Staff Report for Administrative Approval – Hillside Review – Notice of Conditional Approval

Weber County Planning Division

Synopsis

Application Information

Application Request: Consideration and action on a request to approve a Hillside Review for the Eisenberg Residence on Lot 71-R of Summit Eden Phase 1C.
Applicant: Michael Eisenberg
File Number: HSR 2018-01

Property Information

Approximate Address: 8488 E Spring Park Rd, Eden
Project Area: 0.06 acres
Zoning: DRR-1
Existing Land Use: Vacant
Proposed Land Use: Single Family Residence
Parcel ID: 23-130-0038
Township, Range, Section: 7N 2E Sec 8

Adjacent Land Use

North: Vacant Residential
South: Vacant Residential
East: Vacant Residential
West: Vacant Residential

Staff Information

Report Presenter: Steve Burton
sburton@co.weber.ut.us
801-399-8766
Report Reviewer: RK

Applicable Ordinances

- Weber County Land Use Code Title 108 (Standards) Chapter 14 (Hillside Development Review)
- Weber County Land Use Code Title 108 (Standards) Chapter 22 (Natural Hazards Areas)

Background

The subject lot is located in Summit Eden Phase 1C which was recorded with the Weber County Recorder's office on January 27, 2014. The average slope of the lot exceeds 25 percent, as such, plans for development are required to be reviewed by the Hillside Development Review Board, as outlined in the Uniform Land Use Code of Weber County (LUC) Title108 Chapter 14.

IGES has performed the geotechnical report and the geologic hazards investigation. Information related to the construction of the dwelling as outlined in the geologic and geotechnical reports, have been distributed to the Hillside Review Board for comment. The reports have been reviewed by all applicable review agencies.

Planning Division Review

The Planning Division Staff has determined that, in compliance with review agency conditions, the requirements and standards provided by the Hillside Review Chapter have been met for the excavation and construction of the dwelling. The following submittals were required:

1. Engineered Plans.
2. Geotechnical Investigation and Geologic Hazards Report (see Exhibit A).
3. Utah Pollution Discharge Elimination system (UPDES) Permit with Storm water Pollution Prevention Plan. A condition of approval from the Planning Division is that the applicant provides the UPDES Permit and SWPPP with the building permit application.
4. Landscaping plan.

Weber County Hillside Review Board comments

The Weber County Hillside Review Board, on this particular application, made the following comments and conditions:

Weber County Engineering Division: The Engineering Division granted approval on April 12, 2018. The approval is subject to

the following comments as conditions of approval:

1. Ensure that an IGES engineering geologist or a geotechnical engineer observes the foundation excavation.
2. Grade the property to carry water away from the foundation. No landscape watering will be allowed.
3. Follow all other recommendations given in the IGES report.

Weber Fire District: The Fire District granted an approval on April 16, 2018 subject to the following conditions:

1. A residential suppression system is required.
2. Adherence to both specific and general comments from the full Fire District review.

Weber County Building Inspection Department: The Building Official, on April 13, 2018, completed an initial review of this project and will require the following items be addressed.

1. The Engineer of record will need to provide a letter acknowledging the study and he has addressed any changes to the plan.
2. A Geo Tech will need to be on site to approve the soils prior to placement of the footings. Please provide a copy of the findings at the footing inspection.

Weber-Morgan Health Department: The Health Department has verified that that they will not impose any requirements or conditions for this application due to the proposed residence connecting to the Powder Mountain Water and Sewer District for culinary and wastewater services.

Weber County Planning Division: The Planning Division has granted approval subject to the applicant complying with all Board requirements and conditions. This approval is also subject to the applicant developing Lot 71-R according to approved plans and in compliance with the geologic and geotechnical investigation reports performed by IGES, dated August 30, 2017 as project number 02565-001 which outline specific recommendations for the site development.

Planning Division Findings

Based on site inspections and review agency comments, the Planning Division Staff is recommending approval subject to the following conditions:

1. Development of the lot must comply with the excavating, grading, and filling standards outlined in LUC §108-14-8 as well as the recommendations outlined in the geologic and geotechnical reports that were provided with the application.
2. The applicant shall provide the UPDES Permit and SWPPP with the building permit application.
3. The landscaping shall be non-irrigated, natural vegetation, as shown on the landscaping plan.

The recommendation for approval is based on the following findings:

1. The application was submitted and has been deemed complete.
2. The requirements and standards found in the Hillside Development Review Procedures and Standards Chapter have been met or will be met during the excavation and construction phase of the dwelling.
3. The Hillside Review Board members reviewed the application individually and have provided their comments.
4. The applicant has met or will meet, as part of the building permit process and/or during the excavation and construction phase of the dwelling, the requirements and conditions set forth by the Hillside Review Board. As a condition it is understood, by the applicant and his geo-technical engineer and geologist, that if any geologic hazards are revealed during the excavation and construction phase of the dwelling, work on Lot 71-R will cease pending the development of appropriate mitigation measures and subsequent approval by the County and the County's contracted geo-technical and/or geological consultant.

Administrative Approval

Administrative approval of Lot 71-R, Michael Eisenberg Hillside Review (HSR2018-01), is hereby granted based upon its compliance with the Weber County Land Use Code. This approval is subject to the requirements of applicable review agencies and is based on the findings listed in this staff report.

Date of Administrative Approval: _____

_____

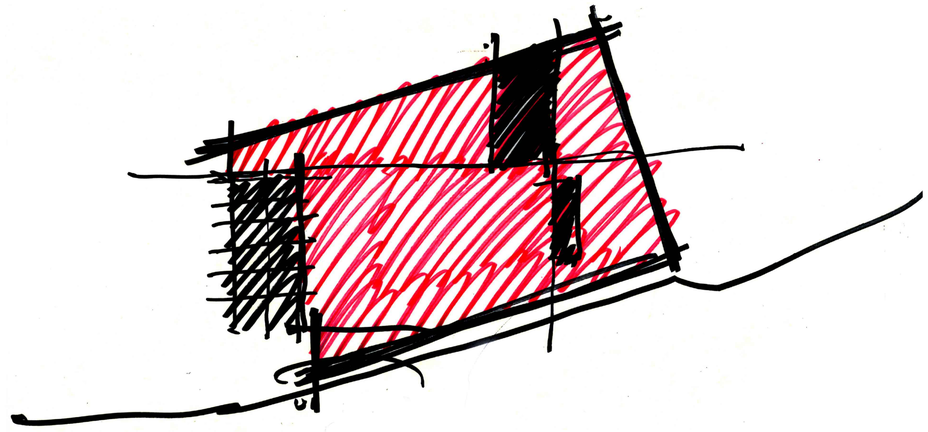
Rick Grover
Weber County Planning Director

Exhibits

A. Approved Plans
B. Geotechnical Investigation and Geologic Hazards Report
C. Landscaping Plan

Map 1

Exhibit A



March 13, 2018

Issued for Construction

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen Street
Halifax, Nova Scotia Canada B3K 3B4
ph: (902) 429-1867 fax: (902) 429-6276

Blackwell
Structural Engineers
19 Duncan Street, Suite 405
Toronto, Ontario Canada M5H 3H1
ph: (416) 593-5300 fax: (416) 593-4840

Talisman Civil Engineers
Civil Engineers
5217 S State St #200
Murray, Utah, United States 84107
ph: (801) 743-1300

IGES
Geotechnical Engineers
12429 South Street 300 East, Suite 100
Draper, Utah, United States 84020-8770
ph: (801) 748-4045

Edge Builders LLC
Construction Management
P.O. Box 17404,
Salt Lake City, Utah, United States 84117
ph: (801) 879-6200

Lot 71R

Village House
Summit Powder Mountain
8488 E. Spring Park
Eden, UT
84310

Exhibit A

GENERAL NOTES

1. ALL CONSTRUCTION MUST STRICTLY FOLLOW THE STANDARDS AND SPECIFICATIONS SET FORTH BY: GOVERNING UTILITY MUNICIPALITY, GOVERNING CITY OR COUNTY (IF UN-INCORPORATED), INDIVIDUAL PRODUCT MANUFACTURERS, THE DESIGN ENGINEER, AND AMERICAN PUBLIC WORKS ASSOCIATION (APWA). THE ORDER LISTED ABOVE IS ARRANGED BY SENIORITY. IF A CONSTRUCTION PRACTICE IS NOT SPECIFIED BY ANY OF THE LISTED SOURCES, CONTRACTOR MUST CONTACT DESIGN ENGINEER FOR DIRECTION.
2. CONTRACTOR TO STRICTLY FOLLOW GEOTECHNICAL RECOMMENDATIONS FOR THIS PROJECT. ALL GRADING INCLUDING BUT NOT LIMITED TO CUT, FILL, COMPACTION, ASPHALT SECTION, SUBBASE, TRENCH EXCAVATION/BACKFILL, SITE GRUBBING, RETAINING WALLS AND FOOTINGS MUST BE COORDINATED DIRECTLY WITH THE PROJECT GEOTECHNICAL ENGINEER.
3. TRAFFIC CONTROL, STRIPING & SIGNAGE TO CONFORM TO CURRENT UDOT TRANSPORTATION ENGINEER'S MANUAL AND MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
4. ANY AREA OUTSIDE THE LIMIT OF WORK THAT IS DISTURBED SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT NO COST TO OWNER.
5. CONSULT ALL OF THE DRAWINGS AND SPECIFICATIONS FOR COORDINATION REQUIREMENTS BEFORE COMMENCING CONSTRUCTION.
6. AT ALL LOCATIONS WHERE EXISTING PAVEMENT ABUTS NEW CONSTRUCTION, THE EDGE OF THE EXISTING PAVEMENT SHALL BE SAWCUT TO A CLEAN, SMOOTH EDGE.
7. ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE MOST RECENT, ADOPTED EDITION OF ADA ACCESSIBILITY GUIDELINES.
8. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED THOROUGHLY REVIEWED PLANS AND OTHER DOCUMENTS APPROVED BY ALL OF THE PERMITTING AUTHORITIES.
9. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING AND NOTIFYING ENGINEER OR INSPECTING AUTHORITY 48 HOURS IN ADVANCE OF COVERING UP ANY PHASE OF CONSTRUCTION REQUIRING OBSERVATION.
10. ANY WORK IN THE PUBLIC RIGHT-OF-WAY WILL REQUIRE PERMITS FROM THE APPROPRIATE, CITY, COUNTY OR STATE AGENCY CONTROLLING THE ROAD, INCLUDING OBTAINING REQUIRED INSPECTIONS.
11. ALL DIMENSIONS, GRADES & UTILITY DESIGNS SHOWN ON THE PLANS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES.
12. CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS BEFORE BIDDING AND BRING UP ANY QUESTIONS BEFOREHAND.
13. SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH BY THE GEOTECHNICAL ENGINEER.
14. CATCH SLOPES SHALL BE GRADED AS SPECIFIED ON GRADING PLANS.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FLAGGING, CAUTION SIGNS, LIGHTS, BARRICADES, FLAGMEN, AND ALL OTHER DEVICES NECESSARY FOR PUBLIC SAFETY.
16. CONTRACTOR SHALL, AT THE TIME OF BIDDING AND THROUGHOUT THE PERIOD OF THE CONTRACT, BE LICENSED IN THE STATE OF UTAH AND SHALL BE BONDABLE FOR AN AMOUNT EQUAL TO OR GREATER THAN THE AMOUNT BID AND TO DO THE TYPE OF WORK CONTEMPLATED IN THE PLANS AND SPECIFICATIONS. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PLANS AND SPECIFICATIONS.
17. CONTRACTOR SHALL INSPECT THE SITE OF THE WORK PRIOR TO BIDDING TO SATISFY HIMSELF BY PERSONAL EXAMINATION OR BY SUCH OTHER MEANS AS HE MAY PREFER OF THE LOCATION OF THE PROPOSED WORK AND OF THE ACTUAL CONDITIONS OF AND AT THE SITE OF WORK. IF, DURING THE COURSE OF HIS EXAMINATION, A BIDDER FINDS FACTS OR CONDITIONS WHICH APPEAR TO HIM TO BE IN CONFLICT WITH THE LETTER OR SPIRIT OF THE PROJECT PLANS AND SPECIFICATIONS, HE SHALL CONTACT THE ENGINEER FOR ADDITIONAL INFORMATION AND EXPLANATION BEFORE SUBMITTING HIS BID. SUBMISSION OF A BID BY THE CONTRACTOR SHALL CONSTITUTE ACKNOWLEDGMENT THAT, IF AWARDED THE CONTRACT, HE HAS RELIED AND IS RELYING ON HIS OWN EXAMINATION OF (1) THE SITE OF THE WORK, (2) ACCESS TO THE SITE, AND (3) ALL OTHER DATA AND MATTERS REQUISITE TO THE FULFILLMENT OF THE WORK AND ON HIS OWN KNOWLEDGE OF EXISTING FACILITIES ON AND IN THE VICINITY OF THE SITE OF THE WORK. TO BE CONSTRUCTED UNDER THIS CONTRACT. THE INFORMATION PROVIDED BY THE ENGINEER IS NOT INTENDED TO BE A SUBSTITUTE FOR, OR A SUPPLEMENT TO, THE INDEPENDENT VERIFICATION BY THE CONTRACTOR TO THE EXTENT SUCH INDEPENDENT INVESTIGATION OF SITE CONDITIONS IS DEEMED NECESSARY OR DESIRABLE BY THE CONTRACTOR. CONTRACTOR SHALL ACKNOWLEDGE THAT HE HAS NOT RELIED SOLELY UPON OWNER- OR ENGINEER-FURNISHED INFORMATION REGARDING SITE CONDITIONS IN PREPARING AND SUBMITTING HIS BID.
18. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE ALL WATER, POWER, SANITARY FACILITIES AND TELEPHONE SERVICES AS REQUIRED FOR THE CONTRACTOR'S USE DURING CONSTRUCTION.
19. CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE OWNER, ENGINEER, AND/OR GOVERNING AGENCIES.
20. CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, CONTROL POINTS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSES FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.
21. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOBSITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY SCHEDULING INSPECTION AND TESTING OF ALL FACILITIES CONSTRUCTED UNDER THIS CONTRACT. ALL TESTING SHALL CONFORM TO THE REGULATORY AGENCY'S STANDARD SPECIFICATIONS. ALL TESTING AND INSPECTION SHALL BE PAID FOR BY THE OWNER; ALL RE-TESTING AND/OR RE-INSPECTION SHALL BE PAID FOR BY THE CONTRACTOR.
23. IF EXISTING IMPROVEMENTS NEED TO BE DISTURBED AND/OR REMOVED FOR THE PROPER PLACEMENT OF IMPROVEMENTS TO BE CONSTRUCTED BY THESE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING OR REPAIRING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND/OR REPLACEMENT. THERE WILL BE NO EXTRA COST DUE TO THE CONTRACTOR FOR REPLACING OR REPAIRING EXISTING IMPROVEMENTS.
24. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.
25. CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.
26. WHERE THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

GENERAL NOTES CONT.

27. CONTRACTOR SHALL BE SKILLED AND REGULARLY ENGAGED IN THE GENERAL CLASS AND TYPE OF WORK CALLED FOR IN THE PROJECT PLANS AND SPECIFICATIONS. THEREFORE, THE OWNER IS RELYING UPON THE EXPERIENCE AND EXPERTISE OF THE CONTRACTOR. PRICES PROVIDED WITHIN THE CONTRACT DOCUMENTS SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THE TRUE INTENT AND PURPOSE OF THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE COMPETENT, KNOWLEDGEABLE AND HAVE SPECIAL SKILLS IN THE NATURE, EXTENT AND INHERENT CONDITIONS OF THE WORK TO BE PERFORMED. CONTRACTOR SHALL ALSO ACKNOWLEDGE THAT THERE ARE CERTAIN PECULIAR AND INHERENT CONDITIONS EXISTENT IN THE CONSTRUCTION OF THE PARTICULAR FACILITIES WHICH MAY CREATE, DURING THE CONSTRUCTION PROGRAM, UNUSUAL OR UNSAFE CONDITIONS HAZARDOUS TO PERSONS, PROPERTY AND THE ENVIRONMENT. CONTRACTOR SHALL BE AWARE OF SUCH PECULIAR RISKS AND HAVE THE SKILL AND EXPERIENCE TO FORESEE AND TO ADOPT PROTECTIVE MEASURES TO ADEQUATELY AND SAFELY PERFORM THE CONSTRUCTION WORK WITH RESPECT TO SUCH HAZARDS.
28. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL STRIPING AND/OR PAVEMENT MARKINGS NECESSARY TO TIE EXISTING STRIPING INTO FUTURE STRIPING. METHOD OF REMOVAL SHALL BE BY GRINDING OR SANDBLASTING.
29. CONTRACTOR SHALL PROVIDE ALL SHORING, BRACING, SLOPING OR OTHER PROVISIONS NECESSARY TO PROTECT WORKMEN FOR ALL AREAS TO BE EXCAVATED TO A DEPTH OF 4' OR MORE. FOR EXCAVATIONS 4 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH INDUSTRIAL COMMISSION OF UTAH SAFETY ORDERS SECTION 68 - EXCAVATIONS, AND SECTION 69 - TRENCHES, ALONG WITH ANY LOCAL CODES OR ORDINANCES.
30. ALL EXISTING GATES AND FENCES TO REMAIN UNLESS OTHERWISE NOTED ON PLANS. PROTECT ALL GATES AND FENCES FROM DAMAGE.

UTILITY NOTES

1. CONTRACTOR SHALL COORDINATE LOCATION OF NEW "DRY UTILITIES" WITH THE APPROPRIATE UTILITY COMPANY, INCLUDING BUT NOT LIMITED TO: TELEPHONE SERVICE, GAS SERVICE, CABLE, POWER, INTERNET.
2. EXISTING UTILITIES HAVE BEEN SHOWN ON THE PLANS USING A COMBINATION OF ON-SITE SURVEYS (BY OTHERS). PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATE, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY BLUE STAKES AT 1-800-662-4111 48 HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK. THE CONTRACTOR SHALL RECORD THE BLUE STAKES ORDER NUMBER AND FURNISH ORDER NUMBER TO OWNER AND ENGINEER PRIOR TO ANY EXCAVATION. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DIRECTLY CONTACT ANY OTHER UTILITY COMPANIES THAT ARE NOT MEMBERS OF BLUE STAKES. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE PROJECT.
3. CONTRACTOR SHALL POT HOLE ALL UTILITIES TO DETERMINE IF CONFLICTS EXIST PRIOR TO BEGINNING ANY EXCAVATION. NOTIFY ENGINEER OF ANY CONFLICTS. CONTRACTOR SHALL VERIFY LOCATION AND INVERTS OF EXISTING UTILITIES TO WHICH NEW UTILITIES WILL BE CONNECTED. PRIOR TO COMMENCING ANY EXCAVATION WORK THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE REQUIRED PROCEDURES.
4. CARE SHOULD BE TAKEN IN ALL EXCAVATIONS DUE TO POSSIBLE EXISTENCE OF UNRECORDED UTILITY LINES. EXCAVATION REQUIRED WITHIN PROXIMITY OF EXISTING UTILITY LINES SHALL BE DONE BY HAND. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING UTILITY LINES OR STRUCTURES INCURRED DURING CONSTRUCTION OPERATIONS AT HIS EXPENSE.
5. ALL VALVES AND MANHOLE COVERS SHALL BE RAISED OR LOWERED TO MEET FINISHED GRADE.
6. CONTRACTOR SHALL CUT PIPES OFF FLUSH WITH THE INSIDE WALL OF THE BOX OR MANHOLE.
7. CONTRACTOR SHALL GROUT AT CONNECTION OF PIPE TO BOX WITH NON-SHRINKING GROUT, INCLUDING PIPE VOIDS LEFT BY CUTTING PROCESS, TO A SMOOTH FINISH.
8. CONTRACTOR SHALL GROUT WITH NON-SHRINK GROUT BETWEEN GRADE RINGS AND BETWEEN BOTTOM OF INLET LID FRAME AND TOP OF CONCRETE BOX.
9. SILT AND DEBRIS IS TO BE CLEANED OUT OF ALL STORM DRAIN BOXES. CATCH BASINS ARE TO BE MAINTAINED IN A CLEANED CONDITION AS NEEDED UNTIL AFTER THE FINAL BOND RELEASE INSPECTION.
10. CONTRACTOR SHALL CLEAN ASPHALT, TAR OR OTHER ADHESIVES OFF OF ALL MANHOLE LIDS AND INLET GRATES TO ALLOW ACCESS.
11. EACH TRENCH SHALL BE EXCAVATED SO THAT THE PIPE CAN BE LAID TO THE ALIGNMENT AND GRADE AS REQUIRED. THE TRENCH WALL SHALL BE SO BRACED THAT THE WORKMEN MAY WORK SAFELY AND EFFICIENTLY. ALL TRENCHES SHALL BE DRAINED SO THE PIPE LAYING MAY TAKE PLACE IN DEWATERED CONDITIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE COST OF DEWATERING AND NO COST CHANGE WILL BE PROVIDED.
12. CONTRACTOR SHALL PROVIDE AND MAINTAIN AT ALL TIMES AMPLE MEANS AND DEVICES WITH WHICH TO REMOVE PROMPTLY AND TO PROPERLY DISPOSE OF ALL WATER ENTERING THE TRENCH EXCAVATION.
13. MAINTAIN A MINIMUM 18" VERTICAL SEPARATION DISTANCE BETWEEN ALL UTILITY CROSSINGS.
14. CONTRACTOR SHALL START INSTALLATION AT LOW POINT OF ALL NEW GRAVITY UTILITY LINES.
15. ALL BOLTED FITTINGS MUST BE GREASED AND WRAPPED.
16. UNLESS SPECIFICALLY NOTED OTHERWISE, MAINTAIN AT LEAST 2 FEET OF COVER OVER ALL STORM DRAIN LINES AT ALL TIMES (INCLUDING DURING CONSTRUCTION).
17. ALL WATER LINES SHALL BE INSTALLED A MINIMUM OF 60" OF COVER TO TOP OF PIPE BELOW FINISHED GRADE.
18. ALL SEWER LINES AND SEWER SERVICES SHALL HAVE A MINIMUM SEPARATION OF 10 FEET, PIPE EDGE TO PIPE EDGE, FROM THE WATER LINES.
19. CONTRACTOR SHALL INSTALL THRUST BLOCKING AT ALL WATERLINE ANGLE POINTS AND TEES.
20. ALL UNDERGROUND UTILITIES SHALL BE IN PLACE PRIOR TO INSTALLATION OF CURB, GUTTER, SIDEWALK AND STREET PAVING.
21. CONTRACTOR SHALL INSTALL MAGNETIC LOCATING TAPE CONTINUOUSLY OVER ALL NONMETALLIC PIPE.
22. THE CONTRACTOR SHALL NOTIFY TALISMAN CIVIL CONSULTANTS, LLC. IN WRITING AT LEAST 48 HOURS PRIOR TO BACKFILLING OF ANY PIPE WHICH STUBS TO A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH THE REGULATORY AGENCY STANDARD SPECIFICATIONS.
23. UNDER NO CIRCUMSTANCE SHALL THE PIPE OR ACCESSORIES BE DROPPED INTO THE TRENCH

EROSION CONTROL GENERAL NOTES:

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO WEBER COUNTY ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTIES. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

LEGEND:

SYMBOL / LINETYPE	DESCRIPTION
4"W	EXISTING 4" WATER PIPE
W	EXISTING WATER SERVICE LATERAL
	EXISTING WATER METER
	EXISTING WATER VALVE
8"SS	EXISTING 8" SANITARY SEWER PIPE
	EXISTING SANITARY SEWER LATERAL AND CLEANOUT
(1)SS-P	EXISTING PRESSURIZED SANITARY SEWER PIPE
	EXISTING SANITARY SEWER GRINDER/PUMP
S	EXISTING SANITARY SEWER MANHOLE
15"SD	EXISTING 15" STORM DRAIN PIPE
D	EXISTING STORM DRAIN MANHOLE
	EXISTING STORM DRAIN FLARED END SECTION
T	EXISTING TELECOMMUNICATION CONDUIT
TL	EXISTING TELECOMMUNICATION PULL BOX
E	EXISTING ELECTRICAL CONDUIT
E / TR	EXISTING ELECTRICAL PULL BOX
G	EXISTING ELECTRICAL TRANSFORMER
	EXISTING GAS PIPE
	PROPOSED CONCRETE
	PROPOSED GABION BASKET WALL
W	PROPOSED WATER METER
G	PROPOSED GAS PIPE
P	PROPOSED ELECTRICAL CONDUIT
T	PROPOSED TELECOMMUNICATIONS CONDUIT

NOTE: LEGEND MAY CONTAIN SYMBOLS THAT ARE NOT USED IN PLAN SET.

EROSION CONTROL GENERAL NOTES:

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO WEBER COUNTY ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTIES. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

MAINTENANCE:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL VEGETATION IS RE-ESTABLISHED.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

EXPOSED SLOPES:

ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:

A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED
B) TRACKING STRAW PERPENDICULAR TO SLOPES
C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

* SEED MIXTURE FOR REVEGITATION

a. MEADOW BROME (RIGOR)	14lb/ac
b. ORCHARD GRASS	10lb/ac
c. ALFALFA (ADAK)	4lb/ac

ABBREVIATIONS:

BG - BUILDING
BW - BOTTOM OF WALL
FL - FLOWLINE
FG - FINISHED GROUND
EX - EXISTING
MA - MATCH
TW - TOP OF WALL

WEBER COUNTY

2380 WASHINGTON BLVD. #240
OGDEN, UT 84401
(801) 399-8374

ROCKY MOUNTIAN POWER

1438 WEST 2550 SOUTH
OGDEN, UT 84401
(801) 629-4429

POWDER MOUNTAIN WATER & SEWER DISTRICT

PO BOX 270
EDEN, UT 84310
(801) 745-0912

LOT 71 Residence
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6376

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET
SUITE 200
MURRAY, UT 84107
801.743.1300

REGISTERED PROFESSIONAL ENGINEER
No. 7899501
RYAN W. CATHEY
STATE OF UTAH

No.	Description	Date

Revision:

NOTES:

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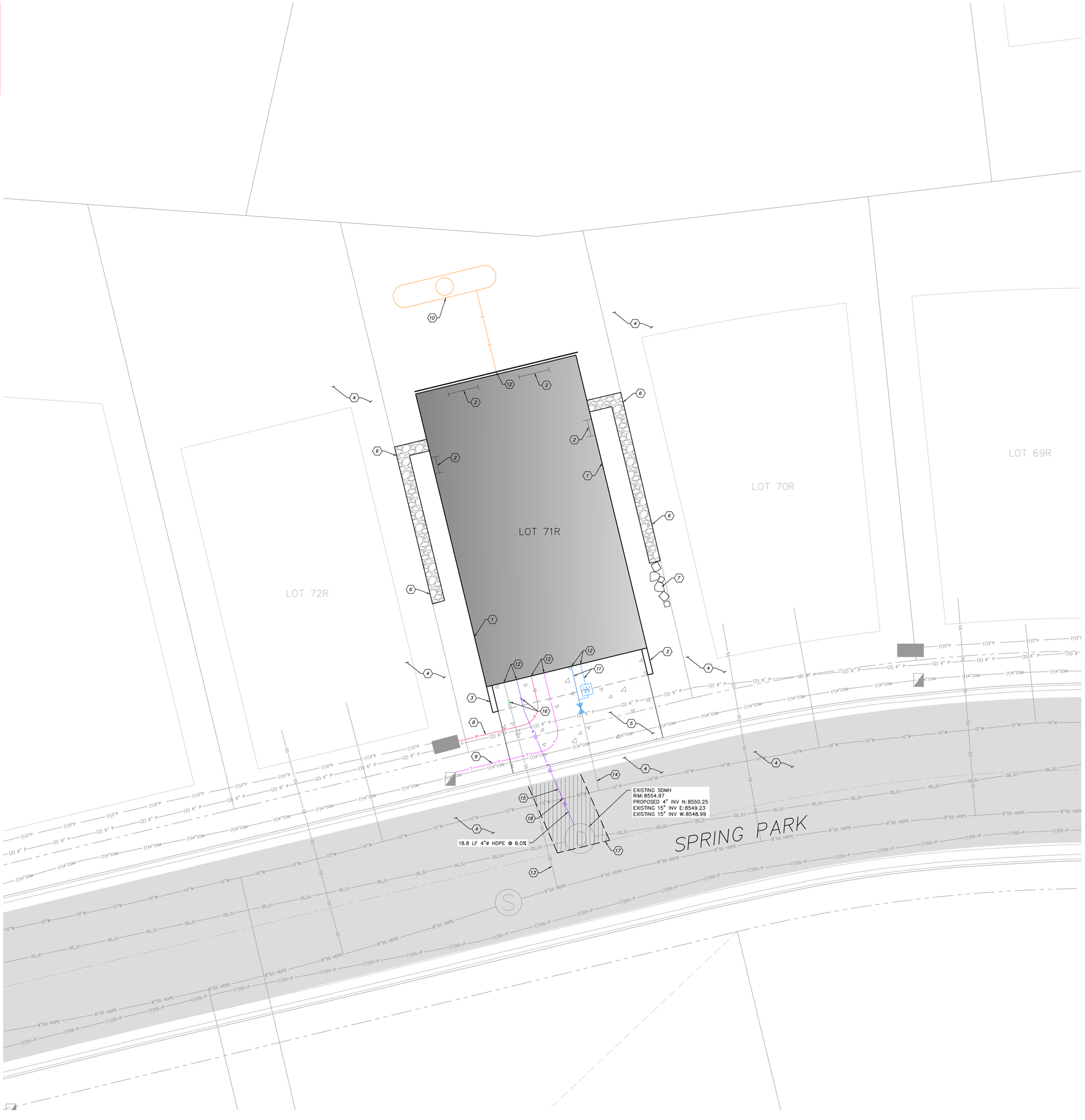
SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

General Notes & Legend

scale: N/A
date: 12/22/2017
drawn: JLB
chk'd: RWC

C001

Exhibit A



GENERAL NOTES:

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO WEBER COUNTY ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY WEBER COUNTY. ALSO, INSPECTORS WILL HAVE THE RIGHT TO REQUEST CHANGES TO THE FACILITIES AS NEEDED.

DUST MUST BE KEPT TO A MINIMUM. CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTACT POWDER MOUNTAIN WATER & SEWER IMPROVEMENT DISTRICT TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF WATER QUALITY.

ENSURE ALL GRADING SLOPES AWAY FROM STRUCTURE AT 5% FOR A MINIMUM OF 10' PER IRC R401.3

UTILITIES:

ENSURE MINIMUM BURIED DEPTH PER BUILDING CODE FOR ALL BURIED UTILITIES.

IMPROVEMENTS, INCLUDING LANDSCAPING, SHALL NOT INTERFERE WITH ANY DRAINAGE CULVERT, RIP RAP, AND DRAINAGE PATTERN ASSOCIATED WITH ANY DRAINAGE EASEMENT.

KEY NOTES:

1. BUILDING FOOTPRINT. SEE ARCHITECTURAL PLANS.
2. EGRESS WINDOW. SEE ARCHITECTURAL PLANS.
3. CONCRETE WALL. SEE ARCHITECTURAL PLANS.
4. PROTECT IN PLACE EXISTING IMPROVEMENTS. IF DAMAGED, REPLACE AT CONTRACTOR'S EXPENSE.
5. INSTALL CONCRETE DRIVEWAY PER DETAIL C/SHEET C701.
6. INSTALL GABION WALL PER GEOTECHNICAL REPORT. SEE GRADING PLAN FOR ELEVATIONS.
7. INSTALL ROCK WALL PER GEOTECHNICAL REPORT. SEE GRADING PLAN FOR ELEVATIONS.
8. INSTALL ELECTRICAL LINE FROM SERVICE BOX TO BUILDING.
9. INSTALL TELECOMMUNICATIONS LINE FROM SERVICE BOX TO BUILDING.
10. INSTALL PROPANE TANK PER DETAIL A/SHEET 701. SERVICE LINE TO BUILDING TO BE INSTALLED BY OTHERS.
11. INSTALL CULINARY WATER AND FIRE LINES PER DETAIL B/SHEET 701.
12. SEE MECHANICAL PLANS FOR CONTINUATION OF UTILITY WITHIN BUILDING.
13. EXISTING SEWER LATERAL.
14. EXISTING WATER LATERAL.
15. INSTALL 4"ø HDPE STORM DRAIN PIPE PER APWA STANDARD PLANS NO. 381 & 382.
16. INSTALL CLEANOUT PER APWA STANDARD PLAN NO. 431.
17. SAWCUT, REMOVE AND PROPERLY DISPOSE OF ASPHALT. WHEN TRENCH FOR STORM DRAIN PIPE HAS BEEN PROPERLY BACKFILLED AND COMPACTED PER APWA PLAN 381, PROVIDE ASPHALT CONCRETE T-PATCH PER APWA PLAN 255 WITH A 60" MINIMUM SECOND CUT FROM FIRST CUT.
18. PROVIDE A MINIMUM 18" VERTICAL CLEARANCE BETWEEN WATER LINE AND STORM DRAIN AT CROSSING. CONTACT ENGINEER FOR GUIDANCE IF 18" VERTICAL CLEARANCE IS NOT POSSIBLE.

SCALE
HORIZONTAL 1" = 5'
0 1.25' 2.5' 5' 7.5'

LOT 71 Residence
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
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REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
APPROVED
STATE OF UTAH

No.	Description	Date
Revision:		

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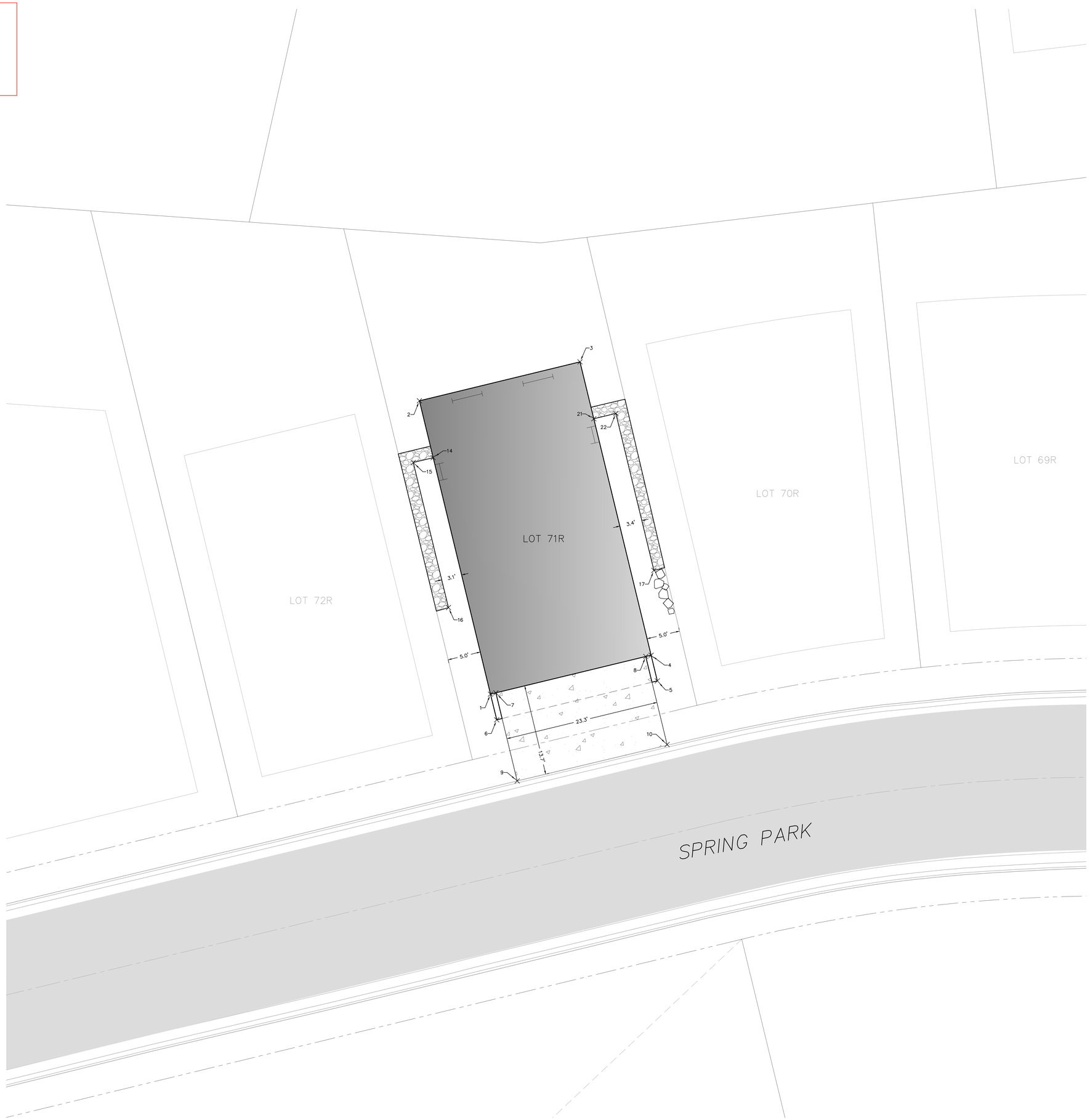
Site & Utility Plan

scale: 1"=8'
date: 12/22/2017
drawn: JLB
chk'd: RWC

C201

Exhibit A



Point Table		
Point #	Northing	Easting
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2	3656049.35	1572718.01
3	3656055.24	1572742.31
4	3656010.85	1572753.06
5	3656006.97	1572754.01
6	3656001.08	1572729.71
7	3656005.16	1572729.50
8	3656010.66	1572752.25
9	3655991.83	1572732.81
10	3655997.33	1572755.48
14	3656040.74	1572720.10
15	3656040.01	1572717.08
16	3656018.06	1572722.40
17	3656023.68	1572753.49
21	3656046.63	1572744.39
22	3656047.44	1572747.73

SCALE

HORIZONTAL: 1" = 5'

0 1.25' 2.5' 5' 7.5'

LOT 71 Residence

Summit Powder Mountain
Eden, Utah

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Halifax, Nova Scotia
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Horizontal Control Plan

scale: 1"=5'
date: 12/22/2017
drawn: JLB
chk'd: RWC

C202

Exhibit A

LOT 71 Residence

Summit Powder Mountain
Eden, Utah

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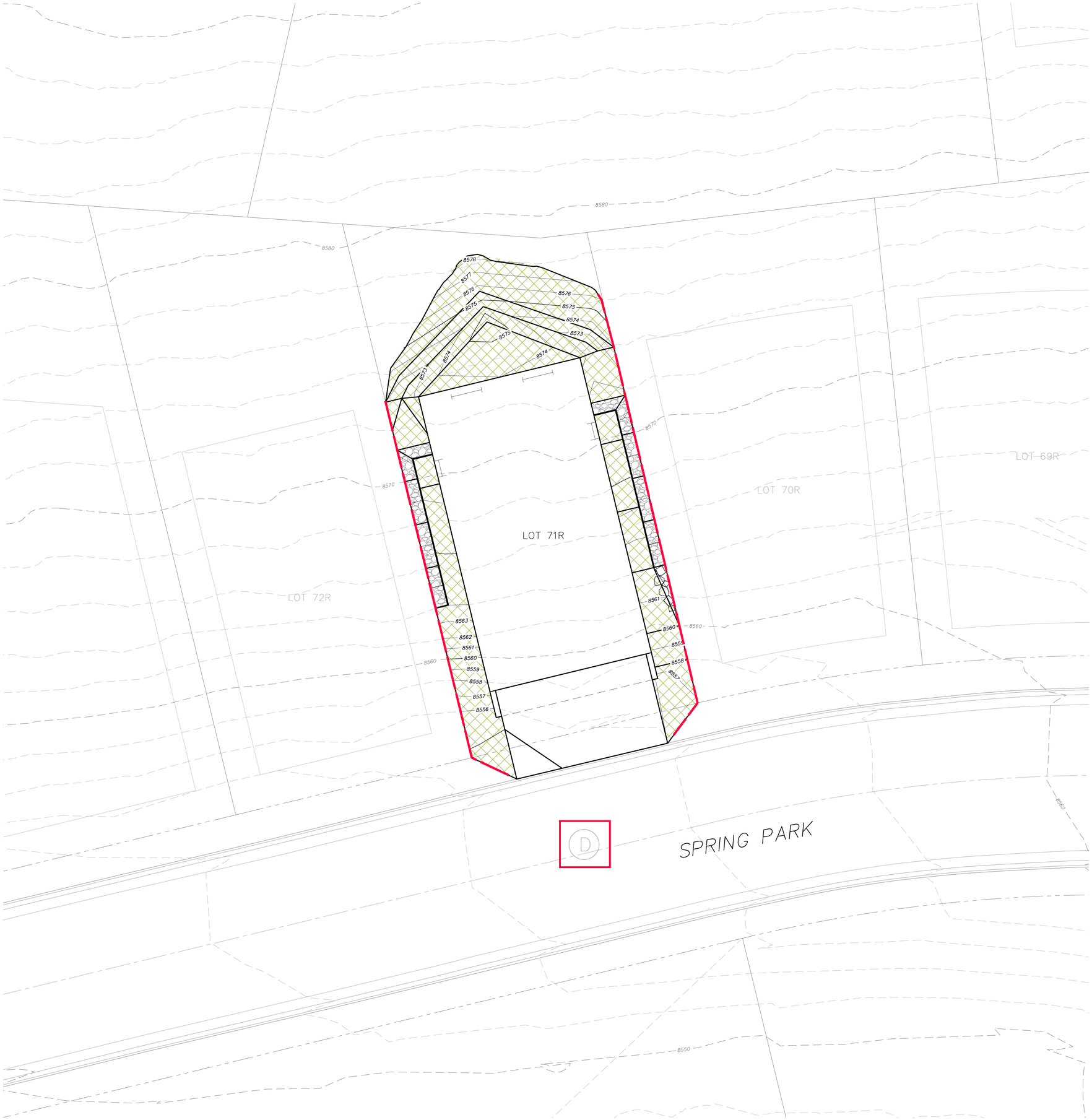
SCALE
HORIZONTAL: 1" = 5'
0 1.25 2.5 5 7.5

Grading & Drainage Plan

scale: 1"=5'
date: 12/23/2017
drawn: JLB
chk'd: RWC

C301

Exhibit A



EROSION CONTROL GENERAL NOTES:

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CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE UTAH DIVISION OF WATER QUALITY.

MAINTENANCE:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL VEGETATION IS RE-ESTABLISHED.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

EXPOSED SLOPES:

ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:

A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED
B) TRACKING STRAW PERPENDICULAR TO SLOPES
C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

HATCHING INDICATES AREAS TO RECEIVE 4" TOPSOIL AND TO BE SEEDED FOR NATURAL VEGETATION. AREAS RECEIVING SEEDING FOR NATURAL REVEGETATION ON SLOPES OF 3:1 OR STEEPER MUST BE COVERED WITH AN EROSION CONTROL BLANKET AFTER THE FINAL GRADING AND SEEDING ARE FINISHED. INSTALL NORTH AMERICAN GREEN SC-150 BLANKET OR APPROVED EQUAL. FOLLOW MANUFACTURER'S SPECIFICATIONS.

INSTALL INLET PROTECTION IN FORM OF CONCRETE BLOCKS / FILTER CLOTH / GRAVEL OR SILT SACK AT EXISTING AND PROPOSED CATCH BASINS AS SHOWN ON PLAN. SEE EROSION CONTROL DETAILS ON SHEET C701.

INSTALL SILT FENCE ALONG DOWN GRADIENT LIMITS OF DISTURBANCE AS SHOWN ON PLAN. SEE EROSION CONTROL DETAILS ON SHEET C701.

INSTALL ORANGE SAFETY FENCING AROUND OUTER LIMITS OF PROJECT PRIOR TO GRADING.

SEED MIXTURE FOR REVEGITATION
40% MOUNTAIN BROME (BROMUS MARGINATUS)
25% SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS)
5% SHEEP FESCUE (FESTUCA OVINA SPP. DURIUSCULA)
5% ALPINE BLUEGRASS (POA ALPINE)
25% THICKSPIKE WHEATGRASS (ELYMUS LANCEOLATUS SSP. LANCEOLATUS)

SEEDING RATE IS 40 POUNDS PER ACRE.

SCALE
HORIZONTAL: 1" = 5'
0 1.25 2.5 5 7.5

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Erosion Control Plan

scale: 1"=5'
date: 12/22/2017
drawn: JLB
chk'd: RWC

C601

Exhibit A

Silt fence

1. **GENERAL**
   - A. Description. A temporary sediment barrier consisting of a filter fabric stretched across and attached to supporting posts and entrenched.
   - B. Application. To intercept sediment from disturbed areas of limited extent.
   - C. Perimeter Control: Place barrier at down gradient limits of disturbance.
   - D. Sediment Barrier: Place barrier at toe of slope or soil stockpile.
   - E. Protection of Existing Waterways: Place barrier at top of stream bank.
   - F. Inlet Protection.
2. **PRODUCTS**
   - A. Fabric. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester, or polyethylene yarn. Synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life at a temperature range of 0 deg F to 120 deg F.
   - B. Burlap. 10 ounces per square yard of fabric.
   - C. Posts. Either 2" x 4" diameter wood, or 1.33 pounds per linear foot steel with a minimum length of 5 feet, or steel posts with projections for fastening wire to them.
3. **EXECUTION**
   - A. Cut the fabric on site to desired width, unroll, and drape over the barrier. Secure the fabric toe with rocks or dirt and secure the fabric to the mesh with twin, staples or similar devices.
   - B. When attaching two silt fences together, place the end post of the second fence inside the end post of the first fence. Rotate both posts at least 180 degrees on a clockwise direction to create a tight seal with the filter fabric. Drive both posts into the ground and bury the flap.
   - C. When used to control sediments from a steep slope, place silt fences away from the toe of the slope for increased holding capacity.
   - D. Maintenance.
     1) Inspect immediately after each rainfall and at least daily during prolonged rainfall.
     2) Should the fabric on a silt fence or filter barrier decompose or become ineffective before the end of the expected usable life and the barrier still be necessary, replace the fabric promptly.
     3) Remove sediment deposits after each storm event. They must be removed when deposits reach approximately one-half the height of the barrier.
     4) Re-anchor fence as necessary to prevent shortcutting.
     5) Inspect for runoff bypassing ends of barriers or undercutting barriers.

Inlet protection – fence or straw bale

1. **GENERAL**
   - A. Description. A temporary sediment barrier around storm drain inlet.
   - B. Application. At inlets in paved or unpaved areas where up gradient area is to be disturbed by construction activities.
2. **PRODUCT** (Not used)
3. **EXECUTION**
   - A. Installation and application criteria.
     1) Provide up gradient sediment controls, such as silt fence during construction of inlet.
     2) When construction of inlet is complete erect straw bale barrier, silt fence or other approved sediment barrier surrounding perimeter of inlet.
     3) Install filter fabric completely around grate.
   - B. Maintenance.
     1) Inspect inlet protection after every large storm event and at a minimum of once monthly.
     2) Remove sediment accumulated when it reaches 4-inches in depth.
     3) Repair or re-align barrier or fence as needed.
     4) Look for bypassing or undercutting and re-compact soil around barrier or fence as required.

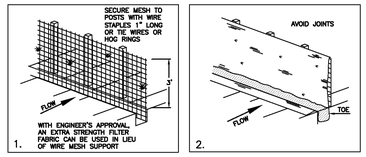
3/4" and 1" meter

1. **GENERAL**
   - A. In street surfaces or other vehicular traffic areas (like driveway approaches), Install the same type of meter box as required for 1 1/2" and 2" service meters. See Plan 522.
   - B. Before backfilling, secure inspection of installation by ENGINEER.
2. **PRODUCTS**
   - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   - B. Backfill. Common fill, APWA Section 31 05 13. Maximum particle size 2-inches.
   - C. Castings: Grey iron class 35 minimum per ASTM A 48, coated with asphalt based paint or better.
3. **EXECUTION**
   - A. Meter Placement:
     1) All meters are to be installed in the park strip or within 7 feet of the property line (street side).
     2) Do not install meters under driveway approaches, sidewalks, or curb and gutter.
   - B. Meter Box: Set box so grade of the frame and cover matches the grade of the surrounding surface.
   - C. Pipe Outside of Right-of-Way: Coordinate with utility agency or adjacent property owner for type of pipe to be used outside of right-of-way.
   - D. Inspection: Before backfilling around meter box, secure inspection of installation by ENGINEER.
   - E. Base Course and Backfill Placement: Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26. Maximum lift thickness before compaction is 8-inches.

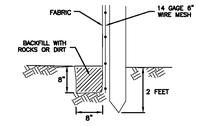
Cover collar for water valve box

1. **GENERAL**
   - A. In a pavement surface, fill an annular space around a frame and cover casting with concrete. The concrete will support the casting under traffic loadings.
2. **PRODUCTS**
   - A. Base Course: Untreated base course, APWA Section 32 11 23. Do not use gravel as a base course without ENGINEER's permission.
   - B. Concrete: Class 4000, APWA Section 03 30 04.
   - C. Concrete Curing Agent: Type ID Class A (clear with fugitive dye), membrane forming compound, APWA Section 03 39 00.
3. **EXECUTION**
   - A. Base Course: Maximum lift thickness is 8-inches before compaction. Compaction is 95 percent or greater relative to a modified proctor density, APWA Section 31 23 26.
   - B. Pavement Preparation: Provide a neat vertical and concentric joint between concrete collar and existing asphalt concrete surface. Clean edges of all dirt, oil, and loose debris.

NARRATIVE: THIS PLAN MAY BE USED FOR THE CONSTRUCTION OF A STORM WATER BEST MANAGEMENT PRACTICE (BMP). IT IS NOT INCLUSIVE OF ALL PRACTICES AVAILABLE AND IS ONLY SPECIFIC TO THE CONSTRUCTION OF THIS TYPE. MAINTENANCE OF THIS TYPE OF INSTALLATION IS IMPORTANT AND SHOULD BE CONTINUOUSLY MONITORED BY THE CONTRACTOR AND ENGINEER. DETAILS SHOWN HERE HIGHLIGHT IMPORTANT PARTS OF CONSTRUCTION, AND SHOULD BE MODIFIED AS NEEDED.



INSTALLATION SEQUENCE



TOE DETAIL

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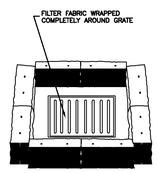
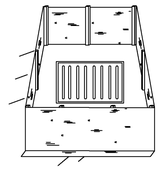
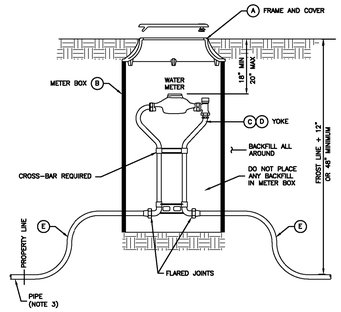


STRAW BALE BARRIER
(PLAN No. 121)



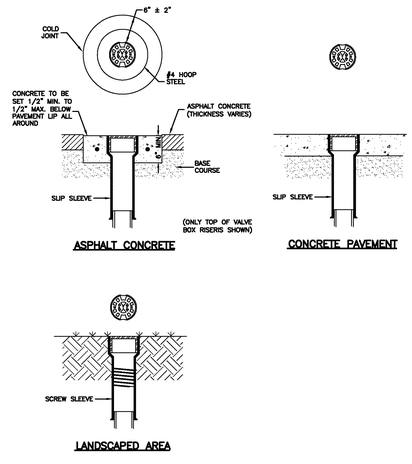
SILT FENCE
(PLAN No. 122)



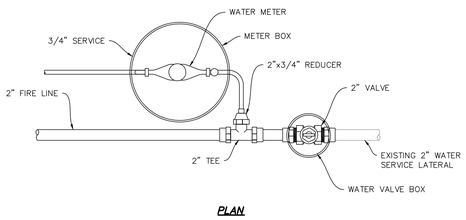
SECTION

LEGEND			
No.	*	ITEM	DESCRIPTION
A		FRAME AND COVER	CAST IRON COVER (gross) DUCTILE IRON COVER (driveway)
B		METER BOX (16" TO 21" DIAMETER) (30" TO 36" DEEP)	CORRUGATED PE, PVC, CMP OR MATERIAL ACCEPTABLE TO AGENCY
C		3/4" METER YOKE	OPTIONAL BACKFLOW PROTECTION PER AGENCY REQUIREMENTS
D		1" METER YOKE	OPTIONAL BACKFLOW PROTECTION PER AGENCY REQUIREMENTS
E		COPPER PIPE	TYPE K (SOFT)

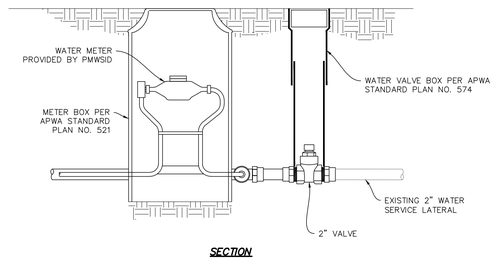
* FURNISHED BY UTILITY AGENCY



February 2006	**Silt fence** 7	Plan **122**
February 2006	**Inlet protection - fence or straw bale** 15	Plan **124** Sheet 3 of 3
August 2001	**3/4" and 1" meter** 239	Plan **521**
August 2010	**Cover collar for water valve box** 277	Plan **574**

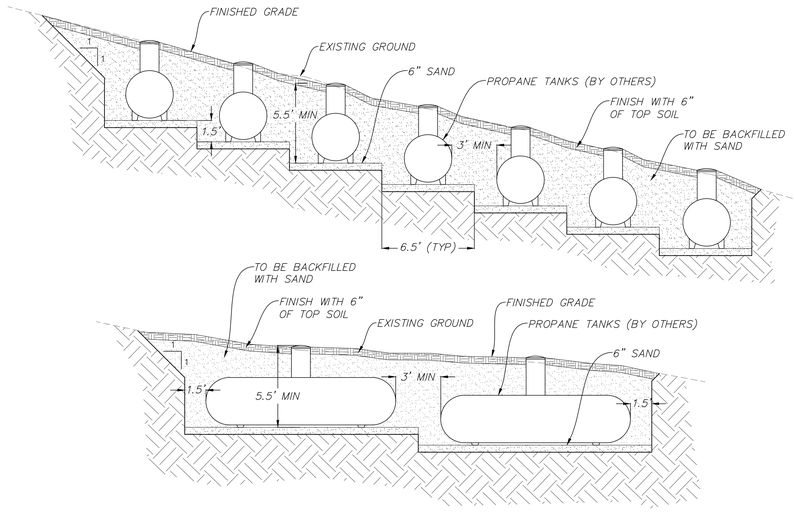


PLAN

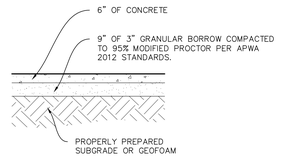


SECTION

A — NTS
FIRE LINE AND WATER METER DETAIL



B — NTS
PROPANE TANK PIT TYPICAL DETAIL



C — NTS
CONCRETE DRIVEWAY PAVEMENT SECTION

LOT 71 Residence
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6376

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET
SUITE 200
MURRAY, UT 84107
801.743.1300

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CATHEY
12/22/17
STATE OF UTAH

No.	Description	Date
Revision:		

NOTES:

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SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Details

scale: N/A
date: 12/22/2017
drawn: JLB
chk'd: RWC

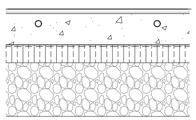
C701

Exhibit A

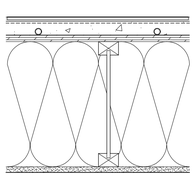
TYPE	INTERIOR WALL TYPE DESCRIPTION	
P1	+ 1/2" GWB to u/s of structure, PTD + 2x4 studs on a common 2x6 plate @ 16" o.c. + acoustic batt to fill cavity + 1/2" GWB to u/s of structure, PTD	6 1/2"
P2	+ 1/2" GWB to u/s of structure, PTD + 2x6 studs @ 16" o.c. + 5 1/2" acoustic batt in cavity + 1/2" GWB to u/s of structure, PTD	6 1/2"
P3	+ 1/2" GWB to u/s of structure, PTD + 2x6 studs @ 16" o.c. + 1/2" GWB to u/s of structure, PTD	6 1/2"
P4	+ 1/2" GWB to u/s of structure, PTD + 2x4 studs @ 16" o.c. + 1/2" GWB to u/s of structure, PTD	4 1/2"
P5	+ tile TBD + 5/8" tile backer board to u/s of structure + 2x4 studs @ 16" o.c. + 3 1/2" acoustic batt in cavity + 1/2" GWB to u/s of structure, PTD	5"
P6	+ tile TBD + 5/8" tile backer board to u/s of structure + 2x4 studs on common 2x6 plate @ 16" o.c. + 5 1/2" acoustic batt in cavity + 5/8" tile backer board to u/s of structure + tile TBD	7 1/2"
P7	+ tile TBD + 5/8" tile backer board to u/s of structure + 2x6 studs @ 16" o.c. + 5 1/2" acoustic batt in cavity + 1/2" GWB to u/s of structure, PTD	7"
P8	+ 1/2" GWB, PTD + 2x6 studs @ 16" o.c. + 2x4 studs @ 16" o.c. + 1/2" GWB + Backsplash, refer to spec	11 1/4"

FLOOR TYPE DESCRIPTION

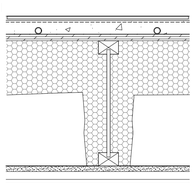
Floor Assembly Type 1
System Components:
- Thinset tile, refer to specification
- 4" reinforced concrete slab on grade as per structural w/ hydronic in-floor heating system, refer to finish schedule for finish
- 10 mil. poly under slab vapor retarder (seal all joints)
- 2" XPS rigid insulation (R10)
- 6" compacted gravel base



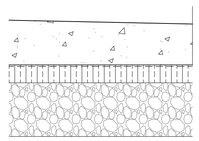
Floor Assembly Type 2
System Components:
- Thinset tile, refer to specification
- Anti-fracture membrane, refer to specification
- 1 1/2" gyp-crete over-pour w/ in-floor heating, refer to specification
- 3/4" sheathing as per structural
- 14" I-Joists, refer to structural
- Acoustic insulation, refer to specification
- 5/8"gypsum, ceiling finish as noted



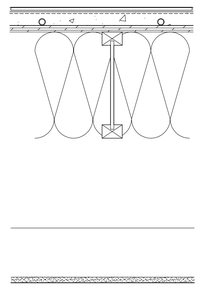
Floor Assembly Type 3 - 1 HR FRR Required
System Components:
- Thinset tile TBC
- Anti-fracture membrane, TBC
- 1 1/2" gyp-crete over-pour w/ hydronic in-floor heating, refer to specification
- 3/4" plywood sub floor as per structural
- 14" I-Joists, refer to structural
- 6" 2lb. closed cell spray foam insulation (R36)
- 5/8" Type X Exterior Grade Gypsum sheathing
- Strapping as required
- Metal composite panel TBD



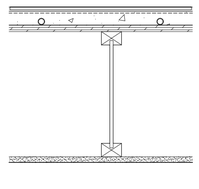
Floor Assembly Type 4
System Components:
- min. 4" reinforced concrete slab on grade as per structural, slope min. 2% to drain, refer to finish schedule for finish
- 10 mil. poly underslab vapor retarder (seal all joints)
- 2" XPS rigid insulation (R10)
- 6" compacted gravel base



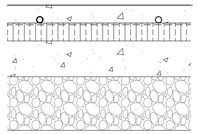
Floor Assembly Type 5
System Components:
- Thinset tile TBC
- Anti-fracture membrane, TBC
- 1 1/2" gyp-crete over-pour w/ in-floor heating, refer to specification
- 3/4" sheathing as per structural
- 14" I-Joists, refer to structural
- Acoustic insulation
- Furring as req'd.
- 5/8"gypsum, ceiling finish as noted



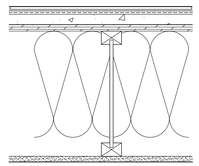
Floor Assembly Type 6
System Components:
- Thinset tile
- Anti-fracture membrane
- 1 1/2" gyp-crete over-pour w/ in-floor heating, refer to specification
- 3/4" sheathing, refer to structural
- 14" I-Joists, refer to structural
- 5/8"gypsum, ceiling finish as noted



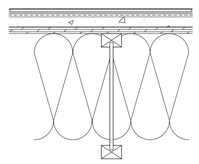
Floor Assembly Type 7
System Components:
- 2" concrete topping w/ in-floor heating, refer to specification
- 10 mil. vapor retarder (seal all joints)
- 2" XPS rigid insulation (R10)
- 4" reincofraced concrete slab on grade as per structural
- 6" compacted gravel base



Floor Assembly Type 8
System Components:
- Thinset tile TBC
- Ditra-heat Schluter assembly, refer to specification
- Over-pour to achieve slope
- 3/4" sheathing as per structural
- 14" I-Joists, refer to structural
- Acoustic insulation
- 5/8"gypsum, ceiling finish as noted

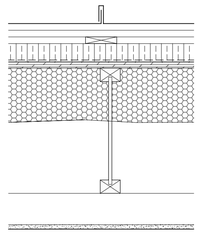


Floor Assembly Type 9
System Components:
- Thinset tile TBC
- Ditra-heat Schluter assembly, refer to specification
- Over-pour to achieve slope
- 3/4" sheathing as per structural
- 14" I-Joists, refer to structural
- Acoustic insulation
- Furring as req'd
- 5/8"gypsum, ceiling finish as noted

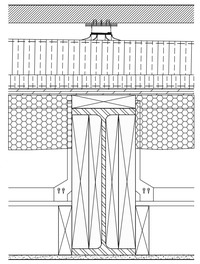


EXTERIOR ROOF TYPE DESCRIPTION

Roof Assembly Type 1 (Sloped Roof)
System Components:
- Snow retention system, refer to spec.
- Standing-seam metal roofing system (Class A roof covering), refer to specification
- 2 layers of alternating 1x4 strapping
- 2" vapor-open mineral wool insulation board (R8), refer to specification
- Vapor open roof membrane, refer to spec
- 3/4" exterior grade sheathing as per structural
- 14" I-Joists, refer to structural
- 6" 2lb. closed-cell sprayfoam insulation (R36)
- Furring as req'd
- 5/8" gypsum board, painted finish

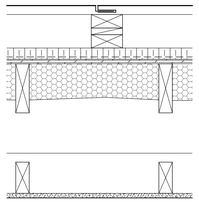


Roof Assembly Type 2
System Components:
- Concrete paver, refer to specification (Class A roof covering)
- Pedestal system, refer to specification
- PVC low-slop roofing membrane (Class A roof covering)
- Tapered insulation sloped to drain
- 1-1/2" XPS insulation (R7.5)
- Self-adhered air/vapour barrier
- 3/4" exterior grade sheathing as per structural
- 11 7/8" I-Joists, refer to structural
- 6" 2lb. closed-cell sprayfoam insulation (R36)
- Furring as req'd
- 5/8" gypsum board, painted finish

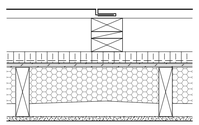


EXTERIOR WALL TYPE DESCRIPTION

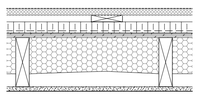
Exterior Wall Assembly 1
System Components
- Metal cladding system, refer to specification
- Vertical strapping as req'd
- 1-1/4" vapor-open mineral wool insulation board (R5), refer to specification
- Self-adhered vapor-open air barrier, refer to specification
- 1/2" exterior grade sheathing as per structural
- 2x6 wood studs as per structural
- 5" 2lb. closed-cell sprayfoam cavity insulation (R30)
- 2x4 stud wall, hold stud wall 1" from conc. wall below
- 1/2" gypsum board, painted finish



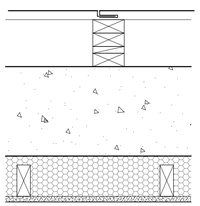
Exterior Wall Assembly 2
System Components
- Metal cladding system, refer to specification
- Vertical strapping as req'd
- 1-1/4" vapor-open mineral wool insulation board (R5), refer to specification
- Self-adhered vapor-open air barrier, refer to specification
- 1/2" exterior grade sheathing as per structural
- 2x6 wood studs as per structural
- 5" 2lb. closed-cell sprayfoam cavity insulation (R30)
- 1/2" gypsum board, painted finish



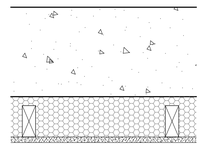
Exterior Wall Assembly 3
System Components
- Metal Composite panel TBC
- Vertical strapping
- 1-1/4" vapor-open mineral wool insulation board (R5), refer to specification
- self-adhered vapor-open air barrier, refer to specification
- 1/2" exterior grade sheathing as per structural
- 2x6 wood studs as per structural
- 5" 2lb. closed-cell sprayfoam cavity insulation (R30)
- 1/2" gypsum board, painted finish



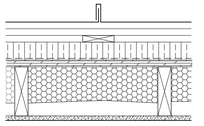
Exterior Wall Assembly 4
System Components
- Metal cladding system, refer to specification
- Vertical strapping as req'd
- Reinforced boardform concrete wall as per structural
- 4-1/2" 2lb. closed-cell spray foam insulation (R27)
- 2x4 stud wall, hold stud wall 1" from conc. wall below
- 1/2" gypsum board, painted finish



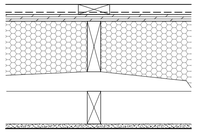
Exterior Wall Assembly 5
System Components
- Reinforced boardform concrete wall as per structural
- 4-1/2" 2lb. closed-cell spray foam insulation (R27)
- 2x4 stud wall, hold stud wall 1" from conc. wall below
- 1/2" gypsum board, painted finish



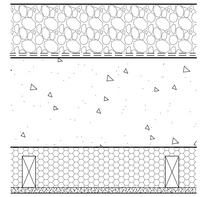
Exterior Wall Assembly 6
System Components
- Standing-seam metal cladding system, refer to specification
- 2 layers of alternating 1x4 strapping
- 2" vapor-open mineral wool insulation board (R8), refer to specification
- Vapor-open roof membrane, refer to specification
- 3/4" exterior grade sheathing as per structural
- 2x6 wood studs as per structural
- 5" 2lb. closed-cell spray foam insulation (R30)
- 1/2" gypsum board, painted finish



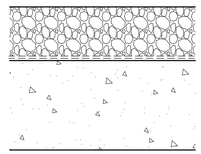
Exterior Wall Assembly 7
System Components
- Aluminum panel, refer to specification
- 1x4 vertical strapping
- Vapor-open roof membrane, refer to specification
- 3/4" exterior grade sheathing as per structural
- 2x6 wood studs as per structural
- 4" 2lb. closed-cell spray foam insulation (R24)
- 1/2" gypsum board, painted finish



Foundation Wall Assembly 1
System Components:
- 6" gravel backfill
- Foundation waterproofing system, refer to specification
- Reinforced concrete boardform foundation wall as per structural
- 4 1/2" 2lb. closed cell sprayfoam insulation (R27)
- 2x4 studs wall, hold stud wall 1" from wall and insulate behind
- 1/2" gypsum board, painted finish



Foundation Wall Assembly 2
System Components:
- 6" gravel backfill
- Foundation waterproofing system, refer to specification
- Reinforced boardform concrete foundation wall as per structural



1 / A001 Partition Type Legend
Scale 1 1/2" = 1'-0"

Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

true north

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
3	Issued for Construction	2018.03.13
2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1
Revision:		

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SHOP DRAWINGS:
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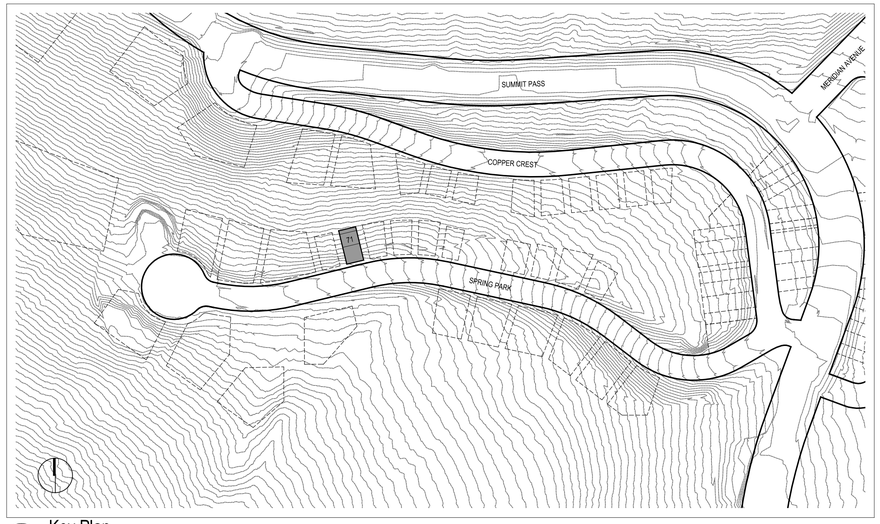
Partition Types

scale: as noted
date: 17-11-23
drawn: WP/RD
chk'd: BML

A001

Exhibit A



5 A001 **Key Plan**
NTS

	Mark	Fixture	Manufacturer	Model
KITCHEN				
	1	Fridge	Thermador	T36B8920SS 36-inch built-in 2-door bottom freezer
	2	Dishwasher	Thermador	DWHD440MPR
	3	Microwave	Thermador	MBES built-in microwave
	4	Oven	Thermador	ME301JS 30-inch built-in single oven
	7	Cooktop	Thermador	CIT365XM 36-inch induction cooktop
	10	Vent Hood	Thermador	VCIN36JP 36-inch custom insert
	8	Dumb-waiter	Inclinator	Homewaiter
MUD ROOM				
	5	Washer	Maytag	MHW8200FC
	6	Dryer	Maytag	MGD8200FC
POWDER ROOM				
		Toilet	Duravit	Floor Standing Rimless #216709..92
		Sink	Catalano	Premium 60x47 #160VP00
		Faucet	Hansgrohe	Talis S #32146001

	Mark	Fixture	Manufacturer	Model
BATHROOM 1-4				
		Toilet	Duravit	Floor Standing Rimless #216709..92
		Sink	Catalano	Premium 60x47 #160VP00
		Faucet	Hansgrohe	Talis S #32146001
		Overhead Shower	Hansgrohe	Raindance E #27381000
		Hand Shower	Hansgrohe	Raindance Select E #26520000
		Shower Controls	Hansgrohe	Shower Select #15761000
SHOWER ROOM				
		Overhead Shower	Hansgrohe	Raindance E #27381000
		Hand Shower	Hansgrohe	Raindance Select E #26520000
		Shower Controls	Hansgrohe	Shower Select #15761000

4 A001 **Fixture Schedule**

	Baseboard		North Wall		East Wall		South Wall		West Wall		Floors	Ceiling	
	Material	Finish	Material	Finish	Material	Finish	South	Finish	Material	Finish	Material	Material	Finish
GROUND LEVEL													
Garage	N/A	N/A	GWB	PT-C1	CONC	BF	CONC	BF	CONC	BF	CONC	MTL	SAT
Entry	PVC	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	CONC/POL	GWB	PT-C3
WC	PVC	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	CONC/POL	GWB	PT-C3
SECOND LEVEL													
Living Room	PVC	PT-C1	GWB	PT-C1	GLZ/GWB	PT-C1	GLZ	N/A	GLZ/GWB	PT-C1	CONC/CT3	GWB	PT-C3
Bathroom 1	PVC	PT-C1	GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CONC/CT2	GWB	PT-C3
Bathroom 2	PVC	PT-C1	GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CONC/CT2	GWB	PT-C3
Bedroom 1	PVC	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	GLZ/GWB	PT-C1	CONC/CT3	GWB	PT-C3
Bedroom 2	PVC	PT-C1	GWB	PT-C1	GLZ/GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	CONC/CT3	GWB	PT-C3
THIRD LEVEL													
Kitchen	PVC	PT-C1	GWB	PT-C1	GLZ/GWB	PT-C1	GLZ	N/A	GLZ/GWB	PT-C1	CONC/CT3	GWB	PT-C3
Bathroom 3	PVC	PT-C1	GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CONC/CT2	GWB	PT-C3
Bathroom 4	PVC	PT-C1	GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CONC/CT2	GWB	PT-C3
Bedroom 3	PVC	PT-C1	GLZ/GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	GLZ/GWB	PT-C1	CONC/CT3	GWB	PT-C3
Bedroom 4	PVC	PT-C1	GLZ/GWB	PT-C1	GLZ/GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	CONC/CT3	GWB	PT-C3
FOURTH LEVEL													
Lounge	PVC	PT-C1	GWB	PT-C1	GLZ/GWB	PT-C1	GLZ/GWB	PT-C1	GLZ/GWB	PT-C1	CONC/CT3	GWB	PT-C3
Shower	N/A	N/A	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CT1/GWB	PT-C1	CONC/CT2	CT1/GWB	N/A
WC	PVC	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	GWB	PT-C1	CONC/CT3	GWB	PT-C3

Finish Types.

Paint	PT-C1 - Benjamin Moore Decorators White - Egg Shell Finish
	PT-C3 - Benjamin Moore Decorators White - Flat Finish (Ceilings Only)
Wood	WD1 - engineered hardwood floors
Concrete	POL - polished concrete
	BF - 4" board form
Ceramic Tile	CT1 - white subway tile 4X16
	CT2 - grey 2x2 antislip tile
	CT3 - large formate tile
Metal Panel	SAT - satin

Legend

N/A	not applicable
GWB	gypsum wall board per spec.
CONC	concrete
CT	ceramic tile
MTL	metal composite panel
GLZ	floor to ceiling glazing
PVC	polyvinyl chloride

3 A001 **Room Finish Schedule**

AD	AREA DRAIN	DN	DOWN	LO	LOW	RM	ROOM	WD	WOOD
ADJ	ADJACENT	DR	DOOR	MAX	MAXIMUM	SC	SAW CUT		
AFF	ABOVE FINISHED FLOOR	DWG	DRAWING	MO	MASONRY OPENING	SIM	SIMILAR		
ALUM	ALUMINUM	EA	EACH	MECH	MECHANICAL	SPEC	SPECIFIED OR SPECIFICATION		
ANOD	ANODIZED	EL	ELEVATION	MEMBR	MEMBRANE	SPK	SPRINKLER		
BSMT	BASEMENT	ELEC	ELECTRICAL	MIN	MINIMUM	ST STL	STAINLESS STEEL		
BYOND	BEYOND	ELEV	ELEVATOR / ELEVATION	MRGWB	MOISTURE-RESISTANT	STC	SOUND TRANSMISSION COEFFICIENT		
BOT	BOTTOM	EQ	EQUAL		GYPSUM WALL BOARD	STL	STEEL		
B/W	BETWEEN	FOC	FACE OF CONCRETE	MTL	METAL	STRUCT	STRUCTURAL		
CHNL	CHANNEL	FOF	FACE OF WOOD FRAMING	NIC	NOT IN CONTRACT	TELE	TELEPHONE		
CJ	CONTROL JOINT	FDN	FOUNDATION	NOM	NOMINAL	TLT	TOILET		
CLG	CEILING	GA	GAUGE	OC	ON CENTER	TOFF	TOP OF FINISHED FLOOR		
CLR	CLEAR	GALV	GALVANIZED	OH	OPPOSITE HAND	TOC	TOP OF CONCRETE		
CMU	CONCRETE MASONRY UNIT	GWB	GYPSUM WALL BOARD	OZ	OUNCE	TOS	TOP OF STEEL		
COF	CENTERLINE OF WOOD FRAMING	HC	HOLLOW CORE	PCC	PRE-CAST CONCRETE	TP	TOILET PAPER DISPENSER		
COL	COLUMN	HI	HIGH	PLYD	PLYWOOD	T/D	TELEPHONE/DATA		
CONC	CONCRETE	HM	HOLLOW METAL	PT	PRESSURE TREATED	UON	UNLESS OTHERWISE NOTED		
CONT	CONTINUOUS	HP	HIGH POINT	PTD	PAINTED	U/S	UNDERSIDE		
OPT	CARPET	HVAC	HEATING, VENTILATING,	PVC	POLYVINYL CHLORIDE	VIF	VERIFY IN FIELD		
CT	CERAMIC TILE		AND AIR CONDITIONING	RCP	REFLECTED CEILING PLAN	VP	VISION PANEL		
DBL	DOUBLE	ILO	IN LIEU OF	RD	ROOF DRAIN	TYP	TYPICAL		
DIA	DIAMETER	INSUL	INSULATED	REQD	REQUIRED	VIF	VERIFY IN FIELD		
DIMS	DIMENSIONS	INT	INTERIOR	REV	REVERSE	WI	WITH		

2 A001 **Abbreviations**

building number	northwest corner natural grade elevation	northeast corner natural grade elevation	southwest corner natural grade elevation	southeast corner natural grade elevation	upper level floor elevation	height to building ridge	average building height (less than 35')
71R	8573.37	8573.37	8557.28	8558.86	8584.38	8598.44	**32.325**

1 A001 **Height Restriction Chart**

Lot 71R
Village House

Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

true north

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
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1	for coordination	2017.12.1
Revision:		

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SHOP DRAWINGS:
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Abbreviations & Key Plan

scale: as noted
date: 17-11-23
drawn: WP/RD
chk'd: BML

A002

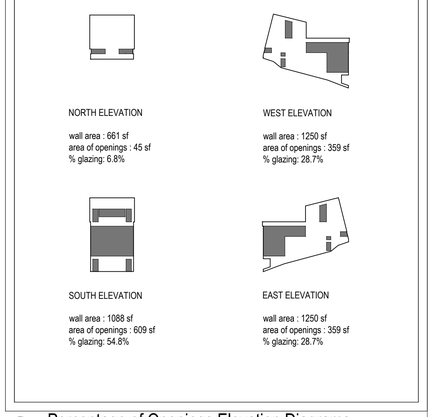
Exhibit A

1 A100 Site Plan
Scale 1/8" = 1'-0"

Site Plan Notes:

+ Provide native revegetation seed for all disturbed areas
+ See Civil Engineering drawings for information relating but not limited to:
  - site location.
  - site boundaries.
  - rights-of-way, easements.
  - geodetic elevations, site grading, earthwork.
  - all underground and aboveground services including fire hydrants, maintenance access covers, transformers, air condensers.
  - paved areas such as driveways, curbs, curb cutouts.

+ See Structural Engineering drawings for reference to Geotechnical Report.
+Refer to Structural Engineering drawings for Foundation Plan



2 A100 Percentage of Openings Elevation Diagrams

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Site Plan

scale: 1/8" = 1'-0"
date: 17-08-09
drawn: WP/RD
chk'd: BML

A100

Exhibit A

LEGEND

- (X) Window / Door Type
- (PX) Partition Type
- Roof Drain
- CJ Control Joint

SQUARE FOOTAGES

LIVABLE (ANSI Z765-2003)

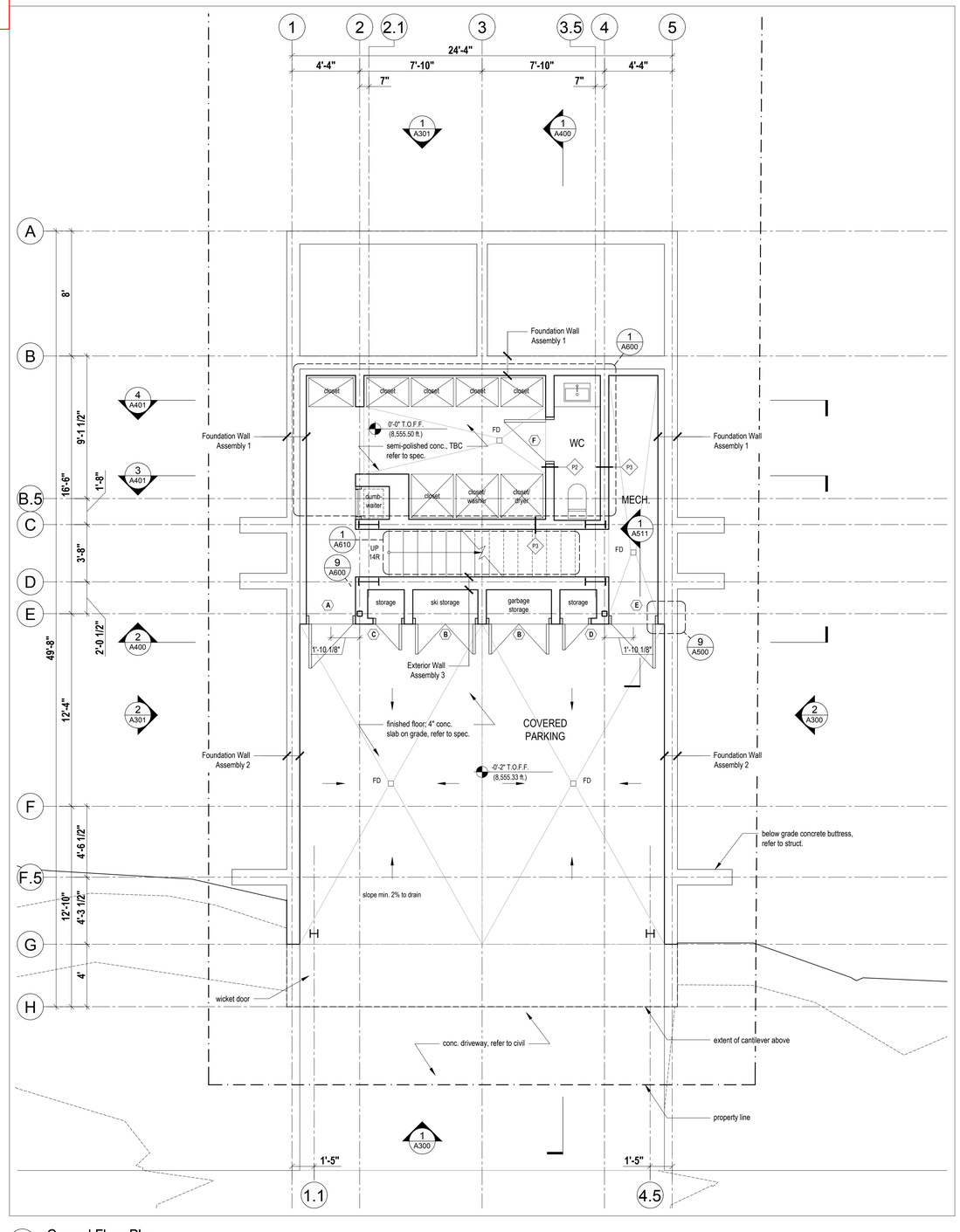
Ground Floor Plan	265 square feet
Second Floor Plan	1254 square feet
Third Floor Plan	1008 square feet
Fourth Floor Plan	535 square feet
Below Grade Livable Total:	1,519 square feet
Above Grade Livable Total:	1,543 square feet
Total:	**3,062 square feet**

Mechanical / Storage:	164 square feet
Viewing Deck:	662 square feet
Covered Parking:	512 square feet
GROSS (excluding exterior spaces):	**3,329 square feet**

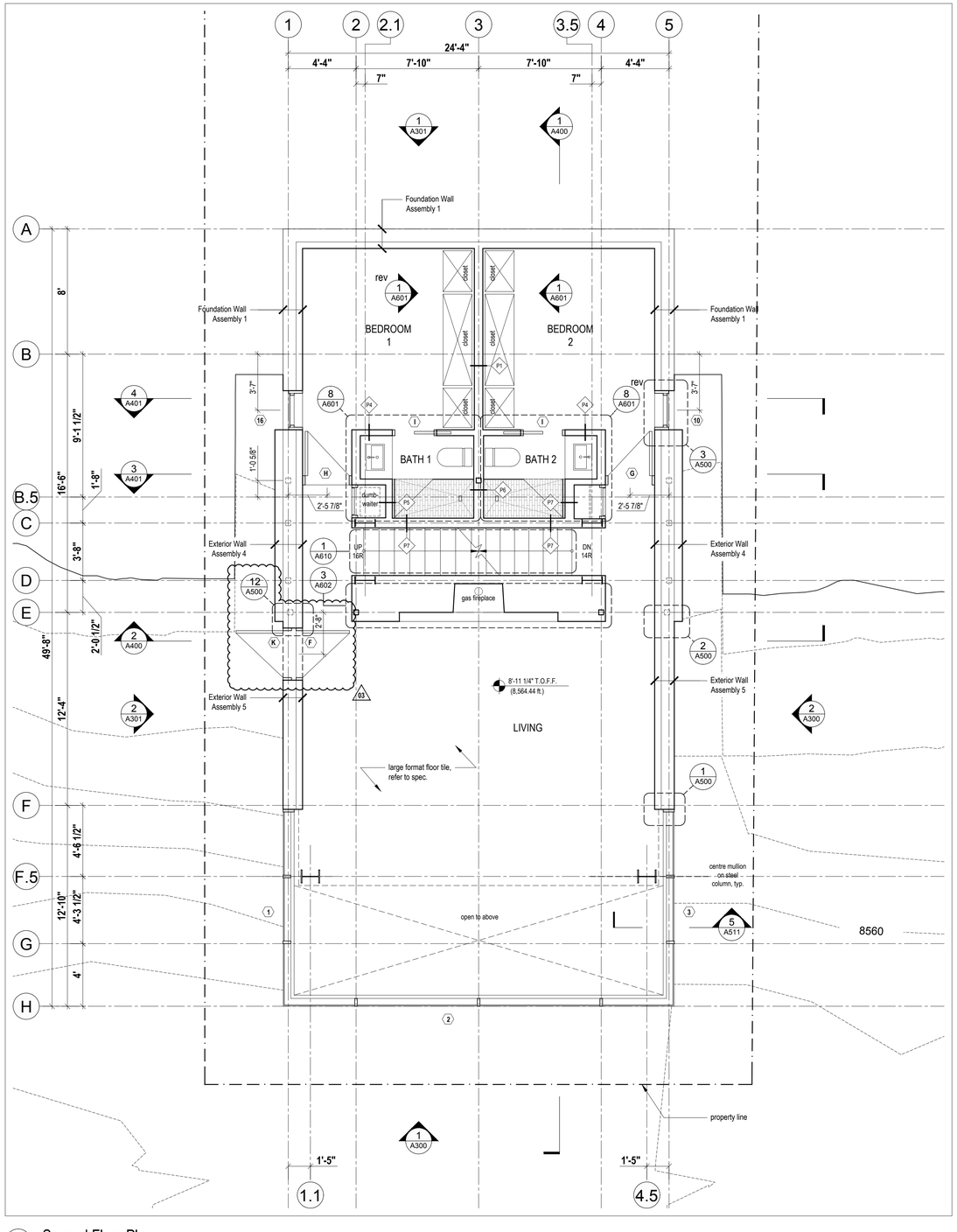
NOTE: Finished square footage calculations were made based on plan dimensions only and may vary from the finished square footage of the house as built.

MECHANICAL AND PLUMBING NOTES:

+ All work shall be performed in accordance with 2015 International Residential Code, 2015 International Mechanical Code, 2015 International Plumbing Code, and 2015 International Energy Code, including state and local amendments, subject to authority having jurisdiction interpretation.
+ For plumbing fixtures that are located below the elevation level of the nearest upstream man hole cover, a backwater valve is required. Fixtures that are above the elevation level of the manhole cover shall not discharge through the backwater valve per IRC P3008.1.
+ Closely coordinate new mechanical and plumbing construction with all mechanical, electrical, architectural, and structural members. Provide alternate routing, offsets, and transitions as required for coordination of all work without additional cost.
+ Do not shut-off / put out any systems / services without first coordinating all downtime with the owner's personnel.
+ Submit all equipment, air devices, valves, fittings, pipe materials, insulation, and accessories to be used in this project. Submit electronic submittal to architect for review and approval. Do not place order until reviewed and approved.
+ Contractor shall provide 1 year standard warranty.
+ Install all equipment in accordance with manufacturer's installation instructions.
+ Project Elevation is 8,555.5 ft for equipment selection.
+ Provide all duct in accordance with SMACNA standards for 2" WC pressure class. Seal all transverse and longitudinal seams and joints except for welded or locking-type longitudinal joints.
+ Dryers located in closets shall be provided with make-up air, per IRC G2439.5
+ If a single duct will be used for combustion air, provide a minimum duct size of 1 sq. inch per 3000 Btu/hour input. The one opening must be in the top 12 inches of the room, per IRC G2407.6.2.



2 A201 Ground Floor Plan
Scale 1/4" = 1'-0"



1 A201 Second Floor Plan
Scale 1/4" = 1'-0"

Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

Plan North

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
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1	for coordination	2017.12.1

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Ground & Second Floor Plans

scale: 1/4" = 1'-0"
date: 17-11-23
drawn: WP/RD
chk'd: BML

A201

Exhibit A

LEGEND

- X — Window / Door Type
- PX — Partition Type
- Roof Drain
- CJ — Control Joint

SQUARE FOOTAGES

LIVABLE (ANSI Z765-2003)

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+ Do not shut-off / put out any systems / services without first coordinating all downtime with the owner's personnel.
+ Submit all equipment, air devices, valves, fittings, pipe materials, insulation, and accessories to be used in this project. Submit electronic submittal to architect for review and approval. Do not place order until reviewed and approved.
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+ Install all equipment in accordance with manufacturer's installation instructions.
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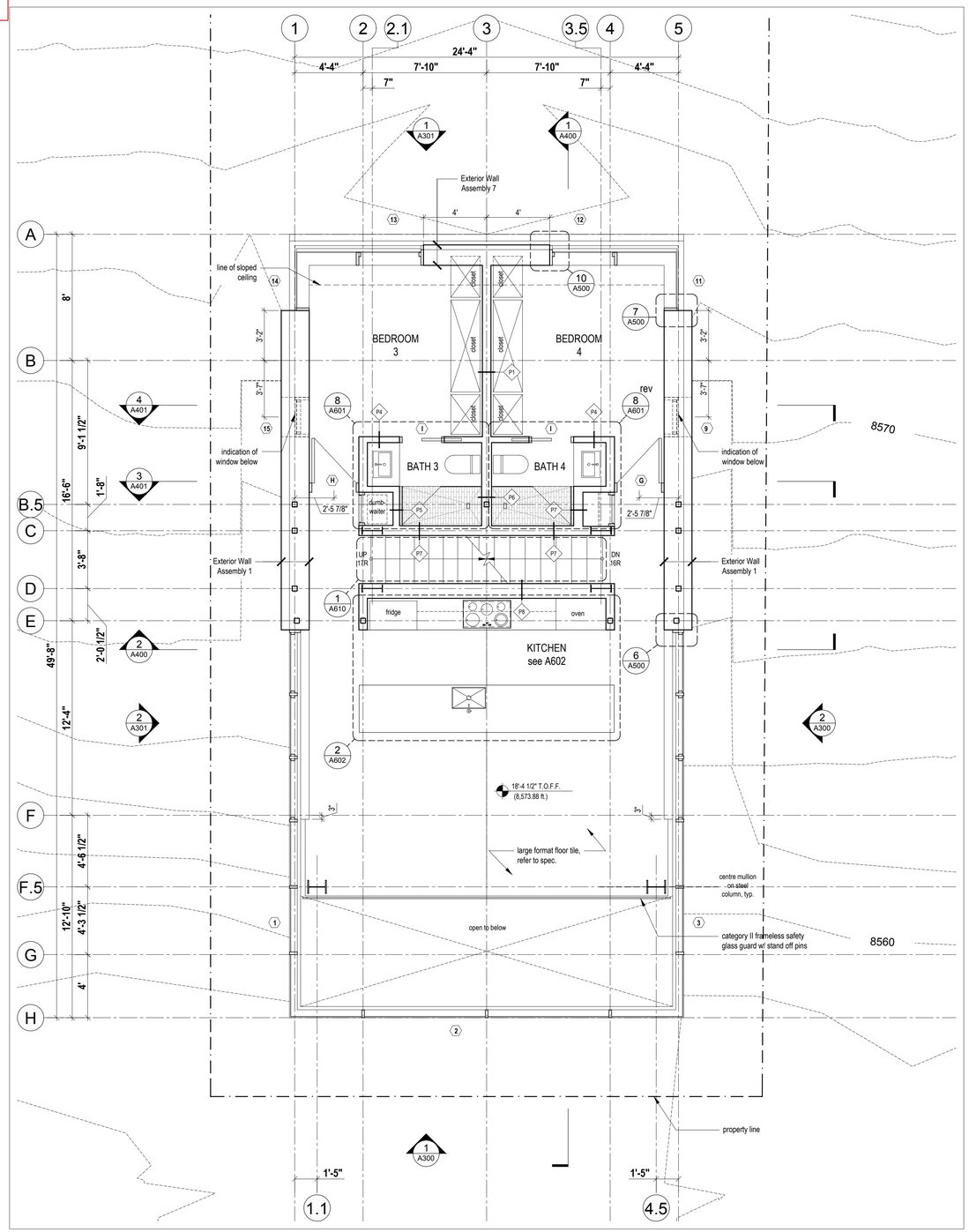
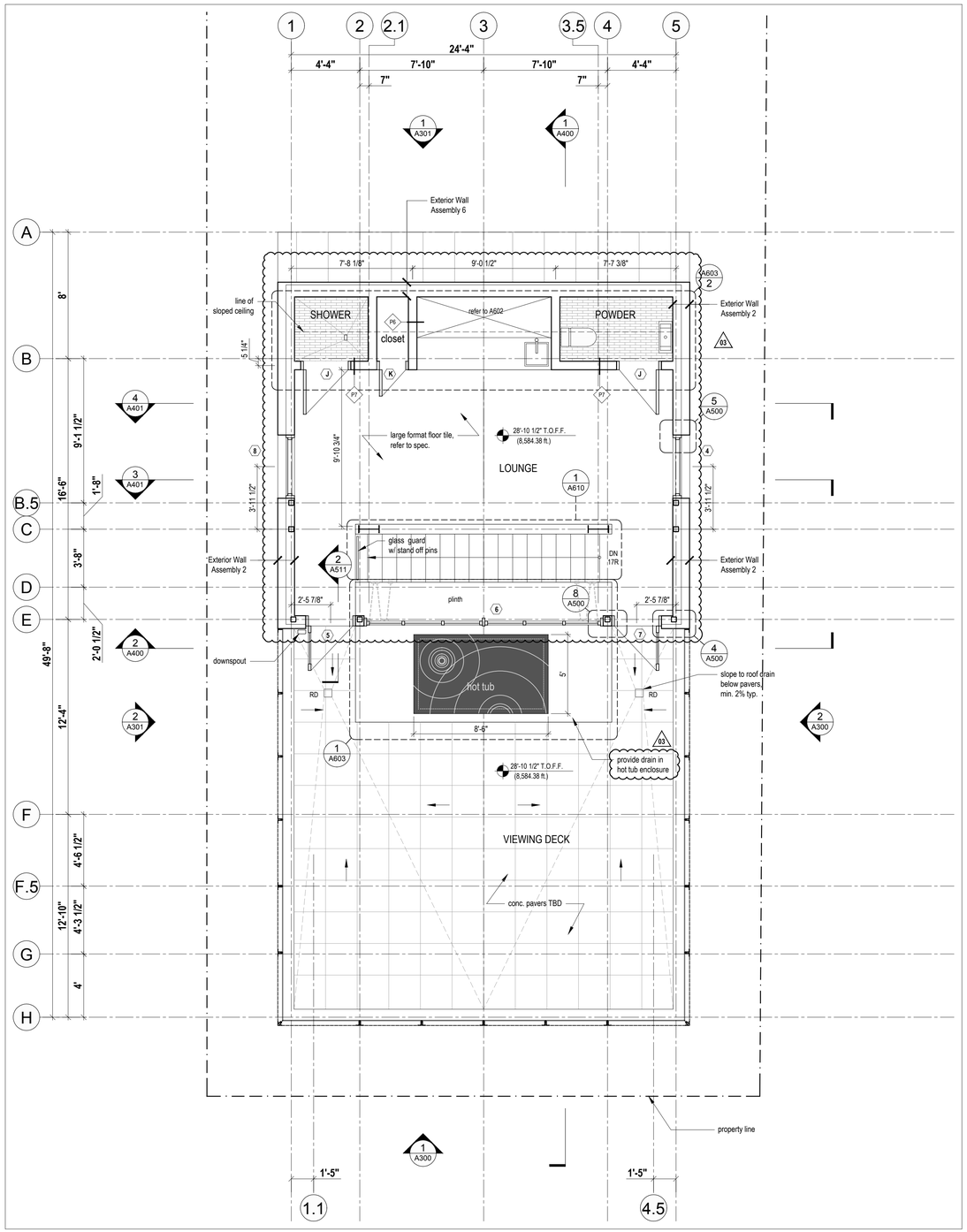
+ If a single duct will be used for combustion air, provide a minimum duct size of 1 sq. inch per 3000 Btu/hour input. The one opening must be in the top 12 inches of the room, per IRC G2407.6.2.



2 A202 Third Floor Plan
Scale 1/4" = 1'-0"



1 A202 Fourth Floor Plan
Scale 1/4" = 1'-0"

Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

True north

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
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Third & Fourth Floor Plans

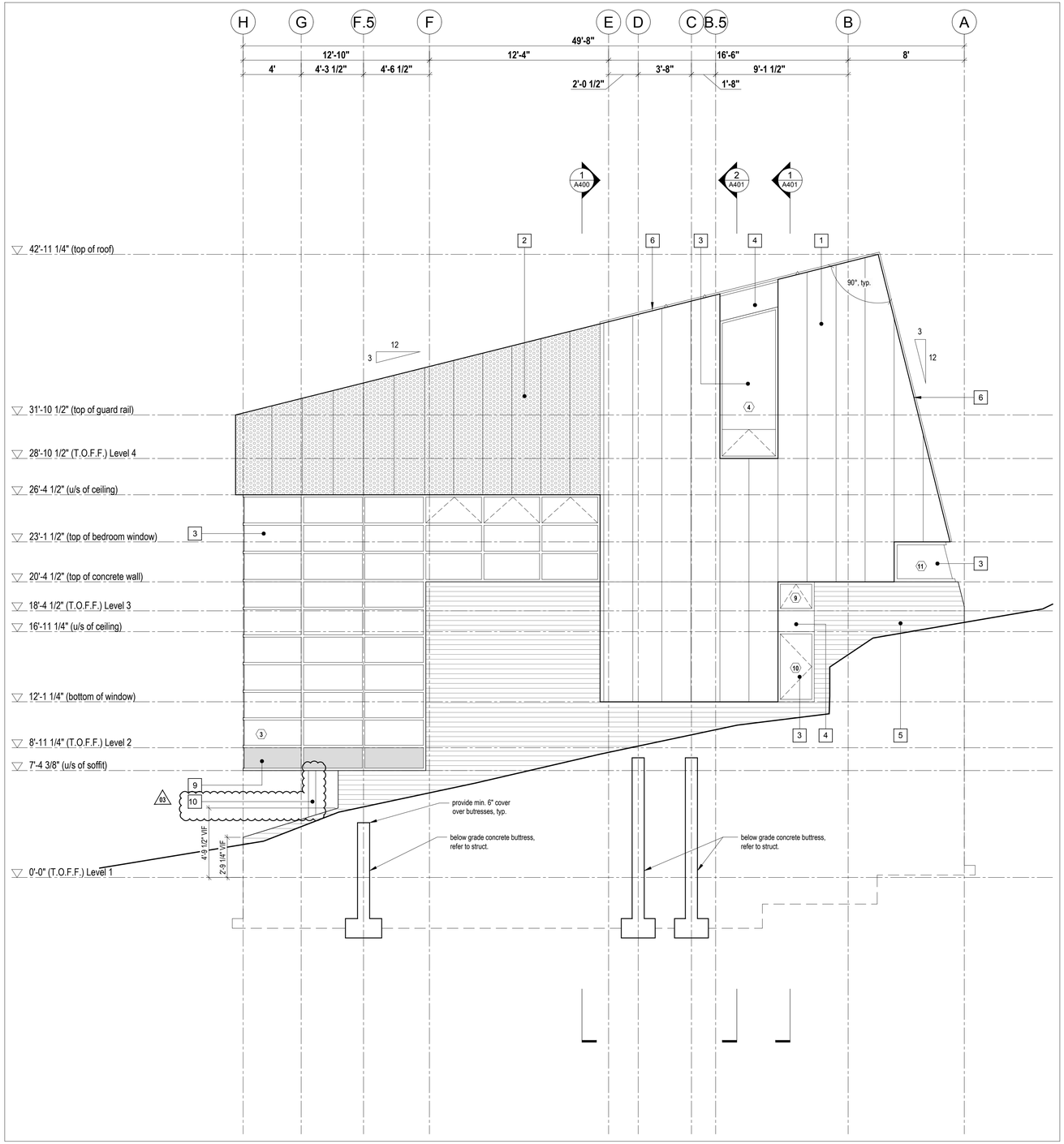
scale: 1/4" = 1'-0"
date: 17-11-23
drawn: WP/RD
chk'd: BML

A202

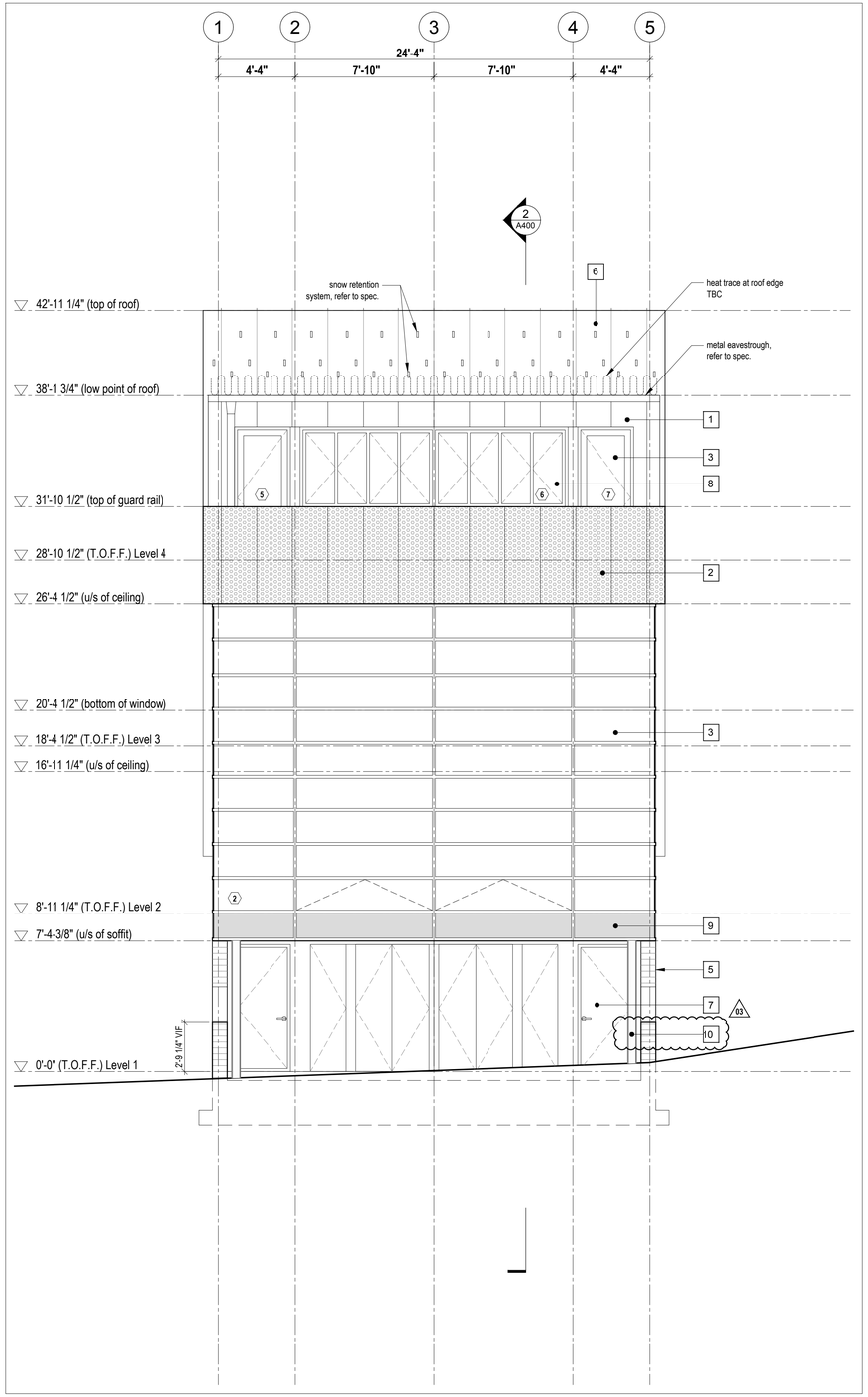
Exhibit A

LEGEND

1	flat seam zinc panel	4	metal panel to match curtain wall	7	garage door TBD	10	Galvanized steel column, as per structural
2	perforated zinc panel	5	boardform concrete wall	8	"Nana Wall" Window System, refer to spec	11	Galvanized steel storm door, refer to door schedule
3	curtain wall system	6	standing seam zinc	9	Glazed Spandrel Panel		



2 A300 **East Elevation**
Scale 1/4" = 1'-0"



1 A300 **South Elevation**
Scale 1/4" = 1'-0"

Lot 71R
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Summit Powder Mountain
Eden, Utah

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Exterior Elevations

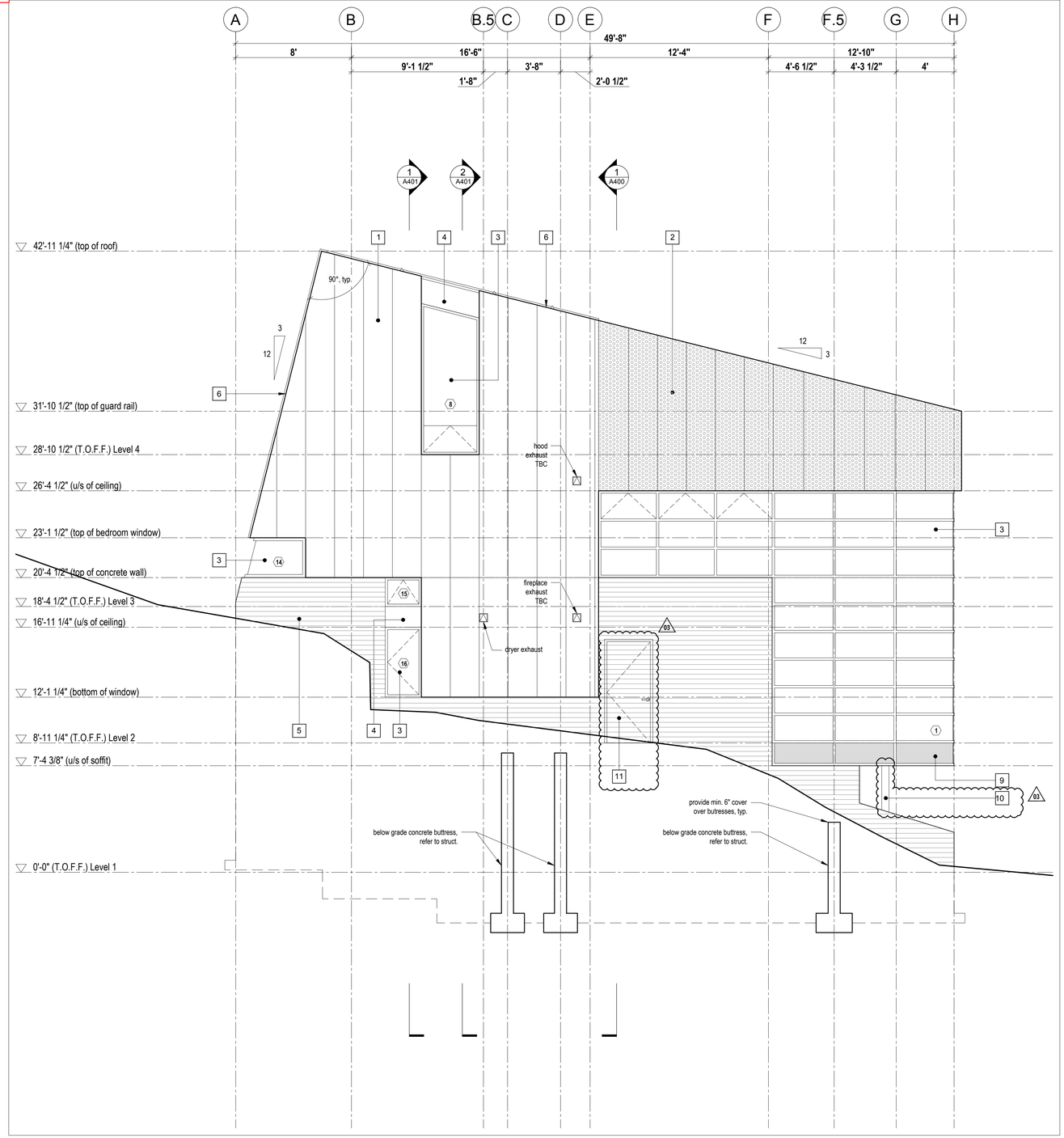
scale: 1/4" = 1'-0"
date: 17-11-23
drawn: WP/RD
chk'd: BML

A300

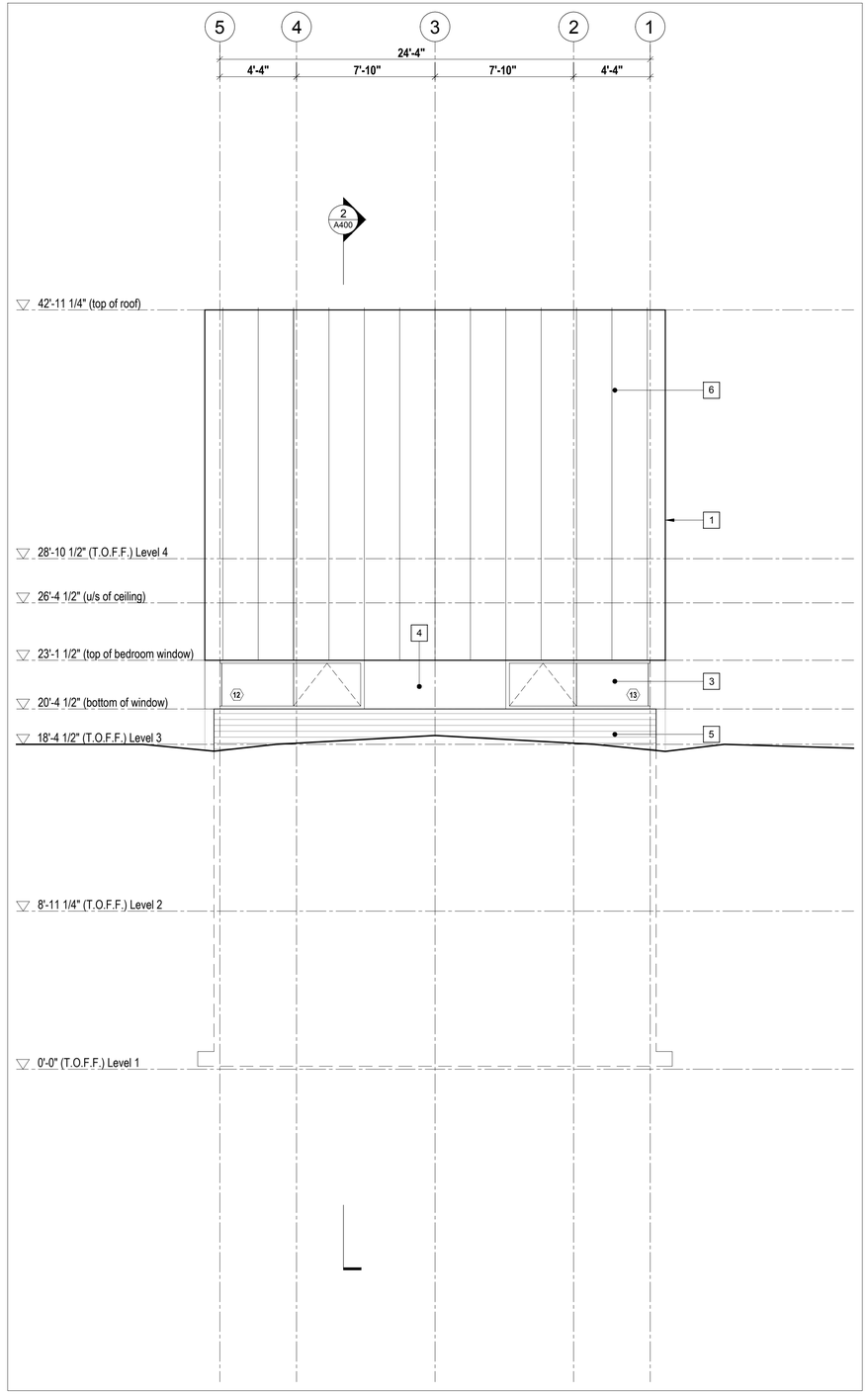
Exhibit A

LEGEND

1	flat seam zinc panel	4	metal panel to match curtain wall	7	garage door TBD
2	perforated zinc panel	5	boardform concrete wall	8	"Nana Wall" Window System, refer to spec
3	curtain wall system	6	standing seam zinc	9	Glazed Spandrel Panel
10	Galvanized steel column, as per structural				
11	Galvanized steel storm door, refer to door schedule				



2 A301 **West Elevation**
Scale 1/4" = 1'-0"



1 A301 **North Elevation**
Scale 1/4" = 1'-0"

Lot 71R
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Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
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Halifax, Nova Scotia
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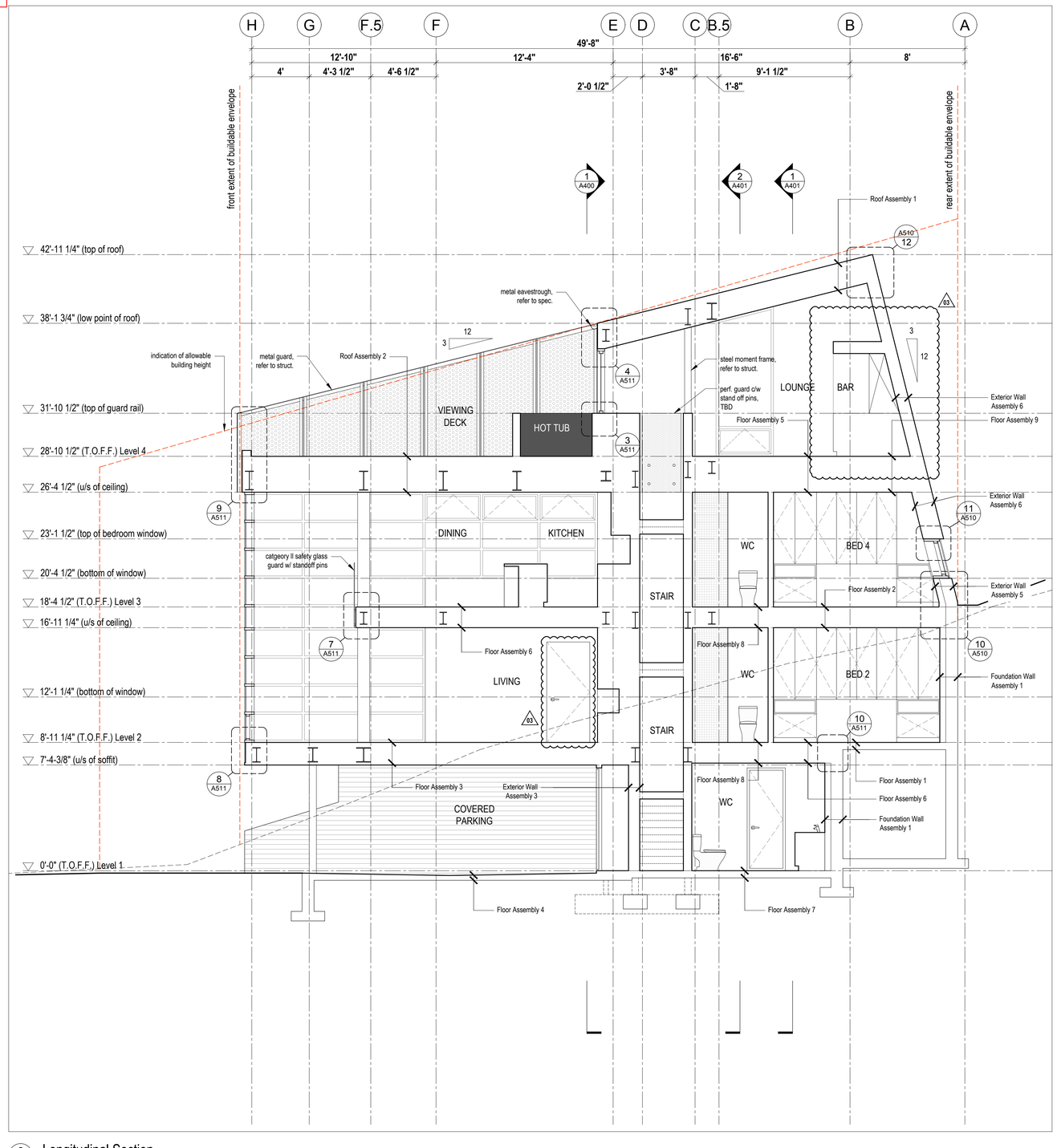
Exterior Elevations

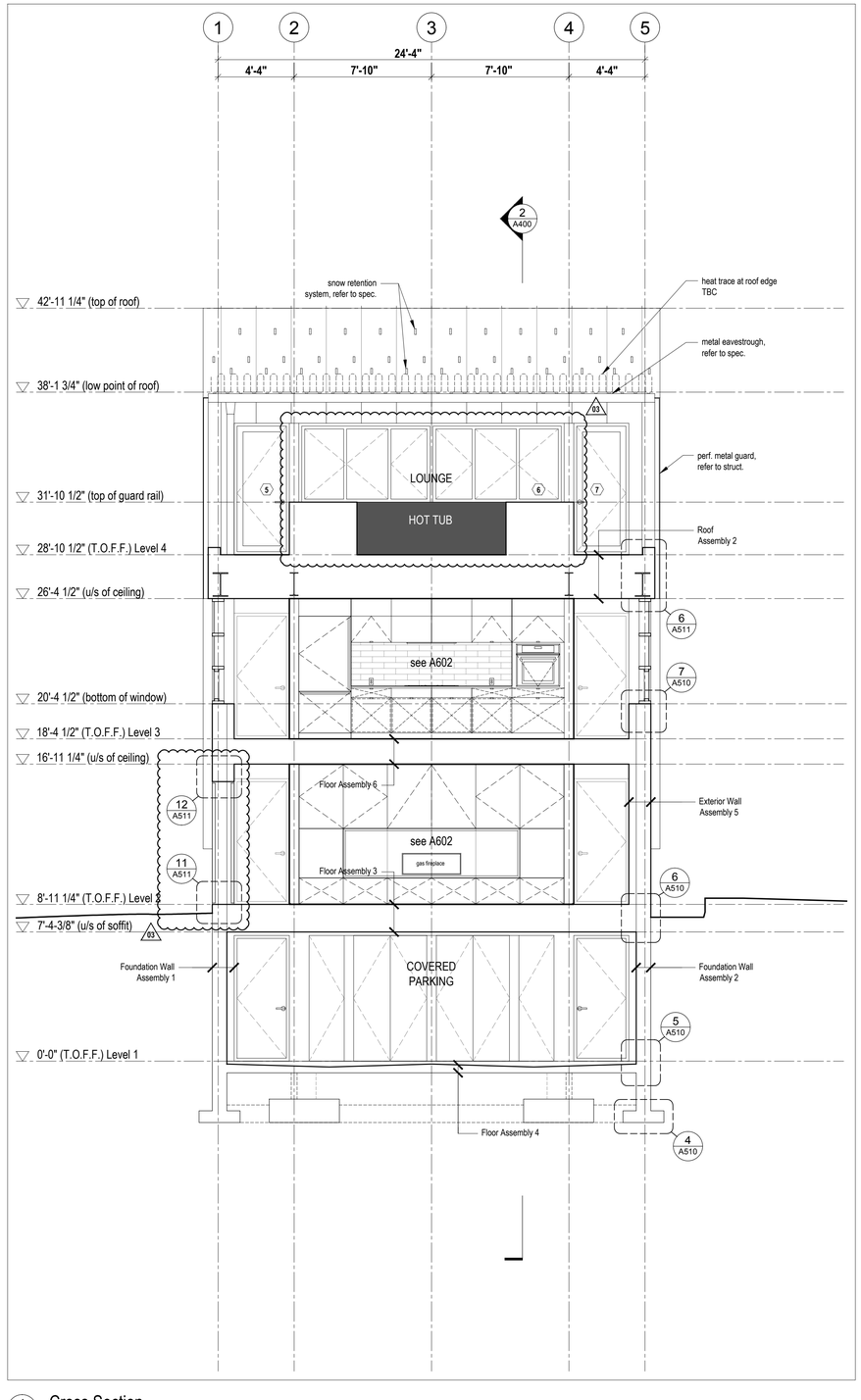
scale: 1/4" = 1'-0"
date: 17-11-23
drawn: WP/RD
chk'd: BML

A301

Exhibit A



2 A400 Longitudinal Section
Scale 1/4" = 1'-0"



1 A400 Cross Section
Scale 1/4" = 1'-0"

Lot 71R
Village House

Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple

Architects Limited

2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4

ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
3	Issued for Construction	2018.03.13
2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1

Revision:

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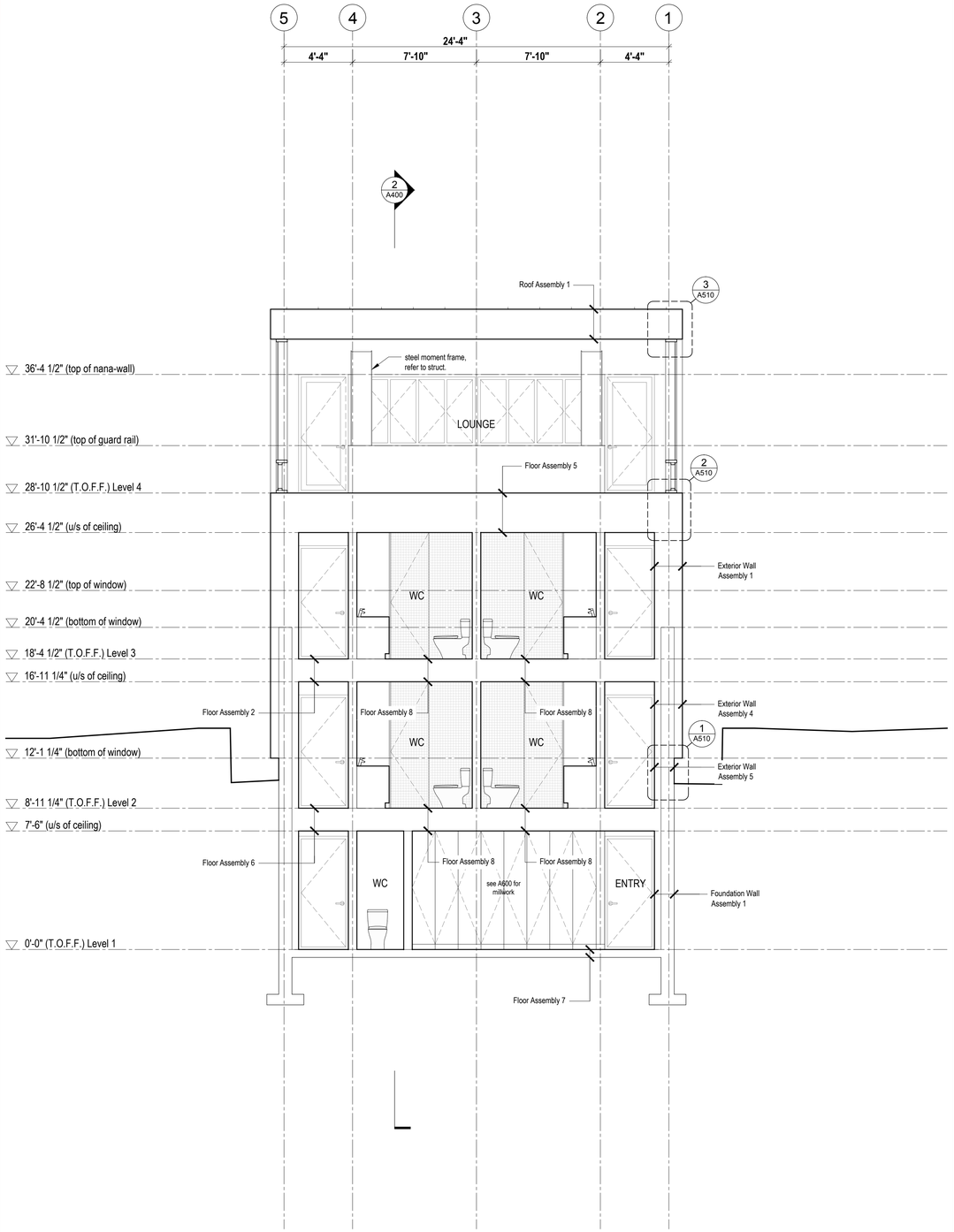
Building Sections

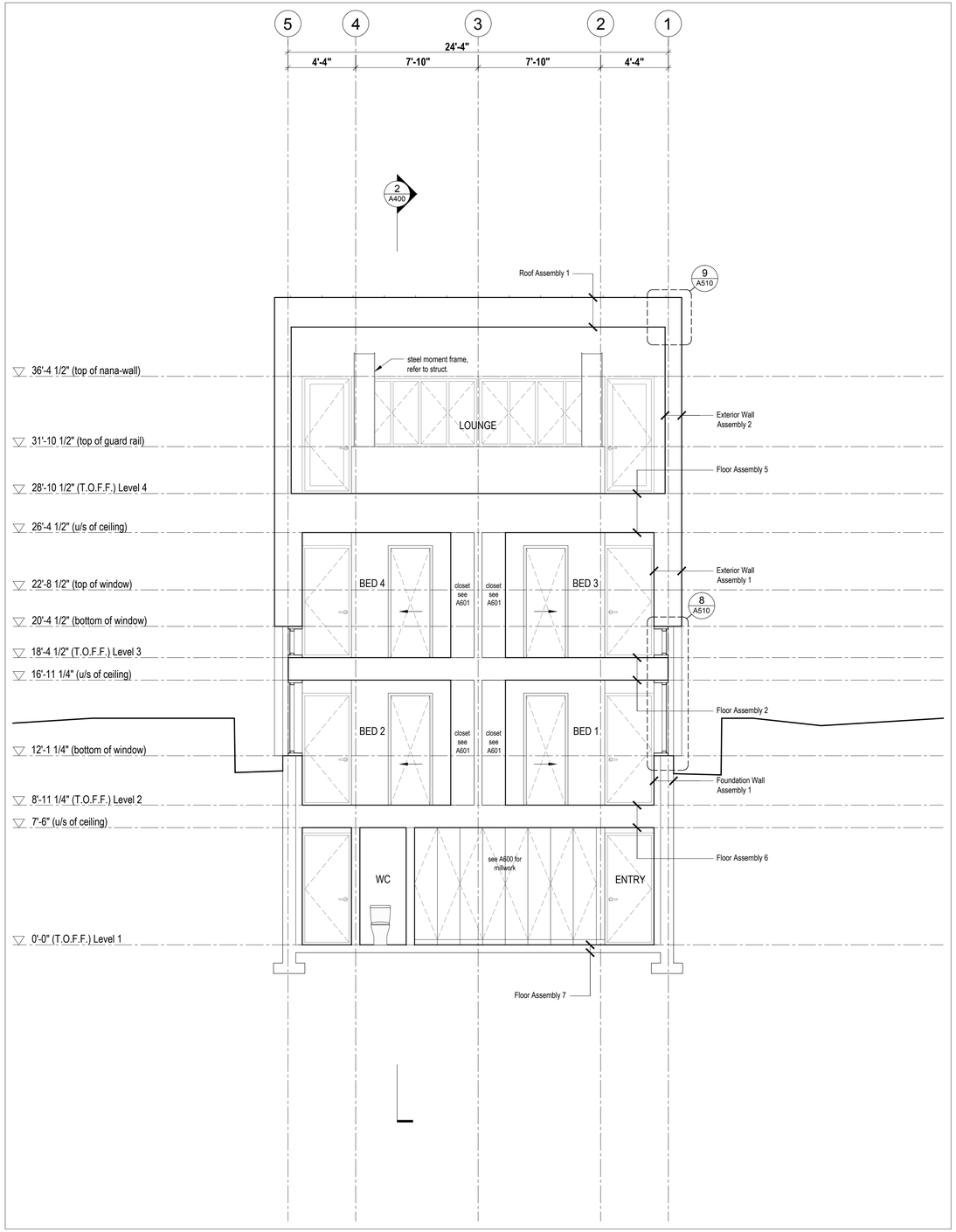
scale: 1/4" = 1'-0"
date: 17-11-23
drawn: WP/RD
chk'd: BML

A400

Exhibit A



2 A401 Cross Section
Scale 1/4" = 1'-0"



1 A401 Cross Section
Scale 1/4" = 1'-0"

Lot 71R
Village House

Summit Powder Mountain
Eden, Utah

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Architects Limited
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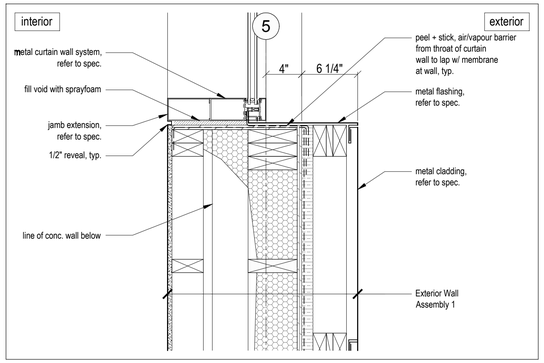
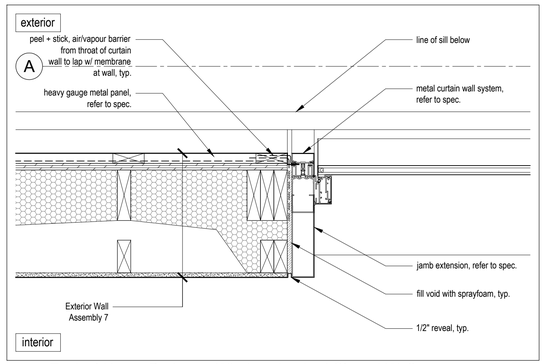
scale: 1/4" = 1'-0"
date: 17-11-23
drawn: WP/RD
chk'd: BML

A401

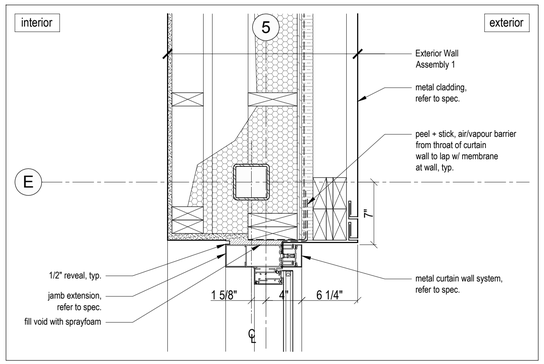
Exhibit A



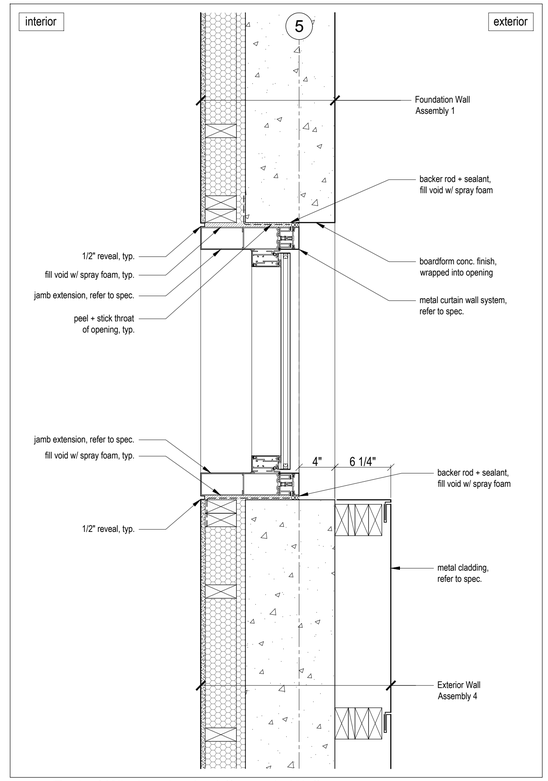
7 A500 Window Jamb at Bedroom Window
Scale 1 1/2" = 1'-0"



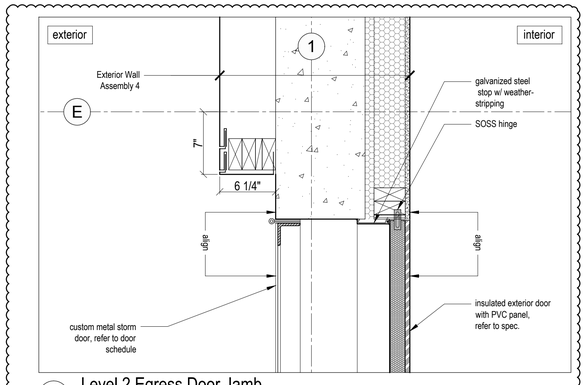
10 A500 Typical Upper Bedroom Window Jamb at Sloped Wall
Scale 1 1/2" = 1'-0"



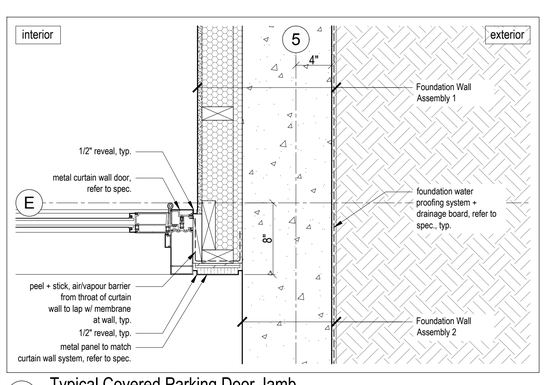
6 A500 Window Jamb at Kitchen Window
Scale 1 1/2" = 1'-0"



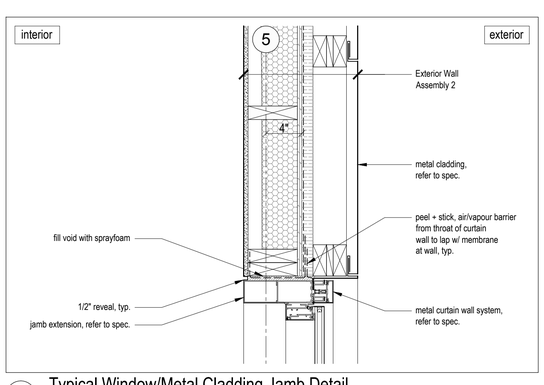
3 A500 Typical Window Jamb at Concrete Wall
Scale 1 1/2" = 1'-0"



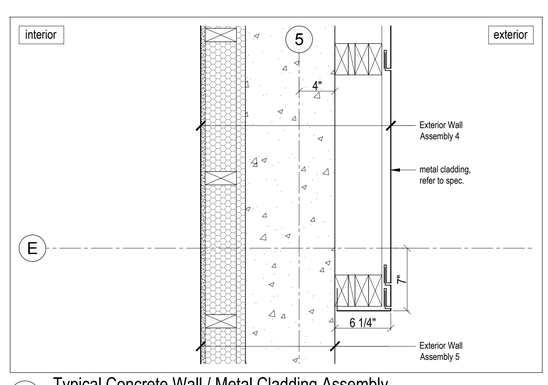
12 A500 Level 2 Egress Door Jamb
Scale 1 1/2" = 1'-0"



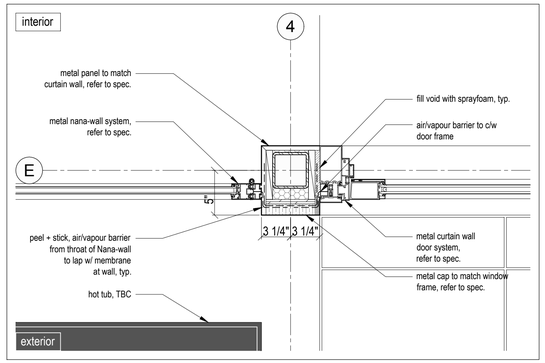
9 A500 Typical Covered Parking Door Jamb
Scale 1 1/2" = 1'-0"



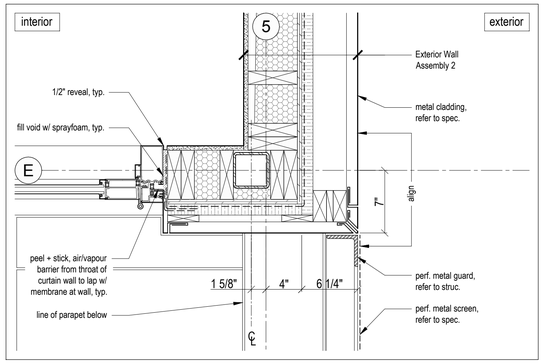
5 A500 Typical Window/Metal Cladding Jamb Detail
Scale 1 1/2" = 1'-0"



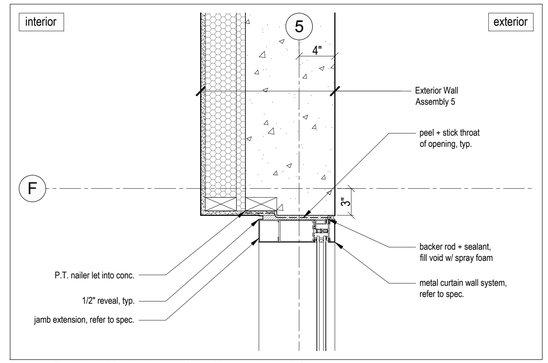
2 A500 Typical Concrete Wall / Metal Cladding Assembly
Scale 1 1/2" = 1'-0"



8 A500 HSS Detail at Nana-wall / Door Jamb
Scale 1 1/2" = 1'-0"



4 A500 Roof Deck Door Jamb and Perforated Guard
Scale 1 1/2" = 1'-0"



1 A500 Typical Curtain Wall to Concrete Wall
Scale 1 1/2" = 1'-0"

Lot 71R
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Summit Powder Mountain
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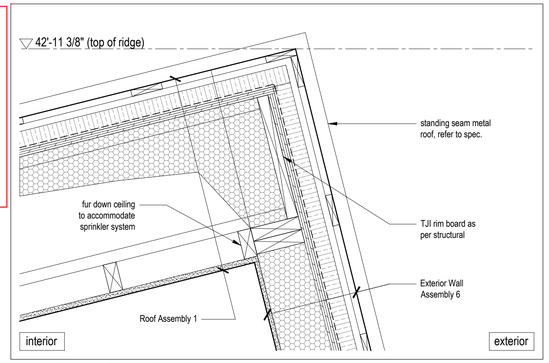
Plan Details

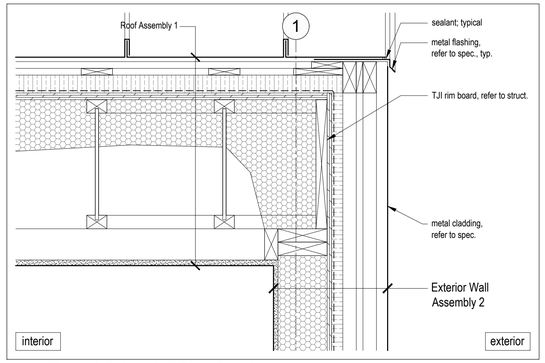
scale: 1 1/2" = 1'-0"
date: 17-11-23
drawn: RD/WP
chk'd: BML

A500

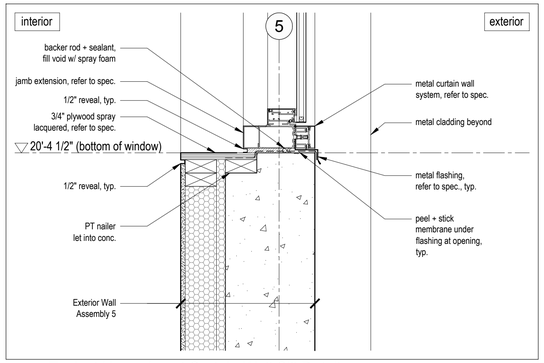
Exhibit A



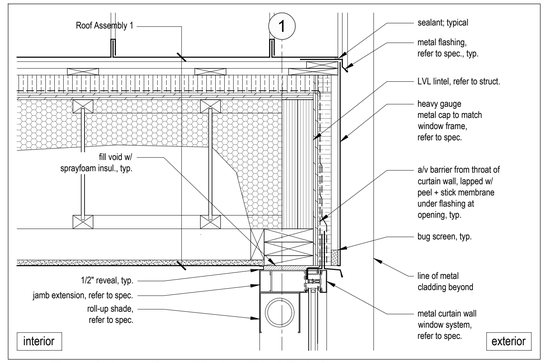
12 A510 Typical Ridge Detail
Scale 1 1/2" = 1'-0"



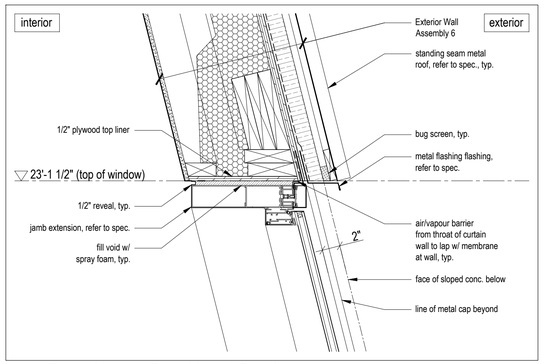
9 A510 Typical Rake Wall/Roof Detail
Scale 1 1/2" = 1'-0"



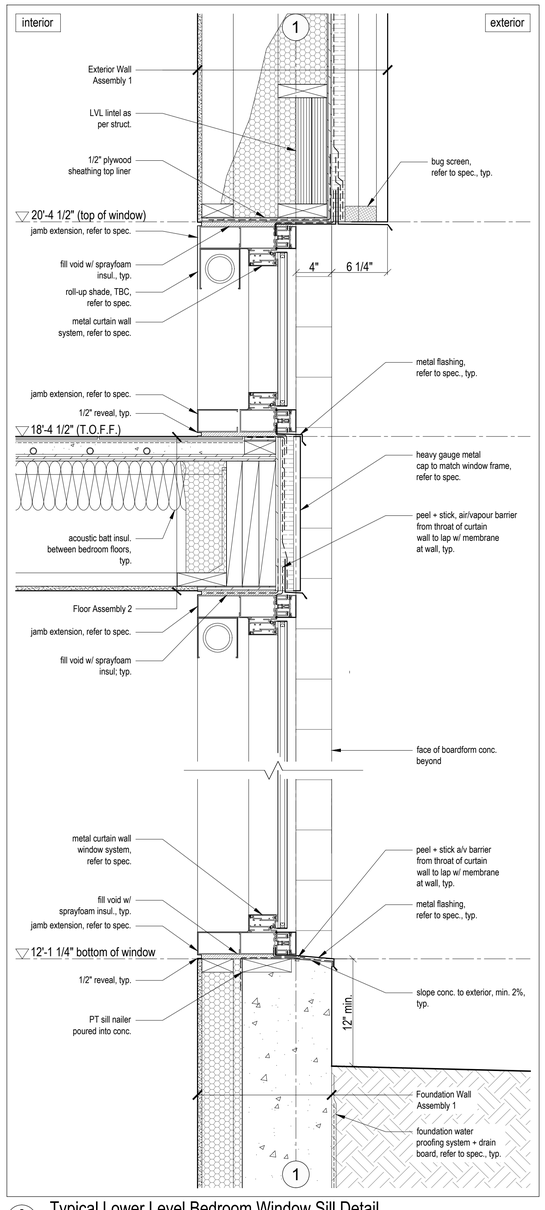
7 A510 Typical Upper Level Curtain Wall Sill Detail



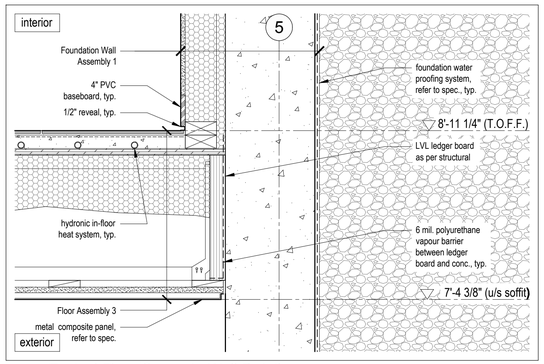
3 A510 Typical Upper Rake Window/Roof Detail
Scale 1 1/2" = 1'-0"



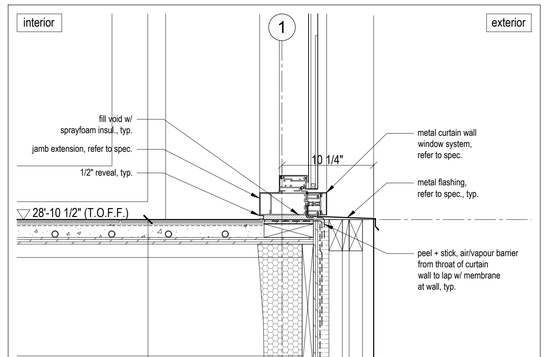
11 A510 Typical Lower Raked Head Detail
Scale 1 1/2" = 1'-0"

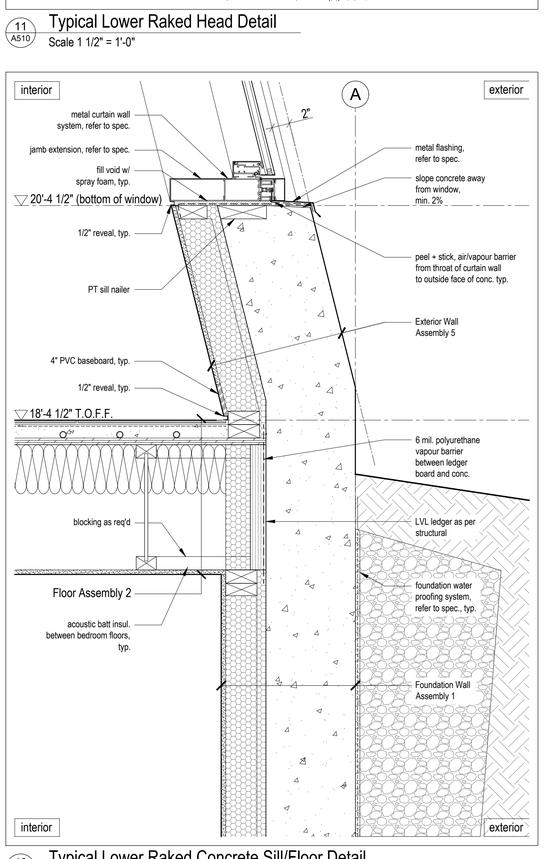


8 A510 Typical Lower Level Bedroom Window Sill Detail
Scale 1 1/2" = 1'-0"

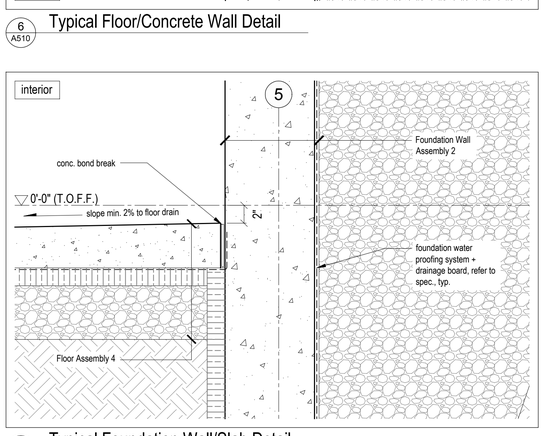


6 A510 Typical Floor/Concrete Wall Detail

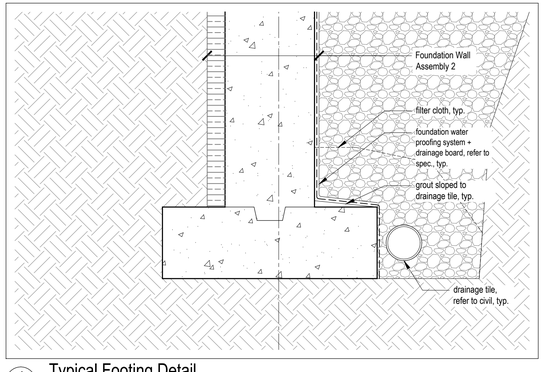




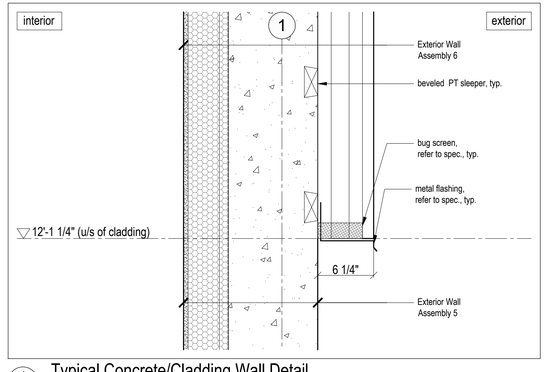
10 A510 Typical Lower Raked Concrete Sill/Floor Detail
Scale 1 1/2" = 1'-0"



5 A510 Typical Foundation Wall/Slab Detail



4 A510 Typical Footing Detail



1 A510 Typical Concrete/Cladding Wall Detail
Scale 1 1/2" = 1'-0"

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drawn: RD
chk'd: BML

A510

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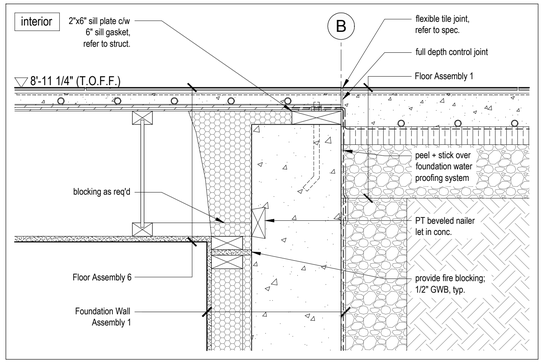
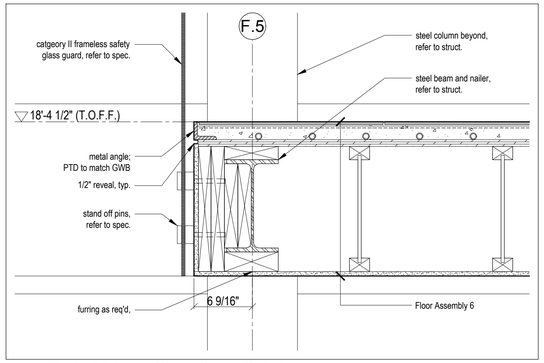
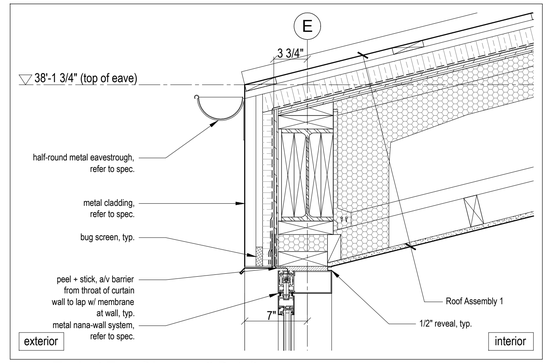


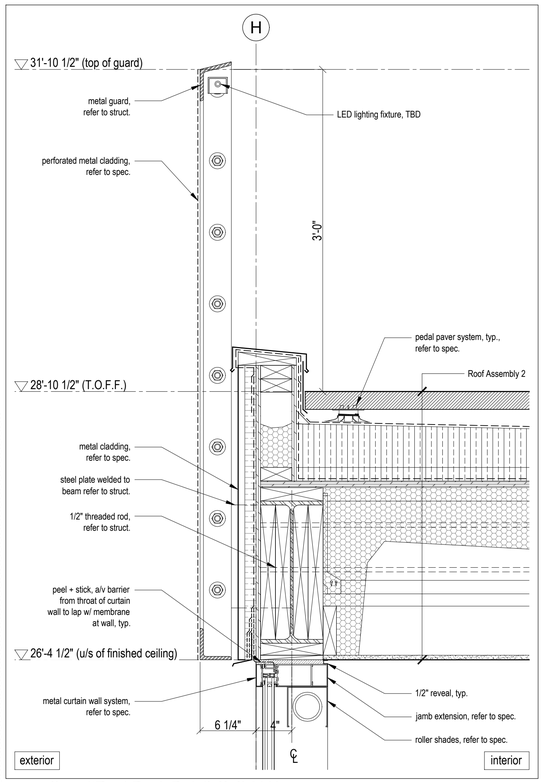
10 A511 Foundation Wall/Slab/Floor Detail
Scale 1 1/2" = 1'-0"



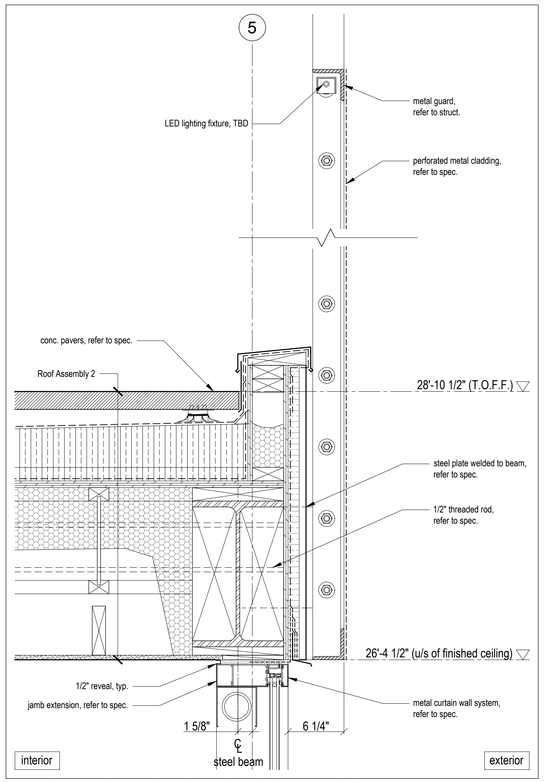
7 A511 Typical Interior Glass Guard Detail
Scale 1 1/2" = 1'-0"



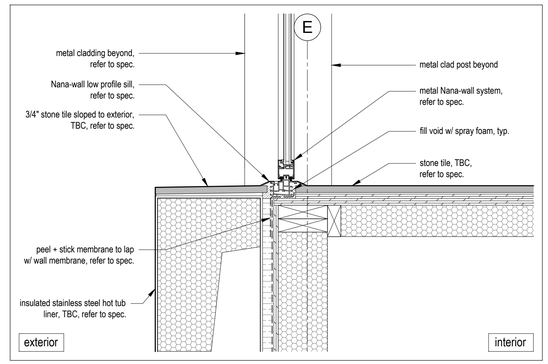
4 A511 Typical Eave/Nana-wall Detail



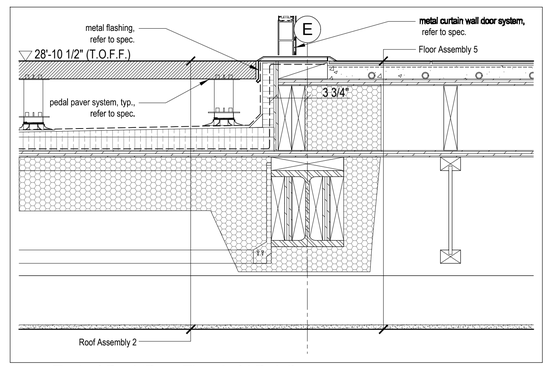
9 A511 Guard/Roof Deck Detail @ Grid H



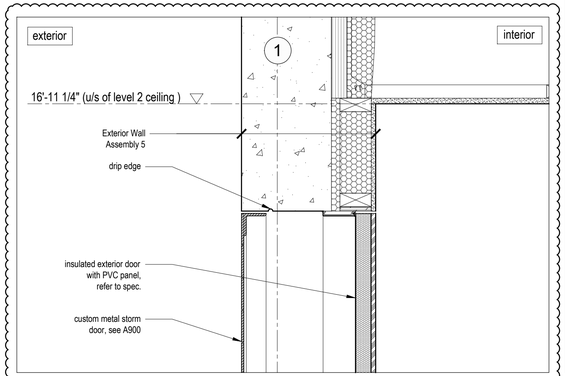
6 A511 Typical Guard/Roof Deck Detail @ Grid 1 & 5
Scale 1 1/2" = 1'-0"

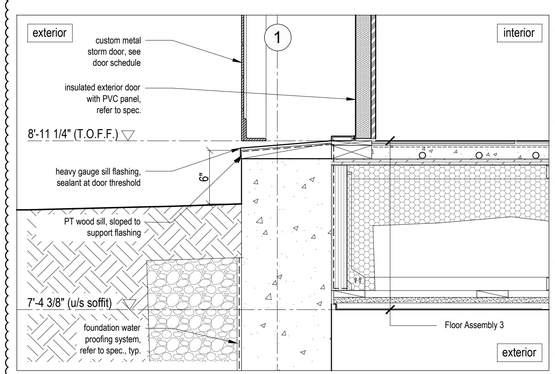


3 A511 Nana-wall Sill Detail

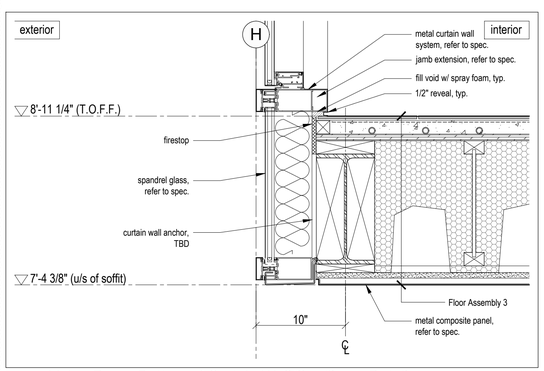


2 A511 Typical Deck/Door Threshold Detail

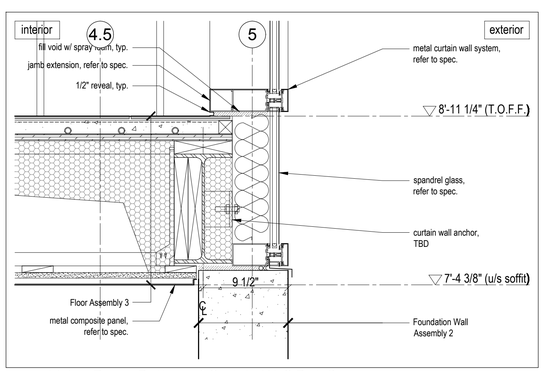




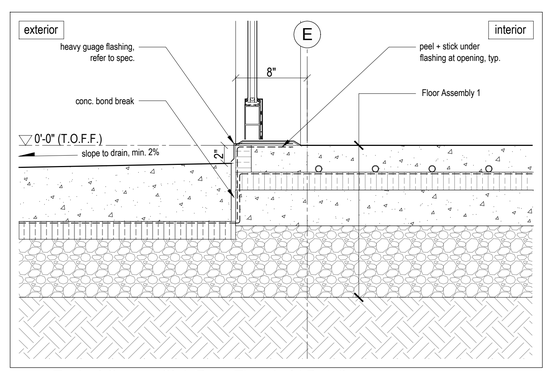
11 A511 Egress Door Sill
Scale 1 1/2" = 1'-0"



8 A511 Living Room Bottom of Curtain Wall/Cantilever Detail
Scale 1 1/2" = 1'-0"



5 A511 Living Room Bottom of Curtain Wall Detail
Scale 1 1/2" = 1'-0"



1 A511 Typical Garage Slab/Door Threshold Detail

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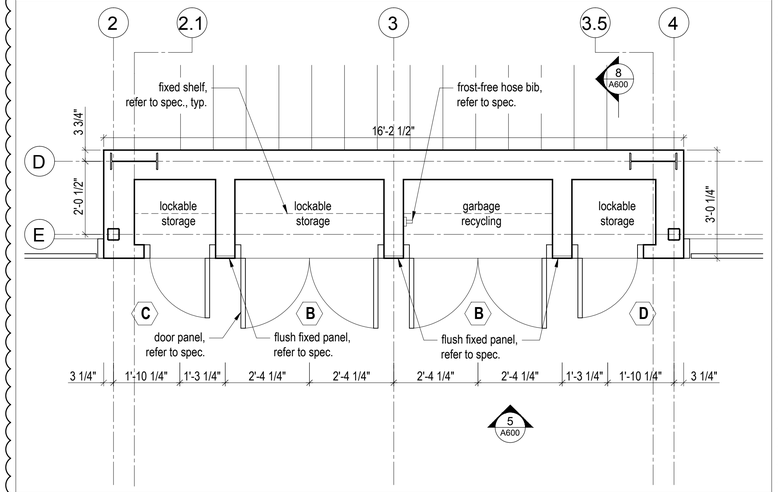
Section Details

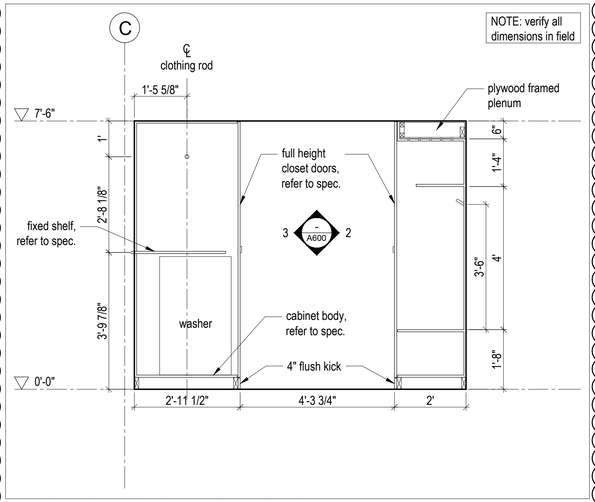
scale: 1 1/2" = 1'-0"
date: 17-11-23
drawn: RD/WP
chk'd: BML

A511

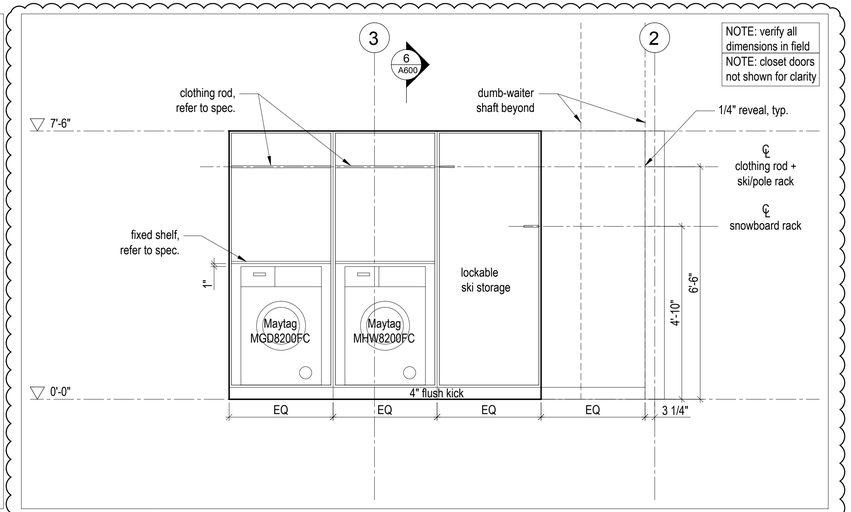
Exhibit A



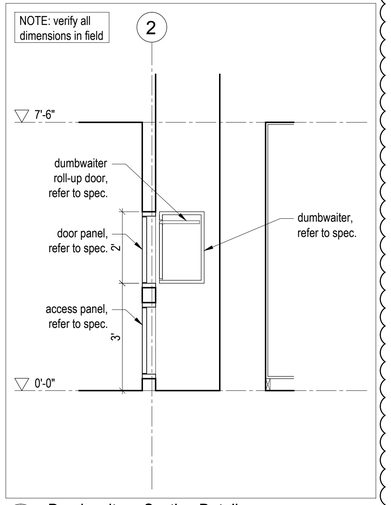
9 A600 Garage Closet - Enlarged Plan
Scale 1/2" = 1'-0"



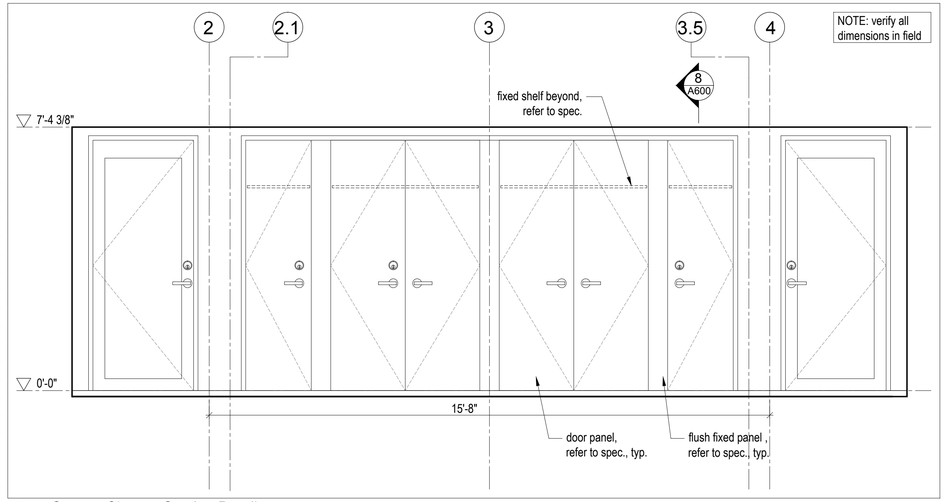
6 A600 Laundry/Ski Equipment Closet- Section Detail
Scale 1/2" = 1'-0"



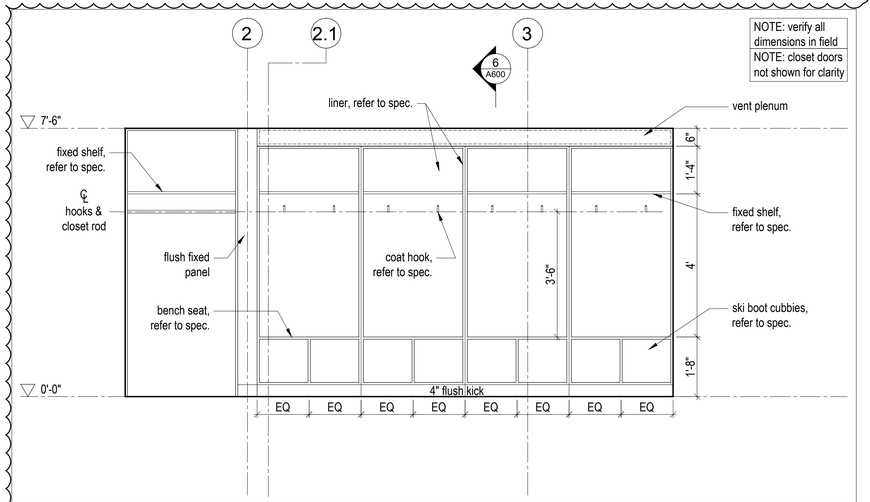
3 A600 Laundry/Ski Equipment Closet - Elevation
Scale 1/2" = 1'-0"



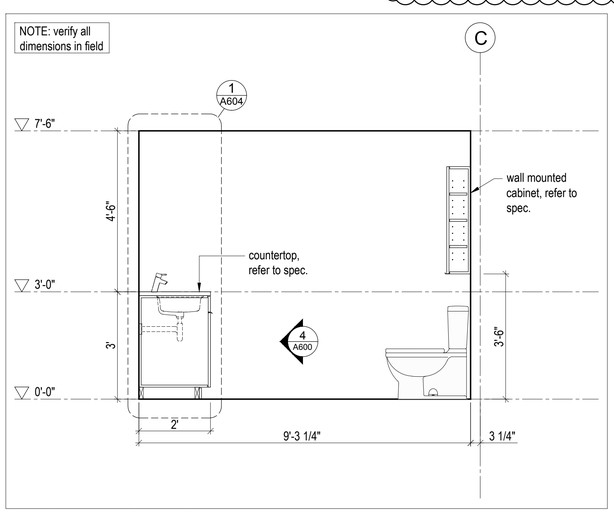
8 A600 Dumbwaiter - Section Detail
Scale 1/2" = 1'-0"



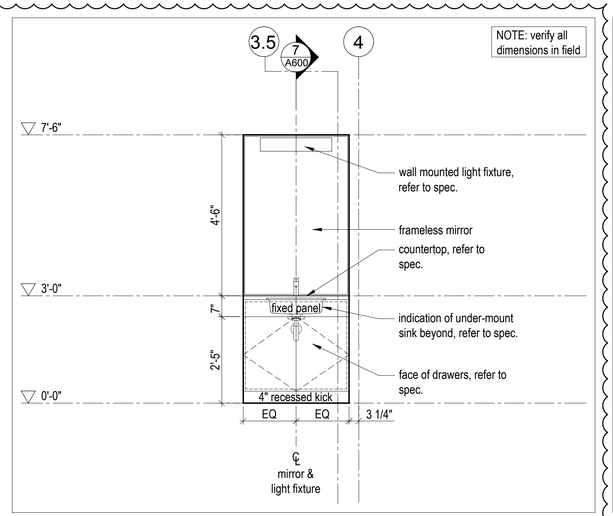
5 A600 Garage Closet - Section Detail
Scale 1/2" = 1'-0"



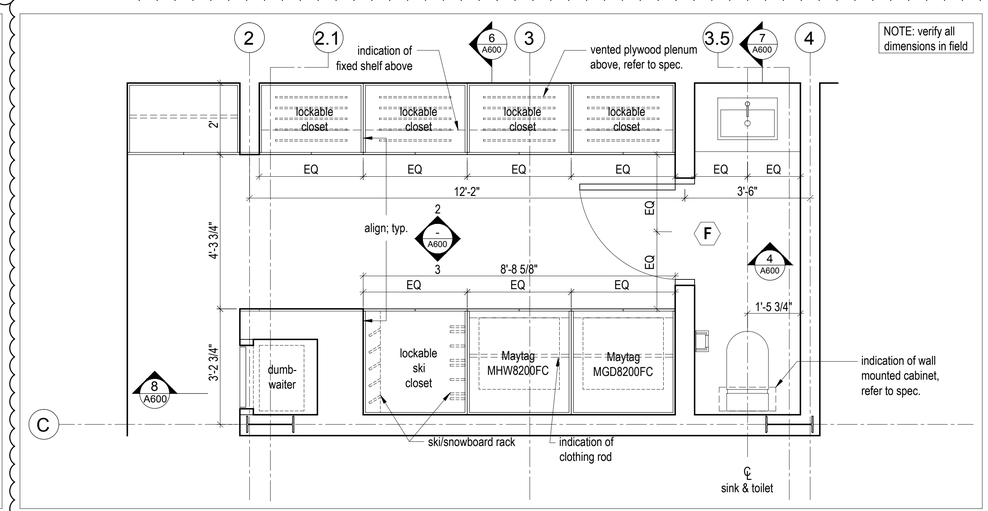
2 A600 Ski Equipment Closet - Elevation
Scale 1/2" = 1'-0"



7 A600 Bathroom - Section Detail
Scale 1/2" = 1'-0"



4 A600 Bathroom - Elevation
Scale 1/2" = 1'-0"



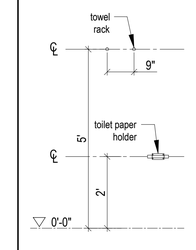
1 A600 Bathroom - Enlarged Plan
Scale 1/2" = 1'-0"

Lot 71R
Village Houses
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field



No.	Description	Date
3	Issued for Construction	2018.03.13
2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1

Revision:

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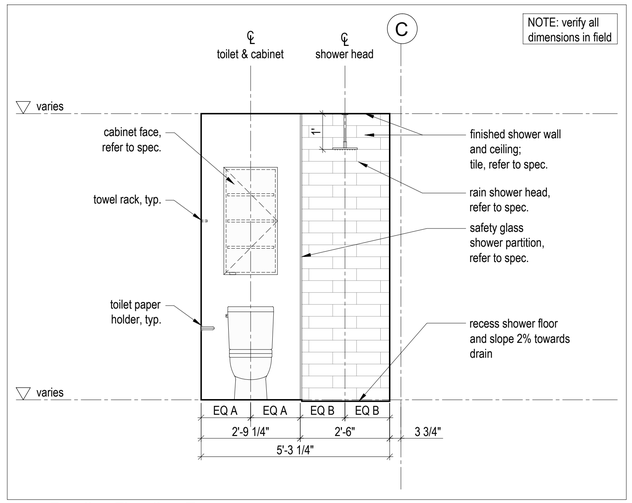
Millwork - Ground Floor

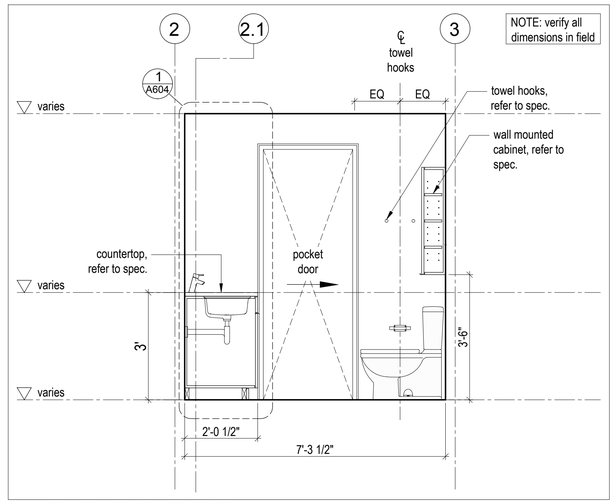
scale: 1/2" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

A600

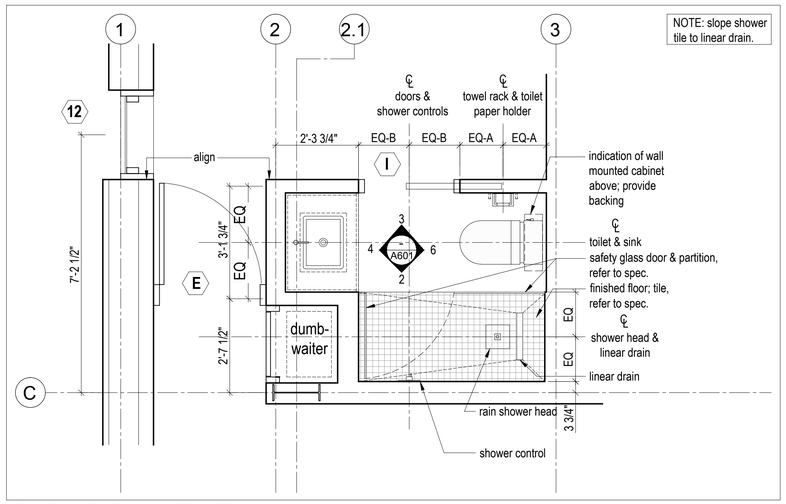
Exhibit A



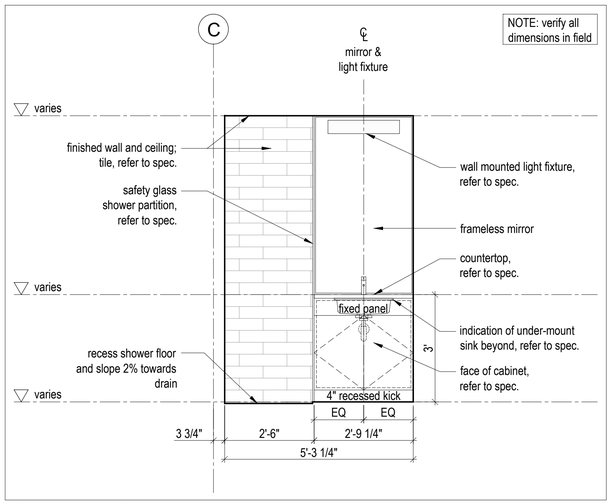
6 A601 Ensuite - Elevation, Typ.
Scale 1/2" = 1'-0"



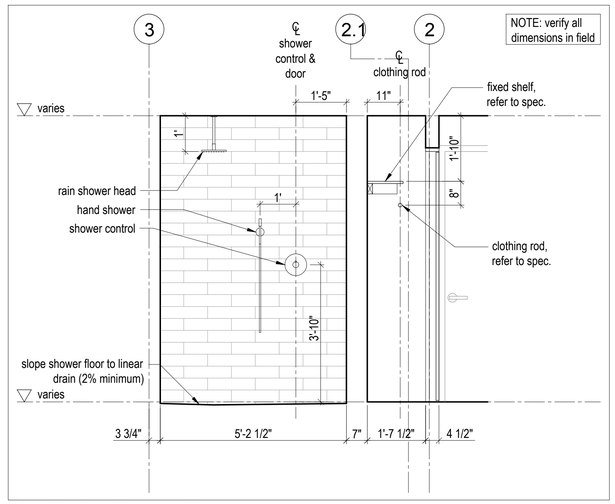
3 A601 Ensuite - Section Detail, Typ.
Scale 1/2" = 1'-0"



8 A601 Ensuite - Enlarged Plan, Typ.
Scale 1/2" = 1'-0"

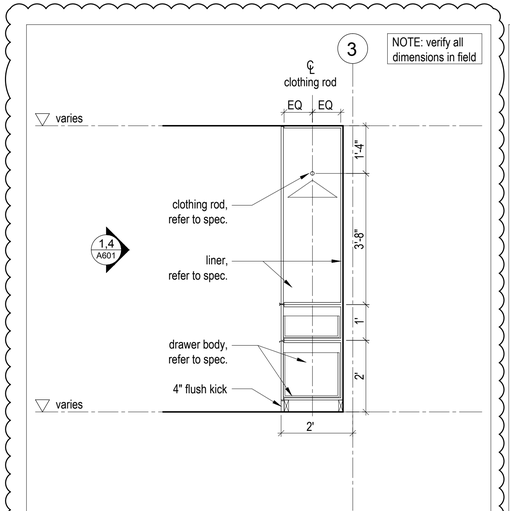


5 A601 Ensuite - Elevation, Typ.
Scale 1/2" = 1'-0"

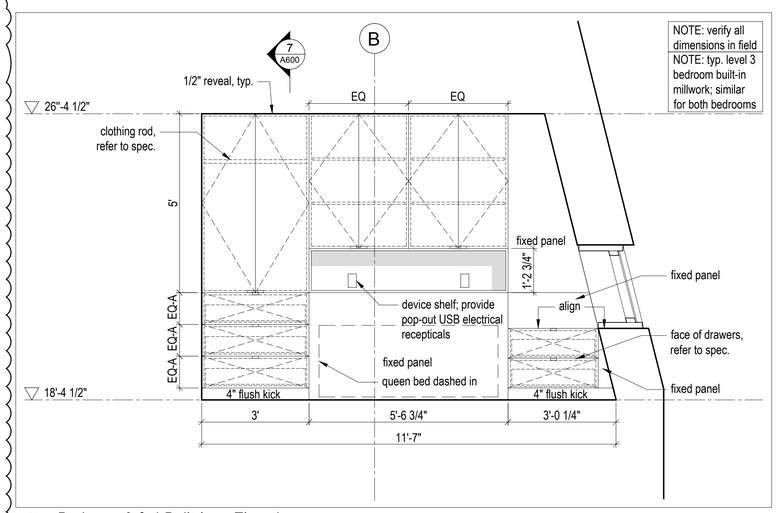


2 A601 Ensuite - Elevation, Typ.
Scale 1/2" = 1'-0"

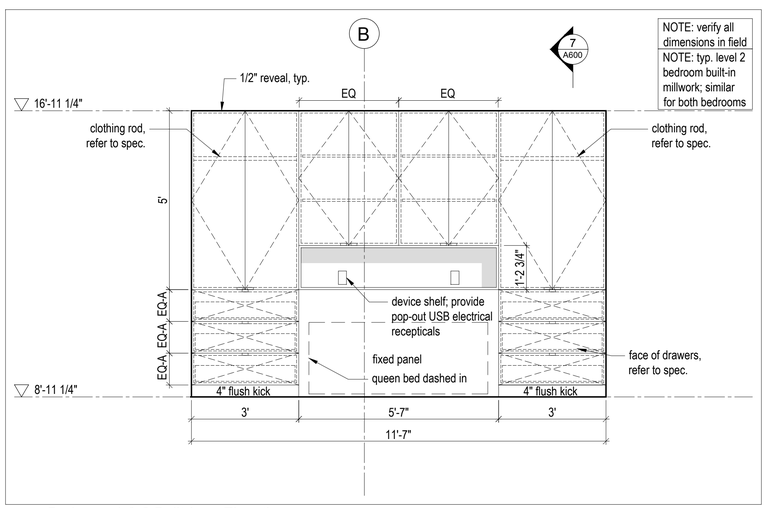
03



7 A601 Bedroom 1-4 Built-Ins - Section Detail
Scale 1/2" = 1'-0"



4 A601 Bedroom 3 & 4 Built-Ins - Elevation
Scale 1/2" = 1'-0"



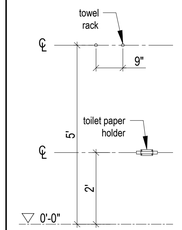
1 A601 Bedroom 1 & 2 Built-Ins - Elevation
Scale 1/2" = 1'-0"

Lot 71R
Village Houses
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field



No.	Description	Date
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2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1
Revision:		

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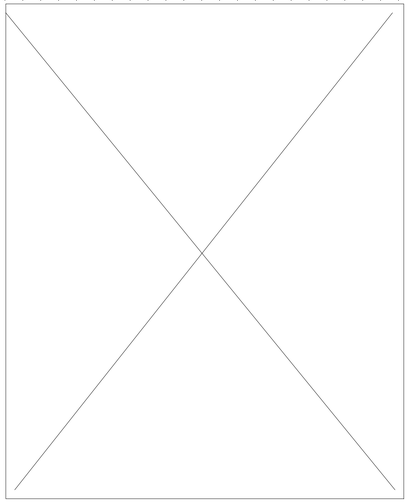
Millwork - Second Floor

scale: 1/2" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

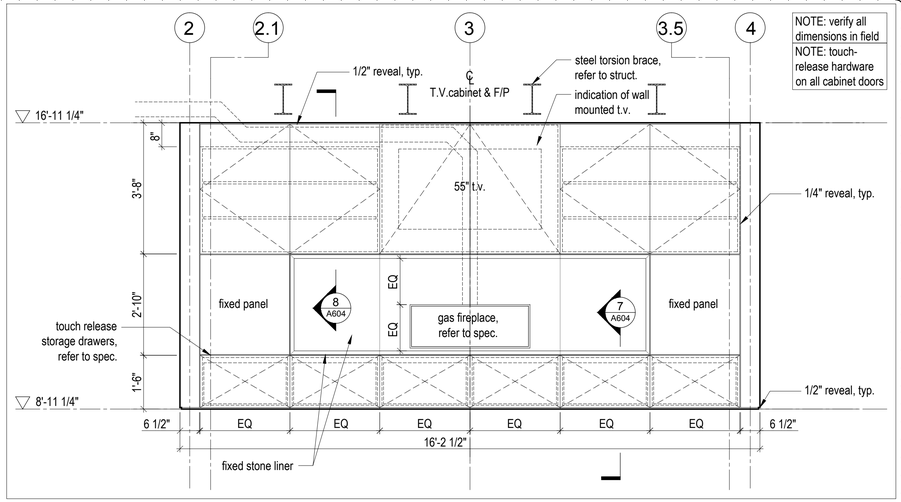
A601

Exhibit A

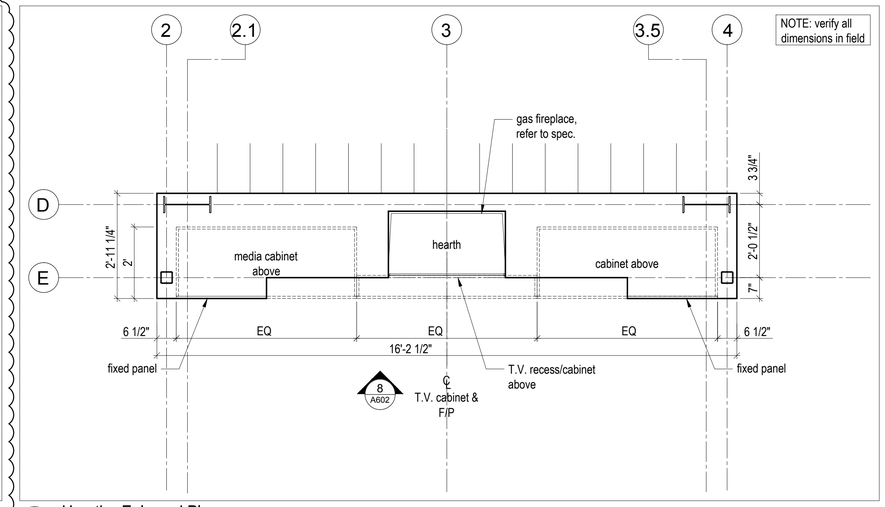
03



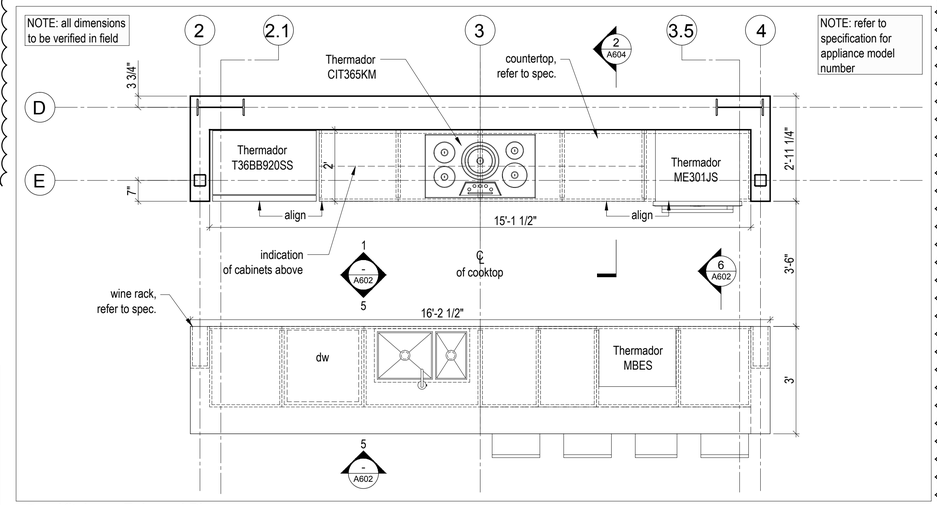
9 A604 Not Used
Scale 1/2" = 1'-0"



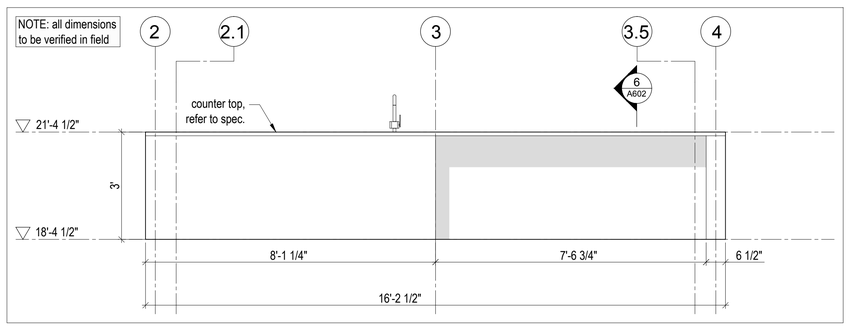
8 A604 Hearth - Elevation
Scale 1/2" = 1'-0"



3 A604 Hearth - Enlarged Plan
Scale 1/2" = 1'-0"

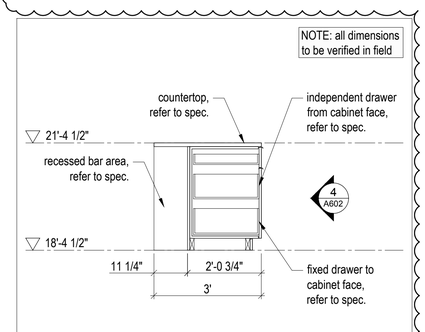


2 A602 Kitchen - Enlarged Plan
Scale 1/2" = 1'-0"

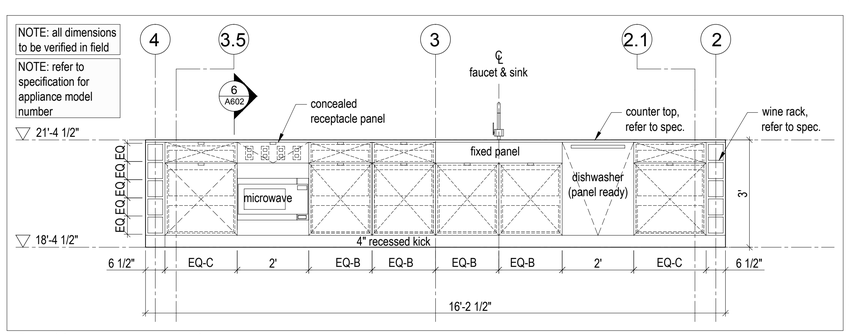


5 A602 Kitchen Island - Elevation
Scale 1/2" = 1'-0"

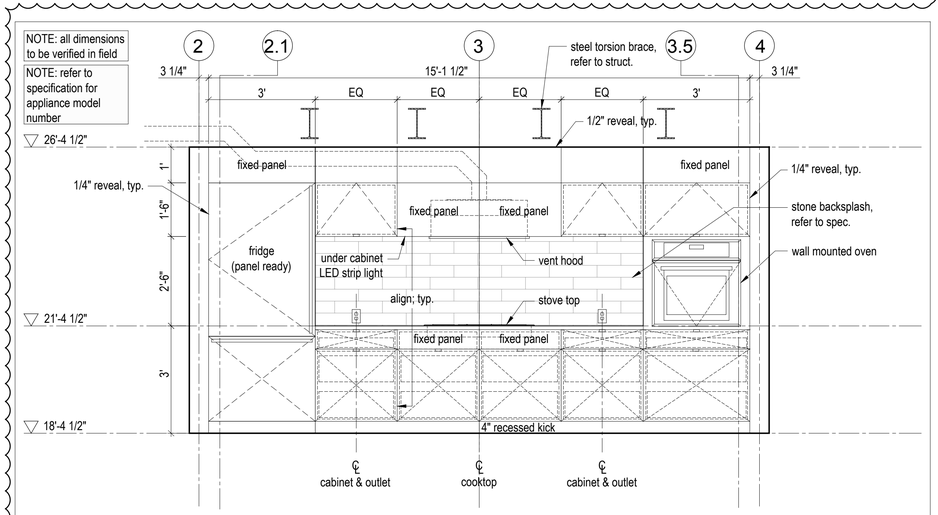
7 A602 Not Used
Scale 1/2" = 1'-0"



6 A602 Kitchen Island - Section Detail
Scale 1/2" = 1'-0"



4 A602 Kitchen Island - Elevation
Scale 1/2" = 1'-0"



1 A602 Kitchen - Elevation
Scale 1/2" = 1'-0"

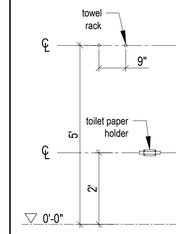
Lot 71R
Village Houses
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field

▽ 8'-0"
Typical installation heights; provide backing as needed



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Revision:		

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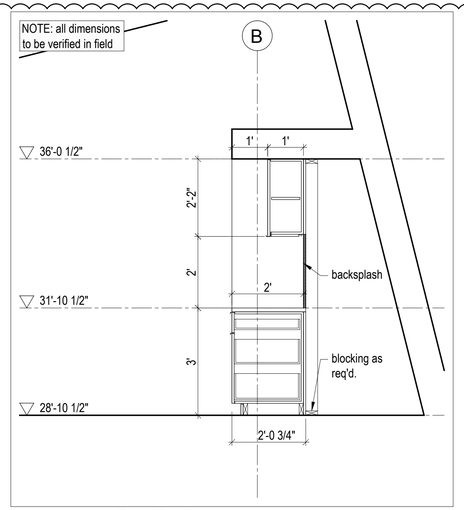
Millwork - Third & Fourth Floor

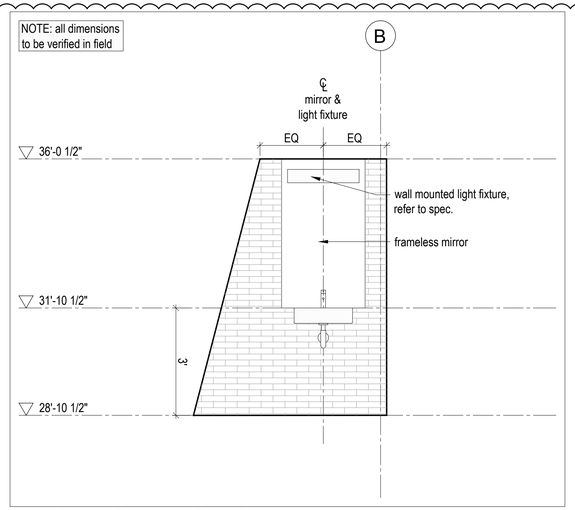
scale: 1/2" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

A602

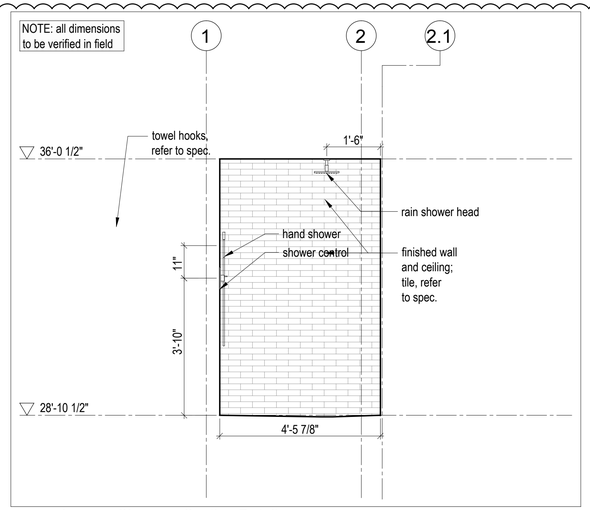
Exhibit A



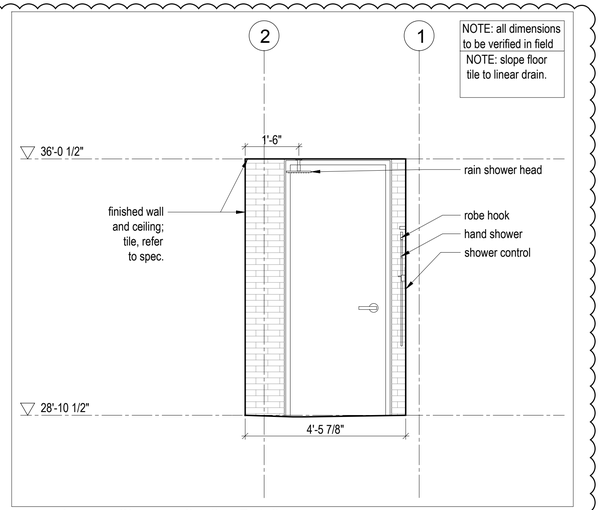
9 A603 Lounge Bar - Section
Scale 1/2" = 1'-0"



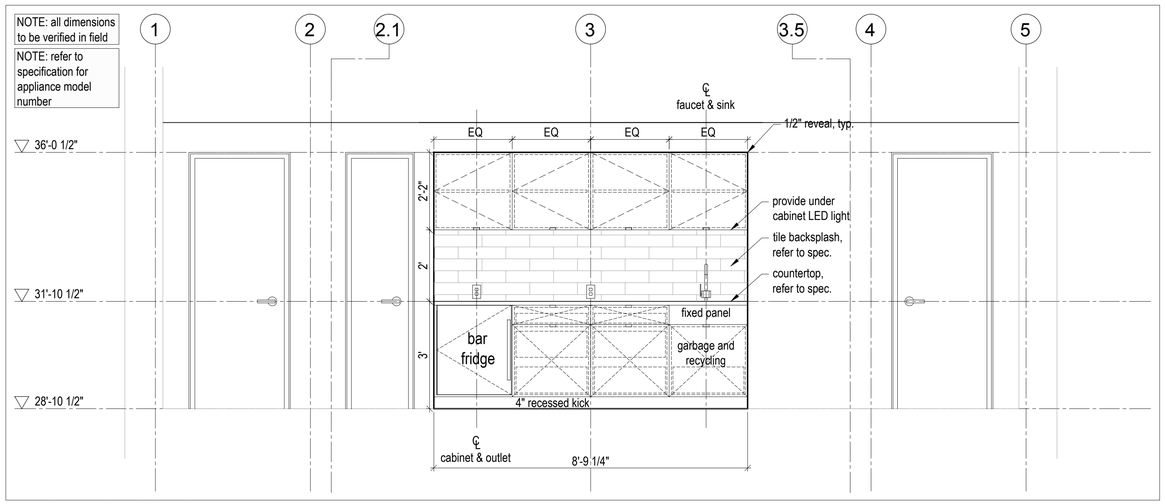
8 A603 Lounge Bathroom - Elevation
Scale 1/2" = 1'-0"



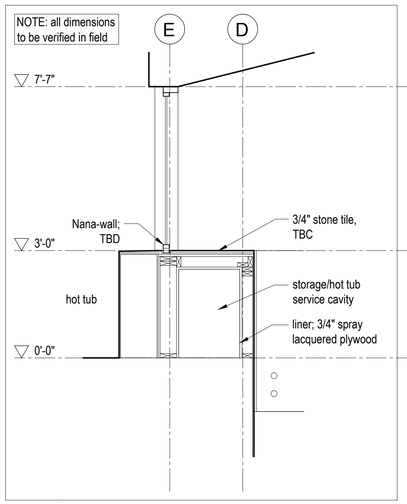
7 A603 Lounge Shower - Section Detail
Scale 1/2" = 1'-0"



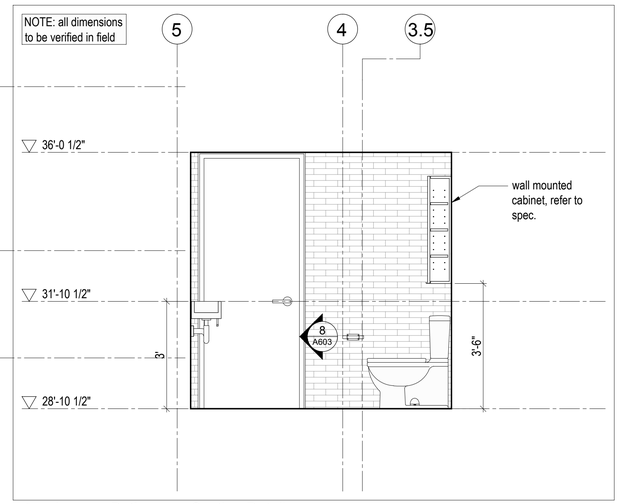
6 A603 Lounge Shower - Section Detail
Scale 1/2" = 1'-0"



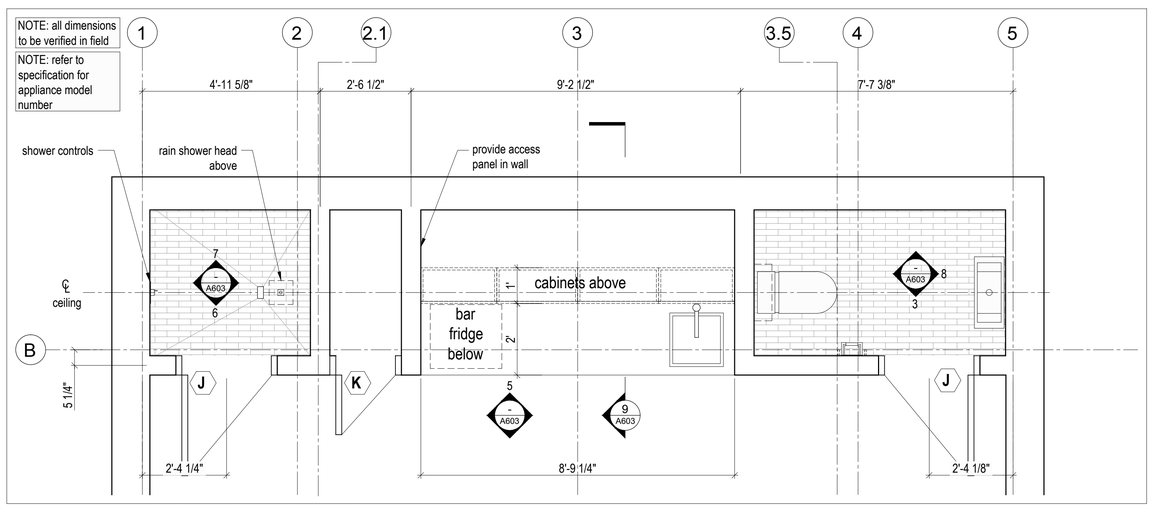
5 A603 Lounge Bar - Elevation
Scale 1/2" = 1'-0"



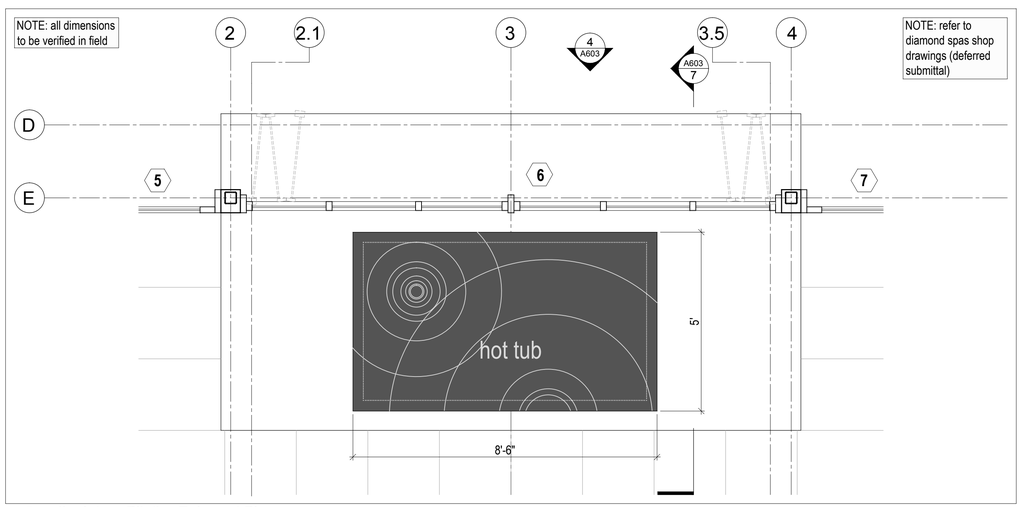
4 A603 Sculpture Plinth - Section Detail
Scale 1/2" = 1'-0"



3 A603 Lounge Bathroom - Section Detail
Scale 1/2" = 1'-0"



2 A603 Lounge Shower/Bar/Powder Room - Enlarged Plan
Scale 1/2" = 1'-0"



1 A603 Sculpture Plinth - Enlarged Plan
Scale 1/2" = 1'-0"

Lot 71R
Village Houses
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
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fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field

8'-0"
Typical installation heights; provide backing as needed

towel rack
℄
9"
toilet paper holder
5'
℄
2"
0'-0"

No.	Description	Date
3	Issued for Construction	2018.03.13
2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1

Revision:

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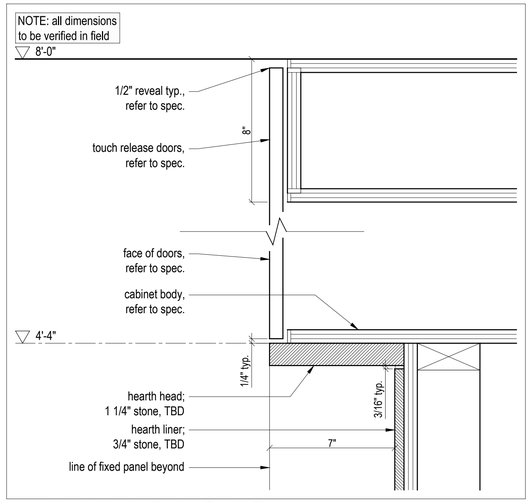
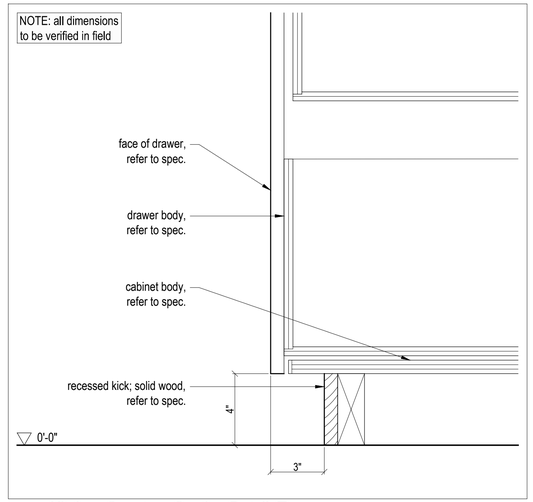
Millwork - Fourth Floor

scale: 1/2" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

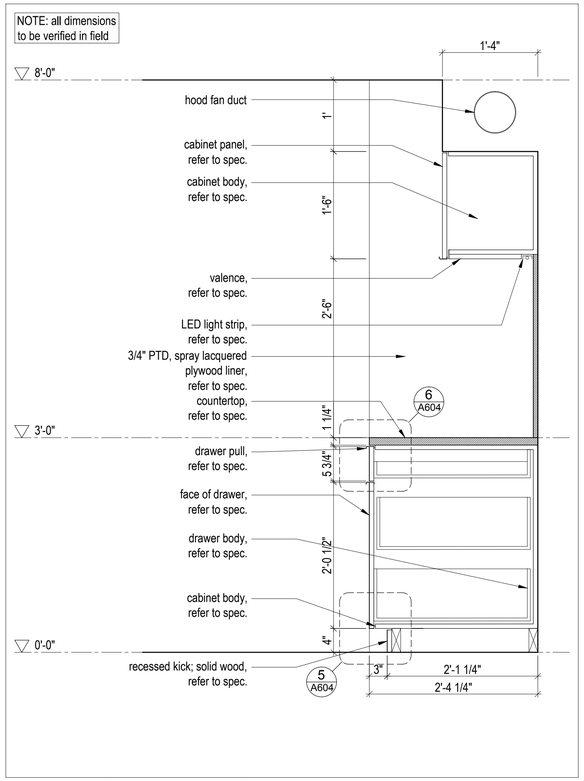
A603



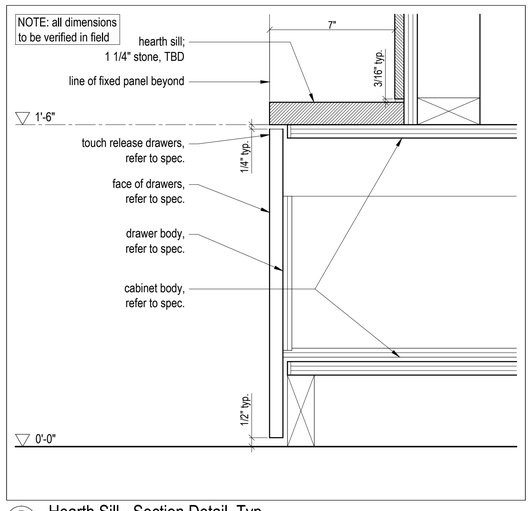
8 A604 Hearth Head - Section Detail, Typ.
Scale 3" = 1'-0"



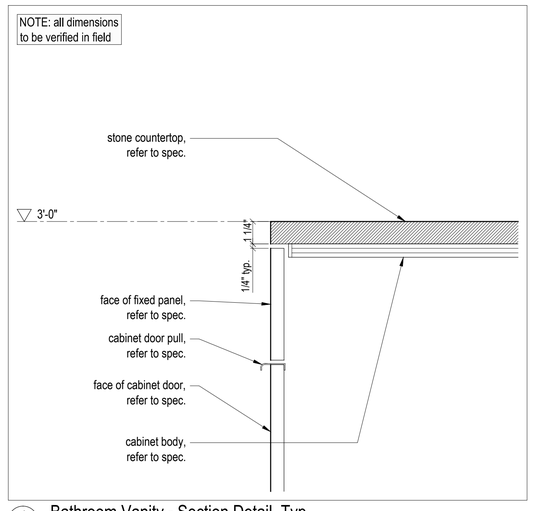
5 A604 Kitchen Counter - Section Detail, Typ.
Scale 3" = 1'-0"



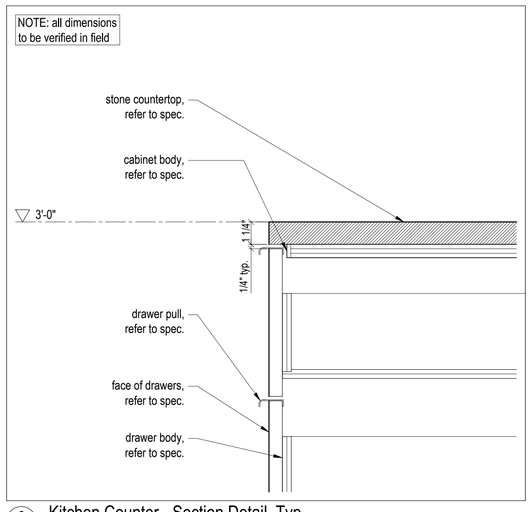
2 A604 Kitchen Counter - Enlarged Section
Scale 1" = 1'-0"



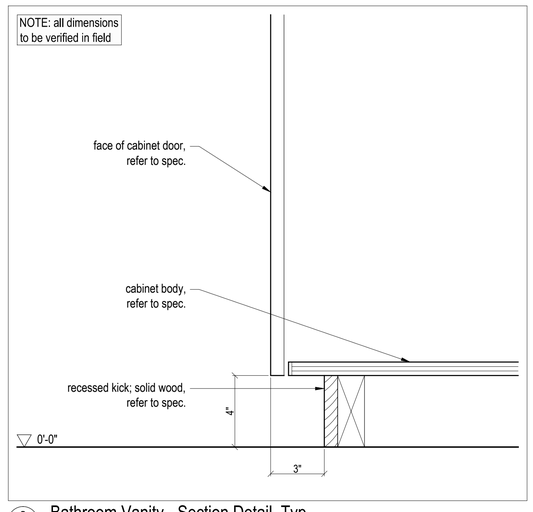
7 A604 Hearth Sill - Section Detail, Typ.
Scale 3" = 1'-0"



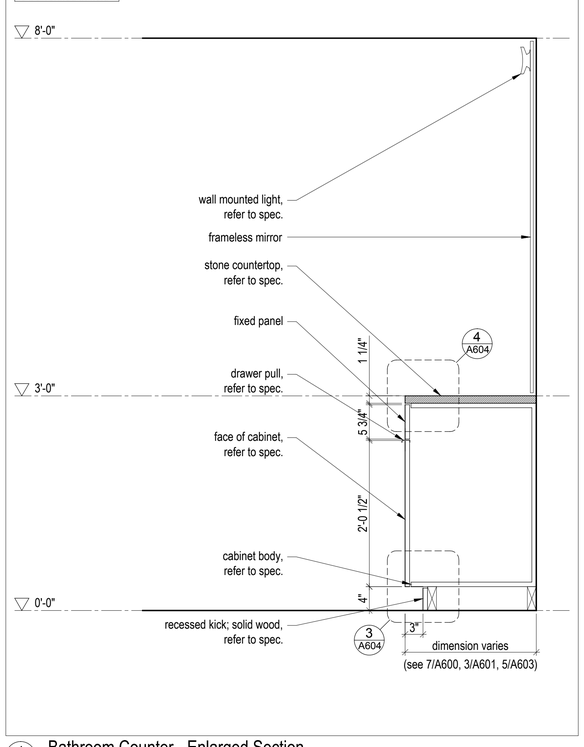
4 A604 Bathroom Vanity - Section Detail, Typ.
Scale 3" = 1'-0"



6 A604 Kitchen Counter - Section Detail, Typ.
Scale 3" = 1'-0"



3 A604 Bathroom Vanity - Section Detail, Typ.
Scale 3" = 1'-0"



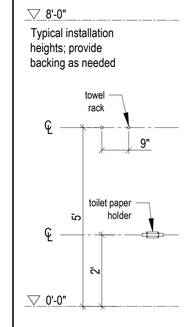
1 A604 Bathroom Counter - Enlarged Section
Scale 1" = 1'-0"

Lot 71R
Village Houses

Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT



3	**Issued for Construction**	**2018.03.13**
2	**Issued for Tender**	**2017.12.22**
No.	**Description**	**Date**
Revision:		

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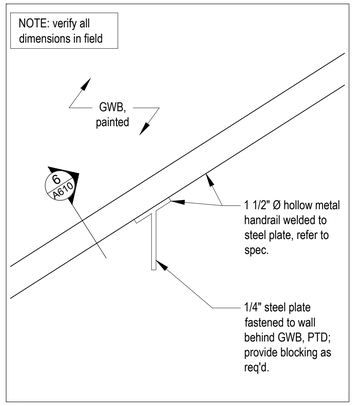
SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Millwork - Details

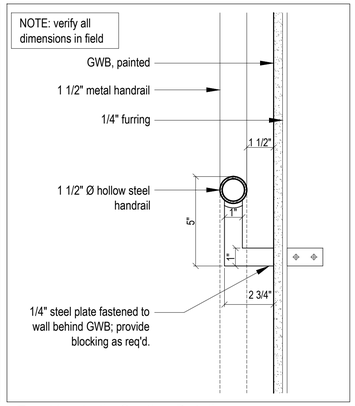
scale: as noted
date: 17-06-15
drawn: RD
chk'd: BML

A604

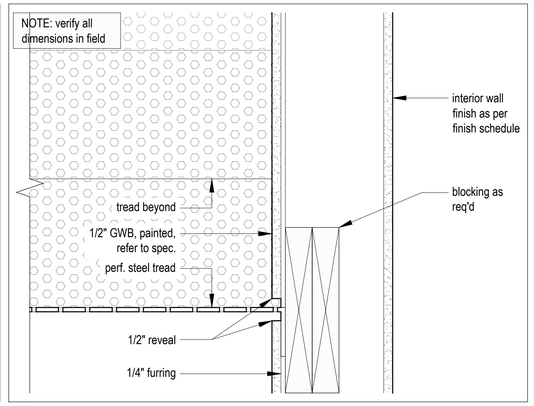
Exhibit A



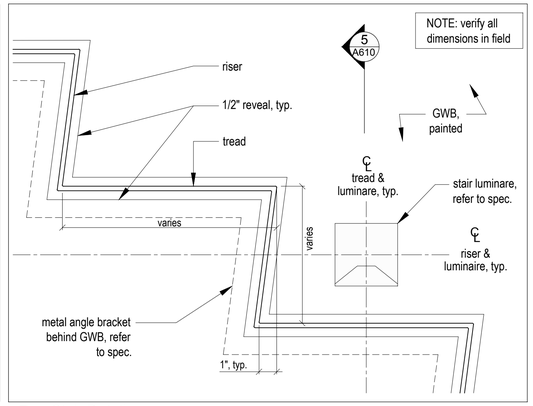
7 A610 Handrail Connection - Detail
Scale 3" = 1'-0"



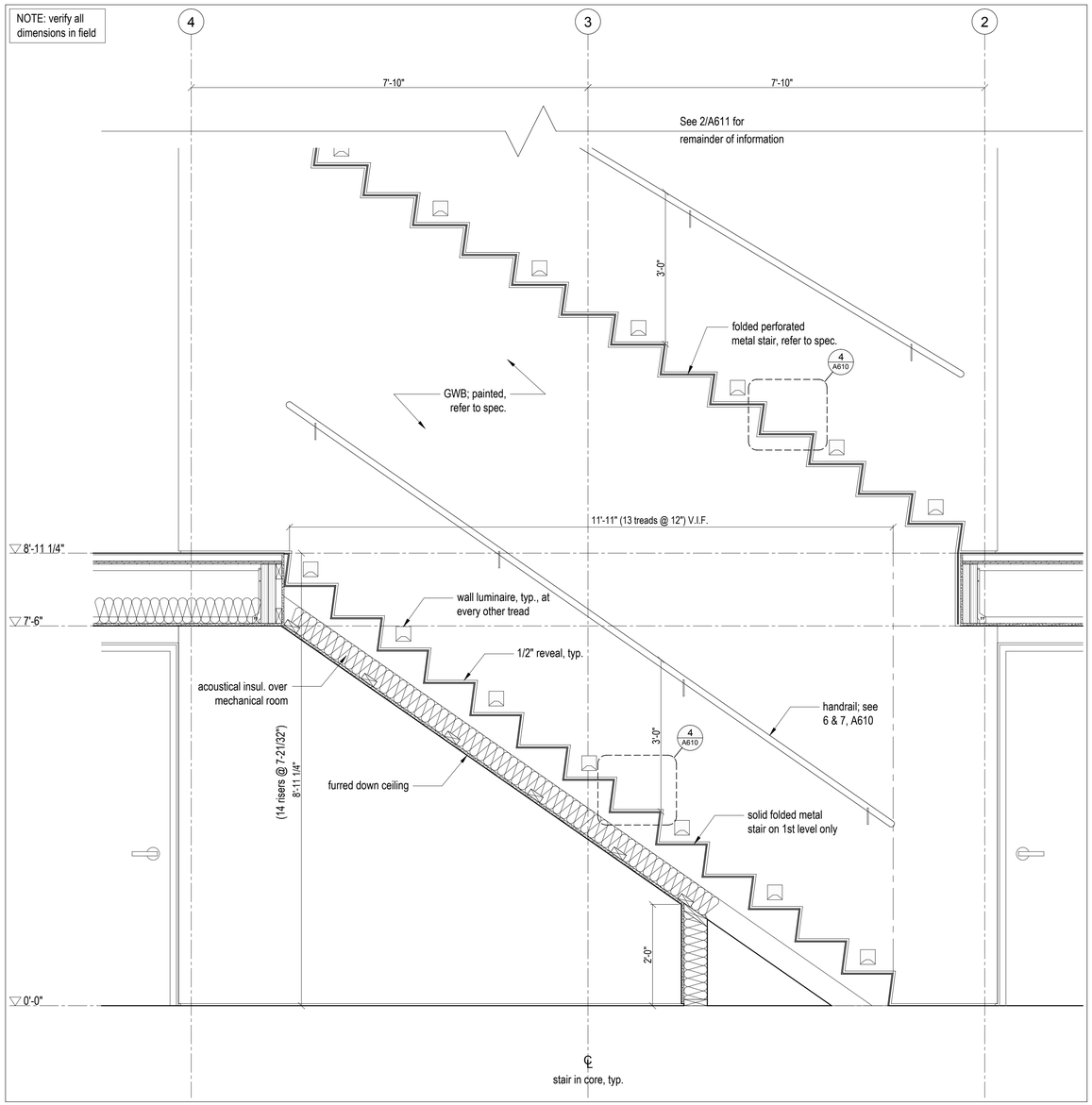
6 A610 Handrail - Section Detail
Scale 3" = 1'-0"



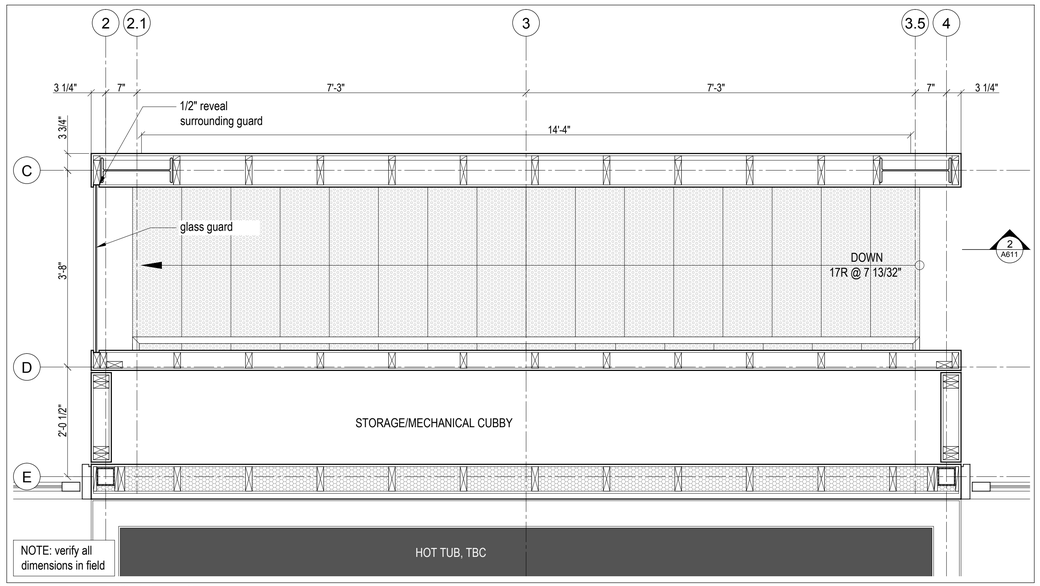
5 A610 Stair Detail
Scale 3" = 1'-0"



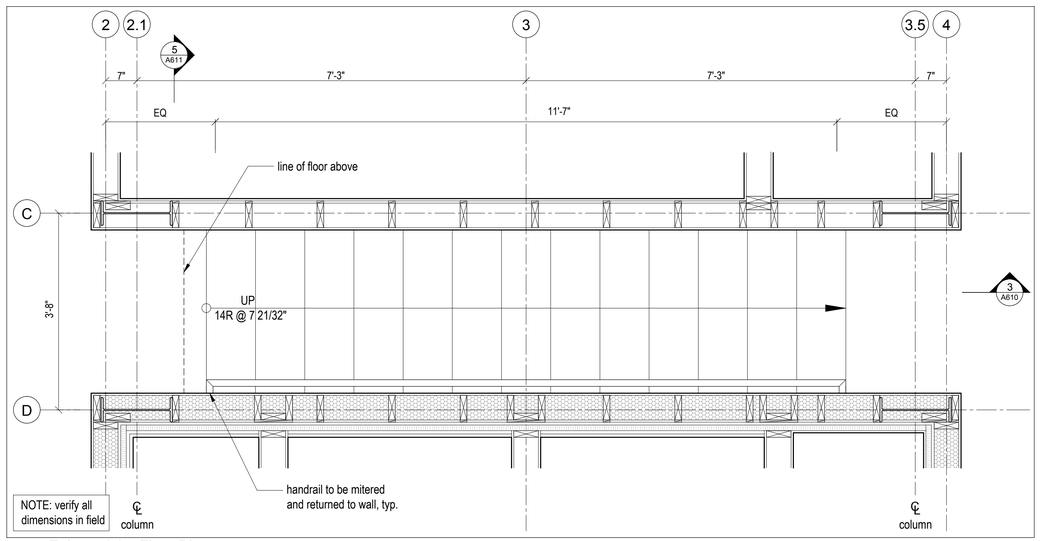
4 A610 Stair Detail
Scale 3" = 1'-0"



3 A610 Lower Stair Section
Scale 3/4" = 1'-0"



2 A610 Enlarged 4th Floor Plan
Scale 3/4" = 1'-0"



1 A610 Enlarged 1st Floor Plan
Scale 3/4" = 1'-0"

LOT 71R
Village House 71
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
3	Issued for Construction	2018.03.13
2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1

Revision:

NOTES:

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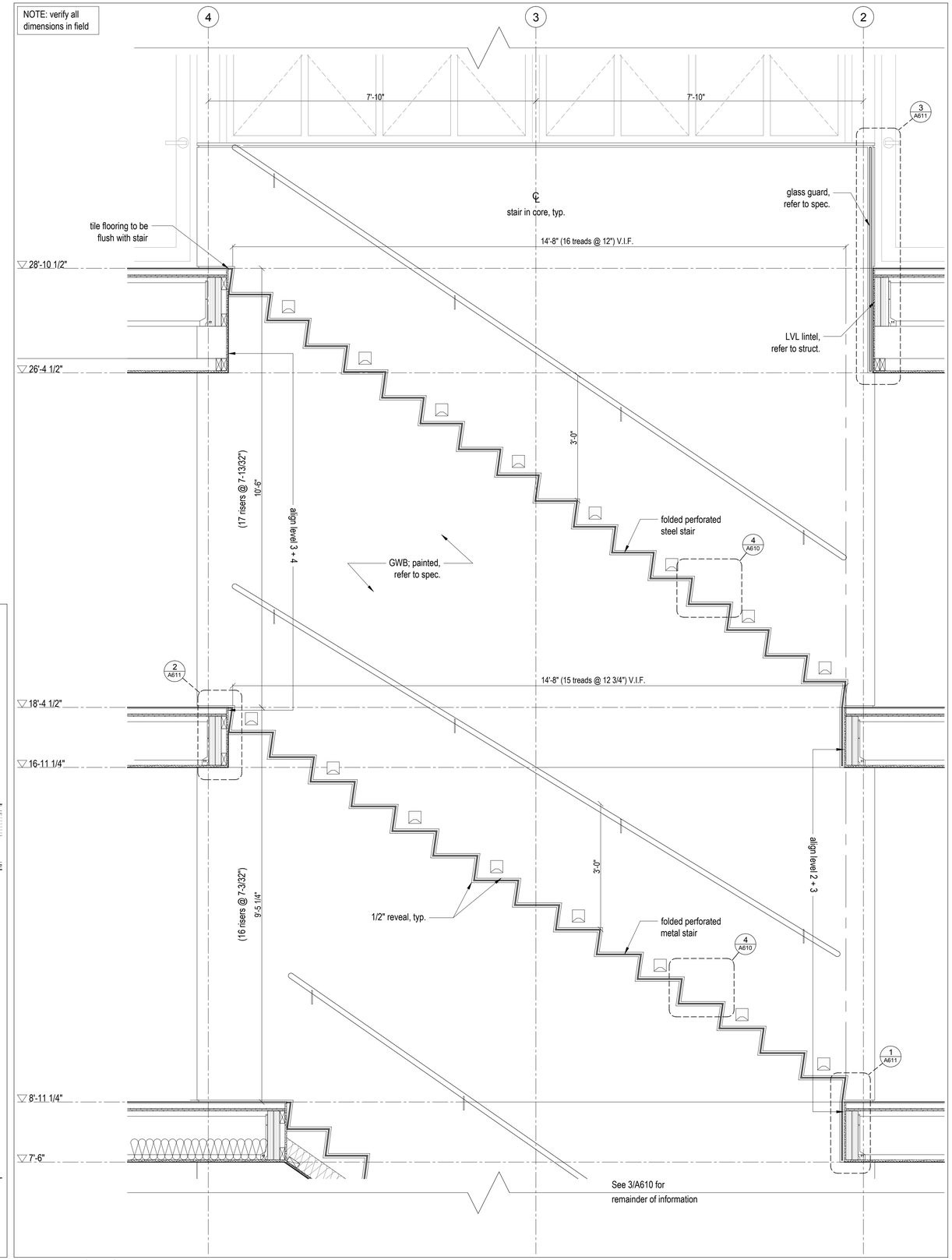
SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

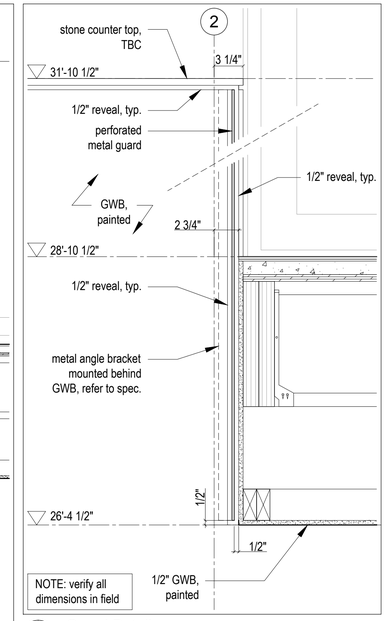
Stair

scale: as noted
date: 17-11-23
drawn: RD
chk'd: BML

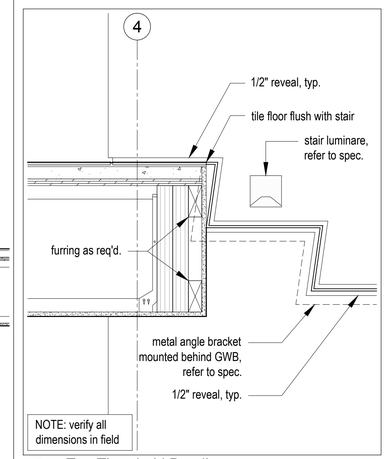
A610

Exhibit A

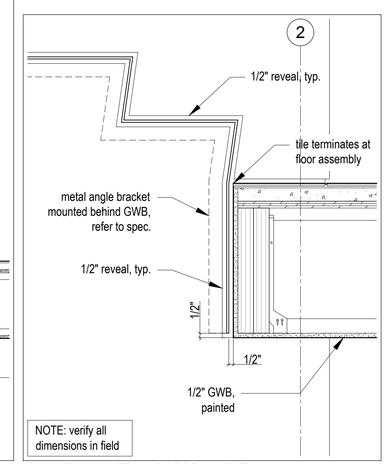




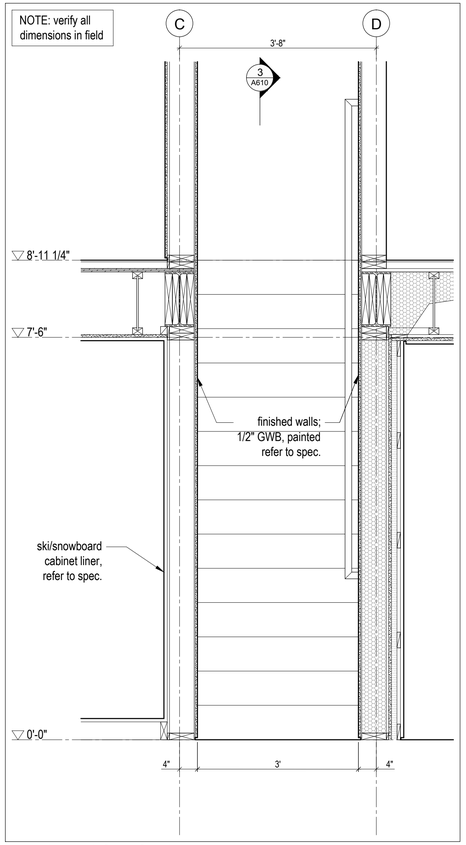
3 A611 Guard Detail
Scale 1 1/2" = 1'-0"



2 A611 Top Threshold Detail
Scale 1 1/2" = 1'-0"



1 A611 Bottom Threshold Detail, Typ.
Scale 1 1/2" = 1'-0"



5 A611 Level 1 Stair Section
Scale 3/4" = 1'-0"

4 A611 Upper Stair Section
Scale 3/4" = 1'-0"

LOT 71R
Village House 71
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
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1	for coordination	2017.12.1
Revision:		

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Stair

scale: as noted
date: 17-11-23
drawn: RD
chk'd: BML

A611

Exhibit A

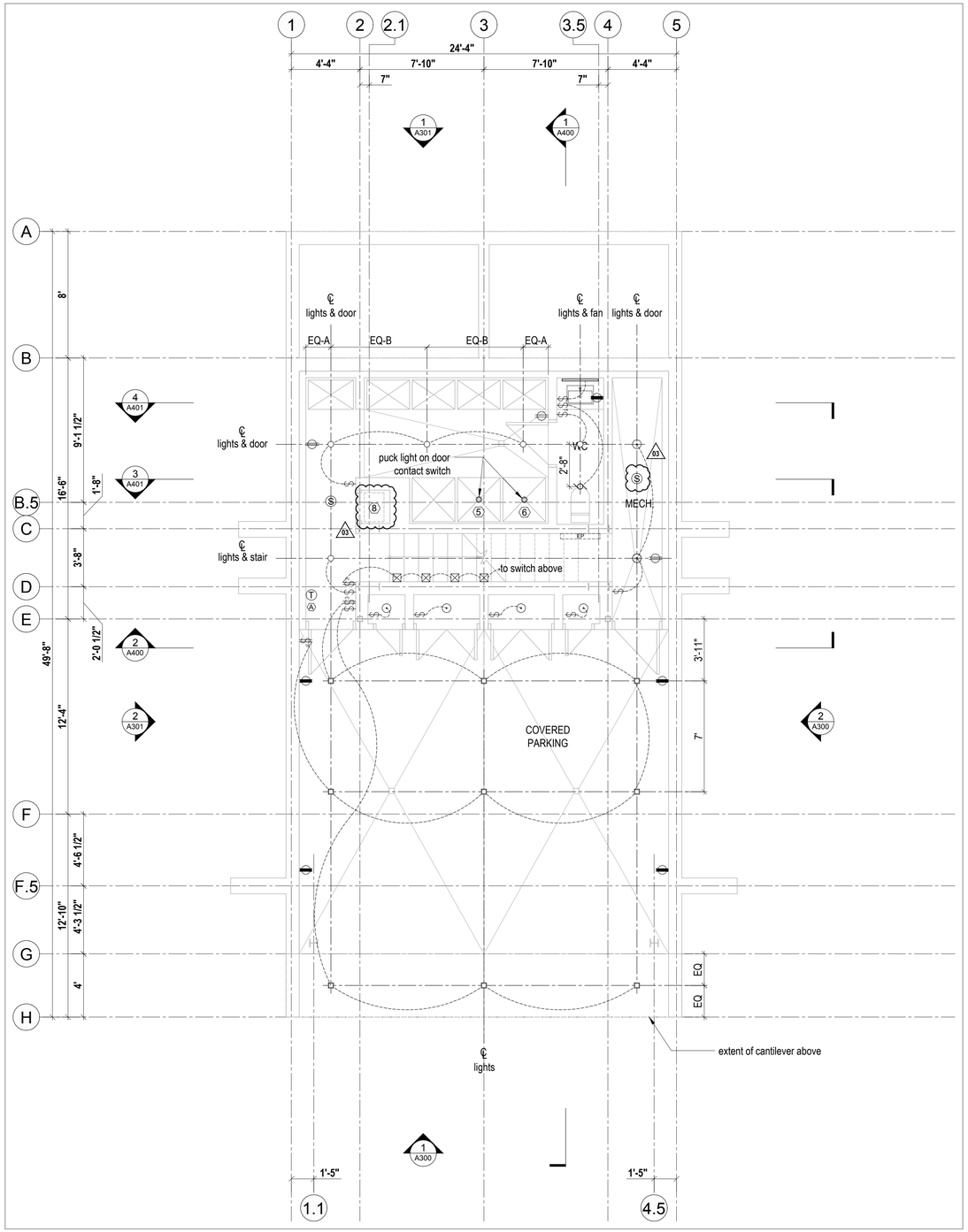
ELECTRIC LEGEND:

- 125v duplex
- GFCI duplex
- 240v duplex
- floor duplex
- shower luminaire
- wall mounted stair luminaire
- square trim LED potlight
- ceiling mounted utility luminaire
- single head spotlight
- puck light
- ceiling mounted pendent
- LED pot light
- wall switch
- ceiling mounted pendant
- three-way switch
- switch with timer
- exhaust fan
- cable jack
- internet jack
- telephone jack
- smoke & CO alarm
- thermostat
- alarm control pad
- ceiling fan
- interior LED strip light
- exterior LED strip light
- electrical panel

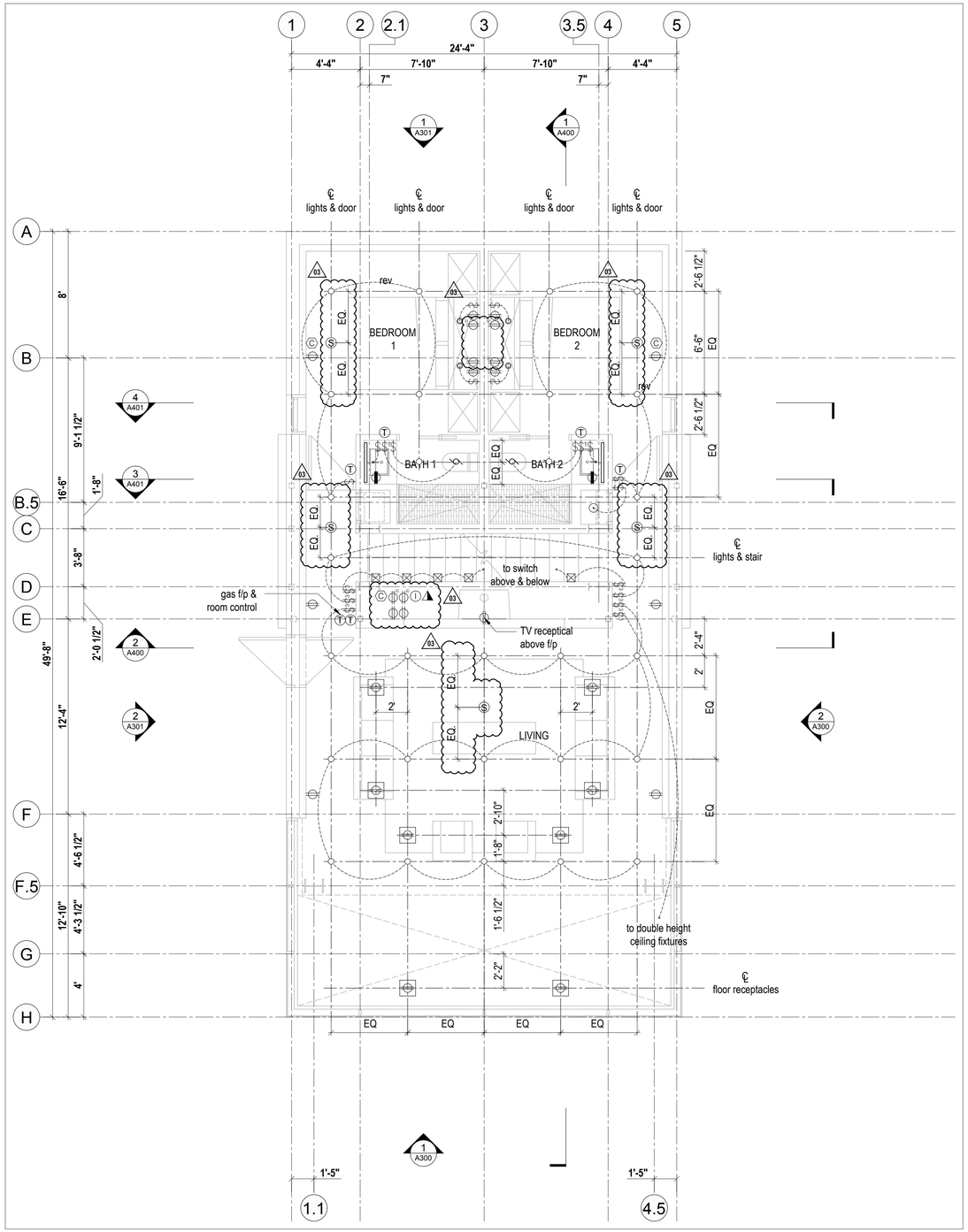
APPLIANCE LEGEND
(refer to appliance specs for electrical requirements)

1. refrigerator / freezer
2. dishwasher
3. microwave
4. oven
5. washer
6. dryer
7. cooktop
8. dumb-waiter
9. hot tub
10. vent hood

NOTE:
All exterior lighting to conform to Lighting Level LZ1: Low Ambient Lighting, Joint IOA-IES Lighting Ordinance, 2011



2 A800 Ground Floor Plan
Scale 1/4" = 1'-0"



1 A800 Second Floor Plan
Scale 1/4" = 1'-0"

Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

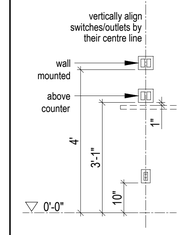
MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

True north

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field

Typical installation heights and alignments



No.	Description	Date
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1	for coordination	2017.12.1
Revision:		

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SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Ground & Second Floor Electrical Plans

scale: 1/4" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

A800

Exhibit A

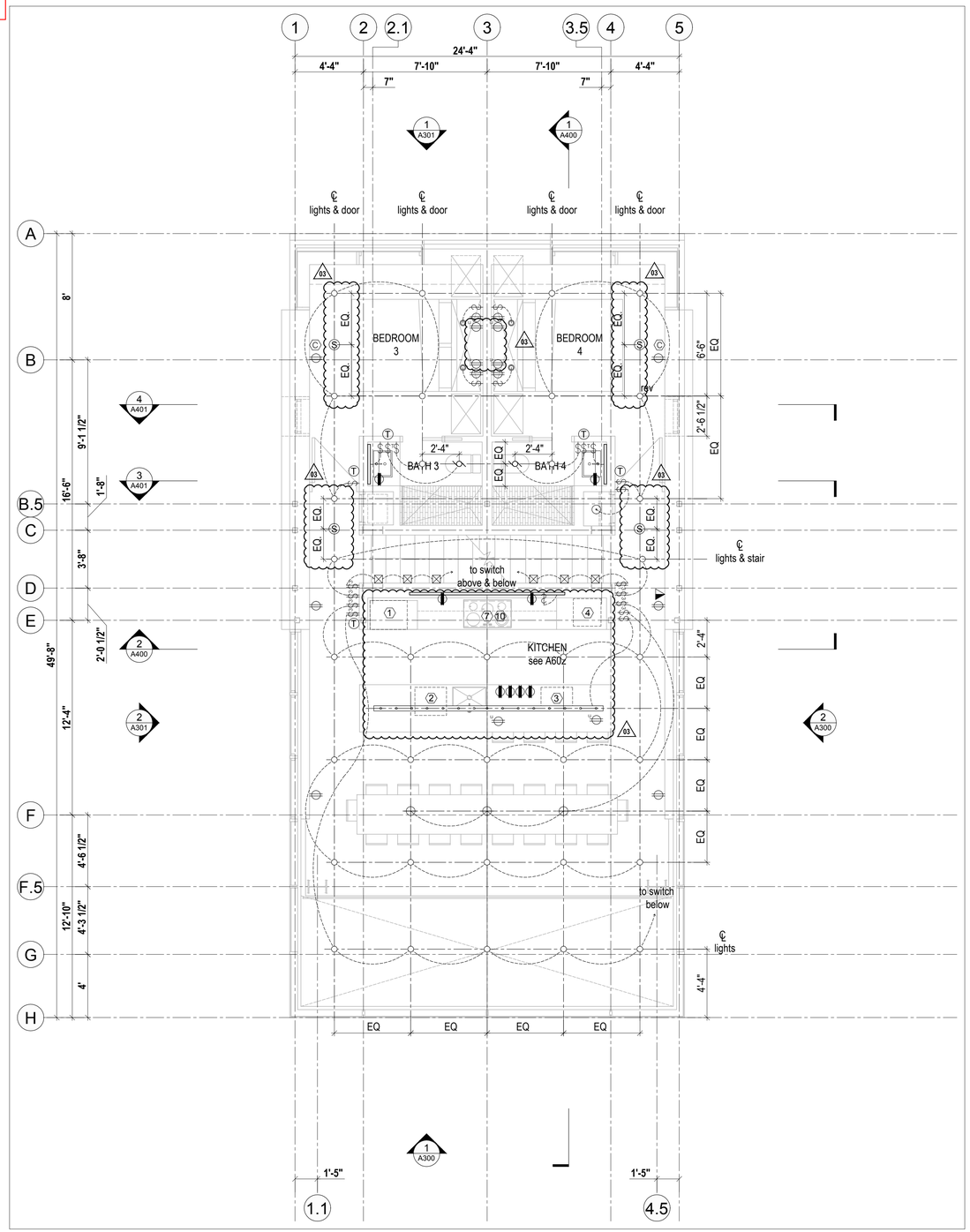
ELECTRIC LEGEND:

- 125v duplex
- GFCI duplex
- 240v duplex
- floor duplex
- usb duplex
- shower luminaire
- wall mounted stair luminaire
- square trim LED potlight
- ceiling mounted utility luminaire
- single head spotlight
- puck light
- ceiling mounted pendent
- LED pot light
- wall switch
- ceiling mounted pendant
- three-way switch
- switch with timer
- exhaust fan
- cable jack
- internet jack
- telephone jack
- smoke alarm (wall mounted)
- thermostat
- alarm control pad
- carbon monoxide detector
- interior LED strip light
- exterior LED strip light
- electrical panel
- ceiling fan

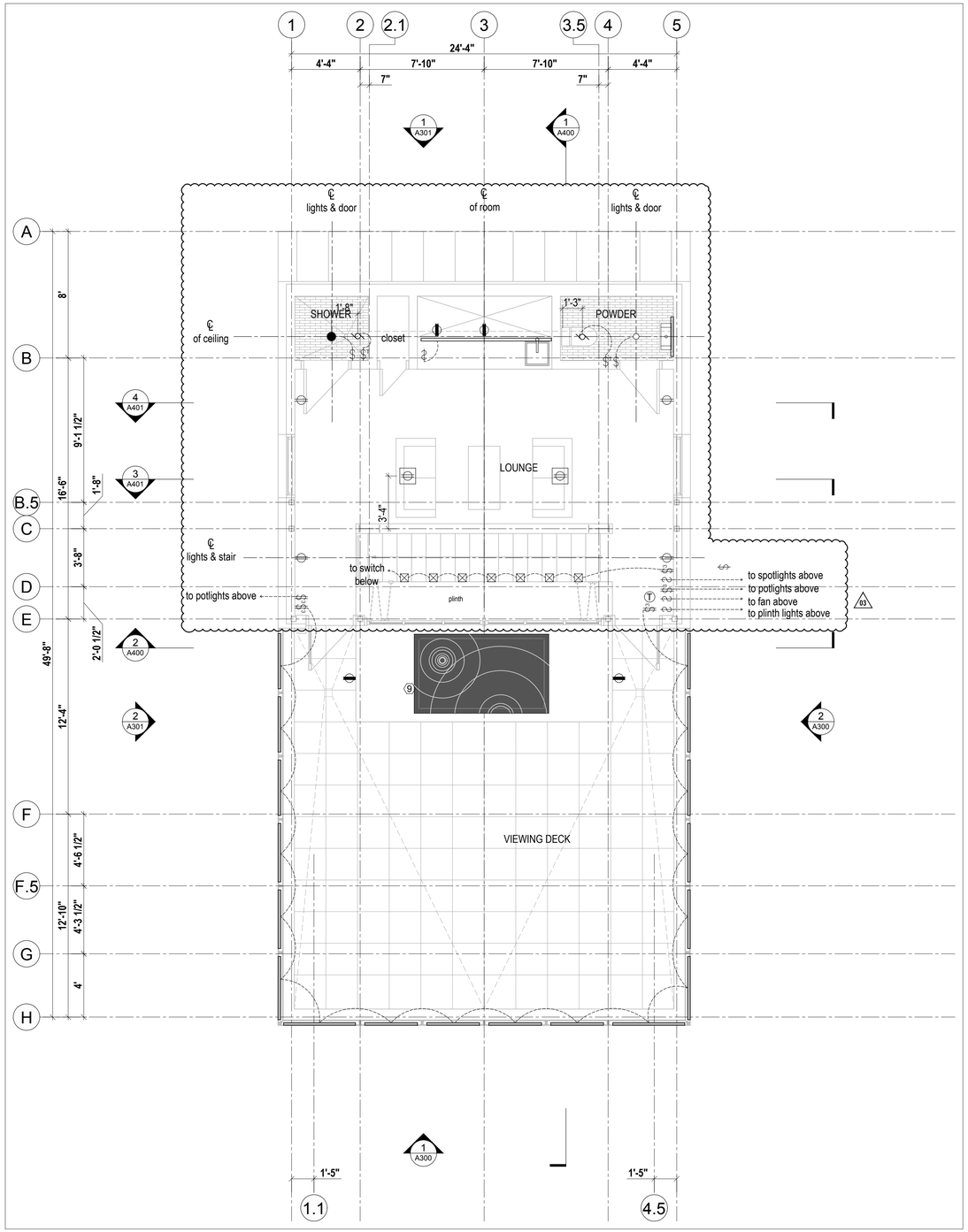
APPLIANCE LEGEND
(refer to appliance specs for electrical requirements)

1. refrigerator / freezer
2. dishwasher
3. microwave
4. oven
5. washer
6. dryer
7. cooktop
8. dumb-waiter
9. hot tub
10. vent hood

NOTE:
All exterior lighting to conform to Lighting Level LZ1: Low Ambient Lighting, Joint IOA-IES Lighting Ordinance, 2011



2 A801 Third Floor Plan
Scale 1/4" = 1'-0"



1 A801 Fourth Floor Plan
Scale 1/4" = 1'-0"

Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
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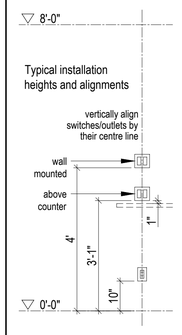
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

True North

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field



No.	Description	Date
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1	for coordination	2017.12.1
Revision:		

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SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Third & Fourth Electrical Plans

scale: 1/4" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

A801

Exhibit A

ELECTRIC LEGEND:

- 125v duplex
- GFCI duplex
- 240v duplex
- floor duplex
- shower luminaire
- wall mounted stair luminaire
- square trim LED potlight
- ceiling mounted utility luminaire
- single head spotlight
- puck light
- ceiling mounted pendent
- LED pot light
- wall switch
- ceiling mounted pendant
- three-way switch
- switch with timer
- exhaust fan
- cable jack
- internet jack
- telephone jack
- smoke alarm (wall mounted)
- thermostat
- alarm control pad
- carbon monoxide detector
- interior LED strip light
- exterior LED strip light
- electrical panel
- ceiling fan

APPLIANCE LEGEND
(refer to appliance specs for electrical requirements)

1. refrigerator / freezer
2. dishwasher
3. microwave
4. oven
5. washer
6. dryer
7. cooktop
8. dumb-waiter
9. hot tub
10. vent hood

NOTE:
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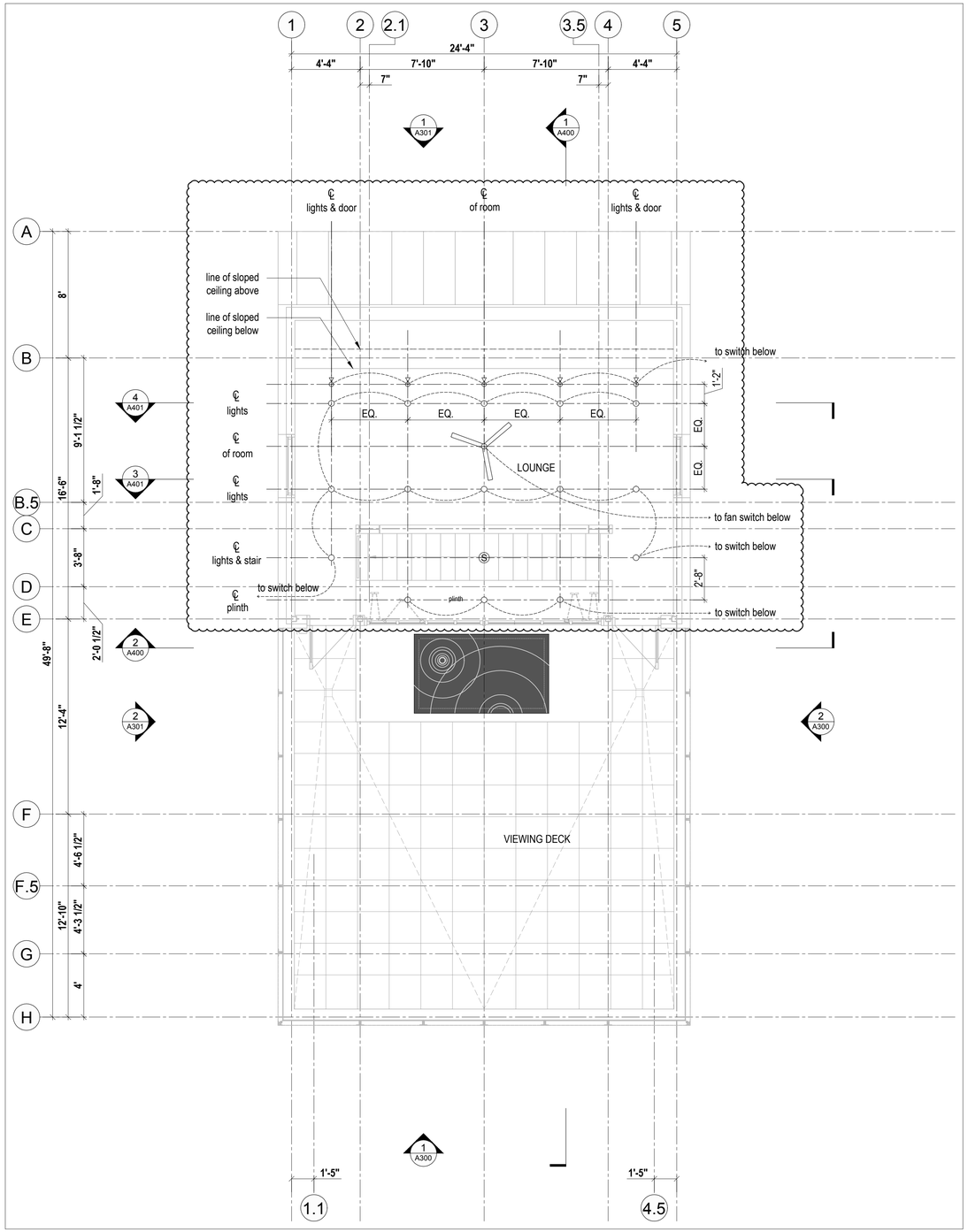


1 A802 Loft Plan
Scale 1/4" = 1'-0"

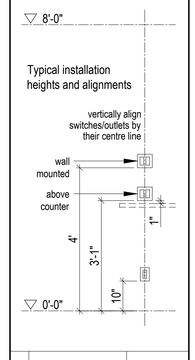
Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

True north

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

NOTE: all dimensions to be verified in field



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ENGINEER'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify MacKay-Lyons Sweetapple Architects Ltd. and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Engineer.

AUTHORITIES' REQUIREMENTS AND APPROVALS:
All materials and workmanship must comply with the requirements of all authorities having jurisdication over the work. It is the Builder's responsibility to gain necessary approval from all relevant Authorities.

DIMENSIONS:
All dimensions must be verified on site. Do not scale off drawings. Plans take precedent over elevations. In the absence of dimensions, or if discrepancies exist, consult Architect. All minimum dimensions are to comply with the International Residential Code.

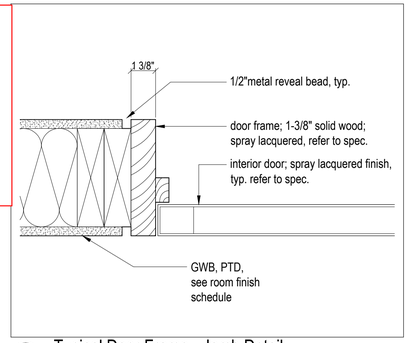
SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Level 4 Electrical Plan

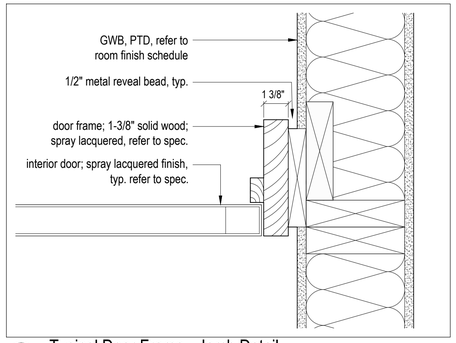
scale: 1/4" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

A802

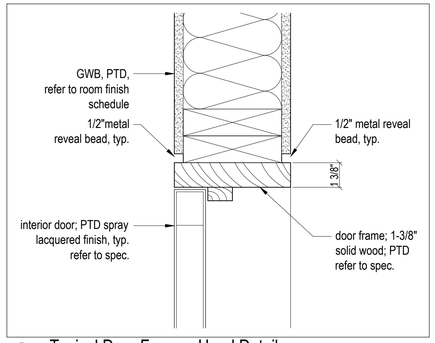
Exhibit A



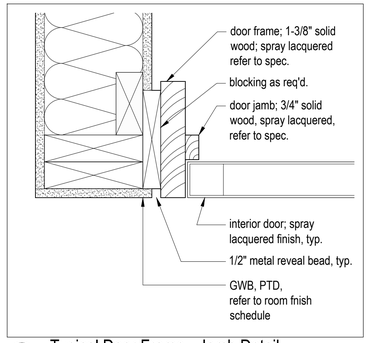
6 A900 Typical Door Frame - Jamb Detail
Scale 3" = 1'-0"



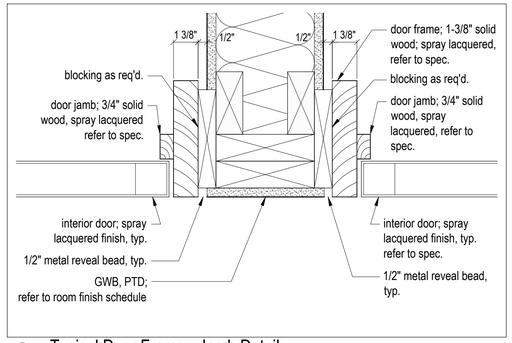
5 A900 Typical Door Frame - Jamb Detail
Scale 3" = 1'-0"



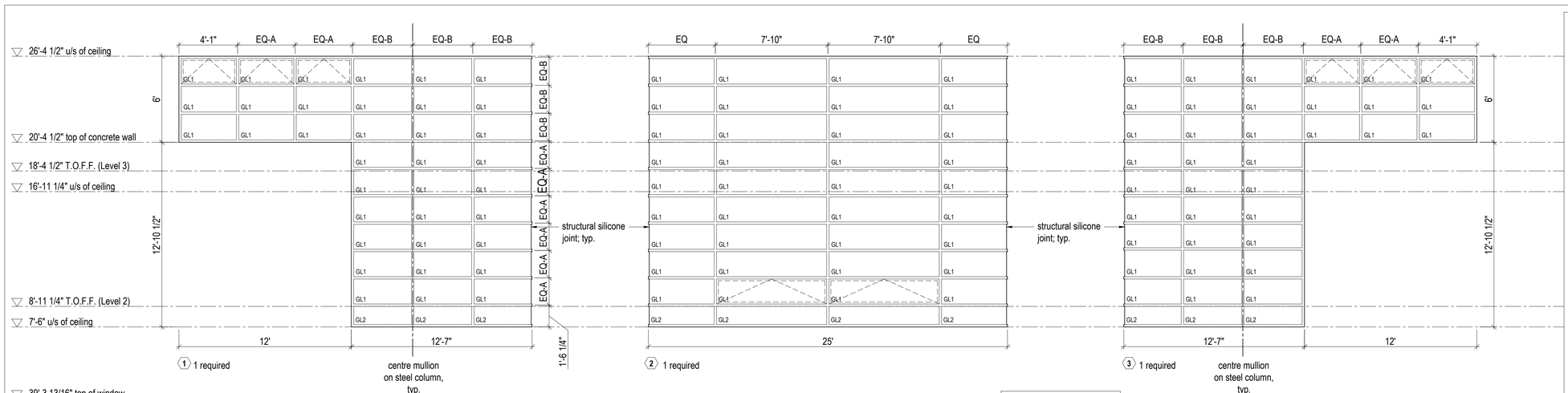
4 A900 Typical Door Frame - Head Detail
Scale 3" = 1'-0"

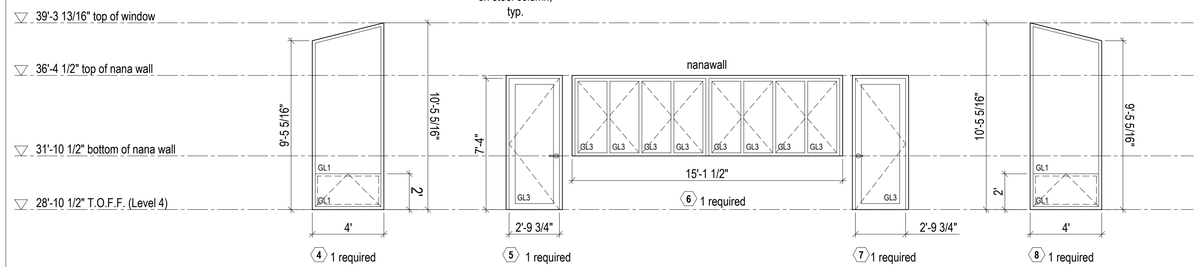


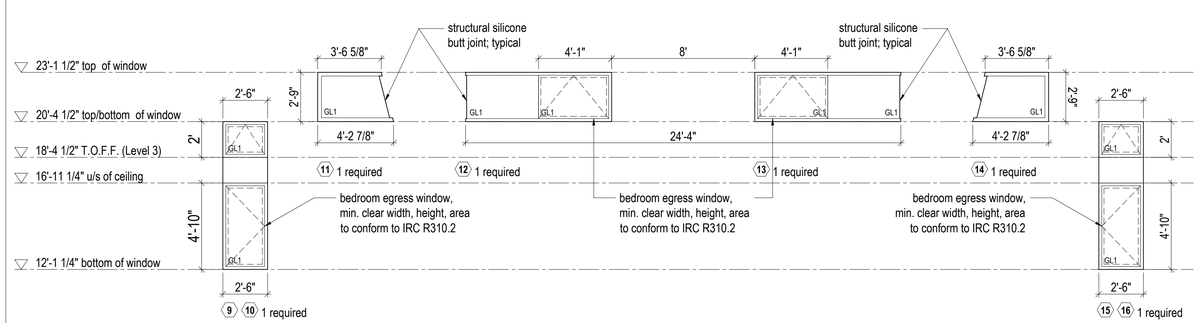
3 A900 Typical Door Frame - Jamb Detail
Scale 3" = 1'-0"



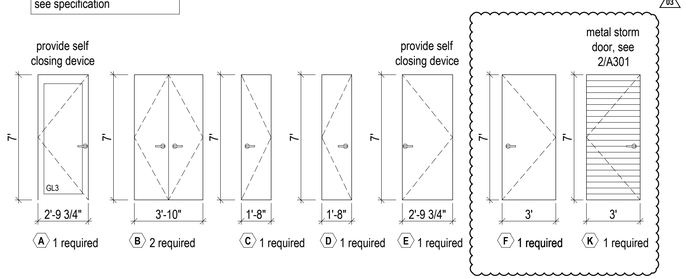
2 A900 Typical Door Frame - Jamb Detail
Scale 3" = 1'-0"

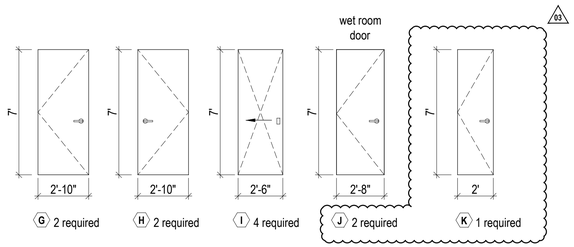






NOTE: for door construction see specification





NOTES:

1. Curtainwall window frames to be OLDCASTLE RELIANCE - SS series clear anodized aluminum, 0.32 U-factor, 0.30 SHGC.
2. Casement Operators in Curtainwall window frames to be OLDCASTLE ZERO SIGHTLINE SERIES 30P clear anodized aluminum finish, 0.32 U-factor, 0.30 SHGC. Outswing operation typical.
3. All glazed exterior doors to be OLDCASTLE AD-375 THERMAL ENTRANCE series clear anodized aluminum finish, 0.44 U-factor, 0.179 SHGC. Outswing operation typical.
4. All entry doors are to have keyed entry lever and deadbolt. Information to be provided as part of glazing shop drawings and reviewed by architect.
5. Windows sizes are finished frames. It is the contractor's responsibility to determine rough openings.
6. All operable windows to have insect screens. Review screen type with architect prior to installation.
7. Refer to spec for window head / sill / jamb flashing material.
8. All operable windows to be outswing.
9. All joints of door cladding to align with joints of wall cladding when doors are in closed position.
10. All dimensions to be verified in field prior to fabrication.
11. Provide shop drawings for all windows, doors, and head/sill/jamb conditions for review by architect prior to fabrication and installation.
12. Refer to floor plans for door swing directions.
13. All U-factors shall be determined by testing in accordance with NFRC 100 and labeled as such by the manufacturer, per IECC R402.3
14. Provide window fall protection devices in accordance with R312.2 of the 2015 IRC.

GLAZING LEGEND

GL1 - Double Glazed Vision Glass

GL2 - Spandrel Glass

GL3 - Category II Safety Glass

1 A900 Window & Door Schedule
Scale 1/4" = 1'-0"

Lot 71R
Village House
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6276

STATE OF UTAH
Brian MacKay-Lyons
No. 9809836
LICENSED ARCHITECT

No.	Description	Date
3	Issued for Construction	2018.03.13
2	Issued for Tender	2017.12.22
1	for coordination	2017.12.1

Revision:

NOTES:

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SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Window / Door Schedule

scale: 1/4" = 1'-0"
date: 17-11-23
drawn: RD
chk'd: BML

A900

Exhibit A

010000 GENERAL

1. CONFORM TO THE REQUIREMENTS OF THE BUILDING CODE OF IBC 2015, LATEST EDITION, AND ALL OTHER APPLICABLE LOCAL CODES AND REGULATIONS OF AGENCIES HAVING JURISDICTION.
2. READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH THE SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS.
3. BEFORE PROCEEDING WITH WORK, CHECK ALL THE DIMENSIONS SHOWN ON THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS AND REPORT DISCREPANCIES TO THE CONSULTANT.
4. REFER TO THE ARCHITECTURAL AND OTHER DRAWINGS FOR LOCATIONS AND DIMENSIONING OF OPENINGS AND SLEEVES NOT SHOWN ON THE STRUCTURAL DRAWINGS. HOWEVER, OBTAIN THE CONSULTANT'S PRIOR APPROVAL BEFORE INSTALLING OPENINGS, SLEEVES, ETC. WHICH ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
5. SEE ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATIONS OF PITS, BASES, SUMPS, TRENCHES, DEPRESSIONS, GROOVES, CURBS, CHAMFERS AND SLOPES NOT SHOWN ON STRUCTURAL DRAWINGS.
6. HORIZONTAL AND VERTICAL DESIGN LOADS ARE NOTED. THEY SHALL NOT BE EXCEEDED DURING CONSTRUCTION.
7. TYPICAL STRUCTURAL DETAILS SHALL GOVERN THE WORK. IF DETAILS DIFFER ON THE DRAWINGS, THE MOST STRINGENT SHALL GOVERN.
8. ALL TEMPORARY WORKS INCLUDING SHORING ARE TO BE PROVIDED BY THE CONTRACTOR.

010001 DESIGN NOTES

1. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDSAND REQUIREMENTS OF THE FOLLOWING CODES:
2. THE IBC 2015, AND ALL OTHER APPLICABLE LOCAL CODES AND REGULATIONS HAVING JURISDICTION.
3. AMERICAN SOCIETY OF CIVIL ENGINEERS: ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES.
4. AMERICAN CONCRETE INSTITUTE (ACI): ACI-318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
5. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC): AISC-325 AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL 14TH EDITION.
6. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC): AISC 360-16 SPECIFICATIONS FOR STRUCTURAL STEEL STRUCTURES.
7. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC): AISC-341-16 SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS.
8. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC): AISC-358-11 PREQUALIFIED CONNECTIONS FOR SPECIAL AND INTERMEDIATE STEEL MOMENT FRAMES FOR SEISMIC APPLICATIONS - INCLUDING SUPPLEMENT NO.1.
9. AMERICAN WOOD COUNCIL (AWC): NDS-2015 NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION COMMENTARY - WITH SUPPLEMENT 2015 EDITION.
10. AMERICAN WOOD COUNCIL (AWC): SDPWS-2015 SPECIAL DESIGN PROVISIONS FOR WIND AND SEISMIC.
11. FORCES ON STRUCTURAL FRAME:

A.	LIVE:	VARIES REFER TO NOTES UNDER PLANS	
B.	DEAD:	VARIES REFER TO NOTES UNDER PLANS	
C.	SNOW:	EXPOSURE FACTOR (CE)	= 1.0
		THERMAL FACTOR (CT)	= 1.0
		IMPORTANCE FACTOR (I)	= 1
		ROOF SLOPE FACTOR (CS)	= 1
		GROUND SNOW LOAD (PG):	= 270psf
		FLAT ROOF SNOW LOAD (PF):	= 189psf
		SLOPED ROOF SNOW LOAD (PS):	= 189psf
		FROST DEPTH:	= 40in
C.	WIND:	BASIC WIND SPEED (V):	=115mph
		WIND IMPORTANCE FACTOR (I):	= 1
		EXPOSURE FACTOR:	= C

12. SEISMIC ANALYSIS:

A.	SEISMIC IMPORTANCE FACTOR (I):	= 1
B.	RISK CATEGORY:	= II
C.	SPECTRAL RESPONSE ACCEL (Ss):	= 0.813g
D.	SPECTRAL RESPONSE ACCEL (S1):	= 0.269g
E.	SITE CLASSIFICATION:	= C
F.	DESIGN SPECTRAL RESPONSE (SDS):	= 0.582g
G.	DESIGN SPECTRAL RESPONSE (SD1):	= 0.274g
H.	SEISMIC DESIGN CATEGORY:	= D

17. LATERAL LOAD RESISTING SYSTEMS

A.	THE LATERAL FORCES ARE RESISTED BY:	
	I) LATERAL SYSTEM:	BEARING WALL SYSTEM PLYWOOD SHEARWALLS
	RESPONSE MOD. COEFFICIENT(R):	6.5
	OVERSTRENGTH FACTOR(Ω):	3
	DEFLECTION MODIFICATION FACTOR(Cd):	4
	II) LATERAL SYSTEM:	MOMENT RESISTING FRAMES (SMF)
	RESPONSE MOD. COEFFICTIENT(R):	8
	OVERSTRENGTH FACTOR(Ω):	3
	DEFLECTION MODIFICATION FACTOR(Cd):	5.5
	**DECREASE DEFLECTION LIMITS IN ACCORDANCE WITH ASCE-7 12.12.1.1, MOMENT FRAMES IN SEISMIC REGIONS D THROUGH F	
B.	SEISMIC ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE.
C.	ANALYSIS SOFTWARE:	RISA FLOOR/3D

18. LATERAL LOAD ON FOUNDATIONS

A. A GEOTECHNICAL REPORT "GEOTCHNICAL AND GEOLOGIC HAZARD INVESTIGATION: LOT 71R OF SUMMIT EDEN PHASE 1C 8488 E. SPRING PARK ROAD SUMMIT POWDER MOUNTAIN RESORT WEBER COUNTY, UTAH" PROJECT NUMBER 02565-001, DATED AUGUST 30TH, 2017 HAS BEEN PREPARED BY IGES INC.
B. THE CONTRACTOR IS TO READ THE REPORT AND BE FAMILIAR WITH IT'S CONTENTS.
C. BASEMENT WALLS ARE DESIGNED TO RETAIN AN EQUIVALENT FLUID DENSITY OF 55pcf AS PER THE REPORT.
D. FOUNDATION WALLS ARE DESIGNED ASSUMING THERE IS FREE-DRAINING BACKFILL OR THAT OTHER PROVISIONS HAVE BEEN MADE, SUCH THAT THE WALLS ARE NOT SUBJECT TO HYDROSTATIC PRESSURE.

030000 CONCRETE

1. NOMINAL MAXIMUM SIZE OF AGGREGATE SHALL BE 3/4". USE SMALLER AGGREGATES AS APPROPRIATE IN AREAS OF CONGESTED REINFORCING STEEL OR TO IMPROVE WORKABILITY. MODIFY MIX DESIGNS TO SUIT.

CATEGORY	DESCRIPTION	EXPOSURE CLASS PER A23.1	CONCRETE STRENGTH f'c (psi)	MAX W/C RATIO	AIR CONTENT[1]	SCOPE
CM1	FOUNDATION MIX		3500		5-8%	FOOTING AND CAPS
CM2	SLAB ON GRADE MIX		3000			SLABS ON GRADE
CM3	SLAB AND BEAM MIX		4500			FRAMED SLABS AND BEAMS
CM4	COLUMN AND WALL MIX		4500			CONC. COLUMNS AND WALLS NOT EXPOSED TO FREEZE THAW OR DE-ICING CHEMICALS
CM5	TOPPING MIX		3000			TOPPINGS ON CONCRETE
CM6	COMPOSITE DECK MIX		3000			SLABS ON METAL DECKS
CM7	PARKING SLAB AND BEAM MIX	C-1[2]	5000	0.40	5-8%	FOUNDATION WALLS ADJACENT TO PAVING FRAMED SLABS AND BEAMS EXPOSED TO DE-ICING CHEMICALS
CM8	PAVING MIX	C-2	4700	0.45	5-8%	EXTERIOR PAVING AND SIDEWALKS
CM9	PARKING MIX	C-4	3500	0.55	4-7%	SLAB ON GRADE IN PARKING GARAGE EXPOSED TO DE-ICING CHEMICALS BUT NOT TO FREEZE THAW
CM10	INTENTIONALLY LEFT BLANK					
CM11	EXTERIOR WALL MIX	F-2	3500	0.55	4-7%	FOUNDATION WALLS AND OTHER WALLS AND OTHER WALLS EXPOSED TO FREEZE THAW BUT NOT EXPOSEDTO DE-ICING CHEMICALS

1. WHERE AGGREGATES SMALLER THAN 14 mm ARE USED, INCREASE AIR CONTENT BY 1%
2. REINFORCED CONCRETE EXPOSED TO DE-ICING CHEMICALS TO HAVE DCI CORROSION INHIBITOR @ 11L/cu.m. DOSAGE OR APPROVED EQUIVALENT

2. REINFORCEMENT:
CONFORM TO THE REQUIREMENTS OF ASTM A615 AND ASTM A706 IF WELDABLE REINFORCEMENT IS USED.
A. REINFORCING BARS SHALL BE MINIMUM ASTM A615 GRADE 60 AND WELDED WIRE FABRIC SHALL BE MINUMUM ASTM A185, SUPPLY IN FLAT SHEETS.

3. SLAB ON GRADE:
A. PLACE SLABS ON GRADE ON MATERIAL CAPABLE OF OS SUSTAINING 500psf WITHOUT SETTLEMENT RELATIVE TO BUILDING FOOTING.
B. BEFORE PLACING SLAB, PLACE MINIMUM 6" OF 3/4" MAXIMUM SIZE CLEAR CRUSHED STONE OVER THE SUB GRADE. THOROUGHLY ROLL AND CONSOLIDATE TO THE LINES AND LEVELS REQUIRED.
4. CONCRETE AND REINFORCEMENT:
A. PROVIDE DOWELS TO WALLS AND COLUMNS SIMILAR IN NUMBER, SIZE, AND SPACING TO VERTICAL STEEL IN THE WALL OR COLUMN EXCEPT WHEN NOTED OTHERWISE.
B. PROVIDE 1.5"x2.5" KEYS AT ALL CONSTRUCTION JOINTS UNLESS NOTED OTHERWISE.
C. CONCRETE COVER TO REINFORCEMENT TO CONFORM TO THE REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE AND ACI 318 AND THE FOLLOWING COVER REQUIREMENTS:

REINFORCING TYPE:

SLABS NOT EXPOSED TO WEATHER AND INTERIOR WALL SURFACES	3/4in
EXTERIOR WALL SURFACES, SLABS EXPOSED TO WEATHER #5 AND SMALLER	1 1/2in
EXTERIOR WALL SURFACES, SLABS EXPOSED TO WEATHER LARGER THAN #5	2in
COLUMN AND BEAM TIES	1 1/2in
CLEAR DISTANCE BETWEEN BARS	2in
FORMED DIRECTLY AGAINST EARTH	3in

D. SECURELY TIE IN PLACE AND ADEQUATELY SUPPORT ALL REINFORCEMENT. LAP ALL BARS MARKED 'CONTINUOUS JOINTS' (CONT.) MINIMUM 40db.
E. WHERE CHEMICAL ANCHORS ARE QEQUIRED, USE HILTI HIT HY 200 EPOXY OR APPROVED EQUAL.

310000 FOUNDATIONS

1. A GEOTHECHNICAL REPORT "GEOTCHNICAL AND GEOLOGIC HAZARD INVESTIGATION: LOT 71R OF SUMMIT EDEN PHASE 1C 8488 E. SPRING PARK ROAD SUMMIT POWDER MOUNTAIN RESORT WEBER COUNTY, UTAH" PROJECT NUMBER 02565-001, DATED AUGUST 30TH, 2017 HAS BEEN PREPARED BY IGES INC.. READ THIS REPORT, AND BE THOROUGHLY FAMILIARIZED WITH THEIR FINDINGS.
2. FOUND ALL FOOTINGS ON NATURALLY CONSOLIDATED UNDISTURBED SOIL CAPABLE OF SAFELY SUSTAINING AN ALLOWABLE BEARING VALUE OF 2900 PSF.
3. FOUND FOOTINGS EXPOSED TO FREEZING BELOW THE LEVEL AT WHICH POTENTIAL DAMAGE RESULTING FROM FROST ACTION CAN OCCUR, BUT A MINIMUM OF 40in BELOW FINISHED GRADE IF NOT NOTED TO BE FOUNDED LOWER.
4. THE LINE OF SLOPE BETWEEN ADJACENT FOOTINGS OR EXCAVATIONS OR ALONG STEPPED FOOTINGS SHALL NOT EXCEED A RISE OF 7 IN A RUN OF 10.
5. DO NOT PLACE BACKFILL AGAINST WALLS RETAINING EARTH (OTHER THAN CANTILEVER WALLS) UNTIL THE FLOOR CONSTRUCTION AT TOP AND BOTTOM OF THE WALLS IS POURED AND HAS ATTAINED 70% OF ITS SPECIFIED STRENGTH.
6. CARRY OUT BACKFILLING AGAINST FOUNDATION WALLS WHERE THERE IS GRADE ON BOTH SIDES IN SUCH A MANNER THAT THE LEVEL OF BACKFILLING ON ONE SIDE OF THE WALL IS NEVER MORE THAN 1'-8" DIFFERENT FROM THE LEVEL ON THE OTHER SIDE OF THE WALL.

050000 STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL AND MISCELANEOUS METAL SHALL BE DETAILED, FABRICATED AND ERECTED IN CONFORMANCE WITH AISC 325.
2. MATERIALS:
ALL STRUCTURAL STEEL SHALL CONFORM TO THE NOTED ASTM STANDARDS UNO.

A.	W-SHAPES	A992
B.	HSS (RECTANGULAR AND SQUARE)	A500 (Fy = 45ksi)
C.	HSS (CIRCULAR)	A500 (Fy = 42ksi)
D.	ANGLES/C-CHANNELS/MC-CHANNELS	A36
E.	ALL OTHER STEEL PLATES	A36

3. WHERE SPECIFIED, GALVANIZED STEEL IS TO BE COMPLETED IN ACCORDANCE WITH ASTM A123 HOT DIP PROCESS.
4. ALL TEMPORARY BRACING, SHORING, AND ERECTION CLIPS REQUIRED BY THE CONTRACTOR ARE NOT SHOWN. WORK IS TO CONFORM TO OSHA REQUIREMENTS.
5. SHOP DRAWINGS ARE TO BE SUBMITTED TO CONSULTANTS FOR REVIEW PRIOR TO FABRICATION.
6. TESTING AND INSPECTION AGENCIES SHALL SEND STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE CONSULTANT.
7. CONNECTIONS
A. ALL STEEL-TO -STEEL BOLTED CONNECTIONS TO BE MADE WITH HIGH STRENGTH BOLTS AS PER 'SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS"
B. UNLESS NOTED BOLTS IN CONNECTIONS SHALL BE BEARING TYPE WITH THREADS EXCLUDED FROM THE SHEAR PLANE. USE ASTM A325 BOLTS UNLESS NOTED.
C. STEEL WASHERS CONFORM TO A436. NUTS TO CONFORM TO A563
D. ANCHOR BOLTS AND ANCHOR RODS TO CONFORM TO ASTM F1554 GRADE 36.
E. ALL WELDED CONNECTIONS TO BE COMPLETED IN ACCORDANCE WITH THE "STRUCTURAL WELDING CODE - STEEL (AWS-01.1) AND HAVE A MINIMUM TENSILE STRENGTH OF 70ksi FOR ALL ELECTRODES.
F. ALL WELDERS ARE TO BE QUALIFIED IN ACCORDANCE WITH AWS.01.1 FOR ALL WELDS THEY WILL BE COMPLETING.
G. WELD LENGTHS CALLED FOR ON STRUCTURAL DRAWINGS ARE NET EFFECTIVE LENGTH. IF NO LENGTH IS SPECIFIED USE THE MINIMUM SIZE AS SPECIFIED IN AISC 360, SECTION J2.2B.
H. ALL WELDING TO BE PERFORMED IN ACCORDANCE WITH A WRITTEN WELDING PROCEDURE SPECIFICATION (WPS). SUBMIT ALL WPS TO CONSULTANT WHICH OUTLINES ALL PROCEDURES, ELECTRODE SPECIFICATIONS, DATA SHEETS AND LIMITATIONS.
I. RUN-OFF TABS PER AWS D1.1 ARE REQUIRED FOR ALL COMPLETE JOINT PENETRATION WELDS. START AND COMPLETE ALL WELDS ON RUN-OFF TABS. WELDS ARE NOT TO BE COMPLETED AT COPE HOLE LOCATIONS.
J. COMPLETE PENETRATION AND PARTIAL PENETRATION WELDS SHALL BE INSPECTED AND EXAMINED BY ULTRASONIC TESTING. ALL TESTING AND INSPECTION SHALL CONFORM TO IBC REQUIREMENTS.
8. ALL HEADED STUDS WELDED TO BEAMS OR CONCRETE CONNECTIONS SHALL BE NELSON STUDS OR APPROVED EQUAL.
9. HEADED STUDS SHALL BE AUTOMATICALLY WELDED IN SHOP OR FIELD WELDED WITH EQUIPMENT APPROVED BY THE MANUFACTURER OF THE STUDS.

060000 WOOD:

1. FRAMING LUMBER SHALL BE DOUGLAS FIR-LARCH AND MEET THE FOLLOWING MINIMUM REQUIREMENTS UNLESS NOTED OTHERWISE.

2x6 STUDS, SILLS AND PLATES	No2
2x_ JOISTS & BLOCKING	No2
6x6 AND LARGER	No1

2. ENGINEERED FRAMING BEAMS AND MATERIAL SHALL MEET THE FOLLOWING MINUMUM REQUIREMENTS UNLESS NOTED OTHERWISE.

"PSL"	PARALLEL STRAND LUMBER	
	BENDING STRESS (EDGE LOADED)	Fb = 2,900psi
	SHEAR STRESS (EDGE LOADED)	Fv = 290psi
	COMPRESSIVE STRESS (PERP TO GRAIN)	Fc = 750psi
	COMPRESSIVE STRESS (PARA TO GRAN)	Fc = 2,900psi
	MODULUS OF ELASTICITY	E = 2,000ksi
"LVL"	LAMINATED VENEER LUMBER	
	BENDING STRESS (EDGE LOADED)	Fb = 2,600psi
	SHEAR STRESS (EDGE LOADED)	Fv = 285psi
	COMPRESSIVE STRESS (PERP TO GRAIN)	Fc = 750psi
	COMPRESSIVE STRESS (PARA TO GRAN)	Fc = 2,510psi
	MODULUS OF ELASTICITY	E = 1,800ksi
"LSL"	LAMINATED STRAND LUMBER	
	BENDING STRESS (EDGE LOADED)	Fb = 2,325psi
	SHEAR STRESS (EDGE LOADED)	Fv = 310psi
	COMPRESSIVE STRESS (PERP TO GRAIN)	Fc = 900psi
	COMPRESSIVE STRESS (PARA TO GRAN)	Fc = 2,170psi
	MODULUS OF ELASTICITY	E = 1,550ksi

3. ALL ROOF SHEATHING TO BE 3/4" C-D GRADE PLYWOOD WITH EXTERIOR GRADE GLUE OR OSB PANELS. TYPICAL NAILING TO BE 10d @ 6" c/c AT ALL SUPPORTED EDGES AND 10d @ 12" c/c AT INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE.
4. ALL FLOOR SHEATHING TO BE 3/4" C-D GRADE T&G SHEATHING WITH EXTERIOR GRADE GLUE OR OSB PANELS. BLOCK ALL PANEL EDGES. TYPICAL NAILING TO BE 10d @ 6" c/c AT ALL SUPPORTED EDGES AND 10d @ 12" c/c AT INTERMEDIATE SUPPORTS, UNLESS NOTED OTHERWISE.
5. ALL LOAD BEARING STUD WALLS NOT INDICATED AS SHEARWALLS ON PLANS TO BE SHEATHED WITH PLYWOOD OR OSB PANELS. BLOCK ALL PANEL EDGES. TYPICAL NAILING TO BE 10d @ 6" c/c AT ALL SUPPORTED EDGES AND 10d @ 12" c/c AT INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE.
6. ENGINEERED FLOOR JOISTS TO BE MANUFACTURED FLOOR JOIST SYSTEM BY REDBUILT ENGINEERED WOOD PRODUCTS. PROVIDE SEALED ENGINEERED FLOOR LAYOUTS FROM MANUFACTURER PRIOR TO FABRICATION OF ELEMENTS.
7. ALL BLOCKING IN ENGINEERED FLOOR SYSTEM TO BE FULL DEPTH LVL MATERIAL.
8. SUBSTITUTION OF FLOOR SYSTEM CAN BE MADE WITH THE SUBMISISON OF EQUIVALENCY REPORT FROM ALTERNATE SUPPLIER.
9. ALL WOOD-TO-WOOD CONNECTIONS ARE TO BE BY SIMPSON STRONG TIE OR APPROVED EQUIVALENT. ALL HANGERS TO BE RATED FOR MINUIMUM CONNECTION FORCES NOTED ON PLANS.
10. EXECUTION:
A. ALL SILL PLATES TO BE STAMPED "KD" WHICH INDICATES KILN DRIED WITH A MOISTURE CONTENT NOT EXCEEDING 13%.
B. ALL WOOD SILL PLATES UNDER BEARING, EXTERIOR WALLS OR SHEARWALLS IN CONTACT WITH CONCRETE OR MASONRY SHALL BE BOLTED TO THE CONCRETE OR MASONRY BELOW WITH 5/8" Ø ANCHORS @ 4'-0" c/c BEGINNING AT 9" MAXIMUM FROM EACH END OF THE PLATES, EXTENDING MINIMUM 8" INTO THE CONCRETE OR MASONRY BELOW.
C. PROVIDE SOLID BLOCKING, INCLUDING SQUASH BLOCKS, BELOW ALL POINT LOADS, EXTENDING DOWN TO THE TOP OF FOUNDATIONS.
D. PROVIDE BRIDGING IN FLOOR AND ROOF ASSEMBLIES AT 8'-0" c/c MAXIMUM UNLESS SPECIFICALLY DETAILED OTHERWISE BY THE ENGINEERED FLOOR SUPPLIER.
E. REFER TO TYPICAL DETAILS FOR STANDARD FRAMING REQUIREMENTS AT WOOD TO STEEL, WOOD TO FOUNDATION AND WOOD TO WOOD FLOOR ASSEMBLIES.
F. PROTECT ALL WOOD PRODUCTS FROM DAMAGE AND STAINING DUE TO WETTING AND MOISTURE.
G. RE-TIGHTEN ALL ANCHORS JUST PRIOR TO COVERING THE WALL FRAMING.

010003 NOTABLE SUBMITTALS

1. GENERAL REVIEW BY COMPONENT ENGINEERS
A. COMPONENT ENGINEERS ARE RESPONSIBLE FOR GENERAL REVIEW OF THE CONSTRUCTION FOR THE PORTION OF THE WORK PREPARED UNDER THEIR PROFESSIONAL SEALS. THEY SHALL PROVIDE:
I) REPORTS FOR EACH SITE VISIT
II) A PROJECT COMPLETION NOTICE.
A. ENGINEERED COMPONENTS INCLUDE: PRECAST CONCRETE, OPEN WEB STEEL JOISTS, METAL DECK, PRE-ENGINEERED WOOD TRUSSES, DEEP FOUNDATIONS, MISCELLANEOUS METALS, STRUCTURAL GLASS, GLASS CONNECTIONS, CURTAINWALL, HELICAL PEIRS, GEOPIERS, MICROPILES.

010004 SUBMITTALS

1. GEOMETRY
A. SUBMIT SURVEY RECORDS CONFIRMING THAT THE BUILT GEOMETRY MATCHES THE DESIGN GEOMETRY.
2. CONCRETE REINFORCEMENT
A. SUBMIT REINFORCING PLACING DRAWINGS AND BAR LISTS FOR REVIEW BY THE CONSULTANT.
B. PROVIDE TEST CYLINDERS IN ACCORDANCE WITH ASTM STANDARDS.
3. STRUCTURAL STEEL
A. SUBMIT DETAILED SHOP DRAWINGS AND DETAILED CONNECTIONS FOR ALL STEEL COMPONENTS, BASED ON SECTION DETAILS AND CONNECTION DETAILS PROVIDED, FOR THE REVIEW OF THE CONSULTANT PRIOR TO ANY FABRICATION.
B. ERECTION AND SETTING DRAWINGS FOR THE REVIEW OF THE CONSULTANT.

010005 DEFERRED SUBMITTALS

1. ITEMS NOTED BELOW ARE INDICATED AS DEFERRED SUBMITALS. THE ITEMS HAVE BEEN SHOWN OR INDICATED ON STRUCTURAL & ARCHITECTURAL DRAWINGS TO CONVEY DESIGN INTENT ONLY. FINAL SIZES, DETAILS, SHOP DRAWINGS AND CALCULATIONS SHALL BE SEALED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF UTAH. ALL SUBMITALS SHALL BE SUPPLIED TO THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.

A. CUSTOM STEEL GUARD AT WALKOUT TERRACE
B. HELICAL PIER DESIGN

FRAMING PLAN LEGEND

REPEAT FRAMING ELEMENTS (SPAN)	
REPEAT FRAMING ELEMENTS (EXTENT)	
BEAM MEMBERS	
EXTERIOR STUD & LOAD BEARING STUDS	
WALLS (NON-LOAD BEARING)	
STUD WALL ABOVE	
CONCRETE WALLS	
COLUMN (HSS)	
COLUMN (WOOD)	
COLUMN ABOVE	
CANTILEVERS	CANT.
MOMENT CONNECTIONS	
EXTENT OF FINISHES	
EXTENT OF ROOF	
EXTENT OF ELEMENTS BELOW	

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SEAL:

PROFESSIONAL STRUCTURAL ENGINEER
No. 10985527-2203
MICHAEL F SULLAWAY
STATE OF UTAH

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
GENERAL NOTES

S-001

Exhibit A

SCHEDULE OF SPECIAL INSPECTIONS

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	DETAILED INSTRUCTIONS AND FREQUENCIES
REINFORCED CONCRETE (IBC 1705.3 & 1705.12.1)			
REINFORCING STEEL		X	VERIFY PRIOR TO PLACING CONCRETE THAT REINFORCING IS OF SPECIFIED TYPE, GRADE AND SIZE; THAT IT IS FREE OF OIL, DIRT AND RUST; THAT IT IS LOCATED AND SPACED PROPERLY; THAT HOOKS, BENDS, TIES, STIRRUPS, AND SUPPLEMENTAL REINFORCEMENT ARE PLACED CORRECTLY; THAT TAP LENGTHS, STAGGER AND OFFSETS ARE PROVIDED, AND THAT ALL MECHANICAL CONNECTIONS ARE INSTALLED PER THE MANUFACTURER'S INSTRUCTIONS AND/OR EVALUATION REPORT.
ANCHORAGE		X	INSPECTION OF ANCHORS CAST IN CONCRETE.
USE OF REQUIRED MIX DESIGN		X	VERIFY THAT ALL MIXTURES USED COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS; ACI 318: Ch. 4, 5.2-5.4; AND IBC 1904.3, 1913.2, 1913.3.
CONCRETE SAMPLING FOR STRENGTH TESTS, SLUMP, AIR CONTENT, AND TEMPERATURE	X		
CONCRETE PLACEMENT	X		
CURING TEMPERATURE AND TECHNIQUES		X	VERIFY THAT AMBIENT TEMPERATURE FOR CONCRETE IS KEPT > 50°F FOR AT LEAST 7 DAYS AFTER PLACEMENT. HIGH-EARLY-STRENGTH CONCRETE SHALL BE KEPT > 50°F FOR AT LEAST 3 DAYS. ACCELERATED CURING METHODS MAY BE USED (SEE ACI 318:5.11.3). ALL CONCRETE MATERIALS, REINFORCEMENT, FORMS, FILLERS, AND GROUND SHALL BE FREE FROM FROST. IN HOT WEATHER CONDITIONS ENSURE THAT APPROPRIATE MEASURES ARE TAKEN TO AVOID PLASTIC SHRINKAGE CRACKING AND THAT THE SPECIFIED WATER/CEMENT RATIO IS NOT EXCEEDED.
STRENGTH VERIFICATION		X	VERIFY THAT ADEQUATE STRENGTH HAS BEEN ACHIEVED PRIOR TO THE REMOVAL OF FORMS.
FORMWORK		X	VERIFY THAT FORMS ARE PLACED PLUMB AND CONFORM TO THE SHAPES, LINES, AND DIMENSIONS OF THE MEMBERS AS REQUIRED BY THE APPROVED CONSTRUCTION DOCUMENTS.
STRUCTURAL STEEL - PRIOR TO WELDING (TABLE N5.4-1, AISC 360-10)			
VERIFY WELDING PROCEDURES (WPS) AND CONSUMABLE CERTIFICATES	X		
MATERIAL IDENTIFICATION		X	VERIFY TYPE AND GRADE OF MATERIAL.
WELDER IDENTIFICATION		X	A SYSTEM SHALL BE MAINTAINED BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED.
FIT-UP GROOVE WELDS		X	VERIFY JOINT PENETRATION, DIMENSIONS, CLEANLINESS, TACKING, AND BACKING.
ACCESS HOLES		X	VERIFY CONFIGURATION AND FINISH.
FIT-UP FILLET WELDS		X	VERIFY ALIGNMENT, GAPS AT ROOT, CLEANLINESS OF STEEL SURFACES, AND TACK WELD QUALITY AND LOCATION.
STRUCTURAL STEEL - DURING WELDING (TABLE N5.4-2, AISC 360-10)			
USE OF QUALIFIED WELDERS		X	VERIFY THAT WELDERS ARE APPROPRIATELY QUALIFIED.
CONTROL AND HANDLING OF WELDING CONSUMABLES		X	VERIFY PACKAGING AND EXPOSURE CONTROL.
CRACKED TACK WELDS		X	VERIFY THAT WELDING DOES NOT OCCUR OVER CRACKED TACK WELDING.
ENVIRONMENTAL CONDITIONS		X	VERIFY THAT WIND SPEED, PRECIPITATION, AND TEMPERATURE ARE WITHIN LIMITS.
WPS FOLLOWED		X	VERIFY ITEMS SUCH AS SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.
WPS FOLLOWED		X	VERIFY ITEMS SUCH AS SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.
WELDING TECHNIQUES		X	VERIFY INTERPASS AND FINAL CLEANING, EACH PASS IS WITHIN PROFILE LIMITATIONS, AND QUALITY OF EACH PASS.
STRUCTURAL STEEL - AFTER WELDING (TABLE N5.4-3, AISC 360-10)			
WELDS CLEANED		X	VERIFY THAT WELDS HAVE BEEN PROPERLY CLEANED.
SIZE, LENGTH, AND LOCATION OF WELDS	X		
WELDS MEET VISUAL ACCEPTANCE CRITERIA	X		
ARC STRIKES	X		
K-AREA	X		
BACKING AND WELD TABS REMOVED	X		
REPAIR ACTIVITIES	X		
DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT/MEMBER	X		

VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	DETAILED INSTRUCTIONS AND FREQUENCIES
NON-DISTRUCTIVE TESTING (SECTION N5.5, AISC 360-10)			
CJP WELDS		X	ULTRASONIC TESTING SHALL BE PERFORMED ON 10% OF CJP GROOVE WELDS IN BUTT, T- AND CORNER JOINTS SUBJECTED TO TRANSVERSELY APPLIED TENSION LOADING IN MATERIALS 5/16" THICK OR GREATER. TESTING RATE MUST BE INCREASED IF >5% OF WELDS TESTED HAVE UNACCEPTABLE DEFECTS.
ACCESS HOLES (FLANGE > 2")	X		
WELD JOINTS SUBJECT TO FATIGUE	X		
OTHER STEEL INSPECTIONS (SECTION N5.7, AISC 360-10; TABLES J8-1 & J10-1, AISC 341-10)			
STRUCTURAL STEEL DETAILS		X	ALL FABRICATED STEEL OR STEEL FRAMES SHALL BE INSPECTED TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN IN THE CONSTRUCTION DOCUMENTS, SUCH AS BRACES, STIFFENERS, MEMBER LOCATIONS, AND PROPER APPLICATION OF JOINT DETAILS AT EACH CONNECTION.
ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL		X	SHALL BE ON THE PREMISES DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH CONSTRUCTION DOCUMENTS. VERIFY THE DIAMETER, GRADE, TYPE, AND LENGTH OF THE ANCHOR ROD OR EMBEDMENT ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.
WOOD CONSTRUCTION (IBC 1705.10.1 & 1705.11.2)			
HIGH-LOAD DIAPHRAGMS		X	VERIFY THICKNESS AND GRADE OF SHEATHING, SIZE OF FRAMING MEMBERS AT PANEL EDGES, NAIL/STAPLE DIAMETERS AND LENGTH, AND THE NUMBER OF FASTENER LINES AND FASTENER SPACING PER APPROVED PLANS. *PERFORMED BY CODE INSPECTION FIRM.*
STRUCTURAL WOOD		X	WHERE FASTENER SPACING IS < 4" o.c.: VERIFY PROPER NAILING, BOLTING, ANCHORING, AND OTHER FASTENING OF SHEAR WALLS, DIAPHRAGMS, BRACES, AND HOLDOWNS. *PERFORMED BY CODE INSPECTION FIRM.*
SOILS (IBC 1705.6)			
VERIFY SUBGRADE IS ADEQUATE TO ACHIEVE DESIGN BEARING CAPACITY		X	PRIOR TO PLACEMENT OF CONCRETE.
VERIFY EXCAVATIONS EXTEND TO PROPER DEPTH AND MATERIAL		X	PROIR TO PLACEMENT OF COMPACTED FILL OR CONCRETE.
VERIFY THAT SUBGRADE HAS BEEN APPROPRIATELY PREPARED PRIOR TO PLACING COMPACTED FILL		X	PROIR TO PLACEMENT OF COMPACTED FILL.
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS		X	ALL MATERIALS SHALL BE CHECKED AT EACH LIFT FOR PROPER CLASSIFICATIONS AND GRADATIONS NOT LESS THAN ONCE FOR EACH 10,000 SQ.FT. OF SURFACE AREA.
VERIFY PROPER MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION.	X		ALL MATERIALS SHALL BE CHECKED AT EACH LIFT FOR PROPER CLASSIFICATIONS AND GRADATIONS NOT LESS THAN ONCE FOR EACH 10,000 SQ.FT. OF SURFACE AREA.

1. SPECIAL INSPECTORS SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO PERFORMING ANY DUTIES.
2. SPECIAL INSPECTORS SHALL PROVIDE PROOF OF LICENSURE BY THE STATE OF UTAH FOR EACH TYPE OF INSPECTION.
3. SPECIAL INSPECTIONS AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS, THIS STATEMENT, AND THE IBC SECTIONS 1704 AND 1705.
4. INSPECTION REPORTS WILL BE SUBMITTED TO THE CODE CONSULTANT, THE ARCHITECT, AND THE STATE OF UTAH BUILDING OFFICIAL WITHIN 48 HOURS OF PERFORMING INSPECTIONS.
5. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS, TESTING AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS AND A STATEMENT INDICATING THAT THE STRUCTURE IS IN COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND APPLICABLE CODES SHALL BE SUBMITTED.

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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
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PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
GENERAL NOTES CONT.'D

S-002

Exhibit A

ABBREVIATIONS 0001

A.BOLT	=	ANCHOR BOLT	kN	=	KILONEWTON
ADJ.	=	ADJUSTABLE	kg	=	KILOGRAM
ALT.	=	ALTERNATE	kN.m	=	KILONEWTON METRES
ARCH.	=	ARCHITECTURAL	kN/sq.m	=	KILONEWTON PER SQUARE METRE
			kN/m	=	KILONEWTON PER METRE
B	=	BOTTOM	L.L.	=	LIVE LOAD
BLL	=	BOTTOM LOWER LAYER	LG.	=	LONG
BUL	=	BOTTOM UPPER LAYER	L.V.	=	LONG LEG VERTICAL
BLDG.	=	BUILDING	LLH.	=	LONG LEG HORIZONTAL
BM.	=	BEAM			
BR	=	BASE OR BEARING PLATE	MAX.	=	MAXIMUM
BSMT.	=	BASEMENT	MECH.	=	MECHANICAL
			MEZZ.	=	MEZZANINE
CA.	=	COLUMN ABOVE	MIN.	=	MINIMUM
C/C	=	CENTRE TO CENTRE	MISC.	=	MISCELLANEOUS
℄	=	CENTRE LINE	ML	=	MIDDLE LAYER
CANT.	=	CANTILEVER	mm	=	MILLIMETRE
COL.	=	COLUMN	MOM.	=	MOMENT
CONC.	=	CONCRETE	m	=	METRIC METRE
CONSTR.	=	CONSTRUCTION	MPa	=	MEGAPASCAL
CONT.	=	CONTINUOUS	Mf	=	FACTORED MOMENT
c/w	=	COMPLETE WITH			
			N	=	NEWTONS
DET.	=	DETAIL	N.F.	=	NEAR FACE
DIAG.	=	DIAGONAL	N-S	=	NORTH-SOUTH
DIA.	=	DIAMETER	NTS.	=	NOT TO SCALE
Ø	=	DIAMETER, BAR DIAMETER			
DIM.	=	DIMENSION	OWSJ	=	OPEN WEB STEEL JOISTS
D.J.	=	DOUBLE JOIST	OPEN	=	OPENING
DO.	=	DITTO			
D.L.	=	DEAD LOAD	PL.	=	PLATE
DWG.	=	DRAWING	P.C.	=	PRECAST
DWL.	=	DOWEL	PROJ.	=	PROJECTION
EA.	=	EACH	R	=	REACTION
EA.F.	=	EACH FACE	RAD	=	RADIUS
EA.W.	=	EACH WAY	REF.	=	REFERENCE
EL.	=	ELEVATION	REINF.	=	REINFORCING,REINFORCEMENT
ELECT.	=	ELECTRICAL	REQ'D	=	REQUIRED
ELEV.	=	ELEVATOR	REV.	=	REVISION,REVISED
E-W	=	EAST-WEST	r/w	=	REINFORCED WITH
EQ.	=	EQUAL			
EXIST.	=	EXISTING	SECT.	=	SECTION
EXP. J.	=	EXPANSION JOINT	SDF	=	STEP DOWN FOOTING
EXT.	=	EXTERIOR	SL.	=	SLAB
			SPEC'S.	=	SPECIFICATIONS
F.F.	=	FAR FACE	STD.	=	STANDARD
FDN.	=	FOUNDATION	SQ.	=	SQUARE
FIN.	=	FINISHED	STRUCT.	=	STRUCTURAL
FL.	=	FLOOR			
FTG.	=	FOOTING	T	=	TOP
			T.J.	=	TIE JOIST
GA.	=	GAUGE	TLL	=	TOP LOWER LAYER
GALV.	=	GALVANIZED	TUL	=	TOP UPPER LAYER
GEN.	=	GENERAL	TEMP.	=	TEMPERATURE
			TYP.	=	TYPICAL
H. HOR.	=	HORIZONTAL	U/N	=	UNLESS OTHERWISE NOTED
HH	=	HOOKED EACH END	U/S	=	UNDERSIDE
INT.	=	INTERIOR	Vf	=	FACTORED SHEAR FORCE
			V. VERT.	=	VERTICAL
JT.	=	JOINT	WWF	=	WELDED WIRE FABRIC
			w/	=	WITH
			wD; wL	=	UNIFORMLY DISTRIBUTED LOADS

REINFORCEMENT DEVELOPMENT LENGTHS 0301

TABLE 1 - TENSION DEVELOPMENT LENGTH (in)

BAR SIZE	f'c				
	2900psi	3626psi	4352psi	5077psi	5802psi
4	12.6	11.8	11.8	11.8	11.8
5	18.9	16.9	15.4	14.6	13.4
6	25.2	22.8	20.9	19.3	18.1
8	39.8	35.4	32.3	29.9	28.0
9	47.6	42.5	39.0	35.8	33.5
11	55.5	49.6	45.3	41.7	39.4
14	71.7	63.8	58.3	53.9	50.8
18	87.4	78.0	71.3	66.1	61.8

TABLE 2 - TENSION LAP SPLICE (CLASS B) LENGTH (in)

BAR SIZE	f'c				
	2900psi	3626psi	4352psi	5077psi	5802psi
4	16.5	15.0	13.4	12.4	11.8
5	24.8	22.0	20.1	19.1	17.5
6	33.1	29.7	27.2	25.2	23.6
8	51.8	46.1	42.1	39.0	36.4
9	54.1	55.3	50.8	46.5	43.5
11	72.4	64.6	58.9	55.3	51.2
14	LAP SPLICES NOT PERMITTED				
18					

TABLE 3 - DEVELOPMENT LENGTH (in) FOR STANDARD HOOKS.

BAR SIZE	f'c				
	2900psi	3626psi	4352psi	5077psi	5802psi
4	6.1	5.9	5.9	5.9	5.9
5	9.4	8.3	7.5	6.9	6.7
6	12.4	11.0	10.2	9.4	8.9
8	15.4	13.8	12.6	11.6	11.0
9	18.5	16.5	15.2	14.2	13.0
11	21.7	16.9	17.7	16.3	15.2
14	38.5	34.4	31.4	29.1	27.2
18	49.6	44.4	40.6	37.5	35.1

TABLE 4 - COMPRESSION DEVELOPMENT LENGTH (in)

BAR SIZE	f'c=2900psi	f'c=3626psi	f'c≥4352psi
4	8.3	7.9	7.9
5	12.6	11.4	10.2
6	16.9	15.0	13.8
8	21.3	18.9	17.3
9	25.2	22.8	20.9
11	29.5	26.4	24.4
14	38.2	33.9	31.1
18	46.5	41.7	38.2

TABLE 5 - COMPRESSION LAP SPLICE LENGTH (in)

BAR SIZE	USUAL CONFINEMENT
4	11.8
5	17.3
6	22.8
8	28.7
9	34.6
11	40.2

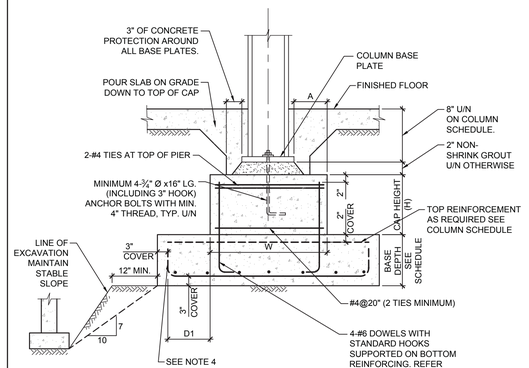
NOTE: #14 AND #18 BARS SHALL BE SPLICED WITH MECHANICAL CONNECTORS

TABLE 6 - STANDARD HOOK DIMENSION FOR BLACK REINFORCING.

BAR SIZE	400R OR 500R		400W OR 500W	
	90° HOOK (in)	180° HOOK (in)	90° HOOK (in)	180° HOOK (in)
4	7.1	5.5	7.1	5.1
5	10.2	7.1	9.8	6.7
6	12.2	8.7	11.8	7.9
8	15.7	11.0	15.7	11.0
9	20.1	15.7	19.3	13.8
11	24.0	18.9	23.2	16.9
14	31.1	26.8	30.3	24.4
18	40.6	35.4	39.8	32.7

REFER TO REINFORCING STEEL MANUAL OF STANDARD PRACTICE FOR MORE INFORMATION.

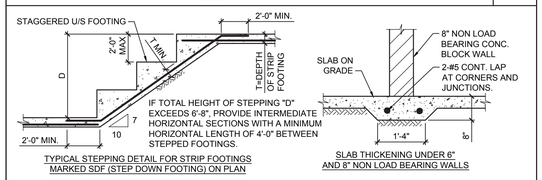
FOOTINGS AND BASES FOR STEEL COLUMNS 0303



NOTE:

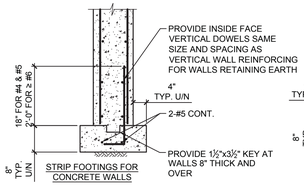
1. WHERE RATIO OF CAP HEIGHT TO CAP WIDTH (H/W) EXCEEDS 3, PROVIDE 0.5% VERTICAL STEEL (8-#6 MINIMUM) WITH #4 TIES SPACED AT THE LESSER OF 20" o/c OR THE LEAST CAP DIMENSION (2 TIES MINIMUM).
2. HEIGHT (H) OF CAP SHALL BE A MINIMUM OF 2 X PROJECTION (A) BUT NOT LESS THAN 8".
3. SEE COLUMN SCHEDULE FOR ADDITIONAL REQUIREMENTS.
4. IF D1 IS LESS THAN THE TENSION DEVELOPMENT LENGTH FOR THE SPECIFIED BAR (REFER TO TABLE 1, DETAIL 0301), PROVIDE STANDARD HOOK.
5. TIE ARRANGEMENT IN PIERS AS PER TYPICAL DETAIL 0329.

WALL FOOTINGS 0306

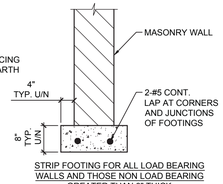


TYPICAL STEPPING DETAIL FOR STRIP FOOTINGS MARKED SDF (STEP DOWN FOOTING) ON PLAN

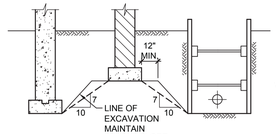
SLAB THICKENING UNDER 6" AND 8" NON LOAD BEARING WALLS



STRIP FOOTINGS FOR CONCRETE WALLS

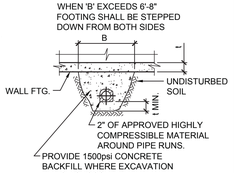


STRIP FOOTING FOR ALL LOAD BEARING WALLS AND THOSE NON LOAD BEARING GREATER THAN 8" THICK



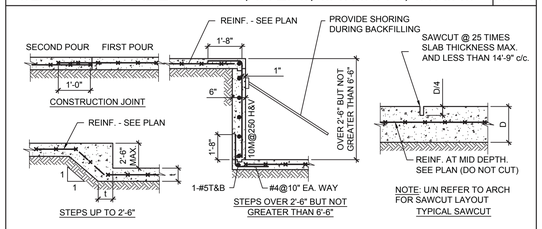
ADJUST FOOTING ELEVATIONS SHOWN ON DRAWINGS IF NECESSARY TO MAINTAIN THE MAX. 7 TO 10 SLOPE BETWEEN FOOTINGS AND ADJACENT EXCAVATIONS FOR DRAINS OR OTHER ITEMS.

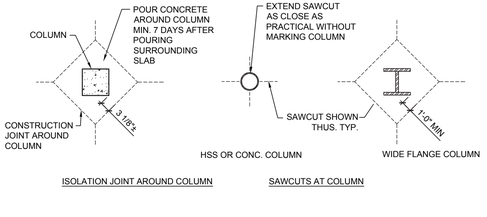
RELATION TO ADJACENT FOOTINGS AND EXCAVATIONS



PIPES CROSSING BENEATH CONT. WALL FOOTINGS

SLABS ON GRADE - JOINTS, STEPS, SAWCUTS, STAIRS 0311

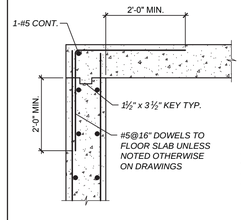




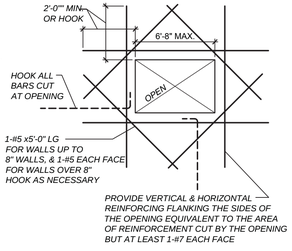
ISOLATION JOINT AROUND COLUMN

SAWCUTS AT COLUMN

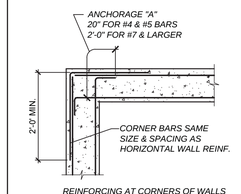
CONCRETE WALLS, PITS AND TRENCHES 0312



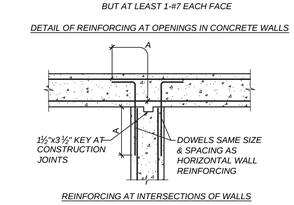
DETAIL AT TOP OF WALL/GRADE BEAM



DETAIL OF REINFORCING AT OPENINGS IN CONCRETE WALLS



REINFORCING AT CORNERS OF WALLS



REINFORCING AT INTERSECTIONS OF WALLS

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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

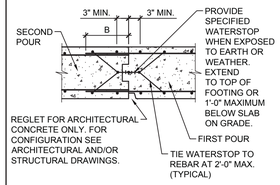
SHEET TITLE:
TYPICAL DETAILS

S-003

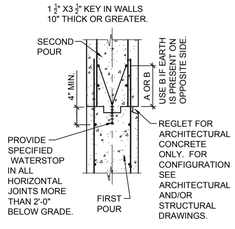
Exhibit A

CONSTRUCTION JOINTS IN WALLS 0314

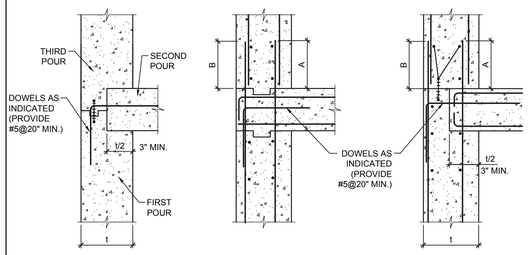
SPLICE LENGTHS
A - REFER TO TABLE 5, DETAIL 0301
B - REFER TO TABLE 2, DETAIL 0301. INCREASE BY 50% IF EPOXY-COATED BAR IS USED.



VERTICAL JOINT

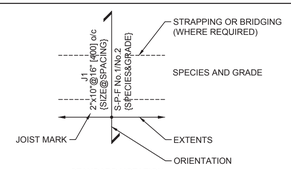


HORIZONTAL JOINT



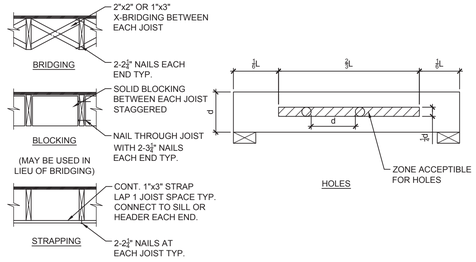
HORIZONTAL JOINTS AT SLAB

WOOD FRAMING FOR FLOORS (1 OF 2) 0601

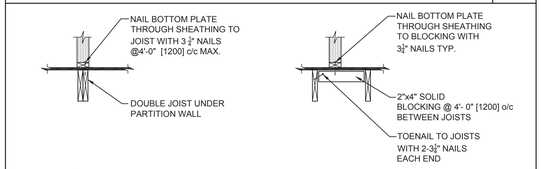


STANDARD NOTATION

NOTES:
1. SEE PLANS FOR JOIST SIZE, SPACING, SPECIES AND LUMBER GRADE. SPACING NOT TO EXCEED 16" [406].
2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, PROVIDE BRIDGING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.
3. WHERE SPECIFIED ON THE DRAWINGS, PROVIDE STRAPPING AS PER THE DETAIL BELOW AND THE SPACING REQUIREMENTS OF NOTE 4.
4. LINES OF BRIDGING AND/OR STRAPPING ARE TO BE LOCATED NOT MORE THAN 7'-0" FROM A SUPPORT AND SPACED AT NOT GREATER THAN 7'-0" o/c.
5. UNLESS NOTED OTHERWISE, JOISTS ARE NOT TO BE NOTCHED.
6. WHERE HOLES ARE REQUIRED IN UNIFORMLY LOADED JOISTS FOR WIRING OR PLUMBING, THEIR DIAMETER SHALL NOT EXCEED ONE QUARTER OF THE JOIST DEPTH. CENTRE HOLES AT THE MID-DEPTH OF THE JOISTS, WITHIN THE MIDDLE TWO-THIRDS OF THE SPAN. HOLES SHALL BE SPACED NO CLOSER THAN A CLEAR DISTANCE OF ONE FULL JOIST DEPTH FROM ONE ANOTHER AS PER THE DETAIL BELOW.
7. HOLES NOT CONFORMING TO THE REQUIREMENTS OF NOTE 6 MUST BE APPROVED BY THE CONSULTANT.



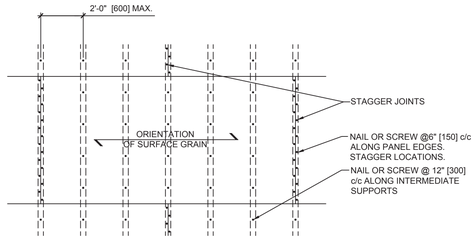
WOOD FRAMING FOR FLOORS (2 OF 2) 0602



MIN 1½" OF BOTTOM PLATE OVER SUPPORTING JOIST

LESS THAN 1½" OF BOTTOM PLATE OVER SUPPORTING JOIST

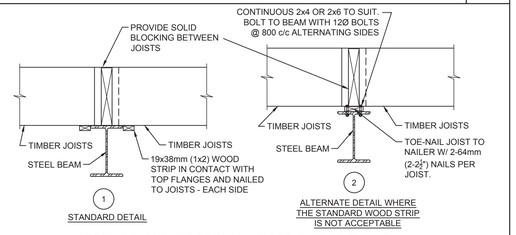
SUPPORT OF NON-LOADBEARING PARTITIONS PARALLEL TO JOISTS



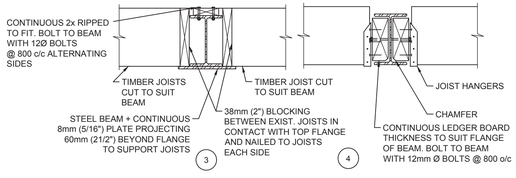
ATTACHMENT OF SHEATHING/SUB-FLOOR

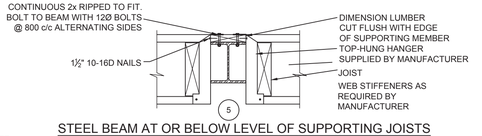
NOTE:
1. EDGES OF FLOOR SHEATHING TO BE TONGUE AND GROOVE.
2. USE 2" NAILS OR 1⅝" SCREWS FOR SHEATHING LESS THAN ¾" THICK.
3. USE 2½" NAILS OR 2" SCREWS FOR ¾" TO 1" SHEATHING
4. USE PRESSURE TREATED PLYWOOD FOR FLOORS OF KITCHENS AND BATHROOMS.
5. MINIMUM THICKNESS OF SUB-FLOOR SHALL BE ⅝" FOR JOIST SPACING UP TO 1'-8" [500] AND ¾" FOR JOIST SPACING OF 2'-0" [600]

STEEL BEAMS SUPPORTING WOOD JOISTS 0603



STEEL BEAM SUPPORTING JOISTS ON TOP FLANGE

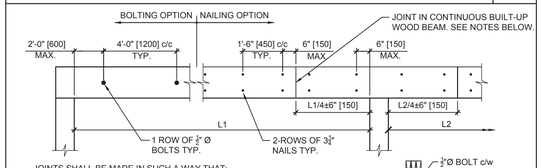




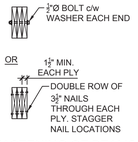
STEEL BEAM AT OR BELOW LEVEL OF SUPPORTING JOISTS

NOTE:
1. WHERE BEAMS ARE BEING INSTALLED TO SUPPORT EXISTING JOISTS, SAFELY SUPPORT JOISTS AND ANY OTHER LOADS ABOVE, UNTIL THE NEW BEAM IS INSTALLED AND PROPERLY SUPPORTED.
2. SEE PLANS AND/OR SECTIONS FOR SIZES OF JOISTS AND BEAMS.

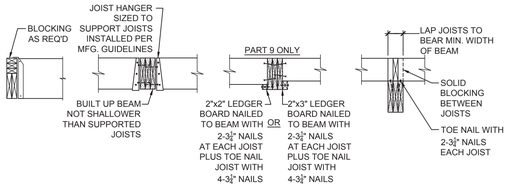
BUILT-UP WOOD BEAMS 0604



JOINTS SHALL BE MADE IN SUCH A WAY THAT:
1. JOINTS SHALL BE LOCATED AS SHOWN ABOVE.
2. JOINTS SHALL ONLY BE MADE IN MULTIPLE SPAN BEAMS WHICH ARE CONTINUOUS OVER THEIR SUPPORTS AS INDICATED ON PLAN. PLIES OF BEAMS INDICATED AS SINGLE SPAN BEAMS SHALL NOT HAVE JOINTS.
3. JOINTS SHALL NOT BE MADE NEAR END SUPPORTS.
4. NOT MORE THAN ONE JOINT SHALL OCCUR IN ANY INDIVIDUAL MEMBER WITHIN ANY ONE SPAN NOR WITHIN TWO ADJACENT SPANS.
5. JOINTS SHALL NOT BE MADE IN ADJACENT MEMBERS OF A BUILT-UP BEAM AT THE SAME LOCATION.
6. NOT MORE THAN HALF OF THE MEMBERS WITHIN A BUILT UP BEAM SHALL BE JOINED AT ANY ONE LOCATION.
7. THE ABOVE REQUIREMENTS ARE BASED ON THE PROVISIONS OF PART 9 OF THE BUILDING CODE AND MAY NOT BE SUITABLE TO STRUCTURES FALLING OUTSIDE THE SCOPE OF PART 9



FASTENING OF BEAMS
NOTE: SEE ABOVE FOR SPACING OF ANCHORS

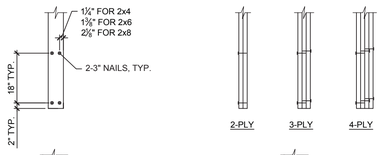


SUPPORT OF JOISTS

NOTES:
1. THE PLIES OF 4- AND 5-PLY BEAMS ARE TO BE FASTENED USING BOLTS ONLY. 2- AND 3-PLY BEAMS MAY BE NAILED OR BOLTED.
2. 4- AND 5-PLY BEAMS ARE TO BE TOP LOADED WHENEVER POSSIBLE; THEY MAY BE SIDE LOADED PROVIDED THEY ARE LOADED EQUALLY FROM BOTH SIDES.

BUILT-UP WOOD COLUMNS 0610

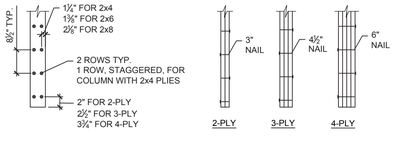
BUILT-UP WOOD COLUMN IN WALL



WOOD SHEATHED WALLS

INTERIOR PARTITIONS

FREE STANDING BUILT-UP WOOD COLUMN



NOTES:
1. NO SPLICES SHALL BE MADE IN ANY BUILT-UP WOOD COLUMNS.
2. DETAILS ABOVE ONLY APPLY TO SPF COLUMNS.
3. ALL NAILS TO BE COMMON WIRE NAILS.

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SEAL:

PROFESSIONAL STRUCTURAL ENGINEER
LICENCE NO. 9385627-2203
MICHAEL F CULLAWAY
STATE OF UTAH

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

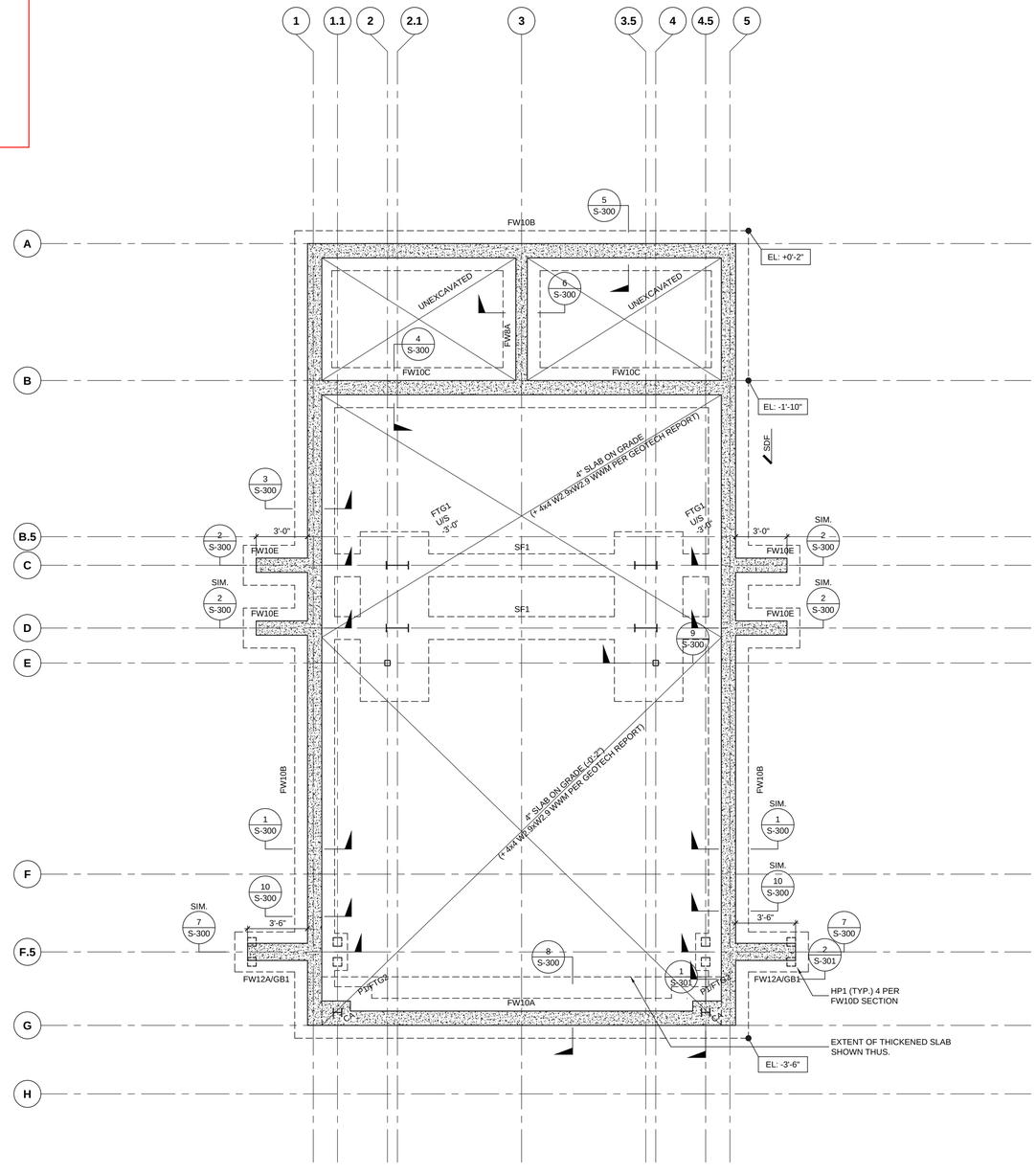
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
TYPICAL DETAILS CONT.'D

S-004

Exhibit A



1 S-100 FOUNDATION PLAN
1/4" = 1'-0"

NOTES:

1. A GEOTCHNICAL REPORT HAS BEE PREPARED BY IGES INC. "GEOTECHNICAL AND GEOLOGIC HAZARD INVESTIGATION LOT 71R OF SUMMIT EDEN PHASE 1C 8488 E. SPRING PARK ROAD SUMMIT POWDER MOUNTAIN." CONTRACTOR IS TO READ THE REPORT AND BECOME FAMILIAR WITH ITS CONTENTS.
2. SHALLOW FOUNDATIONS HAVE BEEN DESIGNED WITH AN ALLOWABLE BEARING CAPCITY OF 2,900psf FOR DEAD AND LIVE LOADS. ⅓ INCREASE FOR SEISMIC AND WIND.
3. NO FOOTINGS ARE TO BE CAST WITHOUT PRIOR APPROVAL FROM THE GEOTECHNICAL CONSULTANT.
4. ASSUMED SPOT ELEVATIONS OF FOOTINGS ARE GIVEN AS UNDERSIDE OF FOOTING AND ARE RELATIVE FINISHED FLOOR OF (0'-0"). U/S OF FOOTINGS MAY BE REQUIRED TO VARY BASED ON COMMENTS FROM IGES FOLLOWING EXCAVATION.
5. REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

FOUNDATION MEMBER SCHEDULE

MEMBER MARK	MEMBER DESCRIPTION	REMARKS
FW10A	10" CONCRETE FOUNDATION WALL	V.I.F #5 @ 18" c/c V.O.F #5 @ 18" c/c H.I.F #5 @ 18" c/c H.O.F #5 @ 18" c/c ON 10"x28" CONTINUOUS STRIP FOOTING r/w 2 #5 CONTINUOUS BARS. WALL TO BE COMPLETELY BACKFILLED EACH SIDE.
FW10B	10" CONCRETE FOUNDATION WALL	V.I.F #5 @ 18" c/c V.O.F #5 @ 18" c/c H.I.F #5 @ 18" c/c H.O.F #5 @ 18" c/c ON 10"x28" CONTINUOUS STRIP FOOTING r/w 2 #5 CONTINUOUS BARS.
FW10C	10" CONCRETE FOUNDATION WALL	V.I.F #5 @ 18" c/c V.O.F N/A H.I.F #5 @ 18" c/c H.O.F N/A ON 10"x28" CONTINUOUS STRIP FOOTING r/w 2 #5 CONTINUOUS BARS.
FW10D	10" CONCRETE BUTTRESS WALL	NOT IN USE.
FW10E	10" CONCRETE BUTTRESS WALL	V.I.F #5 @ 12" c/c V.O.F #5 @ 12" c/c HORIZONTAL: #3 TIES @ 10" c/c ON 5'-4" x 2'4" x 1'-4" PAD FOOTING r/w 4 #6 LONG DIRECTION TOP AND BOTTOM 6 #6 SHORT DIRECTION TOP AND BOTTOM
FW12A	12" CONCRETE BUTTRESS WALL	V.I.F #5 @ 12" c/c V.O.F #5 @ 12" c/c HORIZONTAL: #4 TIES. REFER TO SECTION ON GB1: 7 #6 TOP AND BOTTOM #4 TIES @ 4" c/c 2-HP1 AT EACH END
FW8A	8" CONCRETE FOUNDATION WALL	V #5 @ 16" c/c MIDDLE OF WALL H #5 @ 16" c/c MIDDLE OF WALL ON 10"x24" CONTINUOUS STRIP FOOTING r/w 2 #5 CONTINUOUS BARS.
FTG1	4'-0"x10'-0"x1'-4" CONCRETE PAD FOOTING	r/w 5 #6 BARS LONG DIRECTION EACH FACE 8 #6 BARS SHORT DIRECTION EACH FACE
FTG2	3'-0"x4'-0"x0'-10" CONCRETE PAD FOOTING	r/w 4 #5 BARS LONG DIRECTION BOTTOM 6 #5 BARS SHORT DIRECTION BOTTOM
SF1	20"x10" CONT. STRIP FOOTING	r/w 2 #5 CONTINUOUS
P1	16"x16" CONCRETE PIER (MIN. DIMENSIONS)	r/w 10 #5 VERTICALS AND #4 TIES @ 10"c/c. PROVIDE #5 HOOKED DOWELS TO FOOTING
HP1	HELICAL PILE	EACH PIER RATED FOR 45 KIPS C/T (LFRD)

NOTES:

1. AT A MINIMUM PROVIDE DOWELS FROM STRIP FOOTING TO WALLS ABOVE MATCHING VERTICAL BARS FROM WALL ABOVE.
2. PROVIDE 1 1/2"x2 1/2" SHEAR KEY IN TOP OF ALL STRIP FOOTINGS.

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	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

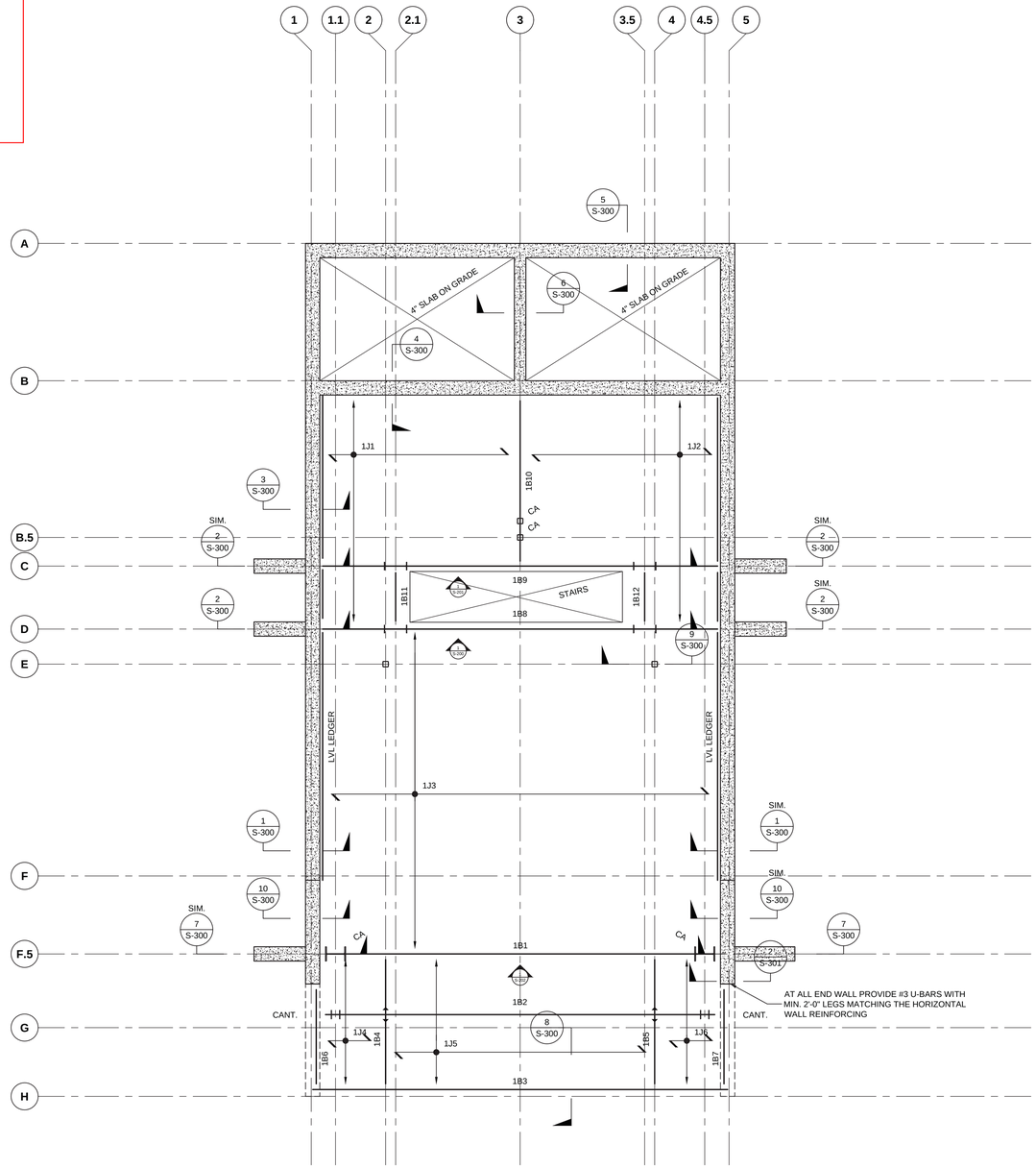
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
FOUNDATION PLAN

S-100

Exhibit A



1 S-101 GARAGE LEVEL SHOWING LEVEL 2 FRAMING
1/4" = 1'-0"

1. MAIN FLOOR DATUM IS LOCATED (8'-11 1/4") ABOVE PROJECT 0'-0"
2. TOP OF SHEATHING IS AT (-0'-2") BELOW FINISH
3. WHERE CROSSEED AND NOTED SHEATHING ELEVATION IS GIVEN RELATIVE TO THE DATUM
4. LOADS USED IN DESIGN: DEAD: 40psf (INTERIOR SPACE + 1 1/2" LIGHTWEIGHT GYPCRETE)
   SNOW: N/A
   LIVE: 40psf
5. ALL SHEATHING TO BE 3/4" T&G APPLIED DIRECTLY TO THE JOISTS.
6. TYPICAL NAILING SHALL BE 10d NAILS @ 6"c/c @ ALL SUPPORTED EDGES
7. OVER SFRS BEAMS NAILING SPACING TO BE 2" ROWS OF 10d BOX NAILS @ 2" c/c TO NAILER PLATE.
8. REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

LEVEL 2 MEMBER SCHEDULE

MEMBER MARK	MEMBER DESCRIPTION	REACTIONS		REMARKS
		LEFT	RIGHT	
1J1	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
1J2	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
1J3	14" REDBUILT RED I-65 @16" c/c	1.5 HU416	1.5 HU416	
1J4	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
1J5	14" REDBUILT RED I-45 @16" c/c	1.5 HU416	1.5 HU416	
1J6	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
1B1 (SFRS)	W12x72	89.0 SEE 7/S-300	89.0 SEE 7/S-300	REFER TO STEEL ELEVATIONS FOR NAILER REQUIREMENTS
1B2	W12x50	22.0 (1)	22.0 (1)	TOP PLATE NAILER + WEB PACK OUT
1B3	W12x30	7.0 (1)	7.0 (1)	TOP PLATE NAILER + WEB PACK OUT
1B4	W12x30	Vl =7.5 (1)	Vl =19.5 Mf=33.0 (7) Vl =7.5 (1)	TOP PLATE NAILER + WEB PACK OUT
1B5	W12x30	Vl =7.5 (1)	Vl =19.5 Mf=33.0 (7) Vl =7.5 (1)	TOP PLATE NAILER + WEB PACK OUT
1B6	W12x26	1.5 (1)	1.5 (1)	TOP PLATE NAILER
1B7	W12x26	1.5 (1)	1.5 (1)	TOP PLATE NAILER
1B8 (SFRS)	W12x35	5.0 REFER TO S-105	5.0 REFER TO S-105	REFER TO STEEL ELEVATIONS FOR NAILER REQUIREMENTS
1B9 (SFRS)	W12x35	14.5 REFER TO S-105	14.5 REFER TO S-105	REFER TO STEEL ELEVATIONS FOR NAILER REQUIREMENTS
1B10	W12X26	23.0 (1)	23.0 SIM. 6/S-400	TOP PLATE NAILER
1B11	W12x22	1.0 SIM. (8)	1.0 SIM. (8)	TOP PLATE NAILER + WEB PACK OUT
1B12	W12x22	1.0 SIM. (8)	1.0 SIM. (8)	TOP PLATE NAILER + WEB PACK OUT
LVL LEDGER	1 3/4" x 14" LVL	BENT PLATE WITH 3/4" THREADED ROD @ 24" c/c FROM BENT PLATE TO FOUNDATION WALL. FASTEN LEDGER TO PLATE WITH TBS WOOD-TO-STEEL SCREWS @ 8" c/c. REFER TO 3/S-300		

NOTES:

1. ALL WOOD CONNECTORS ARE TO BE BY SIMPSON STRONG TIE. PROVIDE CONSULTANT WITH FULL SPEC. OF ALL ALTERNATE HANGERS FOR APPROVAL PRIOR TO USE.
2. ALL LOADS HAVE BEEN FACTORED IN ACCORDANCE WITH IBC 2015 LOAD CASES (LRFD)
3. LEFT AND RIGHT BEAM REACTIONS ORIENTATED WITH THE MEMBER LABEL ON PLAN.
4. ALL FASTENERS (ie. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOD (ie. SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.9.5.
5. FOR STEEL BEAMS, REFER TO S-203 FOR CONNECTION DETAILING

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PROJECT NAME:
VILLAGE HOUSE AT LOT 71

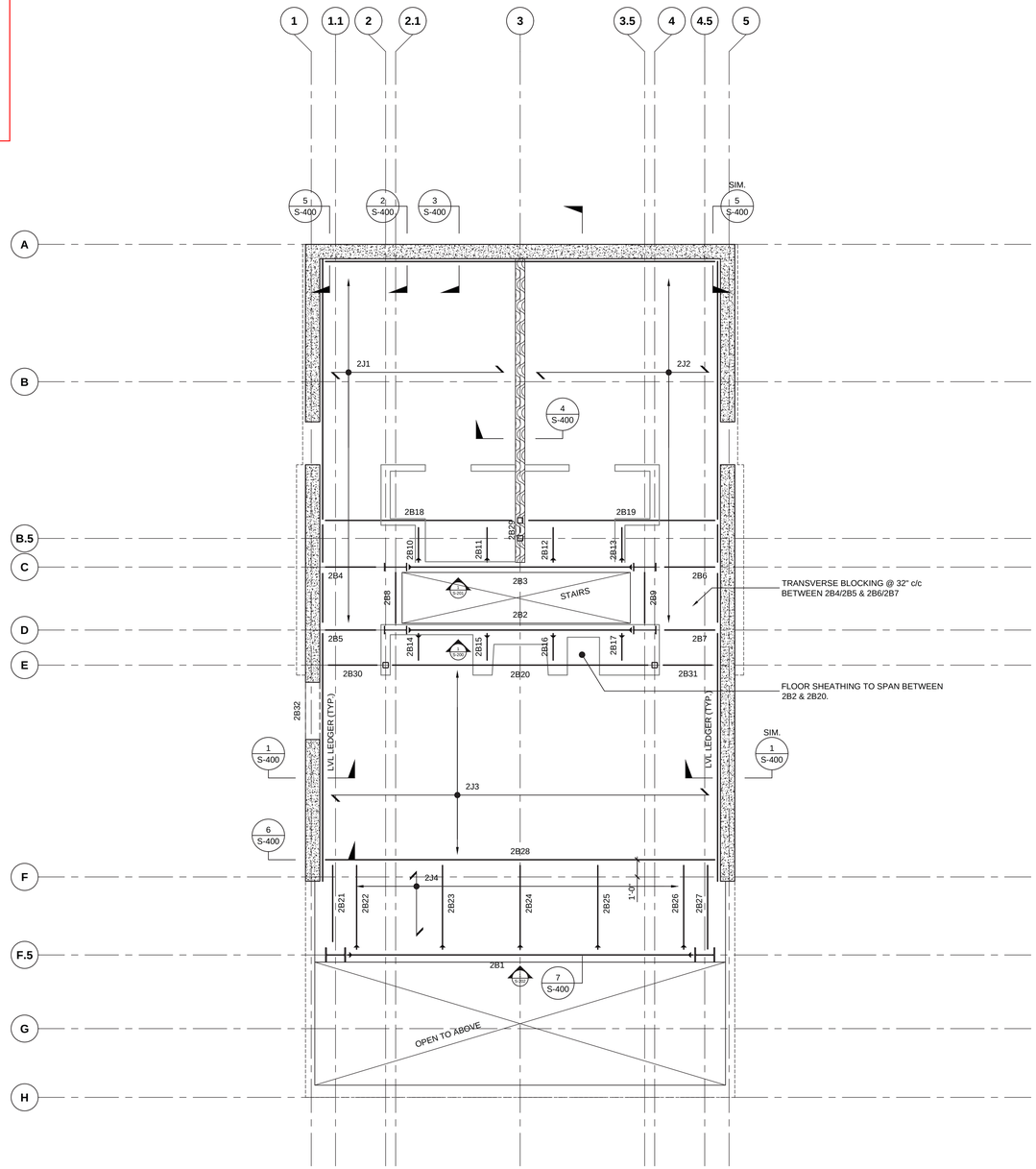
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE: AS NOTED	PROJECT NUMBER: 170450

SHEET TITLE:
LEVEL 2 FRAMING PLAN

S-101

Exhibit A



1 / S-102 LEVEL 2 SHOWING LEVEL 3 FLOOR FRAMING
1/4" = 1'-0"

1. SECOND FLOOR DATUM IS LOCATED (+18'-4 1/2") ABOVE PROJECT 0'-0"
2. TOP OF SHEATHING IS AT (-0'-2") BELOW FINISH
3. WHERE CROSSEED AND NOTED SHEATHING ELEVATION IS GIVEN RELATIVE TO THE DATUM
4. LOADS USED IN DESIGN: DEAD: 40psf (INTERIOR SPACE + 1 1/2" LIGHTWEIGHT GYPCRETE)
   SNOW: N/A
   LIVE: 40psf
5. ALL SHEATHING TO BE 3/4" T&G APPLIED DIRECTLY TO THE JOISTS.
6. TYPICAL NAILING SHALL BE 10d NAILS @ 6"c/c @ ALL SUPPORTED EDGES. 12"c/c @ ALL INTERMEDIATE SUPPORT UNLESS OTHERWISE NOTED.
7. OVER SMF NAILING SPACING TO BE 2" c/c TO NAILER PLATE.
8. REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

LEVEL 3 MEMBER SCHEDULE

MEMBER MARK	MEMBER DESCRIPTION	REACTIONS LEFT	REACTIONS RIGHT	REMARKS
2J1	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
2J2	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
2J3	14" REDBUILT RED I-65 @12" c/c	1.5 HU416	1.5 HU416	
2J4	14" REDBUILT RED I-45 @16" c/c	1.0 HU416	1.0 HU416	
2B1 (SFRS)	W10x26	Vf = 4.0 Mf= 23.0 (11)	Vf = 4.0 Mf= 23.0 (11)	RBS SPECIAL MOMENT FRAME REFER TO STEEL ELEVATIONS
2B2 (SFRS)	W14x22	Vf = 3.5 Mf= 18.5 (11)	Vf = 3.5 Mf= 18.5 (11)	RBS SPECIAL MOMENT FRAME REFER TO STEEL ELEVATIONS
2B3 (SFRS)	W14x22	Vf = 5.5 Mf= 37.0 (11)	Vf = 5.5 Mf= 37.0 (11)	RBS SPECIAL MOMENT FRAME REFER TO STEEL ELEVATIONS
2B4	W12x22	1.0 SIM. 6/S-400	1.0 SIM. (8)	WEB PACK OUT + TOP PLATE NAILER
2B5	W12x22	1.0 SIM. 6/S-400	1.0 SIM. (8)	WEB PACK OUT + TOP PLATE NAILER
2B6	W12x22	1.0 SIM. (8)	1.0 SIM. 6/S-400	WEB PACK OUT + TOP PLATE NAILER
2B7	W12x22	1.0 SIM. (8)	1.0 SIM. 6/S-400	WEB PACK OUT + TOP PLATE NAILER
2B8	W12x22	1.0 SIM. (8)	1.0 SIM. (8)	WEB PACK OUT + TOP PLATE NAILER
2B9	W12x22	1.0 SIM. (8)	1.0 SIM. (8)	WEB PACK OUT + TOP PLATE NAILER
2B10	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B11	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B12	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B13	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B14	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE TOP PLATE NAILER
2B15	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE TOP PLATE NAILER
2B16	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE TOP PLATE NAILER
2B17	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE TOP PLATE NAILER
2B18	W10x22	2.0 SIM. 6/S-400	2.0 (8)	
2B19	W10x22	2.0 (8)	2.0 SIM. 6/S-400	
2B20	W10x22	2.0 (8)	2.0 (8)	
2B21	W10x22	1.0 SIM. (8)	1.0 (1)	
2B22	W10x22	Vf = 1.0 Mf= 9.0 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B23	W10x22	Vf = 1.0 Mf= 9.0 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B4	W10x22	Vf = 1.0 Mf= 9.0 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B25	W10x22	Vf = 1.0 Mf= 9.0 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B26	W10x22	Vf = 1.0 Mf= 9.0 (17)	1.0 (1)	TORSION NODAL BRACE TOP PLATE NAILER
2B27	W10x22	1.0 SIM. (8)	1.0 (1)	
2B28	W10x26	4.5 SIM. 6/S-400	4.5 SIM. 6/S-400	
2B29	W10x22	1.0 (8)	1.0 (8)	
2B30	2 - 1 3/4" x 14" LVL	0.5 HU416	0.5 SIM. (8)	
2B31	2 - 1 3/4" x 14" LVL	0.5 SIM. (1)	0.5 HU416	
2B32	10" x 24" CONCRETE BEAM			2 #6 BARS TOP AND BOTTOM #3 STIRRUPS @ 8" c/c
LVL LEDGER	1 3/4" x 14" LVL	BENT PLATE WITH 3/4" THREADED ROD @ 24" c/c FROM BENT PLATE TO FOUNDATION WALL. FASTEN LEDGER TO PLATE WITH TBS WOOD-TO-STEEL SCREWS @ 8" c/c. REFER TO 3/S-300		

NOTES:

1. ALL WOOD CONNECTORS ARE TO BE BY SIMPSON STRONG TIE. PROVIDE CONSULTANT WITH FULL SPEC. OF ALL ALTERNATE HANGERS FOR APPROVAL PRIOR TO USE.
2. ALL LOADS HAVE BEEN FACTORED IN ACCORDANCE WITH IBC 2015 LOAD CASES (LRFD)
3. LEFT AND RIGHT BEAM REACTIONS ORIENTATED WITH THE MEMBER LABEL ON PLAN.
4. ALL FASTENERS (ie. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOD (ie. SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.9.5.
5. FOR STEEL BEAMS, REFER TO S-203 FOR CONNECTION DETAILING

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SEAL:

PROFESSIONAL STRUCTURAL ENGINEER
No. 6838627-2203
MICHAEL F SULLAWAY
STATE OF UTAH

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

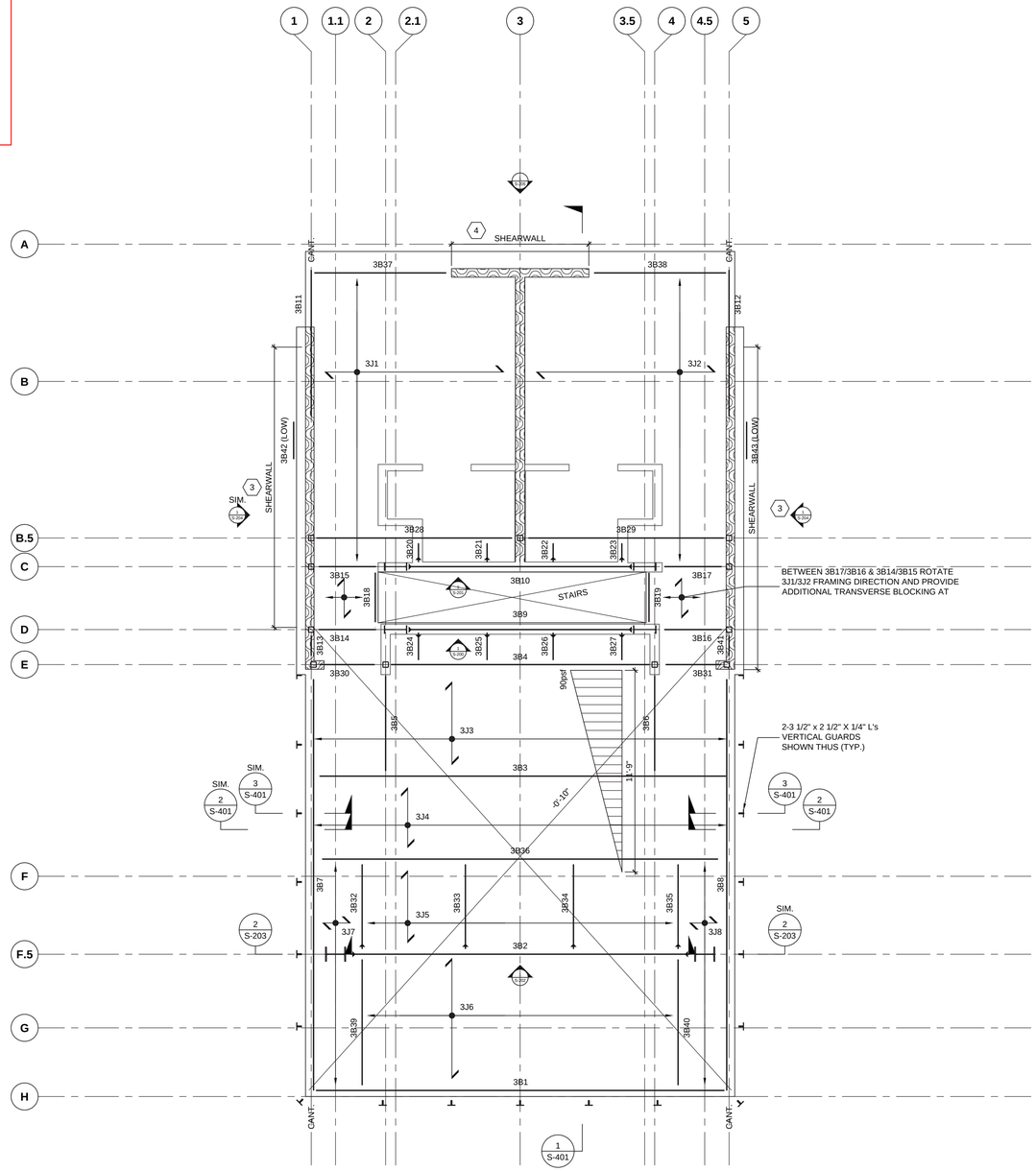
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE: AS NOTED	PROJECT NUMBER: 170450

SHEET TITLE:
LEVEL 3 FRAMING PLAN

S-102

Exhibit A



1 / S-103 LEVEL 3 SHOWING LEVEL 4 FRAMING
1/4" = 1'-0"

1. TERRACE DATUM IS LOCATED (28'-10 1/2") ABOVE PROJECT 0'-0"
2. TOP OF SHEATHING IS AT (-0'-2") BELOW THE DATUM.
3. WHERE CROSSEED AND NOTED SHEATHING ELEVATION IS GIVEN RELATIVE TO THE DATUM
4. LOADS USED IN DESIGN: DEAD: 40psf (INTERIOR SPACE + 1 1/2" LIGHTWEIGHT GYPCRETE)
   45psf (EXTERIOR TERRACE - SLOPED INSULATION)
   SNOW: 192psf
   LIVE: 40psf
5. ALL SHEATHING TO BE 3/4" T&G APPLIED DIRECTLY TO THE JOISTS.
6. TYPICAL NAILING SHALL BE 10d NAILS @ 6"c/c @ ALL SUPPORTED EDGES AND OVER SHEARWALLS. 12" c/c @ ALL INTERMEDIATE SUPPORT UNLESS OTHERWISE NOTED.
7. OVER SMF NAILING SPACING TO BE 2" c/c TO NAILER PLATE.
8. REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

LEVEL 4 MEMBER SCHEDULE

MEMBER MARK	MEMBER DESCRIPTION	REACTIONS LEFT	REACTIONS RIGHT	REMARKS
3J1	11 7/8" REDBUILT RED I-45 @ 16" c/c	1.0 3" MIN BEARING	1.0 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J2	11 7/8" REDBUILT RED I-45 @ 16" c/c	1.0 3" MIN BEARING	1.0 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J3	11 7/8" REDBUILT RED I-45 @ 16" c/c	2.0 3" MIN BEARING	2.0 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J4	11 7/8" REDBUILT RED I-45 @ 16" c/c	1.5 3" MIN BEARING	1.5 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J5	11 7/8" REDBUILT RED I-45 @ 16" c/c	1.5 3" MIN BEARING	1.5 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J6	11 7/8" REDBUILT RED I-45 @ 16" c/c	2.5 3" MIN BEARING	2.5 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J7	11 7/8" REDBUILT RED I-45 @ 16" c/c	1.0 3" MIN BEARING	1.0 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3J8	11 7/8" REDBUILT RED I-45 @ 16" c/c	1.0 3" MIN BEARING	1.0 3" MIN BEARING	PROVIDE HU412 WHERE SUPPORTED BY BEAM FRAMING.
3B1	W16x36	17.5 (1)	17.5 (1)	WEB PACK OUT + TOP PLATE NAILER
3B2 (SFRS)	W12x35	Vf = 28.0 Mf = 100.0 (11)	Vf = 28.0 Mf = 100.0 (11)	RBS SPECIAL MOMENT FRAME REFER TO STEEL ELEVATIONS
3B3	W16x57	30.0 (1)	30.0 (1)	WEB PACK OUT + TOP PLATE NAILER
3B4	W8x48	13.0	13.0 (8)	WEB PACK OUT + TOP PLATE NAILER
3B5	W16x26	1.5 (1)	1.5 (8)	TOP PLATE NAILER
3B6	W16x26	1.5 (1)	1.5 (8)	TOP PLATE NAILER
3B7 (SFRS)	W16x67	60.0	19.5 (8)	WEB PACK OUT + TOP PLATE NAILER DRAG STRUT TO SHEARWALLS
3B8 (SFRS)	W16x67	60.0	19.5 (8)	WEB PACK OUT + TOP PLATE NAILER DRAG STRUT TO SHEARWALLS
3B9 (SFRS)	W14x22	Vf = 2.5 Mf = 14.0 (11)	Vf = 2.5 Mf = 14.0 (11)	RBS SPECIAL MOMENT FRAME REFER TO STEEL ELEVATIONS
3B10 (SFRS)	W14x22	Vf = 6.0 Mf = 38.0 (11)	Vf = 6.0 Mf = 38.0 (11)	RBS SPECIAL MOMENT FRAME REFER TO STEEL ELEVATIONS
3B11	3 - 1 3/4" x 11 7/8" LVL	Vf = -5.0 4 1/2" MIN. BEARING	Vf = 14.0 4 1/2" MIN. BEARING	REFER TO SHEARWALL ELEVATIONS FOR STRAP HOLDDOWNS
3B12	3 - 1 3/4" x 11 7/8" LVL	Vf = 14.0 4 1/2" MIN. BEARING	Vf = -5.0 4 1/2" MIN. BEARING	REFER TO SHEARWALL ELEVATIONS FOR STRAP HOLDDOWNS
3B13 (SFRS)	W8x18	1.0 (8)	1.0 (8)	WEB PACK OUT + TOP PLATE NAILER
3B14	W12x22	1.0 (10)	1.0 SIM. (8)	WEB PACK OUT + TOP PLATE NAILER
3B15	W12x22	1.0 (8)	1.0 SIM. (8)	WEB PACK OUT + TOP PLATE NAILER
3B16	W12x22	1.0 SIM. (8)	1.0 (10)	WEB PACK OUT + TOP PLATE NAILER
3B17	W12x22	1.0 SIM. (8)	1.0 (8)	WEB PACK OUT + TOP PLATE NAILER
3B18	2 - 1 3/4" x 14" LVL	1.0 HU416	1.0 HU416	
3B19	W12x22	1.0 SIM. (8)	1.0 SIM. (8)	
3B20	W10x22	Vf = 1.0 Mf= 9.5 (1)	1.0 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B21	W10x22	Vf = 1.0 Mf= 9.5 (1)	1.0 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B22	W10x22	Vf = 1.0 Mf= 9.5 (1)	1.0 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B23	W10x22	Vf = 1.0 Mf= 9.5 (1)	1.0 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B24	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B25	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B26	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B27	W10x22	1.0 (1)	Vf = 1.0 Mf= 9.5 (17)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B28	W10x22	1.5 (8)	1.5 (10)	TOP PLATE NAILER
3B29	W10x22	1.5 (10)	1.5 (8)	TOP PLATE NAILER
3B30	W8x18	3.0 (8)	3.0 (8)	WEB PACK OUT + TOP PLATE NAILER
3B31	W8x18	3.0 (8)	3.0 (8)	WEB PACK OUT + TOP PLATE NAILER
3B32	W12x26	Vf = 2.0 Mf= 14.5 (17)	2.0 (1)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B33	W12x26	Vf = 1.5 Mf= 14.5 (17)	1.5 (1)	TORSION NODAL BRACE TOP PLATE NAILER
3B34	W12x26	Vf = 1.5 Mf= 14.5 (17)	1.5 (1)	TORSION NODAL BRACE TOP PLATE NAILER
3B35	W12x26	Vf = 2.0 Mf= 14.5 (17)	2.0 (1)	TORSION NODAL BRACE WEB PACK OUT + TOP PLATE NAILER
3B36	W16x50	24.5 (1)	24.5 (1)	WEB PACK OUT + TOP PLATE NAILER
3B37	3 - 1 3/4" x 11 7/8" LVL	9.0 HGUS410	9.0 4 1/2" MIN. BEARING	INSTALL DOUBLE LVL WITH HANGER PRIOR TO LAMINATING 3RD PLY
3B38	3 - 1 3/4" x 11 7/8" LVL	9.0 4 1/2" MIN. BEARING	9.0 HGUS410	INSTALL DOUBLE LVL WITH HANGER PRIOR TO LAMINATING 3RD PLY
3B39	2 - 1 3/4" x 11 7/8" LVL	4.0 HU412	4.0 HU412	
3B40	2 - 1 3/4" x 11 7/8" LVL	4.0 HU412	4.0 HU412	
3B41 (SFRS)	W8x18	1.0 (8)	1.0 (8)	
3B42	2 - 1 3/4" x 11 7/8" LVL	2.0 HUCQ410	2.0 HUCQ410	
3B43	2 - 1 3/4" x 11 7/8" LVL	2.0 HUCQ410	2.0 HUCQ410	

NOTES:

1. ALL WOOD CONNECTORS ARE TO BE BY SIMPSON STRONG TIE. PROVIDE CONSULTANT WITH FULL SPEC. OF ALL ALTERNATE HANGERS FOR APPROVAL PRIOR TO USE.
2. ALL LOADS HAVE BEEN FACTORED IN ACCORDANCE WITH IBC 2015 LOAD CASES (LRFD)
3. LEFT AND RIGHT BEAM REACTIONS ORIENTATED WITH THE MEMBER LABEL ON PLAN.
4. ALL FASTENERS (ie. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOD (ie. SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.9.5.
5. FOR STEEL BEAMS, REFER TO S-203 FOR CONNECTION DETAILING

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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

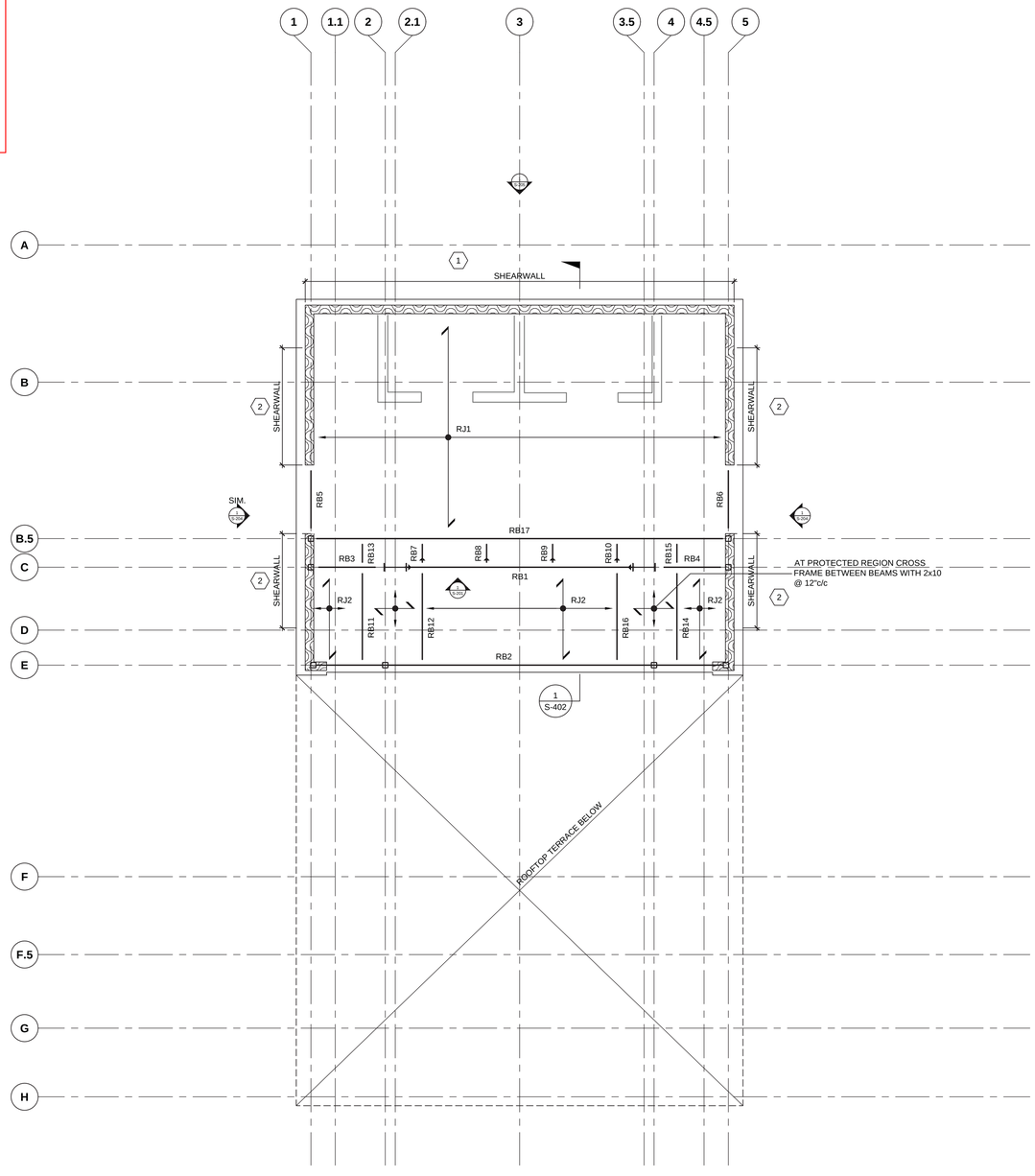
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE: AS NOTED	PROJECT NUMBER: 170450

SHEET TITLE:
LEVEL 4 FRAMING PLAN

S-103

Exhibit A



1 S-104 LEVEL 4 SHOWING UPPER ROOF FRAMING
1/4" = 1'-0"

1. ROOF DATUM VARIES BASED ON ROOF SLOPE. REFER TO ARCHITECTURAL DRAWINGS.
2. TOP OF SHEATHING IS AT (-0'-3 1/2") BELOW FINISH
3. LOADS USED IN DESIGN: DEAD: 25psf
   SNOW: 192psf
   LIVE: N/A
4. ALL SHEATHING TO BE 3/4" T&G APPLIED DIRECTLY TO THE JOISTS.
5. TYPICAL NAILING SHALL BE 10d NAILS @ 6"c/c @ ALL SUPPORTED EDGES AND OVER SHEARWALLS. 12" c/c @ ALL INTERMEDIATE SUPPORT UNLESS OTHERWISE NOTED.
6. OVER SMF NAILING SPACING TO BE 2" c/c TO NAILER PLATE.
7. REFER TO GENERAL NOTES AND TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

ROOF MEMEBER SCHEDULE

MEMBER MARK	MEMBER DESCRIPTION	REACTIONS		REMARKS
		LEFT	RIGHT	
RJ1	14" REDBUILT RED I-90 @12" c/c	2.5 LSSU410	2.5 LSSU410	SOLID BLOCKING @ 8'-0" c/c MAX
RJ2	14" REDBUILT RED I-45 @16" c/c	1.5 LSSU410	1.5 LSSU410	SOLID BLOCKING @ 8'-0" c/c MAX
RB1 (SFRS)	W14x22	Vf =8.0 Mf=28.0 (11)	Vf =8.0 Mf=28.0 (11)	REFER TO STEEL ELEVATIONS
RB2	W10x26	1.0 (13) 12.5	12.5 (13) 1.0 (13)	WEB PACK OUT + TOP PLATE NAILER
RB3	W14X22	2.5 (13)	2.5 SIM. (10)	WEB PACK OUT + TOP PLATE NAILER
RB4	W14x22	2.5 SIM. (10)	2.5 (13)	WEB PACK OUT + TOP PLATE NAILER
RB5	2 - 1 3/4" x 14" LVL	1.0 LSSU410	1.0 MIN 3" BEARING	
RB6	2 - 1 3/4" x 14" LVL	1.0 LSSU410	1.0 MIN 3" BEARING	
RB7	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE
RB8	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE
RB9	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE
RB10	W10x22	Vf = 1.0 Mf= 9.5 (17)	1.0 (1)	TORSION NODAL BRACE
RB11	2 - 1 3/4" x 14" LVL	1.5 HU416	1.5 HU416	CUT BOTTOM OF BEAM FLAT AT LOW END. MAX 2" NOTCH.
RB12	2 - 1 3/4" x 14" LVL	1.5 HU416	1.5 HU416	CUT BOTTOM OF BEAM FLAT AT LOW END. MAX 2" NOTCH.
RB13	2 - 1 3/4" x 14" LVL	1.5 HU416	1.5 HU416	CUT BOTTOM OF BEAM FLAT AT LOW END. MAX 2" NOTCH.
RB14	2 - 1 3/4" x 14" LVL	1.5 HU416	1.5 HU416	CUT BOTTOM OF BEAM FLAT AT LOW END. MAX 2" NOTCH.
RB15	2 - 1 3/4" x 14" LVL	1.5 HU416	1.5 HU416	CUT BOTTOM OF BEAM FLAT AT LOW END. MAX 2" NOTCH.
RB16	2 - 1 3/4" x 14" LVL	1.5 HU416	1.5 HU416	CUT BOTTOM OF BEAM FLAT AT LOW END. MAX 2" NOTCH.
RB17	W14x53	30.5 (13)	30.5 (13)	

NOTES:

1. ALL WOOD CONNECTORS ARE TO BE BY SIMPSON STRONG TIE. PROVIDE CONSULTANT WITH FULL SPEC. OF ALL ALTERNATE HANGERS FOR APPROVAL PRIOR TO USE.
2. ALL LOADS HAVE BEEN FACTORED IN ACCORDANCE WITH IBC 2015 LOAD CASES (LRFD)
3. LEFT AND RIGHT BEAM REACTIONS ORIENTATED WITH THE MEMBER LABEL ON PLAN.
4. ALL FASTENERS (ie. NAILS, SCREWS, ANCHOR BOLTS, ETC.) WHICH ARE TO BE INSTALLED IN PRESERVATIVE TREATED WOOD (ie. SILL PLATES) SHALL MEET THE REQUIREMENTS OF IBC 2304.9.5.
5. FOR STEEL BEAMS, REFER TO S-203 FOR CONNECTION DETAILING

SHEARWALL SCHEDULE

MEMBER MARK	PLYWOOD SHEATHING	EDGE NAILING	RIM/BLOCKING TO TOP PLATE	BOTTOM PLATE TO RIM	SILL BOLTING	ASD SHEAR (PLF)
SW1 (1)	15/32" STRUCT I	8d @ 6" c/c	A35 @ 32" c/c	16d @ 6" c/c COMMON	5/8"Ø @ 32" c/c	280
SW2 (2)	15/32" STRUCT I	8d @ 4" c/c	A35 @ 32" c/c	16d @ 6" c/c COMMON	5/8"Ø @ 32" c/c	430
SW3 (3)	15/32" STRUCT I	8d @ 3" c/c	A35 @ 16" c/c	16d @ 6" c/c COMMON	5/8"Ø @ 16" c/c	550
SW4 (4)	15/32" STRUCT I	8d @ 2" c/c	A35 @ 8" c/c	16d @ 6" c/c COMMON	5/8"Ø @ 16" c/c	730

NOTES:

1. ALL PANEL EDGES SHALL BE BACKED WITH 2" NOMINAL FRAMING MINIMUM.
2. ALL PANEL EDGES RECIEVING EDGE NAILING FROM ABUTTING PANELS SHALL BE 3" NOMINAL MINIMUM OR STAGGER ROWS TO PROVIDE MINIMUM 1/2" EDGE DISTANCE.
3. PROVIDE 3"x3"x0.229 WASHERS FOR ALL ANCHOR BOLTS TO STILL PLATES (TYP.). LOCATE ANCHORS, SUCH THAT EDGE OF WASHER IS WITHIN 1/2" OF INSIDE FACE OF SHEATHING.
4. AT INTERMEDIATE FRAMING MEMBERS NAIL WALLS @ 12" c/c.
5. EDGE NAILS NOTED IN SCHEDULE TO BE STAGGERED AND PROVIDE 1/2" EDGE DISTANCE MINUMUM.
6. ALL FASTENERS IN CONTACT WITH PRESSURE TREATED SILL SHALL BE GALVANIZED.
7. SEE SHEARWALL ELEVATIONS FOR ADDITIONAL INFORMATION.

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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
ROOF FRAMING PLAN

S-104

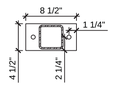
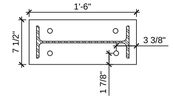
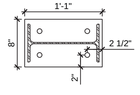
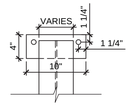
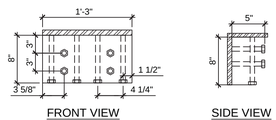
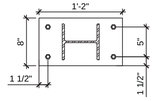
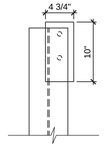
Exhibit A

COLUMN SCHEDULE

COLUMN DATA	B.5 - 1	B.5(-1'-5/8") - 3	B.5 - 3	B.5 - 5	C - 1	C - 2.1	C - 3.5	C - 5	D - 1	D - 2.1	D - 3.5	D - 5	E - 1.1	E - 2	E - 4	E - 5	F.5 - 1.1	F.5 - 4.5	G(-0'-9 1/16") - 1.1	G(-0'-9 1/16") - 4.5
ROOF PEAK																				
(34'-3 1/4")	HSS 4"x4"x 1/4" Cf: 31.0			HSS 4"x4"x 1/4" Cf: 31.0	HSS 4"x4"x 1/4" Cf: 2.5	Cf: 10.5 Tf: -7.0 Mf: 60.0	Cf: 10.5 Tf: -7.0 Mf: 60.0	HSS 4"x4"x 1/4" Cf: 2.5												
LEVEL 4													HSS 4"x4"x 1/4" Cf: 0			HSS 4"x4"x 1/4" Cf: 0 Vf: 0				
(28'-10 1/2")	2" Cf: 34.5		Cf: 2.5	2" Cf: 34.5	2" Cf: 4.0	Cf: 22.5 Tf: -17.5 Mf: 48.0	Cf: 22.5 Tf: -17.5 Mf: 48.0	Cf: 4.0	HSS 4"x4"x 1/4" Cf: 2.5	Cf: 5.5 Tf: -3.5 Mf: 30.0	Cf: 5.5 Tf: -3.5 Mf: 30.0	HSS 4"x4"x 1/4" Cf: 2.5	2" Cf: 20.0	Cf: 12.0 Cf: 29.0	Cf: 12.0 Cf: 29.0	2" Cf: 20.0	Cf: 88.5 Tf: 0 Mf: 55.0	Cf: 88.5 Tf: 0 Mf: 55.0		
TOP OF CONCRETE									2"			2"								
WALL (20'-4 1/2")			HSS 4"x4"x 1/4"			W16x31 Cf: 35.0 Tf: -27.5 Mf: 52.0	W16x31 Cf: 35.0 Tf: -27.5 Mf: 52.0		W16x31 Cf: 12.0 Tf: -7.5 Mf: 20.0	W16x31 Cf: 12.0 Tf: -7.5 Mf: 20.0		HSS 4"x4"x 1/4"	HSS 4"x4"x 1/4"		W14x74 Cf: 92.0 Tf: 0 Mf: 27.0	W14x74 Cf: 92.0 Tf: 0 Mf: 27.0		
LEVEL 3														HSS 4"x4"x 1/4" Cf: 30.5	HSS 4"x4"x 1/4" Cf: 30.5					
(18'-4 1/2")		HSS 4"x4"x 1/4" Cf: 4.0	Cf: 6.0																	
LEVEL 2		TRANSFER BEAM	TRANSFER BEAM			TRANSFER BEAM Cf: 35.5 Tf: -27.5 Mf: 100.0 Vf: 14.0	TRANSFER BEAM Cf: 35.5 Tf: -27.5 Mf: 100.0 Vf: 14.0			TRANSFER BEAM Cf: 12.5 Tf: -7.5 Mf: 44.0 Vf: 7.0	TRANSFER BEAM Cf: 12.5 Tf: -7.5 Mf: 44.0 Vf: 7.0					TRANSFER BEAM Cf: 93.0 Tf: 0 Vf: 12.5 Mf: 101.5	TRANSFER BEAM Cf: 93.0 Tf: 0 Vf: 12.5 Mf: 101.5		
(8'-11 1/4")														Cf: 30.5	Cf: 30.5					
LEVEL 1																			W6x20 Cf: 28.5	W6x20 Cf: 28.5
(0'-0")						2" Cf: 38.0 Tf: -15.0	2" Cf: 38.0 Tf: -15.0			2" Cf: 10.5 Tf: -5.5	2" Cf: 10.5 Tf: -5.5			2"	2"				2"	2"
BASEPLATE	A			A	A	B	B	A	A	B	B	A	A	A	A	A			F	F
ADDITIONAL																				

NOTES:

1. ALL FORCES ARE GIVEN IN KIP AND KIP-FT.

BASEPLATE A - 5/8" THICK	BASEPLATE B - 5/8" THICK	BASEPLATE C - 5/8" THICK	BASEPLATE D - 5/8" THICK	BASEPLATE E - 5/8" THICK	BASEPLATE F - 5/8" THICK	BASEPLATE G - 13/16" THICK
						
2-3/4"Ø HILTI HIT-Z BARS DRILLED AND EPOXIED 6" USING HILTI HIT-HY 200	4-5/8"Ø HILTI HIT-Z BARS DRILLED AND EPOXIED 6" USING HILTI HIT-HY 200	4-3/4"Ø HILTI HEX HEAD HEADED STUD ANCHORS CAST-IN WITH 6" EMDBEDMENT	2-5/8"Ø HILTI HEX HEAD CAST IN ANCHORS MIN. 8" EMBEDMENT	8-5/8"Ø HILTI HEX HEAD HEADED STUD ANCHORS WELDED TO BASEPLATE CAST-IN WITH EMDBEDMENT AS SHOWN	4-3/4"Ø HILTI HIT-Z BARS DRILLED AND EPOXIED 6" USING HILTI HIT-HY 200	2-5/8"Ø HILTI HEX HEAD CAST IN ANCHORS MIN. 8" EMBEDMENT

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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

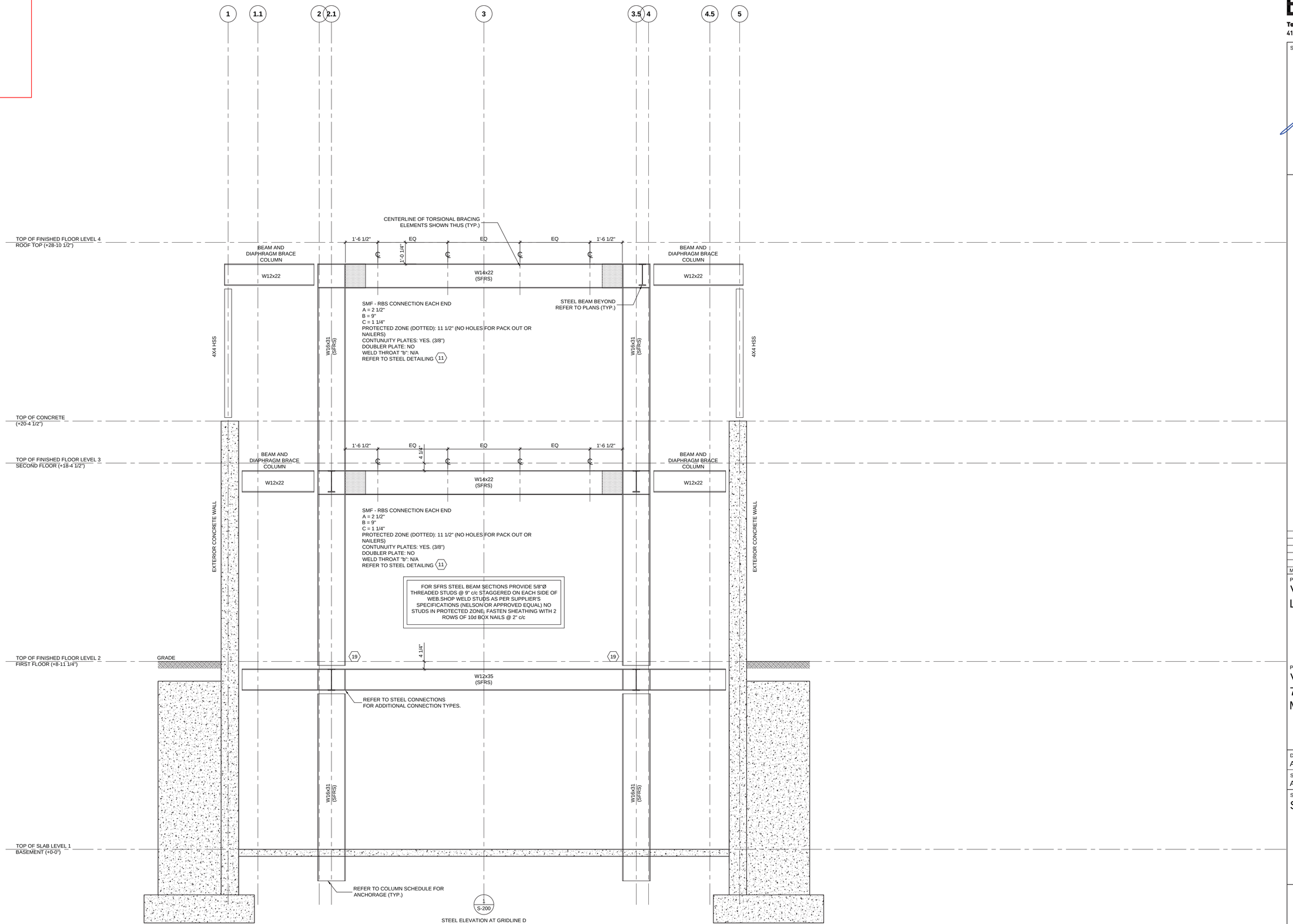
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
COLUMN SCHEDULE

S-105

Exhibit A



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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
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	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

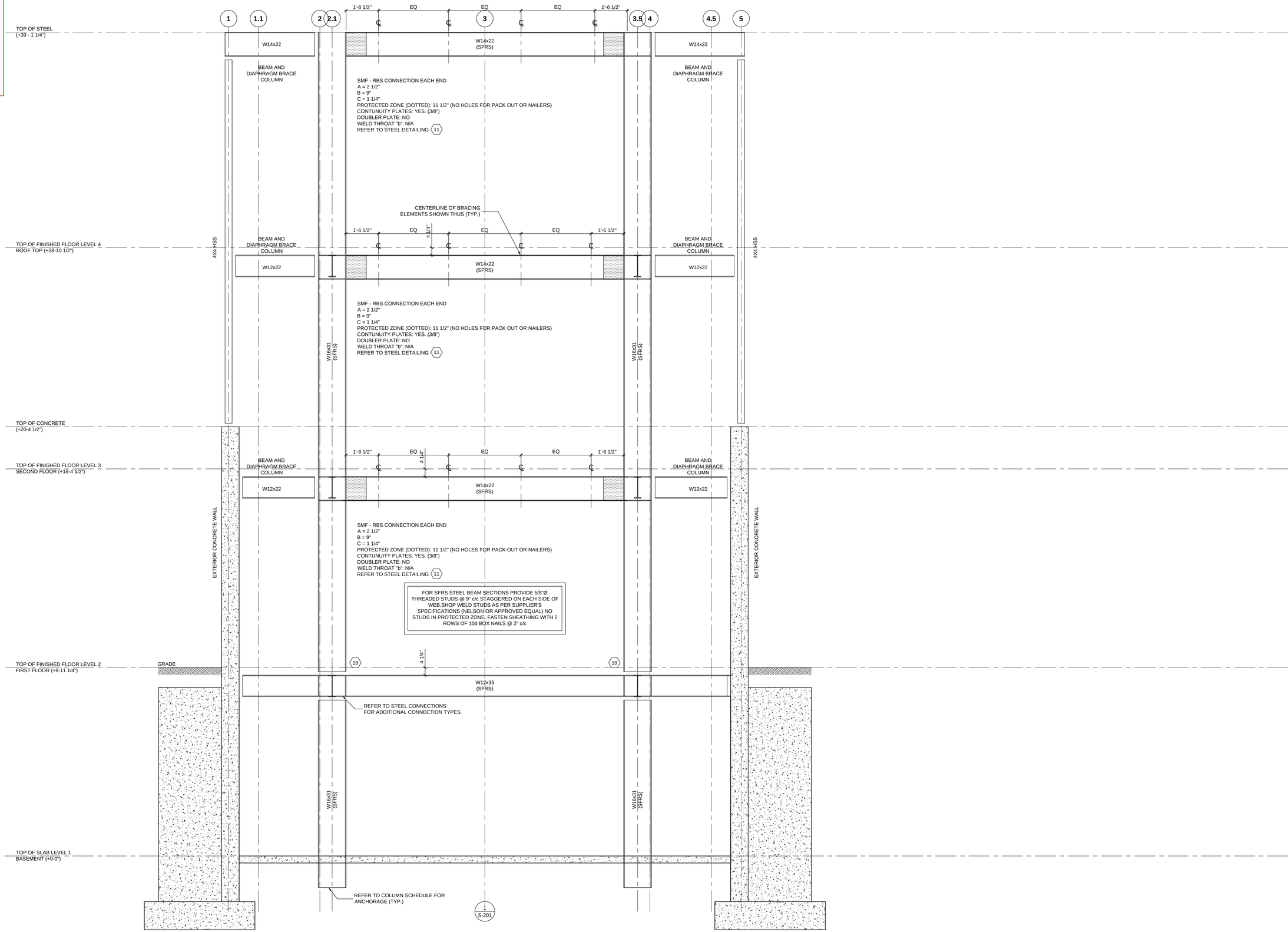
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
STEEL ELEVATIONS

S-200

Exhibit A



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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
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	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

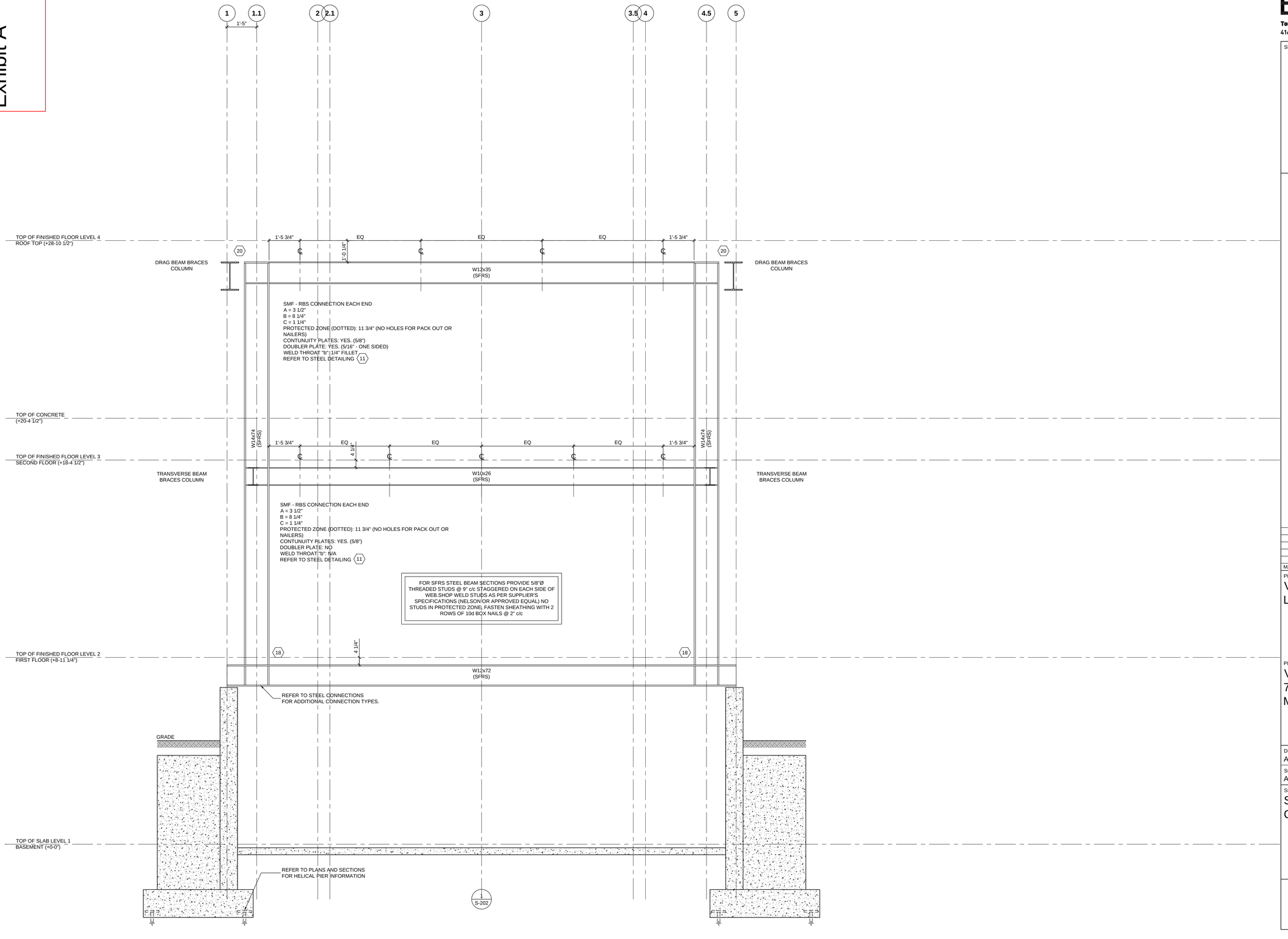
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
STEEL ELEVATIONS CONT'D

S-201

Exhibit A



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SEAL:

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
STEEL ELEVATIONS CONT'D

S-202

Exhibit A

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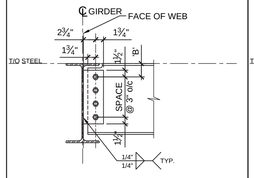
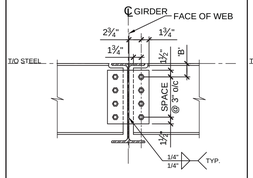
SEAL:



REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

ONE-SIDED CONNECTION

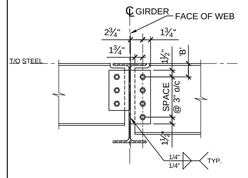
BEAM TO GIRDER | ¾" = 1'-0" | 1



REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

TWO-SIDED CONNECTION

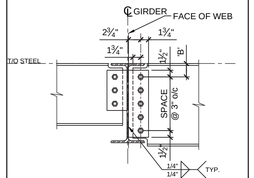
BEAM TO GIRDER | ¾" = 1'-0" | 2



REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

TWO-SIDED CONNECTION

BEAM TO GIRDER | ¾" = 1'-0" | 3



REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

TWO-SIDED CONNECTION

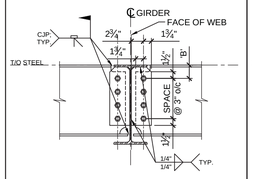
BEAM TO GIRDER | ¾" = 1'-0" | 4

CONNECTION SCHEDULE

BEAM SIZE	PLATE THICKNESS	BOLTS DIA.	BOLTS QTY.	DIM. 'B'	V/ [kip] (MAX)
W8	5/16	3/4	2	2½	24
W10	5/16	3/4	2	2½	24
W12	5/16	3/4	3	2½	41
W14	5/16	3/4	3	2½	43
W16	5/16	3/4	4	2½	62
W18	5/16	3/4	5	2½	81

CONNECTION SCHEDULE NOTES
1. ALL HOLE SIZES ARE 15/16Ø UNLESS NOTED
2. BOLTS TO BE ASTM A325N OR A325X
3. ALL WELDS TO BE E70XX
4. SHEAR PLATES SHALL BE MINIMUM GRADE A36
5. REFER TO BEAM SCHEDULE FOR FACTORED DESIGN REACTIONS. THE REACTION FORCES NOTED IN THE RESPECTIVE BEAM SCHEDULES SHALL NOT EXCEED THE CONNECTION CAPACITY NOTED IN THIS TABLE.

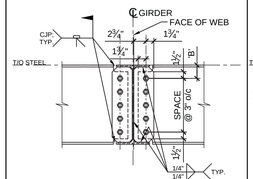
CONNECTION SCHEDULE | NTS | 5



REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

UNEQUAL BEAM AND GIRDER DEPTH

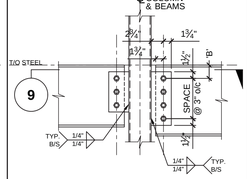
MOMENT CONNECTION | ¾" = 1'-0" | 6



REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

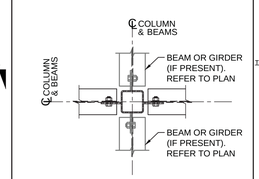
EQUAL BEAM AND GIRDER DEPTH

MOMENT CONNECTION | ¾" = 1'-0" | 7



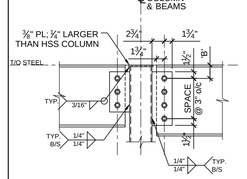
REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

GIRDER TO COLUMN | ¾" = 1'-0" | 8



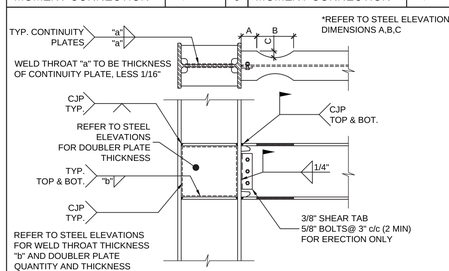
REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

GIRDER TO COLUMN | ¾" = 1'-0" | 9

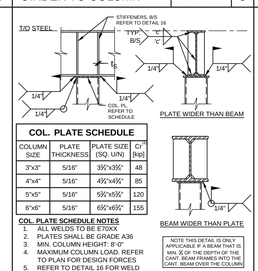


REFER TO DETAIL 5 FOR SHEAR PL AND BOLTS

TOP OF HSS COLUMN | ¾" = 1'-0" | 10



REDUCED BEAM SECTION BEAM-TO-COULMN CONNECTION | ¾" = 1'-0" | 11



COL. PLATE SCHEDULE

COLUMN SIZE	PLATE THICKNESS	PLATE SIZE (SQ. UIN)	C/ [kip]
3"x3"	5/16"	3½"x3½"	48
4"x4"	5/16"	4½"x4½"	85
5"x5"	5/16"	5½"x5½"	120
6"x6"	5/16"	6½"x6½"	155

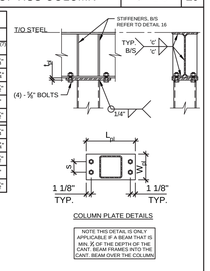
COL. PLATE SCHEDULE NOTES
1. ALL WELDS TO BE E70XX
2. PLATES SHALL BE GRADE A36
3. MIN. COLUMN HEIGHT: 8'-0"
4. MAXIMUM COLUMN LOAD. REFER TO PLAN FOR DESIGN FORCES
5. REFER TO DETAIL 16 FOR WELD SIZE 'c' FOR STIFFENERS, TYP.

BEAM OVER COL. - WELD | ¾" = 1'-0" | 12

COLUMN PLATE SCHEDULE

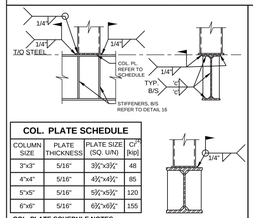
COLUMN SIZE	BEAM FLANGE WIDTH	PLATES t_p	L_{tp}	W_{tp}	s [1]
3"x3"	< 4½"	1/2"	9"	4"	2½"
	4½" - 6"	1/2"	9"	5"	2½"
	6"-7"	1/2"	9"	6"	3½"
	7"-8½"	1/2"	9"	7"	4"
	> 7½"	1/2"	9"	8"	5½"
4"x4"	< 4½"	1/2"	10"	4"	2½"
	4½" - 6"	1/2"	10"	5"	2½"
	6"-7"	1/2"	10"	6"	3½"
	7"-8½"	1/2"	10"	7"	4"
	> 7½"	1/2"	10"	8"	5½"
5"x5"	< 4½"	1/2"	11"	4"	2½"
	4½" - 6"	1/2"	11"	5"	2½"
	6"-7"	1/2"	11"	6"	3½"
	7"-8½"	1/2"	11"	7"	4"
	> 7½"	1/2"	11"	8"	5½"
6"x6"	< 4½"	1/2"	12"	4"	2½"
	4½" - 6"	1/2"	12"	5"	2½"
	6"-7"	1/2"	12"	6"	3½"
	7"-8½"	1/2"	12"	7"	4"
	> 7½"	1/2"	12"	8"	5½"

COLUMN PLATE SCHEDULE NOTES
1. ALL HOLE SIZES ARE 15/16Ø UNLESS NOTED
2. BOLTS TO BE ASTM A325N OR A325X
3. ALL WELDS TO BE E70XX
4. PLATES SHALL BE GRADE A36
5. MINIMUM COLUMN HEIGHT: 8'-0"
6. MAXIMUM FACTORED COLUMN LOADS. REFER TO PLAN:
   HSS3"x3" = 48 kip HSS5"x5" = 120 kip
   HSS4"x4" = 85 kip HSS6"x6" = 155 kip
7. THE GAUGE 's' FOR ALL W16 AND W18 SECTIONS SHALL BE 3½"
8. REFER TO DETAIL 16 FOR WELD SIZE 'c' FOR STIFFENERS, TYP.



NOTE: THIS DETAIL IS ONLY APPLICABLE IF A BEAM THAT IS MIN. ¾ OF THE DEPTH OF THE CANT. BEAM FRAMES INTO THE CANT. BEAM OVER THE COLUMN

BEAM OVER COLUMN - BOLTS | ¾" = 1'-0" | 13



COL. PLATE SCHEDULE

COLUMN SIZE	PLATE THICKNESS	PLATE SIZE (SQ. UIN)	C/ [kip]
3"x3"	5/16"	3½"x3½"	48
4"x4"	5/16"	4½"x4½"	85
5"x5"	5/16"	5½"x5½"	120
6"x6"	5/16"	6½"x6½"	155

COL. PLATE SCHEDULE NOTES
1. ALL WELDS TO BE E70XX
2. PLATES SHALL BE GRADE A36
3. MIN. COLUMN HEIGHT: 8'-0"
4. MAXIMUM COLUMN LOAD. REFER TO PLAN FOR DESIGN FORCES
5. REFER TO DETAIL 16 FOR WELD SIZE 'c' FOR STIFFENERS, TYP.

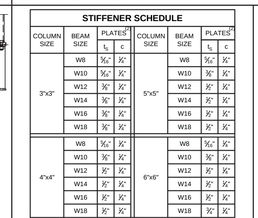
NOTE: THIS DETAIL IS ONLY APPLICABLE IF A BEAM THAT IS MIN. ¾ OF THE DEPTH OF THE CANT. BEAM FRAMES INTO THE CANT. BEAM OVER THE COLUMN

COL. ON BEAM - WELD | ¾" = 1'-0" | 14

COLUMN PLATE SCHEDULE

COLUMN SIZE	BEAM FLANGE WIDTH	PLATES t_p	L_{tp}	W_{tp}	s [1]
3"x3"	< 4½"	1/2"	9"	4"	2½"
	4½" - 6"	1/2"	9"	5"	2½"
	6"-7"	1/2"	9"	6"	3½"
	7"-8½"	1/2"	9"	7"	4"
	> 7½"	1/2"	9"	8"	5½"
4"x4"	< 4½"	1/2"	10"	4"	2½"
	4½" - 6"	1/2"	10"	5"	2½"
	6"-7"	1/2"	10"	6"	3½"
	7"-8½"	1/2"	10"	7"	4"
	> 7½"	1/2"	10"	8"	5½"
5"x5"	< 4½"	1/2"	11"	4"	2½"
	4½" - 6"	1/2"	11"	5"	2½"
	6"-7"	1/2"	11"	6"	3½"
	7"-8½"	1/2"	11"	7"	4"
	> 7½"	1/2"	11"	8"	5½"
6"x6"	< 4½"	1/2"	12"	4"	2½"
	4½" - 6"	1/2"	12"	5"	2½"
	6"-7"	1/2"	12"	6"	3½"
	7"-8½"	1/2"	12"	7"	4"
	> 7½"	1/2"	12"	8"	5½"

COLUMN PLATE SCHEDULE NOTES
1. ALL HOLE SIZES ARE 15/16Ø UNLESS NOTED
2. BOLTS TO BE ASTM A325N OR A325X
3. ALL WELDS TO BE E70XX
4. PLATES SHALL BE GRADE A36
5. MINIMUM COLUMN HEIGHT: 8'-0"
6. MAXIMUM FACTORED COLUMN LOADS. REFER TO PLAN:
   HSS3"x3" = 48 kip HSS5"x5" = 120 kip
   HSS4"x4" = 85 kip HSS6"x6" = 155 kip
7. THE GAUGE 's' FOR ALL W16 AND W18 SECTIONS SHALL BE 3½"
8. REFER TO DETAIL 16 FOR WELD SIZE 'c' FOR STIFFENERS, TYP.



NOTE: THIS DETAIL IS ONLY APPLICABLE IF A BEAM THAT IS MIN. ¾ OF THE DEPTH OF THE CANT. BEAM FRAMES INTO THE CANT. BEAM OVER THE COLUMN

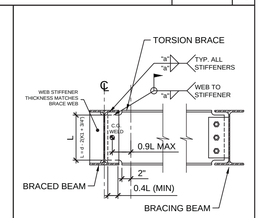
COLUMN ON BEAM - BOLTS | ¾" = 1'-0" | 15

STIFFENER SCHEDULE

COLUMN SIZE	BEAM SIZE	PLATES [2] t_s	c	COLUMN SIZE	BEAM SIZE	PLATES [2] t_s	c
3"x3"	W8	5/16"	½"	5"x5"	W8	5/16"	½"
	W10	5/16"	½"		W10	3/8"	½"
	W12	½"	½"		W12	½"	½"
	W14	½"	½"		W14	½"	½"
	W16	½"	½"		W16	½"	½"
	W18	½"	½"		W18	½"	½"
4"x4"	W8	5/16"	½"	6"x6"	W8	5/16"	½"
	W10	½"	½"		W10	½"	½"
	W12	½"	½"		W12	½"	½"
	W14	½"	½"		W14	½"	½"
	W16	½"	½"		W16	½"	½"
	W18	½"	½"		W18	½"	½"

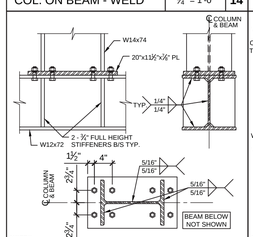
STIFFENER SCHEDULE NOTES
1. SECTIONS HEAVIER THAN WHAT IS NOTED IN THE SCHEDULE DO NOT REQUIRE STIFFENERS
2. PLATE WIDTH (REFERENCE DIMENSION A SHALL BE TAKEN AS $b_f/2$ - 2" WHERE b_f IS THE WIDTH OF THE BEAM FLANGE
3. ALL WELDS TO BE E70XX
4. PLATES SHALL BE GRADE A36

STIFFENER SCHEDULE | NTS | 16



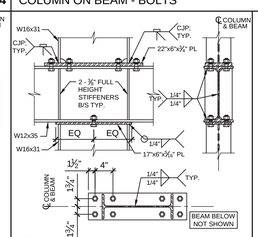
LEG OF WELD "a" TO BE "w" BRACE LESS 1/16"

TORSION BRACE | ¾" = 1'-0" | 17



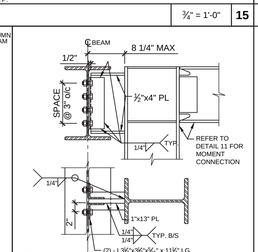
NOTES
1. ALL HOLE SIZES ARE 15/16Ø UNLESS NOTED
2. BOLTS TO BE ASTM A325N OR A325X
3. ALL WELDS TO BE E70XX
4. PLATES SHALL BE GRADE MIN. GRADE A36
5. REFER TO 2/S202

F.5 MOMENT FRAME | ¾" = 1'-0" | 18



NOTES
1. ALL HOLE SIZES ARE 15/16Ø UNLESS NOTED
2. BOLTS TO BE ASTM A325N OR A325X
3. ALL WELDS TO BE E70XX
4. PLATES SHALL BE GRADE MIN. GRADE A36
5. REFER TO 1/S200 AND 1/S201

C&D MOMENT FRAME | ¾" = 1'-0" | 19



NOTES
1. ALL HOLE SIZES ARE 15/16Ø UNLESS NOTED
2. BOLTS TO BE ASTM A325N OR A325X
3. ALL WELDS TO BE E70XX
4. PLATES SHALL BE GRADE MIN. GRADE A36
5. REFER TO 2/S202

OUTRIGGER DETAILS | ¾" = 1'-0" | 20

MARK	DATE	DESCRIPTION
	2018.02.01	ISSUED FOR PERMIT
	2017.12.13	ISSUED FOR INTERNAL COORD.
	2017.12.02	ISSUED FOR COORDINATION
	2017.11.22	ISSUED C GRADE COSTING
	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

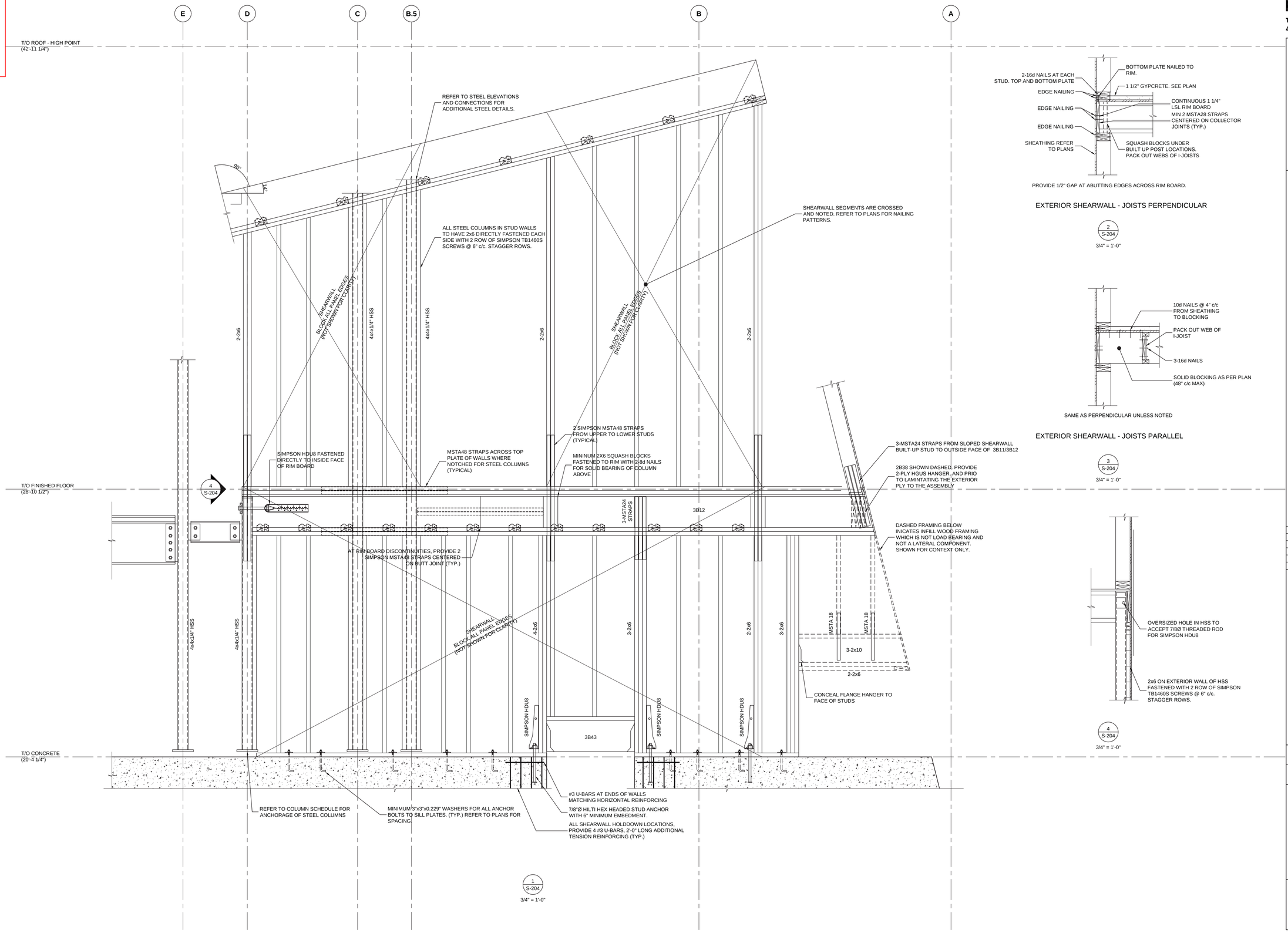
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
STEEL CONNECTIONS

S-203

Exhibit A



EXTERIOR SHEARWALL - JOISTS PERPENDICULAR

2 S-204

3/4" = 1'-0"

SAME AS PERPENDICULAR UNLESS NOTED

EXTERIOR SHEARWALL - JOISTS PARALLEL

3 S-204

3/4" = 1'-0"

4 S-204

3/4" = 1'-0"

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PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
WOOD SHEARWALL ELEVATIONS

S-204

Exhibit A

5

1

T/O ROOF - HIGH POINT
(42'-11 1/4")

T/O FINISHED FLOOR
(28'-10 1/2")

T/O CONCRETE
(20'-4 1/4")

3-2x6

SHEARWALL
BLOCK ALL PANEL EDGES
(NOT SHOWN FOR CLARITY)

SHEARWALL SEGMENTS ARE CROSSED AND NOTED. REFER TO PLANS FOR NAILING PATTERNS.

HUS26(-2) AT BASE OF EVERY STUD
(SIMILAR TO 3/S-400)

3-MSTA24 STRAPS FROM SLOPED SHEARWALL BUILT-UP STUD TO OUTSIDE FACE OF 3B11/3B12

2B11 SHOWN DASHED. PROVIDE 2-PLY HGUS HANGER, PRIOR TO LAMINTATING THE EXTERIOR PLY TO THE ASSEMBLY (TYP.)

3B38

3B37

3-MSTA48 STRAPS

3B12

3B11

DASHED FRAMING BELOW INICATES INFILL WOOD FRAMING WHICH IS NOT LOAD BEARING AND NOT A LATERAL COMPONENT. SHOWN FOR CONTEXT ONLY.

MSTA 18

3-2x10

2-2x6

CONCEAL FLANGE HANGER TO FACE OF STUDS

SIMPSON HDU8

7/8"Ø HILTI HEX HEADED STUD ANCHOR WITH 6" MINIMUM EMBEDMENT.

ALL SHEARWALL HOLDDOWN LOCATIONS, PROVIDE 4 #3 U-BARS, 2'-0" LONG ADDITIONAL TENSION REINFORCING (TYP.)

1
S-205
3/4" = 1'-0"

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SEAL:

PROFESSIONAL STRUCTURAL ENGINEER
6995627-2203
MICHAEL F SULLAWAY
STATE OF UTAH

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	2018.02.01	ISSUED FOR PERMIT
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PROJECT NAME:
VILLAGE HOUSE AT LOT 71

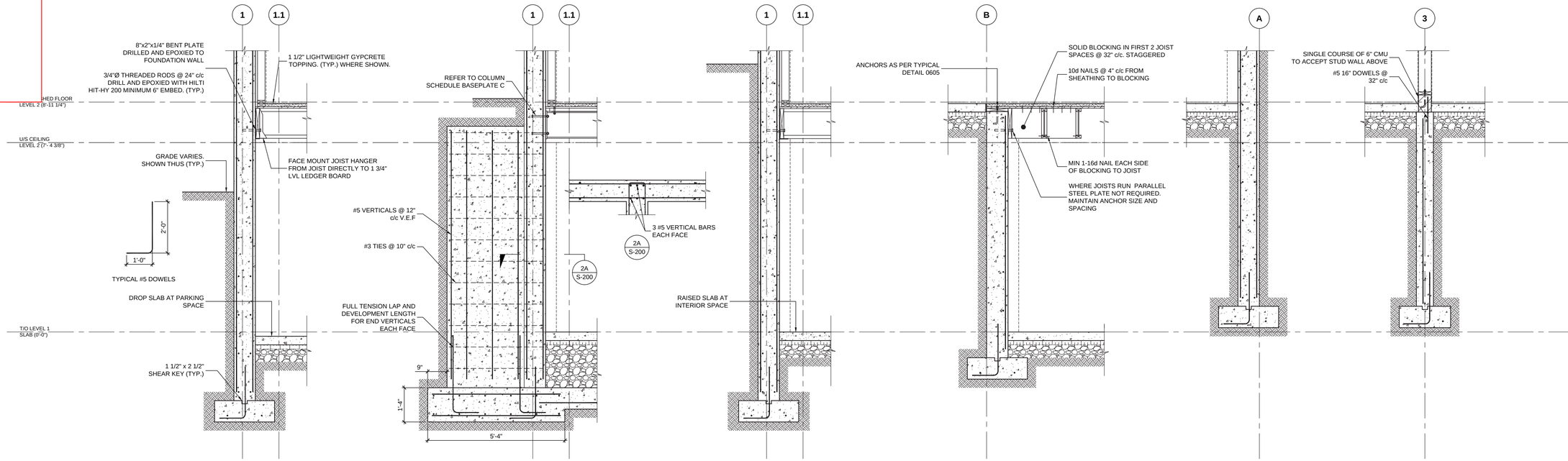
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

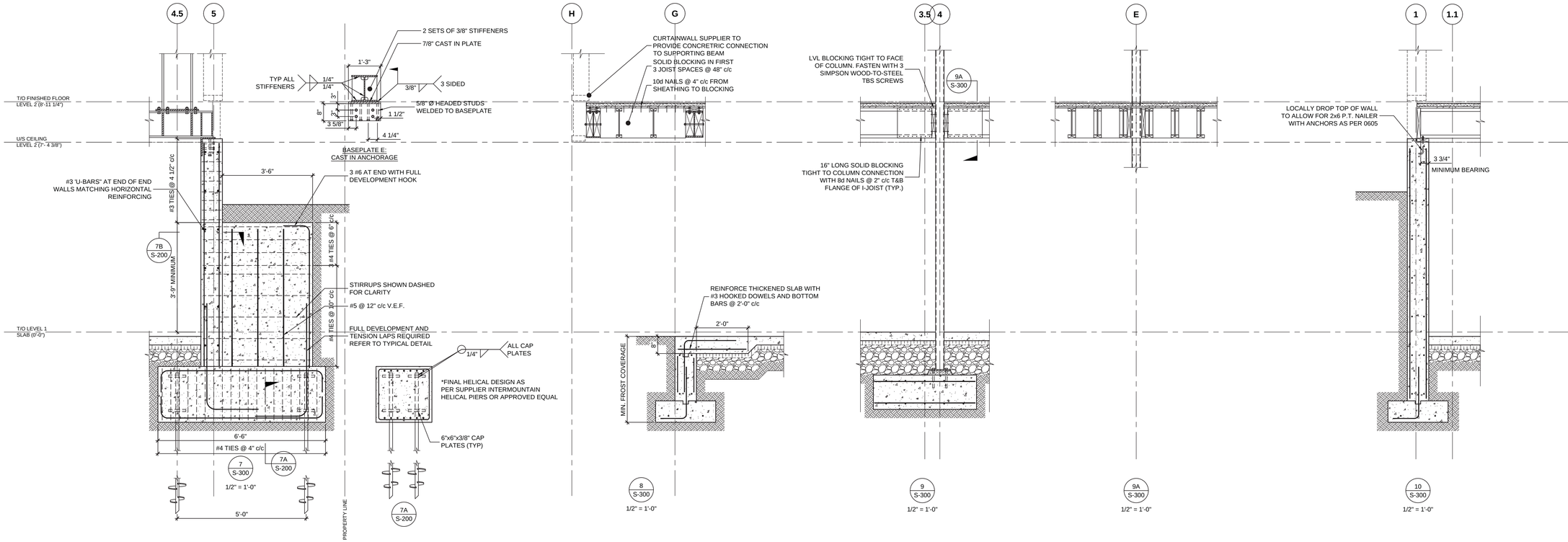
DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
WOOD SHEARWALL ELEVATIONS

S-205

Exhibit A





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SEAL:

PROFESSIONAL STRUCTURAL ENGINEER
REGISTERED 6905827-2203
MICHAEL F SULLAWAY
STATE OF UTAH

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VILLAGE HOUSE AT LOT 71

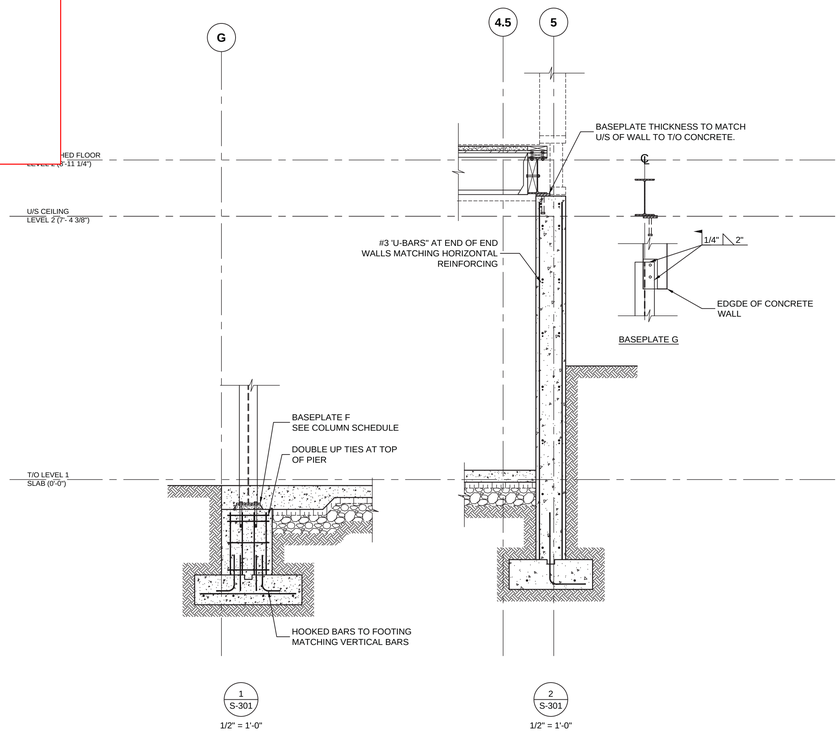
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
FOUNDATION SECTIONS

S-300

Exhibit A



BASEPLATE G

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	2017.11.07	INTERNAL COORDINATION

PROJECT NAME:
VILLAGE HOUSE AT LOT 71

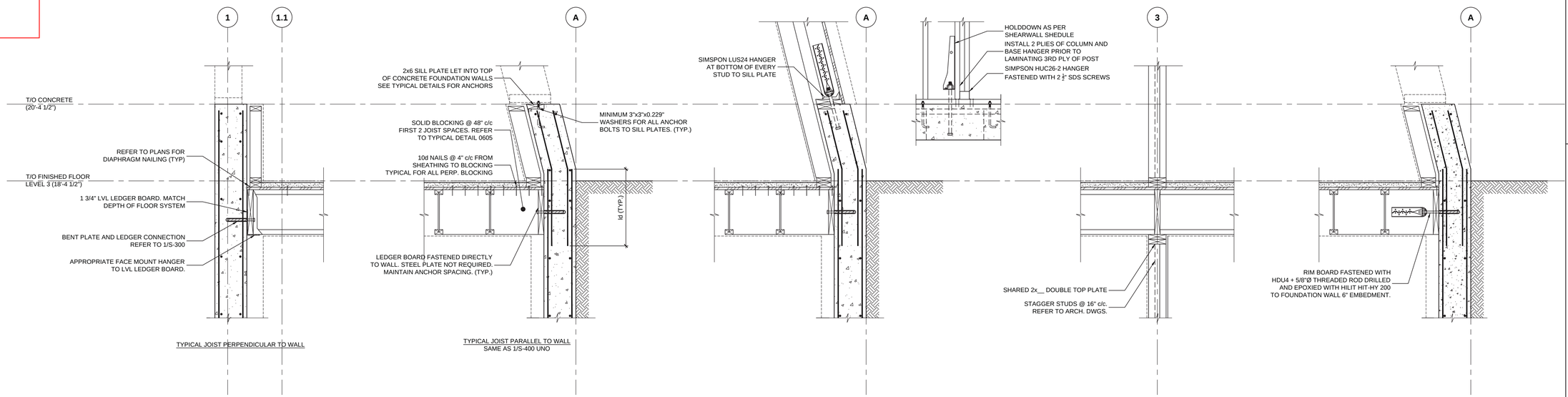
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

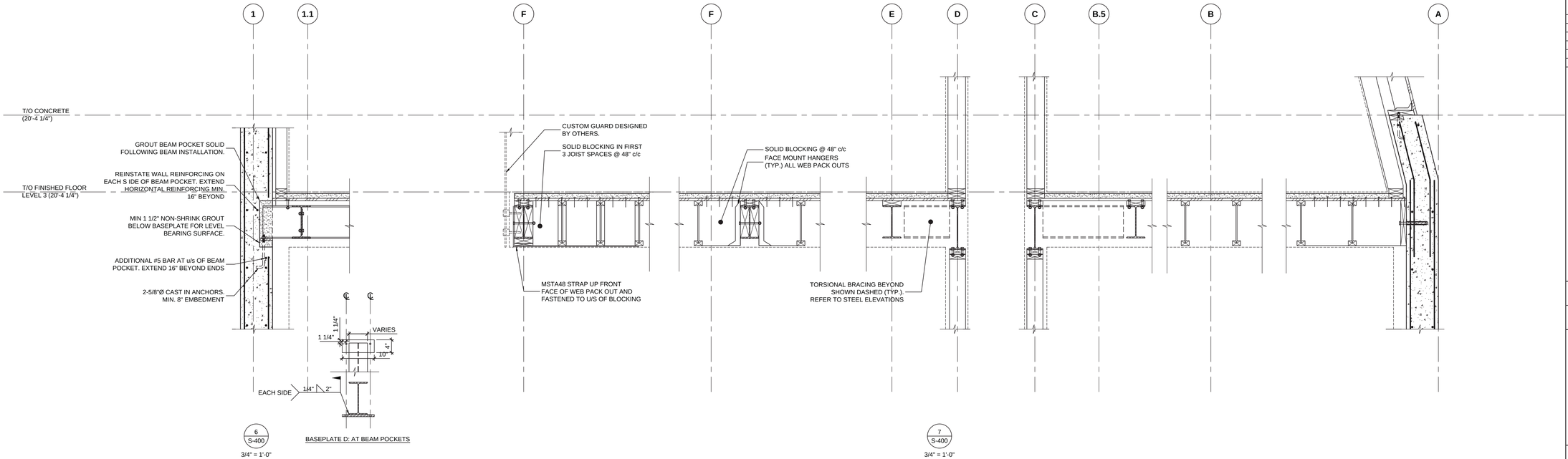
DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
FOUNDATION SECTIONS CONT'D

S-301

Exhibit A





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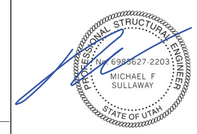

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VILLAGE HOUSE AT LOT 71

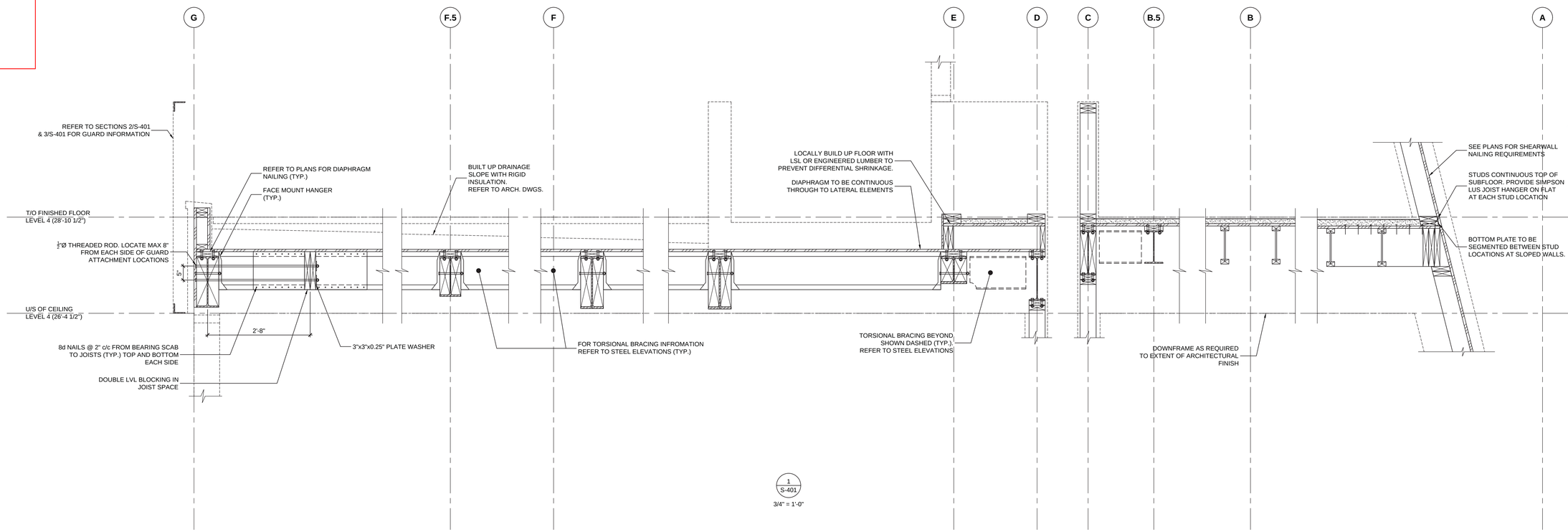
PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

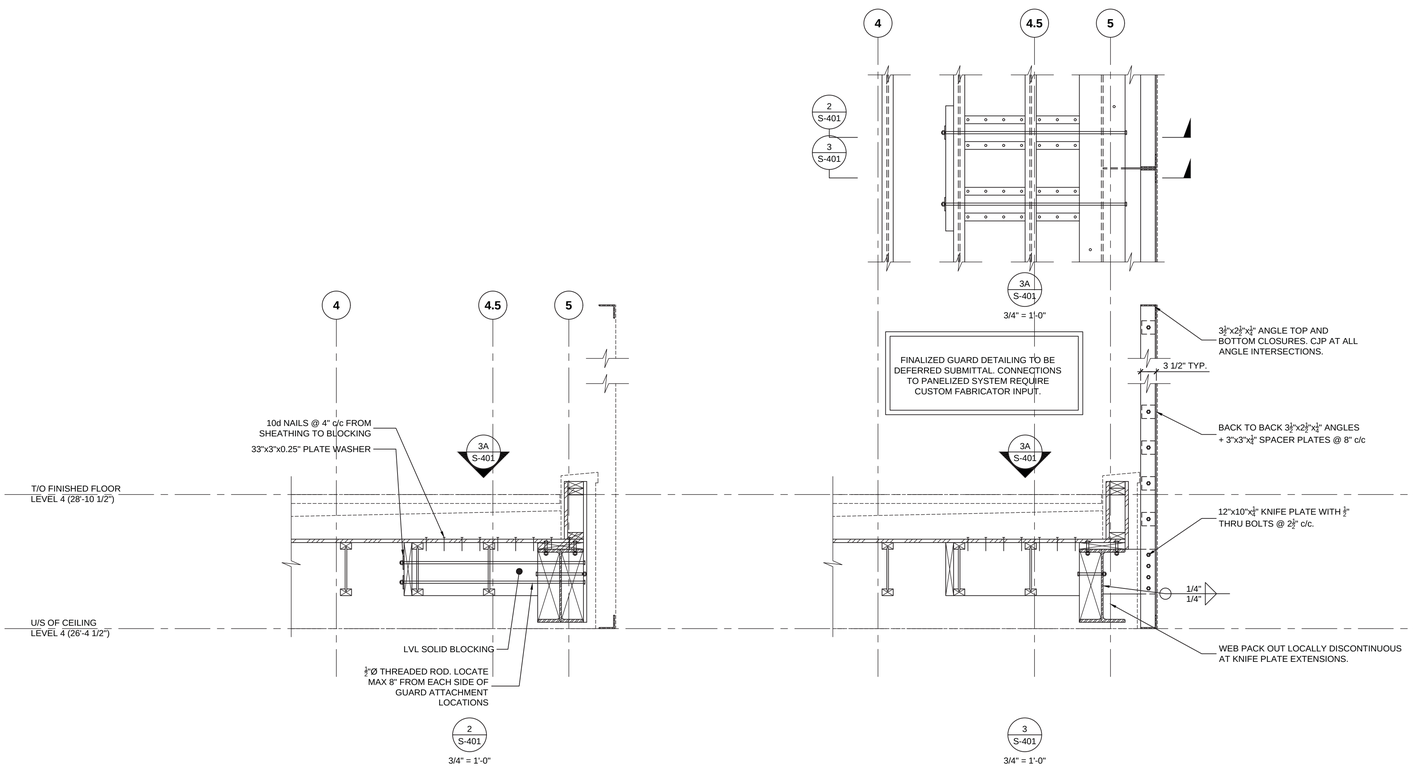
DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
FRAMING SECTIONS

S-400

Exhibit A





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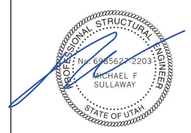

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VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
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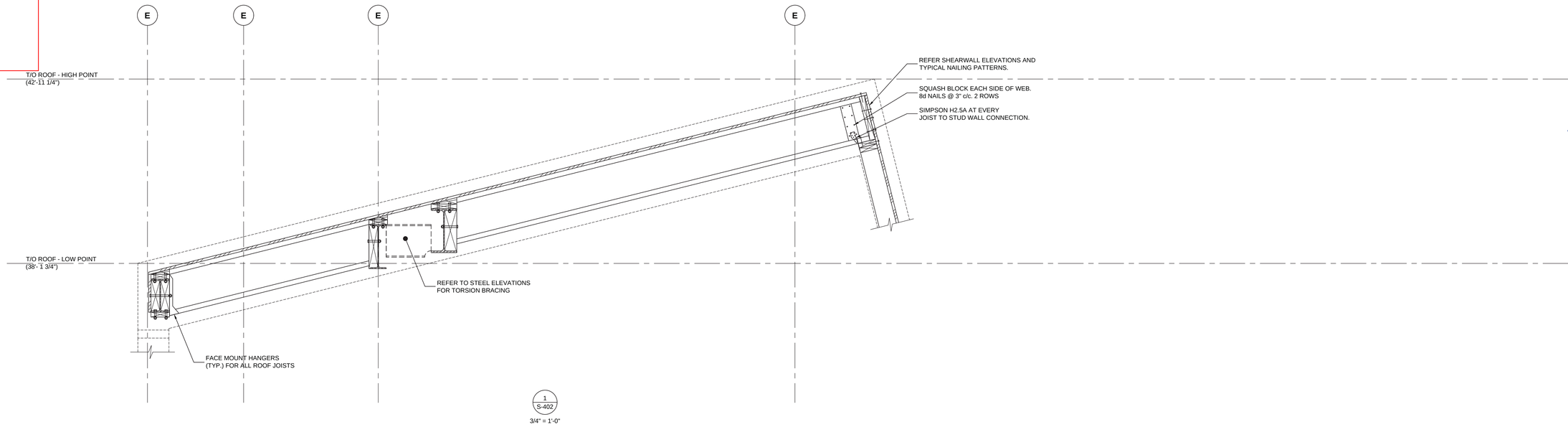
SHEET TITLE:
FRAMING SECTIONS CONT'D

S-401

Exhibit A



1
S-402

3/4" = 1'-0"

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PROJECT NAME:
VILLAGE HOUSE AT LOT 71

PROJECT ADDRESS:
VILLAGE HOUSE LOT 71, SUMMIT POWDER MOUNTAIN

DRAWN:	CHECKED:
AVB	--
SCALE:	PROJECT NUMBER:
AS NOTED	170450

SHEET TITLE:
FRAMING SECTIONS CONT'D

S-402

Exhibit B

Intermountain GeoEnvironmental Services, Inc.
12429 South 300 East, Suite 100, Draper, Utah 84120
Phone (801) 748-4044 ~ F: (801) 748-4045
www.igesinc.com

GEOTECHNICAL AND GEOLOGIC HAZARD INVESTIGATION
Lot 71R of Summit Eden Phase 1C
8488 E. Spring Park Road
Summit Powder Mountain Resort
Weber County, Utah

IGES Project No. 02565-001

August 30, 2017

Prepared for:

Mr. Michael Eisenberg

Exhibit B

Intermountain GeoEnvironmental Services, Inc.
12429 South 300 East, Suite 100, Draper, Utah 84120 ~ T: (801) 748-4044 ~ F: (801) 748-4

Prepared for:

Mr. Michael Eisenberg
347 Fifth Avenue, Suite 800
New York, New York 10016

Geotechnical and Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
8488 E. Spring Park Road
Summit Powder Mountain Resort
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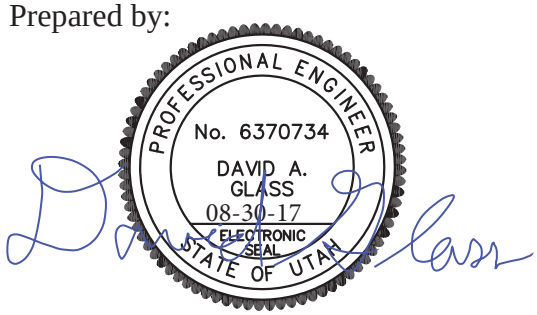
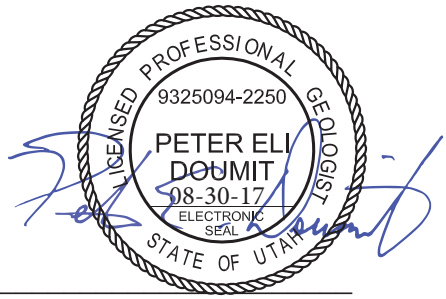
IGES Project No. 02565-001

Prepared by:



David A. Glass, P.E.
Senior Geotechnical Engineer



Peter E. Doumit, P.G., C.P.G.
Senior Geologist

IGES, Inc.
12429 South 300 East, Suite 100
Draper, Utah 84120
(801) 748-4044

August 30, 2017

Exhibit B

TABLE OF CONTENTS

Exhibit B

Exhibit B

1.0 INTRODUCTION

1.1 PURPOSE AND SCOPE OF WORK

This report presents the results of a geotechnical and geologic hazard investigation conducted for Lot 71R of Summit Eden Phase 1C, part of the currently on-going expansion at the Powder Mountain Ski Resort in Weber County. The purpose of our investigation was to assess the nature and engineering properties of the subsurface soils at the project site and to provide recommendations for the design and construction of foundations, grading, and drainage. In addition, geologic hazards have been assessed for the property. The scope of work completed for this study included literature review, site reconnaissance, subsurface exploration, engineering analyses, and preparation of this report.

Our services were performed in accordance with our proposal dated June 6, 2017, and your signed authorization. The recommendations presented in this report are subject to the limitations presented in the "Limitations" section of this report (Section 6.1).

1.2 PROJECT DESCRIPTION

Our understanding of the project is based primarily on our previous involvement with the Summit Powder Mountain Resort project, which included two geotechnical investigations for the greater 200-acre Powder Mountain Resort expansion project (IGES, 2012a and 2012b), as well as a number of lot-specific and site-specific geotechnical and geologic hazard investigations in various locations across the greater Powder Mountain Resort expansion area.

The Summit Powder Mountain Resort expansion project is located southeast of SR-158 (Powder Mountain Road), south of previously developed portions of Powder Mountain Resort, in unincorporated Weber County, Utah. The Summit Powder Mountain project area is accessed by Powder Ridge Road. Lot 71R is located within Phase 1C of the Powder Mountain expansion project (Summit Eden), on the south side of Summit Pass – the street address is 8488 East Spring Park Road. The 0.062-acre residential lot has an approximate buildable area (building envelope) of 2,717 square feet. The proposed improvements will include a single-family home, presumably a high-end vacation home, with associated improvements such as utilities and hardscape. Construction plans were not available for our review; however, based on our experience in this area, the new home will likely be a two- to three-story structure, the lowest story consisting of a partial walk-out basement, founded on conventional spread footings. Foundation loads are expected to be on the order of 1,500 psf or less.

2.0 METHODS OF STUDY

2.1 LITERATURE REVIEW

2.1.1 Geotechnical

The earliest geotechnical report for the area is by AMEC (2001), which was a reconnaissance-level geotechnical and geologic hazard study. IGES later completed a geotechnical investigation for the Powder Mountain Resort expansion in 2012 (2012a, 2012b). Our previous work included twenty-two test pits and one soil boring excavated at various locations across the 200-acre development; as a part of this current study, the logs from relevant nearby test pits and other data from our reports were reviewed.

2.1.2 Geological

Several pertinent publications were reviewed as part of this assessment. Sorensen and Crittenden, Jr. (1979) provides 1:24,000 scale geologic mapping of the Huntsville Quadrangle, and Crittenden, Jr. (1972) provides 1:24,000 scale geologic mapping of the Brown's Hole Quadrangle. Coogan and King (2001) provide more recent geologic mapping of the area, but at a 1:100,000 scale. An updated Coogan and King (2016) regional geologic map (1:62,500 scale) provides the most recent published geologic mapping that covers the project area. Western Geologic (2012) conducted a reconnaissance-level geologic hazard study for the greater 200-acre Powder Mountain expansion project, including the Lot 71R area. The Western Geologic (2012) study modified some of the potential landslide hazard boundaries that had previously been mapped at a regional scale (1:100,000) by Coogan and King (2001) and Elliott and Harty (2010). The corresponding United States Geological Survey (USGS) topographic maps for the Huntsville and Brown's Hole Quadrangles (2014) provide physiographic and hydrologic data for the project area. Regional-scale geologic hazard maps pertaining to landslides (Elliott and Harty, 2010; Colton, 1991), faults (Christenson and Shaw, 2008a; USGS and Utah Geological Survey (UGS), 2006), debris-flows (Christenson and Shaw, 2008b), and liquefaction (Christenson and Shaw, 2008c; Anderson et al., 1994) that cover the project area were also reviewed. The Quaternary Fault and Fold Database (USGS and UGS, 2006), was reviewed to identify the location of proximal faults that have had associated Quaternary-aged displacement.

Stereo-paired aerial imagery for the project site and recent and historic Google Earth imagery was also reviewed to assist in the identification of potential adverse geologic conditions. The aerial photographs reviewed are documented in the *References* section of this report.

2.2 FIELD INVESTIGATION

Subsurface soils were investigated by excavating one test pit at a central location within the property boundary. The approximate location of the test pit is illustrated on the *Geotechnical & Geology Map* (Figure A-2 in Appendix A). The soil types were visually logged at the time of our

field work in general accordance with the *Unified Soil Classification System* (USCS). Soil classifications and descriptions are included on the test pit log, Figure A-3 in Appendix A. A key to USCS symbols and terminology is included as Figure A-4, and a key to physical rock properties is included as Figure A-5.

2.3 LABORATORY TESTING

Samples retrieved during the subsurface investigation were transported to the IGES laboratory for evaluation of engineering properties. Specific laboratory tests included:

- Atterberg Limits (ASTM D4318)
- Grain-Size Distribution (ASTM D6913)
- In situ Moisture Content (ASTM D7263)
- Corrosion Suite (resistivity, pH, soluble sulfate, soluble chloride)

Results of the laboratory testing are discussed in this report and presented in Appendix B. Some test results, including moisture content, gradation, and Atterberg Limits, have been incorporated into the test pit log (Figure A-3).

3.0 GEOLOGIC CONDITIONS

3.1 GENERAL GEOLOGIC SETTING

The Lot 71R property is situated in the western portion of the northern Wasatch Mountains, approximately 4 miles northeast of Ogden Valley. The Wasatch Mountains contain a broad depositional history of thick Precambrian and Paleozoic sediments that have been subsequently modified by various tectonic episodes that have included thrusting, folding, intrusion, and volcanics, as well as scouring by glacial and fluvial processes (Stokes, 1987). The uplift of the Wasatch Mountains occurred relatively recently during the Late Tertiary Period (Miocene Epoch) between 12 and 17 million years ago (Milligan, 2000). Since uplift, the Wasatch Front has seen substantial modification due to such occurrences as movement along the Wasatch Fault and associated spurs, the development of the numerous canyons that empty into the current Salt Lake Valley and Utah Valley and their associated alluvial fans, erosion and deposition from Lake Bonneville, and localized mass movement events (Hintze, 1988).

The Wasatch Mountains, as part of the Middle Rocky Mountains Province (Milligan, 2000), were uplifted as a fault block along the Wasatch Fault (Hintze, 1988). Ogden Valley itself is a fault-bounded trough that was occupied by Lake Bonneville (Sorensen and Crittenden, Jr, 1979) before being cut through by the Ogden River and subsequently dammed to form the Pineview Reservoir.

The Wasatch Fault and its associated segments are part of an approximately 230-mile long zone of active normal faulting referred to as the Wasatch Fault Zone (WFZ), which has well-documented evidence of late Pleistocene and Holocene (though not historic) movement (Lund, 1990; Hintze, 1988). The faults associated with the WFZ are all normal faults, exhibiting block movement down to the west of the fault and up to the east. The WFZ is contained within a greater area of active seismic activity known as the Intermountain Seismic Belt (ISB), which runs approximately north-south from northwestern Montana, along the Wasatch Front of Utah, through southern Nevada, and into northern Arizona. In terms of earthquake risk and potential associated damage, the ISB ranks only second in North America to the San Andreas Fault Zone in California (Stokes, 1987).

The WFZ consists of a series of ten segments of the Wasatch Fault that each display different characteristics and past movement, and are believed to have movement independent of one another (UGS, 1996). The Lot 71R property is located approximately 10.2 miles to the northeast of the Weber Segment of the Wasatch Fault, which is the closest documented Holocene-aged (active) fault to the property and trends north-south along the Wasatch Front (USGS and UGS, 2006).

3.2 SURFICIAL GEOLOGY

According to Sorensen and Crittenden, Jr. (1979), the property is entirely underlain by the undivided Tertiary/Cretaceous Wasatch and Evanston Formations (TKwe), described as

"unconsolidated pale-reddish-brown pebble, cobble, and boulder conglomerate, forms boulder-covered slopes. Clasts are mainly Precambrian quartzite and are tan, gray, or purple; matrix is mainly poorly consolidated sand and silt." A generalized bedding attitude shows this unit striking due north and dipping 10 degrees to the east. This map forms the basemap for the *Regional Geology Map 1* (Figure A-6). Coogan and King (2001) produced a regional-scale geologic map that covered the property; this map shows the property to be near the contact between undifferentiated mass-movement deposits and the Wasatch Formation. Western Geologic (2012) identified a number of landslide deposits contained within the Powder Mountain Resort expansion area (*Regional Geology Map 2*, Figure A-7). In this map, the southern margin of the property abuts deposits mapped as "mixed slope colluvium, shallow landslides, and talus," with a large Holocene to Late Pleistocene landslide deposit noted further south. Finally, Coogan and King (2016) updated their 2001 map, which shows the southern margin of the property to be at the contact between landslide deposits (unit Qms) and the Wasatch Formation (unit Tw) (*Regional Geology Map 3*, Figure A-8). A nearby bedding attitude shows the Wasatch Formation to be striking nearly due north and dipping at 5 degrees to the east.

3.3 HYDROLOGY

The USGS topographic maps for the Huntsville and Brown's Hole Quadrangles (2014) show that the Lot 71R project area is situated on a slope, with the local topographic gradient down to the southeast towards a small unnamed southwest-trending dry drainage. To the southwest, this drainage eventually connects with a larger west-trending ephemeral drainage locally known as Lefty's Canyon (see Figure A-1). No active or ephemeral stream drainages are found on or adjacent to the property, and no springs are known to occur on the property, though it is possible that springs may occur on various parts of the property during peak runoff.

Baseline groundwater depths for the Lot 71R property are currently unknown, but are anticipated to fluctuate both seasonally and annually. Groundwater was not encountered in the test pit excavated in this investigation.

3.4 GEOLOGIC HAZARDS FROM LITERATURE

Based upon the available geologic literature, regional-scale geologic hazard maps that cover the Lot 71R project area have been produced for landslide, fault, debris-flow, and liquefaction hazards. The following is a summary of the data presented in these regional geologic hazard maps.

3.4.1 Landslides

Two regional-scale landslide hazard maps have been produced that cover the project area. Colton (1991) does not show the property to be underlain by or adjacent to landslide deposits, though south-trending landslide deposits are noted nearby to west. Elliott and Harty (2010) shows deposits mapped as "Landslide undifferentiated from talus and/or colluvial deposits" near the southern margin of the property. More site-specific, Western Geologic (2012) used the Elliott and Harty

(2010) map as a base map, which reinterprets the southern half deposits to be definitive landslide deposits (see Figure A-7). As noted above, most recently Coogan and King (2016) on a regional scale show the southern margin of the property to be at the contact between the Wasatch Formation (to the north) and landslide deposits (to the south; see Figure A-8).

3.4.2 Faults

Neither Christensen and Shaw (2008a) nor the Quaternary Fault and Fold Database of the United States (USGS and UGS, 2006) show any Quaternary-aged (~2.6 million years ago to the present) faults to be present on or projecting towards the subject property. The Weber County Natural Hazards Overlay Districts defines an active fault to be "a fault displaying evidence of greater than four inches of displacement along one or more of its traces during Holocene time (about 11,000 years ago to the present)" (Weber County, 2015). The closest active fault to the property is the Weber Segment of the Wasatch Fault Zone, located approximately 10.2 miles southwest of the western margin of the property (USGS and UGS, 2006).

3.4.3 Debris Flows

Christensen and Shaw (2008b) do not show the project area to be located within a debris-flow hazard special study area.

3.4.4 Liquefaction

Anderson, et al. (1994) and Christensen and Shaw (2008c) both show the project area to be located in an area with very low potential for liquefaction.

3.5 REVIEW OF AERIAL IMAGERY

A series of aerial photographs that cover project area were taken from the UGS Aerial Imagery Collection and analyzed stereoscopically for the presence of adverse geologic conditions across the property. This included a review of photos collected from the years 1946, 1952, and 1963. A table displaying the details of the aerial photographs reviewed can be found in the *References* section at the end of this report.

No geologic lineaments, fault scarps, landslide headscarps, or landslide deposits were observed in the aerial photography on the subject property.

Google Earth imagery of the property from between the years of 1993 and 2014 were also reviewed. No landslide or other geological hazard features were noted in the imagery. The property was observed to be covered in bushes. Some surficial gravel, cobbles, and boulders, were observed, though the property does not contain any drainages. The only notable change to the property observed across this time frame was the installation of Spring Park Road, between September of 2011 and October of 2014. The southern approximately one-third to one-half of the lot was disturbed in the road-building process.

At the time of this report, no LiDAR data for the project area was available to be reviewed.

3.6 SEISMICITY

Following the criteria outlined in the 2015 International Building Code (IBC, 2015), spectral response at the site was evaluated for the *Maximum Considered Earthquake* (MCE) which equates to a probabilistic seismic event having a two percent probability of exceedance in 50 years (2PE50). Spectral accelerations were determined based on the location of the site using the *U.S. Seismic "DesignMaps" Web Application* (USGS, 2012/15); this software incorporates seismic hazard maps depicting probabilistic ground motions and spectral response data developed for the United States by the U. S. Geological Survey as part of NEHRP/NSHMP (Frankel et al., 1996). These maps have been incorporated into both *NEHRP Recommended Provisions for Seismic Regulations for New Buildings and Other Structures* (FEMA, 1997) and the *International Building Code* (IBC) (International Code Council, 2015).

Table 3.6
Short- and Long-Period Spectral Accelerations for MCE

Parameter	Short Period (0.2 sec)	Long Period (1.0 sec)
MCE Spectral Response Acceleration (g)	$S_S = 0.811$	$S_1 = 0.269$
MCE Spectral Response Acceleration Site Class C (g)	$S_{MS} = S_s F_a = 0.872$	$S_{M1} = S_1 F_v = 0.412$
Design Spectral Response Acceleration (g)	$S_{DS} = S_{MS*}{}^2/_3 = 0.582$	$S_{D1} = S_{M1*}{}^2/_3 = 0.274$

To account for site effects, site coefficients that vary with the magnitude of spectral acceleration and *Site Class* are used. Site Class is a parameter that accounts for site amplification effects of soft soils and is based on the average shear wave velocity of the upper 100 feet; based on our field exploration and our understanding of the geology in this area, the subject site is appropriately classified as Site Class C (*soft rock*). Based on IBC criteria, the short-period (F_a) coefficient is 1.076 and long-period (F_v) site coefficient is 1.531. Based on the design spectral response accelerations for a *Building Risk Category* of I, II or III, the site's *Seismic Design Category* is D. The short- and long-period *Design Spectral Response Accelerations* are presented in Table 2.0; a summary of the *Design Maps* analysis is presented in Appendix B. The *peak ground acceleration* (PGA) may be taken as $0.4*S_{MS}$.

3.7 GEOLOGIC HAZARD ASSESSMENT

Geologic hazard assessments are necessary to determine the potential risk associated with particular geologic hazards that are capable of adversely affecting a proposed development area.

As such, they are essential in evaluating the suitability of an area for development and provide critical data in both the planning and design stages of a proposed development. The geologic hazard assessment discussion below is based upon a qualitative assessment of the risk associated with a particular geologic hazard, based upon the data reviewed and collected as part of this investigation.

A “low” hazard rating is an indication that the hazard is either absent, is present in such a remote possibility so as to pose limited or little risk, or is not anticipated to impact the project in an adverse way. Areas with a low-risk determination for a particular geologic hazard do not require additional site-specific studies or associated mitigation practices with regard to the geologic hazard in question. A “moderate” hazard rating is an indication that the hazard has the capability of adversely affecting the project at least in part, and that the conditions necessary for the geologic hazard are present in a significant, though not abundant, manner. Areas with a moderate-risk determination for a particular geologic hazard may require additional site-specific studies, depending on location and construction specifics, as well as associated mitigation practices in the areas that have been identified as the most prone to susceptibility to the particular geologic hazard. A “high” hazard rating is an indication that the hazard is very capable of or currently does adversely affect the project, that the geologic conditions pertaining to the particular hazard are present in abundance, and/or that there is geologic evidence of the hazard having occurred at the area in the historic or geologic past. Areas with a high-risk determination always require additional site-specific hazard investigations and associated mitigation practices where the location and construction specifics are directly impacted by the hazard. For areas with a high-risk geologic hazard, simple avoidance is often considered.

The following is a summary of the geologic hazard assessment for the Lot 71R property.

3.7.1 Landslides/Mass Movement

According to the several most recent geologic maps produced that cover the property, the southern margin of the lot abuts mapped landslide deposits (Coogan and King, 2016; Western Geologic, 2012; Elliott and Harty, 2010). However, landslide deposits or geomorphic features indicative of landsliding were not observed on the property in the aerial imagery, during the site reconnaissance, or in the subsurface. Though some evidence of slight to moderate soil creep was observed in the aspen trees found on the property, the subsurface data indicate that this is restricted to the topsoil. Given this information, the risk associated with landslides is considered low to moderate, given the proximity to mapped landslide deposits.

3.7.2 Rockfall

Though the property is on a slope, no bedrock outcrops are exposed upslope of the property. As such, the rockfall hazard associated with the property is considered to be low.

3.7.3 Surface-Fault Rupture and Earthquake-Related Hazards

No faults are known to be present on or project across the property, and the closest active fault to the property is the Weber Segment of the Wasatch Fault Zone, located approximately 10.2 miles to the west of the property (USGS and UGS, 2006). Given this information, the risk associated with surface-fault-rupture on the property is considered low.

The entire property is subject to earthquake-related ground shaking from a large earthquake generated along the active Wasatch Fault. Given the distance from the Wasatch Fault, the hazard associated with ground shaking is considered to be moderate. Proper building design according to appropriate building code and design parameters can assist in mitigating the hazard associated with earthquake ground shaking.

3.7.4 Liquefaction

The site is underlain by the Wasatch Formation, a poorly consolidated sedimentary rock unit (conglomerate). Rock units such as these are not considered susceptible to liquefaction; as such, the potential for liquefaction occurring at the site is considered low.

3.7.5 Debris-Flows and Flooding Hazards

The property does not contain and is not located adjacent to any active or ephemeral drainages. Additionally, there are no debris-flow source areas upslope of the property, and the property is on a consistent slope downhill to the southeast. Given these conditions, the debris-flow and flooding hazard associated with the property is considered to be low.

3.7.6 Shallow Groundwater

Groundwater was not encountered in the test pit excavated as part of this investigation. The test pit was excavated in mid-June, and the groundwater level was likely to be on its way down from its seasonal high. No springs were observed on the property, and no plants indicative of shallow groundwater conditions were observed on the property. However, shallow groundwater conditions have been observed at the nearby *Lot 75R* property (IGES, 2017).

Given the existing data, it is expected that groundwater levels will fluctuate both seasonally and annually, and the risk associated with shallow groundwater hazards is considered low to moderate. Spring thaw and runoff are likely to significantly contribute to elevated groundwater conditions (localized perched conditions). However, shallow groundwater issues can be mitigated through appropriate grading measures and/or the avoidance of the construction of basement levels, or constructing basements with foundation drains.

4.0 GENERALIZED SITE CONDITIONS

4.1 SITE RECONNAISSANCE

Mr. Peter E. Doumit, P.G., C.P.G., of IGES conducted reconnaissance of the site and the immediate adjacent properties on June 16, 2017. The site reconnaissance was conducted with the intent to assess the general geologic conditions present across the property, with specific interest in those areas identified in the geologic literature and aerial imagery reviews as potential geologic hazard areas. Additionally, the site reconnaissance provided the opportunity to geologically map the surficial geology of the area. Figure A-2 is a site-specific geologic map of the Lot 71R property and adjacent areas.

At the time of the site reconnaissance, the property was observed to have uneven surface topography that consistently sloped downhill to the southeast. A cluster of small aspen trees (many of which were dead) were observed near the northern margin of the property, though most of the property was covered in low-lying bushes and grasses. The aspens displayed evidence of slight to moderate soil creep in places, though this was later found to be restricted to the topsoil.

Pebbles, cobbles, and some boulders of dark yellowish orange to purple quartzite were observed on the surface. These rock clasts[1] were typically subrounded to rounded, and up to 2 feet in diameter, though generally 1 inch in diameter, and part of a surficial colluvial geologic unit derived from weathered Wasatch Formation.

No springs, seeps, or running water were observed on the property at the time of the site visit.

The lot was found to be elevated at least 6 feet above Spring Park Road, and aside from the road cut, appeared to be native ground. No adverse geologic conditions were observed on the property at this time.

4.2 SUBSURFACE CONDITIONS

On June 19, 2017, a single exploration test pit was excavated in the north-central portion of the lot (see Figure A-2). The test pit was excavated to a depth of 12 feet below existing grade with the aid of a Caterpillar 315C tracked excavator. Upon completion of logging, the test pit was backfilled without compactive effort. A detailed log of the test pit is displayed in Figure A-3. Three distinct geologic units were encountered in the subsurface. The soil and moisture conditions encountered during our investigation are discussed in the following paragraphs.

[1] Clast: An individual constituent, grain, or fragment of a sediment or rock, produced by the mechanical or chemical disintegration or a larger rock mass. (AGI, 2005)

4.2.1 Earth Materials

A/B Soil Horizon: This topsoil unit was found to be between approximately 1.5 to 2 feet thick. The unit was a grayish brown, medium stiff, moist, lean CLAY with gravel (CL), with gravel and larger-sized quartzite clasts comprising between approximately 5 and 10% of the unit. The topsoil was found to be forming upon the underlying colluvium unit.

Colluvium: This unit was approximately 3 to 3.5 feet thick. The unit consisted of a dark brown, loose to medium stiff, moist, gravelly lean CLAY (CL) that was gradational to a clayey GRAVEL (GC). Gravel and larger-sized subrounded to subangular quartzite clasts comprised between approximately 25 and 30% of the unit, though in places was as much as 50% of the unit. Individual clasts were as much as 3 feet in diameter, though the mode clast size was approximately 3 to 6 inches in diameter.

Wasatch Formation: This unit was at least 7 feet thick and extended to the maximum depth of exploration within the test pit. The unit consisted of weakly consolidated conglomerate bedrock that had been largely disaggregated into a moderate reddish brown, medium-dense to dense, moist mixture of clay, sand, and gravel that collectively classifies as clayey GRAVEL with sand (GC). Gravel and larger-sized subrounded quartzite clasts comprised between approximately 40 and 50% of the unit, with individual clasts up to 1 foot in diameter, with a mode clast size of 2 to 3 inches. Pinhole voids up to 1 mm in diameter were commonly observed within the unit.

4.2.2 Groundwater

Groundwater was not encountered in the test pit excavated for this project; however, it should be noted that shallow groundwater seepage has been encountered in the nearby Lot 75R property (IGES, 2017).

4.3 SLOPE STABILITY

4.3.1 Global Stability

The stability of the existing natural slope has been assessed in accordance with methodologies set forth in Blake et al. 2002 and AASHTO LRFD for Bridge Design Specifications with respect to a representative cross-section, illustrated on Figure D-1 in Appendix D (the section is identified in plan-view on Figure A-2). The stability of the slope was modeled using SLIDE, a computer application incorporating (among others) Spencer's Method of analysis. Calculations for stability were developed by searching for the minimum factor of safety for a translational-type failure occurring through surficial soils (colluvium and Qlos), just above the underlying conglomerate bedrock. A translational-type failure has been assumed, occurring within the surficial soils overlying bedrock. Analysis was performed for both static and seismic (pseudo-static) cases.

Groundwater, e.g. a piezometric groundwater surface, was not encountered during our subsurface investigation; however, seepage was noted in test pits on nearby properties (IGES, 2017). Accordingly, groundwater was not modeled in our limit-equilibrium analysis. Saturated parallel seepage has been modeled in a separate analysis (see Section 4.3.2).

Soil strength parameters were selected based on soil types observed, local experience, correlation with index properties (Atterberg Limits, clay content), site-specific strength testing (direct shear test), and comparisons with soil strength laboratory data from a nearby sites. Based on this assessment, the following soil strength parameters were selected for this analysis:

Table 4.3.1a
Soil Strength Parameters

Earth Materials	Friction angle (degrees)	Cohesion (psf)	Unit Weight (pcf)
Qac	36	0	120
Bedrock (Tw)	39	0	130
Qls	33	200	125
Engineered Fill (Af)	34	100	125

Pseudo-static (seismic screening) analysis of the proposed slope was performed in general conformance with Blake et al. 2002, ASCE 7-10 and AASHTO LRFD for Bridge Design Specifications. The design seismic event was taken as the ground motion with a 2 percent probability of exceedance in 50 years (2PE50). Based on information provided on the USGS website ground motion calculator, the Peak Ground Acceleration (PGA) associated with a 2PE50 event is estimated to be 0.35g. Half of the PGA, (0.17g), was taken as the horizontal seismic coefficient (k_h) (Hynes and Franklin, 1984), and used in the pseudo-static seismic screen analysis. The results of the analyses have been summarized in Table 4.3.1b.

Table 4.3.1b
Results of Slope Stability Analyses

Section	Static Factor of Safety	Pseudo-Static Factor of Safety
Existing Condition	2.6	1.6

The results of the analysis indicated the existing conditions meet the minimum required factors-of-safety of 1.5 and 1.0 for both the static and seismic (pseudo-static) case, respectively. The planned improvements will include a basement level, which would tend to unload the slope and further improve the stability of the slope; significant fill placement on the slope, which would tend to load the slope and decrease stability, is not anticipated. A summary of the slope stability analysis is presented in Appendix D.

4.3.2 Surficial Stability

Our subsurface investigation indicates that the near-surface soils generally consist of sandy clay with gravel (CL). Material identified as ‘topsoil’ (A/B Horizon) generally ranges in thickness from 1.5 to 2 feet; the topsoil has developed on the prevailing colluvial cover, and therefore consists largely of gravelly clay, but with a higher organic component (abundant roots).

IGES assessed the potential for the upper three feet to become mobilized under saturated parallel seepage conditions. Our assessment assumes three feet of clayey colluvium or topsoil, fully saturated, and a 3.5H:1V slope (this would be a transient condition that could occur during primary spring run-off and snowmelt). Our model assumes an estimated effective friction angle of 28 degrees and a cohesion of 100 psf, and a saturated unit weight of 136 pcf. Based on this model, a factor-of-safety of 1.93 results. Sample calculations are presented in Appendix D.

Our calculations do not take into account the beneficial effects of plant roots, which were commonly observed throughout the topsoil units. Many of the existing natural slopes are thickly vegetated, which is expected to reduce the likelihood of shallow surficial slope instability.

Based on our infinite slope model, and the foregoing discussion, IGES considers the potential for surficial slope instability on this site to be low.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 GENERAL CONCLUSIONS

Based on the results of the field observations, literature review, and slope stability analyses, **the subsurface conditions are considered suitable for the proposed development provided that the recommendations presented in this report are incorporated into the design and construction of the project.**

Supporting data upon which the following conclusions and recommendations are based have been presented in the previous sections of this report. The recommendations presented herein are governed by the physical properties of the earth materials encountered in the subsurface explorations. If subsurface conditions other than those described herein are encountered in conjunction with construction, and/or if design and layout changes are initiated, IGES must be informed so that our recommendations can be reviewed and revised as deemed necessary.

5.2 GEOLOGIC CONCLUSIONS AND RECOMMENDATIONS

Based upon the data collected and reviewed as part of the geologic hazard assessment, IGES makes the following conclusions regarding the geological hazards present at the Lot 71R project area:

- **The Lot 71R project area does not appear to have geological hazards that are capable of adversely impacting the development as currently proposed under the existing conditions.**

- Though recent geologic mapping shows the site to be located adjacent to landslide deposits, no evidence of landsliding was observed on the surface or subsurface of the property. Therefore, the risk of landslide hazards is considered to be low, but should not be considered zero given the proximity to mapped landslide deposits.

- Earthquake ground shaking may potentially affect all parts of the project area and is considered to pose a moderate risk.

- Shallow groundwater conditions were not observed in the test pit, though groundwater seepage has been observed in test pits on nearby properties; therefore, shallow groundwater hazards are considered to be low to moderate for the property.

- Rockfall, surface-fault-rupture, liquefaction, debris-flow, and flooding hazards are considered to be low for the property.

Given the conclusions listed above, IGES makes the following recommendations:

- Because landslide deposits are noted near the property, an IGES engineering geologist or geotechnical engineer should observe the foundation excavation to assess the absence (or presence) of landslide-induced shearing.

- Effort should be made to limit the introduction of water into the subsurface near the proposed residence. Appropriate grading and drainage away from the home and xeriscape or natural landscaping will assist in reducing the risk of landsliding.

5.3 EARTHWORK

5.3.1 General Site Preparation and Grading

Below proposed structures, fills, and man-made improvements, all vegetation, topsoil, debris and undocumented fill (if any) should be removed. Any existing utilities should be re-routed or protected in place. The exposed native soils should then be proof-rolled with heavy rubber-tired equipment such as a scraper or loader*. Any soft/loose areas identified during proof-rolling should be removed and replaced with structural fill. All excavation bottoms should be observed by an IGES representative during proof-rolling or otherwise prior to placement of engineered fill to evaluate whether soft, loose, or otherwise deleterious earth materials have been removed, and to assess compliance with the recommendations presented in this report.

*not required where bedrock is exposed in the foundation subgrade

5.3.2 Excavations

Soft, loose, or otherwise unsuitable soils beneath structural elements, hardscape or pavements may need to be over-excavated and replaced with structural fill. If over-excavation is required, the excavations should extend one foot laterally for every foot of depth of over-excavation. Excavations should extend laterally at least two feet beyond flatwork, pavements, and slabs-on-grade. Structural fill should consist of granular materials and should be placed and compacted in accordance with the recommendations presented in this report.

Prior to placing engineered fill, all excavation bottoms should be scarified to at least 6 inches, moisture conditioned as necessary at or slightly above optimum moisture content (OMC), and compacted to at least 90 percent of the maximum dry density (MDD) as determined by ASTM D-1557 (Modified Proctor). Scarification is not required where hard bedrock is exposed.

5.3.3 Excavation Stability

The contractor is responsible for site safety, including all temporary trenches excavated at the site and the design of any required temporary shoring. The contractor is responsible for providing the "competent person" required by Occupational Safety and Health (OSHA) standards to evaluate soil conditions. For planning purposes, Soil Type C is expected to predominate at the site (sands

and gravels). Close coordination between the competent person and IGES should be maintained to facilitate construction while providing safe excavations.

Based on OSHA guidelines for excavation safety, trenches with vertical walls up to 5 feet in depth may be occupied. Where very moist soil conditions or groundwater is encountered, or when the trench is deeper than 5 feet, we recommend a trench-shield or shoring be used as a protective system to workers in the trench. As an alternative to shoring or shielding, trench walls may be laid back at one and one-half horizontal to one vertical (1½H:1V) (34 degrees) in accordance with OSHA Type C soils. Trench walls may need to be laid back at a steeper grade pending evaluation of soil conditions by the geotechnical engineer. Soil conditions should be evaluated in the field on a case-by-case basis. Large rocks exposed on excavation walls should be removed (scaled) to minimize rock fall hazards.

5.3.4 Structural Fill and Compaction

All fill placed for the support of structures, flatwork or pavements should consist of structural fill. Structural fill should consist of granular native soils, which may be defined as soils with less than 25% fines, 10-60% sand, and contain no rock larger than 4 inches in nominal size (6 inches in greatest dimension). Structural fill should also be free of vegetation and debris. All structural fill should be 1 inch minus material when within 1 foot of any base coarse material. Soils not meeting these criteria may be suitable for use as structural fill; however, such soils should be evaluated on a case by case basis and should be approved by IGES prior to use.

All structural fill should be placed in maximum 4-inch loose lifts if compacted by small hand-operated compaction equipment, maximum 6-inch loose lifts if compacted by light-duty rollers, and maximum 8-inch loose lifts if compacted by heavy duty compaction equipment that is capable of efficiently compacting the entire thickness of the lift. Additional lift thickness may be allowed by IGES provided the Contractor can demonstrate sufficient compaction can be achieved with a given lift thickness with the equipment in use. We recommend that all structural fill be compacted on a horizontal plane, unless otherwise approved by IGES. Structural fill underlying all shallow footings and pavements should be compacted to at least 95 percent of the MDD as determined by ASTM D-1557. **The moisture content should be at, or slightly above, the OMC for all structural fill**. Any imported fill materials should be approved prior to importing. Also, prior to placing any fill, the excavations should be observed by IGES to confirm that unsuitable materials have been removed. In addition, proper grading should precede placement of fill, as described in the General Site Preparation and Grading subsection of this report.

Specifications from governing authorities such as Weber County and/or special service districts having their own precedence for backfill and compaction should be followed where more stringent.

5.3.5 Oversize Material

Based on our observations, there is a significant potential for the presence of oversize materials (larger than 6 inches in greatest dimension). Large rocks, particularly boulders (>12 inches), may require special handling, such as segregation from structural fill, and disposal.

5.3.6 Utility Trench Backfill

Utility trenches should be backfilled with structural fill in accordance with Section 5.3.4 of this report. Utility trenches can be backfilled with the onsite soils free of debris, organic and oversized material. Prior to backfilling the trench, pipes should be bedded in and shaded with a uniform granular material that has a Sand Equivalent (SE) of 30 or greater. Pipe bedding may be water-densified in-place (jetting). Alternatively, pipe bedding and shading may consist of clean ¾-inch gravel. Native earth materials can be used as backfill over the pipe bedding zone. All utility trenches backfilled below pavement sections, curb and gutter, and hardscape, should be backfilled with structural fill compacted to at least 95 percent of the MDD as determined by ASTM D-1557. All other trenches should be backfilled and compacted to approximately 90 percent of the MDD (ASTM D-1557). However, in all cases the pipe bedding and shading should meet the design criteria of the pipe manufacturer. Specifications from governing authorities having their own precedence for backfill and compaction should be followed where they are more stringent.

5.4 FOUNDATION RECOMMENDATIONS

Based on our field observations and considering the presence of relatively competent native earth materials, we recommend that the footings for proposed single-family home be founded either *entirely* on competent native soils or *entirely* on structural fill. Native/fill transition zones are not allowed. Where soft, loose, or otherwise deleterious earth materials are exposed on the foundation subgrade, IGES recommends a minimum over-excavation of 2 feet and replacement with structural fill. Alternatively, the foundations may be extended such that the foundations bear directly on competent earth materials (Wasatch Formation, e.g. conglomerate bedrock). It should be noted that Wasatch Formation was encountered at a depth of approximately 5 feet below existing grade, but may be deeper, or shallower, at specific locations. We recommend that IGES assess the bottom of the foundation excavation prior to the placement of steel or concrete, or structural fill, to identify the competent native earth materials as well as any unsuitable soils or transition zones. Additional over-excavation may be required based on the actual subsurface conditions observed.

Shallow spread or continuous wall footings constructed entirely on structural fill, or entirely on competent, uniform native earth materials (Wasatch Formation conglomerate) may be proportioned utilizing a maximum net allowable bearing pressure of **2,900 pounds per square foot (psf)** for dead load plus live load conditions. The net allowable bearing values presented above are for dead load plus live load conditions. The allowable bearing capacity may be increased by one-third for short-term loading (wind and seismic). The minimum recommended footing width is 20 inches for continuous wall footings and 30 inches for isolated spread footings.

All conventional foundations exposed to the full effects of frost should be established at a minimum depth of 42 inches below the lowest adjacent final grade. Interior footings, not subjected to the full effects of frost (i.e., *a continuously heated structure*), may be established at higher elevations, however, a minimum depth of embedment of 12 inches is recommended for confinement purposes.

Foundation drains should be installed around below-ground foundations (e.g., basement walls) to minimize the potential for flooding from shallow groundwater or seepage, which may be present at various times during the year, particularly spring run-off.

5.5 SETTLEMENT

5.5.1 Static Settlement

Static settlements of properly designed and constructed conventional foundations, founded as described in Section 5.4, are anticipated to be on the order of 1 inch or less. Differential settlement is expected to be half of total settlement over a distance of 30 feet.

5.5.2 Dynamic Settlement

Dynamic settlement (or seismically-induced settlement) consists of dry dynamic settlement of unsaturated soils (above groundwater) and liquefaction-induced settlement (below groundwater). During a strong seismic event, seismically-induced settlement can occur within loose to moderately dense sandy soil due to reduction in volume during, and shortly after, an earthquake event. Settlement caused by ground shaking is often non-uniformly distributed, which can result in differential settlement.

Based on the subsurface conditions encountered, dynamic settlement arising from a MCE seismic event is expected to be low; for design purposes, settlement on the order of ½ inch over 40 feet may be assumed.

5.6 EARTH PRESSURES AND LATERAL RESISTANCE

Lateral forces imposed upon conventional foundations due to wind or seismic forces may be resisted by the development of passive earth pressures and friction between the base of the footing and the supporting soils. In determining the frictional resistance against concrete, a coefficient of friction of 0.45 for sandy/gravelly native soils or structural fill should be used.

Ultimate lateral earth pressures from *granular* backfill acting against retaining walls, temporary shoring, or buried structures may be computed from the lateral pressure coefficients or equivalent fluid densities presented in Table 5.6. These lateral pressures should be assumed even if the backfill is placed in a relatively narrow gap between a vertical bedrock cut and the foundation

wall. These coefficients and densities assume no buildup of hydrostatic pressures. The force of water should be added to the presented values if hydrostatic pressures are anticipated.

Clayey soils drain poorly and may swell upon wetting, thereby greatly increasing lateral pressures acting on earth retaining structures; therefore, clayey soils should not be used as retaining wall backfill. Backfill should consist of native granular soil with an Expansion Index (EI) less than 20.

Walls and structures allowed to rotate slightly should use the active condition. If the element is to be constrained against rotation (i.e., a basement wall), the at-rest condition should be used. These values should be used with an appropriate factor of safety against overturning and sliding. A value of 1.5 is typically used. Additionally, if passive resistance is calculated in conjunction with frictional resistance, the passive resistance should be reduced by ½.

Table 5.6
Lateral Earth Pressure Coefficients

Condition	Level Backfill		2H:1V Backfill	
	Lateral Pressure Coefficient	Equivalent Fluid Density (pcf)	Lateral Pressure Coefficient	Equivalent Fluid Density (pcf)
Active (Ka)	0.33	41.7	0.53	66.5
At-rest (Ko)	0.50	55	0.80	85
Passive (Kp)	3.0	375	—	—
Seismic Active	0.12	15.1	0.38	47.4
Seismic Passive	-0.33	-40.8	—	—
Seismic At-rest	0.18	22.5	0.57	71.7

For seismic analyses, the *active* earth pressure coefficient provided in the table is based on the Mononobe-Okabe pseudo-static approach and only accounts for the dynamic horizontal thrust produced by ground motion. Hence, the resulting dynamic thrust pressure *should be added* to the static pressure to determine the total pressure on the wall. The pressure distribution of the dynamic horizontal thrust may be closely approximated as an inverted triangle with stress decreasing with depth and the resultant acting at a distance approximately 0.6 times the loaded height of the structure, measured upward from the bottom of the structure.

5.7 CONCRETE SLAB-ON-GRADE CONSTRUCTION

To minimize settlement and cracking of slabs, and to aid in drainage beneath the concrete floor slabs, all concrete slabs should be founded on a minimum 4-inch layer of compacted gravel overlying properly prepared subgrade. The gravel should consist of free-draining gravel or road base with a 3/4-inch maximum particle size and no more than 5 percent passing the No. 200 mesh sieve. The layer should be compacted to at least 95 percent of the MDD as determined by ASTM D-1557.

All concrete slabs should be designed to minimize cracking as a result of shrinkage. Consideration should be given to reinforcing the slab with a welded wire fabric, re-bar, or fibermesh. Slab reinforcement should be designed by the structural engineer; however, as a minimum, slab reinforcement should consist of 4''×4'' W2.9×W2.9 welded wire mesh within the middle third of the slab. We recommend that concrete be tested to assess that the slump and/or air content is in compliance with the plans and specifications. We recommend that concrete be placed in general accordance with the requirements of the American Concrete Institute (ACI). A Modulus of Subgrade Reaction of **250 psi/inch** may be used for design.

A moisture barrier (vapor retarder) consisting of 10-mil thick Visqueen (or equivalent) plastic sheeting should be placed below slabs-on-grade where moisture-sensitive floor coverings or equipment is planned. Prior to placing this moisture barrier, any objects that could puncture it, such as protruding gravel or rocks, should be removed from the building pad. Alternatively, the subgrade may be covered with 2 inches of clean sand**.**

5.8 MOISTURE PROTECTION AND SURFACE DRAINAGE

Surface moisture should not be allowed to infiltrate into the soils in the vicinity of the foundations. As such, design strategies to minimize ponding and infiltration near the structures should be implemented.

We recommend roof runoff devices be installed to direct all runoff a minimum of 10 feet away from foundations. The builder should be responsible for compacting the exterior backfill soils around the foundation; failure to properly compact the basement backfill can result in excessive settlement and damage to exterior improvements such as pavement or other flatwork. Additionally, the ground surface within 10 feet of the structures should be constructed so as to slope a minimum of **five** percent away from the structure. Pavement sections should be constructed to divert surface water off the pavement into storm drains, curb/gutter, or another suitable location.

Where basements are planned, IGES recommends a perimeter foundation drain be constructed in accordance with the International Residential Code (IRC).

5.9 SOIL CORROSION POTENTIAL

Laboratory testing of a representative soil sample obtained during our subsurface exploration indicated that the soil sample tested had a sulfate content of 16.5 ppm. Accordingly, the soils are classified as having a 'low potential' for deterioration of concrete due to the presence of soluble sulfate. As such, conventional Type II Portland cement may be used for all concrete in contact with site soils.

To evaluate the corrosion potential of ferrous metal in contact with onsite native soil a sample was tested for soil resistivity, soluble chloride and pH. The test indicated that the onsite soil tested has

a minimum soil resistivity of 15,283 OHM-cm, soluble chloride content of 5.3 ppm and a pH of 7.1. Based on this result, the onsite native soil is considered to be *mildly corrosive* to ferrous metal.

5.10 CONSTRUCTION CONSIDERATIONS

5.10.1 Over-Size Material

Large boulders (up to 48 inches in diameter) were observed on the surface and within the test pits; as such, excavation of the basement may generate an abundance of over-size material that may require special handling, processing, or disposal.

6.0 CLOSURE

6.1 LIMITATIONS

The concept of risk is a significant consideration of geotechnical analyses. The analytical means and methods used in performing geotechnical analyses and development of resulting recommendations do not constitute an exact science. Analytical tools used by geotechnical engineers are based on limited data, empirical correlations, engineering judgment and experience. As such the solutions and resulting recommendations presented in this report cannot be considered risk-free and constitute IGES's best professional opinions and recommendations based on the available data and other design information available at the time they were developed. IGES has developed the preceding analyses, recommendations and designs, at a minimum, in accordance with generally accepted professional geotechnical engineering practices and care being exercised in the project area at the time our services were performed. No warrantees, guarantees or other representations are made.

The information contained in this report is based on limited field testing and our understanding of the project. The subsurface data used in the preparation of this report were obtained largely from the exploration made on Lot 71R. It is very likely that variations in the soil, rock, and groundwater conditions exist between and beyond the point explored. The nature and extent of the variations may not be evident until construction occurs and additional explorations are completed. If any conditions are encountered at this site that are different from those described in this report, IGES must be immediately notified so that we may make any necessary revisions to recommendations presented in this report. In addition, if the scope of the proposed construction or grading changes from those described in this report, our firm must also be notified.

This report was prepared for our client's exclusive use on the project identified in the foregoing. Use of the data, recommendations or design information contained herein for any other project or development of the site not as specifically described in this report is at the user's sole risk and without the approval of IGES, Inc. It is the client's responsibility to see that all parties to the project including the designer, contractor, subcontractors, etc. are made aware of this report in its entirety. The use of information contained in this report for bidding purposes should be done at the contractor's option and risk.

We recommend that IGES be retained to review the final design plans, grading plans and specifications to determine if our engineering recommendations have been properly incorporated in the project development documents. We also recommend that IGES be retained to evaluate construction performance and other geotechnical aspects of the project as construction initiates and progresses through its completion.

6.2 ADDITIONAL SERVICES

The recommendations made in this report are based on the assumption that an adequate program of tests and observations will be made during the construction. IGES staff or other qualified personnel should be on site to verify compliance with these recommendations. These tests and observations should include at a minimum the following:

- Observations and testing during site preparation, earthwork and structural fill placement.
- Consultation as may be required during construction.
- Quality control on concrete placement to verify slump, air content, and strength.

We also recommend that project plans and specifications be reviewed by us to verify compatibility with our conclusions and recommendations. Additional information concerning the scope and cost of these services can be obtained from our office.

We appreciate the opportunity to be of service on this project. Should you have any questions regarding the report or wish to discuss additional services, please do not hesitate to contact us at your convenience at (801) 748-4044.

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AERIAL PHOTOGRAPHS

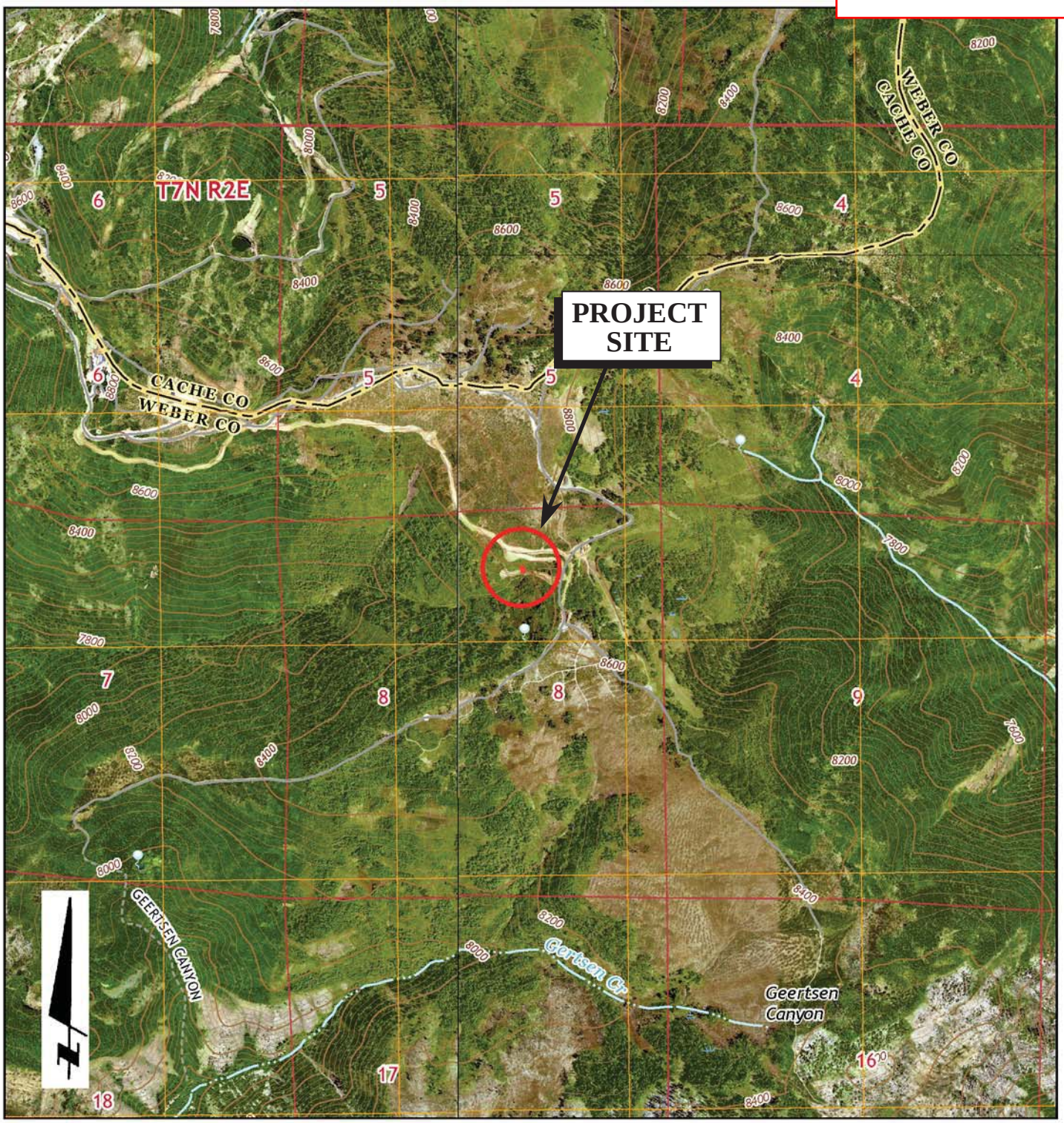
Data Set	Date	Flight	Photographs	Scale
1947 AAJ	August 10, 1946	AAJ_1B	88, 89, 90	1:20,000
1953 AAI	September 14, 1952	AAI_4K	34, 35, 36	1:20,000
1963 ELK	June 25, 1963	ELK_3	57, 58, 59	1:15,840

*https://geodata.geology.utah.gov/imagery/

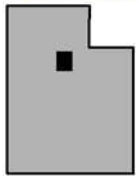
Exhibit B

APPENDIX A

Exhibit B



BASE MAP:
USGS Huntsville, Browns Hole, James Peak and Sharp Mountain 7.5-Minute Quadrangle Topographic Maps (2017)



MAP LOCATION

0' 1000' 2000'
SCALE 1:24,000

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Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
8488 E. Spring Park Road
Weber County, Utah

SITE VICINITY MAP

Figure

A-1

Exhibit B

LEGEND

TP-1
TD 12'
WF 5'
No GW
Approximate test pit location with total depth (TD), depth to Wasatch Formation (WF), and depth to groundwater (GW)

Af	Artificial fill
Qc	Colluvium
Qac	Colluvium and alluvium, undifferentiated
Qls	Landslide (queried where uncertain)
Tw	Wasatch Formation (conglomerate bedrock)

Contact between geologic units (approximate)

Landslide scarp (queried where uncertain)

A — A' Geologic Cross-Section

PROJECT SITE

TP-1
TD 12'
WF 5'
No GW

A

A'

COPPER CREST

SPRING PARK

OPEN SPACE

Tw

Qc

Qls?

Qac

Af

44R 45R 46R 47R 48R 49R 51R 52R 53 54 55 63 64 65 66 67 68 69R 70R 71R 72R 73R 74R 77 78 79 80 81 82 83 84R 85R

8550 8560 8570 8580 8590

0 25' 50'
SCALE 1"=50'

Basemap: Undated 50-scale map of Phase 1C prepared by NV5

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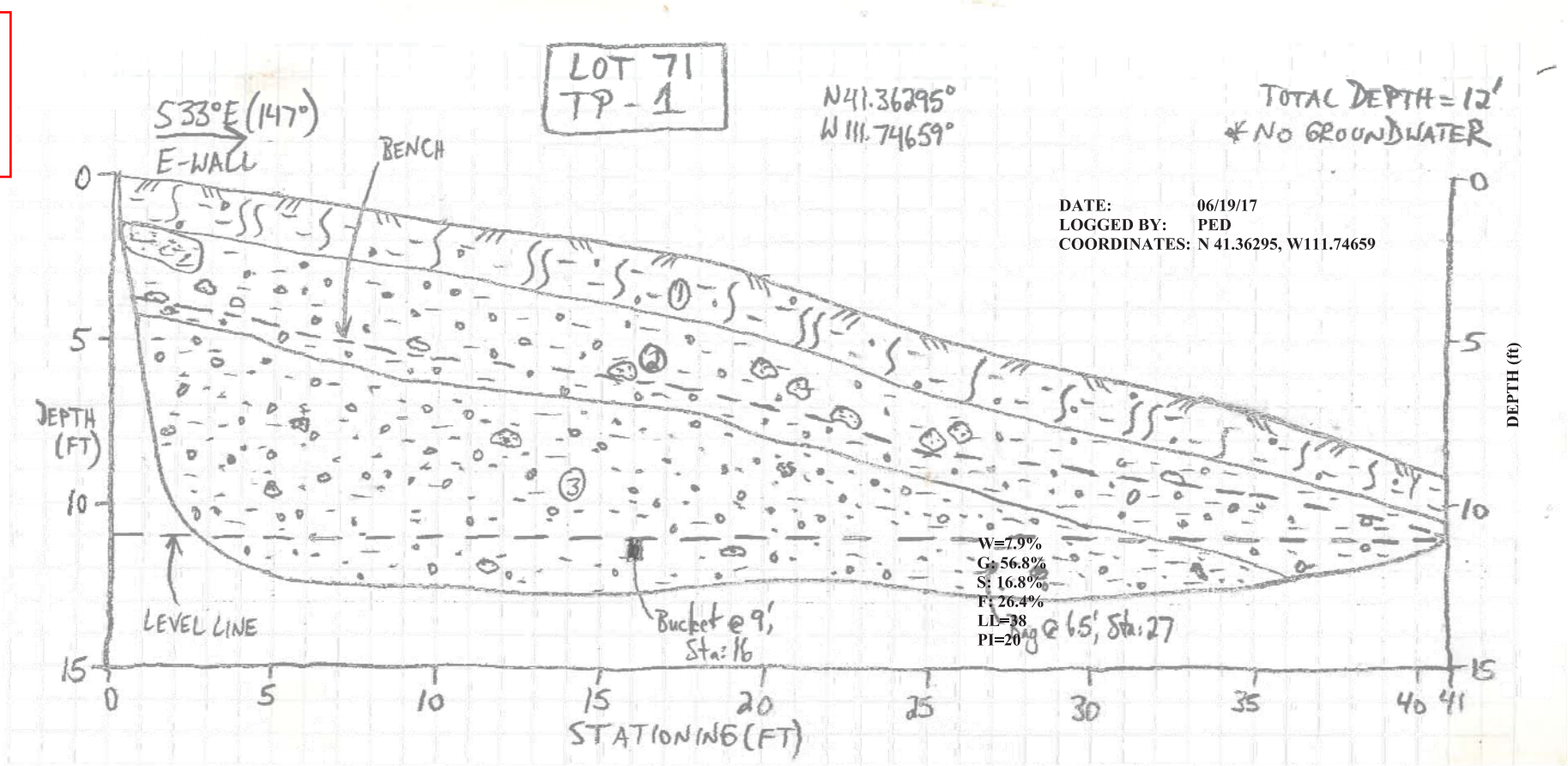
Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah GEOTECH & GEOLOGY MAP

Figure
A-2

Exhibit B



LITHOLOGIC UNIT DESCRIPTIONS:

1) **A/B Soil Horizon:** ~1.5-2' thick; grayish brown (5Y 3/2) lean CLAY with gravel (CL), medium stiff, moist, low plasticity, massive; gravel and larger sized clasts comprise ~5-10% of unit; clasts entirely subrounded pale yellowish orange (10YR 8/6) to medium gray (N5) quartzite up to 6" in diameter, though mode size ~1-2"; abundant plant and tree roots; gradational, irregular basal contact.

2) **Colluvium:** ~3-3.5' thick; dark yellowish brown (10YR 4/2) gravelly lean CLAY (CL), loose to medium stiff, moist, low plasticity, massive; gravel and larger sized clasts comprise ~25-30% of unit, though can be as much as 50% in places; clasts entirely subrounded to subangular quartzite as above up to 3' in diameter, though mode size ~3-6"; likely contains an alluvial component; common to abundant plant and tree roots; possibly reversely graded; gradational, irregular basal contact.

3) **Wasatch Formation:** At least ~7' thick; poorly consolidated conglomerate bedrock, largely disaggregated to moderate reddish brown (10R 4/6) clayey GRAVEL with sand (GC), medium dense to dense, moist, low to moderate plasticity fines, massive; gravel and larger sized clasts comprise ~40-50% of unit; clasts entirely subrounded quartzite as above, though some clasts exhibit hydrothermal alteration; clasts up to 1' in diameter, though mode size ~2-3"; clast distribution appears fairly homogeneous; matrix-supported; common 1 mm pinholes throughout; grades to sandy lean clay with gravel in south side of test pit; occasional plant and tree roots.

SCALE: 1"=5' H&V

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Project No. 02565-001

Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah

TEST PIT LOG TP-1

Figure

A-3

Exhibit B

UNIFIED SOIL CLASSIFICATION SYSTEM

MAJOR DIVISIONS			USCS SYMBOL	TYPICAL DESCRIPTIONS
COARSE GRAINED SOILS (More than half of material is larger than the #200 sieve)	GRAVELS (More than half of coarse fraction is larger than the #4 sieve)	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW	WELL-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
			GP	POORLY-GRADED GRAVELS, GRAVEL-SAND MIXTURES WITH LITTLE OR NO FINES
		GRAVELS WITH OVER 12% FINES	GM	SILTY GRAVELS, GRAVEL-SILT-SAND MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS (More than half of coarse fraction is smaller than the #4 sieve)	CLEAN SANDS WITH LITTLE OR NO FINES	SW	WELL-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
			SP	POORLY-GRADED SANDS, SAND-GRAVEL MIXTURES WITH LITTLE OR NO FINES
		SANDS WITH OVER 12% FINES	SM	SILTY SANDS, SAND-GRAVEL-SILT MIXTURES
			SC	CLAYEY SANDS SAND-GRAVEL-CLAY MIXTURES
FINE GRAINED SOILS (More than half of material is smaller than the #200 sieve)	SILTS AND CLAYS (Liquid limit less than 50)		ML	INORGANIC SILTS & VERY FINE SANDS, SILTY OR CLAYEY FINE SANDS, CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS (Liquid limit greater than 50)		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILT
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS & ORGANIC SILTS OF MEDIUM-TO-HIGH PLASTICITY
HIGHLY ORGANIC SOILS			PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

LOG KEY SYMBOLS

- BORING SAMPLE LOCATION
- TEST-PIT SAMPLE LOCATION
- WATER LEVEL (level after completion)
- WATER LEVEL (level where first encountered)

CEMENTATION

DESCRIPTION	DESCRIPTION
WEAKELY	CRUMBLES OR BREAKS WITH HANDLING OR SLIGHT FINGER PRESSURE
MODERATELY	CRUMBLES OR BREAKS WITH CONSIDERABLE FINGER PRESSURE
STRONGLY	WILL NOT CRUMBLE OR BREAK WITH FINGER PRESSURE

OTHER TESTS KEY

C	CONSOLIDATION	SA	SIEVE ANALYSIS
AL	ATTERBERG LIMITS	DS	DIRECT SHEAR
UC	UNCONFINED COMPRESSION	T	TRIAXIAL
S	SOLUBILITY	R	RESISTIVITY
O	ORGANIC CONTENT	RV	R-VALUE
CBR	CALIFORNIA BEARING RATIO	SU	SOLUBLE SULFATES
COMP	MOISTURE/DENSITY RELATIONSHIP	PM	PERMEABILITY
CI	CALIFORNIA IMPACT	-200	% FINER THAN #200
COL	COLLAPSE POTENTIAL	Gs	SPECIFIC GRAVITY
SS	SHRINK SWELL	SL	SWELL LOAD

MODIFIERS

DESCRIPTION	%
TRACE	<5
SOME	5 - 12
WITH	>12

MOISTURE CONTENT

DESCRIPTION	FIELD TEST
DRY	ABSENCE OF MOISTURE, DUSTY, DRY TO THE TOUCH
MOIST	DAMP BUT NO VISIBLE WATER
WET	VISIBLE FREE WATER, USUALLY SOIL BELOW WATER TABLE

STRATIFICATION

DESCRIPTION	THICKNESS	DESCRIPTION	THICKNESS
SEAM	1/16 - 1/2"	OCCASIONAL	ONE OR LESS PER FOOT OF THICKNESS
LAYER	1/2 - 12"	FREQUENT	MORE THAN ONE PER FOOT OF THICKNESS

GENERAL NOTES

1. Lines separating strata on the logs represent approximate boundaries only. Actual transitions may be gradual.
2. No warranty is provided as to the continuity of soil conditions between individual sample locations.
3. Logs represent general soil conditions observed at the point of exploration on the date indicated.
4. In general, Unified Soil Classification designations presented on the logs were evaluated by visual methods only. Therefore, actual designations (based on laboratory tests) may vary

APPARENT / RELATIVE DENSITY - COARSE-GRAINED SOIL

APPARENT DENSITY	SPT (blows/ft)	MODIFIED CA. SAMPLER (blows/ft)	CALIFORNIA SAMPLER (blows/ft)	RELATIVE DENSITY (%)	FIELD TEST
VERY LOOSE	<4	<4	<5	0 - 15	EASILY PENETRATED WITH 1/2-INCH REINFORCING ROD PUSHED BY HAND
LOOSE	4 - 10	5 - 12	5 - 15	15 - 35	DIFFICULT TO PENETRATE WITH 1/2-INCH REINFORCING ROD PUSHED BY HAND
MEDIUM DENSE	10 - 30	12 - 35	15 - 40	35 - 65	EASILY PENETRATED A FOOT WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER
DENSE	30 - 50	35 - 60	40 - 70	65 - 85	DIFFICULT TO PENETRATED A FOOT WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER
VERY DENSE	>50	>60	>70	85 - 100	PENETRATED ONLY A FEW INCHES WITH 1/2-INCH REINFORCING ROD DRIVEN WITH 5-LB HAMMER

CONSISTENCY - FINE-GRAINED SOIL

CONSISTENCY	SPT (blows/ft)	TORVANE UNTRAINED SHEAR STRENGTH (tsf)	POCKET PENETROMETER UNCONFINED COMPRESSIVE STRENGTH (tsf)	FIELD TEST
VERY SOFT	<2	<0.125	<0.25	EASILY PENETRATED SEVERAL INCHES BY THUMB. EXUDES BETWEEN THUMB AND FINGERS WHEN SQUEEZED BY HAND.
SOFT	2 - 4	0.125 - 0.25	0.25 - 0.5	EASILY PENETRATED ONE INCH BY THUMB. MOLDED BY LIGHT FINGER PRESSURE.
MEDIUM STIFF	4 - 8	0.25 - 0.5	0.5 - 1.0	PENETRATED OVER 1/2 INCH BY THUMB WITH MODERATE EFFORT. MOLDED BY STRONG FINGER PRESSURE.
STIFF	8 - 15	0.5 - 1.0	1.0 - 2.0	INDENTED ABOUT 1/2 INCH BY THUMB BUT PENETRATED ONLY WITH GREAT EFFORT.
VERY STIFF	15 - 30	1.0 - 2.0	2.0 - 4.0	READILY INDENTED BY THUMBNAIL.
HARD	>30	>2.0	>4.0	INDENTED WITH DIFFICULTY BY THUMBNAIL.

KEY TO SOIL SYMBOLS AND TERMINOLOGY

Project No. 02565-001
Engr. DAG
Drafted By DAG
Date August 2017

IGES
Intermountain Geo-Environmental Services, Inc.

Figure A-4

Exhibit B

Rock Classification Should Include:
1. Rock name (or classification) 2. Color 3. Weathering 4. Fracturing 5. Competency 6. Additional comments indicating rock characteristics which might affect engineering properties

Weathering

Weathering	Field Test
Fresh	No visible sign of decomposition or discoloration. Rings under hammer impact.
Slightly Weathered	Slight discoloration inwards from open fractures, otherwise similar to Fresh.
Moderately Weathered	Discoloration throughout. Weaker minerals such as feldspar are decomposed. Strength somewhat less than fresh rock but cores cannot be broken by hand or scraped with a knife. Texture preserved.
Highly Weathered	Most minerals somewhat decomposed. Specimens can be broken by hand with effort or shaved with a knife. Core stones present in rock mass. Texture becoming indistinct but fabric preserved.
Completely Weathered	Minerals decomposed to soil but fabric and structure preserved. Specimens easily crumble or penetrated.

Fracturing

Spacing	Description
>6 ft	Very Widely
2-6 ft	Widely
8-24 in	Moderately
2 ½-8 in	Closely
¾-2 ½ in	Very Closely

Bedding of Sedimentary Rocks

Splitting Property	Thickness	Stratification
Massive	>4.0 ft	Very thick bedded
Blocky	2.0-4.0 ft	Thick-bedded
Slabby	2 ½-24 in	Thin-bedded
Flaggy	½-2 ½ in	Very thin-bedded
Shaly or platy	⅛ – ½ in	Laminated
Papery	< ⅛ in	Thinly laminated

RQD

RQD (%)	Rock Quality
90-100	Excellent
75-90	Good
50-75	Fair
25-50	Poor
0-25	Very Poor

Competency

Class	Strength	Field Test	Approximate Range of Unconfined Compressive Strength (tsf)
I	Extremely Strong	Many blows with geologic hammer required to break intact specimen.	>2000
II	Very Strong	Hand-held specimen breaks with pick end of hammer under more than one blow.	2000-1000
III	Strong	Cannot by scraped or peeled with knife, hand-held specimen can be broken with single moderate blow with pick end of hammer	1000-500
IV	Moderately Strong	Can just be scraped or peeled with knife. Indentations 1-3 mm show in specimen with moderate blow with pick end of hammer.	500-250
V	Weak	Material crumbles under moderate blow with pick end of hammer and can be peeled with a knife, but is hard to hand-trim for triaxial test specimen.	250-10
VI	Friable	Material crumbles in hand.	N/A

KEY TO PHYSICAL ROCK PROPERTIES

Project No. 02565-001
Engr. DAG
Drafted By DAG
Date August 2017

IGES
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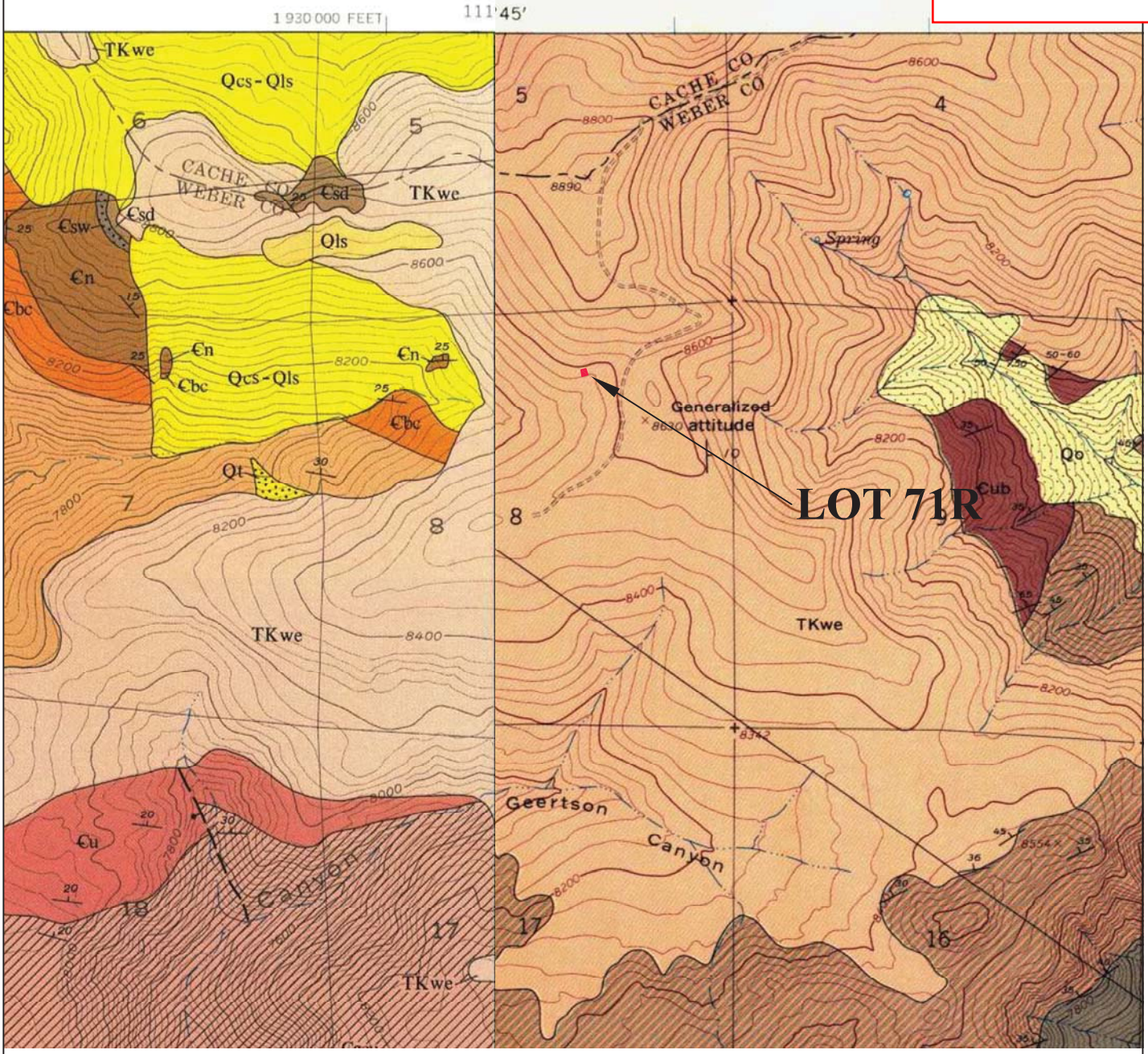
Figure A-5

Exhibit B



BASE MAPS

-USGS Huntsville 7.5-Minute Geologic Quadrangle Map (GQ-1503), Sorensen and Crittenden, Jr. (1979)

-USGS Brown's Hole 7.5-Minute Geologic Quadrangle Map (GQ-968), Crittenden, Jr. (1972)

N

0' 1,000' 2,000' 4,000'

SCALE: 1"=2,000'

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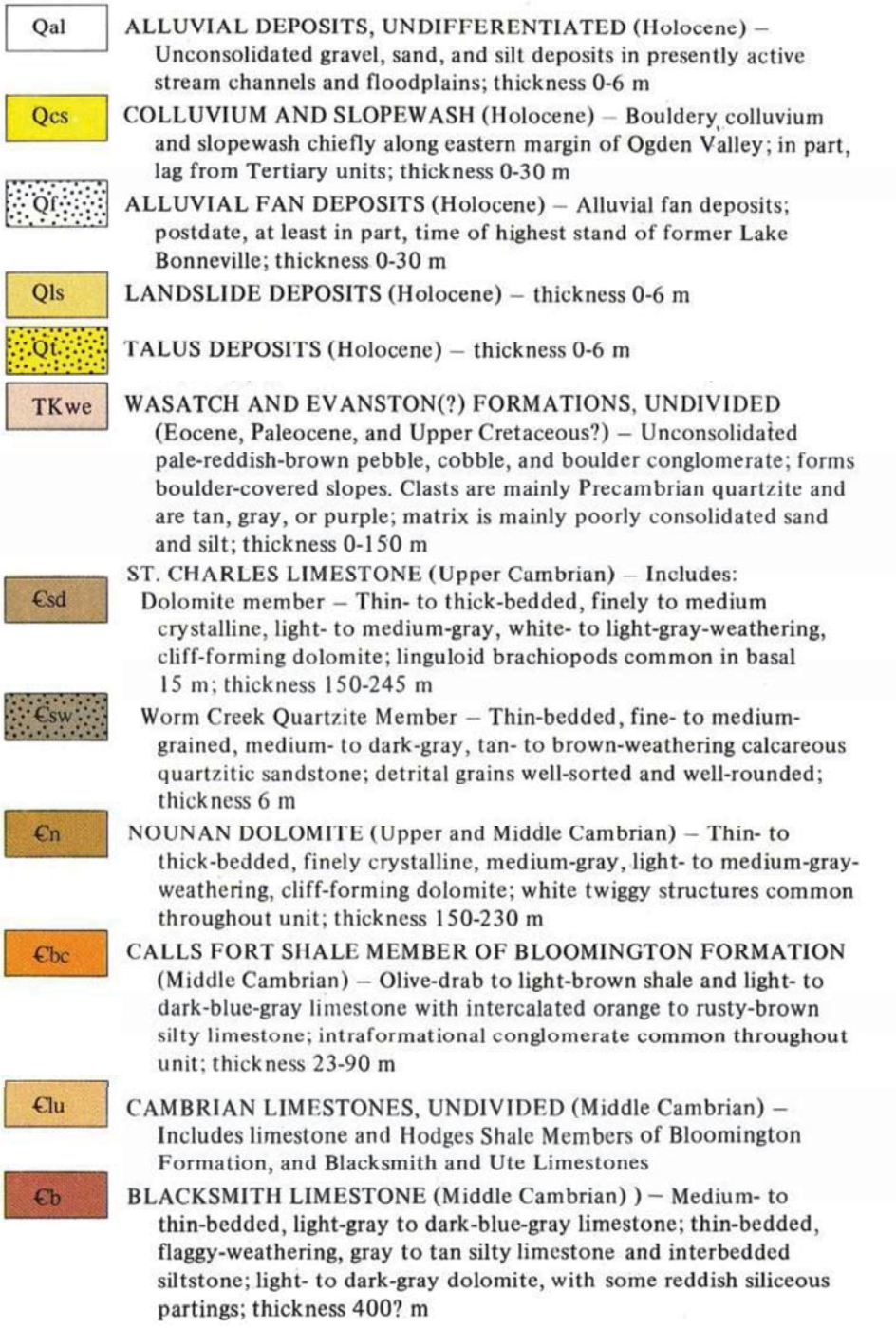
Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah REGIONAL GEOLOGY MAP 1

Figure

A-6a

Exhibit B

MAP LEGEND



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Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah REGIONAL GEOLOGY MAP 1

Figure

A-6b

Exhibit B

MAP LEGEND

Cu — UTE LIMESTONE (Middle Cambrian) — Medium- to thin-bedded, finely crystalline, light- to dark-gray silty limestone with irregular wavy partings, mottled and streaked surfaces, worm tracks, and twiggy structures common throughout unit; oolites and *Girvanella* in many beds; olive-drab fissile shale interbedded throughout unit. Includes thin-bedded, gray-weathering, pale-tan to brown dolomite exposed at base of unit, 18-24 m at head of Geertsen Canyon and 0-3 m elsewhere; thickness 245? m

Cgcu — GEERTSEN CANYON QUARTZITE (Lower Cambrian) — Includes: Upper member — Pale-buff to white or flesh-pink quartzite, locally streaked with pale red or purple. Coarse-grained; small pebbles occur throughout unit and increase in abundance downward. Base marked by zone 30-60 m thick of cobble conglomerate in beds 30 cm to 2 m thick; clasts, 5-10 cm in diameter, are mainly reddish vein quartz or quartzite, sparse gray quartzite, or red jasper; thickness 730-820 m

Cgcl — Lower member — Pale-buff to white and tan quartzite with irregular streaks and lenses of cobble conglomerate decreasing in abundance downward. Lower 90-120 m strongly arkosic, streaked greenish or pinkish. Feldspar clasts increase in size to 0.6-1.3 cm in lower part of unit; thickness 490-520 m

Recently active normal fault — Dashed where inferred. Ticks on downthrown side

Pre-Tertiary normal fault — Dotted where concealed Bar and ball on downthrown side

Thrust fault — Dashed where inferred Sawteeth on upper plate

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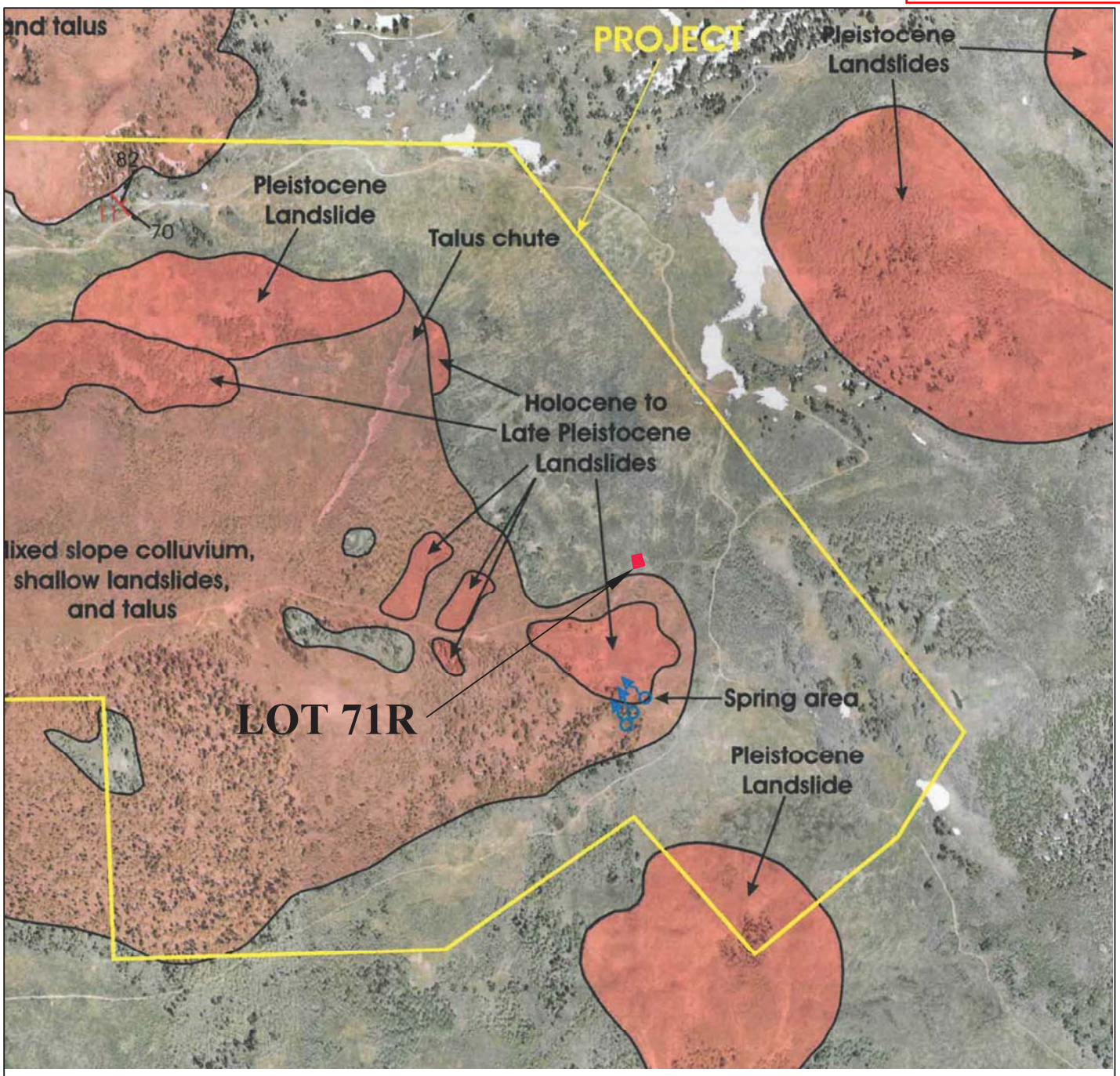
Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah REGIONAL GEOLOGY MAP 1

Figure

A-6c

Exhibit B



BASE MAP

-Western Geologic (2012)
Geologic Hazards
Reconaissance Report, Figure 3

N

0' 500' 1,000' 2,000'

SCALE: 1"=1,000'

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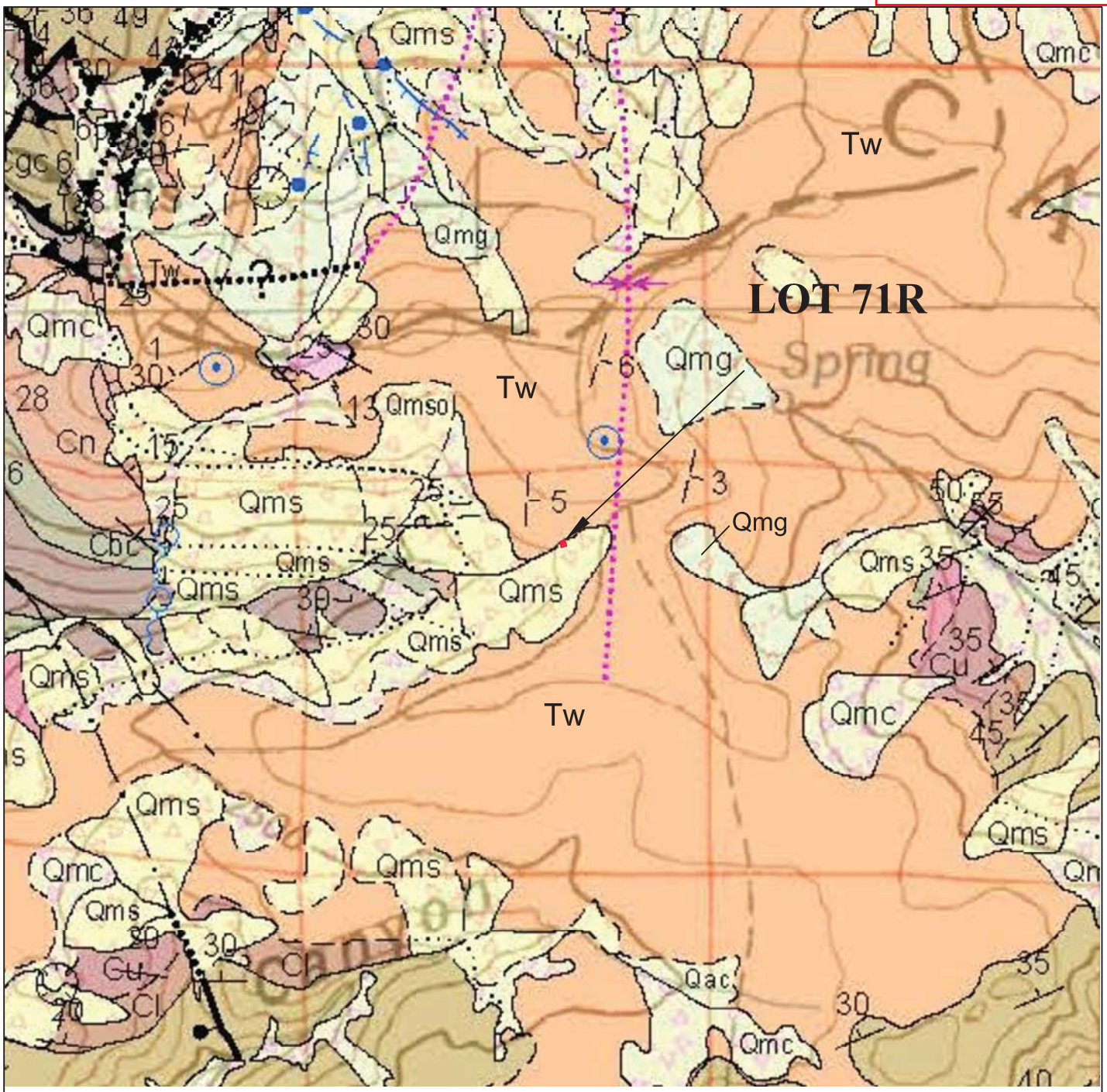
Project No. 02565-001

Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah REGIONAL GEOLOGY MAP 2

Figure

A-7

Exhibit B



BASE MAP

-Coogan and King (2016)
UGS Ogden 30'x60' Geologic
Quadrangle Map, OFR-635DM
Plate 1

N

0' 1,000' 2,000' 4,000'

SCALE: 1"=2,000'

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Geotechnical & Geologic Hazard Investigation
Lot 71R of Summit Eden Phase 1C
Summit Powder Mountain Resort
Weber County, Utah REGIONAL GEOLOGY MAP 3

Figure

A-8a

Exhibit B

MAP LEGEND

Qmc **Landslide and colluvial deposits, undivided (Holocene and Pleistocene)** – Poorly sorted to unsorted clay- to boulder-sized material; mapped where landslide deposits are difficult to distinguish from colluvium (slopewash and soil creep) and where mapping separate, small, intermingled areas of landslide and colluvial deposits is not possible at map scale; locally includes talus and debris flow and flood deposits; typically mapped where landslides are thin ("shallow"); also mapped where the blocky or rumpled morphology that is characteristic of landslides has been diminished ("smoothed") by slopewash and soil creep; composition depends on local sources; 6 to 40 feet (2-12 m) thick. These deposits are as unstable as other landslide units (Qms, Qmsy, Qmso).

Human disturbances

Qh, Qh? **Human disturbances (Historical)** - Mapped disturbances obscure original deposits or rocks by cover or removal; only larger disturbances that pre-date the 1984 aerial photographs used to map the Ogden 30 x 60-minute quadrangle are shown; includes engineered fill, particularly along Interstate Highways 80 and 84, the Union Pacific Railroad, and larger dams, as well as aggregate operations, gravel pits, sewage-treatment facilities, cement plant quarries and operations, brick plant and clay pit, Defense Depot Ogden (Browning U.S. Army Reserve Center), gas and oil field operations (for example drill pads) including gas plants, and low dams along several creeks, including a breached dam on Yellow Creek.

Qms, Qms?, Qmsy, Qmsy?, Qmso, Qmso?

Landslide deposits (Holocene and upper and middle? Pleistocene) – Poorly sorted clay- to boulder-sized material; includes slides, slumps, and locally flows and floods; generally characterized by hummocky topography, main and internal scarps, and chaotic bedding in displaced blocks; composition depends on local sources; morphology becomes more subdued with time and amount of water in material during emplacement; Qms may be in contact with Qms when landslides are different/distinct; thickness highly variable, up to about 20 to 30 feet (6-9 m) for small slides, and 80 to 100 feet (25-30 m) thick for larger landslides. Qmsy and Qmso queried where relative age uncertain; Qms queried where classification uncertain. Numerous landslides are too small to show at map scale and more detailed maps shown in the index to geologic mapping should be examined.

Qmg, Qmg?

Mass-movement and glacial deposits, undivided (Holocene and Pleistocene) – Unsorted and unstratified clay, silt, sand, and gravel; mapped where glacial deposits lack typical moraine morphology, and appear to have failed or moved down slope; also mapped in upper Strawberry Bowl (Snow Basin quadrangle) where glacial deposits have lost their distinct morphology and the contacts between them and colluvium and talus in the cirques cannot be mapped; likely less than 30 feet (9 m) thick, but may be thicker in Mantua, James Peak, North Ogden, Huntsville, and Peterson quadrangles.

Tw, Tw?

Wasatch Formation (Eocene and upper Paleocene) – Typically red to brownish-red sandstone, siltstone, mudstone, and conglomerate with minor gray limestone and marlstone locally (see Twl); lighter shades of red, yellow, tan, and light gray present locally and more common in uppermost part, complicating mapping of contacts with overlying similarly colored Norwood and Fowkes Formations; clasts typically rounded Neoproterozoic and Paleozoic sedimentary rocks, mainly Neoproterozoic and Cambrian quartzite; basal conglomerate more gray and less likely to be red, and containing more locally derived angular clasts of limestone, dolomite and sandstone, typically from Paleozoic strata, for example in northern Causey Dam

Exhibit B

APPENDIX B

Exhibit B

IGES

Water Content and Unit Weight of Soil

(In General Accordance with ASTM D7263 Method B and D2216)

Project: Eisenburg/Lot 71
No: 02565-001
Location: Summit Powder Mtn.
Date: 7/27/2017
By: BSS

Sample Info.	Boring No.	TP-1							
	Sample								
	Depth	6.5'							
	Split	Yes							
	Split sieve	3/8"							
Total sample (g)		4602.00							
Moist coarse fraction (g)		2341.80							
Moist split fraction (g)		2260.20							
	Sample height, H (in)								
	Sample diameter, D (in)								
	Mass rings + wet soil (g)								
	Mass rings/tare (g)								
	Moist unit wt., γ_m (pcf)								
Coarse Fraction	Wet soil + tare (g)	2652.02							
	Dry soil + tare (g)	2628.15							
	Tare (g)	310.51							
	Water content (%)	1.0							
Split Fraction	Wet soil + tare (g)	840.29							
	Dry soil + tare (g)	769.74							
	Tare (g)	327.86							
	Water content (%)	16.0							
Water Content, w (%)		**7.9**							
Dry Unit Wt., γ_d (pcf)									

Entered by:_____

Reviewed:_____

Exhibit B

IGES

Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis

(ASTM D6913)

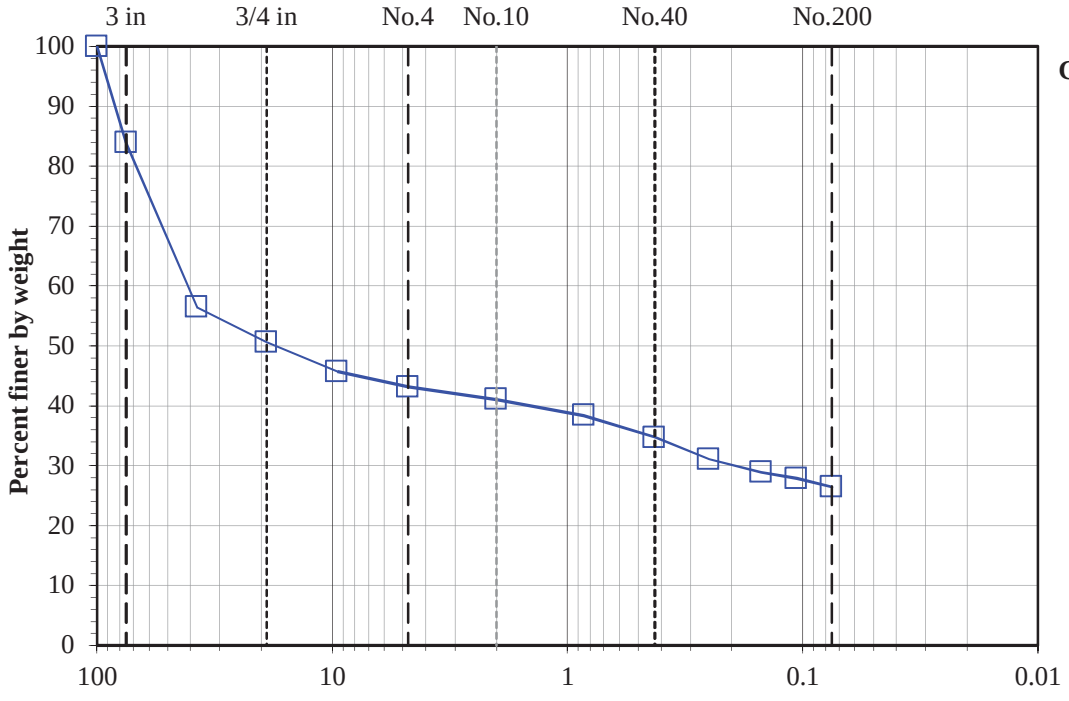
Project: Eisenberg/Lot 71
No: 02565-001
Location: Summit Powder Mtn.
Date: 8/1/2017
By: BSS

Boring No.: TP-1
Sample:
Depth: 6.5'
Description: Reddish brown clayey gravel with sand

	Moist	Dry
Split:	Yes	
Split sieve:	3/8"	
Total sample wt. (g):	4602.00	4266.95
+3/8" Coarse fraction (g):	2341.80	2317.93
-3/8" Split fraction (g):	512.43	441.88
Split fraction:	0.457	

Water content data	C.F.(+3/8")	S.F.(-3/8")
Moist soil + tare (g):	2652.02	840.29
Dry soil + tare (g):	2628.15	769.74
Tare (g):	310.51	327.86
Water content (%):	1.0	16.0

Sieve	Accum. Wt. Ret. (g)	Grain Size (mm)	Percent Finer	
8"	-	200	-	
6"	-	150	-	
4"	-	100	100.0	
3"	684.05	75	84.0	
1.5"	1859.65	37.5	56.4	
3/4"	2108.29	19	50.6	
3/8"	2317.93	9.5	45.7	←Split
No.4	24.34	4.75	43.2	
No.10	44.74	2	41.1	
No.20	70.65	0.85	38.4	
No.40	106.36	0.425	34.7	
No.60	141.28	0.25	31.1	
No.100	162.40	0.15	28.9	
No.140	172.21	0.106	27.9	
No.200	186.43	0.075	26.4	



Gravel (%): 56.8
Sand (%): 16.8
Fines (%): 26.4

Entered by:_____
Reviewed:_____

Exhibit B

IGES

Liquid Limit, Plastic Limit, and Plasticity Index of Soils

(ASTM D4318)

Project: Eisenberg/Lot 71
No: 02565-001
Location: Summit Powder Mtn.
Date: 8/1/2017
By: BRR
Grooving tool type: Plastic
Liquid limit device: Mechanical
Rolling method: Hand

Boring No.: TP-1
Sample:
Depth: 6.5'
Description: Reddish brown lean clay

Preparation method: Wet
Liquid limit test method: Multipoint
Screened over No.40: Yes
Larger particles removed: Wet sieved
Approximate maximum grain size: 3"
Estimated percent retained on No.40: See Particle Size Distribution
As-received water content (%): 7.9

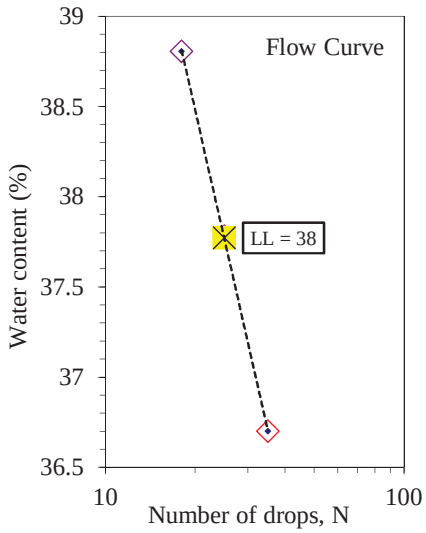
Plastic Limit

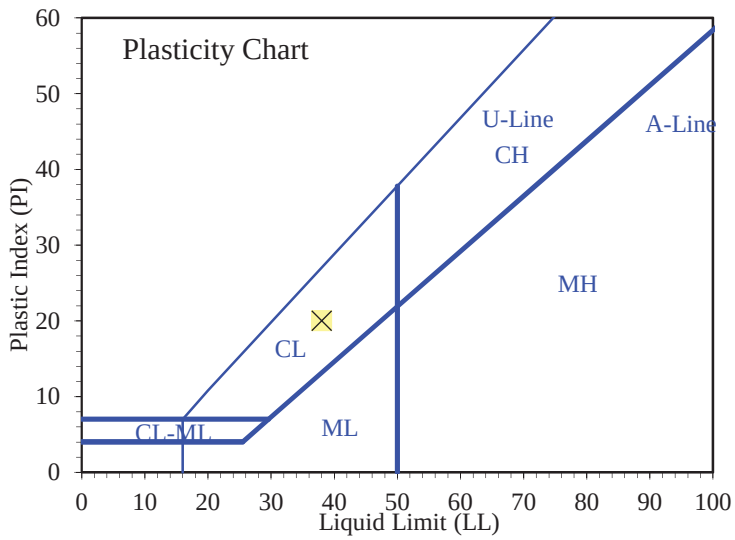
Determination No	1	2				
Wet Soil + Tare (g)	28.05	28.27				
Dry Soil + Tare (g)	27.06	27.32				
Water Loss (g)	0.99	0.95				
Tare (g)	21.51	22.03				
Dry Soil (g)	5.55	5.29				
Water Content, w (%)	17.84	17.96				

Liquid Limit

Determination No	1	2	3			
Number of Drops, N	35	25	18			
Wet Soil + Tare (g)	28.47	29.21	29.55			
Dry Soil + Tare (g)	26.58	27.20	27.47			
Water Loss (g)	1.89	2.01	2.08			
Tare (g)	21.43	21.88	22.11			
Dry Soil (g)	5.15	5.32	5.36			
Water Content, w (%)	36.70	37.78	38.81			
One-Point LL (%)		38				

Liquid Limit, LL (%)	**38**
Plastic Limit, PL (%)	**18**
Plasticity Index, PI (%)	**20**





Entered by:_____
Reviewed:_____

Exhibit B

IGES

Minimum Laboratory Soil Resistivity, pH of Soil for Use in Corrosion Testing, and Ions in Water by Chemically Suppressed Ion Chromatography *(AASHTO T 288, T 289, ASTM D4327, and C1580)*

Project: **Eisenberg/Lot 71**
No: **02565-001**
Location: Summit Powder Mtn.
Date: 8/1/2017
By: DKS

Sample info.	Boring No.	TP-1							
	Sample								
	Depth	9.0'							
Water content data	Wet soil + tare (g)	90.47							
	Dry soil + tare (g)	84.66							
	Tare (g)	37.88							
	Water content (%)	12.4							
Chem. data	pH	7.12							
	Soluble chloride* (ppm)	<5.34							
	Soluble sulfate** (ppm)	16.5							
Resistivity data	Pin method	2							
	Soil box	Miller Small							
		Approximate Soil condition (%)	Resistance Reading (Ω)	Soil Box Multiplier (cm)	Resistivity (Ω-cm)	Approximate Soil condition (%)	Resistance Reading (Ω)	Soil Box Multiplier (cm)	Resistivity (Ω-cm)
		As Is	53790	0.67	36039				
		+3	25100	0.67	16817				
		+6	22810	0.67	15283				
		+9	23880	0.67	16000				
	Minimum resistivity (Ω-cm)	**15283**							

* Performed by AWAL using EPA 300.0

** Performed by AWAL using ASTM C1580

Entered by:_____
Reviewed:_____

Exhibit B

APPENDIX C

Exhibit B

USGS Design Maps Detailed Report

2012/2015 International Building Code (41.3628°N, 111.7455°W)

Site Class C – “Very Dense Soil and Soft Rock”, Risk Category I/II/III

Section 1613.3.1 — Mapped acceleration parameters

Note: Ground motion values provided below are for the direction of maximum horizontal spectral response acceleration. They have been converted from corresponding geometric mean ground motions computed by the USGS by applying factors of 1.1 (to obtain S_S) and 1.3 (to obtain S_1). Maps in the 2012/2015 International Building Code are provided for Site Class B. Adjustments for other Site Classes are made, as needed, in Section 1613.3.3.

From Figure 1613.3.1(1) [1] $S_S = 0.811$ g

From Figure 1613.3.1(2) [2] $S_1 = 0.269$ g

Section 1613.3.2 — Site class definitions

The authority having jurisdiction (not the USGS), site-specific geotechnical data, and/or the default has classified the site as Site Class C, based on the site soil properties in accordance with Section 1613.

2010 ASCE-7 Standard – Table 20.3-1
SITE CLASS DEFINITIONS

Site Class	$\overline{v}_s$	$\overline{N}$ or $\overline{N}_{ch}$	$\overline{s}_u$
A. Hard Rock	>5,000 ft/s	N/A	N/A
B. Rock	2,500 to 5,000 ft/s	N/A	N/A
C. Very dense soil and soft rock	1,200 to 2,500 ft/s	>50	>2,000 psf
D. Stiff Soil	600 to 1,200 ft/s	15 to 50	1,000 to 2,000 psf
E. Soft clay soil	<600 ft/s	<15	<1,000 psf
	Any profile with more than 10 ft of soil having the characteristics: • Plasticity index PI > 20, • Moisture content w ≥ 40%, and • Undrained shear strength $\overline{s}_u$ < 500 psf		
F. Soils requiring site response analysis in accordance with Section 21.1	See Section 20.3.1		

For SI: 1ft/s = 0.3048 m/s 1lb/ft² = 0.0479 kN/m²

Section 1613.3.3 — Site coefficients and adjusted maximum considered earthquake spectral response acceleration parameters

Exhibit B

TABLE 1613.3.3(1)
VALUES OF SITE COEFFICIENT F_a

Site Class	Mapped Spectral Response Acceleration at Short Period				
	$S_S \le 0.25$	$S_S = 0.50$	$S_S = 0.75$	$S_S = 1.00$	$S_S \ge 1.25$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.2	1.2	1.1	1.0	1.0
D	1.6	1.4	1.2	1.1	1.0
E	2.5	1.7	1.2	0.9	0.9
F	See Section 11.4.7 of ASCE 7				

Note: Use straight–line interpolation for intermediate values of S_S

For Site Class = C and S_S = 0.811 g, F_a = 1.076

TABLE 1613.3.3(2)
VALUES OF SITE COEFFICIENT F_v

Site Class	Mapped Spectral Response Acceleration at 1–s Period				
	$S_1 \le 0.10$	$S_1 = 0.20$	$S_1 = 0.30$	$S_1 = 0.40$	$S_1 \ge 0.50$
A	0.8	0.8	0.8	0.8	0.8
B	1.0	1.0	1.0	1.0	1.0
C	1.7	1.6	1.5	1.4	1.3
D	2.4	2.0	1.8	1.6	1.5
E	3.5	3.2	2.8	2.4	2.4
F	See Section 11.4.7 of ASCE 7				

Note: Use straight–line interpolation for intermediate values of S_1

For Site Class = C and S_1 = 0.269 g, F_v = 1.531

Exhibit B

Equation (16-37): $S_{MS} = F_a S_S = 1.076 \times 0.811 = 0.872$ g

Equation (16-38): $S_{M1} = F_v S_1 = 1.531 \times 0.269 = 0.412$ g

Section 1613.3.4 — Design spectral response acceleration parameters

Equation (16-39): $S_{DS} = \frac{2}{3} S_{MS} = \frac{2}{3} \times 0.872 = 0.582$ g

Equation (16-40): $S_{D1} = \frac{2}{3} S_{M1} = \frac{2}{3} \times 0.412 = 0.274$ g

Exhibit B

Section 1613.3.5 — Determination of seismic design category

TABLE 1613.3.5(1)
SEISMIC DESIGN CATEGORY BASED ON SHORT-PERIOD (0.2 second) RESPONSE ACCELERATION

VALUE OF S_{DS}	RISK CATEGORY		
	I or II	III	IV
$S_{DS} < 0.167g$	A	A	A
$0.167g \le S_{DS} < 0.33g$	B	B	C
$0.33g \le S_{DS} < 0.50g$	C	C	D
$0.50g \le S_{DS}$	D	D	D

For Risk Category = I and S_{DS} = 0.582 g, Seismic Design Category = D

TABLE 1613.3.5(2)
SEISMIC DESIGN CATEGORY BASED ON 1-SECOND PERIOD RESPONSE ACCELERATION

VALUE OF S_{D1}	RISK CATEGORY		
	I or II	III	IV
$S_{D1} < 0.067g$	A	A	A
$0.067g \le S_{D1} < 0.133g$	B	B	C
$0.133g \le S_{D1} < 0.20g$	C	C	D
$0.20g \le S_{D1}$	D	D	D

For Risk Category = I and S_{D1} = 0.274 g, Seismic Design Category = D

Note: When S_1 is greater than or equal to 0.75g, the Seismic Design Category is **E** for buildings in Risk Categories I, II, and III, and **F** for those in Risk Category IV, irrespective of the above.

Seismic Design Category ≡ “the more severe design category in accordance with Table 1613.3.5(1) or 1613.3.5(2)” = D

Note: See Section 1613.3.5.1 for alternative approaches to calculating Seismic Design Category.

References

1. *Figure 1613.3.1(1)*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/IBC-2012-Fig1613p3p1(1).pdf
2. *Figure 1613.3.1(2)*: https://earthquake.usgs.gov/hazards/designmaps/downloads/pdfs/IBC-2012-Fig1613p3p1(2).pdf

Exhibit B

USGS Design Maps Summary Report

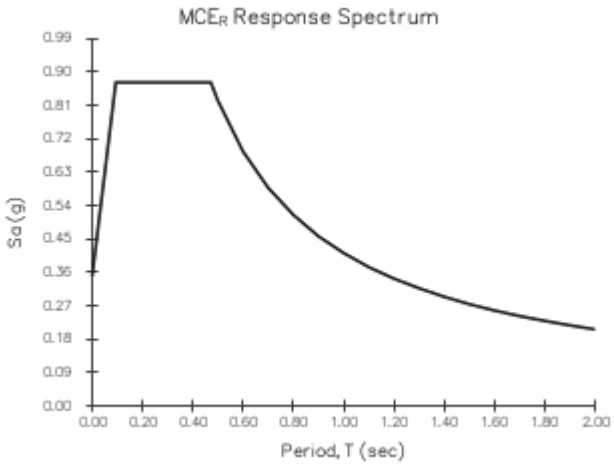
User–Specified Input

Report Title	Lot 71 Tue August 29, 2017 17:01:38 UTC
Building Code Reference Document	2012/2015 International Building Code (which utilizes USGS hazard data available in 2008)
Site Coordinates	41.3628°N, 111.7455°W
Site Soil Classification	Site Class C – "Very Dense Soil and Soft Rock"
Risk Category	I/II/III

USGS–Provided Output

S_S =	0.811 g	S_{MS} =	0.872 g	S_{DS} =	0.582 g
S_1 =	0.269 g	S_{M1} =	0.412 g	S_{D1} =	0.274 g

For information on how the SS and S1 values above have been calculated from probabilistic (risk-targeted) and deterministic ground motions in the direction of maximum horizontal response, please return to the application and select the "2009 NEHRP" building code reference document.



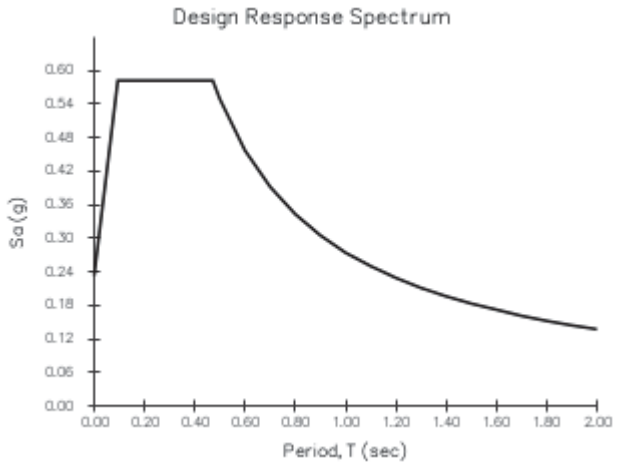


Exhibit B

APPENDIX D

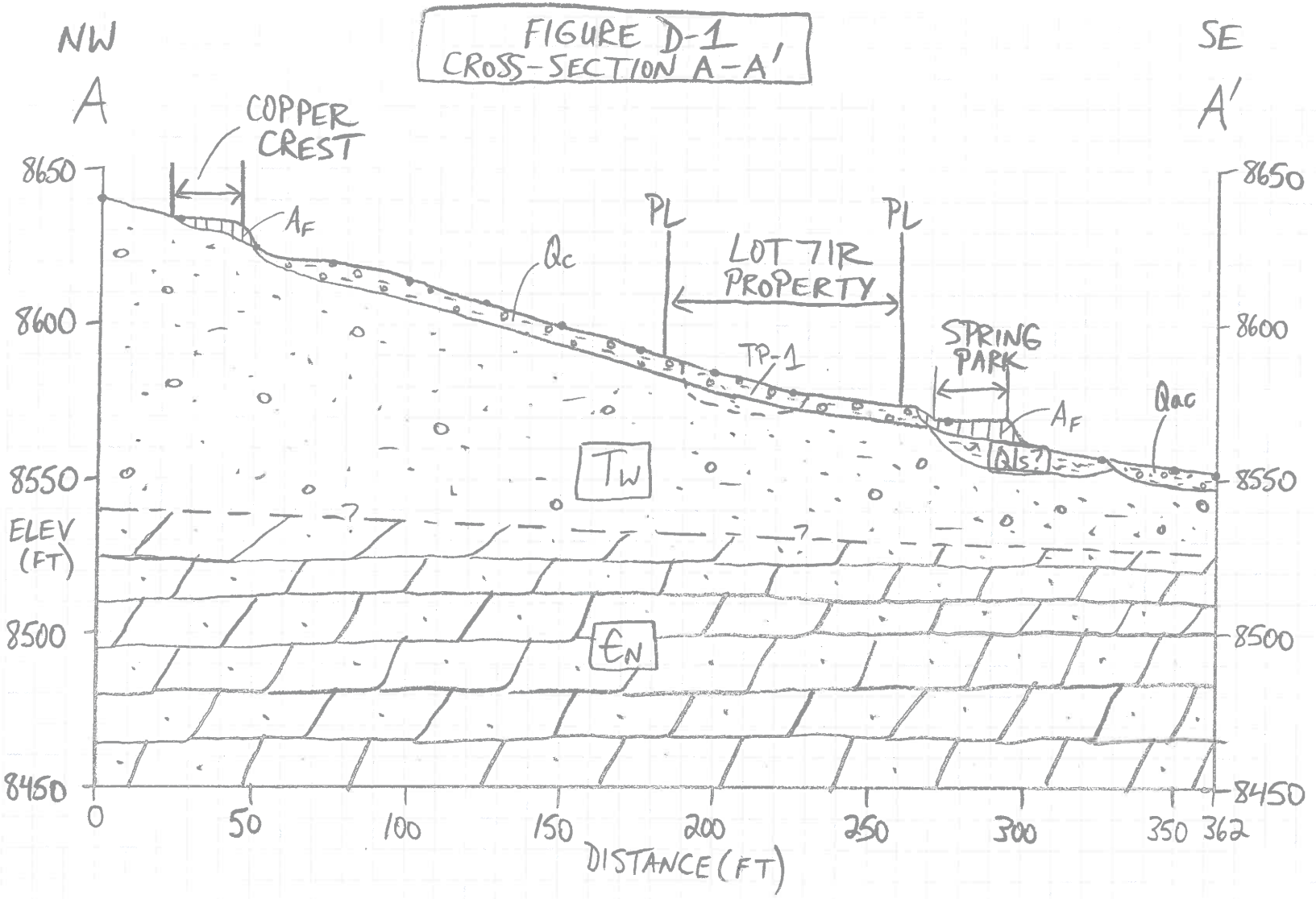
Exhibit B

Project No. 02565-001

Date 8-23-17 by PED

Ckd by _____ on _____

FIGURE D-1
CROSS-SECTION A-A'



A_F = ARTIFICIAL FILL

Qac = ALLUVIUM AND COLLUVIUM

Qc = COLLUVIUM

QLS? = POSSIBLE LANDSLIDE

T_W = WASATCH FORMATION

ϵ_N = NOUNAN DOLOMITE

0 25 50

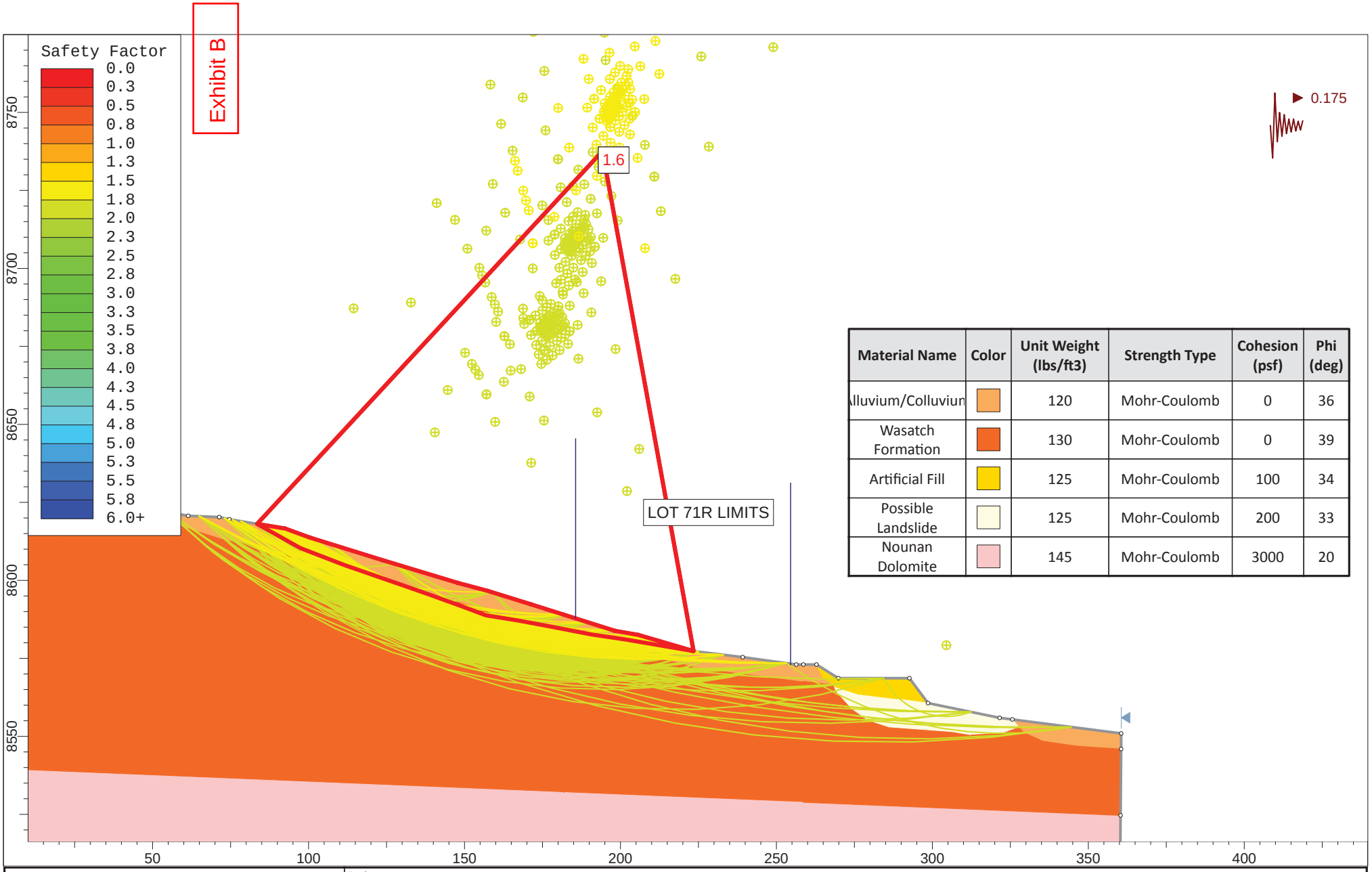
FEET

1" = 50'

*NO VERTICAL EXAGGERATION

IGES

Intermountain GeoEnvironmental Services, Inc.

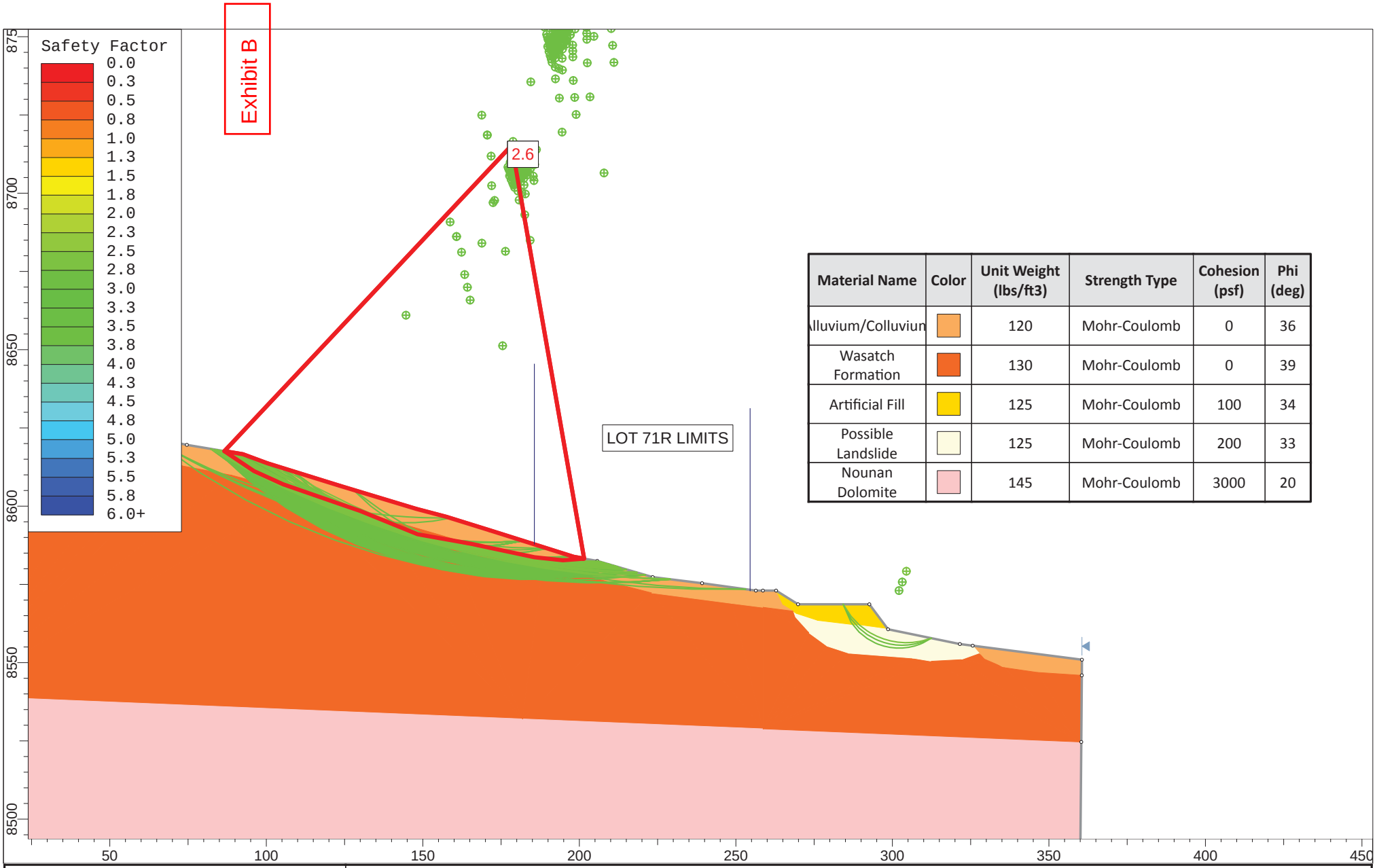


Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (deg)
lluvium/Colluviun		120	Mohr-Coulomb	0	36
Wasatch Formation		130	Mohr-Coulomb	0	39
Artificial Fill		125	Mohr-Coulomb	100	34
Possible Landslide		125	Mohr-Coulomb	200	33
Nounan Dolomite		145	Mohr-Coulomb	3000	20

IGES®

SLIDEINTERPRET 7.025

Project	Powder Mountain Lot 71R			
Analysis Description	Seismic			
Drawn By	TQH	Scale	1:500	Company: IGES Inc.
Date	8/29/2017			File Name: Lot 71.slim



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IGES®

SLIDEINTERPRET 7.025

Project	Powder Mountain Lot 71R		
Analysis Description	Static		
Drawn By	TQH	*Scale* 1:500	*Company* IGES Inc.
Date	8/29/2017		*File Name* Lot 71.slim

Exhibit B

Lot 71R
02565-001
8/29/2017

c'	100	psf	Effective Cohesion (including apparent cohesion for coarse, angular soils)
ϕ'	28	deg	Effective Friction Angle
Y_{sat}	136	pcf	Saturated Unit Weight of Soil
Y_w	62.4	pcf	Unit weight of water
h	3	ft	Depth to shear surface
β	16.0	deg	Slope Gradient (3.5H:1V)

FS 1.93

Input Variable
Calculated Value

This model assumes c>0 and the face of the slope is saturated to depth h

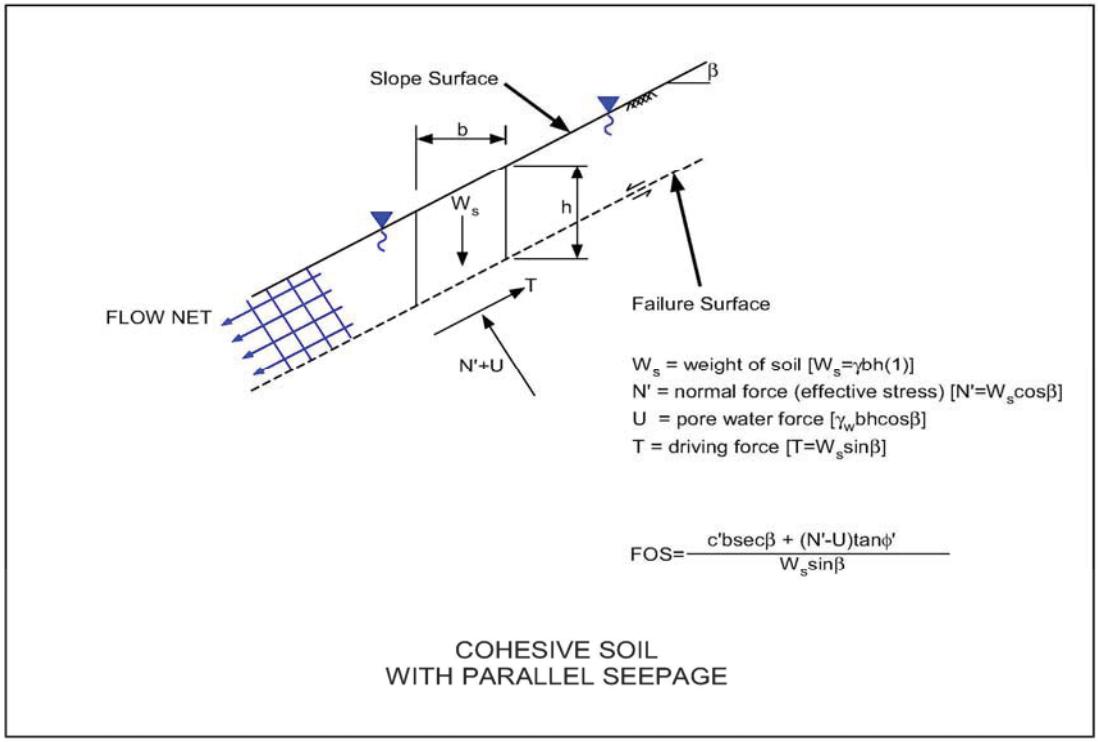
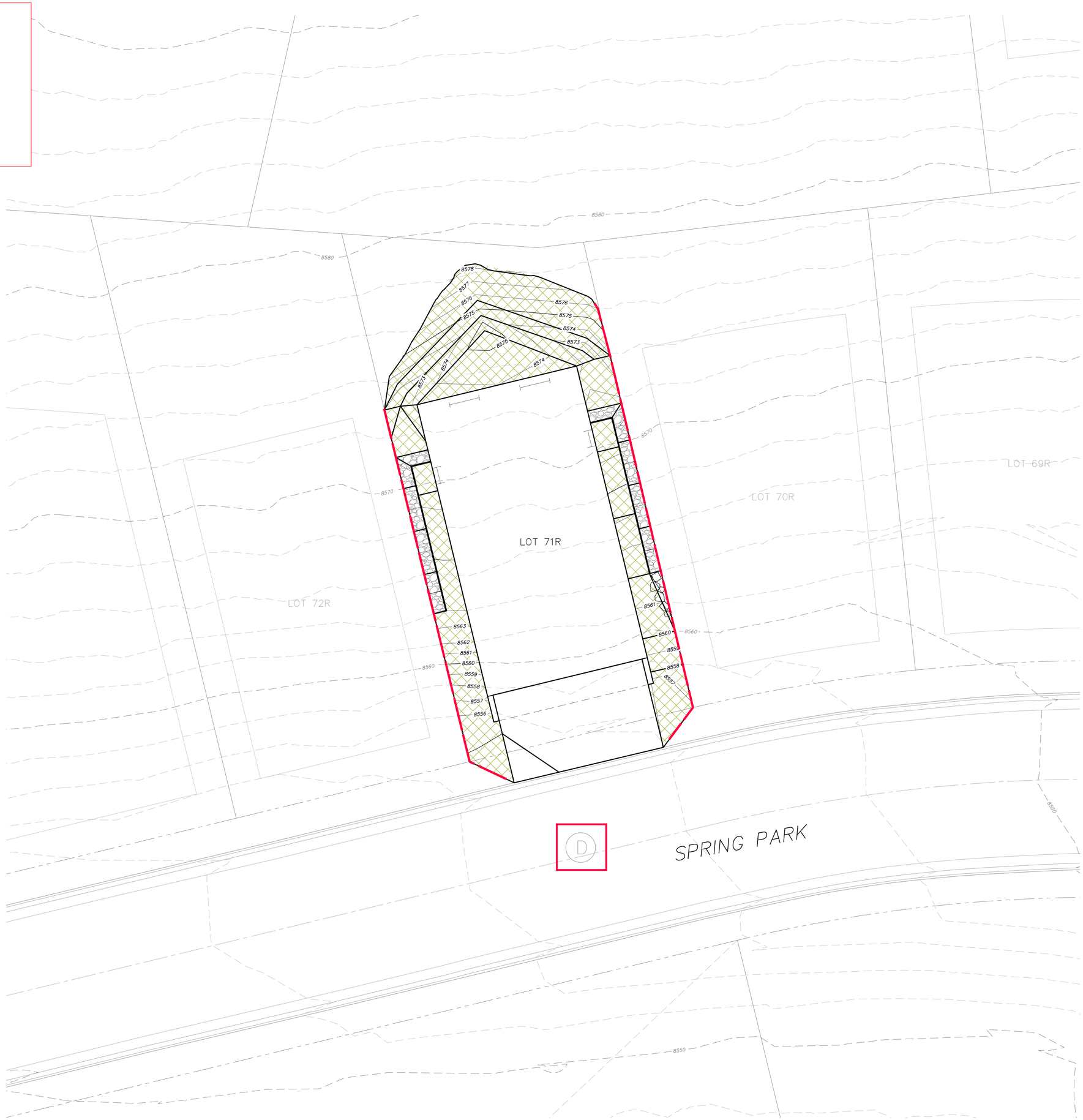


Exhibit C



EROSION CONTROL GENERAL NOTES:

THE CONTRACTOR TO USE BEST MANAGEMENT PRACTICES FOR PROVIDING EROSION CONTROL FOR CONSTRUCTION OF THIS PROJECT. ALL MATERIAL AND WORKMANSHIP SHALL CONFORM TO WEBER COUNTY ORDINANCES AND ALL WORK SHALL BE SUBJECT TO INSPECTION BY THE COUNTY. ALSO, INSPECTORS WILL HAVE THE RIGHT TO CHANGE THE FACILITIES AS NEEDED.

CONTRACTOR SHALL KEEP THE SITE WATERED TO CONTROL DUST. CONTRACTOR TO LOCATE A NEARBY HYDRANT FOR USE AND TO INSTALL TEMPORARY METER. CONSTRUCTION WATER COST TO BE INCLUDED IN BID.

WHEN GRADING OPERATIONS ARE COMPLETED AND THE DISTURBED GROUND IS LEFT "OPEN" FOR 14 DAYS OR MORE, THE AREA SHALL BE FURROWED PARALLEL TO THE CONTOURS.

THE CONTRACTOR SHALL MODIFY EROSION CONTROL MEASURES TO ACCOMMODATE PROJECT PLANNING.

ALL ACCESS TO PROPERTY WILL BE FROM PUBLIC RIGHT-OF-WAYS.

THE CONTRACTOR IS REQUIRED BY STATE AND FEDERAL REGULATIONS TO PREPARE A STORM WATER POLLUTION PREVENTION PLAN AND FILE A "NOTICE OF INTENT" WITH THE UTAH DIVISION OF WATER QUALITY.

MAINTENANCE:

ALL BEST MANAGEMENT PRACTICES (BMP'S) SHOWN ON THIS PLAN MUST BE MAINTAINED AT ALL TIMES UNTIL VEGETATION IS RE-ESTABLISHED.

THE CONTRACTOR'S RESPONSIBILITY SHALL INCLUDE MAKING BI-WEEKLY CHECKS ON ALL EROSION CONTROL MEASURES TO DETERMINE IF REPAIR OR SEDIMENT REMOVAL IS NECESSARY. CHECKS SHALL BE DOCUMENTED AND COPIES OF THE INSPECTIONS KEPT ON SITE.

SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF BARRIER.

SEDIMENT TRACKED ONTO PAVED ROADS MUST BE CLEANED UP AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN THE END OF THE NORMAL WORK DAY. THE CLEAN UP WILL INCLUDE SWEEPING OF THE TRACKED MATERIAL, PICKING IT UP, AND DEPOSITING IT TO A CONTAINED AREA.

EXPOSED SLOPES:

ANY EXPOSED SLOPE THAT WILL REMAIN UNTOUCHED FOR LONGER THAN 14 DAYS MUST BE STABILIZED BY ONE OR MORE OF THE FOLLOWING METHODS:

A) SPRAYING DISTURBED AREAS WITH A TACKIFIER VIA HYDROSEED
B) TRACKING STRAW PERPENDICULAR TO SLOPES
C) INSTALLING A LIGHT-WEIGHT, TEMPORARY EROSION CONTROL BLANKET

SCOPE OF WORK:

PROVIDE, INSTALL AND/OR CONSTRUCT THE FOLLOWING PER THE SPECIFICATIONS GIVEN OR REFERENCED, THE DETAILS NOTED, AND/OR AS SHOWN ON THE CONSTRUCTION DRAWINGS:

HATCHING INDICATES AREAS TO RECEIVE 4" TOPSOIL AND TO BE SEEDED FOR NATURAL VEGETATION. AREAS RECEIVING SEEDING FOR NATURAL REVEGETATION ON SLOPES OF 3:1 OR STEEPER MUST BE COVERED WITH AN EROSION CONTROL BLANKET AFTER THE FINAL GRADING AND SEEDING ARE FINISHED. INSTALL NORTH AMERICAN GREEN SC-150 BLANKET OR APPROVED EQUAL. FOLLOW MANUFACTURER'S SPECIFICATIONS.

INSTALL INLET PROTECTION IN FORM OF CONCRETE BLOCKS / FILTER CLOTH / GRAVEL OR SILT SACK AT EXISTING AND PROPOSED CATCH BASINS AS SHOWN ON PLAN. SEE EROSION CONTROL DETAILS ON SHEET C701.

INSTALL SILT FENCE ALONG DOWN GRADIENT LIMITS OF DISTURBANCE AS SHOWN ON PLAN. SEE EROSION CONTROL DETAILS ON SHEET C701.

INSTALL ORANGE SAFETY FENCING AROUND OUTER LIMITS OF PROJECT PRIOR TO GRADING.

SEED MIXTURE FOR REVEGITATION
40% MOUNTAIN BROME (BROMUS MARGINATUS)
25% SLENDER WHEATGRASS (ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS)
5% SHEEP FESCUE (FESTUCA OVINA SPP. DURIUSCULA)
5% ALPINE BLUEGRASS (POA ALPINE)
25% THICKSPIKE WHEATGRASS (ELYMUS LANCEOLATUS SSP. LANCEOLATUS)

SEEDING RATE IS 40 POUNDS PER ACRE.

SCALE
HORIZONTAL: 1" = 5'
0 1.25 2.5 5 7.5

LOT 71 Residence
Summit Powder Mountain
Eden, Utah

MacKay-Lyons Sweetapple
Architects Limited
2188 Gottingen St.
Halifax, Nova Scotia
Canada B3K 3B4
ph: (902) 429.1867
fax: (902) 429.6376

TALISMAN CIVIL CONSULTANTS
5217 SOUTH STATE STREET
SUITE 200
MURRAY, UT 84107
801.743.1300

REGISTERED PROFESSIONAL ENGINEER
No. 7899506
RYAN W. CARTER
STATE OF UTAH

No.	Description	Date
Revision:		

NOTES:

COPYRIGHT RELATED TO THE USE OF THIS DRAWING:
The use of this drawing shall be governed by standard copyright law as generally accepted in architectural practice.

ARCHITECT'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify MacKay-Lyons Sweetapple Architects Ltd. and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Architect.

ENGINEER'S REQUIREMENTS AND APPROVALS:
It is the Builder's responsibility to notify MacKay-Lyons Sweetapple Architects Ltd. and to seek prior written approval for materials and workmanship which deviates from instructions provided by the Engineer.

AUTHORITIES' REQUIREMENTS AND APPROVALS:
All materials and workmanship must comply with the requirements of all authorities having jurisdiction over the work. It is the Builder's responsibility to gain necessary approval from all relevant Authorities.

DIMENSIONS:
All dimensions must be verified on site. Do not scale off drawings. Plans take precedent over elevations. In the absence of dimensions, or if discrepancies exist, consult Architect. All minimum dimensions are to comply with the International Building Code, 2009 Edition.

SHOP DRAWINGS:
Submit shop drawings to the Architect and Engineer for approval prior to manufacture of prefabricated elements of the building.

Erosion Control Plan

scale: 1"=5'
date: 12/22/2017
drawn: JLB
chk'd: RWC

C601