILED VERIFY
10. CONNECT TO EX. 6" P.I. WATER LINE CONTRACTOR TO FILED VERIFY



NOTES TO CONTRACTOR:

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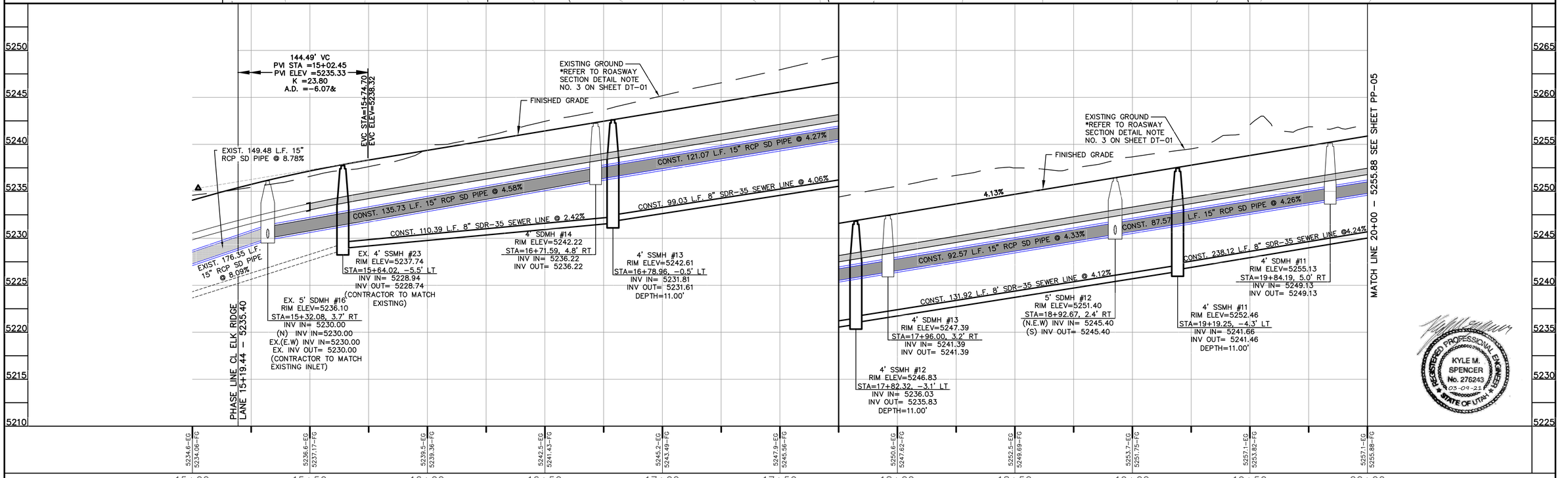
(24"x36")
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



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Northern ENGINEERING INC
ENGINEERING–LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

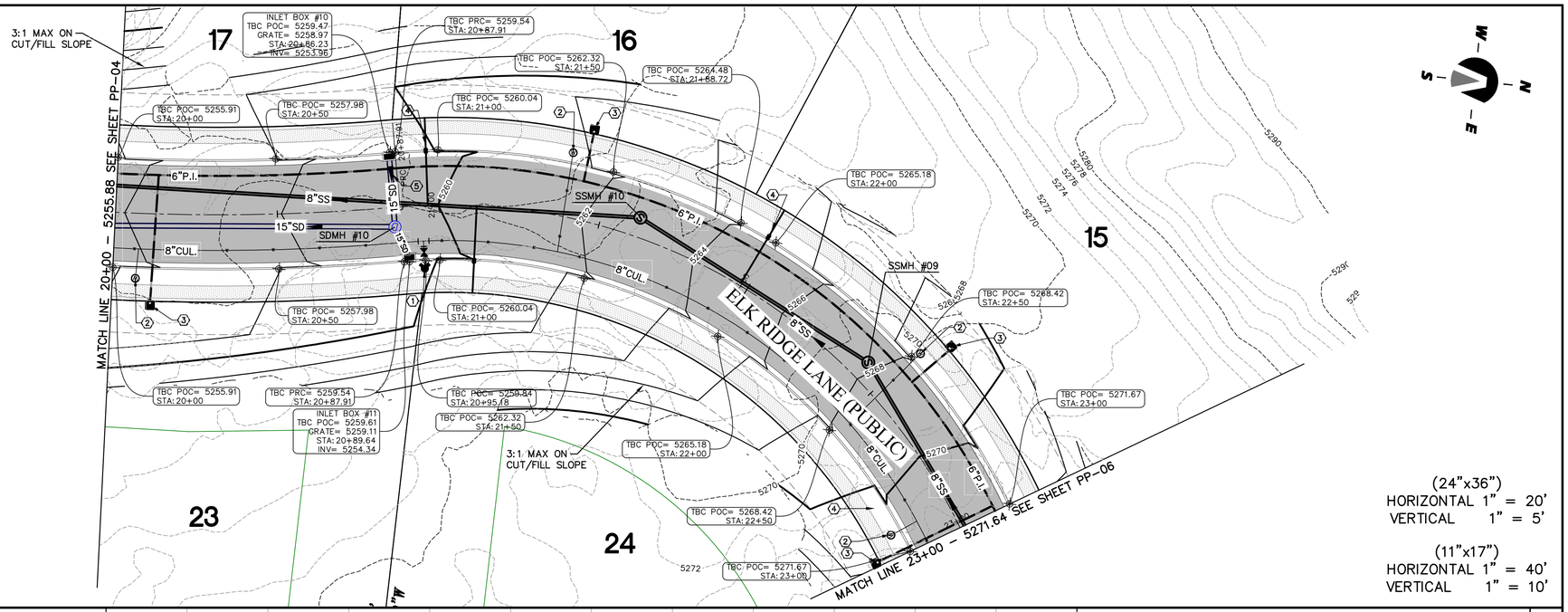
THE RIDGE AT ALPINE PHASE 5

ELK RIDGE LANE STA. 15+00 – 20+00

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP–04



(1) CONST. FIRE HYDRANT AS PER CITY STANDARDS
(2) CONST. CULINARY WATER LATERAL W/METER TO LOT
(3) CONST. IRRIGATION WATER LATERAL TO LOT
(4) CONST. SEWER LATERAL 2% MINIMUM SLOPE
(5) CONST. 11.80 L.F. 15" RCP SD PIPE @ 5.17%

NOTES TO CONTRACTOR:

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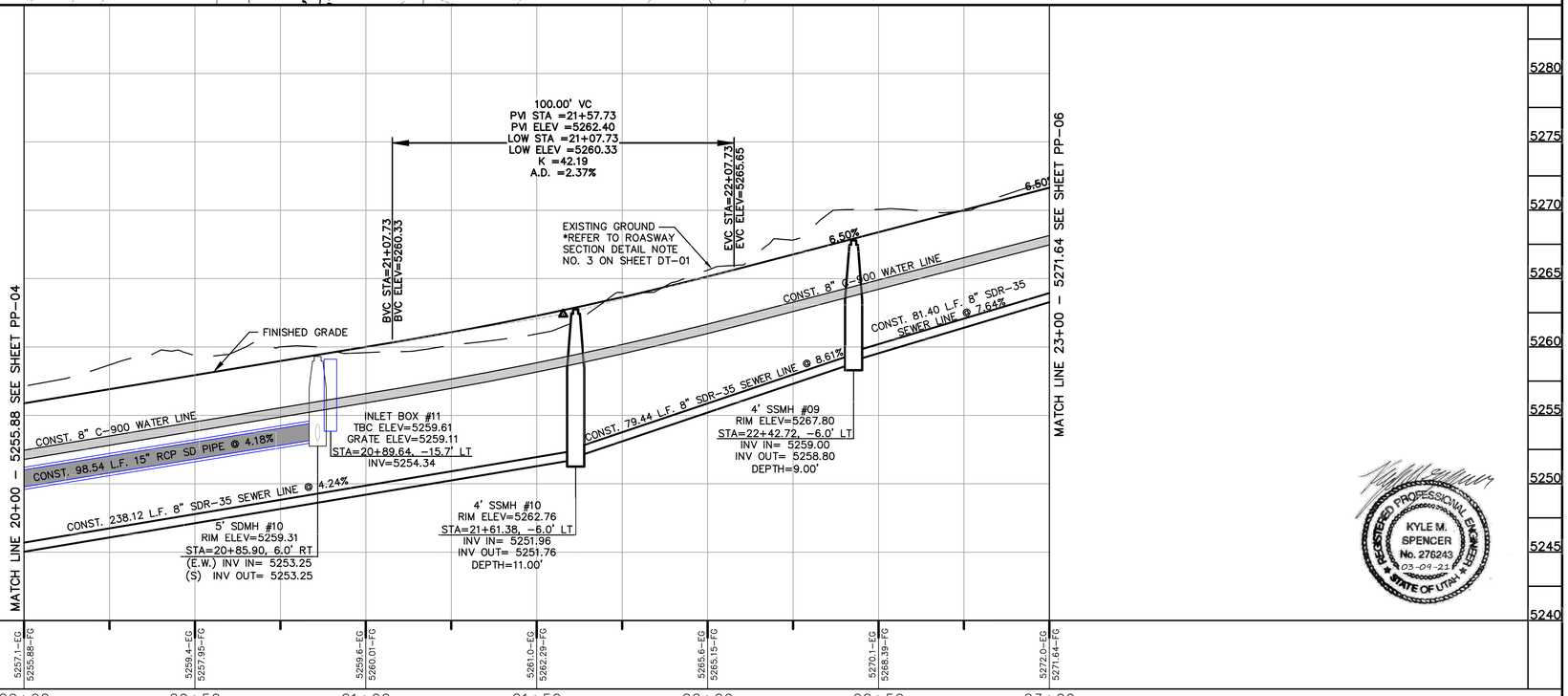

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
05-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
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ENGINEERING-LAND PLANNING CONSTRUCTION MANAGEMENT
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OREM, UTAH 84097
(801) 802-8992

THE RIDGE AT ALPINE PHASE 5

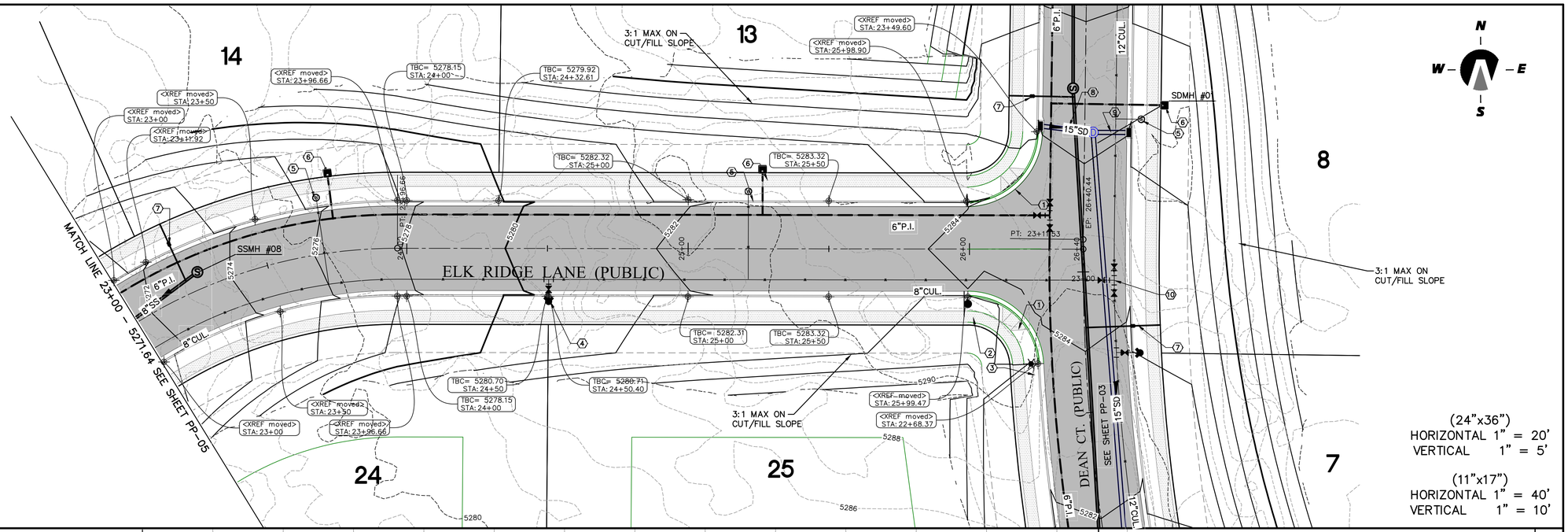
ELK RIDGE LANE STA. 20+00 - 23+00

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP-05

1. CONST. HANDICAP RAMP AS PER CITY STANDARDS
2. CONST. STOP & STREET SIGN AS PER CITY STANDARDS
3. CONST. STREET LIGHT AS PER CITY STANDARDS
4. CONST. FIRE HYDRANT AS PER CITY STANDARDS
5. CONST. CULINARY WATER LATERAL W/METER TO LOT
6. CONST. IRRIGATION WATER LATERAL TO LOT
7. CONST. SEWER LATERAL 2% MINIMUM SLOPE
8. CONST. 13.22 L.F. 15" RCP SD PIPE @ 1.00%
9. CONST. 18.26 L.F. 15" RCP SD PIPE @ 0.95%
9. CONST. 12"x12"x8" TEE W/VALVES AS PER CITY STANDARDS



NOTES TO CONTRACTOR:

1) CONTRACTOR TO FIELD VERIFY ALL EXISTING CURB & GUTTER, STORM DRAIN, CHANNEL CROSSINGS, & SEWER ELEVATIONS OR INVERTS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER WHEN ELEVATIONS OR INVERTS DO NOT MATCH PLANS.

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(24"x36")
HORIZONTAL 1" = 20'
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HORIZONTAL 1" = 40'
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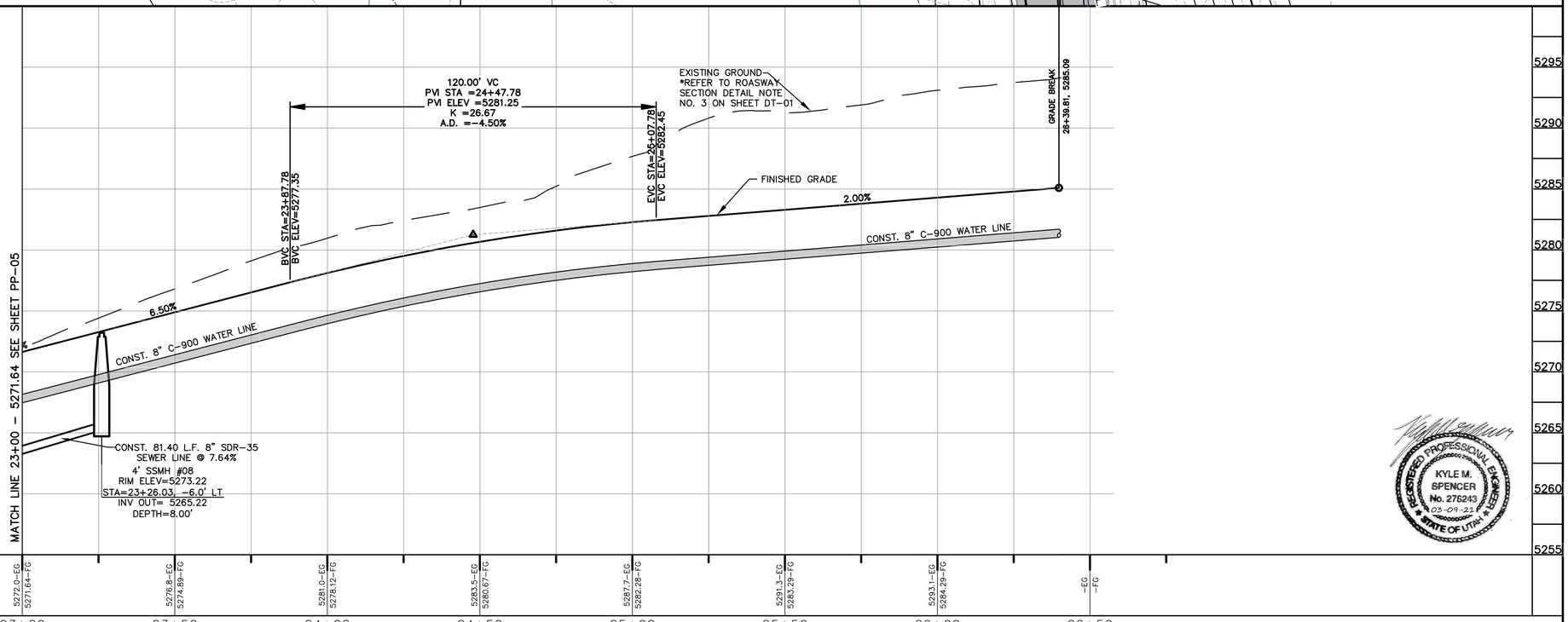

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
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1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

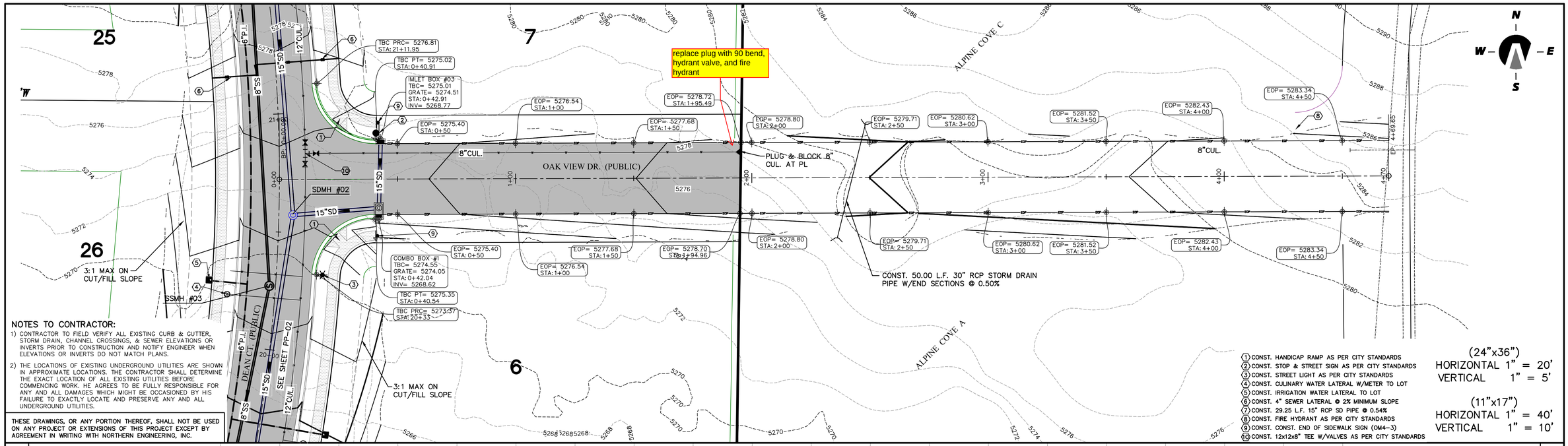
THE RIDGE AT ALPINE PHASE 5

ELK RIDGE LANE STA. 23+00 - 26+40.44

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP-06



NOTES TO CONTRACTOR:

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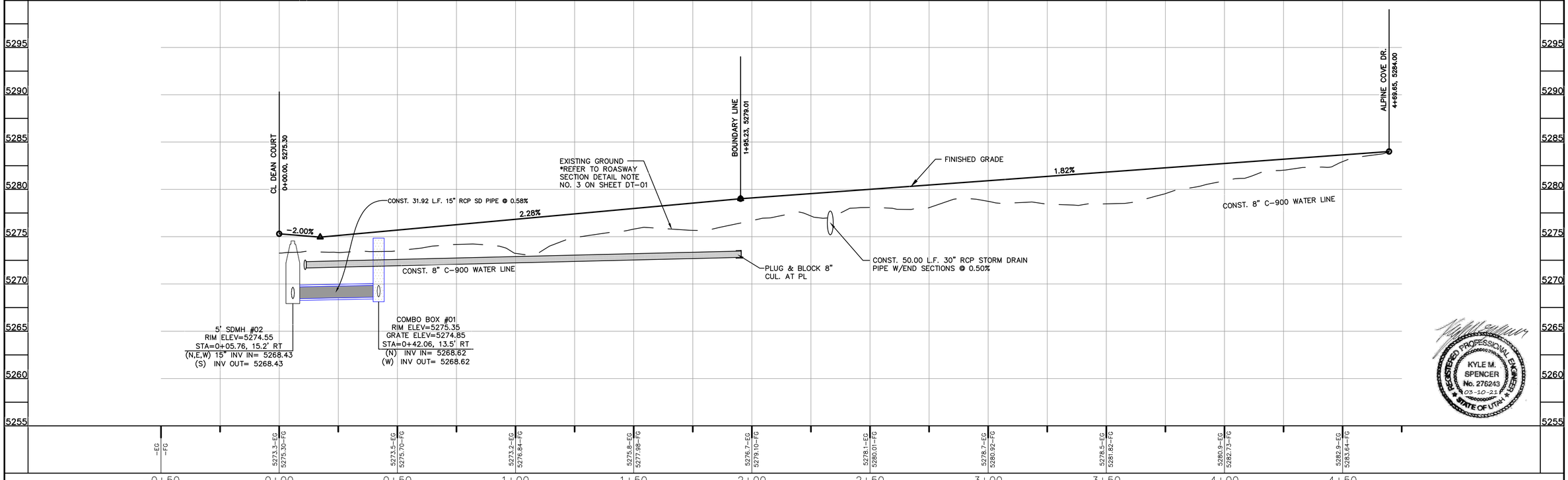
1. CONST. HANDICAP RAMP AS PER CITY STANDARDS
2. CONST. STOP & STREET SIGN AS PER CITY STANDARDS
3. CONST. STREET LIGHT AS PER CITY STANDARDS
4. CONST. CULINARY WATER LATERAL W/METER TO LOT
5. CONST. IRRIGATION WATER LATERAL TO LOT
6. CONST. 4" SEWER LATERAL @ 2% MINIMUM SLOPE
7. CONST. 29.25 L.F. 15" RCP SD PIPE @ 0.54%
8. CONST. FIRE HYDRANT AS PER CITY STANDARDS
9. CONST. CONST. END OF SIDEWALK SIGN (OM4-3)
10. CONST. 12x12x8" TEE W/VALVES AS PER CITY STANDARDS

(24"x36")
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-10-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
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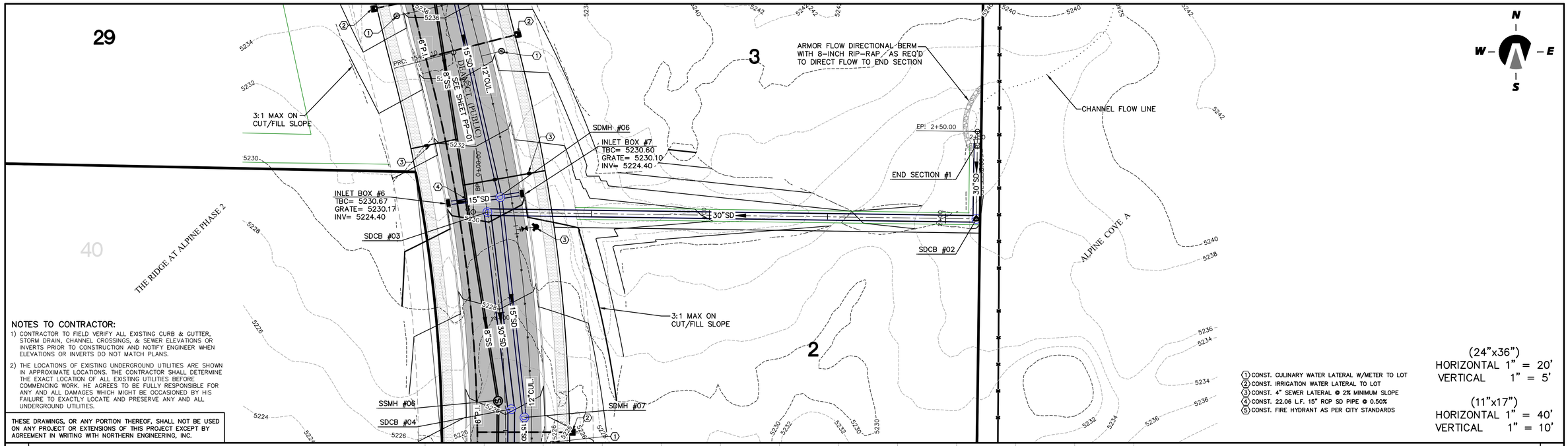
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

THE RIDGE AT ALPINE PHASE 5

OAK VIEW DRIVE
ALPINE CITY, UTAH

JOB NO. 3-20-030
SHEET NO. PP-07



NOTES TO CONTRACTOR:

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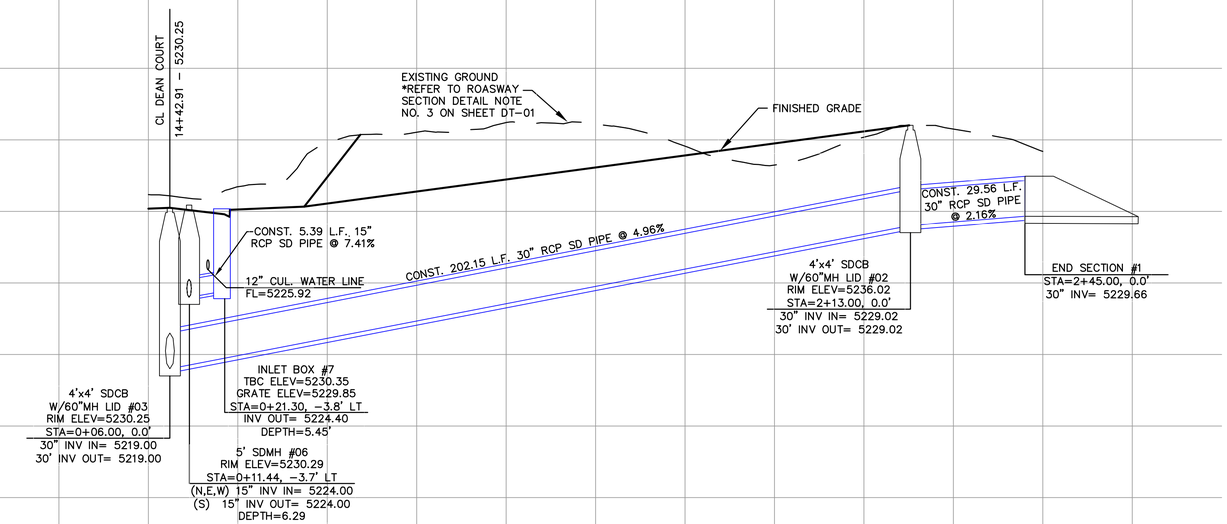
1. CONST. CULINARY WATER LATERAL W/METER TO LOT
2. CONST. IRRIGATION WATER LATERAL TO LOT
3. CONST. 4" SEWER LATERAL @ 2% MINIMUM SLOPE
4. CONST. 22.06 L.F. 15" RCP SD PIPE @ 0.50%
5. CONST. FIRE HYDRANT AS PER CITY STANDARDS

(24"x36")
HORIZONTAL 1" = 20'
VERTICAL 1" = 5'

(11"x17")
HORIZONTAL 1" = 40'
VERTICAL 1" = 10'



REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
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1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

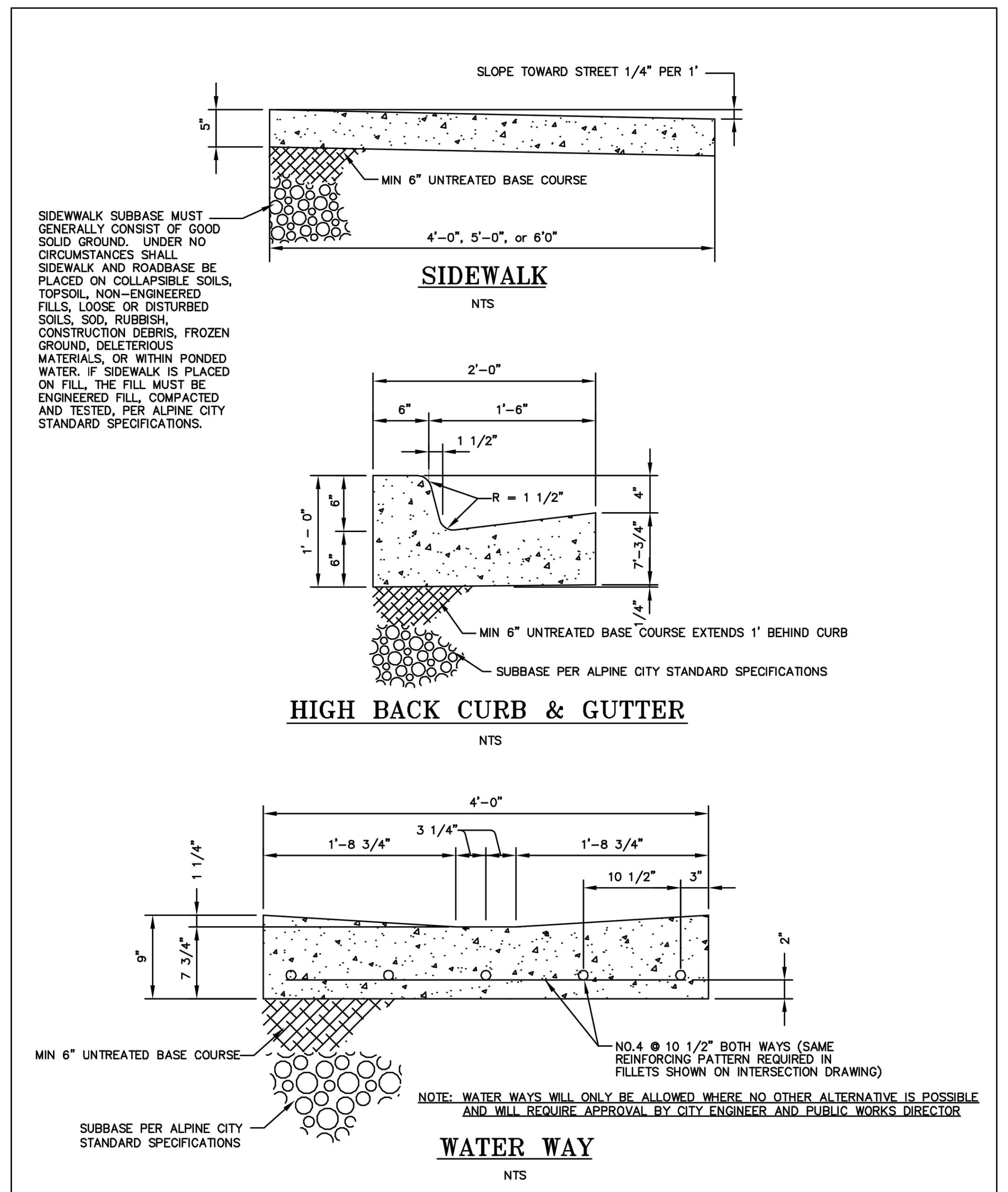
THE RIDGE AT ALPINE PHASE 5

OFFSITE 30' STORM DRAIN

ALPINE CITY, UTAH

JOB NO. 3-20-030

SHEET NO. PP-08



STATEMENT OF USE

THIS DOCUMENT AND ANY ILLUSTRATIONS HEREON ARE PROVIDED AS STANDARD CONSTRUCTION DETAILS WITHIN ALPINE CITY. DEVEATION FROM THIS DOCUMENT REQUIRES APPROVAL OF ALPINE CITY, ALPINE CITY CORPRTATION CAN NOT BE HELD LIABLE FOR MISSUSE OR CHANGES REGARDING THIS DOCUMENT.

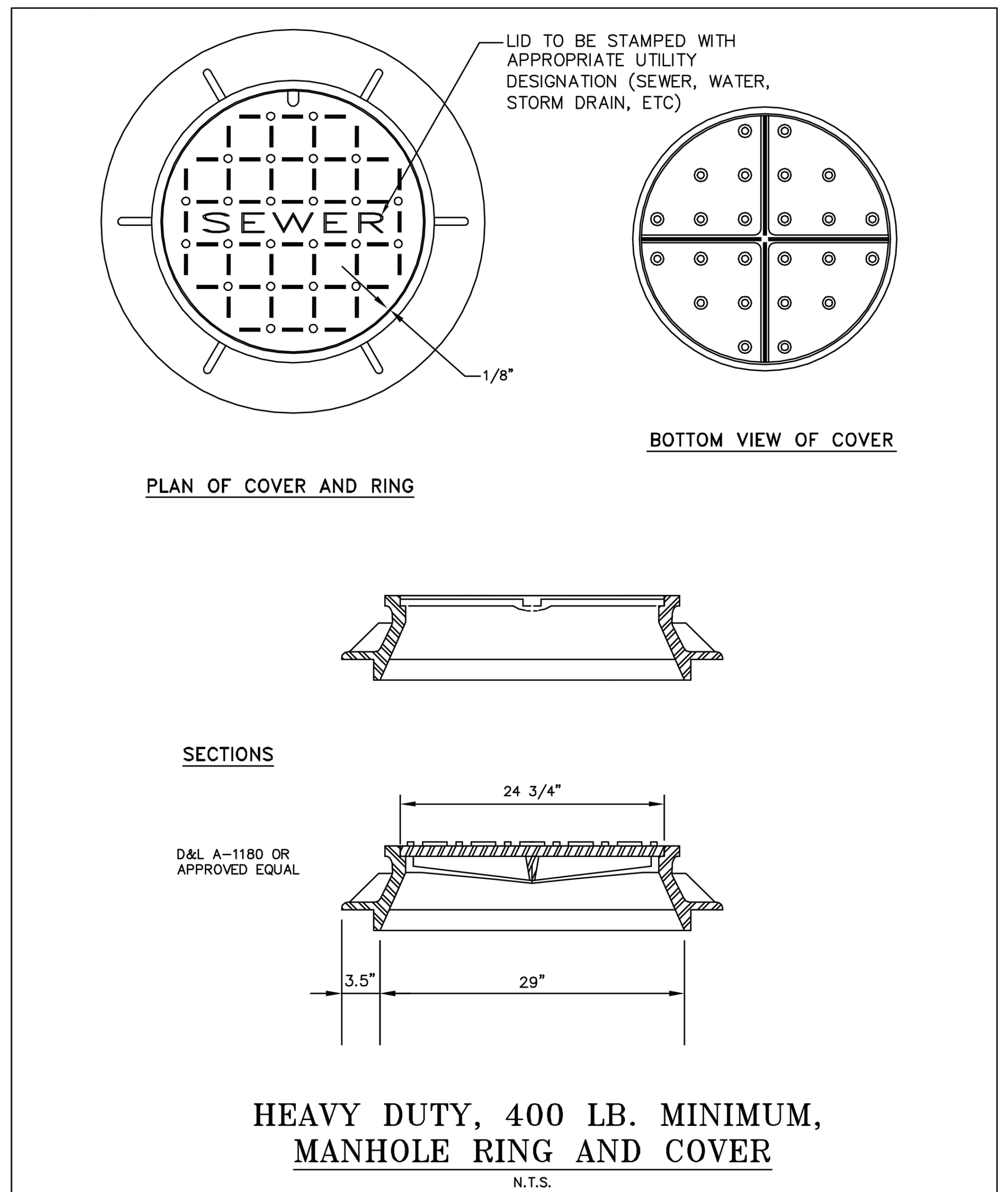
REVISION | NO. | BY | APRL. | DATE

ALPINE CITY ESTABLISHED 1850

SIDEWALK, CURB & GUTTER, WATER WAY

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

STANDARD DRAWING NUMBER: 4
PLOT SCALE: N.T.S.
DRAWN BY: WJM
DESIGN BY:
CHECKED BY:
ADOPTED DATE: 4/14/04



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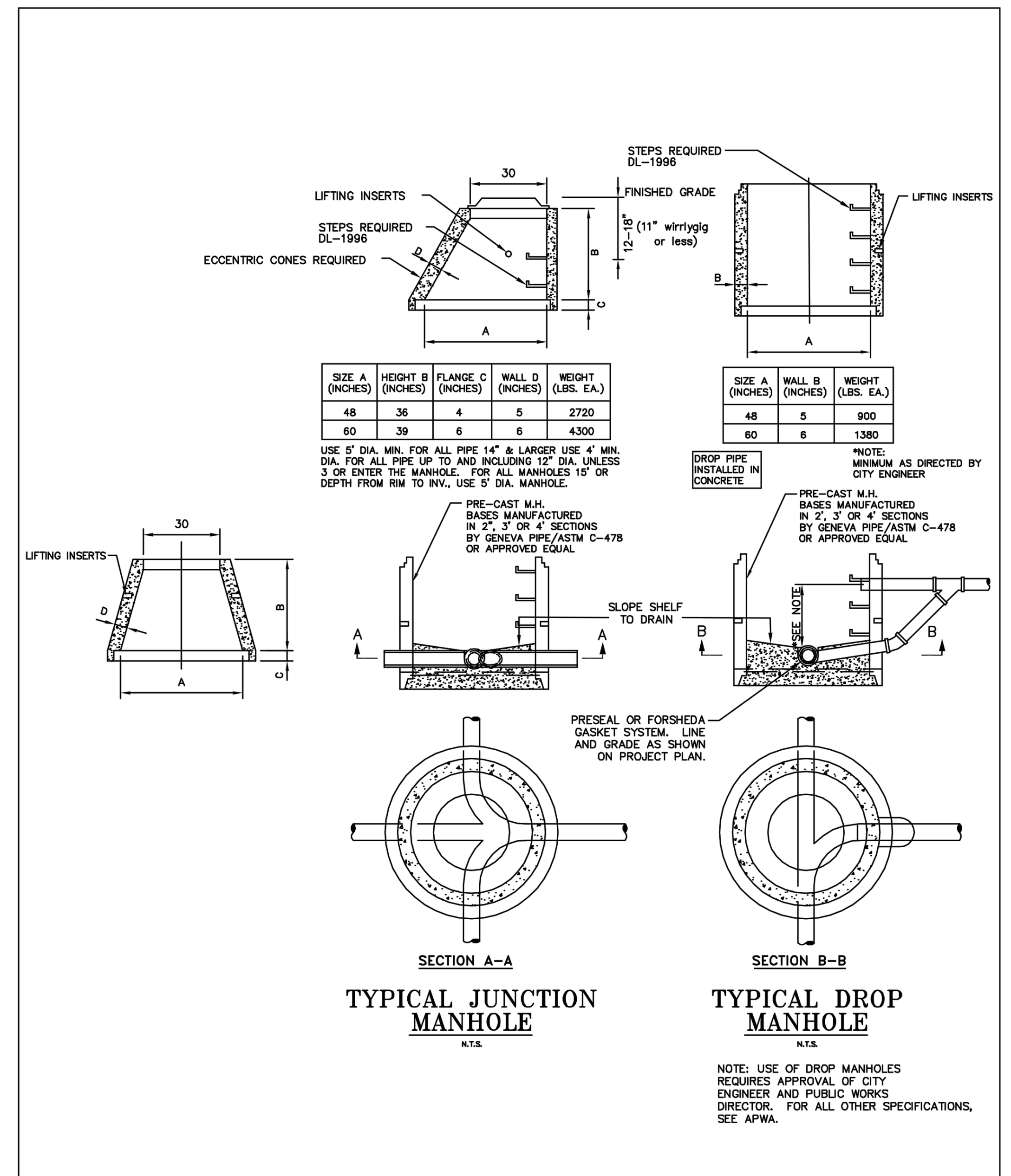
MANHOLE RING & COVER (typical)

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

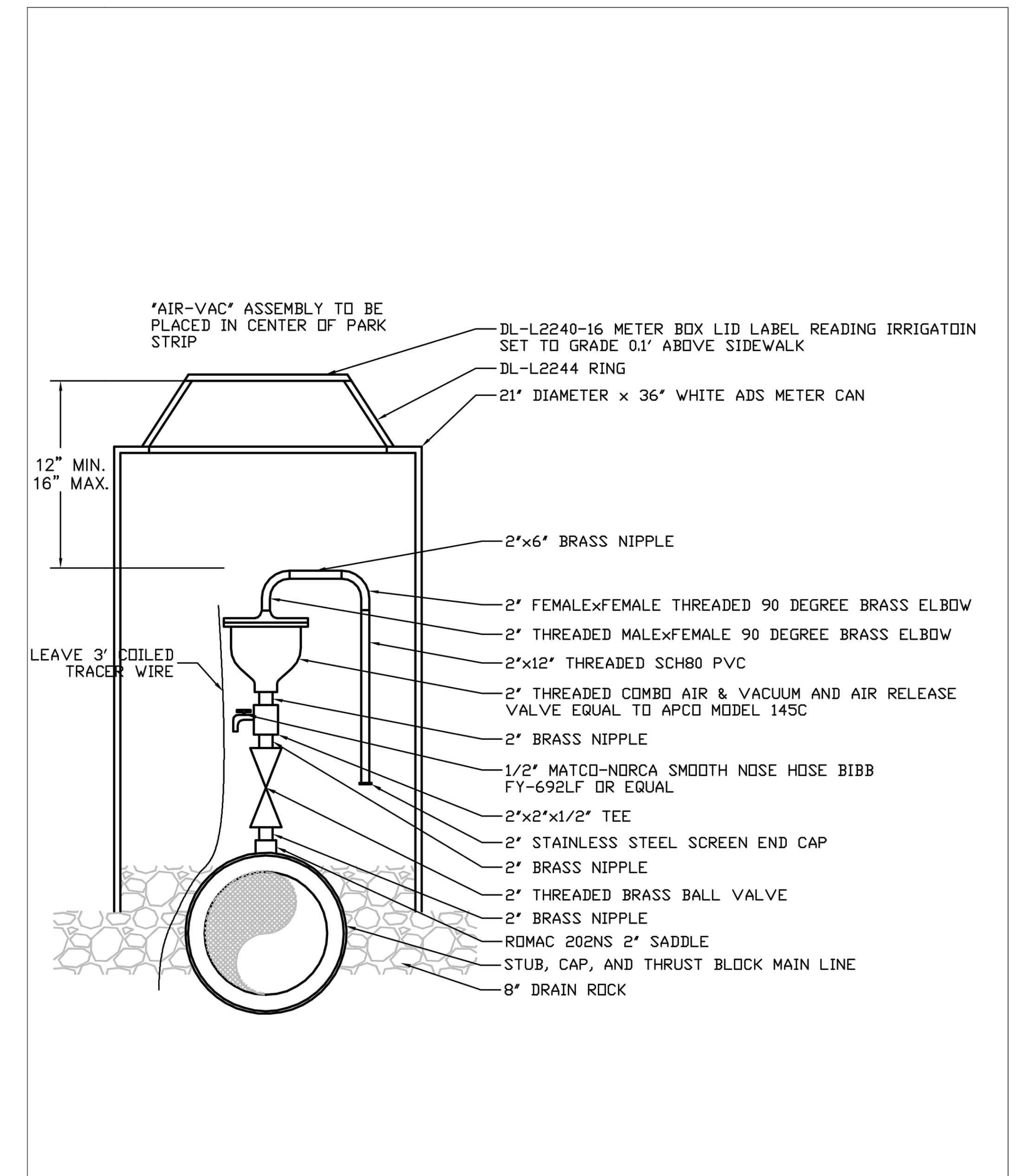
STANDARD DRAWING NUMBER: 16
PLOT SCALE: N.T.S.
DRAWN BY: WJM
ADOPTED DATE: 4/14/04



SEWER MANHOLE (TYPICAL)

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

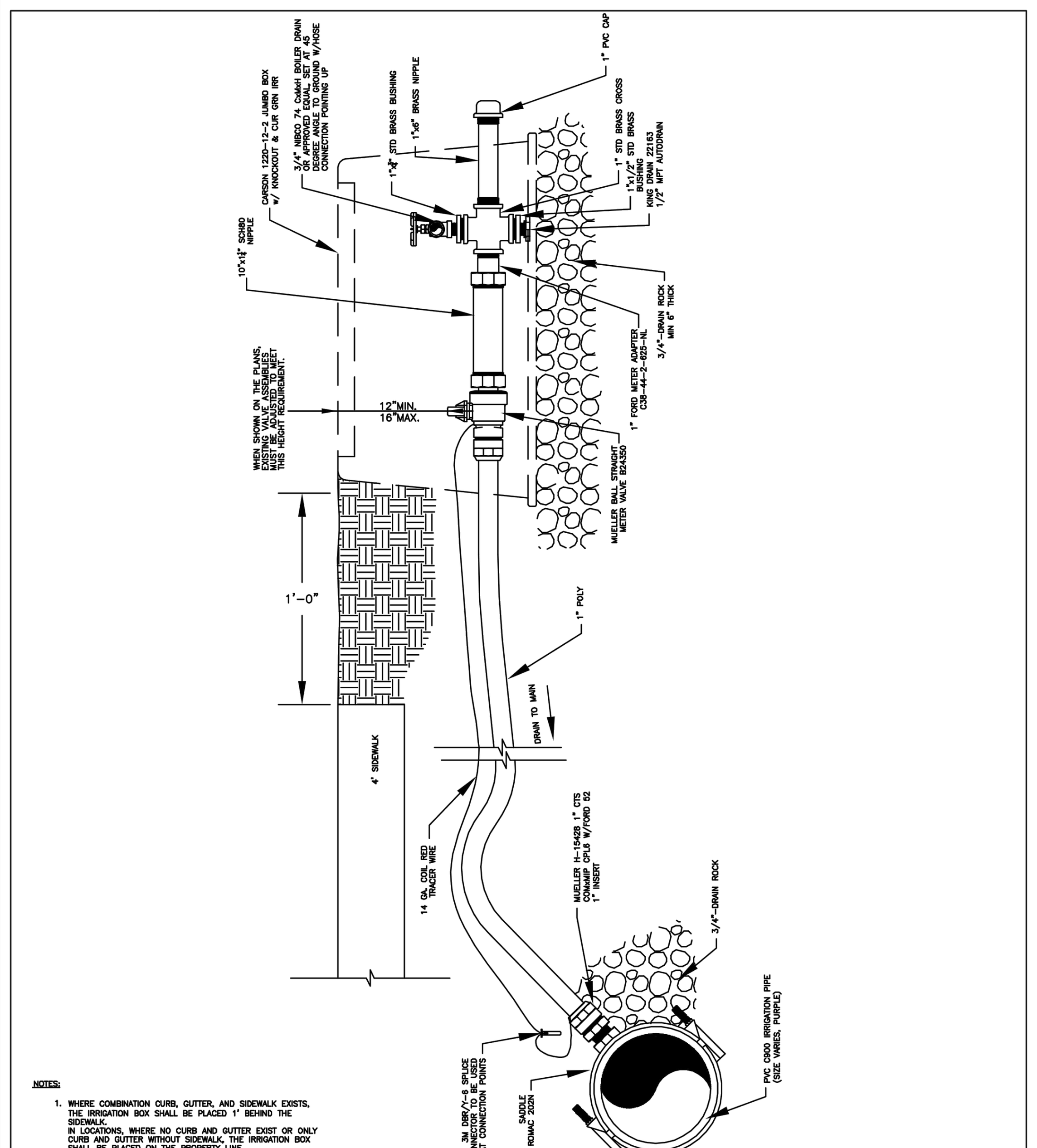
STANDARD DRAWING NUMBER: 17
PLOT SCALE: N.T.S.
DRAWN BY: WJM
ADOPTED DATE: 4/14/04



SECONDARY WATER AIR-VAC ASSEMBLY

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

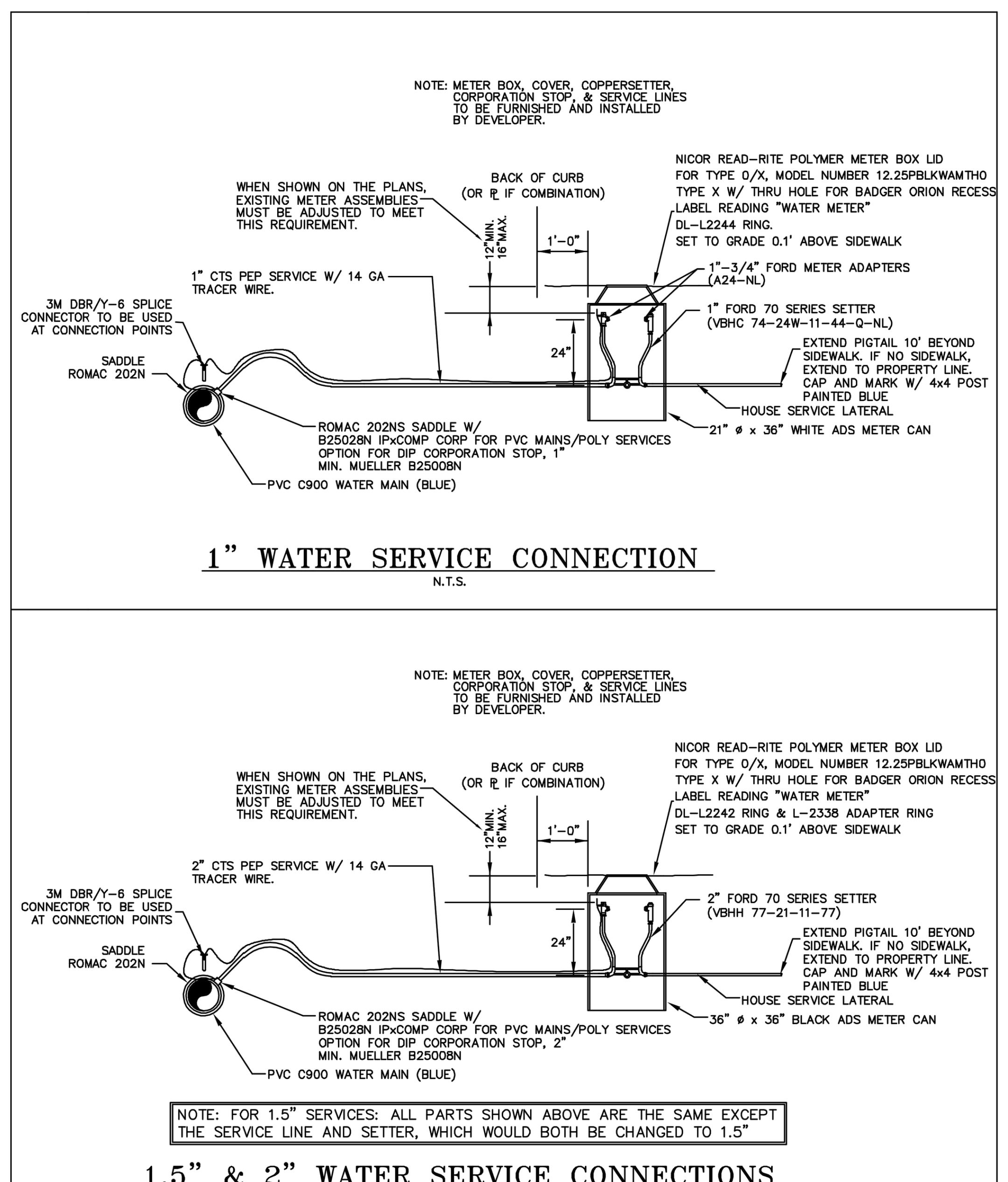
STANDARD DRAWING NUMBER: 26
PLOT SCALE: N.T.S.
DRAWN BY: WJM
ADOPTED DATE: 12/7/18



Pressurized Irrigation Distribution System

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

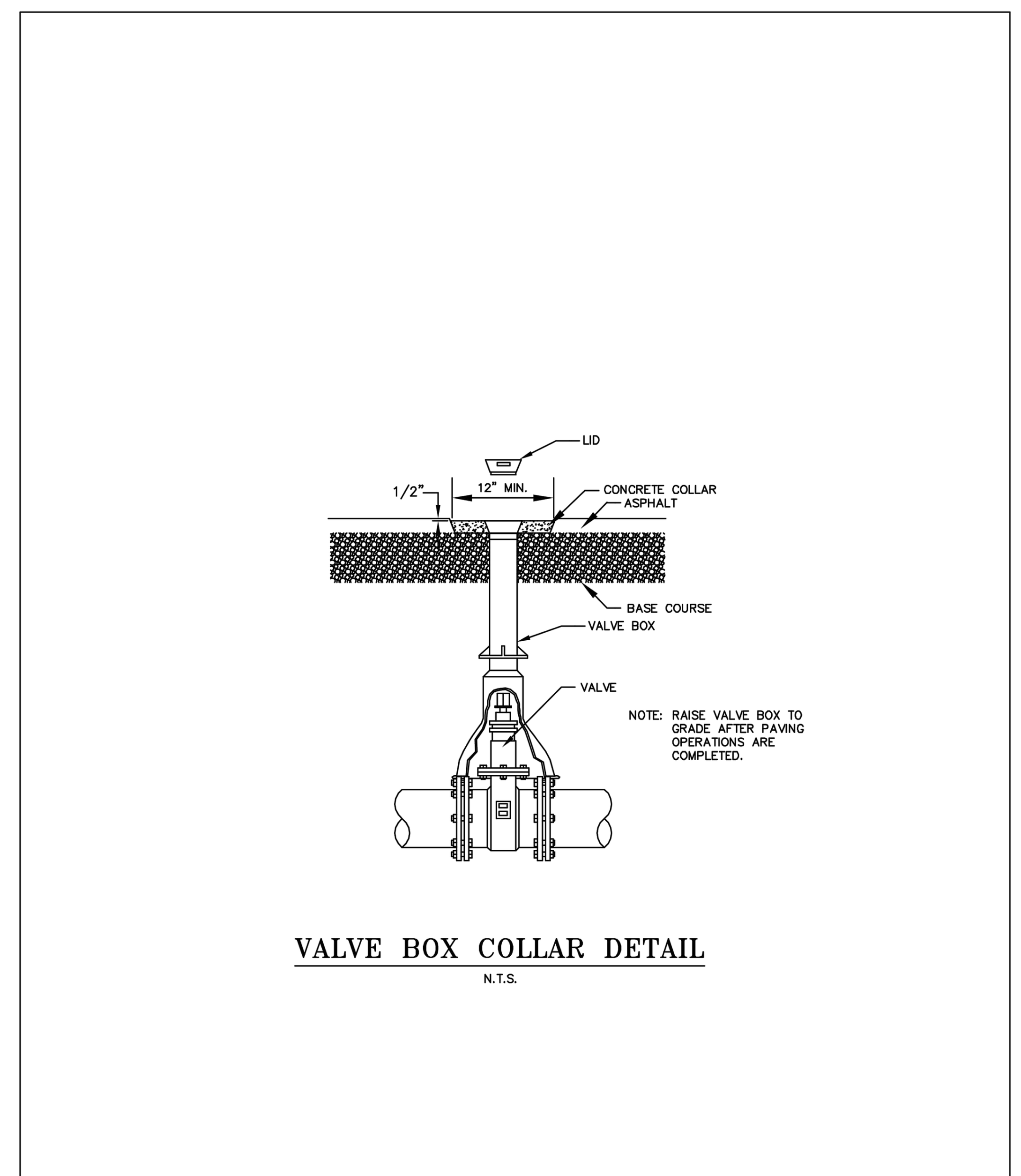
STANDARD DRAWING NUMBER: 24
PLOT SCALE: N.T.S.
DRAWN BY: B.D.B.
ADOPTED DATE: 8/10/05



WATER SERVICE CONNECTION DETAIL

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

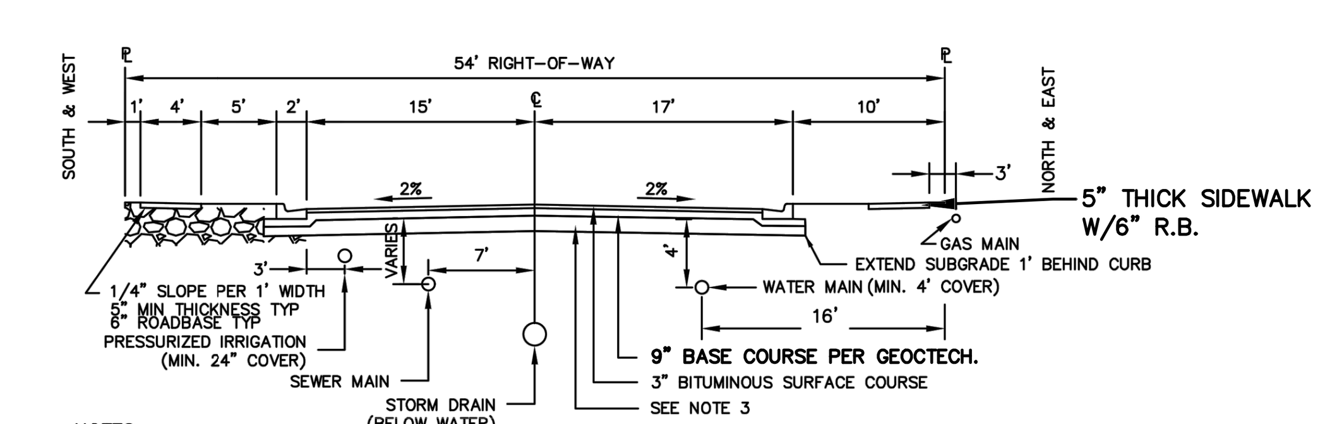
STANDARD DRAWING NUMBER: 27
PLOT SCALE: N.T.S.
DRAWN BY: WJM
ADOPTED DATE: 4/14/04



VALVE BOX DETAIL

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

STANDARD DRAWING NUMBER: 27a
PLOT SCALE: N.T.S.
DRAWN BY: WJM
ADOPTED DATE: 4/14/04



NOTES:

1. WATER VALVES AND 5-INCH VALVE OPENING MUELLER FIRE HYDRANT SHALL BE LOCATER AS APPROVED.
2. NO WATER LINE SMALLER THAN 8-INCH DIA. SHALL BE INSTALLED WITHOUT APPROVAL OF CITY COUNCIL.
3. INSTALL SUB-GRADE PER CURRENT GEOTECHNICAL RECOMMENDATIONS WHICH ARE: IF UNDOCUMENTED FILL IS ENCOUNTED, CONTRACTOR TO OVER EXCAVATE 24" AND PLACE A-1-A MATERIAL
4. CULINARY WATER MAINS SHALL BE ON THE NORTH AND EAST SIDE OF THE STREET. PRESSURIZED IRRIGATION AND SEWER LINES SHALL BE ON THE SOUTH AND WEST SIDE OF THE STREET.

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-09-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE		
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2				APPROVED:	DATE:
1				COGO FILE:	DATE:
				REV. COGO FILE:	DATE:

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ENGINEERING-LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

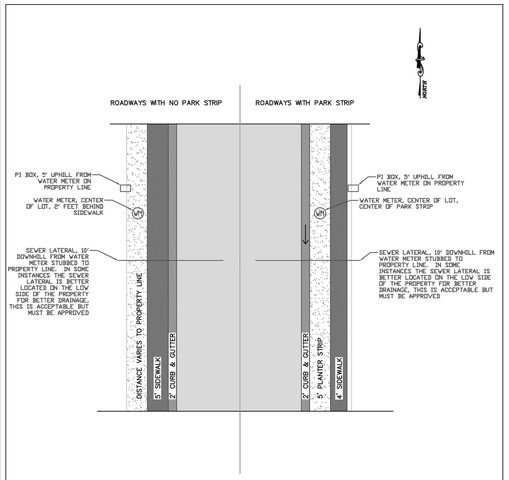
THE RIDGE AT ALPINE PHASE 5

DETAILS

ALPINE, UTAH

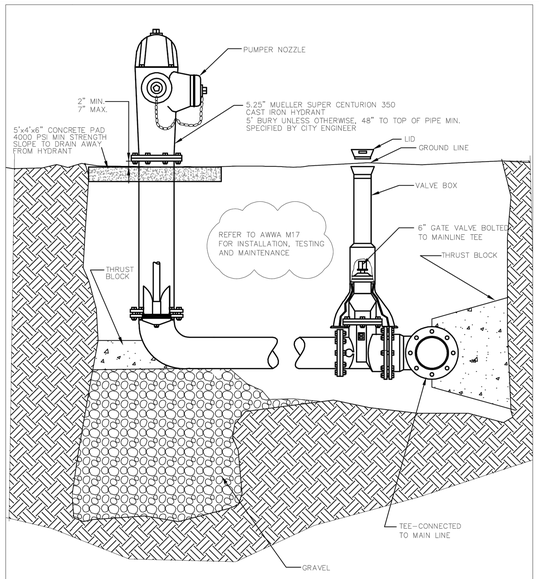
JOB NO. 3-17-055

SHEET NO. DT-01



STANDARD LOT UTILITY LOCATIONS

N.T.S.



STANDARD FIRE HYDRANT DETAIL

N.T.S.

STATEMENT OF USE

THIS DOCUMENT AND ANY ILLUSTRATIONS HEREON ARE PROVIDED AS STANDARD CONSTRUCTION DETAILS WITHIN ALPINE CITY. DEVIATION FROM THIS DOCUMENT REQUIRES APPROVAL OF ALPINE CITY. ALPINE CITY CORPORATION CAN NOT BE HELD LIABLE FOR MISSUSE OR CHANGES REGARDING THIS DOCUMENT.

REVISION

NO.		BY	APPR.	DATE

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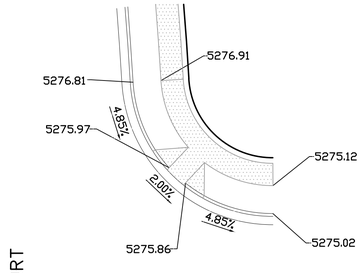
ALPINE CITY
ESTABLISHED 1850

TYPICAL FIRE HYDRANT

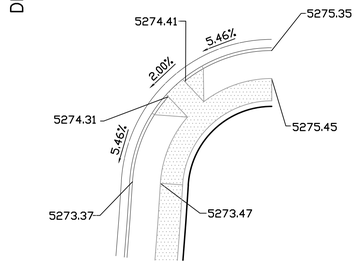
ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

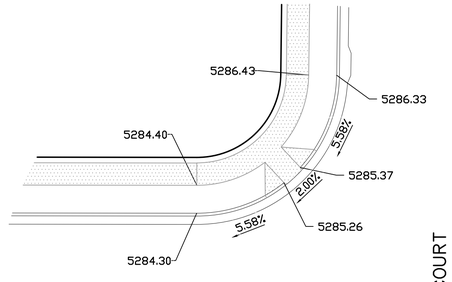
STANDARD DRAWING NUMBER:	23
PLOT SCALE:	N.T.S.
DRAWN BY:	WJM
DESIGN BY:	
CHECKED BY:	
ADOPTED DATE:	4/14/04



DEAN COURT

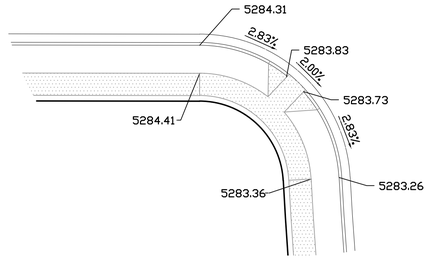
OAK VIEW DRIVE





ELK RIDGE LANE

DEAN COURT



ADA RAMP AT GROVE DR. & ZACHARY WAY

STATEMENT OF USE

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REVISION

NO.		BY	APPR.	DATE

CAD FILE: K:\3-20-030-00 Alpine Ridge\CAD\Preliminary\PHASE 5\PH5 DETAIL-2.dwg

ALPINE CITY
ESTABLISHED 1850

STANDARD LOT UTILITY LOCATIONS

ALPINE CITY
20 NORTH MAIN
ALPINE, UT 84004

STANDARD DRAWING NUMBER:	12
PLOT SCALE:	N.T.S.
DRAWN BY:	WJM
DESIGN BY:	
CHECKED BY:	
ADOPTED DATE:	1/6/1200

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ENGINEERING—LAND PLANNING
CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

ALPINE VIEW ESTATES

ADA RAMP DETAILS

ALPINE, UTAH

JOB NO. 3-17-055

SHEET NO. DT-02

JAU-FANG LU
34:124:0001

MICHAEL D. & SHARON J. GEURTS
34:117:0005

MICHAEL D. & SHARON J. GEURTS
34:117:0004

CASSIS LAND COMPANY INC.
34:117:0002

CRAIG J & SHARLENE K SKIDMORE
34:117:0001

TODD SMITH
34:070:0008

GREGORY A & PATRICIA R ZIPPI
34:070:0007

ALEXANDER C & JANICE JOHNSON
34:070:0006

RYAN & CATHERINE JOHNSON
34:070:0001

ALPINE COVE C

ALPINE COVE A

PLUG & BLOCK
8" CUL AT PL

ELK RIDGE LANE

DEAN ST.

ELK RIDGE LN

ELIZA CIRCLE

THE RIDGE AT ALPINE PHASE 2

PRIVATE OPEN SPACE

PHASE 5
PHASE 1

PHASE 5
PHASE 2

INLET BOX 01
INLET BOX 02
INLET BOX 03
INLET BOX 04
INLET BOX 05
INLET BOX 06
INLET BOX 07
INLET BOX 10
INLET BOX 11
INLET BOX 12
INLET BOX 13

COMBO BOX 01

SDMH 01
SDMH 02
SDMH 04
SDMH 05
SDMH 06
SDMH 07
SDMH 10
SDMH 11
SDMH 12
SDMH 13
SDMH 14

SDCB 03
SDCB 04

SD END SECTION W/TRASH RACK #01

EX.INLET BOX 2
EX.SDMH 16
EX.SDCB 01

EX. 5' SSMH #15
RIM ELEV=5208.70
STA=11+15.30, -11' LT
INV IN= 5194.64
INV OUT= 5294.44
DEPTH=14.46'

EX.8"CUL
EX.8"IRR
EX.8"SS

8"CUL
8"SS
6"IRR

(24"x36")
SCALE 1" = 60'
(11"x17")
SCALE 1" = 120'

LEGEND

- PROPOSED CURB & GUTTER
- PROPOSED SILT FENCE (SEE SHEET ECP-02)
- PROPOSED VEHICLE TRACKING CONTROL
- PROPOSED OFFSITE CURB INLET PROTECTION (SEE SHEET ECP-02)
- CONCRETE WASH OUT AREA – DO NOT WASH OUT CONCRETE TRUCKS INTO STORM DRAIN, OPEN DITCHES, OR STREET. WHEN WASHING CONCRETE TO REMOVE FINE PARTICLES AND EXPOSE THE AGGREGATE, AVOID CREATING RUNOFF BY DRAINING THE WATER WITH IN THE BERM OR LEVEL AREA. DISPOSE HARDENED CONCRETE ON A REGULAR BASIS OR AS NEEDED
- PORTABLE TOILET

REGISTERED PROFESSIONAL ENGINEER
KYLE M. SPENCER
No. 276243
03-10-21
STATE OF UTAH

NO.	REVISIONS	BY	DATE
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CHECKED BY: DATE:
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OREM, UTAH 84097
(801) 802-8992

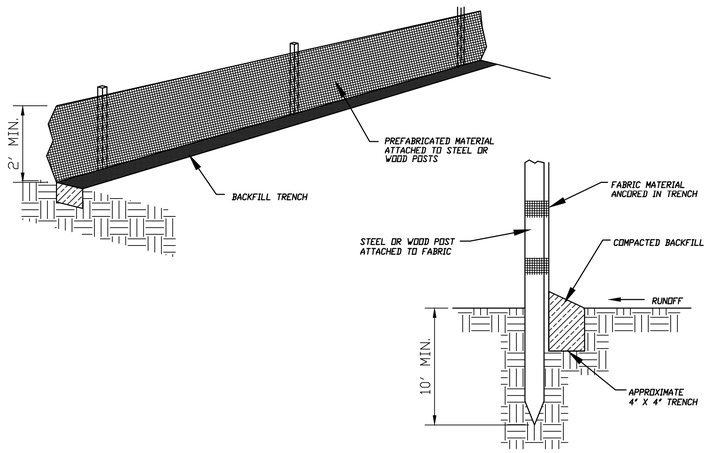
THE RIDGE AT ALPINE PHASE 5

EROSION CONTROL PLAN

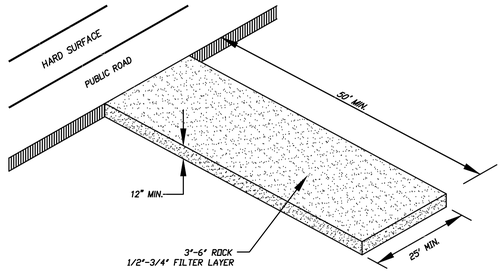
ALPINE CITY, UTAH

JOB NO. 3-20-030

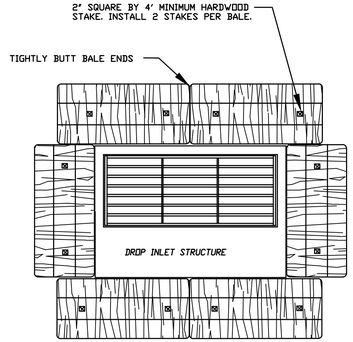
SHEET NO. ECP-01



SILT FENCE DETAIL
-NTS-

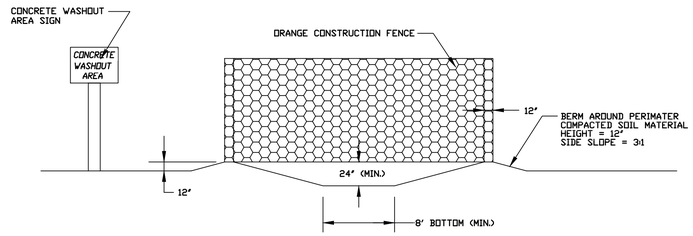


VEHICLE TRACKING DETAIL
NOT TO SCALE

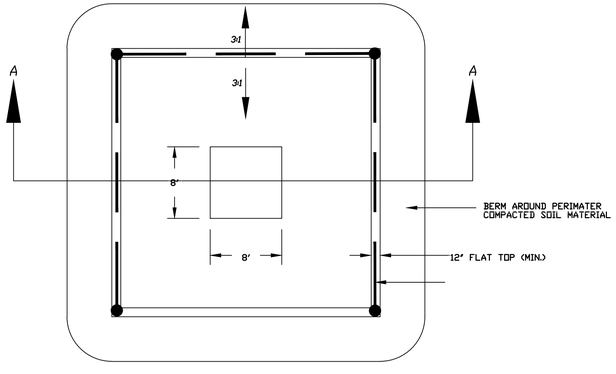


PLAN VIEW

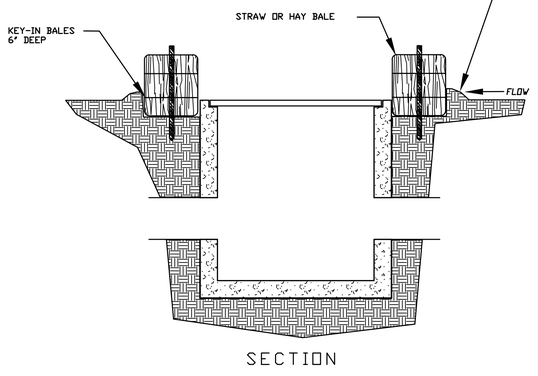
NOTES:
1. KEY-IN BALES IN AN EXCAVATED TRENCH AROUND THE PERIMETER OF THE DROP INLET STRUCTURE THAT IS 6" DEEP BY A BALES WIDTH WIDE.
2. OVERLAP ON CORNERS MUST BE AT LEAST HALF A BALE WIDE.
3. DEPENDING ON THE SIZE OF THE INLET STRUCTURE, MORE BALES THAN SHOWN MAY BE REQUIRED.
4. IN MEDIAN AREAS, CONSTRUCT SO THAT THE TOPS OF THE BALES ARE NOT HIGHER THAN THE ADJACENT ROADWAY.
5. MAINTAIN A PROPERLY FUNCTIONING SEDIMENT BARRIER THROUGHOUT CONSTRUCTION OR UNTIL DISTURBED AREAS CONTRIBUTING TO THE INLET HAVE BEEN PAVED OR VEGETATED.
6. REMOVE SEDIMENT AS IT ACCUMULATES AND PLACE IT IN A STABLE AREA APPROVED BY THE ENGINEER.



SECTION A-A



CONCRETE WASHOUT PIT
-NTS-



SECTION

STRAW BALE DROP INLET PROTECTION DETAIL
-NTS-

GENERAL NOTES:

1. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING AND CONTROLLING ONSITE EROSION DUE TO WIND AND RUNOFF. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL FACILITIES SHOWN.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING DRAINAGE AND EROSION CONTROL FACILITIES AS REQUIRED. STREETS SHALL BE KEPT CLEAN OF DEBRIS FROM SITE TRAFFIC.
3. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED DUE TO UNFORESEEN PROBLEMS OR IF THE PLAN DOES NOT FUNCTION AS INTENDED. A REPRESENTATIVE OF THE CITY OR COUNTY PUBLIC WORKS DEPARTMENT MAY REQUIRE ADDITIONAL CONTROL DEVICES UPON INSPECTION OF PROPOSED FACILITIES.
4. CONTRACTOR SHALL USE VEHICLE TRACKING CONTROL AT ALL LOCATIONS WHERE VEHICLES WILL ENTER OR EXIT THE SITE. CONTROL FACILITIES WILL BE MAINTAINED WHILE CONSTRUCTION IS IN PROGRESS, MOVED WHEN NECESSARY, AND REMOVED WHEN THE SITE IS PAVED.
5. ALL SWPPP DRAINAGE SYSTEMS USING A GEOTECHNICAL FABRIC FOR INLET GRATE PROTECTION MUST HAVE FABRIC REGULARLY CLEANED (14 DAY INTERVAL MAX, MORE FREQUENTLY IF NEEDED) TO INSURE THAT SILT DOES NOT FORM IMPERMEABLE BARRIER OVER INLET.

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REV. COGO FILE:		DATE:	

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CONSTRUCTION MANAGEMENT
1040 E. 800 N.
OREM, UTAH 84097
(801) 802-8992

THE RIDGE AT ALPINE PHASE 5

EROSION CONTROL DETAILS

ALPINE, UTAH

JOB NO. 3-20-030

SHEET NO. ECP-02

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: Public Hearing – Ordinance 2021-08 Animal Ordinance

FOR CONSIDERATION ON: 16 March 2021

PETITIONER: Staff

ACTION REQUESTED BY PETITIONER: Review and approve the proposed ordinance.

BACKGROUND INFORMATION:

Current City code allows for a maximum of 5 large animals (horses or cows) on a single lot. One large animal is permitted on a lot of 10,000 square feet, and an additional large animal is permitted for every additional 10,000 square feet for a maximum of 5 large animals per lot. The City has received feedback from residents who would like to be able to have more than 5 large animals on a single lot if they have a larger lot with additional acreage.

Staff have reviewed the ordinances for large animals in Lehi, Highland, American Fork, and Draper. None of these neighboring municipalities have a hard cap on the number of large animals like Alpine City does.

CITY	REQUIREMENTS	MAX #
Alpine City	Minimum Lot size 10,000 sq ft. for 1 large animal, with 1 additional large animal for each 10,000 sq. ft.	5 per lot
American Fork	Permitted on land zoned for livestock management, with 1 large animal permitted for each 10,000 sq. ft.	N/A
Draper	Minimum lot size 20,000 sq. ft. for 2 horses, with 1 additional horse for each 10,000 sq. ft.	N/A
Highland	Minimum lot size 30,000 sq. ft. for 3 large animals, with 1 additional large animal for each 10,000 sq. ft.	N/A
Lehi	Dependent on zone. In permitted zones, 2 horses per half acre. No limit on 5 or more acres and/or agricultural zones, other zones a maximum of 2 horses per lot.	N/A

On February 2, 2021, the Planning Commission reviewed the proposal to remove the cap limit on number of large animals and recommended approval to the City Council:

> **MOTION:** Sylvia Christiansen moved to recommend that Ordinance 2021-05 Animal Ordinance be approved as proposed. Troy Slade seconded the motion. There were 4 Ayes and 2 Nays (recorded below). The motion passed.
>
> **Ayes:**
> Sylvia Christiansen
> Troy Slade
> Alan MacDonald
> Jane Griener
>
> **Nays:**
> Ethan Alan
> John MacKay

On February 9, 2021, the City Council discussed the proposal to remove the cap limit. After a lengthy discussion, the City tabled the item to the next meeting.

Motion: Greg Gordon moved to table Ordinance No. 2021-08 allow more time to analyze the language. Carla Merrill seconded the motion. There were 5 Ayes and 0 Nays, as recorded below. The motion passed unanimously.

Ayes	**Nays**
Carla Merrill	
Jessica Smuin	
Greg Gordon	
Lon Lott	
Jason Thelin	

The City Council continued the discussion at the February 23, 2021 City Council meeting and decided to increase the requirement to have one large animal from 10,000 square feet to 20,000 square feet. They asked that the item be sent back to Planning Commission to hold a public hearing on the proposed change.

FINAL MOTION: Jason Thelin moved that we table Ordinance 2021-08 to go back to Planning Commission to have a public hearing on changing the minimum to 20,000 square foot lot size for 1 large animal and one additional animal for each additional 10,000 square feet. In addition, raise the cap from maximum of 5 large animals to 8-10 large animals per lot. Exceptions for additional animals may be granted by the City Council on lots over 5 acres in size, with consideration given to proximity to neighbors, proximity to dwellings and the overall percentage of land designated for the large animals to roam. Greg Gordon seconded the motion. There were 3 Ayes and 1 Nay, as recorded below. The motion passed.

Ayes:	**Nays:**
Jason Thelin	Carla Merrill
Lon Lott	
Greg Gordon	

STAFF RECOMMENDATION:
Review the proposed ordinance, hold a public hearing, and recommend approval of the proposed ordinance.

SAMPLE MOTION TO APPROVE:
I motion to recommend that Ordinance 2021-05 be approved as proposed.

SAMPLE MOTION TO APPROVE WITH CONDITIONS:
I motion to recommend that Ordinance 2021-05 be approved with the following conditions/changes:

- ***Insert Finding***

SAMPLE MOTION TO TABLE/DENY:
I motion that Ordinance 2021-05 be tabled/denied based on the following:

ALPINE CITY
ORDINANCE 2021-08

AN ORDINANCE ADOPTING AMENDMENTS TO ARTICLE 3.21.090 OF THE ALPINE CITY DEVELOPMENT CODE PERTAINING TO FARM ANIMAL AND AGRICULTURAL REGULATIONS.

WHEREAS, The City Council of Alpine, Utah has deemed it in the best interest of Alpine City to amend the animal and agricultural regulations ordinance with regards to the maximum number of horses allowed on a property; and

WHEREAS, the Alpine City Planning Commission has reviewed the proposed Amendments to the Development Code, held a public hearing, and has forwarded a recommendation to the City Council; and

WHEREAS, the Alpine City Council has reviewed the proposed Amendments to the Development Code:

NOW THEREFORE, be it ordained by the Council of Alpine City, in the State of Utah, as follows: The amendments to Article 3.21.090 contained in the attached document will supersede Article 3.21.090 as previously adopted. This ordinance shall take effect upon posting.

SECTION 1: **AMENDMENT** "3.21.090 Farm Animal And Agricultural Regulations" of the Alpine City Development Code is hereby *amended* as follows:

AMENDMENT

3.21.090 Farm Animal And Agricultural Regulations

Animal and fowl allowed in the City of Alpine shall be used only for family food production or the enjoyment and convenience of the owner, and shall be subject to the regulations of the State Health Department and the City of Alpine. The following regulations shall apply in all zones:

1. **Horses/cows**. One horse or cow, and suckling offspring up to 6 months, shall be permitted on a ~~10,000~~20,000 square foot lot, plus one animal for each additional 10,000 square feet. There shall be a maximum of ~~five~~ eight to ten (~~5~~8-10) animals per lot. Exceptions for additional animals may be granted by the City Council on lots over 5 Acres in size, with consideration given to proximity to neighbors, proximity to dwellings, and the overall percentage of land designated for the large animals to roam.
2. **Pigs**. One pig, and suckling offspring up to 6 months, shall be permitted on a 10,000 square foot lot, plus one more pig for an additional 10,000 square feet. There shall be a maximum of two (2) pigs regardless of lot size.
3. **Goats/sheep**. One goat or sheep, and suckling offspring up to 6 months, shall be permitted on a 10,000 square foot lot or two goats or sheep on a 20,000 square foot lot,

plus two additional sheep or goats for each additional 10,000 square feet with a maximum of ten sheep or goats.

4. **Other animals**. Exotic animals or animals not mentioned above may be permitted after review and recommendation by the Planning Commission and approval by the City Council.
5. **Animal enclosures**. Barns, stables, corrals, pens, coops and runs for the keeping of animals and fowl are allowed provided such uses are located at least seventy-five (75) feet from any neighboring dwelling. Animal enclosures may be located closer than seventy-five (75) feet to the animal owner's home. Such facilities shall be maintained in a clean and inoffensive condition. A fence around the perimeter of the parcel is not considered an enclosure.
6. **Fur bearing animals**. The raising of fur bearing animals shall require review and recommendation by the Planning Commission and approval of the City Council.
7. **Slope**. On lots greater than twenty (20) percent average slope, the type and extent of agricultural use shall require review and recommendation by the Planning Commission and approval by the City Council.
8. **Additional animals**. Conditional approval for additional animals may be granted by the City Council upon recommendation by the Planning Commission.
9. **Pre-existing rights**. In instances where a new dwelling is built within seventy-five feet of an existing animal enclosure, the animal owner shall have a pre-existing right and shall not be required to move the animals or enclosure. If the animal enclosure is removed, the right is abandoned. If a new enclosure were built, the property owner would have to comply under the new ordinance.
10. **Beekeeping**
    a. Purpose. The purpose of this section is to authorize beekeeping subject to certain requirements intended to avoid problems that may otherwise be associated with beekeeping in populated areas.
    b. Hives.
        i. A person shall not locate or allow a hive on property owned or occupied by another person without first obtaining written permission from the owner or occupant.
        ii. Hives shall be placed at least five (5) feet from any property line; provided, however, that this requirement may be waived in writing by the adjoining property owner.
    c. Beekeeper Registration. Each beekeeper shall be registered with the Utah Department of Agriculture and Food as provided in the Utah Bee Inspection Act set forth in Title 4, Chapter 11 of the Utah State Code, as amended.
    d. Flyways. A hive shall be placed on property so the general flight pattern of bees is in a direction that will deter bee contact with humans and domesticated animals. If any portion of a hive is located within fifteen (15) feet from an area which provides public access or from a property line on the lot where an apiary is located, as measured from the nearest point on the hive to the property line, a flyway barrier at least six (6) feet in height shall be established and maintained around the hive except as needed to allow access. Such flyway, if located along

the property line or within five (5) feet of the property line, shall consist of a solid wall, fence, dense vegetation, or a combination thereof which extends at least ten (10) feet beyond the hive in each direction so that bees are forced to fly to an elevation of at least six (6) feet above ground level over property lines in the vicinity of the apiary.

e. Water. Each beekeeper shall ensure that a convenient source of water is available to the colony continuously between March 1 and October 31 of each year. The water shall be in a location that minimizes any nuisance created by bees seeking water on neighboring property.

(Ord. 2002-05, Amended Ord. 2007- 15; Ord. 2011-12, 10/25/11)

PASSED AND ADOPTED BY THE ALPINE CITY COUNCIL
_____.

	AYE	**NAY**	**ABSENT**	**ABSTAIN**
Lon Lott	_____	_____	_____	_____
Carla Merrill	_____	_____	_____	_____
Gregory Gordon	_____	_____	_____	_____
Jason Thelin	_____	_____	_____	_____
Jessica Smuin	_____	_____	_____	_____

Presiding Officer

_____
Troy Stout, Mayor, Alpine City

Attest

_____
Bonnie Cooper, City Recorder Alpine City

ALPINE CITY
ORDINANCE 2021-08

AN ORDINANCE ADOPTING AMENDMENTS TO ARTICLE 3.21.090 OF THE ALPINE CITY DEVELOPMENT CODE PERTAINING TO FARM ANIMAL AND AGRICULTURAL REGULATIONS.

WHEREAS, The City Council of Alpine, Utah has deemed it in the best interest of Alpine City to amend the animal and agricultural regulations ordinance with regards to the maximum number of horses allowed on a property; and

WHEREAS, the Alpine City Planning Commission has reviewed the proposed Amendments to the Development Code, held a public hearing, and has forwarded a recommendation to the City Council; and

WHEREAS, the Alpine City Council has reviewed the proposed Amendments to the Development Code:

NOW THEREFORE, be it ordained by the Council of Alpine City, in the State of Utah, as follows: The amendments to Article 3.21.090 contained in the attached document will supersede Article 3.21.090 as previously adopted. This ordinance shall take effect upon posting.

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AMENDMENT

3.21.090 Farm Animal And Agricultural Regulations

Animal and fowl allowed in the City of Alpine shall be used only for family food production or the enjoyment and convenience of the owner, and shall be subject to the regulations of the State Health Department and the City of Alpine. The following regulations shall apply in all zones:

1. **Horses/cows**. One horse or cow, and suckling offspring up to 6 months, shall be permitted on a 20,000 square foot lot, plus one animal for each additional 10,000 square feet. There shall be a maximum of eight to ten (8-10) animals per lot. Exceptions for additional animals may be granted by the City Council on lots over 5 Acres in size, with consideration given to proximity to neighbors, proximity to dwellings, and the overall percentage of land designated for the large animals to roam.
2. **Pigs**. One pig, and suckling offspring up to 6 months, shall be permitted on a 10,000 square foot lot, plus one more pig for an additional 10,000 square feet. There shall be a maximum of two (2) pigs regardless of lot size.
3. **Goats/sheep**. One goat or sheep, and suckling offspring up to 6 months, shall be permitted on a 10,000 square foot lot or two goats or sheep on a 20,000 square foot lot,

plus two additional sheep or goats for each additional 10,000 square feet with a maximum of ten sheep or goats.

4. **Other animals**. Exotic animals or animals not mentioned above may be permitted after review and recommendation by the Planning Commission and approval by the City Council.
5. **Animal enclosures**. Barns, stables, corrals, pens, coops and runs for the keeping of animals and fowl are allowed provided such uses are located at least seventy-five (75) feet from any neighboring dwelling. Animal enclosures may be located closer than seventy-five (75) feet to the animal owner's home. Such facilities shall be maintained in a clean and inoffensive condition. A fence around the perimeter of the parcel is not considered an enclosure.
6. **Fur bearing animals**. The raising of fur bearing animals shall require review and recommendation by the Planning Commission and approval of the City Council.
7. **Slope**. On lots greater than twenty (20) percent average slope, the type and extent of agricultural use shall require review and recommendation by the Planning Commission and approval by the City Council.
8. **Additional animals**. Conditional approval for additional animals may be granted by the City Council upon recommendation by the Planning Commission.
9. **Pre-existing rights**. In instances where a new dwelling is built within seventy-five feet of an existing animal enclosure, the animal owner shall have a pre-existing right and shall not be required to move the animals or enclosure. If the animal enclosure is removed, the right is abandoned. If a new enclosure were built, the property owner would have to comply under the new ordinance.
10. **Beekeeping**
    a. Purpose. The purpose of this section is to authorize beekeeping subject to certain requirements intended to avoid problems that may otherwise be associated with beekeeping in populated areas.
    b. Hives.
        i. A person shall not locate or allow a hive on property owned or occupied by another person without first obtaining written permission from the owner or occupant.
        ii. Hives shall be placed at least five (5) feet from any property line; provided, however, that this requirement may be waived in writing by the adjoining property owner.
    c. Beekeeper Registration. Each beekeeper shall be registered with the Utah Department of Agriculture and Food as provided in the Utah Bee Inspection Act set forth in Title 4, Chapter 11 of the Utah State Code, as amended.
    d. Flyways. A hive shall be placed on property so the general flight pattern of bees is in a direction that will deter bee contact with humans and domesticated animals. If any portion of a hive is located within fifteen (15) feet from an area which provides public access or from a property line on the lot where an apiary is located, as measured from the nearest point on the hive to the property line, a flyway barrier at least six (6) feet in height shall be established and maintained around the hive except as needed to allow access. Such flyway, if located along

the property line or within five (5) feet of the property line, shall consist of a solid wall, fence, dense vegetation, or a combination thereof which extends at least ten (10) feet beyond the hive in each direction so that bees are forced to fly to an elevation of at least six (6) feet above ground level over property lines in the vicinity of the apiary.

e. Water. Each beekeeper shall ensure that a convenient source of water is available to the colony continuously between March 1 and October 31 of each year. The water shall be in a location that minimizes any nuisance created by bees seeking water on neighboring property.

(Ord. 2002-05, Amended Ord. 2007- 15; Ord. 2011-12, 10/25/11)

PASSED AND ADOPTED BY THE ALPINE CITY COUNCIL
_____.

	AYE	**NAY**	**ABSENT**	**ABSTAIN**
Lon Lott	_____	_____	_____	_____
Carla Merrill	_____	_____	_____	_____
Gregory Gordon	_____	_____	_____	_____
Jason Thelin	_____	_____	_____	_____
Jessica Smuin	_____	_____	_____	_____

Presiding Officer

_____
Troy Stout, Mayor, Alpine City

Attest

_____
Bonnie Cooper, City Recorder Alpine City

ALPINE PLANNING COMMISSION AGENDA

SUBJECT: Planning Commission Minutes February 16, 2021

FOR CONSIDERATION ON: 16 March 2021

PETITIONER: Staff

ACTION REQUESTED BY PETITIONER: Approve Minutes

BACKGROUND INFORMATION:

Minutes from the February 16, 2021 Planning Commission Meeting.

STAFF RECOMMENDATION:

Review and approve the Planning Commission Minutes.

ALPINE CITY PLANNING COMMISSION MEETING
Alpine City Hall, 20 North Main, Alpine, UT
February 16, 2021

I. GENERAL BUSINESS

A. Welcome and Roll Call: The meeting was called to order at 7:00 p.m. by Chairwoman Jane Griener. The following were present and constituted a quorum:

Chairwoman: Jane Griener

Commission Members: Ethan Allen, John MacKay, Alan MacDonald, Troy Slade, Ed Bush
Excused: Sylvia Christiansen
Staff: Austin Roy, Jed Muhlestein, Marla Fox
Others: Hyrum Bosserman

B. Prayer/Opening Comments: Troy Slade
C. Pledge of Allegiance: Ethan Allen

Hyrum Bosserman introduced himself to the Planning Commission.

II. PUBLIC COMMENT

No Comments.

III. ACTION ITEMS

A. Open Public Meetings Training by City Attorney

Hyrum Bosserman, from the City Attorney's office, said the City needed to fulfill the open training requirement. He asked if anyone knew what Sunshine Laws were. Jane Griener said that they were laws that make sure nothing was done in secret. Hyrum Bosserman said that was correct. He noted that it started in 1976 as a federal law and the law stated:

1. *Every portion of every meeting of an agency must be open to the public observation.*
2. *Procedures must be implemented to ensure that the public is provided with adequate advance notice of the agency's scheduled meeting and agenda and there was to be transparency on the decisions made by governing bodies.*

The intent as the Utah legislature had set forth that everything done by a legislative body took place in an open forum. Public business should be public business, which was what they were trying to ensure. Mr. Bosserman continued with the presentation. He explained what a meeting was under the open and public meetings act: whenever a quorum of a decision-making body was present it constituted a meeting but required notice at least 24 hours in advance. A quorum was a simple majority, and since there were seven members in the commission, anytime four or more officials met it constituted as a quorum. There needed to be an agenda, date, and location of the meeting noticed 24 hours in advance and posted at the principal office and the government website. There should be a schedule of regularly scheduled meetings posted and noticed once a year. There should be an agenda that reasonably specified the items of topics of discussion for action. Items raised by the public but not on the agenda may be discussed but no action may be taken.

Mr. Bosserman had prepared a quiz and they went through the questions. He explained that Planning Commission members were not allowed to meet in numbers that would constitute a quorum outside of a posted meeting because it would be considered a de facto meeting that would require notice and would be in violation of the public meetings act. Jane Griener asked about involvement of an email chain and its validity as a quorum. Mr. Bosserman explained that a text group or email chain with a quorum of members qualified as a meeting if City matters were discussed. They could email separately or have a thread with less than a quorum, but not the entire group. It was a gray area, but best practice would be to keep it less than a quorum. All records were subject to a GRAMA requests and an email chain could be subject to these requests.

Hyrum Bosserman explained that there needed to be an anchor location for meetings, and it was best to have a quorum present but that members were allowed to attend meetings through other means if they were unable to be there in person. COVID-19 was a special exception; via a signed affidavit they were allowed to suspend an anchor location. However, the affidavit needed to be renewed every 30 days. It needed to be noticed to the public how they could attend these virtual meetings.

Hyrum Bosserman explained that during emergencies, the Mayor could hold a meeting with limited notice.

Hyrum Bosserman explained that the public was allowed to send concerns electronically to the Planning Commission, but best practice would be to bring up the message during the meeting. If the person wanted to remain anonymous, that was okay. He also said it was not okay for Planning Commission members to send emails or texts to other members expressing extreme disappointment in that member's position or vote. These thoughts needed to be expressed on the record for transparency.

Hyrum Bosserman said Planning Commission member's emails were considered public records and could be retrieved during a GRAMA request. He said best practice would be to have a separate email account for City emails, so they didn't have to sift through personal emails. Ed Bush asked if they should have Planning Commission emails through the City. Mr. Bosserman said that that would be a good practice, but it was a matter of practicality. Troy Slade asked if the Planning Commission was required to store City emails. Mr. Bosserman said the emails were public record and should not be deleted; he said they should be stored. There were certain time limitations depending on the subject.

Hyrum Bosserman explained that if the audio system went down during a meeting and the public could not speak or be heard, best practice would be to suspend the meeting and continue later when the electronic issues were worked out.

Hyrum Bosserman explained that closed meetings were related to misconduct of an employee. Additionally, closed meetings were held if the City was planning on selling or acquiring a piece of property, imminent litigation pending, a hotly contested site Plan, security issues, or criminal conduct. He said there had to be a roll call with votes to go into a closed session and a motion made to go into a closed session and state the reason for the closed session. He said that once the session was closed, the recording needed to be stopped and a new one started for the closed session. Any actions during a closed session needed to be voted on during an open session with a motion and a second made. Any discussion during a closed session was to remain private and minutes must be approved within a short window of time. Approved minutes and audio recordings needed to be posted for the public within three days.

Hyrum Bosserman explained that the consequences of noncompliance was that an item could be voidable. The action item would need to be brought to the next meeting, discussed again, and a new motion made. If an action item was left off the agenda, that item could be discussed, but no action can be taken until the item could be legally noticed.

B. Ordinance 2021-06 – Accessory Building Setback Exception Criteria

Austin Roy stated that this had been tabled on January 5, 2021. The Bingham, Cushing, and Strong families spoke during the public comment portion of the Planning Commission meeting. They felt an amendment was needed to the accessory building setback exception ordinance, as well as the maximum allowed height for structures receiving an exception. The wording had been changed and a draft was being put together by the legal staff. The Planning Commission discussed the item and told the residents they would hold a public hearing.

The Planning Commission held a public hearing for the proposal on January 19, 2021, and recommended that the proposal be denied through the following motion:

> ***MOTION:*** *Ed Bush made motion to recommend that the Accessory Building Setback Exceptions be denied as proposed and that the ordinance be left as is. Sylvia Christiansen seconded the motion. There were 5 Ayes and 2 Nays (recorded below). The motion passed.*
>
Ayes	***Nays***
Sylvia Christiansen	*John MacKay*
Ed Bush	*Jane Griener*
Ethan Allen	
Alan MacDonald	
Troy Slade	

On January 26, 2021, the City Council reviewed the proposal and decided that the City ordinance needed to be amended. The item was sent back to the Planning Commission to draft language which would allow for increased height. It would also allow structures to be built in an easement if they were moveable.

> ***MOTION:*** *Jason Thelin motioned that the council send back the proposal to the Planning Commission instructing them to do two things one look at the allowable height for accessory buildings and determine if a height of 12-feet 6-inches would be acceptable in Alpine City and second determine if movable accessory building would be allowable with in the setback and easements of a property. Greg Gordon seconded the motion. There were 4 Ayes and 1 Nays, as recorded below. The motion passed.*
>
Ayes	***Nays***
Lon Lott	*Carla Merrill*
Jessica Smuin	
Greg Gordon	
Jason Thelin	

The Planning Commission reviewed the proposed ordinance again at the February 2, 2021 meeting. After some discussion, the Planning Commission decided to table the item to address a few issues. The following motion was made:

MOTION: Alan MacDonald moved to table this issue until further review of these issues:

1. *Incorporate height amendment of 12 feet 6 inches or 13 feet;*
2. *Consider incorporating a 2-foot setback;*
3. *Consider appropriate language for movable buildings that can be moved within 24 hours or a fine;*
4. *Building have no power, gas, water, mechanical running to it;*

5. *Staff consider legal ramifications of encroaching on a city easement and the process for a resident to get a sign off from the city and utility company.*

John MacKay seconded the motion. There were 6 Ayes and 0 Nays (recorded below). The motion passed.

Ayes:	***Nays:***
Sylvia Christiansen	
Ethan Allen	
Alan MacDonald	
Troy Slade	
John MacKay	
Jane Griener	

Austin Roy said the new proposed language to the Accessory Building Setback stated:

Accessory buildings shall be set back not less than fifteen (15) feet from the rear lot line and ten (10) feet from the side lot line, except that a two (2) foot minimum rear or side setback shall be required when all the following conditions are met:

1. The accessory building is located more than twelve (12) feet from an existing dwelling on the same or adjacent lot;
2. The accessory building contains no openings on the side contiguous to the lot line;
3. No drainage from the roof will be discharged onto an adjacent lot;
4. The accessory building shall be constructed of non-combustive materials or have fire resistive walls rated at one (1) hour or more;
5. The building will not be placed on land designated as a recorded easement, such as a utility or tail easement, unless the owner(s) of said easement agree(s) to allow the encroachment. Documentation of the agreement shall be provided to the city;
6. The building will not be taller than twelve (12) feet six (6) inches to the top of the roof line'
7. The building does not require permanent attachment to the ground and can be moved or relocated within 24 hours;
8. The owner acknowledges that they bear all costs of moving a building, including damage to the property, in the event on easement needs to be accessed, and fines shall be issued for buildings that cannot be moved within 24 hours;
9. The building will not exceed 200 square feet in size; and
10. The building will have no associated electrical, gas, plumbing, or mechanical equipment attached or running to it. A solar powered light may be permitted if it does not prohibit the building from being movable as described above.

Ed Bush said the language seemed to imply that everyone that wanted to build in the setback couldn't have a movable structure. He said he thought the City Council wanted this to change moveable buildings to apply to easements only and not to all properties. The moveable issue was put in strictly for easements. Ed Bush asked how the moveability of a structure would be measured and what the definition of a moveable building was; anything not attached to the ground was considered moveable. This ordinance would only get more complicated and would be amended as they came across different issues with it. Ordinances were typically proactive, but they would need to clarify with the attorney if this would apply retroactively or not.

The Planning Commission discussed making changes to the ordinance and what the intention of the City Council was. Ed Bush said that they could table this issue. He asked the City Council to be more specific about the intention of their motion. The Planning Commission could decide if they were okay with the

12-foot, six-inch height for sheds in the easement and making the structures movable. Alternatively, they could recommend something totally different.

MOTION: John MacKay moved to recommend that Ordinance 2021-06 be approved as proposed. The motion died for a lack of a second.

Alan MacDonald asked the Planning Commissioners how they were feeling about sending this issue back to the City Council for further clarification on the motion. The Planning Commission members all said they want to work on a new ordinance further.

Alan MacDonald wanted to know what they all wanted to work on since no one seconded John MacKay's motion. Ed Bush said he would want the language to be changed to say a person could only have a moveable structure if the structure was on an easement. He wanted items 7 and 8 subbed to 5. There was discussion about the two-foot minimum.

Alan MacDonald said they needed to decide if they were comfortable allowing people to put a structure in an easement. Jane Griener said the owner would have to get an agreement from the owner of the easement in order to encroach on the easement.

Alan MacDonald said a standard shed height was 10 feet. Custom sheds could be whatever was desired. He wanted to know why they were choosing a 12-foot, six-inch height. Austin Roy said that number was proposed by an applicant because that was the height of their shed. It was based on a diagram that had been drawn up based on the 12-foot, six-inch request to determine the line of sight. The current allowable heights were 20 for an accessory building and 34 for a home. How these heights were determined and how to determine an appropriate height for this ordinance was discussed. Some thought the number was arbitrary and so a relevant number for sight line at two-foot out was calculated by Jane Griener. She came up with a little over 10.3 feet using a right triangle calculator.

Building and encroaching on a utility easement was discussed. Citizens would have to request permission from the utility company.

Ed Bush said if they put a movable paragraph, the language of numbers 7 and 8 needed to be under the sub-head of number 5: Sheds on an easement.

Code enforcement had extended the deadline for this issue until June from February, so they had time on their side and didn't need to force themselves to rush to decide. They wanted to take the time to make the right decision and consider unintended consequences. There was discussion about other things going into easement areas such as fences or retaining walls. Marla Fox said that the form for accessory buildings and retaining walls was the same form. There was more discussion about the height number.

MOTION: Ed Bush moved to recommend the Accessory Building Setback Exception be approved with this exception:

1. Move number 7 and 8 to be conditions under number 5 easement encroachment.

John MacKay seconded the motion. There were 6 Ayes and 0 Nays (recorded below). The motion passed.

Ayes:	**Nays:**
Ethan Allen	
Ed Bush	

Alan MacDonald
Troy Slade
John MacKay
Jane Griener

Jane Griener asked Austin Roy to bring back the retaining walls ordinance for review.

IV. COMMUNICATIONS

Austin Roy said the City Council needed to hold a couple of meetings on certain dates and this would move one of the August meetings and the meeting in November would be moved from the 2nd to the 3rd Tuesday. He will bring the correct dates at a later date.

V. APPROVAL OF PLANNING COMMISSION MINUTES: February 2, 2021

MOTION: Troy Slade moved to approve the minutes for February 2, 2021 as written.

Ethan Allen seconded the motion. There were 6 Ayes and 0 Nays (recorded below). The motion passed unanimously.

Ayes:	**Nays:**
Ethan Allen	None
Jane Griener	
Ed Bush	
Alan MacDonald	
Troy Slade	
John MacKay	

MOTION: John MacKay moved to adjourn the meeting.

Alan MacDonald seconded the motion. There were 6 Ayes and 0 Nays (recorded below). The motion passed unanimously.

Ayes:	**Nays:**
Ethan Allen	None
Jane Griener	
Ed Bush	
Alan MacDonald	
Troy Slade	
John MacKay	

The meeting was adjourned at 9:35 p.m.